

**SUMMARY REPORT  
Phase III Remedial Investigation  
Northeast Cape, St. Lawrence Island, Alaska**

**VOLUME II: APPENDICES E THROUGH K**

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**VOLUME II**

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## **APPENDIX E**

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*Chemical Data Quality Review*

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**MWH**

# **CHEMICAL DATA QUALITY REVIEW**

**NE Cape HTRW - St. Lawrence Island**

**Soil and Water Sampling**

**Project #**

**01-065**

**Received: 1/29/02**

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## **1.0 Introduction**

This report summarizes the technical review of analytical results generated in support of the soil and groundwater sampling event at Northeast Cape, St. Lawrence Island, Alaska. The criteria applied for this review are consistent with analytical method protocols, in conjunction with the laboratory-established control limits. In cases where specific guidance was not available from either of these sources, the data have been evaluated using professional judgement consistent with industry standards. The review included evaluation of sample collection, holding time and summary information for blanks (to assess contamination), sample duplicates (to assess precision), laboratory control samples (to assess accuracy) and matrix spike and surrogate recoveries (to assess matrix effect). Instrument calibration review and raw data verification were not performed.

The report is arranged by method; within each method section is a sub-section addressing each data quality indicator. In situations where all applicable criteria were met, it will be stated. If criteria were not met, the non-compliance, qualifier and associated samples are listed. Appendices A and B list qualifier definitions and acronyms, respectively. Appendix C, the data summary table, displays all sample results, as well as qualifiers and descriptors that may apply. Appendix D includes a summary of all qualified data, by analysis type. All samples collected are identified in Table 1. Any discrepancies or deficiencies associated with sampling and analysis can be found in Table 2. Rejected data are identified in Table 3 (Appendix E). Tables 4 through 14 (Appendix E) list all qualified data by data quality indicator and analysis type.

The laboratory electronic data format (EDF) for this project was used to generate this report. In many cases abbreviations are used from the EDF; refer to the acronyms (Appendix B) for an explanation of abbreviations. When discrepancies between the hardcopy data and the EDF are found, the EDF has been modified to reflect values from the hardcopy, unless the hardcopy is found to be in error. Results used to generate this report are deemed to be accurate.

I certify that all data validation criteria described above were assessed, and any qualifications made to the data were in accordance with the cited reference documents.

Authorized Signature (209) 576-2621

## **2.0 Executive Summary**

Seventy-five soil/sediment samples, six methanol trip blanks, twenty-five aqueous samples and fifteen aqueous trip blanks were collected by Montgomery Watson Harza in Anchorage, Alaska from July 24, 2001 to September 24, 2001. Samples were submitted to Analytical Resources, Inc. (ARI) in Seattle, Washington (Primary Laboratory) and Sound Analytical Services, Inc. (SAS) in Tacoma, Washington (Referee Laboratory) within one to five days of collection. Samples were analyzed for BTEX, GRO, DRO, RRO, pesticides, PCBs, PAH, semivolatiles, volatile organics, metals and TOC.

Data packages generated by Analytical Resources Incorporation did not display method numbers for preparation and cleanup, prep and analysis batch identification, accuracy and precision limits for most methods and dilution factors for metals, volatiles and some TOC. The laboratory was contacted and QC limits were submitted for the associated data. Most information missing on the hardcopy was present in the electronic; however, values could not be checked against the hardcopy.

Matrix problems were observed in the PAH analyses, especially in samples collected from site 28. Samples were extracted based on initial screens at either low or medium levels. Reporting limits are high for many compounds, and the reporting limits vary significantly from sample to sample. In some cases, samples were extracted at the medium level due to low internal standard response; however, target compounds were not detected. Internal standard response was not reported in the data packages; therefore, impact could not be evaluated. The laboratory flagged many compounds as "M" due to poor spectral matches caused by matrix effect.

BTEX target compounds were detected in some of the trip blanks associated with the samples for this analysis. Concentrations detected in the blanks were higher than concentrations detected in the associated samples which impacted approximately (16%) of the data.

Many of the samples were re-extracted for DRO and RRO at ARI due to extraction deficiencies, and most re-extracts missed holding time. High concentrations of target compounds were detected requiring dilution for quantitation, in many cases surrogates were diluted out. Matrix effect was observed; many of the matrix spikes exhibited poor accuracy and precision. In addition, poor precision was exhibited in some of the sample duplicates and QA triplicate sets indicating a heterogenous matrix.

Some samples missed holding time for pesticides/PCBs analysis. Some samples were qualified due to low surrogate recoveries. High levels of aroclor 1260 were detected in some samples from site 31. In some cases concentrations detected, saturated the detector used for analysis, in these cases aroclor 1260 is only reported from the appropriate dilution and will not be observed in the original analysis. Throughout the project only aroclor 1242 was used as the matrix spike and LCS spiking compound. It would have been preferable to spike with aroclor 1260 or 1254 since these were the only target compounds detected in the project.

### 3.0 BTEX

The following number of samples were prepared and analyzed by the listed methods:

**Laboratory: ARI**

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
30	SX	METHOD	8260SIM	µg/Kg
7	WX	METHOD	SW8260	µg/L
6	WX	METHOD	AK101	µg/L

**Laboratory: SAS**

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
4	SX	SW5030B	SW8021B	mg/Kg
4	WX	SW5030B	SW8021B	mg/L
2	WX	SW5030	SW8260B	µg/L

Samples analyzed by this method are identified in Table 1.

#### 3.1 Holding Time

All samples were analyzed within the required technical holding time.

#### 3.2 Surrogates

All surrogate recoveries were within the required limit except the following:

**Laboratory: SAS**

SDG: Lab ID	100492 Field ID	Matrix	Dil Factor		Surrogate	% Rec	Recovery Limits		Q <sup>2</sup>	Bias	RC
			1	2			J/UJ	L			
100492-04	01NE21SS369	SX	1		trifluorotoluene	25.5	70 - 130	J/UJ	L	b	
					bromofluorobenzene	20.8	70 - 130	J/UJ			
100492-07	01NE24SD314	SX	1		trifluorotoluene	64.3	70 - 130	J/UJ	L	b	
					bromofluorobenzene	56.3	70 - 130	J/UJ			
100492-11	01NE31SS321	SX	1		trifluorotoluene	69.5	70 - 130	J/UJ	L	b	
					bromofluorobenzene	57.4	70 - 130	J/UJ			

<sup>1</sup> Laboratory-established limits

<sup>2</sup> According to the Functional Guidelines for Organic Data Review, if the surrogate recovery is > UCL, flag detected results J; if the surrogate recovery is < LCL, flag detected results J and non-detects UJ; if the surrogate recovery is less than 10%, flag detected results J and non-detects UR

### **3.3 Blanks**

Method blanks were analyzed at the minimum required frequency. All target compounds were reported as nondetected in all cases.

**3.3 Blanks (cont.)**

Six methanol trip blanks and six water trip blanks were collected for analysis by this method. All target compounds were reported as nondetected in all cases except the following:

**Laboratory :** ARI  
**Date Collected:** 8/18/01

Field Blank ID	Analyte	Result	Units
01NE00TB101			
Trip Blank	toluene	46	µg/Kg
	ethylbenzene	8.4	µg/Kg
	m,p-xylene	31	µg/Kg
	o-xylene	10	µg/Kg
<b>Affected samples:</b>			
DN07K	01NE06SD116	ethylbenzene	12 B H k µg/Kg
DN07L	01NE06SD117	ethylbenzene	0.88 B H k µg/Kg
DN07K	01NE06SD116	m,p-xylene	44 B H k µg/Kg
DN07L	01NE06SD117	m,p-xylene	3.3 B H k µg/Kg
DN07K	01NE06SD116	o-xylene	14 B H k µg/Kg
DN07L	01NE06SD117	o-xylene	1 B H k µg/Kg
DN07K	01NE06SD116	toluene	78 B H k µg/Kg
DN07L	01NE06SD117	toluene	4.7 B H k µg/Kg

**Date Collected:** 8/21/01

Field Blank ID	Analyte	Result	Units
01NE00TB104			
Trip Blank	toluene	45	µg/Kg
	ethylbenzene	8	µg/Kg
	m,p-xylene	30	µg/Kg
	o-xylene	9.8	µg/Kg
<b>Affected samples:</b>			
DN40K	01NE29SD129	m,p-xylene	3.2 B H k µg/Kg
DN40N	01NE29SD126	toluene	7.4 B H k µg/Kg
DN40M	01NE29SD127	toluene	9.7 B H k µg/Kg
DN40J	01NE29SD128	toluene	6.4 B H k µg/Kg
DN40K	01NE29SD129	toluene	4.7 B H k µg/Kg

Date Collected: 8/24/01

Field	Blank ID	Analyte	Result	Units
01NE00TB111				
Trip Blank		toluene	39	µg/Kg
		ethylbenzene	5.4	µg/Kg
		m,p-xylene	20	µg/Kg
		o-xylene	6.2	µg/Kg
<b>Affected samples:</b>				
DN68K	01NE09SS171	toluene	9 B	H k µg/Kg
DN68A	01NE21SS169	toluene	39 B	H k µg/Kg

Date Collected: 8/24/01

Field	Blank ID	Analyte	Result	Units
01NE00TB114				
Trip Blank		toluene	44	µg/Kg
		ethylbenzene	7.1	µg/Kg
		m,p-xylene	28	µg/Kg
		o-xylene	8.3	µg/Kg
<b>Affected samples:</b>				
DN69P	01NE31SS123	m,p-xylene	17 B	H k µg/Kg
DN69R	01NE31SS221	m,p-xylene	9 B	H k µg/Kg
DN69P	01NE31SS123	o-xylene	5.3 B	H k µg/Kg
DN69N	01NE31SS121	toluene	12 B	H k µg/Kg
DN69P	01NE31SS123	toluene	24 B	H k µg/Kg
DN69Q	01NE31SS124	toluene	7.3 B	H k µg/Kg
DN69R	01NE31SS221	toluene	14 B	H k µg/Kg

Date Collected: 8/24/01

Field Blank ID	Analyte	Result	Units			
01NE00TB109						
Trip Blank	toluene	440			µg/Kg	
	ethylbenzene	87			µg/Kg	
	m,p-xylene	330			µg/Kg	
	o-xylene	100			µg/Kg	
<b>Affected samples:</b>						
DN70F	01NE21SB169	ethylbenzene	6.7 B	H	k	µg/Kg
DN70K	01NE24SD115	ethylbenzene	8.8 B	H	k	µg/Kg
DN70F	01NE21SB169	m,p-xylene	21 B	H	k	µg/Kg
DN70G	01NE21SB171	m,p-xylene	23 B	H	k	µg/Kg
DN70I	01NE21SD114	m,p-xylene	10 B	H	k	µg/Kg
DN70B	01NE21SS170	m,p-xylene	7.4 B	H	k	µg/Kg
DN70H	01NE21SS172	m,p-xylene	96 B	H	k	µg/Kg
DN70J	01NE21SS173	m,p-xylene	32 B	H	k	µg/Kg
DN70K	01NE24SD115	m,p-xylene	30 B	H	k	µg/Kg
DN70F	01NE21SB169	o-xylene	6.3 B	H	k	µg/Kg
DN70K	01NE24SD115	o-xylene	9.2 B	H	k	µg/Kg
DN70F	01NE21SB169	toluene	24 B	H	k	µg/Kg
DN70A	01NE21SB170	toluene	7.2 B	H	k	µg/Kg
DN70G	01NE21SB171	toluene	41 B	H	k	µg/Kg
DN70D	01NE21SD113	toluene	55 B	H	k	µg/Kg
DN70I	01NE21SD114	toluene	19 B	H	k	µg/Kg
DN70B	01NE21SS170	toluene	11 B	H	k	µg/Kg
DN70H	01NE21SS172	toluene	140 B	H	k	µg/Kg
DN70J	01NE21SS173	toluene	73 B	H	k	µg/Kg
DN70C	01NE24SD114	toluene	3.2 B	H	k	µg/Kg
DN70K	01NE24SD115	toluene	38 B	H	k	µg/Kg
DN70E	01NE24SD214	toluene	17 B	H	k	µg/Kg

<sup>1</sup> According to the National Functional Guidelines for Organic Data Review, any target compound detected in a field blank that was also detected in an associated sample is qualified if the sample result is less than 10x the blank concentration for common laboratory contaminants, or 5x for all other compounds. Flagging for this project is modified to "B" at the amount found in the sample.

### 3.4 Matrix Spike/Matrix Spike Duplicates

MS/MSDs were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

### 3.5 Laboratory Control Samples

Laboratory control samples were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

### **3.6 Quantitation Limits**

The practical quantitation limits (PQLs) achieved by the laboratories were acceptable relative to the estimated quantitation limits (EQL) suggested by these methods for aqueous and soil matrix samples. Project specific reporting limits for water matrix were met by both laboratories.

### **3.7 QA / QC Triplicates**

Five sets of QA / QC triplicate samples were collected for analysis by this method. All results were in agreement except for the following:

**Matrix:** SX

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN70C	01NE24SD114	Primary Sample toluene	3.2	µg/Kg	B	H	k
DN70E	01NE24SD214	QC Dup of 01NE24SD114 toluene	17	µg/Kg	B	H	k
100492-07	01NE24SD314	QA Dup of 01NE24SD114 toluene	< 0.015	mg/Kg	UJ	L	b

No data were qualified on the basis of field duplicate precision.

### **3.8 Additional Comments**

Target compounds were detected in some of the trip blanks at concentrations greater than levels detected in associated samples (see section 3.3). In addition, samples 01NE35GW301 and 01NE35TB302 were received by the laboratory at an elevated temperature and therefore are qualified as estimated. 3 of 3 vials of sample 01NE00TB107 had bubbles and is qualified as estimated. Results of samples listed above should be considered minimum values.

### **3.9 Overall Assessment**

Minor data quality deficiencies were found, resulting in a significant amount of qualified data. No data were rejected. Most data were qualified due to field blank contamination. Tables 4 through 14 list all qualified sample results, by data quality indicator and analysis type. Results that were qualified as estimated or nondetected are useable for limited purposes. All other data generated by this method should be considered useable as reported.

#### 4.0 Gasoline Range Organics

The following number of samples were prepared and analyzed by the listed methods:

**Laboratory: ARI**

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
42	WX	METHOD	AK101	mg/L
31	SX	METHOD	AK101	mg/Kg

**Laboratory: SAS**

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
8	WX	METHOD	AK101	mg/L
4	SX	METHOD	AK101	mg/Kg

Samples analyzed by this method are identified in Table 1.

##### 4.1 Holding Time

All samples were analyzed within the required technical holding time except the following:

**Laboratory: ARI**

SDG:	DN73			Holding Time (Days)	RTHT (Days)						
Lab ID	Field ID	Matrix	Collected	Prepared	Analyzed	Analysis	Analysis	Q	Bias	RC	
DN73M	01NE21SW114	WX	8/21/01	9/5/01	9/5/01	15	14	J/UJ	L	e	

<sup>1</sup> Required technical holding time established for the method

<sup>2</sup> According to the Functional Guidelines for Organic Data Review, if analysis holding time is exceeded, flag detected and nondetected results as estimated

#### 4.2 Surrogates

All surrogate recoveries were within the required limits except the following:

Laboratory: SAS

SDG: 100492

Lab ID	Field ID	Matrix	Factor	Surrogate	% Rec	Recovery Limits		Q	Bias	RC
						Dil	1			
100492-04	01NE21SS369	SX	1	trifluorotoluene bromofluorobenzene	23.8 24	50 - 150 50 - 150	J/UJ J/UJ	L L	b b	

<sup>1</sup> Laboratory-established limits

<sup>2</sup> According to the Functional Guidelines for Organic Data Review, if the surrogate recovery is > UCL, flag detected results J; if the surrogate recovery is < LCL, flag detected results J and non-detects UJ; if the surrogate recovery is less than 10%, flag detected results J and non-detects UR

#### 4.3 Blanks

Method blanks were analyzed at the minimum required frequency. Gasoline range organics were reported as non-detected in all cases except the following:

Laboratory: SAS

Project ID: 100492

MB Batch ID: GB2813

Matrix: WQ

Analyte	Result	PQL	Units	1		
				Q	Bias	RC
gasoline range organics	0.03	0.05	mg/L			
Affected Samples:	Sample ID	Field ID				
100492-02	01NE21SW313		0.04	0.05	mg/L	B H a
100492-03	01NE00TB112		0.03	0.05	mg/L	B H a

<sup>1</sup> According to the National Functional Guidelines for Organic Data Review, any compound detected in a blank that was also detected in an associated sample is qualified if the sample result is less than 10x the blank concentration for common laboratory contaminants, or 5x for all other analytes. Flagging for this project is modified to "B" at the amount found in the sample.

#### **4.3 Blanks (cont.)**

Six methanol trip blanks and thirteen water trip blanks were collected for analysis by this method. Gasoline range organics were reported as nondetected in all cases except the following:

**Laboratory : SAS**

**Date Collected: 8/24/01**

<b>Field Blank ID</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>
01NE00TB112	gasoline range organics	0.029	mg/L

No sample results were affected by the above blank result

<sup>1</sup> According to the National Functional Guidelines for Organic Data Review, any target compound detected in a field blank that was also detected in an associated sample is qualified if the sample result is less than 10x the blank concentration for common laboratory contaminants, or 5x for all other compounds. Flagging for this project is modified to "B" at the amount found in the sample

#### **4.4 Matrix Spike/Matrix Spike Duplicates**

MS/MSDs were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

#### **4.5 Laboratory Control Samples**

Laboratory control samples were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

#### **4.6 Quantitation Limits**

The practical quantitation limits (PQLs) achieved by the laboratories were acceptable relative to the estimated quantitation limits (EQL) suggested by this method for aqueous and soil matrix samples. Project specific reporting limits for water were met by both laboratories.

#### **4.7 QA / QC Triplicates**

Ten sets of QA / QC triplicate samples were collected for analysis by this method. A disagreement of greater than five times (when one result is nondetected) was found for the following primary, QC and QA triplicate set:

**Matrix: WX**

<b>Lab ID</b>	<b>Field ID</b>		<b>Analyte</b>		<b>Result</b>	<b>Units</b>	<b>Q</b>	<b>Bias</b>	<b>RC</b>
DN73J	01NE21SW113	Primary Sample	gasoline range organics	<	0.25	mg/L	U		
DN73N	01NE21SW213	QC Dup of 01NE21SW113	gasoline range organics	<	0.25	mg/L	U		
100492-02	01NE21SW313	QA Dup of 01NESW113	gasoline range organics		0.04	mg/L	B	H	a

No data were qualified on the basis of field duplicate precision.

#### **4.8 Additional Comments**

Due to elevated temperature, gasoline range organics results for 01NE35GW301 and 01NE35TB302 were qualified as estimated; results should be considered minimum values.

#### **4.9 Overall Assessment**

Minor data quality deficiencies were found, resulting in an insignificant amount of qualified data. No data were rejected. Most qualifications made were due to method blank contamination and elevated temperature. Tables 4 through 14 list all qualified sample results, by data quality indicator and analysis type. Results that were qualified as estimated or nondetected are useable for limited purposes. All other data generated by this method should be considered useable as reported.

## 5.0 Diesel / Residual Range Organics

The following number of samples were prepared and analyzed by the listed methods:

### Laboratory: ARI

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
158	SX	SW3545	AK102/103	mg/Kg
49	WX	SW3510C	AK102/103	mg/L
11	SX	SW3550B	AK102/103	mg/Kg

### Laboratory: SAS

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
17	SX	METHOD	AK103	mg/Kg
17	SX	METHOD	AK102	mg/Kg
6	WX	METHOD	AK103	mg/L
6	WX	METHOD	AK102	mg/L

Samples analyzed by this method are identified in Table 1.

**5.1 Holding Time**

All samples were prepared and analyzed within the required technical holding time except the following:

**Laboratory: ARI**

SDG:	DK21												
		Holding Time (Days)		RTHT (Days)		1		2		Q		Bias RC	
Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Prep	Anal	Prep	Anal	Q	Bias	RC	
DK21ARE	01NE35GW102	WX	7/24/01	8/2/01	8/4/01	9	2	7	40	J/UJ	L	e	

\*Date received by laboratory: 7/25/01

SDG:	DK48												
		Holding Time (Days)		RTHT (Days)		1		2		Q		Bias RC	
Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Prep	Anal	Prep	Anal	Q	Bias	RC	
DK48ARE	01NE35GW101	WX	7/25/01	8/2/01	8/4/01	8	2	7	40	J/UJ	L	e	
DK48BRE	01NE35GW103	WX	7/25/01	8/2/01	8/4/01	8	2	7	40	J/UJ	L	e	
DK48DRE	01NE35GW201	WX	7/25/01	8/2/01	8/4/01	8	2	7	40	J/UJ	L	e	

\*Date received by laboratory: 7/27/01

SDG:	DN40												
		Holding Time (Days)		RTHT (Days)		1		2		Q		Bias RC	
Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Prep	Anal	Prep	Anal	Q	Bias	RC	
DN40G-RE	01NE29SD120	SX	8/21/01	9/10/01	9/19/01	20	9	14	40	J/UJ	L	e	
DN40H-RE	01NE29SD121	SX	8/21/01	9/10/01	9/19/01	20	9	14	40	J/UJ	L	e	
DN40I-RE	01NE29SD122	SX	8/21/01	9/10/01	9/19/01	20	9	14	40	J/UJ	L	e	
DN40A-RE	01NE29SD123	SX	8/21/01	9/21/01	9/24/01	31	3	14	40	J/UJ	L	e	
DN40B-RE	01NE29SD124	SX	8/21/01	9/10/01	9/18/01	20	8	14	40	J/UJ	L	e	
DN40C-RE	01NE29SD125	SX	8/21/01	9/10/01	9/18/01	20	8	14	40	J/UJ	L	e	
DN40N-RE	01NE29SD126	SX	8/21/01	9/10/01	9/19/01	20	9	14	40	J/UJ	L	e	
DN40M-RE	01NE29SD127	SX	8/21/01	9/10/01	9/19/01	20	9	14	40	J/UJ	L	e	
DN40E-RE	01NE29SD128	SX	8/21/01	9/10/01	9/18/01	20	8	14	40	J/UJ	L	e	
DN40F-RE	01NE29SD129	SX	8/21/01	9/10/01	9/18/01	20	8	14	40	J/UJ	L	e	
DN40D-RE	01NE29SD225	SX	8/21/01	9/10/01	9/18/01	20	8	14	40	J/UJ	L	e	

\*Date received by laboratory: 8/24/01

SDG:	DN53										Holding Time (Days)		RTHT (Days)	
			Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Prep	Anal	Prep	Anal	Q	Bias	RC

DN53B-RE	01NE09SW107	WX	8/23/01	9/5/01	9/6/01	13	1	7	40	J/UJ	L	e
DN53G-RE	01NE09SW108	WX	8/23/01	9/5/01	9/6/01	13	1	7	40	J/UJ	L	e
DN53A-RE	01NE09SW109	WX	8/23/01	9/5/01	9/6/01	13	1	7	40	J/UJ	L	e
DN53F-RE	01NE09SW207	WX	8/23/01	9/5/01	9/6/01	13	1	7	40	J/UJ	L	e

\*Date received by laboratory: 8/25/01

SDG:	DN68										Holding Time (Days)		RTHT (Days)	
			Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Prep	Anal	Prep	Anal	Q	Bias

DN68F-RE	01NE09SD114	SX	8/24/01	9/12/01	9/13/01	19	1	14	40	J/UJ	L	e
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\*Date received by laboratory: 8/28/01

SDG:	DN71										Holding Time (Days)		RTHT (Days)	
			Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Prep	Anal	Prep	Anal	Q	Bias

DN71D-RE	01NE09MW103	WX	8/26/01	9/12/01	9/15/01	17	3	7	40	J/UJ	L	e
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\*Date received by laboratory: 8/28/01

SDG:	DN73										Holding Time (Days)		RTHT (Days)	
			Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Prep	Anal	Prep	Anal	Q	Bias

DN73G-RE	01NE04WP102	WX	8/25/01	9/5/01	9/7/01	11	2	7	40	J/UJ	L	e
DN73H-RE	01NE04WP103	WX	8/25/01	9/5/01	9/10/01	11	5	7	40	J/UJ	L	e
DN73F-RE	01NE04WP104	WX	8/25/01	9/5/01	9/7/01	11	2	7	40	J/UJ	L	e
DN73C-RE	01NE06WP103	WX	8/25/01	9/5/01	9/7/01	11	2	7	40	J/UJ	L	e
DN73M-RE	01NE21SW114	WX	8/21/01	9/5/01	9/7/01	15	2	7	40	J/UJ	L	e
DN73M	01NE21SW114	WX	8/21/01	8/29/01	8/31/01	8	2	7	40	J/UJ	L	e
DN73A-RE	01NE30WP101	WX	8/25/01	9/5/01	9/7/01	11	2	7	40	J/UJ	L	e
DN73D-RE	01NE31SW101	WX	8/24/01	9/5/01	9/7/01	12	2	7	40	J/UJ	L	e
DN73E-RE	01NE31SW102	WX	8/24/01	9/5/01	9/7/01	12	2	7	40	J/UJ	L	e

\*Date received by laboratory: 8/28/01

<sup>1</sup> Required technical holding time established for the method

<sup>2</sup> According to the Functional Guidelines for Organic Data Review, if sample preparation or analysis holding time is exceeded, flag detected and nondetected results as estimated

## 5.2 Surrogates

All surrogate recoveries were within the required limits except the following:

Laboratory: ARI

SDG: DN69

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits		Q <sup>2</sup>	Bias	RC
						1	2			
DN69B	01NE21SB170	SX	20	o-terphenyl	0	10 - 117	none*	NA	NA	
DN69C	01NE21SS170	SX	20	o-terphenyl	0	10 - 117	none*	NA	NA	
DN69G	01NE21SS173	SX	20	o-terphenyl	0	10 - 117	none*	NA	NA	
DN69H	01NE21SD113	SX	20	o-terphenyl	0	10 - 117	none*	NA	NA	
DN69O	01NE31SS122	SX	100	o-terphenyl	0	10 - 117	none*	NA	NA	

**5.2 Surrogates (cont.)**

Laboratory: ARI

SDG: DN04

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits		Q <sup>2</sup>	Bias	RC
						1	2			
DN04C	01NE28SD119	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN04D	01NE28SD120	SX	1	o-terphenyl	36	50 - 150	J/UJ	L	b	
DN04D-RE	01NE28SD120	SX	1	o-terphenyl	45	50 - 150	J/UJ	L	b	
DN04F	01NE28SD122	SX	1	o-terphenyl	34	50 - 150	J/UJ	L	b	
DN04F-RE	01NE28SD122	SX	1	o-terphenyl	36	50 - 150	J/UJ	L	b	
DN04G	01NE28SD123	SX	1	o-terphenyl	33	50 - 150	J/UJ	L	b	
DN04G-RE	01NE28SD123	SX	1	o-terphenyl	42	50 - 150	J/UJ	L	b	
DN04L	01NE28SD128	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN04O	01NE28SD130	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN04P	01NE28SD131	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN04Q	01NE28SD132	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA	NA

SDG: DN05

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits		Q <sup>2</sup>	Bias	RC
						1	2			
DN05A	01NE28SD153	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN05B	01NE28SD154	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN05C	01NE28SD155	SX	500	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN05D	01NE28SD156	SX	500	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN05E	01NE28SD157	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN05F	01NE28SD158	SX	40	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN05G	01NE28SD253	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN05H	01NE28SD257	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA	NA

SDG: DN06

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits		Q <sup>2</sup>	Bias	RC
						1	2			
DN06B	01NE28SD136	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06F	01NE28SD140	SX	40	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06J	01NE28SD143	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06K	01NE28SD144	SX	40	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06L	01NE28SD145	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06M	01NE28SD146	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06N	01NE28SD147	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06O	01NE28SD148	SX	40	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06P	01NE28SD149	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06Q	01NE28SD150	SX	40	o-terphenyl	0	50 - 150	none*	NA	NA	NA
DN06R	01NE28SD151	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA	NA

**Laboratory:** ARI

**SDG:** DN06

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
DN06S	01NE28SD251	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA
DN06T	01NE28SD152	SX	40	o-terphenyl	0	50 - 150	none*	NA	NA

**SDG:** DN07

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
DN07A	01NE06TP101	SX	10	o-terphenyl	0	50 - 150	none*	NA	NA
DN07C	01NE06TP102	SX	50	o-terphenyl	0	50 - 150	none*	NA	NA
DN07P	01NE07SS127	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA

**SDG:** DN38

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
DN38J	01NE28SD167	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA
DN38K	01NE28SD168	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA
DN38L	01NE28SD169	SX	500	o-terphenyl	0	50 - 150	none*	NA	NA
DN38M	01NE28SD170	SX	500	o-terphenyl	0	50 - 150	none*	NA	NA

**SDG:** DN39

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
DN39A	01NE28SD159	SX	1000	o-terphenyl	0	50 - 150	none*	NA	NA
DN39B-DL	01NE28SD160	SX	1000	o-terphenyl	0	50 - 150	none*	NA	NA
DN39C	01NE28SD161	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA
DN39C-DL	01NE28SD161	SX	1000	o-terphenyl	0	50 - 150	none*	NA	NA
DN39D	01NE28SD163	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA
DN39D-DL	01NE28SD163	SX	1000	o-terphenyl	0	50 - 150	none*	NA	NA
DN39E-DL	01NE28SD164	SX	1000	o-terphenyl	0	50 - 150	none*	NA	NA
DN39F	01NE28SD263	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA
DN39F-DL	01NE28SD263	SX	1000	o-terphenyl	0	50 - 150	none*	NA	NA
DN39H	01NE28SD172	SX	1	o-terphenyl	13	50 - 150	J/UJ	L	b
DN39H-DL	01NE28SD172	SX	10	o-terphenyl	0	50 - 150	none*	NA	NA
DN39K	01NE28SD175	SX	1	o-terphenyl	45	50 - 150	J/UJ	L	b
DN39L	01NE28SD176	SX	1	o-terphenyl	31	50 - 150	J/UJ	L	b
DN39M	01NE28SD271	SX	1	o-terphenyl	41	50 - 150	J/UJ	L	b
DN39O	01NE28SD177	SX	50	o-terphenyl	0	50 - 150	none*	NA	NA
DN39P	01NE28SD178	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA
DN39P-DL	01NE28SD178	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA
DN39Q	01NE28SD179	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA
DN39R	01NE28SD180	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA
DN39S	01NE28SD181	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA

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Diesel / Residual Range Organics

NE Cape HTRW - St. Lawrence Island

**Laboratory:** ARI

**SDG:** DN39

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
DN39T	01NE28SD182	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA

**SDG:** DN55

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
DN55C	01NE33SS103	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA

**SDG:** DN68

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
DN68F	01NE09SD114	SX	1	o-terphenyl	42	50 - 150	J/UJ	L	b
DN68F-RE	01NE09SD114	SX	1	o-terphenyl	40	50 - 150	J/UJ	L	b
DN68S	01NE32SS101	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA
DN68T	01NE32SS102	SX	200	o-terphenyl	0	50 - 150	none*	NA	NA
DN68U	01NE32SS103	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA
DN68V	01NE32SS104	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA

**SDG:** DN71

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
DN71D	01NE09MW103	WX	1	o-terphenyl	24	50 - 150	J/UJ	L	b
DN71D-RE	01NE09MW103	WX	1	o-terphenyl	19	50 - 150	J/UJ	L	b

**SDG:** DN78

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
DN78A	01NE31SS105	SX	50	o-terphenyl	0	50 - 150	none*	NA	NA
DN78B	01NE31SS205	SX	50	o-terphenyl	0	50 - 150	none*	NA	NA
DN78F	01NE31SS109	SX	5	o-terphenyl	40	50 - 150	J/UJ	L	b
DN78H	01NE31SS111	SX	1	o-terphenyl	40	50 - 150	J/UJ	L	b
DN78I	01NE31SS112	SX	1	o-terphenyl	36	50 - 150	J/UJ	L	b
DN78K	01NE31SS114	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA
DN78L	01NE31SS115	SX	4	o-terphenyl	24	50 - 150	J/UJ	L	b
DN78M	01NE31SS116	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA
DN78N	01NE31SS117	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA
DN78O	01NE31SS118	SX	20	o-terphenyl	0	50 - 150	none*	NA	NA
DN78P	01NE31SS119	SX	50	o-terphenyl	0	50 - 150	none*	NA	NA
DN78Q	01NE31SS120	SX	50	o-terphenyl	0	50 - 150	none*	NA	NA
DN78R	01NE31SS220	SX	100	o-terphenyl	0	50 - 150	none*	NA	NA
DN78S	01NE31SS125	SX	1	o-terphenyl	32	50 - 150	J/UJ	L	b

**Laboratory:** SAS

Prepared by ETHIX

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Diesel / Residual Range Organics

NE Cape HTRW - St. Lawrence Island

**Laboratory:** SAS

**SDG:** 100413

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
100413L04	01NE28SD363	SX	50	o-terphenyl	0	50 - 150	none*	NA	NA

**SDG:** 100492

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	Q <sup>1</sup>	Bias	RC
100492L05	01NE31SS320	SX	20	n-triacontane-d62	0	50 - 150	none*	NA	NA

<sup>1</sup> Laboratory-established limits

<sup>2</sup> According to the Functional Guidelines for Organic Data Review, if the surrogate recovery is > UCL, flag detected results J; if the surrogate recovery is < LCL, flag detected results J and non-detects UJ; if the surrogate recovery is less than 10%, flag detected results J and non-detects UR.

\* qualifiers do not apply if the sample was diluted by >5 times and the recovery is <LCL

### 5.3 Blanks

Method blanks were analyzed at the minimum required frequency. Diesel range organics were reported as non-detected in all cases except the following:

**Laboratory:** ARI

**Project ID:** DN73

**Prep Date:** 8/29/01

**MB Batch ID:** TD0827E-01

**Matrix:** WQ

Analyte	Result	PQL	Units	Q <sup>1</sup>	Bias	RC
diesel range organics	0.34	0.25	mg/L			

Affected Samples:	Sample ID	Field ID	Result	PQL	Units	Q <sup>1</sup>	Bias	RC
DN73C	01NE06WP103	0.29	0.25	mg/L	B	H	a	
DN73F	01NE04WP104	0.96	0.25	mg/L	B	H	a	
DN73G	01NE04WP102	1.4	1.2	mg/L	B	H	a	

<sup>1</sup> According to the National Functional Guidelines for Organic Data Review, any compound detected in a blank that was also detected in an associated sample is qualified if the sample result is less than 10x the blank concentration for common laboratory contaminants, or 5x for all other analytes. Flagging for this project is modified to "B" at the amount found in the sample.

Field blanks were not collected for analysis by this method.

#### 5.4 Matrix Spike/Matrix Spike Duplicates

MS/MSDs were analyzed at the required frequency. All recoveries and RPDs were within the required limits except the following:

**Laboratory:** SAS

**Prep Date:** 8/29/01

**Prep Batch ID:** DS0407

**Spiked Sample:** 01NE28SD371

**Matrix:** SX

**Dil Factor:** 1

ANALYTE	Sample Result mg/Kg	Spike Conc. mg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							
residual range organics	2000	1800	78.4	136	60 - 140	54	50	J/UJ	N	f	

**Associated Samples:**

01NE29SD325	(	100413-01	)	01NE28SD375	(	100413-02	)
01NE28SD371	(	100413-03	)	01NE28SD363	(	100413-04	)
01NE29SD314	(	100413-05	)	01NE28SD363	(	100413L04	)

**Laboratory:** ARI

**Prep Date:** 8/24/01

**Prep Batch ID:** TD0823C-01

**Spiked Sample:** 01NE28SD158

**Matrix:** SX

**Dil Factor:** 40

ANALYTE	Sample Result mg/Kg	Spike Conc. mg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							
diesel range organics	3800	68.2	968	4910	26 - 132	134	30	J/UJ	H	c	f

**Associated Samples:**

01NE28SD153	(	DN05A	)	01NE28SD154	(	DN05B	)
01NE28SD155	(	DN05C	)	01NE28SD156	(	DN05D	)
01NE28SD157	(	DN05E	)	01NE28SD158	(	DN05F	)
01NE28SD253	(	DN05G	)	01NE28SD257	(	DN05H	)

**Laboratory:** ARI  
**Prep Date:** 8/27/01  
**Prep Batch ID:** TD0823D-01  
**Spiked Sample:** 01NE28SD139  
**Matrix:** SX  
**Dil Factor:** 10

<b>ANALYTE</b>	Sample Result mg/Kg	Spike Conc. mg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD	Limits <sup>1</sup>						
diesel range organics	520	117	133	13.7	26 - 132	163	30	J/UJ	L	c	f
<b>Associated Samples:</b>											
01NE28SD135	(	DN06A	)	01NE28SD136	(	DN06B	)				
01NE28SD137	(	DN06C	)	01NE28SD138	(	DN06D	)				
01NE28SD139	(	DN06E	)	01NE28SD140	(	DN06F	)				
01NE28SD239	(	DN06G	)	01NE28SD141	(	DN06H	)				
01NE28SD142	(	DN06I	)	01NE28SD143	(	DN06J	)				
01NE28SD144	(	DN06K	)	01NE28SD145	(	DN06L	)				
01NE28SD146	(	DN06M	)	01NE28SD147	(	DN06N	)				
01NE28SD148	(	DN06O	)	01NE28SD149	(	DN06P	)				
01NE28SD150	(	DN06Q	)	01NE28SD151	(	DN06R	)				
01NE28SD251	(	DN06S	)	01NE28SD152	(	DN06T	)				

**Laboratory:** ARI  
**Prep Date:** 9/3/01  
**Prep Batch ID:** TD0831A-01  
**Spiked Sample:** 01NE09SD113  
**Matrix:** SX  
**Dil Factor:** 1

<b>ANALYTE</b>	Sample Result mg/Kg	Spike Conc. mg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD	Limits <sup>1</sup>						
diesel range organics	270	305	42	182	26 - 132	186	30	J/UJ	H	c	f
<b>Associated Samples:</b>											
01NE09SD107	(	DN76D	)	01NE09SD108	(	DN76E	)				
01NE30SS101	(	DN76F	)	01NE30SD101	(	DN76G	)				
01NE30SS103	(	DN76H	)	01NE30SS102	(	DN76I	)				
01NE09SD109	(	DN76J	)	01NE09SD213	(	DN76K	)				
01NE24SD114	(	DN76L	)	01NE24SD115	(	DN76M	)				
01NE32SS105	(	DN76N	)	01NE09SD113	(	DN76P	)				

**Laboratory:** ARI  
**Prep Date:** 9/4/01  
**Prep Batch ID:** TD0831B-01  
**Spiked Sample:** 01NE21SS269  
**Matrix:** SX  
**Dil Factor:** 5

ANALYTE	Sample Result mg/Kg	Spike Conc. mg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							

diesel range organics	220	275	57.5	143	26 - 132	147	30	J/UJ	H	c	f
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**Associated Samples:**

01NE21SS169	(	DN68A	)	01NE21SS269	(	DN68B	)
01NE09SD114	(	DN68F	)	01NE09SD114	(	DN68F-RE	)
01NE31SS101	(	DN68N	)	01NE31SS102	(	DN68O	)
01NE31SS103	(	DN68Q	)	01NE31SS104	(	DN68R	)
01NE32SS101	(	DN68S	)	01NE32SS102	(	DN68T	)
01NE32SS103	(	DN68U	)	01NE32SS104	(	DN68V	)

**Laboratory:** ARI  
**Prep Date:** 9/6/01  
**Prep Batch ID:** TD0831C-01  
**Spiked Sample:** 01NE31SS121  
**Matrix:** SX  
**Dil Factor:** 5

ANALYTE	Sample Result mg/Kg	Spike Conc. mg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							

diesel range organics	47	86.4	85	64	26 - 132	75.9	30	J/UJ	N	f
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**Associated Samples:**

01NE21SB169	(	DN69A	)	01NE21SB170	(	DN69B	)
01NE21SS170	(	DN69C	)	01NE21SB171	(	DN69D	)
01NE21SS171	(	DN69E	)	01NE21SS172	(	DN69F	)
01NE21SS173	(	DN69G	)	01NE21SD113	(	DN69H	)
01NE21SD114	(	DN69I	)	01NE31SS121	(	DN69N	)
01NE31SS122	(	DN69O	)	01NE31SS123	(	DN69P	)
01NE31SS124	(	DN69Q	)	01NE31SS221	(	DN69R	)

<sup>1</sup> Laboratory-established limits

<sup>2</sup> If the MS or MSD recovery is < LCL apply J to all detected results, apply UJ to all non-detects; if the MS or MSD recovery is > UCL apply J to all detected results; if the MS/MSD RPD is > UCL apply J to all detected results, apply UJ to all non-detects. For this review, qualifiers will apply to the spiked sample only

#### 5.4 Sample Duplicates

Sample duplicates were also analyzed. Precision between the primary and duplicate sample results was acceptable in all cases except the following:

Laboratory: ARI		<i>Primary Sample</i>	<i>Replicate Sample</i>	<i>RPD</i>	<i>Units</i>	<i>RPD Limit</i> <sup>1</sup>	<i>Q</i> <sup>2</sup>	<i>Bias RC</i>
<i>Analyte</i>		01NE09SD107 DN76D SX	01NE09SD107 DN76DDP SX					
diesel range organics		320 J	220	37	mg/Kg	30	J/UJ	N f

Laboratory: ARI		<i>Primary Sample</i>	<i>Replicate Sample</i>	<i>RPD</i>	<i>Units</i>	<i>RPD Limit</i> <sup>1</sup>	<i>Q</i> <sup>2</sup>	<i>Bias RC</i>
<i>Analyte</i>		01NE28SD118 DN04B SX	01NE28SD118 DN04BDP SX					
diesel range organics		330 J	520	45	mg/Kg	30	J/UJ	N f

Laboratory: SAS		<i>Primary Sample</i>	<i>Replicate Sample</i>	<i>RPD</i>	<i>Units</i>	<i>RPD Limit</i> <sup>1</sup>	<i>Q</i> <sup>2</sup>	<i>Bias RC</i>
<i>Analyte</i>		01NE31SS321 100492-11 SX	01NE31SS321 100492R11 SX					
diesel range organics		54 J	29	60	mg/Kg	50	J/UJ	N f

<sup>1</sup>  
Laboratory-established Limits

<sup>2</sup>  
According to the Functional Guidelines for Organic Data Review, If the duplicate RPD exceeds the UCL, flag the original sample as estimated J/UJ

#### 5.5 Laboratory Control Samples

Laboratory control samples were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

#### 5.6 Quantitation Limits

The practical quantitation limits (PQLs) achieved by the laboratories were acceptable relative to the estimated quantitation limits (EQL) suggested by this method for aqueous and soil samples. Project specific reporting limits were met by both labs for water. Five detected results were below the quantitation limit, and are flagged "J". Results below the reporting limit are considered qualitatively acceptable, but quantitatively unreliable, due to the uncertainty in precision near the limit of detection.

## 5.7 Other Qualifications

The following detected results are estimated due to calibration range exceedance:

**Laboratory:** SAS  
**Project ID:** 100302

Lab ID	Field ID	Matrix	Dil		Analyte	Result	PQL	Units	Q	Bias	RC
			Factor	Analyte							
100302-04	01NE28SD351	SX	1	diesel range organics	17000	54	mg/Kg	J	N	o	
100302-05	01NE28SD353	SX	1	diesel range organics	13000	36	mg/Kg	J	N	o	

**Laboratory:** SAS  
**Project ID:** 100492

Lab ID	Field ID	Matrix	Dil		Analyte	Result	PQL	Units	Q	Bias	RC
			Factor	Analyte							
100492-05	01NE31SS320	SX	1	residual range organics	14000	33	mg/Kg	J	N	o	

**Laboratory:** ARI  
**Project ID:** DN39

Lab ID	Field ID	Matrix	Dil		Analyte	Result	PQL	Units	Q	Bias	RC
			Factor	Analyte							
DN39B	01NE28SD160	SX	10	diesel range organics	58000	50	mg/Kg	J	N	o	
DN39C	01NE28SD161	SX	20	diesel range organics	60000	100	mg/Kg	J	N	o	
DN39D	01NE28SD163	SX	20	diesel range organics	49000	100	mg/Kg	J	N	o	
DN39E	01NE28SD164	SX	10	diesel range organics	48000	50	mg/Kg	J	N	o	
DN39F	01NE28SD263	SX	20	diesel range organics	50000	100	mg/Kg	J	N	o	
DN39H	01NE28SD172	SX	1	diesel range organics	5200	22	mg/Kg	J	N	o	
DN39P	01NE28SD178	SX	20	diesel range organics	42000	160	mg/Kg	J	N	o	

**Laboratory:** ARI  
**Project ID:** DN55

Lab ID	Field ID	Matrix	Dil		Analyte	Result	PQL	Units	Q	Bias	RC
			Factor	Analyte							
DN55H	01NE34SS106	SX	4	diesel range organics	1200	20	mg/Kg	J	N	o	

<sup>1</sup> According to the Functional Guidelines, any result that exceeds the calibration range should be flagged as estimated

Compounds detected at concentrations exceeding the calibration range are quantitatively unreliable. The samples listed above were appropriately diluted and reanalyzed.

### 5.8 QA / QC Triplicates

Twenty-three sets of QA / QC triplicate samples were collected for analysis by this method. A disagreement of greater than three times (when all results are above the RL) or greater than five times (when one result is nondetected) or three times (when one result is less than the RL) was found for the following primary, QC and QA triplicate sets:

**Matrix:** SX

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN05E	01NE28SD157	Primary Sample	diesel range organics	15000	mg/Kg		
DN05H	01NE28SD257	QC Dup of 01NE28SD157	diesel range organics	18000	mg/Kg		
100302-06	01NE28SD357	QA Dup of 01NE28SD157	diesel range organics	3700	mg/Kg		

**Matrix:** SX

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN78A	01NE31SS105	Primary Sample	diesel range organics	3400	mg/Kg		
DN78B	01NE31SS205	QC Dup of 01NE31SS105	diesel range organics	3700	mg/Kg		
100492-06	01NE31SS305	QA Dup of 01NE31SS105	diesel range organics	990	mg/Kg		

No data were qualified on the basis of field duplicate precision.

A major disagreement of greater than five times (when all results are above the RL) or greater than ten times (when one result is nondetected) or greater than five times when (one result is less than the RL) was found for the following primary, QC and QA triplicate sets:

**Matrix:** SX

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN78A	01NE31SS105	Primary Sample	motor oil	< 500	mg/Kg	UJ	N n
DN78B	01NE31SS205	QC Dup of 01NE31SS105	motor oil	< 500	mg/Kg	UJ	N n
100492-06	01NE31SS305	QA Dup of 01NE31SS105	residual range organi	43	mg/Kg	J	N n

**Matrix:** SX

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN06E	01NE28SD139	Primary Sample	diesel range organics	520	mg/Kg	J	N c,f,n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	diesel range organics	610	mg/Kg	J	N n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	diesel range organics	64	mg/Kg	J	N m,n

Results for these samples have been flagged "n".

### **5.9 Additional Comments**

Due to elevated temperature, diesel/residual range organics results for sample 01NE35GW301 are qualified as estimated. Results should be considered minimum values.

Some samples required dilutions to accurately quantitate diesel range organics (see section 5.7). All reporting limits and concentrations were adjusted for the dilutions. Nondetected residual range organics and results within the calibration range should be used from the original analysis, and DRO results outside the calibration range (flagged o) should be used from the appropriate dilutions.

### **Overall Assessment**

Major and minor data quality deficiencies were found, resulting in a significant amount of qualified data. No data were rejected. Most qualifications made were due to surrogate recovery problems, and poor accuracy and/or precision in the matrix spikes and sample duplicates indicating matrix effect. Tables 4 through 14 list all qualified sample results, by data quality indicator and analysis type. Results that were qualified as estimated or nondetected are useable for limited purposes. All other data generated by this method should be considered useable as reported.

## **6.0 Organochlorine Pesticides / PCBs**

The following number of samples were prepared and analyzed by the listed methods:

**Laboratory: ARI**

<b># of Samples</b>	<b>Matrix</b>	<b>Prep Method</b>	<b>Analysis Method</b>	<b>Reporting Units</b>
156	SX	SW3550B	SW8082	µg/Kg
38	SX	SW3550B	SW8081	µg/Kg
31	WX	SW3510C	SW8082	µg/L

**Laboratory: SAS**

<b># of Samples</b>	<b>Matrix</b>	<b>Prep Method</b>	<b>Analysis Method</b>	<b>Reporting Units</b>
15	SX	SW3550	SW8082	mg/Kg
4	WX	SW3510	SW8082	µg/L
1	SX	SW3550	SW8081A	µg/Kg

Samples analyzed by this method are identified in Table 1.

### 6.1 Holding Time

All samples were prepared and analyzed within the required technical holding time except the following:

Laboratory: ARI

SDG:	DN40	Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Holding Time (Days)		RTHT (Days)		Q	Bias	RC
								Prep	Anal	Prep	Anal			
DN40G-RE	01NE29SD120	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40H-RE	01NE29SD121	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40I-RE	01NE29SD122	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40A-RE	01NE29SD123	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40B-RE	01NE29SD124	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40C-RE	01NE29SD125	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40N-RE	01NE29SD126	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40M-RE	01NE29SD127	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40E-RE	01NE29SD128	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40F-RE	01NE29SD129	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		
DN40D-RE	01NE29SD225	SX	8/21/01	9/5/01	9/7/01	15	2	14	40	J/UJ	L	e		

\*Date received by laboratory: 8/24/01

SDG:	DN73	Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Holding Time (Days)		RTHT (Days)		Q	Bias	RC
								Prep	Anal	Prep	Anal			
DN73M	01NE21SW11	WX	8/21/01	8/29/01	8/31/01	8	2	7	40	J/UJ	L	e		

\*Date received by laboratory: 8/28/01

Laboratory: SAS

SDG:	100492	Lab ID	Field ID	Matrix	Collected	Prepared*	Analyzed	Holding Time (Days)		RTHT (Days)		Q	Bias	RC
								Prep	Anal	Prep	Anal			
100492-13	01NE09SD313	SX	8/24/01	9/10/01	9/10/01	17	0	14	40	J/UJ	L	e		
100492-12	01NE14SS303	SX	8/24/01	9/10/01	9/10/01	17	0	14	40	J/UJ	L	e		
100492-04	01NE21SS369	SX	8/24/01	9/10/01	9/10/01	17	0	14	40	J/UJ	L	e		
100492-10	01NE31SS302	SX	8/24/01	9/10/01	9/10/01	17	0	14	40	J/UJ	L	e		

\*Date received by laboratory: 8/28/01

<sup>1</sup> Required technical holding time established for the method

<sup>2</sup> According to the Functional Guidelines for Organic Data Review, if sample preparation or analysis holding time is exceeded, flag detected and nondetected results as estimated

## 6.2 Surrogates

All surrogate recoveries were within the required limits except the following:

Laboratory: ARI

SDG: DN04

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	<sup>1</sup> Q	<sup>2</sup> Bias	RC
DN04P-RE	01NE28SD131	SX	1	decachlorobiphenyl	38.2	39 - 132	J/UJ	L	b

SDG: DN07

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	<sup>1</sup> Q	<sup>2</sup> Bias	RC
DN07G	01NE28SD113	SX	1	tetrachloro-m-xylene	24.8	34 - 128	J/UJ	L	b
DN07P-DL	01NE07SS127	SX	20	tetrachloro-m-xylene decachlorobiphenyl	0 0	34 - 128 39 - 132	none*	NA	NA

SDG: DN38

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	<sup>1</sup> Q	<sup>2</sup> Bias	RC
DN38J	01NE28SD167	SX	4	tetrachloro-m-xylene	32	34 - 128	J/UJ	L	b

SDG: DN39

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	<sup>1</sup> Q	<sup>2</sup> Bias	RC
DN39H	01NE28SD172	SX	1	tetrachloro-m-xylene	33.2	34 - 128	J/UJ	L	b

SDG: DN68

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	<sup>1</sup> Q	<sup>2</sup> Bias	RC
DN68U	01NE32SS103	SX	1	decachlorobiphenyl	37.5	41 - 128	J/UJ	L	b
DN68V	01NE32SS104	SX	1	tetrachloro-m-xylene	118	40 - 116	J/none	H	b

SDG: DN69

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	<sup>1</sup> Q	<sup>2</sup> Bias	RC
DN69K-DL	01NE14SS102	SX	20	decachlorobiphenyl tetrachloro-m-xylene	0 0	39 - 132 34 - 128	none*	NA	NA

SDG: DN71

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits	<sup>1</sup> Q	<sup>2</sup> Bias	RC
DN71D	01NE09MW10	WX	1	decachlorobiphenyl	19	22 - 139	J/UJ	L	b

Laboratory: ARI

SDG: DN76

Lab ID	Field ID	Matrix	Dil	Surrogate	% Rec	Recovery	Q	Bias	RC
			Factor			Limits			
DN76N	01NE32SS105	SX	1	decachlorobiphenyl	38.2	41 - 128	J/UJ	L	b

SDG: DQ74

Lab ID	Field ID	Matrix	Dil	Surrogate	% Rec	Recovery	Q	Bias	RC
			Factor			Limits			
DQ74A	01NE16SS167	SX	1	decachlorobiphenyl	40	41 - 128	J/UJ	L	b
DQ74B	01NE16SS168	SX	1	decachlorobiphenyl tetrachloro-m-xylene	29.2 38.8	41 - 128 40 - 116	J/UJ J/UJ	L L	b b
DQ74B-DL	01NE16SS168	SX	5	decachlorobiphenyl	36.2	41 - 128	J/UJ	L	b
DQ74C	01NE28SD183	SX	1	decachlorobiphenyl	35.2	41 - 128	J/UJ	L	b
DQ74D	01NE28SD184	SX	1	decachlorobiphenyl	35.8	41 - 128	J/UJ	L	b
DQ74E	01NE28SD185	SX	1	decachlorobiphenyl	34.5	41 - 128	J/UJ	L	b
DQ74E-DL	01NE28SD185	SX	40	tetrachloro-m-xylene decachlorobiphenyl	0 0	40 - 116 41 - 128	none* none*	NA NA	NA NA
DQ74F-DL	01NE28SD186	SX	20	decachlorobiphenyl tetrachloro-m-xylene	0 0	41 - 128 40 - 116	none* none*	NA NA	NA NA
DQ74G	01NE28SD187	SX	1	decachlorobiphenyl	31.8	41 - 128	J/UJ	L	b
DQ74J	01NE28SD190	SX	1	decachlorobiphenyl tetrachloro-m-xylene	32.2 31	41 - 128 40 - 116	J/UJ J/UJ	L L	b b
DQ74K	01NE28SD191	SX	1	decachlorobiphenyl	38.2	41 - 128	J/UJ	L	b
DQ74L	01NE28SD192	SX	1	decachlorobiphenyl tetrachloro-m-xylene	36.2 38.2	41 - 128 40 - 116	J/UJ J/UJ	L L	b b
DQ74M	01NE28SD292	SX	1	decachlorobiphenyl tetrachloro-m-xylene	38.8 39.5	41 - 128 40 - 116	J/UJ J/UJ	L L	b b
DQ74N	01NE28SD285	SX	1	decachlorobiphenyl	34	41 - 128	J/UJ	L	b
DQ74N-DL	01NE28SD285	SX	20	tetrachloro-m-xylene decachlorobiphenyl	0 0	40 - 116 41 - 128	none* none*	NA NA	NA NA

<sup>1</sup> Laboratory-established limits

<sup>2</sup> According to the Functional Guidelines for Organic Data Review, if the surrogate recovery is > UCL, flag detected results J; if the surrogate recovery is < LCL, flag detected results J and non-detects UJ; if the surrogate recovery is less than 10%, flag detected results J and non-detects UR

### **6.3 Blanks**

Method blanks were analyzed at the minimum required frequency. All target compounds were reported as non-detected in all cases.

Field blanks were not collected for analysis by this method.

#### 6.4 Matrix Spike/Matrix Spike Duplicates

MS/MSDs were analyzed at the required frequency. All recoveries and RPDs were within the required limits except the following:

Laboratory: ARI  
SDG: DN68  
Prep Date: 9/3/01  
Prep Batch ID: PE0831A-01  
Spiked Sample: 01NE31SS102  
Matrix: SX  
Dil Factor: 1

ANALYTE	Sample Result µg/Kg	Spike Conc. µg/Kg	% Recovery		Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD						
4,4'-DDT	< 97	37	403	414	35 - 117	28	NA	J/none	H	c

Associated

Samples: 01NE31SS101 ( DN68N ) 01NE31SS101 ( DN68N-DL )  
01NE31SS102 ( DN68O ) 01NE31SS102 ( DN68O-DL )  
01NE31SS202 ( DN68P ) 01NE31SS202 ( DN68P-DL )  
01NE31SS103 ( DN68Q ) 01NE31SS103 ( DN68Q-DL )  
01NE31SS104 ( DN68R ) 01NE31SS104 ( DN68R-DL )  
01NE32SS103 ( DN68U ) 01NE32SS104 ( DN68V )  
01NE31SS121 ( DN69N ) 01NE31SS122 ( DN69O )  
01NE31SS122 ( DN69O-DL ) 01NE31SS123 ( DN69P )  
01NE31SS123 ( DN69P-DL ) 01NE31SS124 ( DN69Q )  
01NE32SS105 ( DN76N )

**Laboratory:** SAS  
**SDG:** 100492  
**Prep Date:** 9/5/01  
**Prep Batch ID:** PE1416  
**Spiked Sample:** 01NE31SS302  
**Matrix:** SX  
**Dil Factor:** 1

ANALYTE	Sample Result µg/Kg	Spike Conc. µg/Kg	% Recovery		Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD						
endrin	<	2.3	53.4	1050	1010	45 - 145	-3.9	22	J/none	H c
dieldrin	<	2.3	53.4	464	450	47 - 135	-3.1	26	J/none	H c
4,4'-DDT	<	2.3	53.4	764	743	47 - 135	-2.8	26	J/none	H c

**Associated Samples:** 01NE31SS302 ( 100492-10 )

<sup>1</sup> Laboratory-established limits

<sup>2</sup> If the MS or MSD recovery is < LCL apply J to all detected results, apply UJ to all non-detects; if the MS or MSD recovery is > UCL apply J to all detected results; if the MS/MSD RPD is > UCL apply J to all detected results, apply UJ to all non-detects. For this review, qualifiers will apply to the spiked sample only

## 6.5 Laboratory Control Samples

Laboratory control samples were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

## 6.6 Quantitation Limits

The practical quantitation limits (PQLs) achieved by the laboratories were acceptable relative to the estimated quantitation limits (EQL) suggested by this method for aqueous and soil matrix samples. All detected results reported were above the quantitation limit. Project specific reporting limits were met by both laboratories for water.

## 6.7 Other Qualifications

The following detected results are estimated due to calibration range exceedance:

Laboratory: ARI  
Project ID: DN68

Lab ID	Field ID	Matrix	Dil		Result	PQL	Units	Q	Bias	RC
			Factor	Analyte						
DN68O	01NE31SS102	SX	1	aroclor 1260	3200	37	µg/Kg	J	N	o
DN68Q	01NE31SS103	SX	1	aroclor 1260	3000	35	µg/Kg	J	N	o
DN68R	01NE31SS104	SX	1	aroclor 1260	3200	35	µg/Kg	J	N	o

Laboratory: ARI  
Project ID: DQ74

Lab ID	Field ID	Matrix	Dil		Result	PQL	Units	Q	Bias	RC
			Factor	Analyte						
DQ74B	01NE16SS168	SX	1	4,4'-DDT	140	3.8	µg/Kg	J	N	o
DQ74C	01NE28SD183	SX	1	4,4'-DDD	200	7	µg/Kg	J	N	o
DQ74F	01NE28SD186	SX	1	4,4'-DDD	290	5	µg/Kg	J	N	o

<sup>1</sup>

According to the Functional Guidelines, any result that exceeds the calibration range should be flagged as estimated

Compounds detected at concentrations exceeding the calibration range are quantitatively unreliable. The samples listed above were appropriately diluted and reanalyzed.

## 6.8 QA / QC Triplicates

Nineteen sets of QA / QC triplicate samples were collected for analysis by this method. All samples were reported as nondetected for all target compounds.

## 6.9 Additional Comments

In some cases aroclor reporting limits were elevated due to matrix interference. In some samples, high levels of aroclor 1260 saturated the detector during analysis, and therefore aroclor 1260 could not be reported on the undiluted run and was reported from the dilution. Throughout the project only aroclor 1242 was used as the matrix spike and LCS spiking compound although this analyte was not detected.

## Overall Assessment

Minor data quality deficiencies were found, resulting in a significant amount of qualified data. No data were rejected. Most qualifications made were due to low surrogate recovery indicating matrix effect. Tables 4 through 14 list all qualified sample results, by data quality indicator and analysis type. Results that were qualified as estimated or nondetected are useable for limited purposes. All other data generated by this method should be considered useable as reported.

## **7.0 Polynuclear Aromatic Hydrocarbons**

The following number of samples were prepared and analyzed by the listed methods:

**Laboratory: ARI**

<b># of Samples</b>	<b>Matrix</b>	<b>Prep Method</b>	<b>Analysis Method</b>	<b>Reporting Units</b>
113	SX	SW3550B	8270SIM	µg/Kg
25	WX	SW3520C	8270SIM	µg/L

**Laboratory: SAS**

<b># of Samples</b>	<b>Matrix</b>	<b>Prep Method</b>	<b>Analysis Method</b>	<b>Reporting Units</b>
12	SX	SW3550	SW8270C	µg/Kg
3	WX	SW3510	SW8270C	µg/L

Samples analyzed by this method are identified in Table 1.

### 7.1 Holding Time

All samples were prepared and analyzed within the required technical holding time except the following:

**Laboratory: ARI**

SDG:	DN04	Matrix	Collected	Prepared*	Analyzed	Holding Time (Days)		RTHT (Days)		Q <sup>2</sup>	Bias	RC
						Prep	Anal	Prep	Anal			
		SX	8/18/01	9/5/01	9/7/01	18	2	14	40	J/UJ	L	e
		SX	8/18/01	9/5/01	9/6/01	18	1	14	40	J/UJ	L	e

\*Date received by laboratory: 8/21/01

SDG:	DN06	Matrix	Collected	Prepared*	Analyzed	Holding Time (Days)		RTHT (Days)		Q <sup>2</sup>	Bias	RC
						Prep	Anal	Prep	Anal			
		SX	8/19/01	9/5/01	9/6/01	17	1	14	40	J/UJ	L	e
		SX	8/19/01	9/5/01	9/6/01	17	1	14	40	J/UJ	L	e
		SX	8/19/01	9/5/01	9/7/01	17	2	14	40	J/UJ	L	e
		SX	8/19/01	9/5/01	9/6/01	17	1	14	40	J/UJ	L	e

\*Date received by laboratory: 8/21/01

SDG:	DN39	Matrix	Collected	Prepared*	Analyzed	Holding Time (Days)		RTHT (Days)		Q <sup>2</sup>	Bias	RC
						Prep	Anal	Prep	Anal			
		SX	8/20/01	9/6/01	9/7/01	17	1	14	40	J/UJ	L	e

\*Date received by laboratory: 8/24/01

SDG:	DN40	Matrix	Collected	Prepared*	Analyzed	Holding Time (Days)		RTHT (Days)		Q <sup>2</sup>	Bias	RC
						Prep	Anal	Prep	Anal			
		SX	8/21/01	9/6/01	9/7/01	16	1	14	40	J/UJ	L	e
		SX	8/21/01	9/6/01	9/7/01	16	1	14	40	J/UJ	L	e
		SX	8/21/01	9/6/01	9/7/01	16	1	14	40	J/UJ	L	e

\*Date received by laboratory: 8/24/01

SDG:	DN55	Matrix	Collected	Prepared*	Analyzed	Holding Time (Days)		RTHT (Days)		Q <sup>2</sup>	Bias	RC
						Prep	Anal	Prep	Anal			
		SX	8/23/01	9/12/01	9/17/01	20	5	14	40	J/UJ	L	e

\*Date received by laboratory: 8/25/01

SDG:	DN76	Matrix	Collected	Prepared*	Analyzed	Holding Time (Days)		RTHT <sup>1</sup> (Days)		Q	Bias	RC
						Prep	Anal	Prep	Anal			
DN76E-RE	01NE09SD108	SX	8/23/01	9/12/01	9/17/01	20	5	14	40	J/UJ	L	e
DN76P-RE	01NE09SD113	SX	8/24/01	9/12/01	9/18/01	19	6	14	40	J/UJ	L	e
DN76H-RE	01NE30SS103	SX	8/24/01	9/12/01	9/17/01	19	5	14	40	J/UJ	L	e

\*Date received by laboratory: 8/28/01

<sup>1</sup> Required technical holding time established for the method

<sup>2</sup> According to the Functional Guidelines for Organic Data Review, if sample preparation or analysis holding time is exceeded, flag detected and nondetected results as estimated

## 7.2 Surrogates

All surrogate recoveries were within the required limits except the following:

Laboratory: ARI											
SDG: DN04											
Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
				d14-dibenzo(a,h)anthracene	d10-2-methylnaphthalene		30 - 160	30 - 160			
DN04I-DL	01NE28SD125	SX	50	d14-dibenzo(a,h)anthracene	d10-2-methylnaphthalene	0	30 - 160	none*	NA	NA	NA
DN04M-DL	01NE28SD225	SX	50	d10-2-methylnaphthalene	d14-dibenzo(a,h)anthracene	0	30 - 160	none*	NA	NA	NA
DN04S	01NE28SD134	SX	50	d14-dibenzo(a,h)anthracene	d10-2-methylnaphthalene	0	30 - 160	none*	NA	NA	NA
SDG: DN05											
Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
				d14-dibenzo(a,h)anthracene	d10-2-methylnaphthalene		30 - 160	30 - 160			
DN05F-DL	01NE28SD158	SX	50	d14-dibenzo(a,h)anthracene	d10-2-methylnaphthalene	0	30 - 160	none*	NA	NA	NA
SDG: DN06											
Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
				d14-dibenzo(a,h)anthracene	d10-2-methylnaphthalene		30 - 160	J/UJ	L	b	
DN06H	01NE28SD141	SX	1	d14-dibenzo(a,h)anthracene	d10-2-methylnaphthalene	29.7	30 - 160	J/UJ	L	b	
DN06H-DL	01NE28SD141	SX	3	d14-dibenzo(a,h)anthracene	d14-dibenzo(a,h)anthracene	27	30 - 160	J/UJ	L	b	
DN06J-DL	01NE28SD143	SX	40	d10-2-methylnaphthalene	d14-dibenzo(a,h)anthracene	0	30 - 160	none*	NA	NA	NA
DN06K-DL	01NE28SD144	SX	40	d10-2-methylnaphthalene	d14-dibenzo(a,h)anthracene	0	30 - 160	none*	NA	NA	NA
DN06L	01NE28SD145	SX	50	d14-dibenzo(a,h)anthracene	d10-2-methylnaphthalene	0	30 - 160	none*	NA	NA	NA
DN06L-DL	01NE28SD145	SX	100	d10-2-methylnaphthalene	d14-dibenzo(a,h)anthracene	0	30 - 160	none*	NA	NA	NA
DN06O-DL	01NE28SD148	SX	30	d10-2-methylnaphthalene	d14-dibenzo(a,h)anthracene	0	30 - 160	none*	NA	NA	NA
DN06Q	01NE28SD150	SX	50	d14-dibenzo(a,h)anthracene	d10-2-methylnaphthalene	0	30 - 160	none*	NA	NA	NA
SDG: DN07											
Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
				d10-2-methylnaphthalene	d14-dibenzo(a,h)anthracene		30 - 160	30 - 160			
DN07I-DL	01NE28SD115	SX	20	d10-2-methylnaphthalene	d14-dibenzo(a,h)anthracene	0	30 - 160	none*	NA	NA	NA

Laboratory: ARI  
SDG: DN38

Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
DN38A	01NE29SD114	SX	1	d14-dibenzo(a,h)anthracene	26.7	30 - 160	J/UJ	L	b		
DN38L	01NE28SD169	SX	1	d14-dibenzo(a,h)anthracene	170	30 - 160	J/none	H	b		

SDG: DN39

Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
DN39K	01NE28SD175	SX	3	d10-2-methylnaphthalene	19	30 - 160	J/UJ	L	b		
				d14-dibenzo(a,h)anthracene	29	30 - 160	J/UJ	L	b		
DN39K-RE	01NE28SD175	SX	1	d14-dibenzo(a,h)anthracene	24	30 - 160	J/UJ	L	b		
				d10-2-methylnaphthalene	19	30 - 160	J/UJ	L	b		

SDG: DN40

Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
DN40E	01NE29SD128	SX	3	d10-2-methylnaphthalene	9	30 - 160	J/UR	L	b		
				d14-dibenzo(a,h)anthracene	21	30 - 160	J/UJ	L	b		
DN40N	01NE29SD126	SX	3	d14-dibenzo(a,h)anthracene	20	30 - 160	J/UJ	L	b		
				d10-2-methylnaphthalene	11	30 - 160	J/UJ	L	b		
DN40N-RE	01NE29SD126	SX	3	d10-2-methylnaphthalene	26	30 - 160	J/UJ	L	b		

SDG: DN55

Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
DN55D	01NE34SS101	SX	1	d10-2-methylnaphthalene	26	30 - 160	J/UJ	L	b		
				d14-dibenzo(a,h)anthracene	16	30 - 160	J/UJ	L	b		

SDG: DN76

Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
DN76E	01NE09SD108	SX	3	d14-dibenzo(a,h)anthracene	25	30 - 160	J/UJ	L	b		
DN76H	01NE30SS103	SX	3	d14-dibenzo(a,h)anthracene	29	30 - 160	J/UJ	L	b		
DN76P	01NE09SD113	SX	3	d14-dibenzo(a,h)anthracene	23	30 - 160	J/UJ	L	b		

Laboratory: SAS

SDG: 100302

Lab ID	Field ID	Matrix	Dil Factor	Surrogate		% Rec	Recovery Limits		Q	Bias	RC
100302-02	01NE28SD311	SX	1	2-fluorobiphenyl	50	55 - 148	none*	NA	NA		
100302-05	01NE28SD353	SX	10	2-fluorobiphenyl	34	55 - 148	none*	NA	NA		
100302L03	01NE28SD325	SX	10	nitrobenzene-d5	178	51 - 159	J/none	H	b		

Laboratory: SAS  
SDG: 100302

Lab ID	Field ID	Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits		Q	Bias	RC
						1	2			
100302L04	01NE28SD351	SX	100	p-terphenyl-d14	0	43 - 148	none*	NA	NA	NA
				nitrobenzene-d5		51 - 159	none*	NA	NA	NA
				2-fluorobiphenyl		55 - 148	none*	NA	NA	NA
SDG: 100413		Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits		Q	Bias	RC
						1	2			
						51 - 159	none*	NA	NA	NA
100413-04	01NE28SD363	SX	100	nitrobenzene-d5	0	55 - 148	none*	NA	NA	NA
				2-fluorobiphenyl		43 - 148	none*	NA	NA	NA
				p-terphenyl-d14		55 - 148	none*	NA	NA	NA
100413-05	01NE29SD314	SX	1	2-fluorobiphenyl	50.4	55 - 148	none*	NA	NA	NA
SDG: 100492		Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits		Q	Bias	RC
						1	2			
						55 - 148	none*	NA	NA	NA
SDG: 100553		Matrix	Dil Factor	Surrogate	% Rec	Recovery Limits		Q	Bias	RC
						1	2			
						48 - 137	J/UJ	L	b	
100553-01	01NE07WP302	WX	1	p-terphenyl-d14	40.6	59 - 126	J/UJ	L	b	
				2-fluorobiphenyl		44.3				

<sup>1</sup> Laboratory-established limits

<sup>2</sup> According to the Functional Guidelines for Organic Data Review, for base/neutral or acid fractions as applicable; if the recoveries for any two surrogates in one fraction are > UCL, flag detected results J; if the recoveries for any two surrogates in one fraction are < LCL, flag detected results J and non-detects UJ; if any surrogate recovery in one fraction is less than 10%, flag detected results J and non-detects UR

\* qualifiers do not apply if the sample was diluted by >5 times and the recovery is <LCL

### 7.3 Blanks

Method blanks were analyzed at the minimum required frequency. All target compounds were reported as nondetected.

#### Blanks (cont.)

Field blanks were not collected for analysis by this method.

#### 7.4 Matrix Spike/Matrix Spike Duplicates

MS/MSDs were analyzed at the required frequency. All recoveries and RPDs were within the required limits except the following:

**Laboratory:** SAS

**Prep Date:** 8/24/01

**Prep Batch ID:** SS0361

**Spiked Sample:** 01NE28SD311

**Matrix:** SX

**Dil Factor:** 1

Analyte	Sample Result µg/Kg	Spike Conc. µg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							
phenanthrene	55	454	166	86	54 - 149	55.1	35	J/UJ	H	c	f
fluoranthene	110	454	255	145	53 - 153	48.8	34	J/UJ	H	c	f
pyrene	66	454	149	102	54 - 136	31.2	40	J/none	H	c	

**Associated Samples:**

01NE28SD311	( 100302-02 )	01NE28SD325	( 100302-03 )
01NE28SD351	( 100302-04 )	01NE28SD353	( 100302-05 )
01NE28SD357	( 100302-06 )	01NE28SD339	( 100302-08 )
01NE28SD325	( 100302L03 )	01NE28SD351	( 100302L04 )

**Laboratory:** SAS

**Prep Date:** 8/27/01

**Prep Batch ID:** SS0364

**Spiked Sample:** 01NE29SD325

**Matrix:** SX

**Dil Factor:** 1

Analyte	Sample Result µg/Kg	Spike Conc. µg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							
benzo(b)fluoranthene	< 2	111	83.2	131	48 - 149	45	38	J/UJ	N	f	
benzo(k)fluoranthene	< 2	111	62.6	99.6	47 - 143	46	42	J/UJ	N	f	

**Associated Samples:**

01NE29SD325	( 100413-01 )	01NE28SD375	( 100413-02 )
01NE28SD371	( 100413-03 )	01NE28SD363	( 100413-04 )
01NE29SD314	( 100413-05 )		

<sup>1</sup> Laboratory-established recovery limits

<sup>2</sup> If the MS or MSD recovery is < LCL apply J to all detected results, apply UJ to all non-detects; if the MS or MSD recovery is > UCL apply J to all detected results; if the MS/MSD RPD is > UCL apply J to all detected results, apply UJ to all non-detects. For this review, qualifiers apply to the spiked sample only

## 7.5 Laboratory Control Samples

Laboratory control samples were analyzed at the required frequency. All recoveries and RPDs were within the required limits except the following:

Laboratory: ARI  
LCS Batch ID: SM0824D-01  
Prep Date: 8/28/01  
Matrix: SX

Analyte	Limits							
	LCS	LCSD	RPD	% Rec	RPD	Q <sup>2</sup>	Bias	RC
phenanthrene	116	NA	NA	48 - 112	30	J/none	H	d
benzo(k)fluoranthene	135	NA	NA	44 - 123	30	J/none	H	d
Associated Samples:	01NE28SD149 ( DN06P )							

<sup>1</sup>

Laboratory-established Limits

<sup>2</sup>

For specific compounds in all samples associated with the preparation batch - if the LCS recovery is > UCL apply J to all detected results; if the LCS recovery is < LCL apply J to all detected results, apply UR to all non-detects; if the RPD is > UCL, apply J to all detected results, apply UJ to all nondetects

## 7.6 Quantitation Limits

The practical quantitation limits (PQLs) achieved by SAS were acceptable relative to the estimated quantitation limits (EQL) suggested by this method for aqueous and soil samples. Reporting limits at ARI were high for many compounds in soils. In addition, reporting limits varied significantly from sample to sample. Project specific reporting limits were met for water by both laboratories. One detected result was below the quantitation limit, and is flagged "J". Results below the reporting limit are considered qualitatively acceptable, but quantitatively unreliable, due to the uncertainty in precision near the limit of detection.

## 7.7 Other Qualifications

The following detected results are estimated due to calibration range exceedance:

**Project ID: 100302**

Lab ID	Field ID	Matrix	Dil Factor	Analyte	Result	PQL	Units	Q	Bias	RC
100302-03	01NE28SD325	SX	1	2-methylnaphthalene	1900	3.2	µg/Kg	J	N	o
100302-04	01NE28SD351	SX	10	2-methylnaphthalene	19000	23	µg/Kg	J	N	o

**Project ID: DN04**

Lab ID	Field ID	Matrix	Dil Factor	Analyte	Result	PQL	Units	Q	Bias	RC
DN04D	01NE28SD120	SX	1	2-methylnaphthalene	5500	12	µg/Kg	J	N	o
				naphthalene	1600	12	µg/Kg	J	N	o
DN04G	01NE28SD123	SX	1	naphthalene	1500	14	µg/Kg	J	N	o
DN04H	01NE28SD124	SX	1	2-methylnaphthalene	5000	6.2	µg/Kg	J	N	o
				naphthalene	3500	6.2	µg/Kg	J	N	o
DN04I	01NE28SD125	SX	5	2-methylnaphthalene	5600	20	µg/Kg	J	N	o
				naphthalene	3100	20	µg/Kg	J	N	o
DN04K	01NE28SD127	SX	1	2-methylnaphthalene	30000	190	µg/Kg	J	N	o
DN04M	01NE28SD225	SX	10	2-methylnaphthalene	9700	37	µg/Kg	J	N	o
				naphthalene	4400	37	µg/Kg	J	N	o
DN04N	01NE28SD129	SX	1	2-methylnaphthalene	3700	7.7	µg/Kg	J	N	o
				naphthalene	4700	7.7	µg/Kg	J	N	o
DN04S-RE	01NE28SD134	SX	1	2-methylnaphthalene	25000	160	µg/Kg	J	N	o

**Project ID: DN05**

Lab ID	Field ID	Matrix	Dil Factor	Analyte	Result	PQL	Units	Q	Bias	RC
DN05B	01NE28SD154	SX	1	2-methylnaphthalene	18000	140	µg/Kg	J	N	o
DN05C	01NE28SD155	SX	1	2-methylnaphthalene	260000	910	µg/Kg	J	N	o
				naphthalene	130000	910	µg/Kg	J	N	o
DN05D	01NE28SD156	SX	1	2-methylnaphthalene	250000	930	µg/Kg	J	N	o
				naphthalene	110000	930	µg/Kg	J	N	o
DN05F	01NE28SD158	SX	1	2-methylnaphthalene	14000	34	µg/Kg	J	N	o
				naphthalene	6500	34	µg/Kg	J	N	o

**Project ID: DN06**

Lab ID	Field ID	Matrix	Dil Factor	Analyte	Result	PQL	Units	Q	Bias	RC
DN06E	01NE28SD139	SX	1	fluoranthene	890	4.6	µg/Kg	J	N	o
				phenanthrene	990	4.6	µg/Kg	J	N	o
				pyrene	1000	4.6	µg/Kg	J	N	o
DN06I	01NE28SD142	SX	1	2-methylnaphthalene	620	4.6	µg/Kg	J	N	o
DN06J	01NE28SD143	SX	1	2-methylnaphthalene	52000	140	µg/Kg	J	N	o

**Project ID:** DN06

Lab ID	Field ID	Matrix	Dil Factor	Analyte	Result	PQL	Units	Q	Bias	RC
				naphthalene	23000	140	µg/Kg	J	N	o
DN06K	01NE28SD144	SX	1	2-methylnaphthalene	41000	110	µg/Kg	J	N	o
				naphthalene	18000	110	µg/Kg	J	N	o
DN06L	01NE28SD145	SX	50	2-methylnaphthalene	33000	230	µg/Kg	J	N	o
DN06M	01NE28SD146	SX	1	2-methylnaphthalene	280000	700	µg/Kg	J	N	o
				naphthalene	140000	700	µg/Kg	J	N	o
DN06O	01NE28SD148	SX	1	2-methylnaphthalene	39000	120	µg/Kg	J	N	o
				naphthalene	17000	120	µg/Kg	J	N	o

**Project ID:** DN07

Lab ID	Field ID	Matrix	Dil Factor	Analyte	Result	PQL	Units	Q	Bias	RC
DN07I	01NE28SD115	SX	3	2-methylnaphthalene	6700	41	µg/Kg	J	N	o

**Project ID:** DN39

Lab ID	Field ID	Matrix	Dil Factor	Analyte	Result	PQL	Units	Q	Bias	RC
DN39C	01NE28SD161	SX	1	2-methylnaphthalene	260000	1600	µg/Kg	J	N	o

<sup>1</sup> According to the Functional Guidelines, any result that exceeds the calibration range should be flagged as estimated

Compounds detected at concentrations exceeding the calibration range are quantitatively unreliable. The listed samples were appropriately diluted and reanalyzed.

### 7.8 QA / QC Triplicates

Fourteen sets of QA / QC triplicate samples were collected for analysis by this method. A disagreement of greater than four times (soil), two times (water) (when all results were above the RL) or five times (when one result is nondetected) or greater than three times (when one result was below the RL) was found for the following target compounds in the primary, QC and QA triplicate sets:

**Matrix:** SX

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN04I	01NE28SD125	Primary Sample acenaphthene	140	µg/Kg			
DN04M	01NE28SD225	QC Dup of 01NE28SD125 acenaphthene	270	µg/Kg			
100302-03	01NE28SD325	QA Dup of 01NE28SD125 acenaphthene	57	µg/Kg			

**Matrix:** SX

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN06R	01NE28SD151	Primary Sample benzo(b)fluoranthene	< 700	µg/Kg	U		
DN06S	01NE28SD251	QC Dup of 01NE28SD151 benzo(b)fluoranthene	< 680	µg/Kg	U		
100302-04	01NE28SD351	QA Dup of 01NE28SD151 benzo(b)fluoranthene	86	µg/Kg			
DN06R	01NE28SD151	Primary Sample chrysene	< 700	µg/Kg	U		
DN06S	01NE28SD251	QC Dup of 01NE28SD151 chrysene	< 680	µg/Kg	U		
100302-04	01NE28SD351	QA Dup of 01NE28SD151 chrysene	120	µg/Kg			

**Matrix:** SX

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN05A	01NE28SD153	Primary Sample pyrene	< 670	µg/Kg	U		
DN05G	01NE28SD253	QC Dup of 01NE28SD153 pyrene	< 570	µg/Kg	U		
100302-05	01NE28SD353	QA Dup of 01NE28SD153 pyrene	85	µg/Kg			

**Matrix:** SX

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN38A	01NE29SD114	Primary Sample acenaphthene	13	µg/Kg	J	L	b
DN38B	01NE29SD214	QC Dup of 01NE29SD114 acenaphthene	14	µg/Kg			
100413-05	01NE29SD314	QA Dup of 01NE29SD114 acenaphthene	< 3.4	µg/Kg	U		
DN38A	01NE29SD114	Primary Sample pyrene	< 8.4	µg/Kg	UJ	L	b
DN38B	01NE29SD214	QC Dup of 01NE29SD114 pyrene	17	µg/Kg			
100413-05	01NE29SD314	QA Dup of 01NE29SD114 pyrene	< 3.4	µg/Kg	U		

**Matrix:** SX

<b>Lab ID</b>	<b>Field ID</b>		<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Q</b>	<b>Bias</b>	<b>RC</b>
DN07D	01NE28SD111	Primary Sample	phenanthrene	210	µg/Kg			
DN07E	01NE28SD211	QC Dup of 01NE28SD111	phenanthrene	48	µg/Kg			
100302-02	01NE28SD311	QA Dup of 01NE28SD111 phenanthrene		55	µg/Kg	J	N	c,f

No data were qualified on the basis of field duplicate precision.

### 7.8 QA / QC Triplicates (cont.)

A major disagreement of greater than five times (when all results are above the RL) or greater than five times (when one result is less than the RL) or greater than ten times (when one result is nondetected) was found for the following primary, QC and QA triplicate sets:

**Matrix: SX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN05E	01NE28SD157	Primary Sample	acenaphthene	200	µg/Kg	J	N	n
DN05H	01NE28SD257	QC Dup of 01NE28SD157	acenaphthene	< 71	µg/Kg	UJ	N	n
100302-06	01NE28SD357	QA Dup of 01NE28SD157	acenaphthene	< 20	µg/Kg	UJ	N	n
DN05E	01NE28SD157	Primary Sample	fluorene	200	µg/Kg	J	N	n
DN05H	01NE28SD257	QC Dup of 01NE28SD157	fluorene	< 71	µg/Kg	UJ	N	n
100302-06	01NE28SD357	QA Dup of 01NE28SD157	fluorene	< 20	µg/Kg	UJ	N	n

**Matrix: SX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN39D	01NE28SD163	Primary Sample	2-methylnaphthalene	2700 *	µg/Kg	J	N	n
DN39F	01NE28SD263	QC Dup of 01NE28SD163	2-methylnaphthalene	2700	µg/Kg	J	N	n
100413-04	01NE28SD363	QA Dup of 01NE28SD163	2-methylnaphthalene	< 210	µg/Kg	UJ	N	n
DN39D	01NE28SD163	Primary Sample	acenaphthene	2300 *	µg/Kg	J	N	n
DN39F	01NE28SD263	QC Dup of 01NE28SD163	acenaphthene	2400	µg/Kg	J	N	n
100413-04	01NE28SD363	QA Dup of 01NE28SD163	acenaphthene	< 210	µg/Kg	UJ	N	n
DN39D	01NE28SD163	Primary Sample	naphthalene	9500 *	µg/Kg	J	N	n
DN39F	01NE28SD263	QC Dup of 01NE28SD163	naphthalene	9700	µg/Kg	J	N	n
100413-04	01NE28SD363	QA Dup of 01NE28SD163	naphthalene	< 210	µg/Kg	UJ	N	n

**Matrix: SX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN06R	01NE28SD151	Primary Sample	acenaphthene	1200 *	µg/Kg	J	N	n
DN06S	01NE28SD251	QC Dup of 01NE28SD151	acenaphthene	1500	µg/Kg	J	N	n
100302-04	01NE28SD351	QA Dup of 01NE28SD151	acenaphthene	< 23	µg/Kg	UJ	N	n
DN06R	01NE28SD151	Primary Sample	acenaphthylene	< 700 *	µg/Kg	UJ	N	n
DN06S	01NE28SD251	QC Dup of 01NE28SD151	acenaphthylene	< 680	µg/Kg	UJ	N	n
100302-04	01NE28SD351	QA Dup of 01NE28SD151	acenaphthylene	< 23	µg/Kg	UJ	N	n
DN06R	01NE28SD151	Primary Sample	benzo(k)fluoranthene	< 700 *	µg/Kg	UJ	N	n
DN06S	01NE28SD251	QC Dup of 01NE28SD151	benzo(k)fluoranthene	< 680	µg/Kg	UJ	N	n
100302-04	01NE28SD351	QA Dup of 01NE28SD151	benzo(k)fluoranthene	23	µg/Kg	J	N	n
DN06R	01NE28SD151	Primary Sample	fluorene	2400	µg/Kg	J	N	n
DN06S	01NE28SD251	QC Dup of 01NE28SD151	fluorene	2400	µg/Kg	J	N	n
100302-04	01NE28SD351	QA Dup of 01NE28SD151	fluorene	< 23	µg/Kg	UJ	N	n

Matrix: SX

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN38A	01NE29SD114	Primary Sample	fluoranthene	< 8.4	µg/Kg	UJ	L	b,n
DN38B	01NE29SD214	QC Dup of 01NE29SD114	fluoranthene	36	µg/Kg	J	N	n
100413-05	01NE29SD314	QA Dup of 01NE29SD114	fluoranthene	< 3.4	µg/Kg	UJ	N	n
DN38A	01NE29SD114	Primary Sample	phenanthrene	11	µg/Kg	J	L	b,n
DN38B	01NE29SD214	QC Dup of 01NE29SD114	phenanthrene	63	µg/Kg	J	N	n
100413-05	01NE29SD314	QA Dup of 01NE29SD114	phenanthrene	< 3.4	µg/Kg	UJ	N	n

## Matrix: SX

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN06E	01NE28SD139	Primary Sample	2-methylnaphthalene	34	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	2-methylnaphthalene	14	µg/Kg	J	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	2-methylnaphthalene	4	µg/Kg	J	N	n
DN06E	01NE28SD139	Primary Sample	acenaphthene	100	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	acenaphthene	8.6	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	acenaphthene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	anthracene	33	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	anthracene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	anthracene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	benzo(a)anthracene	230	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	benzo(a)anthracene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	benzo(a)anthracene	< 7.3	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	benzo(a)pyrene	320	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	benzo(a)pyrene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	benzo(a)pyrene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	benzo(b)fluoranthene	420	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	benzo(b)fluoranthene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	benzo(b)fluoranthene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	benzo(g,h,l)perylene	71	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	benzo(g,h,l)perylene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	benzo(g,h,l)perylene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	benzo(k)fluoranthene	300	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	benzo(k)fluoranthene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	benzo(k)fluoranthene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	chrysene	380	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	chrysene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	chrysene	< 7.3	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	dibenzo(a,h)anthracene	29	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	dibenzo(a,h)anthracene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	dibenzo(a,h)anthracene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	dibenzofuran	75	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	dibenzofuran	< 4.8	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	fluoranthene	890	µg/Kg	J	N	n,o
DN06G	01NE28SD239	QC Dup of 01NE28SD139	fluoranthene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	fluoranthene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	fluorene	100	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	fluorene	7.2	µg/Kg	J	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	fluorene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	indeno(1,2,3,c,d)pyrene	89	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	indeno(1,2,3,c,d)pyrene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	indeno(1,2,3,c,d)pyrene	< 3.6	µg/Kg	UJ	N	n

**Matrix:** SX

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN06E	01NE28SD139	Primary Sample	naphthalene	50	µg/Kg	J	N	n
DN06G	01NE28SD239	QC Dup of 01NE28SD139	naphthalene	14	µg/Kg	J	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	naphthalene	5.1	µg/Kg	J	N	n
DN06E	01NE28SD139	Primary Sample	phenanthrene	990	µg/Kg	J	N	n,o
DN06G	01NE28SD239	QC Dup of 01NE28SD139	phenanthrene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	phenanthrene	< 3.6	µg/Kg	UJ	N	n
DN06E	01NE28SD139	Primary Sample	pyrene	1000	µg/Kg	J	N	n,o
DN06G	01NE28SD239	QC Dup of 01NE28SD139	pyrene	< 4.8	µg/Kg	UJ	N	n
100302-08	01NE28SD339	QA Dup of 01NE28SD139	pyrene	< 3.6	µg/Kg	UJ	N	n

**Matrix:** SX

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN04I	01NE28SD125	Primary Sample	fluorene	140	µg/Kg	J	N	n
DN04M	01NE28SD225	QC Dup of 01NE28SD125	fluorene	280	µg/Kg	J	N	n
100302-03	01NE28SD325	QA Dup of 01NE28SD125	fluorene	52	µg/Kg	J	N	n
DN04I	01NE28SD125	Primary Sample	phenanthrene	49	µg/Kg	J	N	n
DN04M	01NE28SD225	QC Dup of 01NE28SD125	phenanthrene	110	µg/Kg	J	N	n
100302-03	01NE28SD325	QA Dup of 01NE28SD125	phenanthrene	16	µg/Kg	J	N	n

**Matrix:** SX

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN05A	01NE28SD153	Primary Sample	acenaphthene	1300	µg/Kg	J	N	n
DN05G	01NE28SD253	QC Dup of 01NE28SD153	acenaphthene	1200	µg/Kg	J	N	n
100302-05	01NE28SD353	QA Dup of 01NE28SD153	acenaphthene	< 14	µg/Kg	UJ	N	n
DN05A	01NE28SD153	Primary Sample	benzo(a)anthracene	< 670	µg/Kg	UJ	N	n
DN05G	01NE28SD253	QC Dup of 01NE28SD153	benzo(a)anthracene	< 570	µg/Kg	UJ	N	n
100302-05	01NE28SD353	QA Dup of 01NE28SD153	benzo(a)anthracene	24	µg/Kg	J	N	m,n
DN05A	01NE28SD153	Primary Sample	chrysene	< 670	µg/Kg	UJ	N	n
DN05G	01NE28SD253	QC Dup of 01NE28SD153	chrysene	< 570	µg/Kg	UJ	N	n
100302-05	01NE28SD353	QA Dup of 01NE28SD153	chrysene	48	µg/Kg	J	N	n
DN05A	01NE28SD153	Primary Sample	fluorene	1600	µg/Kg	J	N	n
DN05G	01NE28SD253	QC Dup of 01NE28SD153	fluorene	1400	µg/Kg	J	N	n
100302-05	01NE28SD353	QA Dup of 01NE28SD153	fluorene	< 14	µg/Kg	UJ	N	n
DN05A	01NE28SD153	Primary Sample	naphthalene	1600	µg/Kg	J	N	n
DN05G	01NE28SD253	QC Dup of 01NE28SD153	naphthalene	1400	µg/Kg	J	N	n
100302-05	01NE28SD353	QA Dup of 01NE28SD153	naphthalene	< 14	µg/Kg	UJ	N	n

Results for these samples have been flagged "n".

The QA and QC samples for 01NE28SD139 are in agreement for most target compounds; the primary sample may be incorrectly identified.

**7.8 QA / QC Triplicates (cont.)**

The primary and QC sample for 01NE28D153 exhibited good precision; the QA sample may be incorrectly identified.

**7.9 Additional Comments**

Some samples required dilutions to accurately quantitate several compounds (see section 7.7). All reporting limits and concentrations were adjusted for the dilutions. Nondetected results and compounds within the calibration range should be used from the original analysis, and compounds outside the calibration range (flagged o) should be used from the appropriate dilutions.

**Overall Assessment**

Minor data quality deficiencies were found, resulting in a significant amount of qualified data . No data were rejected. Most qualifications made were due to low surrogate recovery and poor precision among the QC/QA triplicate sets indicating matrix effect. Tables 4 through 14 list all qualified sample results, by data quality indicator and analysis type. Results that were qualified as estimated or nondetected are useable for limited purposes. All other data generated by this method should be considered useable as reported.

## 8.0 Semivolatile Organics

The following number of samples were prepared and analyzed by the listed methods:

**Laboratory: ARI**

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
3	WX	SW3520C	SW8270	µg/L

**Laboratory: SAS**

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
1	WX	SW3510	SW8270C	µg/L

Samples analyzed by this method are identified in Table 1.

### 8.1 Holding Time

All samples were prepared and analyzed within the required technical holding time.

### 8.2 Surrogates

All surrogate recoveries were within the required limits.

### 8.3 Blanks

Method blanks were analyzed at the minimum required frequency. All target compounds were reported as nondetected in all cases except the following:

**Labcode: ARI**

**MB Batch ID: SV0827B-01**

**Matrix: WQ**

Analyte	Result	PQL	Units	1	Q	Bias	RC
bis(2-ethylhexyl)phthalate	1.9	1					

Affected Samples:	Sample ID	Field ID					
DN53C	01NE16GW101	2.5	1	µg/L	B	H	a
DN53D	01NE16GW201	2.2	1	µg/L	B	H	a
DN53E	01NE16GW102	1.4	1	µg/L	B	H	a

<sup>1</sup> According to the National Functional Guidelines for Organic Data Review, any compound detected in a blank that was also detected in an associated sample is qualified if the sample result is less than 10x the blank concentration for common laboratory contaminants, or 5x for all other analytes. Flagging for this project is modified to "B" at the amount found in the sample.

Field blanks were not collected for analysis by this method.

**8.4 Matrix Spike/Matrix Spike Duplicates**

MS/MSDs were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

**8.5 Laboratory Control Samples**

Laboratory control samples were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

**8.6 Quantitation Limits**

The practical quantitation limits (PQLs) achieved by the laboratories were acceptable relative to the estimated quantitation limits (EQL) suggested by this method for aqueous samples.

**8.7 QA / QC Triplicates**

One set of QA / QC triplicate samples was collected for analysis by this method. All results were in agreement.

**8.8 Overall Assessment**

Minor data quality deficiencies were found, resulting in an insignificant amount of qualified data. No data were rejected. All data were qualified due to low level bis(2-ethylhexyl)phthalate contamination in the method blank. Tables 4 through 14 list all qualified sample results, by data quality indicator and analysis type. Results that were qualified as estimated or nondetected are useable for limited purposes. All other data generated by this method should be considered useable as reported.

## **9.0 Volatile Organics**

The following number of samples were prepared and analyzed by the listed methods:

**Laboratory: ARI**

<b># of Samples</b>	<b>Matrix</b>	<b>Prep Method</b>	<b>Analysis Method</b>	<b>Reporting Units</b>
27	WX	METHOD	SW8260	µg/L
11	SX	METHOD	SW8260	µg/Kg

**Laboratory: SAS**

<b># of Samples</b>	<b>Matrix</b>	<b>Prep Method</b>	<b>Analysis Method</b>	<b>Reporting Units</b>
4	WX	SW5030	SW8260B	µg/L
1	SX	SW5035	SW8260B	µg/Kg

Samples analyzed by this method are identified in Table 1.

### **9.1 Holding Time**

All samples were analyzed within the required technical holding time.

### **9.2 Surrogates**

All surrogate recoveries were within the required limits.

### 9.3 Blanks

Method blanks were analyzed at the minimum required frequency. All target compounds were reported as nondetected in all cases except the following:

**Labcode:** ARI  
**Date Analyzed:** 8/24/01  
**MB Batch ID:** F5082401A  
**Matrix:** SQ

Analyte		Result	PQL	Units	Q	Bias	RC	
bromomethane		110	62	µg/Kg				
<b>Affected Samples:</b>	<b>Sample ID</b>	<b>Field ID</b>						
	DN07N	01NE07SS125	98	62	µg/Kg	B	H	a
	DN07P	01NE07SS127	170	75	µg/Kg	B	H	a
	DN07Q	01NE07SD105	400	200	µg/Kg	B	H	a
	DN07R	01NE07SD104	170	150	µg/Kg	B	H	a

**Labcode:** ARI  
**Date Analyzed:** 8/27/01  
**MB Batch ID:** F5082701A  
**Matrix:** SQ

Analyte		Result	PQL	Units	Q	Bias	RC	
bromomethane		240	110	µg/Kg				
<b>Affected Samples:</b>	<b>Sample ID</b>	<b>Field ID</b>						
	DN07O	01NE07SS126	200	110	µg/Kg	B	H	a

**Labcode:** ARI  
**Date Analyzed:** 8/30/01  
**MB Batch ID:** F5083001A  
**Matrix:** SQ

Analyte		Result	PQL	Units	Q	Bias	RC	
bromomethane		89	29	µg/Kg				
<b>Affected Samples:</b>	<b>Sample ID</b>	<b>Field ID</b>						
	DN68C	01NE09SD108	360	180	µg/Kg	B	H	a
	DN68L	01NE00TB111	90	50	µg/Kg	B	H	a

<sup>1</sup> According to the National Functional Guidelines for Organic Data Review, any compound detected in a blank that was also detected in an associated sample is qualified if the sample result is less than 10x the blank concentration for common laboratory contaminants, or 5x for all other analytes. Flagging for this project is modified to "B" at the amount found in the sample.

### 9.3 Blanks (cont.)

One methanol trip blank and nine water trip blanks were collected for analysis by this method. All target compounds were reported as nondetected in all cases except the following:

**Laboratory :** ARI  
**Date Collected:** 8/24/01

Field	Blank ID	Analyte	Result	Units
01NE00TB111	Trip Blank	bromomethane	90	µg/Kg
		toluene	61	µg/Kg

No sample results were affected by the above blank result

**Date Collected:** 8/27/01

Field	Blank ID	Analyte	Result	Units
01NE00TB118	Trip Blank	chloromethane	3.2	µg/L

No sample results were affected by the above blank result

**Laboratory :** SAS  
**Date Collected:** 8/23/01

Field	Blank ID	Analyte	Result	Units
01NE00TB110	Trip Blank	chloromethane	2.4	µg/L
		trichlorofluoromethane	0.16	µg/L
		acetone	0.72	µg/L
		tetrachloroethylene	0.18	µg/L

Affected samples:	Qualified Result	Bias	RC
100418-02      01NE09SW307	acetone      0.73	B      H	k      µg/L

**Date Collected:** 8/27/01

Field	Blank ID	Analyte	Result	Units
01NE00TB117	Trip Blank	methylene chloride	0.42	µg/L
		chloroform	0.091	µg/L
		tetrachloroethylene	0.24	µg/L
		styrene	0.34	µg/L

No sample results were affected by the above blank result

<sup>1</sup> According to the National Functional Guidelines for Organic Data Review, any target analyte detected in a field blank that was also detected in an associated sample is qualified if the sample result is less than 10x the blank concentration for common laboratory contaminants, or 5x for all other analytes. Flagging for this project is modified to "B" at the amount found in the sample

#### 9.4 Matrix Spike/Matrix Spike Duplicates

MS/MSDs were analyzed at the required frequency. All recoveries and RPDs were within the required limits except the following:

Laboratory: SAS  
Prep Date: 9/7/01  
Prep Batch ID: ITS1245  
Spiked Sample: 01NE09SD313  
Matrix: SX  
Dil Factor: 1

Analyte	Sample	Spike	% Recovery		Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
	Result	Conc.	MS	MSD						
μg/Kg	μg/Kg									
toluene	16	12	317	480	75 - 125	41	30	J/UJ	N	c f

Associated Samples: 01NE09SD313 ( 100492-13 )

<sup>1</sup> Laboratory-established limits

<sup>2</sup> If the MS or MSD recovery is < LCL apply J to all detected results, apply UJ to all non-detects; if the MS or MSD recovery is > UCL apply J to all detected results; if the MS/MSD RPD is > UCL apply J to all detected results, apply UJ to all non-detects. For this review, qualifiers apply to the spiked sample only

#### 9.5 Laboratory Control Samples

Laboratory control samples were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

#### 9.6 Quantitation Limits

The practical quantitation limits (PQLs) achieved by the laboratories were acceptable relative to the estimated quantitation limits (EQL) suggested by this method for aqueous and soil matrix samples. Project-specific reporting limits for water matrix were met by the laboratories. Soil limits were not specified; however, reporting limits varied significantly from sample to sample at ARI and were much higher than those reported at SAS. Nine detected results were below the quantitation limit, and are flagged "J". Results below the reporting limit are considered qualitatively acceptable, but quantitatively unreliable, due to the uncertainty in precision near the limit of detection.

### 9.8 QA / QC Triplicates

Three sets of QA / QC triplicate samples were collected for analysis by this method. A major disagreement of greater than five times (when one result is below the reporting limit) or ten times (when one result is nondetect) was found for the following primary, QC and QA triplicate sets:

**Matrix: SX**

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN68G	01NE09SD113 Primary Sample	2-butanone	<	1400	µg/Kg	UJ	N
DN68H	01NE09SD213 QC Dup of 01NE09SD113	2-butanone	<	490	µg/Kg	UJ	N
100492-13	01NE09SD313 QA Dup of 01NE09SD113	2-butanone	56	µg/Kg	J	N	n
DN68G	01NE09SD113 Primary Sample	carbon disulfide	<	270	µg/Kg	UJ	N
DN68H	01NE09SD213 QC Dup of 01NE09SD113	carbon disulfide	<	98	µg/Kg	UJ	N
100492-13	01NE09SD313 QA Dup of 01NE09SD113	carbon disulfide	20	µg/Kg	J	N	n
DN68G	01NE09SD113 Primary Sample	chloromethane	<	270	µg/Kg	UJ	N
DN68H	01NE09SD213 QC Dup of 01NE09SD113	chloromethane	<	98	µg/Kg	UJ	N
100492-13	01NE09SD313 QA Dup of 01NE09SD113	chloromethane	1.2	µg/Kg	J	N	m,n
DN68G	01NE09SD113 Primary Sample	toluene	<	270	µg/Kg	UJ	N
DN68H	01NE09SD213 QC Dup of 01NE09SD113	toluene	<	98	µg/Kg	UJ	N
100492-13	01NE09SD313 QA Dup of 01NE09SD113	toluene	16	µg/Kg	J	N	c,f,n

**Matrix: WX**

Lab ID	Field ID	Analyte	Result	Units	Q	Bias	RC
DN88A	01NE07WP102 Primary Sample	naphthalene	<	5	µg/L	UJ	N
DN88B	01NE07WP202 QC Dup of 01NE07WP102	naphthalene	<	5	µg/L	UJ	N
100553-01	01NE07WP302 QA Dup of 01NE07WP102	naphthalene	0.17	µg/L	J	N	m,n

Results for these samples have been flagged "n".

### 9.9 Additional Comments

Three of three VOA vials were received at Analytical Resources, Inc. (ARI) with tiny bubbles for 01NE00TB108, 01NE09MW103, 01NE00TB116, 01NE00TB117 and 01NE00TB118; results for all target compounds are qualified as estimated.

### Overall Assessment

Minor data quality deficiencies were found, resulting in some qualified data. No data were rejected. Most data were qualified due low-level bromomethane method blank contamination. Tables 4 through 14 list all qualified sample results, by data quality indicator and analysis type. Results that were qualified as estimated or nondetected are useable for limited purposes. All other data generated by this method should be considered useable as reported.

## 10.0 Metals

The following number of samples were prepared and analyzed by the listed methods:

Laboratory: ARI

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
119	SX	SW3050B	SW6010B	mg/Kg
36	SX	SW7471A	SW7471A	mg/Kg
33	SX	SW3050B	E200.8	mg/Kg
13	SX	SW3050	SW6010B	mg/Kg
28	WX	SW3010A	SW6010B	µg/L
28	WX	SW7060A	SW7060A	µg/L
28	WX	SW7470A	SW7470A	µg/L
28	WX	METHOD	SW7740	µg/L
28	WX	SW3020A	SW7841	µg/L
28	WX	SW3020A	SW7421	µg/L
4	WX	NONE	SW6010B	mg/L
4	WX	SW3010A	SW6010B	mg/L

Laboratory: SAS

# of Samples	Matrix	Prep Method	Analysis Method	Reporting Units
14	SX	SW3051	SW6010	mg/Kg
3	SX	SW7471	SW7471	mg/Kg
1	SX	SW3051	SW6020	mg/Kg
3	WX	SW3005	SW6010	mg/L
3	WX	SW7470	SW7470	mg/L

Samples analyzed by these methods are identified in Table 1.

### 10.1 Holding Time

All samples were analyzed within the required technical holding time.

## 10.2 Blanks

Method blanks were analyzed at the minimum required frequency. All target analytes were reported as nondetected in all cases except the following:

Labcode: SAS  
Prep Date: 9/7/01  
MB Batch ID: TP983  
Matrix: WQ

Analyte	Result	PQL	Units	Q <sup>1</sup>	Bias	RC
silver	0.015	0.05	mg/L			
Affected Samples:	Sample ID	Field ID				
	100418-02	01NE09SW307	0.029	0.050	mg/L	B H a

<sup>1</sup> According to the National Functional Guidelines for Inorganic Data Review, any analyte detected in a blank that was also detected in an associated sample is qualified if the sample result is less than 5X the blank concentration. Flagging for this project is modified to "B" at the amount found in the sample.

Field blanks were not collected for analysis by these methods.

### 10.3 Matrix Spikes

Matrix spikes were analyzed at the required frequency. All recoveries were within the required limits except the following:

**Laboratory:** SAS  
**Prep Date:** 8/27/01  
**Prep Batch ID:** ZT477  
**Spiked Sample:** 01NE29SW317  
**Matrix:** WX

Analyte	Sample Result mg/L	Spike Conc. mg/L	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							
mercury	< 0.0002	0.002	40	NA	75 - 125	NA	NA	20	J/UJ	L	c

**Associated Samples:** 01NE29SW317 ( 100413-06 )

**Laboratory:** SAS  
**Prep Date:** 9/7/01  
**Prep Batch ID:** SP985  
**Spiked Sample:** 01NE16SS365  
**Matrix:** SX

Analyte	Sample Result mg/Kg	Spike Conc. mg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							
lead	180	198.1	201	NA	75 - 125	NA	NA	35	J/none	H	c

**Associated Samples:** 01NE16SS365 ( 100492-08 )

**Laboratory:** ARI  
**Prep Date:** 8/31/01  
**Prep Batch ID:** DN40  
**Spiked Sample:** 01NE29SD128  
**Matrix:** SX

Analyte	Sample Result mg/Kg	Spike Conc. mg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							
antimony	< 7	270	18.9	NA	75 - 125	NA	NA	20	J/UR	L	c

**Associated Samples:** 01NE29SD128 ( DN40E ) 01NE29SD129 ( DN40F )  
 01NE29SD127 ( DN40M ) 01NE29SD126 ( DN40N )

**Laboratory:** ARI  
**Prep Date:** 9/4/01  
**Prep Batch ID:** DN76  
**Spiked Sample:** 01NE09SD113  
**Matrix:** SX

Analyte	Sample Result mg/Kg	Spike Conc. mg/Kg	% Recovery			Limits <sup>1</sup>	MS/MSD RPD	Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
			MS	MSD							
antimony	< 30	1030	41.7	NA	75 - 125	NA	NA	20	J/UJ	L	C
<b>Associated Samples:</b>											
	01NE09SD107	(	DN76D	)	01NE09SD108	(	DN76E	)			
	01NE30SS101	(	DN76F	)	01NE30SD101	(	DN76G	)			
	01NE30SS103	(	DN76H	)	01NE30SS102	(	DN76I	)			
	01NE09SD109	(	DN76J	)	01NE09SD213	(	DN76K	)			
	01NE24SD114	(	DN76L	)	01NE24SD115	(	DN76M	)			
	01NE30SS201	(	DN76O	)	01NE09SD113	(	DN76P	)			

<sup>1</sup> Laboratory-established limits

<sup>2</sup> According to the Functional Guidelines for Inorganic Data Review, for all samples in the same preparation batch; if the MS or MSD recovery is > 30% and < LCL apply J to all detected results, apply UJ to all non-detects; if the MS or MSD recovery is > UCL apply J to all detected results; if the recovery is < 30%, apply J to all detected results, apply R to all nondetects; if the MS/MSD RPD is > UCL apply J to all detected results, apply UJ to all non-detects

#### 10.4 Sample Duplicates

Sample duplicates were also analyzed. Precision between the primary and duplicate sample results was acceptable in all cases except the following:

Analyte	<i>Primary Sample</i>	<i>Replicate Sample</i>	RPD	Units	RPD Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
	SX	SX						
lead	19	12	45	mg/Kg	35	J / UJ	N	f
Analyte	<i>Primary Sample</i>	<i>Replicate Sample</i>	RPD	Units	RPD Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
	WX	WX						
lead	0.23	0.16	36	mg/L	20	J / UJ	N	f
Analyte	<i>Primary Sample</i>	<i>Replicate Sample</i>	RPD	Units	RPD Limit <sup>1</sup>	Q <sup>2</sup>	Bias	RC
	SX	SX						
zinc	62	43	36	mg/Kg	35	J / UJ	N	f

<sup>1</sup>  
Laboratory-established Limits

<sup>2</sup>  
According to the Functional Guidelines for Inorganic Data Review, If the duplicate RPD exceeds the UCL, flag detected results J for all associated samples of similar matrix

#### 10.5 Serial Dilutions

Serial dilutions were not reported.

#### 10.6 Laboratory Control Samples

Laboratory control samples were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

#### 10.7 Quantitation Limits

The practical quantitation limits (PQLs) achieved by ARI were acceptable relative to the estimated quantitation limits (EQL) suggested by these methods for aqueous and soil matrix samples. Project specific reporting limits were not submitted for soil matrix. Method detection limits exceeded required reporting limits by two times for thallium in two samples at SAS. Thirty detected results were below the quantitation limit, and are flagged "J". Results below the reporting limit are considered qualitatively acceptable, but quantitatively unreliable, due to the uncertainty in precision near the limit of detection.

### 10.8 QA / QC Triplicates

Eighteen sets of QA / QC triplicate samples were collected for analysis by these methods. A disagreement of greater than two times (soil) was found for the following target analytes in the primary, QC and QA triplicate sets:

**Matrix: SX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN04I	01NE28SD125	Primary Sample	lead	7	mg/Kg			
DN04M	01NE28SD225	QC Dup of 01NE28SD125	lead	5	mg/Kg			
100302-03	01NE28SD325	QA Dup of 01NE28SD125	lead	13	mg/Kg			

**Matrix: SX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN05A	01NE28SD153	Primary Sample	lead	32	mg/Kg			
DN05G	01NE28SD253	QC Dup of 01NE28SD153	lead	60	mg/Kg			
100302-05	01NE28SD353	QA Dup of 01NE28SD153	lead	23	mg/Kg			

**Matrix: SX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN38A	01NE29SD114	Primary Sample	lead	17	mg/Kg			
DN38B	01NE29SD214	QC Dup of 01NE29SD114	lead	14	mg/Kg			
100413-05	01NE29SD314	QA Dup of 01NE29SD114	lead	30	mg/Kg			

**Matrix: WX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN53H	01NE09SW107	Primary Sample	silver	< 3	µg/L	U		
DN53F	01NE09SW207	QC Dup of 01NE09SW107	silver	< 3	µg/L	U		
100418-02	01NE09SW307	QA Dup of 01NE09SW107	silver	0.03	mg/L	B	H	a

**Matrix: SX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN68A	01NE21SS169	Primary Sample	arsenic	< 30	mg/Kg	U		
DN68B	01NE21SS269	QC Dup of 01NE21SS169	arsenic	< 30	mg/Kg	U		
100492-04	01NE21SS369	QA Dup of 01NE21SS169	arsenic	6	mg/Kg	J	N	m

**Matrix: WX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN73L	01NE24SW114	Primary Sample	arsenic	< 1	µg/L	U		
DN73K	01NE24SW214	QC Dup of 01NE24SW114	arsenic	< 1	µg/L	U		
100492-01	01NE24SW314	QA Dup of 01NE24SW114	arsenic	0.005	mg/L	J	N	m
DN36A	01NE29SW117	Primary Sample	lead	< 1	µg/L	U		
DN36B	01NE29SW217	QC Dup of 01NE29SW117	lead	< 1	µg/L	U		
100413-06	01NE29SW317	QA Dup of 01NE29SW117	lead	0.006	mg/L	J	N	m

**Matrix: WX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN73L	01NE24SW114	Primary Sample	selenium	< 2	µg/L	U		
DN73K	01NE24SW214	QC Dup of 01NE24SW114	selenium	< 2	µg/L	U		
100492-01	01NE24SW314	QA Dup of 01NE24SW114	selenium	0.01	mg/L	J	N	m
DN73L	01NE24SW114	Primary Sample	thallium	< 1	µg/L	U		
DN73K	01NE24SW214	QC Dup of 01NE24SW114	thallium	< 1	µg/L	U		
100492-01	01NE24SW314	QA Dup of 01NE24SW114	thallium	0.007	mg/L	J	N	m

**Matrix: SX**

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN76P	01NE09SD113	Primary Sample	antimony	< 30	mg/Kg	UJ	L	c
DN76K	01NE09SD213	QC Dup of 01NE09SD113	antimony	< 30	mg/Kg	UJ	L	c
100492-13	01NE09SD313	QA Dup of 01NE09SD113	antimony	4.6	mg/Kg	J	N	m
DN76P	01NE09SD113	Primary Sample	cadmium	1	mg/Kg			
DN76K	01NE09SD213	QC Dup of 01NE09SD113	cadmium	< 1	mg/Kg	U		
100492-13	01NE09SD313	QA Dup of 01NE09SD113	cadmium	< 6.2	mg/Kg	U		
DN76P	01NE09SD113	Primary Sample	sodium	210	mg/Kg			
DN76K	01NE09SD213	QC Dup of 01NE09SD113	sodium	290	mg/Kg			
100492-13	01NE09SD313	QA Dup of 01NE09SD113	sodium	< 1200	mg/Kg	U		

According to project guidelines, if there is > 2X difference (detected results > RL) or > 3X difference (when one result is < RL) or > 5X difference (when one result is nondetected); it is considered a disagreement

No data were qualified on the basis of field duplicate precision.

### 10.8 QA / QC Triplicates

A major disagreement of greater than three times (soil) was found for the following target analytes in the primary, QC and QA triplicate sets:

Matrix: SX

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN40C	01NE29SD125	Primary Sample	lead	9	mg/Kg	J	N	n
DN40D	01NE29SD225	QC Dup of 01NE29SD125	lead	7	mg/Kg	J	N	n
100413-01	01NE29SD325	QA Dup of 01NE29SD125	lead	25	mg/Kg	J	N	n
DN76F	01NE30SS101	Primary Sample	silver	< 0.7	mg/Kg	UJ	N	n
DN76O	01NE30SS201	QC Dup of 01NE30SS101	silver	< 0.6	mg/Kg	UJ	N	n
100492-09	01NE30SS301	QA Dup of 01NE30SS101	silver	14	mg/Kg	J	N	n

Matrix: WX

Lab ID	Field ID	Dup ID	Analyte	Result	Units	Q	Bias	RC
DN73K	01NE24SW214	QC Dup of 01NE24SW114	lead	1	µg/L	J	N	n
DN73L	01NE24SW114	Primary Sample	lead	< 1	µg/L	UJ	N	n
100492-01	01NE24SW314	QA Dup of 01NE24SW114	lead	0.23	mg/L	J	N	f,n
DN53F	01NE09SW207	QC Dup of 01NE09SW107	lead	< 1	µg/L	UJ	N	n
DN53H	01NE09SW107	Primary Sample	lead	< 1	µg/L	UJ	N	n
100418-02	01NE09SW307	QA Dup of 01NE09SW107	lead	0.02	mg/L	J	N	n

Results for these samples have been flagged as estimated.

### 10.9 Additional Comments

Due to low temperatures (< 2.0°C), all target analytes for water samples 01NE07SW105, 01NE07WP101, 01NE09MW103, 01NE09SW109, 01NE09SW112 and 01NE09WP102 are qualified as estimated.

Water samples 01NE35GW101, 01NE35GW102, 01NE35GW103, and 01NE35GW104 were analyzed for dissolved metals for iron and magnesium only. All associated quality control was within the established limits.

### Overall Assessment

Minor data quality deficiencies were found, resulting in a significant amount of qualified data. Some data were rejected. The majority of rejected data was due to low matrix spike recovery for antimony, indicating matrix effect. Most data were qualified due to poor matrix spike accuracy and poor QA/QC triplicate precision, indicating matrix effect. Tables 3 through 14 list all qualified sample results, by data quality indicator and analysis type. Results that were rejected are unuseable for any purpose. Results that were qualified as estimated or nondetected are useable for limited purposes. All other data generated by this method should be considered useable as reported.

## **11.0 Total Organic Carbon**

The following number of samples were prepared and analyzed by the listed method:

**Laboratory:** ARI

<b># of Samples</b>	<b>Matrix</b>	<b>Prep Method</b>	<b>Analysis Method</b>	<b>Reporting Units</b>
91	SX	METHOD	Plumb, 1981	PERCENT

Samples analyzed by this method are identified in Table 1.

### **11.1 Holding Time**

All samples were analyzed within the required technical holding time.

### **11.2 Blanks**

Method blanks were analyzed at the minimum required frequency. All total organic carbon results were reported as nondetected.

Field blanks were not collected for analysis by these methods.

### **11.3 Matrix Spike/Matrix Spike Duplicates**

MS/MSDs were analyzed at the required frequency. All recoveries and RPDs were within the required limits.

### **11.4 Laboratory Control Samples**

Laboratory control samples were analyzed at the required frequency. All recoveries were within the required limits.

### **11.5 Quantitation Limits**

The practical quantitation limits (PQLs) achieved by the laboratory was acceptable relative to the estimated quantitation limits (EQL) suggested by this method for aqueous and soil samples. All detected results reported were above the quantitation limit.

### **11.6 QA / QC Triplicates**

QA / QC triplicate samples were not collected for analysis by this method.

### **11.7 Overall Assessment**

No data quality deficiencies were found; therefore, all data generated by this method should be considered useable as reported.

## **12.0 References**

"USEPA Test Methods for Evaluating Solid Waste Physical/Chemical Methods", July 1992 (SW-846)

"Methods for Chemical Analysis of Water and Wastes", March 1983 (EPA-600)

"National Functional Guidelines for Organic Data Review", October 1999

"National Functional Guidelines for Inorganic Data Review", February, 1994

"State of Alaska Method AK101, Determination of Gasoline Range Organics"

"State of Alaska Method AK102, Determination of Diesel Range Organics"

"State of Alaska Method AK103, Determination of Residual Range Organics"

"USACOE Chemical Quality Assurance for HTRW Projects", October 1997

*Appendix A*

## Qualifier Definitions

B	The sample result is less than 5 or 10 times (for common laboratory contaminants) the associated blank contamination.
U	The analyte was analyzed for, but was not detected above the reported quantitation limit.
UJ	The analyte was not detected above the reported quantitation limit. However, the reported quantitation is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J/none	Sample results for the analyte are estimated for positive results; results reported below the quantitation limit are not qualified (high bias).
J/UJ	Sample results for the analyte are estimated for both positive results and results reported below the quantitation limit (low bias).
R/UR	The sample results are rejected for both positive results and results reported below the quantitation limit due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

## *Appendix B*

# **Acronyms**

ARI -	Analytical Resources, Inc., Seattle, Washington
CRQL -	Contract Required Quantitation Limit
H -	High Bias
L -	Low Bias
LCL -	Lower Control Limit
LCS/LCSD -	Laboratory Control Sample/Laboratory Control Sample Duplicate
MB -	Method Blank
MDL -	Method Detection Limit
MS/MSD -	Matrix Spike/Matrix Spike Duplicate
N -	No Bias Determined
NA -	Not Applicable
NE -	Not Established
NR -	Not Reported
PQL -	Practical Quantitation Limit
Q -	Qualifier
QA -	Quality Assurance
QC -	Quality Control
RPD -	Relative Percent Difference
RRL -	Required Reporting Limit
RSD -	Relative Standard Deviation
RTHT -	Required Technical Holding Time
SAS -	Sound Analytical Services, Inc., Tacoma, Washington
SD -	Sample Duplicate
SE -	Sediment Matrix
SO -	Soil Matrix
SW-846 -	EPA Test Methods for Evaluating Solid Waste
SX -	Soil
UCL -	Upper Control Limit
WX -	Groundwater

*Appendix C*

## Data Summary Table

**QUALIFIER REASON CODES**

- a - The analyte was found in the method blank
- a- - Negative drift observed in instrument calibration blanks
- b - Surrogate spike recovery outside control limits
- c - Matrix Spike/Matrix Spike Duplicate (MS/MSD) recovery outside control limits
- d - Laboratory Control Sample (LCS) recovery outside control limits
- e - Holding time exceeded
- f - MS/LCS sample duplicate failed precision criteria
- h - Second column results indicate that the environmental results were not confirmed
- i - Instrument Calibration outside control limits
- k - The analyte was found in the field blank
- m - Numerical value between the MDL and PQL
- n - Field duplicate precision problem
- o - Result reported exceeds calibration range
- p - Sample was not properly collected, preserved or shipped
- s - Internal Standard outside control limits
- t - Sample temperature outside acceptance criteria

(Note: Where multiple qualifiers have been applied the first qualifier corresponds to the first reason code)

BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	100413-06	100413-07									
	Field ID	01NE29SW317	01NE00TB107									
	Matrix	WX	WX									
	Date Collected	8/20/01	8/20/01									
Analyte	Units	mg/L	RESULT	Q	RC	RESULT	Q	RC				
benzene		0.0005	U		p	0.0005	UJ	p				
ethylbenzene		0.001	U		p	0.001	UJ	p				
m,p-xylene		0.002	U		p	0.002	UJ	p				
o-xylene		0.001	U		p	0.001	UJ	p				
toluene		0.001	U		p	0.001	UJ	p				

## BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	100492-02	100492-03	100492-04	100492-07	100492-11	100492-14							
	Field ID	01NE21SW313	01NE00TB112	01NE21SS369	01NE24SD314	01NE31SS321	01NE00TB106							
	Matrix	WX	WX	SX	SX	SX	SX							
	Date Collected	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01	8/23/01							
	Units	mg/L	mg/L	mg/Kg	mg/Kg	mg/Kg	mg/Kg							
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC		
benzene	0.0005	U		0.0005	U	b	0.0074	UJ	b	0.011	UJ	b	0.02	U
ethylbenzene	0.001	U		0.001	U	b	0.015	UJ	b	0.021	UJ	b	0.04	U
m,p-xylene	0.002	U		0.002	U	b	0.03	UJ	b	0.043	UJ	b	0.08	U
o-xylene	0.001	U		0.001	U	b	0.015	UJ	b	0.021	UJ	b	0.04	U
toluene	0.001	U		0.001	U	b	0.015	UJ	b	0.021	UJ	b	0.04	U

## BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	99805-01	99805-02										
	Field ID	01NE35GW301			01NE35TB302								
	Matrix	WX			WX								
	Date Collected	7/25/01			7/25/01								
	Units	µg/L			µg/L								
	RESULT	Q	RC	RESULT	Q	RC							
benzene	0.4	UJ	t	0.4	UJ	t							
ethylbenzene	0.4	UJ	t	0.4	UJ	t							
m,p-xylene	0.8	UJ	t	0.8	UJ	t							
o-xylene	0.4	UJ	t	0.4	UJ	t							
toluene	0.4	UJ	t	0.4	UJ	t							

BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	DK21A	DK21C			
	Field ID	01NE35GW102	01NE35TB101			
	Matrix	WX	WX			
	Date Collected	7/24/01	7/24/01			
	Units	µg/L	µg/L			
	RESULT	Q	RC	RESULT	Q	RC
benzene	1	U		1	U	
ethylbenzene	1	U		1	U	
m,p-xylene	1	U		1	U	
o-xylene	1	U		1	U	
toluene	1	U		1	U	

## BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	DK48A			DK48B			DK48C			DK48D			DK48E				
	Field ID	01NE35GW101			01NE35GW103			01NE35GW104			01NE35GW201			01NE35TB102				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	7/25/01			7/25/01			7/26/01			7/25/01			7/25/01				
	Units	µg/L			µg/L			µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
benzene	1	U		1	U		1	U		1	U		1	U		1	U	
ethylbenzene	1	U		1	U		1	U		1	U		1	U		1	U	
m,p-xylene	1	U		1	U		1	U		1	U		1	U		1	U	
o-xylene	1	U		1	U		1	U		1	U		1	U		1	U	
toluene	1	U		1	U		1	U		1	U		1	U		1	U	

## BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07K			DN07L			DN07M					
	Field ID	01NE06SD116			01NE06SD117			01NE00TB101					
	Matrix	SX			SX			SX					
	Date Collected	8/18/01			8/18/01			8/18/01					
	Units	µg/Kg			µg/Kg			µg/Kg					
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC				
benzene	11	U		0.67	U		5	U					
ethylbenzene	12	B	k	0.88	B	k	8.4						
m,p-xylene	44	B	k	3.3	B	k	31						
o-xylene	14	B	k	1	B	k	10						
toluene	78	B	k	4.7	B	k	46						

## BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	DN40J			DN40K			DN40L			DN40M			DN40N				
	Field ID	01NE29SD128			01NE29SD129			01NE00TB104			01NE29SD127			01NE29SD126				
	Matrix	SX			SX			SX			SX			SX				
	Date Collected	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
benzene	3.3	U		1.2	U		5	U		2.9	U		4.4	U				
ethylbenzene	3.3	U		1.2	U		8			2.9	U		4.4	U				
m,p-xylene	6.5	U		3.2	B	k	30			5.7	U		8.8	U				
o-xylene	3.3	U		1.2	U		9.8			2.9	U		4.4	U				
toluene	6.4	B	k	4.7	B	k	45			9.7	B	k	7.4	B	k			

## BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68A			DN68B			DN68K			DN68L				
	Field ID	01NE21SS169			01NE21SS269			01NE09SS171			01NE00TB111				
	Matrix	SX			SX			SX			SX				
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg				
benzene		RESULT	Q	RC											
ethylbenzene		15	U		15	U		2.5	U		5	U			
m,p-xylene		15	U		15	U		2.5	U		5.4				
o-xylene		29	U		30	U		5	U		20				
toluene		15	U		15	U		2.5	U		6.2				
		39	B	k	15	U		9	B	k	39				

## BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	DN69N			DN69O			DN69P			DN69Q			DN69R			DN69S		
	Field ID	01NE31SS121			01NE31SS122			01NE31SS123			01NE31SS124			01NE31SS221			01NE00TB114		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
benzene		4.1	U		2.4	U		5.2	U		3	U		3.5	U		5	U	
ethylbenzene		4.1	U		2.4	U		5.2	U		3	U		3.5	U		7.1		
m,p-xylene		8.3	U		4.8	U		17	B	k	5.9	U		9	B	k	28		
o-xylene		4.1	U		2.4	U		5.3	B	k	3	U		3.5	U		8.3		
toluene		12	B	k	2.4	U		24	B	k	7.3	B	k	14	B	k	44		

## BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	DN70A			DN70B			DN70C			DN70D			DN70E			DN70F		
	Field ID	01NE21SB170			01NE21SS170			01NE24SD114			01NE21SD113			01NE24SD214			01NE21SB169		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
Analyte	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
benzene		2.9	U		3.7	U		3	U		15	U		9.1	U		4.1	U	
ethylbenzene		2.9	U		3.7	U		3	U		15	U		9.1	U		6.7	B	k
m,p-xylene		5.8	U		7.4	B	k	6.1	U		29	U		18	U		21	B	k
o-xylene		2.9	U		3.7	U		3	U		15	U		9.1	U		6.3	B	k
toluene		7.2	B	k	11	B	k	3.2	B	k	55	B	k	17	B	k	24	B	k

## BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	DN70G			DN70H			DN70I			DN70J			DN70K			DN70L		
	Field ID	01NE21SB171			01NE21SS172			01NE21SD114			01NE21SS173			01NE24SD115			01NE00TB109		
	Matrix	SX			SX														
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg														
benzene	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
benzene	10	U		34	U		4.2	U		14	U		7.2	U		49	U		
ethylbenzene	10	U		34	U		4.2	U		14	U		8.8	B	k	87			
m,p-xylene	23	B	k	96	B	k	10	B	k	32	B	k	30	B	k	330			
o-xylene	10	U		34	U		4.2	U		14	U		9.2	B	k	100			
toluene	41	B	k	140	B	k	19	B	k	73	B	k	38	B	k	440			

BTEX

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN71A 01NE09SW112 WX 8/26/01 µg/L				
Analyte		RESULT	Q	RC		
benzene		1	U			
ethylbenzene		1	U			
m,p-xylene		1	U			
o-xylene		1	U			
toluene		1	U			

BTEX

## DATA SUMMARY TABLE

Analyte	Sample ID	DN73C			DN73D			DN73E			DN73I			DN73L				
	Field ID	01NE06WP103			01NE31SW101			01NE31SW102			01NE00TB115			01NE24SW114				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	8/25/01			8/24/01			8/24/01			8/24/01			8/24/01				
	Units	µg/L			µg/L			µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
benzene	1	U		1	U		1	U		1	U		1	U		1	U	
ethylbenzene	1	U		1	U		1	U		1	U		1	U		1	U	
m,p-xylene	1	U		1	U		1	U		1	U		1	U		1	U	
o-xylene	1	U		1	U		1	U		1	U		1	U		1	U	
toluene	1	U		1	U		1	U		1	U		1	U		1	U	

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	100413-06 01NE29SW317 WX	100413-07 01NE00TB107 WX	
	Date Collected Units	8/20/01 mg/L	8/20/01 mg/L	
Analyte	RESULT Q RC	RESULT Q RC		
gasoline range organics	0.05 U	0.05 U		

## Gasoline Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100418-02			100418-03			
	Field ID	01NE09SW307			01NE00TB110			
Matrix	WX			WX				
Date Collected	8/23/01			8/23/01				
Units	mg/L			mg/L				
RESULT	Q	RC	RESULT	Q	RC			
gasoline range organics	0.05	U	0.05	U				

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3/20/02

NE Cape HTRW - St. Lawrence Island  
SDG: 100418

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	100492-02 01NE21SW313 WX 8/24/01 mg/L	100492-03 01NE00TB112 WX 8/24/01 mg/L	100492-04 01NE21SS369 SX 8/24/01 mg/Kg	100492-07 01NE24SD314 SX 8/24/01 mg/Kg	100492-11 01NE31SS321 SX 8/24/01 mg/Kg	100492-14 01NE00TB106 SX 8/23/01 mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
gasoline range organics	0.04 B a	0.029 B a	5.5 UJ b	0.74 U	1.1 U	2 U	

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	99805-01 01NE35GW301 WX	99805-02 01NE35TB302 WX	
	Date Collected Units	7/25/01 mg/L	7/25/01 mg/L	
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	
gasoline range organics	0.05 UJ t	0.05 UJ t		

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3/20/02

C-17

NE Cape HTRW - St. Lawrence Island  
SDG: 99805

## Gasoline Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DK21A	DK21C					
	Field ID	01NE35GW102	01NE35TB101					
	Matrix	WX	WX					
	Date Collected	7/24/01	7/24/01					
	Units	mg/L	mg/L					
	RESULT	Q	RC	RESULT	Q	RC		
gasoline range organics	0.25	U		0.25	U			

## Gasoline Range Organics

## DATA SUMMARY TABLE

Sample ID	DK48A	DK48B	DK48C	DK48D	DK48E	
Field ID	01NE35GW101	01NE35GW103	01NE35GW104	01NE35GW201	01NE35TB102	
Matrix	WX	WX	WX	WX	WX	
Date Collected	7/25/01	7/25/01	7/26/01	7/25/01	7/25/01	
Units	mg/L	mg/L	mg/L	mg/L	mg/L	
Analyte	RESULT	Q	RC	RESULT	Q	RC
gasoline range organics	0.25	U		0.25	U	
				0.25	U	
				0.25	U	

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID	DN03H 01NE07SW104	DN03I 01NE00TB102	DN03J 01NE07SW105	
	Matrix	WX	WX	WX	
	Date Collected	8/19/01	8/19/01	8/19/01	
	Units	mg/L	mg/L	mg/L	
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
gasoline range organics	0.25 U	0.25 U	0.25 U		

## Gasoline Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07K	DN07L	DN07M						
	Field ID	01NE06SD116	01NE06SD117	01NE00TB101						
	Matrix	SX	SX	SX						
	Date Collected	8/18/01	8/18/01	8/18/01						
	Units	mg/Kg	mg/Kg	mg/Kg						
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
gasoline range organics	26.1	U		9.09	U		5.48	U		

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3/20/02

C-21

NE Cape HTRW - St. Lawrence Island  
SDG: DN07

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN36G 01NE29SW116 WX 8/21/01 mg/L	DN36H 01NE00TB103 WX 8/20/01 mg/L	DN36I 01NE29SW117 WX 8/20/01 mg/L	DN36J 01NE29SW217 WX 8/20/01 mg/L	DN36K 01NE29SW115 WX 8/20/01 mg/L	DN36L 01NE29SW114 WX 8/20/01 mg/L
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
gasoline range organics	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U

## Gasoline Range Organics

## DATA SUMMARY TABLE

Sample ID	DN40J	DN40K	DN40L	DN40M	DN40N	
Field ID	01NE29SD128	01NE29SD129	01NE00TB104	01NE29SD127	01NE29SD126	
Matrix	SX	SX	SX	SX	SX	
Date Collected	8/21/01	8/21/01	8/21/01	8/21/01	8/21/01	
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Analyte	RESULT	Q	RC	RESULT	Q	RC
gasoline range organics	5.09	U		5	U	
				24	U	
				5.18	U	
				8.56	U	

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3/20/02

C-23

NE Cape HTRW - St. Lawrence Island  
SDG: DN40

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN53J 01NE09SW207 WX 8/23/01 mg/L	DN53K 01NE09SW109 WX 8/23/01 mg/L	DN53L 01NE09SW108 WX 8/23/01 mg/L	DN53M 01NE09SW107 WX 8/23/01 mg/L	DN53N 01NE00TB108 WX 8/23/01 mg/L	
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
gasoline range organics	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	

## Gasoline Range Organics

## DATA SUMMARY TABLE

Sample ID	DN68A	DN68B	DN68G	DN68K	DN68L	
Field ID	01NE21SS169	01NE21SS269	01NE09SD113	01NE09SS171	01NE00TB111	
Matrix	SX	SX	SX	SX	SX	
Date Collected	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01	
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Analyte	RESULT	Q	RC	RESULT	Q	RC
gasoline range organics	50.6	U		47.1	U	
				47.7	U	
				5	U	
				24	U	

Prepared by ETHIX

3/20/02

C-25

NE Cape HTRW - St. Lawrence Island  
SDG: DN68

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN69N 01NE31SS121 SX 8/24/01 mg/Kg	DN69O 01NE31SS122 SX 8/24/01 mg/Kg	DN69P 01NE31SS123 SX 8/24/01 mg/Kg	DN69Q 01NE31SS124 SX 8/24/01 mg/Kg	DN69R 01NE31SS221 SX 8/24/01 mg/Kg	DN69S 01NE00TB114 SX 8/24/01 mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
gasoline range organics	7.06 U	5 U	12.2 U	5.76 U	7.16 U	24 U	

## Gasoline Range Organics

## DATA SUMMARY TABLE

Sample ID	DN70A			DN70B			DN70C			DN70D			DN70E			DN70F		
Field ID	01NE21SB170			01NE21SS170			01NE24SD114			01NE21SD113			01NE24SD214			01NE21SB169		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
Units	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
gasoline range organics	6.43	U		14.8	U		67	U		13.1	U		64.1	U		5.42	U	

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DN70G 01NE21SB171 SX	DN70H 01NE21SS172 SX	DN70I 01NE21SD114 SX	DN70J 01NE21SS173 SX	DN70K 01NE24SD115 SX	DN70L 01NE00TB109 SX
Analyte	Date Collected Units	8/24/01 mg/Kg	8/24/01 mg/Kg	8/24/01 mg/Kg	8/24/01 mg/Kg	8/24/01 mg/Kg	8/24/01 mg/Kg
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
gasoline range organics		5 U	43.3 U	30.1 U	8.04 U	5 U	24 U

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN71A 01NE09SW112 WX 8/26/01 mg/L	DN71Q 01NE09WP102 WX 8/26/01 mg/L	DN71R 01NE09MW103 WX 8/26/01 mg/L	DN71S 01NE00TB116 WX 8/26/01 mg/L	DN71T 01NE09SW111 WX 8/26/01 mg/L	
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
gasoline range organics	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID	DN73A			DN73B			DN73C			DN73D			DN73E			DN73I		
	Field ID	01NE30WP101			01NE09SW110			01NE06WP103			01NE31SW101			01NE31SW102			01NE00TB115		
	Matrix	WX			WX			WX			WX			WX			WX		
	Date Collected	8/25/01			8/25/01			8/25/01			8/24/01			8/24/01			8/24/01		
	Units	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Analyte		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
gasoline range organics		0.25	U		0.25	U		0.25	U		0.25	U		0.25	U		0.25	U	

## Gasoline Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN73J 01NE21SW113 WX 8/24/01 mg/L	DN73L 01NE24SW114 WX 8/24/01 mg/L	DN73M 01NE21SW114 WX 8/21/01 mg/L	DN73N 01NE21SW213 WX 8/24/01 mg/L	DN73O 01NE00TB113 WX 8/24/01 mg/L	
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
gasoline range organics	0.25 U	0.25 U	0.25 UU e	0.25 U	0.25 U	0.25 U	

## Gasoline Range Organics

## DATA SUMMARY TABLE

Sample ID	DN88A	DN88C	DN88F	DN88G	DN88H	
Field ID	01NE07WP102	01NE30WP102	01NE07WP103	01NE07WP101	01NE00TB118	
Matrix	WX	WX	WX	WX	WX	
Date Collected	8/27/01	8/28/01	8/27/01	8/26/01	8/27/01	
Units	mg/L	mg/L	mg/L	mg/L	mg/L	
Analyte	RESULT	Q	RC	RESULT	Q	RC
gasoline range organics	0.25	U		0.25	U	
				0.25	U	
				0.25	U	

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3/20/02

C-32

NE Cape HTRW - St. Lawrence Island  
SDG: DN88

## Diesel Range Organics

## DATA SUMMARY TABLE

	Sample ID 010302-01	100302-02 01NE28SD311	100302-03 01NE28SD325	100302-04 01NE28SD351	100302-05 01NE28SD353	100302-06 01NE28SD357
Analyte	Field ID 01NE06TP301	Matrix SX	Matrix SX	Matrix SX	Matrix SX	Matrix SX
	Date Collected 8/18/01	Units mg/Kg	Date Collected 8/18/01	Units mg/Kg	Date Collected 8/19/01	Units mg/Kg
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	1100		1200		720	
					17000 J o	13000 J o
						3700

## Diesel Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	100302-07 01NE28SW311 WX 8/18/01 mg/L	100302-08 01NE28SD339 SX 8/19/01 mg/Kg	100302L04 01NE28SD351 SX 8/19/01 mg/Kg	100302L05 01NE28SD353 SX 8/19/01 mg/Kg	
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
diesel range organics	0.54	64 J m,n	18000	15000		

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3/20/02

C-34

NE Cape HTRW - St. Lawrence Island  
SDG: 100302

## Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	100302-01 01NE06TP301 SX 8/18/01 mg/Kg	100302-02 01NE28SD311 SX 8/18/01 mg/Kg	100302-03 01NE28SD325 SX 8/18/01 mg/Kg	100302-04 01NE28SD351 SX 8/19/01 mg/Kg	100302-05 01NE28SD353 SX 8/19/01 mg/Kg	100302-06 01NE28SD357 SX 8/19/01 mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
residual range organics	3100	1000	1900	1000	2200	270	

## Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	100302-07	100302-08	
Field ID	01NE28SW311	01NE28SD339	
Matrix	WX	SX	
Date Collected	8/18/01	8/19/01	
Units	mg/L	mg/Kg	
Analyte	RESULT Q RC	RESULT Q RC	
residual range organics	0.15	460	

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3/20/02

C-36

NE Cape HTRW - St. Lawrence Island  
SDG: 100302

## Diesel Range Organics

## DATA SUMMARY TABLE

Sample ID	100413-01	100413-02	100413-03	100413-04	100413-05	100413-06
Field ID	01NE29SD325	01NE28SD375	01NE28SD371	01NE28SD363	01NE29SD314	01NE29SW317
Matrix	SX	SX	SX	SX	SX	WX
Date Collected	8/21/01	8/20/01	8/20/01	8/20/01	8/21/01	8/20/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/L
Analyte	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	54	U		180	870	51000
					120	0.1
						U

## Diesel Range Organics

## DATA SUMMARY TABLE

Sample ID	100413L04						
Field ID	01NE28SD363						
Matrix	SX						
Date Collected	8/20/01						
Units	mg/Kg						
Analyte	RESULT	Q	RC				
diesel range organics	53000						

## Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID 100413-01	100413-02	100413-03	100413-04	100413-05	100413-06
	Field ID 01NE29SD325	01NE28SD375	01NE28SD371	01NE28SD363	01NE29SD314	01NE29SW317
	Matrix SX	SX	SX	SX	SX	WX
Date Collected	8/21/01	8/20/01	8/20/01	8/20/01	8/21/01	8/20/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/L
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
residual range organics	200	1500	2000 J f	5400	180	0.069 J m

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3/20/02

C-39

NE Cape HTRW - St. Lawrence Island  
SDG: 100413

## Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	100413L04		
Field ID	01NE28SD363		
Matrix	SX		
Date Collected	8/20/01		
Units	RESULT	Q	RC
Analyte	residual range organics	5700	

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3/20/02

C-40

NE Cape HTRW - St. Lawrence Island  
SDG: 100413

Diesel Range Organics

DATA SUMMARY TABLE

Sample ID	100418-02		
Field ID	01NE09SW307		
Matrix	WX		
Date Collected	8/23/01		
Units	mg/L		
Analyte	RESULT	Q	RC
diesel range organics	0.098	U	

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3/20/02

C-41

NE Cape HTRW - St. Lawrence Island

SDG: 100418

## Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	100418-02		
Field ID	01NE09SW307		
Matrix	WX		
Date Collected	8/23/01		
Units	mg/L		
Analyte	RESULT	Q	RC
residual range organics	0.098	U	

Prepared by *ETHIX*

3/20/02

NE Cape HTRW - St. Lawrence Island  
SDG: 100418

## Diesel Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100492-01	100492-02	100492-04	100492-05	100492-06	100492-11		
	Field ID	01NE24SW314	01NE21SW313	01NE21SS369	01NE31SS320	01NE31SS305	01NE31SS321		
	Matrix	WX	WX	SX	SX	SX	SX		
	Date Collected	8/24/01	8/24/01	8/24/01	8/23/01	8/24/01	8/24/01		
	Units	mg/L	mg/L	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	0.22			0.36	120	J m	1900	990	54 J f

	Sample ID Field ID Matrix Date Collected Units	100492-13 01NE09SD313 SX 8/24/01 mg/Kg	
Analyte	RESULT Q RC	120 J m	
diesel range organics			

## Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	100492-01 01NE24SW314 WX 8/24/01 mg/L	100492-02 01NE21SW313 WX 8/24/01 mg/L	100492-04 01NE21SS369 SX 8/24/01 mg/Kg	100492-05 01NE31SS320 SX 8/23/01 mg/Kg	100492-06 01NE31SS305 SX 8/24/01 mg/Kg	100492-11 01NE31SS321 SX 8/24/01 mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
residual range organics	0.23	0.073 J m	1500	14000 J o	43 J n	260	

## Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100492-13	100492L05			
	Field ID	01NE09SD313	01NE31SS320			
Matrix	SX	SX				
Date Collected	8/24/01	8/23/01				
Units	mg/Kg	mg/Kg	RESULT	Q	RC	
residual range organics	1200	14000				

## Diesel Range Organics

## DATA SUMMARY TABLE

Sample ID	99805-01		
Field ID	01NE35GW301		
Matrix	WX		
Date Collected	7/25/01		
Units	mg/L		
Analyte	RESULT	Q	RC
diesel range organics	0.11	J	t

Residual Range Organics

DATA SUMMARY TABLE

Sample ID	99805-01		
Field ID	01NE35GW301		
Matrix	WX		
Date Collected	7/25/01		
Units	mg/L		
Analyte	RESULT	Q	RC
residual range organics	0.15	J	t

Prepared by ETHIX

3/20/02

NE Cape HTRW - St. Lawrence Island  
SDG: 99805

Sample ID	DK21A	DK21ARE					
Field ID	01NE35GW102	01NE35GW102					
Matrix	WX	WX					
Date Collected	7/24/01	7/24/01					
Units	mg/L	mg/L					
Analyte	RESULT	Q	RC	RESULT	Q	RC	
diesel range organics	1.4			1.3	UJ	e	
motor oil	2.8			2.3	UJ	e	

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DK48A			DK48ARE			DK48B			DK48BRE			DK48C			DK48CRE		
	Field ID	01NE35GW101			01NE35GW101			01NE35GW103			01NE35GW103			01NE35GW104			01NE35GW104		
	Matrix	WX			WX			WX			WX			WX			WX		
	Date Collected	7/25/01			7/25/01			7/25/01			7/25/01			7/26/01			7/26/01		
	Units	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics		0.25	U		0.25	UJ	e	0.25	U		0.25	UJ	e	0.25	U		0.25	U	
motor oil		0.5	U		0.5	UJ	e	0.5	U		0.5	UJ	e	0.5	U		0.5	U	

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DK48D	DK48DRE			
	Field ID	01NE35GW201	01NE35GW201			
Matrix	WX	WX				
Date Collected	7/25/01	7/25/01				
Units	mg/L	mg/L				
RESULT	Q	RC	RESULT	Q	RC	
diesel range organics	0.25	U	0.25	UJ	e	
motor oil	0.5	U	0.5	UJ	e	

## **Diesel / Residual Range Organics**

## DATA SUMMARY TABLE

	Sample ID	DN03A	DN03B	DN03C	DN03D	DN03E	DN03F
	Field ID	01NE28SW115	01NE28SW211	01NE28SW113	01NE28SW111	01NE28SW112	01NE28SW114
	Matrix	WX	WX	WX	WX	WX	WX
	Date Collected	8/19/01	8/18/01	8/18/01	8/18/01	8/18/01	8/19/01
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Analyte		RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics		0.68	0.41	0.57	0.41	0.71	2.3
motor oil		0.5 U					

Prepared by ETHIX

3/20/02

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NE Cape HTRW - St. Lawrence Island  
SDG: DN03

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN03G	DN03J				
Field ID	01NE07SW104	01NE07SW105				
Matrix	WX	WX				
Date Collected	8/19/01	8/19/01				
Units	mg/L	mg/L				
Analyte	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	0.25	U		0.25	U	
motor oil	0.5	U		0.5	U	

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN04A	DN04B	DN04C	DN04D	DN04D-RE	DN04E
Field ID	01NE28SD117	01NE28SD118	01NE28SD119	01NE28SD120	01NE28SD120	01NE28SD121
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	1500	330 J f	36000	170 J b	480 J b	74
motor oil	920	430	9000	600 J b	1000 J b	580

## DATA SUMMARY TABLE

Sample ID	DN04F			DN04F-RE			DN04G			DN04G-RE			DN04H			DN04I		
Field ID	01NE28SD122			01NE28SD122			01NE28SD123			01NE28SD123			01NE28SD124			01NE28SD125		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
Units	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	110	J	b	310	J	b	140	J	b	1600	J	b	650			1000		
motor oil	460	J	b	910	J	b	490	J	b	1500	J	b	2000			880		

Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04J	DN04K	DN04L	DN04M	DN04N	DN04O		
	Field ID	01NE28SD126	01NE28SD127	01NE28SD128	01NE28SD225	01NE28SD129	01NE28SD130		
	Matrix	SX	SX	SX	SX	SX	SX		
	Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01		
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	5200			3100			15000		
motor oil	1200			300			1800		
							860		
							510		
							2500		
							660		
							14000		
							2200		

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04P	DN04Q	DN04R	DN04S		
	Field ID	01NE28SD131	01NE28SD132	01NE28SD133	01NE28SD134		
	Matrix	SX	SX	SX	SX		
	Date Collected	8/18/01	8/18/01	8/18/01	8/18/01		
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
diesel range organics	RESULT Q RC	56000	150000	4900	5200		
motor oil		9900	6900	780	230 U		

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN05A	DN05B	DN05C	DN05D	DN05E	DN05F		
	Field ID	01NE28SD153	01NE28SD154	01NE28SD155	01NE28SD156	01NE28SD157	01NE28SD158		
	Matrix	SX	SX	SX	SX	SX	SX		
	Date Collected	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01		
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	19000			14000			88000		
motor oil	2400			2000			10000		
							85000		
							15000		
							2000	U	
							3800	J	c,f
							1300		

Analyte	Sample ID	DN05G	DN05H				
	Field ID	01NE28SD253	01NE28SD257				
	Matrix	SX	SX				
	Date Collected	8/19/01	8/19/01				
	Units	mg/Kg	mg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	
diesel range organics	20000			18000			
motor oil	2400			2000	U		

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN06A 01NE28SD135 SX 8/19/01 mg/Kg	DN06B 01NE28SD136 SX 8/19/01 mg/Kg	DN06C 01NE28SD137 SX 8/19/01 mg/Kg	DN06D 01NE28SD138 SX 8/19/01 mg/Kg	DN06E 01NE28SD139 SX 8/19/01 mg/Kg	DN06F 01NE28SD140 SX 8/19/01 mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	1100	40000	560	170	520 J c,f,n	6900	
motor oil	400	13000	2700	1200	2300	1300	

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID Field ID Matrix Date Collected Units	DN06G 01NE28SD239 SX 8/19/01 mg/Kg RESULT Q RC	DN06H 01NE28SD141 SX 8/19/01 mg/Kg RESULT Q RC	DN06I 01NE28SD142 SX 8/19/01 mg/Kg RESULT Q RC	DN06J 01NE28SD143 SX 8/19/01 mg/Kg RESULT Q RC	DN06K 01NE28SD144 SX 8/19/01 mg/Kg RESULT Q RC	DN06L 01NE28SD145 SX 8/19/01 mg/Kg RESULT Q RC
diesel range organics		610 J n	430	280	15000	6700	2500
motor oil		2500	2200	1100	2300	2600	3000

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DN06M 01NE28SD146 SX	DN06N 01NE28SD147 SX	DN06O 01NE28SD148 SX	DN06P 01NE28SD149 SX	DN06Q 01NE28SD150 SX	DN06R 01NE28SD151 SX
Analyte	Date Collected Units	8/19/01 mg/Kg	8/19/01 mg/Kg	8/19/01 mg/Kg	8/19/01 mg/Kg	8/19/01 mg/Kg	8/19/01 mg/Kg
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics		66000	11000	14000	19000	4600	15000
motor oil		1900	1200	1300	1900	1300	1000

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN06S	DN06T				
Field ID	01NE28SD251	01NE28SD152				
Matrix	SX	SX				
Date Collected	8/19/01	8/19/01				
Units	mg/Kg	mg/Kg				
Analyte	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	14000			5700		
motor oil	1000	U		1200		

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07A	DN07B	DN07C	DN07D	DN07E	DN07F											
	Field ID	01NE06TP101	01NE06TP201	01NE06TP102	01NE28SD111	01NE28SD211	01NE28SD112											
	Matrix	SX	SX	SX	SX	SX	SX											
	Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01											
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg											
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC						
diesel range organics	2000			860			3000			640			1500			610		
motor oil	3400			1300			8500			520			820			1800		

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID Field ID Matrix Date Collected Units	DN07G 01NE28SD113 SX 8/18/01 mg/Kg RESULT Q RC	DN07H 01NE28SD114 SX 8/18/01 mg/Kg RESULT Q RC	DN07I 01NE28SD115 SX 8/18/01 mg/Kg RESULT Q RC	DN07J 01NE28SD116 SX 8/18/01 mg/Kg RESULT Q RC	DN07K 01NE06SD116 SX 8/18/01 mg/Kg RESULT Q RC	DN07L 01NE06SD117 SX 8/18/01 mg/Kg RESULT Q RC
diesel range organics		180	680	360	310	110	40
motor oil		420	3200	1600	1500	880	220

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07N	DN07O	DN07P	DN07Q	DN07R	
	Field ID	01NE07SS125	01NE07SS126	01NE07SS127	01NE07SD105	01NE07SD104	
	Matrix	SX	SX	SX	SX	SX	
	Date Collected	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01	
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
	RESULT	Q	RC	RESULT	Q	RC	RESULT
diesel range organics	150			160			720
motor oil	620			740			3600
							280
							1700
							1400
							2800

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID	DN36A			DN36B			DN36C			DN36D			DN36E			DN36F		
	Field ID	01NE29SW117			01NE29SW217			01NE29SW116			01NE29SW115			01NE29SW114			01NE28SW116		
	Matrix	WX			WX			WX			WX			WX			WX		
	Date Collected	8/20/01			8/20/01			8/21/01			8/21/01			8/21/01			8/20/01		
	Units	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Analyte		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics		0.25	U		0.25	U		0.25	U		0.25	U		0.25	U		0.39		
motor oil		0.5	U		0.5	U		0.5	U		0.5	U		0.5	U		0.5	U	

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN38A	DN38B	DN38C	DN38D	DN38E	DN38F									
	Field ID	01NE29SD114	01NE29SD214	01NE29SD115	01NE29SD116	01NE29SD117	01NE29SD118									
	Matrix	SX	SX	SX	SX	SX	SX									
	Date Collected	8/21/01	8/21/01	8/21/01	8/21/01	8/21/01	8/21/01									
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg									
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC							
diesel range organics	410			380			13			95			9.3			18
motor oil	770			810			26			250			10	U		45

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN38G	DN38H	DN38I	DN38J	DN38K	DN38L
Field ID	01NE29SD119	01NE28SD165	01NE28SD166	01NE28SD167	01NE28SD168	01NE28SD169
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/21/01	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	15	120	65	17000	8200	54000
motor oil	100	620	240	10000	3000	6300

Prepared by ETHIX

3/20/02

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NE Cape HTRW - St. Lawrence Island  
SDG: DN38

Sample ID	DN38M					
Field ID	01NE28SD170					
Matrix	SX					
Date Collected	8/20/01					
Units	mg/Kg					
Analyte	RESULT Q RC					
diesel range organics	60000					
motor oil	6900					

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN39A	DN39B	DN39B-DL	DN39C	DN39C-DL	DN39D
Field ID	01NE28SD159	01NE28SD160	01NE28SD160	01NE28SD161	01NE28SD161	01NE28SD163
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyte	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	58000		J o	71000	J o	75000
motor oil	10000	U		2000	U	4000
				10000	U	4000

Analyte	Sample ID	DN39D-DL	DN39E			DN39E-DL			DN39F			DN39F-DL			DN39G		
	Field ID	01NE28SD163	01NE28SD164			01NE28SD164			01NE28SD263			01NE28SD263			01NE28SD171		
	Matrix	SX	SX			SX			SX			SX			SX		
	Date Collected	8/20/01	8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
	Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
		RESULT Q RC															
diesel range organics		56000		48000 J o		59000		50000 J o		57000		2200					
motor oil		10000 U		1600		10000 U		4200		10000 U		4200					

## DATA SUMMARY TABLE

Sample ID	DN39H			DN39H-DL			DN39I			DN39J			DN39K			DN39L		
Field ID	01NE28SD172			01NE28SD172			01NE28SD173			01NE28SD174			01NE28SD175			01NE28SD176		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/20/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
Units	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	5200	J	b,o	5700			1600			950			280	J	b	790	J	b
motor oil	360	J	b	440			2100			2000			1200	J	b	1400	J	b

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID	DN39M			DN39N			DN39O			DN39P			DN39P-DL			DN39Q		
	Field ID	01NE28SD271			01NE28SD275			01NE28SD177			01NE28SD178			01NE28SD178			01NE28SD179		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/20/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
Analyte	Units	mg/Kg			RESULT Q RC			RESULT Q RC			RESULT Q RC			RESULT Q RC			RESULT Q RC		
diesel range organics		1500	J	b	240			12000			42000	J	o	45000			9600		
motor oil		1400	J	b	1800			1200			2200			3300	U		1300		

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39R	DN39S	DN39T			
	Field ID	01NE28SD180	01NE28SD181	01NE28SD182			
	Matrix	SX	SX	SX			
	Date Collected	8/20/01	8/20/01	8/20/01			
	Units	mg/Kg	mg/Kg	mg/Kg			
		RESULT Q RC	RESULT Q RC	RESULT Q RC			
diesel range organics		8900	4100	1400			
motor oil		1900	1700	2100			

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID DN40A	DN40A-RE			DN40B			DN40B-RE			DN40C			DN40C-RE		
	Field ID 01NE29SD123	01NE29SD123			01NE29SD124			01NE29SD124			01NE29SD125			01NE29SD125		
	Matrix SX	SX			SX			SX			SX			SX		
	Date Collected 8/21/01	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01		
Analyte	Units mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
	RESULT Q RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	74	44	J	e	500	1400	J	e	28	150	J	e				
motor oil	500	180	J	e	210	580	J	e	170	790	J	e				

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN40D	DN40D-RE			DN40E			DN40E-RE			DN40F			DN40F-RE				
Field ID	01NE29SD225	01NE29SD225			01NE29SD128			01NE29SD128			01NE29SD129			01NE29SD129				
Matrix	SX	SX			SX			SX			SX			SX				
Date Collected	8/21/01	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01				
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg				
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
diesel range organics	23			150	J	e	48			180	J	e	5	U		15	J	e
motor oil	140			680	J	e	280			1000	J	e	13			73	J	e

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN40G			DN40G-RE			DN40H			DN40H-RE			DN40I			DN40I-RE		
	Field ID	01NE29SD120			01NE29SD120			01NE29SD121			01NE29SD121			01NE29SD122			01NE29SD122		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01			8/21/01		
	Units	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
diesel range organics	27			47	J	e	5	U		11	J	e	25			37	J	e	
motor oil	51			100	J	e	10			10	UJ	e	19			50	J	e	

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID DN40M	DN40M-RE			DN40N	DN40N-RE							
	Field ID 01NE29SD127	01NE29SD127			01NE29SD126	01NE29SD126							
	Matrix SX	SX			SX	SX							
	Date Collected 8/21/01	8/21/01			8/21/01	8/21/01							
Analyte	Units mg/Kg	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics		59			250	J	e	110			240	J	e
motor oil		440			1100	J	e	570			1000	J	e

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN53A 01NE09SW109 WX 8/23/01 mg/L	DN53A-RE 01NE09SW109 WX 8/23/01 mg/L	DN53B 01NE09SW107 WX 8/23/01 mg/L	DN53B-RE 01NE09SW107 WX 8/23/01 mg/L	DN53F 01NE09SW207 WX 8/23/01 mg/L	DN53F-RE 01NE09SW207 WX 8/23/01 mg/L
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	0.25 U	0.25 UJ e	0.25 U	0.25 UJ e	0.25 U	0.25 U	0.25 UJ e
motor oil	0.5 U	0.5 UJ e	0.5 U	0.5 UJ e	0.5 U	0.5 U	0.5 UJ e

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN53G	DN53G-RE			
	Field ID	01NE09SW108	01NE09SW108			
	Matrix	WX	WX			
	Date Collected	8/23/01	8/23/01			
	Units	mg/L	mg/L			
	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	0.25	U		0.25	UJ	e
motor oil	0.5	U		0.5	UJ	e

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN55A	DN55B	DN55C	DN55D	DN55E	DN55F
Field ID	01NE33SS101	01NE33SS102	01NE33SS103	01NE34SS101	01NE34SS102	01NE34SS103
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/23/01	8/23/01	8/23/01	8/23/01	8/23/01	8/23/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	170	150	660	47	14	13
motor oil	300	270	2100	150	77	76

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID Field ID Matrix Date Collected Units	DN55G 01NE34SS105 SX 8/23/01 mg/Kg RESULT Q RC	DN55H 01NE34SS106 SX 8/23/01 mg/Kg RESULT Q RC	DN55H-DL 01NE34SS106 SX 8/23/01 mg/Kg RESULT Q RC	DN55I 01NE34SS107 SX 8/23/01 mg/Kg RESULT Q RC	DN55J 01NE34SS108 SX 8/23/01 mg/Kg RESULT Q RC	DN55K 01NE34SS109 SX 8/23/01 mg/Kg RESULT Q RC
diesel range organics		980	1200 J o	1100	41	220	300
motor oil		100 U	58	100 U	95	280	1200

Analyte	Sample ID	DN55L	DN55M			
	Field ID	01NE34SS110	01NE34SS111			
	Matrix	SX	SX			
	Date Collected	8/23/01	8/23/01			
	Units	mg/Kg	mg/Kg			
	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	230			7.1		
motor oil	620			30		

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN68A	DN68B			DN68F			DN68F-RE			DN68N	DN68O			
Field ID	01NE21SS169	01NE21SS269			01NE09SD114			01NE09SD114			01NE31SS101	01NE31SS102			
Matrix	SX	SX			SX			SX			SX	SX			
Date Collected	8/24/01	8/24/01			8/24/01			8/24/01			8/24/01	8/24/01			
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg	mg/Kg			
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	270			220	J	c,f	93	J	b	65	J	b,e	11		25
motor oil	2800			2200			740	J	b	300	J	b,e	33		95

	Sample ID DN68Q	DN68R	DN68S	DN68T	DN68U	DN68V
	Field ID 01NE31SS103	01NE31SS104	01NE32SS101	01NE32SS102	01NE32SS103	01NE32SS104
	Matrix SX	SX	SX	SX	SX	SX
Date Collected	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	18	49	7600	13000	230	600
motor oil	62	140	2000 U	2000 U	1100	1200

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN69A	DN69B	DN69C	DN69D	DN69E	DN69F
Field ID	01NE21SB169	01NE21SB170	01NE21SS170	01NE21SB171	01NE21SS171	01NE21SS172
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyte	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	640			340		
motor oil	3700			2300		
				380		
				2200		
				5 U		
				25		
					94	140
					530	390

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN69G	DN69H	DN69I	DN69N	DN69O	DN69P
Field ID	01NE21SS173	01NE21SD113	01NE21SD114	01NE31SS121	01NE31SS122	01NE31SS123
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyte	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	300			310		
motor oil	1700			2000		
				310	47 J f	11000
				2000	350	7800
						240
						1300

Prepared by ETHIX

3/20/02

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NE Cape HTRW - St. Lawrence Island  
SDG: DN69

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN69Q	DN69R			
	Field ID	01NE31SS124	01NE31SS221	Matrix	SX	SX
	Date Collected	8/24/01	8/24/01	Units	mg/Kg	mg/Kg
	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	100			39		
motor oil	190			340		

Prepared by ETHIX

3/20/02

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NE Cape HTRW - St. Lawrence Island  
SDG: DN69

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DN71A 01NE09SW112 WX	DN71B 01NE09WP102 WX	DN71C 01NE06SW116 WX	DN71D 01NE09MW103 WX	DN71D-RE 01NE09MW103 WX	DN71E 01NE09SW111 WX
Analyte	Date Collected Units	8/26/01 mg/L	8/26/01 mg/L	8/26/01 mg/L	8/26/01 mg/L	8/26/01 mg/L	8/26/01 mg/L
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics		0.25 U	0.93	0.25 U	0.25 UJ b	0.25 UJ b,e	0.25 U
motor oil		0.5 U	4.2	0.5 U	0.5 UJ b	0.5 UJ b,e	0.5 U

## DATA SUMMARY TABLE

Sample ID	DN71F	DN71G			DN71H			DN71I			DN71J			DN71M				
Field ID	01NE24SW114	01NE24SW214			01NE03WP102			01NE03WP103			01NE03WP104			01NE21SW113				
Matrix	WX	WX																
Date Collected	8/24/01	8/24/01			8/25/01			8/25/01			8/25/01			8/24/01				
Units	mg/L	mg/L																
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	0.25	UJ	t	0.25	UJ	t	3.3			2.4			1.8			0.3		
motor oil	0.5	UJ	t	0.5	UJ	t	1.3			8.1			6.3			0.5	U	

Analyte	Sample ID	DN71N	DN71P									
	Field ID	01NE21SW213	01NE09SW110									
	Matrix	WX	WX									
	Date Collected	8/24/01	8/25/01									
	Units	mg/L	mg/L									
	RESULT	Q	RC	RESULT	Q	RC						
diesel range organics	0.28			0.25	U							
motor oil	0.5	U		0.5	U							

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN73A	DN73A-RE	DN73C	DN73C-RE	DN73D	DN73D-RE
Field ID	01NE30WP101	01NE30WP101	01NE06WP103	01NE06WP103	01NE31SW101	01NE31SW101
Matrix	WX	WX	WX	WX	WX	WX
Date Collected	8/25/01	8/25/01	8/25/01	8/25/01	8/24/01	8/24/01
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Analyte	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	2	1	UJ e	0.29	B a	0.58 J e
motor oil	6.9	2.5	J e	0.5	U	1.1 J e
					0.25 U	0.25 UJ e
					0.5 U	0.5 UJ e

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN73E			DN73E-RE			DN73F			DN73F-RE			DN73G			DN73G-RE		
	Field ID	01NE31SW102			01NE31SW102			01NE04WP104			01NE04WP104			01NE04WP102			01NE04WP102		
	Matrix	WX			WX			WX			WX			WX			WX		
	Date Collected	8/24/01			8/24/01			8/25/01			8/25/01			8/25/01			8/25/01		
	Units	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics		0.25	U		0.25	UJ	e	0.96	B	a	2.4	J	e	1.4	B	a	1	UJ	e
motor oil		0.5	U		0.5	UJ	e	2.6			6	J	e	6.5			2.2	J	e

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN73H	DN73H-RE			DN73M			DN73M-RE					
Field ID	01NE04WP103	01NE04WP103			01NE21SW114			01NE21SW114					
Matrix	WX	WX			WX			WX					
Date Collected	8/25/01	8/25/01			8/21/01			8/21/01					
Units	mg/L	mg/L			mg/L			mg/L					
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
diesel range organics	2			0.25	UJ	e	0.25	UJ	e	0.25	UJ	e	
motor oil	5.4			0.5	UJ	e	0.5	UJ	e	0.5	UJ	e	

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID DN76D	DN76E	DN76F	DN76G	DN76H	DN76I
	Field ID 01NE09SD107	01NE09SD108	01NE30SS101	01NE30SD101	01NE30SS103	01NE30SS102
	Matrix SX	SX	SX	SX	SX	SX
	Date Collected 8/23/01	8/23/01	8/24/01	8/24/01	8/24/01	8/24/01
Analyte	Units mg/Kg	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	320 J f	84	390	84	170	11
motor oil	2100	520	2300	270	1200	21

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN76J	DN76K	DN76L	DN76M	DN76N	DN76P
Field ID	01NE09SD109	01NE09SD213	01NE24SD114	01NE24SD115	01NE32SS105	01NE09SD113
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyte	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	510			120	4600	100
motor oil	1300			680	3100	230
					1000	1400
					3600	270 J c,f

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN78A 01NE31SS105 SX 8/23/01 mg/Kg	DN78B 01NE31SS205 SX 8/23/01 mg/Kg	DN78C 01NE31SS106 SX 8/23/01 mg/Kg	DN78D 01NE31SS107 SX 8/23/01 mg/Kg	DN78E 01NE31SS108 SX 8/23/01 mg/Kg	DN78F 01NE31SS109 SX 8/23/01 mg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	3400	3700	620	690	550	470 J b	
motor oil	500 UJ n	500 UJ n	100 U	100 U	50 U	50 UJ b	

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN78G			DN78H			DN78I			DN78J			DN78K			DN78L		
Field ID	01NE31SS110			01NE31SS111			01NE31SS112			01NE31SS113			01NE31SS114			01NE31SS115		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/23/01			8/23/01			8/23/01			8/23/01			8/23/01			8/23/01		
Units	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	310			78	J	b	120	J	b	640			1600			380	J	b
motor oil	40	U		32	J	b	12	J	b	100	U		200	U		40	UJ	b

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DN78M 01NE31SS116 SX	DN78N 01NE31SS117 SX	DN78O 01NE31SS118 SX	DN78P 01NE31SS119 SX	DN78Q 01NE31SS120 SX	DN78R 01NE31SS220 SX
Analyte	Date Collected Units	8/23/01 mg/Kg	8/23/01 mg/Kg	8/23/01 mg/Kg	8/23/01 mg/Kg	8/23/01 mg/Kg	8/23/01 mg/Kg
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
diesel range organics	1200	2100	3000	1600	2100	2200	
motor oil	200 U	200 U	200 U	7800	11000	8200	

Sample ID	DN78S		
Field ID	01NE31SS125		
Matrix	SX		
Date Collected	8/23/01		
Units	mg/Kg		
Analyte	RESULT	Q	RC
diesel range organics	64	J	b
motor oil	210	J	b

## Diesel / Residual Range Organics

## DATA SUMMARY TABLE

Sample ID	DN88A	DN88C	DN88D	DN88E	DN88F	
Field ID	01NE07WP102	01NE30WP102	01NE06WP102	01NE07WP101	01NE07WP103	
Matrix	WX	WX	WX	WX	WX	
Date Collected	8/27/01	8/28/01	8/27/01	8/28/01	8/27/01	
Units	mg/L	mg/L	mg/L	mg/L	mg/L	
Analyte	RESULT	Q	RC	RESULT	Q	RC
diesel range organics	0.25	U		0.25	U	
motor oil	1.1			0.5	U	
				0.56	U	
				0.66	0.39	
				2.7	1.4	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	100302-02 01NE28SD311 SX 8/18/01 mg/Kg	100302-03 01NE28SD325 SX 8/18/01 mg/Kg	100302-04 01NE28SD351 SX 8/19/01 mg/Kg	100302-05 01NE28SD353 SX 8/19/01 mg/Kg	100302-06 01NE28SD357 SX 8/19/01 mg/Kg	100302-07 01NE28SW311 WX 8/18/01 µg/L
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
aroclor 1016	0.67 U	0.22 U	0.17 U	0.11 U	0.17 U	0.17 U	0.095 U
aroclor 1221	0.67 U	0.22 U	0.17 U	0.11 U	0.17 U	0.17 U	0.19 U
aroclor 1232	0.67 U	0.22 U	0.17 U	0.11 U	0.17 U	0.17 U	0.095 U
aroclor 1242	0.67 U	0.22 U	0.17 U	0.11 U	0.17 U	0.17 U	0.095 U
aroclor 1248	0.67 U	0.22 U	0.17 U	0.11 U	0.17 U	0.17 U	0.095 U
aroclor 1254	0.67 U	0.22 U	0.17 U	0.45	0.17 U	0.17 U	0.095 U
aroclor 1260	0.67 U	0.22 U	0.17 U	0.11 U	0.51	0.095 U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	100302-08 01NE28SD339 SX 8/19/01 mg/Kg			
Analyte		RESULT	Q	RC	
aroclor 1016		0.25	U		
aroclor 1221		0.25	U		
aroclor 1232		0.25	U		
aroclor 1242		0.25	U		
aroclor 1248		0.25	U		
aroclor 1254		0.25	U		
aroclor 1260		0.25	U		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	100413-01	100413-02			100413-03			100413-04			100413-05			100413-06			
	Field ID	01NE29SD325	01NE28SD375			01NE28SD371			01NE28SD363			01NE29SD314			01NE29SW317			
	Matrix	SX	SX			SX			SX			SX			WX			
	Date Collected	8/21/01	8/20/01			8/20/01			8/20/01			8/21/01			8/20/01			
	Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			µg/L			
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	0.16	U		0.46	U		0.58	U		0.16	U		0.26	U		0.1	U	
aroclor 1221	0.16	U		0.46	U		0.58	U		0.16	U		0.26	U		0.21	U	
aroclor 1232	0.16	U		0.46	U		0.58	U		0.16	U		0.26	U		0.1	U	
aroclor 1242	0.16	U		0.46	U		0.58	U		0.16	U		0.26	U		0.1	U	
aroclor 1248	0.16	U		0.46	U		0.58	U		0.16	U		0.26	U		0.1	U	
aroclor 1254	0.16	U		0.46	U		0.58	U		0.16	U		0.26	U		0.1	U	
aroclor 1260	0.16	U		0.46	U		0.58	U		0.45			0.26	U		0.1	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	100418-02						
	Field ID	01NE09SW307						
	Matrix	WX						
	Date Collected	8/23/01						
	Units	µg/L	RESULT	Q	RC			
aroclor 1016		0.1	U					
aroclor 1221		0.2	U					
aroclor 1232		0.1	U					
aroclor 1242		0.1	U					
aroclor 1248		0.1	U					
aroclor 1254		0.1	U					
aroclor 1260		0.1	U					

Prepared by ETHIX

3/20/02

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NE Cape HTRW - St. Lawrence Island  
SDG: 100418

## Organochlorine Pesticides

## DATA SUMMARY TABLE

Analyte	Sample ID	100492-10		
	Field ID	01NE31SS302		
	Matrix	SX		
	Date Collected	8/24/01		
	Units	µg/Kg		
	RESULT	Q	RC	
4,4'-DDD	2.3	U		
4,4'-DDE	2.3	U		
4,4'-DDT	2.3	U		
aldrin	1.1	U		
alpha-BHC	1.1	U		
beta-BHC	1.1	U		
chlordane	11	U		
delta-BHC	1.1	U		
dieldrin	2.3	U		
endosulfan I	1.1	U		
endosulfan II	2.3	U		
endosulfan sulfate	2.3	U		
endrin	2.3	U		
endrin aldehyde	2.3	U		
endrin ketone	2.3	U		
gamma-BHC	1.1	U		
heptachlor	1.1	U		
heptachlor epoxide	1.1	U		
methoxychlor	11	U		
toxaphene	110	U		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	100492-01 01NE24SW314 WX	100492-04 01NE21SS369 SX	100492-10 01NE31SS302 SX	100492-12 01NE14SS303 SX	100492-13 01NE09SD313 SX	
Analyte	Date Collected Units	8/24/01 µg/L	8/24/01 mg/Kg	8/24/01 mg/Kg	8/24/01 mg/Kg	8/24/01 mg/Kg	
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
aroclor 1016		0.097 U	0.41 UJ e	0.11 UJ e	0.11 UJ e	0.63 UJ e	
aroclor 1221		0.19 U	0.41 UJ e	0.11 UJ e	0.11 UJ e	0.63 UJ e	
aroclor 1232		0.097 U	0.41 UJ e	0.11 UJ e	0.11 UJ e	0.63 UJ e	
aroclor 1242		0.097 U	0.41 UJ e	0.11 UJ e	0.11 UJ e	0.63 UJ e	
aroclor 1248		0.097 U	0.41 UJ e	0.11 UJ e	0.11 UJ e	0.63 UJ e	
aroclor 1254		0.097 U	0.41 UJ e	0.11 UJ e	0.11 UJ e	0.63 UJ e	
aroclor 1260		0.097 U	0.41 UJ e	3 J e	0.71 J e	0.63 UJ e	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN03A			DN03B			DN03C			DN03D			DN03E			DN03F		
	Field ID	01NE28SW115			01NE28SW211			01NE28SW113			01NE28SW111			01NE28SW112			01NE28SW114		
	Matrix	WX			WX														
	Date Collected	8/19/01			8/18/01			8/18/01			8/18/01			8/18/01			8/19/01		
	Units	µg/L			µg/L														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
aroclor 1016	1	U		1	U		1	U		1	U		1	U		1	U		
aroclor 1221	2	U		2	U		2	U		2	U		2	U		2	U		
aroclor 1232	1	U		1	U		1	U		1	U		1	U		1	U		
aroclor 1242	1	U		1	U		1	U		1	U		1	U		1	U		
aroclor 1248	1	U		1	U		1	U		1	U		1	U		1	U		
aroclor 1254	1	U		1	U		1	U		1	U		1	U		1	U		
aroclor 1260	1	U		1	U		1	U		1	U		1	U		1	U		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN03G			DN03J								
	Field ID	01NE07SW104			Matrix	WX							
Date Collected	8/19/01			Units	WX			RESULT	Q	RC	RESULT	Q	RC
		RESULT	Q	RC		RESULT	Q	RC					
aroclor 1016		1	U			1	U						
aroclor 1221		2	U			2	U						
aroclor 1232		1	U			1	U						
aroclor 1242		1	U			1	U						
aroclor 1248		1	U			1	U						
aroclor 1254		1	U			1	U						
aroclor 1260		1	U			1	U						

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN04A			DN04B			DN04C			DN04D			DN04E			DN04F		
Field ID	01NE28SD117			01NE28SD118			01NE28SD119			01NE28SD120			01NE28SD121			01NE28SD122		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	61	U		50	U		200	U		190	U		180	U		220	U	
aroclor 1221	120	U		99	U		410	U		390	U		360	U		440	U	
aroclor 1232	61	U		50	U		200	U		190	U		180	U		220	U	
aroclor 1242	61	U		50	U		200	U		190	U		180	U		220	U	
aroclor 1248	61	U		50	U		200	U		190	U		180	U		220	U	
aroclor 1254	61	U		50	U		340			190	U		180	U		220	U	
aroclor 1260	61	U		50	U		390			190	U		180	U		220	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN04G			DN04H			DN04I			DN04J			DN04K			DN04L		
Field ID	01NE28SD123			01NE28SD124			01NE28SD125			01NE28SD126			01NE28SD127			01NE28SD128		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	240	U		100	U		67	U		200	U		140	U		180	U	
aroclor 1221	470	U		210	U		130	U		390	U		270	U		360	U	
aroclor 1232	240	U		100	U		67	U		200	U		140	U		180	U	
aroclor 1242	240	U		100	U		67	U		200	U		140	U		180	U	
aroclor 1248	240	U		100	U		67	U		200	U		140	U		180	U	
aroclor 1254	240	U		100	U		67	U		200	U		140	U		180	U	
aroclor 1260	240	U		100	U		67	U		200	U		140	U		180	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN04M			DN04N			DN04O			DN04P			DN04P-RE			DN04Q		
Field ID	01NE28SD225			01NE28SD129			01NE28SD130			01NE28SD131			01NE28SD131			01NE28SD132		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	62	U		130	U		170	U		64	U		64	UJ	b	180	U	
aroclor 1221	120	U		260	U		350	U		130	U		130	UJ	b	360	U	
aroclor 1232	62	U		130	U		170	U		64	U		64	UJ	b	180	U	
aroclor 1242	62	U		130	U		170	U		64	U		64	UJ	b	180	U	
aroclor 1248	62	U		130	U		170	U		64	U		64	UJ	b	180	U	
aroclor 1254	62	U		130	U		200			160			130	J	b	180	U	
aroclor 1260	62	U		130	U		310			140			140	J	b	190		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04R			DN04S								
	Field ID	01NE28SD133			01NE28SD134								
	Matrix	SX			SX								
	Date Collected	8/18/01			8/18/01								
	Units	µg/Kg			µg/Kg								
		RESULT	Q	RC	RESULT	Q	RC						
aroclor 1016		150	U		150	U							
aroclor 1221		300	U		300	U							
aroclor 1232		150	U		150	U							
aroclor 1242		150	U		150	U							
aroclor 1248		150	U		150	U							
aroclor 1254		150	U		150	U							
aroclor 1260		150	U		150	U							

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN05A			DN05B			DN05C			DN05D			DN05E			DN05F		
Field ID	01NE28SD153			01NE28SD154			01NE28SD155			01NE28SD156			01NE28SD157			01NE28SD158		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01		
Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	47	U		50	U		61	U		61	U		47	U		46	U	
aroclor 1221	94	U		100	U		120	U		120	U		94	U		91	U	
aroclor 1232	47	U		50	U		61	U		61	U		47	U		46	U	
aroclor 1242	47	U		50	U		120			61	U		47	U		46	U	
aroclor 1248	47	U		50	U		61	U		61	U		47	U		46	U	
aroclor 1254	150			170			1700			520			47	U		48		
aroclor 1260	94			82			700			230			47	U		46	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN05G			DN05H					
	Field ID	01NE28SD253	SX		01NE28SD257	SX				
	Date Collected	8/19/01		8/19/01			Units	µg/Kg	µg/Kg	
		RESULT	Q	RC	RESULT	Q	RC			
aroclor 1016		40	U		49	U				
aroclor 1221		80	U		97	U				
aroclor 1232		40	U		49	U				
aroclor 1242		40	U		49	U				
aroclor 1248		40	U		49	U				
aroclor 1254		170			49	U				
aroclor 1260		99			49	U				

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06A			DN06B			DN06C			DN06D			DN06E			DN06F		
	Field ID	01NE28SD135			01NE28SD136			01NE28SD137			01NE28SD138			01NE28SD139			01NE28SD140		
	Matrix	SX			SX														
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01		
	Units	µg/Kg			µg/Kg														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
aroclor 1016	45	U		80	U		60	U		65	U		78	U		110	U		
aroclor 1221	89	U		160	U		120	U		130	U		160	U		220	U		
aroclor 1232	45	U		80	U		60	U		65	U		78	U		110	U		
aroclor 1242	45	U		80	U		60	U		65	U		78	U		110	U		
aroclor 1248	45	U		80	U		60	U		65	U		78	U		110	U		
aroclor 1254	45	U		100			60	U		65	U		78	U		110	U		
aroclor 1260	45	U		250			60	U		65	U		78	U		110	U		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06G			DN06H			DN06I			DN06J			DN06K			DN06L		
	Field ID	01NE28SD239			01NE28SD141			01NE28SD142			01NE28SD143			01NE28SD144			01NE28SD145		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
aroclor 1016		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1221		81	U		70	U		78	U		95	U		78	U		77	U	
aroclor 1232		160	U		140	U		160	U		190	U		160	U		150	U	
aroclor 1242		81	U		70	U		78	U		95	U		78	U		77	U	
aroclor 1248		81	U		70	U		78	U		95	U		78	U		77	U	
aroclor 1254		81	U		70	U		78	U		95	U		78	U		77	U	
aroclor 1260		81	U		70	U		78	U		95	U		78	U		77	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06M			DN06N			DN06O			DN06P			DN06Q			DN06R		
	Field ID	01NE28SD146			01NE28SD147			01NE28SD148			01NE28SD149			01NE28SD150			01NE28SD151		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
aroclor 1016		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1221		95	U		41	U		82	U		44	U		47	U		47	U	
aroclor 1232		190	U		82	U		160	U		87	U		94	U		94	U	
aroclor 1242		95	U		41	U		82	U		44	U		47	U		47	U	
aroclor 1248		95	U		41	U		82	U		44	U		47	U		47	U	
aroclor 1254		95	U		41	U		82	U		260			47	U		47	U	
aroclor 1260		95	U		41	U		82	U		150			47	U		47	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06S			DN06T					
	Field ID	01NE28SD251			01NE28SD152					
Matrix	SX			SX						
Date Collected	8/19/01			8/19/01						
Units	µg/Kg			µg/Kg						
	RESULT	Q	RC	RESULT	Q	RC				
aroclor 1016	45	U		54	U					
aroclor 1221	90	U		110	U					
aroclor 1232	45	U		54	U					
aroclor 1242	45	U		54	U					
aroclor 1248	45	U		54	U					
aroclor 1254	45	U		54	U					
aroclor 1260	45	U		54	U					

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07D			DN07E			DN07F			DN07G			DN07G-RE			DN07H		
	Field ID	01NE28SD111			01NE28SD211			01NE28SD112			01NE28SD113			01NE28SD113			01NE28SD114		
	Matrix	SX			SX														
	Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
	Units	µg/Kg			µg/Kg														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
aroclor 1016	200	U		250	U		75	U		260	UJ	b	260	U		94	U		
aroclor 1221	410	U		500	U		150	U		510	UJ	b	510	U		190	U		
aroclor 1232	200	U		250	U		75	U		260	UJ	b	260	U		94	U		
aroclor 1242	200	U		250	U		75	U		260	UJ	b	260	U		94	U		
aroclor 1248	200	U		250	U		75	U		260	UJ	b	260	U		94	U		
aroclor 1254	200	U		250	U		75	U		260	UJ	b	260	U		94	U		
aroclor 1260	200	U		250	U		75	U		260	UJ	b	260	U		94	U		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN07I 01NE28SD115 SX 8/18/01 µg/Kg	DN07J 01NE28SD116 SX 8/18/01 µg/Kg	DN07K 01NE06SD116 SX 8/18/01 µg/Kg	DN07L 01NE06SD117 SX 8/18/01 µg/Kg	DN07N 01NE07SS125 SX 8/19/01 µg/Kg	DN07O 01NE07SS126 SX 8/19/01 µg/Kg
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
aroclor 1016	230 U	53 U	130 U	43 U	39 U	71 U	
aroclor 1221	460 U	110 U	270 U	86 U	79 U	140 U	
aroclor 1232	230 U	53 U	130 U	43 U	39 U	71 U	
aroclor 1242	230 U	53 U	130 U	43 U	39 U	71 U	
aroclor 1248	230 U	53 U	130 U	43 U	39 U	71 U	
aroclor 1254	230 U	53 U	130 U	43 U	39 U	71 U	
aroclor 1260	230 U	53 U	130 U	43 U	1100		130

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07P			DN07P-DL			DN07Q			DN07R				
	Field ID	01NE07SS127			01NE07SS127			01NE07SD105			01NE07SD104				
	Matrix	SX			SX			SX			SX				
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
aroclor 1016		44	U		880	U		280	U		79	U			
aroclor 1221		88	U		1800	U		560	U		160	U			
aroclor 1232		44	U		880	U		280	U		79	U			
aroclor 1242		44	U		880	U		280	U		79	U			
aroclor 1248		44	U		880	U		280	U		79	U			
aroclor 1254		44	U		880	U		280	U		79	U			
aroclor 1260		44	U		880	U		280	U		79	U			
					13000			280	U		79	U			

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN36A			DN36B			DN36C			DN36D			DN36E			DN36F		
Field ID	01NE29SW117			01NE29SW217			01NE29SW116			01NE29SW115			01NE29SW114			01NE28SW116		
Matrix	WX			WX			WX			WX			WX			WX		
Date Collected	8/20/01			8/20/01			8/21/01			8/21/01			8/21/01			8/20/01		
Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	1	U		1	U		1	U		1	U		1	U		1	U	
aroclor 1221	2	U		2	U		2	U		2	U		2	U		2	U	
aroclor 1232	1	U		1	U		1	U		1	U		1	U		1	U	
aroclor 1242	1	U		1	U		1	U		1	U		1	U		1	U	
aroclor 1248	1	U		1	U		1	U		1	U		1	U		1	U	
aroclor 1254	1	U		1	U		1	U		1	U		1	U		1	U	
aroclor 1260	1	U		1	U		1	U		1	U		1	U		1	U	

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NE Cape HTRW - St. Lawrence Island

SDG: DN36

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

	Sample ID	DN38A			DN38B			DN38C			DN38D			DN38E			DN38F		
	Field ID	01NE29SD114			01NE29SD214			01NE29SD115			01NE29SD116			01NE29SD117			01NE29SD118		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01			8/21/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016		60	U		65	U		50	U		52	U		37	U		45	U	
aroclor 1221		120	U		130	U		100	U		100	U		74	U		89	U	
aroclor 1232		60	U		65	U		50	U		52	U		37	U		45	U	
aroclor 1242		60	U		65	U		50	U		52	U		37	U		45	U	
aroclor 1248		60	U		65	U		50	U		52	U		37	U		45	U	
aroclor 1254		60	U		65	U		50	U		52	U		37	U		45	U	
aroclor 1260		60	U		65	U		50	U		52	U		37	U		45	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

	Sample ID	DN38G			DN38H			DN38I			DN38J			DN38K			DN38L		
	Field ID	01NE29SD119			01NE28SD165			01NE28SD166			01NE28SD167			01NE28SD168			01NE28SD169		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/21/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016		38	U		50	U		44	U		170	U		40	U		44	U	
aroclor 1221		75	U		100	U		87	U		340	U		79	U		89	U	
aroclor 1232		38	U		50	U		44	U		170	U		40	U		44	U	
aroclor 1242		38	U		50	U		44	U		170	U		40	U		44	U	
aroclor 1248		38	U		50	U		44	U		170	U		40	U		44	U	
aroclor 1254		38	U		50	U		44	U		170	U		40	U		153	U	
aroclor 1260		38	U		150			44	U		5400			680			440		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN38M			
	Field ID	01NE28SD170			
	Matrix	SX			
	Date Collected	8/20/01			
	Units	µg/Kg			
	RESULT	Q	RC		
aroclor 1016	49	UJ	b		
aroclor 1221	98	UJ	b		
aroclor 1232	49	UJ	b		
aroclor 1242	49	UJ	b		
aroclor 1248	49	UJ	b		
aroclor 1254	188	UJ	b		
aroclor 1260	540				

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN39A			DN39B			DN39C			DN39D			DN39E			DN39F		
Field ID	01NE28SD159			01NE28SD160			01NE28SD161			01NE28SD163			01NE28SD164			01NE28SD263		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/20/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	49	U		49	U		52	U		47	U		47	U		48	U	
aroclor 1221	98	U		99	U		100	U		94	U		94	U		97	U	
aroclor 1232	49	U		49	U		52	U		47	U		47	U		48	U	
aroclor 1242	49	U		49	U		52	U		47	U		47	U		48	U	
aroclor 1248	49	U		49	U		52	U		47	U		47	U		48	U	
aroclor 1254	61			49	U		52	U		73			47	U		110		
aroclor 1260	140			63			52	U		180			47	U		170		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN39G 01NE28SD171	DN39H 01NE28SD172	DN39I 01NE28SD173	DN39J 01NE28SD174	DN39K 01NE28SD175	DN39L 01NE28SD176
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
aroclor 1016	250 U	290 UJ b	120 U	71 U	180 U	290 U	
aroclor 1221	500 U	570 UJ b	250 U	140 U	360 U	590 U	
aroclor 1232	250 U	290 UJ b	120 U	71 U	180 U	290 U	
aroclor 1242	250 U	290 UJ b	120 U	71 U	180 U	290 U	
aroclor 1248	250 U	290 UJ b	120 U	71 U	180 U	290 U	
aroclor 1254	250 U	290 UJ b	120 U	71 U	180 U	290 U	
aroclor 1260	250 U	290 UJ b	120 U	71 U	180 U	290 U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39M			DN39N			DN39O			DN39P			DN39Q			DN39R		
	Field ID	01NE28SD271			01NE28SD275			01NE28SD177			01NE28SD178			01NE28SD179			01NE28SD180		
	Matrix	SX			SX														
	Date Collected	8/20/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
	Units	µg/Kg			µg/Kg														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
aroclor 1016	230	U		170	U		120	U		110	U		43	U		74	U		
aroclor 1221	450	U		340	U		230	U		220	U		87	U		150	U		
aroclor 1232	230	U		170	U		120	U		110	U		43	U		74	U		
aroclor 1242	230	U		170	U		120	U		110	U		43	U		74	U		
aroclor 1248	230	U		170	U		120	U		110	U		43	U		74	U		
aroclor 1254	230	U		170	U		120	U		110	U		43	U		74	U		
aroclor 1260	230	U		170	U		120	U		110	U		43	U		74	U		

Prepared by ETHIX

3/20/02

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NE Cape HTRW - St. Lawrence Island  
SDG: DN39

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39S			DN39T							
	Field ID	01NE28SD181			Matrix	01NE28SD182			Date Collected	8/20/01		
	Units	SX				SX				8/20/01		
	RESULT	Q	RC	RESULT	Q	RC						
aroclor 1016	47	U		110	U							
aroclor 1221	94	U		230	U							
aroclor 1232	47	U		110	U							
aroclor 1242	47	U		110	U							
aroclor 1248	47	U		110	U							
aroclor 1254	47	U		110	U							
aroclor 1260	47	U		110	U							

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN40A			DN40A-RE			DN40B			DN40B-RE			DN40C			DN40C-RE		
Field ID	01NE29SD123			01NE29SD123			01NE29SD124			01NE29SD124			01NE29SD125			01NE29SD125		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01			8/21/01		
Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	73	U		73	UJ	e	48	U		48	UJ	e	48	U		48	UJ	e
aroclor 1221	150	U		150	UJ	e	96	U		96	UJ	e	96	U		96	UJ	e
aroclor 1232	73	U		73	UJ	e	48	U		48	UJ	e	48	U		48	UJ	e
aroclor 1242	73	U		73	UJ	e	48	U		48	UJ	e	48	U		48	UJ	e
aroclor 1248	73	U		73	UJ	e	48	U		48	UJ	e	48	U		48	UJ	e
aroclor 1254	73	U		73	UJ	e	48	U		48	UJ	e	48	U		48	UJ	e
aroclor 1260	73	U		73	UJ	e	48	U		48	UJ	e	48	U		48	UJ	e

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DN40D 01NE29SD225 SX	DN40D-RE 01NE29SD225 SX	DN40E 01NE29SD128 SX	DN40E-RE 01NE29SD128 SX	DN40F 01NE29SD129 SX	DN40F-RE 01NE29SD129 SX
	Date Collected Units	8/21/01 µg/Kg	8/21/01 µg/Kg	8/21/01 µg/Kg	8/21/01 µg/Kg	8/21/01 µg/Kg	8/21/01 µg/Kg
Analyste	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
aroclor 1016	51 U	52 UJ e	49 U	49 UJ e	38 U	38 UJ e	38 UJ e
aroclor 1221	100 U	100 UJ e	97 U	98 UJ e	76 U	77 UJ e	77 UJ e
aroclor 1232	51 U	52 UJ e	49 U	49 UJ e	38 U	38 UJ e	38 UJ e
aroclor 1242	51 U	52 UJ e	49 U	49 UJ e	38 U	38 UJ e	38 UJ e
aroclor 1248	51 U	52 UJ e	49 U	49 UJ e	38 U	38 UJ e	38 UJ e
aroclor 1254	51 U	52 UJ e	49 U	49 UJ e	38 U	38 UJ e	38 UJ e
aroclor 1260	51 U	52 UJ e	49 U	49 UJ e	38 U	38 UJ e	38 UJ e

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN40G			DN40G-RE			DN40H			DN40H-RE			DN40I			DN40I-RE			
Field ID	01NE29SD120			01NE29SD120			01NE29SD121			01NE29SD121			01NE29SD122			01NE29SD122			
Matrix	SX			SX			SX			SX			SX			SX			
Date Collected	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01			8/21/01			
Analyte	Units	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	µg/Kg	41	U		41	UJ	e	36	U		36	UJ	e	40	U		40	UJ	e
aroclor 1221	µg/Kg	81	U		81	UJ	e	72	U		72	UJ	e	80	U		80	UJ	e
aroclor 1232	µg/Kg	41	U		41	UJ	e	36	U		36	UJ	e	40	U		40	UJ	e
aroclor 1242	µg/Kg	41	U		41	UJ	e	36	U		36	UJ	e	40	U		40	UJ	e
aroclor 1248	µg/Kg	41	U		41	UJ	e	36	U		36	UJ	e	40	U		40	UJ	e
aroclor 1254	µg/Kg	41	U		41	UJ	e	36	U		36	UJ	e	40	U		40	UJ	e
aroclor 1260	µg/Kg	41	U		41	UJ	e	36	U		36	UJ	e	40	U		40	UJ	e

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN40M			DN40M-RE			DN40N			DN40N-RE				
	Field ID	01NE29SD127			01NE29SD127			01NE29SD126			01NE29SD126				
	Matrix	SX			SX			SX			SX				
	Date Collected	8/21/01			8/21/01			8/21/01			8/21/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
aroclor 1016		50	U	50	UJ	e	47	U		47	UJ	e			
aroclor 1221		100	U	100	UJ	e	94	U		94	UJ	e			
aroclor 1232		50	U	50	UJ	e	47	U		47	UJ	e			
aroclor 1242		50	U	50	UJ	e	47	U		47	UJ	e			
aroclor 1248		50	U	50	UJ	e	47	U		47	UJ	e			
aroclor 1254		50	U	50	UJ	e	47	U		47	UJ	e			
aroclor 1260		50	U	50	UJ	e	47	U		47	UJ	e			

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN53A			DN53B			DN53F			DN53G				
	Field ID	01NE09SW109			01NE09SW107			01NE09SW207			01NE09SW108				
	Matrix	WX			WX			WX			WX				
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01				
	Units	µg/L			µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	1	U		1	U		1	U		1	U				
aroclor 1221	2	U		2	U		2	U		2	U				
aroclor 1232	1	U		1	U		1	U		1	U				
aroclor 1242	1	U		1	U		1	U		1	U				
aroclor 1248	1	U		1	U		1	U		1	U				
aroclor 1254	1	U		1	U		1	U		1	U				
aroclor 1260	1	U		1	U		1	U		1	U				

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

	Sample ID	DN55A			DN55B			DN55C			DN55D			DN55E			DN55F		
	Field ID	01NE33SS101			01NE33SS102			01NE33SS103			01NE34SS101			01NE34SS102			01NE34SS103		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01			8/23/01			8/23/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016		36	U		39	U		36	U		45	U		41	U		40	U	
aroclor 1221		72	U		77	U		72	U		89	U		82	U		81	U	
aroclor 1232		36	U		39	U		36	U		45	U		41	U		40	U	
aroclor 1242		36	U		39	U		36	U		45	U		41	U		40	U	
aroclor 1248		36	U		39	U		36	U		45	U		41	U		40	U	
aroclor 1254		36	U		39	U		36	U		45	U		41	U		40	U	
aroclor 1260		36	U		39	U		36	U		45	U		41	U		40	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN55I			DN55J			DN55K			DN55L				
	Field ID	01NE34SS107			01NE34SS108			01NE34SS109			01NE34SS110				
	Matrix	SX			SX			SX			SX				
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg				
aroclor 1016	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
aroclor 1221	37	U		43	U		39	U		41	U				
aroclor 1232	75	U		85	U		78	U		83	U				
aroclor 1242	37	U		43	U		39	U		41	U				
aroclor 1248	37	U		43	U		39	U		41	U				
aroclor 1254	37	U		43	U		39	U		41	U				
aroclor 1260	50			250			150			170					
	37	U		110			63			64					

## Organochlorine Pesticides / PCBs

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68N			DN68N-DL			DN68O			DN68O-DL			DN68P			DN68P-DL		
	Field ID	01NE31SS101			01NE31SS101			01NE31SS102			01NE31SS102			01NE31SS202			01NE31SS202		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
4,4'-DDD		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
4,4'-DDE		3.5	U		35	U		3.7	U		37	U		3.8	U		38	U	
4,4'-DDT		2.6	U		35	U		3.7	U		37	U		5.6	U		38	U	
aldrin		210	U		300	U		97	U		160	U		120	U		190	U	
alpha-BHC		1.8	U		18	U		1.9	U		19	U		1.9	U		19	U	
alpha-chlordane		1.8	U		18	U		1.9	U		19	U		1.9	U		19	U	
aroclor 1016		1.8	U		35	U		350	U		37	U		370	U		38	U	
aroclor 1221		70	U		700	U		74	U		740	U		76	U		760	U	
aroclor 1232		35	U		350	U		37	U		370	U		38	U		380	U	
aroclor 1242		35	U		350	U		37	U		370	U		38	U		380	U	
aroclor 1248		35	U		350	U		37	U		370	U		38	U		380	U	
aroclor 1254		35	U		350	U		37	U		370	U		38	U		380	U	
aroclor 1260					6700			3200	J	o	4700						4800		
beta-BHC		1.8	U		18	U		1.9	U		19	U		1.9	U		19	U	
delta-BHC		1.8	U		18	U		1.9	U		19	U		1.9	U		19	U	
dieldrin		43	U		59	U		27	U		38	U		35	U		46	U	
endosulfan I		1.8	U		18	U		1.9	U		19	U		1.9	U		19	U	
endosulfan II		3.5	U		35	U		3.7	U		37	U		3.8	U		38	U	
endosulfan sulfate		34	U		360	U		170	U		250	U		180	U		250	U	
endrin		4.8	U		35	U		3.7	U		37	U		4.1	U		38	U	
endrin aldehyde		56	U		67	U		36	U		49	U		40	U		49	U	
endrin ketone		3.5	U		35	U		3.7	U		37	U		3.8	U		38	U	
gamma-BHC		1.8	U		18	U		1.9	U		19	U		1.9	U		19	U	
gamma-chlordane		1.8	U		18	U		1.9	U		19	U		1.9	U		19	U	
heptachlor		1.8	U		18	U		1.9	U		19	U		1.9	U		19	U	
heptachlor epoxide		1.8	U		18	U		1.9	U		19	U		1.9	U		19	U	
methoxychlor		37	U		180	U		22	U		32	U		25	U		190	U	
toxaphene		180	U		1800	U		190	U		1900	U		190	U		1900	U	

## Organochlorine Pesticides / PCBs

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68Q			DN68Q-DL			DN68R			DN68R-DL			DN68U			DN68V		
	Field ID	01NE31SS103			01NE31SS103			01NE31SS104			01NE31SS104			01NE32SS103			01NE32SS104		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
Analyte	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
4,4'-DDD		3.5	U		35	U		3.5	U		35	U		4.3	UJ	b	3.5	U	
4,4'-DDE		3.5	U		35	U		3.5	U		35	U		4.3	UJ	b	3.5	U	
4,4'-DDT		130	U		190	U		78	U		160	U		4.3	UJ	b	8.6	U	
aldrin		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
alpha-BHC		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
alpha-chlordane		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
aroclor 1016		35	U		350	U		35	U		350	U		43	UJ	b	35	U	
aroclor 1221		70	U		700	U		71	U		710	U		87	UJ	b	69	U	
aroclor 1232		35	U		350	U		35	U		350	U		43	UJ	b	35	U	
aroclor 1242		35	U		350	U		35	U		350	U		43	UJ	b	35	U	
aroclor 1248		35	U		350	U		35	U		350	U		43	UJ	b	35	U	
aroclor 1254		35	U		350	U		35	U		350	U		43	UJ	b	35	U	
aroclor 1260		3000	J	o	4100			3200	J	o	4400			43	UJ	b	160	J	b,c
beta-BHC		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
delta-BHC		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
dieldrin		28	U		36	U		28	U		39	U		4.3	UJ	b	3.5	U	
endosulfan I		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
endosulfan II		3.5	U		35	U		3.5	U		35	U		4.3	UJ	b	3.5	U	
endosulfan sulfate		160	U		220	U		170	U		240	U		4.3	UJ	b	8.8	U	
endrin		3.5	U		35	U		3.5	U		35	U		4.3	UJ	b	3.5	U	
endrin aldehyde		32	U		40	U		34	U		43	U		4.3	UJ	b	3.5	U	
endrin ketone		3.5	U		35	U		3.5	U		35	U		4.3	UJ	b	3.5	U	
gamma-BHC		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
gamma-chlordane		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
heptachlor		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
heptachlor epoxide		1.8	U		18	U		1.8	U		18	U		2.2	UJ	b	1.7	U	
methoxychlor		24	U		180	U		24	U		180	U		22	UJ	b	17	U	
toxaphene		180	U		1800	U		180	U		1800	U		220	UJ	b	170	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68A			DN68B			DN68F			DN68M				
	Field ID	01NE21SS169			01NE21SS269			01NE09SD114			01NE34SS104				
	Matrix	SX			SX			SX			SX				
	Date Collected	8/24/01			8/24/01			8/24/01			8/23/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
aroclor 1016	180	U		180	U		200	U		38	U				
aroclor 1221	360	U		370	U		390	U		76	U				
aroclor 1232	180	U		180	U		200	U		38	U				
aroclor 1242	180	U		180	U		200	U		38	U				
aroclor 1248	180	U		180	U		200	U		38	U				
aroclor 1254	180	U		180	U		200	U		590					
aroclor 1260	180	U		180	U		200	U		470					

## Organochlorine Pesticides / PCBs

## DATA SUMMARY TABLE

Analyte	Sample ID	DN69N			DN69O			DN69O-DL			DN69P			DN69P-DL			DN69Q		
	Field ID	01NE31SS121			01NE31SS122			01NE31SS122			01NE31SS123			01NE31SS123			01NE31SS124		
	Matrix	SX			SX														
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
4,4'-DDD	5.8	U		71	U		71	U		7.3	U		73	U		3.8	U		
4,4'-DDE	5.8	U		5.7	U		37	U		17	U		73	U		3.8	U		
4,4'-DDT	5.8	U		160	U		160	U		610	U		930	U		14	U		
aldrin	2.9	U		1.9	U		19	U		3.6	U		36	U		1.9	U		
alpha-BHC	2.9	U		1.9	U		19	U		3.6	U		36	U		1.9	U		
alpha-chlordane	2.9	U		1.9	U		19	U		3.6	U		36	U		1.9	U		
aroclor 1016	58	U		37	U		370	U		73	U		730	U		38	U		
aroclor 1221	120	U		75	U		750	U		150	U		1500	U		77	U		
aroclor 1232	58	U		190	U		370	U		73	U		730	U		38	U		
aroclor 1242	58	U		37	U		370	U		73	U		730	U		38	U		
aroclor 1248	58	U		100	U		370	U		73	U		730	U		38	U		
aroclor 1254	58	U		66	U		370	U		73	U		730	U		38	U		
aroclor 1260	58	U		410	U		370	U					22000			360			
beta-BHC	2.9	U		10	U		19	U		3.6	U		36	U		1.9	U		
delta-BHC	2.9	U		7.8	U		19	U		3.6	U		36	U		1.9	U		
dieldrin	5.8	U		7.2	U		37	U		140	U		210	U		3.8	U		
endosulfan I	2.9	U		7.8	U		19	U		3.6	U		36	U		1.9	U		
endosulfan II	5.8	U		3.7	U		37	U		7.3	U		73	U		3.8	U		
endosulfan sulfate	5.8	U		75			64	U		400	U		1200	U		21	U		
endrin	5.8	U		3.7	U		37	U		14	U		73	U		3.8	U		
endrin aldehyde	5.8	U		3.7	U		37	U		170	U		220	U		3.8	U		
endrin ketone	5.8	U		16	U		37	U		7.3	U		73	U		3.8	U		
gamma-BHC	2.9	U		1.9	U		19	U		3.6	U		36	U		1.9	U		
gamma-chlordane	2.9	U		4	U		19	U		36	U		42	U		1.9	U		
heptachlor	2.9	U		3.4	U		19	U		3.6	U		36	U		1.9	U		
heptachlor epoxide	2.9	U		1.9	U		19	U		3.6	U		36	U		1.9	U		
methoxychlor	29	U		19	U		190	U		100	U		360	U		19	U		
toxaphene	290	U		190	U		1900	U		360	U		3600	U		190	U		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN69A			DN69B			DN69C			DN69D			DN69E			DN69F		
	Field ID	01NE21SB169			01NE21SB170			01NE21SS170			01NE21SB171			01NE21SS171			01NE21SS172		
	Matrix	SX			SX														
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
aroclor 1016	45	U		49	U		77	U		39	U		52	U		130	U		
aroclor 1221	91	U		98	U		150	U		79	U		100	U		270	U		
aroclor 1232	45	U		49	U		77	U		39	U		52	U		130	U		
aroclor 1242	45	U		49	U		77	U		39	U		52	U		130	U		
aroclor 1248	45	U		49	U		77	U		39	U		52	U		130	U		
aroclor 1254	45	U		49	U		140			39	U		52	U		130	U		
aroclor 1260	45	U		49	U		150			39	U		52	U		130	U		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN69G			DN69H			DN69I			DN69J			DN69K			DN69K-DL		
Field ID	01NE21SS173			01NE21SD113			01NE21SD114			01NE14SS101			01NE14SS102			01NE14SS102		
Matrix	SX			SX			SX			SX			SX			SX		
Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
Analyte	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	57	U		65	U		84	U		360	U		37	U		730	U	
aroclor 1221	110	U		130	U		170	U		730	U		73	U		1500	U	
aroclor 1232	57	U		65	U		84	U		360	U		37	U		730	U	
aroclor 1242	57	U		65	U		84	U		360	U		37	U		730	U	
aroclor 1248	57	U		65	U		84	U		360	U		37	U		730	U	
aroclor 1254	140			65	U		84	U		360	U		37	U		730	U	
aroclor 1260	180			65	U		84	U		3600						19000		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN69L	DN69M			
	Field ID	01NE14SS103	01NE14SS203			
	Matrix	SX	SX			
	Date Collected	8/24/01	8/24/01			
	Units	µg/Kg	µg/Kg			
	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	37	U		37	U	
aroclor 1221	74	U		74	U	
aroclor 1232	37	U		37	U	
aroclor 1242	37	U		37	U	
aroclor 1248	37	U		37	U	
aroclor 1254	37	U		37	U	
aroclor 1260	200			300		

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN71A			DN71B			DN71D			DN71E			DN71F			DN71G		
	Field ID	01NE09SW112			01NE09WP102			01NE09MW103			01NE09SW111			01NE24SW114			01NE24SW214		
	Matrix	WX			WX			WX			WX			WX			WX		
	Date Collected	8/26/01			8/26/01			8/26/01			8/26/01			8/24/01			8/24/01		
	Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
aroclor 1016		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1221		1	U		1	U		1	UJ	b	1	U		1	U		1	U	
aroclor 1232		2	U		2	U		2	UJ	b	2	U		2	U		2	U	
aroclor 1242		1	U		1	U		1	UJ	b	1	U		1	U		1	U	
aroclor 1248		1	U		1	U		1	UJ	b	1	U		1	U		1	U	
aroclor 1254		1	U		1	U		1	UJ	b	1	U		1	U		1	U	
aroclor 1260		1	U		1	U		1	UJ	b	1	U		1	U		1	U	

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN71M			DN71P								
	Field ID	01NE21SW113			01NE09SW110								
	Matrix	WX			WX								
Date Collected	Units	8/24/01			8/25/01								
		µg/L			µg/L								
	RESULT	Q	RC	RESULT	Q	RC							
aroclor 1016	1	U		1	U								
aroclor 1221	2	U		2	U								
aroclor 1232	1	U		1	U								
aroclor 1242	1	U		1	U								
aroclor 1248	1	U		1	U								
aroclor 1254	1	U		1	U								
aroclor 1260	1	U		1	U								

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Sample ID	DN73C	DN73M							
Field ID	01NE06WP103	01NE21SW114							
Matrix	WX	WX							
Date Collected	8/25/01	8/21/01							
Units	µg/L	µg/L							
Analyte	RESULT	Q	RC	RESULT	Q	RC			
aroclor 1016	1	U		1	UJ	e			
aroclor 1221	2	U		2	UJ	e			
aroclor 1232	1	U		1	UJ	e			
aroclor 1242	1	U		1	UJ	e			
aroclor 1248	1	U		1	UJ	e			
aroclor 1254	1	U		1	UJ	e			
aroclor 1260	1	U		1	UJ	e			

## Organochlorine Pesticides / PCBs

## DATA SUMMARY TABLE

Analyte	Sample ID	DN76N								
	Field ID	01NE32SS105								
	Matrix	SX								
	Date Collected	8/24/01								
	Units	µg/Kg								
		RESULT	Q	RC						
4,4'-DDD		3.6	UJ	b						
4,4'-DDE		3.6	UJ	b						
4,4'-DDT		37	UJ	b						
aldrin		1.8	UJ	b						
alpha-BHC		1.8	UJ	b						
alpha-chlordane		1.8	UJ	b						
aroclor 1016		36	UJ	b						
aroclor 1221		72	UJ	b						
aroclor 1232		36	UJ	b						
aroclor 1242		36	UJ	b						
aroclor 1248		36	UJ	b						
aroclor 1254		36	UJ	b						
aroclor 1260		890	J	b						
beta-BHC		1.8	UJ	b						
delta-BHC		1.8	UJ	b						
dieldrin		11	UJ	b						
endosulfan I		1.8	UJ	b						
endosulfan II		3.6	UJ	b						
endosulfan sulfate		7.3	UJ	b						
endrin		3.6	UJ	b						
endrin aldehyde		7.8	UJ	b						
endrin ketone		3.6	UJ	b						
gamma-BHC		1.8	UJ	b						
gamma-chlordane		2.8	UJ	b						
heptachlor		1.8	UJ	b						
heptachlor epoxide		1.8	UJ	b						
methoxychlor		3.1	UJ	b						
toxaphene		180	UJ	b						

Prepared by ETHIX

3/20/02

C-149

NE Cape HTRW - St. Lawrence Island

SDG: DN76

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN76A			DN76C			DN76D			DN76E			DN76J			DN76K			
	Field ID	01NE16SS165			01NE16SS166			01NE09SD107			01NE09SD108			01NE09SD109			01NE09SD213			
	Matrix	SX			SX			SX			SX			SX			SX			
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01			8/24/01			8/24/01			
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			
RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aroclor 1016	37	U		41	U		230	U		120	U		92	U		110	U			
aroclor 1221	75	U		82	U		460	U		250	U		180	U		220	U			
aroclor 1232	37	U		41	U		230	U		120	U		92	U		110	U			
aroclor 1242	37	U		41	U		230	U		120	U		98	U		110	U			
aroclor 1248	37	U		41	U		230	U		120	U		92	U		110	U			
aroclor 1254	37	U		41	U		230	U		120	U		150	U		110	U			
aroclor 1260	37	U		62			230	U		120	U		460	U		110	U			

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN76L			DN76M			DN76P					
	Field ID	01NE24SD114			01NE24SD115			01NE09SD113					
	Matrix	SX			SX			SX					
	Date Collected	8/24/01			8/24/01			8/24/01					
Analyte	Units	µg/Kg			µg/Kg			µg/Kg					
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
aroclor 1016		250	U		43	U		200	U				
aroclor 1221		490	U		87	U		410	U				
aroclor 1232		250	U		43	U		200	U				
aroclor 1242		250	U		43	U		200	U				
aroclor 1248		250	U		43	U		200	U				
aroclor 1254		250	U		43	U		200	U				
aroclor 1260		250	U		43	U		200	U				

## Polychlorinated Biphenyls

## DATA SUMMARY TABLE

Analyte	Sample ID	DN88A			DN88E			DN88F					
	Field ID	01NE07WP102			01NE07WP101			01NE07WP103					
	Matrix	WX			WX			WX					
	Date Collected	8/27/01			8/28/01			8/27/01					
	Units	µg/L			µg/L			µg/L					
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC				
aroclor 1016	1	U		1	U		1	U					
aroclor 1221	2	U		2	U		2	U					
aroclor 1232	1	U		1	U		1	U					
aroclor 1242	1	U		1	U		1	U					
aroclor 1248	1	U		1	U		1	U					
aroclor 1254	1	U		1	U		1	U					
aroclor 1260	1	U		1	U		1	U					

## Organochlorine Pesticides / PCBs

## DATA SUMMARY TABLE

Analyte	Sample ID	DQ74A			DQ74B			DQ74B-DL			DQ74C			DQ74C-DL			DQ74D			
	Field ID	01NE16SS167			01NE16SS168			01NE16SS168			01NE28SD183			01NE28SD183			01NE28SD184			
	Matrix	SX			SX			SX			SX			SX			SX			
	Date Collected	9/24/01			9/24/01			9/24/01			9/24/01			9/24/01			9/24/01			
Units	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC		
4,4'-DDD		3.7	UJ	b		6	J	b		19	UJ	b		200	J	b,o		210		
4,4'-DDE		3.7	UJ	b		5	J	b		19	UJ	b		18	UJ	b		35	U	
4,4'-DDT		11	J	b		140	J	b,o		120	J	b		14	UJ	b		35	U	
aldrin		1.8	UJ	b		1.9	UJ	b		9.5	UJ	b		3.5	UJ	b		18	U	
alpha-BHC		1.8	UJ	b		1.9	UJ	b		9.5	UJ	b		6.3	UJ	b		18	U	
alpha-chlordane		1.8	UJ	b		1.9	UJ	b		9.5	UJ	b		3.5	UJ	b		18	U	
beta-BHC		1.8	UJ	b		1.9	UJ	b		9.5	UJ	b		12	J	b		18	U	
delta-BHC		1.8	UJ	b		1.9	UJ	b		9.5	UJ	b		3.5	UJ	b		18	U	
dieldrin		3.7	UJ	b		3.8	UJ	b		19	UJ	b		11	UJ	b		35	U	
endosulfan I		1.8	UJ	b		2.5	J	b		9.5	UJ	b		3.5	UJ	b		18	U	
endosulfan II		3.7	UJ	b		3.8	UJ	b		19	UJ	b		7	UJ	b		35	U	
endosulfan sulfate		3.7	UJ	b		3.8	UJ	b		19	UJ	b		11	UJ	b		35	U	
endrin		3.7	UJ	b		3.8	UJ	b		19	UJ	b		7	UJ	b		35	U	
endrin aldehyde		3.7	UJ	b		6.4	UJ	b		19	UJ	b		7	UJ	b		35	U	
endrin ketone		3.7	UJ	b		3.8	UJ	b		19	UJ	b		7	UJ	b		35	U	
gamma-BHC		1.8	UJ	b		1.9	UJ	b		9.5	UJ	b		3.9	UJ	b		18	U	
gamma-chlordane		1.8	UJ	b		1.9	UJ	b		9.5	UJ	b		6.4	UJ	b		18	U	
heptachlor		1.8	UJ	b		1.9	UJ	b		9.5	UJ	b		4.6	J	b		18	U	
heptachlor epoxide		1.8	UJ	b		1.9	UJ	b		9.5	UJ	b		3.5	UJ	b		18	U	
methoxychlor		18	UJ	b		19	UJ	b		95	UJ	b		35	UJ	b		180	U	
toxaphene		180	UJ	b		190	UJ	b		950	UJ	b		350	UJ	b		1800	U	
																		270	UJ	b

## Organochlorine Pesticides / PCBs

## DATA SUMMARY TABLE

Analyte	Sample ID	DQ74E			DQ74E-DL			DQ74F			DQ74F-DL			DQ74G			DQ74H		
	Field ID	01NE28SD185			01NE28SD185			01NE28SD186			01NE28SD186			01NE28SD187			01NE28SD188		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	9/24/01			9/24/01			9/24/01			9/24/01			9/24/01			9/24/01		
Analyte	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
4,4'-DDD		J	b		1500			290	J	o	470			7.2	J	b	34	U	
4,4'-DDE		110	UJ	b	260	U		18	U		100	U		6.6	UJ	b	34	U	
4,4'-DDT		32	UJ	b	260	U		14	U		100	U		6.6	UJ	b	34	U	
aldrín		3.3	UJ	b	130	U		2.5	U		50	U		3.3	UJ	b	17	U	
alpha-BHC		4	UJ	b	130	U		4	U		50	U		3.3	UJ	b	17	U	
alpha-chlordane		3.3	UJ	b	130	U		2.5	U		50	U		3.3	UJ	b	17	U	
beta-BHC		6.4	UJ	b	130	U		6.3	U		50	U		3.3	UJ	b	17	U	
delta-BHC		3.3	UJ	b	130	U		2.5	U		50	U		3.3	UJ	b	17	U	
dieldrin		97	UJ	b	260	U		5	U		100	U		6.6	UJ	b	34	U	
endosulfan I		3.3	UJ	b	130	U		2.5	U		50	U		3.3	UJ	b	17	U	
endosulfan II		8.3	UJ	b	260	U		8.7	U		100	U		6.6	UJ	b	34	U	
endosulfan sulfate		58	UJ	b	260	U		8.6			100	U		6.6	UJ	b	34	U	
endrin		6.6	UJ	b	260	U		5	U		100	U		6.6	UJ	b	34	U	
endrin aldehyde		38	UJ	b	260	U		5	U		100	U		6.6	UJ	b	34	U	
endrin ketone		6.6	UJ	b	260	U		5	U		100	U		6.6	UJ	b	34	U	
gamma-BHC		3.3	UJ	b	130	U		6.5			50	U		3.3	UJ	b	17	U	
gamma-chlordane		32	UJ	b	130	U		6.4	U		50	U		3.3	UJ	b	17	U	
heptachlor		3.3	UJ	b	130	U		4.4			50	U		3.3	UJ	b	17	U	
heptachlor epoxide		3.3	UJ	b	130	U		2.5	U		50	U		3.3	UJ	b	17	U	
methoxychlor		33	UJ	b	1300	U		25	U		500	U		33	UJ	b	170	U	
toxaphene		330	UJ	b	13000	U		250	U		5000	U		330	UJ	b	1700	U	

## Organochlorine Pesticides / PCBs

## DATA SUMMARY TABLE

	Sample ID	DQ74I			DQ74J			DQ74K			DQ74L			DQ74M			DQ74N		
	Field ID	01NE28SD189			01NE28SD190			01NE28SD191			01NE28SD192			01NE28SD292			01NE28SD285		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	9/24/01			9/24/01			9/24/01			9/24/01			9/24/01			9/24/01		
Analyte	Units	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
		µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
4,4'-DDD		31	U		10	UJ	b	15	J	b	7.2	UJ	b	7.1	UJ	b			
4,4'-DDE		31	U		10	UJ	b	5.3	UJ	b	4.3	UJ	b	6.5	UJ	b	82	UJ	b
4,4'-DDT		31	U		10	UJ	b	5.3	UJ	b	4.3	UJ	b	5	UJ	b	22	UJ	b
aldrin		15	U		5.2	UJ	b	2.6	UJ	b	2.2	UJ	b	2.1	UJ	b	2.8	UJ	b
alpha-BHC		15	U		5.2	UJ	b	2.9	UJ	b	2.2	UJ	b	2.1	UJ	b	2.8	UJ	b
alpha-chlordane		15	U		5.2	UJ	b	2.6	UJ	b	2.2	UJ	b	2.1	UJ	b	2.8	UJ	b
beta-BHC		15	U		5.2	UJ	b	9.2	UJ	b	2.2	UJ	b	2.1	UJ	b	3.9	J	b
delta-BHC		15	U		5.2	UJ	b	2.6	UJ	b	2.2	UJ	b	2.1	UJ	b	2.8	UJ	b
dieldrin		31	U		10	UJ	b	5.3	UJ	b	4.3	UJ	b	7.8	UJ	b	16	UJ	b
endosulfan I		15	U		5.2	UJ	b	2.6	UJ	b	2.2	UJ	b	2.1	UJ	b	2.8	UJ	b
endosulfan II		31	U		10	UJ	b	5.3	UJ	b	4.3	UJ	b	4.1	UJ	b	5.7	UJ	b
endosulfan sulfate		31	U		10	UJ	b	5.3	UJ	b	4.3	UJ	b	12	UJ	b	56	UJ	b
endrin		31	U		10	UJ	b	5.3	UJ	b	4.3	UJ	b	4.1	UJ	b	5.7	UJ	b
endrin aldehyde		31	U		10	UJ	b	5.3	UJ	b	4.3	UJ	b	4.1	UJ	b	35	UJ	b
endrin ketone		31	U		10	UJ	b	5.3	UJ	b	4.3	UJ	b	4.1	UJ	b	5.7	UJ	b
gamma-BHC		15	U		5.2	UJ	b	2.9	J	b	2.2	UJ	b	2.1	UJ	b	2.8	UJ	b
gamma-chlordane		15	U		5.2	UJ	b	2.6	UJ	b	2.2	UJ	b	3.8	UJ	b	26	UJ	b
heptachlor		15	U		5.2	UJ	b	2.6	UJ	b	2.2	UJ	b	2.1	UJ	b	2.8	UJ	b
heptachlor epoxide		15	U		5.2	UJ	b	2.6	UJ	b	2.2	UJ	b	2.1	UJ	b	2.8	UJ	b
methoxychlor		150	U		52	UJ	b	26	UJ	b	22	UJ	b	21	UJ	b	28	UJ	b
toxaphene		1500	U		520	UJ	b	260	UJ	b	220	UJ	b	210	UJ	b	280	UJ	b

## Organochlorine Pesticides / PCBs

## DATA SUMMARY TABLE

Analyte	Sample ID	DQ74N-DL			
	Field ID	01NE28SD285	SX		
	Matrix				
	Date Collected	9/24/01			
	Units	µg/Kg			
	RESULT	Q	RC		
4,4'-DDD	830				
4,4'-DDE	110	U			
4,4'-DDT	110	U			
aldrin	57	U			
alpha-BHC	57	U			
alpha-chlordane	57	U			
beta-BHC	57	U			
delta-BHC	57	U			
dieldrin	110	U			
endosulfan I	57	U			
endosulfan II	110	U			
endosulfan sulfate	110	U			
endrin	110	U			
endrin aldehyde	110	U			
endrin ketone	110	U			
gamma-BHC	57	U			
gamma-chlordane	57	U			
heptachlor	57	U			
heptachlor epoxide	57	U			
methoxychlor	570	U			
toxaphene	5700	U			

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	100302-02			100302-03			100302-04			100302-05			100302-06			100302-08		
	Field ID	01NE28SD311			01NE28SD325			01NE28SD351			01NE28SD353			01NE28SD357			01NE28SD339		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/18/01			8/18/01			8/19/01			8/19/01			8/19/01			8/19/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
2-chloronaphthalene	9.3	U		3.2	U		2900			14	U		20	U		3.6			
2-methylnaphthalene	17			1900	J	o	19000	J	o	2800			2200			4	J	n	
acenaphthene	9.3	U		57			23	UJ	n	14	UJ	n	20	UJ	n	3.6	UJ	n	
acenaphthylene	9.3	U		3.2	U		23	UJ	n	14	U		20	U		3.6	U		
anthracene	9.3	U		3.2	U		23	U		14	U		20	U		3.6	UJ	n	
benzo(a)anthracene	19	U		6.4	U		45	U		24	J	m,n	41	U		7.3	UJ	n	
benzo(a)pyrene	9.3	U		3.2	U		23	U		14	U		20	U		3.6	UJ	n	
benzo(b)fluoranthene	9.3	U		3.2	U		86			14	U		20	U		3.6	UJ	n	
benzo(g,h,i)perylene	9.3	U		3.2	U		23	U		14	U		20	U		3.6	UJ	n	
benzo(k)fluoranthene	9.3	U		3.2	U		23	J	n	14	U		20	U		3.6	UJ	n	
chrysene	19	U		6.4	U		120			48	J	n	41	U		7.3	UJ	n	
dibenz(a,h)anthracene	9.3	U		3.2	U		23	U		14	U		20	U		3.6	UJ	n	
fluoranthene	110	J	c,f	3.2	U		23	U		14	U		20	U		3.6	UJ	n	
fluorene	9.3	U		52	J	n	23	UJ	n	14	UJ	n	20	UJ	n	3.6	UJ	n	
indeno(1,2,3,c,d)pyrene	9.3	U		3.2	U		23	U		14	U		20	U		3.6	UJ	n	
naphthalene	14			1400			7600			14	UJ	n	1900			5.1	J	n	
phenanthrene	55	J	c,f	16	J	n	780			230			20	U		3.6	UJ	n	
pyrene	66	J	c	3.2	U		240			85			20	U		3.6	UJ	n	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	100302L03	100302L04													
	Field ID	01NE28SD325	01NE28SD351													
	Matrix	SX	SX													
	Date Collected	8/18/01	8/19/01													
Analyte	Units	µg/Kg	µg/Kg	RESULT	Q	RC	RESULT	Q	RC							
2-chloronaphthalene		32	U	230	U											
2-methylnaphthalene		2200		28000												
acenaphthene		48		990												
acenaphthylene		32	U	230	U											
anthracene		32	U	230	U											
benzo(a)anthracene		64	U	450	U											
benzo(a)pyrene		32	U	230	U											
benzo(b)fluoranthene		32	U	230	U											
benzo(g,h,i)perylene		32	U	230	U											
benzo(k)fluoranthene		32	U	230	U											
chrysene		64	U	450	U											
dibenzo(a,h)anthracene		32	U	230	U											
fluoranthene		32	U	230	U											
fluorene		54		2800												
indeno(1,2,3,c,d)pyrene		32	U	230	U											
naphthalene		1700		9900												
phenanthrene		32	U	900												
pyrene		32	U	230	U											

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	100413-01			100413-02			100413-03			100413-04			100413-05			100413-06		
	Date Collected	8/21/01			8/20/01			8/20/01			8/20/01			8/21/01			8/20/01		
Analyte	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/L		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
2-chloronaphthalene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
2-methylnaphthalene		2	U		68			7.8	U		210	UJ	n	57			0.098	U	
acenaphthene		2	U		6.4	U		7.8	U		210	UJ	n	3.4	U		0.098	U	
acenaphthylene		2	U		20			7.8	U		210	U		3.4	U		0.098	U	
anthracene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
benzo(a)anthracene		4	U		13	U		16	U		420	U		6.8	U		0.098	U	
benzo(a)pyrene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
benzo(b)fluoranthene		2	UJ	f	6.4	U		7.8	U		210	U		3.4	U		0.098	U	
benzo(g,h,i)perylene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
benzo(k)fluoranthene		2	UJ	f	6.4	U		7.8	U		210	U		3.4	U		0.098	U	
chrysene		4	U		13	U		16	U		420	U		6.8	U		0.098	U	
dibenzo(a,h)anthracene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
fluoranthene		2	U		6.4	U		7.8	U		720			3.4	UJ	n	0.098	U	
fluorene		2	U		6.4	U		7.8	U		3300			14			0.098	U	
indeno(1,2,3,c,d)pyrene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
naphthalene		2	U		68			7.8	U		210	UJ	n	28			0.098	U	
phenanthrene		2	U		6.4	U		7.8	U		210	U		3.4	UJ	n	0.098	U	
pyrene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Sample ID	100418-02			
Field ID	01NE09SW307			
Matrix	WX			
Date Collected	8/23/01			
Units	µg/L			
Analyte	RESULT	Q	RC	
2-chloronaphthalene	0.099	U		
2-methylnaphthalene	0.099	U		
acenaphthene	0.099	U		
acenaphthylene	0.099	U		
anthracene	0.099	U		
benzo(a)anthracene	0.099	U		
benzo(a)pyrene	0.099	U		
benzo(b)fluoranthene	0.099	U		
benzo(g,h,i)perylene	0.099	U		
benzo(k)fluoranthene	0.099	U		
chrysene	0.099	U		
dibenzo(a,h)anthracene	0.099	U		
fluoranthene	0.099	U		
fluorene	0.099	U		
indeno(1,2,3,c,d)pyrene	0.099	U		
naphthalene	0.099	U		
phenanthrene	0.099	U		
pyrene	0.099	U		

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	100492-13			
	Field ID	01NE09SD313	Matrix	SX	Date Collected	8/24/01
	Units	µg/Kg	RESULT	Q	RC
2-chloronaphthalene	8.9	U			
2-methylnaphthalene	8.9	U			
acenaphthene	8.9	U			
acenaphthylene	8.9	U			
anthracene	8.9	U			
benzo(a)anthracene	18	U			
benzo(a)pyrene	8.9	U			
benzo(b)fluoranthene	8.9	U			
benzo(g,h,i)perylene	8.9	U			
benzo(k)fluoranthene	8.9	U			
chrysene	18	U			
dibenzo(a,h)anthracene	8.9	U			
fluoranthene	8.9	U			
fluorene	8.9	U			
indeno(1,2,3,c,d)pyrene	8.9	U			
naphthalene	8.9	U			
phenanthrene	8.9	U			
pyrene	8.9	U			

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	100553-01		
	Field ID	01NE07WP302		
	Matrix	WX		
	Date Collected	8/27/01		
	Units	µg/L		
	RESULT	Q	RC	
2-chloronaphthalene	0.095	UJ	b	
2-methylnaphthalene	0.095	UJ	b	
acenaphthene	0.095	UJ	b	
acenaphthylene	0.095	UJ	b	
anthracene	0.095	UJ	b	
benzo(a)anthracene	0.095	UJ	b	
benzo(a)pyrene	0.095	UJ	b	
benzo(b)fluoranthene	0.095	UJ	b	
benzo(g,h,i)perylene	0.095	UJ	b	
benzo(k)fluoranthene	0.095	UJ	b	
chrysene	0.095	UJ	b	
dibenzo(a,h)anthracene	0.095	UJ	b	
fluoranthene	0.095	UJ	b	
fluorene	0.095	UJ	b	
indeno(1,2,3,c,d)pyrene	0.095	UJ	b	
naphthalene	0.095	UJ	b	
phenanthrene	0.095	UJ	b	
pyrene	0.095	UJ	b	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN03G			DN03J								
	Field ID	01NE07SW104			01NE07SW105								
	Matrix	WX			WX								
	Date Collected	8/19/01			8/19/01								
Analyte	Units	RESULT	Q	RC	RESULT	Q	RC						
	µg/L				µg/L								
2-methylnaphthalene		0.05	U		0.05	U							
acenaphthene		0.05	U		0.05	U							
acenaphthylene		0.05	U		0.05	U							
anthracene		0.05	U		0.05	U							
benzo(a)anthracene		0.05	U		0.05	U							
benzo(a)pyrene		0.05	U		0.05	U							
benzo(b)fluoranthene		0.05	U		0.05	U							
benzo(g,h,i)perylene		0.05	U		0.05	U							
benzo(k)fluoranthene		0.05	U		0.05	U							
chrysene		0.05	U		0.05	U							
dibenzo(a,h)anthracene		0.05	U		0.05	U							
dibenzofuran		0.05	U		0.05	U							
fluoranthene		0.05	U		0.05	U							
fluorene		0.05	U		0.05	U							
indeno(1,2,3,c,d)pyrene		0.05	U		0.05	U							
naphthalene		0.05	U		0.05	U							
phenanthrene		0.05	U		0.05	U							
pyrene		0.05	U		0.05	U							

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04A			DN04B			DN04C			DN04D			DN04D-DL			DN04E		
	Field ID	01NE28SD117			01NE28SD118			01NE28SD119			01NE28SD120			01NE28SD120			01NE28SD121		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acenaphthene	91	U			12	U		7500			5500	J	o	6600			330		
acenaphthylene	91	U			12	U		310	U		270			270			16		
anthracene	91	U			12	U		690			12	U		120	U		11	U	
benzo(a)anthracene	91	U			12	U		720			12	U		120	U		11	U	
benzo(a)pyrene	91	U			12	U		440			12	U		120	U		11	U	
benzo(b)fluoranthene	91	U			12	U		970			12	U		120	U		11	U	
benzo(g,h,l)perylene	91	U			12	U		310	U		12	U		120	U		11	U	
benzo(k)fluoranthene	91	U			12	U		660			12	U		120	U		11	U	
chrysene	91	U			12	U		2200			12	U		120	U		11	U	
dibenzo(a,h)anthracene	91	U			12	U		310	U		12	U		120	U		11	U	
dibenzofuran	91	U			12	U		3300			95			120	U		11	U	
fluoranthene	91	U			12	U		9700			15			120	U		16		
fluorene	91	U			12	U		4600			250			280			11		
indeno(1,2,3,c,d)pyrene	91	U			12	U		310	U		12	U		120	U		11	U	
naphthalene	91	U			12	U		3900			1600	J	o	1600			240		
phenanthrene	91	U			12	U		21000			50			120	U		15		
pyrene	91	U			12	U		6900			12	U		120	U		11	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04F			DN04G			DN04G-DL			DN04H			DN04H-DL			DN04I		
	Field ID	01NE28SD122			01NE28SD123			01NE28SD123			01NE28SD124			01NE28SD124			01NE28SD125		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acenaphthene		22			13	U		14	U		13	U		14	U		13	U	
acenaphthylene		13	U		13	U		14	U		13	U		14	U		13	U	
anthracene		13	U		13	U		14	U		13	U		14	U		13	U	
benzo(a)anthracene		13	U		13	U		14	U		13	U		14	U		13	U	
benzo(a)pyrene		13	U		13	U		14	U		13	U		14	U		13	U	
benzo(b)fluoranthene		13	U		13	U		14	U		13	U		14	U		13	U	
benzo(g,h,i)perylene		13	U		13	U		14	U		13	U		14	U		13	U	
benzo(k)fluoranthene		13	U		13	U		14	U		13	U		14	U		13	U	
chrysene		13	U		13	U		14	U		13	U		14	U		13	U	
dibenzo(a,h)anthracene		13	U		13	U		14	U		13	U		14	U		13	U	
dibenzofuran		13	U		13	U		14	U		13	U		14	U		13	U	
fluoranthene		13	U		13	U		14	U		13	U		14	U		13	U	
fluorene		13	U		13	U		14	U		13	U		14	U		13	U	
indeno(1,2,3,c,d)pyrene		13	U		13	U		14	U		13	U		14	U		13	U	
naphthalene		24			13	U		1500	J	o	13	U		1600			3500	J	o
phenanthrene		13	U		13	U		14	U		13	U		14	U		26	U	
pyrene		13	U		13	U		14	U		13	U		14	U		6.2	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04I-DL			DN04J			DN04K			DN04K-DL			DN04L			DN04M		
	Field ID	01NE28SD125			01NE28SD126			01NE28SD127			01NE28SD127			01NE28SD128			01NE28SD225		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acenaphthene		6500			3400			30000	J	o	33000			18000			9700	J	o
acenaphthylene		240			670			1400			1900	U		1000			270		
anthracene		200	U		280	U		190	U		1900	U		280	U		37	U	
benzo(a)anthracene		200	U		280	U		190	U		1900	U		280	U		37	U	
benzo(a)pyrene		200	U		280	U		190	U		1900	U		280	U		37	U	
benzo(b)fluoranthene		200	U		280	U		190	U		1900	U		280	U		37	U	
benzo(g,h,l)perylene		200	U		280	U		190	U		1900	U		280	U		37	U	
benzo(k)fluoranthene		200	U		280	U		190	U		1900	U		280	U		37	U	
chrysene		200	U		280	U		190	U		1900	U		280	U		37	U	
dibenzo(a,h)anthracene		200	U		280	U		190	U		1900	U		280	U		37	U	
dibenzofuran		200	U		390			540			1900	U		440			81		
fluoranthene		200	U		280	U		190	U		1900	U		280	U		37	U	
fluorene		200	U		1400			2500			2100			2600			280	J	n
indeno(1,2,3,c,d)pyrene		200	U		280	U		190	U		1900	U		280	U		37	U	
naphthalene		3700			610			3400			3500			1600			4400	J	o
phenanthrene		200	U		280			1000			1900	U		810			110	J	n
pyrene		200	U		280	U		190	U		1900	U		280	U		37	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04M-DL			DN04N			DN04N-DL			DN04O			DN04P			DN04Q		
	Field ID	01NE28SD225			01NE28SD129			01NE28SD129			01NE28SD130			01NE28SD131			01NE28SD132		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acenaphthene		9600			3700	J	o	1500			23000			33000			53000		
acenaphthylene		260			61			150	U		2600	U		2400			4500		
anthracene		180	U		7.7	U		150	U		2600	U		960	U		2600	U	
benzo(a)anthracene		180	U		9.2			150	U		2600	U		960	U		2600	U	
benzo(a)pyrene		180	U		7.7	U		150	U		2600	U		960	U		2600	U	
benzo(b)fluoranthene		180	U		7.7	U		150	U		2600	U		960	U		2600	U	
benzo(g,h,i)perylene		180	U		7.7	U		150	U		2600	U		960	U		2600	U	
benzo(k)fluoranthene		180	U		7.7	U		150	U		2600	U		960	U		2600	U	
chrysene		180	U		7.7	U		150	U		2600	U		960	U		2600	U	
dibenzo(a,h)anthracene		180	U		7.7	U		150	U		2600	U		960	U		2600	U	
dibenzofuran		180	U		28			150	U		2600	U		960	U		2600	U	
fluoranthene		180	U		8.4			150	U		2600	U		960	U		2600	U	
fluorene		220			120			150	U		3200			6900			10000		
indeno(1,2,3,c,d)pyrene		180	U		7.7	U		150	U		2600	U		960	U		2600	U	
naphthalene		4400			4700	J	o	7400			3200			6400			14000		
phenanthrene		180	U		48			150	U		2900			4800			7400		
pyrene		180	U		10			150	U		2600	U		960	U		2600	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04R			DN04S			DN04S-RE			DN04S-REDL				
	Field ID	01NE28SD133			01NE28SD134			01NE28SD134			01NE28SD134				
	Matrix	SX			SX			SX			SX				
	Date Collected	8/18/01			8/18/01			8/18/01			8/18/01				
Analyte	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT		
2-methylnaphthalene	5900			13000			25000	J	e,o	26000	J	e			
acenaphthene	630			440	U		2300	J	e	2700	J	e			
acenaphthylene	88	U		440	U		160	UJ	e	1600	UJ	e			
anthracene	150			440	U		160	UJ	e	1600	UJ	e			
benzo(a)anthracene	88	U		440	U		160	UJ	e	1600	UJ	e			
benzo(a)pyrene	88	U		440	U		160	UJ	e	1600	UJ	e			
benzo(b)fluoranthene	88	U		440	U		160	UJ	e	1600	UJ	e			
benzo(g,h,l)perylene	88	U		440	U		160	UJ	e	1600	UJ	e			
benzo(k)fluoranthene	88	U		440	U		160	UJ	e	1600	UJ	e			
chrysene	88	U		440	U		160	UJ	e	1600	UJ	e			
dibenzo(a,h)anthracene	88	U		440	U		160	UJ	e	1600	UJ	e			
dibenzofuran	620			980			1200	J	e	1600	UJ	e			
fluoranthene	88	U		440	U		160	UJ	e	1600	UJ	e			
fluorene	2200			2600			4100	J	e	3900	J	e			
indeno(1,2,3,c,d)pyrene	88	U		440	U		160	UJ	e	1600	UJ	e			
naphthalene	780			2000			1800	J	e	3600	J	e			
phenanthrene	1100			2100			3400	J	e	3400	J	e			
pyrene	88	U		440	U		160	UJ	e	1600	UJ	e			

Prepared by ETHIX

3/20/02

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NE Cape HTRW - St. Lawrence Island

SDG: DN04

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN05A			DN05B			DN05B-DL			DN05C			DN05C-DL			DN05D				
	Field ID	01NE28SD153			01NE28SD154			01NE28SD154			01NE28SD155			01NE28SD155			01NE28SD156				
	Matrix	SX			SX			SX			SX			SX			SX				
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg				
RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
2-methylnaphthalene	8900		18000	J	o	18000			260000	J	o	440000			250000	J	o				
acenaphthene	1300	J	n	1000			1400	U		14000			11000			8300					
acenaphthylene	670	U		140	U		1400	U		910	U		9100	U		930	U				
anthracene	670	U		140	U		1400	U		1600			9100	U		1800					
benzo(a)anthracene	670	UU	n	140	U		1400	U		1800			9100	U		1900					
benzo(a)pyrene	670	U		140	U		1400	U		1400			9100	U		1400					
benzo(b)fluoranthene	670	U		140	U		1400	U		1600			9100	U		1400					
benzo(g,h,i)perylene	670	U		140	U		1400	U		910			9100	U		930	U				
benzo(k)fluoranthene	670	U		140	U		1400	U		1600			9100	U		1900					
chrysene	670	UU	n	140	U		1400	U		2600			9100	U		2600					
dibenzo(a,h)anthracene	670	U		140	U		1400	U		910	U		9100	U		930	U				
dibenzofuran	670	U		390			1400	U		5300			9100	U		5600					
fluoranthene	670	U		290			1400	U		4900			9100	U		5100					
fluorene	1600	J	n	1900			1800			20000			19000			18000					
indeno(1,2,3,c,d)pyrene	670	U		140	U		1400	U		1200			9100	U		1200					
naphthalene	1600	J	n	2600			2800			130000	J	o	160000			110000	J	o			
phenanthrene	670			1400			1400	U		17000			16000			16000					
pyrene	670	U		180			1400	U		3600			9100	U		3600					

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN05D-DL			DN05E			DN05F			DN05F-DL			DN05G			DN05H						
	Field ID	01NE28SD156			01NE28SD157			01NE28SD158			01NE28SD158			01NE28SD253			01NE28SD257						
	Matrix	SX			SX			SX			SX			SX			SX						
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01						
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg						
2-methylnaphthalene	RESULT	Q	RC	370000	3000	J	o	14000	J	o	38000	7700	7700	7700	7700	7700	3100	3100	3100				
acenaphthene	RESULT	Q	RC	10000	200	J	n	600	J	n	1700	U	1200	J	n	71	UJ	n	71	UJ	n		
acenaphthylene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		
anthracene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		
benzo(a)anthracene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	UJ	n	71	U	71	U	71	U	
benzo(a)pyrene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		
benzo(b)fluoranthene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		
benzo(g,h,l)perylene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		
benzo(k)fluoranthene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		
chrysene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	UJ	n	71	U	71	U	71	U	
dibenzo(a,h)anthracene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		
dibenzofuran	RESULT	Q	RC	9300	U	68	U	290	U	290	U	1700	U	570	U	570	U	570	U	570	U		
fluoranthene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		
fluorene	RESULT	Q	RC	17000	200	J	n	810	J	n	810	U	1700	U	1400	J	n	71	UJ	n	71	UJ	n
indeno(1,2,3,c,d)pyrene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		
naphthalene	RESULT	Q	RC	130000	1000	J	o	6500	J	o	6500	J	o	18000	18000	1400	J	n	1100	1100	1100		
phenanthrene	RESULT	Q	RC	15000	75	J	o	400	J	o	400	J	o	1700	U	630	U	630	U	630	U		
pyrene	RESULT	Q	RC	9300	U	68	U	34	U	34	U	1700	U	570	U	570	U	570	U	570	U		

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06A			DN06B			DN06C			DN06C-DL			DN06D			DN06D-DL		
	Field ID	01NE28SD135			01NE28SD136			01NE28SD137			01NE28SD137			01NE28SD138			01NE28SD138		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		290			78000			29			22			8.8			12	U	
acenaphthene		110			5700			3.6	U		11	U		3.8	U		12	U	
acenaphthylene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
anthracene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
benzo(a)anthracene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
benzo(a)pyrene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
benzo(b)fluoranthene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
benzo(g,h,i)perylene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
benzo(k)fluoranthene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
chrysene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
dibenzo(a,h)anthracene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
dibenzofuran		67	U		1900			3.6	U		11	U		3.8	U		12	U	
fluoranthene		67	U		1200	U		5.4			11	U		3.8	U		12	U	
fluorene		110			10000			5.4			11	U		3.8	U		12	U	
indeno(1,2,3,c,d)pyrene		67	U		1200	U		3.6	U		11	U		3.8	U		12	U	
naphthalene		93			29000			45			37			9.6			12	U	
phenanthrene		150			5200			5			11	U		3.8	U		12	U	
pyrene		67	U		1200	U		5			11	U		3.8	U		12	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06E			DN06E-DL			DN06F			DN06G			DN06G-DL			DN06H		
	Field ID	01NE28SD139			01NE28SD139			01NE28SD140			01NE28SD239			01NE28SD239			01NE28SD141		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
2-methylnaphthalene	34	J	n	32			830			14	J	n	16			260	J	b	
acenaphthene	100	J	n	92			1300			8.6	UJ	n	14	U		18	J	b	
acenaphthylene	4.6	U		14	U		830	U		4.8	U		14	U		4.1	UJ	b	
anthracene	33	J	n	32			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
benzo(a)anthracene	230	J	n	200			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
benzo(a)pyrene	320	J	n	250			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
benzo(b)fluoranthene	420	J	n	200			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
benzo(g,h,i)perylene	71	J	n	66			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
benzo(k)fluoranthene	300	J	n	370			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
chrysene	380	J	n	330			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
dibenzo(a,h)anthracene	29	J	n	23			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
dibenzofuran	75	J	n	65			830	U		4.8	UJ	n	14	U		12	J	b	
fluoranthene	890	J	n,o	850			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
fluorene	100	J	n	83			830	U		7.2	J	n	14	U		48	J	b	
indeno(1,2,3,c,d)pyrene	89	J	n	85			830	U		4.8	UJ	n	14	U		4.1	UJ	b	
naphthalene	50	J	n	43			1300			14	J	n	17			200	J	b	
phenanthrene	990	J	n,o	910			830	U		4.8	UJ	n	14	U		30	J	b	
pyrene	1000	J	n,o	700			830	U		4.8	UJ	n	14	U		4.1	UJ	b	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06H-DL			DN06H-RE			DN06I			DN06I-DL			DN06J			DN06J-DL			
	Field ID	01NE28SD141			01NE28SD141			01NE28SD142			01NE28SD142			01NE28SD143			01NE28SD143			
	Matrix	SX			SX			SX			SX			SX			SX			
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			
RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
2-methylnaphthalene	270	J	b	290	J	e	620	J	o	670			52000	J	o	110000				
acenaphthene	23	J	b	41	UJ	e	23			22			1600			5700	U			
acenaphthylene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
anthracene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
benzo(a)anthracene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
benzo(a)pyrene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
benzo(b)fluoranthene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
benzo(g,h,i)perylene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
benzo(k)fluoranthene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
chrysene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
dibenzo(a,h)anthracene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
dibenzofuran	13	J	b	41	UJ	e	5.5			14	U		730			5700	U			
fluoranthene	12	UJ	b	41	UJ	e	4.6	U		14	U		140			5700	U			
fluorene	50	J	b	45	J	e	22			25			3100			5700	U			
indeno(1,2,3,c,d)pyrene	12	UJ	b	41	UJ	e	4.6	U		14	U		140	U		5700	U			
naphthalene	220	J	b	450	J	e	350			380			23000	J	o	49000				
phenanthrene	34	J	b	41	J	e	8.3			14	U		1000			5700	U			
pyrene	12	UJ	b	41	UJ	e	5			14	U		140			5700	U			

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06K			DN06K-DL			DN06L			DN06L-DL			DN06L-RE			DN06M		
	Field ID	01NE28SD144			01NE28SD144			01NE28SD145			01NE28SD145			01NE28SD145			01NE28SD146		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		41000	J	o	94000			33000	J	o	32000			1000	J	e	280000	J	o
acenaphthene		1600			4500	U		800			730			610	J	e	9400		
acenaphthylene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
anthracene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
benzo(a)anthracene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
benzo(a)pyrene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
benzo(b)fluoranthene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
benzo(g,h,i)perylene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
benzo(k)fluoranthene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
chrysene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
dibenzo(a,h)anthracene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
dibenzofuran		600			4500	U		590			640			170	J	e	4000		
fluoranthene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
fluorene		2200			4500	U		1600			1700			880	J	e	17000		
indeno(1,2,3,c,d)pyrene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	
naphthalene		18000	J	o	34000			12000			11000			430	J	e	140000	J	o
phenanthrene		610			4500	U		1300			1200			670	J	e	6900		
pyrene		110	U		4500	U		230	U		450	U		49	UJ	e	700	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06M-DL			DN06N			DN06O			DN06O-DL			DN06P			DN06Q		
	Field ID	01NE28SD146			01NE28SD147			01NE28SD148			01NE28SD148			01NE28SD149			01NE28SD150		
	Matrix	SX			SX														
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01			8/19/01		
Units	Units	µg/Kg			µg/Kg														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
2-methylnaphthalene	500000			5200			39000	J	o	59000			18000			7200			
acenaphthene	12000			610	U		1000			3600	U		1400			360			
acenaphthylene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
anthracene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
benzo(a)anthracene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
benzo(a)pyrene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
benzo(b)fluoranthene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
benzo(g,h,i)perylene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
benzo(k)fluoranthene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
chrysene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
dibenzo(a,h)anthracene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
dibenzofuran	7000	U		610	U		320			3600	U		1200	U		180			
fluoranthene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
fluorene	16000			610	U		790			3600	U		2800			560			
indeno(1,2,3,c,d)pyrene	7000	U		610	U		120	U		3600	U		1200	U		140	U		
naphthalene	220000			1200			17000	J	o	27000			3200			2600			
phenanthrene	7000	U		610	U		330			3600	U		1500	J	d	280			
pyrene	7000	U		610	U		120	U		3600	U		1200	U		140	U		

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06Q-RE			DN06Q-REDL			DN06R			DN06S			DN06T				
	Field ID	01NE28SD150			01NE28SD150			01NE28SD151			01NE28SD251			01NE28SD152				
	Matrix	SX			SX			SX			SX			SX				
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
2-methylnaphthalene	1000	J	e	1200	J	e	29000			28000			15000					
acenaphthene	330	J	e	330	J	e	1200	J	n	1500	J	n	680					
acenaphthylene	28	UJ	e	83	UJ	e	700	UJ	n	680	UJ	n	400	U				
anthracene	28	UJ	e	83	UJ	e	700	U		680	U		400	U				
benzo(a)anthracene	28	UJ	e	83	UJ	e	700	U		680	U		400	U				
benzo(a)pyrene	28	UJ	e	83	UJ	e	700	U		680	U		400	U				
benzo(b)fluoranthene	28	UJ	e	83	UJ	e	700	U		680	U		400	U				
benzo(g,h,i)perylene	28	UJ	e	83	UJ	e	700	U		680	U		400	U				
benzo(k)fluoranthene	28	UJ	e	83	UJ	e	700	UJ	n	680	UJ	n	400	U				
chrysene	31	J	e	83	UJ	e	700	U		680	U		400	U				
dibenzo(a,h)anthracene	28	UJ	e	83	UJ	e	700	U		680	U		400	U				
dibenzofuran	97	J	e	83	J	e	700	U		680	U		400	U				
fluoranthene	31	J	e	83	UJ	e	700	U		680	U		400	U				
fluorene	390	J	e	410	J	e	2400	J	n	2400	J	n	1200					
indeno(1,2,3,c,d)pyrene	28	UJ	e	83	UJ	e	700	U		680	U		400	U				
naphthalene	610	J	e	400	J	e	5600			5300			3400					
phenanthrene	250	J	e	220	J	e	990			950			480					
pyrene	36	J	e	83	UJ	e	700	U		680	U		400	U				

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07D			DN07E			DN07F			DN07G			DN07H			DN07I		
	Field ID	01NE28SD111			01NE28SD211			01NE28SD112			01NE28SD113			01NE28SD114			01NE28SD115		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acenaphthene	37	U			44	U		39			160			1400			6700	J	o
acenaphthylene	37	U			44	U		14	U		45	U		74			340		
anthracene	40				53			14	U		45	U		17	U		41	U	
benzo(a)anthracene	37	U			44	U		14	U		45	U		17	U		41	U	
benzo(a)pyrene	37	U			44	U		14	U		45	U		17	U		41	U	
benzo(b)fluoranthene	37	U			44	U		14	U		45	U		17	U		41	U	
benzo(g,h,i)perylene	37	U			44	U		14	U		45	U		17	U		41	U	
benzo(k)fluoranthene	37	U			44	U		14	U		45	U		17	U		41	U	
chrysene	44				44	U		14	U		45	U		17	U		41	U	
dibenzo(a,h)anthracene	37	U			44	U		14	U		45	U		17	U		41	U	
dibenzofuran	37	U			44	U		14	U		45	U		33			150		
fluoranthene	37	U			48			14	U		45	U		17	U		41	U	
fluorene	160				44	U		14	U		63			140			600		
indeno(1,2,3,c,d)pyrene	37	U			44	U		14	U		45	U		17	U		41	U	
naphthalene	37	U			44	U		14	U		45	U		330			1700		
phenanthrene	210				48			15			45	U		18			41	U	
pyrene	180				79			14	U		63			17	U		41	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07I-DL			DN07J			DN07N			DN07O			DN07P			DN07Q		
	Field ID	01NE28SD115			01NE28SD116			01NE07SS125			01NE07SS126			01NE07SS127			01NE07SD105		
	Matrix	SX			SX														
	Date Collected	8/18/01			8/18/01			8/19/01			8/19/01			8/19/01			8/19/01		
Units	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
	µg/Kg																		
2-methylnaphthalene	8700			210			6.9	U		13	U		47			50	U		
acenaphthene	300			9.4	U		6.9	U		13	U		7.9	U		50	U		
acenaphthylene	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
anthracene	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
benzo(a)anthracene	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
benzo(a)pyrene	270	U		9.4	U		6.9	U		13	U		82			50	U		
benzo(b)fluoranthene	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
benzo(g,h,i)perylene	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
benzo(k)fluoranthene	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
chrysene	270	U		9.4	U		6.9	U		13	U		13			50	U		
dibenzo(a,h)anthracene	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
dibenzofuran	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
fluoranthene	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
fluorene	630			9.4	U		6.9	U		13	U		7.9	U		50	U		
indeno(1,2,3,c,d)pyrene	270	U		9.4	U		6.9	U		13	U		7.9	U		50	U		
naphthalene	1900			110			6.9	U		13	U		27			50	U		
phenanthrene	270	U		9.4	U		6.9	U		13	U		14			50	U		
pyrene	270	U		9.4	U		6.9	U		13	U		13			50	U		

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Sample ID	DN07R			
Field ID	01NE07SD104			
Matrix	SX			
Date Collected	8/19/01			
Units	µg/Kg			
Analyte	RESULT	Q	RC	
2-methylnaphthalene	14	U		
acenaphthene	14	U		
acenaphthylene	14	U		
anthracene	14	U		
benzo(a)anthracene	14	U		
benzo(a)pyrene	14	U		
benzo(b)fluoranthene	14			
benzo(g,h,i)perylene	14	U		
benzo(k)fluoranthene	14			
chrysene	35			
dibenzo(a,h)anthracene	14	U		
dibenzofuran	14	U		
fluoranthene	14	U		
fluorene	14	U		
indeno(1,2,3,c,d)pyrene	14	U		
naphthalene	14	U		
phenanthrene	14	U		
pyrene	26			

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN36A			DN36B			DN36C			DN36D			DN36E				
	Field ID	01NE29SW117			01NE29SW217			01NE29SW116			01NE29SW115			01NE29SW114				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	8/20/01			8/20/01			8/21/01			8/21/01			8/21/01				
	Units	µg/L			µg/L			µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
2-methylnaphthalene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
acenaphthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
acenaphthylene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
anthracene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(a)anthracene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(a)pyrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(b)fluoranthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(g,h,i)perylene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(k)fluoranthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
chrysene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
dibenzo(a,h)anthracene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
dibenzofuran	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
fluoranthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
fluorene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
indeno(1,2,3,c,d)pyrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
naphthalene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
phenanthrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
pyrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				

Prepared by ETHIX

3/20/02

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NE Cape HTRW - St. Lawrence Island

SDG: DN36

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN38A			DN38B			DN38C			DN38D			DN38E			DN38F		
	Field ID	01NE29SD114			01NE29SD214			01NE29SD115			01NE29SD116			01NE29SD117			01NE29SD118		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01			8/21/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		150	J	b	130			2.9	U		3.1	U		2.2	U		8	U	
acenaphthene		13	J	b	14			2.9	U		3.1	U		2.2	U		8	U	
acenaphthylene		8.4	UJ	b	3.8	U		2.9	U		3.1	U		2.2	U		8	U	
anthracene		8.4	UJ	b	3.8	U		2.9	U		3.1	U		2.2	U		23		
benzo(a)anthracene		8.4	UJ	b	3.8	U		2.9	U		3.1	U		2.2	U		8	U	
benzo(a)pyrene		8.4	UJ	b	3.8	U		2.9	U		3.1	U		2.2	U		8	U	
benzo(b)fluoranthene		8.4	UJ	b	4.2			2.9	U		3.1	U		2.2	U		8	U	
benzo(g,h,i)perylene		8.4	UJ	b	3.8	U		2.9	U		3.1	U		2.2	U		8	U	
benzo(k)fluoranthene		8.4	UJ	b	4.2			2.9	U		3.1	U		2.2	U		8	U	
chrysene		8.4	UJ	b	5.3			2.9	U		3.1	U		2.2	U		8	U	
dibenzo(a,h)anthracene		8.4	UJ	b	3.8	U		2.9	U		3.1	U		2.2	U		8	U	
dibenzofuran		8.4	UJ	b	13			2.9	U		3.1	U		2.2	U		8	U	
fluoranthene		8.4	UJ	b,n	36	J	n	2.9	U		3.1	U		2.2	U		10		
fluorene		17	J	b	26			2.9	U		3.1	U		2.2	U		8	U	
indeno(1,2,3,c,d)pyrene		8.4	UJ	b	3.8	U		2.9	U		3.1	U		2.2	U		8	U	
naphthalene		31	J	b	26			2.9	U		3.1	U		2.2	U		8	U	
phenanthrene		11	J	b,n	63	J	n	2.9	U		3.1	U		2.2	U		22		
pyrene		8.4	UJ	b	17			2.9	U		3.1	U		2.2	U		8	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN38G			DN38H			DN38I			DN38J			DN38K			DN38L		
	Field ID	01NE29SD119			01NE28SD165			01NE28SD166			01NE28SD167			01NE28SD168			01NE28SD169		
	Matrix	SX			SX														
	Date Collected	8/21/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
	Units	µg/Kg			µg/Kg														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
2-methylnaphthalene	6.6	U		8.8	U		7.7	U		1200	U		13000			38000	J	b	
acenaphthene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		7900	J	b	
acenaphthylene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
anthracene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
benzo(a)anthracene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
benzo(a)pyrene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
benzo(b)fluoranthene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
benzo(g,h,i)perylene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
benzo(k)fluoranthene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
chrysene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
dibenzo(a,h)anthracene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
dibenzofuran	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1400	J	b	
fluoranthene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
fluorene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		8800	J	b	
indeno(1,2,3,c,d)pyrene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	
naphthalene	6.6	U		8.8	U		7.7	U		1200	U		4900			9900	J	b	
phenanthrene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		3700	J	b	
pyrene	6.6	U		8.8	U		7.7	U		1200	U		1200	U		1300	UJ	b	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Sample ID	DN38M			
Field ID	01NE28SD170			
Matrix	SX			
Date Collected	8/20/01			
Units	µg/Kg			
Analyte	RESULT Q RC			
2-methylnaphthalene	51000			
acenaphthene	12000			
acenaphthylene	1400 U			
anthracene	1400 U			
benzo(a)anthracene	1400 U			
benzo(a)pyrene	1400 U			
benzo(b)fluoranthene	1400 U			
benzo(g,h,l)perylene	1400 U			
benzo(k)fluoranthene	1400 U			
chrysene	1400 U			
dibenzo(a,h)anthracene	1400 U			
dibenzofuran	2300			
fluoranthene	1400 U			
fluorene	16000			
indeno(1,2,3,c,d)pyrene	1400 U			
naphthalene	14000			
phenanthrene	5900			
pyrene	1400 U			

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39A			DN39B			DN39C			DN39C-DL			DN39D			DN39E		
	Field ID	01NE28SD159			01NE28SD160			01NE28SD161			01NE28SD161			01NE28SD163			01NE28SD164		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/20/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		3000			3400			260000	J	o	260000			2700	J	n	31000		
acenaphthene		2100			3700			12000			16000	U		2300	J	n	4600		
acenaphthylene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
anthracene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
benzo(a)anthracene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
benzo(a)pyrene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
benzo(b)fluoranthene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
benzo(g,h,i)perylene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
benzo(k)fluoranthene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
chrysene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
dibenzo(a,h)anthracene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
dibenzofuran		1400	U		1400	U		3900			16000	U		1400	U		1400	U	
fluoranthene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
fluorene		1400	U		2300			18000			16000	U		2600			6900		
indeno(1,2,3,c,d)pyrene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	
naphthalene		7300			16000			54000			58000			9500	J	n	14000		
phenanthrene		1400	U		1400	U		6200			16000	U		1400	U		1400	U	
pyrene		1400	U		1400	U		1600	U		16000	U		1400	U		1400	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39F			DN39G			DN39H			DN39I			DN39J			DN39K		
	Field ID	01NE28SD263			01NE28SD171			01NE28SD172			01NE28SD173			01NE28SD174			01NE28SD175		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/20/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		2700	J	n	45	U		4200	U		1400			660			33	UJ	b
acenaphthene		2400	J	n	45	U		4200	U		54	U		31			33	UJ	b
acenaphthylene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
anthracene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
benzo(a)anthracene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
benzo(a)pyrene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
benzo(b)fluoranthene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
benzo(g,h,i)perylene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
benzo(k)fluoranthene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
chrysene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
dibenzo(a,h)anthracene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
dibenzofuran		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
fluoranthene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
fluorene		2400			45	U		4200	U		87			62			33	UJ	b
indeno(1,2,3,c,d)pyrene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
naphthalene		9700	J	n	45	U		4200	U		2000			330			33	UJ	b
phenanthrene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b
pyrene		1400	U		45	U		4200	U		54	U		31	U		33	UJ	b

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39K-RE			DN39L			DN39M			DN39N			DN39O			DN39P		
	Field ID	01NE28SD175			01NE28SD176			01NE28SD271			01NE28SD275			01NE28SD177			01NE28SD178		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/20/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
2-methylnaphthalene	21	J	e,b	52	U		40	U		100			1700	U		3100	U		
acenaphthene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
acenaphthylene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
anthracene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
benzo(a)anthracene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
benzo(a)pyrene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
benzo(b)fluoranthene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
benzo(g,h,l)perylene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
benzo(k)fluoranthene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
chrysene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
dibenzo(a,h)anthracene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
dibenzofuran	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
fluoranthene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
fluorene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
indeno(1,2,3,c,d)pyrene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
naphthalene	11	UJ	e,b	52	U		40	U		34			1700	U		3100	U		
phenanthrene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		
pyrene	11	UJ	e,b	52	U		40	U		31	U		1700	U		3100	U		

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39Q			DN39R			DN39S			DN39T			DN39T-DL				
	Field ID	01NE28SD179			01NE28SD180			01NE28SD181			01NE28SD182			01NE28SD182				
	Matrix	SX																
	Date Collected	8/20/01			8/20/01			8/20/01			8/20/01			8/20/01				
Analyte	Units	µg/Kg																
		RESULT	Q	RC														
2-methylnaphthalene		1200	U		1100	U		1400	U		20	U		68	U			
acenaphthene		1200	U		1100	U		1400	U		20	U		68	U			
acenaphthylene		1200	U		1100	U		1400	U		20	U		68	U			
anthracene		1200	U		1100	U		1900			20	U		68	U			
benzo(a)anthracene		1200	U		1100	U		4400			20	U		68	U			
benzo(a)pyrene		1200	U		1100	U		2300			20	U		68	U			
benzo(b)fluoranthene		1200	U		1100	U		2600			20	U		68	U			
benzo(g,h,i)perylene		1200	U		1100	U		1400	U		20	U		68	U			
benzo(k)fluoranthene		1200	U		1100	U		2700			20	U		68	U			
chrysene		1200	U		1100	U		5500			20	U		68	U			
dibenzo(a,h)anthracene		1200	U		1100	U		1400	U		20	U		68	U			
dibenzofuran		1200	U		1100	U		1400	U		20	U		68	U			
fluoranthene		1200	U		1100	U		9300			20	U		68	U			
fluorene		1200	U		1100	U		1400	U		20	U		68	U			
indeno(1,2,3,c,d)pyrene		1200	U		1100	U		1400	U		20	U		68	U			
naphthalene		1200	U		1100	U		1400	U		20	U		68	U			
phenanthrene		1200	U		1100	U		4100			27			68	U			
pyrene		1200	U		1100	U		7500			20			68	U			

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN40A			DN40B			DN40C			DN40C-RE			DN40D			DN40E		
	Field ID	01NE29SD123			01NE29SD124			01NE29SD125			01NE29SD125			01NE29SD225			01NE29SD128		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01			8/21/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acenaphthene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
acenaphthylene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
anthracene	26	U			10			8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
benzo(a)anthracene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
benzo(a)pyrene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
benzo(b)fluoranthene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
benzo(g,h,i)perylene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
benzo(k)fluoranthene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
chrysene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
dibenzo(a,h)anthracene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
dibenzofuran	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
fluoranthene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
fluorene	26	U			13			8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
indeno(1,2,3,c,d)pyrene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
naphthalene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
phenanthrene	26	U			10			8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b
pyrene	26	U			8.7	U		8.5	U		8.7	UJ	e	9.1	U		8.7	UJ	b

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN40E-RE			DN40F			DN40G			DN40H			DN40I			DN40M		
	Field ID	01NE29SD128			01NE29SD129			01NE29SD120			01NE29SD121			01NE29SD122			01NE29SD127		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01			8/21/01		
Analyte	Units	$\mu\text{g/Kg}$			$\mu\text{g/Kg}$			$\mu\text{g/Kg}$			$\mu\text{g/Kg}$			$\mu\text{g/Kg}$			$\mu\text{g/Kg}$		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
2-methylnaphthalene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
acenaphthene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
acenaphthylene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
anthracene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
benzo(a)anthracene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
benzo(a)pyrene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
benzo(b)fluoranthene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
benzo(g,h,i)perylene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
benzo(k)fluoranthene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
chrysene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
dibenzo(a,h)anthracene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
dibenzofuran		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
fluoranthene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
fluorene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
indeno(1,2,3,c,d)pyrene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
naphthalene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
phenanthrene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U
pyrene		18	UJ	e		6.8	U		7.3	U		6.4	U		7	U		8.9	U

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN40N			DN40N-RE					
	Field ID	01NE29SD126			01NE29SD126					
	Matrix	SX			SX					
	Date Collected	8/21/01			8/21/01					
	Units	µg/Kg			µg/Kg					
2-methylnaphthalene		RESULT	Q	RC	RESULT	Q	RC			
acenaphthene	8.3	UJ	b		8.5	UJ	b,e			
acenaphthylene	8.3	UJ	b		8.5	UJ	b,e			
anthracene	8.3	UJ	b		8.5	UJ	b,e			
benzo(a)anthracene	8.3	UJ	b		8.5	UJ	b,e			
benzo(a)pyrene	8.3	UJ	b		8.5	UJ	b,e			
benzo(b)fluoranthene	8.3	UJ	b		8.5	UJ	b,e			
benzo(g,h,i)perylene	8.3	UJ	b		8.5	UJ	b,e			
benzo(k)fluoranthene	8.3	UJ	b		8.5	UJ	b,e			
chrysene	8.3	UJ	b		8.5	UJ	b,e			
dibenzo(a,h)anthracene	8.3	UJ	b		8.5	UJ	b,e			
dibenzofuran	8.3	UJ	b		8.5	UJ	b,e			
fluoranthene	8.3	UJ	b		8.5	UJ	b,e			
fluorene	8.3	UJ	b		8.5	UJ	b,e			
indeno(1,2,3,c,d)pyrene	8.3	UJ	b		8.5	UJ	b,e			
naphthalene	8.3	UJ	b		8.5	UJ	b,e			
phenanthrene	8.3	UJ	b		8.5	UJ	b,e			
pyrene	8.3	UJ	b		8.5	UJ	b,e			

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN53A			DN53B			DN53F			DN53G			DN53I				
	Field ID	01NE09SW109			01NE09SW107			01NE09SW207			01NE09SW108			01NE16GW103				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01			8/23/01				
	Units	µg/L			µg/L			µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
2-methylnaphthalene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
acenaphthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05					
acenaphthylene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
anthracene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(a)anthracene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(a)pyrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(b)fluoranthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(g,h,i)perylene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
benzo(k)fluoranthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
chrysene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
dibenzo(a,h)anthracene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
dibenzofuran	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
fluoranthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
fluorene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
indeno(1,2,3,c,d)pyrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
naphthalene	0.05	U		0.05	U		0.05	U		0.05	U		1.5					
phenanthrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				
pyrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U				

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN55D			DN55D-RE			DN55E			DN55F			DN55M				
	Field ID	01NE34SS101			01NE34SS101			01NE34SS102			01NE34SS103			01NE34SS111				
	Matrix	SX			SX			SX			SX			SX				
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01			8/23/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
2-methylnaphthalene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
acenaphthene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
acenaphthylene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
anthracene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
benzo(a)anthracene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
benzo(a)pyrene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
benzo(b)fluoranthene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
benzo(g,h,l)perylene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
benzo(k)fluoranthene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
chrysene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
dibenzo(a,h)anthracene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
dibenzofuran	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
fluoranthene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
fluorene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
indeno(1,2,3,c,d)pyrene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
naphthalene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
phenanthrene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				
pyrene	2.6	UJ	b	8.9	UJ	e	2.4	U		2.4	U		2.1	U				

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Sample ID	DN68F			
Field ID	01NE09SD114			
Matrix	SX			
Date Collected	8/24/01			
Units	µg/Kg			
Analyte	RESULT	Q	RC	
2-methylnaphthalene	35	U		
acenaphthene	35	U		
acenaphthylene	35	U		
anthracene	35	U		
benzo(a)anthracene	35	U		
benzo(a)pyrene	35	U		
benzo(b)fluoranthene	35	U		
benzo(g,h,i)perylene	35	U		
benzo(k)fluoranthene	35	U		
chrysene	35	U		
dibenzo(a,h)anthracene	35	U		
dibenzofuran	35	U		
fluoranthene	35	U		
fluorene	35	U		
indeno(1,2,3,c,d)pyrene	35	U		
naphthalene	35	U		
phenanthrene	35	U		
pyrene	35	U		

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN71A			DN71B			DN71D			DN71E			DN71P				
	Field ID	01NE09SW112			01NE09WP102			01NE09MW103			01NE09SW111			01NE09SW110				
	Matrix	WX																
	Date Collected	8/26/01			8/26/01			8/26/01			8/26/01			8/25/01				
Analyte	Units	µg/L																
		RESULT	Q	RC														
2-methylnaphthalene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
acenaphthene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
acenaphthylene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
anthracene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
benzo(a)anthracene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
benzo(a)pyrene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
benzo(b)fluoranthene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
benzo(g,h,i)perylene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
benzo(k)fluoranthene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
chrysene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
dibenzo(a,h)anthracene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
dibenzofuran		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
fluoranthene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
fluorene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
indeno(1,2,3,c,d)pyrene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
naphthalene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
phenanthrene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			
pyrene		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U			

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN73A			DN73D			DN73E				
	Field ID	01NE30WP101			01NE31SW101			01NE31SW102				
	Matrix	WX			WX			WX				
	Date Collected	8/25/01			8/24/01			8/24/01				
	Units	µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
2-methylnaphthalene	0.1	U		0.05	U		0.05	U				
acenaphthene	0.1	U		0.05	U		0.05	U				
acenaphthylene	0.1	U		0.05	U		0.05	U				
anthracene	0.1	U		0.05	U		0.05	U				
benzo(a)anthracene	0.1	U		0.05	U		0.05	U				
benzo(a)pyrene	0.1	U		0.05	U		0.05	U				
benzo(b)fluoranthene	0.1	U		0.05	U		0.05	U				
benzo(g,h,i)perylene	0.1	U		0.05	U		0.05	U				
benzo(k)fluoranthene	0.1	U		0.05	U		0.05	U				
chrysene	0.1	U		0.05	U		0.05	U				
dibenzo(a,h)anthracene	0.1	U		0.05	U		0.05	U				
dibenzofuran	0.1	U		0.05	U		0.05	U				
fluoranthene	0.1	U		0.05	U		0.05	U				
fluorene	0.1	U		0.05	U		0.05	U				
indeno(1,2,3,c,d)pyrene	0.1	U		0.05	U		0.05	U				
naphthalene	0.1	U		0.05	U		0.05	U				
phenanthrene	0.1	U		0.05	U		0.05	U				
pyrene	0.1	U		0.05	U		0.05	U				

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN76D			DN76E			DN76E-RE			DN76F			DN76G			DN76H		
	Field ID	01NE09SD107			01NE09SD108			01NE09SD108			01NE30SS101			01NE30SD101			01NE30SS103		
	Matrix	SX			SX														
	Date Collected	8/23/01			8/23/01			8/23/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
2-methylnaphthalene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
acenaphthene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
acenaphthylene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
anthracene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
benzo(a)anthracene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
benzo(a)pyrene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
benzo(b)fluoranthene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
benzo(g,h,l)perylene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
benzo(k)fluoranthene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
chrysene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
dibenzo(a,h)anthracene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
dibenzofuran	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
fluoranthene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
fluorene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
indeno(1,2,3,c,d)pyrene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
naphthalene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
phenanthrene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	
pyrene	41	U		22	UJ	b	25	UJ	e	27	U		22	U		53	UJ	b	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN76H-RE			DN76I			DN76J			DN76K			DN76P			DN76P-RE		
	Field ID	01NE30SS103			01NE30SS102			01NE09SD109			01NE09SD213			01NE09SD113			01NE09SD113		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
2-methylnaphthalene		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acenaphthene		60	UJ	e	6.8	U		16	U		19	U		36	UJ	b	40	UJ	e
acenaphthylene		60	UJ	e	6.8	U		16	U		19	U		36	UJ	b	40	UJ	e
anthracene		60	UJ	e	6.8	U		16	U		19	U		36	UJ	b	40	UJ	e
benzo(a)anthracene		60	UJ	e	6.8	U		21			19	U		36	UJ	b	40	UJ	e
benzo(a)pyrene		60	UJ	e	6.8	U		86			19	U		36	UJ	b	40	UJ	e
benzo(b)fluoranthene		60	UJ	e	6.8	U		39			19	U		36	UJ	b	40	UJ	e
benzo(g,h,i)perylene		60	UJ	e	6.8	U		88			19	U		36	UJ	b	40	UJ	e
benzo(k)fluoranthene		60	UJ	e	6.8	U		57			19	U		36	UJ	b	40	UJ	e
chrysene		60	UJ	e	6.8	U		64			19	U		36	UJ	b	40	UJ	e
dibenzo(a,h)anthracene		60	UJ	e	6.8	U		16	U		19	U		36	UJ	b	40	UJ	e
dibenzofuran		60	UJ	e	6.8	U		16	U		19	U		36	UJ	b	40	UJ	e
fluoranthene		60	UJ	e	6.8	U		23			19	U		36	UJ	b	40	UJ	e
fluorene		60	UJ	e	6.8	U		16	U		19	U		36	UJ	b	40	UJ	e
indeno(1,2,3,c,d)pyrene		60	UJ	e	6.8	U		18			19	U		36	UJ	b	40	UJ	e
naphthalene		60	UJ	e	6.8	U		16	U		19	U		36	UJ	b	40	UJ	e
phenanthrene		60	UJ	e	6.8	U		24			19	U		36	UJ	b	40	UJ	e
pyrene		60	UJ	e	6.8	U		41			19	U		36	UJ	b	40	UJ	e

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	DN88A			DN88B			DN88C			DN88E			DN88F				
	Field ID	01NE07WP102			01NE07WP202			01NE30WP102			01NE07WP101			01NE07WP103				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	8/27/01			8/27/01			8/28/01			8/28/01			8/27/01				
	Units	µg/L			µg/L			µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
2-methylnaphthalene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
acenaphthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
acenaphthylene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
anthracene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
benzo(a)anthracene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
benzo(a)pyrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
benzo(b)fluoranthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
benzo(g,h,l)perylene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
benzo(k)fluoranthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
chrysene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
dibenzo(a,h)anthracene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
dibenzofuran	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
fluoranthene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
fluorene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
indeno(1,2,3,c,d)pyrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
naphthalene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
phenanthrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	
pyrene	0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	

## Polynuclear Aromatic Hydrocarbons

## DATA SUMMARY TABLE

Analyte	Sample ID	100413-01			100413-02			100413-03			100413-04			100413-05			100413-06		
	Field ID	01NE29SD325			01NE28SD375			01NE28SD371			01NE28SD363			01NE29SD314			01NE29SW317		
	Matrix	SX			SX			SX			SX			SX			WX		
	Date Collected	8/21/01			8/20/01			8/20/01			8/20/01			8/21/01			8/20/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/L		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
2-chloronaphthalene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
2-methylnaphthalene		2	U		68			7.8	U		210	UJ	n	57			0.098	U	
acenaphthene		2	U		6.4	U		7.8	U		210	UJ	n	3.4	U		0.098	U	
acenaphthylene		2	U		20			7.8	U		210	U		3.4	U		0.098	U	
anthracene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
benzo(a)anthracene		4	U		13	U		16	U		420	U		6.8	U		0.098	U	
benzo(a)pyrene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
benzo(b)fluoranthene		2	UJ	f	6.4	U		7.8	U		210	U		3.4	U		0.098	U	
benzo(g,h,i)perylene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
benzo(k)fluoranthene		2	UJ	f	6.4	U		7.8	U		210	U		3.4	U		0.098	U	
chrysene		4	U		13	U		16	U		420	U		6.8	U		0.098	U	
dibenz(a,h)anthracene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
fluoranthene		2	U		6.4	U		7.8	U		720			3.4	UJ	n	0.098	U	
fluorene		2	U		6.4	U		7.8	U		3300			14			0.098	U	
indeno(1,2,3,c,d)pyrene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	
naphthalene		2	U		68			7.8	U		210	UJ	n	28			0.098	U	
phenanthrene		2	U		6.4	U		7.8	U		210	U		3.4	UJ	n	0.098	U	
pyrene		2	U		6.4	U		7.8	U		210	U		3.4	U		0.098	U	

## Semivolatile Organics

## DATA SUMMARY TABLE

Sample ID	100418-01		
Field ID	01NE16GW301		
Matrix	WX		
Date Collected	8/23/01		
Units	RESULT	Q	RC
1,2,4-trichlorobenzene	1	U	
1,2-dichlorobenzene	1	U	
1,3-dichlorobenzene	1	U	
1,4-dichlorobenzene	1	U	
2,4,5-trichlorophenol	1	U	
2,4,6-trichlorophenol	1	U	
2,4-dichlorophenol	1	U	
2,4-dimethylphenol	1	U	
2,4-dinitrophenol	1	U	
2,4-dinitrotoluene	1	U	
2,6-dinitrotoluene	1	U	
2-chloronaphthalene	0.1	U	
2-chlorophenol	1	U	
2-methylnaphthalene	0.1	U	
2-methylphenol	1	U	
2-nitroaniline	1	U	
2-nitrophenol	1	U	
3,3'-dichlorobenzidine	1	U	
3-&4-methylphenol	1	U	
3-nitroaniline	1	U	
4,6-dinitro-2-methylphenol	1	U	
4-bromophenyl phenyl ether	1	U	
4-chloro-3-methylphenol	1	U	
4-chloroaniline	1	U	
4-chlorophenyl phenyl ether	1	U	
4-nitroaniline	1	U	
4-nitrophenol	1	U	
acenaphthene	0.1	U	
acenaphthylene	0.1	U	

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NE Cape HTRW - St. Lawrence Island

SDG: 100418

## Semivolatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100418-01		
	Field ID	01NE16GW301		
	Matrix	WX		
	Date Collected	8/23/01		
	Units	µg/L		
		RESULT	Q	RC
anthracene		0.1	U	
benzo(a)anthracene		0.1	U	
benzo(a)pyrene		0.1	U	
benzo(b)fluoranthene		0.1	U	
benzo(g,h,l)perylene		0.1	U	
benzo(k)fluoranthene		0.1	U	
benzoic acid		1	U	
benzyl alcohol		1	U	
bis(2-chloroethoxy)methane		1	U	
bis(2-chloroethyl)ether		1	U	
bis(2-chloroisopropyl)ether		1	U	
bis(2-ethylhexyl)phthalate		1	U	
butylbenzylphthalate		5.2	U	
chrysene		0.1	U	
di-n-butylphthalate		5.2	U	
di-n-octylphthalate		1	U	
dibenzo(a,h)anthracene		0.1	U	
dibenzofuran		1	U	
diethylphthalate		2.6	U	
dimethylphthalate		1	U	
fluoranthene		0.1	U	
fluorene		0.1	U	
hexachlorobenzene		1	U	
hexachlorobutadiene		1	U	
hexachlorocyclopentadiene		0.52	U	
hexachloroethane		1	U	
indeno(1,2,3,c,d)pyrene		0.1	U	
isophorone		1	U	
n-nitroso-di-n-propylamine		1	U	

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## Semivolatile Organics

## DATA SUMMARY TABLE

Sample ID	100418-01						
Field ID	01NE16GW301						
Matrix	WX						
Date Collected	8/23/01						
Units	µg/L						
Analyte	RESULT Q RC						
n-nitrosodiphenylamine	1 U						
naphthalene	0.1 U						
nitrobenzene	1 U						
pentachlorophenol	1 U						
phenanthrene	0.1 U						
phenol	1 U						
pyrene	0.1 U						

## Semivolatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN53C			DN53D			DN53E				
	Field ID	01NE16GW101			01NE16GW201			01NE16GW102				
	Matrix	WX			WX			WX				
	Date Collected	8/23/01			8/23/01			8/23/01				
Analyte	Units	µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
1,2,4-trichlorobenzene	1	U		1	U		1	U				
1,2-dichlorobenzene	1	U		1	U		1	U				
1,3-dichlorobenzene	1	U		1	U		1	U				
1,4-dichlorobenzene	1	U		1	U		1	U				
2,2'-oxybis (1-chloropropane)	1	U		1	U		1	U				
2,4,5-trichlorophenol	5	U		5	U		5	U				
2,4,6-trichlorophenol	5	U		5	U		5	U				
2,4-dichlorophenol	3	U		3	U		3	U				
2,4-dimethylphenol	3	U		3	U		3	U				
2,4-dinitrophenol	10	U		10	U		10	U				
2,4-dinitrotoluene	5	U		5	U		5	U				
2,6-dinitrotoluene	5	U		5	U		5	U				
2-chloronaphthalene	1	U		1	U		1	U				
2-chlorophenol	1	U		1	U		1	U				
2-methylnaphthalene	1	U		1	U		1	U				
2-methylphenol	1	U		1	U		1	U				
2-nitroaniline	5	U		5	U		5	U				
2-nitrophenol	5	U		5	U		5	U				
3,3-dichlorobenzidine	5	U		5	U		5	U				
3-nitroaniline	6	U		6	U		6	U				
4,6-dinitro-2-methylphenol	10	U		10	U		10	U				
4-bromophenyl phenyl ether	1	U		1	U		1	U				
4-chloro-3-methylphenol	2	U		2	U		2	U				
4-chloroaniline	3	U		3	U		3	U				
4-chlorophenyl phenyl ether	1	U		1	U		1	U				
4-methylphenol	1	U		1	U		1	U				
4-nitroaniline	5	U		5	U		5	U				
4-nitrophenol	5	U		5	U		5	U				
acenaphthene	1	U		1	U		1	U				

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## Semivolatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN53C			DN53D			DN53E				
	Field ID	01NE16GW101			01NE16GW201			01NE16GW102				
	Matrix	WX			WX			WX				
	Date Collected	8/23/01			8/23/01			8/23/01				
	Units	µg/L			µg/L			µg/L				
acenaphthylene		1	U		1	U		1	U			
anthracene		1	U		1	U		1	U			
benzo(a)anthracene		1	U		1	U		1	U			
benzo(a)pyrene		1	U		1	U		1	U			
benzo(b)fluoranthene		1	U		1	U		1	U			
benzo(g,h,i)perylene		1	U		1	U		1	U			
benzo(k)fluoranthene		1	U		1	U		1	U			
benzoic acid		10	U		10	U		10	U			
benzyl alcohol		5	U		5	U		5	U			
bis(2-chloroethoxy)methane		1	U		1	U		1	U			
bis(2-chloroethyl)ether		2	U		2	U		2	U			
bis(2-ethylhexyl)phthalate		2.5	B	a	2.2	B	a	1.4	B	a		
butylbenzylphthalate		1	U		1	U		1	U			
carbazole		1	U		1	U		1	U			
chrysene		1	U		1	U		1	U			
di-n-butylphthalate		1	U		1	U		1	U			
di-n-octylphthalate		1	U		1	U		1	U			
dibenzo(a,h)anthracene		1	U		1	U		1	U			
dibenzofuran		1	U		1	U		1	U			
diethylphthalate		1	U		1	U		1	U			
dimethylphthalate		1	U		1	U		1	U			
fluoranthene		1	U		1	U		1	U			
fluorene		1	U		1	U		1	U			
hexachlorobenzene		1	U		1	U		1	U			
hexachlorobutadiene		2	U		2	U		2	U			
hexachlorocyclopentadiene		5	U		5	U		5	U			
hexachloroethane		2	U		2	U		2	U			
indeno(1,2,3,c,d)pyrene		1	U		1	U		1	U			
isophorone		1	U		1	U		1	U			

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NE Cape HTRW - St. Lawrence Island

SDG: DN53

## Semivolatile Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN53C 01NE16GW101 WX 8/23/01 µg/L	DN53D 01NE16GW201 WX 8/23/01 µg/L	DN53E 01NE16GW102 WX 8/23/01 µg/L	
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
n-nitroso-di-n-propylamine	2 U	2 U	2 U		
n-nitrosodiphenylamine	1 U	1 U	1 U		
naphthalene	1 U	1 U	1 U		
nitrobenzene	1 U	1 U	1 U		
pentachlorophenol	5 U	5 U	5 U		
phenanthrene	1 U	1 U	1 U		
phenol	2 U	2 U	2 U		
pyrene	1 U	1 U	1 U		

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100418-02			100418-03					
	Field ID	01NE09SW307			01NE00TB110					
	Matrix	WX			WX					
	Date Collected	8/23/01			8/23/01					
	Units	µg/L			µg/L					
RESULT	Q	RC	RESULT	Q	RC					
1,1,1,2-tetrachloroethane	0.4	U	0.4	U						
1,1,1-trichloroethane	0.4	U	0.4	U						
1,1,2,2-tetrachloroethane	0.4	U	0.4	U						
1,1,2-trichloroethane	0.4	U	0.4	U						
1,1-dichloroethane	0.4	U	0.4	U						
1,1-dichloroethene	0.4	U	0.4	U						
1,1-dichloropropene	0.4	U	0.4	U						
1,2,3-trichlorobenzene	0.4	U	0.4	U						
1,2,3-trichloropropane	0.4	U	0.4	U						
1,2,4-trichlorobenzene	0.4	U	0.4	U						
1,2,4-trimethylbenzene	0.4	U	0.4	U						
1,2-dibromo-3-chloropropane	0.4	U	0.4	U						
1,2-dibromoethane	0.4	U	0.4	U						
1,2-dichlorobenzene	0.4	U	0.4	U						
1,2-dichloroethane	0.4	U	0.4	U						
1,2-dichloropropane	0.4	U	0.4	U						
1,3,5-trimethylbenzene	0.4	U	0.4	U						
1,3-dichlorobenzene	0.4	U	0.4	U						
1,3-dichloropropane	0.4	U	0.4	U						
1,4-dichlorobenzene	0.4	U	0.4	U						
2,2-dichloropropane	0.4	U	0.4	U						
2-butanone	2	U	2	U						
2-chlorotoluene	0.4	U	0.4	U						
2-hexanone	2	U	2	U						
4-chlorotoluene	0.4	U	0.4	U						
4-isopropyltoluene	0.4	U	0.4	U						
4-methyl-2-pentanone	2	U	2	U						
acetone	0.73	B	k	0.72	J	m				
benzene	0.4	U		0.4	U					

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NE Cape HTRW - St. Lawrence Island

SDG: 100418

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100418-02			100418-03					
	Field ID	01NE09SW307			01NE00TB110					
	Matrix	WX			WX					
	Date Collected	8/23/01			8/23/01					
	Units	µg/L			µg/L					
		RESULT	Q	RC	RESULT	Q	RC			
bromobenzene		0.4	U		0.4	U				
bromochloromethane		0.4	U		0.4	U				
bromodichloromethane		0.4	U		0.4	U				
bromoform		0.4	U		0.4	U				
bromomethane		0.8	U		0.8	U				
carbon disulfide		0.4	U		0.4	U				
carbon tetrachloride		0.4	U		0.4	U				
chlorobenzene		0.4	U		0.4	U				
chloroethane		0.4	U		0.4	U				
chloroform		0.4	U		0.4	U				
chloromethane		0.4	U		2.4					
cis-1,2-dichloroethylene		0.4	U		0.4	U				
cis-1,3-dichloropropene		0.4	U		0.4	U				
dibromochloromethane		0.4	U		0.4	U				
dibromomethane		0.4	U		0.4	U				
dichlorodifluoromethane		0.4	U		0.4	U				
ethylbenzene		0.4	U		0.4	U				
hexachlorobutadiene		0.4	U		0.4	U				
isopropylbenzene		0.4	U		0.4	U				
m,p-xylene		0.8	U		0.8	U				
methylene chloride		0.4	U		0.4	U				
n-butylbenzene		0.4	U		0.4	U				
n-propylbenzene		0.4	U		0.4	U				
naphthalene		0.4	U		0.4	U				
o-xylene		0.4	U		0.4	U				
sec-butylbenzene		0.4	U		0.4	U				
styrene		0.4	U		0.4	U				
tert-butylbenzene		0.4	U		0.4	U				
tetrachloroethylene		0.4	U		0.18	J	m			

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NE Cape HTRW - St. Lawrence Island

SDG: 100418

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100418-02	100418-03						
	Field ID	01NE09SW307	01NE00TB110						
	Matrix	WX	WX						
	Date Collected	8/23/01	8/23/01						
	Units	µg/L	µg/L						
	RESULT	Q	RC	RESULT	Q	RC			
toluene	0.4	U		0.4	U				
trans-1,2-dichloroethene	0.4	U		0.4	U				
trans-1,3-dichloropropene	0.4	U		0.4	U				
trichloroethene	0.4	U		0.4	U				
trichlorofluoromethane	0.4	U		0.16	J	m			
vinyl chloride	0.4	U		0.4	U				

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100492-13			
	Field ID	01NE09SD313	SX		
	Matrix				
	Date Collected	8/24/01			
	Units	µg/Kg			
	RESULT	Q	RC		
1,1,1,2-tetrachloroethane	1.9	U			
1,1,1-trichloroethane	1.9	U			
1,1,2,2-tetrachloroethane	1.9	U			
1,1,2-trichloroethane	1.9	U			
1,1-dichloroethane	1.9	U			
1,1-dichloroethene	1.9	U			
1,1-dichloropropene	1.9	U			
1,2,3-trichlorobenzene	1.9	U			
1,2,3-trichloropropane	1.9	U			
1,2,4-trichlorobenzene	1.9	U			
1,2,4-trimethylbenzene	1.9	U			
1,2-dibromo-3-chloropropane	1.9	U			
1,2-dibromoethane	1.9	U			
1,2-dichlorobenzene	1.9	U			
1,2-dichloroethane	1.9	U			
1,2-dichloropropane	1.9	U			
1,3,5-trimethylbenzene	1.9	U			
1,3-dichlorobenzene	1.9	U			
1,3-dichloropropane	1.9	U			
1,4-dichlorobenzene	1.9	U			
2,2-dichloropropane	1.9	U			
2-butanone	56	J	n		
2-chlorotoluene	1.9	U			
2-hexanone	9.3	U			
4-chlorotoluene	1.9	U			
4-isopropyltoluene	1.9	U			
4-methyl-2-pentanone	9.3	U			
acetone	460				
benzene	1.9	U			

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NE Cape HTRW - St. Lawrence Island  
SDG: 100492

## Volatile Organics

## DATA SUMMARY TABLE

Sample ID	100492-13		
Field ID	01NE09SD313		
Matrix	SX		
Date Collected	8/24/01		
Units	µg/Kg		
Analyte	RESULT	Q	RC
bromobenzene	1.9	U	
bromochloromethane	1.9	U	
bromodichloromethane	1.9	U	
bromoform	1.9	U	
bromomethane	1.9	U	
carbon disulfide	20	J	n
carbon tetrachloride	1.9	U	
chlorobenzene	1.9	U	
chloroethane	1.9	U	
chloroform	1.9	U	
chloromethane	1.2	J	m,n
cis-1,2-dichloroethene	1.9	U	
cis-1,3-dichloropropene	1.9	U	
dibromochloromethane	1.9	U	
dibromomethane	1.9	U	
dichlorodifluoromethane	1.9	U	
ethylbenzene	1.9	U	
hexachlorobutadiene	1.9	U	
isopropylbenzene	1.9	U	
m,p-xylene	3.7	U	
methylene chloride	1.9	U	
n-butylbenzene	1.9	U	
n-propylbenzene	1.9	U	
naphthalene	1.9	U	
o-xylene	1.9	U	
sec-butylbenzene	1.9	U	
styrene	1.9	U	
tert-butylbenzene	1.9	U	
tetrachloroethylene	1.9	U	

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NE Cape HTRW - St. Lawrence Island

SDG: 100492

## Volatile Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	100492-13 01NE09SD313 SX 8/24/01 µg/Kg			
Analyte	RESULT	Q	RC		
toluene	16	J	c,f,n		
trans-1,2-dichloroethene	1.9	U			
trans-1,3-dichloropropene	1.9	U			
trichloroethene	1.9	U			
trichlorofluoromethane	1.9	U			
vinyl chloride	1.9	U			

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100553-01			100553-02					
	Field ID	01NE07WP302			01NE00TB117					
	Matrix	WX			WX					
	Date Collected	8/27/01			8/27/01					
	Units	µg/L			µg/L					
RESULT	Q	RC	RESULT	Q	RC					
1,1,1,2-tetrachloroethane	0.4	U	0.4	UJ	p					
1,1,1-trichloroethane	0.4	U	0.4	UJ	p					
1,1,2,2-tetrachloroethane	0.4	U	0.4	UJ	p					
1,1,2-trichloroethane	0.4	U	0.4	UJ	p					
1,1-dichloroethane	0.4	U	0.4	UJ	p					
1,1-dichloroethene	0.4	U	0.4	UJ	p					
1,1-dichloropropene	0.4	U	0.4	UJ	p					
1,2,3-trichlorobenzene	0.4	U	0.4	UJ	p					
1,2,3-trichloropropane	0.4	U	0.4	UJ	p					
1,2,4-trichlorobenzene	0.4	U	0.4	UJ	p					
1,2,4-trimethylbenzene	0.4	U	0.4	UJ	p					
1,2-dibromo-3-chloropropane	0.4	U	0.4	UJ	p					
1,2-dibromoethane	0.4	U	0.4	UJ	p					
1,2-dichlorobenzene	0.4	U	0.4	UJ	p					
1,2-dichloroethane	0.4	U	0.4	UJ	p					
1,2-dichloropropane	0.4	U	0.4	UJ	p					
1,3,5-trimethylbenzene	0.4	U	0.4	UJ	p					
1,3-dichlorobenzene	0.4	U	0.4	UJ	p					
1,3-dichloropropane	0.4	U	0.4	UJ	p					
1,4-dichlorobenzene	0.4	U	0.4	UJ	p					
2,2-dichloropropane	0.4	U	0.4	UJ	p					
2-butanone	2	U	2	UJ	p					
2-chlorotoluene	0.4	U	0.4	UJ	p					
2-hexanone	2	U	2	UJ	p					
4-chlorotoluene	0.4	U	0.4	UJ	p					
4-isopropyltoluene	0.4	U	0.4	UJ	p					
4-methyl-2-pentanone	2	U	2	UJ	p					
acetone	1.8	J	m	2	UJ	p				
benzene	0.4	U	0.4	UJ	p					

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NE Cape HTRW - St. Lawrence Island

SDG: 100553

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100553-01			100553-02					
	Field ID	01NE07WP302			01NE00TB117					
	Matrix	WX			WX					
	Date Collected	8/27/01			8/27/01					
	Units	µg/L			µg/L					
RESULT	Q	RC	RESULT	Q	RC					
bromobenzene	0.4	U	0.4	UJ	p					
bromoform	0.4	U	0.4	UJ	p					
bromochloromethane	0.4	U	0.4	UJ	p					
bromodichloromethane	0.4	U	0.4	UJ	p					
bromomethane	0.8	U	0.8	UJ	p					
carbon disulfide	0.4	U	0.4	UJ	p					
chlorobenzene	0.4	U	0.4	UJ	p					
chloroethane	0.4	U	0.4	UJ	p					
chloroform	0.4	U	0.091	J	m,p					
chloromethane	0.46		0.4	UJ	p					
cis-1,2-dichloroethene	0.4	U	0.4	UJ	p					
cis-1,3-dichloropropene	0.4	U	0.4	UJ	p					
dibromochloromethane	0.4	U	0.4	UJ	p					
dibromomethane	0.4	U	0.4	UJ	p					
dichlorodifluoromethane	0.4	U	0.4	UJ	p					
ethylbenzene	0.4	U	0.4	UJ	p					
hexachlorobutadiene	0.4	U	0.4	UJ	p					
isopropylbenzene	0.4	U	0.4	UJ	p					
m,p-xylene	0.8	U	0.8	UJ	p					
methylene chloride	0.4	U	0.42	J	p					
n-butylbenzene	0.4	U	0.4	UJ	p					
n-propylbenzene	0.4	U	0.4	UJ	p					
naphthalene	0.17	J	m,n	0.4	UJ	p				
o-xylene	0.4	U	0.4	UJ	p					
sec-butylbenzene	0.4	U	0.4	UJ	p					
styrene	0.4	U	0.34	J	m,p					
tert-butylbenzene	0.4	U	0.4	UJ	p					
tetrachloroethylene	0.4	U	0.24	J	m,p					

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NE Cape HTRW - St. Lawrence Island

SDG: 100553

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	100553-01	100553-02			
	Field ID	01NE07WP302	01NE00TB117			
	Matrix	WX	WX			
	Date Collected	8/27/01	8/27/01			
	Units	µg/L	µg/L			
	RESULT	Q	RC	RESULT	Q	RC
toluene	0.4	U		0.4	UJ	p
trans-1,2-dichloroethene	0.4	U		0.4	UJ	p
trans-1,3-dichloropropene	0.4	U		0.4	UJ	p
trichloroethene	0.4	U		0.4	UJ	p
trichlorofluoromethane	0.4	U		0.4	UJ	p
vinyl chloride	0.4	U		0.4	UJ	p

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NE Cape HTRW - St. Lawrence Island  
SDG: 100553

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN03H			DN03I			DN03J					
	Field ID	01NE07SW104			01NE00TB102			01NE07SW105					
	Matrix	WX			WX			WX					
	Date Collected	8/19/01			8/19/01			8/19/01					
	Units	µg/L			µg/L			µg/L					
1,1,1,2-tetrachloroethane	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,1,1-trichloroethane	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,1,2,2-tetrachloroethane	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,1,2-trichloroethane	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,1-dichloroethane	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,1-dichloroethene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,1-dichloropropene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,2,3-trichlorobenzene	RESULT	5	U	RC	RESULT	5	U	RESULT	5	U	RC		
1,2,3-trichloropropane	RESULT	3	U	RC	RESULT	3	U	RESULT	3	U	RC		
1,2,4-trichlorobenzene	RESULT	5	U	RC	RESULT	5	U	RESULT	5	U	RC		
1,2,4-trimethylbenzene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,2-dibromo-3-chloropropane	RESULT	5	U	RC	RESULT	5	U	RESULT	5	U	RC		
1,2-dichlorobenzene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,2-dichloroethane	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,2-dichloropropane	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,3,5-trimethylbenzene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,3-dichlorobenzene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,3-dichloropropane	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
1,4-dichlorobenzene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
112trichloro122trifluoroethane	RESULT	2	U	RC	RESULT	2	U	RESULT	2	U	RC		
2,2-dichloropropane	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
2-butanone	RESULT	5	U	RC	RESULT	5	U	RESULT	5	U	RC		
2-chloroethylvinyl ether	RESULT	5	U	RC	RESULT	5	U	RESULT	5	U	RC		
2-chlorotoluene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
2-hexanone	RESULT	5	U	RC	RESULT	5	U	RESULT	5	U	RC		
4-chlorotoluene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
4-isopropyltoluene	RESULT	1	U	RC	RESULT	1	U	RESULT	1	U	RC		
4-methyl-2-pentanone	RESULT	5	U	RC	RESULT	5	U	RESULT	5	U	RC		
acetone	RESULT	5	U	RC	RESULT	5	U	RESULT	5	U	RC		

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN03H			DN03I			DN03J				
	Field ID	01NE07SW104			01NE00TB102			01NE07SW105				
	Matrix	WX			WX			WX				
	Date Collected	8/19/01			8/19/01			8/19/01				
	Units	µg/L			µg/L			µg/L				
RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC				
acrolein	50	U	50	U		50	U					
acrylonitrile	1	U	1	U		1	U					
benzene	1	U	1	U		1	U					
bromobenzene	1	U	1	U		1	U					
bromochloromethane	1	U	1	U		1	U					
bromodichloromethane	1	U	1	U		1	U					
bromoethane	2	U	2	U		2	U					
bromoform	1	U	1	U		1	U					
bromomethane	1	U	1	U		1	U					
carbon disulfide	1	U	1	U		1	U					
carbon tetrachloride	1	U	1	U		1	U					
chlorobenzene	1	U	1	U		1	U					
chloroethane	1	U	1	U		1	U					
chloroform	1	U	1	U		1	U					
chloromethane	1	U	1	U		1	U					
cis-1,2-dichloroethene	1	U	1	U		1	U					
cis-1,3-dichloropropene	1	U	1	U		1	U					
dibromochloromethane	1	U	1	U		1	U					
dibromomethane	1	U	1	U		1	U					
ethylbenzene	1	U	1	U		1	U					
ethylene dibromide	1	U	1	U		1	U					
hexachlorobutadiene	5	U	5	U		5	U					
isopropylbenzene	1	U	1	U		1	U					
m,p-xylene	1	U	1	U		1	U					
methyl iodide	1	U	1	U		1	U					
methylene chloride	2	U	2	U		2	U					
n-butylbenzene	1	U	1	U		1	U					
n-propylbenzene	1	U	1	U		1	U					
naphthalene	5	U	5	U		5	U					

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NE Cape HTRW - St. Lawrence Island

SDG: DN03

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN03H			DN03I			DN03J				
	Field ID	01NE07SW104			01NE00TB102			01NE07SW105				
	Matrix	WX			WX			WX				
	Date Collected	8/19/01			8/19/01			8/19/01				
	Units	µg/L			µg/L			µg/L				
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC		
o-xylene		1	U		1	U		1	U			
sec-butylbenzene		1	U		1	U		1	U			
styrene		1	U		1	U		1	U			
tert-butylbenzene		1	U		1	U		1	U			
tetrachloroethylene		1	U		1	U		1	U			
toluene		1	U		1	U		1	U			
trans-1,2-dichloroethene		1	U		1	U		1	U			
trans-1,3-dichloropropene		1	U		1	U		1	U			
trans-1,4-dichloro-2-butene		5	U		5	U		5	U			
trichloroethene		1	U		1	U		1	U			
trichlorofluoromethane		1	U		1	U		1	U			
vinyl acetate		5	U		5	U		5	U			
vinyl chloride		1	U		1	U		1	U			

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07N			DN07O			DN07P			DN07Q			DN07R				
	Field ID	01NE07SS125			01NE07SS126			01NE07SS127			01NE07SD105			01NE07SD104				
	Matrix	SX																
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01				
	Units	µg/Kg																
RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
1,1,1,2-tetrachloroethane	62	U	110	U		75	U		200	U		150	U					
1,1,1-trichloroethane	62	U	110	U		140			200			280						
1,1,2,2-tetrachloroethane	62	U	110	U		75	U		200	U		150	U					
1,1,2-trichloroethane	62	U	110	U		75	U		200	U		150	U					
1,1-dichloroethane	62	U	110	U		75	U		200	U		150	U					
1,1-dichloroethene	62	U	110	U		75	U		200	U		150	U					
1,1-dichloropropene	62	U	110	U		75	U		200	U		150	U					
1,2,3-trichlorobenzene	310	U	540	U		370	U		1000	U		770	U					
1,2,3-trichloropropane	120	U	220	U		150	U		400	U		310	U					
1,2,4-trichlorobenzene	310	U	540	U		370	U		1000	U		770	U					
1,2,4-trimethylbenzene	62	U	110	U		75	U		200	U		150	U					
1,2-dibromo-3-chloropropane	310	U	540	U		370	U		1000	U		770	U					
1,2-dichlorobenzene	62	U	110	U		75	U		200	U		150	U					
1,2-dichloroethane	62	U	110	U		75	U		200	U		150	U					
1,2-dichloropropane	62	U	110	U		75	U		200	U		150	U					
1,3,5-trimethylbenzene	62	U	110	U		75	U		200	U		150	U					
1,3-dichlorobenzene	62	U	110	U		75	U		200	U		150	U					
1,3-dichloropropane	62	U	110	U		75	U		200	U		150	U					
1,4-dichlorobenzene	62	U	110	U		75	U		200	U		150	U					
112trichloro122trifluoroethane	62	U	110	U		75	U		200	U		150	U					
2,2-dichloropropane	62	U	110	U		75	U		200	U		150	U					
2-butanone	310	U	540	U		370	U		1000	U		770	U					
2-chloroethylvinyl ether	310	U	540	U		370	U		1000	U		770	U					
2-chlorotoluene	62	U	110	U		75	U		200	U		150	U					
2-hexanone	310	U	540	U		370	U		1000	U		770	U					
4-chlorotoluene	62	U	110	U		75	U		200	U		150	U					
4-isopropyltoluene	62	U	110	U		75	U		200	U		150	U					
4-methyl-2-pentanone	310	U	540	U		370	U		1000	U		770	U					
acetone	310	U	840			370	U		1400			910						

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NE Cape HTRW - St. Lawrence Island

SDG: DN07

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07N			DN07O			DN07P			DN07Q			DN07R				
	Field ID	01NE07SS125			01NE07SS126			01NE07SS127			01NE07SD105			01NE07SD104				
	Matrix	SX			SX			SX			SX			SX				
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
acrolein	3100	U		5400	U		3700	U		10000	U		7700	U				
acrylonitrile	310	U		540	U		370	U		1000	U		770	U				
benzene	62	U		110	U		75	U		200	U		150	U				
bromobenzene	62	U		110	U		75	U		200	U		150	U				
bromochloromethane	62	U		110	U		75	U		200	U		150	U				
bromodichloromethane	62	U		110	U		75	U		200	U		150	U				
bromoethane	120	U		220	U		150	U		400	U		310	U				
bromoform	62	U		110	U		75	U		200	U		150	U				
bromomethane	98	B	a	200	B	a	170	B	a	400	B	a	170	B	a			
carbon disulfide	62	U		110	U		75	U		200	U		150	U				
carbon tetrachloride	62	U		110	U		75	U		200	U		150	U				
chlorobenzene	62	U		110	U		75	U		200	U		150	U				
chloroethane	62	U		110	U		75	U		200	U		150	U				
chloroform	62	U		110	U		75	U		200	U		150	U				
chloromethane	62	U		110	U		75	U		200	U		150	U				
cis-1,2-dichloroethene	62	U		110	U		75	U		200	U		150	U				
cis-1,3-dichloropropene	62	U		110	U		75	U		200	U		150	U				
dibromochloromethane	62	U		110	U		75	U		200	U		150	U				
dibromomethane	62	U		110	U		75	U		200	U		150	U				
ethylbenzene	62	U		110	U		75	U		200	U		150	U				
ethylene dibromide	62	U		110	U		75	U		200	U		150	U				
hexachlorobutadiene	310	U		540	U		370	U		1000	U		770	U				
isopropylbenzene	62	U		110	U		75	U		200	U		150	U				
m,p-xylene	62	U		130	U		75	U		200	U		150	U				
methyl iodide	62	U		110	U		75	U		200	U		150	U				
methylene chloride	190	U		320	U		220	U		600	U		460	U				
n-butylbenzene	120	U		220	U		150	U		400	U		310	U				
n-propylbenzene	62	U		110	U		75	U		200	U		150	U				
naphthalene	310	U		540	U		370	U		1000	U		770	U				

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3/20/02

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NE Cape HTRW - St. Lawrence Island

SDG: DN07

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07N			DN07O			DN07P			DN07Q			DN07R				
	Field ID	01NE07SS125			01NE07SS126			01NE07SS127			01NE07SD105			01NE07SD104				
	Matrix	SX			SX			SX			SX			SX				
	Date Collected	8/19/01			8/19/01			8/19/01			8/19/01			8/19/01				
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
o-xylene	62	U		110	U		75	U		200	U		150	U				
sec-butylbenzene	62	U		110	U		75	U		200	U		150	U				
styrene	62	U		110	U		75	U		200	U		150	U				
tert-butylbenzene	62	U		110	U		75	U		200	U		150	U				
tetrachloroethylene	62	U		110	U		75	U		200	U		150	U				
toluene	62	U		140			75	U		200	U		150	U				
trans-1,2-dichloroethene	62	U		110	U		75	U		200	U		150	U				
trans-1,3-dichloropropene	62	U		110	U		75	U		200	U		150	U				
trans-1,4-dichloro-2-butene	310	U		540	U		370	U		1000	U		770	U				
trichloroethene	62	U		110	U		75	U		200	U		150	U				
trichlorofluoromethane	62	U		110	U		75	U		200	U		150	U				
vinyl acetate	310	U		540	U		370	U		1000	U		770	U				
vinyl chloride	62	U		110	U		75	U		200	U		150	U				

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN36G			DN36H			DN36I			DN36J			DN36K			DN36L		
	Field ID	01NE29SW116			01NE00TB103			01NE29SW117			01NE29SW217			01NE29SW115			01NE29SW114		
	Matrix	WX			WX														
	Date Collected	8/21/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01		
Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
1,1,1,2-tetrachloroethane	1	U		1	U		1	U		1	U		1	U		1	U		
1,1,1-trichloroethane	1	U		1	U		1	U		1	U		1	U		1	U		
1,1,2,2-tetrachloroethane	1	U		1	U		1	U		1	U		1	U		1	U		
1,1,2-trichloroethane	1	U		1	U		1	U		1	U		1	U		1	U		
1,1-dichloroethane	1	U		1	U		1	U		1	U		1	U		1	U		
1,1-dichloroethene	1	U		1	U		1	U		1	U		1	U		1	U		
1,1-dichloropropene	1	U		1	U		1	U		1	U		1	U		1	U		
1,2,3-trichlorobenzene	5	U		5	U		5	U		5	U		5	U		5	U		
1,2,3-trichloropropane	3	U		3	U		3	U		3	U		3	U		3	U		
1,2,4-trichlorobenzene	5	U		5	U		5	U		5	U		5	U		5	U		
1,2,4-trimethylbenzene	1	U		1	U		1	U		1	U		1	U		1	U		
1,2-dibromo-3-chloropropane	5	U		5	U		5	U		5	U		5	U		5	U		
1,2-dichlorobenzene	1	U		1	U		1	U		1	U		1	U		1	U		
1,2-dichloroethane	1	U		1	U		1	U		1	U		1	U		1	U		
1,2-dichloropropane	1	U		1	U		1	U		1	U		1	U		1	U		
1,3,5-trimethylbenzene	1	U		1	U		1	U		1	U		1	U		1	U		
1,3-dichlorobenzene	1	U		1	U		1	U		1	U		1	U		1	U		
1,3-dichloropropane	1	U		1	U		1	U		1	U		1	U		1	U		
1,4-dichlorobenzene	1	U		1	U		1	U		1	U		1	U		1	U		
112trichloro122trifluoroethane	2	U		2	U		2	U		2	U		2	U		2	U		
2,2-dichloropropane	1	U		1	U		1	U		1	U		1	U		1	U		
2-butanone	5	U		5	U		5	U		5	U		5	U		5	U		
2-chloroethylvinyl ether	5	U		5	U		5	U		5	U		5	U		5	U		
2-chlorotoluene	1	U		1	U		1	U		1	U		1	U		1	U		
2-hexanone	5	U		5	U		5	U		5	U		5	U		5	U		
4-chlorotoluene	1	U		1	U		1	U		1	U		1	U		1	U		
4-isopropyltoluene	1	U		1	U		1	U		1	U		1	U		1	U		
4-methyl-2-pentanone	5	U		5	U		5	U		5	U		5	U		5	U		
acetone	5	U		5	U		5	U		5	U		5	U		5	U		

Prepared by ETHIX

3/20/02

C-221

NE Cape HTRW - St. Lawrence Island

SDG: DN36

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN36G			DN36H			DN36I			DN36J			DN36K			DN36L			
	Field ID	01NE29SW116			01NE00TB103			01NE29SW117			01NE29SW217			01NE29SW115			01NE29SW114			
	Matrix	WX																		
	Date Collected	8/21/01			8/20/01			8/20/01			8/20/01			8/20/01			8/20/01			
	Units	µg/L																		
RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acrolein	50	U		50	U		50	U		50	U		50	U		50	U		50	U
acrylonitrile	1	U		1	U		1	U		1	U		1	U		1	U		1	U
benzene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
bromobenzene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
bromochloromethane	1	U		1	U		1	U		1	U		1	U		1	U		1	U
bromodichloromethane	1	U		1	U		1	U		1	U		1	U		1	U		1	U
bromoethane	2	U		2	U		2	U		2	U		2	U		2	U		2	U
bromoform	1	U		1	U		1	U		1	U		1	U		1	U		1	U
bromomethane	1	U		1	U		1	U		1	U		1	U		1	U		1	U
carbon disulfide	1	U		1	U		1	U		1	U		1	U		1	U		1	U
carbon tetrachloride	1	U		1	U		1	U		1	U		1	U		1	U		1	U
chlorobenzene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
chloroethane	1	U		1	U		1	U		1	U		1	U		1	U		1	U
chloroform	1	U		1	U		1	U		1	U		1	U		1	U		1	U
chloromethane	1	U		1	U		1	U		1	U		1	U		1	U		1	U
cis-1,2-dichloroethene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
cis-1,3-dichloropropene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
dibromochloromethane	1	U		1	U		1	U		1	U		1	U		1	U		1	U
dibromomethane	1	U		1	U		1	U		1	U		1	U		1	U		1	U
ethylbenzene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
ethylene dibromide	1	U		1	U		1	U		1	U		1	U		1	U		1	U
hexachlorobutadiene	5	U		5	U		5	U		5	U		5	U		5	U		5	U
isopropylbenzene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
m,p-xylene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
methyl iodide	1	U		1	U		1	U		1	U		1	U		1	U		1	U
methylene chloride	2	U		2	U		2	U		2	U		2	U		2	U		2	U
n-butylbenzene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
n-propylbenzene	1	U		1	U		1	U		1	U		1	U		1	U		1	U
naphthalene	5	U		5	U		5	U		5	U		5	U		5	U		5	U

## Volatile Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN36G 01NE29SW116 WX 8/21/01 µg/L	DN36H 01NE00TB103 WX 8/20/01 µg/L	DN36I 01NE29SW117 WX 8/20/01 µg/L	DN36J 01NE29SW217 WX 8/20/01 µg/L	DN36K 01NE29SW115 WX 8/20/01 µg/L	DN36L 01NE29SW114 WX 8/20/01 µg/L
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
o-xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U
sec-butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U
styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tetrachloroethylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U
toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,4-dichloro-2-butene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U
vinyl acetate	5 U	5 U	5 U	5 U	5 U	5 U	5 U
vinyl chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN53J			DN53K			DN53L			DN53M			DN53N			DN53O		
	Field ID	01NE09SW207			01NE09SW109			01NE09SW108			01NE09SW107			01NE00TB108			TRIP BLANK		
	Matrix	WX			WX														
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01			8/23/01			8/23/01		
Units	Units	µg/L			µg/L														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
1,1,1,2-tetrachloroethane	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,1,1-trichloroethane	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,1,2,2-tetrachloroethane	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,1,2-trichloroethane	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,1-dichloroethane	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,1-dichloroethene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,1-dichloropropene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,2,3-trichlorobenzene	5	U		5	U		5	U		5	U		5	UJ	p	5	U		
1,2,3-trichloropropane	3	U		3	U		3	U		3	U		3	UJ	p	3	U		
1,2,4-trichlorobenzene	5	U		5	U		5	U		5	U		5	UJ	p	5	U		
1,2,4-trimethylbenzene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,2-dibromo-3-chloropropane	5	U		5	U		5	U		5	U		5	UJ	p	5	U		
1,2-dichlorobenzene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,2-dichloroethane	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,2-dichloropropane	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,3,5-trimethylbenzene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,3-dichlorobenzene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,3-dichloropropane	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
1,4-dichlorobenzene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
112trichloro122trifluoroethane	2	U		2	U		2	U		2	U		2	UJ	p	2	U		
2,2-dichloropropane	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
2-butanone	5	U		5	U		5	U		5	U		5	UJ	p	5	U		
2-chloroethylvinyl ether	5	U		5	U		5	U		5	U		5	UJ	p	5	U		
2-chlorotoluene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
2-hexanone	5	U		5	U		5	U		5	U		5	UJ	p	5	U		
4-chlorotoluene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
4-isopropyltoluene	1	U		1	U		1	U		1	U		1	UJ	p	1	U		
4-methyl-2-pentanone	5	U		5	U		5	U		5	U		5	UJ	p	5	U		
acetone	5	U		5	U		5	U		5	U		5	UJ	p	5	U		

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN53J			DN53K			DN53L			DN53M			DN53N			DN53O		
	Field ID	01NE09SW207			01NE09SW109			01NE09SW108			01NE09SW107			01NE00TB108			TRIP BLANK		
	Matrix	WX			WX			WX			WX			WX			WX		
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01			8/23/01			8/23/01		
Analyte	Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acrolein		50	U		50	U		50	U		50	U		50	UJ	p	50	U	
acrylonitrile		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
benzene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
bromobenzene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
bromochloromethane		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
bromodichloromethane		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
bromoethane		2	U		2	U		2	U		2	U		2	UJ	p	2	U	
bromoform		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
bromomethane		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
carbon disulfide		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
carbon tetrachloride		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
chlorobenzene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
chloroethane		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
chloroform		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
chloromethane		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
cis-1,2-dichloroethene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
cis-1,3-dichloropropene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
dibromochloromethane		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
dibromomethane		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
ethylbenzene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
ethylene dibromide		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
hexachlorobutadiene		5	U		5	U		5	U		5	U		5	UJ	p	5	U	
isopropylbenzene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
m,p-xylene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
methyl iodide		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
methylene chloride		2	U		2	U		2	U		2	U		2	UJ	p	2	U	
n-butylbenzene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
n-propylbenzene		1	U		1	U		1	U		1	U		1	UJ	p	1	U	
naphthalene		5	U		5	U		5	U		5	U		5	UJ	p	5	U	

## Volatile Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN53J 01NE09SW207 WX 8/23/01 µg/L	DN53K 01NE09SW109 WX 8/23/01 µg/L	DN53L 01NE09SW108 WX 8/23/01 µg/L	DN53M 01NE09SW107 WX 8/23/01 µg/L	DN53N 01NE00TB108 WX 8/23/01 µg/L	DN53O TRIP BLANK WX 8/23/01 µg/L
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
o-xylene	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
sec-butylbenzene	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
styrene	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
tert-butylbenzene	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
tetrachloroethylene	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
toluene	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
trans-1,2-dichloroethene	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
trans-1,3-dichloropropene	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
trans-1,4-dichloro-2-butene	5 U	5 U	5 U	5 U	5 U	5 UJ p	5 U
trichloroethene	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U
vinyl acetate	5 U	5 U	5 U	5 U	5 U	5 UJ p	5 U
vinyl chloride	1 U	1 U	1 U	1 U	1 U	1 UJ p	1 U

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68C			DN68D			DN68E			DN68F			DN68G			DN68H		
	Field ID	01NE09SD108			01NE09SD109			01NE09SD107			01NE09SD114			01NE09SD113			01NE09SD213		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/23/01			8/23/01			8/23/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
1,1,1,2-tetrachloroethane		180	U		81	U		220	U		440	U		270	U		98	U	
1,1,1-trichloroethane		200			81	U		220	U		440	U		270	U		98	U	
1,1,2,2-tetrachloroethane		180	U		81	U		220	U		440	U		270	U		98	U	
1,1,2-trichloroethane		180	U		81	U		220	U		440	U		270	U		98	U	
1,1-dichloroethane		180	U		81	U		220	U		440	U		270	U		98	U	
1,1-dichloroethene		180	U		81	U		220	U		440	U		270	U		98	U	
1,1-dichloropropene		180	U		81	U		220	U		440	U		270	U		98	U	
1,2,3-trichlorobenzene		910	U		400	U		1100	U		2200	U		1400	U		490	U	
1,2,3-trichloropropane		360	U		160	U		440	U		880	U		540	U		200	U	
1,2,4-trichlorobenzene		910	U		400	U		1100	U		2200	U		1400	U		490	U	
1,2,4-trimethylbenzene		180	U		81	U		220	U		440	U		270	U		98	U	
1,2-dibromo-3-chloropropane		910	U		400	U		1100	U		2200	U		1400	U		490	U	
1,2-dichlorobenzene		180	U		81	U		220	U		440	U		270	U		98	U	
1,2-dichloroethane		180	U		81	U		220	U		440	U		270	U		98	U	
1,2-dichloropropane		180	U		81	U		220	U		440	U		270	U		98	U	
1,3,5-trimethylbenzene		180	U		81	U		220	U		440	U		270	U		98	U	
1,3-dichlorobenzene		180	U		81	U		220	U		440	U		270	U		98	U	
1,3-dichloropropane		180	U		81	U		220	U		440	U		270	U		98	U	
1,4-dichlorobenzene		180	U		81	U		220	U		440	U		270	U		98	U	
112trichloro122trifluoroethane		180	U		81	U		220	U		440	U		270	U		98	U	
2,2-dichloropropane		180	U		81	U		220	U		440	U		270	U		98	U	
2-butanone		910	U		400	U		1100	U		2200	U		1400	UJ n		490	UJ n	
2-chloroethylvinyl ether		910	U		400	U		1100	U		2200	U		1400	U		490	U	
2-chlorotoluene		180	U		81	U		220	U		440	U		270	U		98	U	
2-hexanone		910	U		400	U		1100	U		2200	U		1400	U		490	U	
4-chlorotoluene		180	U		81	U		220	U		440	U		270	U		98	U	
4-isopropyltoluene		180	U		81	U		220	U		440	U		270	U		98	U	
4-methyl-2-pentanone		910	U		400	U		1100	U		2200	U		1400	U		490	U	
acetone		1500			400	U		1100	U		2200	U		1600			580		

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NE Cape HTRW - St. Lawrence Island

SDG: DN68

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68C			DN68D			DN68E			DN68F			DN68G			DN68H		
	Field ID	01NE09SD108			01NE09SD109			01NE09SD107			01NE09SD114			01NE09SD113			01NE09SD213		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/23/01			8/23/01			8/23/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
acrolein		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acrylonitrile		9100	U		4000	U		11000	U		22000	U		14000	U		4900	U	
benzene		910	U		400	U		1100	U		2200	U		1400	U		490	U	
bromobenzene		180	U		81	U		220	U		440	U		270	U		98	U	
bromoform		180	U		81	U		220	U		440	U		270	U		98	U	
bromochloromethane		180	U		81	U		220	U		440	U		270	U		98	U	
bromodichloromethane		180	U		81	U		220	U		440	U		270	U		98	U	
bromoethane		360	U		160	U		440	U		880	U		540	U		200	U	
bromomethane		180	U		81	U		220	U		440	U		270	U		98	U	
carbon disulfide		360	B	a	81	U		220	U		440	U		270	UJ	n	98	UJ	n
chlorobenzene		180	U		81	U		220	U		440	U		270	U		98	U	
chloroethane		180	U		81	U		220	U		440	U		270	U		98	U	
chloroform		180	U		81	U		220	U		440	U		270	U		98	U	
chloromethane		180	U		81	U		220	U		440	U		270	UJ	n	98	UJ	n
cis-1,2-dichloroethylene		180	U		81	U		220	U		440	U		270	U		98	U	
cis-1,3-dichloropropene		180	U		81	U		220	U		440	U		270	U		98	U	
dibromochloromethane		180	U		81	U		220	U		440	U		270	U		98	U	
dibromomethane		180	U		81	U		220	U		440	U		270	U		98	U	
ethylbenzene		180	U		81	U		220	U		440	U		270	U		98	U	
ethylene dibromide		180	U		81	U		220	U		440	U		270	U		98	U	
hexachlorobutadiene		910	U		400	U		1100	U		2200	U		1400	U		490	U	
isopropylbenzene		180	U		81	U		220	U		440	U		270	U		98	U	
m,p-xylene		180	U		81	U		220	U		440	U		270	U		98	U	
methyl iodide		180	U		81	U		220	U		440	U		270	U		98	U	
methylene chloride		550	U		240	U		660	U		1300	U		820	U		290	U	
n-butylbenzene		360	U		160	U		440	U		880	U		540	U		200	U	
n-propylbenzene		180	U		81	U		220	U		440	U		270	U		98	U	
naphthalene		910	U		400	U		1100	U		2200	U		1400	U		490	U	

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68C			DN68D			DN68E			DN68F			DN68G			DN68H		
	Field ID	01NE09SD108			01NE09SD109			01NE09SD107			01NE09SD114			01NE09SD113			01NE09SD213		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/23/01			8/23/01			8/23/01			8/24/01			8/24/01			8/24/01		
	Units	µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg			µg/Kg		
o-xylene		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
sec-butylbenzene		180	U		81	U		220	U		440	U		270	U		98	U	
styrene		180	U		81	U		220	U		440	U		270	U		98	U	
tert-butylbenzene		180	U		81	U		220	U		440	U		270	U		98	U	
tetrachloroethylene		180	U		81	U		220	U		440	U		270	U		98	U	
toluene		6000			81	U		220	U		440	U		270	UJ	n	98	UJ	n
trans-1,2-dichloroethene		180	U		81	U		220	U		440	U		270	U		98	U	
trans-1,3-dichloropropene		180	U		81	U		220	U		440	U		270	U		98	U	
trans-1,4-dichloro-2-butene		910	U		400	U		1100	U		2200	U		1400	U		490	U	
trichloroethene		180	U		81	U		220	U		440	U		270	U		98	U	
trichlorofluoromethane		180	U		81	U		220	U		440	U		270	U		98	U	
vinyl acetate		910	U		400	U		1100	U		2200	U		1400	U		490	U	
vinyl chloride		180	U		81	U		220	U		440	U		270	U		98	U	

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68L			
	Field ID	01NE00TB111	SX		
	Matrix				
	Date Collected	8/24/01			
	Units	µg/Kg			
		RESULT	Q	RC	
1,1,1,2-tetrachloroethane		50	U		
1,1,1-trichloroethane		50	U		
1,1,2,2-tetrachloroethane		50	U		
1,1,2-trichloroethane		50	U		
1,1-dichloroethane		50	U		
1,1-dichloroethene		50	U		
1,1-dichloropropene		50	U		
1,2,3-trichlorobenzene		250	U		
1,2,3-trichloropropane		100	U		
1,2,4-trichlorobenzene		250	U		
1,2,4-trimethylbenzene		50	U		
1,2-dibromo-3-chloropropane		250	U		
1,2-dichlorobenzene		50	U		
1,2-dichloroethane		50	U		
1,2-dichloropropane		50	U		
1,3,5-trimethylbenzene		50	U		
1,3-dichlorobenzene		50	U		
1,3-dichloropropane		50	U		
1,4-dichlorobenzene		50	U		
112trichloro122trifluoroethane		50	U		
2,2-dichloropropane		50	U		
2-butanone		250	U		
2-chloroethylvinyl ether		250	U		
2-chlorotoluene		50	U		
2-hexanone		250	U		
4-chlorotoluene		50	U		
4-isopropyltoluene		50	U		
4-methyl-2-pentanone		250	U		
acetone		250	U		

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68L			
	Field ID	01NE00TB111	SX		
	Date Collected	8/24/01			
	Units	µg/Kg	RESULT	Q	RC
acrolein		2500	U		
acrylonitrile		250	U		
benzene		50	U		
bromobenzene		50	U		
bromochloromethane		50	U		
bromodichloromethane		50	U		
bromoethane		100	U		
bromoform		50	U		
bromomethane		90	B a		
carbon disulfide		50	U		
carbon tetrachloride		50	U		
chlorobenzene		50	U		
chloroethane		50	U		
chloroform		50	U		
chloromethane		50	U		
cis-1,2-dichloroethene		50	U		
cis-1,3-dichloropropene		50	U		
dibromochloromethane		50	U		
dibromomethane		50	U		
ethylbenzene		50	U		
ethylene dibromide		50	U		
hexachlorobutadiene		250	U		
isopropylbenzene		50	U		
m,p-xylene		50	U		
methyl iodide		50	U		
methylene chloride		150	U		
n-butylbenzene		100	U		
n-propylbenzene		50	U		
naphthalene		250	U		

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NE Cape HTRW - St. Lawrence Island  
SDG: DN68

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68L			
	Field ID	01NE00TB111	Matrix	SX	Date Collected	8/24/01
	Units	µg/Kg	RESULT	Q	RC
o-xylene	50	U			
sec-butylbenzene	50	U			
styrene	50	U			
tert-butylbenzene	50	U			
tetrachloroethylene	50	U			
toluene	61				
trans-1,2-dichloroethene	50	U			
trans-1,3-dichloropropene	50	U			
trans-1,4-dichloro-2-butene	250	U			
trichloroethene	50	U			
trichlorofluoromethane	50	U			
vinyl acetate	250	U			
vinyl chloride	50	U			

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NE Cape HTRW - St. Lawrence Island  
SDG: DN68

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN71A			DN71Q			DN71R			DN71S			DN71T				
	Field ID	01NE09SW112			01NE09WP102			01NE09MW103			01NE00TB116			01NE09SW111				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	8/26/01			8/26/01			8/26/01			8/26/01			8/26/01				
Units	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
	µg/L																	
1,1,1,2-tetrachloroethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,1,1-trichloroethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,1,2,2-tetrachloroethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,1,2-trichloroethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,1-dichloroethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,1-dichloroethene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,1-dichloropropene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,2,3-trichlorobenzene	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
1,2,3-trichloropropane	3	U		3	U		3	UJ	p	3	UJ	p	3	U				
1,2,4-trichlorobenzene	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
1,2,4-trimethylbenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,2-dibromo-3-chloropropane	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
1,2-dichlorobenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,2-dichloroethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,2-dichloropropane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,3,5-trimethylbenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,3-dichlorobenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,3-dichloropropane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
1,4-dichlorobenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
112trichloro122trifluoroethane	2	U		2	U		2	UJ	p	2	UJ	p	2	U				
2,2-dichloropropane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
2-butanone	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
2-chloroethylvinyl ether	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
2-chlorotoluene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
2-hexanone	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
4-chlorotoluene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
4-isopropyltoluene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
4-methyl-2-pentanone	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
acetone	5	U		5	U		5	UJ	p	5	UJ	p	5	U				

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NE Cape HTRW - St. Lawrence Island

SDG: DN71

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN71A			DN71Q			DN71R			DN71S			DN71T				
	Field ID	01NE09SW112			01NE09WP102			01NE09MW103			01NE00TB116			01NE09SW111				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	8/26/01			8/26/01			8/26/01			8/26/01			8/26/01				
	Units	µg/L			µg/L			µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
acrolein	50	U		50	U		50	UJ	p	50	UJ	p	50	U				
acrylonitrile	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
benzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
bromobenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
bromochloromethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
bromodichloromethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
bromoethane	2	U		2	U		2	UJ	p	2	UJ	p	2	U				
bromoform	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
bromomethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
carbon disulfide	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
carbon tetrachloride	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
chlorobenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
chloroethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
chloroform	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
chloromethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
cis-1,2-dichloroethene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
cis-1,3-dichloropropene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
dibromochloromethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
dibromomethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
ethylbenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
ethylene dibromide	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
hexachlorobutadiene	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
isopropylbenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
m,p-xylene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
methyl iodide	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
methylene chloride	2	U		2	U		2	UJ	p	2	UJ	p	2	U				
n-butylbenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
n-propylbenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
naphthalene	5	U		5	U		5	UJ	p	5	UJ	p	5	U				

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NE Cape HTRW - St. Lawrence Island

SDG: DN71

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN71A			DN71Q			DN71R			DN71S			DN71T				
	Field ID	01NE09SW112			01NE09WP102			01NE09MW103			01NE00TB116			01NE09SW111				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	8/26/01			8/26/01			8/26/01			8/26/01			8/26/01				
Units	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
	µg/L				µg/L			µg/L			µg/L			µg/L				
o-xylene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
sec-butylbenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
styrene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
tert-butylbenzene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
tetrachloroethylene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
toluene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
trans-1,2-dichloroethene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
trans-1,3-dichloropropene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
trans-1,4-dichloro-2-butene	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
trichloroethene	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
trichlorofluoromethane	1	U		1	U		1	UJ	p	1	UJ	p	1	U				
vinyl acetate	5	U		5	U		5	UJ	p	5	UJ	p	5	U				
vinyl chloride	1	U		1	U		1	UJ	p	1	UJ	p	1	U				

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN73A			DN73B			DN73I				
	Field ID	01NE30WP101			01NE09SW110			01NE00TB115				
	Matrix	WX			WX			WX				
	Date Collected	8/25/01			8/25/01			8/24/01				
	Units	µg/L			µg/L			µg/L				
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
1,1,1,2-tetrachloroethane	1	U		1	U		1	U				
1,1,1-trichloroethane	1	U		1	U		1	U				
1,1,2,2-tetrachloroethane	1	U		1	U		1	U				
1,1,2-trichloroethane	1	U		1	U		1	U				
1,1-dichloroethane	1	U		1	U		1	U				
1,1-dichloroethene	1	U		1	U		1	U				
1,1-dichloropropene	1	U		1	U		1	U				
1,2,3-trichlorobenzene	5	U		5	U		5	U				
1,2,3-trichloropropane	3	U		3	U		3	U				
1,2,4-trichlorobenzene	5	U		5	U		5	U				
1,2,4-trimethylbenzene	1	U		1	U		1	U				
1,2-dibromo-3-chloropropane	5	U		5	U		5	U				
1,2-dichlorobenzene	1	U		1	U		1	U				
1,2-dichloroethane	1	U		1	U		1	U				
1,2-dichloropropane	1	U		1	U		1	U				
1,3,5-trimethylbenzene	1	U		1	U		1	U				
1,3-dichlorobenzene	1	U		1	U		1	U				
1,3-dichloropropane	1	U		1	U		1	U				
1,4-dichlorobenzene	1	U		1	U		1	U				
112trichloro122trifluoroethane	2	U		2	U		2	U				
2,2-dichloropropane	1	U		1	U		1	U				
2-butane	5	U		5	U		5	U				
2-chloroethylvinyl ether	5	U		5	U		5	U				
2-chlorotoluene	1	U		1	U		1	U				
2-hexanone	5	U		5	U		5	U				
4-chlorotoluene	1	U		1	U		1	U				
4-isopropyltoluene	1	U		1	U		1	U				
4-methyl-2-pentanone	5	U		5	U		5	U				
acetone	13			5	U		5	U				

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NE Cape HTRW - St. Lawrence Island

SDG: DN73

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN73A			DN73B			DN73I				
	Field ID	01NE30WP101			01NE09SW110			01NE00TB115				
	Matrix	WX			WX			WX				
	Date Collected	8/25/01			8/25/01			8/24/01				
	Units	µg/L			µg/L			µg/L				
RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC				
acrolein	50	U		50	U		50	U				
acrylonitrile	1	U		1	U		1	U				
benzene	1	U		1	U		1	U				
bromobenzene	1	U		1	U		1	U				
bromo(chloromethane)	1	U		1	U		1	U				
bromodichloromethane	1	U		1	U		1	U				
bromoethane	2	U		2	U		2	U				
bromoform	1	U		1	U		1	U				
bromomethane	1	U		1	U		1	U				
carbon disulfide	1	U		1	U		1	U				
carbon tetrachloride	1	U		1	U		1	U				
chlorobenzene	1	U		1	U		1	U				
chloroethane	1	U		1	U		1	U				
chloroform	1	U		1	U		1	U				
chloromethane	1	U		1	U		1	U				
cis-1,2-dichloroethylene	1	U		1	U		1	U				
cis-1,3-dichloropropene	1	U		1	U		1	U				
dibromochloromethane	1	U		1	U		1	U				
dibromomethane	1	U		1	U		1	U				
ethylbenzene	1	U		1	U		1	U				
ethylene dibromide	1	U		1	U		1	U				
hexachlorobutadiene	5	U		5	U		5	U				
isopropylbenzene	1	U		1	U		1	U				
m,p-xylene	1	U		1	U		1	U				
methyl iodide	1	U		1	U		1	U				
methylene chloride	2	U		2	U		2	U				
n-butylbenzene	1	U		1	U		1	U				
n-propylbenzene	1	U		1	U		1	U				
naphthalene	5	U		5	U		5	U				

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NE Cape HTRW - St. Lawrence Island  
SDG: DN73

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN73A			DN73B			DN73I				
	Field ID	01NE30WP101			01NE09SW110			01NE00TB115				
	Matrix	WX			WX			WX				
	Date Collected	8/25/01			8/25/01			8/24/01				
	Units	µg/L			µg/L			µg/L				
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC		
o-xylene		1	U		1	U		1	U			
sec-butylbenzene		1	U		1	U		1	U			
styrene		1	U		1	U		1	U			
tert-butylbenzene		1	U		1	U		1	U			
tetrachloroethylene		1	U		1	U		1	U			
toluene		1	U		1	U		1	U			
trans-1,2-dichloroethene		1	U		1	U		1	U			
trans-1,3-dichloropropene		1	U		1	U		1	U			
trans-1,4-dichloro-2-butene		5	U		5	U		5	U			
trichloroethene		1	U		1	U		1	U			
trichlorofluoromethane		1	U		1	U		1	U			
vinyl acetate		5	U		5	U		5	U			
vinyl chloride		1	U		1	U		1	U			

## Volatile Organics

## DATA SUMMARY TABLE

Analyte	Sample ID	DN88A			DN88B			DN88C			DN88F			DN88G			DN88H		
	Field ID	01NE07WP102			01NE07WP202			01NE30WP102			01NE07WP103			01NE07WP101			01NE00TB118		
	Matrix	WX			WX														
	Date Collected	8/27/01			8/27/01			8/28/01			8/27/01			8/26/01			8/27/01		
Units	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
	µg/L				µg/L														
1,1,1,2-tetrachloroethane	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,1,1-trichloroethane	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,1,2,2-tetrachloroethane	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,1,2-trichloroethane	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,1-dichloroethane	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,1-dichloroethene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,1-dichloropropene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,2,3-trichlorobenzene	5	U		5	U		5	U		5	U		5	U		5	UJ	p	
1,2,3-trichloropropane	3	U		3	U		3	U		3	U		3	U		3	UJ	p	
1,2,4-trichlorobenzene	5	U		5	U		5	U		5	U		5	U		5	UJ	p	
1,2,4-trimethylbenzene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,2-dibromo-3-chloropropane	5	U		5	U		5	U		5	U		5	U		5	UJ	p	
1,2-dichlorobenzene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,2-dichloroethane	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,2-dichloropropane	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,3,5-trimethylbenzene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,3-dichlorobenzene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,3-dichloropropane	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
1,4-dichlorobenzene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
112trichloro122trifluoroethane	2	U		2	U		2	U		2	U		2	U		2	UJ	p	
2,2-dichloropropane	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
2-butanone	5	U		5	U		5	U		5	U		5	U		5	UJ	p	
2-chloroethylvinyl ether	5	U		5	U		5	U		5	U		5	U		5	UJ	p	
2-chlorotoluene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
2-hexanone	5	U		5	U		5	U		5	U		5	U		5	UJ	p	
4-chlorotoluene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
4-isopropyltoluene	1	U		1	U		1	U		1	U		1	U		1	UJ	p	
4-methyl-2-pentanone	5	U		5	U		5	U		5	U		5	U		5	UJ	p	
acetone	5	U		5	U		5	U		5	U		5	U	19	5	UJ	p	

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NE Cape HTRW - St. Lawrence Island

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SDG: DN88

## Volatile Organics

## DATA SUMMARY TABLE

	Sample ID	DN88A			DN88B			DN88C			DN88F			DN88G			DN88H		
	Field ID	01NE07WP102			01NE07WP202			01NE30WP102			01NE07WP103			01NE07WP101			01NE00TB118		
	Matrix	WX			WX			WX			WX			WX			WX		
	Date Collected	8/27/01			8/27/01			8/28/01			8/27/01			8/26/01			8/27/01		
Analyte	Units	$\mu\text{g/L}$			$\mu\text{g/L}$			$\mu\text{g/L}$			$\mu\text{g/L}$			$\mu\text{g/L}$			$\mu\text{g/L}$		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
acrolein		50	U		50	U		50	U		50	U		50	U		50	UJ	p
acrylonitrile		1	U		1	U		1	U		1	U		1	U		1	UJ	p
benzene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
bromobenzene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
bromochloromethane		1	U		1	U		1	U		1	U		1	U		1	UJ	p
bromodichloromethane		1	U		1	U		1	U		1	U		1	U		1	UJ	p
bromoethane		2	U		2	U		2	U		2	U		2	U		2	UJ	p
bromoform		1	U		1	U		1	U		1	U		1	U		1	UJ	p
bromomethane		1	U		1	U		1	U		1	U		1	U		1	UJ	p
carbon disulfide		1	U		1	U		1	U		1	U		1	U		1	UJ	p
carbon tetrachloride		1	U		1	U		1	U		1	U		1	U		1	UJ	p
chlorobenzene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
chloroethane		1	U		1	U		1	U		1	U		1	U		1	UJ	p
chloroform		1	U		1	U		1	U		1	U		1	U		1	UJ	p
chloromethane		1	U		1	U		1	U		1	U		1	U		3.2	J	p
cis-1,2-dichloroethene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
cis-1,3-dichloropropene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
dibromochloromethane		1	U		1	U		1	U		1	U		1	U		1	UJ	p
dibromomethane		1	U		1	U		1	U		1	U		1	U		1	UJ	p
ethylbenzene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
ethylene dibromide		1	U		1	U		1	U		1	U		1	U		1	UJ	p
hexachlorobutadiene		5	U		5	U		5	U		5	U		5	U		5	UJ	p
isopropylbenzene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
m,p-xylene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
methyl iodide		1	U		1	U		1	U		1	U		1	U		1	UJ	p
methylene chloride		2	U		2	U		2	U		2	U		2	U		2	UJ	p
n-butylbenzene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
n-propylbenzene		1	U		1	U		1	U		1	U		1	U		1	UJ	p
naphthalene		5	UJ	n	5	UJ	n	5	U		5	U		5	U		5	UJ	p

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3/20/02

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NE Cape HTRW - St. Lawrence Island  
SDG: DN88

## Volatile Organics

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN88A 01NE07WP102 WX 8/27/01 µg/L	DN88B 01NE07WP202 WX 8/27/01 µg/L	DN88C 01NE30WP102 WX 8/28/01 µg/L	DN88F 01NE07WP103 WX 8/27/01 µg/L	DN88G 01NE07WP101 WX 8/26/01 µg/L	DN88H 01NE00TB118 WX 8/27/01 µg/L
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
o-xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
sec-butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
tert-butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
tetrachloroethylene	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
trans-1,2-dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
trans-1,3-dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
trans-1,4-dichloro-2-butene	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ p
trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p
vinyl acetate	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ p
vinyl chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ p

## Dissolved Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DK21B					
	Field ID	01NE35GW102					
Matrix	WX						
Date Collected	7/24/01						
Units	mg/L						
	RESULT	Q	RC				
iron	1.79						
manganese	0.165						

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3/20/02

C-242

NE Cape HTRW - St. Lawrence Island  
SDG: DK21

## Dissolved Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DK48F	DK48G	DK48H		
	Field ID	01NE35GW101	01NE35GW103	01NE35GW104		
	Matrix	WX	WX	WX		
	Date Collected	7/25/01	7/25/01	7/26/01		
	Units	mg/L	mg/L	mg/L		
	RESULT	Q	RC	RESULT	Q	RC
iron	0.02	U		0.33		
manganese	0.089		0.092	0.105		

## Total Metals

DATA SUMMARY TABLE

	Sample ID Field ID Matrix	100302-02 01NE28SD311 SX	100302-03 01NE28SD325 SX	100302-04 01NE28SD351 SX	100302-05 01NE28SD353 SX	100302-06 01NE28SD357 SX	100302-08 01NE28SD339 SX
Analyte	Date Collected Units	8/18/01 mg/Kg	8/18/01 mg/Kg	8/19/01 mg/Kg	8/19/01 mg/Kg	8/19/01 mg/Kg	8/19/01 mg/Kg
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
chromium		12 U	20	17	8.1	15	21
lead		28	13	30	23	16	14
zinc		62 J f	43 J f	80 J f	34 J f	43 J f	60 J f

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	100413-01	100413-02	100413-03	100413-04	100413-05	100413-06
	Field ID	01NE29SD325	01NE28SD375	01NE28SD371	01NE28SD363	01NE29SD314	01NE29SW317
	Matrix	SX	SX	SX	SX	SX	WX
	Date Collected	8/21/01	8/20/01	8/20/01	8/20/01	8/21/01	8/20/01
Units	RESULT	Q	RC	RESULT	Q	RC	RESULT
aluminum							0.021 J m
antimony							0.025 J m
arsenic							0.01 U
barium							0.0056
beryllium							0.002 U
cadmium							0.005 U
calcium							7.3
chromium	15		8.8	11 U	22	19	0.01 U
cobalt							0.005 U
copper							0.01 U
iron							0.39
lead	25	J n	35	39	43	30	0.0059 J m
magnesium							2.9
manganese							0.024
mercury							0.0002 UJ c
nickel							0.01 U
potassium							1.3 J m
selenium							0.0075 J m
silver							0.039 J m
sodium							35
thallium							0.02 U
vanadium							0.005 U
zinc	40		32	21	100	60	0.01 U

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3/20/02

C-245

NE Cape HTRW - St. Lawrence Island  
SDG: 100413

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	100418-02		
	Field ID	01NE09SW307		
	Matrix	WX		
	Date Collected	8/23/01		
	Units	mg/L		
	RESULT	Q	RC	
aluminum	0.056	J	m	
antimony	0.016	J	m	
arsenic	0.01	U		
barium	0.0046	J	m	
beryllium	0.002	U		
cadmium	0.005	U		
calcium	1.9			
chromium	0.01	U		
cobalt	0.005	U		
copper	0.01	U		
iron	0.21			
lead	0.019	J	n	
magnesium	1			
manganese	0.0077			
mercury	0.0002	U		
nickel	0.01	U		
potassium	0.17	J	m	
selenium	0.05	U		
silver	0.029	B	a	
sodium	4.9			
thallium	0.02	U		
vanadium	0.005	U		
zinc	0.011			

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	100492-01			100492-04			100492-08			100492-09			100492-13				
	Field ID	01NE24SW314			01NE21SS369			01NE16SS365			01NE30SS301			01NE09SD313				
	Matrix	WX			SX			SX			SX			SX				
	Date Collected	8/24/01			8/24/01			8/23/01			8/24/01			8/24/01				
Units		mg/L			mg/Kg			mg/Kg			mg/Kg			mg/Kg				
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC		
aluminum		0.038	J	m	3100						13000			16000				
antimony		0.033	J	m	7.5	J	m				3.9	J	m	4.6	J	m		
arsenic		0.0051	J	m	6	J	m				7.4			12				
barium		0.0099			53						170			120				
beryllium		0.002	U		1.5	U					0.44	J	m	4.7				
cadmium		0.005	U		3.7	U					2.3	U		6.2	U			
calcium		5.4			4100						1500			4100				
chromium		0.01	U		7.5	U					30			28				
cobalt		0.005	U		1.7	J	m				6.4			10				
copper		0.024			6.7	J	m				16			34				
iron		3.2			39000						19000			31000				
lead		0.23	J	f,n	19	J	f		180	J	c	16	J	f	300	J	f	
magnesium		1.4			1200						3500			4500				
manganese		0.028			570						90			210				
mercury		0.0002	U		0.22						0.15			0.2	J	m		
nickel		0.02	U		3.4	J	m				18			16				
potassium		0.87	J	m	490	J	m				740	J	m	1200	J	m		
selenium		0.011	J	m	6.3	J	m				23	U		62	U			
silver		0.012			7.5	U					14	J	n	6	J	m		
sodium		18			750	U					450			1200	U			
thallium		0.0074	J	m	15	U					9.1	U		25	U			
vanadium		0.005	U		11						42			54				
zinc		0.06			240						49			84				

## Total Metals

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DK21A 01NE35GW102 WX				
	Date Collected Units	7/24/01 mg/L				
Analyte		RESULT Q RC				
iron		45.3				
manganese		0.204				

## Total Metals

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DK48A 01NE35GW101 WX	DK48B 01NE35GW103 WX	DK48C 01NE35GW104 WX	
Analyte	Date Collected Units	RESULT Q RC	RESULT Q RC	RESULT Q RC	
iron	7/25/01 mg/L	10.4	2.78	9.18	
manganese		0.161	0.122	0.165	

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN03G			DN03J					
	Field ID	01NE07SW104			01NE07SW105					
	Matrix	WX			WX					
	Date Collected	8/19/01			8/19/01					
	Units	µg/L			µg/L					
RESULT	Q	RC	RESULT	Q	RC					
aluminum	320		240	J	t					
antimony	50	U	50	UJ	t					
arsenic	1	U	1	UJ	t					
barium	8		12	J	t					
beryllium	1	U	1	UJ	t					
cadmium	2	U	2	UJ	t					
calcium	3320		4990	J	t					
chromium	5	U	5	UJ	t					
cobalt	3	U	3	UJ	t					
copper	3		2	J	t					
iron	1160		3660	J	t					
lead	4		2	J	t					
magnesium	1280		1440	J	t					
manganese	7		96	J	t					
mercury	0.1	U	0.1	UJ	t					
nickel	10	U	10	UJ	t					
potassium	810		500	UJ	t					
selenium	2	U	2	UJ	t					
silver	3	U	3	UJ	t					
sodium	6290		4720	J	t					
thallium	1	U	1	UJ	t					
vanadium	3	U	3	UJ	t					
zinc	20		19	J	t					

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04A			DN04B			DN04C			DN04D			DN04E			DN04F		
	Field ID	01NE28SD117			01NE28SD118			01NE28SD119			01NE28SD120			01NE28SD121			01NE28SD122		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/18/01			8/18/01			8/18/01			8/18/01			8/18/01			8/18/01		
	Units	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
chromium		4.4			19			39			13			9			4	U	
lead		5			9			70			20	U		10	U		20	U	
zinc		17			40.1			1040			28			21			15		

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04G	DN04H	DN04I	DN04J	DN04K	DN04L
	Field ID	01NE28SD123	01NE28SD124	01NE28SD125	01NE28SD126	01NE28SD127	01NE28SD128
	Matrix	SX	SX	SX	SX	SX	SX
	Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
chromium	RESULT 7	Q 19	RC 18	RESULT 9	Q 12	RC 18	
lead	RESULT 9	Q U	RC 8	RESULT 7	Q 10	RC U	RESULT 9
zinc	RESULT 13	Q 30	RC 30	RESULT 36	Q 33	RC 59	

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04M	DN04N	DN04O	DN04P	DN04Q	DN04R		
	Field ID	01NE28SD225	01NE28SD129	01NE28SD130	01NE28SD131	01NE28SD132	01NE28SD133		
	Matrix	SX	SX	SX	SX	SX	SX		
	Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01		
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
chromium	RESULT 17	Q 5	RC	RESULT 10	Q 18.6	RC	RESULT 19	Q 10	RC
lead	5	10	U	20	21	20	U	9	U
zinc	29	12		96	96.3	114		45	

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C-253

NE Cape HTRW - St. Lawrence Island  
SDG: DN04

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04S			
	Field ID	01NE28SD134	SX		
	Matrix				
	Date Collected	8/18/01			
	Units	mg/Kg			
	RESULT	Q	RC		
chromium	22				
lead	10	U			
zinc	63				

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN05A	DN05B	DN05C	DN05D	DN05E	DN05F									
	Field ID	01NE28SD153	01NE28SD154	01NE28SD155	01NE28SD156	01NE28SD157	01NE28SD158									
	Matrix	SX	SX	SX	SX	SX	SX									
	Date Collected	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01									
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg									
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC				
chromium	13.2			17.1			649			19.9			25.5			8
lead	32			30			4590			113			20			12
zinc	65.5			65.1			4810			511			64.2			17

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN05G	DN05H			
	Field ID	01NE28SD253	01NE28SD257			
	Matrix	SX	SX			
	Date Collected	8/19/01	8/19/01			
	Units	mg/Kg	mg/Kg			
	RESULT	Q	RC	RESULT	Q	RC
chromium	12.8		22.6			
lead	60		19			
zinc	67		56.6			

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06A	DN06B	DN06C	DN06D	DN06E	DN06F									
	Field ID	01NE28SD135	01NE28SD136	01NE28SD137	01NE28SD138	01NE28SD139	01NE28SD140									
	Matrix	SX	SX	SX	SX	SX	SX									
	Date Collected	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01									
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg									
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC							
chromium	9.9			31			24			24.6			22			19
lead	4			64			13			13			13			17
zinc	22.2			200			51			48			53			50

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06G	DN06H	DN06I	DN06J	DN06K	DN06L
	Field ID	01NE28SD239	01NE28SD141	01NE28SD142	01NE28SD143	01NE28SD144	01NE28SD145
	Matrix	SX	SX	SX	SX	SX	SX
	Date Collected	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
chromium	RESULT Q RC	21	21.7	22	40	24	24
lead	RESULT Q RC	9	10	12	75	27	17
zinc	RESULT Q RC	51	33	23	223	91	50

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06M	DN06N	DN06O	DN06P	DN06Q	DN06R		
	Field ID	01NE28SD146	01NE28SD147	01NE28SD148	01NE28SD149	01NE28SD150	01NE28SD151		
	Matrix	SX	SX	SX	SX	SX	SX		
	Date Collected	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01		
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
chromium	RESULT 24	Q 20	RC	RESULT 17	Q 26.6	RC	RESULT 20.9	Q 19.4	RC
lead	RESULT 13	Q 24	RC	RESULT 14	Q 82	RC	RESULT 22	Q 21	RC
zinc	RESULT 34	Q 68.7	RC	RESULT 43	Q 266	RC	RESULT 78.4	Q 60.9	RC

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06S	DN06T			
	Field ID	01NE28SD251	01NE28SD152			
	Matrix	SX	SX			
	Date Collected	8/19/01	8/19/01			
	Units	mg/Kg	mg/Kg			
	RESULT	Q	RC	RESULT	Q	RC
chromium	17.7		22.3			
lead	23		22			
zinc	67.9		68.7			

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07D	DN07E	DN07F	DN07G	DN07H	DN07I								
	Field ID	01NE28SD111	01NE28SD211	01NE28SD112	01NE28SD113	01NE28SD114	01NE28SD115								
	Matrix	SX	SX	SX	SX	SX	SX								
	Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01								
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg								
RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
chromium	17		17			23.7			12			20			10
lead	20		20	U		14			10			10			10
zinc	94		77			46			183			37			16

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NE Cape HTRW - St. Lawrence Island  
SDG: DN07

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07J			DN07K			DN07L			DN07N			DN07O			DN07P		
	Field ID	01NE28SD116			01NE06SD116			01NE06SD117			01NE07SS125			01NE07SS126			01NE07SS127		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/18/01			8/18/01			8/18/01			8/19/01			8/19/01			8/19/01		
Analyte	Units	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aluminum					7790			9850			10800			11700			11300		
antimony					20	U		6	U		30	U		30	U		20	U	
arsenic					20	U		6	U		50			30	U		30		
barium					53			53.8			63			78			135		
beryllium					0.6			0.8			0.8			0.9			0.9		
cadmium					0.7	U		0.2	U		2			3			1.3		
calcium					1790			2360			2050			5070			2860		
chromium	25.7				6			13.9			64			75			65		
cobalt					2			5.1			17			19			17		
copper					7.4			8			91			97			120		
iron					12200			16400			152000			112000			129000		
lead	9				8			15			350			460			419		
magnesium					1530			2900			2630			2900			3180		
manganese					72.7			164			694			520			559		
mercury					0.2	U		0.06	U		0.56			0.3			0.47		
nickel					5			9			37			43			57		
potassium					1500			820			900			1010			1080		
selenium					20	U		6	U		30	U		30	U		20	U	
silver					1	U		0.4	U		2			2			1	U	
sodium					450			160			180			180			210		
thallium					20	U		6	U		30	U		30	U		20	U	
vanadium					16			25.8			30			31			29		
zinc	45.1				20			29.8			175			444			294		

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07Q			DN07R					
	Field ID	01NE07SD105			01NE07SD104					
	Matrix	SX			SX					
	Date Collected	8/19/01			8/19/01					
	Units	mg/Kg			mg/Kg					
		RESULT	Q	RC	RESULT	Q	RC			
aluminum		3640			12000					
antimony		20	U		20	U				
arsenic		20	U		20	U				
barium		28			77.4					
beryllium		0.4			1.2					
cadmium		1.1			1					
calcium		1780			3040					
chromium		5			19					
cobalt		2			3.2					
copper		13.6			27.5					
iron		8380			18400					
lead		20			41					
magnesium		740			2140					
manganese		55.3			79.5					
mercury		0.1	U		0.1					
nickel		5			13					
potassium		370			1000					
selenium		20	U		20	U				
silver		1	U		1	U				
sodium		120			180					
thallium		20	U		20	U				
vanadium		9.8			25.4					
zinc		62			203					

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN36A			DN36B			DN36C			DN36D			DN36E				
	Field ID	01NE29SW117			01NE29SW217			01NE29SW116			01NE29SW115			01NE29SW114				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	8/20/01			8/20/01			8/21/01			8/21/01			8/21/01				
	Units	µg/L			µg/L			µg/L			µg/L			µg/L				
	RESULT	Q	RC		Q	RC												
aluminum	40			40			40			40			40					
antimony	50	U		50	U		50	U		50	U		50	U				
arsenic	1	U		1	U		1	U		1	U		1	U				
barium	5			5			5			5			5					
beryllium	1	U		1	U		1	U		1	U		1	U				
cadmium	2	U		2	U		2	U		2	U		2	U				
calcium	7170			7250			6900			7440			7620					
chromium	5	U		5	U		5	U		5	U		5	U				
cobalt	3	U		3	U		3	U		3	U		3	U				
copper	2	U		2	U		2	U		2	U		2	U				
iron	400			350			320			360			310					
lead	1	U		1	U		1	U		1	U		1	U				
magnesium	2550			2600			2400			2030			1980					
manganese	21			21			21			27			17					
mercury	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U				
nickel	10	U		10	U		10	U		10	U		10	U				
potassium	900			1100			700			500	U		700					
selenium	2	U		2	U		2	U		2	U		2	U				
silver	3	U		3	U		3	U		3	U		3	U				
sodium	27900			29100			25300			14500			14200					
thallium	1	U		1	U		1	U		1	U		1	U				
vanadium	3	U		3	U		3	U		3	U		3	U				
zinc	6	U		13			6	U		6	U		6	U				

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN38A	DN38B	DN38C	DN38D	DN38E	DN38F									
	Field ID	01NE29SD114	01NE29SD214	01NE29SD115	01NE29SD116	01NE29SD117	01NE29SD118									
	Matrix	SX	SX	SX	SX	SX	SX									
	Date Collected	8/21/01	8/21/01	8/21/01	8/21/01	8/21/01	8/21/01									
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg									
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC							
chromium	18			16			11			15			2.8			11.3
lead	17			14			8			15			8			11
zinc	53			44			34			46			26.6			35

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN38G	DN38H	DN38I	DN38J	DN38K	DN38L
	Field ID	01NE29SD119	01NE28SD165	01NE28SD166	01NE28SD167	01NE28SD168	01NE28SD169
	Matrix	SX	SX	SX	SX	SX	SX
	Date Collected	8/21/01	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
chromium	RESULT 24.9	Q 27.4	RC 30.1	RESULT 57.1	Q 24.4	RC 27.1	
lead	24	61	18	219	57	48	
zinc	43.5	71.8	52.2	186	113	94.9	

## Total Metals

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN38M 01NE28SD170 SX 8/20/01 mg/Kg				
Analyte		RESULT Q RC				
chromium		24.9				
lead		36				
zinc		81.4				

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39A	DN39B	DN39C	DN39D	DN39E	DN39F									
	Field ID	01NE28SD159	01NE28SD160	01NE28SD161	01NE28SD163	01NE28SD164	01NE28SD263									
	Matrix	SX	SX	SX	SX	SX	SX									
	Date Collected	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01									
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg									
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC				
chromium	28.2			24.5			26.8			21.4			21.4			23.2
lead	46			28			36			28			22			29
zinc	80.4			71.7			148			155			53.2			89.2

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39G	DN39H	DN39I	DN39J	DN39K	DN39L									
	Field ID	01NE28SD171	01NE28SD172	01NE28SD173	01NE28SD174	01NE28SD175	01NE28SD176									
	Matrix	SX	SX	SX	SX	SX	SX									
	Date Collected	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01									
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg									
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC							
chromium	9			15			29			26.1			14			12
lead	20	U		30			22			14			30			20
zinc	19			104			54			47.9			48			68

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39M	DN39N	DN39O	DN39P	DN39Q	DN39R	
	Field ID	01NE28SD271	01NE28SD275	01NE28SD177	01NE28SD178	01NE28SD179	01NE28SD180	
	Matrix	SX	SX	SX	SX	SX	SX	
	Date Collected	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01	
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
chromium	8		9			21	14.4	31.3
lead	10	U	10	U		33	24	42
zinc	17		16			66	49.3	99.5

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39S	DN39T			
	Field ID	01NE28SD181	01NE28SD182			
Matrix	SX	SX				
Date Collected	8/20/01	8/20/01				
Units	mg/Kg	mg/Kg				
	RESULT	Q	RC	RESULT	Q	RC
chromium	19			21		
lead	30			39		
zinc	124			65		

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN40A	DN40B	DN40C	DN40D	DN40E	DN40F
	Field ID	01NE29SD123	01NE29SD124	01NE29SD125	01NE29SD225	01NE29SD128	01NE29SD129
	Matrix	SX	SX	SX	SX	SX	SX
	Date Collected	8/21/01	8/21/01	8/21/01	8/21/01	8/21/01	8/21/01
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
aluminum						13100	4820
antimony						7 UR c	5 UR c
arsenic						7 U	5 U
barium						104	39.8
beryllium						0.3	0.2
cadmium						0.3 U	0.2 U
calcium						1890	1580
chromium	27	7.3	12.8	12.5		20.8	6.1
cobalt						3.9	2
copper						10.8	1.8
iron						12900	8720
lead	23	9	9 J n	7 J n		8	4
magnesium						3290	2030
manganese						90.1	96.1
mercury						0.05	0.04 U
nickel						13	5
potassium						1020	1360
selenium						7 U	5 U
silver						0.4 U	0.3 U
sodium						713	577
thallium						7 U	5 U
vanadium						35	16.7
zinc	69	34.6	32.1	27.5		33.1	17.9

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NE Cape HTRW - St. Lawrence Island  
SDG: DN40

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN40G			DN40H			DN40I			DN40M			DN40N				
	Field ID	01NE29SD120			01NE29SD121			01NE29SD122			01NE29SD127			01NE29SD126				
	Matrix	SX			SX			SX			SX			SX				
	Date Collected	8/21/01			8/21/01			8/21/01			8/21/01			8/21/01				
	Units	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg				
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC		
aluminum											12100			15900				
antimony											7	UR	c	10	UR	c		
arsenic											7	U		10	U			
barium											88.6			115				
beryllium											0.7			1.3				
cadmium											0.3	U		0.4	U			
calcium											2260			3270				
chromium		3.9			4.9			2.9			17.8			22.9				
cobalt											7			4.8				
copper											11			10.9				
iron											9520			14900				
lead		5			5			6			9			14				
magnesium											2650			3770				
manganese											80.1			114				
mercury											0.06	U		0.09	U			
nickel											13			14				
potassium											930			1140				
selenium											7	U		10	U			
silver											0.4	U		0.6	U			
sodium											530			416				
thallium											7	U		10	U			
vanadium											30			34.2				
zinc		14.4			19.7			16.2			31.4			44				

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN53A			DN53F			DN53G			DN53H				
	Field ID	01NE09SW109			01NE09SW207			01NE09SW108			01NE09SW107				
	Matrix	WX			WX			WX			WX				
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01				
	Units	µg/L			µg/L			µg/L			µg/L				
	RESULT	Q	RC		RESULT	Q	RC		RESULT	Q	RC		RESULT	Q	RC
aluminum	100	J	t		80				130				50		
antimony	50	UJ	t		50	U			50	U			50	U	
arsenic	1	UJ	t		1	U			1	U			1	U	
barium	20	J	t		5				5				5		
beryllium	1	UJ	t		1	U			1	U			1	U	
cadmium	2	UJ	t		2	U			2	U			2	U	
calcium	2950	J	t		1780				1650				1740		
chromium	5	UJ	t		5	U			5	U			5	U	
cobalt	3	UJ	t		3	U			3	U			3	U	
copper	4	J	t		2	U			2	U			2	U	
iron	1150	J	t		150				310				120		
lead	6	J	t		1	UJ	n		1	U			1	UJ	n
magnesium	820	J	t		880				850				850		
manganese	12	J	t		6				8				6		
mercury	0.1	UJ	t		0.1	U			0.1	U			0.1	U	
nickel	10	UJ	t		10	U			10	U			10	U	
potassium	500	UJ	t		500	U			500	U			500	U	
selenium	2	UJ	t		2	U			2	U			2	U	
silver	3	UJ	t		3	U			3	U			3	U	
sodium	4040	J	t		4080				4020				4000		
thallium	1	UJ	t		1	U			1	U			1	U	
vanadium	3	UJ	t		3	U			3	U			3	U	
zinc	60	J	t		6	U			6	U			6	U	

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NE Cape HTRW - St. Lawrence Island

SDG: DN53

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN68A			DN68B			DN68F					
	Field ID	01NE21SS169			01NE21SS269			01NE09SD114					
	Matrix	SX			SX			SX					
	Date Collected	8/24/01			8/24/01			8/24/01					
Analyte	Units	mg/Kg			RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
	aluminum	3940			4010			15300					
antimony		30 U			30 U			30 U					
arsenic		30 U			30 U			30 U					
barium		59			54			71					
beryllium		0.5 U			0.5 U			1.6					
cadmium		1 U			1 U			1 U					
calcium		4570			4310			4940					
chromium		4			4			16					
cobalt		3			2			5					
copper		4			4			16					
iron		41200			44600			13000					
lead		10 U			10 U			40					
magnesium		1320			1320			2920					
manganese		690			561			247					
mercury		0.3 U			0.2 U			0.3 U					
nickel		5 U			5 U			10					
potassium		650			470			650					
selenium		30 U			30 U			30 U					
silver		2 U			2 U			2 U					
sodium		170			250			240					
thallium		30 U			30 U			30 U					
vanadium		8			9			24					
zinc		302			253			38					

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN69A			DN69B			DN69C			DN69D			DN69E			DN69F		
	Field ID	01NE21SB169			01NE21SB170			01NE21SS170			01NE21SB171			01NE21SS171			01NE21SS172		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
	Units	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
aluminum		18100			13400			14700			14800			17300			19400		
antimony		7	U		8	U		10	U		6	U		10	U		20	U	
arsenic		7	U		8	U		10	U		6	U		10	U		20	U	
barium		122			97.2			103			122			136			96		
beryllium		0.3			0.7			0.8			1			1.6			1.4		
cadmium		0.3	U		0.3	U		0.9			0.4			1.3			1	U	
calcium		1320			3400			4190			5240			4600			5160		
chromium		27.4			20.5			22			41			39.8			25		
cobalt		3.8			5.2			4.5			8.3			12.1			7		
copper		10.6			27.2			36.3			16.4			23.7			37.3		
iron		12700			16700			19600			23900			29500			41200		
lead		12			13			25			21			23			67		
magnesium		3380			3330			3380			8770			6100			4460		
manganese		77.2			151			154			452			765			320		
mercury		0.09			0.07			0.25			0.06	U		0.07	U		0.2	U	
nickel		13			13			16			26			27			17		
potassium		980			1000			910			3670			1960			1450		
selenium		7	U		8	U		10	U		6	U		10	U		20	U	
silver		0.4	U		0.5	U		0.9			0.4	U		0.6	U		1	U	
sodium		170			239			260			457			295			470		
thallium		7	U		8	U		10	U		6	U		10	U		20	U	
vanadium		40			34.7			38.8			51.6			50.1			46		
zinc		29.5			63.2			166			133			256			184		

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN69G			DN69H			DN69I				
	Field ID	01NE21SS173			01NE21SD113			01NE21SD114				
	Matrix	SX			SX			SX				
	Date Collected	8/24/01			8/24/01			8/24/01				
Analyte	Units	mg/Kg			mg/Kg			mg/Kg				
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC		
aluminum		13200			24600			33100				
antimony		8	U		10	U		20	U			
arsenic		8	U		10	U		20	U			
barium		115			155			193				
beryllium		0.7			1.7			1.8				
cadmium		0.8			0.9			1.2				
calcium		3450			3920			6910				
chromium		23.2			36			50				
cobalt		4.7			11.2			14.2				
copper		28.3			37.4			54.6				
iron		14700			57400			51400				
lead		17			58			64				
magnesium		3400			6080			8250				
manganese		163			786			560				
mercury		0.16			0.1	U		0.1	U			
nickel		13			23			33				
potassium		880			1950			3180				
selenium		8	U		10	U		20	U			
silver		0.5	U		0.7	U		1	U			
sodium		239			380			580				
thallium		8	U		10	U		20	U			
vanadium		34.8			62.6			81.1				
zinc		167			150			190				

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN71A			DN71B			DN71D			DN71E			DN71K			DN71L		
	Field ID	01NE09SW112			01NE09WP102			01NE09MW103			01NE09SW111			01NE31SW101			01NE31SW102		
	Matrix	WX			WX														
	Date Collected	8/26/01			8/26/01			8/26/01			8/26/01			8/24/01			8/24/01		
	Units	µg/L			µg/L														
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
aluminum	40	J	t	48900	J	t	164000	J	t	230			50			20	U		
antimony	50	UJ	t	50	UJ	t	120	J	t	50	U		50	U		50	U		
arsenic	1	UJ	t	12	J	t	5	UJ	t	1	U		1	U		1	U		
barium	5	J	t	271	J	t	1160	J	t	6			3	U		3			
beryllium	1	UJ	t	4	J	t	14	J	t	1	U		1	U		1	U		
cadmium	2	UJ	t	2	J	t	4	J	t	2	U		2	U		2	U		
calcium	1750	J	t	7970	J	t	58600	J	t	1010			2210			2060			
chromium	5	UJ	t	75	J	t	99	J	t	5	U		5	U		5	U		
cobalt	3	UJ	t	12	J	t	37	J	t	3	U		3	U		3	U		
copper	2	UJ	t	46	J	t	68	J	t	2	U		2	U		2	U		
iron	200	J	t	77300	J	t	322000	J	t	1540			30			20	U		
lead	1	UJ	t	56	J	t	300	J	t	1	U		1	U		1	U		
magnesium	860	J	t	8570	J	t	38900	J	t	950			850			800			
manganese	12	J	t	326	J	t	2240	J	t	29			5			1			
mercury	0.1	UJ	t	0.2	J	t	0.4	J	t	0.1	U		0.1	U		0.1	U		
nickel	10	UJ	t	110	J	t	80	J	t	10	U		10	U		10	U		
potassium	500	J	t	3000	J	t	16400	J	t	1000			500	U		500	U		
selenium	2	UJ	t	2	UJ	t	10	UJ	t	2	U		2	U		2	U		
silver	3	UJ	t	3	UJ	t	3	UJ	t	3	U		3	U		3	U		
sodium	4290	J	t	9090	J	t	46900	J	t	4370			4170			4090			
thallium	1	UJ	t	1	UJ	t	5	UJ	t	1	U		1	U		1	U		
vanadium	3	UJ	t	97	J	t	149	J	t	3	U		3	U		3	U		
zinc	6	UJ	t	419	J	t	512	J	t	11			6	U		6	U		

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN71O			DN71P								
	Field ID	01NE21SW114			01NE09SW110								
	Matrix	WX			WX								
Date Collected	Units	8/24/01			8/25/01								
		µg/L			µg/L			RESULT	Q	RC			
aluminum		710			190								
antimony		.50	U		50	U							
arsenic		2			1	U							
barium		10			6								
beryllium		1	U		1	U							
cadmium		2	U		2	U							
calcium		11400			1670								
chromium		5	U		5	U							
cobalt		3	U		3	U							
copper		2	U		2	U							
iron		6340			550								
lead		2			1	U							
magnesium		2490			840								
manganese		494			9								
mercury		0.1	U		0.1	U							
nickel		10	U		10	U							
potassium		2600			500	U							
selenium		2	U		2	U							
silver		3	U		3	U							
sodium		38100			4210								
thallium		1	U		1	U							
vanadium		3	U		3	U							
zinc		9			6	U							

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SDG: DN71

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN73A			DN73C			DN73J			DN73K			DN73L				
	Field ID	01NE30WP101			01NE06WP103			01NE21SW113			01NE24SW214			01NE24SW114				
	Matrix	WX			WX			WX			WX			WX				
	Date Collected	8/25/01			8/25/01			8/24/01			8/24/01			8/24/01				
Analyte	Units	µg/L			µg/L			µg/L			µg/L			µg/L				
		RESULT	Q	RC	RESULT	Q	RC											
aluminum		8170			78300			110			20			30				
antimony		50	U		50	U		50	U		50	U		50	U			
arsenic		7			22			2			1	U		1	U			
barium		102			406			5			8			10				
beryllium		1	U		4			1	U		1	U		1	U			
cadmium		2	U		6			2	U		2	U		2	U			
calcium		3680			15800			13600			4420			5480				
chromium		30			1220			5	U		5	U		5	U			
cobalt		5			52			3	U		3	U		3	U			
copper		17			260			2	U		20			26				
iron		13500			98800			4170			2440			3060				
lead		7			160			1	U		1	J	n	1	UJ	n		
magnesium		3970			15600			2960			1060			1340				
manganese		56			1580			687			21			25				
mercury		0.2			0.1			0.1	U		0.1	U		0.1	U			
nickel		90			1680			10	U		10	U		10	U			
potassium		1730			7920			2350			500	U		650				
selenium		2	U		4	U		2	U		2	U		2	U			
silver		3	U		3	U		3	U		3	U		3	U			
sodium		13000			17700			27000			13000			16300				
thallium		1	U		2			1	U		1	U		1	U			
vanadium		20			153			3	U		3	U		3	U			
zinc		146			17700			6	U		47			55				

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN76A			DN76B			DN76C			DN76D			DN76E			DN76F		
	Field ID	01NE16SS165			01NE16SS265			01NE16SS166			01NE09SD107			01NE09SD108			01NE30SS101		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/23/01			8/23/01			8/23/01			8/23/01			8/23/01			8/24/01		
	Units	mg/Kg																	
aluminum											7740			20000			19700		
antimony								30			UJ c			20			UJ c		
arsenic								30			U			20			U		
barium								72						111			173		
beryllium								0.7						2			0.3		
cadmium								1			U			0.9			U		
calcium								2020						2090			2000		
chromium								5						22			31		
cobalt								2			U			4			5.8		
copper								6						15.9			14.2		
iron								31100						22200			17500		
lead	205				240			42			10			U			27		
magnesium								930						2980			4150		
manganese								50.5						125			86.8		
mercury								0.2			U			0.2			U		
nickel								6			U			10			18		
potassium								290			U			1060			1250		
selenium								30			U			20			U		
silver								2			U			1			U		
sodium								180						270			240		
thallium								30			U			20			U		
vanadium								21						44			44.5		
zinc								15						42			45		

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NE Cape HTRW - St. Lawrence Island

SDG: DN76

## Total Metals

## DATA SUMMARY TABLE

	Sample ID	DN76G			DN76H			DN76I			DN76J			DN76K			DN76L		
	Field ID	01NE30SD101			01NE30SS103			01NE30SS102			01NE09SD109			01NE09SD213			01NE24SD114		
	Matrix	SX			SX			SX			SX			SX			SX		
	Date Collected	8/24/01			8/24/01			8/24/01			8/24/01			8/24/01			8/24/01		
Analyte	Units	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
aluminum		21700			640			13200			4640			17400			7110		
antimony		50	J	c	30	UJ	c	15	J	c	250	J	c	30	UJ	c	70	J	c
arsenic		20	U		30	U		6	U		60	U		30	U		50	U	
barium		209			34			85.3			112			92			143		
beryllium		3.3			0.7	U		1			1	U		3.3			0.9	U	
cadmium		4			1	U		0.5			7			1	U		2	U	
calcium		5440			2530			4040			1910			3540			10200		
chromium		30			3	U		52.1			42			21			13		
cobalt		22			2	U		10.8			38			6			23		
copper		29.8			2			41.3			429			25			368		
iron		105000			6730			26400			483000			22500			56400		
lead		59			10	U		28			630			340			140		
magnesium		4810			1630			7250			1030			3390			1990		
manganese		6480			8			340			970			132			249		
mercury		0.1	U		0.3	U		0.04	U		0.6			0.2	U		0.3	U	
nickel		30			7	U		31			110			10			24		
potassium		1510			340	U		2340			970			1120			960		
selenium		20	U		30	U		6	U		60	U		30	U		50	U	
silver		1	U		2	U		0.3	U		3	U		2	U		3	U	
sodium		410			270			222			280			290			670		
thallium		20	U		30	U		6	U		60	U		30	U		50	U	
vanadium		48			4			35.8			3	U		41			30		
zinc		368			9			89			1790			58			1480		

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN76M			DN76O			DN76P					
	Field ID	01NE24SD115			01NE30SS201			01NE09SD113					
	Matrix	SX			SX			SX					
	Date Collected	8/24/01			8/24/01			8/24/01					
Units	mg/Kg			mg/Kg			mg/Kg						
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	
aluminum	5570			17800			18600						
antimony	11	J	C	9	UJ	C	30	UJ	C				
arsenic	7	U		9	U		30	U					
barium	30.4			160			105						
beryllium	0.6			0.5			3.8						
cadmium	0.5			0.4	U		1						
calcium	1670			1810			3140						
chromium	12.3			28.5			19						
cobalt	6.9			5.3			6						
copper	212			13.7			23						
iron	26100			15200			19600						
lead	49			11			100						
magnesium	1400			3790			3050						
manganese	182			80.3			107						
mercury	0.06	U		0.1			0.2	U					
nickel	18			16			13						
potassium	520			1040			1000						
selenium	7	U		9	U		30	U					
silver	0.4	U		0.6	UJ	n	2	U					
sodium	131			227			210						
thallium	7	U		9	U		30	U					
vanadium	12.7			38.1			35						
zinc	227			42			58						

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SDG: DN76

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DN88A			DN88C			DN88E			DN88F				
	Field ID	01NE07WP102			01NE30WP102			01NE07WP101			01NE07WP103				
	Matrix	WX			WX			WX			WX				
	Date Collected	8/27/01			8/28/01			8/28/01			8/27/01				
Analyte	Units	µg/L			µg/L			µg/L			µg/L				
		RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC		
aluminum		25800			820			10600	J	t	14700				
antimony		50	U		50	U		50	UJ	t	50	U			
arsenic		4			3			10	J	t	4				
barium		130			21			126	J	t	130				
beryllium		2			1	U		1	UJ	t	1	U			
cadmium		2	U		2	U		2	UJ	t	2	U			
calcium		4310			1330			7570	J	t	3960				
chromium		14			5	U		255	J	t	14				
cobalt		4			3	U		64	J	t	4				
copper		18			2			67	J	t	11				
iron		18700			7900			47100	J	t	11200				
lead		17			2			40	J	t	6				
magnesium		3620			1420			3770	J	t	3710				
manganese		60			90			593	J	t	105				
mercury		0.2			0.1	U		0.2	J	t	0.1	U			
nickel		10	U		10	U		3540	J	t	10	U			
potassium		2000			1300			5300	J	t	1600				
selenium		2	U		2	U		2	UJ	t	2	U			
silver		3	U		3	U		3	UJ	t	3	U			
sodium		10300			6520			8480	J	t	12600				
thallium		1	U		1	U		1	UJ	t	1	U			
vanadium		35			3	U		79	J	t	29				
zinc		23			6	U		2470	J	t	20				

## Total Metals

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DY36A 01NE09SD107	DY36B 01NE09SD108	DY36C 01NE30SS101	DY36D 01NE30SD101	DY36E 01NE30SS103	DY36F 01NE30SS102
Analyte	Date Collected Units	SX mg/Kg	SX mg/Kg	SX mg/Kg	SX mg/Kg	SX mg/Kg	SX mg/Kg
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
arsenic		8	5.9	5.3	19.8	2 U	4.4

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DY36G	DY36H	DY36I	DY36J	DY36K	DY36L
	Field ID	01NE09SD109	01NE09SD213	01NE24SD114	01NE24SD115	01NE30SS201	01NE09SD113
	Matrix	SX	SX	SX	SX	SX	SX
	Date Collected	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
arsenic	25.7	7.2	11	5.6	3.6	10	

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DY38A			DY38B			DY38C								
	Field ID	01NE21SS169			01NE21SS269			01NE09SD114								
	Matrix	SX			SX			SX								
	Date Collected	8/24/01			8/24/01			8/24/01								
	Units	mg/Kg			mg/Kg			mg/Kg								
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC							
arsenic	7.4			7			6									

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DY39A	DY39B	DY39C	DY39D	DY39E	DY39F					
	Field ID	01NE21SB169	01NE21SB170	01NE21SS170	01NE21SB171	01NE21SS171	01NE21SS172					
	Matrix	SX	SX	SX	SX	SX	SX					
	Date Collected	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01	8/24/01					
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg					
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC
arsenic		3		4		5.9		4.3		6.1		11.5

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DY39G	DY39H	DY39I	
	Field ID	01NE21SS173	01NE21SD113	01NE21SD114	
	Matrix	SX	SX	SX	
	Date Collected	8/24/01	8/24/01	8/24/01	
	Units	mg/Kg	mg/Kg	mg/Kg	
	RESULT	Q	RC	RESULT	Q
arsenic	4.5			12.1	
				14.7	

## Total Metals

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DY41A 01NE29SD128 SX	DY41B 01NE29SD129 SX	DY41C 01NE29SD127 SX	DY41D 01NE29SD126 SX	
Analyte	Date Collected Units	8/21/01 mg/Kg	8/21/01 mg/Kg	8/21/01 mg/Kg	8/21/01 mg/Kg	
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
arsenic		4.8	2.8	5.7	3.3	

## Total Metals

## DATA SUMMARY TABLE

Analyte	Sample ID	DY42A	DY42B	DY42C	DY42D	DY42E	
	Field ID	01NE06SD116	01NE06SD117	01NE07SS126	01NE07SD105	01NE07SD104	
	Matrix	SX	SX	SX	SX	SX	
	Date Collected	8/18/01	8/18/01	8/19/01	8/19/01	8/19/01	
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
arsenic	RESULT	Q	RC	RESULT	Q	RC	RESULT
	1.6			4.1			17.3
							4.1
							3.3

## General Chemistry

## DATA SUMMARY TABLE

	Sample ID DN04A	DN04B	DN04C	DN04D	DN04E	DN04F
Field ID	01NE28SD117	01NE28SD118	01NE28SD119	01NE28SD120	01NE28SD121	01NE28SD122
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01
Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
total organic carbon	4.5	3.5	32	28	34	49

## General Chemistry

## DATA SUMMARY TABLE

Analyte	Sample ID	DN04G	DN04H	DN04I	DN04J	DN04K	DN04L
	Field ID	01NE28SD123	01NE28SD124	01NE28SD125	01NE28SD126	01NE28SD127	01NE28SD128
	Matrix	SX	SX	SX	SX	SX	SX
	Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01
	Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
		RESULT Q RC					
total organic carbon		44	14	7.4	31	31	19

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3/20/02

C-293

NE Cape HTRW - St. Lawrence Island  
SDG: DN04

## General Chemistry

## DATA SUMMARY TABLE

Sample ID	DN04N	DN04O	DN04P	DN04Q	DN04R	DN04S
Field ID	01NE28SD129	01NE28SD130	01NE28SD131	01NE28SD132	01NE28SD133	01NE28SD134
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01
Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
total organic carbon	41	26	7.6	16	21	18

## General Chemistry

## DATA SUMMARY TABLE

Analyte	Sample ID	DN05A	DN05B	DN05C	DN05D	DN05E	DN05F
	Field ID	01NE28SD153	01NE28SD154	01NE28SD155	01NE28SD156	01NE28SD157	01NE28SD158
	Matrix	SX	SX	SX	SX	SX	SX
	Date Collected	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01
	Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
		RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
total organic carbon		14	12	10	7.3	4	12

Prepared by ETHIX

3/20/02

C-295

NE Cape HTRW - St. Lawrence Island  
SDG: DN05

## General Chemistry

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix Date Collected Units	DN06A 01NE28SD135 SX 8/19/01 PERCENT RESULT Q RC	DN06B 01NE28SD136 SX 8/19/01 PERCENT RESULT Q RC	DN06C 01NE28SD137 SX 8/19/01 PERCENT RESULT Q RC	DN06D 01NE28SD138 SX 8/19/01 PERCENT RESULT Q RC	DN06E 01NE28SD139 SX 8/19/01 PERCENT RESULT Q RC	DN06F 01NE28SD140 SX 8/19/01 PERCENT RESULT Q RC
Analyte							
total organic carbon		0.55	9.1	7.5	6.9	10	11

## General Chemistry

## DATA SUMMARY TABLE

Analyte	Sample ID	DN06H	DN06I	DN06J	DN06K	DN06L	DN06M								
	Field ID	01NE28SD141	01NE28SD142	01NE28SD143	01NE28SD144	01NE28SD145	01NE28SD146								
	Matrix	SX	SX	SX	SX	SX	SX								
	Date Collected	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01	8/19/01								
	Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT								
	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC	RESULT	Q	RC			
total organic carbon	12			13			11			12			15		

## General Chemistry

## DATA SUMMARY TABLE

Analyte	Sample ID Field ID Matrix Date Collected Units	DN06N 01NE28SD147 SX 8/19/01 PERCENT RESULT Q RC	DN06O 01NE28SD148 SX 8/19/01 PERCENT RESULT Q RC	DN06P 01NE28SD149 SX 8/19/01 PERCENT RESULT Q RC	DN06Q 01NE28SD150 SX 8/19/01 PERCENT RESULT Q RC	DN06R 01NE28SD151 SX 8/19/01 PERCENT RESULT Q RC	DN06T 01NE28SD152 SX 8/19/01 PERCENT RESULT Q RC
total organic carbon		4.6	15	3.8	3.2	4.3	3.6

## General Chemistry

## DATA SUMMARY TABLE

Sample ID	DN07A	DN07C	DN07D	DN07F	DN07G	DN07H
Field ID	01NE06TP101	01NE06TP102	01NE28SD111	01NE28SD112	01NE28SD113	01NE28SD114
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01	8/18/01
Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Analyte	RESULT	Q	RC	RESULT	Q	RC
total organic carbon	2			21	7	30
						37

## General Chemistry

## DATA SUMMARY TABLE

Analyte	Sample ID	DN07I	DN07J			
	Field ID	01NE28SD115	01NE28SD116			
	Matrix	SX	SX			
	Date Collected	8/18/01	8/18/01			
	Units	PERCENT	PERCENT			
		RESULT Q RC	RESULT Q RC			
total organic carbon		35	3.9			

Prepared by ETHIX

3/20/02

C-300

NE Cape HTRW - St. Lawrence Island  
SDG: DN07

## General Chemistry

## DATA SUMMARY TABLE

Analyte	Sample ID	DN38A	DN38C	DN38D	DN38E	DN38F	DN38G
	Field ID	01NE29SD114	01NE29SD115	01NE29SD116	01NE29SD117	01NE29SD118	01NE29SD119
	Matrix	SX	SX	SX	SX	SX	SX
	Date Collected	8/21/01	8/21/01	8/21/01	8/21/01	8/21/01	8/21/01
	Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
		RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
total organic carbon		3.2	0.74	4.7	0.32	0.58	0.5

Prepared by ETHIX

3/20/02

C-301

NE Cape HTRW - St. Lawrence Island  
SDG: DN38

## General Chemistry

## DATA SUMMARY TABLE

Sample ID	DN38H	DN38I	DN38J	DN38K	DN38L	DN38M
Field ID	01NE28SD165	01NE28SD166	01NE28SD167	01NE28SD168	01NE28SD169	01NE28SD170
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01
Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
total organic carbon	2.6	1.3	3	3.1	11	9.1

Prepared by ETHIX

3/20/02

C-302

NE Cape HTRW - St. Lawrence Island  
SDG: DN38

## General Chemistry

## DATA SUMMARY TABLE

Analyte	Sample ID	DN39A	DN39B	DN39C	DN39D	DN39E	DN39G
	Field ID	01NE28SD159	01NE28SD160	01NE28SD161	01NE28SD163	01NE28SD164	01NE28SD171
	Matrix	SX	SX	SX	SX	SX	SX
	Date Collected	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01
	Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
		RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC
total organic carbon		5.3	4.5	3.9	4.1	4	24

Prepared by ETHIX

3/20/02

C-303

NE Cape HTRW - St. Lawrence Island  
SDG: DN39

## General Chemistry

## DATA SUMMARY TABLE

Sample ID	DN39H	DN39I	DN39J	DN39K	DN39L	DN39O
Field ID	01NE28SD172	01NE28SD173	01NE28SD174	01NE28SD175	01NE28SD176	01NE28SD177
Matrix	SX	SX	SX	SX	SX	SX
Date Collected	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01	8/20/01
Units	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Analyte	RESULT	Q	RC	RESULT	Q	RC
total organic carbon	25			16		
				10		
				22		
				43		
				21		

Prepared by ETHIX

3/20/02

C-304

NE Cape HTRW - St. Lawrence Island  
SDG: DN39

## General Chemistry

## DATA SUMMARY TABLE

	Sample ID DN39P	DN39Q	DN39R	DN39S	DN39T	
	Field ID 01NE28SD178	01NE28SD179	01NE28SD180	01NE28SD181	01NE28SD182	
	Matrix SX	SX	SX	SX	SX	
	Date Collected 8/20/01	8/20/01	8/20/01	8/20/01	8/20/01	
	Units PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
Analyte	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
total organic carbon	9.7	4.5	3.4	3.4	11	

## General Chemistry

## DATA SUMMARY TABLE

Analyte	Sample ID Field ID Matrix Date Collected Units	DN40A 01NE29SD123 SX 8/21/01 PERCENT RESULT Q RC	DN40B 01NE29SD124 SX 8/21/01 PERCENT RESULT Q RC	DN40C 01NE29SD125 SX 8/21/01 PERCENT RESULT Q RC	DN40G 01NE29SD120 SX 8/21/01 PERCENT RESULT Q RC	DN40H 01NE29SD121 SX 8/21/01 PERCENT RESULT Q RC	DN40I 01NE29SD122 SX 8/21/01 PERCENT RESULT Q RC
total organic carbon		8.9	5.2	3.9	0.27	0.19	1.1

## General Chemistry

## DATA SUMMARY TABLE

	Sample ID Field ID Matrix	DN55I 01NE34SS107 SX	DN55J 01NE34SS108 SX	DN55K 01NE34SS109 SX	DN55L 01NE34SS110 SX	
Analyte	Date Collected Units	8/23/01 PERCENT	8/23/01 PERCENT	8/23/01 PERCENT	8/23/01 PERCENT	
	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	RESULT Q RC	
total organic carbon		1.7	5.7	6.4	7.2	

## General Chemistry

## DATA SUMMARY TABLE

Sample ID	DN68F			
Field ID	01NE09SD114			
Matrix	SX			
Date Collected	8/24/01			
Units	PERCENT			
Analyte	RESULT	Q	RC	
total organic carbon	18			

Prepared by ETHIX

3/20/02

C-308

NE Cape HTRW - St. Lawrence Island  
SDG: DN68

## General Chemistry

## DATA SUMMARY TABLE

Sample ID	DN76P	
Field ID	01NE09SD113	
Matrix	SX	
Date Collected	8/24/01	
Units	PERCENT	
Analyte	RESULT Q RC	
total organic carbon	28	

*Appendix D*

## **Data Quality Summary**

*by Analysis Type*

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Prepared by **ETHIX**  
3/19/02

Appendix D  
NE Cape HTRW - St. Lawrence Island

# Data Quality Summary

## BTEX

	Data Points	% of Data	% of Qualified Data	Bias (low/none/high)
<b>TOTAL DATA POINTS:</b>	<b>265</b>	-	-	-
<b>TOTAL QUALIFIED DATA POINTS:</b>	<b>74</b>	<b>27.9%</b>	-	-
<b>TOTAL REJECTED DATA POINTS:</b>	<b>0</b>	<b>0.0%</b>	-	-
<b>Qualified/Rejected as a result of:</b>				
k	- The analyte was found in the field blank	44	16.6%	59.5% H
b	- Surrogate spike recovery outside control limits	15	5.7%	20.3% L
t	- Sample temperature outside acceptance criteria	10	3.8%	13.5% L
p	- Sample was not properly collected, preserved or shippe	5	1.9%	6.8% L

# Data Quality Summary

## Gasoline Range Organics

	Data Points	% of Data	% of Qualified Data	Bias (low/none/high)
<b>TOTAL DATA POINTS:</b>	<b>85</b>	-	-	-
<b>TOTAL QUALIFIED DATA POINTS:</b>	<b>6</b>	<b>7.1%</b>	-	-
<b>TOTAL REJECTED DATA POINTS:</b>	<b>0</b>	<b>0.0%</b>	-	-
<b>Qualified/Rejected as a result of:</b>				
t      - Sample temperature outside acceptance criteria	2	2.4%	33.3%	L
a      - The analyte was found in the method blank	2	2.4%	33.3%	H
e      - Holding time exceeded	1	1.2%	16.7%	L
b      - Surrogate spike recovery outside control limits	1	1.2%	16.7%	L

# Data Quality Summary

## Diesel / Residual Range Organics

	Data Points	% of Data	% of Qualified Data	Bias (low/none/high)
<b>TOTAL DATA POINTS:</b>	<b>585</b>	-	-	-
<b>TOTAL QUALIFIED DATA POINTS:</b>	<b>131</b>	<b>22.4%</b>	-	-
<b>TOTAL REJECTED DATA POINTS:</b>	<b>0</b>	<b>0.0%</b>	-	-
<b>Qualified/Rejected as a result of:</b>				
e - Holding time exceeded	56	9.6%	42.7%	L
b - Surrogate spike recovery outside control limits	33	5.6%	25.2%	L
o - Result reported exceeds calibration range	10	1.7%	7.6%	N
t - Sample temperature outside acceptance criteria	6	1.0%	4.6%	L
f - Laboratory duplicate failed precision criteria	5	0.9%	3.8%	N
n - Field duplicate precision problem	4	0.7%	3.1%	N
m - Numerical value is between the MDL and RL	4	0.7%	3.1%	N
b,e - Multiple Reasons	4	0.7%	3.1%	L
a - The analyte was found in the method blank	3	0.5%	2.3%	H
c,f - Multiple Reasons	2	0.3%	1.5%	N
m,n - Multiple Reasons	1	0.2%	0.8%	N
c,f,n - Multiple Reasons	1	0.2%	0.8%	N
c,f - Multiple Reasons	1	0.2%	0.8%	H
b,o - Multiple Reasons	1	0.2%	0.8%	L

# Data Quality Summary

## Organochlorine Pesticides / PCBs

	Data Points	% of Data	% of Qualified Data	Bias (low/none/high)
<b>TOTAL DATA POINTS:</b>	<b>2393</b>			
<b>TOTAL QUALIFIED DATA POINTS:</b>	<b>458</b>	<b>19.1%</b>		
<b>TOTAL REJECTED DATA POINTS:</b>	<b>0</b>	<b>0.0%</b>		
<b>Qualified/Rejected as a result of:</b>				
b - Surrogate spike recovery outside control limits	339	14.2%	74.0%	L
b,c - Multiple Reasons	1	0.0%	0.2%	H
b,o - Multiple Reasons	2	0.1%	0.4%	L
e - Holding time exceeded	112	4.7%	24.5%	L
o - Result reported exceeds calibration range	4	0.2%	0.9%	N

# Data Quality Summary

## Polynuclear Aromatic Hydrocarbons

	Data Points	% of Data	% of Qualified Data	Bias (low/none/high)
<b>TOTAL DATA POINTS:</b>	<b>3564</b>	-	-	-
<b>TOTAL QUALIFIED DATA POINTS:</b>	<b>609</b>	17.1%	-	-
<b>TOTAL REJECTED DATA POINTS:</b>	<b>0</b>	0.0%	-	-
<b>Qualified/Rejected as a result of:</b>				
b - Surrogate spike recovery outside control limits	214	6.0%	35.1%	L
b,e - Multiple Reasons	18	0.5%	3.0%	L
b,n - Multiple Reasons	2	0.1%	0.3%	L
c - MS/MSD recovery outside control limits	1	0.0%	0.2%	H
c,f - Multiple Reasons	2	0.1%	0.3%	N
d - Laboratory Control Sample (LCS) outside control limits	1	0.0%	0.2%	H
e - Holding time exceeded	215	6.0%	35.3%	L
e,b - Multiple Reasons	18	0.5%	3.0%	L
e,o - Multiple Reasons	1	0.0%	0.2%	L
f - Laboratory duplicate failed precision criteria	2	0.1%	0.3%	N
m,n - Multiple Reasons	1	0.0%	0.2%	N
n - Field duplicate precision problem	98	2.7%	16.1%	N
n,o - Multiple Reasons	3	0.1%	0.5%	N
o - Result reported exceeds calibration range	33	0.9%	5.4%	N

# Data Quality Summary

## Semivolatile Organics

	Data Points	% of Data	% of Qualified Data	Bias (low/none/high)
<b>TOTAL DATA POINTS:</b>	<b>263</b>	-	-	-
<b>TOTAL QUALIFIED DATA POINTS:</b>	<b>3</b>	<b>1.1%</b>	-	-
<b>TOTAL REJECTED DATA POINTS:</b>	<b>0</b>	<b>0.0%</b>	-	-
<b>Qualified/Rejected as a result of:</b>				
a - The analyte was found in the method blank	3	1.1%	100.0%	H

# Data Quality Summary

## Volatile Organics

	Data Points	% of Data	% of Qualified Data	Bias (low/none/high)
<b>TOTAL DATA POINTS:</b>	<b>3231</b>	-	-	-
<b>TOTAL QUALIFIED DATA POINTS:</b>	<b>375</b>	<b>11.6%</b>	-	-
<b>TOTAL REJECTED DATA POINTS:</b>	<b>0</b>	<b>0.0%</b>	-	-
<b>Qualified/Rejected as a result of:</b>				
p	- Sample was not properly collected, preserved or shipped	345	10.7%	92.0% L
n	- Field duplicate precision problem	12	0.4%	3.2% N
a	- The analyte was found in the method blank	7	0.2%	1.9% H
m	- Numerical value is between the MDL and RL	4	0.1%	1.1% N
m,p	- Multiple Reasons	3	0.1%	0.8% N
m,n	- Multiple Reasons	2	0.1%	0.5% N
k	- The analyte was found in the field blank	1	0.0%	0.3% H
c,f,n	- Multiple Reasons	1	0.0%	0.3% N

# Data Quality Summary

## Total Metals

	Data Points	% of Data	% of Qualified Data	Bias (low/none/high)
<b>TOTAL DATA POINTS:</b>	<b>1947</b>	-	-	-
<b>TOTAL QUALIFIED DATA POINTS:</b>	<b>204</b>	<b>10.5%</b>	-	-
<b>TOTAL REJECTED DATA POINTS:</b>	<b>4</b>	<b>0.2%</b>	-	-
<b>Qualified/Rejected as a result of:</b>				
t - Sample temperature outside acceptance criteria	138	7.1%	66.3%	L
m - Numerical value is between the MDL and RL	30	1.5%	14.4%	N
c - MS/MSD recovery outside control limits	13	0.7%	6.3%	L
n - Field duplicate precision problem	11	0.6%	5.3%	N
f - Laboratory duplicate failed precision criteria	9	0.5%	4.3%	N
f,n - Multiple Reasons	1	0.1%	0.5%	N
c - MS/MSD recovery outside control limits	1	0.1%	0.5%	H
a - The analyte was found in the method blank	1	0.1%	0.5%	H

# Data Quality Summary

## Total Organic Carbon

	Data Points	% of Data	% of Qualified Data	Bias (low/none/high)
<b>TOTAL DATA POINTS:</b>	92	-	-	-
<b>TOTAL QUALIFIED DATA POINTS:</b>	0	0.0%	-	-
<b>TOTAL REJECTED DATA POINTS:</b>	0	0.0%	-	-
<b>Qualified/Rejected as a result of:</b>				
No Qualified Data				

*Appendix E*

**Sample Table**  
**Qualified Data Tables**  
*by Data Quality Indicator and Analysis Type*

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

The following samples were collected and analyzed by all applicable methods:

Laboratory:	ARI	(Primary Laboratory)					
SDG:	DK21		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	1 Q Bias RC
Date Rec'd:	7/25/01						
Lab ID	Field ID	Field QC ID					
<b>BTEX</b>							
DK21A	01NE35GW102	QC Dup of 01NE35GW101	7/24/01	WX	2	NR*	none
DK21C	01NE35TB101	Trip Blank	7/24/01	WX	2	NR*	none
<b>Diesel / Residual Range Organics</b>							
DK21A	01NE35GW102	QC Dup of 01NE35GW101	7/24/01	WX	2.0	NR*	none
DK21ARE	01NE35GW102	QC Dup of 01NE35GW101	7/24/01	WX	2.0	NR*	none
<b>Dissolved Metals</b>							
DK21B	01NE35GW102	QC Dup of 01NE35GW101	7/24/01	WX	2	NR*	none
<b>Gasoline Range Organics</b>							
DK21A	01NE35GW102	QC Dup of 01NE35GW101	7/24/01	WX	2	NR*	none
DK21C	01NE35TB101	Trip Blank	7/24/01	WX	2	NR*	none
<b>Total Metals</b>							
DK21A	01NE35GW102	QC Dup of 01NE35GW101	7/24/01	WX	2	NR*	none
SDG:	DK48						
Date Rec'd:	7/27/01		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	1 Q Bias RC
Lab ID	Field ID	Field QC ID					
<b>BTEX</b>							
DK48A	01NE35GW101	Primary Sample	7/25/01	WX	2.0	NR*	none
DK48B	01NE35GW103		7/25/01	WX	2.0	NR*	none
DK48C	01NE35GW104		7/26/01	WX	2.0	NR*	none
DK48D	01NE35GW201	QC Dup of 01NE35GW101	7/25/01	WX	2.0	NR*	none
DK48E	01NE35TB102	Trip Blank	7/25/01	WX	2.0	NR*	none
<b>Diesel / Residual Range Organics</b>							
DK48A	01NE35GW101	Primary Sample	7/25/01	WX	2.0	NR*	none
DK48ARE	01NE35GW101	Primary Sample	7/25/01	WX	2.0	NR*	none
DK48B	01NE35GW103		7/25/01	WX	2.0	NR*	none
DK48BRE	01NE35GW103		7/25/01	WX	2.0	NR*	none
DK48C	01NE35GW104		7/26/01	WX	2.0	NR*	none
DK48CRE	01NE35GW104		7/26/01	WX	2.0	NR*	none
DK48D	01NE35GW201	QC Dup of 01NE35GW101	7/25/01	WX	2.0	NR*	none
DK48DRE	01NE35GW201		7/25/01	WX	2.0	NR*	none
<b>Dissolved Metals</b>							
DK48F	01NE35GW101	Primary Sample	7/25/01	WX	2.0	NR*	none
DK48G	01NE35GW103		7/25/01	WX	2.0	NR*	none
DK48H	01NE35GW104		7/26/01	WX	2.0	NR*	none

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)							
SDG:	DK48		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Date Rec'd:	7/27/01								
Lab ID	Field ID	Field QC ID							
<b>Gasoline Range Organics</b>									
DK48A	01NE35GW101	Primary Sample	7/25/01	WX	2.0	NR*	none		
DK48B	01NE35GW103		7/25/01	WX	2.0	NR*	none		
DK48C	01NE35GW104		7/26/01	WX	2.0	NR*	none		
DK48D	01NE35GW201	QC Dup of 01NE35GW101	7/25/01	WX	2.0	NR*	none		
DK48E	01NE35TB102	Trip Blank	7/25/01	WX	2.0	NR*	none		
<b>Total Metals</b>									
DK48A	01NE35GW101	Primary Sample	7/25/01	WX	2.0	NR*	none		
DK48B	01NE35GW103		7/25/01	WX	2.0	NR*	none		
DK48C	01NE35GW104		7/26/01	WX	2.0	NR*	none		
 <b>SDG: DN03</b>									
Date Rec'd:	8/21/01		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Lab ID	Field ID	Field QC ID							
<b>Diesel / Residual Range Organics</b>									
DN03A	01NE28SW115		8/19/01	WX	0.5	NR*	none		
DN03B	01NE28SW211	QC Dup of 01NE28SW111	8/18/01	WX	2.5	NR*	none		
DN03C	01NE28SW113		8/18/01	WX	2.5	NR*	none		
DN03D	01NE28SW111	Primary Sample	8/18/01	WX	1.5	NR*	none		
DN03E	01NE28SW112		8/18/01	WX	1.5	NR*	none		
DN03F	01NE28SW114		8/19/01	WX	1.5	NR*	none		
DN03G	01NE07SW104		8/19/01	WX	2.0	NR*	none		
DN03J	01NE07SW105		8/19/01	WX	1.0	NR*	none		
<b>Gasoline Range Organics</b>									
DN03H	01NE07SW104		8/19/01	WX	2.0	NR*	none		
DN03I	01NE00TB102	Trip Blank	8/19/01	WX	1.0	NR*	none		
DN03J	01NE07SW105		8/19/01	WX	1.0	NR*	none		
<b>Polychlorinated Biphenyls</b>									
DN03A	01NE28SW115		8/19/01	WX	0.5	NR*	none		
DN03B	01NE28SW211	QC Dup of 01NE28SW111	8/18/01	WX	2.5	NR*	none		
DN03C	01NE28SW113		8/18/01	WX	2.5	NR*	none		
DN03D	01NE28SW111	Primary Sample	8/18/01	WX	1.5	NR*	none		
DN03E	01NE28SW112		8/18/01	WX	1.5	NR*	none		
DN03F	01NE28SW114		8/19/01	WX	1.5	NR*	none		
DN03G	01NE07SW104		8/19/01	WX	2.0	NR*	none		
DN03J	01NE07SW105		8/19/01	WX	1.0	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN03G	01NE07SW104		8/19/01	WX	2.0	NR*	none		
DN03J	01NE07SW105		8/19/01	WX	1.0	NR*	none		
<b>Total Metals</b>									
DN03G	01NE07SW104		8/19/01	WX	2.0	NR*	none		
DN03J	01NE07SW105		8/19/01	WX	1.0	NR*	J/UJ	L	t

Prepared by **ETHIX**

3/19/02

E-1-2

Table 1 - Samples List

NE Cape HTRW - St. Lawrence Island

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

<b>Laboratory:</b>		<b>ARI</b>	<b>(Primary Laboratory)</b>		<b>Date Collected</b>	<b>Matrix</b>	<b>Temp Blank °C:</b>	<b>Cooler °C:</b>	<b>Q<sup>1</sup></b>	<b>Bias</b>	<b>RC</b>
<b>SDG:</b>	<b>DN03</b>	<b>Date Rec'd:</b>	<b>8/21/01</b>								
<b>Lab ID</b>	<b>Field ID</b>	<b>Field QC ID</b>									
<b>Volatile Organics</b>											
DN03H	01NE07SW104		8/19/01	WX	2.0	NR*	none				
DN03I	01NE00TB102	Trip Blank	8/19/01	WX	1.0	NR*	none				
DN03J	01NE07SW105		8/19/01	WX	1.0	NR*	none				
<b>SDG: DN04</b>											
<b>Date Rec'd:</b>	<b>8/21/01</b>		<b>Date Collected</b>	<b>Matrix</b>	<b>Temp Blank °C:</b>	<b>Cooler °C:</b>	<b>Q<sup>1</sup></b>				
<b>Lab ID</b>	<b>Field ID</b>	<b>Field QC ID</b>									
<b>Diesel / Residual Range Organics</b>											
DN04A	01NE28SD117		8/18/01	SX	2.0	NR*	none				
DN04B	01NE28SD118		8/18/01	SX	2.0	NR*	none				
DN04C	01NE28SD119		8/18/01	SX	2.0	NR*	none				
DN04D	01NE28SD120		8/18/01	SX	2.0	NR*	none				
DN04D-RE	01NE28SD120		8/18/01	SX	2.0	NR*	none				
DN04E	01NE28SD121		8/18/01	SX	2.0	NR*	none				
DN04F	01NE28SD122		8/18/01	SX	2.0	NR*	none				
DN04F-RE	01NE28SD122		8/18/01	SX	2.0	NR*	none				
DN04G	01NE28SD123		8/18/01	SX	1.0	NR*	none				
DN04G-RE	01NE28SD123		8/18/01	SX	1.0	NR*	none				
DN04H	01NE28SD124		8/18/01	SX	1.0	NR*	none				
DN04I	01NE28SD125	Primary Sample	8/18/01	SX	1.0	NR*	none				
DN04J	01NE28SD126		8/18/01	SX	1.0	NR*	none				
DN04K	01NE28SD127		8/18/01	SX	1.0	NR*	none				
DN04L	01NE28SD128		8/18/01	SX	1.0	NR*	none				
DN04M	01NE28SD225	QC Dup of 01NE28SD125	8/18/01	SX	1.0	NR*	none				
DN04N	01NE28SD129		8/18/01	SX	2.0	NR*	none				
DN04O	01NE28SD130		8/18/01	SX	2.0	NR*	none				
DN04P	01NE28SD131		8/18/01	SX	2.0	NR*	none				
DN04Q	01NE28SD132		8/18/01	SX	2.0	NR*	none				
DN04R	01NE28SD133		8/18/01	SX	2.0	NR*	none				
DN04S	01NE28SD134		8/18/01	SX	2.0	NR*	none				

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)									
SDG:	DN04										
Date Rec'd:	8/21/01		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC		
Lab ID	Field ID	Field QC ID									
<b>General Chemistry</b>											
DN04A	01NE28SD117		8/18/01	SX	2.0	NR*	none				
DN04B	01NE28SD118		8/18/01	SX	2.0	NR*	none				
DN04C	01NE28SD119		8/18/01	SX	2.0	NR*	none				
DN04D	01NE28SD120		8/18/01	SX	2.0	NR*	none				
DN04E	01NE28SD121		8/18/01	SX	2.0	NR*	none				
DN04F	01NE28SD122		8/18/01	SX	2.0	NR*	none				
DN04G	01NE28SD123		8/18/01	SX	1.0	NR*	none				
DN04H	01NE28SD124		8/18/01	SX	1.0	NR*	none				
DN04I	01NE28SD125	Primary Sample	8/18/01	SX	1.0	NR*	none				
DN04J	01NE28SD126		8/18/01	SX	1.0	NR*	none				
DN04K	01NE28SD127		8/18/01	SX	1.0	NR*	none				
DN04L	01NE28SD128		8/18/01	SX	1.0	NR*	none				
DN04N	01NE28SD129		8/18/01	SX	2.0	NR*	none				
DN04O	01NE28SD130		8/18/01	SX	2.0	NR*	none				
DN04P	01NE28SD131		8/18/01	SX	2.0	NR*	none				
DN04Q	01NE28SD132		8/18/01	SX	2.0	NR*	none				
DN04R	01NE28SD133		8/18/01	SX	2.0	NR*	none				
DN04S	01NE28SD134		8/18/01	SX	2.0	NR*	none				
<b>Polychlorinated Biphenyls</b>											
DN04A	01NE28SD117		8/18/01	SX	2.0	NR*	none				
DN04B	01NE28SD118		8/18/01	SX	2.0	NR*	none				
DN04C	01NE28SD119		8/18/01	SX	2.0	NR*	none				
DN04D	01NE28SD120		8/18/01	SX	2.0	NR*	none				
DN04E	01NE28SD121		8/18/01	SX	2.0	NR*	none				
DN04F	01NE28SD122		8/18/01	SX	2.0	NR*	none				
DN04G	01NE28SD123		8/18/01	SX	1.0	NR*	none				
DN04H	01NE28SD124		8/18/01	SX	1.0	NR*	none				
DN04I	01NE28SD125	Primary Sample	8/18/01	SX	1.0	NR*	none				
DN04J	01NE28SD126		8/18/01	SX	1.0	NR*	none				
DN04K	01NE28SD127		8/18/01	SX	1.0	NR*	none				
DN04L	01NE28SD128		8/18/01	SX	1.0	NR*	none				
DN04M	01NE28SD225	QC Dup of 01NE28SD125	8/18/01	SX	1.0	NR*	none				
DN04N	01NE28SD129		8/18/01	SX	2.0	NR*	none				
DN04O	01NE28SD130		8/18/01	SX	2.0	NR*	none				
DN04P	01NE28SD131		8/18/01	SX	2.0	NR*	none				
DN04P-RE	01NE28SD131		8/18/01	SX	2.0	NR*	none				
DN04Q	01NE28SD132		8/18/01	SX	2.0	NR*	none				
DN04R	01NE28SD133		8/18/01	SX	2.0	NR*	none				
DN04S	01NE28SD134		8/18/01	SX	2.0	NR*	none				

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN04								
Date Rec'd:	8/21/01								
Lab ID	Field ID	Field QC ID							
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN04A	01NE28SD117		8/18/01	SX	2.0	NR*	none		
DN04B	01NE28SD118		8/18/01	SX	2.0	NR*	none		
DN04C	01NE28SD119		8/18/01	SX	2.0	NR*	none		
DN04D	01NE28SD120		8/18/01	SX	2.0	NR*	none		
DN04D-DL	01NE28SD120		8/18/01	SX	2.0	NR*	none		
DN04E	01NE28SD121		8/18/01	SX	2.0	NR*	none		
DN04F	01NE28SD122		8/18/01	SX	2.0	NR*	none		
DN04G	01NE28SD123		8/18/01	SX	1.0	NR*	none		
DN04G-DL	01NE28SD123		8/18/01	SX	1.0	NR*	none		
DN04H	01NE28SD124		8/18/01	SX	1.0	NR*	none		
DN04H-DL	01NE28SD124		8/18/01	SX	1.0	NR*	none		
DN04I	01NE28SD125 Primary Sample		8/18/01	SX	1.0	NR*	none		
DN04I-DL	01NE28SD125 Primary Sample		8/18/01	SX	1.0	NR*	none		
DN04J	01NE28SD126		8/18/01	SX	1.0	NR*	none		
DN04K	01NE28SD127		8/18/01	SX	1.0	NR*	none		
DN04K-DL	01NE28SD127		8/18/01	SX	1.0	NR*	none		
DN04L	01NE28SD128		8/18/01	SX	1.0	NR*	none		
DN04M	01NE28SD225 QC Dup of 01NE28SD125		8/18/01	SX	1.0	NR*	none		
DN04M-DL	01NE28SD225 QC Dup of 01NE28SD125		8/18/01	SX	1.0	NR*	none		
DN04N	01NE28SD129		8/18/01	SX	2.0	NR*	none		
DN04N-DL	01NE28SD129		8/18/01	SX	2.0	NR*	none		
DN04O	01NE28SD130		8/18/01	SX	2.0	NR*	none		
DN04P	01NE28SD131		8/18/01	SX	2.0	NR*	none		
DN04Q	01NE28SD132		8/18/01	SX	2.0	NR*	none		
DN04R	01NE28SD133		8/18/01	SX	2.0	NR*	none		
DN04S	01NE28SD134		8/18/01	SX	2.0	NR*	none		
DN04S-RE	01NE28SD134		8/18/01	SX	2.0	NR*	none		
DN04S-REDL	01NE28SD134		8/18/01	SX	2.0	NR*	none		

**Table 1 - Samples List**

**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC								
SDG:	DN04																		
Date Rec'd:	8/21/01	Field ID	Field QC ID																
<b>Total Metals</b>																			
DN04A	01NE28SD117			8/18/01	SX	2.0	NR*	none											
DN04B	01NE28SD118			8/18/01	SX	2.0	NR*	none											
DN04C	01NE28SD119			8/18/01	SX	2.0	NR*	none											
DN04D	01NE28SD120			8/18/01	SX	2.0	NR*	none											
DN04E	01NE28SD121			8/18/01	SX	2.0	NR*	none											
DN04F	01NE28SD122			8/18/01	SX	2.0	NR*	none											
DN04G	01NE28SD123			8/18/01	SX	1.0	NR*	none											
DN04H	01NE28SD124			8/18/01	SX	1.0	NR*	none											
DN04I	01NE28SD125	Primary Sample		8/18/01	SX	1.0	NR*	none											
DN04J	01NE28SD126			8/18/01	SX	1.0	NR*	none											
DN04K	01NE28SD127			8/18/01	SX	1.0	NR*	none											
DN04L	01NE28SD128			8/18/01	SX	1.0	NR*	none											
DN04M	01NE28SD225	QC Dup of 01NE28SD125		8/18/01	SX	1.0	NR*	none											
DN04N	01NE28SD129			8/18/01	SX	2.0	NR*	none											
DN04O	01NE28SD130			8/18/01	SX	2.0	NR*	none											
DN04P	01NE28SD131			8/18/01	SX	2.0	NR*	none											
DN04Q	01NE28SD132			8/18/01	SX	2.0	NR*	none											
DN04R	01NE28SD133			8/18/01	SX	2.0	NR*	none											
DN04S	01NE28SD134			8/18/01	SX	2.0	NR*	none											
SDG:	DN05																		
Date Rec'd:	8/21/01																		
Lab ID	Field ID	Field QC ID		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC								
<b>Diesel / Residual Range Organics</b>																			
DN05A	01NE28SD153	Primary Sample		8/19/01	SX	5.5	NR*	none											
DN05B	01NE28SD154			8/19/01	SX	5.5	NR*	none											
DN05C	01NE28SD155			8/19/01	SX	5.5	NR*	none											
DN05D	01NE28SD156			8/19/01	SX	5.5	NR*	none											
DN05E	01NE28SD157	Primary Sample		8/19/01	SX	5.5	NR*	none											
DN05F	01NE28SD158			8/19/01	SX	5.5	NR*	none											
DN05G	01NE28SD253	QC Dup of 01NE28SD153		8/19/01	SX	5.5	NR*	none											
DN05H	01NE28SD257	QC Dup of 01NE28SD157		8/19/01	SX	5.5	NR*	none											
<b>General Chemistry</b>																			
DN05A	01NE28SD153	Primary Sample		8/19/01	SX	5.5	NR*	none											
DN05B	01NE28SD154			8/19/01	SX	5.5	NR*	none											
DN05C	01NE28SD155			8/19/01	SX	5.5	NR*	none											
DN05D	01NE28SD156			8/19/01	SX	5.5	NR*	none											
DN05E	01NE28SD157	Primary Sample		8/19/01	SX	5.5	NR*	none											
DN05F	01NE28SD158			8/19/01	SX	5.5	NR*	none											

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN05								
Date Rec'd:	8/21/01								
Lab ID	Field ID	Field QC ID							
<b>Polychlorinated Biphenyls</b>									
DN05A	01NE28SD153	Primary Sample	8/19/01	SX	5.5	NR*	none		
DN05B	01NE28SD154		8/19/01	SX	5.5	NR*	none		
DN05C	01NE28SD155		8/19/01	SX	5.5	NR*	none		
DN05D	01NE28SD156		8/19/01	SX	5.5	NR*	none		
DN05E	01NE28SD157	Primary Sample	8/19/01	SX	5.5	NR*	none		
DN05F	01NE28SD158		8/19/01	SX	5.5	NR*	none		
DN05G	01NE28SD253	QC Dup of 01NE28SD153	8/19/01	SX	5.5	NR*	none		
DN05H	01NE28SD257	QC Dup of 01NE28SD157	8/19/01	SX	5.5	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN05A	01NE28SD153	Primary Sample	8/19/01	SX	5.5	NR*	none		
DN05B	01NE28SD154		8/19/01	SX	5.5	NR*	none		
DN05B-DL	01NE28SD154		8/19/01	SX	5.5	NR*	none		
DN05C	01NE28SD155		8/19/01	SX	5.5	NR*	none		
DN05C-DL	01NE28SD155		8/19/01	SX	5.5	NR*	none		
DN05D	01NE28SD156		8/19/01	SX	5.5	NR*	none		
DN05D-DL	01NE28SD156		8/19/01	SX	5.5	NR*	none		
DN05E	01NE28SD157	Primary Sample	8/19/01	SX	5.5	NR*	none		
DN05F	01NE28SD158		8/19/01	SX	5.5	NR*	none		
DN05F-DL	01NE28SD158		8/19/01	SX	5.5	NR*	none		
DN05G	01NE28SD253	QC Dup of 01NE28SD153	8/19/01	SX	5.5	NR*	none		
DN05H	01NE28SD257	QC Dup of 01NE28SD157	8/19/01	SX	5.5	NR*	none		
<b>Total Metals</b>									
DN05A	01NE28SD153	Primary Sample	8/19/01	SX	5.5	NR*	none		
DN05B	01NE28SD154		8/19/01	SX	5.5	NR*	none		
DN05C	01NE28SD155		8/19/01	SX	5.5	NR*	none		
DN05D	01NE28SD156		8/19/01	SX	5.5	NR*	none		
DN05E	01NE28SD157	Primary Sample	8/19/01	SX	5.5	NR*	none		
DN05F	01NE28SD158		8/19/01	SX	5.5	NR*	none		
DN05G	01NE28SD253	QC Dup of 01NE28SD153	8/19/01	SX	5.5	NR*	none		
DN05H	01NE28SD257	QC Dup of 01NE28SD157	8/19/01	SX	5.5	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN06								
Date Rec'd:	8/21/01								
Lab ID	Field ID	Field QC ID							
<b>Diesel / Residual Range Organics</b>									
DN06A	01NE28SD135		8/19/01	SX	3.5	NR*	none		
DN06B	01NE28SD136		8/19/01	SX	3.5	NR*	none		
DN06C	01NE28SD137		8/19/01	SX	3.5	NR*	none		
DN06D	01NE28SD138		8/19/01	SX	3.5	NR*	none		
DN06E	01NE28SD139	Primary Sample	8/19/01	SX	3.5	NR*	none		
DN06F	01NE28SD140		8/19/01	SX	3.5	NR*	none		
DN06G	01NE28SD239	QC Dup of 01NE28SD139	8/19/01	SX	3.5	NR*	none		
DN06H	01NE28SD141		8/19/01	SX	1.5	NR*	none		
DN06I	01NE28SD142		8/19/01	SX	1.5	NR*	none		
DN06J	01NE28SD143		8/19/01	SX	1.5	NR*	none		
DN06K	01NE28SD144		8/19/01	SX	1.5	NR*	none		
DN06L	01NE28SD145		8/19/01	SX	1.5	NR*	none		
DN06M	01NE28SD146		8/19/01	SX	1.5	NR*	none		
DN06N	01NE28SD147		8/19/01	SX	5.0	NR*	none		
DN06O	01NE28SD148		8/19/01	SX	5.0	NR*	none		
DN06P	01NE28SD149		8/19/01	SX	5.0	NR*	none		
DN06Q	01NE28SD150		8/19/01	SX	5.0	NR*	none		
DN06R	01NE28SD151	Primary Sample	8/19/01	SX	5.0	NR*	none		
DN06S	01NE28SD251	QC Dup of 01NE28SD151	8/19/01	SX	5.0	NR*	none		
DN06T	01NE28SD152		8/19/01	SX	5.0	NR*	none		
<b>General Chemistry</b>									
DN06A	01NE28SD135		8/19/01	SX	3.5	NR*	none		
DN06B	01NE28SD136		8/19/01	SX	3.5	NR*	none		
DN06C	01NE28SD137		8/19/01	SX	3.5	NR*	none		
DN06D	01NE28SD138		8/19/01	SX	3.5	NR*	none		
DN06E	01NE28SD139	Primary Sample	8/19/01	SX	3.5	NR*	none		
DN06F	01NE28SD140		8/19/01	SX	3.5	NR*	none		
DN06H	01NE28SD141		8/19/01	SX	1.5	NR*	none		
DN06I	01NE28SD142		8/19/01	SX	1.5	NR*	none		
DN06J	01NE28SD143		8/19/01	SX	1.5	NR*	none		
DN06K	01NE28SD144		8/19/01	SX	1.5	NR*	none		
DN06L	01NE28SD145		8/19/01	SX	1.5	NR*	none		
DN06M	01NE28SD146		8/19/01	SX	1.5	NR*	none		
DN06N	01NE28SD147		8/19/01	SX	5.0	NR*	none		
DN06O	01NE28SD148		8/19/01	SX	5.0	NR*	none		
DN06P	01NE28SD149		8/19/01	SX	5.0	NR*	none		
DN06Q	01NE28SD150		8/19/01	SX	5.0	NR*	none		
DN06R	01NE28SD151	Primary Sample	8/19/01	SX	5.0	NR*	none		
DN06T	01NE28SD152		8/19/01	SX	5.0	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN06								
Date Rec'd:	8/21/01								
Lab ID	Field ID	Field QC ID							
<b>Polychlorinated Biphenyls</b>									
DN06A	01NE28SD135		8/19/01	SX	3.5	NR*	none		
DN06B	01NE28SD136		8/19/01	SX	3.5	NR*	none		
DN06C	01NE28SD137		8/19/01	SX	3.5	NR*	none		
DN06D	01NE28SD138		8/19/01	SX	3.5	NR*	none		
DN06E	01NE28SD139	Primary Sample	8/19/01	SX	3.5	NR*	none		
DN06F	01NE28SD140		8/19/01	SX	3.5	NR*	none		
DN06G	01NE28SD239	QC Dup of 01NE28SD139	8/19/01	SX	3.5	NR*	none		
DN06H	01NE28SD141		8/19/01	SX	1.5	NR*	none		
DN06I	01NE28SD142		8/19/01	SX	1.5	NR*	none		
DN06J	01NE28SD143		8/19/01	SX	1.5	NR*	none		
DN06K	01NE28SD144		8/19/01	SX	1.5	NR*	none		
DN06L	01NE28SD145		8/19/01	SX	1.5	NR*	none		
DN06M	01NE28SD146		8/19/01	SX	1.5	NR*	none		
DN06N	01NE28SD147		8/19/01	SX	5.0	NR*	none		
DN06O	01NE28SD148		8/19/01	SX	5.0	NR*	none		
DN06P	01NE28SD149		8/19/01	SX	5.0	NR*	none		
DN06Q	01NE28SD150		8/19/01	SX	5.0	NR*	none		
DN06R	01NE28SD151	Primary Sample	8/19/01	SX	5.0	NR*	none		
DN06S	01NE28SD251	QC Dup of 01NE28SD151	8/19/01	SX	5.0	NR*	none		
DN06T	01NE28SD152		8/19/01	SX	5.0	NR*	none		

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	1	Q	Bias	RC
SDG:	DN06									
Date Rec'd:	8/21/01									
<b>Polynuclear Aromatic Hydrocarbons</b>										
DN06A	01NE28SD135		8/19/01	SX	3.5	NR*			none	
DN06B	01NE28SD136		8/19/01	SX	3.5	NR*			none	
DN06C	01NE28SD137		8/19/01	SX	3.5	NR*			none	
DN06C-DL	01NE28SD137		8/19/01	SX	3.5	NR*			none	
DN06D	01NE28SD138		8/19/01	SX	3.5	NR*			none	
DN06D-DL	01NE28SD138		8/19/01	SX	3.5	NR*			none	
DN06E	01NE28SD139	Primary Sample	8/19/01	SX	3.5	NR*			none	
DN06E-DL	01NE28SD139	Primary Sample	8/19/01	SX	3.5	NR*			none	
DN06F	01NE28SD140		8/19/01	SX	3.5	NR*			none	
DN06G	01NE28SD239	QC Dup of 01NE28SD139	8/19/01	SX	3.5	NR*			none	
DN06G-DL	01NE28SD239	QC Dup of 01NE28SD139	8/19/01	SX	3.5	NR*			none	
DN06H	01NE28SD141		8/19/01	SX	1.5	NR*			none	
DN06H-DL	01NE28SD141		8/19/01	SX	1.5	NR*			none	
DN06H-RE	01NE28SD141		8/19/01	SX	1.5	NR*			none	
DN06I	01NE28SD142		8/19/01	SX	1.5	NR*			none	
DN06I-DL	01NE28SD142		8/19/01	SX	1.5	NR*			none	
DN06J	01NE28SD143		8/19/01	SX	1.5	NR*			none	
DN06J-DL	01NE28SD143		8/19/01	SX	1.5	NR*			none	
DN06K	01NE28SD144		8/19/01	SX	1.5	NR*			none	
DN06K-DL	01NE28SD144		8/19/01	SX	1.5	NR*			none	
DN06L	01NE28SD145		8/19/01	SX	1.5	NR*			none	
DN06L-DL	01NE28SD145		8/19/01	SX	1.5	NR*			none	
DN06L-RE	01NE28SD145		8/19/01	SX	1.5	NR*			none	
DN06M	01NE28SD146		8/19/01	SX	1.5	NR*			none	
DN06M-DL	01NE28SD146		8/19/01	SX	1.5	NR*			none	
DN06N	01NE28SD147		8/19/01	SX	5.0	NR*			none	
DN06O	01NE28SD148		8/19/01	SX	5.0	NR*			none	
DN06O-DL	01NE28SD148		8/19/01	SX	5.0	NR*			none	
DN06P	01NE28SD149		8/19/01	SX	5.0	NR*			none	
DN06Q	01NE28SD150		8/19/01	SX	5.0	NR*			none	
DN06Q-RE	01NE28SD150		8/19/01	SX	5.0	NR*			none	
DN06Q-REDL	01NE28SD150		8/19/01	SX	5.0	NR*			none	
DN06R	01NE28SD151	Primary Sample	8/19/01	SX	5.0	NR*			none	
DN06S	01NE28SD251	QC Dup of 01NE28SD151	8/19/01	SX	5.0	NR*			none	
DN06T	01NE28SD152		8/19/01	SX	5.0	NR*			none	

**Table 1 - Samples List**

**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC
SDG:	DN06	Date Rec'd:	8/21/01								
Lab ID	Field ID	Field QC ID									
<b>Total Metals</b>											
DN06A	01NE28SD135			8/19/01	SX	3.5	NR*	none			
DN06B	01NE28SD136			8/19/01	SX	3.5	NR*	none			
DN06C	01NE28SD137			8/19/01	SX	3.5	NR*	none			
DN06D	01NE28SD138			8/19/01	SX	3.5	NR*	none			
DN06E	01NE28SD139	Primary Sample		8/19/01	SX	3.5	NR*	none			
DN06F	01NE28SD140			8/19/01	SX	3.5	NR*	none			
DN06G	01NE28SD239	QC Dup of 01NE28SD139		8/19/01	SX	3.5	NR*	none			
DN06H	01NE28SD141			8/19/01	SX	1.5	NR*	none			
DN06I	01NE28SD142			8/19/01	SX	1.5	NR*	none			
DN06J	01NE28SD143			8/19/01	SX	1.5	NR*	none			
DN06K	01NE28SD144			8/19/01	SX	1.5	NR*	none			
DN06L	01NE28SD145			8/19/01	SX	1.5	NR*	none			
DN06M	01NE28SD146			8/19/01	SX	1.5	NR*	none			
DN06N	01NE28SD147			8/19/01	SX	5.0	NR*	none			
DN06O	01NE28SD148			8/19/01	SX	5.0	NR*	none			
DN06P	01NE28SD149			8/19/01	SX	5.0	NR*	none			
DN06Q	01NE28SD150			8/19/01	SX	5.0	NR*	none			
DN06R	01NE28SD151	Primary Sample		8/19/01	SX	5.0	NR*	none			
DN06S	01NE28SD251	QC Dup of 01NE28SD151		8/19/01	SX	5.0	NR*	none			
DN06T	01NE28SD152			8/19/01	SX	5.0	NR*	none			
SDG:	DN07										
Date Rec'd:	8/21/01										
Lab ID	Field ID	Field QC ID		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC
<b>BTEX</b>											
DN07K	01NE06SD116			8/18/01	SX	1.0	NR*	none			
DN07L	01NE06SD117			8/18/01	SX	1.0	NR*	none			
DN07M	01NE00TB101	Trip Blank		8/18/01	SX	1.0	NR*	none			

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC
SDG:	DN07	Date Rec'd:	8/21/01								
Lab ID	Field ID	Field QC ID									
<b>Diesel / Residual Range Organics</b>											
DN07A	01NE06TP101	Primary Sample		8/18/01	SX	1.0	NR*	none			
DN07B	01NE06TP201	QC Dup of 01NE06TP101		8/18/01	SX	1.0	NR*	none			
DN07C	01NE06TP102			8/18/01	SX	1.0	NR*	none			
DN07D	01NE28SD111	Primary Sample		8/18/01	SX	1.0	NR*	none			
DN07E	01NE28SD211	QC Dup of 01NE28SD111		8/18/01	SX	1.0	NR*	none			
DN07F	01NE28SD112			8/18/01	SX	1.0	NR*	none			
DN07G	01NE28SD113			8/18/01	SX	1.0	NR*	none			
DN07H	01NE28SD114			8/18/01	SX	1.0	NR*	none			
DN07I	01NE28SD115			8/18/01	SX	1.0	NR*	none			
DN07J	01NE28SD116			8/18/01	SX	1.0	NR*	none			
DN07K	01NE06SD116			8/18/01	SX	1.0	NR*	none			
DN07L	01NE06SD117			8/18/01	SX	1.0	NR*	none			
DN07M	01NE00TB101	Trip Blank		8/18/01	SX	1.0	NR*	none			
<b>Gasoline Range Organics</b>											
DN07K	01NE06SD116			8/18/01	SX	1.0	NR*	none			
DN07L	01NE06SD117			8/18/01	SX	1.0	NR*	none			
DN07M	01NE00TB101	Trip Blank		8/18/01	SX	1.0	NR*	none			
<b>General Chemistry</b>											
DN07A	01NE06TP101	Primary Sample		8/18/01	SX	1.0	NR*	none			
DN07C	01NE06TP102			8/18/01	SX	1.0	NR*	none			
DN07D	01NE28SD111	Primary Sample		8/18/01	SX	1.0	NR*	none			
DN07F	01NE28SD112			8/18/01	SX	1.0	NR*	none			
DN07G	01NE28SD113			8/18/01	SX	1.0	NR*	none			
DN07H	01NE28SD114			8/18/01	SX	1.0	NR*	none			
DN07I	01NE28SD115			8/18/01	SX	1.0	NR*	none			
DN07J	01NE28SD116			8/18/01	SX	1.0	NR*	none			

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)							
SDG:	DN07		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Date Rec'd:	8/21/01								
Lab ID	Field ID	Field QC ID							
<b>Polychlorinated Biphenyls</b>									
DN07D	01NE28SD111	Primary Sample	8/18/01	SX	1.0	NR*	none		
DN07E	01NE28SD211	QC Dup of 01NE28SD111	8/18/01	SX	1.0	NR*	none		
DN07F	01NE28SD112		8/18/01	SX	1.0	NR*	none		
DN07G	01NE28SD113		8/18/01	SX	1.0	NR*	none		
DN07G-RE	01NE28SD113		8/18/01	SX	1.0	NR*	none		
DN07H	01NE28SD114		8/18/01	SX	1.0	NR*	none		
DN07I	01NE28SD115		8/18/01	SX	1.0	NR*	none		
DN07J	01NE28SD116		8/18/01	SX	1.0	NR*	none		
DN07K	01NE06SD116		8/18/01	SX	1.0	NR*	none		
DN07L	01NE06SD117		8/18/01	SX	1.0	NR*	none		
DN07N	01NE07SS125		8/19/01	SX	1.0	NR*	none		
DN07O	01NE07SS126		8/19/01	SX	1.0	NR*	none		
DN07P	01NE07SS127		8/19/01	SX	1.0	NR*	none		
DN07P-DL	01NE07SS127		8/19/01	SX	1.0	NR*	none		
DN07Q	01NE07SD105		8/19/01	SX	1.0	NR*	none		
DN07R	01NE07SD104		8/19/01	SX	1.0	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN07D	01NE28SD111	Primary Sample	8/18/01	SX	1.0	NR*	none		
DN07E	01NE28SD211	QC Dup of 01NE28SD111	8/18/01	SX	1.0	NR*	none		
DN07F	01NE28SD112		8/18/01	SX	1.0	NR*	none		
DN07G	01NE28SD113		8/18/01	SX	1.0	NR*	none		
DN07H	01NE28SD114		8/18/01	SX	1.0	NR*	none		
DN07I	01NE28SD115		8/18/01	SX	1.0	NR*	none		
DN07I-DL	01NE28SD115		8/18/01	SX	1.0	NR*	none		
DN07J	01NE28SD116		8/18/01	SX	1.0	NR*	none		
DN07N	01NE07SS125		8/19/01	SX	1.0	NR*	none		
DN07O	01NE07SS126		8/19/01	SX	1.0	NR*	none		
DN07P	01NE07SS127		8/19/01	SX	1.0	NR*	none		
DN07Q	01NE07SD105		8/19/01	SX	1.0	NR*	none		
DN07R	01NE07SD104		8/19/01	SX	1.0	NR*	none		

**Table 1 - Samples List**

**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)								
SDG:	DN07		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC
Lab ID	Field ID	Field QC ID								
<b>Total Metals</b>										
DN07D	01NE28SD111	Primary Sample	8/18/01	SX	1.0	NR*	none			
DN07E	01NE28SD211	QC Dup of 01NE28SD111	8/18/01	SX	1.0	NR*	none			
DN07F	01NE28SD112		8/18/01	SX	1.0	NR*	none			
DN07G	01NE28SD113		8/18/01	SX	1.0	NR*	none			
DN07H	01NE28SD114		8/18/01	SX	1.0	NR*	none			
DN07I	01NE28SD115		8/18/01	SX	1.0	NR*	none			
DN07J	01NE28SD116		8/18/01	SX	1.0	NR*	none			
DN07K	01NE06SD116		8/18/01	SX	1.0	NR*	none			
DN07L	01NE06SD117		8/18/01	SX	1.0	NR*	none			
DN07N	01NE07SS125		8/19/01	SX	1.0	NR*	none			
DN07O	01NE07SS126		8/19/01	SX	1.0	NR*	none			
DN07P	01NE07SS127		8/19/01	SX	1.0	NR*	none			
DN07Q	01NE07SD105		8/19/01	SX	1.0	NR*	none			
DN07R	01NE07SD104		8/19/01	SX	1.0	NR*	none			
<b>Volatile Organics</b>										
DN07N	01NE07SS125		8/19/01	SX	1.0	NR*	none			
DN07O	01NE07SS126		8/19/01	SX	1.0	NR*	none			
DN07P	01NE07SS127		8/19/01	SX	1.0	NR*	none			
DN07Q	01NE07SD105		8/19/01	SX	1.0	NR*	none			
DN07R	01NE07SD104		8/19/01	SX	1.0	NR*	none			
SDG:	DY42		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC
Date Rec'd:	8/21/01									
Lab ID	Field ID	Field QC ID								
<b>Total Metals</b>										
DY42A	01NE06SD116		8/18/01	SX	1.0	NR*	none			
DY42B	01NE06SD117		8/18/01	SX	1.0	NR*	none			
DY42C	01NE07SS126		8/19/01	SX	1.0	NR*	none			
DY42D	01NE07SD105		8/19/01	SX	1.0	NR*	none			
DY42E	01NE07SD104		8/19/01	SX	1.0	NR*	none			
SDG:	DN36		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC
Date Rec'd:	8/24/01									
Lab ID	Field ID	Field QC ID								
<b>Diesel / Residual Range Organics</b>										
DN36A	01NE29SW117	Primary Sample	8/20/01	WX	2.5	NR*	none			
DN36B	01NE29SW217	QC Dup of 01NE29SW117	8/20/01	WX	2.0	NR*	none			
DN36C	01NE29SW116		8/21/01	WX	1.5	NR*	none			
DN36D	01NE29SW115		8/21/01	WX	2.5	NR*	none			
DN36E	01NE29SW114		8/21/01	WX	2.5	NR*	none			
DN36F	01NE28SW116		8/20/01	WX	2.0	NR*	none			

Prepared by ETHIX

3/19/02

Table 1 - Samples List

E-1-14

NE Cape HTRW - St. Lawrence Island

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN36								
Date Rec'd:	8/24/01								
Lab ID	Field ID	Field QC ID							
<b>Gasoline Range Organics</b>									
DN36G	01NE29SW116		8/21/01	WX	2.0	NR*	none		
DN36H	01NE00TB103	Trip Blank	8/20/01	WX	2.0	NR*	none		
DN36I	01NE29SW117	Primary Sample	8/20/01	WX	2.0	NR*	none		
DN36J	01NE29SW217	QC Dup of 01NE29SW117	8/20/01	WX	2.0	NR*	none		
DN36K	01NE29SW115		8/20/01	WX	2.0	NR*	none		
DN36L	01NE29SW114		8/20/01	WX	2.0	NR*	none		
<b>Polychlorinated Biphenyls</b>									
DN36A	01NE29SW117	Primary Sample	8/20/01	WX	2.5	NR*	none		
DN36B	01NE29SW217	QC Dup of 01NE29SW117	8/20/01	WX	2.0	NR*	none		
DN36C	01NE29SW116		8/21/01	WX	1.5	NR*	none		
DN36D	01NE29SW115		8/21/01	WX	2.5	NR*	none		
DN36E	01NE29SW114		8/21/01	WX	2.5	NR*	none		
DN36F	01NE28SW116		8/20/01	WX	2.0	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN36A	01NE29SW117	Primary Sample	8/20/01	WX	3.5	NR*	none		
DN36B	01NE29SW217	QC Dup of 01NE29SW117	8/20/01	WX	2.0	NR*	none		
DN36C	01NE29SW116		8/21/01	WX	1.5	NR*	none		
DN36D	01NE29SW115		8/21/01	WX	2.5	NR*	none		
DN36E	01NE29SW114		8/21/01	WX	2.5	NR*	none		
<b>Total Metals</b>									
DN36A	01NE29SW117	Primary Sample	8/20/01	WX	3.5	NR*	none		
DN36B	01NE29SW217	QC Dup of 01NE29SW117	8/20/01	WX	2.0	NR*	none		
DN36C	01NE29SW116		8/21/01	WX	1.5	NR*	J/UJ	L	t
DN36D	01NE29SW115		8/21/01	WX	2.5	NR*	none		
DN36E	01NE29SW114		8/21/01	WX	2.5	NR*	none		
<b>Volatile Organics</b>									
DN36G	01NE29SW116		8/21/01	WX	2.0	NR*	none		
DN36H	01NE00TB103	Trip Blank	8/20/01	WX	2.0	NR*	none		
DN36I	01NE29SW117	Primary Sample	8/20/01	WX	2.0	NR*	none		
DN36J	01NE29SW217	QC Dup of 01NE29SW117	8/20/01	WX	2.0	NR*	none		
DN36K	01NE29SW115		8/20/01	WX	2.0	NR*	none		
DN36L	01NE29SW114		8/20/01	WX	2.0	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC							
SDG:	DN38																
Date Rec'd:	8/24/01																
Lab ID	Field ID	Field QC ID															
<b>Diesel / Residual Range Organics</b>																	
DN38A	01NE29SD114	Primary Sample		8/21/01	SX	3.5	NR*	none									
DN38B	01NE29SD214	QC Dup of 01NE29SD114		8/21/01	SX	3.5	NR*	none									
DN38C	01NE29SD115			8/21/01	SX	3.5	NR*	none									
DN38D	01NE29SD116			8/21/01	SX	3.5	NR*	none									
DN38E	01NE29SD117			8/21/01	SX	3.5	NR*	none									
DN38F	01NE29SD118			8/21/01	SX	3.5	NR*	none									
DN38G	01NE29SD119			8/21/01	SX	3.5	NR*	none									
DN38H	01NE28SD165			8/20/01	SX	0.5	NR*	none									
DN38I	01NE28SD166			8/20/01	SX	0.5	NR*	none									
DN38J	01NE28SD167			8/20/01	SX	0.5	NR*	none									
DN38K	01NE28SD168			8/20/01	SX	0.5	NR*	none									
DN38L	01NE28SD169			8/20/01	SX	0.5	NR*	none									
DN38M	01NE28SD170			8/20/01	SX	0.5	NR*	none									
<b>General Chemistry</b>																	
DN38A	01NE29SD114	Primary Sample		8/21/01	SX	3.5	NR*	none									
DN38C	01NE29SD115			8/21/01	SX	3.5	NR*	none									
DN38D	01NE29SD116			8/21/01	SX	3.5	NR*	none									
DN38E	01NE29SD117			8/21/01	SX	3.5	NR*	none									
DN38F	01NE29SD118			8/21/01	SX	3.5	NR*	none									
DN38G	01NE29SD119			8/21/01	SX	3.5	NR*	none									
DN38H	01NE28SD165			8/20/01	SX	0.5	NR*	none									
DN38I	01NE28SD166			8/20/01	SX	0.5	NR*	none									
DN38J	01NE28SD167			8/20/01	SX	0.5	NR*	none									
DN38K	01NE28SD168			8/20/01	SX	0.5	NR*	none									
DN38L	01NE28SD169			8/20/01	SX	0.5	NR*	none									
DN38M	01NE28SD170			8/20/01	SX	0.5	NR*	none									
<b>Polychlorinated Biphenyls</b>																	
DN38A	01NE29SD114	Primary Sample		8/21/01	SX	3.5	NR*	none									
DN38B	01NE29SD214	QC Dup of 01NE29SD114		8/21/01	SX	3.5	NR*	none									
DN38C	01NE29SD115			8/21/01	SX	3.5	NR*	none									
DN38D	01NE29SD116			8/21/01	SX	3.5	NR*	none									
DN38E	01NE29SD117			8/21/01	SX	3.5	NR*	none									
DN38F	01NE29SD118			8/21/01	SX	3.5	NR*	none									
DN38G	01NE29SD119			8/21/01	SX	3.5	NR*	none									
DN38H	01NE28SD165			8/20/01	SX	0.5	NR*	none									
DN38I	01NE28SD166			8/20/01	SX	0.5	NR*	none									
DN38J	01NE28SD167			8/20/01	SX	0.5	NR*	none									
DN38K	01NE28SD168			8/20/01	SX	0.5	NR*	none									
DN38L	01NE28SD169			8/20/01	SX	0.5	NR*	none									
DN38M	01NE28SD170			8/20/01	SX	0.5	NR*	none									

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)									
SDG:	DN38										
Date Rec'd:	8/24/01		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	1	Q	Bias	RC	
Lab ID	Field ID	Field QC ID									
<b>Polynuclear Aromatic Hydrocarbons</b>											
DN38A	01NE29SD114	Primary Sample	8/21/01	SX	3.5	NR*					
DN38B	01NE29SD214	QC Dup of 01NE29SD114	8/21/01	SX	3.5	NR*					
DN38C	01NE29SD115		8/21/01	SX	3.5	NR*					
DN38D	01NE29SD116		8/21/01	SX	3.5	NR*					
DN38E	01NE29SD117		8/21/01	SX	3.5	NR*					
DN38F	01NE29SD118		8/21/01	SX	3.5	NR*					
DN38G	01NE29SD119		8/21/01	SX	3.5	NR*					
DN38H	01NE28SD165		8/20/01	SX	0.5	NR*					
DN38I	01NE28SD166		8/20/01	SX	0.5	NR*					
DN38J	01NE28SD167		8/20/01	SX	0.5	NR*					
DN38K	01NE28SD168		8/20/01	SX	0.5	NR*					
DN38L	01NE28SD169		8/20/01	SX	0.5	NR*					
DN38M	01NE28SD170		8/20/01	SX	0.5	NR*					
<b>Total Metals</b>											
DN38A	01NE29SD114	Primary Sample	8/21/01	SX	3.5	NR*					
DN38B	01NE29SD214	QC Dup of 01NE29SD114	8/21/01	SX	3.5	NR*					
DN38C	01NE29SD115		8/21/01	SX	3.5	NR*					
DN38D	01NE29SD116		8/21/01	SX	3.5	NR*					
DN38E	01NE29SD117		8/21/01	SX	3.5	NR*					
DN38F	01NE29SD118		8/21/01	SX	3.5	NR*					
DN38G	01NE29SD119		8/21/01	SX	3.5	NR*					
DN38H	01NE28SD165		8/20/01	SX	0.5	NR*					
DN38I	01NE28SD166		8/20/01	SX	0.5	NR*					
DN38J	01NE28SD167		8/20/01	SX	0.5	NR*					
DN38K	01NE28SD168		8/20/01	SX	0.5	NR*					
DN38L	01NE28SD169		8/20/01	SX	0.5	NR*					
DN38M	01NE28SD170		8/20/01	SX	0.5	NR*					

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN39								
Date Rec'd:	8/24/01								
Lab ID	Field ID	Field QC ID							
<b>Diesel / Residual Range Organics</b>									
DN39A	01NE28SD159		8/20/01	SX	1.5	NR*	none		
DN39B	01NE28SD160		8/20/01	SX	1.5	NR*	none		
DN39B-DL	01NE28SD160		8/20/01	SX	1.5	NR*	none		
DN39C	01NE28SD161		8/20/01	SX	1.5	NR*	none		
DN39C-DL	01NE28SD161		8/20/01	SX	1.5	NR*	none		
DN39D	01NE28SD163 Primary Sample		8/20/01	SX	1.5	NR*	none		
DN39D-DL	01NE28SD163 Primary Sample		8/20/01	SX	1.5	NR*	none		
DN39E	01NE28SD164		8/20/01	SX	1.5	NR*	none		
DN39E-DL	01NE28SD164		8/20/01	SX	1.5	NR*	none		
DN39F	01NE28SD263 QC Dup of 01NE28SD163		8/20/01	SX	1.5	NR*	none		
DN39F-DL	01NE28SD263 QC Dup of 01NE28SD163		8/20/01	SX	1.5	NR*	none		
DN39G	01NE28SD171 Primary Sample		8/20/01	SX	3.5	NR*	none		
DN39H	01NE28SD172		8/20/01	SX	3.5	NR*	none		
DN39H-DL	01NE28SD172		8/20/01	SX	3.5	NR*	none		
DN39I	01NE28SD173		8/20/01	SX	3.5	NR*	none		
DN39J	01NE28SD174		8/20/01	SX	3.5	NR*	none		
DN39K	01NE28SD175 Primary Sample		8/20/01	SX	3.5	NR*	none		
DN39L	01NE28SD176		8/20/01	SX	3.5	NR*	none		
DN39M	01NE28SD271 QC Dup of 01NE28SD171		8/20/01	SX	3.5	NR*	none		
DN39N	01NE28SD275 QC Dup of 01NE28SD175		8/20/01	SX	3.5	NR*	none		
DN39O	01NE28SD177		8/20/01	SX	1.5	NR*	none		
DN39P	01NE28SD178		8/20/01	SX	1.5	NR*	none		
DN39P-DL	01NE28SD178		8/20/01	SX	1.5	NR*	none		
DN39Q	01NE28SD179		8/20/01	SX	1.5	NR*	none		
DN39R	01NE28SD180		8/20/01	SX	1.5	NR*	none		
DN39S	01NE28SD181		8/20/01	SX	1.5	NR*	none		
DN39T	01NE28SD182		8/20/01	SX	1.5	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
SDG:	DN39								
Date Rec'd:	8/24/01								
Lab ID	Field ID	Field QC ID							
<b>General Chemistry</b>									
DN39A	01NE28SD159		8/20/01	SX	1.5	NR*	none		
DN39B	01NE28SD160		8/20/01	SX	1.5	NR*	none		
DN39C	01NE28SD161		8/20/01	SX	1.5	NR*	none		
DN39D	01NE28SD163	Primary Sample	8/20/01	SX	1.5	NR*	none		
DN39E	01NE28SD164		8/20/01	SX	1.5	NR*	none		
DN39G	01NE28SD171	Primary Sample	8/20/01	SX	3.5	NR*	none		
DN39H	01NE28SD172		8/20/01	SX	3.5	NR*	none		
DN39I	01NE28SD173		8/20/01	SX	3.5	NR*	none		
DN39J	01NE28SD174		8/20/01	SX	3.5	NR*	none		
DN39K	01NE28SD175	Primary Sample	8/20/01	SX	3.5	NR*	none		
DN39L	01NE28SD176		8/20/01	SX	3.5	NR*	none		
DN39O	01NE28SD177		8/20/01	SX	1.5	NR*	none		
DN39P	01NE28SD178		8/20/01	SX	1.5	NR*	none		
DN39Q	01NE28SD179		8/20/01	SX	1.5	NR*	none		
DN39R	01NE28SD180		8/20/01	SX	1.5	NR*	none		
DN39S	01NE28SD181		8/20/01	SX	1.5	NR*	none		
DN39T	01NE28SD182		8/20/01	SX	1.5	NR*	none		
<b>Polychlorinated Biphenyls</b>									
DN39A	01NE28SD159		8/20/01	SX	1.5	NR*	none		
DN39B	01NE28SD160		8/20/01	SX	1.5	NR*	none		
DN39C	01NE28SD161		8/20/01	SX	1.5	NR*	none		
DN39D	01NE28SD163	Primary Sample	8/20/01	SX	1.5	NR*	none		
DN39E	01NE28SD164		8/20/01	SX	1.5	NR*	none		
DN39F	01NE28SD263	QC Dup of 01NE28SD163	8/20/01	SX	1.5	NR*	none		
DN39G	01NE28SD171	Primary Sample	8/20/01	SX	3.5	NR*	none		
DN39H	01NE28SD172		8/20/01	SX	3.5	NR*	none		
DN39I	01NE28SD173		8/20/01	SX	3.5	NR*	none		
DN39J	01NE28SD174		8/20/01	SX	3.5	NR*	none		
DN39K	01NE28SD175	Primary Sample	8/20/01	SX	3.5	NR*	none		
DN39L	01NE28SD176		8/20/01	SX	3.5	NR*	none		
DN39M	01NE28SD271	QC Dup of 01NE28SD171	8/20/01	SX	3.5	NR*	none		
DN39N	01NE28SD275	QC Dup of 01NE28SD175	8/20/01	SX	3.5	NR*	none		
DN39O	01NE28SD177		8/20/01	SX	1.5	NR*	none		
DN39P	01NE28SD178		8/20/01	SX	1.5	NR*	none		
DN39Q	01NE28SD179		8/20/01	SX	1.5	NR*	none		
DN39R	01NE28SD180		8/20/01	SX	1.5	NR*	none		
DN39S	01NE28SD181		8/20/01	SX	1.5	NR*	none		
DN39T	01NE28SD182		8/20/01	SX	1.5	NR*	none		

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	1	Q	Bias	RC
SDG:	DN39									
Date Rec'd:	8/24/01									
Lab ID	Field ID	Field QC ID								
<b>Polynuclear Aromatic Hydrocarbons</b>										
DN39A	01NE28SD159		8/20/01	SX	1.5	NR*				
DN39B	01NE28SD160		8/20/01	SX	1.5	NR*				
DN39C	01NE28SD161		8/20/01	SX	1.5	NR*				
DN39C-DL	01NE28SD161		8/20/01	SX	1.5	NR*				
DN39D	01NE28SD163	Primary Sample	8/20/01	SX	1.5	NR*				
DN39E	01NE28SD164		8/20/01	SX	1.5	NR*				
DN39F	01NE28SD263	QC Dup of 01NE28SD163	8/20/01	SX	1.5	NR*				
DN39G	01NE28SD171	Primary Sample	8/20/01	SX	3.5	NR*				
DN39H	01NE28SD172		8/20/01	SX	3.5	NR*				
DN39I	01NE28SD173		8/20/01	SX	3.5	NR*				
DN39J	01NE28SD174		8/20/01	SX	3.5	NR*				
DN39K	01NE28SD175	Primary Sample	8/20/01	SX	3.5	NR*				
DN39K-RE	01NE28SD175	Primary Sample	8/20/01	SX	3.5	NR*				
DN39L	01NE28SD176		8/20/01	SX	3.5	NR*				
DN39M	01NE28SD271	QC Dup of 01NE28SD171	8/20/01	SX	3.5	NR*				
DN39N	01NE28SD275	QC Dup of 01NE28SD175	8/20/01	SX	3.5	NR*				
DN39O	01NE28SD177		8/20/01	SX	1.5	NR*				
DN39P	01NE28SD178		8/20/01	SX	1.5	NR*				
DN39Q	01NE28SD179		8/20/01	SX	1.5	NR*				
DN39R	01NE28SD180		8/20/01	SX	1.5	NR*				
DN39S	01NE28SD181		8/20/01	SX	1.5	NR*				
DN39T	01NE28SD182		8/20/01	SX	1.5	NR*				
DN39T-DL	01NE28SD182		8/20/01	SX	1.5	NR*				

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
SDG:	DN39	Date Rec'd:	8/24/01							
Lab ID	Field ID	Field QC ID								
<b>Total Metals</b>										
DN39A	01NE28SD159			8/20/01	SX	1.5	NR*	none		
DN39B	01NE28SD160			8/20/01	SX	1.5	NR*	none		
DN39C	01NE28SD161			8/20/01	SX	1.5	NR*	none		
DN39D	01NE28SD163	Primary Sample		8/20/01	SX	1.5	NR*	none		
DN39E	01NE28SD164			8/20/01	SX	1.5	NR*	none		
DN39F	01NE28SD263	QC Dup of 01NE28SD163		8/20/01	SX	1.5	NR*	none		
DN39G	01NE28SD171	Primary Sample		8/20/01	SX	3.5	NR*	none		
DN39H	01NE28SD172			8/20/01	SX	3.5	NR*	none		
DN39I	01NE28SD173			8/20/01	SX	3.5	NR*	none		
DN39J	01NE28SD174			8/20/01	SX	3.5	NR*	none		
DN39K	01NE28SD175	Primary Sample		8/20/01	SX	3.5	NR*	none		
DN39L	01NE28SD176			8/20/01	SX	3.5	NR*	none		
DN39M	01NE28SD271	QC Dup of 01NE28SD171		8/20/01	SX	3.5	NR*	none		
DN39N	01NE28SD275	QC Dup of 01NE28SD175		8/20/01	SX	3.5	NR*	none		
DN39O	01NE28SD177			8/20/01	SX	1.5	NR*	none		
DN39P	01NE28SD178			8/20/01	SX	1.5	NR*	none		
DN39Q	01NE28SD179			8/20/01	SX	1.5	NR*	none		
DN39R	01NE28SD180			8/20/01	SX	1.5	NR*	none		
DN39S	01NE28SD181			8/20/01	SX	1.5	NR*	none		
DN39T	01NE28SD182			8/20/01	SX	1.5	NR*	none		
 <b>SDG: DN40</b>										
Date Rec'd:	8/24/01			Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Lab ID	Field ID	Field QC ID								
<b>BTEX</b>										
DN40J	01NE29SD128			8/21/01	SX	3.5	NR*	none		
DN40K	01NE29SD129			8/21/01	SX	3.5	NR*	none		
DN40L	01NE00TB104	Trip Blank		8/21/01	SX	3.5	NR*	none		
DN40M	01NE29SD127			8/21/01	SX	3.5	NR*	none		
DN40N	01NE29SD126			8/21/01	SX	3.5	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN40								
Date Rec'd:	8/24/01								
<b>Diesel / Residual Range Organics</b>									
DN40A	01NE29SD123		8/21/01	SX	1.5	NR*	none		
DN40A-RE	01NE29SD123		8/21/01	SX	1.5	NR*	none		
DN40B	01NE29SD124		8/21/01	SX	1.5	NR*	none		
DN40B-RE	01NE29SD124		8/21/01	SX	1.5	NR*	none		
DN40C	01NE29SD125	Primary Sample	8/21/01	SX	1.5	NR*	none		
DN40C-RE	01NE29SD125	Primary Sample	8/21/01	SX	1.5	NR*	none		
DN40D	01NE29SD225	QC Dup of 01NE29SD125	8/21/01	SX	1.5	NR*	none		
DN40D-RE	01NE29SD225	QC Dup of 01NE29SD125	8/21/01	SX	1.5	NR*	none		
DN40E	01NE29SD128		8/21/01	SX	1.5	NR*	none		
DN40E-RE	01NE29SD128		8/21/01	SX	1.5	NR*	none		
DN40F	01NE29SD129		8/21/01	SX	1.5	NR*	none		
DN40F-RE	01NE29SD129		8/21/01	SX	1.5	NR*	none		
DN40G	01NE29SD120		8/21/01	SX	3.5	NR*	none		
DN40G-RE	01NE29SD120		8/21/01	SX	3.5	NR*	none		
DN40H	01NE29SD121		8/21/01	SX	3.5	NR*	none		
DN40H-RE	01NE29SD121		8/21/01	SX	3.5	NR*	none		
DN40I	01NE29SD122		8/21/01	SX	3.5	NR*	none		
DN40I-RE	01NE29SD122		8/21/01	SX	3.5	NR*	none		
DN40M	01NE29SD127		8/21/01	SX	3.5	NR*	none		
DN40M-RE	01NE29SD127		8/21/01	SX	3.5	NR*	none		
DN40N	01NE29SD126		8/21/01	SX	3.5	NR*	none		
DN40N-RE	01NE29SD126		8/21/01	SX	3.5	NR*	none		
<b>Gasoline Range Organics</b>									
DN40J	01NE29SD128		8/21/01	SX	3.5	NR*	none		
DN40K	01NE29SD129		8/21/01	SX	3.5	NR*	none		
DN40L	01NE00TB104	Trip Blank	8/21/01	SX	3.5	NR*	none		
DN40M	01NE29SD127		8/21/01	SX	3.5	NR*	none		
DN40N	01NE29SD126		8/21/01	SX	3.5	NR*	none		
<b>General Chemistry</b>									
DN40A	01NE29SD123		8/21/01	SX	1.5	NR*	none		
DN40B	01NE29SD124		8/21/01	SX	1.5	NR*	none		
DN40C	01NE29SD125	Primary Sample	8/21/01	SX	1.5	NR*	none		
DN40G	01NE29SD120		8/21/01	SX	3.5	NR*	none		
DN40H	01NE29SD121		8/21/01	SX	3.5	NR*	none		
DN40I	01NE29SD122		8/21/01	SX	3.5	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	1	Q	Bias	RC
<b>SDG: DN40</b>										
Date Rec'd:	8/24/01									
Lab ID	Field ID	Field QC ID								
<b>Polychlorinated Biphenyls</b>										
DN40A	01NE29SD123		8/21/01	SX	1.5	NR*				
DN40A-RE	01NE29SD123		8/21/01	SX	1.5	NR*				
DN40B	01NE29SD124		8/21/01	SX	1.5	NR*				
DN40B-RE	01NE29SD124		8/21/01	SX	1.5	NR*				
DN40C	01NE29SD125	Primary Sample	8/21/01	SX	1.5	NR*				
DN40C-RE	01NE29SD125	Primary Sample	8/21/01	SX	1.5	NR*				
DN40D	01NE29SD225	QC Dup of 01NE29SD125	8/21/01	SX	1.5	NR*				
DN40D-RE	01NE29SD225	QC Dup of 01NE29SD125	8/21/01	SX	1.5	NR*				
DN40E	01NE29SD128		8/21/01	SX	1.5	NR*				
DN40E-RE	01NE29SD128		8/21/01	SX	1.5	NR*				
DN40F	01NE29SD129		8/21/01	SX	1.5	NR*				
DN40F-RE	01NE29SD129		8/21/01	SX	1.5	NR*				
DN40G	01NE29SD120		8/21/01	SX	3.5	NR*				
DN40G-RE	01NE29SD120		8/21/01	SX	3.5	NR*				
DN40H	01NE29SD121		8/21/01	SX	3.5	NR*				
DN40H-RE	01NE29SD121		8/21/01	SX	3.5	NR*				
DN40I	01NE29SD122		8/21/01	SX	3.5	NR*				
DN40I-RE	01NE29SD122		8/21/01	SX	3.5	NR*				
DN40M	01NE29SD127		8/21/01	SX	3.5	NR*				
DN40M-RE	01NE29SD127		8/21/01	SX	3.5	NR*				
DN40N	01NE29SD126		8/21/01	SX	3.5	NR*				
DN40N-RE	01NE29SD126		8/21/01	SX	3.5	NR*				
<b>Polynuclear Aromatic Hydrocarbons</b>										
DN40A	01NE29SD123		8/21/01	SX	1.5	NR*				
DN40B	01NE29SD124		8/21/01	SX	1.5	NR*				
DN40C	01NE29SD125	Primary Sample	8/21/01	SX	1.5	NR*				
DN40C-RE	01NE29SD125	Primary Sample	8/21/01	SX	1.5	NR*				
DN40D	01NE29SD225	QC Dup of 01NE29SD125	8/21/01	SX	1.5	NR*				
DN40E	01NE29SD128		8/21/01	SX	1.5	NR*				
DN40E-RE	01NE29SD128		8/21/01	SX	1.5	NR*				
DN40F	01NE29SD129		8/21/01	SX	1.5	NR*				
DN40G	01NE29SD120		8/21/01	SX	3.5	NR*				
DN40H	01NE29SD121		8/21/01	SX	3.5	NR*				
DN40I	01NE29SD122		8/21/01	SX	3.5	NR*				
DN40M	01NE29SD127		8/21/01	SX	3.5	NR*				
DN40N	01NE29SD126		8/21/01	SX	3.5	NR*				
DN40N-RE	01NE29SD126		8/21/01	SX	3.5	NR*				

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC
SDG:	DN40	Date Rec'd:	8/24/01								
Lab ID	Field ID	Field QC ID									
<b>Total Metals</b>											
DN40A	01NE29SD123			8/21/01	SX	1.5	NR*	none			
DN40B	01NE29SD124			8/21/01	SX	1.5	NR*	none			
DN40C	01NE29SD125	Primary Sample		8/21/01	SX	1.5	NR*	none			
DN40D	01NE29SD225	QC Dup of 01NE29SD125		8/21/01	SX	1.5	NR*	none			
DN40E	01NE29SD128			8/21/01	SX	1.5	NR*	none			
DN40F	01NE29SD129			8/21/01	SX	1.5	NR*	none			
DN40G	01NE29SD120			8/21/01	SX	3.5	NR*	none			
DN40H	01NE29SD121			8/21/01	SX	3.5	NR*	none			
DN40I	01NE29SD122			8/21/01	SX	3.5	NR*	none			
DN40M	01NE29SD127			8/21/01	SX	3.5	NR*	none			
DN40N	01NE29SD126			8/21/01	SX	3.5	NR*	none			
SDG:	DY41										
Date Rec'd:	8/24/01										
Lab ID	Field ID	Field QC ID		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC
<b>Total Metals</b>											
DY41A	01NE29SD128			8/21/01	SX	1.5	NR*	none			
DY41B	01NE29SD129			8/21/01	SX	1.5	NR*	none			
DY41C	01NE29SD127			8/21/01	SX	3.5	NR*	none			
DY41D	01NE29SD126			8/21/01	SX	3.5	NR*	none			
SDG:	DN53										
Date Rec'd:	8/25/01										
Lab ID	Field ID	Field QC ID		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	1	Bias	RC
<b>Diesel / Residual Range Organics</b>											
DN53A	01NE09SW109			8/23/01	WX	1.5	NR*	none			
DN53A-RE	01NE09SW109			8/23/01	WX	1.5	NR*	none			
DN53B	01NE09SW107	Primary Sample		8/23/01	WX	2.0	NR*	none			
DN53B-RE	01NE09SW107	Primary Sample		8/23/01	WX	2.0	NR*	none			
DN53F	01NE09SW207	QC Dup of 01NE09SW107		8/23/01	WX	2.0	NR*	none			
DN53F-RE	01NE09SW207	QC Dup of 01NE09SW107		8/23/01	WX	2.0	NR*	none			
DN53G	01NE09SW108			8/23/01	WX	0.5	NR*	none			
DN53G-RE	01NE09SW108			8/23/01	WX	0.5	NR*	none			
<b>Gasoline Range Organics</b>											
DN53J	01NE09SW207	QC Dup of 01NE09SW207		8/23/01	WX	0.5	NR*	none			
DN53K	01NE09SW109			8/23/01	WX	0.5	NR*	none			
DN53L	01NE09SW108			8/23/01	WX	0.5	NR*	none			
DN53M	01NE09SW107	Primary Sample		8/23/01	WX	0.5	NR*	none			
DN53N	01NE00TB108	Trip Blank		8/23/01	WX	0.5	NR*	none			

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
SDG:	DN53								
Date Rec'd:	8/25/01								
Lab ID	Field ID	Field QC ID							
<b>Polychlorinated Biphenyls</b>									
DN53A	01NE09SW109		8/23/01	WX	1.5	NR*	none		
DN53B	01NE09SW107	Primary Sample	8/23/01	WX	2.0	NR*	none		
DN53F	01NE09SW207	QC Dup of 01NE09SW107	8/23/01	WX	2.0	NR*	none		
DN53G	01NE09SW108		8/23/01	WX	0.5	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN53A	01NE09SW109		8/23/01	WX	1.5	NR*	none		
DN53B	01NE09SW107	Primary Sample	8/23/01	WX	2.0	NR*	none		
DN53F	01NE09SW207	QC Dup of 01NE09SW107	8/23/01	WX	2.0	NR*	none		
DN53G	01NE09SW108		8/23/01	WX	0.5	NR*	none		
DN53I	01NE16GW103		8/23/01	WX	0.5	NR*	none		
<b>Semivolatile Organics</b>									
DN53C	01NE16GW101	Primary Sample	8/23/01	WX	-0.5	NR*	none		
DN53D	01NE16GW201	QC Dup of 01NE16GW101	8/23/01	WX	-0.5	NR*	none		
DN53E	01NE16GW102		8/23/01	WX	-0.5	NR*	none		
<b>Total Metals</b>									
DN53A	01NE09SW109		8/23/01	WX	1.5	NR*	J/UJ	L	t
DN53F	01NE09SW207	QC Dup of 01NE09SW107	8/23/01	WX	2.0	NR*	none		
DN53G	01NE09SW108		8/23/01	WX	0.5	NR*	J/UJ	L	t
DN53H	01NE09SW107	Primary Sample	8/23/01	WX	0.5	NR*	J/UJ	L	t
<b>Volatile Organics</b>									
DN53J	01NE09SW207	QC Dup of 01NE09SW207	8/23/01	WX	0.5	NR*	none		
DN53K	01NE09SW109		8/23/01	WX	0.5	NR*	none		
DN53L	01NE09SW108		8/23/01	WX	0.5	NR*	none		
DN53M	01NE09SW107	Primary Sample	8/23/01	WX	0.5	NR*	none		
DN53N	01NE00TB108	Trip Blank	8/23/01	WX	0.5	NR*	none		
DN53O	TRIP BLANK	Trip Blank	8/23/01	WX	NR*	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN55								
Date Rec'd:	8/25/01								
<b>Diesel / Residual Range Organics</b>									
DN55A	01NE33SS101		8/23/01	SX	-0.5	NR*	none		
DN55B	01NE33SS102		8/23/01	SX	-0.5	NR*	none		
DN55C	01NE33SS103		8/23/01	SX	-0.5	NR*	none		
DN55D	01NE34SS101		8/23/01	SX	-0.5	NR*	none		
DN55E	01NE34SS102		8/23/01	SX	-0.5	NR*	none		
DN55F	01NE34SS103		8/23/01	SX	-0.5	NR*	none		
DN55G	01NE34SS105		8/23/01	SX	-0.5	NR*	none		
DN55H	01NE34SS106		8/23/01	SX	-0.5	NR*	none		
DN55H-DL	01NE34SS106		8/23/01	SX	-0.5	NR*	none		
DN55I	01NE34SS107		8/23/01	SX	-0.5	NR*	none		
DN55J	01NE34SS108		8/23/01	SX	-0.5	NR*	none		
DN55K	01NE34SS109		8/23/01	SX	-0.5	NR*	none		
DN55L	01NE34SS110		8/23/01	SX	-0.5	NR*	none		
DN55M	01NE34SS111		8/23/01	SX	-0.5	NR*	none		
<b>General Chemistry</b>									
DN55I	01NE34SS107		8/23/01	SX	-0.5	NR*	none		
DN55J	01NE34SS108		8/23/01	SX	-0.5	NR*	none		
DN55K	01NE34SS109		8/23/01	SX	-0.5	NR*	none		
DN55L	01NE34SS110		8/23/01	SX	-0.5	NR*	none		
<b>Polychlorinated Biphenyls</b>									
DN55A	01NE33SS101		8/23/01	SX	-0.5	NR*	none		
DN55B	01NE33SS102		8/23/01	SX	-0.5	NR*	none		
DN55C	01NE33SS103		8/23/01	SX	-0.5	NR*	none		
DN55D	01NE34SS101		8/23/01	SX	-0.5	NR*	none		
DN55E	01NE34SS102		8/23/01	SX	-0.5	NR*	none		
DN55F	01NE34SS103		8/23/01	SX	-0.5	NR*	none		
DN55I	01NE34SS107		8/23/01	SX	-0.5	NR*	none		
DN55J	01NE34SS108		8/23/01	SX	-0.5	NR*	none		
DN55K	01NE34SS109		8/23/01	SX	-0.5	NR*	none		
DN55L	01NE34SS110		8/23/01	SX	-0.5	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN55D	01NE34SS101		8/23/01	SX	-0.5	NR*	none		
DN55D-RE	01NE34SS101		8/23/01	SX	-0.5	NR*	none		
DN55E	01NE34SS102		8/23/01	SX	-0.5	NR*	none		
DN55F	01NE34SS103		8/23/01	SX	-0.5	NR*	none		
DN55M	01NE34SS111		8/23/01	SX	-0.5	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
SDG:	DN68	Date Rec'd:	8/28/01							
Lab ID	Field ID	Field QC ID								
<b>BTEX</b>										
DN68A	01NE21SS169	Primary Sample		8/24/01	SX	2.5	NR*	none		
DN68B	01NE21SS269	QC Dup of 01NE21SS169		8/24/01	SX	2.5	NR*	none		
DN68K	01NE09SS171			8/24/01	SX	2.5	NR*	none		
DN68L	01NE00TB111	Trip Blank		8/24/01	SX	2.5	NR*	none		
<b>Diesel / Residual Range Organics</b>										
DN68A	01NE21SS169	Primary Sample		8/24/01	SX	2.5	NR*	none		
DN68B	01NE21SS269	QC Dup of 01NE21SS169		8/24/01	SX	2.5	NR*	none		
DN68F	01NE09SD114			8/24/01	SX	2.5	NR*	none		
DN68F-RE	01NE09SD114			8/24/01	SX	2.5	NR*	none		
DN68N	01NE31SS101			8/24/01	SX	1.0	NR*	none		
DN68O	01NE31SS102	Primary Sample		8/24/01	SX	1.0	NR*	none		
DN68Q	01NE31SS103			8/24/01	SX	1.0	NR*	none		
DN68R	01NE31SS104			8/24/01	SX	1.0	NR*	none		
DN68S	01NE32SS101			8/24/01	SX	1.0	NR*	none		
DN68T	01NE32SS102			8/24/01	SX	1.0	NR*	none		
DN68U	01NE32SS103			8/24/01	SX	1.0	NR*	none		
DN68V	01NE32SS104			8/24/01	SX	1.0	NR*	none		
<b>Gasoline Range Organics</b>										
DN68A	01NE21SS169	Primary Sample		8/24/01	SX	2.5	NR*	none		
DN68B	01NE21SS269	QC Dup of 01NE21SS169		8/24/01	SX	2.5	NR*	none		
DN68G	01NE09SD113	Primary Sample		8/24/01	SX	2.5	NR*	none		
DN68K	01NE09SS171			8/24/01	SX	2.5	NR*	none		
DN68L	01NE00TB111	Trip Blank		8/24/01	SX	2.5	NR*	none		
<b>General Chemistry</b>										
DN68F	01NE09SD114			8/24/01	SX	2.5	NR*	none		
<b>Organochlorine Pesticides / PCBs</b>										
DN68N	01NE31SS101			8/24/01	SX	1.0	NR*	none		
DN68N-DL	01NE31SS101			8/24/01	SX	1.0	NR*	none		
DN68O	01NE31SS102	Primary Sample		8/24/01	SX	1.0	NR*	none		
DN68O-DL	01NE31SS102	Primary Sample		8/24/01	SX	1.0	NR*	none		
DN68P	01NE31SS202	QC Dup of 01NE31SS102		8/24/01	SX	1.0	NR*	none		
DN68P-DL	01NE31SS202	QC Dup of 01NE31SS102		8/24/01	SX	1.0	NR*	none		
DN68Q	01NE31SS103			8/24/01	SX	1.0	NR*	none		
DN68Q-DL	01NE31SS103			8/24/01	SX	1.0	NR*	none		
DN68R	01NE31SS104			8/24/01	SX	1.0	NR*	none		
DN68R-DL	01NE31SS104			8/24/01	SX	1.0	NR*	none		
DN68U	01NE32SS103			8/24/01	SX	1.0	NR*	none		
DN68V	01NE32SS104			8/24/01	SX	1.0	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)							
SDG:	DN68		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Date Rec'd:	8/28/01								
Lab ID	Field ID	Field QC ID							
<b>Polychlorinated Biphenyls</b>									
DN68A	01NE21SS169	Primary Sample	8/24/01	SX	2.5	NR*	none		
DN68B	01NE21SS269	QC Dup of 01NE21SS169	8/24/01	SX	2.5	NR*	none		
DN68F	01NE09SD114		8/24/01	SX	2.5	NR*	none		
DN68M	01NE34SS104		8/23/01	SX	1.0	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN68F	01NE09SD114		8/24/01	SX	2.5	NR*	none		
<b>Total Metals</b>									
DN68A	01NE21SS169	Primary Sample	8/24/01	SX	2.5	NR*	none		
DN68B	01NE21SS269	QC Dup of 01NE21SS169	8/24/01	SX	2.5	NR*	none		
DN68F	01NE09SD114		8/24/01	SX	2.5	NR*	none		
<b>Volatile Organics</b>									
DN68C	01NE09SD108		8/23/01	SX	2.5	NR*	none		
DN68D	01NE09SD109		8/23/01	SX	2.5	NR*	none		
DN68E	01NE09SD107		8/23/01	SX	2.5	NR*	none		
DN68F	01NE09SD114		8/24/01	SX	2.5	NR*	none		
DN68G	01NE09SD113	Primary Sample	8/24/01	SX	2.5	NR*	none		
DN68H	01NE09SD213	QC Dup of 01NE09SD113	8/24/01	SX	2.5	NR*	none		
DN68L	01NE00TB111	Trip Blank	8/24/01	SX	2.5	NR*	none		
 <b>SDG: DN69</b>									
Date Rec'd:	8/28/01		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Lab ID	Field ID	Field QC ID							
<b>BTEX</b>									
DN69N	01NE31SS121	Primary Sample	8/24/01	SX	2.5	NR*	none		
DN69O	01NE31SS122		8/24/01	SX	2.5	NR*	none		
DN69P	01NE31SS123		8/24/01	SX	2.5	NR*	none		
DN69Q	01NE31SS124		8/24/01	SX	2.5	NR*	none		
DN69R	01NE31SS221	QC Dup of 01NE31SS121	8/24/01	SX	2.5	NR*	none		
DN69S	01NE00TB114	Trip Blank	8/24/01	SX	2.5	NR*	none		

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	1 Q	Bias	RC
SDG:	DN69								
Date Rec'd:	8/28/01								
<b>Diesel / Residual Range Organics</b>									
DN69A	01NE21SB169		8/24/01	SX	3.5	NR*	none		
DN69B	01NE21SB170		8/24/01	SX	3.5	NR*	none		
DN69C	01NE21SS170		8/24/01	SX	3.5	NR*	none		
DN69D	01NE21SB171		8/24/01	SX	3.5	NR*	none		
DN69E	01NE21SS171		8/24/01	SX	3.5	NR*	none		
DN69F	01NE21SS172		8/24/01	SX	3.5	NR*	none		
DN69G	01NE21SS173		8/24/01	SX	3.5	NR*	none		
DN69H	01NE21SD113		8/24/01	SX	3.5	NR*	none		
DN69I	01NE21SD114		8/24/01	SX	3.5	NR*	none		
DN69N	01NE31SS121	Primary Sample	8/24/01	SX	2.5	NR*	none		
DN69O	01NE31SS122		8/24/01	SX	2.5	NR*	none		
DN69P	01NE31SS123		8/24/01	SX	2.5	NR*	none		
DN69Q	01NE31SS124		8/24/01	SX	2.5	NR*	none		
DN69R	01NE31SS221	QC Dup of 01NE31SS121	8/24/01	SX	2.5	NR*	none		
<b>Gasoline Range Organics</b>									
DN69N	01NE31SS121	Primary Sample	8/24/01	SX	2.5	NR*	none		
DN69O	01NE31SS122		8/24/01	SX	2.5	NR*	none		
DN69P	01NE31SS123		8/24/01	SX	2.5	NR*	none		
DN69Q	01NE31SS124		8/24/01	SX	2.5	NR*	none		
DN69R	01NE31SS221	QC Dup of 01NE31SS121	8/24/01	SX	2.5	NR*	none		
DN69S	01NE00TB114	Trip Blank	8/24/01	SX	2.5	NR*	none		
<b>Organochlorine Pesticides / PCBs</b>									
DN69N	01NE31SS121	Primary Sample	8/24/01	SX	2.5	NR*	none		
DN69O	01NE31SS122		8/24/01	SX	2.5	NR*	none		
DN69O-DL	01NE31SS122		8/24/01	SX	2.5	NR*	none		
DN69P	01NE31SS123		8/24/01	SX	2.5	NR*	none		
DN69P-DL	01NE31SS123		8/24/01	SX	2.5	NR*	none		
DN69Q	01NE31SS124		8/24/01	SX	2.5	NR*	none		
<b>Polychlorinated Biphenyls</b>									
DN69A	01NE21SB169		8/24/01	SX	3.5	NR*	none		
DN69B	01NE21SB170		8/24/01	SX	3.5	NR*	none		
DN69C	01NE21SS170		8/24/01	SX	3.5	NR*	none		
DN69D	01NE21SB171		8/24/01	SX	3.5	NR*	none		
DN69E	01NE21SS171		8/24/01	SX	3.5	NR*	none		
DN69F	01NE21SS172		8/24/01	SX	3.5	NR*	none		
DN69G	01NE21SS173		8/24/01	SX	3.5	NR*	none		
DN69H	01NE21SD113		8/24/01	SX	3.5	NR*	none		
DN69I	01NE21SD114		8/24/01	SX	3.5	NR*	none		
DN69J	01NE14SS101		8/24/01	SX	3.5	NR*	none		
DN69K	01NE14SS102		8/24/01	SX	3.5	NR*	none		
DN69K-DL	01NE14SS102		8/24/01	SX	3.5	NR*	none		
DN69L	01NE14SS103	Primary Sample	8/24/01	SX	3.5	NR*	none		
DN69M	01NE14SS203	QC Dup of 01NE14SS103	8/24/01	SX	3.5	NR*	none		

Prepared by ETHIX

3/19/02

E-1-29

Table 1 - Samples List

NE Cape HTRW - St. Lawrence Island

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)							
SDG:	DN69								
Date Rec'd:	8/28/01	Date Collected		Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Lab ID	Field ID	Field QC ID							
<b>Total Metals</b>									
DN69A	01NE21SB169		8/24/01	SX	3.5	NR*	none		
DN69B	01NE21SB170		8/24/01	SX	3.5	NR*	none		
DN69C	01NE21SS170		8/24/01	SX	3.5	NR*	none		
DN69D	01NE21SB171		8/24/01	SX	3.5	NR*	none		
DN69E	01NE21SS171		8/24/01	SX	3.5	NR*	none		
DN69F	01NE21SS172		8/24/01	SX	3.5	NR*	none		
DN69G	01NE21SS173		8/24/01	SX	3.5	NR*	none		
DN69H	01NE21SD113		8/24/01	SX	3.5	NR*	none		
DN69I	01NE21SD114		8/24/01	SX	3.5	NR*	none		
 <b>SDG: DN70</b>									
Date Rec'd:	8/28/01	Date Collected		Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Lab ID	Field ID	Field QC ID							
<b>BTEX</b>									
DN70A	01NE21SB170		8/24/01	SX	5.0	NR*	none		
DN70B	01NE21SS170		8/24/01	SX	5.0	NR*	none		
DN70C	01NE24SD114	Primary Sample	8/24/01	SX	5.0	NR*	none		
DN70D	01NE21SD113		8/24/01	SX	5.0	NR*	none		
DN70E	01NE24SD214	QC Dup of 01NE24SD114	8/24/01	SX	5.0	NR*	none		
DN70F	01NE21SB169		8/24/01	SX	5.0	NR*	none		
DN70G	01NE21SB171		8/24/01	SX	5.0	NR*	none		
DN70H	01NE21SS172		8/24/01	SX	5.0	NR*	none		
DN70I	01NE21SD114		8/24/01	SX	5.0	NR*	none		
DN70J	01NE21SS173		8/24/01	SX	5.0	NR*	none		
DN70K	01NE24SD115		8/24/01	SX	5.0	NR*	none		
DN70L	01NE00TB109	Trip Blank	8/24/01	SX	5.0	NR*	none		
<b>Gasoline Range Organics</b>									
DN70A	01NE21SB170		8/24/01	SX	5.0	NR*	none		
DN70B	01NE21SS170		8/24/01	SX	5.0	NR*	none		
DN70C	01NE24SD114	Primary Sample	8/24/01	SX	5.0	NR*	none		
DN70D	01NE21SD113		8/24/01	SX	5.0	NR*	none		
DN70E	01NE24SD214	QC Dup of 01NE24SD114	8/24/01	SX	5.0	NR*	none		
DN70F	01NE21SB169		8/24/01	SX	5.0	NR*	none		
DN70G	01NE21SB171		8/24/01	SX	5.0	NR*	none		
DN70H	01NE21SS172		8/24/01	SX	5.0	NR*	none		
DN70I	01NE21SD114		8/24/01	SX	5.0	NR*	none		
DN70J	01NE21SS173		8/24/01	SX	5.0	NR*	none		
DN70K	01NE24SD115		8/24/01	SX	5.0	NR*	none		
DN70L	01NE00TB109	Trip Blank	8/24/01	SX	5.0	NR*	none		

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN71								
Date Rec'd:	8/28/01								
Lab ID	Field ID	Field QC ID							
<b>BTEX</b>									
DN71A	01NE09SW112		8/26/01	WX	1.5	NR*	none		
<b>Diesel / Residual Range Organics</b>									
DN71A	01NE09SW112		8/26/01	WX	1.5	NR*	none		
DN71B	01NE09WP102		8/26/01	WX	1.5	NR*	none		
DN71C	01NE06SW116		8/26/01	WX	1.5	NR*	none		
DN71D	01NE09MW103		8/26/01	WX	1.5	NR*	none		
DN71D-RE	01NE09MW103		8/26/01	WX	1.5	NR*	none		
DN71E	01NE09SW111		8/26/01	WX	2.5	NR*	none		
DN71F	01NE24SW114 Primary Sample		8/24/01	WX	6.5	NR*	none		
DN71G	01NE24SW214 QC Dup of 01NE24SW114		8/24/01	WX	6.5	NR*	none		
DN71H	01NE03WP102		8/25/01	WX	3.5	NR*	none		
DN71I	01NE03WP103		8/25/01	WX	3.5	NR*	none		
DN71J	01NE03WP104		8/25/01	WX	3.5	NR*	none		
DN71M	01NE21SW113 Primary Sample		8/24/01	WX	4.5	NR*	none		
DN71N	01NE21SW213 QC Dup of 01NE21SW113		8/24/01	WX	4.5	NR*	none		
DN71P	01NE09SW110		8/25/01	WX	3.0	NR*	none		
<b>Gasoline Range Organics</b>									
DN71A	01NE09SW112		8/26/01	WX	1.5	NR*	none		
DN71Q	01NE09WP102		8/26/01	WX	3.0	NR*	none		
DN71R	01NE09MW103		8/26/01	WX	3.0	NR*	none		
DN71S	01NE00TB116 Trip Blank		8/26/01	WX	3.0	NR*	none		
DN71T	01NE09SW111		8/26/01	WX	1.5	NR*	none		
<b>Polychlorinated Biphenyls</b>									
DN71A	01NE09SW112		8/26/01	WX	1.5	NR*	none		
DN71B	01NE09WP102		8/26/01	WX	1.5	NR*	none		
DN71D	01NE09MW103		8/26/01	WX	1.5	NR*	none		
DN71E	01NE09SW111		8/26/01	WX	2.5	NR*	none		
DN71F	01NE24SW114 Primary Sample		8/24/01	WX	6.5	NR*	none		
DN71G	01NE24SW214 QC Dup of 01NE24SW114		8/24/01	WX	6.5	NR*	none		
DN71M	01NE21SW113 Primary Sample		8/24/01	WX	4.5	NR*	none		
DN71P	01NE09SW110		8/25/01	WX	3.0	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN71A	01NE09SW112		8/26/01	WX	1.5	NR*	none		
DN71B	01NE09WP102		8/26/01	WX	1.5	NR*	none		
DN71D	01NE09MW103		8/26/01	WX	1.5	NR*	none		
DN71E	01NE09SW111		8/26/01	WX	2.5	NR*	none		
DN71P	01NE09SW110		8/25/01	WX	3.0	NR*	none		

**Table 1 - Samples List**

**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)							
SDG:	DN71		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
Lab ID	Field ID	Field QC ID							
<b>Total Metals</b>									
DN71A	01NE09SW112		8/26/01	WX	1.5	NR*	J/UJ	L	t
DN71B	01NE09WP102		8/26/01	WX	1.5	NR*	J/UJ	L	t
DN71D	01NE09MW103		8/26/01	WX	1.5	NR*	J/UJ	L	t
DN71E	01NE09SW111		8/26/01	WX	2.5	NR*	none		
DN71K	01NE31SW101		8/24/01	WX	3.5	NR*	none		
DN71L	01NE31SW102		8/24/01	WX	3.5	NR*	none		
DN71O	01NE21SW114		8/24/01	WX	4.5	NR*	none		
DN71P	01NE09SW110		8/25/01	WX	3.0	NR*	none		
<b>Volatile Organics</b>									
DN71A	01NE09SW112		8/26/01	WX	1.5	NR*	none		
DN71Q	01NE09WP102		8/26/01	WX	3.0	NR*	none		
DN71R	01NE09MW103		8/26/01	WX	3.0	NR*	none		
DN71S	01NE00TB116	Trip Blank	8/26/01	WX	3.0	NR*	none		
DN71T	01NE09SW111		8/26/01	WX	1.5	NR*	none		
SDG:	DN73		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
Date Rec'd:	8/28/01								
Lab ID	Field ID	Field QC ID							
<b>BTEX</b>									
DN73C	01NE06WP103		8/25/01	WX	6.0	NR*	none		
DN73D	01NE31SW101		8/24/01	WX	6.0	NR*	none		
DN73E	01NE31SW102		8/24/01	WX	6.0	NR*	none		
DN73I	01NE00TB115	Trip Blank	8/24/01	WX	6.0	NR*	none		
DN73L	01NE24SW114	Primary Sample	8/24/01	WX	4.5	NR*	none		
<b>Diesel / Residual Range Organics</b>									
DN73A	01NE30WP101		8/25/01	WX	6.0	NR*	none		
DN73A-RE	01NE30WP101		8/25/01	WX	6.0	NR*	none		
DN73C	01NE06WP103		8/25/01	WX	4.0	NR*	none		
DN73C-RE	01NE06WP103		8/25/01	WX	4.0	NR*	none		
DN73D	01NE31SW101		8/24/01	WX	4.5	NR*	none		
DN73D-RE	01NE31SW101		8/24/01	WX	4.5	NR*	none		
DN73E	01NE31SW102		8/24/01	WX	4.5	NR*	none		
DN73E-RE	01NE31SW102		8/24/01	WX	4.5	NR*	none		
DN73F	01NE04WP104		8/25/01	WX	6.0	NR*	none		
DN73F-RE	01NE04WP104		8/25/01	WX	6.0	NR*	none		
DN73G	01NE04WP102		8/25/01	WX	4.0	NR*	none		
DN73G-RE	01NE04WP102		8/25/01	WX	4.0	NR*	none		
DN73H	01NE04WP103		8/25/01	WX	4.0	NR*	none		
DN73H-RE	01NE04WP103		8/25/01	WX	4.0	NR*	none		
DN73M	01NE21SW114		8/21/01	WX	4.5	NR*	none		
DN73M-RE	01NE21SW114		8/21/01	WX	4.5	NR*	none		

Prepared by *ETHIX*

3/19/02

Table 1 - Samples List

E-1-32

NE Cape HTRW - St. Lawrence Island

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
SDG:	DN73								
Date Rec'd:	8/28/01								
Lab ID	Field ID	Field QC ID							
<b>Gasoline Range Organics</b>									
DN73A	01NE30WP101		8/25/01	WX	6.0	NR*	none		
DN73B	01NE09SW110		8/25/01	WX	6.0	NR*	none		
DN73C	01NE06WP103		8/25/01	WX	6.0	NR*	none		
DN73D	01NE31SW101		8/24/01	WX	6.0	NR*	none		
DN73E	01NE31SW102		8/24/01	WX	6.0	NR*	none		
DN73I	01NE00TB115 Trip Blank		8/24/01	WX	6.0	NR*	none		
DN73J	01NE21SW113 Primary Sample		8/24/01	WX	4.5	NR*	none		
DN73L	01NE24SW114 Primary Sample		8/24/01	WX	4.5	NR*	none		
DN73M	01NE21SW114		8/21/01	WX	4.5	NR*	none		
DN73N	01NE21SW213 QC Dup of 01NE21SW113		8/24/01	WX	4.5	NR*	none		
DN73O	01NE00TB113 Trip Blank		8/24/01	WX	4.5	NR*	none		
<b>Polychlorinated Biphenyls</b>									
DN73C	01NE06WP103		8/25/01	WX	4.0	NR*	none		
DN73M	01NE21SW114		8/21/01	WX	4.5	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN73A	01NE30WP101		8/25/01	WX	6.0	NR*	none		
DN73D	01NE31SW101		8/24/01	WX	4.5	NR*	none		
DN73E	01NE31SW102		8/24/01	WX	4.5	NR*	none		
<b>Total Metals</b>									
DN73A	01NE30WP101		8/25/01	WX	6.0	NR*	none		
DN73C	01NE06WP103		8/25/01	WX	4.0	NR*	none		
DN73J	01NE21SW113 Primary Sample		8/24/01	WX	4.5	NR*	none		
DN73K	01NE24SW214 QC Dup of 01NE24SW114		8/24/01	WX	4.5	NR*	none		
DN73L	01NE24SW114 Primary Sample		8/24/01	WX	4.5	NR*	none		
<b>Volatile Organics</b>									
DN73A	01NE30WP101		8/25/01	WX	6.0	NR*	none		
DN73B	01NE09SW110		8/25/01	WX	6.0	NR*	none		
DN73I	01NE00TB115 Trip Blank		8/24/01	WX	6.0	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DN76								
Date Rec'd:	8/28/01								
Lab ID	Field ID	Field QC ID							
<b>Diesel / Residual Range Organics</b>									
DN76D	01NE09SD107		8/23/01	SX	5.8	5	none		
DN76E	01NE09SD108		8/23/01	SX	5.8	5	none		
DN76F	01NE30SS101	Primary Sample	8/24/01	SX	4.5	NR*	none		
DN76G	01NE30SD101		8/24/01	SX	4.5	NR*	none		
DN76H	01NE30SS103		8/24/01	SX	4.5	NR*	none		
DN76I	01NE30SS102		8/24/01	SX	4.5	NR*	none		
DN76J	01NE09SD109		8/24/01	SX	4.5	NR*	none		
DN76K	01NE09SD213	QC Dup of 01NE09SD113	8/24/01	SX	4.5	NR*	none		
DN76L	01NE24SD114	Primary Sample	8/24/01	SX	4.5	NR*	none		
DN76M	01NE24SD115		8/24/01	SX	4.5	NR*	none		
DN76N	01NE32SS105		8/24/01	SX	4.5	NR*	none		
DN76P	01NE09SD113	Primary Sample	8/24/01	SX	4.5	NR*	none		
<b>General Chemistry</b>									
DN76P	01NE09SD113	Primary Sample	8/24/01	SX	4.5	NR*	none		
<b>Organochlorine Pesticides / PCBs</b>									
DN76N	01NE32SS105		8/24/01	SX	4.5	NR*	none		
<b>Polychlorinated Biphenyls</b>									
DN76A	01NE16SS165	Primary Sample	8/23/01	SX	5.8	5	none		
DN76C	01NE16SS166		8/23/01	SX	5.8	5	none		
DN76D	01NE09SD107		8/23/01	SX	5.8	5	none		
DN76E	01NE09SD108		8/23/01	SX	5.8	5	none		
DN76J	01NE09SD109		8/24/01	SX	4.5	NR*	none		
DN76K	01NE09SD213	QC Dup of 01NE09SD113	8/24/01	SX	4.5	NR*	none		
DN76L	01NE24SD114	Primary Sample	8/24/01	SX	4.5	NR*	none		
DN76M	01NE24SD115		8/24/01	SX	4.5	NR*	none		
DN76P	01NE09SD113	Primary Sample	8/24/01	SX	4.5	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN76D	01NE09SD107		8/23/01	SX	5.8	5	none		
DN76E	01NE09SD108		8/23/01	SX	5.8	5	none		
DN76E-RE	01NE09SD108		8/23/01	SX	5.8	5	none		
DN76F	01NE30SS101	Primary Sample	8/24/01	SX	4.5	NR*	none		
DN76G	01NE30SD101		8/24/01	SX	4.5	NR*	none		
DN76H	01NE30SS103		8/24/01	SX	4.5	NR*	none		
DN76H-RE	01NE30SS103		8/24/01	SX	4.5	NR*	none		
DN76I	01NE30SS102		8/24/01	SX	4.5	NR*	none		
DN76J	01NE09SD109		8/24/01	SX	4.5	NR*	none		
DN76K	01NE09SD213	QC Dup of 01NE09SD113	8/24/01	SX	4.5	NR*	none		
DN76P	01NE09SD113	Primary Sample	8/24/01	SX	4.5	NR*	none		
DN76P-RE	01NE09SD113	Primary Sample	8/24/01	SX	4.5	NR*	none		

**Table 1 - Samples List**

**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
SDG:	DN76	Date Rec'd:	8/28/01							
Lab ID	Field ID	Field QC ID								
<b>Total Metals</b>										
DN76A	01NE16SS165	Primary Sample		8/23/01	SX	5.8	5	none		
DN76B	01NE16SS265	QC Dup of 01NE16SS165		8/23/01	SX	5.8	5	none		
DN76C	01NE16SS166			8/23/01	SX	5.8	5	none		
DN76D	01NE09SD107			8/23/01	SX	5.8	5	none		
DN76E	01NE09SD108			8/23/01	SX	5.8	5	none		
DN76F	01NE30SS101	Primary Sample		8/24/01	SX	4.5	NR*	none		
DN76G	01NE30SD101			8/24/01	SX	4.5	NR*	none		
DN76H	01NE30SS103			8/24/01	SX	4.5	NR*	none		
DN76I	01NE30SS102			8/24/01	SX	4.5	NR*	none		
DN76J	01NE09SD109			8/24/01	SX	4.5	NR*	none		
DN76K	01NE09SD213	QC Dup of 01NE09SD113		8/24/01	SX	4.5	NR*	none		
DN76L	01NE24SD114	Primary Sample		8/24/01	SX	4.5	NR*	none		
DN76M	01NE24SD115			8/24/01	SX	4.5	NR*	none		
DN76O	01NE30SS201	QC Dup of 01NE30SS101		8/24/01	SX	4.5	NR*	none		
DN76P	01NE09SD113	Primary Sample		8/24/01	SX	4.5	NR*	none		
 <b>SDG: DN78</b>										
Date Rec'd:	8/28/01	Date Collected			Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Lab ID	Field ID	Field QC ID								
<b>Diesel / Residual Range Organics</b>										
DN78A	01NE31SS105	Primary Sample		8/23/01	SX	5.8	5	none		
DN78B	01NE31SS205	QC Dup of 01NE31SS105		8/23/01	SX	5.8	5	none		
DN78C	01NE31SS106			8/23/01	SX	5.8	5	none		
DN78D	01NE31SS107			8/23/01	SX	5.8	5	none		
DN78E	01NE31SS108			8/23/01	SX	5.8	5	none		
DN78F	01NE31SS109			8/23/01	SX	5.8	5	none		
DN78G	01NE31SS110			8/23/01	SX	5.8	5	none		
DN78H	01NE31SS111			8/23/01	SX	5.8	5	none		
DN78I	01NE31SS112			8/23/01	SX	5.8	5	none		
DN78J	01NE31SS113			8/23/01	SX	5.8	5	none		
DN78K	01NE31SS114			8/23/01	SX	5.8	5	none		
DN78L	01NE31SS115			8/23/01	SX	5.8	5	none		
DN78M	01NE31SS116			8/23/01	SX	5.8	5	none		
DN78N	01NE31SS117			8/23/01	SX	5.8	5	none		
DN78O	01NE31SS118			8/23/01	SX	5.8	5	none		
DN78P	01NE31SS119			8/23/01	SX	5.8	5	none		
DN78Q	01NE31SS120	Primary Sample		8/23/01	SX	5.8	5	none		
DN78R	01NE31SS220	QC Dup of 01NE31SS120		8/23/01	SX	5.8	5	none		
DN78S	01NE31SS125			8/23/01	SX	5.8	5	none		

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DY36	Date Rec'd:	8/28/01							
Lab ID	Field ID	Field QC ID	Total Metals							
DY36A	01NE09SD107			8/23/01	SX	5.8	NR*	none		
DY36B	01NE09SD108			8/23/01	SX	5.8	NR*	none		
DY36C	01NE30SS101	Primary Sample		8/24/01	SX	4.5	NR*	none		
DY36D	01NE30SD101			8/24/01	SX	4.5	NR*	none		
DY36E	01NE30SS103			8/24/01	SX	4.5	NR*	none		
DY36F	01NE30SS102			8/24/01	SX	4.5	NR*	none		
DY36G	01NE09SD109			8/24/01	SX	4.5	NR*	none		
DY36H	01NE09SD213	QC Dup of 01NE09SD113		8/24/01	SX	4.5	NR*	none		
DY36I	01NE24SD114	Primary Sample		8/24/01	SX	4.5	NR*	none		
DY36J	01NE24SD115			8/24/01	SX	4.5	NR*	none		
DY36K	01NE30SS201	QC Dup of 01NE30SS101		8/24/01	SX	4.5	NR*	none		
DY36L	01NE09SD113	Primary Sample		8/24/01	SX	4.5	NR*	none		
SDG:	DY38	Date Rec'd:	8/28/01	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
Lab ID	Field ID	Field QC ID	Total Metals							
DY38A	01NE21SS169	Primary Sample		8/24/01	SX	2.5	NR*	none		
DY38B	01NE21SS269	QC Dup of 01NE21SS169		8/24/01	SX	2.5	NR*	none		
DY38C	01NE09SD114			8/24/01	SX	4.5	NR*	none		
SDG:	DY39	Date Rec'd:	8/28/01	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
Lab ID	Field ID	Field QC ID	Total Metals							
DY39A	01NE21SB169			8/24/01	SX	3.5	NR*	none		
DY39B	01NE21SB170			8/24/01	SX	3.5	NR*	none		
DY39C	01NE21SS170			8/24/01	SX	3.5	NR*	none		
DY39D	01NE21SB171			8/24/01	SX	3.5	NR*	none		
DY39E	01NE21SS171			8/24/01	SX	3.5	NR*	none		
DY39F	01NE21SS172			8/24/01	SX	3.5	NR*	none		
DY39G	01NE21SS173			8/24/01	SX	3.5	NR*	none		
DY39H	01NE21SD113			8/24/01	SX	3.5	NR*	none		
DY39I	01NE21SD114			8/24/01	SX	3.5	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
SDG:	DN88								
Date Rec'd:	8/29/01								
Lab ID	Field ID	Field QC ID							
<b>Diesel / Residual Range Organics</b>									
DN88A	01NE07WP102	Primary Sample	8/27/01	WX	5.0	NR*	none		
DN88C	01NE30WP102		8/28/01	WX	4.0	NR*	none		
DN88D	01NE06WP102		8/27/01	WX	4.0	NR*	none		
DN88E	01NE07WP101		8/28/01	WX	1.5	NR*	none		
DN88F	01NE07WP103		8/27/01	WX	2.0	NR*	none		
<b>Gasoline Range Organics</b>									
DN88A	01NE07WP102	Primary Sample	8/27/01	WX	4.0	NR*	none		
DN88C	01NE30WP102		8/28/01	WX	4.0	NR*	none		
DN88F	01NE07WP103		8/27/01	WX	4.0	NR*	none		
DN88G	01NE07WP101		8/26/01	WX	4.0	NR*	none		
DN88H	01NE00TB118	Trip Blank	8/27/01	WX	4.0	NR*	none		
<b>Polychlorinated Biphenyls</b>									
DN88A	01NE07WP102	Primary Sample	8/27/01	WX	5.0	NR*	none		
DN88E	01NE07WP101		8/28/01	WX	1.5	NR*	none		
DN88F	01NE07WP103		8/27/01	WX	2.0	NR*	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
DN88A	01NE07WP102	Primary Sample	8/27/01	WX	5.0	NR*	none		
DN88B	01NE07WP202	QC Dup of 01NE07WP102	8/27/01	WX	5.0	NR*	none		
DN88C	01NE30WP102		8/28/01	WX	4.0	NR*	none		
DN88E	01NE07WP101		8/28/01	WX	1.5	NR*	none		
DN88F	01NE07WP103		8/27/01	WX	2.0	NR*	none		
<b>Total Metals</b>									
DN88A	01NE07WP102	Primary Sample	8/27/01	WX	5.0	NR*	none		
DN88C	01NE30WP102		8/28/01	WX	4.0	NR*	none		
DN88E	01NE07WP101		8/28/01	WX	1.5	NR*	J/UJ	L	t
DN88F	01NE07WP103		8/27/01	WX	2.0	NR*	none		
<b>Volatile Organics</b>									
DN88A	01NE07WP102	Primary Sample	8/27/01	WX	4.0	NR*	none		
DN88B	01NE07WP202	QC Dup of 01NE07WP102	8/27/01	WX	4.0	NR*	none		
DN88C	01NE30WP102		8/28/01	WX	4.0	NR*	none		
DN88F	01NE07WP103		8/27/01	WX	4.0	NR*	none		
DN88G	01NE07WP101		8/26/01	WX	4.0	NR*	none		
DN88H	01NE00TB118	Trip Blank	8/27/01	WX	4.0	NR*	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	ARI	(Primary Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
SDG:	DQ74	Date Rec'd:	9/27/01							
Lab ID	Field ID	Field QC ID								
<b>Organochlorine Pesticides / PCBs</b>										
DQ74A	01NE16SS167			9/24/01	SX	4.0	NR*	none		
DQ74B	01NE16SS168			9/24/01	SX	4.0	NR*	none		
DQ74B-DL	01NE16SS168			9/24/01	SX	4.0	NR*	none		
DQ74C	01NE28SD183			9/24/01	SX	4.0	NR*	none		
DQ74C-DL	01NE28SD183			9/24/01	SX	4.0	NR*	none		
DQ74D	01NE28SD184			9/24/01	SX	4.0	NR*	none		
DQ74E	01NE28SD185	Primary Sample		9/24/01	SX	4.0	NR*	none		
DQ74E-DL	01NE28SD185	Primary Sample		9/24/01	SX	4.0	NR*	none		
DQ74F	01NE28SD186			9/24/01	SX	4.0	NR*	none		
DQ74F-DL	01NE28SD186			9/24/01	SX	4.0	NR*	none		
DQ74G	01NE28SD187			9/24/01	SX	4.0	NR*	none		
DQ74H	01NE28SD188			9/24/01	SX	4.0	NR*	none		
DQ74I	01NE28SD189			9/24/01	SX	4.0	NR*	none		
DQ74J	01NE28SD190			9/24/01	SX	4.0	NR*	none		
DQ74K	01NE28SD191			9/24/01	SX	4.0	NR*	none		
DQ74L	01NE28SD192	Primary Sample		9/24/01	SX	4.0	NR*	none		
DQ74M	01NE28SD292	QC Dup of 01NE28SD192		9/24/01	SX	4.0	NR*	none		
DQ74N	01NE28SD285	QC Dup of 01NE28SD185		9/24/01	SX	4.0	NR*	none		
DQ74N-DL	01NE28SD285	QC Dup of 01NE28SD185		9/24/01	SX	4.0	NR*	none		
<b>Laboratory: SAS (Referee Laboratory)</b>										
SDG:	99805	Date Rec'd:	7/27/01	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q	Bias	RC
Lab ID	Field ID	Field QC ID								
<b>BTEX</b>										
99805-01	01NE35GW301	QA Dup of 01NE35GW101		7/25/01	WX	8.7	8.3	J/UJ	L	t
99805-02	01NE35TB302	Trip Blank		7/25/01	WX	8.7	8.3	J/UJ	L	t
<b>Diesel Range Organics</b>										
99805-01	01NE35GW301	QA Dup of 01NE35GW101		7/25/01	WX	8.7	8.3	J/UJ	L	t
<b>Gasoline Range Organics</b>										
99805-01	01NE35GW301	QA Dup of 01NE35GW101		7/25/01	WX	8.7	8.3	none		
99805-02	01NE35TB302	Trip Blank		7/25/01	WX	8.7	8.3	none		
<b>Residual Range Organics</b>										
99805-01	01NE35GW301	QA Dup of 01NE35GW101		7/25/01	WX	8.7	8.3	J/UJ	L	t

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	SAS	(Referee Laboratory)	Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
SDG:	100302								
Date Rec'd:	8/21/01								
<b>Diesel Range Organics</b>									
100302-01	01NE06TP301	QA Dup of 01NE06TP101	8/18/01	SX	1.9	3.6	none		
100302-02	01NE28SD311	QA Dup of 01NE28SD111	8/18/01	SX	1.9	3.6	none		
100302-03	01NE28SD325	QA Dup of 01NE28SD125	8/18/01	SX	1.9	3.6	none		
100302-04	01NE28SD351	QA Dup of 01NE28SD151	8/19/01	SX	1.9	3.6	none		
100302-05	01NE28SD353	QA Dup of 01NE28SD153	8/19/01	SX	1.9	3.6	none		
100302-06	01NE28SD357	QA Dup of 01NE28SD157	8/19/01	SX	1.9	3.6	none		
100302-07	01NE28SW311	QA Dup of 01NE28SW111	8/18/01	WX	1.7	2	none		
100302-08	01NE28SD339	QA Dup of 01NE28SD139	8/19/01	SX	1.9	3.6	none		
100302L04	01NE28SD351	QA Dup of 01NE28SD151	8/19/01	SX	1.9	3.6	none		
100302L05	01NE28SD353	QA Dup of 01NE28SD153	8/19/01	SX	1.9	3.6	none		
<b>Polychlorinated Biphenyls</b>									
100302-02	01NE28SD311	QA Dup of 01NE28SD111	8/18/01	SX	1.9	3.6	none		
100302-03	01NE28SD325	QA Dup of 01NE28SD125	8/18/01	SX	1.9	3.6	none		
100302-04	01NE28SD351	QA Dup of 01NE28SD151	8/19/01	SX	1.9	3.6	none		
100302-05	01NE28SD353	QA Dup of 01NE28SD153	8/19/01	SX	1.9	3.6	none		
100302-06	01NE28SD357	QA Dup of 01NE28SD157	8/19/01	SX	1.9	3.6	none		
100302-07	01NE28SW311	QA Dup of 01NE28SW111	8/18/01	WX	1.7	2	none		
100302-08	01NE28SD339	QA Dup of 01NE28SD139	8/19/01	SX	1.9	3.6	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
100302-02	01NE28SD311	QA Dup of 01NE28SD111	8/18/01	SX	1.9	3.6	none		
100302-03	01NE28SD325	QA Dup of 01NE28SD125	8/18/01	SX	1.9	3.6	none		
100302-04	01NE28SD351	QA Dup of 01NE28SD151	8/19/01	SX	1.9	3.6	none		
100302-05	01NE28SD353	QA Dup of 01NE28SD153	8/19/01	SX	1.9	3.6	none		
100302-06	01NE28SD357	QA Dup of 01NE28SD157	8/19/01	SX	1.9	3.6	none		
100302-08	01NE28SD339	QA Dup of 01NE28SD139	8/19/01	SX	1.9	3.6	none		
100302L03	01NE28SD325	QA Dup of 01NE28SD125	8/18/01	SX	1.9	3.6	none		
100302L04	01NE28SD351	QA Dup of 01NE28SD151	8/19/01	SX	1.9	3.6	none		
<b>Residual Range Organics</b>									
100302-01	01NE06TP301	QA Dup of 01NE06TP101	8/18/01	SX	1.9	3.6	none		
100302-02	01NE28SD311	QA Dup of 01NE28SD111	8/18/01	SX	1.9	3.6	none		
100302-03	01NE28SD325	QA Dup of 01NE28SD125	8/18/01	SX	1.9	3.6	none		
100302-04	01NE28SD351	QA Dup of 01NE28SD151	8/19/01	SX	1.9	3.6	none		
100302-05	01NE28SD353	QA Dup of 01NE28SD153	8/19/01	SX	1.9	3.6	none		
100302-06	01NE28SD357	QA Dup of 01NE28SD157	8/19/01	SX	1.9	3.6	none		
100302-07	01NE28SW311	QA Dup of 01NE28SW111	8/18/01	WX	1.7	2	none		
100302-08	01NE28SD339	QA Dup of 01NE28SD139	8/19/01	SX	1.9	3.6	none		

**Table 1 - Samples List****NE Cape HTRW - St. Lawrence Island**

Laboratory:	SAS	(Referee Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC							
SDG:	100302																
Date Rec'd:	8/21/01																
Lab ID	Field ID	Field QC ID															
<b>Total Metals</b>																	
100302-02	01NE28SD311	QA Dup of 01NE28SD111		8/18/01	SX	1.9	3.6		none								
100302-03	01NE28SD325	QA Dup of 01NE28SD125		8/18/01	SX	1.9	3.6		none								
100302-04	01NE28SD351	QA Dup of 01NE28SD151		8/19/01	SX	1.9	3.6		none								
100302-05	01NE28SD353	QA Dup of 01NE28SD153		8/19/01	SX	1.9	3.6		none								
100302-06	01NE28SD357	QA Dup of 01NE28SD157		8/19/01	SX	1.9	3.6		none								
100302-08	01NE28SD339	QA Dup of 01NE28SD139		8/19/01	SX	1.9	3.6		none								
 <b>SDG: 100413</b>																	
<b>Date Rec'd: 8/24/01</b>				Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC							
Lab ID	Field ID	Field QC ID															
<b>BTEX</b>																	
100413-06	01NE29SW317	QA Dup of 01NE29SW117		8/20/01	WX	2.3	4.5		none								
100413-07	01NE00TB107	Trip Blank		8/20/01	WX	2.3	4.5		none								
<b>Diesel Range Organics</b>																	
100413-01	01NE29SD325	QA Dup of 01NE29SD125		8/21/01	SX	4.1	4.6		none								
100413-02	01NE28SD375	QA Dup of 01NE28SD175		8/20/01	SX	4.1	4.6		none								
100413-03	01NE28SD371	QA Dup of 01NE28SD171		8/20/01	SX	4.1	4.6		none								
100413-04	01NE28SD363	QA Dup of 01NE28SD163		8/20/01	SX	4.1	4.6		none								
100413-05	01NE29SD314	QA Dup of 01NE29SD114		8/21/01	SX	4.1	4.6		none								
100413-06	01NE29SW317	QA Dup of 01NE29SW117		8/20/01	WX	2.3	4.5		none								
100413L04	01NE28SD363	QA Dup of 01NE28SD163		8/20/01	SX	4.1	4.6		none								
<b>Gasoline Range Organics</b>																	
100413-06	01NE29SW317	QA Dup of 01NE29SW117		8/20/01	WX	2.3	4.5		none								
100413-07	01NE00TB107	Trip Blank		8/20/01	WX	2.3	4.5		none								
<b>Polychlorinated Biphenyls</b>																	
100413-01	01NE29SD325	QA Dup of 01NE29SD125		8/21/01	SX	4.1	4.6		none								
100413-02	01NE28SD375	QA Dup of 01NE28SD175		8/20/01	SX	4.1	4.6		none								
100413-03	01NE28SD371	QA Dup of 01NE28SD171		8/20/01	SX	4.1	4.6		none								
100413-04	01NE28SD363	QA Dup of 01NE28SD163		8/20/01	SX	4.1	4.6		none								
100413-05	01NE29SD314	QA Dup of 01NE29SD114		8/21/01	SX	4.1	4.6		none								
100413-06	01NE29SW317	QA Dup of 01NE29SW117		8/20/01	WX	2.3	4.5		none								
<b>Polynuclear Aromatic Hydrocarbons</b>																	
100413-01	01NE29SD325	QA Dup of 01NE29SD125		8/21/01	SX	4.1	4.6		none								
100413-02	01NE28SD375	QA Dup of 01NE28SD175		8/20/01	SX	4.1	4.6		none								
100413-03	01NE28SD371	QA Dup of 01NE28SD171		8/20/01	SX	4.1	4.6		none								
100413-04	01NE28SD363	QA Dup of 01NE28SD163		8/20/01	SX	4.1	4.6		none								
100413-05	01NE29SD314	QA Dup of 01NE29SD114		8/21/01	SX	4.1	4.6		none								
100413-06	01NE29SW317	QA Dup of 01NE29SW117		8/20/01	WX	2.3	4.5		none								

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	SAS	(Referee Laboratory)							
SDG:	100413		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Lab ID	Field ID	Field QC ID							
<b>Residual Range Organics</b>									
100413-01	01NE29SD325	QA Dup of 01NE29SD125	8/21/01	SX	4.1	4.6	none		
100413-02	01NE28SD375	QA Dup of 01NE28SD175	8/20/01	SX	4.1	4.6	none		
100413-03	01NE28SD371	QA Dup of 01NE28SD171	8/20/01	SX	4.1	4.6	none		
100413-04	01NE28SD363	QA Dup of 01NE28SD163	8/20/01	SX	4.1	4.6	none		
100413-05	01NE29SD314	QA Dup of 01NE29SD114	8/21/01	SX	4.1	4.6	none		
100413-06	01NE29SW317	QA Dup of 01NE29SW117	8/20/01	WX	2.3	4.5	none		
100413L04	01NE28SD363	QA Dup of 01NE28SD163	8/20/01	SX	4.1	4.6	none		
<b>Total Metals</b>									
100413-01	01NE29SD325	QA Dup of 01NE29SD125	8/21/01	SX	4.1	4.6	none		
100413-02	01NE28SD375	QA Dup of 01NE28SD175	8/20/01	SX	4.1	4.6	none		
100413-03	01NE28SD371	QA Dup of 01NE28SD171	8/20/01	SX	4.1	4.6	none		
100413-04	01NE28SD363	QA Dup of 01NE28SD163	8/20/01	SX	4.1	4.6	none		
100413-05	01NE29SD314	QA Dup of 01NE29SD114	8/21/01	SX	4.1	4.6	none		
100413-06	01NE29SW317	QA Dup of 01NE29SW117	8/20/01	WX	2.3	4.5	none		
 <b>SDG: 100418</b>									
Date Rec'd:	8/27/01		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
Lab ID	Field ID	Field QC ID							
<b>Diesel Range Organics</b>									
100418-02	01NE09SW307	QA Dup of 01NE09SW107	8/23/01	WX	2.9	2.6	none		
<b>Gasoline Range Organics</b>									
100418-02	01NE09SW307	QA Dup of 01NE09SW107	8/23/01	WX	4.5	4.4	none		
100418-03	01NE00TB110	Trip Blank	8/23/01	WX	4.5	4.4	none		
<b>Polychlorinated Biphenyls</b>									
100418-02	01NE09SW307	QA Dup of 01NE09SW107	8/23/01	WX	2.9	2.6	none		
<b>Polynuclear Aromatic Hydrocarbons</b>									
100418-02	01NE09SW307	QA Dup of 01NE09SW107	8/23/01	WX	2.9	2.6	none		
<b>Residual Range Organics</b>									
100418-02	01NE09SW307	QA Dup of 01NE09SW107	8/23/01	WX	2.9	2.6	none		
<b>Semivolatile Organics</b>									
100418-01	01NE16GW301	QA Dup of 01NE16GW101	8/23/01	WX	4.5	4.4	none		
<b>Total Metals</b>									
100418-02	01NE09SW307	QA Dup of 01NE09SW107	8/23/01	WX	4.5	4.4	none		
<b>Volatile Organics</b>									
100418-02	01NE09SW307	QA Dup of 01NE09SW107	8/23/01	WX	4.5	4.4	none		
100418-03	01NE00TB110	Trip Blank	8/23/01	WX	4.5	4.4	none		

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory:	SAS	(Referee Laboratory)		Date Collected	Matrix	Temp Blank °C:	Cooler °C:	Q <sup>1</sup>	Bias	RC
SDG:	100492	Date Rec'd:	8/28/01							
Lab ID	Field ID	Field QC ID								
<b>BTEX</b>										
100492-02	01NE21SW313	QA Dup of 01NESW113		8/24/01	WX	3.9	2.8		none	
100492-03	01NE00TB112	Trip Blank		8/24/01	WX	3.9	2.8		none	
100492-04	01NE21SS369	QA Dup of 01NE21SS169		8/24/01	SX	NR*	5.5		none	
100492-07	01NE24SD314	QA Dup of 01NE24SD114		8/24/01	SX	NR*	5.5		none	
100492-11	01NE31SS321	QA Dup of 01NE31SS121		8/24/01	SX	NR*	5.5		none	
100492-14	01NE00TB106	Trip Blank		8/23/01	SX	NR*	5.5		none	
<b>Diesel Range Organics</b>										
100492-01	01NE24SW314	QA Dup of 01NE24SW114		8/24/01	WX	3.9	2.8		none	
100492-02	01NE21SW313	QA Dup of 01NESW113		8/24/01	WX	3.9	2.8		none	
100492-04	01NE21SS369	QA Dup of 01NE21SS169		8/24/01	SX	NR*	5.5		none	
100492-05	01NE31SS320	QA Dup of 01NE31SS120		8/23/01	SX	NR*	5.5		none	
100492-06	01NE31SS305	QA Dup of 01NE31SS105		8/24/01	SX	NR*	5.5		none	
100492-11	01NE31SS321	QA Dup of 01NE31SS121		8/24/01	SX	NR*	5.5		none	
100492-13	01NE09SD313	QA Dup of 01NE09SD113		8/24/01	SX	NR*	5.5		none	
<b>Gasoline Range Organics</b>										
100492-02	01NE21SW313	QA Dup of 01NESW113		8/24/01	WX	3.9	2.8		none	
100492-03	01NE00TB112	Trip Blank		8/24/01	WX	3.9	2.8		none	
100492-04	01NE21SS369	QA Dup of 01NE21SS169		8/24/01	SX	NR*	5.5		none	
100492-07	01NE24SD314	QA Dup of 01NE24SD114		8/24/01	SX	NR*	5.5		none	
100492-11	01NE31SS321	QA Dup of 01NE31SS121		8/24/01	SX	NR*	5.5		none	
100492-14	01NE00TB106	Trip Blank		8/23/01	SX	NR*	5.5		none	
<b>Organochlorine Pesticides</b>										
100492-10	01NE31SS302	QA Dup of 01NE31SS102		8/24/01	SX	NR*	5.5		none	
<b>Polychlorinated Biphenyls</b>										
100492-01	01NE24SW314	QA Dup of 01NE24SW114		8/24/01	WX	3.9	2.8		none	
100492-04	01NE21SS369	QA Dup of 01NE21SS169		8/24/01	SX	NR*	5.5		none	
100492-10	01NE31SS302	QA Dup of 01NE31SS102		8/24/01	SX	NR*	5.5		none	
100492-12	01NE14SS303	QA Dup of 01NE14SS103		8/24/01	SX	NR*	5.5		none	
100492-13	01NE09SD313	QA Dup of 01NE09SD113		8/24/01	SX	NR*	5.5		none	
<b>Polynuclear Aromatic Hydrocarbons</b>										
100492-13	01NE09SD313	QA Dup of 01NE09SD113		8/24/01	SX	NR*	5.5		none	
<b>Residual Range Organics</b>										
100492-01	01NE24SW314	QA Dup of 01NE24SW114		8/24/01	WX	3.9	2.8		none	
100492-02	01NE21SW313	QA Dup of 01NESW113		8/24/01	WX	3.9	2.8		none	
100492-04	01NE21SS369	QA Dup of 01NE21SS169		8/24/01	SX	NR*	5.5		none	
100492-05	01NE31SS320	QA Dup of 01NE31SS120		8/23/01	SX	NR*	5.5		none	
100492-06	01NE31SS305	QA Dup of 01NE31SS105		8/24/01	SX	NR*	5.5		none	
100492-11	01NE31SS321	QA Dup of 01NE31SS121		8/24/01	SX	NR*	5.5		none	
100492-13	01NE09SD313	QA Dup of 01NE09SD113		8/24/01	SX	NR*	5.5		none	
100492L05	01NE31SS320	QA Dup of 01NE31SS120		8/23/01	SX	3.9	2.8		none	

**Table 1 - Samples List**  
**NE Cape HTRW - St. Lawrence Island**

Laboratory: SAS (Referee Laboratory)								
SDG:	100492		Date Collected	Matrix	Temp	Blank	Cooler	Q <sup>1</sup>
Date Rec'd:	8/28/01				°C:	°C:	°C:	
Lab ID	Field ID	Field QC ID						Bias RC
<b>Total Metals</b>								
100492-01	01NE24SW314	QA Dup of 01NE24SW114	8/24/01	WX	3.9	2.8	none	
100492-04	01NE21SS369	QA Dup of 01NE21SS169	8/24/01	SX	NR*	5.5	none	
100492-08	01NE16SS365	QA Dup of 01NE16SS165	8/23/01	SX	NR*	5.5	none	
100492-09	01NE30SS301	QA Dup of 01NE30SS101	8/24/01	SX	NR*	5.5	none	
100492-13	01NE09SD313	QA Dup of 01NE09SD113	8/24/01	SX	NR*	5.5	none	
<b>Volatile Organics</b>								
100492-13	01NE09SD313	QA Dup of 01NE09SD113	8/24/01	SX	NR*	5.5	none	
SDG:	100553		Date Collected	Matrix	Temp	Blank	Cooler	Q <sup>1</sup>
Date Rec'd:	8/30/01				°C:	°C:	°C:	
Lab ID	Field ID	Field QC ID						Bias RC
<b>Polynuclear Aromatic Hydrocarbons</b>								
100553-01	01NE07WP302	QA Dup of 01NE07WP102	8/27/01	WX	3.2	4	none	
<b>Volatile Organics</b>								
100553-01	01NE07WP302	QA Dup of 01NE07WP102	8/27/01	WX	3.2	4	none	
100553-02	01NE00TB117	Trip Blank	8/27/01	WX	3.2	4	none	

<sup>1</sup> If both a temperature blank and cooler temperature are recorded, the temperature blank will be considered most valid; if there is a significant discrepancy between the cooler temperature and the temperature blank, (> 5° C), the most extreme temperature will be used to qualify data for all associated samples - if the temperature is > 6° C, for all target analytes except metals and soil AK101, flag all associated detected and non-detected results as estimated (J/UJ); for metals in water matrix only, if the temperature is < 2° C, flag all associated detected and non-detected results as estimated (J/UJ)

\* NR = Not Reported

**Table 2 - Sampling and Analysis Discrepancies / Deficiencies**

**Laboratory:** SAS

**SDG:** 100302

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	01NE28SD339	All applicable	Sample in cooler but not requested on CoC - lab added per MW 8/22/01

**SDG:** 100413

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	01NE00TB107	All applicable	Time collected in EDF and hardcopy shown as "0700", CoC and sample tracker shown as "1900"
VOA	01NE00TB107	All applicable	3 of 3 vials had bubbles
BTEX	01NE29SW317	All applicable	CoC requested SW8260; lab analyzed for SW8021B
All applicable	01NE28SD314	All applicable	Field ID on HC and EDF (01NE28SD314) do not match CoC and sample tracker (01NE29SD314)
All applicable	01NE29SW317	All applicable	Time collected in EDF and hardcopy shown as "0750", CoC and sample tracker shown as "1950"

**SDG:** 100418

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
SVOA	01NE16GW301	3-4-methylphenol	Not in EDFs

**SDG:** 100492

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	Cooler Receipt Forms not completely filled out
Low-level VOA	01NE09SD313	All applicable	CoC requested low-level VOA analysis - lab did not analyze for low-level. Sample tracker does not show analysis for low-level
All applicable	01NE21SS369, 01NE31SS320, 01NE31SS305, 01NE24SD314, 01NE16SS365, 01NE30SS301, 01NE31SS302, 01NE31SS321 01NE14SS303, 01NE09SD313 & 01NE00TB106	All applicable	Temperature blank not recorded on cooler receipt form
Total Metals	01NE24SW314	nickel	Results for SW6020 in EDF; hardcopy shows results for only SW6010
Total Metals	01NE16SS365	lead	CoC requested SW7421; lab analyzed by SW6020

Prepared by **ETHIX**

3/19/02

Table 2 - Sampling and Analysis Discrepancies / Deficiencies

E-2-1

NE Cape HTRW - St. Lawrence Island

**Table 2 - Sampling and Analysis Discrepancies / Deficiencies**

**Laboratory:** SAS

**SDG:** 100492

<b>Analysis Type</b>	<b>Affected Samples</b>	<b>Affected Analytes</b>	<b>Discrepancy / Deficiency</b>
GRO & VOA	01NE00TB112	All applicable	Time collected in EDF and hardcopy shown as "0700", CoC and sample tracker shown as "1900"
<b>SDG:</b> 100553			
<b>Analysis Type</b>	<b>Affected Samples</b>	<b>Affected Analytes</b>	<b>Discrepancy / Deficiency</b>
VOA	01NE00TB117	All applicable	3 of 3 vials had bubbles
<b>SDG:</b> All applicable			
<b>Analysis Type</b>	<b>Affected Samples</b>	<b>Affected Analytes</b>	<b>Discrepancy / Deficiency</b>
All applicable	All applicable	All applicable	Prep methods not reported on hardcopy
All applicable	All applicable	All applicable	Dilution factors reported on hardcopy do not match EDF

**Table 2 - Sampling and Analysis Discrepancies / Deficiencies**

**Laboratory:** ARI

**SDG:** All applicable

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
VOA	All applicable	All applicable	Dilution factors not reported on hardcopy
All applicable	All applicable	All applicable	MS/MSD - RPD and LCS limits not reported on hardcopy
Metals	All applicable	All applicable	Dilution factors not reported on hardcopy
Metals	Water matrix	All applicable	Units on hardcopy reported in mg/L; EDF reported in µg/L

**SDG:** DN03

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
PAH	All applicable	All applicable	Field IDs not reported on hardcopy
All applicable	All applicable	All applicable	Questions #14 and #16 not answered on all cooler receipt forms
GRO & VOA	DN03H, DN03I, DN03J	All applicable	Field ID "O1NE07SW104", "O1NE00TB102", & O1NE07SW105 should begin with "0" and not "O"

**SDG:** DN04

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable
TOC	Most samples	total organic carbon	Dilution factors in EDF do not match hardcopy - rounding issue
DRO	01NE28SD125	All applicable	Not in EDF
DRO/RRO	01NE28SD122	All applicable	Run number in EDF entered as "1", hardcopy indicates to be a rerun "2"
DRO	01NE28SD125	All applicable	Not entered in EDF

**SDG:** DN05

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable
PAH	01NE28SD157	acenaphthene	Result reported on hardcopy as "200 Y"; EDF reported as "ND" (PQL = 68)
PCB	01NE28SD153	aroclor 1221	PQL reported on hardcopy as "94"; EDF reported as "93"

**Table 2 - Sampling and Analysis Discrepancies / Deficiencies**

**Laboratory:** ARI

**SDG:** DN06

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable
All applicable	01NE28SD251	All applicable	All container labels shown as "01NE28SD251" and CoC shown as "01NE28SD252"; lab logged in as "01NE28SD251"
PCB	01NE28SD150	aroclor 1221	PQL reported on hardcopy as "94"; EDF reported as "93"
PAH	01NE28SD239	acenaphthene	Result reported on hardcopy as "8.6"; EDF reported as "ND" (PQL = 4.8)

**SDG:** DN07

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	Labels for 01NE07S"D" ... 125, 126, 127 for metals; lab used 01NE07S"S" per rest of the samples
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable
TOC	01NE28SD113 & 01NE28SD114	total organic carbon	Dilution factors in EDF do not match hardcopy - rounding issue
PCB	01NE28SD111	All applicable	RL reported on HC do not match EDF
PCB	01NE28SD115	aroclor 1221	RL reported on HC do not match EDF
PCB	01NE07SS127 (DL)	All applicable	Dilution factor reported as "20" on hardcopy - reported as "1" in EDF
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable

**SDG:** DN36

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
VOA	01NE00TB103	All applicable	2 VOAs contained pea-size air bubbles - tagged and instructed to use VOA w/o bubble
Metals	01NE29SW114	potassium	Result reported on hardcopy as "700" - EDF reported as "680"
Metals	01NE29SW116	potassium	Result reported on hardcopy as "700" - EDF reported as "740"
Metals	01NE29SW217	potassium	Result reported on hardcopy as "1100" - EDF reported as "1120"
Metals	01NE29SW117	potassium	Result reported on hardcopy as "900" - EDF reported as "890"
All applicable	01NE29SW116	All applicable	Date and time collected does not match sample tracker (1010) - CoC, hardcopy, & EDF agree (1335)
Metals	01NE29SW114	All applicable	Bottles received at lab; however, was not requested on CoC - lab analyzed per MW 8/24/01

**Table 2 - Sampling and Analysis Discrepancies / Deficiencies**

**Laboratory:** ARI

**SDG:** DN38

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
PCB	01NE28SD165, 01NE28SD167, 01NE28SD169 & 01NE28SD170	aroclor 1260	Results reported in EDF do not match hardcopy
PAH	01NE28SD165	All applicable	Missing hardcopy results - no indication that sample was analyzed (see surrogate summary) - results reported in EDF

**SDG:** DN39

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
Metals	01NE28SD173	All applicable	Time collected not indicated on jar label
PCB	01NE28SD173	All applicable	Time collected on jar label shown as "1030" - CoC shown as "1035"
PCB	01NE28SD172	All applicable	Time collected on jar label shown as "1130" - CoC shown as "1030"
TOC	Most samples	total organic carbon	Dilution factors in EDF do not match hardcopy - rounding issue
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable

**SDG:** DN40

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
PCB	01NE29SD124 & 01NE29SD124-RE	aroclor 1221	Reporting limit in EDF does not match hardcopy
All applicable	All applicable	All applicable	"RE" not added to sample IDs in EDF where applicable
PAH	01NE29SD120	All applicable	Results not reported in EDF
BTEX	All applicable	All applicable	Dilution factors not reported on hardcopy
PCB	01NE29SD125	All applicable	Missing hardcopy results
PAH	01NE29SD123	All applicable	Two sets of results reported on hardcopy; does not appear to be DL or RE. Reported dates are different (9/10/01 & 10/4/01)
PCB	01NE29SD126 Dilution2	All applicable	Hardcopy sample ID indicates that this sample is a dilution; however, sample was not diluted but appears to be a RE
TOC	All applicable	TOC	Dilution factors not reported on hardcopy
PCB	All re-extracts	All applicable	Date extracted in EDF does not match hardcopy

**Table 2 - Sampling and Analysis Discrepancies / Deficiencies**

**Laboratory:** ARI

**SDG:** DN53

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
Metals	All applicable	All applicable	Containers received at lab for CoC #40 and CoC #46; however, analysis not requested on CoC
RSK175	All applicable	All applicable	Analysis requested on CoC #46; not reported on hardcopy and EDF
GRO & VOA	TRIP BLANK	All applicable	Not requested on CoC; reported on hardcopy and EDF
All applicable	All applicable	All applicable	"RE" not added to sample IDs in EDF where applicable
GRO & VOA	01NE00TB108	All applicable	3 of 3 vials had air bubbles < pea size

**SDG:** DN55

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable
PCB	01NE33SS103	aroclor 1221	Reporting limit in EDF does not match hardcopy
PAH	01NE34SS101 (RE)	All applicable	Matrix missing on hardcopy
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable

**SDG:** DN68

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable
BTEX & GRO	All applicable	All applicable	Dilution factors not reported on hardcopy
BTEX & GRO	01NE09SS171	All applicable	Analyses not indicated on CoC
All applicable	01NE31SS202	All applicable	Sample tracker ID shown as "01NE31SS302"
All applicable	All applicable	All applicable	"RE" and/or "DL" not added to sample IDs in EDF where applicable

**SDG:** DN69

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	"DL" not added to sample IDs in EDF where applicable
BTEX	01NE31SS121	toluene	Result reported on hardcopy does not match EDF - rounding issue

**Table 2 - Sampling and Analysis Discrepancies / Deficiencies**

**Laboratory:** ARI

**SDG:** DN69

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	"DL" not added to sample IDs in EDF where applicable
<b>SDG: DN70</b>			
Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
BTEX & GRO	01NE00TB109	All applicable	Not recorded on sample tracker
<b>SDG: DN71</b>			
Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
GRO & VOA	01NE00TB116 & 01NE09MW103	All applicable	All 3 vials have 6-8mm pea-size bubbles
All applicable	All applicable	All applicable	"RE" not added to sample IDs in EDF where applicable
Metals	Most samples	potassium	Results reported on hardcopy do not match EDF
DRO/RRO	All applicable	All applicable	"RE" not added to sample IDs in EDF where applicable
PCBs	01NE24SW114	All applicable	One bottle label shown as "01NE24SD114"; time collected as "830" - CoC shown as "01NE24SW114"
PCBs	01NE24SW214	All applicable	Two bottle labels shown as "01NE24SD214"; time collected as "835" - CoC shown as "01NE24SW214"
GRO	01NE09SW112	surrogates	Recoveries reported on hardcopy do not match EDF
<b>SDG: DN73</b>			
Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
DRO	01NE04WP103	All applicable	Bottle label ID shown as "01NEWP104"; time matches
GRO & Metals	01NE21SW113	All applicable	Time collected in EDF as "1900"; CoC shown as "1440"
All applicable	All applicable	All applicable	"RE" not added to sample IDs in EDF where applicable
GRO/BTEX (AK101)	01NE06WP103, 01NE31SW101, 01NE31SW102, 01NE00TB115, 01NE24SW114	trifluorotoluene & bromobenzene	Surrogate recoveries for GRO not in EDF, only BTEX surrogate recoveries entered in EDF- both entered as AK101
Metals	01NE24SW114	potassium	Results entered in EDF as "650"; hardcopy shown as "600"
DRO	01NE04WP104	All applicable	CoC indicates analysis for DRO; lab analyzed for DRO and RRO

**Table 2 - Sampling and Analysis Discrepancies / Deficiencies**

**Laboratory:** ARI

**SDG:** DN76

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
Pb	All applicable	All applicable	CoC shows method as SW7421; lab analyzed by method SW6010B
PCBs	01NE09SD109	aroclor 1242 & aroclor 1254	Reporting limits in EDF do not match hardcopy
PCBs	01NE09SD107	aroclor 1221	Reporting limit in EDF does not match hardcopy
All applicable	01NE09SD213	All applicable	Time (0845) incorrect in EDF; should be "0835"
PCBs	01NE09SD213	All applicable	PAH and metals bottle labels indicate ID as "01NE09SD214", time "835"
All applicable	All applicable	All applicable	"RE" not added to sample IDs in EDF where applicable

**SDG:** DN88

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
GRO	01NE00TB118	All applicable	GRO analysis not requested on CoC
GRO & Voa	01NE00TB118	All applicable	Contained air bubbles
GRO & Voa	01NE07WP102	All applicable	Shown as "01NE07WP102" in EDF and hardcopy; shown on CoC as "01NE07WP102"

**SDG:** DQ74

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
All applicable	All applicable	All applicable	"DL" not added to sample IDs in EDF where applicable
PEST	All applicable	All applicable	IDs begin with "O1" in EDF and hardcopy; shown as "01" on CoC and sample tracker
All applicable	All IDs	All applicable	All IDs on CoC "0"1NE...; hardcopy and EDF shown as "O"1NE...

**SDG:** DY36

Analysis Type	Affected Samples	Affected Analytes	Discrepancy / Deficiency
Metals	01NE24SD115	All applicable	Not shown on tracker; sample 01NE24SD116 shown as same time collected (930)
Metals	01NE09SD213	All applicable	Time collected on sample tracker shown as "835"; shown as "0845" on CoC

**Table 3 - Rejected Data**

Due to severe analytical deficiencies, the following nondetected results are rejected:

***Analysis Type: Total Metals***

***Labcode: ARI***

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN40E	01NE29SD128	SX	antimony	<	7	mg/Kg	UR	L c
DN40F	01NE29SD129	SX	antimony	<	5	mg/Kg	UR	L c
DN40M	01NE29SD127	SX	antimony	<	7	mg/Kg	UR	L c
DN40N	01NE29SD126	SX	antimony	<	10	mg/Kg	UR	L c

**Table 4 - Sample Condition Qualifications (p,t)**

Due to sample condition deficiencies, the following results are qualified as estimated:

**Analysis Type: BTEX**

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100413-07	01NE00TB107	WX	benzene	<	0.0005	mg/L	UJ	L
			ethylbenzene	<	0.001	mg/L	UJ	L
			m,p-xylene	<	0.002	mg/L	UJ	L
			o-xylene	<	0.001	mg/L	UJ	L
			toluene	<	0.001	mg/L	UJ	L
99805-01	01NE35GW301	WX	benzene	<	0.4	µg/L	UJ	L
			ethylbenzene	<	0.4	µg/L	UJ	L
			m,p-xylene	<	0.8	µg/L	UJ	L
			o-xylene	<	0.4	µg/L	UJ	L
			toluene	<	0.4	µg/L	UJ	L
99805-02	01NE35TB302	WX	benzene	<	0.4	µg/L	UJ	L
			ethylbenzene	<	0.4	µg/L	UJ	L
			m,p-xylene	<	0.8	µg/L	UJ	L
			o-xylene	<	0.4	µg/L	UJ	L
			toluene	<	0.4	µg/L	UJ	L

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** Diesel / Residual Range Organics

**Labcode:** ARI

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN71F	01NE24SW114	WX	diesel range organics	<	0.25	mg/L	UJ	L t
			motor oil	<	0.5	mg/L	UJ	L t
DN71G	01NE24SW214	WX	diesel range organics	<	0.25	mg/L	UJ	L t
			motor oil	<	0.5	mg/L	UJ	L t

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** Diesel Range Organics

**Labcode:** SAS

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
99805-01	01NE35GW301	WX	diesel range organics	0.11	mg/L	J	L	t

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** *Gasoline Range Organics*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
99805-01	01NE35GW301	WX	gasoline range organics	< 0.05	mg/L	UJ	L	t
99805-02	01NE35TB302	WX	gasoline range organics	< 0.05	mg/L	UJ	L	t

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** *Residual Range Organics*

**Labcode:** **SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
99805-01	01NE35GW301	WX	residual range organics	0.15	mg/L	J	L	t

**Table 4 - Sample Condition Qualifications (p,t)*****Analysis Type: Total Metals******Labcode: ARI***

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN03J	01NE07SW105	WX	aluminum	240	µg/L	J	L	t
			antimony	< 50	µg/L	UJ	L	t
			arsenic	< 1	µg/L	UJ	L	t
			barium	12	µg/L	J	L	t
			beryllium	< 1	µg/L	UJ	L	t
			cadmium	< 2	µg/L	UJ	L	t
			calcium	4990	µg/L	J	L	t
			chromium	< 5	µg/L	UJ	L	t
			cobalt	< 3	µg/L	UJ	L	t
			copper	2	µg/L	J	L	t
			iron	3660	µg/L	J	L	t
			lead	2	µg/L	J	L	t
			magnesium	1440	µg/L	J	L	t
			manganese	96	µg/L	J	L	t
			mercury	< 0.1	µg/L	UJ	L	t
			nickel	< 10	µg/L	UJ	L	t
			potassium	< 500	µg/L	UJ	L	t
			selenium	< 2	µg/L	UJ	L	t
			silver	< 3	µg/L	UJ	L	t
			sodium	4720	µg/L	J	L	t
			thallium	< 1	µg/L	UJ	L	t
			vanadium	< 3	µg/L	UJ	L	t
			zinc	19	µg/L	J	L	t

**Table 4 - Sample Condition Qualifications (p,t)*****Analysis Type: Total Metals******Labcode: ARI***

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN53A	01NE09SW109	WX	aluminum	100	µg/L	J	L	t
			antimony	<	50	µg/L	UJ	L
			arsenic	<	1	µg/L	UJ	L
			barium		20	µg/L	J	L
			beryllium	<	1	µg/L	UJ	L
			cadmium	<	2	µg/L	UJ	L
			calcium		2950	µg/L	J	L
			chromium	<	5	µg/L	UJ	L
			cobalt	<	3	µg/L	UJ	L
			copper		4	µg/L	J	L
			iron		1150	µg/L	J	L
			lead		6	µg/L	J	L
			magnesium		820	µg/L	J	L
			manganese		12	µg/L	J	L
			mercury	<	0.1	µg/L	UJ	L
			nickel	<	10	µg/L	UJ	L
			potassium	<	500	µg/L	UJ	L
			selenium	<	2	µg/L	UJ	L
			silver	<	3	µg/L	UJ	L
			sodium		4040	µg/L	J	L
			thallium	<	1	µg/L	UJ	L
			vanadium	<	3	µg/L	UJ	L
			zinc		60	µg/L	J	L

**Table 4 - Sample Condition Qualifications (p,t)*****Analysis Type: Total Metals******Labcode: ARI***

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN71A	01NE09SW112	WX	aluminum	40	µg/L	J	L	t
			antimony	<	50	µg/L	UJ	L
			arsenic	<	1	µg/L	UJ	L
			barium		5	µg/L	J	L
			beryllium	<	1	µg/L	UJ	L
			cadmium	<	2	µg/L	UJ	L
			calcium		1750	µg/L	J	L
			chromium	<	5	µg/L	UJ	L
			cobalt	<	3	µg/L	UJ	L
			copper	<	2	µg/L	UJ	L
			iron		200	µg/L	J	L
			lead	<	1	µg/L	UJ	L
			magnesium		860	µg/L	J	L
			manganese		12	µg/L	J	L
			mercury	<	0.1	µg/L	UJ	L
			nickel	<	10	µg/L	UJ	L
			potassium		500	µg/L	J	L
			selenium	<	2	µg/L	UJ	L
			silver	<	3	µg/L	UJ	L
			sodium		4290	µg/L	J	L
			thallium	<	1	µg/L	UJ	L
			vanadium	<	3	µg/L	UJ	L
			zinc	<	6	µg/L	UJ	L

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** *Total Metals*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN71B	01NE09WP102	WX	aluminum	48900	µg/L	J	L	t
			antimony	< 50	µg/L	UJ	L	t
			arsenic	12	µg/L	J	L	t
			barium	271	µg/L	J	L	t
			beryllium	4	µg/L	J	L	t
			cadmium	2	µg/L	J	L	t
			calcium	7970	µg/L	J	L	t
			chromium	75	µg/L	J	L	t
			cobalt	12	µg/L	J	L	t
			copper	46	µg/L	J	L	t
			iron	77300	µg/L	J	L	t
			lead	56	µg/L	J	L	t
			magnesium	8570	µg/L	J	L	t
			manganese	326	µg/L	J	L	t
			mercury	0.2	µg/L	J	L	t
			nickel	110	µg/L	J	L	t
			potassium	3000	µg/L	J	L	t
			selenium	< 2	µg/L	UJ	L	t
			silver	< 3	µg/L	UJ	L	t
			sodium	9090	µg/L	J	L	t
			thallium	< 1	µg/L	UJ	L	t
			vanadium	97	µg/L	J	L	t
			zinc	419	µg/L	J	L	t

**Table 4 - Sample Condition Qualifications (p,t)*****Analysis Type: Total Metals******Labcode: ARI***

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN71D	01NE09MW103	WX	aluminum	164000	µg/L	J	L	t
			antimony	120	µg/L	J	L	t
			arsenic	< 5	µg/L	UJ	L	t
			barium	1160	µg/L	J	L	t
			beryllium	14	µg/L	J	L	t
			cadmium	4	µg/L	J	L	t
			calcium	58600	µg/L	J	L	t
			chromium	99	µg/L	J	L	t
			cobalt	37	µg/L	J	L	t
			copper	68	µg/L	J	L	t
			iron	322000	µg/L	J	L	t
			lead	300	µg/L	J	L	t
			magnesium	38900	µg/L	J	L	t
			manganese	2240	µg/L	J	L	t
			mercury	0.4	µg/L	J	L	t
			nickel	80	µg/L	J	L	t
			potassium	16400	µg/L	J	L	t
			selenium	< 10	µg/L	UJ	L	t
			silver	< 3	µg/L	UJ	L	t
			sodium	46900	µg/L	J	L	t
			thallium	< 5	µg/L	UJ	L	t
			vanadium	149	µg/L	J	L	t
			zinc	512	µg/L	J	L	t

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** *Total Metals*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN88E	01NE07WP101	WX	aluminum	10600	µg/L	J	L	t
			antimony	<	50	µg/L	UJ	L
			arsenic		10	µg/L	J	L
			barium		126	µg/L	J	L
			beryllium	<	1	µg/L	UJ	L
			cadmium	<	2	µg/L	UJ	L
			calcium		7570	µg/L	J	L
			chromium		255	µg/L	J	L
			cobalt		64	µg/L	J	L
			copper		67	µg/L	J	L
			iron		47100	µg/L	J	L
			lead		40	µg/L	J	L
			magnesium		3770	µg/L	J	L
			manganese		593	µg/L	J	L
			mercury		0.2	µg/L	J	L
			nickel		3540	µg/L	J	L
			potassium		5300	µg/L	J	L
			selenium	<	2	µg/L	UJ	L
			silver	<	3	µg/L	UJ	L
			sodium		8480	µg/L	J	L
			thallium	<	1	µg/L	UJ	L
			vanadium		79	µg/L	J	L
			zinc		2470	µg/L	J	L

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** *Volatile Organics*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN53N	01NE00TB108	WX	1,1,1,2-tetrachloroethane	<	1	µg/L	UJ	L	p
			1,1,1-trichloroethane	<	1	µg/L	UJ	L	p
			1,1,2,2-tetrachloroethane	<	1	µg/L	UJ	L	p
			1,1,2-trichloroethane	<	1	µg/L	UJ	L	p
			1,1-dichloroethane	<	1	µg/L	UJ	L	p
			1,1-dichloroethene	<	1	µg/L	UJ	L	p
			1,1-dichloropropene	<	1	µg/L	UJ	L	p
			1,2,3-trichlorobenzene	<	5	µg/L	UJ	L	p
			1,2,3-trichloropropane	<	3	µg/L	UJ	L	p
			1,2,4-trichlorobenzene	<	5	µg/L	UJ	L	p
			1,2,4-trimethylbenzene	<	1	µg/L	UJ	L	p
			1,2-dibromo-3-chloropropane	<	5	µg/L	UJ	L	p
			1,2-dichlorobenzene	<	1	µg/L	UJ	L	p
			1,2-dichloroethane	<	1	µg/L	UJ	L	p
			1,2-dichloropropane	<	1	µg/L	UJ	L	p
			1,3,5-trimethylbenzene	<	1	µg/L	UJ	L	p
			1,3-dichlorobenzene	<	1	µg/L	UJ	L	p
			1,3-dichloropropane	<	1	µg/L	UJ	L	p
			1,4-dichlorobenzene	<	1	µg/L	UJ	L	p
			112trichloro122trifluoroethane	<	2	µg/L	UJ	L	p
			2,2-dichloropropane	<	1	µg/L	UJ	L	p
			2-butanone	<	5	µg/L	UJ	L	p
			2-chloroethylvinyl ether	<	5	µg/L	UJ	L	p
			2-chlorotoluene	<	1	µg/L	UJ	L	p
			2-hexanone	<	5	µg/L	UJ	L	p
			4-chlorotoluene	<	1	µg/L	UJ	L	p
			4-isopropyltoluene	<	1	µg/L	UJ	L	p
			4-methyl-2-pentanone	<	5	µg/L	UJ	L	p
			acetone	<	5	µg/L	UJ	L	p
			acrolein	<	50	µg/L	UJ	L	p
			acrylonitrile	<	1	µg/L	UJ	L	p
			benzene	<	1	µg/L	UJ	L	p
			bromobenzene	<	1	µg/L	UJ	L	p
			bromochloromethane	<	1	µg/L	UJ	L	p
			bromodichloromethane	<	1	µg/L	UJ	L	p
			bromoethane	<	2	µg/L	UJ	L	p
			bromoform	<	1	µg/L	UJ	L	p
			bromomethane	<	1	µg/L	UJ	L	p
			carbon disulfide	<	1	µg/L	UJ	L	p
			carbon tetrachloride	<	1	µg/L	UJ	L	p
			chlorobenzene	<	1	µg/L	UJ	L	p
			chloroethane	<	1	µg/L	UJ	L	p

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Table 4 - Sample Condition Qualifications (p,t)

NE Cape HTRW - St. Lawrence Island

**Table 4 - Sample Condition Qualifications (p,t)****Analysis Type:** *Volatile Organics***Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN53N	01NE00TB108	WX	chloroform	<	1	µg/L	UJ	L	p
			chloromethane	<	1	µg/L	UJ	L	p
			cis-1,2-dichloroethene	<	1	µg/L	UJ	L	p
			cis-1,3-dichloropropene	<	1	µg/L	UJ	L	p
			dibromochloromethane	<	1	µg/L	UJ	L	p
			dibromomethane	<	1	µg/L	UJ	L	p
			ethylbenzene	<	1	µg/L	UJ	L	p
			ethylene dibromide	<	1	µg/L	UJ	L	p
			hexachlorobutadiene	<	5	µg/L	UJ	L	p
			isopropylbenzene	<	1	µg/L	UJ	L	p
			m,p-xylene	<	1	µg/L	UJ	L	p
			methyl iodide	<	1	µg/L	UJ	L	p
			methylene chloride	<	2	µg/L	UJ	L	p
			n-butylbenzene	<	1	µg/L	UJ	L	p
			n-propylbenzene	<	1	µg/L	UJ	L	p
			naphthalene	<	5	µg/L	UJ	L	p
			o-xylene	<	1	µg/L	UJ	L	p
			sec-butylbenzene	<	1	µg/L	UJ	L	p
			styrene	<	1	µg/L	UJ	L	p
			tert-butylbenzene	<	1	µg/L	UJ	L	p
			tetrachloroethylene	<	1	µg/L	UJ	L	p
			toluene	<	1	µg/L	UJ	L	p
			trans-1,2-dichloroethene	<	1	µg/L	UJ	L	p
			trans-1,3-dichloropropene	<	1	µg/L	UJ	L	p
			trans-1,4-dichloro-2-butene	<	5	µg/L	UJ	L	p
			trichloroethene	<	1	µg/L	UJ	L	p
			trichlorofluoromethane	<	1	µg/L	UJ	L	p
			vinyl acetate	<	5	µg/L	UJ	L	p
			vinyl chloride	<	1	µg/L	UJ	L	p

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** *Volatile Organics*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN71R	01NE09MW103	WX	1,1,1,2-tetrachloroethane	<	1	µg/L	UJ	L	p
			1,1,1-trichloroethane	<	1	µg/L	UJ	L	p
			1,1,2,2-tetrachloroethane	<	1	µg/L	UJ	L	p
			1,1,2-trichloroethane	<	1	µg/L	UJ	L	p
			1,1-dichloroethane	<	1	µg/L	UJ	L	p
			1,1-dichloroethene	<	1	µg/L	UJ	L	p
			1,1-dichloropropene	<	1	µg/L	UJ	L	p
			1,2,3-trichlorobenzene	<	5	µg/L	UJ	L	p
			1,2,3-trichloropropane	<	3	µg/L	UJ	L	p
			1,2,4-trichlorobenzene	<	5	µg/L	UJ	L	p
			1,2,4-trimethylbenzene	<	1	µg/L	UJ	L	p
			1,2-dibromo-3-chloropropane	<	5	µg/L	UJ	L	p
			1,2-dichlorobenzene	<	1	µg/L	UJ	L	p
			1,2-dichloroethane	<	1	µg/L	UJ	L	p
			1,2-dichloropropane	<	1	µg/L	UJ	L	p
			1,3,5-trimethylbenzene	<	1	µg/L	UJ	L	p
			1,3-dichlorobenzene	<	1	µg/L	UJ	L	p
			1,3-dichloropropane	<	1	µg/L	UJ	L	p
			1,4-dichlorobenzene	<	1	µg/L	UJ	L	p
			112trichloro122trifluoroethane	<	2	µg/L	UJ	L	p
			2,2-dichloropropane	<	1	µg/L	UJ	L	p
			2-butanone	<	5	µg/L	UJ	L	p
			2-chloroethylvinyl ether	<	5	µg/L	UJ	L	p
			2-chlorotoluene	<	1	µg/L	UJ	L	p
			2-hexanone	<	5	µg/L	UJ	L	p
			4-chlorotoluene	<	1	µg/L	UJ	L	p
			4-isopropyltoluene	<	1	µg/L	UJ	L	p
			4-methyl-2-pentanone	<	5	µg/L	UJ	L	p
			acetone	<	5	µg/L	UJ	L	p
			acrolein	<	50	µg/L	UJ	L	p
			acrylonitrile	<	1	µg/L	UJ	L	p
			benzene	<	1	µg/L	UJ	L	p
			bromobenzene	<	1	µg/L	UJ	L	p
			bromochloromethane	<	1	µg/L	UJ	L	p
			bromodichloromethane	<	1	µg/L	UJ	L	p
			bromoethane	<	2	µg/L	UJ	L	p
			bromoform	<	1	µg/L	UJ	L	p
			bromomethane	<	1	µg/L	UJ	L	p
			carbon disulfide	<	1	µg/L	UJ	L	p
			carbon tetrachloride	<	1	µg/L	UJ	L	p
			chlorobenzene	<	1	µg/L	UJ	L	p
			chloroethane	<	1	µg/L	UJ	L	p

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Table 4 - Sample Condition Qualifications (p,t)

NE Cape HTRW - St. Lawrence Island

**Table 4 - Sample Condition Qualifications (p,t)*****Analysis Type: Volatile Organics******Labcode: ARI***

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN71R	01NE09MW103	WX	chloroform	<	1	µg/L	UJ	L	p
			chloromethane	<	1	µg/L	UJ	L	p
			cis-1,2-dichloroethene	<	1	µg/L	UJ	L	p
			cis-1,3-dichloropropene	<	1	µg/L	UJ	L	p
			dibromochloromethane	<	1	µg/L	UJ	L	p
			dibromomethane	<	1	µg/L	UJ	L	p
			ethylbenzene	<	1	µg/L	UJ	L	p
			ethylene dibromide	<	1	µg/L	UJ	L	p
			hexachlorobutadiene	<	5	µg/L	UJ	L	p
			isopropylbenzene	<	1	µg/L	UJ	L	p
			m,p-xylene	<	1	µg/L	UJ	L	p
			methyl iodide	<	1	µg/L	UJ	L	p
			methylene chloride	<	2	µg/L	UJ	L	p
			n-butylbenzene	<	1	µg/L	UJ	L	p
			n-propylbenzene	<	1	µg/L	UJ	L	p
			naphthalene	<	5	µg/L	UJ	L	p
			o-xylene	<	1	µg/L	UJ	L	p
			sec-butylbenzene	<	1	µg/L	UJ	L	p
			styrene	<	1	µg/L	UJ	L	p
			tert-butylbenzene	<	1	µg/L	UJ	L	p
			tetrachloroethylene	<	1	µg/L	UJ	L	p
			toluene	<	1	µg/L	UJ	L	p
			trans-1,2-dichloroethene	<	1	µg/L	UJ	L	p
			trans-1,3-dichloropropene	<	1	µg/L	UJ	L	p
			trans-1,4-dichloro-2-butene	<	5	µg/L	UJ	L	p
			trichloroethene	<	1	µg/L	UJ	L	p
			trichlorofluoromethane	<	1	µg/L	UJ	L	p
			vinyl acetate	<	5	µg/L	UJ	L	p
			vinyl chloride	<	1	µg/L	UJ	L	p

**Table 4 - Sample Condition Qualifications (p,t)****Analysis Type:** *Volatile Organics***Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN71S	01NE00TB116	WX	1,1,1,2-tetrachloroethane	<	1	µg/L	UJ	L	p
			1,1,1-trichloroethane	<	1	µg/L	UJ	L	p
			1,1,2,2-tetrachloroethane	<	1	µg/L	UJ	L	p
			1,1,2-trichloroethane	<	1	µg/L	UJ	L	p
			1,1-dichloroethane	<	1	µg/L	UJ	L	p
			1,1-dichloroethene	<	1	µg/L	UJ	L	p
			1,1-dichloropropene	<	1	µg/L	UJ	L	p
			1,2,3-trichlorobenzene	<	5	µg/L	UJ	L	p
			1,2,3-trichloropropane	<	3	µg/L	UJ	L	p
			1,2,4-trichlorobenzene	<	5	µg/L	UJ	L	p
			1,2,4-trimethylbenzene	<	1	µg/L	UJ	L	p
			1,2-dibromo-3-chloropropane	<	5	µg/L	UJ	L	p
			1,2-dichlorobenzene	<	1	µg/L	UJ	L	p
			1,2-dichloroethane	<	1	µg/L	UJ	L	p
			1,2-dichloropropane	<	1	µg/L	UJ	L	p
			1,3,5-trimethylbenzene	<	1	µg/L	UJ	L	p
			1,3-dichlorobenzene	<	1	µg/L	UJ	L	p
			1,3-dichloropropane	<	1	µg/L	UJ	L	p
			1,4-dichlorobenzene	<	1	µg/L	UJ	L	p
			112trichloro122trifluoroethane	<	2	µg/L	UJ	L	p
			2,2-dichloropropane	<	1	µg/L	UJ	L	p
			2-butanone	<	5	µg/L	UJ	L	p
			2-chloroethylvinyl ether	<	5	µg/L	UJ	L	p
			2-chlorotoluene	<	1	µg/L	UJ	L	p
			2-hexanone	<	5	µg/L	UJ	L	p
			4-chlorotoluene	<	1	µg/L	UJ	L	p
			4-isopropyltoluene	<	1	µg/L	UJ	L	p
			4-methyl-2-pentanone	<	5	µg/L	UJ	L	p
			acetone	<	5	µg/L	UJ	L	p
			acrolein	<	50	µg/L	UJ	L	p
			acrylonitrile	<	1	µg/L	UJ	L	p
			benzene	<	1	µg/L	UJ	L	p
			bromobenzene	<	1	µg/L	UJ	L	p
			bromochloromethane	<	1	µg/L	UJ	L	p
			bromodichloromethane	<	1	µg/L	UJ	L	p
			bromoethane	<	2	µg/L	UJ	L	p
			bromoform	<	1	µg/L	UJ	L	p
			bromomethane	<	1	µg/L	UJ	L	p
			carbon disulfide	<	1	µg/L	UJ	L	p
			carbon tetrachloride	<	1	µg/L	UJ	L	p
			chlorobenzene	<	1	µg/L	UJ	L	p
			chloroethane	<	1	µg/L	UJ	L	p

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Table 4 - Sample Condition Qualifications (p,t)

NE Cape HTRW - St. Lawrence Island

**Table 4 - Sample Condition Qualifications (p,t)****Analysis Type:** *Volatile Organics***Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN71S	01NE00TB116	WX	chloroform	<	1	µg/L	UJ	L	p
			chloromethane	<	1	µg/L	UJ	L	p
			cis-1,2-dichloroethene	<	1	µg/L	UJ	L	p
			cis-1,3-dichloropropene	<	1	µg/L	UJ	L	p
			dibromochloromethane	<	1	µg/L	UJ	L	p
			dibromomethane	<	1	µg/L	UJ	L	p
			ethylbenzene	<	1	µg/L	UJ	L	p
			ethylene dibromide	<	1	µg/L	UJ	L	p
			hexachlorobutadiene	<	5	µg/L	UJ	L	p
			isopropylbenzene	<	1	µg/L	UJ	L	p
			m,p-xylene	<	1	µg/L	UJ	L	p
			methyl iodide	<	1	µg/L	UJ	L	p
			methylene chloride	<	2	µg/L	UJ	L	p
			n-butylbenzene	<	1	µg/L	UJ	L	p
			n-propylbenzene	<	1	µg/L	UJ	L	p
			naphthalene	<	5	µg/L	UJ	L	p
			o-xylene	<	1	µg/L	UJ	L	p
			sec-butylbenzene	<	1	µg/L	UJ	L	p
			styrene	<	1	µg/L	UJ	L	p
			tert-butylbenzene	<	1	µg/L	UJ	L	p
			tetrachloroethylene	<	1	µg/L	UJ	L	p
			toluene	<	1	µg/L	UJ	L	p
			trans-1,2-dichloroethene	<	1	µg/L	UJ	L	p
			trans-1,3-dichloropropene	<	1	µg/L	UJ	L	p
			trans-1,4-dichloro-2-butene	<	5	µg/L	UJ	L	p
			trichloroethene	<	1	µg/L	UJ	L	p
			trichlorofluoromethane	<	1	µg/L	UJ	L	p
			vinyl acetate	<	5	µg/L	UJ	L	p
			vinyl chloride	<	1	µg/L	UJ	L	p

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** *Volatile Organics*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN88H	01NE00TB118	WX	1,1,1,2-tetrachloroethane	<	1	µg/L	UJ	L	p
			1,1,1-trichloroethane	<	1	µg/L	UJ	L	p
			1,1,2,2-tetrachloroethane	<	1	µg/L	UJ	L	p
			1,1,2-trichloroethane	<	1	µg/L	UJ	L	p
			1,1-dichloroethane	<	1	µg/L	UJ	L	p
			1,1-dichloroethene	<	1	µg/L	UJ	L	p
			1,1-dichloropropene	<	1	µg/L	UJ	L	p
			1,2,3-trichlorobenzene	<	5	µg/L	UJ	L	p
			1,2,3-trichloropropane	<	3	µg/L	UJ	L	p
			1,2,4-trichlorobenzene	<	5	µg/L	UJ	L	p
			1,2,4-trimethylbenzene	<	1	µg/L	UJ	L	p
			1,2-dibromo-3-chloropropane	<	5	µg/L	UJ	L	p
			1,2-dichlorobenzene	<	1	µg/L	UJ	L	p
			1,2-dichloroethane	<	1	µg/L	UJ	L	p
			1,2-dichloropropane	<	1	µg/L	UJ	L	p
			1,3,5-trimethylbenzene	<	1	µg/L	UJ	L	p
			1,3-dichlorobenzene	<	1	µg/L	UJ	L	p
			1,3-dichloropropane	<	1	µg/L	UJ	L	p
			1,4-dichlorobenzene	<	1	µg/L	UJ	L	p
			112trichloro122trifluoroethane	<	2	µg/L	UJ	L	p
			2,2-dichloropropane	<	1	µg/L	UJ	L	p
			2-butanone	<	5	µg/L	UJ	L	p
			2-chloroethylvinyl ether	<	5	µg/L	UJ	L	p
			2-chlorotoluene	<	1	µg/L	UJ	L	p
			2-hexanone	<	5	µg/L	UJ	L	p
			4-chlorotoluene	<	1	µg/L	UJ	L	p
			4-isopropyltoluene	<	1	µg/L	UJ	L	p
			4-methyl-2-pentanone	<	5	µg/L	UJ	L	p
			acetone	<	5	µg/L	UJ	L	p
			acrolein	>	50	µg/L	UJ	L	p
			acrylonitrile	<	1	µg/L	UJ	L	p
			benzene	<	1	µg/L	UJ	L	p
			bromobenzene	<	1	µg/L	UJ	L	p
			bromochloromethane	<	1	µg/L	UJ	L	p
			bromodichloromethane	<	1	µg/L	UJ	L	p
			bromoethane	<	2	µg/L	UJ	L	p
			bromoform	<	1	µg/L	UJ	L	p
			bromomethane	<	1	µg/L	UJ	L	p
			carbon disulfide	<	1	µg/L	UJ	L	p
			carbon tetrachloride	<	1	µg/L	UJ	L	p
			chlorobenzene	<	1	µg/L	UJ	L	p
			chloroethane	<	1	µg/L	UJ	L	p

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Table 4 - Sample Condition Qualifications (p,t)

NE Cape HTRW - St. Lawrence Island

**Table 4 - Sample Condition Qualifications (p,t)****Analysis Type: Volatile Organics****Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN88H	01NE00TB118	WX	chloroform	<	1	µg/L	UJ	L	p
			chloromethane		3.2	µg/L	J	L	p
			cis-1,2-dichloroethene	<	1	µg/L	UJ	L	p
			cis-1,3-dichloropropene	<	1	µg/L	UJ	L	p
			dibromochloromethane	<	1	µg/L	UJ	L	p
			dibromomethane	<	1	µg/L	UJ	L	p
			ethylbenzene	<	1	µg/L	UJ	L	p
			ethylene dibromide	<	1	µg/L	UJ	L	p
			hexachlorobutadiene	<	5	µg/L	UJ	L	p
			isopropylbenzene	<	1	µg/L	UJ	L	p
			m,p-xylene	<	1	µg/L	UJ	L	p
			methyl iodide	<	1	µg/L	UJ	L	p
			methylene chloride	<	2	µg/L	UJ	L	p
			n-butylbenzene	<	1	µg/L	UJ	L	p
			n-propylbenzene	<	1	µg/L	UJ	L	p
			naphthalene	<	5	µg/L	UJ	L	p
			o-xylene	<	1	µg/L	UJ	L	p
			sec-butylbenzene	<	1	µg/L	UJ	L	p
			styrene	<	1	µg/L	UJ	L	p
			tert-butylbenzene	<	1	µg/L	UJ	L	p
			tetrachloroethylene	<	1	µg/L	UJ	L	p
			toluene	<	1	µg/L	UJ	L	p
			trans-1,2-dichloroethene	<	1	µg/L	UJ	L	p
			trans-1,3-dichloropropene	<	1	µg/L	UJ	L	p
			trans-1,4-dichloro-2-butene	<	5	µg/L	UJ	L	p
			trichloroethene	<	1	µg/L	UJ	L	p
			trichlorofluoromethane	<	1	µg/L	UJ	L	p
			vinyl acetate	<	5	µg/L	UJ	L	p
			vinyl chloride	<	1	µg/L	UJ	L	p

**Table 4 - Sample Condition Qualifications (p,t)**

**Analysis Type:** *Volatile Organics*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100553-02	01NE00TB117	WX	1,1,1,2-tetrachloroethane	< 0.4	µg/L	UJ	L	p
			1,1,1-trichloroethane	< 0.4	µg/L	UJ	L	p
			1,1,2,2-tetrachloroethane	< 0.4	µg/L	UJ	L	p
			1,1,2-trichloroethane	< 0.4	µg/L	UJ	L	p
			1,1-dichloroethane	< 0.4	µg/L	UJ	L	p
			1,1-dichloroethene	< 0.4	µg/L	UJ	L	p
			1,1-dichloropropene	< 0.4	µg/L	UJ	L	p
			1,2,3-trichlorobenzene	< 0.4	µg/L	UJ	L	p
			1,2,3-trichloropropane	< 0.4	µg/L	UJ	L	p
			1,2,4-trichlorobenzene	< 0.4	µg/L	UJ	L	p
			1,2,4-trimethylbenzene	< 0.4	µg/L	UJ	L	p
			1,2-dibromo-3-chloropropane	< 0.4	µg/L	UJ	L	p
			1,2-dibromoethane	< 0.4	µg/L	UJ	L	p
			1,2-dichlorobenzene	< 0.4	µg/L	UJ	L	p
			1,2-dichloroethane	< 0.4	µg/L	UJ	L	p
			1,2-dichloropropane	< 0.4	µg/L	UJ	L	p
			1,3,5-trimethylbenzene	< 0.4	µg/L	UJ	L	p
			1,3-dichlorobenzene	< 0.4	µg/L	UJ	L	p
			1,3-dichloropropane	< 0.4	µg/L	UJ	L	p
			1,4-dichlorobenzene	< 0.4	µg/L	UJ	L	p
			2,2-dichloropropane	< 0.4	µg/L	UJ	L	p
			2-butanone	< 2	µg/L	UJ	L	p
			2-chlorotoluene	< 0.4	µg/L	UJ	L	p
			2-hexanone	< 2	µg/L	UJ	L	p
			4-chlorotoluene	< 0.4	µg/L	UJ	L	p
			4-isopropyltoluene	< 0.4	µg/L	UJ	L	p
			4-methyl-2-pentanone	< 2	µg/L	UJ	L	p
			acetone	< 2	µg/L	UJ	L	p
			benzene	< 0.4	µg/L	UJ	L	p
			bromobenzene	< 0.4	µg/L	UJ	L	p
			bromochloromethane	< 0.4	µg/L	UJ	L	p
			bromodichloromethane	< 0.4	µg/L	UJ	L	p
			bromoform	< 0.4	µg/L	UJ	L	p
			bromomethane	< 0.8	µg/L	UJ	L	p
			carbon disulfide	< 0.4	µg/L	UJ	L	p
			carbon tetrachloride	< 0.4	µg/L	UJ	L	p
			chlorobenzene	< 0.4	µg/L	UJ	L	p
			chloroethane	< 0.4	µg/L	UJ	L	p
			chloroform	0.091	µg/L	J	N	m,p
			chloromethane	< 0.4	µg/L	UJ	L	p
			cis-1,2-dichloroethene	< 0.4	µg/L	UJ	L	p
			cis-1,3-dichloropropene	< 0.4	µg/L	UJ	L	p

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Table 4 - Sample Condition Qualifications (p,t)

NE Cape HTRW - St. Lawrence Island

**Table 4 - Sample Condition Qualifications (p,t)*****Analysis Type:*** ***Volatile Organics******Labcode:*** **SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
100553-02	01NE00TB117	WX	dibromochloromethane	<	0.4	µg/L	UJ	L	p
			dibromomethane	<	0.4	µg/L	UJ	L	p
			dichlorodifluoromethane	<	0.4	µg/L	UJ	L	p
			ethylbenzene	<	0.4	µg/L	UJ	L	p
			hexachlorobutadiene	<	0.4	µg/L	UJ	L	p
			isopropylbenzene	<	0.4	µg/L	UJ	L	p
			m,p-xylene	<	0.8	µg/L	UJ	L	p
			methylene chloride		0.42	µg/L	J	L	p
			n-butylbenzene	<	0.4	µg/L	UJ	L	p
			n-propylbenzene	<	0.4	µg/L	UJ	L	p
			naphthalene	<	0.4	µg/L	UJ	L	p
			o-xylene	<	0.4	µg/L	UJ	L	p
			sec-butylbenzene	<	0.4	µg/L	UJ	L	p
			styrene		0.34	µg/L	J	N	m,p
			tert-butylbenzene	<	0.4	µg/L	UJ	L	p
			tetrachloroethylene		0.24	µg/L	J	N	m,p
			toluene	<	0.4	µg/L	UJ	L	p
			trans-1,2-dichloroethene	<	0.4	µg/L	UJ	L	p
			trans-1,3-dichloropropene	<	0.4	µg/L	UJ	L	p
			trichloroethene	<	0.4	µg/L	UJ	L	p
			trichlorofluoromethane	<	0.4	µg/L	UJ	L	p
			vinyl chloride	<	0.4	µg/L	UJ	L	p

**Table 5 - Holding Time Qualifications (e)**

Due to holding time exceedance, the following results are qualified as estimated:

**Analysis Type: Diesel / Residual Range Organics**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DK21ARE	01NE35GW102	WX	diesel range organics motor oil	1.3 2.3	mg/L mg/L	UJ UJ	L L	e e
DK48ARE	01NE35GW101	WX	diesel range organics motor oil	< 0.25 < 0.5	mg/L mg/L	UJ UJ	L L	e e
DK48BRE	01NE35GW103	WX	diesel range organics motor oil	< 0.25 < 0.5	mg/L mg/L	UJ UJ	L L	e e
DK48DRE	01NE35GW201	WX	diesel range organics motor oil	< 0.25 < 0.5	mg/L mg/L	UJ UJ	L L	e e
DN40A-RE	01NE29SD123	SX	diesel range organics motor oil	44 180	mg/Kg mg/Kg	J J	L L	e e
DN40B-RE	01NE29SD124	SX	diesel range organics motor oil	1400 580	mg/Kg mg/Kg	J J	L L	e e
DN40C-RE	01NE29SD125	SX	diesel range organics motor oil	150 790	mg/Kg mg/Kg	J J	L L	e e
DN40D-RE	01NE29SD225	SX	diesel range organics motor oil	150 680	mg/Kg mg/Kg	J J	L L	e e
DN40E-RE	01NE29SD128	SX	diesel range organics motor oil	180 1000	mg/Kg mg/Kg	J J	L L	e e
DN40F-RE	01NE29SD129	SX	diesel range organics motor oil	15 73	mg/Kg mg/Kg	J J	L L	e e
DN40G-RE	01NE29SD120	SX	diesel range organics motor oil	47 100	mg/Kg mg/Kg	J J	L L	e e
DN40H-RE	01NE29SD121	SX	diesel range organics motor oil	11 < 10	mg/Kg mg/Kg	J UJ	L L	e e
DN40I-RE	01NE29SD122	SX	diesel range organics motor oil	37 50	mg/Kg mg/Kg	J J	L L	e e
DN40M-RE	01NE29SD127	SX	diesel range organics motor oil	250 1100	mg/Kg mg/Kg	J J	L L	e e
DN40N-RE	01NE29SD126	SX	diesel range organics motor oil	240 1000	mg/Kg mg/Kg	J J	L L	e e
DN53A-RE	01NE09SW109	WX	diesel range organics motor oil	< 0.25 < 0.5	mg/L mg/L	UJ UJ	L L	e e

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Table 5 - Holding Time Qualifications (e)

NE Cape HTRW - St. Lawrence Island

**Table 5 - Holding Time Qualifications (e)**

**Analysis Type: Diesel / Residual Range Organics**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN53B-RE	01NE09SW107	WX	diesel range organics	< 0.25	mg/L	UJ	L	e
			motor oil	< 0.5	mg/L	UJ	L	e
DN53F-RE	01NE09SW207	WX	diesel range organics	< 0.25	mg/L	UJ	L	e
			motor oil	< 0.5	mg/L	UJ	L	e
DN53G-RE	01NE09SW108	WX	diesel range organics	< 0.25	mg/L	UJ	L	e
			motor oil	< 0.5	mg/L	UJ	L	e
DN68F-RE	01NE09SD114	SX	diesel range organics	65	mg/Kg	J	L	b,e
			motor oil	300	mg/Kg	J	L	b,e
DN71D-RE	01NE09MW103	WX	diesel range organics	< 0.25	mg/L	UJ	L	b,e
			motor oil	< 0.5	mg/L	UJ	L	b,e
DN73A-RE	01NE30WP101	WX	diesel range organics	< 1	mg/L	UJ	L	e
			motor oil	2.5	mg/L	J	L	e
DN73C-RE	01NE06WP103	WX	diesel range organics	0.58	mg/L	J	L	e
			motor oil	1.1	mg/L	J	L	e
DN73D-RE	01NE31SW101	WX	diesel range organics	< 0.25	mg/L	UJ	L	e
			motor oil	< 0.5	mg/L	UJ	L	e
DN73E-RE	01NE31SW102	WX	diesel range organics	< 0.25	mg/L	UJ	L	e
			motor oil	< 0.5	mg/L	UJ	L	e
DN73F-RE	01NE04WP104	WX	diesel range organics	2.4	mg/L	J	L	e
			motor oil	6	mg/L	J	L	e
DN73G-RE	01NE04WP102	WX	diesel range organics	< 1	mg/L	UJ	L	e
			motor oil	2.2	mg/L	J	L	e
DN73H-RE	01NE04WP103	WX	diesel range organics	< 0.25	mg/L	UJ	L	e
			motor oil	< 0.5	mg/L	UJ	L	e
DN73M	01NE21SW114	WX	diesel range organics	< 0.25	mg/L	UJ	L	e
			motor oil	< 0.5	mg/L	UJ	L	e
DN73M-RE	01NE21SW114	WX	diesel range organics	< 0.25	mg/L	UJ	L	e
			motor oil	< 0.5	mg/L	UJ	L	e

**Table 5 - Holding Time Qualifications (e)**

**Analysis Type:** *Gasoline Range Organics*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN73M	01NE21SW114	WX	gasoline range organics	< 0.25	mg/L	UJ	L	e

**Table 5 - Holding Time Qualifications (e)****Analysis Type: Polychlorinated Biphenyls****Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN40A-RE	01NE29SD123	SX	aroclor 1016	< 73	µg/Kg	UJ	L	e
			aroclor 1221	< 150	µg/Kg	UJ	L	e
			aroclor 1232	< 73	µg/Kg	UJ	L	e
			aroclor 1242	< 73	µg/Kg	UJ	L	e
			aroclor 1248	< 73	µg/Kg	UJ	L	e
			aroclor 1254	< 73	µg/Kg	UJ	L	e
			aroclor 1260	< 73	µg/Kg	UJ	L	e
DN40B-RE	01NE29SD124	SX	aroclor 1016	< 48	µg/Kg	UJ	L	e
			aroclor 1221	< 96	µg/Kg	UJ	L	e
			aroclor 1232	< 48	µg/Kg	UJ	L	e
			aroclor 1242	< 48	µg/Kg	UJ	L	e
			aroclor 1248	< 48	µg/Kg	UJ	L	e
			aroclor 1254	< 48	µg/Kg	UJ	L	e
			aroclor 1260	< 48	µg/Kg	UJ	L	e
DN40C-RE	01NE29SD125	SX	aroclor 1016	< 48	µg/Kg	UJ	L	e
			aroclor 1221	< 96	µg/Kg	UJ	L	e
			aroclor 1232	< 48	µg/Kg	UJ	L	e
			aroclor 1242	< 48	µg/Kg	UJ	L	e
			aroclor 1248	< 48	µg/Kg	UJ	L	e
			aroclor 1254	< 48	µg/Kg	UJ	L	e
			aroclor 1260	< 48	µg/Kg	UJ	L	e
DN40D-RE	01NE29SD225	SX	aroclor 1016	< 52	µg/Kg	UJ	L	e
			aroclor 1221	< 100	µg/Kg	UJ	L	e
			aroclor 1232	< 52	µg/Kg	UJ	L	e
			aroclor 1242	< 52	µg/Kg	UJ	L	e
			aroclor 1248	< 52	µg/Kg	UJ	L	e
			aroclor 1254	< 52	µg/Kg	UJ	L	e
			aroclor 1260	< 52	µg/Kg	UJ	L	e
DN40E-RE	01NE29SD128	SX	aroclor 1016	< 49	µg/Kg	UJ	L	e
			aroclor 1221	< 98	µg/Kg	UJ	L	e
			aroclor 1232	< 49	µg/Kg	UJ	L	e
			aroclor 1242	< 49	µg/Kg	UJ	L	e
			aroclor 1248	< 49	µg/Kg	UJ	L	e
			aroclor 1254	< 49	µg/Kg	UJ	L	e
			aroclor 1260	< 49	µg/Kg	UJ	L	e

**Table 5 - Holding Time Qualifications (e)****Analysis Type: Polychlorinated Biphenyls****Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN40F-RE	01NE29SD129	SX	aroclor 1016	< 38	µg/Kg	UJ	L	e
			aroclor 1221	< 77	µg/Kg	UJ	L	e
			aroclor 1232	< 38	µg/Kg	UJ	L	e
			aroclor 1242	< 38	µg/Kg	UJ	L	e
			aroclor 1248	< 38	µg/Kg	UJ	L	e
			aroclor 1254	< 38	µg/Kg	UJ	L	e
			aroclor 1260	< 38	µg/Kg	UJ	L	e
DN40G-RE	01NE29SD120	SX	aroclor 1016	< 41	µg/Kg	UJ	L	e
			aroclor 1221	< 81	µg/Kg	UJ	L	e
			aroclor 1232	< 41	µg/Kg	UJ	L	e
			aroclor 1242	< 41	µg/Kg	UJ	L	e
			aroclor 1248	< 41	µg/Kg	UJ	L	e
			aroclor 1254	< 41	µg/Kg	UJ	L	e
			aroclor 1260	< 41	µg/Kg	UJ	L	e
DN40H-RE	01NE29SD121	SX	aroclor 1016	< 36	µg/Kg	UJ	L	e
			aroclor 1221	< 72	µg/Kg	UJ	L	e
			aroclor 1232	< 36	µg/Kg	UJ	L	e
			aroclor 1242	< 36	µg/Kg	UJ	L	e
			aroclor 1248	< 36	µg/Kg	UJ	L	e
			aroclor 1254	< 36	µg/Kg	UJ	L	e
			aroclor 1260	< 36	µg/Kg	UJ	L	e
DN40I-RE	01NE29SD122	SX	aroclor 1016	< 40	µg/Kg	UJ	L	e
			aroclor 1221	< 80	µg/Kg	UJ	L	e
			aroclor 1232	< 40	µg/Kg	UJ	L	e
			aroclor 1242	< 40	µg/Kg	UJ	L	e
			aroclor 1248	< 40	µg/Kg	UJ	L	e
			aroclor 1254	< 40	µg/Kg	UJ	L	e
			aroclor 1260	< 40	µg/Kg	UJ	L	e
DN40M-RE	01NE29SD127	SX	aroclor 1016	< 50	µg/Kg	UJ	L	e
			aroclor 1221	< 100	µg/Kg	UJ	L	e
			aroclor 1232	< 50	µg/Kg	UJ	L	e
			aroclor 1242	< 50	µg/Kg	UJ	L	e
			aroclor 1248	< 50	µg/Kg	UJ	L	e
			aroclor 1254	< 50	µg/Kg	UJ	L	e
			aroclor 1260	< 50	µg/Kg	UJ	L	e

**Table 5 - Holding Time Qualifications (e)**

**Analysis Type: Polychlorinated Biphenyls**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN40N-RE	01NE29SD126	SX	aroclor 1016	< 47	µg/Kg	UJ	L	e
			aroclor 1221	< 94	µg/Kg	UJ	L	e
			aroclor 1232	< 47	µg/Kg	UJ	L	e
			aroclor 1242	< 47	µg/Kg	UJ	L	e
			aroclor 1248	< 47	µg/Kg	UJ	L	e
			aroclor 1254	< 47	µg/Kg	UJ	L	e
			aroclor 1260	< 47	µg/Kg	UJ	L	e
DN73M	01NE21SW114	WX	aroclor 1016	< 1	µg/L	UJ	L	e
			aroclor 1221	< 2	µg/L	UJ	L	e
			aroclor 1232	< 1	µg/L	UJ	L	e
			aroclor 1242	< 1	µg/L	UJ	L	e
			aroclor 1248	< 1	µg/L	UJ	L	e
			aroclor 1254	< 1	µg/L	UJ	L	e
			aroclor 1260	< 1	µg/L	UJ	L	e

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-04	01NE21SS369	SX	aroclor 1016	< 0.41	mg/Kg	UJ	L	e
			aroclor 1221	< 0.41	mg/Kg	UJ	L	e
			aroclor 1232	< 0.41	mg/Kg	UJ	L	e
			aroclor 1242	< 0.41	mg/Kg	UJ	L	e
			aroclor 1248	< 0.41	mg/Kg	UJ	L	e
			aroclor 1254	< 0.41	mg/Kg	UJ	L	e
			aroclor 1260	< 0.41	mg/Kg	UJ	L	e
100492-10	01NE31SS302	SX	aroclor 1016	< 0.11	mg/Kg	UJ	L	e
			aroclor 1221	< 0.11	mg/Kg	UJ	L	e
			aroclor 1232	< 0.11	mg/Kg	UJ	L	e
			aroclor 1242	< 0.11	mg/Kg	UJ	L	e
			aroclor 1248	< 0.11	mg/Kg	UJ	L	e
			aroclor 1254	< 0.11	mg/Kg	UJ	L	e
			aroclor 1260	3	mg/Kg	J	L	e
100492-12	01NE14SS303	SX	aroclor 1016	< 0.11	mg/Kg	UJ	L	e
			aroclor 1221	< 0.11	mg/Kg	UJ	L	e
			aroclor 1232	< 0.11	mg/Kg	UJ	L	e
			aroclor 1242	< 0.11	mg/Kg	UJ	L	e
			aroclor 1248	< 0.11	mg/Kg	UJ	L	e
			aroclor 1254	< 0.11	mg/Kg	UJ	L	e
			aroclor 1260	0.71	mg/Kg	J	L	e

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Table 5 - Holding Time Qualifications (e)

NE Cape HTRW - St. Lawrence Island

**Table 5 - Holding Time Qualifications (e)**

**Analysis Type: Polychlorinated Biphenyls**

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-13	01NE09SD313	SX	aroclor 1016	< 0.63	mg/Kg	UJ	L	e
			aroclor 1221	< 0.63	mg/Kg	UJ	L	e
			aroclor 1232	< 0.63	mg/Kg	UJ	L	e
			aroclor 1242	< 0.63	mg/Kg	UJ	L	e
			aroclor 1248	< 0.63	mg/Kg	UJ	L	e
			aroclor 1254	< 0.63	mg/Kg	UJ	L	e
			aroclor 1260	< 0.63	mg/Kg	UJ	L	e

**Table 5 - Holding Time Qualifications (e)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN04S-RE	01NE28SD134	SX	2-methylnaphthalene	25000	µg/Kg	J	L	e,o
			acenaphthene	2300	µg/Kg	J	L	e
			acenaphthylene	< 160	µg/Kg	UJ	L	e
			anthracene	< 160	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 160	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 160	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 160	µg/Kg	UJ	L	e
			benzo(g,h,l)perylene	< 160	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 160	µg/Kg	UJ	L	e
			chrysene	< 160	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 160	µg/Kg	UJ	L	e
			dibenzofuran	1200	µg/Kg	J	L	e
			fluoranthene	< 160	µg/Kg	UJ	L	e
			fluorene	4100	µg/Kg	J	L	e
			indeno(1,2,3,c,d)pyrene	< 160	µg/Kg	UJ	L	e
			naphthalene	1800	µg/Kg	J	L	e
			phenanthrene	3400	µg/Kg	J	L	e
			pyrene	< 160	µg/Kg	UJ	L	e
DN04S-REDL	01NE28SD134	SX	2-methylnaphthalene	26000	µg/Kg	J	L	e
			acenaphthene	2700	µg/Kg	J	L	e
			acenaphthylene	< 1600	µg/Kg	UJ	L	e
			anthracene	< 1600	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 1600	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 1600	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 1600	µg/Kg	UJ	L	e
			benzo(g,h,l)perylene	< 1600	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 1600	µg/Kg	UJ	L	e
			chrysene	< 1600	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 1600	µg/Kg	UJ	L	e
			dibenzofuran	< 1600	µg/Kg	UJ	L	e
			fluoranthene	< 1600	µg/Kg	UJ	L	e
			fluorene	3900	µg/Kg	J	L	e
			indeno(1,2,3,c,d)pyrene	< 1600	µg/Kg	UJ	L	e
			naphthalene	3600	µg/Kg	J	L	e
			phenanthrene	3400	µg/Kg	J	L	e
			pyrene	< 1600	µg/Kg	UJ	L	e

**Table 5 - Holding Time Qualifications (e)****Analysis Type: Polynuclear Aromatic Hydrocarbons****Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN06H-RE	01NE28SD141	SX	2-methylnaphthalene	290	µg/Kg	J	L	e
			acenaphthene	< 41	µg/Kg	UJ	L	e
			acenaphthylene	< 41	µg/Kg	UJ	L	e
			anthracene	< 41	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 41	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 41	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 41	µg/Kg	UJ	L	e
			benzo(g,h,l)perylene	< 41	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 41	µg/Kg	UJ	L	e
			chrysene	< 41	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 41	µg/Kg	UJ	L	e
			dibenzofuran	< 41	µg/Kg	UJ	L	e
			fluoranthene	< 41	µg/Kg	UJ	L	e
			fluorene	45	µg/Kg	J	L	e
			indeno(1,2,3,c,d)pyrene	< 41	µg/Kg	UJ	L	e
			naphthalene	450	µg/Kg	J	L	e
			phenanthrene	41	µg/Kg	J	L	e
			pyrene	< 41	µg/Kg	UJ	L	e
DN06L-RE	01NE28SD145	SX	2-methylnaphthalene	1000	µg/Kg	J	L	e
			acenaphthene	610	µg/Kg	J	L	e
			acenaphthylene	< 49	µg/Kg	UJ	L	e
			anthracene	< 49	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 49	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 49	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 49	µg/Kg	UJ	L	e
			benzo(g,h,l)perylene	< 49	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 49	µg/Kg	UJ	L	e
			chrysene	< 49	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 49	µg/Kg	UJ	L	e
			dibenzofuran	170	µg/Kg	J	L	e
			fluoranthene	< 49	µg/Kg	UJ	L	e
			fluorene	880	µg/Kg	J	L	e
			indeno(1,2,3,c,d)pyrene	< 49	µg/Kg	UJ	L	e
			naphthalene	430	µg/Kg	J	L	e
			phenanthrene	670	µg/Kg	J	L	e
			pyrene	< 49	µg/Kg	UJ	L	e

**Table 5 - Holding Time Qualifications (e)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN06Q-RE	01NE28SD150	SX	2-methylnaphthalene	1000	µg/Kg	J	L	e
			acenaphthene	330	µg/Kg	J	L	e
			acenaphthylene	< 28	µg/Kg	UJ	L	e
			anthracene	< 28	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 28	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 28	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 28	µg/Kg	UJ	L	e
			benzo(g,h,l)perylene	< 28	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 28	µg/Kg	UJ	L	e
			chrysene	31	µg/Kg	J	L	e
			dibenzo(a,h)anthracene	< 28	µg/Kg	UJ	L	e
			dibenzofuran	97	µg/Kg	J	L	e
			fluoranthene	31	µg/Kg	J	L	e
			fluorene	390	µg/Kg	J	L	e
			indeno(1,2,3,c,d)pyrene	< 28	µg/Kg	UJ	L	e
			naphthalene	610	µg/Kg	J	L	e
			phenanthrene	250	µg/Kg	J	L	e
			pyrene	36	µg/Kg	J	L	e
DN06Q-REDL	01NE28SD150	SX	2-methylnaphthalene	1200	µg/Kg	J	L	e
			acenaphthene	330	µg/Kg	J	L	e
			acenaphthylene	< 83	µg/Kg	UJ	L	e
			anthracene	< 83	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 83	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 83	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 83	µg/Kg	UJ	L	e
			benzo(g,h,l)perylene	< 83	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 83	µg/Kg	UJ	L	e
			chrysene	< 83	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 83	µg/Kg	UJ	L	e
			dibenzofuran	83	µg/Kg	J	L	e
			fluoranthene	< 83	µg/Kg	UJ	L	e
			fluorene	410	µg/Kg	J	L	e
			indeno(1,2,3,c,d)pyrene	< 83	µg/Kg	UJ	L	e
			naphthalene	400	µg/Kg	J	L	e
			phenanthrene	220	µg/Kg	J	L	e
			pyrene	< 83	µg/Kg	UJ	L	e

**Table 5 - Holding Time Qualifications (e)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN39K-RE	01NE28SD175	SX	2-methylnaphthalene	21	µg/Kg	J	L	e,b
			acenaphthene	< 11	µg/Kg	UJ	L	e,b
			acenaphthylene	< 11	µg/Kg	UJ	L	e,b
			anthracene	< 11	µg/Kg	UJ	L	e,b
			benzo(a)anthracene	< 11	µg/Kg	UJ	L	e,b
			benzo(a)pyrene	< 11	µg/Kg	UJ	L	e,b
			benzo(b)fluoranthene	< 11	µg/Kg	UJ	L	e,b
			benzo(g,h,l)perylene	< 11	µg/Kg	UJ	L	e,b
			benzo(k)fluoranthene	< 11	µg/Kg	UJ	L	e,b
			chrysene	< 11	µg/Kg	UJ	L	e,b
			dibenzo(a,h)anthracene	< 11	µg/Kg	UJ	L	e,b
			dibenzofuran	< 11	µg/Kg	UJ	L	e,b
			fluoranthene	< 11	µg/Kg	UJ	L	e,b
			fluorene	< 11	µg/Kg	UJ	L	e,b
			indeno(1,2,3,c,d)pyrene	< 11	µg/Kg	UJ	L	e,b
			naphthalene	< 11	µg/Kg	UJ	L	e,b
			phenanthrene	< 11	µg/Kg	UJ	L	e,b
			pyrene	< 11	µg/Kg	UJ	L	e,b
DN40C-RE	01NE29SD125	SX	2-methylnaphthalene	< 8.7	µg/Kg	UJ	L	e
			acenaphthene	< 8.7	µg/Kg	UJ	L	e
			acenaphthylene	< 8.7	µg/Kg	UJ	L	e
			anthracene	< 8.7	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 8.7	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 8.7	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 8.7	µg/Kg	UJ	L	e
			benzo(g,h,l)perylene	< 8.7	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 8.7	µg/Kg	UJ	L	e
			chrysene	< 8.7	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 8.7	µg/Kg	UJ	L	e
			dibenzofuran	< 8.7	µg/Kg	UJ	L	e
			fluoranthene	< 8.7	µg/Kg	UJ	L	e
			fluorene	< 8.7	µg/Kg	UJ	L	e
			indeno(1,2,3,c,d)pyrene	< 8.7	µg/Kg	UJ	L	e
			naphthalene	< 8.7	µg/Kg	UJ	L	e
			phenanthrene	< 8.7	µg/Kg	UJ	L	e
			pyrene	< 8.7	µg/Kg	UJ	L	e

**Table 5 - Holding Time Qualifications (e)****Analysis Type: Polynuclear Aromatic Hydrocarbons****Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN40E-RE	01NE29SD128	SX	2-methylnaphthalene	< 18	µg/Kg	UJ	L	e
			acenaphthene	< 18	µg/Kg	UJ	L	e
			acenaphthylene	< 18	µg/Kg	UJ	L	e
			anthracene	< 18	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 18	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 18	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 18	µg/Kg	UJ	L	e
			benzo(g,h,l)perylene	< 18	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 18	µg/Kg	UJ	L	e
			chrysene	< 18	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 18	µg/Kg	UJ	L	e
			dibenzofuran	< 18	µg/Kg	UJ	L	e
			fluoranthene	< 18	µg/Kg	UJ	L	e
			fluorene	< 18	µg/Kg	UJ	L	e
			indeno(1,2,3,c,d)pyrene	< 18	µg/Kg	UJ	L	e
			naphthalene	< 18	µg/Kg	UJ	L	e
			phenanthrene	< 18	µg/Kg	UJ	L	e
			pyrene	< 18	µg/Kg	UJ	L	e
DN40N-RE	01NE29SD126	SX	2-methylnaphthalene	< 8.5	µg/Kg	UJ	L	b,e
			acenaphthene	< 8.5	µg/Kg	UJ	L	b,e
			acenaphthylene	< 8.5	µg/Kg	UJ	L	b,e
			anthracene	< 8.5	µg/Kg	UJ	L	b,e
			benzo(a)anthracene	< 8.5	µg/Kg	UJ	L	b,e
			benzo(a)pyrene	< 8.5	µg/Kg	UJ	L	b,e
			benzo(b)fluoranthene	< 8.5	µg/Kg	UJ	L	b,e
			benzo(g,h,l)perylene	< 8.5	µg/Kg	UJ	L	b,e
			benzo(k)fluoranthene	< 8.5	µg/Kg	UJ	L	b,e
			chrysene	< 8.5	µg/Kg	UJ	L	b,e
			dibenzo(a,h)anthracene	< 8.5	µg/Kg	UJ	L	b,e
			dibenzofuran	< 8.5	µg/Kg	UJ	L	b,e
			fluoranthene	< 8.5	µg/Kg	UJ	L	b,e
			fluorene	< 8.5	µg/Kg	UJ	L	b,e
			indeno(1,2,3,c,d)pyrene	< 8.5	µg/Kg	UJ	L	b,e
			naphthalene	< 8.5	µg/Kg	UJ	L	b,e
			phenanthrene	< 8.5	µg/Kg	UJ	L	b,e
			pyrene	< 8.5	µg/Kg	UJ	L	b,e

**Table 5 - Holding Time Qualifications (e)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN55D-RE	01NE34SS101	SX	2-methylnaphthalene	< 8.9	µg/Kg	UJ	L	e
			acenaphthene	< 8.9	µg/Kg	UJ	L	e
			acenaphthylene	< 8.9	µg/Kg	UJ	L	e
			anthracene	< 8.9	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 8.9	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 8.9	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 8.9	µg/Kg	UJ	L	e
			benzo(g,h,i)perylene	< 8.9	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 8.9	µg/Kg	UJ	L	e
			chrysene	< 8.9	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 8.9	µg/Kg	UJ	L	e
			dibenzofuran	< 8.9	µg/Kg	UJ	L	e
			fluoranthene	< 8.9	µg/Kg	UJ	L	e
			fluorene	< 8.9	µg/Kg	UJ	L	e
			indeno(1,2,3,c,d)pyrene	< 8.9	µg/Kg	UJ	L	e
			naphthalene	< 8.9	µg/Kg	UJ	L	e
			phenanthrene	< 8.9	µg/Kg	UJ	L	e
			pyrene	< 8.9	µg/Kg	UJ	L	e
DN76E-RE	01NE09SD108	SX	2-methylnaphthalene	< 25	µg/Kg	UJ	L	e
			acenaphthene	< 25	µg/Kg	UJ	L	e
			acenaphthylene	< 25	µg/Kg	UJ	L	e
			anthracene	< 25	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 25	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 25	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 25	µg/Kg	UJ	L	e
			benzo(g,h,i)perylene	< 25	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 25	µg/Kg	UJ	L	e
			chrysene	< 25	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 25	µg/Kg	UJ	L	e
			dibenzofuran	< 25	µg/Kg	UJ	L	e
			fluoranthene	< 25	µg/Kg	UJ	L	e
			fluorene	< 25	µg/Kg	UJ	L	e
			indeno(1,2,3,c,d)pyrene	< 25	µg/Kg	UJ	L	e
			naphthalene	< 25	µg/Kg	UJ	L	e
			phenanthrene	< 25	µg/Kg	UJ	L	e
			pyrene	< 25	µg/Kg	UJ	L	e

**Table 5 - Holding Time Qualifications (e)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN76H-RE	01NE30SS103	SX	2-methylnaphthalene	< 60	µg/Kg	UJ	L	e
			acenaphthene	< 60	µg/Kg	UJ	L	e
			acenaphthylene	< 60	µg/Kg	UJ	L	e
			anthracene	< 60	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 60	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 60	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 60	µg/Kg	UJ	L	e
			benzo(g,h,i)perylene	< 60	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 60	µg/Kg	UJ	L	e
			chrysene	< 60	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 60	µg/Kg	UJ	L	e
			dibenzofuran	< 60	µg/Kg	UJ	L	e
			fluoranthene	< 60	µg/Kg	UJ	L	e
			fluorene	< 60	µg/Kg	UJ	L	e
			indeno(1,2,3,c,d)pyrene	< 60	µg/Kg	UJ	L	e
			naphthalene	< 60	µg/Kg	UJ	L	e
			phenanthrene	< 60	µg/Kg	UJ	L	e
			pyrene	< 60	µg/Kg	UJ	L	e
DN76P-RE	01NE09SD113	SX	2-methylnaphthalene	< 40	µg/Kg	UJ	L	e
			acenaphthene	< 40	µg/Kg	UJ	L	e
			acenaphthylene	< 40	µg/Kg	UJ	L	e
			anthracene	< 40	µg/Kg	UJ	L	e
			benzo(a)anthracene	< 40	µg/Kg	UJ	L	e
			benzo(a)pyrene	< 40	µg/Kg	UJ	L	e
			benzo(b)fluoranthene	< 40	µg/Kg	UJ	L	e
			benzo(g,h,i)perylene	< 40	µg/Kg	UJ	L	e
			benzo(k)fluoranthene	< 40	µg/Kg	UJ	L	e
			chrysene	< 40	µg/Kg	UJ	L	e
			dibenzo(a,h)anthracene	< 40	µg/Kg	UJ	L	e
			dibenzofuran	< 40	µg/Kg	UJ	L	e
			fluoranthene	< 40	µg/Kg	UJ	L	e
			fluorene	< 40	µg/Kg	UJ	L	e
			indeno(1,2,3,c,d)pyrene	< 40	µg/Kg	UJ	L	e
			naphthalene	< 40	µg/Kg	UJ	L	e
			phenanthrene	< 40	µg/Kg	UJ	L	e
			pyrene	< 40	µg/Kg	UJ	L	e

**Table 6 - Surrogate Qualifications (b)**

Due to surrogate accuracy problems, the following results are qualified as estimated:

**Analysis Type: BTEX**

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-04	01NE21SS369	SX	benzene	< 0.055	mg/Kg	UJ	L	b
			ethylbenzene	< 0.11	mg/Kg	UJ	L	b
			m,p-xylene	< 0.22	mg/Kg	UJ	L	b
			o-xylene	< 0.11	mg/Kg	UJ	L	b
			toluene	< 0.11	mg/Kg	UJ	L	b
100492-07	01NE24SD314	SX	benzene	< 0.0074	mg/Kg	UJ	L	b
			ethylbenzene	< 0.015	mg/Kg	UJ	L	b
			m,p-xylene	< 0.03	mg/Kg	UJ	L	b
			o-xylene	< 0.015	mg/Kg	UJ	L	b
			toluene	< 0.015	mg/Kg	UJ	L	b
100492-11	01NE31SS321	SX	benzene	< 0.011	mg/Kg	UJ	L	b
			ethylbenzene	< 0.021	mg/Kg	UJ	L	b
			m,p-xylene	< 0.043	mg/Kg	UJ	L	b
			o-xylene	< 0.021	mg/Kg	UJ	L	b
			toluene	< 0.021	mg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type: Diesel / Residual Range Organics**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN04D	01NE28SD120	SX	diesel range organics motor oil	170 600	mg/Kg mg/Kg	J J	L L	b b	
DN04D-RE	01NE28SD120	SX	diesel range organics motor oil	480 1000	mg/Kg mg/Kg	J J	L L	b b	
DN04F	01NE28SD122	SX	diesel range organics motor oil	110 460	mg/Kg mg/Kg	J J	L L	b b	
DN04F-RE	01NE28SD122	SX	diesel range organics motor oil	310 910	mg/Kg mg/Kg	J J	L L	b b	
DN04G	01NE28SD123	SX	diesel range organics motor oil	140 490	mg/Kg mg/Kg	J J	L L	b b	
DN04G-RE	01NE28SD123	SX	diesel range organics motor oil	1600 1500	mg/Kg mg/Kg	J J	L L	b b	
DN39H	01NE28SD172	SX	diesel range organics motor oil	5200 360	mg/Kg mg/Kg	J J	L L	b,o b	
DN39K	01NE28SD175	SX	diesel range organics motor oil	280 1200	mg/Kg mg/Kg	J J	L L	b b	
DN39L	01NE28SD176	SX	diesel range organics motor oil	790 1400	mg/Kg mg/Kg	J J	L L	b b	
DN39M	01NE28SD271	SX	diesel range organics motor oil	1500 1400	mg/Kg mg/Kg	J J	L L	b b	
DN68F	01NE09SD114	SX	diesel range organics motor oil	93 740	mg/Kg mg/Kg	J J	L L	b b	
DN68F-RE	01NE09SD114	SX	diesel range organics motor oil	65 300	mg/Kg mg/Kg	J J	L L	b,e b,e	
DN71D	01NE09MW103	WX	diesel range organics motor oil	< <	0.25 0.5	mg/L mg/L	UJ UJ	L L	b b
DN71D-RE	01NE09MW103	WX	diesel range organics motor oil	< <	0.25 0.5	mg/L mg/L	UJ UJ	L L	b,e b,e
DN78F	01NE31SS109	SX	diesel range organics motor oil	< 470	50	mg/Kg mg/Kg	UJ UJ	L L	b b
DN78H	01NE31SS111	SX	diesel range organics motor oil	78 32	mg/Kg mg/Kg	J J	L L	b b	
DN78I	01NE31SS112	SX	diesel range organics motor oil	120 12	mg/Kg mg/Kg	J J	L L	b b	

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** Diesel / Residual Range Organics

**Labcode:** ARI

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN78L	01NE31SS115	SX	diesel range organics motor oil	380 < 40	mg/Kg mg/Kg	J UJ	L L	b b
DN78S	01NE31SS125	SX	diesel range organics motor oil	64 210	mg/Kg mg/Kg	J J	L L	b b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Gasoline Range Organics*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-04	01NE21SS369	SX	gasoline range organics	< 5.5	mg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Organochlorine Pesticides / PCBs*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN68U	01NE32SS103	SX	4,4'-DDD	<	4.3	µg/Kg	UJ	L	b
			4,4'-DDE	<	4.3	µg/Kg	UJ	L	b
			4,4'-DDT	<	4.3	µg/Kg	UJ	L	b
			aldrin	<	2.2	µg/Kg	UJ	L	b
			alpha-BHC	<	2.2	µg/Kg	UJ	L	b
			alpha-chlordane	<	2.2	µg/Kg	UJ	L	b
			aroclor 1016	<	43	µg/Kg	UJ	L	b
			aroclor 1221	<	87	µg/Kg	UJ	L	b
			aroclor 1232	<	43	µg/Kg	UJ	L	b
			aroclor 1242	<	43	µg/Kg	UJ	L	b
			aroclor 1248	<	43	µg/Kg	UJ	L	b
			aroclor 1254	<	43	µg/Kg	UJ	L	b
			aroclor 1260	<	43	µg/Kg	UJ	L	b
			beta-BHC	<	2.2	µg/Kg	UJ	L	b
			delta-BHC	<	2.2	µg/Kg	UJ	L	b
			dieldrin	<	4.3	µg/Kg	UJ	L	b
			endosulfan I	<	2.2	µg/Kg	UJ	L	b
			endosulfan II	<	4.3	µg/Kg	UJ	L	b
			endosulfan sulfate	<	4.3	µg/Kg	UJ	L	b
			endrin	<	4.3	µg/Kg	UJ	L	b
			endrin aldehyde	<	4.3	µg/Kg	UJ	L	b
			endrin ketone	<	4.3	µg/Kg	UJ	L	b
			gamma-BHC	<	2.2	µg/Kg	UJ	L	b
			gamma-chlordane	<	2.2	µg/Kg	UJ	L	b
			heptachlor	<	2.2	µg/Kg	UJ	L	b
			heptachlor epoxide	<	2.2	µg/Kg	UJ	L	b
			methoxychlor	<	22	µg/Kg	UJ	L	b
			toxaphene	<	220	µg/Kg	UJ	L	b
DN68V	01NE32SS104	SX	aroclor 1260	160	µg/Kg	J	H	b,c	

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Organochlorine Pesticides / PCBs*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN76N	01NE32SS105	SX	4,4'-DDD	<	3.6	µg/Kg	UJ	L	b
			4,4'-DDE	<	3.6	µg/Kg	UJ	L	b
			4,4'-DDT	<	37	µg/Kg	UJ	L	b
			aldrin	<	1.8	µg/Kg	UJ	L	b
			alpha-BHC	<	1.8	µg/Kg	UJ	L	b
			alpha-chlordane	<	1.8	µg/Kg	UJ	L	b
			aroclor 1016	<	36	µg/Kg	UJ	L	b
			aroclor 1221	<	72	µg/Kg	UJ	L	b
			aroclor 1232	<	36	µg/Kg	UJ	L	b
			aroclor 1242	<	36	µg/Kg	UJ	L	b
			aroclor 1248	<	36	µg/Kg	UJ	L	b
			aroclor 1254	<	36	µg/Kg	UJ	L	b
			aroclor 1260		890	µg/Kg	J	L	b
			beta-BHC	<	1.8	µg/Kg	UJ	L	b
			delta-BHC	<	1.8	µg/Kg	UJ	L	b
			dieldrin	<	11	µg/Kg	UJ	L	b
			endosulfan I	<	1.8	µg/Kg	UJ	L	b
			endosulfan II	<	3.6	µg/Kg	UJ	L	b
			endosulfan sulfate	<	7.3	µg/Kg	UJ	L	b
			endrin	<	3.6	µg/Kg	UJ	L	b
			endrin aldehyde	<	7.8	µg/Kg	UJ	L	b
			endrin ketone	<	3.6	µg/Kg	UJ	L	b
			gamma-BHC	<	1.8	µg/Kg	UJ	L	b
			gamma-chlordane	<	2.8	µg/Kg	UJ	L	b
			heptachlor	<	1.8	µg/Kg	UJ	L	b
			heptachlor epoxide	<	1.8	µg/Kg	UJ	L	b
			methoxychlor	<	3.1	µg/Kg	UJ	L	b
			toxaphene	<	180	µg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Organochlorine Pesticides / PCBs*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DQ74A	01NE16SS167	SX	4,4'-DDD	<	3.7	µg/Kg	UJ	L b
			4,4'-DDE	<	3.7	µg/Kg	UJ	L b
			4,4'-DDT		11	µg/Kg	J	L b
			aldrin	<	1.8	µg/Kg	UJ	L b
			alpha-BHC	<	1.8	µg/Kg	UJ	L b
			alpha-chlordane	<	1.8	µg/Kg	UJ	L b
			beta-BHC	<	1.8	µg/Kg	UJ	L b
			delta-BHC	<	1.8	µg/Kg	UJ	L b
			dieldrin	<	3.7	µg/Kg	UJ	L b
			endosulfan I	<	1.8	µg/Kg	UJ	L b
			endosulfan II	<	3.7	µg/Kg	UJ	L b
			endosulfan sulfate	<	3.7	µg/Kg	UJ	L b
			endrin	<	3.7	µg/Kg	UJ	L b
			endrin aldehyde	<	3.7	µg/Kg	UJ	L b
			endrin ketone	<	3.7	µg/Kg	UJ	L b
			gamma-BHC	<	1.8	µg/Kg	UJ	L b
			gamma-chlordane	<	1.8	µg/Kg	UJ	L b
			heptachlor	<	1.8	µg/Kg	UJ	L b
			heptachlor epoxide	<	1.8	µg/Kg	UJ	L b
			methoxychlor	<	18	µg/Kg	UJ	L b
			toxaphene	<	180	µg/Kg	UJ	L b
DQ74B	01NE16SS168	SX	4,4'-DDD		6	µg/Kg	J	L b
			4,4'-DDE		5	µg/Kg	J	L b
			4,4'-DDT		140	µg/Kg	J	L b,o
			aldrin	<	1.9	µg/Kg	UJ	L b
			alpha-BHC	<	1.9	µg/Kg	UJ	L b
			alpha-chlordane	<	1.9	µg/Kg	UJ	L b
			beta-BHC	<	1.9	µg/Kg	UJ	L b
			delta-BHC	<	1.9	µg/Kg	UJ	L b
			dieldrin	<	3.8	µg/Kg	UJ	L b
			endosulfan I		2.5	µg/Kg	J	L b
			endosulfan II	<	3.8	µg/Kg	UJ	L b
			endosulfan sulfate	<	3.8	µg/Kg	UJ	L b
			endrin	<	3.8	µg/Kg	UJ	L b
			endrin aldehyde	<	6.4	µg/Kg	UJ	L b
			endrin ketone	<	3.8	µg/Kg	UJ	L b
			gamma-BHC	<	1.9	µg/Kg	UJ	L b
			gamma-chlordane	<	1.9	µg/Kg	UJ	L b
			heptachlor	<	1.9	µg/Kg	UJ	L b
			heptachlor epoxide	<	1.9	µg/Kg	UJ	L b
			methoxychlor	<	19	µg/Kg	UJ	L b
			toxaphene	<	190	µg/Kg	UJ	L b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Organochlorine Pesticides / PCBs*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DQ74B-DL	01NE16SS168	SX	4,4'-DDD	<	19	µg/Kg	UJ	L	b
			4,4'-DDE	<	19	µg/Kg	UJ	L	b
			4,4'-DDT		120	µg/Kg	J	L	b
			aldrin	<	9.5	µg/Kg	UJ	L	b
			alpha-BHC	<	9.5	µg/Kg	UJ	L	b
			alpha-chlordane	<	9.5	µg/Kg	UJ	L	b
			beta-BHC	<	9.5	µg/Kg	UJ	L	b
			delta-BHC	<	9.5	µg/Kg	UJ	L	b
			dieldrin	<	19	µg/Kg	UJ	L	b
			endosulfan I	<	9.5	µg/Kg	UJ	L	b
			endosulfan II	<	19	µg/Kg	UJ	L	b
			endosulfan sulfate	<	19	µg/Kg	UJ	L	b
			endrin	<	19	µg/Kg	UJ	L	b
			endrin aldehyde	<	19	µg/Kg	UJ	L	b
			endrin ketone	<	19	µg/Kg	UJ	L	b
			gamma-BHC	<	9.5	µg/Kg	UJ	L	b
			gamma-chlordane	<	9.5	µg/Kg	UJ	L	b
			heptachlor	<	9.5	µg/Kg	UJ	L	b
			heptachlor epoxide	<	9.5	µg/Kg	UJ	L	b
			methoxychlor	<	95	µg/Kg	UJ	L	b
			toxaphene	<	950	µg/Kg	UJ	L	b
DQ74C	01NE28SD183	SX	4,4'-DDD		200	µg/Kg	J	L	b,o
			4,4'-DDE	<	18	µg/Kg	UJ	L	b
			4,4'-DDT	<	14	µg/Kg	UJ	L	b
			aldrin	<	3.5	µg/Kg	UJ	L	b
			alpha-BHC	<	6.3	µg/Kg	UJ	L	b
			alpha-chlordane	<	3.5	µg/Kg	UJ	L	b
			beta-BHC		12	µg/Kg	J	L	b
			delta-BHC	<	3.5	µg/Kg	UJ	L	b
			dieldrin	<	11	µg/Kg	UJ	L	b
			endosulfan I	<	3.5	µg/Kg	UJ	L	b
			endosulfan II	<	7	µg/Kg	UJ	L	b
			endosulfan sulfate	<	11	µg/Kg	UJ	L	b
			endrin	<	7	µg/Kg	UJ	L	b
			endrin aldehyde	<	7	µg/Kg	UJ	L	b
			endrin ketone	<	7	µg/Kg	UJ	L	b
			gamma-BHC	<	3.9	µg/Kg	UJ	L	b
			gamma-chlordane	<	6.4	µg/Kg	UJ	L	b
			heptachlor		4.6	µg/Kg	J	L	b
			heptachlor epoxide	<	3.5	µg/Kg	UJ	L	b
			methoxychlor	<	35	µg/Kg	UJ	L	b
			toxaphene	<	350	µg/Kg	UJ	L	b

Prepared by *ETHIX*

3/19/02

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Table 6 - Surrogate Qualifications (b)

NE Cape HTRW - St. Lawrence Island

**Table 6 - Surrogate Qualifications (b)****Analysis Type: Organochlorine Pesticides / PCBs****Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DQ74D	01NE28SD184	SX	4,4'-DDD		27	µg/Kg	J	L	b
			4,4'-DDE	<	5.4	µg/Kg	UJ	L	b
			4,4'-DDT	<	5.4	µg/Kg	UJ	L	b
			aldrin	<	2.7	µg/Kg	UJ	L	b
			alpha-BHC	<	2.7	µg/Kg	UJ	L	b
			alpha-chlordane	<	2.7	µg/Kg	UJ	L	b
			beta-BHC	<	2.7	µg/Kg	UJ	L	b
			delta-BHC	<	2.7	µg/Kg	UJ	L	b
			dieldrin	<	5.4	µg/Kg	UJ	L	b
			endosulfan I	<	2.7	µg/Kg	UJ	L	b
			endosulfan II	<	5.4	µg/Kg	UJ	L	b
			endosulfan sulfate	<	5.4	µg/Kg	UJ	L	b
			endrin	<	5.4	µg/Kg	UJ	L	b
			endrin aldehyde	<	5.4	µg/Kg	UJ	L	b
			endrin ketone	<	5.4	µg/Kg	UJ	L	b
			gamma-BHC	<	2.7	µg/Kg	UJ	L	b
			gamma-chlordane	<	2.7	µg/Kg	UJ	L	b
			heptachlor	<	2.7	µg/Kg	UJ	L	b
			heptachlor epoxide	<	2.7	µg/Kg	UJ	L	b
			methoxychlor	<	27	µg/Kg	UJ	L	b
			toxaphene	<	270	µg/Kg	UJ	L	b
DQ74E	01NE28SD185	SX	4,4'-DDD			µg/Kg	J	L	b
			4,4'-DDE	<	110	µg/Kg	UJ	L	b
			4,4'-DDT	<	32	µg/Kg	UJ	L	b
			aldrin	<	3.3	µg/Kg	UJ	L	b
			alpha-BHC	<	4	µg/Kg	UJ	L	b
			alpha-chlordane	<	3.3	µg/Kg	UJ	L	b
			beta-BHC	<	6.4	µg/Kg	UJ	L	b
			delta-BHC	<	3.3	µg/Kg	UJ	L	b
			dieldrin	<	97	µg/Kg	UJ	L	b
			endosulfan I	<	3.3	µg/Kg	UJ	L	b
			endosulfan II	<	8.3	µg/Kg	UJ	L	b
			endosulfan sulfate	<	58	µg/Kg	UJ	L	b
			endrin	<	6.6	µg/Kg	UJ	L	b
			endrin aldehyde	<	38	µg/Kg	UJ	L	b
			endrin ketone	<	6.6	µg/Kg	UJ	L	b
			gamma-BHC	<	3.3	µg/Kg	UJ	L	b
			gamma-chlordane	<	32	µg/Kg	UJ	L	b
			heptachlor	<	3.3	µg/Kg	UJ	L	b
			heptachlor epoxide	<	3.3	µg/Kg	UJ	L	b
			methoxychlor	<	33	µg/Kg	UJ	L	b
			toxaphene	<	330	µg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type: Organochlorine Pesticides / PCBs**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DQ74G	01NE28SD187	SX	4,4'-DDD		7.2	µg/Kg	J	L
			4,4'-DDE	<	6.6	µg/Kg	UJ	L
			4,4'-DDT	<	6.6	µg/Kg	UJ	L
			aldrin	<	3.3	µg/Kg	UJ	L
			alpha-BHC	<	3.3	µg/Kg	UJ	L
			alpha-chlordane	<	3.3	µg/Kg	UJ	L
			beta-BHC	<	3.3	µg/Kg	UJ	L
			delta-BHC	<	3.3	µg/Kg	UJ	L
			dieldrin	<	6.6	µg/Kg	UJ	L
			endosulfan I	<	3.3	µg/Kg	UJ	L
			endosulfan II	<	6.6	µg/Kg	UJ	L
			endosulfan sulfate	<	6.6	µg/Kg	UJ	L
			endrin	<	6.6	µg/Kg	UJ	L
			endrin aldehyde	<	6.6	µg/Kg	UJ	L
			endrin ketone	<	6.6	µg/Kg	UJ	L
			gamma-BHC	<	3.3	µg/Kg	UJ	L
			gamma-chlordane	<	3.3	µg/Kg	UJ	L
			heptachlor	<	3.3	µg/Kg	UJ	L
			heptachlor epoxide	<	3.3	µg/Kg	UJ	L
			methoxychlor	<	33	µg/Kg	UJ	L
			toxaphene	<	330	µg/Kg	UJ	L
DQ74J	01NE28SD190	SX	4,4'-DDD	<	10	µg/Kg	UJ	L
			4,4'-DDE	<	10	µg/Kg	UJ	L
			4,4'-DDT	<	10	µg/Kg	UJ	L
			aldrin	<	5.2	µg/Kg	UJ	L
			alpha-BHC	<	5.2	µg/Kg	UJ	L
			alpha-chlordane	<	5.2	µg/Kg	UJ	L
			beta-BHC	<	5.2	µg/Kg	UJ	L
			delta-BHC	<	5.2	µg/Kg	UJ	L
			dieldrin	<	10	µg/Kg	UJ	L
			endosulfan I	<	5.2	µg/Kg	UJ	L
			endosulfan II	<	10	µg/Kg	UJ	L
			endosulfan sulfate	<	10	µg/Kg	UJ	L
			endrin	<	10	µg/Kg	UJ	L
			endrin aldehyde	<	10	µg/Kg	UJ	L
			endrin ketone	<	10	µg/Kg	UJ	L
			gamma-BHC	<	5.2	µg/Kg	UJ	L
			gamma-chlordane	<	5.2	µg/Kg	UJ	L
			heptachlor	<	5.2	µg/Kg	UJ	L
			heptachlor epoxide	<	5.2	µg/Kg	UJ	L
			methoxychlor	<	52	µg/Kg	UJ	L
			toxaphene	<	520	µg/Kg	UJ	L

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type: Organochlorine Pesticides / PCBs**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DQ74K	01NE28SD191	SX	4,4'-DDD		15	µg/Kg	J	L	b
			4,4'-DDE	<	5.3	µg/Kg	UJ	L	b
			4,4'-DDT	<	5.3	µg/Kg	UJ	L	b
			aldrin	<	2.6	µg/Kg	UJ	L	b
			alpha-BHC	<	2.9	µg/Kg	UJ	L	b
			alpha-chlordane	<	2.6	µg/Kg	UJ	L	b
			beta-BHC	<	9.2	µg/Kg	UJ	L	b
			delta-BHC	<	2.6	µg/Kg	UJ	L	b
			dieldrin	<	5.3	µg/Kg	UJ	L	b
			endosulfan I	<	2.6	µg/Kg	UJ	L	b
			endosulfan II	<	5.3	µg/Kg	UJ	L	b
			endosulfan sulfate	<	5.3	µg/Kg	UJ	L	b
			endrin	<	5.3	µg/Kg	UJ	L	b
			endrin aldehyde	<	5.3	µg/Kg	UJ	L	b
			endrin ketone	<	5.3	µg/Kg	UJ	L	b
			gamma-BHC		2.9	µg/Kg	J	L	b
			gamma-chlordane	<	2.6	µg/Kg	UJ	L	b
			heptachlor	<	2.6	µg/Kg	UJ	L	b
			heptachlor epoxide	<	2.6	µg/Kg	UJ	L	b
			methoxychlor	<	26	µg/Kg	UJ	L	b
			toxaphene	<	260	µg/Kg	UJ	L	b
DQ74L	01NE28SD192	SX	4,4'-DDD	<	7.2	µg/Kg	UJ	L	b
			4,4'-DDE	<	4.3	µg/Kg	UJ	L	b
			4,4'-DDT	<	4.3	µg/Kg	UJ	L	b
			aldrin	<	2.2	µg/Kg	UJ	L	b
			alpha-BHC	<	2.2	µg/Kg	UJ	L	b
			alpha-chlordane	<	2.2	µg/Kg	UJ	L	b
			beta-BHC	<	2.2	µg/Kg	UJ	L	b
			delta-BHC	<	2.2	µg/Kg	UJ	L	b
			dieldrin	<	4.3	µg/Kg	UJ	L	b
			endosulfan I	<	2.2	µg/Kg	UJ	L	b
			endosulfan II	<	4.3	µg/Kg	UJ	L	b
			endosulfan sulfate	<	4.3	µg/Kg	UJ	L	b
			endrin	<	4.3	µg/Kg	UJ	L	b
			endrin aldehyde	<	4.3	µg/Kg	UJ	L	b
			endrin ketone	<	4.3	µg/Kg	UJ	L	b
			gamma-BHC	<	2.2	µg/Kg	UJ	L	b
			gamma-chlordane	<	2.2	µg/Kg	UJ	L	b
			heptachlor	<	2.2	µg/Kg	UJ	L	b
			heptachlor epoxide	<	2.2	µg/Kg	UJ	L	b
			methoxychlor	<	22	µg/Kg	UJ	L	b
			toxaphene	<	220	µg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Organochlorine Pesticides / PCBs*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DQ74M	01NE28SD292	SX	4,4'-DDD	<	7.1	µg/Kg	UJ	L	b
			4,4'-DDE	<	6.5	µg/Kg	UJ	L	b
			4,4'-DDT	<	5	µg/Kg	UJ	L	b
			aldrin	<	2.1	µg/Kg	UJ	L	b
			alpha-BHC	<	2.1	µg/Kg	UJ	L	b
			alpha-chlordane	<	2.1	µg/Kg	UJ	L	b
			beta-BHC	<	2.1	µg/Kg	UJ	L	b
			delta-BHC	<	2.1	µg/Kg	UJ	L	b
			dieldrin	<	7.8	µg/Kg	UJ	L	b
			endosulfan I	<	2.1	µg/Kg	UJ	L	b
			endosulfan II	<	4.1	µg/Kg	UJ	L	b
			endosulfan sulfate	<	12	µg/Kg	UJ	L	b
			endrin	<	4.1	µg/Kg	UJ	L	b
			endrin aldehyde	<	4.1	µg/Kg	UJ	L	b
			endrin ketone	<	4.1	µg/Kg	UJ	L	b
			gamma-BHC	<	2.1	µg/Kg	UJ	L	b
			gamma-chlordane	<	3.8	µg/Kg	UJ	L	b
			heptachlor	<	2.1	µg/Kg	UJ	L	b
			heptachlor epoxide	<	2.1	µg/Kg	UJ	L	b
			methoxychlor	<	21	µg/Kg	UJ	L	b
			toxaphene	<	210	µg/Kg	UJ	L	b
DQ74N	01NE28SD285	SX	4,4'-DDE	<	82	µg/Kg	UJ	L	b
			4,4'-DDT	<	22	µg/Kg	UJ	L	b
			aldrin	<	2.8	µg/Kg	UJ	L	b
			alpha-BHC	<	2.8	µg/Kg	UJ	L	b
			alpha-chlordane	<	2.8	µg/Kg	UJ	L	b
			beta-BHC	<	3.9	µg/Kg	J	L	b
			delta-BHC	<	2.8	µg/Kg	UJ	L	b
			dieldrin	<	16	µg/Kg	UJ	L	b
			endosulfan I	<	2.8	µg/Kg	UJ	L	b
			endosulfan II	<	5.7	µg/Kg	UJ	L	b
			endosulfan sulfate	<	56	µg/Kg	UJ	L	b
			endrin	<	5.7	µg/Kg	UJ	L	b
			endrin aldehyde	<	35	µg/Kg	UJ	L	b
			endrin ketone	<	5.7	µg/Kg	UJ	L	b
			gamma-BHC	<	2.8	µg/Kg	UJ	L	b
			gamma-chlordane	<	26	µg/Kg	UJ	L	b
			heptachlor	<	2.8	µg/Kg	UJ	L	b
			heptachlor epoxide	<	2.8	µg/Kg	UJ	L	b
			methoxychlor	<	28	µg/Kg	UJ	L	b
			toxaphene	<	280	µg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type: Polychlorinated Biphenyls**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN04P-RE	01NE28SD131	SX	aroclor 1016	< 64	µg/Kg	UJ	L	b
			aroclor 1221	< 130	µg/Kg	UJ	L	b
			aroclor 1232	< 64	µg/Kg	UJ	L	b
			aroclor 1242	< 64	µg/Kg	UJ	L	b
			aroclor 1248	< 64	µg/Kg	UJ	L	b
			aroclor 1254	130	µg/Kg	J	L	b
			aroclor 1260	140	µg/Kg	J	L	b
DN07G	01NE28SD113	SX	aroclor 1016	< 260	µg/Kg	UJ	L	b
			aroclor 1221	< 510	µg/Kg	UJ	L	b
			aroclor 1232	< 260	µg/Kg	UJ	L	b
			aroclor 1242	< 260	µg/Kg	UJ	L	b
			aroclor 1248	< 260	µg/Kg	UJ	L	b
			aroclor 1254	< 260	µg/Kg	UJ	L	b
			aroclor 1260	< 260	µg/Kg	UJ	L	b
DN38M	01NE28SD170	SX	aroclor 1016	< 49	µg/Kg	UJ	L	b
			aroclor 1221	< 98	µg/Kg	UJ	L	b
			aroclor 1232	< 49	µg/Kg	UJ	L	b
			aroclor 1242	< 49	µg/Kg	UJ	L	b
			aroclor 1248	< 49	µg/Kg	UJ	L	b
			aroclor 1254	< 188	µg/Kg	UJ	L	b
DN39H	01NE28SD172	SX	aroclor 1016	< 290	µg/Kg	UJ	L	b
			aroclor 1221	< 570	µg/Kg	UJ	L	b
			aroclor 1232	< 290	µg/Kg	UJ	L	b
			aroclor 1242	< 290	µg/Kg	UJ	L	b
			aroclor 1248	< 290	µg/Kg	UJ	L	b
			aroclor 1254	< 290	µg/Kg	UJ	L	b
			aroclor 1260	< 290	µg/Kg	UJ	L	b
DN71D	01NE09MW103	WX	aroclor 1016	< 1	µg/L	UJ	L	b
			aroclor 1221	< 2	µg/L	UJ	L	b
			aroclor 1232	< 1	µg/L	UJ	L	b
			aroclor 1242	< 1	µg/L	UJ	L	b
			aroclor 1248	< 1	µg/L	UJ	L	b
			aroclor 1254	< 1	µg/L	UJ	L	b
			aroclor 1260	< 1	µg/L	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Polynuclear Aromatic Hydrocarbon*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN06H	01NE28SD141	SX	2-methylnaphthalene	260	µg/Kg	J	L	b
			acenaphthene	18	µg/Kg	J	L	b
			acenaphthylene	< 4.1	µg/Kg	UJ	L	b
			anthracene	< 4.1	µg/Kg	UJ	L	b
			benzo(a)anthracene	< 4.1	µg/Kg	UJ	L	b
			benzo(a)pyrene	< 4.1	µg/Kg	UJ	L	b
			benzo(b)fluoranthene	< 4.1	µg/Kg	UJ	L	b
			benzo(g,h,l)perylene	< 4.1	µg/Kg	UJ	L	b
			benzo(k)fluoranthene	< 4.1	µg/Kg	UJ	L	b
			chrysene	< 4.1	µg/Kg	UJ	L	b
			dibenzo(a,h)anthracene	< 4.1	µg/Kg	UJ	L	b
			dibenzofuran	12	µg/Kg	J	L	b
			fluoranthene	< 4.1	µg/Kg	UJ	L	b
			fluorene	48	µg/Kg	J	L	b
			indeno(1,2,3,c,d)pyrene	< 4.1	µg/Kg	UJ	L	b
			naphthalene	200	µg/Kg	J	L	b
			phenanthrene	30	µg/Kg	J	L	b
			pyrene	< 4.1	µg/Kg	UJ	L	b
DN06H-DL	01NE28SD141	SX	2-methylnaphthalene	270	µg/Kg	J	L	b
			acenaphthene	23	µg/Kg	J	L	b
			acenaphthylene	< 12	µg/Kg	UJ	L	b
			anthracene	< 12	µg/Kg	UJ	L	b
			benzo(a)anthracene	< 12	µg/Kg	UJ	L	b
			benzo(a)pyrene	< 12	µg/Kg	UJ	L	b
			benzo(b)fluoranthene	< 12	µg/Kg	UJ	L	b
			benzo(g,h,l)perylene	< 12	µg/Kg	UJ	L	b
			benzo(k)fluoranthene	< 12	µg/Kg	UJ	L	b
			chrysene	< 12	µg/Kg	UJ	L	b
			dibenzo(a,h)anthracene	< 12	µg/Kg	UJ	L	b
			dibenzofuran	13	µg/Kg	J	L	b
			fluoranthene	< 12	µg/Kg	UJ	L	b
			fluorene	50	µg/Kg	J	L	b
			indeno(1,2,3,c,d)pyrene	< 12	µg/Kg	UJ	L	b
			naphthalene	220	µg/Kg	J	L	b
			phenanthrene	34	µg/Kg	J	L	b
			pyrene	< 12	µg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Polynuclear Aromatic Hydrocarbon*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN38A	01NE29SD114	SX	2-methylnaphthalene	150	µg/Kg	J	L	b
			acenaphthene	13	µg/Kg	J	L	b
			acenaphthylene	< 8.4	µg/Kg	UJ	L	b
			anthracene	< 8.4	µg/Kg	UJ	L	b
			benzo(a)anthracene	< 8.4	µg/Kg	UJ	L	b
			benzo(a)pyrene	< 8.4	µg/Kg	UJ	L	b
			benzo(b)fluoranthene	< 8.4	µg/Kg	UJ	L	b
			benzo(g,h,i)perylene	< 8.4	µg/Kg	UJ	L	b
			benzo(k)fluoranthene	< 8.4	µg/Kg	UJ	L	b
			chrysene	< 8.4	µg/Kg	UJ	L	b
			dibenzo(a,h)anthracene	< 8.4	µg/Kg	UJ	L	b
			dibenzofuran	< 8.4	µg/Kg	UJ	L	b
			fluoranthene	< 8.4	µg/Kg	UJ	L	b,n
			fluorene	17	µg/Kg	J	L	b
			indeno(1,2,3,c,d)pyrene	< 8.4	µg/Kg	UJ	L	b
			naphthalene	31	µg/Kg	J	L	b
			phenanthrene	11	µg/Kg	J	L	b,n
			pyrene	< 8.4	µg/Kg	UJ	L	b
DN38L	01NE28SD169	SX	2-methylnaphthalene	38000	µg/Kg	J	L	b
			acenaphthene	7900	µg/Kg	J	L	b
			acenaphthylene	< 1300	µg/Kg	UJ	L	b
			anthracene	< 1300	µg/Kg	UJ	L	b
			benzo(a)anthracene	< 1300	µg/Kg	UJ	L	b
			benzo(a)pyrene	< 1300	µg/Kg	UJ	L	b
			benzo(b)fluoranthene	< 1300	µg/Kg	UJ	L	b
			benzo(g,h,i)perylene	< 1300	µg/Kg	UJ	L	b
			benzo(k)fluoranthene	< 1300	µg/Kg	UJ	L	b
			chrysene	< 1300	µg/Kg	UJ	L	b
			dibenzo(a,h)anthracene	< 1300	µg/Kg	UJ	L	b
			dibenzofuran	1400	µg/Kg	J	L	b
			fluoranthene	< 1300	µg/Kg	UJ	L	b
			fluorene	8800	µg/Kg	J	L	b
			indeno(1,2,3,c,d)pyrene	< 1300	µg/Kg	UJ	L	b
			naphthalene	9900	µg/Kg	J	L	b
			phenanthrene	3700	µg/Kg	J	L	b
			pyrene	< 1300	µg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Polynuclear Aromatic Hydrocarbon*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN39K	01NE28SD175	SX	2-methylnaphthalene	< 33	µg/Kg	UJ	L	b
			acenaphthene	< 33	µg/Kg	UJ	L	b
			acenaphthylene	< 33	µg/Kg	UJ	L	b
			anthracene	< 33	µg/Kg	UJ	L	b
			benzo(a)anthracene	< 33	µg/Kg	UJ	L	b
			benzo(a)pyrene	< 33	µg/Kg	UJ	L	b
			benzo(b)fluoranthene	< 33	µg/Kg	UJ	L	b
			benzo(g,h,i)perylene	< 33	µg/Kg	UJ	L	b
			benzo(k)fluoranthene	< 33	µg/Kg	UJ	L	b
			chrysene	< 33	µg/Kg	UJ	L	b
			dibenzo(a,h)anthracene	< 33	µg/Kg	UJ	L	b
			dibenzofuran	< 33	µg/Kg	UJ	L	b
			fluoranthene	< 33	µg/Kg	UJ	L	b
			fluorene	< 33	µg/Kg	UJ	L	b
			indeno(1,2,3,c,d)pyrene	< 33	µg/Kg	UJ	L	b
			naphthalene	< 33	µg/Kg	UJ	L	b
			phenanthrene	< 33	µg/Kg	UJ	L	b
			pyrene	< 33	µg/Kg	UJ	L	b
DN39K-RE	01NE28SD175	SX	2-methylnaphthalene	21	µg/Kg	J	L	e,b
			acenaphthene	< 11	µg/Kg	UJ	L	e,b
			acenaphthylene	< 11	µg/Kg	UJ	L	e,b
			anthracene	< 11	µg/Kg	UJ	L	e,b
			benzo(a)anthracene	< 11	µg/Kg	UJ	L	e,b
			benzo(a)pyrene	< 11	µg/Kg	UJ	L	e,b
			benzo(b)fluoranthene	< 11	µg/Kg	UJ	L	e,b
			benzo(g,h,i)perylene	< 11	µg/Kg	UJ	L	e,b
			benzo(k)fluoranthene	< 11	µg/Kg	UJ	L	e,b
			chrysene	< 11	µg/Kg	UJ	L	e,b
			dibenzo(a,h)anthracene	< 11	µg/Kg	UJ	L	e,b
			dibenzofuran	< 11	µg/Kg	UJ	L	e,b
			fluoranthene	< 11	µg/Kg	UJ	L	e,b
			fluorene	< 11	µg/Kg	UJ	L	e,b
			indeno(1,2,3,c,d)pyrene	< 11	µg/Kg	UJ	L	e,b
			naphthalene	< 11	µg/Kg	UJ	L	e,b
			phenanthrene	< 11	µg/Kg	UJ	L	e,b
			pyrene	< 11	µg/Kg	UJ	L	e,b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Polynuclear Aromatic Hydrocarbon*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN40E	01NE29SD128	SX	2-methylnaphthalene	<	8.7	µg/Kg	UJ	L b
			acenaphthene	<	8.7	µg/Kg	UJ	L b
			acenaphthylene	<	8.7	µg/Kg	UJ	L b
			anthracene	<	8.7	µg/Kg	UJ	L b
			benzo(a)anthracene	<	8.7	µg/Kg	UJ	L b
			benzo(a)pyrene	<	8.7	µg/Kg	UJ	L b
			benzo(b)fluoranthene	<	8.7	µg/Kg	UJ	L b
			benzo(g,h,l)perylene	<	8.7	µg/Kg	UJ	L b
			benzo(k)fluoranthene	<	8.7	µg/Kg	UJ	L b
			chrysene	<	8.7	µg/Kg	UJ	L b
			dibenzo(a,h)anthracene	<	8.7	µg/Kg	UJ	L b
			dibenzofuran	<	8.7	µg/Kg	UJ	L b
			fluoranthene	<	8.7	µg/Kg	UJ	L b
			fluorene	<	8.7	µg/Kg	UJ	L b
			indeno(1,2,3,c,d)pyrene	<	8.7	µg/Kg	UJ	L b
			naphthalene	<	8.7	µg/Kg	UJ	L b
			phenanthrene	<	8.7	µg/Kg	UJ	L b
			pyrene	<	8.7	µg/Kg	UJ	L b
DN40N	01NE29SD126	SX	2-methylnaphthalene	<	8.3	µg/Kg	UJ	L b
			acenaphthene	<	8.3	µg/Kg	UJ	L b
			acenaphthylene	<	8.3	µg/Kg	UJ	L b
			anthracene	<	8.3	µg/Kg	UJ	L b
			benzo(a)anthracene	<	8.3	µg/Kg	UJ	L b
			benzo(a)pyrene	<	8.3	µg/Kg	UJ	L b
			benzo(b)fluoranthene	<	8.3	µg/Kg	UJ	L b
			benzo(g,h,l)perylene	<	8.3	µg/Kg	UJ	L b
			benzo(k)fluoranthene	<	8.3	µg/Kg	UJ	L b
			chrysene	<	8.3	µg/Kg	UJ	L b
			dibenzo(a,h)anthracene	<	8.3	µg/Kg	UJ	L b
			dibenzofuran	<	8.3	µg/Kg	UJ	L b
			fluoranthene	<	8.3	µg/Kg	UJ	L b
			fluorene	<	8.3	µg/Kg	UJ	L b
			indeno(1,2,3,c,d)pyrene	<	8.3	µg/Kg	UJ	L b
			naphthalene	<	8.3	µg/Kg	UJ	L b
			phenanthrene	<	8.3	µg/Kg	UJ	L b
			pyrene	<	8.3	µg/Kg	UJ	L b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type: Polynuclear Aromatic Hydrocarbon**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC	
DN40N-RE	01NE29SD126	SX	2-methylnaphthalene	<	8.5	µg/Kg	UJ	L	b,e
			acenaphthene	<	8.5	µg/Kg	UJ	L	b,e
			acenaphthylene	<	8.5	µg/Kg	UJ	L	b,e
			anthracene	<	8.5	µg/Kg	UJ	L	b,e
			benzo(a)anthracene	<	8.5	µg/Kg	UJ	L	b,e
			benzo(a)pyrene	<	8.5	µg/Kg	UJ	L	b,e
			benzo(b)fluoranthene	<	8.5	µg/Kg	UJ	L	b,e
			benzo(g,h,l)perylene	<	8.5	µg/Kg	UJ	L	b,e
			benzo(k)fluoranthene	<	8.5	µg/Kg	UJ	L	b,e
			chrysene	<	8.5	µg/Kg	UJ	L	b,e
			dibenzo(a,h)anthracene	<	8.5	µg/Kg	UJ	L	b,e
			dibenzofuran	<	8.5	µg/Kg	UJ	L	b,e
			fluoranthene	<	8.5	µg/Kg	UJ	L	b,e
			fluorene	<	8.5	µg/Kg	UJ	L	b,e
			indeno(1,2,3,c,d)pyrene	<	8.5	µg/Kg	UJ	L	b,e
			naphthalene	<	8.5	µg/Kg	UJ	L	b,e
			phenanthrene	<	8.5	µg/Kg	UJ	L	b,e
			pyrene	<	8.5	µg/Kg	UJ	L	b,e
DN55D	01NE34SS101	SX	2-methylnaphthalene	<	2.6	µg/Kg	UJ	L	b
			acenaphthene	<	2.6	µg/Kg	UJ	L	b
			acenaphthylene	<	2.6	µg/Kg	UJ	L	b
			anthracene	<	2.6	µg/Kg	UJ	L	b
			benzo(a)anthracene	<	2.6	µg/Kg	UJ	L	b
			benzo(a)pyrene	<	2.6	µg/Kg	UJ	L	b
			benzo(b)fluoranthene	<	2.6	µg/Kg	UJ	L	b
			benzo(g,h,l)perylene	<	2.6	µg/Kg	UJ	L	b
			benzo(k)fluoranthene	<	2.6	µg/Kg	UJ	L	b
			chrysene	<	2.6	µg/Kg	UJ	L	b
			dibenzo(a,h)anthracene	<	2.6	µg/Kg	UJ	L	b
			dibenzofuran	<	2.6	µg/Kg	UJ	L	b
			fluoranthene	<	2.6	µg/Kg	UJ	L	b
			fluorene	<	2.6	µg/Kg	UJ	L	b
			indeno(1,2,3,c,d)pyrene	<	2.6	µg/Kg	UJ	L	b
			naphthalene	<	2.6	µg/Kg	UJ	L	b
			phenanthrene	<	2.6	µg/Kg	UJ	L	b
			pyrene	<	2.6	µg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type:** *Polynuclear Aromatic Hydrocarbon*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN76E	01NE09SD108	SX	2-methylnaphthalene	< 22	µg/Kg	UJ	L	b
			acenaphthene	< 22	µg/Kg	UJ	L	b
			acenaphthylene	< 22	µg/Kg	UJ	L	b
			anthracene	< 22	µg/Kg	UJ	L	b
			benzo(a)anthracene	< 22	µg/Kg	UJ	L	b
			benzo(a)pyrene	< 22	µg/Kg	UJ	L	b
			benzo(b)fluoranthene	< 22	µg/Kg	UJ	L	b
			benzo(g,h,i)perylene	< 22	µg/Kg	UJ	L	b
			benzo(k)fluoranthene	< 22	µg/Kg	UJ	L	b
			chrysene	< 22	µg/Kg	UJ	L	b
			dibenzo(a,h)anthracene	< 22	µg/Kg	UJ	L	b
			dibenzofuran	< 22	µg/Kg	UJ	L	b
			fluoranthene	< 22	µg/Kg	UJ	L	b
			fluorene	< 22	µg/Kg	UJ	L	b
			indeno(1,2,3,c,d)pyrene	< 22	µg/Kg	UJ	L	b
			naphthalene	< 22	µg/Kg	UJ	L	b
			phenanthrene	< 22	µg/Kg	UJ	L	b
			pyrene	< 22	µg/Kg	UJ	L	b
DN76H	01NE30SS103	SX	2-methylnaphthalene	< 53	µg/Kg	UJ	L	b
			acenaphthene	< 53	µg/Kg	UJ	L	b
			acenaphthylene	< 53	µg/Kg	UJ	L	b
			anthracene	< 53	µg/Kg	UJ	L	b
			benzo(a)anthracene	< 53	µg/Kg	UJ	L	b
			benzo(a)pyrene	< 53	µg/Kg	UJ	L	b
			benzo(b)fluoranthene	< 53	µg/Kg	UJ	L	b
			benzo(g,h,i)perylene	< 53	µg/Kg	UJ	L	b
			benzo(k)fluoranthene	< 53	µg/Kg	UJ	L	b
			chrysene	< 53	µg/Kg	UJ	L	b
			dibenzo(a,h)anthracene	< 53	µg/Kg	UJ	L	b
			dibenzofuran	< 53	µg/Kg	UJ	L	b
			fluoranthene	< 53	µg/Kg	UJ	L	b
			fluorene	< 53	µg/Kg	UJ	L	b
			indeno(1,2,3,c,d)pyrene	< 53	µg/Kg	UJ	L	b
			naphthalene	< 53	µg/Kg	UJ	L	b
			phenanthrene	< 53	µg/Kg	UJ	L	b
			pyrene	< 53	µg/Kg	UJ	L	b

**Table 6 - Surrogate Qualifications (b)**

**Analysis Type: Polynuclear Aromatic Hydrocarbon**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte		Result	Units	Q	Bias	RC
DN76P	01NE09SD113	SX	2-methylnaphthalene	<	36	µg/Kg	UJ	L	b
			acenaphthene	<	36	µg/Kg	UJ	L	b
			acenaphthylene	<	36	µg/Kg	UJ	L	b
			anthracene	<	36	µg/Kg	UJ	L	b
			benzo(a)anthracene	<	36	µg/Kg	UJ	L	b
			benzo(a)pyrene	<	36	µg/Kg	UJ	L	b
			benzo(b)fluoranthene	<	36	µg/Kg	UJ	L	b
			benzo(g,h,l)perylene	<	36	µg/Kg	UJ	L	b
			benzo(k)fluoranthene	<	36	µg/Kg	UJ	L	b
			chrysene	<	36	µg/Kg	UJ	L	b
			dibenzo(a,h)anthracene	<	36	µg/Kg	UJ	L	b
			dibenzofuran	<	36	µg/Kg	UJ	L	b
			fluoranthene	<	36	µg/Kg	UJ	L	b
			fluorene	<	36	µg/Kg	UJ	L	b
			indeno(1,2,3,c,d)pyrene	<	36	µg/Kg	UJ	L	b
			naphthalene	<	36	µg/Kg	UJ	L	b
			phenanthrene	<	36	µg/Kg	UJ	L	b
			pyrene	<	36	µg/Kg	UJ	L	b

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte		Result	Units	Q	Bias	RC
100553-01	01NE07WP302	WX	2-chloronaphthalene	<	0.095	µg/L	UJ	L	b
			2-methylnaphthalene	<	0.095	µg/L	UJ	L	b
			acenaphthene	<	0.095	µg/L	UJ	L	b
			acenaphthylene	<	0.095	µg/L	UJ	L	b
			anthracene	<	0.095	µg/L	UJ	L	b
			benzo(a)anthracene	<	0.095	µg/L	UJ	L	b
			benzo(a)pyrene	<	0.095	µg/L	UJ	L	b
			benzo(b)fluoranthene	<	0.095	µg/L	UJ	L	b
			benzo(g,h,l)perylene	<	0.095	µg/L	UJ	L	b
			benzo(k)fluoranthene	<	0.095	µg/L	UJ	L	b
			chrysene	<	0.095	µg/L	UJ	L	b
			dibenzo(a,h)anthracene	<	0.095	µg/L	UJ	L	b
			fluoranthene	<	0.095	µg/L	UJ	L	b
			fluorene	<	0.095	µg/L	UJ	L	b
			indeno(1,2,3,c,d)pyrene	<	0.095	µg/L	UJ	L	b
			naphthalene	<	0.095	µg/L	UJ	L	b
			phenanthrene	<	0.095	µg/L	UJ	L	b
			pyrene	<	0.095	µg/L	UJ	L	b

### Table 7 - Laboratory Blank Qualifications (a)

Due to laboratory blank contamination, the following detected results are qualified as nondetected:

**Analysis Type: Diesel / Residual Range Organics**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN73C	01NE06WP103	WX	diesel range organics	0.29	mg/L	B	H	a
DN73F	01NE04WP104	WX	diesel range organics	0.96	mg/L	B	H	a
DN73G	01NE04WP102	WX	diesel range organics	1.4	mg/L	B	H	a

**Table 7 - Laboratory Blank Qualifications (a)**

**Analysis Type:** *Gasoline Range Organics*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-02	01NE21SW313	WX	gasoline range organics	0.04	mg/L	B	H	a
100492-03	01NE00TB112	WX	gasoline range organics	0.029	mg/L	B	H	a

**Table 7 - Laboratory Blank Qualifications (a)**

**Analysis Type:** *Semivolatile Organics*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN53C	01NE16GW101	WX	bis(2-ethylhexyl)phthalate	2.5	µg/L	B	H	a
DN53D	01NE16GW201	WX	bis(2-ethylhexyl)phthalate	2.2	µg/L	B	H	a
DN53E	01NE16GW102	WX	bis(2-ethylhexyl)phthalate	1.4	µg/L	B	H	a

**Table 7 - Laboratory Blank Qualifications (a)**

**Analysis Type:** *Total Metals*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100418-02	01NE09SW307	WX	silver	0.029	mg/L	B	H	a

**Table 7 - Laboratory Blank Qualifications (a)**

**Analysis Type:** *Volatile Organics*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN07N	01NE07SS125	SX	bromomethane	98	µg/Kg	B	H	a
DN07O	01NE07SS126	SX	bromomethane	200	µg/Kg	B	H	a
DN07P	01NE07SS127	SX	bromomethane	170	µg/Kg	B	H	a
DN07Q	01NE07SD105	SX	bromomethane	400	µg/Kg	B	H	a
DN07R	01NE07SD104	SX	bromomethane	170	µg/Kg	B	H	a
DN68C	01NE09SD108	SX	bromomethane	360	µg/Kg	B	H	a
DN68L	01NE00TB111	SX	bromomethane	90	µg/Kg	B	H	a

**Table 8 - Field Blank Qualifications (k)**

The following detected results are qualified as nondetected due to field blank contamination:

**Analysis Type: BTEX**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN07K	01NE06SD116	SX	ethylbenzene	12	µg/Kg	B	H	k
			m,p-xylene	44	µg/Kg	B	H	k
			o-xylene	14	µg/Kg	B	H	k
			toluene	78	µg/Kg	B	H	k
DN07L	01NE06SD117	SX	ethylbenzene	0.88	µg/Kg	B	H	k
			m,p-xylene	3.3	µg/Kg	B	H	k
			o-xylene	1	µg/Kg	B	H	k
			toluene	4.7	µg/Kg	B	H	k
DN40J	01NE29SD128	SX	toluene	6.4	µg/Kg	B	H	k
DN40K	01NE29SD129	SX	m,p-xylene	3.2	µg/Kg	B	H	k
			toluene	4.7	µg/Kg	B	H	k
DN40M	01NE29SD127	SX	toluene	9.7	µg/Kg	B	H	k
DN40N	01NE29SD126	SX	toluene	7.4	µg/Kg	B	H	k
DN68A	01NE21SS169	SX	toluene	39	µg/Kg	B	H	k
DN68K	01NE09SS171	SX	toluene	9	µg/Kg	B	H	k
DN69N	01NE31SS121	SX	toluene	12	µg/Kg	B	H	k
DN69P	01NE31SS123	SX	m,p-xylene	17	µg/Kg	B	H	k
			o-xylene	5.3	µg/Kg	B	H	k
			toluene	24	µg/Kg	B	H	k
DN69Q	01NE31SS124	SX	toluene	7.3	µg/Kg	B	H	k
DN69R	01NE31SS221	SX	m,p-xylene	9	µg/Kg	B	H	k
			toluene	14	µg/Kg	B	H	k
DN70A	01NE21SB170	SX	toluene	7.2	µg/Kg	B	H	k
DN70B	01NE21SS170	SX	m,p-xylene	7.4	µg/Kg	B	H	k
			toluene	11	µg/Kg	B	H	k
DN70C	01NE24SD114	SX	toluene	3.2	µg/Kg	B	H	k
DN70D	01NE21SD113	SX	toluene	55	µg/Kg	B	H	k
DN70E	01NE24SD214	SX	toluene	17	µg/Kg	B	H	k

**Table 8 - Field Blank Qualifications (k)**

**Analysis Type: BTEX**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN70F	01NE21SB169	SX	ethylbenzene	6.7	µg/Kg	B	H	k
			m,p-xylene	21	µg/Kg	B	H	k
			o-xylene	6.3	µg/Kg	B	H	k
			toluene	24	µg/Kg	B	H	k
DN70G	01NE21SB171	SX	m,p-xylene	23	µg/Kg	B	H	k
			toluene	41	µg/Kg	B	H	k
DN70H	01NE21SS172	SX	m,p-xylene	96	µg/Kg	B	H	k
			toluene	140	µg/Kg	B	H	k
DN70I	01NE21SD114	SX	m,p-xylene	10	µg/Kg	B	H	k
			toluene	19	µg/Kg	B	H	k
DN70J	01NE21SS173	SX	m,p-xylene	32	µg/Kg	B	H	k
			toluene	73	µg/Kg	B	H	k
DN70K	01NE24SD115	SX	ethylbenzene	8.8	µg/Kg	B	H	k
			m,p-xylene	30	µg/Kg	B	H	k
			o-xylene	9.2	µg/Kg	B	H	k
			toluene	38	µg/Kg	B	H	k

### **Table 8 - Field Blank Qualifications (k)**

**Analysis Type:** *Volatile Organics*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100418-02	01NE09SW307	WX	acetone	0.73	µg/L	B	H	k

**Table 9 - Matrix Spike Qualifications (c)**

Due to matrix spike accuracy problems, the following results are qualified as estimated:

**Analysis Type: Diesel / Residual Range Organics**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN05F	01NE28SD158	SX	diesel range organics	3800	mg/Kg	J	N	c,f
DN06E	01NE28SD139	SX	diesel range organics	520	mg/Kg	J	N	c,f,n
DN68B	01NE21SS269	SX	diesel range organics	220	mg/Kg	J	N	c,f
DN76P	01NE09SD113	SX	diesel range organics	270	mg/Kg	J	H	c,f

**Table 9 - Matrix Spike Qualifications (c)**

**Analysis Type:** *Organochlorine Pesticides / PCBs*

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN68V	01NE32SS104	SX	aroclor 1260	160	µg/Kg	J	H	b,c

**Table 9 - Matrix Spike Qualifications (c)**

**Analysis Type:** *Polynuclear Aromatic Hydrocarbons*

**Labcode:** **SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100302-02	01NE28SD311	SX	fluoranthene	110	µg/Kg	J	N	c,f
			phenanthrene	55	µg/Kg	J	N	c,f
			pyrene	66	µg/Kg	J	H	c

**Table 9 - Matrix Spike Qualifications (c)**

**Analysis Type: Total Metals**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN76D	01NE09SD107	SX	antimony	< 30	mg/Kg	UJ	L	c
DN76E	01NE09SD108	SX	antimony	< 20	mg/Kg	UJ	L	c
DN76F	01NE30SS101	SX	antimony	< 10	mg/Kg	UJ	L	c
DN76G	01NE30SD101	SX	antimony	50	mg/Kg	J	L	c
DN76H	01NE30SS103	SX	antimony	< 30	mg/Kg	UJ	L	c
DN76I	01NE30SS102	SX	antimony	15	mg/Kg	J	L	c
DN76J	01NE09SD109	SX	antimony	250	mg/Kg	J	L	c
DN76K	01NE09SD213	SX	antimony	< 30	mg/Kg	UJ	L	c
DN76L	01NE24SD114	SX	antimony	70	mg/Kg	J	L	c
DN76M	01NE24SD115	SX	antimony	11	mg/Kg	J	L	c
DN76O	01NE30SS201	SX	antimony	< 9	mg/Kg	UJ	L	c
DN76P	01NE09SD113	SX	antimony	< 30	mg/Kg	UJ	L	c

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100413-06	01NE29SW317	WX	mercury	< 0.0002	mg/L	UJ	L	c
100492-08	01NE16SS365	SX	lead	180	mg/Kg	J	H	c

**Table 9 - Matrix Spike Qualifications (c)**

**Analysis Type:** *Volatile Organics*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-13	01NE09SD313	SX	toluene	16	µg/Kg	J	N	c,f,n

### **Table 10 - Laboratory Control Sample Qualifications (d)**

Due to laboratory control sample accuracy problems, the following detected results are qualified as estimated:

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN06P	01NE28SD149	SX	phenanthrene	1500	µg/Kg	J	H	d

**Table 11 - Precision Exceedance Qualifications (f)**

Due to MS/MSD, LCS/LCSD or sample duplicate precision problems, the following results are qualified as estimated:

**Analysis Type: Diesel / Residual Range Organics**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN04B	01NE28SD118	SX	diesel range organics	330	mg/Kg	J	N	f
DN05F	01NE28SD158	SX	diesel range organics	3800	mg/Kg	J	N	c,f
DN06E	01NE28SD139	SX	diesel range organics	520	mg/Kg	J	N	c,f,n
DN68B	01NE21SS269	SX	diesel range organics	220	mg/Kg	J	N	c,f
DN69N	01NE31SS121	SX	diesel range organics	47	mg/Kg	J	N	f
DN76D	01NE09SD107	SX	diesel range organics	320	mg/Kg	J	N	f
DN76P	01NE09SD113	SX	diesel range organics	270	mg/Kg	J	H	c,f

**Table 11 - Precision Exceedance Qualifications (f)**

**Analysis Type:** *Diesel Range Organics*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-11	01NE31SS321	SX	diesel range organics	54	mg/Kg	J	N	f

**Table 11 - Precision Exceedance Qualifications (f)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode:** **SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100302-02	01NE28SD311	SX	fluoranthene	110	µg/Kg	J	N	c,f
			phenanthrene	55	µg/Kg	J	N	c,f
100413-01	01NE29SD325	SX	benzo(b)fluoranthene	<	2	µg/Kg	UJ	N
			benzo(k)fluoranthene	<	2	µg/Kg	UJ	N

**Table 11 - Precision Exceedance Qualifications (f)**

**Analysis Type:** *Residual Range Organics*

**Labcode:** **SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100413-03	01NE28SD371	SX	residual range organics	2000	mg/Kg	J	N	f

**Table 11 - Precision Exceedance Qualifications (f)**

**Analysis Type:** *Total Metals*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100302-02	01NE28SD311	SX	zinc	62	mg/Kg	J	N	f
100302-03	01NE28SD325	SX	zinc	43	mg/Kg	J	N	f
100302-04	01NE28SD351	SX	zinc	80	mg/Kg	J	N	f
100302-05	01NE28SD353	SX	zinc	34	mg/Kg	J	N	f
100302-06	01NE28SD357	SX	zinc	43	mg/Kg	J	N	f
100302-08	01NE28SD339	SX	zinc	60	mg/Kg	J	N	f
100492-01	01NE24SW314	WX	lead	0.23	mg/L	J	N	f,n
100492-04	01NE21SS369	SX	lead	19	mg/Kg	J	N	f
100492-09	01NE30SS301	SX	lead	16	mg/Kg	J	N	f
100492-13	01NE09SD313	SX	lead	300	mg/Kg	J	N	f

**Table 11 - Precision Exceedance Qualifications (f)**

**Analysis Type:** *Volatile Organics*

**Labcode:** **SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-13	01NE09SD313	SX	toluene	16	µg/Kg	J	N	c,f,n

**Table 12 - Below Reporting Limit Qualifications (m)**

The following results are below the reporting limit, and are qualified as estimated:

**Analysis Type: Diesel Range Organics**

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	RL	Units	Q	Bias	RC
100302-08	01NE28SD339	SX	diesel range organics	64	86	mg/Kg	J	N	m,n
100492-04	01NE21SS369	SX	diesel range organics	120	140	mg/Kg	J	N	m
100492-13	01NE09SD313	SX	diesel range organics	120	220	mg/Kg	J	N	m

**Table 12 - Below Reporting Limit Qualifications (m)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode:** SAS

Lab ID	Field ID	Matrix	Analyte	Result	RL	Units	Q	Bias	RC
100302-05	01NE28SD353	SX	benzo(a)anthracene	24	28	µg/Kg	J	N	m,n

**Table 12 - Below Reporting Limit Qualifications (m)**

**Analysis Type: Residual Range Organics**

**Labcode:** **SAS**

Lab ID	Field ID	Matrix	Analyte	Result	RL	Units	Q	Bias	RC
100413-06	01NE29SW317	WX	residual range organics	0.069	0.1	mg/L	J	N	m
100492-02	01NE21SW313	WX	residual range organics	0.073	0.095	mg/L	J	N	m

**Table 12 - Below Reporting Limit Qualifications (m)**

**Analysis Type: Total Metals**

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	RL	Units	Q	Bias	RC
100413-06	01NE29SW317	WX	aluminum	0.021	0.2	mg/L	J	N	m
			antimony	0.025	0.05	mg/L	J	N	m
			lead	0.0059	0.01	mg/L	J	N	m
			potassium	1.3	2	mg/L	J	N	m
			selenium	0.0075	0.05	mg/L	J	N	m
			silver	0.039	0.1	mg/L	J	N	m
100418-02	01NE09SW307	WX	aluminum	0.056	0.2	mg/L	J	N	m
			antimony	0.016	0.05	mg/L	J	N	m
			barium	0.0046	0.005	mg/L	J	N	m
			potassium	0.17	2	mg/L	J	N	m
100492-01	01NE24SW314	WX	aluminum	0.038	0.2	mg/L	J	N	m
			antimony	0.033	0.05	mg/L	J	N	m
			arsenic	0.0051	0.01	mg/L	J	N	m
			potassium	0.87	2	mg/L	J	N	m
			selenium	0.011	0.05	mg/L	J	N	m
			thallium	0.0074	0.02	mg/L	J	N	m
100492-04	01NE21SS369	SX	antimony	7.5	37	mg/Kg	J	N	m
			arsenic	6	7.5	mg/Kg	J	N	m
			cobalt	1.7	3.7	mg/Kg	J	N	m
			copper	6.7	7.5	mg/Kg	J	N	m
			nickel	3.4	7.5	mg/Kg	J	N	m
			potassium	490	1500	mg/Kg	J	N	m
			selenium	6.3	37	mg/Kg	J	N	m
100492-09	01NE30SS301	SX	antimony	3.9	23	mg/Kg	J	N	m
			beryllium	0.44	0.91	mg/Kg	J	N	m
			potassium	740	910	mg/Kg	J	N	m
100492-13	01NE09SD313	SX	antimony	4.6	62	mg/Kg	J	N	m
			mercury	0.2	0.21	mg/Kg	J	N	m
			potassium	1200	2500	mg/Kg	J	N	m
			silver	6	12	mg/Kg	J	N	m

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3/19/02

Table 12 - Below Reporting Limit Qualifications (m)

NE Cape HTRW - St. Lawrence Island

**Table 12 - Below Reporting Limit Qualifications (m)**

**Analysis Type:** *Volatile Organics*

**Labcode:** *SAS*

Lab ID	Field ID	Matrix	Analyte	Result	RL	Units	Q	Bias	RC
100418-03	01NE00TB110	WX	acetone	0.72	2	µg/L	J	N	m
			tetrachloroethylene	0.18	0.4	µg/L	J	N	m
			trichlorofluoromethane	0.16	0.4	µg/L	J	N	m
100492-13	01NE09SD313	SX	chloromethane	1.2	1.9	µg/Kg	J	N	m,n
100553-01	01NE07WP302	WX	acetone	1.8	2	µg/L	J	N	m
			naphthalene	0.17	0.4	µg/L	J	N	m,n
100553-02	01NE00TB117	WX	chloroform	0.091	0.4	µg/L	J	N	m,p
			styrene	0.34	0.4	µg/L	J	N	m,p
			tetrachloroethylene	0.24	0.4	µg/L	J	N	m,p

**Table 13 - Calibration Range Exceedance Qualifications (o)**

The following detected results exceeded calibration range, and are qualified as estimated:

**Analysis Type: Diesel / Residual Range Organics**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN39B	01NE28SD160	SX	diesel range organics	58000	mg/Kg	J	N	o
DN39C	01NE28SD161	SX	diesel range organics	60000	mg/Kg	J	N	o
DN39D	01NE28SD163	SX	diesel range organics	49000	mg/Kg	J	N	o
DN39E	01NE28SD164	SX	diesel range organics	48000	mg/Kg	J	N	o
DN39F	01NE28SD263	SX	diesel range organics	50000	mg/Kg	J	N	o
DN39H	01NE28SD172	SX	diesel range organics	5200	mg/Kg	J	L	b,o
DN39P	01NE28SD178	SX	diesel range organics	42000	mg/Kg	J	N	o
DN55H	01NE34SS106	SX	diesel range organics	1200	mg/Kg	J	N	o

**Table 13 - Calibration Range Exceedance Qualifications (o)**

**Analysis Type: Diesel Range Organics**

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100302-04	01NE28SD351	SX	diesel range organics	17000	mg/Kg	J	N	o
100302-05	01NE28SD353	SX	diesel range organics	13000	mg/Kg	J	N	o

**Table 13 - Calibration Range Exceedance Qualifications (o)**

**Analysis Type: Organochlorine Pesticides / PCBs**

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN68O	01NE31SS102	SX	aroclor 1260	3200	µg/Kg	J	N	o
DN68Q	01NE31SS103	SX	aroclor 1260	3000	µg/Kg	J	N	o
DN68R	01NE31SS104	SX	aroclor 1260	3200	µg/Kg	J	N	o
DQ74B	01NE16SS168	SX	4,4'-DDT	140	µg/Kg	J	L	b,o
DQ74C	01NE28SD183	SX	4,4'-DDD	200	µg/Kg	J	L	b,o
DQ74F	01NE28SD186	SX	4,4'-DDD	290	µg/Kg	J	N	o

**Table 13 - Calibration Range Exceedance Qualifications (o)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN04D	01NE28SD120	SX	2-methylnaphthalene naphthalene	5500 1600	µg/Kg µg/Kg	J J	N N	o o
DN04G	01NE28SD123	SX	naphthalene	1500	µg/Kg	J	N	o
DN04H	01NE28SD124	SX	naphthalene 2-methylnaphthalene	3500 5000	µg/Kg µg/Kg	J J	N N	o o
DN04I	01NE28SD125	SX	naphthalene 2-methylnaphthalene	3100 5600	µg/Kg µg/Kg	J J	N N	o o
DN04K	01NE28SD127	SX	2-methylnaphthalene	30000	µg/Kg	J	N	o
DN04M	01NE28SD225	SX	naphthalene 2-methylnaphthalene	4400 9700	µg/Kg µg/Kg	J J	N N	o o
DN04N	01NE28SD129	SX	2-methylnaphthalene naphthalene	3700 4700	µg/Kg µg/Kg	J J	N N	o o
DN04S-RE	01NE28SD134	SX	2-methylnaphthalene	25000	µg/Kg	J	L	e,o
DN05B	01NE28SD154	SX	2-methylnaphthalene	18000	µg/Kg	J	N	o
DN05C	01NE28SD155	SX	2-methylnaphthalene naphthalene	260000 130000	µg/Kg µg/Kg	J J	N N	o o
DN05D	01NE28SD156	SX	naphthalene 2-methylnaphthalene	110000 250000	µg/Kg µg/Kg	J J	N N	o o
DN05F	01NE28SD158	SX	naphthalene 2-methylnaphthalene	6500 14000	µg/Kg µg/Kg	J J	N N	o o
DN06E	01NE28SD139	SX	pyrene phenanthrene fluoranthene	1000 990 890	µg/Kg µg/Kg µg/Kg	J J J	N N N	n,o n,o n,o
DN06I	01NE28SD142	SX	2-methylnaphthalene	620	µg/Kg	J	N	o
DN06J	01NE28SD143	SX	naphthalene 2-methylnaphthalene	23000 52000	µg/Kg µg/Kg	J J	N N	o o
DN06K	01NE28SD144	SX	naphthalene 2-methylnaphthalene	18000 41000	µg/Kg µg/Kg	J J	N N	o o
DN06L	01NE28SD145	SX	2-methylnaphthalene	33000	µg/Kg	J	N	o
DN06M	01NE28SD146	SX	naphthalene 2-methylnaphthalene	140000 280000	µg/Kg µg/Kg	J J	N N	o o

**Table 13 - Calibration Range Exceedance Qualifications (o)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN06O	01NE28SD148	SX	2-methylnaphthalene naphthalene	39000	µg/Kg	J	N	o
				17000	µg/Kg	J	N	o
DN07I	01NE28SD115	SX	2-methylnaphthalene	6700	µg/Kg	J	N	o
DN39C	01NE28SD161	SX	2-methylnaphthalene	260000	µg/Kg	J	N	o

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100302-03	01NE28SD325	SX	2-methylnaphthalene	1900	µg/Kg	J	N	o
100302-04	01NE28SD351	SX	2-methylnaphthalene	19000	µg/Kg	J	N	o

**Table 13 - Calibration Range Exceedance Qualifications (o)**

**Analysis Type: Residual Range Organics**

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-05	01NE31SS320	SX	residual range organics	14000	mg/Kg	J	N	o

### **Table 13 - Calibration Range Exceedance Qualifications (o)**

Estimated data are usable for limited purposes. The reported result should be considered an estimated value.

**Table 14 - QA/QC Triplicate Qualifications (n)**

Due to major disagreement between the primary, QC and QA sample results, the following results are qualified as estimated:

**Analysis Type: Diesel / Residual Range Organics**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN06E	01NE28SD139	SX	diesel range organics	520	mg/Kg	J	N	c,f,n
DN06G	01NE28SD239	SX	diesel range organics	610	mg/Kg	J	N	n
DN78A	01NE31SS105	SX	motor oil	< 500	mg/Kg	UJ	N	n
DN78B	01NE31SS205	SX	motor oil	< 500	mg/Kg	UJ	N	n

**Table 14 - QA/QC Triplicate Qualifications (n)**

**Analysis Type:** Diesel Range Organics

**Labcode:** SAS

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100302-08	01NE28SD339	SX	diesel range organics	64	mg/Kg	J	N	m,n

**Table 14 - QA/QC Triplicate Qualifications (n)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN04I	01NE28SD125	SX	fluorene	140	µg/Kg	J	N	n
			phenanthrene	49	µg/Kg	J	N	n
DN04M	01NE28SD225	SX	fluorene	280	µg/Kg	J	N	n
			phenanthrene	110	µg/Kg	J	N	n
DN05A	01NE28SD153	SX	acenaphthene	1300	µg/Kg	J	N	n
			benzo(a)anthracene	< 670	µg/Kg	UJ	N	n
			chrysene	< 670	µg/Kg	UJ	N	n
			fluorene	1600	µg/Kg	J	N	n
			naphthalene	1600	µg/Kg	J	N	n
DN05E	01NE28SD157	SX	acenaphthene	200	µg/Kg	J	N	n
			fluorene	200	µg/Kg	J	N	n
DN05G	01NE28SD253	SX	acenaphthene	1200	µg/Kg	J	N	n
			benzo(a)anthracene	< 570	µg/Kg	UJ	N	n
			chrysene	< 570	µg/Kg	UJ	N	n
			fluorene	1400	µg/Kg	J	N	n
			naphthalene	1400	µg/Kg	J	N	n
DN05H	01NE28SD257	SX	acenaphthene	< 71	µg/Kg	UJ	N	n
			fluorene	< 71	µg/Kg	UJ	N	n
DN06E	01NE28SD139	SX	2-methylnaphthalene	34	µg/Kg	J	N	n
			acenaphthene	100	µg/Kg	J	N	n
			anthracene	33	µg/Kg	J	N	n
			benzo(a)anthracene	230	µg/Kg	J	N	n
			benzo(a)pyrene	320	µg/Kg	J	N	n
			benzo(b)fluoranthene	420	µg/Kg	J	N	n
			benzo(g,h,l)perylene	71	µg/Kg	J	N	n
			benzo(k)fluoranthene	300	µg/Kg	J	N	n
			chrysene	380	µg/Kg	J	N	n
			dibenzo(a,h)anthracene	29	µg/Kg	J	N	n
			dibenzofuran	75	µg/Kg	J	N	n
			fluoranthene	890	µg/Kg	J	N	n,o
			fluorene	100	µg/Kg	J	N	n
			indeno(1,2,3,c,d)pyrene	89	µg/Kg	J	N	n
			naphthalene	50	µg/Kg	J	N	n
			phenanthrene	990	µg/Kg	J	N	n,o
			pyrene	1000	µg/Kg	J	N	n,o

**Table 14 - QA/QC Triplicate Qualifications (n)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode:** *ARI*

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN06G	01NE28SD239	SX	2-methylnaphthalene	14	µg/Kg	J	N	n
			acenaphthene	8.6	µg/Kg	UJ	N	n
			anthracene	<	4.8	µg/Kg	UJ	n
			benzo(a)anthracene	<	4.8	µg/Kg	UJ	n
			benzo(a)pyrene	<	4.8	µg/Kg	UJ	n
			benzo(b)fluoranthene	<	4.8	µg/Kg	UJ	n
			benzo(g,h,i)perylene	<	4.8	µg/Kg	UJ	n
			benzo(k)fluoranthene	<	4.8	µg/Kg	UJ	n
			chrysene	<	4.8	µg/Kg	UJ	n
			dibenzo(a,h)anthracene	<	4.8	µg/Kg	UJ	n
			dibenzofuran	<	4.8	µg/Kg	UJ	n
			fluoranthene	<	4.8	µg/Kg	UJ	n
			fluorene	7.2	µg/Kg	J	N	n
			indeno(1,2,3,c,d)pyrene	<	4.8	µg/Kg	UJ	n
			naphthalene	14	µg/Kg	J	N	n
			phenanthrene	<	4.8	µg/Kg	UJ	n
			pyrene	<	4.8	µg/Kg	UJ	n
DN06R	01NE28SD151	SX	acenaphthene	1200	µg/Kg	J	N	n
			acenaphthylene	<	700	µg/Kg	UJ	n
			benzo(k)fluoranthene	<	700	µg/Kg	UJ	n
			fluorene	2400	µg/Kg	J	N	n
DN06S	01NE28SD251	SX	acenaphthene	1500	µg/Kg	J	N	n
			acenaphthylene	<	680	µg/Kg	UJ	n
			benzo(k)fluoranthene	<	680	µg/Kg	UJ	n
			fluorene	2400	µg/Kg	J	N	n
DN38A	01NE29SD114	SX	fluoranthene	<	8.4	µg/Kg	UJ	L
			phenanthrene	11	µg/Kg	J	L	b,n
DN38B	01NE29SD214	SX	fluoranthene	36	µg/Kg	J	N	n
			phenanthrene	63	µg/Kg	J	N	n
DN39D	01NE28SD163	SX	2-methylnaphthalene	2700	µg/Kg	J	N	n
			acenaphthene	2300	µg/Kg	J	N	n
			naphthalene	9500	µg/Kg	J	N	n
DN39F	01NE28SD263	SX	2-methylnaphthalene	2700	µg/Kg	J	N	n
			acenaphthene	2400	µg/Kg	J	N	n
			naphthalene	9700	µg/Kg	J	N	n

**Table 14 - QA/QC Triplicate Qualifications (n)**

**Analysis Type: Polynuclear Aromatic Hydrocarbons**

**Labcode:** SAS

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100302-03	01NE28SD325	SX	fluorene	52	µg/Kg	J	N	n
			phenanthrene	16	µg/Kg	J	N	n
100302-04	01NE28SD351	SX	acenaphthene	<	23	µg/Kg	UJ	N
			acenaphthylene	<	23	µg/Kg	UJ	N
			benzo(k)fluoranthene		23	µg/Kg	J	N
			fluorene	<	23	µg/Kg	UJ	N
100302-05	01NE28SD353	SX	acenaphthene	<	14	µg/Kg	UJ	N
			benzo(a)anthracene		24	µg/Kg	J	N
			chrysene		48	µg/Kg	J	N
			fluorene	<	14	µg/Kg	UJ	N
			naphthalene	<	14	µg/Kg	UJ	N
100302-06	01NE28SD357	SX	acenaphthene	<	20	µg/Kg	UJ	N
			fluorene	<	20	µg/Kg	UJ	N
100302-08	01NE28SD339	SX	2-methylnaphthalene		4	µg/Kg	J	N
			acenaphthene	<	3.6	µg/Kg	UJ	N
			anthracene	<	3.6	µg/Kg	UJ	N
			benzo(a)anthracene	<	7.3	µg/Kg	UJ	N
			benzo(a)pyrene	<	3.6	µg/Kg	UJ	N
			benzo(b)fluoranthene	<	3.6	µg/Kg	UJ	N
			benzo(g,h,i)perylene	<	3.6	µg/Kg	UJ	N
			benzo(k)fluoranthene	<	3.6	µg/Kg	UJ	N
			chrysene	<	7.3	µg/Kg	UJ	N
			dibenzo(a,h)anthracene	<	3.6	µg/Kg	UJ	N
			fluoranthene	<	3.6	µg/Kg	UJ	N
			fluorene	<	3.6	µg/Kg	UJ	N
			indeno(1,2,3,c,d)pyrene	<	3.6	µg/Kg	UJ	N
			naphthalene		5.1	µg/Kg	J	N
			phenanthrene	<	3.6	µg/Kg	UJ	N
			pyrene	<	3.6	µg/Kg	UJ	N
100413-04	01NE28SD363	SX	2-methylnaphthalene	<	210	µg/Kg	UJ	N
			acenaphthene	<	210	µg/Kg	UJ	N
			naphthalene	<	210	µg/Kg	UJ	N
100413-05	01NE29SD314	SX	fluoranthene	<	3.4	µg/Kg	UJ	N
			phenanthrene	<	3.4	µg/Kg	UJ	N

**Table 14 - QA/QC Triplicate Qualifications (n)**

**Analysis Type: Residual Range Organics**

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-06	01NE31SS305	SX	residual range organics	43	mg/Kg	J	N	n

**Table 14 - QA/QC Triplicate Qualifications (n)**

**Analysis Type: Total Metals**

**Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN40C	01NE29SD125	SX	lead	9	mg/Kg	J	N	n
DN40D	01NE29SD225	SX	lead	7	mg/Kg	J	N	n
DN53F	01NE09SW207	WX	lead	< 1	µg/L	UJ	N	n
DN53H	01NE09SW107	WX	lead	< 1	µg/L	UJ	N	n
DN73K	01NE24SW214	WX	lead	1	µg/L	J	N	n
DN73L	01NE24SW114	WX	lead	< 1	µg/L	UJ	N	n
DN76F	01NE30SS101	SX	silver	< 0.7	mg/Kg	UJ	N	n
DN76O	01NE30SS201	SX	silver	< 0.6	mg/Kg	UJ	N	n

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100413-01	01NE29SD325	SX	lead	25	mg/Kg	J	N	n
100418-02	01NE09SW307	WX	lead	0.019	mg/L	J	N	n
100492-01	01NE24SW314	WX	lead	0.23	mg/L	J	N	f,n
100492-09	01NE30SS301	SX	silver	14	mg/Kg	J	N	n

**Table 14 - QA/QC Triplicate Qualifications (n)****Analysis Type: Volatile Organics****Labcode: ARI**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
DN68G	01NE09SD113	SX	2-butanone	<	1400	µg/Kg	UJ	N
			carbon disulfide	<	270	µg/Kg	UJ	N
			chloromethane	<	270	µg/Kg	UJ	N
			toluene	<	270	µg/Kg	UJ	n
DN68H	01NE09SD213	SX	2-butanone	<	490	µg/Kg	UJ	N
			carbon disulfide	<	98	µg/Kg	UJ	N
			chloromethane	<	98	µg/Kg	UJ	N
			toluene	<	98	µg/Kg	UJ	n
DN88A	01NE07WP102	WX	naphthalene	<	5	µg/L	UJ	N
DN88B	01NE07WP202	WX	naphthalene	<	5	µg/L	UJ	n

**Labcode: SAS**

Lab ID	Field ID	Matrix	Analyte	Result	Units	Q	Bias	RC
100492-13	01NE09SD313	SX	2-butanone	56	µg/Kg	J	N	n
			carbon disulfide	20	µg/Kg	J	N	n
			chloromethane	1.2	µg/Kg	J	N	m,n
			toluene	16	µg/Kg	J	N	c,f,n
100553-01	01NE07WP302	WX	naphthalene	0.17	µg/L	J	N	m,n

**The CDQR for 2002 was not available at the time this document was published.**

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## **APPENDIX F**

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*Quality Assurance/Quality Control Report*

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**MWH**

## **QUALITY ASSURANCE QUALITY CONTROL DATA REVIEW**

### **1.0 INTRODUCTION**

MWH Americas, Inc. (MWH) collected soil, water, and tissue samples between July 24 and September 24, 2001 at Northeast Cape, Alaska. Table 1 provides a summary of sample counts by matrix, parameter, and quality control (QC) description. Primary and field duplicate soil and water samples were submitted to Analytical Resource Inc. (ARI) and quality assurance (QA) soil and water samples were submitted to Sound Analytical Services (SAS). Tissue (plant and fish) samples were submitted to Columbia Analytical Services, Inc. (CAS). CAS was unable to perform PCB analysis on the plant tissue sample 01NE28PT3102 due to insufficient sample quantity.

This data review includes data from ARI and CAS only. Samples were reviewed in accordance with established precision, accuracy, reproducibility, comparability, and completeness (PARCC) parameters. PARCC parameters were defined in the Phase III Remedial Investigation Final Work Plan (MWH, 2001). Data were qualified based on the Environmental Protection Agency's National Functional Guidelines (USEPA, 1994 and 1999).

The following specific QC samples, indicators, and associated documentation were reviewed:

- Sample Handling Forms (Chain-of-custody [CoCs])
- Sample Holding Times
- Temperature Blanks
- Trip Blanks
- Field Duplicates
- Method and Instrument Blanks
- Surrogates
- Continuing Calibration Verification (CCV) Samples
- Laboratory Control Samples (LCS) and LCS Duplicates (LCSD)
- Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Samples

### **2.0 DESCRIPTION OF DATA QUALIFIERS**

The following flags were used to qualify data for the Phase III Remedial Investigation at Northeast Cape, Alaska:

- VB – The analyte was detected in the associated blank and the sample indicating possible contamination.
- VHB – Result is an estimate with a high bias.
- VJ – The analyte was positively identified; the quantitation is an estimation.
- VLB – Result is an estimate with a low bias.
- VQQ – The practical quantitation limit is approximate due to QC or matrix effects.

The hierarchy of data qualifiers, listed in order of the most severe through the least severe, are VB, VJ, VLB/VHB and VQQ. Only the most severe qualifier was applied to the data.

## **3.0 DATA REVIEW RESULTS**

The following sections summarize the data review and qualification of sample results for the Northeast Cape Phase III Remedial Investigation.

### **3.1 SAMPLING HANDLING**

All reviewed laboratory sample receipt forms, CoCs, and case narratives indicate that sample handling procedures were in control with the exception of cooler temperature blanks. All coolers temperature blanks were received within the acceptance range of 2-6 degrees Celsius (°C), with the exception of cooler temperature blanks less than 2.0°C. Since samples were received in good condition and not frozen, results were not qualified based on cooler temperatures below 2.0°C.

### **3.2 HOLDING TIMES**

All samples were extracted or analyzed within the recommended holding time for the analytical procedures used for this project with the exception of samples listed in Table 2. When holding times were exceeded by more than two times recommended holding times, positive results were qualified as estimated values and non-detects were rejected. No results were rejected based on holding times.

### **3.3 TRIP BLANKS**

Table 3 summarizes field samples with target analytes in associated trip blanks. Field samples associated with contaminated trip blanks were qualified for cases when the concentration in the sample was within 10 times the concentration of the trip blank. Samples free of the trip blank contaminant were not qualified.

### **3.4 METHOD BLANKS**

Table 6 summarizes qualified primary samples with target analytes in the method blank. Field samples associated with contaminated method blanks were qualified for cases when the concentration in the sample was within 10 times the concentration of the method blank. Samples free of the method blank contaminant were not qualified.

### **3.5 SURROGATE RECOVERIES**

Table 7 summarizes qualified samples with surrogate recoveries outside laboratory acceptance limits. Results were not qualified in cases when surrogates were outside acceptance limits due to dilution required for analysis. Similarly, results were not qualified if the surrogate recovery exceeded laboratory acceptance limits and there were no detections in the sample. When surrogate recoveries exceeded acceptance limits, positive results were qualified as estimates with a high bias. When surrogate recoveries were below acceptance limits, positive results were qualified as biased low and MRLs were qualified as estimates for analytes that were not detected.

### **3.6 LABORATORY CONTROL SAMPLES**

Results were not qualified if the LCS recovery exceeded laboratory acceptance limits and there were no detections in the associated samples. When LCS recoveries exceeded acceptance limits, positive sample results were qualified as estimates with a high bias. When LCS recoveries were below acceptance limits, positive sample results were qualified as biased low and MRLs were qualified as estimates for analytes that were not detected.

Percent recovery for methylene chloride (68%) in the laboratory control sample (LCS), DN07 LCS 8/27/01 was below laboratory acceptance limits (70-130%). The associated samples 01NE07SD104, 01NE07SD105, 01NE07SD125, 01NE07SD126, 01NE07SD127 did not contain detectable amounts of methylene chloride. Therefore, the methylene chloride MRLs for the associated samples were qualified as estimates due to the slightly low recovery.

### **3.7 MATRIX SPIKE AND MATRIX SPIKE DUPLICATES**

Sample results were not qualified for occasions when MS results were outside acceptance limits due to high concentrations of target and/or non-target analyte(s), dilutions, when all other QC parameters were well within limits and/or when the sample selected for spiking was not from the Northeast Cape Site. Sample results were not qualified for high relative percent difference (RPD) results if all other QC parameters were well within limits. For cases when RPD was above acceptance limits and one or both MS samples were outside acceptance limits, positive results were qualified as estimates for the spiked field sample.

For sample 01NE28PT5104 the MS/MSD percent recovery was above laboratory acceptance limits (35-145) for Aroclor 1260. Therefore, Aroclor 1260 was qualified as biased high due to the elevated percent recoveries.

### **3.8 FIELD DUPLICATES**

For the 2001 Northeast Cape sampling event, 24 soil duplicates and 8 water duplicates were collected to evaluate precision. Table 4 summarizes the primary, field duplicate, and QA sample relationships.

Precision among primary and duplicates were evaluated using the agreement criteria listed in Table 5 for each analyte and matrix. For sample sets that did not meet the criteria, all available documentation, including related analyte results and QC results were reviewed to elucidate the cause of disagreement. The findings of this review are discussed below.

Field duplicates and primary soil and water sample results were in agreement, with the exception of results between the method reporting limit (MRL) and method detection limit (MDL). This was due to the inherent low precision between the MRL and MDL; therefore, results were not qualified for these samples.

The plant sample 01NE28PT5104 was not in agreement with its field duplicate 01NE28PT5204 due to non-homogeneity between individual plants. Results were not qualified based on the nature of individual plants including the plants maturity, root system, growth, and health.

This section summarizes qualifications, by method, where there are exceptions to the general qualification approaches and/or approaches to reporting.

## 4.0 COMPLETENESS

Completeness is an expression of how many valid results were received from the laboratory relative to the number expected. The parameter is calculated in the following manner:

$$\%C = (V/T) \times 100\%$$

Where:

$\%C$  = percent completeness;

$V$  = number of measurements judged valid; and

$T$  = number of valid measurements needed to achieve a specific statistical level of confidence.

The completeness goal of 95 percent was met for all analyses. All data, including qualified results, were considered valid and acceptable for the purposes of this project.

## 5.0 REFERENCES

- MWH. 2001. Work Plan Phase III Remedial Investigation Northeast Cape, St. Lawrence Island, Alaska Final. August.
- USEPA. 1998. Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses.
- USEPA. 1999. Contract Laboratory Program National Functional Guidelines for Organic Data Review.

Table 2 Hold Time Exceedances

Sample ID	Matrix	Date Collected	Method	Analyte	Days till extracted	Extract holding time criteria	Days past Extraction Hold time	Days till analyzed	Analysis holding time criteria	Days Past Analysis Hold Time	Qualifier
01NE21SW114	Water	8/21/01	AK101	GRO	15	14	1	15	14	1	--
01NE21SW114	Water	8/21/01	SW8082	PCB	8	7	1	10	40	0	--
01NE28SD141	Soil	8/19/01	8270SIM	PAH	17	14	3	18	40	0	--
01NE28SD145	Soil	8/19/01	8270SIM	dibenzofuran	17	14	3	18	40	0	--
01NE28SD150	Soil	8/19/01	8270SIM	PAH	17	14	3	18	40	0	--
01NE29SD122	Soil	8/21/01	AK102	DRO	20	14	6	29	40	0	--
01NE29SD122	Soil	8/21/01	AK103	RRO	20	14	6	29	40	0	--
01NE29SD123	Soil	8/21/01	AK102	DRO	31	14	17	34	40	0	VLB
01NE29SD123	Soil	8/21/01	AK103	RRO	31	14	17	34	40	0	VLB
01NE29SD124	Soil	8/21/01	AK102	DRO	20	14	6	28	40	0	--
01NE29SD124	Soil	8/21/01	AK103	RRO	20	14	6	28	40	0	--
01NE29SD125	Soil	8/21/01	AK102	DRO	20	14	6	28	40	0	--
01NE29SD225	Soil	8/21/01	AK102	DRO	20	14	6	28	40	0	--
01NE29SD125	Soil	8/21/01	AK103	RRO	20	14	6	28	40	0	--
01NE29SD225	Soil	8/21/01	AK103	RRO	20	14	6	28	40	0	--
01NE29SD125	Soil	8/21/01	SW8082	PCB	15	14	1	17	40	0	--
01NE29SD126	Soil	8/21/01	AK102	DRO	20	14	6	29	40	0	--
01NE29SD126	Soil	8/21/01	AK103	RRO	20	14	6	29	40	0	--
01NE29SD128	Soil	8/21/01	AK102	DRO	20	14	6	28	40	0	--
01NE29SD128	Soil	8/21/01	AK103	RRO	20	14	6	28	40	0	--
01NE29SD129	Soil	8/21/01	AK102	DRO	20	14	6	28	40	0	--
01NE29SD129	Soil	8/21/01	AK103	RRO	20	14	6	28	40	0	--

## Key:

-- - Hold time exceedance less than twice the recommended hold time, therefore results were not qualified.

AK - Alaska Method

**Bold** - exceeded hold time

DRO - diesel range organics

GRO - gasoline range organics

PAH - polynuclear aromatic hydrocarbon

PCB - polychlorinated biphenyls

RRO - residual range organics

SIM - selected ion monitoring

SW - standard waste method

**Table 4 Summary of Primary, Field Duplicate, and QA Relationship and Parameters**

Primary	Duplicate	QA	Parameters*
<b>Soil Samples</b>			
01NE06TP101	01NE06TP201	01NE06TP301	DRO/RRO
01NE09SD113	01NE09SD213	01NE09SD313	DRO/RRO, VOC, PAHs, PCBs, TAL metals
01NE14SS103	01NE14SS203	01NE14SS303	PCBs
01NE16SS165	01NE16SS265	01NE16SS365	Pb
01NE21SS169	01NE21SS269	01NE21SS369	DRO/RRO, GRO, BTEX, PCBs, TAL Metals
01NE24SD114	01NE24SD214	01NE24SD314	GRO, BTEX
01NE28SD111	01NE28SD211	01NE28SD311	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE28SD125	01NE28SD225	01NE28SD325	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE28SD139	01NE28SD239	01NE28SD339	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE28SD151	01NE28SD251	01NE28SD351	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE28SD153	01NE28SD253	01NE28SD353	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE28SD157	01NE28SD257	01NE28SD357	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE28SD163	01NE28SD263	01NE28SD363	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE28SD171	01NE28SD271	01NE28SD371	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE28SD175	01NE28SD275	01NE28SD375	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE28SD185	01NE28SD285	NA	Pesticides
01NE28SD192	01NE28SD292	NA	Pesticides
01NE29SD114	01NE29SD214	01NE29SD314	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE29SD125	01NE29SD225	01NE29SD125	DRO/RRO, PAHs, PCBs, Pb, Zn, Cr
01NE30SS101	01NE30SS201	01NE30SS301	Tal Metals
01NE31SS102	01NE31SS202	01NE31SS302	PCBs, Pesticides
01NE31SS105	01NE31SS205	01NE31SS305	DRO/RRO
01NE31SS120	01NE31SS220	01NE31SS320	DRO/RRO
01NE31SS121	01NE31SS221	01NE31SS321	DRO/RRO, GRO, BTEX, PCBs, Pesticides
<b>Water Samples</b>			
01NE07WP102	01NE07WP202	01NE07WP302	PAHs, VOC
01NE09SW107	01NE09SW207	01NE09SW307	DRO/RRO, GRO, VOCs, PAHs, PCBs, TAL Metals
01NE16GW101	01NE16GW201	01NE16GW301	SVOCs
01NE21SW113	01NE21SW213	01NE21SW313	DRO/RRO, GRO
01NE24SW114	01NE24SW214	01NE24SW314	DRO/RRO, PCBs, TAL metals
01NE28SW111	01NE28SW211	01NE28SW311	DRO/RRO, PCBs
01NE29SW117	01NE29SW217	01NE29SW317	DRO/RRO/GRO/BTEX, PAH, PCBs, TAL metals
01NE35GW101	01NE35GW201	01NE35GW301	DRO/RRO, GRO/BTEX
<b>Plant Sample</b>			
01NE28PT5104	01NE28PT5204	NA	PAH, Ag, As, Ba, Cd, Cr, Cu, Hg, Ni, Pb, Se, V, Zn, PCB

**Key:**

- \* - only includes parameters for primary, field duplicate and QA sample sets
- Ag - silver
- As - arsenic
- Ba - barium
- BTEX - benzene, toluene, ethylbenzene, xylenes
- Cd - cadmium
- Cr - chromium
- Cu - copper
- DRO - diesel range organics
- GRO - gasoline range organics
- Hg - mercury
- NA - not applicable
- Ni - nickel
- PAH - polynuclear aromatic hydrocarbon
- Pb - lead
- PCBs - polychlorinated biphenyls
- RRO - residual range organics
- Se - selenium
- SIM - selected ion monitoring
- TAL - Target Analyte List
- TI - thallium
- TOC - total organic carbon
- V - vanadium
- Zn - zinc
- QA - quality assurance

**Table 6 Summary of Primary and Field Duplicate Samples with Target Analytes in Method Blanks**

<b>Method Blank ID</b>	<b>Impacted samples</b>	<b>Method</b>	<b>Analyte</b>	<b>Result</b>	<b>MRL</b>	<b>MDL</b>	<b>Units</b>	<b>Qualifier</b>
DN07MB		SW8260	Bromomethane	110				
		SW8260	Bromomethane	240				
	01NE07SD104	SW8260	Bromomethane	170				VB
	01NE07SD105	SW8260	Bromomethane	400				VB
	01NE07SS125	SW8260	Bromomethane	98				VB
	01NE07SS126	SW8260	Bromomethane	200				VB
	01NE07SS127	SW8260	Bromomethane	170				VB
DN53MB		SW8270	bis-(2-ethylhexyl)phthalate*	0.0019	0.001	0.00025	mg/L	
	01NE16GW101	SW8270	bis-(2-ethylhexyl)phthalate*	0.0025	0.001	0.00025	mg/L	VB
	01NE16GW102	SW8270	bis-(2-ethylhexyl)phthalate*	0.0014	0.001	0.00025	mg/L	VB
	01NE16GW201	SW8270	bis-(2-ethylhexyl)phthalate*	0.0022	0.001	0.00025	mg/L	VB
DN73MB		AK102	Diesel Range Organics	0.34	0.25	0.02	mg/L	
DN53MB		AK102	Diesel Range Organics	0.34	0.25	0.02	mg/L	
	01NE04WP102	AK102	Diesel Range Organics	1.4	1.2	0.12	mg/L	VB
	01NE04WP103	AK102	Diesel Range Organics	2.0	1.2	0.12	mg/L	VB
	01NE04WP104	AK102	Diesel Range Organics	2.4	0.25	0.02	mg/L	VB
	01NE04WP104	AK102	Diesel Range Organics	0.96	0.25	0.02	mg/L	VB
	01NE06WP103	AK102	Diesel Range Organics	0.58	0.25	0.02	mg/L	VB
	01NE06WP103	AK102	Diesel Range Organics	0.29	0.25	0.02	mg/L	VB
	01NE30WP101	AK102	Diesel Range Organics	2.0	1.2	0.12	mg/L	VB
DN68MB		SW8260	Bromomethane	0.089	0.029	0.019	mg/Kg	
	01NE00TB111	SW8260	Bromomethane	0.09	0.05	0.032	mg/Kg	VB
	01NE09SD108	SW8260	Bromomethane	0.36	0.18	0.12	mg/Kg	VB
DN68MB		SW8260	Chloromethane	0.032	0.029	0.0079	mg/Kg	
DN73MB		AK102	Diesel Range Organics	0.34	0.25	0.02	mg/L	
DN53MB		AK102	Diesel Range Organics	0.34	0.25	0.02	mg/L	
	01NE04WP102	AK102	Diesel Range Organics	1.4	1.2	0.12	mg/L	VB
	01NE04WP103	AK102	Diesel Range Organics	2	1.2	0.12	mg/L	VB
	01NE04WP104	AK102	Diesel Range Organics	0.96	0.25	0.02	mg/L	VB
	01NE06WP103	AK102	Diesel Range Organics	0.29	0.25	0.02	mg/L	VB
	01NE30WP101	AK102	Diesel Range Organics	2	1.2	0.12	mg/L	VB

Key:

\* please note that bis-(2-ethylhexyl)phthalate was the only SVOC analyte detected.

SIM - selected ion monitoring

VB - analyte present in the blank and the sample.

mg/Kg - milligram per kilogram

mg/L - milligram per liter

**Table 7 Summary of Primary and Field Duplicate Samples with Surrogates Outside Laboratory Acceptance Limits**

Sample	Method	Surrogate	Analyte	Result	MRL	Units	Range	Qualifier	Dilution
01NE09MW103	AK102	o-Terphenyl		24	NA	PERCENT	50-150	NA	1
01NE09MW103	AK102		Diesel Range Organics	ND	0.25	MG/L		VQQ	1
01NE09MW103	AK103		Residual Range Organics	ND	0.50	MG/L		VQQ	1
01NE09SD108	8270SIM	2-Methylnaphthalene-d10		32	NA	PERCENT	30-160	NA	3
01NE09SD108	8270SIM	Dibenzo(a,h)anthracene-d14		25	NA	PERCENT	30-160	NA	3
01NE09SD108	8270SIM		2-Methylnaphthalene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Acenaphthene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Acenaphthylene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Anthracene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Benzo(a)anthracene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Benzo(a)pyrene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Benzo(b)fluoranthene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Benzo(g,h,i)perylene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Benzo(k)fluoranthene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Chrysene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Dibenzo(a,h)anthracene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Dibenzofuran	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Fluoranthene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Fluorene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Indeno(1,2,3-cd)pyrene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Naphthalene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Phenanthrene	ND	0.022	mg/Kg		VQQ	3
01NE09SD108	8270SIM		Pyrene	ND	0.022	mg/Kg		VQQ	3
01NE09SD113	8270SIM	2-Methylnaphthalene-d10		34	NA	PERCENT	30-160	NA	3
01NE09SD113	8270SIM	Dibenzo(a,h)anthracene-d14		23	NA	PERCENT	30-160	NA	3
01NE09SD113	8270SIM		2-Methylnaphthalene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Acenaphthene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Acenaphthylene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Anthracene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Benzo(a)anthracene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Benzo(a)pyrene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Benzo(b)fluoranthene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Benzo(g,h,i)perylene	ND	0.036	mg/Kg		VQQ	3

**Table 7 Summary of Primary and Field Duplicate Samples with Surrogates Outside Laboratory Acceptance Limits**

Sample	Method	Surrogate	Analyte	Result	MRL	Units	Range	Qualifier	Dilution
01NE09SD113	8270SIM		Benzo(k)fluoranthene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Chrysene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Dibenzo(a,h)anthracene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Dibenzofuran	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Fluoranthene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Fluorene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Indeno(1,2,3-cd)pyrene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Naphthalene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Phenanthrene	ND	0.036	mg/Kg		VQQ	3
01NE09SD113	8270SIM		Pyrene	ND	0.036	mg/Kg		VQQ	3
01NE09SD114	AK102	o-Terphenyl		42	NA	PERCENT	50-150	NA	1
01NE09SD114	AK102		Diesel Range Organics	93	15	MG/KG		VLB	1
01NE09SD114	AK103		Residual Range Organics	740	29	MG/KG		VLB	1
01NE28PT2102	8270SIM	terphenyl-d14		58	NA	PERCENT	60-119	NA	1
01NE28PT2102	8270SIM	Fluoranthene-d10		57	NA	PERCENT	55-130	NA	1
01NE28PT2102	8270SIM		Fluorene-d10	47	NA	PERCENT	42-130	NA	1
01NE28PT2102	8270SIM		2-Methylnaphthalene	0.0051	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Acenaphthene	0.0038	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Anthracene	0.0052	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Benzo(a)anthracene	0.0045	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Benzo(a)pyrene	ND	0.011	mg/Kg		VQQ	1
01NE28PT2102	8270SIM		Benzo(b)fluoranthene	0.0037	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Benzo(g,h,i)perylene	ND	0.011	mg/Kg		VQQ	1
01NE28PT2102	8270SIM		Benzo(k)fluoranthene	ND	0.011	mg/Kg		VQQ	1
01NE28PT2102	8270SIM		Chrysene	0.005	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Dibenzo(a,h)anthracene	ND	0.011	mg/Kg		VQQ	1
01NE28PT2102	8270SIM		Fluoranthene	0.033	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Fluorene	0.0063	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Indeno(1,2,3-cd)pyrene	0.0027	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Naphthalene	0.0051	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Phenanthrene	0.046	0.011	mg/Kg		VLB	1
01NE28PT2102	8270SIM		Pyrene	0.019	0.011	mg/Kg		VLB	1
01NE28PT3101	8270SIM	fluorene-d10		36	NA	PERCENT	42-130	NA	1

**Table 7 Summary of Primary and Field Duplicate Samples with Surrogates Outside Laboratory Acceptance Limits**

Sample	Method	Surrogate	Analyte	Result	MRL	Units	Range	Qualifier	Dilution
01NE28PT3101	8270SIM	fluoranthene-d10		40	NA	PERCENT	55-130	NA	1
01NE28PT3101	8270SIM	terphenyl-d14		46	NA	PERCENT	60-119	NA	1
01NE28PT3101	8270SIM		2-Methylnaphthalene	0.0046	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Acenaphthene	0.0017	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Anthracene	0.0019	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Benzo(a)anthracene	ND	0.005	mg/Kg		VQQ	1
01NE28PT3101	8270SIM		Benzo(a)pyrene	ND	0.005	mg/Kg		VQQ	1
01NE28PT3101	8270SIM		Benzo(b)fluoranthene	0.003	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Benzo(g,h,i)perylene	ND	0.005	mg/Kg		VQQ	1
01NE28PT3101	8270SIM		Benzo(k)fluoranthene	0.0031	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Chrysene	0.0074	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Dibenzo(a,h)anthracene	ND	0.005	mg/Kg		VQQ	1
01NE28PT3101	8270SIM		Fluoranthene	0.049	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Fluorene	0.005	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Indeno(1,2,3-cd)pyrene	0.0013	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Naphthalene	0.0044	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Phenanthrene	0.062	0.005	mg/Kg		VLB	1
01NE28PT3101	8270SIM		Pyrene	0.026	0.005	mg/Kg		VLB	1
01NE28SD113	SW8082	2,4,5,6-Tetrachloro-meta-xylene		24.8	NA	PERCENT	65-135	NA	1
01NE28SD113	SW8082	Decachlorobiphenyl		46.2	NA	PERCENT	65-135	NA	1
01NE28SD113	SW8082		PCB-1016 (Aroclor 1016)	ND	0.26	mg/Kg		VQQ	1
01NE28SD113	SW8082		PCB-1221 (Aroclor 1221)	ND	0.51	mg/Kg		VQQ	1
01NE28SD113	SW8082		PCB-1232 (Aroclor 1232)	ND	0.26	mg/Kg		VQQ	1
01NE28SD113	SW8082		PCB-1242 (Aroclor 1242)	ND	0.26	mg/Kg		VQQ	1
01NE28SD113	SW8082		PCB-1248 (Aroclor 1248)	ND	0.26	mg/Kg		VQQ	1
01NE28SD113	SW8082		PCB-1254 (Aroclor 1254)	ND	0.26	mg/Kg		VQQ	1
01NE28SD113	SW8082		PCB-1260 (Aroclor 1260)	ND	0.26	mg/Kg		VQQ	1
01NE28SD175	8270SIM	2-Methylnaphthalene-d10		19.0	NA	PERCENT	30-160	NA	3
01NE28SD175	8270SIM	Dibenzo(a,h)anthracene-d14		29.0	NA	PERCENT	30-160	NA	3
01NE28SD175	8270SIM		2-Methylnaphthalene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Acenaphthene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Acenaphthylene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Anthracene	ND	0.033	mg/Kg		VQQ	3

**Table 7 Summary of Primary and Field Duplicate Samples with Surrogates Outside Laboratory Acceptance Limits**

Sample	Method	Surrogate	Analyte	Result	MRL	Units	Range	Qualifier	Dilution
01NE28SD175	8270SIM		Benzo(a)anthracene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Benzo(a)pyrene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Benzo(b)fluoranthene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Benzo(g,h,i)perylene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Benzo(k)fluoranthene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Chrysene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Dibenzo(a,h)anthracene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Dibenzofuran	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Fluoranthene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Fluorene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Indeno(1,2,3-cd)pyrene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Naphthalene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Phenanthrene	ND	0.033	mg/Kg		VQQ	3
01NE28SD175	8270SIM		Pyrene	ND	0.033	mg/Kg		VQQ	3
01NE29SD126	8270SIM	2-Methylnaphthalene-d10		11.0	NA	PERCENT	30-160	NA	3
01NE29SD126	8270SIM	Dibenzo(a,h)anthracene-d14		20.0	NA	PERCENT	30-160	NA	3
01NE29SD126	8270SIM		2-Methylnaphthalene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Acenaphthene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Acenaphthylene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Anthracene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Benzo(a)anthracene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Benzo(a)pyrene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Benzo(b)fluoranthene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Benzo(g,h,i)perylene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Benzo(k)fluoranthene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Chrysene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Dibenzo(a,h)anthracene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Dibenzofuran	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Fluoranthene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Fluorene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Indeno(1,2,3-cd)pyrene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Naphthalene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD126	8270SIM		Phenanthrene	ND	0.0083	mg/Kg		VQQ	3

**Table 7 Summary of Primary and Field Duplicate Samples with Surrogates Outside Laboratory Acceptance Limits**

Sample	Method	Surrogate	Analyte	Result	MRL	Units	Range	Qualifier	Dilution
01NE29SD126	8270SIM		Pyrene	ND	0.0083	mg/Kg		VQQ	3
01NE29SD128	8270SIM	2-Methylnaphthalene-d10		9.0	NA	PERCENT	30-160	NA	3
01NE29SD128	8270SIM	Dibenzo(a,h)anthracene-d14		21.0	NA	PERCENT	30-160	NA	3
01NE29SD128	8270SIM		2-Methylnaphthalene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Acenaphthene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Acenaphthylene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Anthracene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Benzo(a)anthracene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Benzo(a)pyrene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Benzo(b)fluoranthene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Benzo(g,h,i)perylene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Benzo(k)fluoranthene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Chrysene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Dibenzo(a,h)anthracene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Dibenzofuran	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Fluoranthene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Fluorene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Indeno(1,2,3-cd)pyrene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Naphthalene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Phenanthrene	ND	0.0087	mg/Kg		VQQ	3
01NE29SD128	8270SIM		Pyrene	ND	0.0087	mg/Kg		VQQ	3
01NE30SS103	8270SIM	2-Methylnaphthalene-d10		43	NA	PERCENT	30-160	NA	3
01NE30SS103	8270SIM	Dibenzo(a,h)anthracene-d14		29	NA	PERCENT	30-160	NA	3
01NE30SS103	8270SIM		2-Methylnaphthalene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Acenaphthene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Acenaphthylene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Anthracene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Benzo(a)anthracene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Benzo(a)pyrene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Benzo(b)fluoranthene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Benzo(g,h,i)perylene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Benzo(k)fluoranthene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Chrysene	ND	0.053	mg/Kg		VQQ	3

**Table 7 Summary of Primary and Field Duplicate Samples with Surrogates Outside Laboratory Acceptance Limits**

Sample	Method	Surrogate	Analyte	Result	MRL	Units	Range	Qualifier	Dilution
01NE30SS103	8270SIM		Dibenzo(a,h)anthracene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Dibenzofuran	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Fluoranthene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Fluorene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Indeno(1,2,3-cd)pyrene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Naphthalene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Phenanthrene	ND	0.053	mg/Kg		VQQ	3
01NE30SS103	8270SIM		Pyrene	ND	0.053	mg/Kg		VQQ	3
01NE32SS103	SW8081	2,4,5,6-Tetrachloro-meta-xylene		55.8	NA	PERCENT	41-128	NA	1
01NE32SS103	SW8081	Decachlorobiphenyl		37.5	NA	PERCENT	41-128	NA	1
01NE32SS103	SW8081		4,4'-DDD	ND	0.0043	mg/Kg		VQQ	1
01NE32SS103	SW8081		4,4'-DDE	ND	0.0043	mg/Kg		VQQ	1
01NE32SS103	SW8081		4,4'-DDT	ND	0.0043	mg/Kg		VQQ	1
01NE32SS103	SW8081		Aldrin	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		alpha-BHC	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		alpha-Chlordane	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		beta-BHC	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		delta-BHC	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		Dieldrin	ND	0.0043	mg/Kg		VQQ	1
01NE32SS103	SW8081		Endosulfan I	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		Endosulfan II	ND	0.0043	mg/Kg		VQQ	1
01NE32SS103	SW8081		Endosulfan sulfate	ND	0.0043	mg/Kg		VQQ	1
01NE32SS103	SW8081		Endrin	ND	0.0043	mg/Kg		VQQ	1
01NE32SS103	SW8081		Endrin aldehyde	ND	0.0043	mg/Kg		VQQ	1
01NE32SS103	SW8081		Endrin ketone	ND	0.0043	mg/Kg		VQQ	1
01NE32SS103	SW8081		gamma-BHC (Lindane)	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		gamma-Chlordane	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		Heptachlor	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		Heptachlor epoxide	ND	0.0022	mg/Kg		VQQ	1
01NE32SS103	SW8081		Methoxychlor	ND	0.022	mg/Kg		VQQ	1
01NE32SS103	SW8081		PCB-1016 (Aroclor 1016)	ND	0.043	mg/Kg		VQQ	1
01NE32SS103	SW8081		PCB-1221 (Aroclor 1221)	ND	0.087	mg/Kg		VQQ	1
01NE32SS103	SW8081		PCB-1232 (Aroclor 1232)	ND	0.043	mg/Kg		VQQ	1

**Table 7 Summary of Primary and Field Duplicate Samples with Surrogates Outside Laboratory Acceptance Limits**

Sample	Method	Surrogate	Analyte	Result	MRL	Units	Range	Qualifier	Dilution
01NE32SS103	SW8081		PCB-1242 (Aroclor 1242)	ND	0.043	mg/Kg		VQQ	1
01NE32SS103	SW8081		PCB-1248 (Aroclor 1248)	ND	0.043	mg/Kg		VQQ	1
01NE32SS103	SW8081		PCB-1254 (Aroclor 1254)	ND	0.043	mg/Kg		VQQ	1
01NE32SS103	SW8081		PCB-1260 (Aroclor 1260)	ND	0.043	mg/Kg		VQQ	1
01NE32SS103	SW8081		Toxaphene	ND	0.22	mg/Kg		VQQ	1
01NE32SS105	SW8081	2,4,5,6-Tetrachloro-meta-xylene		48.2	NA	PERCENT	41-128	NA	1
01NE32SS105	SW8081	Decachlorobiphenyl		38.2	NA	PERCENT	41-128	NA	1
01NE32SS105	SW8081		4,4'-DDD	ND	0.0036	mg/Kg		VQQ	1
01NE32SS105	SW8081		4,4'-DDE	ND	0.0036	mg/Kg		VQQ	1
01NE32SS105	SW8081		4,4'-DDT	ND	0.037	mg/Kg		VQQ	1
01NE32SS105	SW8081		Aldrin	ND	0.0018	mg/Kg		VQQ	1
01NE32SS105	SW8081		alpha-BHC	ND	0.0018	mg/Kg		VQQ	1
01NE32SS105	SW8081		alpha-Chlordane	ND	0.0018	mg/Kg		VQQ	1
01NE32SS105	SW8081		beta-BHC	ND	0.0018	mg/Kg		VQQ	1
01NE32SS105	SW8081		delta-BHC	ND	0.0018	mg/Kg		VQQ	1
01NE32SS105	SW8081		Dieldrin	ND	0.011	mg/Kg		VQQ	1
01NE32SS105	SW8081		Endosulfan I	ND	0.0018	mg/Kg		VQQ	1
01NE32SS105	SW8081		Endosulfan II	ND	0.0036	mg/Kg		VQQ	1
01NE32SS105	SW8081		Endosulfan sulfate	ND	0.0073	mg/Kg		VQQ	1
01NE32SS105	SW8081		Endrin	ND	0.0036	mg/Kg		VQQ	1
01NE32SS105	SW8081		Endrin aldehyde	ND	0.0078	mg/Kg		VQQ	1
01NE32SS105	SW8081		Endrin ketone	ND	0.0036	mg/Kg		VQQ	1
01NE32SS105	SW8081		gamma-BHC (Lindane)	ND	0.0018	mg/Kg		VQQ	1
01NE32SS105	SW8081		gamma-Chlordane	ND	0.0028	mg/Kg		VQQ	1
01NE32SS105	SW8081		Heptachlor	ND	0.0018	mg/Kg		VQQ	1
01NE32SS105	SW8081		Heptachlor epoxide	ND	0.0018	mg/Kg		VQQ	1
01NE32SS105	SW8081		Methoxychlor	ND	0.0031	mg/Kg		VQQ	1
01NE32SS105	SW8081		PCB-1016 (Aroclor 1016)	ND	0.036	mg/Kg		VQQ	1
01NE32SS105	SW8081		PCB-1221 (Aroclor 1221)	ND	0.072	mg/Kg		VQQ	1
01NE32SS105	SW8081		PCB-1232 (Aroclor 1232)	ND	0.036	mg/Kg		VQQ	1
01NE32SS105	SW8081		PCB-1242 (Aroclor 1242)	ND	0.036	mg/Kg		VQQ	1
01NE32SS105	SW8081		PCB-1248 (Aroclor 1248)	ND	0.036	mg/Kg		VQQ	1
01NE32SS105	SW8081		PCB-1254 (Aroclor 1254)	ND	0.036	mg/Kg		VQQ	1

**Table 7 Summary of Primary and Field Duplicate Samples with Surrogates Outside Laboratory Acceptance Limits**

Sample	Method	Surrogate	Analyte	Result	MRL	Units	Range	Qualifier	Dilution
01NE32SS105	SW8081		PCB-1260 (Aroclor 1260)	0.89	0.036	mg/Kg		VLB	1
01NE32SS105	SW8081		Toxaphene	ND	0.18	mg/Kg		VQQ	1
01NE34SS101	8270SIM	2-Methylnaphthalene-d10		26.0	NA	PERCENT	30-160	NA	1
01NE34SS101	8270SIM	Dibenzo(a,h)anthracene-d14		16.0	NA	PERCENT	30-160	NA	1
01NE34SS101	8270SIM		2-Methylnaphthalene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Acenaphthene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Acenaphthylene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Anthracene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Benzo(a)anthracene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Benzo(a)pyrene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Benzo(b)fluoranthene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Benzo(g,h,i)perylene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Benzo(k)fluoranthene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Chrysene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Dibenzo(a,h)anthracene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Dibenzofuran	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Fluoranthene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Fluorene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Indeno(1,2,3-cd)pyrene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Naphthalene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Phenanthrene	ND	0.0026	mg/Kg		VQQ	1
01NE34SS101	8270SIM		Pyrene	ND	0.0026	mg/Kg		VQQ	1

**Key:**

SIM - selected ion monitoring

VB - analyte present in the blank and the sample.

VLB - Result negatively biased

VHB - Result positively biased

VQQ - PQL approximate due to QC or matrix effects.

mg/Kg - milligram per kilogram

mg/L - milligram per liter

ND - not detected

**Table 3 Summary of Primary and Field Duplicate Samples with Target Analytes in Trip Blanks**

Trip blank	Impacted sample	Method	Analyte	Results	MRL	MDL	Units	Dilution	Qualifier
01NE00TB101		8260SIM	Ethylbenzene	0.0084	0.005	0.0024	mg/Kg	1.0	
	01NE06SD116	8260SIM	Ethylbenzene	0.012	0.011	0.0055	mg/Kg	1.0	VB
	01NE06SD117	8260SIM	Ethylbenzene	0.00088	0.00067	0.00033	mg/Kg	1.0	VB
01NE00TB101		8260SIM	m,p-Xylene (Sum of Isomers)	0.031	0.01	0.01	mg/Kg	1.0	
	01NE06SD116	8260SIM	m,p-Xylene (Sum of Isomers)	0.044	0.022	0.022	mg/Kg	1.0	VB
	01NE06SD117	8260SIM	m,p-Xylene (Sum of Isomers)	0.0033	0.0013	0.0013	mg/Kg	1.0	VB
01NE00TB101		8260SIM	o-Xylene	0.01	0.005	0.0042	mg/Kg	1.0	
	01NE06SD116	8260SIM	o-Xylene	0.014	0.011	0.0094	mg/Kg	1.0	VB
	01NE06SD117	8260SIM	o-Xylene	0.001	0.00067	0.00056	mg/Kg	1.0	VB
01NE00TB101		8260SIM	Toluene	0.046	0.005	0.0048	mg/Kg	1.0	
	01NE06SD116	8260SIM	Toluene	0.078	0.011	0.011	mg/Kg	1.0	VB
	01NE06SD117	8260SIM	Toluene	0.0047	0.00067	0.00063	mg/Kg	1.0	VB
01NE00TB104		8260SIM	Ethylbenzene	0.008	0.005	0.0024	mg/Kg	1.0	
		8260SIM	m,p-Xylene (Sum of Isomers)	0.03	0.01	0.01	mg/Kg	1.0	
		8260SIM	o-Xylene	0.0098	0.005	0.0042	mg/Kg	1.0	
		8260SIM	Toluene	0.045	0.005	0.0048	mg/Kg	1.0	
	01NE29SD126	8260SIM	Toluene	0.0074	0.0044	0.0042	mg/Kg	1.0	VB
	01NE29SD127	8260SIM	Toluene	0.0097	0.0029	0.0027	mg/Kg	1.0	VB
	01NE29SD128	8260SIM	Toluene	0.0064	0.0033	0.0031	mg/Kg	1.0	VB
	01NE29SD129	8260SIM	m,p-Xylene (Sum of Isomers)	0.0032	0.0025	0.0025	mg/Kg	1.0	VB
	01NE29SD129	8260SIM	Toluene	0.0047	0.0012	0.0012	mg/Kg	1.0	VB
		8260SIM	Ethylbenzene	0.0071	0.005	0.0024	mg/Kg	1.0	
		8260SIM	m,p-Xylene (Sum of Isomers)	0.028	0.01	0.01	mg/Kg	1.0	
		8260SIM	o-Xylene	0.0083	0.005	0.0042	mg/Kg	1.0	
		8260SIM	Toluene	0.044	0.005	0.0048	mg/Kg	1.0	
	01NE31SS123	8260SIM	m,p-Xylene (Sum of Isomers)	0.017	0.01	0.01	mg/Kg	1.0	VB
	01NE31SS221	8260SIM	m,p-Xylene (Sum of Isomers)	0.009	0.0069	0.0069	mg/Kg	1.0	VB
	01NE31SS123	8260SIM	o-Xylene	0.0053	0.0052	0.0044	mg/Kg	1.0	VB
	01NE31SS121	8260SIM	Toluene	0.0118	0.0041	0.0039	mg/Kg	1.0	VB
	01NE31SS123	8260SIM	Toluene	0.024	0.0052	0.005	mg/Kg	1.0	VB
	01NE31SS124	8260SIM	Toluene	0.0073	0.003	0.0028	mg/Kg	1.0	VB
01NE00TB109	01NE31SS221	8260SIM	Toluene	0.014	0.0035	0.0033	mg/Kg	1.0	VB
		8260SIM	Ethylbenzene	0.087	0.049	0.024	mg/Kg	1.0	
	01NE21SB169	8260SIM	Ethylbenzene	0.0067	0.0041	0.002	mg/Kg	1.0	VB

**Table 3 Summary of Primary and Field Duplicate Samples with Target Analytes in Trip Blanks**

Trip blank	Impacted sample	Method	Analyte	Results	MRL	MDL	Units	Dilution	Qualifier
	01NE24SD115	8260SIM	Ethylbenzene	0.0088	0.0072	0.0035	mg/Kg	1.0	VB
01NE00TB109		8260SIM	m,p-Xylene (Sum of Isomers)	0.33	0.097	0.097	mg/Kg	1.0	
01NE00TB109		8260SIM	o-Xylene	0.1	0.049	0.041	mg/Kg	1.0	
01NE00TB109		8260SIM	Toluene	0.44	0.049	0.046	mg/Kg	1.0	
	01NE21SD113	8260SIM	Toluene	0.055	0.015	0.014	mg/Kg	1.0	VB
	01NE21SD114	8260SIM	m,p-Xylene (Sum of Isomers)	0.01	0.0083	0.0083	mg/Kg	1.0	VB
	01NE21SD114	8260SIM	Toluene	0.019	0.0042	0.004	mg/Kg	1.0	VB
	01NE21SB169	8260SIM	m,p-Xylene (Sum of Isomers)	0.021	0.0082	0.0082	mg/Kg	1.0	VB
	01NE21SB169	8260SIM	o-Xylene	0.0063	0.0041	0.0035	mg/Kg	1.0	VB
	01NE21SB169	8260SIM	Toluene	0.024	0.0041	0.0039	mg/Kg	1.0	VB
	01NE21SS170	8260SIM	m,p-Xylene (Sum of Isomers)	0.0074	0.0074	0.0074	mg/Kg	1.0	VB
	01NE21SS170	8260SIM	Toluene	0.011	0.0037	0.0035	mg/Kg	1.0	VB
	01NE21SB170	8260SIM	Toluene	0.0072	0.0029	0.0028	mg/Kg	1.0	VB
	01NE21SB171	8260SIM	m,p-Xylene (Sum of Isomers)	0.023	0.021	0.021	mg/Kg	1.0	VB
	01NE21SB171	8260SIM	Toluene	0.041	0.01	0.0098	mg/Kg	1.0	VB
	01NE21SS172	8260SIM	m,p-Xylene (Sum of Isomers)	0.096	0.069	0.069	mg/Kg	1.0	VB
	01NE21SS172	8260SIM	Toluene	0.14	0.034	0.033	mg/Kg	1.0	VB
	01NE21SS173	8260SIM	m,p-Xylene (Sum of Isomers)	0.032	0.027	0.027	mg/Kg	1.0	VB
	01NE21SS173	8260SIM	Toluene	0.073	0.014	0.013	mg/Kg	1.0	VB
	01NE24SD114	8260SIM	Toluene	0.0032	0.003	0.0029	mg/Kg	1.0	VB
	01NE24SD115	8260SIM	m,p-Xylene (Sum of Isomers)	0.03	0.014	0.014	mg/Kg	1.0	VB
	01NE24SD115	8260SIM	o-Xylene	0.0092	0.0072	0.0061	mg/Kg	1.0	VB
	01NE24SD115	8260SIM	Toluene	0.038	0.0072	0.0068	mg/Kg	1.0	VB
	01NE24SD214	8260SIM	Toluene	0.017	0.0091	0.0087	mg/Kg	1.0	VB

**Key:**

SIM - selected ion monitoring

VB - analyte present in the blank and the sample.

mg/Kg - milligram per kilogram

mg/L - milligram per liter

**Table 1 Number of Primary, Field Duplicate, QA, and Trip Blank Samples**

Matrix	Parameter	Method	Number of Primary Samples	Number of Field Duplicate Samples	Number of Trip Blank Samples	Number of QA Samples	Number of QA Trip Blank Samples
Soil	BTEX	SW8260SIM	22	3	5	3	1
	VOC	SW8260	11	1	1	2	0
	PAH	SW8270C SIM	102	12	0	11	0
	DRO	AK102	152	17	0	17	0
	GRO	AK101	24	4	5	3	1
	RRO	AK103	152	17	0	17	0
	TOC	Lab SOP	91	0	0	0	0
	TAL Metals	SW6010B/ SW7000/ EPA200.8	29	3	0	4	0
	Pb	SW7421	2	1	0	1	0
	Pb, Zn, Cr	SW6010B	83	11	0	9	0
	Pesticides	SW8081	19	4	0	1	0
	PCBs	SW8082	135	16	0	14	0
	PAH	SW8270SIM	19	3	0	3	0
	GRO	AK101	29	4	9	4	4
	DRO	AK102	47	6	0	6	0
Water	TAL Metals	SW6010B/ SW7000	22	3	0	3	0
		PCBs	33	3	0	4	0
	VOCs	SW8260	15	2	4	2	2
	SVOCs	SW8270	3	1	0	1	0
	BTEX	SW8260	12	2	4	1	1
	Natural Attenuation	multiple methods	*	6	0	0	0
	Total Lipids	EPA 160.1	30	0	0	0	0
	Metals Ag, As, Ba, Cd, Cu, Hg, Ni, Pb, Sb, Se, V, Zn	SW6010B/6020/7000/EPA 200.8	31	0	0	0	0
	PAH	SW8270C SIM	31	0	0	0	0
	PCBs	SW8082	31	0	0	0	0
Tissue -Plants	PAH	SW8270C SIM	20	1	0	0	0
	Metals Ag, As, Ba, Cd, Cr, Cu, Hg, Ni, Pb, Se, V, Zn	SW6010B/ SW6020/7000	20	1	0	0	0
	PCBs	SW8082	20	1	0	0	0

Key:

Ag - silver

AK - Alaska Method

As - arsenic  
Ba - barium  
BTEX - benzene, toluene, ethylbenzene, xylenes  
Cd - cadmium  
Cr - chromium  
Cu - copper  
DRO - diesel range organics  
EPA  
GRO - gasoline range organics  
Hg - mercury  
Ni - nickel  
PAH - polynuclear aromatic hydrocarbon  
Pb - lead  
PCBs - polychlorinated biphenyls  
RRO - residual range organics  
Se - selenium  
SIM - selected ion monitoring  
SW - Solid Waste Method  
TAL - Target Analyte List  
Ti - thallium  
TOC - total organic carbon  
V - vanadium  
Zn - zinc  
QA - quality assurance  
\* - natural attenuation laboratory parameters included: Alkalinity by A2320B, Chloride by EPA 300, Sulfate by EPA 300, Nitrogen - Ammonia (N) by EPA 350.1, Nitrogen - Kjeldahl by EPA 351.4, Nitrogen, nitrate\_nitrite by EPA 353.2, Sulfide by EPA 376.2, chemical oxygen Demand by EPA 410.4, total and dissolved iron and manganese by SW6010B.

MWH collected soil and water samples between August 14 and August 22, 2002. Table 1 provides a summary of sample counts by matrix, parameter, and quality control (QC) description (primary sample, field duplicate sample, QA sample or trip blank). Primary and field duplicate soil and water samples were submitted to Columbia Analytical Services, Inc. (CAS) and QA soil and water samples were submitted to Sound Analytical Services (SAS).

This data review includes data from CAS.

The following QC samples and indicators were reviewed in accordance with established precision, accuracy, reproducibility, comparability, and completeness (PARCC) parameters. PARCC parameters were defined in the Phase III Remedial Investigation Final Work Plan (MWH, 2001). Data were qualified based on the EPA's National Functional Guidelines (USEPA 1999).

The following specific QC samples, indicators, and associated documentation were reviewed:

Sample Handling Forms (Chain-of-custody [CoCs])

Sample Holding Times

Temperature Blanks

Trip Blanks

Field Duplicates

Equipment Blanks

Method and Instrument Blanks

Surrogates

Continuing Calibration Verification (CCV) Samples

Laboratory Control Samples (LCS) and LCS Duplicates (LCSD)

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Samples

## **REVIEW RESULTS**

Based on the data reviewed, the following flags were used to qualify data in this report:

VB – The analyte was detected in the associated blank and the sample indicating possible contamination.

VHB – Result is an estimate with a high bias.

VJ – The analyte was positively identified; the quantitation is an estimation.

VLB – Result is an estimate with a low bias.

VQQ – The practical quantitation limit is approximate due to QC or matrix effects.

The final qualifier reflects the most severe qualifier that was applied to the data. The hierarchy of data qualifiers, listed in order of the most severe through the least severe, are VB, VJ, VLB/VHB and VQQ. Table 2 summarizes qualified results with final qualifiers. Appendix D summarizes all data reported with final qualifiers.

## **SAMPLING HANDLING**

All reviewed laboratory sample receipt forms, CoCs, and case narratives indicate that sample handling procedures were in control with the exception of cooler temperature blanks.

### **Cooler Temperature Blanks**

All coolers temperature blanks were received within the acceptance range of 2-6 degree Celisus ( $^{\circ}$  C) with the exception of cooler temperature blanks less than 2  $^{\circ}$  C. Sample results were not qualified based on cooler temperatures below 2, samples were received in good condition and not frozen.

### **Holding Times**

All samples were extracted or analyzed, or both, within the recommended holding time for the analytical procedures used for this project.

### **Trip Blanks**

Table 3 summarizes field samples with target analytes in associated trip blanks. Field samples associated with contaminated trip blanks were qualified for cases when the concentration in the sample was within 10 times the concentration of the trip blank. Samples free of the trip blank contaminant were not qualified.

### **Equipment Blanks**

Field samples associated with contaminated equipment blanks were not qualified because the concentration in samples were greater than 10 times the concentration of the equipment blank, samples were free of equipment blank contaminant, and/or analyte was present in associated trip blank.

### **Field Duplicates**

As part of the 2002 Northeast Cape sampling event, 5 soil duplicates and 1 water duplicates were collected to evaluate precision. Table 4 summarizes primary, field duplicate, and QA sample relationships. Table 5 summarizes primary and QC results.

Precision among primary and duplicates were evaluated using the agreement criteria listed in Table 6 for each analyte and matrix. For sample sets that did not meet the criteria, all available documentation, including related analyte results and QC results, were reviewed to elucidate the cause of disagreement. The findings of this review are discussed below.

Field duplicates and primary soil and water sample results were in agreement with the exception of results between the MRL and MDL. This was due to the inherent low precision between the MRL and MDL; therefore, results were not qualified in these cases and not presented in this review.

All data reported by CAS were deemed acceptable for the purposes of this project, with the following qualifications.

## **GENERAL QUALIFICATIONS**

This section is meant to explain qualifications that were applied to results.

### Surrogates

Table 7 summarizes qualified samples with surrogate recoveries outside laboratory acceptance limits. Results were not qualified in cases when surrogates were outside acceptance limits due to dilution required for analysis. Similarly, results were not qualified if the surrogate recovery exceeded laboratory acceptance limits and there were no detections in the sample. When surrogate recoveries exceeded acceptance limits, positive results were qualified as estimates with a high bias. When surrogate recoveries were below acceptance limits, positive results were qualified as biased low and MRLs were qualified as estimates for analytes that were not detected.

### MS/MSD

Sample results were not qualified for occasions when MS results were outside acceptance limits due to high concentrations of target and/or non-target analyte(s), dilutions, when all other QC parameters were well within limits and/or when the sample selected for spiking was not from the Northeast Cape Site. Sample results were not qualified for high relative percent difference (RPD) results if all other QC parameters were well within limits. For cases when RPD was above acceptance limits and one or both MS samples were outside acceptance limits, positive results were qualified as estimates for the spiked field sample.

## **METHOD SPECIFIC QUALIFICATIONS**

This section summarizes qualifications, by method, where there are exceptions to the general qualification approaches and/or approaches to reporting.

### BTEX by SW8260B

#### MS/MSD

The percent MSD recoveries were below laboratory acceptance limits (76-138 percent) for benzene (66 percent), below laboratory acceptance limits (76-139 percent) for ethylbenzene (40 percent), and below laboratory acceptance limits (86-130 percent) for m,p-xylenes (60 percent) in sample 02NE88GW007. Benzene, ethylbenzene, and m,p-xylenes results were not qualified based on MSD recovery because the MS recoveries were within range and the RPDs between the MS and MSD also met criteria.

### DRO by AK102

#### MS/MSD

The percent MS/MSD recoveries were below laboratory acceptance limits (75-125 percent) for DRO (2.5 and 69 percent) in sample 02NE88GW007. Results were not qualified based on the MS/MSD recoveries due to the concentration of DRO in the sample (6.100 mg/L) was greater than 4 times the spike amount (0.8 mg /L).

### Methane, ethane, and ethene by RSK175

MS

The percent MS recovery was below laboratory acceptance limits (61-126 percent) for methane (56 percent) in sample 02NE88GW007. Result was qualified as bias low due to MS recovery,

### **Completeness**

Completeness is an expression of how many valid results were received from the laboratory relative to the number expected. The parameter is calculated in the following manner:

$$\%C = (V/T) \times 100\%$$

Where:

$\%C$  = percent completeness;  
 $V$  = number of measurements judged valid; and  
 $T$  = number of valid measurements needed to achieve a specific statistical level of confidence.

All data, including qualified results, were considered valid and acceptable for use. The completeness goal of 95 percent for all analyses was met.

### **References**

MWH. 2001. Work Plan Phase III Remedial Investigation Northeast Cape, St. Lawrence Island, Alaska Final. August.

United States Environmental Protection Agency. 1999. Contract Laboratory Program National Functional Guidelines for Organic Data Review.

**Table 1 Number of Primary, Field Duplicate, QA, and Trip Blank Samples**

Matrix	Parameter	Method	Number of Primary Samples	Number of Field Duplicate Samples	Number of Trip Blank Samples	Number of Equipment Blanks	Number of QA Samples	Number of QA Trip Blank Samples
Soil	BTEX	SW8260B	40	5	3		4	1
	GRO	AK101	40	5	3		4	1
	DRO	AK102	40	5			4	
	RRO	AK103	40	5			4	
	PAH	SW8270C SIM	40	5			4	
	TOC	Lab SOP	40	5			4	
	Pb, Zn, Cr	SW6020	40	5			4	
	PCBs	SW8082	40	5			4	
Water	BTEX	SW8260B	10	1	3	5	1	1
	GRO	AK101	10	1	3	5	1	1
	DRO	AK102	10	1		5	1	
	RRO	AK103	10	1		5	1	
	Methane, Ethane, Ethene	RSK 175	10	1	2			
	Alkalinity	EPA 300	10	1				
	Sulfate	EPA 300	10	1				

Key:

- AK - Alaska Method
- BTEX - benzene, toluene, ethylbenzene, xylenes
- Cr - chromium
- DRO - diesel range organics
- EPA - Environmental Protection Agency
- GRO - gasoline range organics
- PAH - polynuclear aromatic hydrocarbon
- Pb - lead
- PCBs - polychlorinated biphenyls
- RRO - residual range organics
- SIM - selected ion monitoring
- SW - Solid Waste Method
- TOC - total organic carbon
- Zn - zinc
- QA - quality assurance

**Table 2 Summary of Qualified Results**

Sample ID	Matrix	Method	Analyte	Results	MRL	MDL	Units	Final Qualifier
02NE88EB001	W	AK103	Residual Range Organics	0.081	0.2	0.073	mg/L	VJ
		SW8260B	Benzene	0.00021	0.0005	0.00011	mg/L	VJ
			o-Xylene	0.00009	0.0005	0.000079	mg/L	VJ
			Toluene	0.00045	0.0005	0.000098	mg/L	VB
			Xylene, Isomers m & p	0.00022	0.0005	0.00022	mg/L	VJ
02NE88EB002	W	SW8260B	Toluene	0.00013	0.0005	0.000098	mg/L	VB
02NE88EB003	W	SW8260B	o-Xylene	0.00008	0.0005	0.000079	mg/L	VJ
			Toluene	0.00013	0.0005	0.000098	mg/L	VB
02NE88EB004	W	SW8260B	Toluene	0.00013	0.0005	0.000098	mg/L	VB
02NE88EB005	W	SW8260B	Toluene	0.00015	0.0005	0.000098	mg/L	VB
02NE88GW001	W	AK101	Gasoline Range Organics	0.024	0.05	0.02	mg/L	VJ
		SW8260B	o-Xylene	0.00013	0.0005	0.000079	mg/L	VJ
			Toluene	0.00061	0.0005	0.000098	mg/L	VB
			Xylene, Isomers m & p	0.00022	0.0005	0.00022	mg/L	VJ
02NE88GW002	W	SW8260B	Ethylbenzene	0.00034	0.0005	0.00013	mg/L	VJ
			o-Xylene	0.0001	0.0005	0.000079	mg/L	VJ
			Toluene	0.00036	0.0005	0.000098	mg/L	VB
			Xylene, Isomers m & p	0.00035	0.0005	0.00022	mg/L	VJ
02NE88GW003	W	SW8260B	o-Xylene	0.00008	0.0005	0.000079	mg/L	VJ
			Toluene	0.00024	0.0005	0.000098	mg/L	VB
02NE88GW006	W	SW8260B	Toluene	0.00019	0.0005	0.000098	mg/L	VB
02NE88GW007	W	AK102	Diesel Range Organics	6.1	0.11	0.043	mg/L	VLB
		RSK175	Methane	1.2	0.0005	0.0003	mg/L	VLB
		SW8260B	Toluene	0.0012	0.0005	0.000098	mg/L	VB
02NE88GW008	W	AK103	Residual Range Organics	0.18	0.2	0.073	mg/L	VJ
		SW8260B	Benzene	0.00012	0.0005	0.00011	mg/L	VJ
			Toluene	0.00011	0.0005	0.000098	mg/L	VB
02NE88GW010	W	SW8260B	o-Xylene	0.00015	0.0005	0.000079	mg/L	VJ
02NE88SB001	SO	AK103	Residual Range Organics	39	110	4.5	mg/Kg	VJ
		SIM	Benzo(a)anthracene	0.00051	0.0053	0.00014	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0007	0.0053	0.00015	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00026	0.0053	0.00011	mg/Kg	VJ
			Chrysene	0.001	0.0053	0.00016	mg/Kg	VJ
			Indeno(1,2,3-cd)pyrene	0.00024	0.0053	0.00016	mg/Kg	VJ
			Naphthalene	0.0022	0.0053	0.00023	mg/Kg	VJ
			Pyrene	0.0043	0.0053	0.00012	mg/Kg	VJ
02NE88SB002	SO	AK103	Residual Range Organics	16	110	4.4	mg/Kg	VJ
		SIM	Benzo(b)fluoranthene	0.00031	0.0052	0.00015	mg/Kg	VJ
			Chrysene	0.00066	0.0052	0.00016	mg/Kg	VJ
			Naphthalene	0.00038	0.0052	0.00022	mg/Kg	VJ
			Pyrene	0.0022	0.0052	0.00012	mg/Kg	VJ
02NE88SB003	SO	AK103	Residual Range Organics	6	120	4.9	mg/Kg	VJ
		SIM	Benzo(b)fluoranthene	0.00045	0.0058	0.00016	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00065	0.0058	0.00012	mg/Kg	VJ
			Dibeno(a,h)anthracene	0.00048	0.0058	0.00021	mg/Kg	VJ
			Indeno(1,2,3-cd)pyrene	0.00048	0.0058	0.00018	mg/Kg	VJ
			Naphthalene	0.001	0.0058	0.00024	mg/Kg	VJ
			Phenanthrene	0.00026	0.0058	0.00018	mg/Kg	VJ
02NE88SB004	SO	AK103	Residual Range Organics	7.1	110	4.5	mg/Kg	VJ
		SIM	Benzo(b)fluoranthene	0.0003	0.0053	0.00015	mg/Kg	VJ
			Naphthalene	0.00056	0.0053	0.00023	mg/Kg	VJ
02NE88SB005	SO	AK102	Diesel Range Organics	7.6	12	5.4	mg/Kg	VJ
		AK103	Residual Range Organics	120	120	5.1	mg/Kg	VJ
		SIM	Benzo(b)fluoranthene	0.00032	0.006	0.00017	mg/Kg	VJ
			Chrysene	0.00032	0.006	0.00018	mg/Kg	VJ
			Naphthalene	0.00081	0.006	0.00025	mg/Kg	VJ
			Phenanthrene	0.00051	0.006	0.00018	mg/Kg	VJ

**Table 2 Summary of Qualified Results**

Sample ID	Matrix	Method	Analyte	Results	MRL	MDL	Units	Final Qualifier
02NE88SB005	SO	SIM	Pyrene	0.00017	0.006	0.00014	mg/Kg	VJ
02NE88SB006	SO	AK103	Residual Range Organics	24	110	4.6	mg/Kg	VJ
			Benzo(a)anthracene	0.0011	0.0055	0.00015	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00074	0.0055	0.00016	mg/Kg	VJ
			Chrysene	0.0027	0.0055	0.00017	mg/Kg	VJ
		SW6020	Fluoranthene	0.0041	0.0055	0.00019	mg/Kg	VJ
			Lead	26.2	0.05	0.03	mg/Kg	VJ
		SW8260B	Ethylbenzene	0.34	0.051	0.011	mg/Kg	VJ
			Xylene, Isomers m & p	0.31	0.051	0.021	mg/Kg	VJ
02NE88SB007	SO	SIM	Acenaphthene	0.29	0.034	0.0015	mg/Kg	VHB
			Anthracene	0.026	0.034	0.0013	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0044	0.034	0.00095	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00094	0.034	0.00068	mg/Kg	VJ
			Chrysene	0.0033	0.034	0.0011	mg/Kg	VJ
			Fluoranthene	0.0042	0.034	0.0012	mg/Kg	VJ
			Fluorene	0.8	0.034	0.0012	mg/Kg	VHB
			Naphthalene	5.9	0.034	0.0015	mg/Kg	VHB
			Phenanthrene	0.59	0.034	0.0011	mg/Kg	VHB
			Pyrene	0.01	0.034	0.00075	mg/Kg	VJ
02NE88SB008	SO	AK101	Gasoline Range Organics	54	3.5	2.2	mg/Kg	VHB
			Residual Range Organics	16	110	4.7	mg/Kg	VJ
		SIM	Benzo(a)anthracene	0.00065	0.0055	0.00015	mg/Kg	VJ
			Chrysene	0.0014	0.0055	0.00017	mg/Kg	VJ
			Fluoranthene	0.0017	0.0055	0.00019	mg/Kg	VJ
			Pyrene	0.0047	0.0055	0.00013	mg/Kg	VJ
02NE88SB009	SO	SIM	o-Xylene	0.01	0.044	0.0086	mg/Kg	VJ
			Acenaphthene	0.0043	0.0054	0.00023	mg/Kg	VJ
			Acenaphthylene	0.00055	0.0054	0.00018	mg/Kg	VJ
			Dibenzo(a,h)anthracene	0.0043	0.0054	0.0002	mg/Kg	VJ
			Fluorene	0.0045	0.0054	0.00019	mg/Kg	VJ
02NE88SB010	SO	AK103	Residual Range Organics	25	110	4.7	mg/Kg	VJ
			Acenaphthene	0.0006	0.0056	0.00024	mg/Kg	VJ
		SIM	Fluorene	0.0021	0.0056	0.00019	mg/Kg	VJ
			Naphthalene	0.0037	0.0056	0.00024	mg/Kg	VJ
			Phenanthrene	0.00081	0.0056	0.00017	mg/Kg	VJ
02NE88SB011	SO	AK101	Gasoline Range Organics	130	3.3	2.2	mg/Kg	VHB
			Residual Range Organics	23	110	4.7	mg/Kg	VJ
		SIM	Anthracene	0.0035	0.0055	0.00021	mg/Kg	VJ
			Benzo(a)anthracene	0.00023	0.0055	0.00015	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0005	0.0055	0.00016	mg/Kg	VJ
			Chrysene	0.00064	0.0055	0.00017	mg/Kg	VJ
			Fluoranthene	0.0008	0.0055	0.00019	mg/Kg	VJ
02NE88SB012	SO	AK101	Gasoline Range Organics	83	3	2.2	mg/Kg	VHB
			Residual Range Organics	30	110	4.6	mg/Kg	VJ
		SIM	Anthracene	0.0025	0.0055	0.00021	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00089	0.0055	0.00016	mg/Kg	VJ
			Fluoranthene	0.00044	0.0055	0.00019	mg/Kg	VJ
			Pyrene	0.0015	0.0055	0.00012	mg/Kg	VJ
			PCB-1260 (Aroclor 1260)	0.0097	0.11	0.005	mg/Kg	VJ
02NE88SB013	SO	AK103	o-Xylene	0.013	0.028	0.0085	mg/Kg	VJ
			Gasoline Range Organics	140	2.9	2.2	mg/Kg	VHB
		SIM	Residual Range Organics	55	110	4.5	mg/Kg	VJ
			Benzo(a)anthracene	0.00077	0.0053	0.00014	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00045	0.0053	0.00015	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.0002	0.0053	0.00011	mg/Kg	VJ

**Table 2 Summary of Qualified Results**

Sample ID	Matrix	Method	Analyte	Results	MRL	MDL	Units	Final Qualifier
02NE88SB013	SO	SIM	Benzo(k)fluoranthene	0.00018	0.0053	0.00016	mg/Kg	VJ
			Chrysene	0.0015	0.0053	0.00016	mg/Kg	VJ
			Fluoranthene	0.0019	0.0053	0.00018	mg/Kg	VJ
			Indeno(1,2,3-cd)pyrene	0.00017	0.0053	0.00016	mg/Kg	VJ
			Pyrene	0.0048	0.0053	0.00012	mg/Kg	VJ
02NE88SB014	SO	AK101	Gasoline Range Organics	130	2.4	2.1	mg/Kg	VHB
		AK103	Residual Range Organics	54	110	4.4	mg/Kg	VJ
		SIM	Benzo(a)anthracene	0.00076	0.0053	0.00014	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00094	0.0053	0.00015	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00015	0.0053	0.00011	mg/Kg	VJ
			Chrysene	0.0015	0.0053	0.00016	mg/Kg	VJ
			Fluoranthene	0.0019	0.0053	0.00018	mg/Kg	VJ
			Pyrene	0.0043	0.0053	0.00012	mg/Kg	VJ
02NE88SB015	SO	AK101	Gasoline Range Organics	68	4.5	2.2	mg/Kg	VHB
		AK103	Résidual Range Organics	11	110	4.7	mg/Kg	VJ
		SIM	Benzo(a)anthracene	0.00038	0.0055	0.00015	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00034	0.0055	0.00016	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00025	0.0055	0.00011	mg/Kg	VJ
			Benzo(k)fluoranthene	0.00017	0.0055	0.00017	mg/Kg	VJ
			Chrysene	0.00087	0.0055	0.00017	mg/Kg	VJ
			Fluoranthene	0.0012	0.0055	0.00019	mg/Kg	VJ
			Indeno(1,2,3-cd)pyrene	0.0002	0.0055	0.00017	mg/Kg	VJ
			Pyrene	0.0023	0.0055	0.00013	mg/Kg	VJ
		SW8082	PCB-1260 (Aroclor 1260)	0.0065	0.11	0.0051	mg/Kg	VJ
02NE88SB016	SO	AK101	Gasoline Range Organics	73	4.7	2.2	mg/Kg	VHB
		AK103	Residual Range Organics	7.4	110	4.6	mg/Kg	VJ
		SIM	Anthracene	0.0035	0.0055	0.00021	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00032	0.0055	0.00016	mg/Kg	VJ
			Chrysene	0.00042	0.0055	0.00017	mg/Kg	VJ
			Fluoranthene	0.00048	0.0055	0.00019	mg/Kg	VJ
			Pyrene	0.00095	0.0055	0.00012	mg/Kg	VJ
02NE88SB017	SO	AK102	Diesel Range Organics	7	11	4.7	mg/Kg	VJ
		AK103	Residual Range Organics	8.7	110	4.4	mg/Kg	VJ
		SIM	Benzo(b)fluoranthene	0.00023	0.0052	0.00015	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00014	0.0052	0.00011	mg/Kg	VJ
			Chrysene	0.00018	0.0052	0.00016	mg/Kg	VJ
			Naphthalene	0.00045	0.0052	0.00022	mg/Kg	VJ
			Phenanthrene	0.0004	0.0052	0.00016	mg/Kg	VJ
02NE88SB018	SO	AK102	Diesel Range Organics	7.6	11	5	mg/Kg	VJ
		AK103	Residual Range Organics	12	110	4.6	mg/Kg	VJ
		SIM	Benzo(b)fluoranthene	0.00034	0.0055	0.00016	mg/Kg	VJ
			Chrysene	0.00032	0.0055	0.00017	mg/Kg	VJ
			Fluorene	0.00022	0.0055	0.00019	mg/Kg	VJ
			Naphthalene	0.0019	0.0055	0.00023	mg/Kg	VJ
			Phenanthrene	0.00068	0.0055	0.00017	mg/Kg	VJ
02NE88SB019	SO	SIM	Pyrene	0.00014	0.0055	0.00012	mg/Kg	VJ
			Anthracene	0.0021	0.0054	0.00021	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00018	0.0054	0.00016	mg/Kg	VJ
			Chrysene	0.00035	0.0054	0.00017	mg/Kg	VJ
			Fluoranthene	0.00019	0.0054	0.00019	mg/Kg	VJ
			Pyrene	0.00062	0.0054	0.00012	mg/Kg	VJ
		SW8260B	Ethylbenzene	0.018	0.038	0.011	mg/Kg	VJ
02NE88SB020	SO	SIM	Anthracene	0.0019	0.0054	0.00021	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0003	0.0054	0.00016	mg/Kg	VJ
			Chrysene	0.00023	0.0054	0.00017	mg/Kg	VJ
			Fluoranthene	0.00028	0.0054	0.00019	mg/Kg	VJ
			Pyrene	0.0005	0.0054	0.00012	mg/Kg	VJ

**Table 2 Summary of Qualified Results**

Sample ID	Matrix	Method	Analyte	Results	MRL	MDL	Units	Final Qualifier
02NE88SB021	SO	SIM	Anthracene	0.012	0.05	0.0019	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0052	0.05	0.0014	mg/Kg	VJ
			Fluoranthene	0.0029	0.05	0.0017	mg/Kg	VJ
			Pyrene	0.0059	0.05	0.0011	mg/Kg	VJ
02NE88SB022	SO	SIM	Acenaphthene	2.6	0.14	0.0057	mg/Kg	VHB
			Anthracene	0.3	0.14	0.0052	mg/Kg	VHB
			Benzo(a)anthracene	0.006	0.14	0.0036	mg/Kg	VJ
			Benzo(b)fluoranthene	0.016	0.14	0.0038	mg/Kg	VJ
			Fluoranthene	0.048	0.14	0.0046	mg/Kg	VJ
			Fluorene	6.9	0.14	0.0046	mg/Kg	VHB
			Phenanthrene	5.5	0.14	0.0041	mg/Kg	VHB
			Pyrene	0.12	0.14	0.003	mg/Kg	VJ
02NE88SB023	SO	SIM	Acenaphthene	0.00028	0.0066	0.00028	mg/Kg	VJ
			Anthracene	0.00081	0.0066	0.00025	mg/Kg	VJ
			Benzo(a)anthracene	0.00027	0.0066	0.00017	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00048	0.0066	0.00019	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.0002	0.0066	0.00014	mg/Kg	VJ
			Chrysene	0.00067	0.0066	0.0002	mg/Kg	VJ
			Fluoranthene	0.00088	0.0066	0.00023	mg/Kg	VJ
			Fluorene	0.00068	0.0066	0.00023	mg/Kg	VJ
			Naphthalene	0.0045	0.0066	0.00028	mg/Kg	VJ
			Phenanthrene	0.0022	0.0066	0.0002	mg/Kg	VJ
			Pyrene	0.0008	0.0066	0.00015	mg/Kg	VJ
			Residual Range Organics	33	110	4.6	mg/Kg	VJ
02NE88SB024	SO	AK103	Benzo(b)fluoranthene	0.00027	0.0055	0.00016	mg/Kg	VJ
			Fluoranthene	0.00019	0.0055	0.00019	mg/Kg	VJ
			Fluorene	0.00051	0.0055	0.00019	mg/Kg	VJ
			Naphthalene	0.0011	0.0055	0.00023	mg/Kg	VJ
			Phenanthrene	0.00084	0.0055	0.00017	mg/Kg	VJ
			Pyrene	0.00017	0.0055	0.00012	mg/Kg	VJ
02NE88SB025	SO	AK101	Gasoline Range Organics	11	19	7.4	mg/Kg	VJ
			Acenaphthene	0.0026	0.021	0.00087	mg/Kg	VJ
			Acenaphthylene	0.0011	0.021	0.00066	mg/Kg	VJ
			Benzo(b)fluoranthene	0.021	0.021	0.00058	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.0088	0.021	0.00042	mg/Kg	VJ
			Fluoranthene	0.0025	0.021	0.00071	mg/Kg	VJ
			Fluorene	0.006	0.021	0.00071	mg/Kg	VJ
			Phenanthrene	0.0083	0.021	0.00062	mg/Kg	VJ
			Pyrene	0.0026	0.021	0.00046	mg/Kg	VJ
			Ethylbenzene	0.034	0.18	0.034	mg/Kg	VJ
			o-Xylene	0.071	0.18	0.027	mg/Kg	VJ
			SW8260B					
02NE88SB026	SO	SIM	Acenaphthene	0.00037	0.0076	0.00032	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00057	0.0076	0.00022	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00021	0.0076	0.00016	mg/Kg	VJ
			Chrysene	0.0029	0.0076	0.00023	mg/Kg	VJ
			Fluoranthene	0.0004	0.0076	0.00026	mg/Kg	VJ
			Fluorene	0.00061	0.0076	0.00026	mg/Kg	VJ
			Naphthalene	0.0018	0.0076	0.00032	mg/Kg	VJ
			Phenanthrene	0.0027	0.0076	0.00023	mg/Kg	VJ
			Pyrene	0.0004	0.0076	0.00017	mg/Kg	VJ
02NE88SB027	SO	AK101	Gasoline Range Organics	220	5.4	2.5	mg/Kg	VHB
			Benzo(a)anthracene	0.012	0.031	0.00079	mg/Kg	VJ
			Benzo(a)pyrene	0.0032	0.031	0.00086	mg/Kg	VJ
			Benzo(b)fluoranthene	0.007	0.031	0.00086	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.0016	0.031	0.00061	mg/Kg	VJ
			Benzo(k)fluoranthene	0.0033	0.031	0.00092	mg/Kg	VJ
			Chrysene	0.024	0.031	0.00092	mg/Kg	VJ

Table 2 Summary of Qualified Results

Sample ID	Matrix	Method	Analyte	Results	MRL	MDL	Units	Final Qualifier
02NE88SB027	SO	SIM	Indeno(1,2,3-cd)pyrene	0.0018	0.031	0.00092	mg/Kg	VJ
		SW8082	PCB-1260 (Aroclor 1260)	0.035	0.13	0.0056	mg/Kg	VJ
		SW8260B	Toluene	0.036	0.041	0.012	mg/Kg	VJ
02NE88SB028	SO	SIM	Anthracene	0.00076	0.0069	0.00027	mg/Kg	VJ
			Benzo(a)anthracene	0.00032	0.0069	0.00018	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0012	0.0069	0.0002	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00048	0.0069	0.00014	mg/Kg	VJ
			Chrysene	0.0029	0.0069	0.00021	mg/Kg	VJ
			Fluoranthene	0.00069	0.0069	0.00024	mg/Kg	VJ
			Pyrene	0.001	0.0069	0.00016	mg/Kg	VJ
02NE88SB029	SO	SIM	Acenaphthene	0.00038	0.0062	0.00027	mg/Kg	VJ
			Anthracene	0.0003	0.0062	0.00024	mg/Kg	VJ
			Benzo(a)anthracene	0.00024	0.0062	0.00017	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00024	0.0062	0.00013	mg/Kg	VJ
			Chrysene	0.0013	0.0062	0.00019	mg/Kg	VJ
			Fluoranthene	0.00077	0.0062	0.00022	mg/Kg	VJ
			Fluorene	0.0012	0.0062	0.00022	mg/Kg	VJ
			Phenanthrene	0.0034	0.0062	0.00019	mg/Kg	VJ
			Pyrene	0.00066	0.0062	0.00014	mg/Kg	VJ
			o-Xylene	0.01	0.044	0.0098	mg/Kg	VJ
02NE88SB030	SO	SIM	Benzo(b)fluoranthene	0.0017	0.0064	0.00018	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00044	0.0064	0.00013	mg/Kg	VJ
			Chrysene	0.0021	0.0064	0.0002	mg/Kg	VJ
			Fluoranthene	0.00044	0.0064	0.00022	mg/Kg	VJ
			Fluorene	0.00087	0.0064	0.00022	mg/Kg	VJ
			Naphthalene	0.0047	0.0064	0.00027	mg/Kg	VJ
			Phenanthrene	0.0055	0.0064	0.0002	mg/Kg	VJ
			Pyrene	0.00066	0.0064	0.00015	mg/Kg	VJ
02NE88SB031	SO	AK101	Gasoline Range Organics	110	4	2.2	mg/Kg	VHB
			Residual Range Organics	33	110	4.7	mg/Kg	VJ
		SIM	Benzo(a)anthracene	0.0017	0.0055	0.00015	mg/Kg	VJ
			Benzo(a)pyrene	0.00041	0.0055	0.00016	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0017	0.0055	0.00016	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00045	0.0055	0.00011	mg/Kg	VJ
			Benzo(k)fluoranthene	0.0016	0.0055	0.00017	mg/Kg	VJ
			Chrysene	0.0038	0.0055	0.00017	mg/Kg	VJ
			Indeno(1,2,3-cd)pyrene	0.00019	0.0055	0.00017	mg/Kg	VJ
		SW8260B	o-Xylene	0.015	0.036	0.0087	mg/Kg	VJ
			Toluene	0.032	0.036	0.011	mg/Kg	VJ
02NE88SB032	SO	AK101	Gasoline Range Organics	60	4.5	2.2	mg/Kg	VHB
			Residual Range Organics	12	110	4.6	mg/Kg	VJ
		SIM	Acenaphthene	0.11	0.0054	0.00023	mg/Kg	VLB
			Anthracene	0.011	0.0054	0.00021	mg/Kg	VLB
			Benzo(a)anthracene	0.00037	0.0054	0.00014	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00042	0.0054	0.00015	mg/Kg	VJ
			Chrysene	0.00094	0.0054	0.00017	mg/Kg	VJ
			Fluoranthene	0.0017	0.0054	0.00019	mg/Kg	VJ
			Fluorene	0.47	0.0054	0.00019	mg/Kg	VLB
			Naphthalene	0.9	0.0054	0.00023	mg/Kg	VLB
			Phenanthrene	0.27	0.0054	0.00017	mg/Kg	VLB
			Pyrene	0.0035	0.0054	0.00012	mg/Kg	VJ
			Ethylbenzene	0.025	0.041	0.011	mg/Kg	VJ
02NE88SB033	SO	AK101	Gasoline Range Organics	130	2.6	2.4	mg/Kg	VHB
			Benzo(a)anthracene	0.001	0.0058	0.00016	mg/Kg	VJ
		SIM	Benzo(a)pyrene	0.00028	0.0058	0.00017	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0013	0.0058	0.00017	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00054	0.0058	0.00012	mg/Kg	VJ

**Table 2 Summary of Qualified Results**

Sample ID	Matrix	Method	Analyte	Results	MRL	MDL	Units	Final Qualifier
02NE88SB033	SO	SIM	Chrysene	0.0033	0.0058	0.00018	mg/Kg	VJ
			Fluoranthene	0.0021	0.0058	0.0002	mg/Kg	VJ
			Indeno(1,2,3-cd)pyrene	0.00023	0.0058	0.00018	mg/Kg	VJ
			Pyrene	0.0049	0.0058	0.00013	mg/Kg	VJ
		SW8260B	Ethylbenzene	1.2	0.021	0.012	mg/Kg	VHB
			o-Xylene	1.5	0.021	0.0091	mg/Kg	VHB
			Toluene	0.05	0.021	0.012	mg/Kg	VHB
			Xylene, Isomers m & p	4	0.022	0.022	mg/Kg	VHB
02NE88SB034	SO	AK101	Gasoline Range Organics	140	3	2.3	mg/Kg	VHB
			Residual Range Organics	110	120	4.8	mg/Kg	VJ
		SIM	Anthracene	0.0041	0.0056	0.00022	mg/Kg	VJ
			Benzo(a)anthracene	0.00043	0.0056	0.00015	mg/Kg	VJ
			Benzo(a)pyrene	0.00025	0.0056	0.00016	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0038	0.0056	0.00016	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00041	0.0056	0.00012	mg/Kg	VJ
			Benzo(k)fluoranthene	0.0036	0.0056	0.00017	mg/Kg	VJ
			Chrysene	0.0013	0.0056	0.00017	mg/Kg	VJ
			Dibenzo(a,h)anthracene	0.00026	0.0056	0.00021	mg/Kg	VJ
			Fluoranthene	0.001	0.0056	0.0002	mg/Kg	VJ
			Indeno(1,2,3-cd)pyrene	0.00034	0.0056	0.00017	mg/Kg	VJ
		SW8260B	Pyrene	0.0024	0.0056	0.00013	mg/Kg	VJ
			Ethylbenzene	0.94	0.023	0.011	mg/Kg	VHB
			o-Xylene	0.34	0.023	0.0088	mg/Kg	VHB
			Xylene, Isomers m & p	3	0.023	0.021	mg/Kg	VHB
		SW9060	Total Organic Carbon (TOC)	0.33	0.05	0.02	PERCENT	VJ
02NE88SB035	SO	AK101	Gasoline Range Organics	100	2.5	2.2	mg/Kg	VHB
			Residual Range Organics	24	110	4.5	mg/Kg	VJ
		SIM	Benzo(a)anthracene	0.00044	0.0054	0.00014	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00062	0.0054	0.00015	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00043	0.0054	0.00011	mg/Kg	VJ
			Chrysene	0.0013	0.0054	0.00016	mg/Kg	VJ
			Fluoranthene	0.0013	0.0054	0.00019	mg/Kg	VJ
			Pyrene	0.0027	0.0054	0.00012	mg/Kg	VJ
		SW8260B	Benzene	0.018	0.012	0.012	mg/Kg	VHB
			Ethylbenzene	1.1	0.025	0.011	mg/Kg	VHB
			o-Xylene	0.019	0.025	0.0084	mg/Kg	VJ
			Toluene	0.018	0.025	0.011	mg/Kg	VJ
			Xylene, Isomers m & p	0.95	0.025	0.02	mg/Kg	VHB
02NE88SB036	SO	AK101	Gasoline Range Organics	170	3.3	2.6	mg/Kg	VHB
			Diesel Range Organics	4000	13	5.7	mg/Kg	VJ
		SIM	Acenaphthene	0.13	0.0063	0.00027	mg/Kg	VJ
			Anthracene	0.0039	0.0063	0.00024	mg/Kg	VJ
			Benzo(a)anthracene	0.00021	0.0063	0.00017	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00056	0.0063	0.00018	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00031	0.0063	0.00013	mg/Kg	VJ
			Chrysene	0.0014	0.0063	0.00019	mg/Kg	VJ
			Fluoranthene	0.00097	0.0063	0.00022	mg/Kg	VJ
			Fluorene	0.38	0.0063	0.00022	mg/Kg	VJ
			Naphthalene	6.9	0.32	0.014	mg/Kg	VJ
			Phenanthrene	0.14	0.0063	0.00019	mg/Kg	VJ
		SIM	Pyrene	0.002	0.0063	0.00014	mg/Kg	VJ
		SW6020	Chromium	16.7	0.25	0.04	mg/Kg	VJ
			Lead	21.1	0.06	0.04	mg/Kg	VJ
			Zinc	57.5	0.6	0.1	mg/Kg	VJ
		SW8082	PCB-1260 (Aroclor 1260)	0.033	0.13	0.0058	mg/Kg	VJ
		SW8260B	Benzene	0.062	0.014	0.014	mg/Kg	VJ
			Ethylbenzene	2.2	0.03	0.013	mg/Kg	VJ

Table 2 Summary of Qualified Results

Sample ID	Matrix	Method	Analyte	Results	MRL	MDL	Units	Final Qualifier
02NE88SB036	SO	SW8260B	o-Xylene	1.3	0.03	0.0099	mg/Kg	VJ
			Xylene, Isomers m & p	4.4	0.03	0.024	mg/Kg	VJ
		SW9060	Total Organic Carbon (TOC)	0.81	0.05	0.02	PERCENT	VJ
02NE88SB037	SO	AK103	Residual Range Organics	13	110	4.7	mg/Kg	VJ
			Benzo(a)anthracene	0.00017	0.0056	0.00015	mg/Kg	VJ
		SIM	Chrysene	0.00036	0.0056	0.00017	mg/Kg	VJ
			Fluoranthene	0.00073	0.0056	0.00019	mg/Kg	VJ
			Naphthalene	0.00092	0.0056	0.00024	mg/Kg	VJ
			Phenanthrene	0.0012	0.0056	0.00017	mg/Kg	VJ
			Pyrene	0.00044	0.0056	0.00013	mg/Kg	VJ
02NE88SB038	SO	AK103	Residual Range Organics	5.4	110	4.5	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00015	0.0053	0.00011	mg/Kg	VJ
		SIM	Phenanthrene	0.00022	0.0053	0.00016	mg/Kg	VJ
02NE88SB039	SO	SIM	Benzo(b)fluoranthene	0.00056	0.0055	0.00016	mg/Kg	VJ
			Chrysene	0.00027	0.0055	0.00017	mg/Kg	VJ
			Fluoranthene	0.00024	0.0055	0.00019	mg/Kg	VJ
			Naphthalene	0.00072	0.0055	0.00023	mg/Kg	VJ
			Phenanthrene	0.00053	0.0055	0.00017	mg/Kg	VJ
			Pyrene	0.00021	0.0055	0.00013	mg/Kg	VJ
		SW6020	Chromium	9.09	0.22	0.03	mg/Kg	VJ
02NE88SB040	SO	SIM	Anthracene	0.0002	0.0053	0.0002	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00035	0.0053	0.00015	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00033	0.0053	0.00011	mg/Kg	VJ
			Chrysene	0.0002	0.0053	0.00016	mg/Kg	VJ
			Dibenzo(a,h)anthracene	0.00032	0.0053	0.00019	mg/Kg	VJ
			Fluoranthene	0.0007	0.0053	0.00018	mg/Kg	VJ
			Fluorene	0.0002	0.0053	0.00018	mg/Kg	VJ
			Indeno(1,2,3-cd)pyrene	0.00032	0.0053	0.00016	mg/Kg	VJ
			Naphthalene	0.00031	0.0053	0.00022	mg/Kg	VJ
			Phenanthrene	0.001	0.0053	0.00016	mg/Kg	VJ
			Pyrene	0.00051	0.0053	0.00012	mg/Kg	VJ
		SW9060	Total Organic Carbon (TOC)	0.04	0.05	0.02	PERCENT	VJ
02NE88SB206	SO	AK103	Residual Range Organics	23	110	4.7	mg/Kg	VJ
			Benzo(a)anthracene	0.0011	0.0056	0.00015	mg/Kg	VJ
		SIM	Chrysene	0.0027	0.0056	0.00017	mg/Kg	VJ
			Fluoranthene	0.004	0.0056	0.00019	mg/Kg	VJ
02NE88SB234	SO	AK101	Gasoline Range Organics	110	2.3	2.2	mg/Kg	VHB
			Residual Range Organics	54	110	4.7	mg/Kg	VJ
			Anthracene	0.0033	0.0055	0.00021	mg/Kg	VJ
			Benzo(a)anthracene	0.00021	0.0055	0.00015	mg/Kg	VJ
			Benzo(b)fluoranthene	0.00041	0.0055	0.00016	mg/Kg	VJ
			Chrysene	0.00091	0.0055	0.00017	mg/Kg	VJ
			Dibenzo(a,h)anthracene	0.00031	0.0055	0.0002	mg/Kg	VJ
			Fluoranthene	0.00079	0.0055	0.00019	mg/Kg	VJ
			Pyrene	0.0018	0.0055	0.00013	mg/Kg	VJ
		SW8260B	Ethylbenzene	0.83	0.025	0.011	mg/Kg	VHB
			o-Xylene	0.27	0.025	0.0087	mg/Kg	VHB
			Xylene, Isomers m & p	2.8	0.025	0.021	mg/Kg	VHB
02NE88SB236	SO	AK101	Gasoline Range Organics	88	2.5	2.2	mg/Kg	VHB
			Benzo(a)anthracene	0.001	0.0055	0.00015	mg/Kg	VJ
			Benzo(b)fluoranthene	0.0016	0.0055	0.00016	mg/Kg	VJ
			Benzo(g,h,i)perylene	0.00034	0.0055	0.00011	mg/Kg	VJ
			Chrysene	0.0021	0.0055	0.00017	mg/Kg	VJ
			Fluoranthene	0.0027	0.0055	0.00019	mg/Kg	VJ
			Indeno(1,2,3-cd)pyrene	0.00019	0.0055	0.00017	mg/Kg	VJ
			Pyrene	0.005	0.0055	0.00013	mg/Kg	VJ
		SW8082	PCB-1260 (Aroclor 1260)	0.059	0.11	0.0051	mg/Kg	VJ

**Table 2 Summary of Qualified Results**

Sample ID	Matrix	Method	Analyte	Results	MRL	MDL	Units	Final Qualifier
02NE88SB236	SO	SW8260B	Toluene	0.022	0.023	0.011	mg/Kg	VJ
02NE88SB237	SO	AK103	Residual Range Organics	5.6	110	4.7	mg/Kg	VJ
		SIM	Chrysene	0.00019	0.0055	0.00017	mg/Kg	VJ
			Naphthalene	0.00048	0.0055	0.00023	mg/Kg	VJ
			Phenanthrene	0.00056	0.0055	0.00017	mg/Kg	VJ
02NE88SB239	SO	AK103	Residual Range Organics	5	110	4.7	mg/Kg	VJ
	SO	SIM	Naphthalene	0.00046	0.0056	0.00024	mg/Kg	VJ
	SO	SIM	Phenanthrene	0.00048	0.0056	0.00017	mg/Kg	VJ
	SO	SIM	Pyrene	0.00015	0.0056	0.00013	mg/Kg	VJ
02NE88TB002	SO	SW8260B	Toluene	0.00015	0.0005	0.000098	mg/L	VJ
02NE88TB003	SO	SW8260B	Toluene	0.00013	0.0005	0.000098	mg/L	VB
02NE88TB006	SO	SW8260B	Toluene	0.00011	0.0005	0.000098	mg/L	VJ

Key:

AK - Alaska Method

MDL - method detection limit

mg/Kg - milligrams per kilogram

mg/L - milligrams per liter

MRL - method reporting limit

PCBs - polychlorinated biphenyls

SIM - selected ion monitoring

SO - soil

VB - The analyte was detected in the associated blank and the sample indicating possible contamination.

VB - The practical quantitation limit is approximate due to QC or matrix effects.

VHB - Result is an estimate with a high bias.

VJ - The analyte was positively identified; the quantitation is an estimation.

VLB - Result is an estimate with a low bias.

W - water

**Table 3 Summary of Contaminated Trip Blanks and Impacted Samples**

Impacted Sample	Trip Blank	Method	Analyte	Results	MRL	MDL	Units	Dilution	Qualifier
	02NE88TB003	SW8260B	Toluene	0.00013	0.0005	0.000098	mg/L	1	
02NE88GW003		SW8260B	Toluene	0.00024	0.0005	0.000098	mg/L	1	VB
02NE88GW006		SW8260B	Toluene	0.00019	0.0005	0.000098	mg/L	1	VB
02NE88GW007		SW8260B	Toluene	0.0012	0.0005	0.000098	mg/L	1	VB
02NE88GW008		SW8260B	Toluene	0.00011	0.0005	0.000098	mg/L	1	VB
	02NE88TB002	SW8260B	Toluene	0.00015	0.0005	0.000098	mg/L	1	VJ
02NE88EB001		SW8260B	Toluene	0.00045	0.0005	0.000098	mg/L	1	VB
02NE88EB002		SW8260B	Toluene	0.00013	0.0005	0.000098	mg/L	1	VB
02NE88EB003		SW8260B	Toluene	0.00013	0.0005	0.000098	mg/L	1	VB
02NE88GW001		SW8260B	Toluene	0.00061	0.0005	0.000098	mg/L	1	VB
02NE88GW002		SW8260B	Toluene	0.00036	0.0005	0.000098	mg/L	1	VB
	02NE88TB006	SW8260B	Toluene	0.00011	0.0005	0.000098	mg/L	1	VJ
02NE88EB004		SW8260B	Toluene	0.00013	0.0005	0.000098	mg/L	1	VB
02NE88EB005		SW8260B	Toluene	0.00015	0.0005	0.000098	mg/L	1	VB
02NE88GW010		SW8260B	Toluene	0.0014	0.0005	0.000098	mg/L	1	--

**Key:**

-- - result not qualified; sample result greater than 10 times the trip blank contamination.

MDL - method detection limit

MRL - method reporting limit

VB - The analyte was detected in the associated blank and the sample indicating possible contamination

VJ - The analyte was positively identified; the quantitation is an estimation.

**Table 4 Summary of Primary, QC and QA Samples**

Primary Sample	QC Sample	QA Samples	Parameters
02NE88SB039	02NE88SB239	02NE88SB339	BTEX, GRO, DRO, RRO, Cr, Pb, Zn, PAH SIM, PCBs, TOC
02NE88SB037	02NE88SB237	02NE88SB337	BTEX, GRO, DRO, RRO, Cr, Pb, Zn, PAH SIM, PCBs, TOC
02NE88SB036	02NE88SB236	02NE88SB336	BTEX, GRO, DRO, RRO, Cr, Pb, Zn, PAH SIM, PCBs, TOC
02NE88SB034	02NE88SB234	02NE88SB334	BTEX, GRO, DRO, RRO, Cr, Pb, Zn, PAH SIM, PCBs, TOC
02NE88SB006	02NE88SB206	02NE88SB306	BTEX, GRO, DRO, RRO, Cr, Pb, Zn, PAH SIM, PCBs, TOC
02NE88GW004	02NE88GW204	02NE88GW304	BTEX, GRO, DRO, RRO, Sulfate *, Alkalinity *, Ethane *, Ethene *, Methane *

**Key:**

- \* - only primary and QC samples were tested for these parameters
- BTEX - benzene, toluene, ethylbenzene, xylenes
- Cr - chromium
- DRO - diesel range organics
- GRO - gasoline range organics
- PAH - polynuclear aromatic hydrocarbons
- Pb - lead
- PCBs - polychlorinated biphenyls
- QA - quality assurance
- QC - quality control
- RRO - residual range organics
- SIM - selected ion monitoring
- TOC - total organic carbon
- Zn - zinc

**Table 5 Summary of Primary and QC Results**

Method	Analyte	Primary Soil Sample 02NE88SB039	QC Soil Sample 02NE88SB239	Units	Agreement
AK101	Gasoline Range Organics	ND (4)	ND (4.2)	mg/Kg	Agree
AK102	Diesel Range Organics	ND (11)	ND (11)	mg/Kg	Agree
AK103	Residual Range Organics	ND (110)	5 VJ	mg/Kg	Agree *
E160.3M	Total Solids	91.6	90.2	PERCENT	Agree
SIM	Acenaphthene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Acenaphthylene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Anthracene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Benzo(a)anthracene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Benzo(a)pyrene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Benzo(b)fluoranthene	0.00056 VJ	ND (0.0056)	mg/Kg	Agree
SIM	Benzo(g,h,i)perylene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Benzo(k)fluoranthene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Chrysene	0.00027 VJ	ND (0.0056)	mg/Kg	Agree
SIM	Dibenzo(a,h)anthracene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Fluoranthene	0.00024 VJ	ND (0.0056)	mg/Kg	Agree
SIM	Fluorene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Indeno(1,2,3-cd)pyrene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Naphthalene	0.00072 VJ	0.00046 VJ	mg/Kg	Agree
SIM	Phenanthrene	0.00053 VJ	0.00048 VJ	mg/Kg	Agree
SIM	Pyrene	0.00021 VJ	0.00015 VJ	mg/Kg	Agree
SW6020	Chromium	9.09 VJ	7.71	mg/Kg	Agree
SW6020	Lead	31.4	31.2	mg/Kg	Agree
SW6020	Zinc	62.9	57	mg/Kg	Agree
SW8082	PCB-1016 (Aroclor 1016)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1221 (Aroclor 1221)	ND (0.22)	ND (0.22)	mg/Kg	Agree
SW8082	PCB-1232 (Aroclor 1232)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1242 (Aroclor 1242)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1248 (Aroclor 1248)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1254 (Aroclor 1254)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1260 (Aroclor 1260)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8260B	Benzene	ND (0.016)	ND (0.019)	mg/Kg	Agree
SW8260B	Ethylbenzene	ND (0.038)	ND (0.046)	mg/Kg	Agree
SW8260B	o-Xylene	ND (0.038)	ND (0.046)	mg/Kg	Agree
SW8260B	Toluene	ND (0.038)	ND (0.046)	mg/Kg	Agree
SW8260B	Xylene, Isomers m & p	ND (0.038)	ND (0.046)	mg/Kg	Agree
SW9060	Total Organic Carbon (TOC)	0.07	0.08	PERCENT	Agree
		Primary Soil Sample 02NE88SB037	QC Soil Sample 02NE88SB237		Agree
AK101	Gasoline Range Organics	ND (4.1)	ND (4)	mg/Kg	Agree
AK102	Diesel Range Organics	ND (11)	ND (11)	mg/Kg	Agree
AK103	Residual Range Organics	13 VJ	5.6 VJ	mg/Kg	Agree
E160.3M	Total Solids	90.5	91.4	PERCENT	Agree
SIM	Acenaphthene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Acenaphthylene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Anthracene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Benzo(a)anthracene	0.00017 VJ	ND (0.0055)	mg/Kg	Agree
SIM	Benzo(a)pyrene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Benzo(b)fluoranthene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Benzo(g,h,i)perylene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Benzo(k)fluoranthene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Chrysene	0.00036 VJ	0.00019 VJ	mg/Kg	Agree
SIM	Dibenzo(a,h)anthracene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Fluoranthene	0.00073 VJ	ND (0.0055)	mg/Kg	Agree
SIM	Fluorene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Indeno(1,2,3-cd)pyrene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree

**Table 5 Summary of Primary and QC Results**

<b>Method</b>	<b>Analyte</b>	<b>Primary Soil Sample 02NE88SB039</b>	<b>QC Soil Sample 02NE88SB239</b>	<b>Units</b>	<b>Agreement</b>
SIM	Naphthalene	0.00092 VJ	0.00048 VJ	mg/Kg	Agree
SIM	Phenanthrene	0.0012 VJ	0.00056 VJ	mg/Kg	Agree
SIM	Pyrene	0.00044 VJ	ND (0.0055)	mg/Kg	Agree
SW6020	Chromium	7.26	8.11	mg/Kg	Agree
SW6020	Lead	30.5	33.7	mg/Kg	Agree
SW6020	Zinc	69.8	69.1	mg/Kg	Agree
SW8082	PCB-1016 (Aroclor 1016)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1221 (Aroclor 1221)	ND (0.22)	ND (0.22)	mg/Kg	Agree
SW8082	PCB-1232 (Aroclor 1232)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1242 (Aroclor 1242)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1248 (Aroclor 1248)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1254 (Aroclor 1254)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1260 (Aroclor 1260)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8260B	Benzene	ND (0.019)	ND (0.017)	mg/Kg	Agree
SW8260B	Ethylbenzene	ND (0.047)	ND (0.041)	mg/Kg	Agree
SW8260B	o-Xylene	ND (0.047)	ND (0.041)	mg/Kg	Agree
SW8260B	Toluene	ND (0.047)	ND (0.041)	mg/Kg	Agree
SW8260B	Xylene, Isomers m & p	ND (0.047)	ND (0.041)	mg/Kg	Agree
SW9060	Total Organic Carbon (TOC)	0.1	0.09	PERCENT	Agree
		<b>Primary Soil Sample 02NE88SB036</b>	<b>QC Soil Sample 02NE88SB236</b>		<b>Agree</b>
AK101	Gasoline Range Organics	170 VHB	88 VHB	mg/Kg	Agree
AK102	Diesel Range Organics	4000 VJ	13000	mg/Kg	Agree
AK103	Residual Range Organics	220	180	mg/Kg	Agree
E160.3M	Total Solids	79.6	91.3	PERCENT	Agree
SIM	Acenaphthene	0.13 VJ	0.25	mg/Kg	Agree
SIM	Acenaphthylene	ND (0.0063)	ND (0.0055)	mg/Kg	Agree
SIM	Anthracene	0.0039 VJ	0.013	mg/Kg	Agree
SIM	Benzo(a)anthracene	0.00021 VJ	0.001 VJ	mg/Kg	Agree *
SIM	Benzo(a)pyrene	ND (0.0063)	ND (0.0055)	mg/Kg	Agree
SIM	Benzo(b)fluoranthene	0.00056 VJ	0.0016 VJ	mg/Kg	Agree
SIM	Benzo(g,h,i)perylene	0.00031 VJ	0.00034 VJ	mg/Kg	Agree
SIM	Benzo(k)fluoranthene	ND (0.0063)	ND (0.0055)	mg/Kg	Agree
SIM	Chrysene	0.0014 VJ	0.0021 VJ	mg/Kg	Agree
SIM	Dibenzo(a,h)anthracene	ND (0.0063)	ND (0.0055)	mg/Kg	Agree
SIM	Fluoranthene	0.00097 VJ	0.0027 VJ	mg/Kg	Agree
SIM	Fluorene	0.38 VJ	0.74	mg/Kg	Agree
SIM	Indeno(1,2,3-cd)pyrene	ND (0.0063)	0.00019 VJ	mg/Kg	Agree
SIM	Naphthalene	6.9 VJ	23	mg/Kg	Agree
SIM	Phenanthrene	0.14 VJ	0.44	mg/Kg	Agree
SIM	Pyrene	0.002 VJ	0.005 VJ	mg/Kg	Agree
SW6020	Chromium	16.7 VJ	9.64	mg/Kg	Agree
SW6020	Lead	21.1 VJ	12.6	mg/Kg	Agree
SW6020	Zinc	57.5 VJ	31.9	mg/Kg	Agree
SW8082	PCB-1016 (Aroclor 1016)	ND (0.13)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1221 (Aroclor 1221)	ND (0.25)	ND (0.22)	mg/Kg	Agree
SW8082	PCB-1232 (Aroclor 1232)	ND (0.13)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1242 (Aroclor 1242)	ND (0.13)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1248 (Aroclor 1248)	ND (0.13)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1254 (Aroclor 1254)	ND (0.13)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1260 (Aroclor 1260)	0.033 VJ	0.059 VJ	mg/Kg	Agree
SW8260B	Benzene	0.062 VJ	0.023	mg/Kg	Agree
SW8260B	Ethylbenzene	2.2 VJ	0.66	mg/Kg	Agree
SW8260B	o-Xylene	1.3 VJ	0.58	mg/Kg	Agree
SW8260B	Toluene	0.041	0.022 VJ	mg/Kg	Agree
SW8260B	Xylene, Isomers m & p	4.4 VJ	1.5	mg/Kg	Agree
SW9060	Total Organic Carbon (TOC)	0.81 VJ	0.48	PERCENT	Agree

**Table 5 Summary of Primary and QC Results**

Method	Analyte	Primary Soil Sample 02NE88SB039	QC Soil Sample 02NE88SB239	Units	Agreement
		<b>Primary Soil Sample 02NE88SB034</b>	<b>QC Soil Sample 02NE88SB234</b>		<b>Agree</b>
AK101	Gasoline Range Organics	140 VHB	110 VHB	mg/Kg	Agree
AK102	Diesel Range Organics	4300	3100	mg/Kg	Agree
AK103	Residual Range Organics	110 VJ	54 VJ	mg/Kg	Agree
E160.3M	Total Solids	89.3	91.2	PERCENT	Agree
SIM	Acenaphthene	0.11	0.089	mg/Kg	Agree
SIM	Acenaphthylene	ND (0.0056)	ND (0.0055)	mg/Kg	Agree
SIM	Anthracene	0.0041 VJ	0.0033 VJ	mg/Kg	Agree
SIM	Benzo(a)anthracene	0.00043 VJ	0.00021 VJ	mg/Kg	Agree
SIM	Benzo(a)pyrene	0.00025 VJ	ND (0.0055)	mg/Kg	Agree
SIM	Benzo(b)fluoranthene	0.0038 VJ	0.00041 VJ	mg/Kg	Agree
SIM	Benzo(g,h,i)perylene	0.00041 VJ	ND (0.0055)	mg/Kg	Agree
SIM	Benzo(k)fluoranthene	0.0036 VJ	ND (0.0055)	mg/Kg	Agree
SIM	Chrysene	0.0013 VJ	0.00091 VJ	mg/Kg	Agree
SIM	Dibenzo(a,h)anthracene	0.00026 VJ	0.00031 VJ	mg/Kg	Agree
SIM	Fluoranthene	0.001 VJ	0.00079 VJ	mg/Kg	Agree
SIM	Fluorene	0.24	0.2	mg/Kg	Agree
SIM	Indeno(1,2,3-cd)pyrene	0.00034 VJ	ND (0.0055)	mg/Kg	Agree
SIM	Naphthalene	3.6	3.8	mg/Kg	Agree
SIM	Phenanthrene	0.11	0.091	mg/Kg	Agree
SIM	Pyrene	0.0024 VJ	0.0018 VJ	mg/Kg	Agree
SW6020	Chromium	8.31	10.8	mg/Kg	Agree
SW6020	Lead	15	15.3	mg/Kg	Agree
SW6020	Zinc	31.8	40.2	mg/Kg	Agree
SW8082	PCB-1016 (Aroclor 1016)	ND (0.12)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1221 (Aroclor 1221)	ND (0.23)	ND (0.22)	mg/Kg	Agree
SW8082	PCB-1232 (Aroclor 1232)	ND (0.12)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1242 (Aroclor 1242)	ND (0.12)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1248 (Aroclor 1248)	ND (0.12)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1254 (Aroclor 1254)	ND (0.12)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1260 (Aroclor 1260)	ND (0.12)	ND (0.11)	mg/Kg	Agree
SW8260B	Benzene	ND (0.012)	ND (0.012)	mg/Kg	Agree
SW8260B	Ethylbenzene	0.94 VHB	0.83 VHB	mg/Kg	Agree
SW8260B	o-Xylene	0.34 VHB	0.27 VHB	mg/Kg	Agree
SW8260B	Toluene	ND (0.023)	ND (0.025)	mg/Kg	Agree
SW8260B	Xylene, Isomers m & p	3 VHB	2.8 VHB	mg/Kg	Agree
SW9060	Total Organic Carbon (TOC)	0.33 VJ	0.19	PERCENT	Agree
		<b>Primary Soil Sample 02NE88SB006</b>	<b>QC Soil Sample 02NE88SB206</b>		<b>Agree</b>
AK101	Gasoline Range Organics	51	41	mg/Kg	Agree
AK102	Diesel Range Organics	3700	2900	mg/Kg	Agree
AK103	Residual Range Organics	24 VJ	23 VJ	mg/Kg	Agree
D4129	Total Organic Carbon (TOC)	0.16	0.15	PERCENT	Agree
E160.3M	Total Solids	91.7	90.6	PERCENT	Agree
SIM	Acenaphthene	0.15	0.13	mg/Kg	Agree
SIM	Acenaphthylene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Anthracene	0.034	0.029	mg/Kg	Agree
SIM	Benzo(a)anthracene	0.0011 VJ	0.0011 VJ	mg/Kg	Agree
SIM	Benzo(a)pyrene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Benzo(b)fluoranthene	0.00074 VJ	ND (0.0056)	mg/Kg	Agree
SIM	Benzo(g,h,i)perylene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Benzo(k)fluoranthene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Chrysene	0.0027 VJ	0.0027 VJ	mg/Kg	Agree
SIM	Dibenzo(a,h)anthracene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Fluoranthene	0.0041 VJ	0.004 VJ	mg/Kg	Agree

**Table 5 Summary of Primary and QC Results**

Method	Analyte	Primary Soil Sample 02NE88SB039	QC Soil Sample 02NE88SB239	Units	Agreement
SIM	Fluorene	0.36	0.33	mg/Kg	Agree
SIM	Indeno(1,2,3-cd)pyrene	ND (0.0055)	ND (0.0056)	mg/Kg	Agree
SIM	Naphthalene	1.5	1	mg/Kg	Agree
SIM	Phenanthrene	0.46	0.43	mg/Kg	Agree
SIM	Pyrene	0.011	0.01	mg/Kg	Agree
SW6020	Chromium	13.1	10.8	mg/Kg	Agree
SW6020	Lead	26.2 VJ	61.1	mg/Kg	Agree
SW6020	Zinc	52.8	55.9	mg/Kg	Agree
SW8082	PCB-1016 (Aroclor 1016)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1221 (Aroclor 1221)	ND (0.22)	ND (0.22)	mg/Kg	Agree
SW8082	PCB-1232 (Aroclor 1232)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1242 (Aroclor 1242)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1248 (Aroclor 1248)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1254 (Aroclor 1254)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8082	PCB-1260 (Aroclor 1260)	ND (0.11)	ND (0.11)	mg/Kg	Agree
SW8260B	Benzene	ND (0.021)	ND (0.021)	mg/Kg	Agree
SW8260B	Ethylbenzene	0.34 VJ	0.092	mg/Kg	Agree
SW8260B	o-Xylene	ND (0.051)	ND (0.053)	mg/Kg	Agree
SW8260B	Toluene	ND (0.051)	ND (0.053)	mg/Kg	Agree
SW8260B	Xylene, Isomers m & p	0.31 VJ	0.094	mg/Kg	Agree
		Primary Water Sample 02NE88GW004	QC Water Sample 02NE88GW204		Agreement
AK101	Gasoline Range Organics	1.2	1.2	mg/L	Agree
AK102	Diesel Range Organics	72	56	mg/L	Agree
AK103	Residual Range Organics	1.9	1.3	mg/L	Agree
E300.0	Sulfate	1.4	0.9	mg/L	Agree
E310.1	Alkalinity, Total	258	273	mg/L	Agree
RSK175	Ethane	ND (0.0005)	ND (0.0005)	mg/L	Agree
RSK175	Ethene	ND (0.0015)	ND (0.0015)	mg/L	Agree
RSK175	Methane	1.7	1.8	mg/L	Agree
SW8260B	Benzene	0.03	0.03	mg/L	Agree
SW8260B	Ethylbenzene	0.12	0.12	mg/L	Agree
SW8260B	o-Xylene	0.007	0.0075	mg/L	Agree
SW8260B	Toluene	0.0032	0.0033	mg/L	Agree
SW8260B	Xylene, Isomers m & p	0.085	0.083	mg/L	Agree

**Key:**

(xxx) - MRL for analyte and sample

- Sample results not qualified based on disagreement when results were

\* reported between the MRL and MDL.

AK - Alaska Method

E - Environmental Protection Agency Method

MDL - method detection limit

mg/Kg - milligrams per kilogram

mg/L - milligrams per liter

MRL - method reporting limit

ND - not detected

SW - Solid Waste Method

VJ - estimated value

**Table 6**  
Agreement Criteria

Matrix	Parameter	Disagreement	Major Disagreement
All	All	>5x difference when one result is < MDL	>10x difference when one result is <MDL
All	All	>3x difference when one result is <RL	>5x difference when one result is <RL
Water	All	>2x difference	>3x difference
Soil	All except metals, VOC, BTEX,GRO	>4x difference	>5x difference
Soil	Metals	>2x difference	>3x difference
Soil	VOC, BTEX,GRO	Arbitrary(suggest >5x difference)	Arbitrary(suggest >10X difference)

Table 7 Summary of Surrogates Outside of Acceptance Limits

Sample ID	Method	Surrogate	Analyte	Result	MRL	Units	Limits	Dilution	Qualifier
02NE88SB007	AK103	n-triacontane		194		percent	50-150	10	--
	SIM	Fluorene-d10		110		percent	43-98	1	
			Acenaphthene	0.29	0.034	mg/Kg			VHB
			Anthracene	0.026	0.034	mg/Kg			VHB
			Benzo(b)fluoranthene	0.0044	0.034	mg/Kg			VHB
			Benzo(g,h,i)perylene	0.00094	0.034	mg/Kg			VHB
			Chrysene	0.0033	0.034	mg/Kg			VHB
			Fluoranthene	0.0042	0.034	mg/Kg			VHB
			Fluorene	0.8	0.034	mg/Kg			VHB
			Naphthalene	5.9	0.034	mg/Kg			VHB
			Phenanthrene	0.59	0.034	mg/Kg			VHB
			Pyrene	0.01	0.034	mg/Kg			VHB
02NE88SB008	AK101	4-Bromofluorobenzene		152		percent	50-150	1	
		Gasoline Range Organics		54	3.5	mg/Kg			VHB
02NE88SB011	AK101	4-Bromofluorobenzene		247		percent	50-150	1	
		Gasoline Range Organics		130	3.3	mg/Kg			VHB
02NE88SB012	AK101	4-Bromofluorobenzene		202		percent	50-150	1	
		Gasoline Range Organics		83	3	mg/Kg			VHB
02NE88SB013	AK101	4-Bromofluorobenzene		284		percent	50-150	1	
		Gasoline Range Organics		140	2.9	mg/Kg			VHB
02NE88SB014	AK101	4-Bromofluorobenzene		270		percent	50-150	1	
		Gasoline Range Organics		130	2.4	mg/Kg			VHB
02NE88SB015	AK101	4-Bromofluorobenzene		187		percent	50-150	1	
		Gasoline Range Organics		68	4.5	mg/Kg			VHB
02NE88SB016	AK101	4-Bromofluorobenzene		164		percent	50-150	1	
		Gasoline Range Organics		73	4.7	mg/Kg			VHB
02NE88SB021	AK101	4-Bromofluorobenzene		49		percent	50-150	1	
		Gasoline Range Organics		70	9	mg/Kg			VLB
	AK103	n-triacontane		169		percent	50-150		
02NE88SB022	AK101	4-Bromofluorobenzene		48		percent	50-150	1	
		Gasoline Range Organics		99	8.1	mg/Kg			VLB
	AK102	o-Terphenyl		202		percent	50-150	10	--
	AK103	n-triacontane		194		percent	50-150	10	--
	SIM	Fluorene-d10		149		percent	43-98	1	
			Acenaphthene	2.6	0.14	mg/Kg			VHB
			Anthracene	0.3	0.14	mg/Kg			VHB
			Benzo(a)anthracene	0.006	0.14	mg/Kg			VHB
			Benzo(b)fluoranthene	0.016	0.14	mg/Kg			VHB
			Fluoranthene	0.048	0.14	mg/Kg			VHB
			Fluorene	6.9	0.14	mg/Kg			VHB
			Naphthalene	81	2.7	mg/Kg		10	--
			Phenanthrene	5.5	0.14	mg/Kg			VHB
			Pyrene	0.12	0.14	mg/Kg			VHB *
02NE88SB027	AK101	4-Bromofluorobenzene		279		percent	50-150	1	
		Gasoline Range Organics		220	5.4	mg/Kg			VHB
	SIM	Fluorene-d10		135		percent	43-98	5	
			Acenaphthene	1.3	0.031	mg/Kg			VHB
			Anthracene	0.12	0.031	mg/Kg			VHB
			Benzo(a)anthracene	0.012	0.031	mg/Kg			VHB
			Benzo(a)pyrene	0.0032	0.031	mg/Kg			VHB
			Benzo(b)fluoranthene	0.007	0.031	mg/Kg			VHB
			Benzo(g,h,i)perylene	0.0016	0.031	mg/Kg			VHB
			Benzo(k)fluoranthene	0.0033	0.031	mg/Kg			VHB
			Chrysene	0.024	0.031	mg/Kg			VHB
			Fluoranthene	0.033	0.031	mg/Kg			VHB
			Fluorene	3.9	0.031	mg/Kg			VHB
			Indeno(1,2,3-cd)pyrene	0.0018	0.031	mg/Kg			VHB
			Naphthalene	79	3.1	mg/Kg			VHB
			Phenanthrene	2.7	0.031	mg/Kg			VHB
			Pyrene	0.06	0.031	mg/Kg			VHB
02NE88SB031	AK101	4-Bromofluorobenzene		195		percent	50-150	1	
		Gasoline Range Organics		110	4	mg/Kg			VHB
02NE88SB032	SIM	Fluorene-d10		156		percent	43-98	10	--
	AK101	4-Bromofluorobenzene		166		percent	50-150	1	
02NE88SB032	SIM	Fluoranthene-d10		60	4.5	mg/Kg			VHB
				38		percent	52-108	1	
				39		percent	43-98	1	
				40		percent	61-122	1	
			Acenaphthene	0.11	0.0054	mg/Kg			VLB
			Acenaphthylene	ND	0.0054	mg/Kg			VQQ
			Anthracene	0.011	0.0054	mg/Kg			VLB
			Benzo(a)anthracene	0.00037	0.0054	mg/Kg			VLB
			Benzo(a)pyrene	ND	0.0054	mg/Kg			VQQ

Table 7 Summary of Surrogates Outside of Acceptance Limits

Sample ID	Method	Surrogate	Analyte	Result	MRL	Units	Limits	Dilution	Qualifier
02NE88SB032	SIM		Benzo(b)fluoranthene	0.00042	0.0054	mg/Kg			VLB
			Benzo(g,h,i)perylene	ND	0.0054	mg/Kg			VQQ
			Benzo(k)fluoranthene	ND	0.0054	mg/Kg			VQQ
			Chrysene	0.00094	0.0054	mg/Kg			VLB
			Dibenz(a,h)anthracene	ND	0.0054	mg/Kg			VQQ
			Fluoranthene	0.0017	0.0054	mg/Kg			VLB
			Fluorene	0.47	0.0054	mg/Kg			VLB
			Indeno(1,2,3-cd)pyrene	ND	0.0054	mg/Kg			VQQ
			Naphthalene	0.9	0.0054	mg/Kg			VLB
			Phenanthrene	0.27	0.0054	mg/Kg			VLB
			Pyrene	0.0035	0.0054	mg/Kg			VLB
02NE88SB033	AK101	4-Bromofluorobenzene		213		percent	50 -150	1	
			Gasoline Range Organics	130	2.6	mg/Kg			VHB
	SW8260B	4-Bromofluorobenzene		160		percent	40 -153	1	
			Ethylbenzene	1.2	0.021	mg/Kg			VHB
			Toluene	0.05	0.021	mg/Kg			VHB
			Xylene, Isomers m & p	4	0.022	mg/Kg			VHB
02NE88SB034	AK101	4-Bromofluorobenzene		o-Xylene	1.5	0.021	mg/Kg		VHB
			Gasoline Range Organics	251		percent	50 -150	1	
	SW8260B	4-Bromofluorobenzene		Gasoline Range Organics	140	3	mg/Kg		VHB
				221		percent	40 -153	1	
			Ethylbenzene	0.94	0.023	mg/Kg			VHB
			Xylene, Isomers m & p	3	0.023	mg/Kg			VHB
02NE88SB234	AK101	4-Bromofluorobenzene		o-Xylene	0.34	0.023	mg/Kg		VHB
			Gasoline Range Organics	247		percent	50 -150	1	
	SW8260B	4-Bromofluorobenzene		Gasoline Range Organics	110	2.3	mg/Kg		VHB
				225		percent	40 -153	1	
			Ethylbenzene	0.83	0.025	mg/Kg			VHB
			Xylene, Isomers m & p	2.8	0.025	mg/Kg			VHB
02NE88SB035	AK101	4-Bromofluorobenzene		o-Xylene	0.27	0.025	mg/Kg		VHB
			Gasoline Range Organics	243		percent	50 -150	1	
	SW8260B	4-Bromofluorobenzene		Gasoline Range Organics	100	2.5	mg/Kg		VHB
				222		percent	40 -153	1	
			Benzene	0.018	0.012	mg/Kg			VHB
			Ethylbenzene	1.1	0.025	mg/Kg			VHB
02NE88SB036	AK101	4-Bromofluorobenzene		Toluene	0.018	0.025	mg/Kg		VHB
			Gasoline Range Organics	173		percent	50 -150	1	
02NE88SB236	AK101	4-Bromofluorobenzene		Gasoline Range Organics	170	3.3	mg/Kg		VHB
				161		percent	50 -150	1	
02NE88SB037	AK101	4-Bromofluorobenzene		Gasoline Range Organics	88	2.5	mg/Kg		VHB
				157		percent	50 -150	1	-
02NE88SB237	AK101	4-Bromofluorobenzene		Gasoline Range Organics	ND	4.1	mg/Kg		-
				167		percent	50 -150	1	-
			Gasoline Range Organics	ND	4	mg/Kg			-

## Key

- results not qualified when surrogate above criteria and sample did not contain detectable amount of analyte.
- results not qualified when dilution is greater than 5.

\* - Result reported between the MRL and MDL. The final qualifier is VJ.

MDL - method detection limit

mg/Kg - milligram per kilogram

MRL - method reporting limit

ND - not detected

VHB - Result estimated with a high bias

VJ - Result estimated

VLB - Result estimated with a low bias

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## **APPENDIX G**

*USACE Trip Report – Biological Sampling*

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**DEPARTMENT OF THE ARMY**  
U.S. ARMY ENGINEER DISTRICT, ALASKA  
P.O. BOX 898  
ANCHORAGE, ALASKA 99506-0898

REPLY TO  
ATTENTION OF:

CEPOA-EN-CW-ER (1105-2-10b)

MEMORANDUM FOR RECORD: Final Draft printed, 6 September 2001.

SUBJECT: Northeast Cape, Saint Lawrence Island fish data collection report, August 18 through August 22, 2001.

### **Introduction**

A formally used defense site (FUDS) is located near the Northeast Cape of Saint Lawrence Island, Alaska. The site was abandoned in 1972 and a clean up of the facility is currently underway. Fuel spills were known to exist during the facility's operation and contamination from the spills and other sources may have contaminated fish resources in the Suqitughneq River drainage that originates at the site. The purpose of this field effort was to collect fish samples for human-risk analysis in accordance with the biological sampling plan (BSP). Anadromous Dolly Varden (*Salvelinus malma*), pink salmon (*Onchorhynchus gorbuscha*) and Alaska blackfish (*Dallia pectoralis*) were the target species.

### **Survey Location**

Locations of capture attempts were the Suqitughneq River, Tapisaghak River and the outlet of the Seepanpak Lagoon, Northeast Cape, Saint Lawrence Island, Alaska. The latitude and longitude of each data collection point is listed.

### **Schedule**

The data collection took place between 17 August and 22 August, 2001.

### **Methods**

Dolly Varden and Alaska blackfish were captured in baited hoop nets and minnow traps, and with gillnets. The traps were baited with salmon eggs preserved with a mixture of laundry borax, non-iodized table salt, sugar, and strawberry flavored jello. The salmon eggs used to bait the hoop nets were placed in a container designed to release scent and the fish captured in the hoop nets were not directly exposed to the bait. The blackfish captured in the minnow traps were directly exposed to the bait and could have ingested it while in the traps. Traps were soaked for approximately 24 hours.

Capture with sport gear was attempted, but no fish were caught with sport tackle.

### **Results and Discussion**

Dolly Varden and Alaska blackfish were caught as in the below table (Table 1). Only the fish listed in table 2 were retained. All others were released.

**Table C-1 Target Species Caught During the Survey**

Date	Location	Trap #	N Lat.	W Lon.	Gear	Dolly Varden		Blackfish		Pink Salmon
						Num	mm	Num	mm	
18 Aug 01	Suqi River	1	63 18 45.0	168 56 38.2	HN	23	118- 208	0		
	Suqi River	2	63 18 50.6	168 56 59.9	HN	2	146- 207	0		
	Suqi River	3	63 18 52.9	168 56 59.9	HN	1	232	0		
	Suqi River	4	63 19 21.0	168 58 26.8	HN	0		0		
	Suqi Lagoon	5	63 19 36.4	168 57 54.4	HN	0		0		
	Suqi Lagoon	6	63 20 03.6	168 56 45.6	HN	0		0		
	Suqi Ditch	1	63 18 40.5	168 57 42.0	MT	0		0		
	Suqi Ditch	2	63 18 41.4	168 57 46.0	MT	0		0		
	Suqi Ditch	3	63 18 42.6	168 57 50.2	MT			0		
	Suqi Ditch	4	63 18 49.1	168 57 46.6	MT			3	125- 137	
	Suqi Ditch	5	63 18 50.4	168 57 45.6	MT			6	117- 210	
	Suqi Ditch	6	63 18 50.9	168 57 45.9	MT	0		3	118- 134	
19 Aug 01	Suqi River	1-A	63 18 46.1	168 56 41.6	HN	15	82-174	1	62	
	Suqi River	2-A	63 18 50.3	168 57 02.4	HN	28	98-285	0		
	Suqi River	3-A	63 18 52.9	168 57 32.5	HN	0		0		
	Suqi Lagoon	5-A	63 19 36.4	168 57 54.4	HN	1	153	0		
	Suqi Lagoon	6-A	63 20 03.6	168 56 45.6	HN	0		0		
	Suqi Lagoon	7	63 20 01.4	168 56 50.2	HN	0		0		
	Suqi Ditch	1-a	63 18 42.6	168 57 50.2	MT	0		0		
	Suqi Ditch	2-a	63 18 42.6	168 57 50.2	MT	0		0		

**Table C-1 (cont.) Target Species Caught During the Survey**

Date	Location	Trap #	N Lat.	W Lon.	Gear	Dolly Varden		Blackfish		Pink Salmon
						Num	mm	Num	mm	
	<i>Suqi Ditch</i>	3-a	63 18 49.1	168 57 46.6	MT	0		0		
	<i>Suqi Ditch</i>	4-a	63 18 49.1	168 57 46.6	MT	0		2	110-125	
	<i>Suqi Ditch</i>	5-a	63 18 50.4	168 57 45.6	MT	0				107-152
	<i>Suqi Ditch</i>	6-a	63 18 50.9	168 57 45.9	MT	0				
20 Aug 01	<i>Suqi River</i>	1-B	63 18 45.0	168 56 38.2	HN	51	82-218	0		
	<i>Suqi River</i>	2-B	63 18 50.3	168 57 02.4	HN	21	87-222	0		
	<i>Suqi River</i>	3-B	63 18 53.3	168 57 25.8	HN	4	190-306	0		
	<i>Tap River</i>	4-B	63 18 57.7	168 50 51.7	HN	0		0		
	<i>Tap River</i>	5-b	63 18 57.7	168 50 51.7	HN	0		0		
	<i>Tap River</i>	6-B	63 18 52.0	168 51 174.9	HN	0		0		
	<i>Suqi Ditch</i>	1-b	63 18 53.4	168 57 44.1	MT	3	137-155	16	82-150	
	<i>Suqi Ditch</i>	2-b	63 18 53.4	168 57 44.1	MT					
	<i>Suqi Ditch</i>	3-b	63 18 53.4	168 57 44.1	MT					
	<i>Suqi Ditch</i>	4-b	63 18 53.4	168 57 44.1	MT					
	<i>Suqi Ditch</i>	5-b	63 18 53.4	168 57 44.1	MT					
	<i>Suqi Ditch</i>	6-b	63 18 53.4	168 57 44.1	MT					
	<i>Suqi Lagoon</i>	1	63 19 35.7	168 57 51.4	GN	3	455-480			
	<i>Tap Lagoon</i>	1	63 18 59.5	168 50 49.0	GN	0		0		4
21 Aug 01	<i>Suqi River</i>	3-C	63 18 53.3	168 57 25.8	HN	0		0		
	<i>Suqi River</i>	8-C	63 18 52.4	168 57 21.5	HN	2	124-213	2	132-148	
	<i>Suqi Lagoon</i>	1	63 19	168 57 51.4	GN	8	415-	0		

**Table C-1 (cont.) Target Species Caught During the Survey**

Date	Location	Trap #	N Lat.	W Lon.	Gear	Dolly Varden		Blackfish		Pink Salmon
						Num	mm	Num	mm	Num
			35.7				477			
	<i>Tap Lagoon</i>	1	63 18 59.5	168 50 49.0	GN	4	420- 464	0		3
	<i>Seep Lagoon</i>	1	63 20 42.7	169 16 12.1	GN	0		0		1
22 Aug 01	<i>Suqi Lagoon</i>	1	63 19 35.7	168 57 51.4	GN	8	420- 520	0		0

*Suqi* = Refers to locations within the Suqitughneq River drainage.

*Tap Lagoon* = Tapisaghak River Lagoon.

*Seep Lagoon* = Seepanpak Lagoon

**Table C-2** Fish from Table 1 that were Retained for Analysis  
 (all others in Table 1 were released).

Date	Location	Dolly Varden		Blackfish		Pink Salmon	
		Length <sup>a</sup>	Wt. (g)	Length <sup>a</sup>	Wt. (g) <sup>b</sup>	Length <sup>a</sup>	Wt. (g)
18 Aug	Suqi River			125			
	Suqi River			137			
	Suqi River			210			
	Suqi River			135			
	Suqi River			138			
	Suqi River			139			
	Suqi River			122			
	Suqi River			117			
	Suqi River			134			
	Suqi River			128			
19 Aug	Suqi River	285	200	125			
	Suqi River	254	170	110			
	Suqi River	208	80	138			
	Suqi River	240	125	140			
	Suqi River	218	100	122			
	Suqi River	215	90	131			
	Suqi River			125			
	Suqi River			152			
	Suqi River			110			
	Suqi River			125			
	Suqi River			45			
	Suqi River			107			
	Suqi River			145			
20 Aug	Suqi River	306	300	128		470	980
	Suqi River	455	800	12		445	880
	Suqi River	470	1100	119		463	1140
	Suqi River	480	1090	124			
	Suqi River			128			
	Suqi River			110			
	Suqi River			117			
	Suqi River			133			
	Suqi River			129			
	Suqi River			102			
	Suqi River			142			
	Suqi River			118			
	Suqi River			140			
	Suqi River			128			
	Suqi River			122			
	Suqi River			120			

**Table C-2 (cont.) Fish from Table 1 that were Retained for Analysis  
(all others in Table 1 were released).**

Date	Location	Dolly Varden		Blackfish		Pink Salmon	
		Length <sup>a</sup>	Wt. (g)	Length <sup>a</sup>	Wt. (g) <sup>b</sup>	Length <sup>a</sup>	Wt. (g)
	Suqi River			124			
	Suqi River			112			
	Suqi River			116			
	Suqi River			135			
	Suqi River			135			
	Suqi River			128			
	Suqi River			135			
	Suqi River			112			
	Suqi River			150			
	Suqi River			125			
	Suqi River			138			
	Suqi River			135			
	Suqi River			110			
	Suqi River			119			
	Suqi River			108			
	Suqi River			82			
21 Aug	Suqi River	455	980				
	Suqi River	505	1220				
	Suqi River	450	930				
	Suqi River	415	640				
	Suqi River	445	780				
	Suqi River	477	950				
	Suqi River	448	900				
	Suqi River	420	740				
	Tap River	465	980				
	Tap River	460	860				
	Tap River	490	1240				
22 Aug	Suqi River	450	860				
	Suqi River	440	900				
	Suqi River	420	780				
	Suqi River	480	1090				
	Suqi River	520	1320				
	Suqi River	445	830				
	Suqi River	430	680				
	Suqi River	480	1170				

a. Length is from tip of snout to fork of tail in millimeters for comparison between species (a statistical, mid-eye-to-fork-of-tail measurement was also taken, but not reported).

b. Composite live weight.

**Table C-3      Summary of Sample Goals**

Drainage	Dolly Varden		Blackfish		Pink Salmon	
	Goal	Retained	Goal	Retained	Goal	Retained
Suqi River	10	10	300 grams <sup>a</sup>	1,355 grams <sup>a</sup>	2	0
Tap River	6	3	0	0	2	3
Additional Suqi River Samples	9	9	0	0	0	0
Suqi River Resident Fish Samples	0	8	N/A	N/A	N/A	N/A
<b>Total</b>	<b>25</b>	<b>30</b>	<b>300</b>	<b>1,355</b>	<b>4</b>	<b>3</b>

a – Live weight.

Note: Anadromous Dolly Varden of subsistence harvest size was preferred for analysis. Resident fish were retained for possible contaminant comparison.

The BSP called for sample weights of heads, filets, and roe of 100 grams from anadromous Dolly Varden of a size (approximately 7 + inches) that might typically be retained for human consumption. Recommended sample sizes and weights of Dolly Varden and Alaska blackfish from the Suqitughneq River were met, but the background sample size from the Tapisaghak River was short by three fish.

There is no known discharge data available from the Tapisaghak River, but during this survey it was approximately 30 feet wide and one foot deep when it is contained in one channel. The river appeared to be at normal stage and the water was exceptionally clear. The mouths of all lagoons at Northeast Cape, except perhaps the Seepanpak Lagoon, appear to berm with surf-deposited, sand and gravel during periods of brisk northerly winds. The Seepanpak Lagoon is reported to berm over, but it was open during our visits. The Tapisaghak River and Suqitughneq River lagoons were bermed during the survey, and it was not possible for fresh fish to enter the lagoons from the Bering Sea. Prior to the breaching of the Tapisaghak River berm, only one pink salmon was seen in the lagoon during several visits when we attempted to capture fish with hoop nets and sport tackle. We caught late-run pink salmon and Dolly Varden in the lower lagoon with a gillnet after the berm was breached and fresh fish entered the lagoon, but because of time and weather, only one gillnet set was possible after the berm was breached.

The Tapisaghak River (3.8 miles east of the Suqitughneq River) appears to support a reasonable sized run of pink salmon judged by the few hundred pink salmon estimated spawning up to about 3 miles upstream from the lagoon. The river is braided in places and shows definite signs of scouring, but it is probable that during an even-numbered year, even more pink salmon would spawn in this stream. Pink salmon are of questionable value for this study because of their short resident time in freshwater as fry, but three adult pink salmon were retained as possible background samples. Three sockeye salmon were also seen a few miles upstream in the Tapisaghak River, but they were considered strays to the drainage.

The Suqitughneq River normally lacks the discharge to breach the berm during northerly winds, and probably has never been able to support viable spawning runs of pink salmon because of it. Unlike in the Tapisaghak River where anadromous Dolly Varden that entered prior to berthing had already moved upstream, anadromous Dolly Varden in the Suqitughneq River lagoon had not moved upstream and they were susceptible to the gillnet set in the lagoon.

The Suqitughneq River also supports a stock of resident Dolly Varden that do not appear to migrate to sea. These fish were noted to be sexually mature starting at about 6 inches in length. Resident fish might be expected to have higher contaminant levels present than the anadromous fish because of their continuous residence in the affected drainage. Resident fish from the Suqitughneq River were retained because: 1) we were not catching any anadromous fish during the first few field days and could not guarantee filling the sample goal with anadromous fish, and 2) they spend their lives in the Suqitughneq River, and could possibly be used to help fingerprint any specific Suqitughneq River contaminants that might be found in the anadromous fish.

The mouth of the Seepanpak Lagoon, 9.4 miles west of the Suqitughneq River mouth, was visited on several occasions in an attempt to collect background samples of anadromous Dolly Varden in the event collection attempts at the Tapisaghak River failed. We were informed by the local Natives that, similar to the other streams in the area, the run of anadromous Dolly Varden in the Seepanpak Lagoon drainages was several weeks past peak, but that we may get lucky and catch some late fish. Several angler hours of fishing with sport tackle and one 24 hour set of a 60 foot gillnet produced two strikes from Dolly Varden on sport tackle and the capture of one pink salmon and a large warty sculpin (*Myoxocephalus verrucosus*) in the gill net. According to the local Natives, late July through the first week of August is the best times to catch anadromous salmon and Dolly Varden as they enter the lagoons in this area of Saint Lawrence Island. We appeared to be about two weeks behind the run for this effort, and only low numbers of late-run fish appeared to be entering the rivers once the berms were breached.

A small lake at the head of the Suqitughneq River was visited several times during the survey. This lake appears to be very shallow (no more than about 5 feet deep) with a mud bottom. Although there are reports of fish in the lake, we saw none except the small resident Dolly Varden near the outlet. A flock of several dabbler ducks, possibly pintails, were observed tipping to feed in the center of the lake testifying to its shallowness. Additionally, the water is very clear and the substrate appears to have a uniform, gray appearance with no darker appearing holes when viewed from a higher vantage point. Unless large springs are present, this lake would most likely freeze to the bottom during winter and result in a winterkill of most fish. It is speculated that resident, and perhaps anadromous, Dolly Varden in the Suqitughneq River drainage overwinter in deeper holes and under the abundant cutbanks, or in the lagoon. Alaska blackfish are exceptionally hardy and can overwinter in muddy areas of the drainage with low oxygen concentrations.

A late run of chum salmon reportedly entered the Tapisaghak River and anadromous Dolly Varden were seen upstream in the Suqitughneq River after the COE biologists departed the area on 23 August 2001 (F. Kingeekuk Jr., personal communication to W. O'Connell). The extent of these reported sightings is unknown.

## Site Photos



Photo 1. Recovery of a hoop net trap from the Suqitughneq River at Northeast Cape, Saint Lawrence Island, Alaska on 20 August 2001.

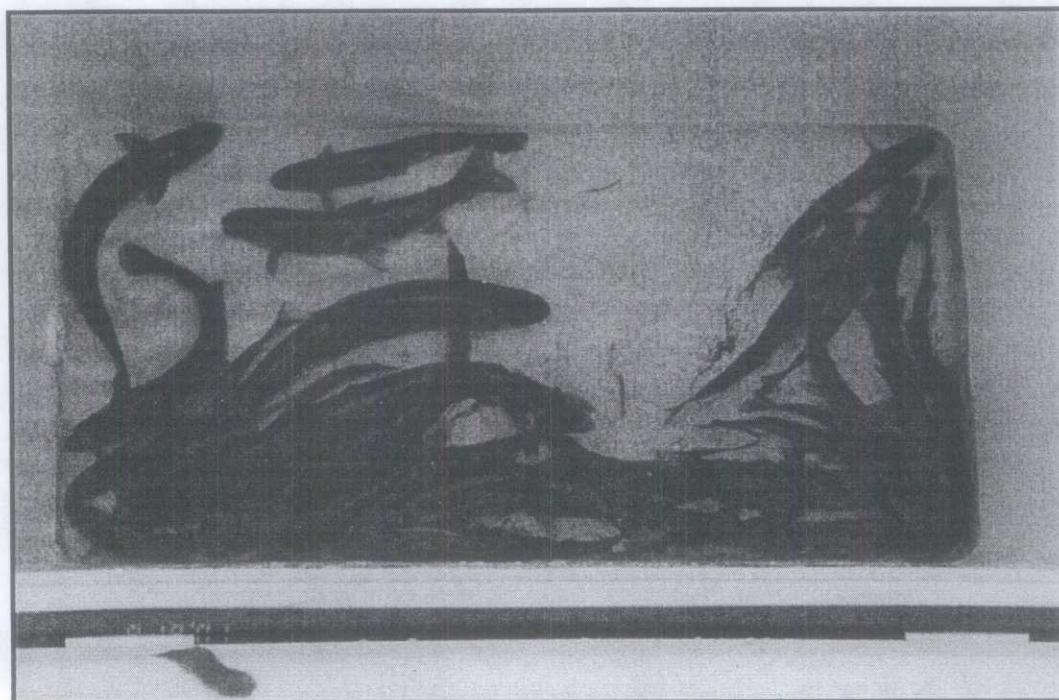


Photo 2. Catch of resident and possibly pre-smolt Dolly Varden from the Suqitughneq River at Northeast Cape, Saint Lawrence Island, Alaska on 20 August 2001 with a baited hoop net trap.

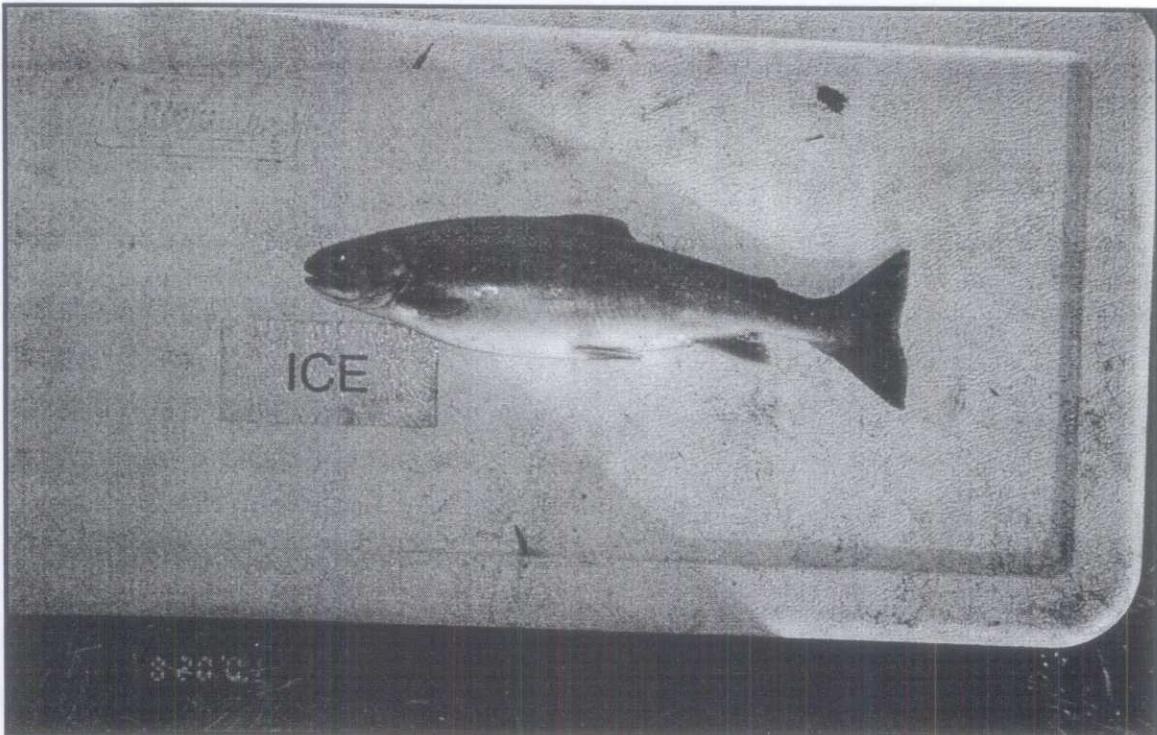


Photo 3. Example of a resident female Dolly Varden (306 mm) in spawning condition from the Suqitughneq River at Northeast Cape, Saint Lawrence Island, Alaska during late August 2001.

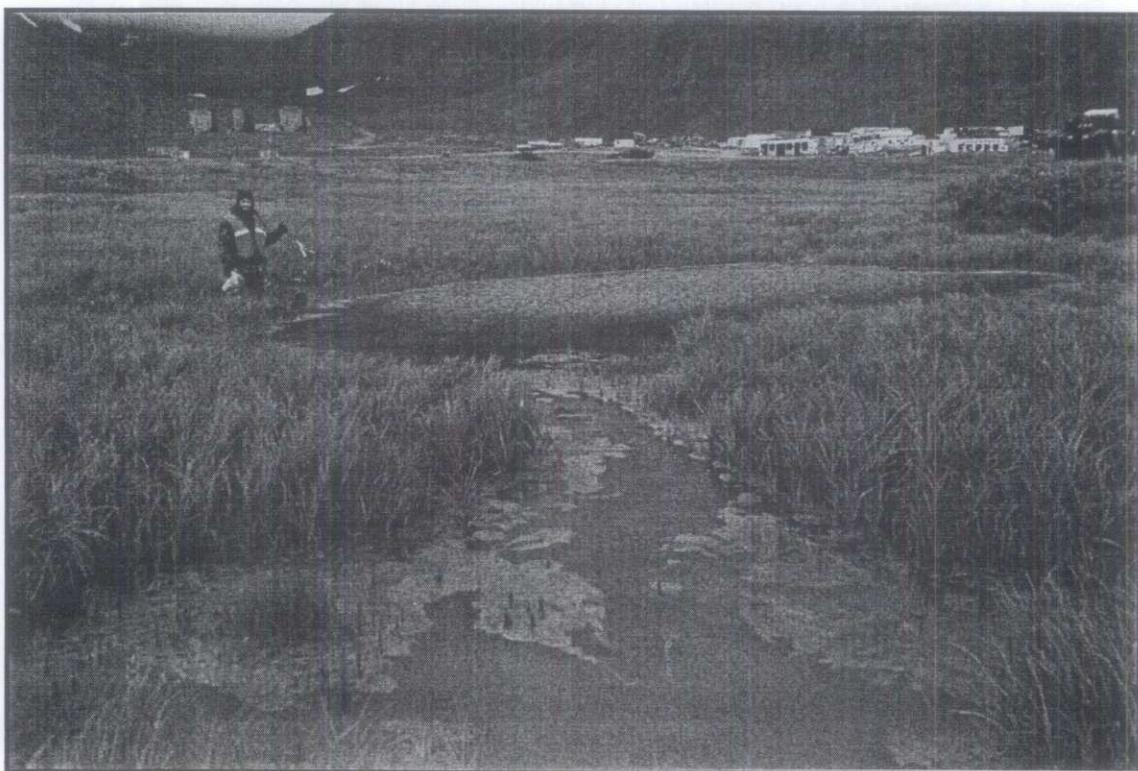


Photo 4. Typical Alaska blackfish habitat in the Suqitughneq River drainage ditch at Northeast Cape, Saint Lawrence Island, Alaska during late August 2001.

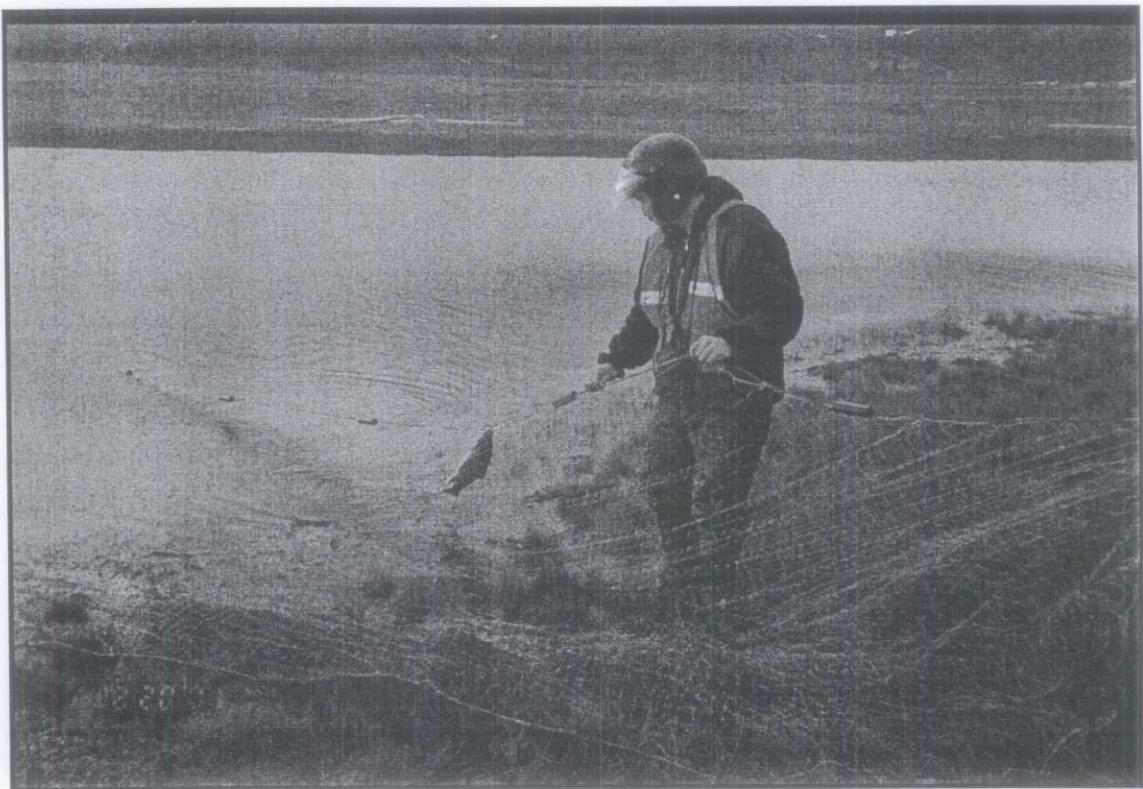


Photo 5. Recovery of a Dolly Varden from a gillnet in the Suqitughneq River lagoon at Northeast Cape, Saint Lawrence Island, Alaska on 20 August 2001.

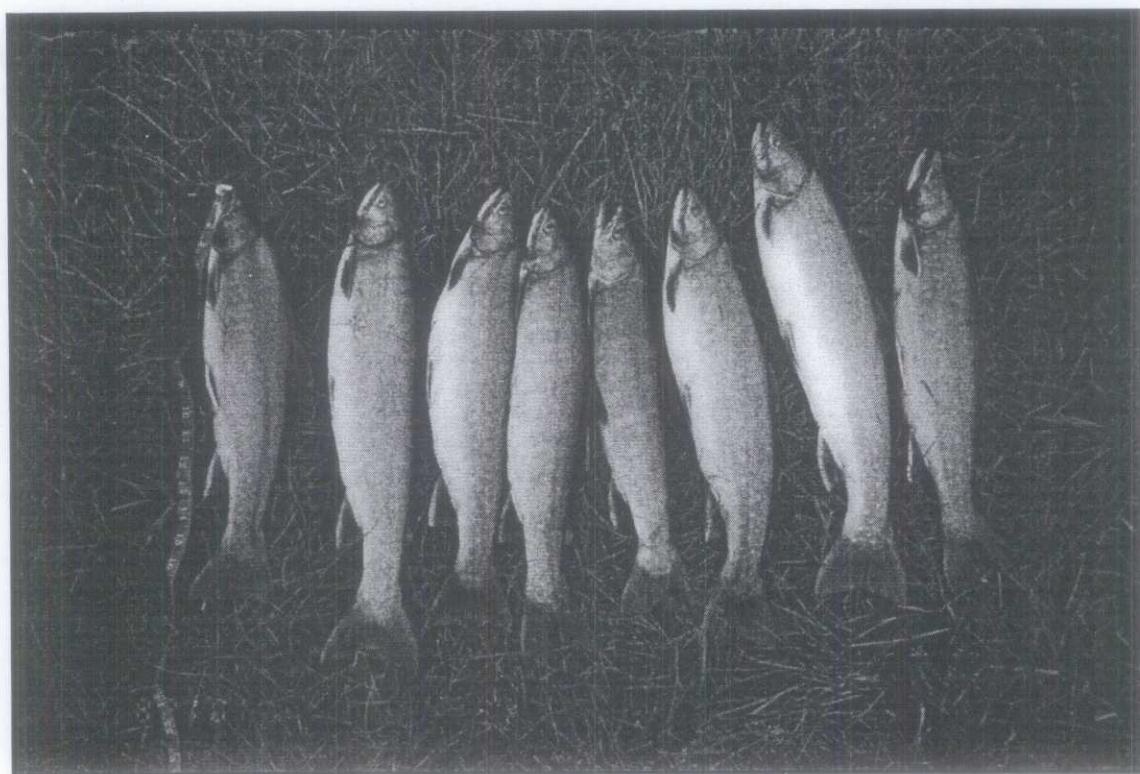


Photo 6. Catch of anadromous Dolly Varden from the Suqitughneq River lagoon at Northeast Cape, Saint Lawrence Island, Alaska on 21 August 2001.

## **Personnel**

The following persons conducted this sampling effort in the field.

Larry Bartlett, Corps of Engineers. Lead biologist.

Chris Hoffman, Corps of Engineers. Assisting biologist.

William O'Connell, Montgomery-Watson-Harza. Fish sample recipient and shipping preparation.

Floyd Kingeekuk Jr. Polar bear watch and local guide.

### **This Trip Report was written by:**

Larry D. Bartlett  
General Biologist  
En-Cw-Er

### **And review by:**

Chris Hoffman  
General Biologist  
En-Cw-Er

### **This trip report is electronically filed in:**

G:\\En-Cw\\En-Cw-Er\\LarryB\\NE Cape FUDS\\trip report Aug 17-23-01.doc

---

## **APPENDIX H**

*Site Survey Data*

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**MWH**

nec-2001 fieldpts.txt

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nec-2001 fieldpts.txt

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nec-2001 fieldpts.txt

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nec-2001 fieldpts.txt

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SEP 25 2002

AMERICAN  
MONTGOMERY WATSON HARZA

## MULLIKIN SURVEYS

Physical Address: 381 E. Bonanza Ave.  
Mail: P.O. Box 790, Homer, AK 99603-0790  
Ph. & Fax: (907) 235-8975      E-mail: mullikin@xyz.net

MONTGOMERY WATSON HARZA

September 19, 2002

Attention: Bonnie McLean  
MWH Americas, Inc.  
4100 Spenard Road  
Anchorage, AK 99517

Re: Northeast Cape 2002

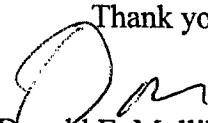
Dear Bonnie:

Please find enclosed an AutoCAD version 200i drawing file of Northeast Cape 2002.

"Ptsground" layer contains the ground elevation at monitor wells (#737 to 746). "Ptsmeas-2002" depicts "shots" for top of PVC pipe and bore hole locations. Also included on disk is a comma delineated point file. Small and large paper plot enclosed.

The preliminary drawing also shows the two rebar and aluminum caps set on site this year, points 3201 and 3202, and several building corners located (the garage and building 107).

Thank you for selecting Mullikin Surveys for this project.



Donald E. Mullikin, P.L.S.

DEM:jvm

C:\Documents and Settings\Administrator\My Documents\Montgomery-Watson\NorthEast Cape\NECape2002.wpd

## 2002.txt

Loc ID	East	North	'Elevation, ft. msl'	
			Ground	PVC
MW 88-1	98080.4499	96392.8914	82.29	81.89
MW 88-2	98257.8812	96455.0726	71.18	70.88
MW 88-3	98169.9401	96458.3585	77.75	77.35
MW 88-4	98365.8078	96331.1320	68.63	68.23
MW 88-5	98292.1088	96216.7210	68.37	67.87
MW 88-6	98271.8042	96140.1494	69.13	68.83
MW 88-7	98271.2457	96033.1581	72.83	72.33
MW 88-8	98185.9420	96083.4849	73.76	73.46
MW 88-9	98044.5023	96154.1887	81.79	80.99
MW 88-10	97970.2989	96293.0099	86.86	86.46
SB 88-11	98320.2355	96241.8412	66.84	
SB 88-12	98329.8776	96398.0750	69.71	,
SB 88-13	98303.2553	96341.1182	69.51	
SB 88-14	98292.8032	96251.2105	67.11	
SB 88-15	98224.4465	96253.7354	71.21	
SB 88-16	98182.7094	96260.0342	72.95	
SB 88-17	98270.0480	96171.5812	69.65	
SB 88-18	98228.2467	96070.5355	71.93	
SB 22-1	97683.0309	96206.4925	97.75	
SB 22-2	97685.3823	96233.7486	98.14	

2002.txt

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3230,98080.6147,96389.9459,81.89,88-1  
3232,97685.3823,96233.7486,98.14,22-2  
3233,97683.0309,96206.4925,97.75,22-1  
3234,97707.5250,96277.2986,95.15,se bldg cor  
3235,97772.6025,96268.1874,94.13,ne bldg cor  
3236,97909.4993,96375.6140,89.46,se bldg cor  
3237,97980.2479,96365.9765,89.89,ne bldg cor  
3238,97973.9268,96320.5867,89.46,nw bldg cor  
3239,98271.2457,96029.4259,72.33,88-7  
3241,98250.4944,96035.9200,73.99,bldg107 ne  
3243,98213.0639,96337.5979,74.11,garage ne  
3244,98139.2229,96375.9385,75.12,garage se  
3501,99641.3824,97547.3059,45.82,fsp708  
3506,97970.3921,96289.2790,86.86,rb rp to 88-10

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## **APPENDIX I**

*Geotechnical Lab Test Report*

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## **LETTER OF TRANSMITTAL**

BSM

**R&M CONSULTANTS, INC.**

**9101 VANGUARD DRIVE  
ANCHORAGE, ALASKA 99507**  
**TEL: (907) 522-1707**  
**FAX: (907) 522-3403**

DATE

11-7-2002

**PROJECT NO.**

251177

**RE: PERMEABILITY TESTS**

TO

MONTGOMERY WATSON HARTZ

4100 SPENARD ROAD

ANCHORAGE, AK 99517

ATTENTION JOHANNA DREHER

**WE ARE SENDING YOU:**

Attached

Under separate cover via

---

**The following items:**

## Shop Drawings

## Plans

## Specifications

### Change order

**— Other**

• 100 •

THESE ARE TRANSMITTED as checked below:

- For approval       Approved as submitted       Resubmit \_\_\_\_\_ copies for approval  
 For your use       Approved as noted       Submit \_\_\_\_\_ copies for distribution  
 As requested       Returned for corrections       Return \_\_\_\_\_ corrected prints  
 For review and comment  
FOR BIDS DUE \_\_\_\_\_  
PRINTS RETURNED AFTER LOAN TO US

**REMARKS**

COPY TO DAVE JOONSON

SIGNED:

Richard A. Dienel

If enclosures are not as noted, kindly notify us at once.

## LABORATORY TEST REPORT

RSM

R&amp;M CONSULTANTS, INC.

9101 VANGUARD DR. ANCHORAGE, ALASKA 99507 PH 907-522-1707

CLIENT: MWH  
 PROJECT: NE Cape  
 CLIENT PROJECT: NE Cape  
 CLIENT ADDRESS: 4100 Spenard Road, Anchorage, AK 99517  
 PROPOSED USE:  
 SOURCE: Test Boring 88-6  
 SAMPLED FROM: Auger / Brass Sleeve  
 LOCATION: Phase III, RI

R&amp;M PROJECT: 251177

LAB NO.: 437

FIELD NO.: 02NE88SB041

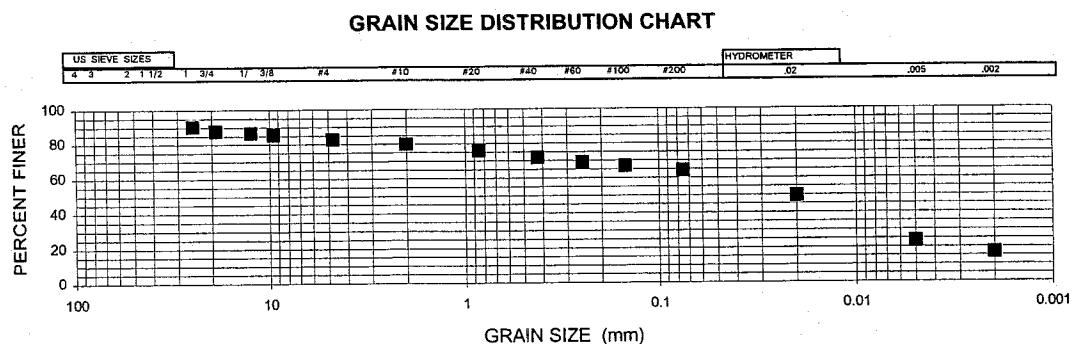
DATE REPORTED: 11/7/2002

DATE RECEIVED: 8/26/2002

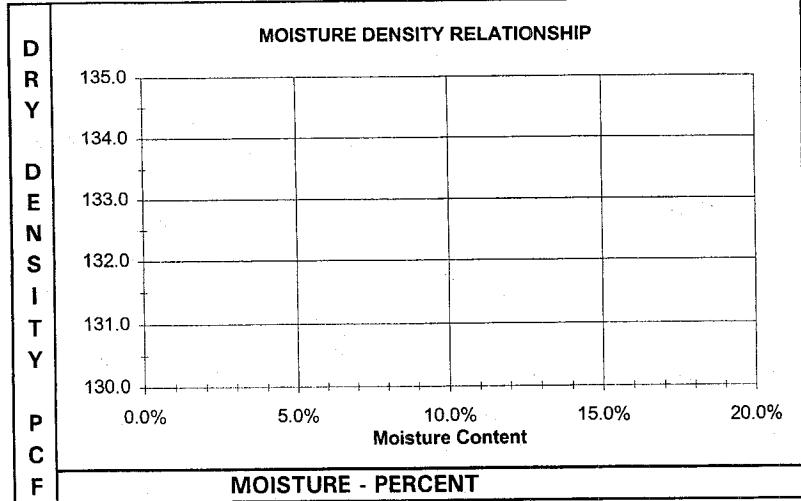
GRAIN SIZE DISTRIBUTION			CLASSIFICATION			COMPACTION		
SIEVE	% PASS	SPEC.		UNIFIED	AASHTO	FAA		
5"			% + 10				OPTIMUM MOISTURE:	
4"			% + 3				CORR. OPTIMUM MOISTURE:	
3"			% GRAVEL	17.3			MIN. DRY DENSITY:	
2"			% SAND	18.5			MAX. DRY DENSITY:	
1 1/2"			% SILT	64.2			CORR. MAX. DRY DENSITY:	
1"	90		% CLAY				% FRACTURE:	
3/4"	88		FSV				METHOD:	
1/2"	87		LL	28.0			NATURAL DENSITY:	
3/8"	86		PL	23.7			NATURAL MOISTURE:	21.7%
#4	83		PI	4.3			WEIGHT LOOSE:	
#8			CLASS	ML			WEIGHT RODDED:	
#10	80							
#16								
#20	76							
#30								
#40	72							
#50								
#60	69							
#80								
#100	67							
#200	64.2							
.02MM	49.6							
.005MM	23.5							
.002MM	16.8							

TOTAL WT. TESTED:

2,596 GMS.



COARSE	SPEC	FINE	SPEC
			DELETERIOUS MAT.
			MINUS #200 MESH
			SOFT FRAGMENTS
			COAT & LIG. OR L.T.WT.PT.
			CLAY LUMPS
			STICKS & ROOTS
			FRIABLE PARTICLES
			THIN-ELONGATED
			ORGANIC COLOR
			FINENESS MODULUS
			SULFATE SOUNDNESS
			DEGRADATION VALUE
			ABSORPTION
			SPG.-BULK
			SPG.-BULK S.S.D.
			SPG.-APPARENT
1.251			
2.557			
2.589			
2.641		2.585	



Tech Responsible: M. Panilo / D. Gettman

Checked By: Rich Giessel

ORGANIC CONTENT %:

L.A. ABRASION LOSS:

PERMEABILITY (cm/s): 1.3E-07

Signed By: *Richard A. Giessel*

Title: Quality Assurance Manager

R&amp;M CLASSIFICATION: Silt, with some Gravel, and with some Sand

REMARKS: Brass liner sample consisted of three distinct soil layers, blue-grey silt, brown gravelly sand, and another layer of blue-grey silt.

## LABORATORY TEST REPORT



R&amp;M CONSULTANTS, INC.

9101 VANGUARD DR. ANCHORAGE, ALASKA 99507 PH 907-522-1707

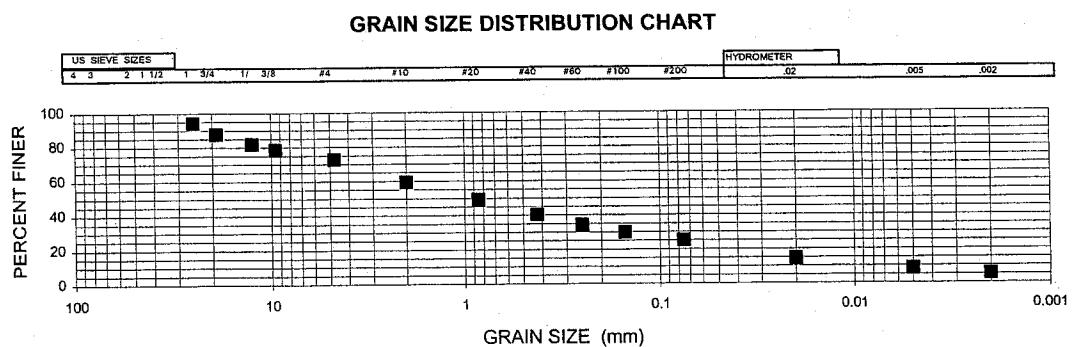
R&amp;M PROJECT: 251177

CLIENT: MWH  
 PROJECT: NE Cape  
 CLIENT PROJECT: NE Cape  
 CLIENT ADDRESS: 4100 Spenard Road, Anchorage, AK 99517  
 PROPOSED USE:  
 SOURCE: Test Boring 88-9  
 SAMPLED FROM: Auger / Brass Sleeve  
 LOCATION: Phase III, RI

SUBMITTED BY: Johanna Dreher  
 DATE SAMPLED: 8/19/2002  
 DEPTH: 10-12'

LAB NO.: 437  
 FIELD NO.: 02NE88SB042  
 DATE REPORTED: 11/7/2002  
 DATE RECEIVED: 8/26/2002

GRAIN SIZE DISTRIBUTION			CLASSIFICATION			COMPACTION	
SIEVE	% PASS	SPEC.		UNIFIED	AASHTO	FAA	
5"			% + 10				OPTIMUM MOISTURE:
4"			% + 3				CORR. OPTIMUM MOISTURE:
3"			% GRAVEL	27.3			MIN. DRY DENSITY:
2"			% SAND	47.7			MAX. DRY DENSITY:
1 1/2"			% SILT	25.0			CORR. MAX. DRY DENSITY:
1"	94		% CLAY				% FRACTURE:
3/4"	88		FSV				METHOD:
1/2"	82		LL				NATURAL DENSITY:
3/8"	78		PL				NATURAL MOISTURE:
#4	73		PI				WEIGHT LOOSE:
#8			CLASS	SM			WEIGHT RODDED:
#10	59						
#16							
#20	49						
#30							
#40	40						
#50							
#60	34						
#80							
#100	30						
#200	25.0						
.02MM	14.3						
.005MM	8.4						
.002MM	5.4						



TOTAL WT. TESTED:

5,475 GMS.

COARSE	SPEC	FINE	SPEC	DELETERIOUS MAT.	D R Y D E N S I T Y	P C F	MOISTURE DENSITY RELATIONSHIP
				MINUS #200 MESH	135.0		
				SOFT FRAGMENTS	134.0		
				COAT & LIG. OR L.T.WT.PT.	133.0		
				CLAY LUMPS	132.0		
				STICKS & ROOTS	131.0		
				FRIABLE PARTICLES	130.0		
0.507				THIN-ELONGATED	0.0%	5.0%	10.0%
2.590				ORGANIC COLOR	15.0%	20.0%	
2.603				FINENESS MODULUS			
2.624		2.640		SULFATE SOUNDNESS			
				DEGRADATION VALUE			
				ABSORPTION			
				SPG.-BULK			
				SPG.-BULK S.S.D.			
				SPG.-APPARENT			

Tech Responsible: M. Panilo / D. Gettman

Checked By: Rich Giessel

ORGANIC CONTENT %:

L.A. ABRASION LOSS:

PERMEABILITY (cm/s): 7.0E-06

Signed By: *Richard A. Giessel*

Title: Quality Assurance Manager

R&amp;M CLASSIFICATION: Sand, with some Gravel, and with some Silt

REMARKS:

## LABORATORY TEST REPORT

**RSM**

R&amp;M CONSULTANTS, INC.

9101 VANGUARD DR. ANCHORAGE, ALASKA 99507 PH 907-522-1707

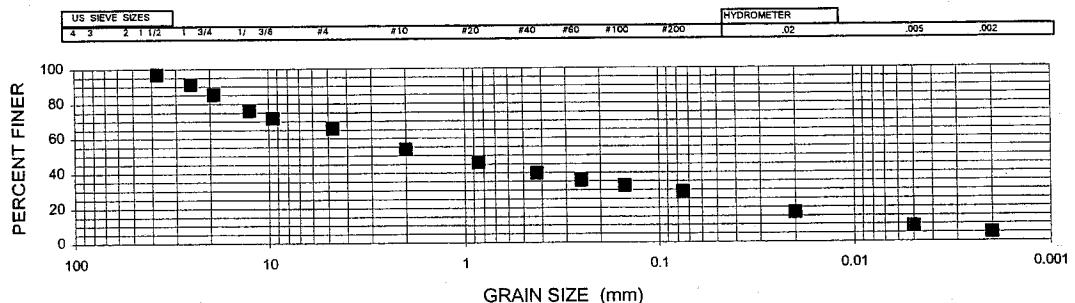
R&amp;M PROJECT: 251177

CLIENT: MWH  
 PROJECT: NE Cape  
 CLIENT PROJECT: NE Cape  
 CLIENT ADDRESS: 4100 Spenard Road, Anchorage, AK 99517  
 PROPOSED USE:  
 SOURCE: Test Boring 88-16  
 SAMPLED FROM: Auger / Brass Sleeve  
 LOCATION: Phase III, RI

LAB NO.: 437  
 FIELD NO.: 02NE88SB043  
 DATE SAMPLED: 8/20/2002  
 DEPTH: 7-9'  
 DATE REPORTED: 11/7/2002  
 DATE RECEIVED: 8/26/2002

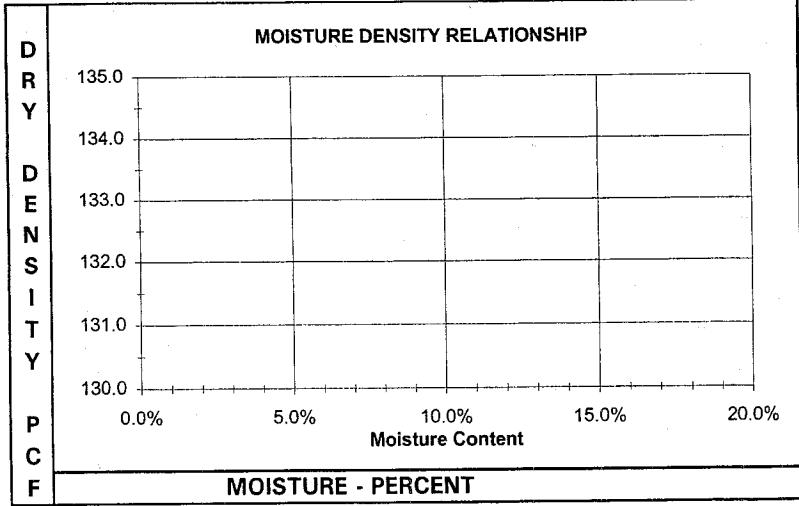
GRAIN SIZE DISTRIBUTION			CLASSIFICATION			COMPACTION	
SIEVE	% PASS	SPEC.		UNIFIED	AASHTO	FAA	
5"			% + 10				OPTIMUM MOISTURE:
4"			% + 3				CORR. OPTIMUM MOISTURE:
3"			% GRAVEL	34.3			MIN. DRY DENSITY:
2"			% SAND	36.7			MAX. DRY DENSITY:
1 1/2"	97		% SILT	29.0			CORR. MAX. DRY DENSITY:
1"	91		% CLAY				% FRACTURE:
3/4"	85		FSV				METHOD:
1/2"	76		LL				NATURAL DENSITY:
3/8"	72		PL				NATURAL MOISTURE:
#4	66		PI				WEIGHT LOOSE:
#8			CLASS	SM			WEIGHT RODDED:
#10	54						
#16							
#20	46						
#30							
#40	40						
#50							
#60	36						
#80							
#100	33						
#200	29.0						
.02MM	16.9						
.005MM	8.7						
.002MM	5.1						

GRAIN SIZE DISTRIBUTION CHART



TOTAL WT. TESTED: 5,321 GMS.

COARSE	SPEC	FINE	SPEC
			DELETERIOUS MAT.
			MINUS #200 MESH
			SOFT FRAGMENTS
			COAT & LIG. OR L.T.WT.PT.
			CLAY LUMPS
			STICKS & ROOTS
			FRIABLE PARTICLES
			THIN-ELONGATED
			ORGANIC COLOR
			FINENESS MODULUS
			SULFATE SOUNDNESS
			DEGRADATION VALUE
			ABSORPTION
1.078			SPG.-BULK
2.582			SPG.-BULK S.S.D.
2.610			SPG.-APPARENT
2.656		2.649	



Tech Responsible: M. Panilo / D. Gettman

Checked By: Rich Giessel

ORGANIC CONTENT %: \_\_\_\_\_

Signed By: *Richard A. Giessel*

L.A. ABRASION LOSS: \_\_\_\_\_

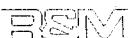
Title: Quality Assurance Manager

PERMEABILITY (cm/s): 5.9E-06

R&amp;M CLASSIFICATION: Sand, with Gravel, and with some Silt

REMARKS: \_\_\_\_\_

## LABORATORY TEST REPORT



R&amp;M CONSULTANTS, INC.

9101 VANGUARD DR. ANCHORAGE, ALASKA 99507 PH 907-522-1707

CLIENT: MWH

R&amp;M PROJECT: 251177

PROJECT: NE Cape

CLIENT PROJECT: NE Cape

CLIENT ADDRESS: 4100 Spenard Road, Anchorage, AK 99517

PROPOSED USE:

SOURCE: Test Boring 88-18

SUBMITTED BY: Johanna Dreher

SAMPLED FROM: Auger / Brass Sleeve

DATE SAMPLED: 8/21/2002

LOCATION: Phase III, RI

DEPTH: 9-11'

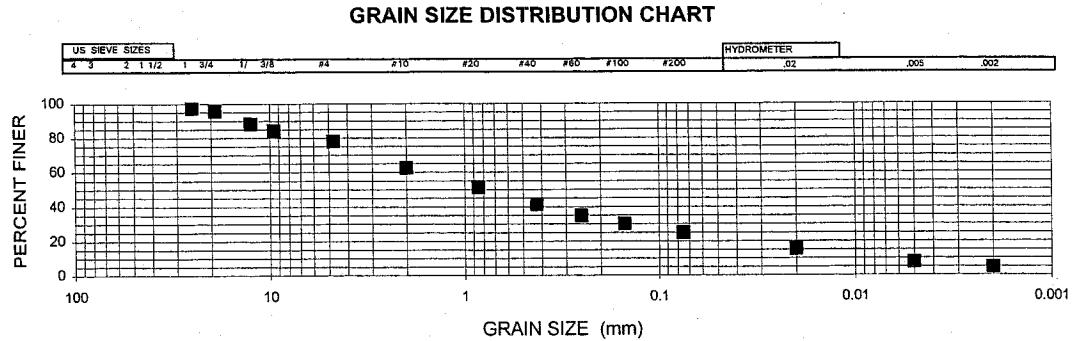
LAB NO.: 437

FIELD NO.: 02NE88SB044

DATE REPORTED: 11/7/2002

DATE RECEIVED: 8/26/2002

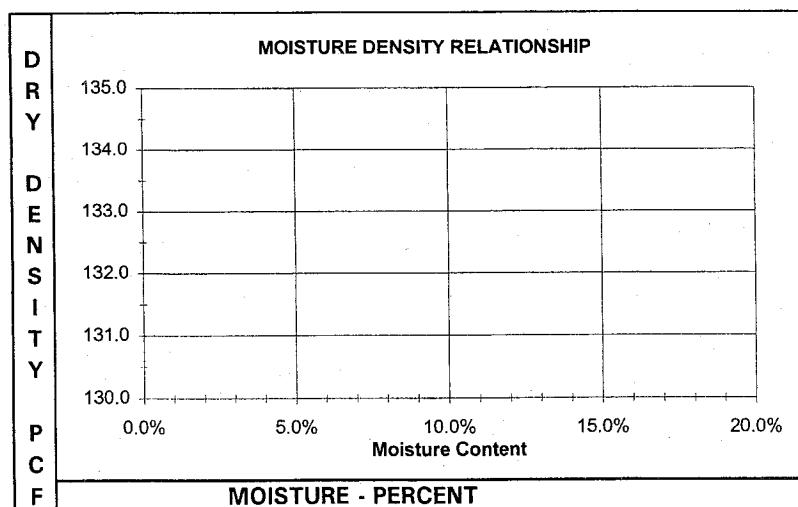
GRAIN SIZE DISTRIBUTION			CLASSIFICATION			COMPACTION	
SIEVE	% PASS	SPEC.		UNIFIED	AASHTO	FAA	
5"			% + 10				OPTIMUM MOISTURE:
4"			% + 3				CORR. OPTIMUM MOISTURE:
3"			% GRAVEL	22.0			MIN. DRY DENSITY:
2"			% SAND	53.1			MAX. DRY DENSITY:
1 1/2"			% SILT	24.9			CORR. MAX. DRY DENSITY:
1"	97		% CLAY				% FRACTURE:
3/4"	96		FSV				METHOD:
1/2"	88		LL				NATURAL DENSITY:
3/8"	84		PL				NATURAL MOISTURE:
#4	78		PI				WEIGHT LOOSE:
#8			CLASS	SM			WEIGHT RODDED:
#10	62						
#16							
#20	51						
#30							
#40	41						
#50							
#60	35						
#80							
#100	30						
#200	24.9						
.02MM	15.5						
.005MM	7.6						
.002MM	4.6						



TOTAL WT. TESTED:

5,813 GMS.

COARSE	SPEC	FINE	SPEC
			DELETERIOUS MAT.
			MINUS #200 MESH
			SOFT FRAGMENTS
			COAT & LIG. OR LT.WT.PT.
			CLAY LUMPS
			STICKS & ROOTS
			FRIABLE PARTICLES
			THIN-ELONGATED
			ORGANIC COLOR
			FINENESS MODULUS
			SULFATE SOUNDNESS
			DEGRADATION VALUE
			ABSORPTION
1.190			SPG.-BULK
2.585			SPG.-BULK S.S.D.
2.616			SPG.-APPARENT
2.667		2.647	



Tech Responsible: M. Panilo / D. Gettman

Checked By: Rich Giessel

ORGANIC CONTENT %:

L.A. ABRASION LOSS:

PERMEABILITY (cm/s): 6.2E-06

Signed By: *Richard A. Giessel*

Title: Quality Assurance Manager

R&amp;M CLASSIFICATION: Sand, with some Gravel, and with some Silt

REMARKS:



Client: MWH  
 Project: NE Cape, Phase III, RI  
 Description: Coarse aggregate screened from bulk samples

Project#: 251177  
 Date: 10/23/2002

### SPECIFIC GRAVITY OF SOILS AND AGGREGATES WORKSHEET

- I. Coarse Aggregate (AASHTO T 85 / ASTM C 127)
- II. Fine Aggregate (AASHTO T 84 / ASTM C 128)
- III. LeChatelier method (AK T-2)

I. Coarse	# 041	# 042	# 043	# 044		
Temperature ( $23 \pm 1^{\circ}\text{C}$ )	22.5	22.5	22.5	22.5		
A. Oven dry mass (g)	447.7	1498.0	1817.4	1277.5		
B. SSD mass (g)	453.3	1505.6	1837.0	1292.7		
C. Mass in water (g)	278.2	927.2	1133.2	798.5		
D. Temperature coefficient	0.99945	0.99945	0.99945	0.99945		
Bulk Sp G = A/(B-C)	2.557	2.590	2.582	2.585		
SSD Sp G = B/(B-C)	2.589	2.603	2.610	2.616		
Apparent Sp G = A/(A-C)	2.641	2.624	2.656	2.667		
% Absorption = $100[(B-A)/A]$	1.25%	0.51%	1.08%	1.19%		
Apparent Sp G at $20^{\circ}\text{C}$	2.640	2.623	2.655	2.666		
II. Fine (From other worksheets)						
Fine Sp. G.	2.590	2.645	2.655	2.653		
% + #4 (From Brass Liner)	23%	26%	33%	19%		
% - #4 (From Brass Liner)	77%	74%	67%	81%		
Weighted Sp. G.	2.601	2.640	2.655	2.656		

#### NOTES:

Coarse Aggregate and Fine Aggregate percentages in Brass Liner Samples varied from their respective bulk samples and were used in void ratio related calculations for permeability tests to give better precision. This required additional testing of Liner sample after the permeability test to determine coarse fraction.



Client: MWH

Project#: 251177

Project: NE Cape, Phase III, RI

Date: 10/23/2002

Description: Coarse aggregate screened from bulk samples

## SPECIFIC GRAVITY OF SOILS AND AGGREGATES WORKSHEET

I. Coarse Aggregate (AASHTO T 85 / ASTM C 127)

II. Fine Aggregate (AASHTO T 84 / ASTM C 128)

III. LeChatelier method (AK T-2)

I. Coarse	# 041	# 042	# 043	# 044	
Temperature ( $23 \pm 1^{\circ}\text{C}$ )	22.5	22.5	22.5	22.5	
A. Oven dry mass (g)	447.7	1498.0	1817.4	1277.5	
B. SSD mass (g)	453.3	1505.6	1837.0	1292.7	
C. Mass in water (g)	278.2	927.2	1133.2	798.5	
D. Temperture coefficient	0.99945	0.99945	0.99945	0.99945	
Bulk Sp G = A/(B-C)	2.557	2.590	2.582	2.585	
SSD Sp G = B/(B-C)	2.589	2.603	2.610	2.616	
Apparent Sp G = A/(A-C)	2.641	2.624	2.656	2.667	
% Absorption = $100[(B-A)/A]$	1.25%	0.51%	1.08%	1.19%	
Apparent Sp G at $20^{\circ}\text{C}$	2.640	2.623	2.655	2.666	
Fine Sp. G.	2.590	2.645	2.655	2.653	
% + #4	17%	27%	34%	22%	
% - #4	83%	73%	66%	78%	
Weighted Sp. G.	2.598	2.639	2.655	2.656	

NOTES:

## R&M Soils Worksheet - Permeability - Sample Data

Client:	Mongomery Watson Hartza	Project:	Northeast Cape, St. Lawrence Island	
Address:	4100 Spenard Road	Material:	Insitu, 6" Long Brass Liner Sample 2.4" Diameter	
	Anchorage, AK 99517	Sampled From:	Test Hole	Field #: 02NE88SB041
Source:	Phase III	Sampled by:	BGM, BO, DQ	Date Sampled: 8/18/2002
Test Location:	R.I. Test Hole 88-6	Received by:	Allen Stevens	Date Received: 8/26/2002
Depth:	4-6'	Tech Assigned:	Rich Giessel	R&M Project #: 251177
Quantity Rep:	Test Boring Sample	Date Completed:	11/5/2002	Lab #: 437

Test Method: ASTM D 5856 - 95 (Reapproved 2002) - Permeability of Granular Soils - Method A

Special Sample Preparation: Field sample delivered to lab in "undisturbed" condition

Permeameter Type: Brass Liner

Method of Compaction: in-situ as near as possible with drive sample

Confinement: Porous stones with filter paper and small coil springs above top stone

CA/FA Wtd. Specific Gravity: 2.601

Permeant Liquid Used: Tap water

### Initial Sample Dimensions and Mass:

Data	Cylinder Height Measurements cm				
	1	2	3	4	
BL	15.195	15.203	15.211	15.210	cm
Delta	1.421	1.368	1.310	1.346	cm
Delta	1.118	1.125	1.167	1.199	cm
Net	12.656	12.710	12.734	12.665	cm
H <sub>i</sub> =	Average Net Height		12.691 cm		
Cylinder Diameter Measurements cm					
	1	2	3	4	
Data	6.178	6.146	6.140	6.192	cm
D=	Average Diameter		6.164 cm		
A=	$\pi(D/2)^2$ Cylinder End Area		29.84 cm <sup>2</sup>		
C <sub>i</sub> =	H <sub>i</sub> *A, Initial Cylinder Volume		378.72 cm <sup>3</sup>		
E	Ws + Brass Liner + Caps		1018.87 g		
F	Caps		16.90 g		
G=	(E-F-N), Ws		791.05 g		

### Initial Moisture Data: (Use minimum 100g)

I	Wet Wt + Tare	g
J	Dry Wt + Tare	g
K	Tare	g
W <sub>i</sub> =	(I-J)/(J-K), Initial moisture	
$\gamma_{di}$ =	(G/(1+w <sub>i</sub> ))/C <sub>i</sub> , Dry density	g/cm <sup>3</sup>
$\gamma_{di}$ =	(G/(1+w <sub>i</sub> ))/C <sub>i</sub> , Dry density	lbs/ft <sup>3</sup>
n=	1- $\gamma_d/\gamma_w P_w$ Initial porosity	
T	Final CA Dry Mass	159.52 g
U=	100(T/Q), % CA in BL Sample	23.24%

### Final Sample Dimensions and Mass:

Data	Cylinder Ht. Measurements cm				
	1	2	3	4	
BL, St	15.292	15.239	15.253	15.291	cm
Delta	2.555	2.546	2.547	2.544	cm
Net	12.737	12.693	12.706	12.747	cm
H <sub>f</sub> =	Average Height		12.721 cm		
$\Delta H$ =	H <sub>f</sub> - H <sub>i</sub> , Final Swell		0.029 cm		
C <sub>f</sub> =	H <sub>f</sub> *A, Final Cyl Volume		379.60 cm <sup>3</sup>		

### Final Moisture Data: (Dry entire sample)

L	Tare Wt	231.39 g
M	T + Wet + BL+2FP	1236.81 g
N	Brass Liner	210.92 g
R	2 Wet filter papers	0.97 g
O=	(M-L-N-R), Wet Wt	793.53 g
P	Dry Wt + Tare	917.82 g
Q=	Dry Wt	686.43 g
w <sub>f</sub> =	(O-Q)/Q, Final Moisture	15.6%

### Final Test data:

h	Hydraulic head	160.3 cm
t=	h/H <sub>f</sub> Hydraulic Gradient	12.60
$\gamma_{af}$ =	Q/C <sub>f</sub>	1.808 g/cm <sup>3</sup>
S=	(O-Q)/ $\gamma_w/V_p$ , Sat %	93.1%
V <sub>p</sub> =	A*H <sub>f</sub> -Q/G <sub>s</sub> * $\gamma_w$	115.3 cm <sup>3</sup>
n=	V <sub>p</sub> /C <sub>f</sub> , Final porosity	0.304
Q <sub>in</sub> =	Total Water Inflow	19.3 cm <sup>3</sup>
N <sub>pv</sub> =	Q <sub>in</sub> /V <sub>p</sub> Pore vols inflow	0.167

Average hydraulic conductivity of last four readings,  $\kappa = 1.3E-09$  m/s or 1.3E-07 cm/s

112.8  
pcf

**R&M Soils Worksheet - Permeability - Flow Test Data**

Test Data:

Test No.	Head h (cm)	Burette Reading		Grad cyl c (cm <sup>3</sup> )	(b-a)-c (cm <sup>3</sup> )	Elapsed Time (t) Q/in (cm <sup>3</sup> )	Time (t) Q/At (s)	v= Q/At h/H <sub>f</sub> (cm/s)	τ = v/t (cm/s)	κ = v/t (cm/s)	Temp °C Correct (Table 1)	Viscosity Perm = κ(Corr.) (cm/s)
		Head initial (cm <sup>3</sup> )	a final (cm <sup>3</sup> )									
		overflow (cm <sup>3</sup> )										
1	160.3				2.72	66,720	1.4E-06	12.60	1.1E-07	21	0.976	1.1E-07
*												
2	160.3				3.53	73,500	1.6E-06	12.60	1.3E-07	21	0.976	1.2E-07
*												
3	160.3				1.23	22,980	1.8E-06	12.60	1.4E-07	21	0.976	1.4E-07
*												
4	160.3				0.31	6,900	1.5E-06	12.60	1.2E-07	21	0.976	1.2E-07
*												
5	160.3				0.19	2,460	2.6E-06	12.60	2.1E-07	21	0.976	2.0E-07
*												
6	160.0				3.95	78,420	1.7E-06	12.58	1.3E-07	21	0.976	1.3E-07
*												
7	159.7				3.75	74,460	1.7E-06	12.55	1.3E-07	21	0.976	1.3E-07
*												
8	160.2				3.62	74,700	1.6E-06	12.59	1.3E-07	21	0.976	1.3E-07
*												
9												
*												
10												
*												
11												
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12												
*												
13												
*												
14												
*												
15												
*												
16												
*												

Total flow and time during testing >> 19.3 400,140

\* Draindown flow between trials

Tested by: Dan Gettman

Checked by: Rich Giessel

Elapsed Time # 041

R&M TP: SOIL-14

Printed: 11/7/2002

Trial:	Clock Time: (mm/dd/yyyy hh:mm)	Elapsed Time: (hh:mm)	Seconds:	T & Evap: (grams)	Delta Evap: (grams)	T & Water: (grams)	Delta Water: (grams)
1	10/30/2002 17:36			142.41		121.12	
2	10/31/2002 12:08	18:32:00	66,720	142.37	-0.04	123.80	2.72
3	11/1/2002 8:33	20:25:00	73,500	142.31	-0.06	127.27	3.53
4	11/1/2002 14:56	6:23:00	22,980	142.29	-0.02	128.48	1.23
5	11/1/2002 16:51	1:55:00	6,900	142.28	-0.01	128.78	0.31
6	11/1/2002 17:32	0:41:00	2,460	142.27	-0.01	128.96	0.19
7	11/2/2002 15:19	21:47:00	78,420	142.22	-0.05	132.86	3.95
8	11/3/2002 12:00	20:41:00	74,460	142.17	-0.05	136.56	3.75
9	11/4/2002 8:45	20:45:00	74,700	142.11	-0.06	140.12	3.62

Note: Sample contained two layers of blue-grey, clayey silt, each about 2" thick, with a layer of brown, gravelly sand between them.



R&M CONSULTANTS, INC. 9101 VANGUARD DR. ANCHORAGE, ALASKA 99507 PH 907-522-1707

## R&M Soils Worksheet - Specific Gravity of Soils

Client:	MWH	Project:	NE Cape
Client Address:	4100 Spenard Road, Anchorage, AK 99517		
Lab Number:	437	Project Number:	251177
Source:	Test Boring 88-6		
Sampled from:	Auger / Brass Sleeve	Location:	Phase III RI
Date Sampled:	8/18/2002	Sampled by:	Douglas Quut
Date Received:	8/26/2002	Received by:	Allen Stevens

### Specific Gravity of Soil Solids by Water Pycnometer AASHTO T 100-99, ASTM D 854-00

#### AASHTO / ASTM Procedure using 500 ml glass - vacuum pycnometer:

1. Determine mass of a dry pycnometer.
2. Enter the calibrated volume of pycnometer on the worksheet.
3. Dry sample to constant mass (mass repeats within 0.1%) at  $105 \pm 5^{\circ}\text{C}$  and cool to room temperature.
4. Wet soil may also be used and dry mass determined at end of test.
5. Add sample to tared pycnometer containing about 100 ml of distilled water and record mass if using oven dry soil.
6. Swirl the soil and water to disperse the soil in the water creating a slurry.
7. Gradually apply vacuum until residual pressure manometer reads less than 13.3 kPa (< 100 mm Hg) (Pycnometer and vacuum pump gauges will read less than 26 inches of Hg.)
8. Agitate continuously and maintain vacuum for 2 hours.
9. Release vacuum slowly by increasing pressure at a rate not to exceed 8 kPa per second. (Pycnometer and vacuum pump gauges should drop no more than 2 inches of Hg per sec for 12-15 sec.)
10. Fill pycnometer to calibration mark with room temperature  $15\text{-}30^{\circ}\text{C}$  distilled water, introducing deaired water carefully with a length of rubber tubing to avoid introduction of air into the soil slurry.
11. Dry any droplets of water from above the calibration mark in the stem of the pycnometer with a rolled up paper towel and determine the mass of pycnometer and sample to the nearest 0.01 gram.
12. Measure and record the temperature of the soil/water slurry to the nearest  $0.1^{\circ}\text{C}$ .
13. Empty the entire contents of the pycnometer into a tared drying pan and dry to constant mass.
14. Record dry mass of sample and calculate specific gravity as shown below.

Type sample:	Silt	Size of Sample:	106 g	No. of Samples:	1
Begin Test Date:	10/21/2002	Tech:	rg / mp	Finish Date:	10/24/2002
Formulas:	Description of data or calculation:				Data:
M <sub>p</sub>	Mass of dry pycnometer (g)				166.76
V <sub>p</sub>	Volume of pycnometer (ml)				499.20
M <sub>s</sub>	Mass of oven dry sample in air (g)				106.21
M <sub>pws,t</sub>	Mass of pycnometer with sample and water (g)				730.00
T <sub>t</sub>	Test Temperature of soil slurry ( $^{\circ}\text{C}$ )				21.8
P <sub>w,t</sub>	Density of water at temperature above, from ASTM D 854, Table 2				0.99782
K	Temperature coefficient, from ASTM D 854, Table 2				0.99961
M <sub>pw,t</sub> = M <sub>p</sub> + (V <sub>p</sub> *P <sub>w,t</sub> )	Calculated mass of pycnometer and water at test temperature (g)				664.872
V <sub>s</sub> = (M <sub>pw,t</sub> + M <sub>s</sub> ) - M <sub>pws,t</sub>	Volume of soil solids in the pycnometer soil slurry (ml)				41.082
P <sub>s</sub> = M <sub>s</sub> /V <sub>s</sub>	Density of soil solids at test temperature (g/ml)				2.585
G <sub>t</sub> = P <sub>s</sub> /P <sub>w,t</sub>	Specific gravity of soil solids at the test temperature				2.591
G <sub>20C</sub>	Specific gravity of soil solids corrected to a temperature of $20^{\circ}\text{C}$				2.590
Notes:	Flask E				

**R&M Soils Worksheet - Permeability - Sample Data**

Client:	Mongomery Watson Hartza	Project:	Northeast Cape, St. Lawrence Island	
Address:	4100 Spenard Road	Material:	In-situ, 6" Long Brass Liner Sample 2.4" Diameter	
	Anchorage, AK 99517	Sampled From:	Test Hole	
Source:	Phase III	Sampled by:	BGM, BO, DQ	
Test Location:	R.I. Test Hole 88-9	Received by:	Allen Stevens	
Depth:	10-12'	Tech Assigned:	Rich Giessel	
Quantity Rep:	Test Boring Sample	Date Completed:	11/6/2002	
			Lab #:	

Test Method: ASTM D 5856 - 95 (Reapproved 2002) - Permeability of Granular Soils - Method A

Special Sample Preparation: Field sample delivered to lab in "undisturbed" condition

Permeameter Type: Brass Liner

Method of Compaction: in-situ as near as possible with drive sample

Confinement: Porous stones with filter paper and small coil springs above top stone

CA/FA Wtd. Specific Gravity: 2.640

Permeant Liquid Used: Tap water

**Initial Sample Dimensions and Mass:**

Data	Cylinder Height Measurements cm				
	1	2	3	4	
BL	15.354	15.323	15.283	15.275	cm
Delta	1.458	1.449	1.455	1.456	cm
Net	13.896	13.874	13.828	13.819	cm
$H_i =$	Average Net Height			13.854	cm
Data	Cylinder Diameter Measurements cm				
	1	2	3	4	
Data	6.155	6.174	6.183	6.178	cm
$D =$	Average Diameter			6.173	cm
$A =$	$\pi(D/2)^2$ , Cylinder End Area			29.92	cm <sup>2</sup>
$C_i =$	$H_i * A$ , Initial Cylinder Volume			414.6	cm <sup>3</sup>
$E =$	Ws + Brass Liner + 2 FP			1155.32	g
$F =$	2 Filter Papers			0.33	g
$G =$	(E-F-N), Ws			946.13	g

**Initial Moisture Data: (Use minimum 100g)**

I	Wet Wt + Tare	g
J	Dry Wt + Tare	g
K	Tare	g
$w_i =$	(I-J)/(J-K), Initial moisture	
$\gamma_{di} =$	$(G/(1+w_i))/C_i$ , Dry density	g/cm <sup>3</sup>
$\gamma_{di} =$	$(G/(1+w_i))/C_i$ , Dry density	lbs/ft <sup>3</sup>
n =	$1 - \gamma_d / G_s \rho_w$ , Initial porosity	
T	Final CA Dry Mass	214.74 g
U =	100(T/Q), % CA in BL Sample	26.22%

**Final Sample Dimensions and Mass:**

Data	Cylinder Ht. Measurements cm				
	1	2	3	4	
BL, St	15.354	15.323	15.283	15.275	cm
Delta	1.458	1.449	1.455	1.456	cm
Net	13.896	13.874	13.828	13.819	cm
$H_f =$	Average Height			13.854	cm
$\Delta H =$	$H_f - H_i$ , Final Swell			0.000	cm
$C_f =$	$H_f * A$ , Final Cyl Volume			414.57	cm <sup>3</sup>

**Final Moisture Data: (Dry entire sample)**

L	Tare Wt	228.26 g
M	Ws + BL+2FP	1134.84 g
N	Brass Liner	208.86 g
R	2 Wet filter papers	1.02 g
O =	(M-N-R), Wet Wt	925.0 g
P	Dry Wt + Tare	1047.2 g
Q =	Dry Wt	819.0 g
$w_f =$	(O-Q)/Q, Final Moisture	12.9%

**Final Test data:**

$h$	Hydraulic head	160.4 cm
$i =$	$h/H_f$ Hydraulic Gradient	11.61
$\gamma_{df} =$	$Q/C_f$	1.975 g/cm <sup>3</sup>
S =	$(O-Q)/\gamma_w/V_p$ , Sat %	103.4%
$V_p =$	$A * H_f - Q/G_s * \gamma_w$	102.7 cm <sup>3</sup>
$n =$	$V_p/C_f$ , Final porosity	0.248
$Q_{in} =$	Total Water Inflow	206.3 cm <sup>3</sup>
$N_{pv} =$	$Q_{in}/V_p$ Pore vols inflow	2.008

Average hydraulic conductivity of last four readings,  $\kappa = 7.0E-08$  m/s or  $7.0E-06$  cm/s

**R&M Soils Worksheet - Permeability - Flow Test Data**

Test Data:

Test No.	Head h (cm)	Burette Reading		Grad cyl (b-a)-c	(b-a)-c	Elapsed Time (t) Q/At	v=	$\tau =$	$\kappa =$		Viscosity Temp (Table 1)	<b>Perm =</b> $\kappa(\text{Corr.})$	
		Head a (cm <sup>3</sup> )	Head b (cm <sup>3</sup> )										
		initial (cm <sup>3</sup> )	final (cm <sup>3</sup> )										
1	160.4					11.16	3240	1E-04	11.61	9.9E-06	21	0.976	9.7E-06
*													
2	160.4					3.09	900	1E-04	11.61	9.9E-06	21	0.976	9.6E-06
*													
3	160.4					151.66	52440	1E-04	11.61	8.3E-06	21	0.976	8.1E-06
*													
4	160.4					11.01	4440	8E-05	11.61	7.1E-06	21	0.976	7.0E-06
*													
5	160.4					11.05	4320	9E-05	11.61	7.4E-06	21	0.976	7.2E-06
*													
6	160.4					7.55	3060	8E-05	11.61	7.1E-06	21	0.976	6.9E-06
*													
7	160.4					10.77	4320	8E-05	11.61	7.2E-06	21	0.976	7.0E-06
*													
8													
*													
9													
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13													
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14													
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15													
*													
16													
*													

Total flow and time during testing >> 206.3 72720

\* Draindown flow between trials

Tested by: Dan Gettman

Checked by: Rich Giessel

Elapsed Time # 042a

R&M TP: SOIL-14

Printed: 11/7/2002

Trial:	Clock Time: (mm/dd/yyyy hh:mm)	Elapsed Time: (hh:mm)	Seconds:	T & Evap: (grams)	Delta Evap: (grams)	T & Water: (grams)	Delta Water: (grams)
0	11/4/2002 16:31			142.28		121.11	
1	11/4/2002 17:25	0:54:00	3,240	142.25	-0.03	132.24	11.16
2	11/4/2002 17:40	0:15:00	900	142.24	-0.01	135.32	3.09
	New Containers for Water Measurements						
	11/4/2002 17:40	0:00:00	0	248.72		24.60	
3	11/5/2002 8:14	14:34:00	52,440	244.05	-4.67	171.59	151.66
4	11/5/2002 9:28	1:14:00	4,440	243.64	-0.41	182.19	11.01
5	11/5/2002 10:40	1:12:00	4,320	243.22	-0.42	192.82	11.05
6	11/5/2002 11:31	0:51:00	3,060	242.94	-0.28	200.09	7.55
7	11/5/2002 12:43	1:12:00	4,320	242.56	-0.38	210.48	10.77



R&M CONSULTANTS, INC. 9101 VANGUARD DR. ANCHORAGE, ALASKA 99507 PH 907-522-1707

## R&M Soils Worksheet - Specific Gravity of Soils

Client:	MWH	Project:	NE Cape
Client Address:	4100 Spenard Road, Anchorage, AK 99517		
Lab Number:	437	Project Number:	251177
Source:	Test Boring 88-9		
Sampled from:	Auger / Brass Sleeve	Location:	Phase III RI
Date Sampled:	8/19/2002	Sampled by:	Douglas Quut
Date Received:	8/26/2002	Received by:	Allen Stevens

### Specific Gravity of Soil Solids by Water Pycnometer AASHTO T 100-99, ASTM D 854-00

#### AASHTO / ASTM Procedure using 500 ml glass - vacuum pycnometer:

1. Determine mass of a dry pycnometer.
2. Enter the calibrated volume of pycnometer on the worksheet.
3. Dry sample to constant mass (mass repeats within 0.1%) at  $105 \pm 5^{\circ}\text{C}$  and cool to room temperature.
4. Wet soil may also be used and dry mass determined at end of test.
5. Add sample to tared pycnometer containing about 100 ml of distilled water and record mass if using oven dry soil.
6. Swirl the soil and water to disperse the soil in the water creating a slurry.
7. Gradually apply vacuum until residual pressure manometer reads less than 13.3 kPa (<100 mm Hg)  
(Pycnometer and vacuum pump gauges will read less than 26 inches of Hg.)
8. Agitate continuously and maintain vacuum for 2 hours.
9. Release vacuum slowly by increasing pressure at a rate not to exceed 8 kPa per second.  
(Pycnometer and vacuum pump gauges should drop no more than 2 inches of Hg per sec for 12-15 sec.)
10. Fill pycnometer to calibration mark with room temperature  $15\text{-}30^{\circ}\text{C}$  distilled water, introducing deaired water carefully with a length of rubber tubing to avoid introduction of air into the soil slurry.
11. Dry any droplets of water from above the calibration mark in the stem of the pycnometer with a rolled up paper towel and determine the mass of pycnometer and sample to the nearest 0.01 gram.
12. Measure and record the temperature of the soil/water slurry to the nearest  $0.1^{\circ}\text{C}$ .
13. Empty the entire contents of the pycnometer into a tared drying pan and dry to constant mass.
14. Record dry mass of sample and calculate specific gravity as shown below.

Type sample:	Silty Sand	Size of Sample:	130 g	No. of Samples:	1
Begin Test Date:	10/21/2002	Tech:	rg / mp	Finish Date:	10/24/2002
Formulas:	Description of data or calculation:				Data:
M <sub>p</sub>	Mass of dry pycnometer (g)				161.06
V <sub>p</sub>	Volume of pycnometer (ml)				499.16
M <sub>s</sub>	Mass of oven dry sample in air (g)				129.55
M <sub>pws,t</sub>	Mass of pycnometer with sample and water (g)				739.64
T <sub>t</sub>	Test Temperature of soil slurry ( $^{\circ}\text{C}$ )				21.6
P <sub>w,t</sub>	Density of water at temperature above, from ASTM D 854, Table 2				0.99786
K	Temperature coefficient, from ASTM D 854, Table 2				0.99966
M <sub>pw,t</sub> = M <sub>p</sub> + (V <sub>p</sub> *P <sub>w,t</sub> )	Calculated mass of pycnometer and water at test temperature (g)				659.152
V <sub>s</sub> = (M <sub>pw,t</sub> + M <sub>s</sub> ) - M <sub>pws,t</sub>	Volume of soil solids in the pycnometer soil slurry (ml)				49.062
P <sub>s</sub> = M <sub>s</sub> /V <sub>s</sub>	Density of soil solids at test temperature (g/ml)				2.641
G <sub>t</sub> = P <sub>s</sub> /P <sub>w,t</sub>	Specific gravity of soil solids at the test temperature				2.646
G <sub>20C</sub>	Specific gravity of soil solids corrected to a temperature of $20^{\circ}\text{C}$				2.645

Flask F

Notes:

## R&M Soils Worksheet - Permeability - Sample Data

Client:	Monggomery Watson Hartza	Project:	Northeast Cape, St. Lawrence Island	
Address:	4100 Spenard Road	Material:	In situ, 6" Long Brass Liner Sample 2.4" Diameter	
	Anchorage, AK 99517	Sampled From:	Test Hole	
Source:	Phase III	Sampled by:	BGM, BO, DQ	Field #: 02NE88SB043
Test Location:	R.I. Test Hole 88-16	Received by:	Allen Stevens	Date Sampled: 8/20/2002
Depth:	7-9'	Tech Assigned:	Rich Giessel	Date Received: 8/26/2002
Quantity Rep:	Test Boring Sample	Date Completed:	R&M Project #: 251177 Lab #: 437	

Test Method: ASTM D 5856 - 95 (Reapproved 2002) - Permeability of Granular Soils - Method A

Special Sample Preparation: Field sample delivered to lab in "undisturbed" condition

Permeameter Type: Brass Liner

Method of Compaction: in-situ as near as possible with drive sample

Confinement: Porous stones with filter paper and small coil springs above top stone

CA/FA Wtd. Specific Gravity: 2.655

Permeant Liquid Used: Tap water

### Initial Sample Dimensions and Mass:

Data	Cylinder Height Measurements cm				
	1	2	3	4	
BL	15.195	15.211	15.197	15.168	cm
Delta	0.000	0.000	0.000	0.000	cm
Net	15.195	15.211	15.197	15.168	cm
$H_i =$	Average Net Height		15.193 cm		
Data	Cylinder Diameter Measurements cm				
	1	2	3	4	
Data	6.161	6.169	6.172	6.182	cm
D =	Average Diameter		6.171 cm		
A =	$\pi(D/2)^2$ , Cylinder End Area		29.91 cm <sup>2</sup>		
C <sub>i</sub> =	$H_i \cdot A$ , Initial Cylinder Volume		454.4 cm <sup>3</sup>		
E =	Ws + Brass Liner + Caps		1024.1 g		
F =	2 Caps		17.1 g		
G =	(E-F-N), Ws		798.57 g		

### Initial Moisture Data: (Use minimum 100g)

I	Wet Wt + Tare	g
J	Dry Wt + Tare	g
K	Tare	g
w <sub>i</sub> =	(I-J)/(J-K), Initial moisture	
$\gamma_{di} =$	$(G/(1+w_i))/C_i$ , Dry density	g/cm <sup>3</sup>
$\gamma_{di} =$	$(G/(1+w_i))/C_i$ , Dry density	lbs/ft <sup>3</sup>
n =	$1-\gamma_d/G_s \rho_w$	Initial porosity
T	Final CA Dry Mass	263.80 g
U =	100(T/Q), % CA in BL Sample	33.02%

### Final Sample Dimensions and Mass:

Data	Cylinder Ht. Measurements cm				
	1	2	3	4	
BL, St	15.195	15.211	15.197	15.168	cm
Delta	0.000	0.000	0.000	0.000	cm
Net	15.195	15.211	15.197	15.168	cm
$H_f =$	Average Height		15.193 cm		
$\Delta H =$	$H_f - H_i$ , Final Swell		0.000 cm		
$C_f =$	$H_f \cdot A$ , Final Cyl Volume		454.40 cm <sup>3</sup>		

### Final Moisture Data: (Dry entire sample)

L	Tare Wt	225.11 g
M	Ws + BL+2FP	1163.63 g
N	Brass Liner	208.48 g
R	2 Wet filter papers	0.95 g
O =	(M-N-R), Wet Wt	954.2 g
P	Dry Wt + Tare	1024.1 g
Q =	Dry Wt	799.0 g
w <sub>f</sub> =	(O-Q)/Q, Final Moisture	19.4%

### Final Test Data:

h	Hydraulic head	67.8 cm
$\iota =$	$h/H_f$ Hydraulic Gradient	4.47
$\gamma_{df} =$	$Q/C_f$	1.758 g/cm <sup>3</sup>
S =	(O-Q)/V <sub>p</sub> , Sat %	102.1%
V <sub>p</sub> =	$A \cdot H_f - Q/G_s \cdot \gamma_w$	152.2 cm <sup>3</sup>
n =	$V_p/C_f$ , Final porosity	0.335
Q <sub>in</sub> =	Total Water Inflow	82.1 cm <sup>3</sup>
N <sub>pv</sub> =	Q <sub>in</sub> /V <sub>p</sub> Pore vols inflow	0.540

Average hydraulic conductivity of last four readings,  $\kappa = 5.9 \text{E}-08 \text{ m/s}$  or  $5.9 \text{E}-06 \text{ cm/s}$

109.7  
pcf

**R&M Soils Worksheet - Permeability - Flow Test Data**

Test Data:

Test No.	Head h (cm)	Burette Reading		Grad cyl	(b-a)-c (cm <sup>3</sup> )	Elapsed Time (t) Q/At (s)	v = h/H <sub>f</sub> v/t (cm/s)	κ = (cm/s)	Temp °C	Viscosity Correct (Table 1)	<b>Perm =</b> κ(Corr.) (cm/s)		
		Head a (cm <sup>3</sup> )	Head b (cm <sup>3</sup> )	Grad cyl overflow (cm <sup>3</sup> )									
		Initial (cm <sup>3</sup> )	Final (cm <sup>3</sup> )	Overflow (cm <sup>3</sup> )									
1	67.8					26.55	2100	2.8E-05	4.47	6.2E-06	21	0.976	6.1E-06
*													
2	67.8					23.58	1920	2.7E-05	4.47	6.0E-06	21	0.976	5.9E-06
*													
3	67.8					13.96	1140	2.7E-05	4.47	6.0E-06	21	0.976	5.9E-06
*													
4	67.8					18.04	1500	2.6E-05	4.47	5.9E-06	21	0.976	5.8E-06
*													
5													
*													
6													
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Total flow and time during testing >> 82.1 6660

\* Draindown flow between trials

Tested by: Dan Gettman

Checked by: Rich Giessel

### Elapsed Time # 043a

Printed: 11/6/2002

Trial:	Clock Time: (mm/dd/yyyy hh:mm)	Elapsed Time: (hh:mm)	Seconds:	T & Evap: (grams)	Delta Evap: (grams)	T & Water: (grams)	Delta Water: (grams)
1	11/5/2002 14:30			217.19		24.69	
2	11/5/2002 15:05	0:35:00	2,100	216.94	-0.25	50.99	26.55
3	11/5/2002 15:37	0:32:00	1,920	216.73	-0.21	74.36	23.58
4	11/5/2002 15:56	0:19:00	1,140	216.60	-0.13	88.19	13.96
5	11/5/2002 16:21	0:25:00	1,500	216.46	-0.14	106.09	18.04
6							
7							
8							
9							

<b>R&amp;M</b> R&M CONSULTANTS, INC. 9101 VANGUARD DR. ANCHORAGE, ALASKA 99507 PH 907-522-1707				
<b>R&amp;M Soils Worksheet - Specific Gravity of Soils</b>				
<b>Client:</b> <b>Client Address:</b> <b>Lab Number:</b> <b>Source:</b> <b>Sampled from:</b> <b>Date Sampled:</b> <b>Date Received:</b>	MWH	Project:	NE Cape	
	4100 Spenard Road, Anchorage, AK 99517			
	437	Project Number:	251177	
	Test Boring 88-16		Submitted by: Depth:	Johanna Dreher 7-9'
	Auger / Brass Sleeve		Location:	Phase III RI
	8/20/2002	Sampled by:	Douglas Quut	Field Number: 02NE88SB043
8/26/2002	Received by:	Allen Stevens		
<b>Specific Gravity of Soil Solids by Water Pycnometer</b> <b>AASHTO T 100-99, ASTM D 854-00</b>				
<b>AASHTO / ASTM Procedure using 500 ml glass - vacuum pycnometer:</b> <ol style="list-style-type: none"> <li>1. Determine mass of a dry pycnometer.</li> <li>2. Enter the calibrated volume of pycnometer on the worksheet.</li> <li>3. Dry sample to constant mass (mass repeats within 0.1%) at <math>105 \pm 5^\circ C</math> and cool to room temperature.</li> <li>4. Wet soil may also be used and dry mass determined at end of test.</li> <li>5. Add sample to tared pycnometer containing about 100 ml of distilled water and record mass if using oven dry soil.</li> <li>6. Swirl the soil and water to disperse the soil in the water creating a slurry.</li> <li>7. Gradually apply vacuum until residual pressure manometer reads less than 13.3 kPa (&lt;100 mm Hg) (Pycnometer and vacuum pump gauges will read less than 26 inches of Hg.)</li> <li>8. Agitate continuously and maintain vacuum for 2 hours.</li> <li>9. Release vacuum slowly by increasing pressure at a rate not to exceed 8 kPa per second. (Pycnometer and vacuum pump gauges should drop no more than 2 inches of Hg per sec for 12-15 sec.)</li> <li>10. Fill pycnometer to calibration mark with room temperature <math>15-30^\circ C</math> distilled water, introducing deaired water carefully with a length of rubber tubing to avoid introduction of air into the soil slurry.</li> <li>11. Dry any droplets of water from above the calibration mark in the stem of the pycnometer with a rolled up paper towel and determine the mass of pycnometer and sample to the nearest 0.01 gram.</li> <li>12. Measure and record the temperature of the soil/water slurry to the nearest <math>0.1^\circ C</math>.</li> <li>13. Empty the entire contents of the pycnometer into a tared drying pan and dry to constant mass.</li> <li>14. Record dry mass of sample and calculate specific gravity as shown below.</li> </ol>				
Type sample:	Silty Sand	Size of Sample:	119 g	
Begin Test Date:	10/21/2002	Tech:	rg / mp	
Finish Date:	10/24/2002			
<b>Formulas:</b>	<b>Description of data or calculation:</b>		<b>Data:</b>	
M <sub>p</sub>	Mass of dry pycnometer (g)		166.39	
V <sub>p</sub>	Volume of pycnometer (ml)		499.25	
M <sub>s</sub>	Mass of oven dry sample in air (g)		119.02	
M <sub>pws,t</sub>	Mass of pycnometer with sample and water (g)		738.68	
T <sub>t</sub>	Test Temperature of soil slurry ( $^\circ C$ )		21.6	
P <sub>w,t</sub>	Density of water at temperature above, from ASTM D 854, Table 2		0.99786	
K	Temperature coefficient, from ASTM D 854, Table 2		0.99966	
M <sub>pw,t</sub> = M <sub>p</sub> + (V <sub>p</sub> *P <sub>w,t</sub> )	Calculated mass of pycnometer and water at test temperature (g)		664.572	
V <sub>s</sub> = (M <sub>pw,t</sub> + M <sub>s</sub> ) - M <sub>pws,t</sub>	Volume of soil solids in the pycnometer soil slurry (ml)		44.912	
P <sub>s</sub> = M <sub>s</sub> /V <sub>s</sub>	Density of soil solids at test temperature (g/ml)		2.650	
G <sub>t</sub> = P <sub>s</sub> /P <sub>w,t</sub>	Specific gravity of soil solids at the test temperature		2.656	
G <sub>20C</sub>	Specific gravity of soil solids corrected to a temperature of $20^\circ C$		2.655	
Flask G				
<b>Notes:</b>				

## R&M Soils Worksheet - Permeability - Sample Data

Client:	Mongomery Watson Hartza	Project:	Northeast Cape, St. Lawrence Island	
Address:	4100 Spenard Road	Material:	In situ, 6" Long Brass Liner Sample 2.4" Diameter	
Source:	Anchorage, AK 99517	Sampled From:	Test Hole	Field #: 02NE88SB044
Test Location:	Phase III	Sampled by:	BGM, BO, DQ	Date Sampled: 8/21/2002
Depth:	R.I. Test Hole 88-18 9-11'	Received by:	Allen Stevens	Date Received: 8/26/2002
Quantity Rep:	Test Boring Sample	Tech Assigned:	Rich Giessel	R&M Project #: 251177
		Date Completed:	11/7/2002	Lab #: 437

Test Method: ASTM D 5856 - 95 (Reapproved 2002) - Permeability of Granular Soils - Method A

Special Sample Preparation: Field sample delivered to lab in "undisturbed" condition

Permeameter Type: Brass Liner

Method of Compaction: in-situ as near as possible with drive sample

Confinement: Porous stones with filter paper and small coil springs above top stone

CA/FA Wtd. Specific Gravity: 2.656

Permeant Liquid Used: Tap water

### Initial Sample Dimensions and Mass:

Data	Cylinder Height Measurements cm				
	1	2	3	4	
BL	15.225	15.257	15.223	15.228	cm
Delta	0.264	0.256	0.255	0.254	cm
Net	14.961	15.001	14.968	14.974	cm
H <sub>i</sub> =	Average Net Height		14.976 cm		
Data	Cylinder Diameter Measurements cm				
	1	2	3	4	
Data	6.158	6.181	6.156	6.185	cm
D=	Average Diameter		6.170 cm		
A=	$\pi(D/2)^2$ Cylinder End Area		29.90 cm <sup>2</sup>		
C <sub>i</sub> =	H <sub>i</sub> *A, Initial Cylinder Volume		447.8 cm <sup>3</sup>		
E	W <sub>s</sub> + Brass Liner + Caps+2FP		1175.01 g		
F	Caps + 2 Filter Papers		17.12 g		
G=	(E-F-N), W <sub>s</sub>		948.29 g		

### Initial Moisture Data: (Use minimum 100g)

I	Wet Wt + Tare	g
J	Dry Wt + Tare	g
K	Tare	g
w <sub>i</sub> =	(I-J)/(J-K), Initial moisture	
$\gamma_{di}$ =	(G/(1+w <sub>i</sub> ))/C <sub>i</sub> , Dry density	g/cm <sup>3</sup>
$\gamma_{di}$ =	(G/(1+w <sub>i</sub> ))/C <sub>i</sub> , Dry density	lbs/ft <sup>3</sup>
n=	1- $\gamma_d/G_s P_w$ Initial porosity	
T	Final CA Dry Mass	161.31 g
U=	100(T/Q), % CA in BL Sample	18.70%

### Final Sample Dimensions and Mass:

Data	Cylinder Ht. Measurements cm				
	1	2	3	4	
BL, St	15.225	15.257	15.223	15.228	cm
Delta	0.264	0.256	0.255	0.254	cm
Net	14.961	15.001	14.968	14.974	cm
H <sub>f</sub> =	Average Height		14.976 cm		
$\Delta H$ =	H <sub>f</sub> - H <sub>i</sub> , Final Swell		0.000 cm		
C <sub>f</sub> =	H <sub>f</sub> *A, Final Cyl Volume		447.77 cm <sup>3</sup>		

### Final Moisture Data: (Dry entire sample)

L	Tare Wt	226.51 g
M	Wet + BL + 2FP	1197.09 g
N	Brass Liner	209.60 g
R	2 Wet filter papers	0.92 g
O=	(M-N-R), Wet Wt	986.57 g
P	Dry Wt + Tare	1088.98 g
Q=	Dry Wt	862.47 g
w <sub>f</sub> =	(O-Q)/Q, Final Moisture	14.4%

### Final Test data:

h	Hydraulic head	67.8 cm
$\iota$ =	$h/H_f$ Hydraulic Gradient	4.53
$\gamma_{df}$ =	$Q/C_f$	1.926 g/cm <sup>3</sup>
S=	(O-Q)/ $\gamma_w/V_p$ , Sat %	101.6%
V <sub>p</sub> =	$A \cdot H_f - Q/G_s \cdot \gamma_w$	122.3 cm <sup>3</sup>
n=	$V_p/C_f$ , Final porosity	0.273
Q <sub>in</sub> =	Total Water Inflow	296.2 cm <sup>3</sup>
N <sub>pv</sub> =	Q <sub>in</sub> /V <sub>p</sub> Pore vols inflow	2.421

Average hydraulic conductivity of last four readings,  $\kappa = 6.2 \times 10^{-8} \text{ m/s}$  or  $6.2 \times 10^{-6} \text{ cm/s}$

**R&M Soils Worksheet - Permeability - Flow Test Data**

Test Data:

Test No.	Head h (cm)	Burette Reading		Grad cyl	(b-a)-c (cm <sup>3</sup> )		Elapsed Time (t) Q/At (s)	v=	i=	κ=	v/i (cm/s)	Temp °C (Table 1)	Viscosity Correct κ(Corr.)	<b>Perm=</b> (cm/s)
		Head initial (cm <sup>3</sup> )	Head final (cm <sup>3</sup> )	overflow Q <sub>in</sub> (cm <sup>3</sup> )										
		a	b	c										
1	160.4						27.9	900	7E-05	10.71	6.5E-06	21	0.976	6.3E-06
*														
2	160.4						46.8	1560	7E-05	10.71	6.3E-06	21	0.976	6.1E-06
*														
3	160.4						28.6	900	7E-05	10.71	6.6E-06	21	0.976	6.5E-06
*														
4	160.4						29.7	900	7E-05	10.71	6.9E-06	21	0.976	6.7E-06
*														
5	160.4						139.5	5100	6E-05	10.71	5.7E-06	21	0.976	5.6E-06
*														
6	160.4						23.7	1020	5E-05	10.71	4.8E-06	21	0.976	4.7E-06
*														
7														
*														
8														
*														
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10														
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11														
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12														
*														
13														
*														
14														
*														
15														
*														
16														
*														
Total flow and time during testing >>								296.2	10380					

\* Draindown flow between trials

Tested by: Dan Gettman

Checked by: Rich Giessel



 R&M CONSULTANTS, INC. 9101 VANGUARD DR. ANCHORAGE, ALASKA 99507 PH 907-522-1707				
<b>R&amp;M Soils Worksheet - Specific Gravity of Soils</b>				
<b>Client:</b> <b>Client Address:</b> <b>Lab Number:</b> <b>Source:</b> <b>Sampled from:</b> <b>Date Sampled:</b> <b>Date Received:</b>	MWH	Project:	NE Cape	
	4100 Spenard Road, Anchorage, AK 99517			
	437	Project Number:	251177	
	Test Boring 88-18		Submitted by: Depth:	Johanna Dreher 9-11'
	Auger / Brass Sleeve		Location:	Phase III RI
	8/21/2002	Sampled by:	Douglas Quut	Field Number: 02NE88SB044
8/26/2002	Received by:	Allen Stevens		
<b>Specific Gravity of Soil Solids by Water Pycnometer</b> <b>AASHTO T 100-99, ASTM D 854-00</b>				
<b>AASHTO / ASTM Procedure using 500 ml glass - vacuum pycnometer:</b> <ol style="list-style-type: none"> <li>1. Determine mass of a dry pycnometer.</li> <li>2. Enter the calibrated volume of pycnometer on the worksheet.</li> <li>3. Dry sample to constant mass (mass repeats within 0.1%) at <math>105 \pm 5^{\circ}\text{C}</math> and cool to room temperature.</li> <li>4. Wet soil may also be used and dry mass determined at end of test.</li> <li>5. Add sample to tared pycnometer containing about 100 ml of distilled water and record mass if using oven dry soil.</li> <li>6. Swirl the soil and water to disperse the soil in the water creating a slurry.</li> <li>7. Gradually apply vacuum until residual pressure manometer reads less than 13.3 kPa (&lt;100 mm Hg) (Pycnometer and vacuum pump gauges will read less than 26 inches of Hg.)</li> <li>8. Agitate continuously and maintain vacuum for 2 hours.</li> <li>9. Release vacuum slowly by increasing pressure at a rate not to exceed 8 kPa per second. (Pycnometer and vacuum pump gauges should drop no more than 2 inches of Hg per sec for 12-15 sec.)</li> <li>10. Fill pycnometer to calibration mark with room temperature <math>15\text{-}30^{\circ}\text{C}</math> distilled water, introducing deaired water carefully with a length of rubber tubing to avoid introduction of air into the soil slurry.</li> <li>11. Dry any droplets of water from above the calibration mark in the stem of the pycnometer with a rolled up paper towel and determine the mass of pycnometer and sample to the nearest 0.01 gram.</li> <li>12. Measure and record the temperature of the soil/water slurry to the nearest <math>0.1^{\circ}\text{C}</math>.</li> <li>13. Empty the entire contents of the pycnometer into a tared drying pan and dry to constant mass.</li> <li>14. Record dry mass of sample and calculate specific gravity as shown below.</li> </ol>				
Type sample:	Silty Sand	Size of Sample:	136 g	
Begin Test Date:	10/21/2002	Tech:	rg / mp	
No. of Samples:			1	
Finish Date:			10/24/2002	
<b>Formulas:</b>	<b>Description of data or calculation:</b>		<b>Data:</b>	
M <sub>p</sub>	Mass of dry pycnometer (g)		165.26	
V <sub>p</sub>	Volume of pycnometer (ml)		498.98	
M <sub>s</sub>	Mass of oven dry sample in air (g)		136.07	
M <sub>pws,t</sub>	Mass of pycnometer with sample and water (g)		747.85	
T <sub>t</sub>	Test Temperature of soil slurry ( $^{\circ}\text{C}$ )		21.7	
P <sub>w,t</sub>	Density of water at temperature above, from ASTM D 854, Table 2		0.99784	
K	Temperature coefficient, from ASTM D 854, Table 2		0.99963	
M <sub>pw,t</sub> = M <sub>p</sub> + (V <sub>p</sub> *P <sub>w,t</sub> )	Calculated mass of pycnometer and water at test temperature (g)		663.162	
V <sub>s</sub> = (M <sub>pw,t</sub> + M <sub>s</sub> ) - M <sub>pws,t</sub>	Volume of soil solids in the pycnometer soil slurry (ml)		51.382	
P <sub>s</sub> = M <sub>s</sub> /V <sub>s</sub>	Density of soil solids at test temperature (g/ml)		2.648	
G <sub>t</sub> = P <sub>s</sub> /P <sub>w,t</sub>	Specific gravity of soil solids at the test temperature		2.654	
G <sub>20C</sub>	Specific gravity of soil solids corrected to a temperature of $20^{\circ}\text{C}$		2.653	
Flask H				
<b>Notes:</b>				

R&M Soils Worksheet - Permeability - Sample Data

**SAMPLE PIPED**

Client:	Mongomery Watson Hartza	Project:	Northeast Cape, St. Lawrence Island	
Address:	4100 Spenard Road	Material:	In situ, 6" Long Brass Liner Sample 2.4" Diameter	
	Anchorage, AK 99517	Sampled From:	Test Hole	Field #: 02NE88SB042
Source:	Phase III	Sampled by:	BGM, BO, DQ	Date Sampled: 8/19/2002
Test Location:	R.I. Test Hole 88-9	Received by:	Allen Stevens	Date Received: 8/26/2002
Depth:	10-12'	Tech Assigned:	Rich Giessel	R&M Project #: 251177
Quantity Rep:	Test Boring Sample	Date Completed:	10/28/2002	Lab #: 437

Test Method: ASTM D 5856 - 95 (Reapproved 2002) - Permeability of Granular Soils / Method A

Special Sample Preparation: Field sample delivered to lab in "undisturbed" condition

Permeameter Type: Brass Liner

Method of Compaction: in-situ as near as possible with drive sample

Confinement: Porous stones with filter paper and small coil springs above top stone

CA/FA Wtd. Specific Gravity: 2.640

Permeant Liquid Used: Tap water

**Initial Sample Dimensions and Mass:**

Data	Cylinder Height Measurements cm			
	1	2	3	4
BL	15.231	15.236	15.237	15.211
Delta	1.079	0.974	0.974	1.081
Net	14.152	14.262	14.263	14.130
$H_i$	Average Net Height		14.202	cm
Cylinder Diameter Measurements cm				
Data	6.139	6.185	6.178	6.175
D	Average Diameter		6.169	cm
A	$\pi(D/2)^2$ , Cylinder End Area		29.89	cm <sup>2</sup>
C <sub>i</sub>	$H_i * A$ , Initial Cylinder Vbolume		424.5	cm <sup>3</sup>
E	Ws + Brass Liner + Caps		996.27	g
F	Caps		18.79	g
G	(E-F-N), Ws		768.6	g

**Initial Moisture Data: (Use minimum 100g)**

I	Wet Wt + Tare	g
J	Dry Wt + Tare	g
K	Tare	g
w <sub>i</sub>	(I-J)/(J-K), Initial moisture	
$\gamma_{di}$	(G/(1+w <sub>i</sub> ))/C <sub>i</sub> , Dry density	g/cm <sup>3</sup>
$\gamma_{ai}$	(G/(1+w <sub>i</sub> ))/C <sub>i</sub> , Dry density	lbs/ft <sup>3</sup>
n	1- $\gamma_{di}/G_s \rho_w$ Initial porosity	

**Final Sample Dimensions and Mass:**

Data	Cylinder Ht. Measurements cm			
	1	2	3	4
$H_f$	Average Height			
$\Delta H$	$H_f - H_i$ , Final Swell			
C <sub>f</sub>	$H_f * A$ , Final Cyl Volume			

**Final Moisture Data: (Dry entire sample)**

L	Tare Wt	228.50 g
M	T + Wet + BL+2FP	1315.55 g
N	Brass Liner	208.91 g
R	2 Wet filter papers	1.06 g
O	(M-L-N-R), Wet Wt	877.1 g
P	Dry Wt + Tare	988.9 g
Q	Dry Wt	760.4 g
w <sub>f</sub>	(O-Q)/Q, Final Moisture	15.3%

**Final Test data:**

h	Hydraulic head	67.6 cm
t	$h/H_f$ Hydraulic Gradient	4.74
$\gamma_{dr}$	$Q/C_f$	1.785 g/cm <sup>3</sup>
S	$(O-Q)/\gamma_w/V_p$ , Sat %	85.1%
V <sub>p</sub>	$A^*H_f - Q/G_s * \gamma_w$	137.3 cm <sup>3</sup>
n	$V_p/C_f$ , Final porosity	0.322
Q <sub>in</sub>	Total Water Inflow	2263.1 cm <sup>3</sup>
N <sub>pv</sub>	Q <sub>in</sub> /V <sub>p</sub> Pore vols inflow	16.480

Average hydraulic conductivity of last four readings,  $\kappa = 1.5E-04$  m/s or  $1.5E-02$  cm/s

R&M Soils Worksheet - Permeability - Sample Data *SAMPLE PIPED*

Client:	Mongomery Watson Hartza	Project:	Northeast Cape, St. Lawrence Island	
Address:	4100 Spenard Road	Material:	Insitu, 6" Long Brass Liner Sample 2.4" Diameter	
	Anchorage, AK 99517	Sampled From:	Test Hole	Field #: 02NE88SB043
Source:	Phase III	Sampled by:	BGM, BO, DQ	Date Sampled: 8/20/2002
Test Location:	R.I. Test Hole 88-16	Received by:	Allen Stevens	Date Received: 8/26/2002
Depth:	7-9'	Tech Assigned:	Rich Giessel	R&M Project #: 251177
Quantity Rep:	Test Boring Sample	Date Completed:		Lab #: 437

Test Method: ASTM D 5856 - 95 (Reapproved 2002) - Permeability of Granular Soils - Method A
Special Sample Preparation: Field sample delivered to lab in "undisturbed" condition
Permeameter Type: Brass Liner
Method of Compaction: in-situ as near as possible with drive sample
Confinement: Porous stones with filter paper and small coil springs above top stone
CA/FA Wtd. Specific Gravity: 2.655
Permeant Liquid Used: Tap water

Initial Sample Dimensions and Mass:					
Data	Cylinder Height Measurements cm				
	1	2	3	4	
BL	15.154	15.201	15.186	15.151	cm
Delta	1.355	1.309	1.212	1.337	cm
Net	13.799	13.892	13.974	13.814	cm
$H_i =$	Average Net Height		13.870 cm		
Cylinder Diameter Measurements cm					
Data	1	2	3	4	
D	6.166	6.139	6.091	6.164	cm
$D =$	Average Diameter		6.140 cm		
A	$\pi(D/2)^2$ Cylinder End Area		29.61 cm <sup>2</sup>		
C <sub>i</sub>	$H_i * A$ , Initial Cylinder Volume		410.7 cm <sup>3</sup>		
E	W <sub>s</sub> + Brass Liner + Caps		1024.1 g		
F	Caps		17.1 g		
G	$(E-F-F_b)$ , W <sub>s</sub>		798.5 g		
Initial Moisture Data: (Use minimum 100g)					
I	Wet Wt + Tare		g		
J	Dry Wt + Tare		g		
K	Tare		g		
$w_i =$	$(I-J)/(J-K)$ , Initial moisture				
$\gamma_{di} =$	$(G/[(1+w_i)(C_i)])$ Dry density		g/cm <sup>3</sup>		
$\gamma_{di} =$	$(G/(1+w_i))/C_i$ , Dry density		lbs/ft <sup>3</sup>		
$n =$	$1 - \gamma_d/G_s \rho_w$ Initial porosity				

Final Sample Dimensions and Mass:			
Data	Cylinder Ht. Measurements cm		
	1	2	3
Data	13.799	13.892	13.974
$H_f =$	Average Height		13.86975 cm
$\Delta H =$	$H_f - H_i$ , Final Swell		0.000 cm
$C_f =$	$H_f * A$ , Final Cyl Volume		410.6722 cm <sup>3</sup>
Final Moisture Data: (Dry entire sample)			
L	Tare Wt	226.41 g	
M	T + Wet + BL+2FP	1291.12 g	1259.91 g
N	Brass Liner	208.56 g	w/o water
R	2 Wet filter papers	1.07 g	and soil
O	(M-L-N-R), Wet Wt	855.1 g	that piped
P	Dry Wt + Tare	940.9 g	through
Q	Dry Wt	714.5 g	sample
W	(O-Q)/Q, Final Moisture	19.7%	
Final Test data:			
$h$	Hydraulic head	67.2 cm	
$\gamma$	$h/H_f$ Hydraulic Gradient	4.85	
$\gamma_{df}$	$Q/C_f$	1.740 g/cm <sup>3</sup>	108.6
S	$(O-Q)/\gamma_w/V_p$ , Sat %	99.8%	
$V_p$	$A * H_f - Q/G_s * \gamma_w$	141.1 cm <sup>3</sup>	
n	$V_p/C_f$ , Final porosity	0.344	
$Q_{in}$	Total Water Inflow	407.2 cm <sup>3</sup>	
$N_{pv}$	$Q_{in}/V_p$ Pore vols inflow	2.886	

Average hydraulic conductivity of last four readings,  $\kappa = 7.8E-05$  m/s or  $7.8E-03$  cm/s

R&M Soils Worksheet - Permeability - Sample Data

*SAMPLE PIPED*

Client:	Monggomery Watson Hartza	Project:	Northeast Cape, St. Lawrence Island	
Address:	4100 Spenard Road	Material:	In situ, 6" Long Brass Liner Sample 2.4" Diameter	
	Anchorage, AK 99517	Sampled From:	Test Hole	Field #:
Source:	Phase III	Sampled by:	BGM, BO, DQ	Date Sampled:
Test Location:	R.I. Test Hole 88-18	Received by:	Allen Stevens	Date Received:
Depth:	9-11'	Tech Assigned:	Rich Giessel	R&M Project #:
Quantity Rep:	Test Boring Sample	Date Completed:	10/28/2002	Lab #:

Test Method: ASTM D 5856 - 95 (Reapproved 2002) - Permeability of Granular Soils - Method A
Special Sample Preparation: Field sample delivered to lab in "undisturbed" condition
Permeameter Type: Brass Liner
Method of Compaction: in-situ as near as possible with drive sample
Confinement: Porous stones with filter paper and small coil springs above top stone
CA/FA Wtd. Specific Gravity: 2.656
Permeant Liquid Used: Tap water

Initial Sample Dimensions and Mass:					
	Cylinder Height Measurements cm				
	1	2	3	4	
Data	14.071	14.103	13.984	14.028	cm
$H_i =$	Average Height				
	14.047 cm				
	Cylinder Diameter Measurements cm				
	1	2	3	4	
Data	6.185	6.133	6.187	6.167	cm
$D =$	Average Diameter				
	6.168 cm				
$A =$	$\pi(D/2)^2$ , Cylinder End Area				
	29.88 cm <sup>2</sup>				
$C_i =$	$H_i \cdot A$ , Initial Cylinder Volume				
	419.7 cm <sup>3</sup>				
$E =$	Ws + Brass Liner + Caps				
	396.2 g				
$F =$	Caps				
	17.2 g				
$G =$	(E-F-F <sub>b</sub> ), Ws				
	709.2 g				

Initial Moisture Data: (Use minimum 100g)		
I	Wet Wt + Tare	g
J	Dry Wt + Tare	g
K	Tare	g
$w_i =$	(I-J)/(J-K), Initial moisture	
$\gamma_{di} =$	$(G/(1+w_i))/C_i$ , Dry density	g/cm <sup>3</sup>
$\gamma_{di} =$	$(G/(1+w_i))/C_i$ , Dry density	lbs/ft <sup>3</sup>
$n =$	$1 - \gamma_d/G_s \rho_w$ , Initial porosity	

Final Sample Dimensions and Mass:				
	Cylinder Ht. Measurements cm			
	1	2	3	4
Data	14.071	14.103	13.984	14.028
$H_f =$	Average Height			14.047 cm
$\Delta H =$	$H_f - H_i$ , Final Swell			0.000 cm
$C_f =$	$H_f \cdot A$ , Final Cyl Volume			419.7075 cm <sup>3</sup>
Final Moisture Data: (Dry entire sample)				
L	Tare Wt	225.1 g		
M	T + Wet + BL + 2FP	1240.0 g		
N	Brass Liner	209.7 g		
R	2 Wet filter papers	0.6 g		
O =	(M-L-N-R), Wet Wt	804.6 g		
P	Dry Wt + Tare	890.3 g		
Q =	Dry Wt	665.2 g		
$w_f =$	(O-Q)/Q, Final Moisture	21.0%		

Final Test data:		
h	Hydraulic head	67.2 cm
$i =$	$h/H_f$ , Hydraulic Gradient	4.78
$\gamma_{df} =$	$Q/C_f$	1.585 g/cm <sup>3</sup>
$S =$	$(O-Q)/\gamma_w/V_p$ , Sat %	82.7%
$V_p =$	$A \cdot H_f \cdot Q / G_s \cdot \gamma_w$	168.8 cm <sup>3</sup>
$n =$	$V_p / C_f$ , Final porosity	0.402
$Q_{in} =$	Total Water Inflow	262.1 cm <sup>3</sup>
$N_{pv} =$	$Q_{in}/V_p$ , Pore vols inflow	1.553

Average hydraulic conductivity of last four readings,  $\kappa = 2.2 \times 10^{-5}$  m/s or  $2.2 \times 10^{-3}$  cm/s

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## **APPENDIX J**

*Environment and Natural Resources  
Institute Taxonomic Report (Plant Report)*

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University of Alaska Anchorage   Environment and Natural Resources Institute  
707 A Street • Suite 103 A • Anchorage, AK 99501 USA • Tel: (907) 257-2783 • Fax: (907) 257-2789

October 4, 2001

William O'Connell  
Montgomery Watson Harza  
4100 Sepnard Road  
Anchorage, AK 99517

RE: Northeast Cape, St. Lawrence Island

Dear Mr. O'Connell:

Below are the identifications of the plants from Northeast Cape, St. Lawrence Island that you provided to me. Our original understanding was that you would be providing samples of vascular plants. Several of the plants, however, are mosses or lichens and would require additional work to identify to species. I have identified them (with one exception) to genus. Sample 1102, a sedge, contained only vegetative material and cannot readily be identified to species. The flowering graminoid sample collected in September is not the same species, and had no sample number- it is listed below as *Arctophila fulva*, a common wetland grass that is often used by waterfowl. Please let me know if you need an identification of sample 1102 to the species level. All other samples were identified to species or subspecies and are listed along with commonly used synonyms and common names. In the table below, I have omitted the prefix for the sample number (01NE28PT) since it was the same for all samples.

If you have any questions, please contact me at the address above or phone me at (907) 257-2785.

Sincerely,

Robert Lipkin  
Research Botanist

cc: Mike Kelly

**IDENTIFICATIONS OF PLANTS FROM NORTHWEST CAPE, ST. LAWRENCE ISLAND**

<b>Sample #</b>	<b>Date</b>	<b>Scientific Name</b>	<b>Synonym</b>	<b>Common Name</b>	<b>Family</b>
1101	25-Jul-01	Unidentified moss			
1102	25-Jul-01	<i>Carex</i> sp. (vegetative material only)			Cyperaceae
2101	25-Jul-01	<i>Pedicularis langsdorffii</i> Fisch. ex Stev. ssp. <i>langsdorffii</i>		Langsdorf's Lousewort	Scrophulariaceae
2102	25-Jul-01	<i>Salix pulchra</i> Cham.	<i>Salix planifolia</i> ssp. <i>pulchra</i> (Cham.) Argus	Diamond-Leaf Willow	Salicaceae
3101	25-Jul-01	<i>Cladina</i> sp. [lichen]			
3102	25-Jul-01	<i>Thamnolia</i> sp. [lichen]			
3103	25-Jul-01	<i>Polemonium acutiflorum</i> Willd. ex Roemer & J.A. Schultes		Tall Jacob's-Ladder	Polemoniaceae
4101	25-Jul-01	<i>Sphagnum</i> sp. [moss]			
5101	25-Jul-01	<i>Stereocaulon</i> sp. [lichen]			
5102	25-Jul-01	<i>Arnica lessingii</i> (Torr. & Gray) Greene ssp. <i>lessingii</i>		Lessing's Leopardbane	Asteraceae
5103	25-Jul-01	<i>Umbilicaria</i> sp. [lichen]			
5104	25-Jul-01	<i>Rhodiola integrifolia</i> Raf.	<i>Sedum roseum</i> ssp. <i>integrifolium</i> (Raf.) Hultén	Entire-Leaf Roseroot	Crassulaceae
5105	25-Jul-01	<i>Cassiope tetragona</i> (L.) D. Don var. <i>tetragona</i>		White Arctic Mountain-Heather	Ericaceae
5106	25-Jul-01	<i>Salix chamissonis</i> Anderss.		Chamisso's Willow	Salicaceae
5107	24-Sep-01	<i>Empetrum nigrum</i> ssp. <i>hermaphroditum</i> (Lange ex Hagerup) Böcher	<i>Empetrum</i> <i>hermaphroditum</i> Lange ex Hagerup	Black crowberry	Empetraceae
?	24-Sep-01	<i>Arctophila fulva</i> (Trin.) Rupr. ex Anderss.		Pendant grass	Poaceae

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## **APPENDIX K**

*Estimate of Contaminated Soil Volume*

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**MWH**

Estimates of contaminated soil volumes are based on exceedences of the 18 AAC 75.340 Table B DRO cleanup level of 250 mg/Kg from soil and sediment sampling conducted in 2001 and 2002. Estimates include extrapolation between sample points and depth estimates based on known sample depths.

Quantities to be removed depend on the cleanup criteria used. Soil for remediation could be estimated by:

- The quantity of material that is contaminated (i.e., any detection, including sodium, iron, etc. that are below any foreseeable cleanup criteria). This is likely to be the largest quantity of material.
- The quantity of material that exceeds Method 2, Level A for RRO, DRO, GRO and 1/10<sup>th</sup> Method 2 for the remaining constituents. This would eliminate constituents like sodium, but would still be a large quantity because calculation of cumulative risk may allow us to leave in place some constituents above 1/10<sup>th</sup>.
- The quantity of material that exceeds Method 2, Level A criteria for RRO, DRO, GRO and ignore other potential constituents. This would roughly capture the extent of the petroleum contamination (roughly because PAH often drive the petroleum cleanup) and be a less labor-intensive calculation. It would also ignore cleanup driven by constituents such as arsenic, which may be background.

Further refinement of the extent of contamination is anticipated.

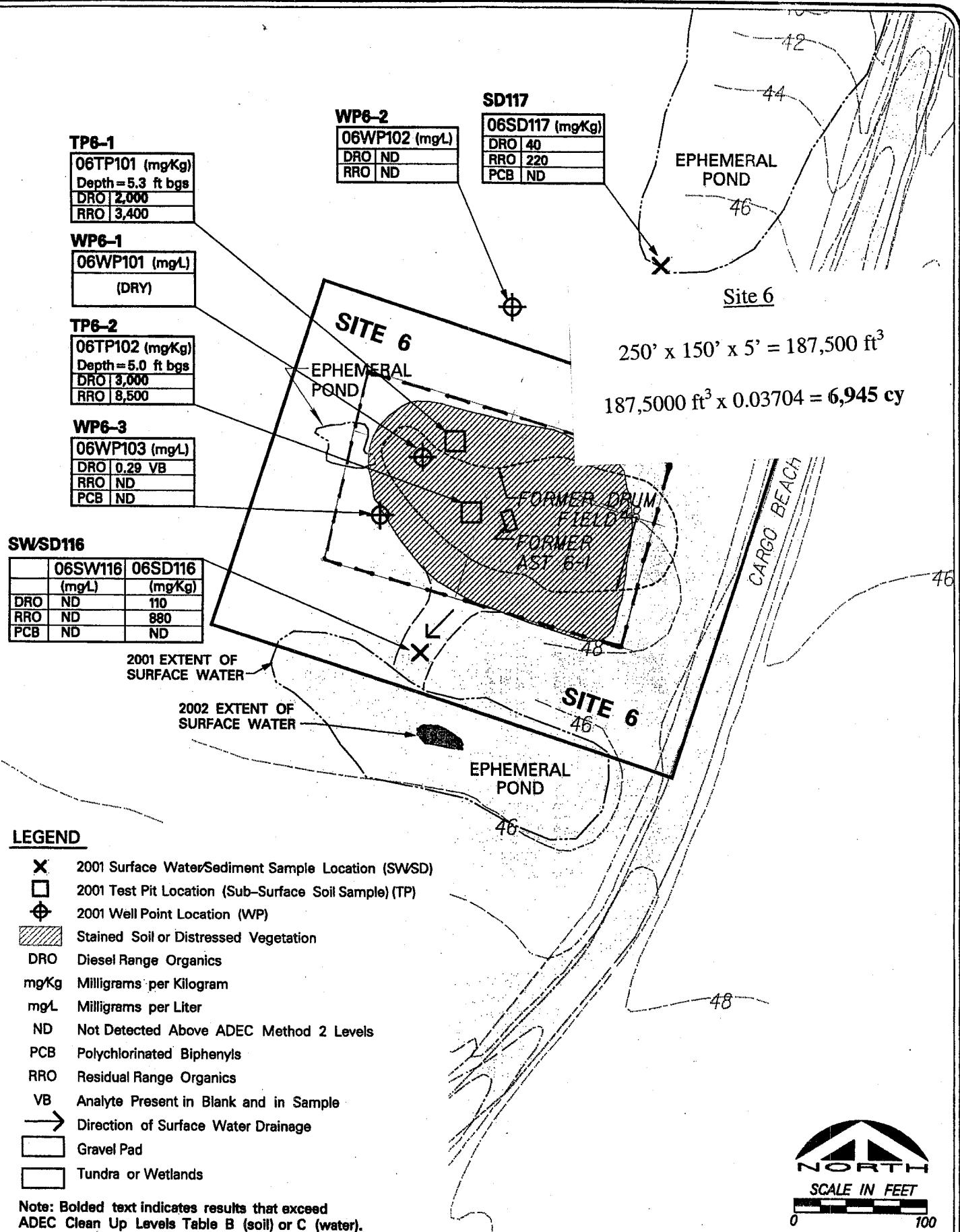


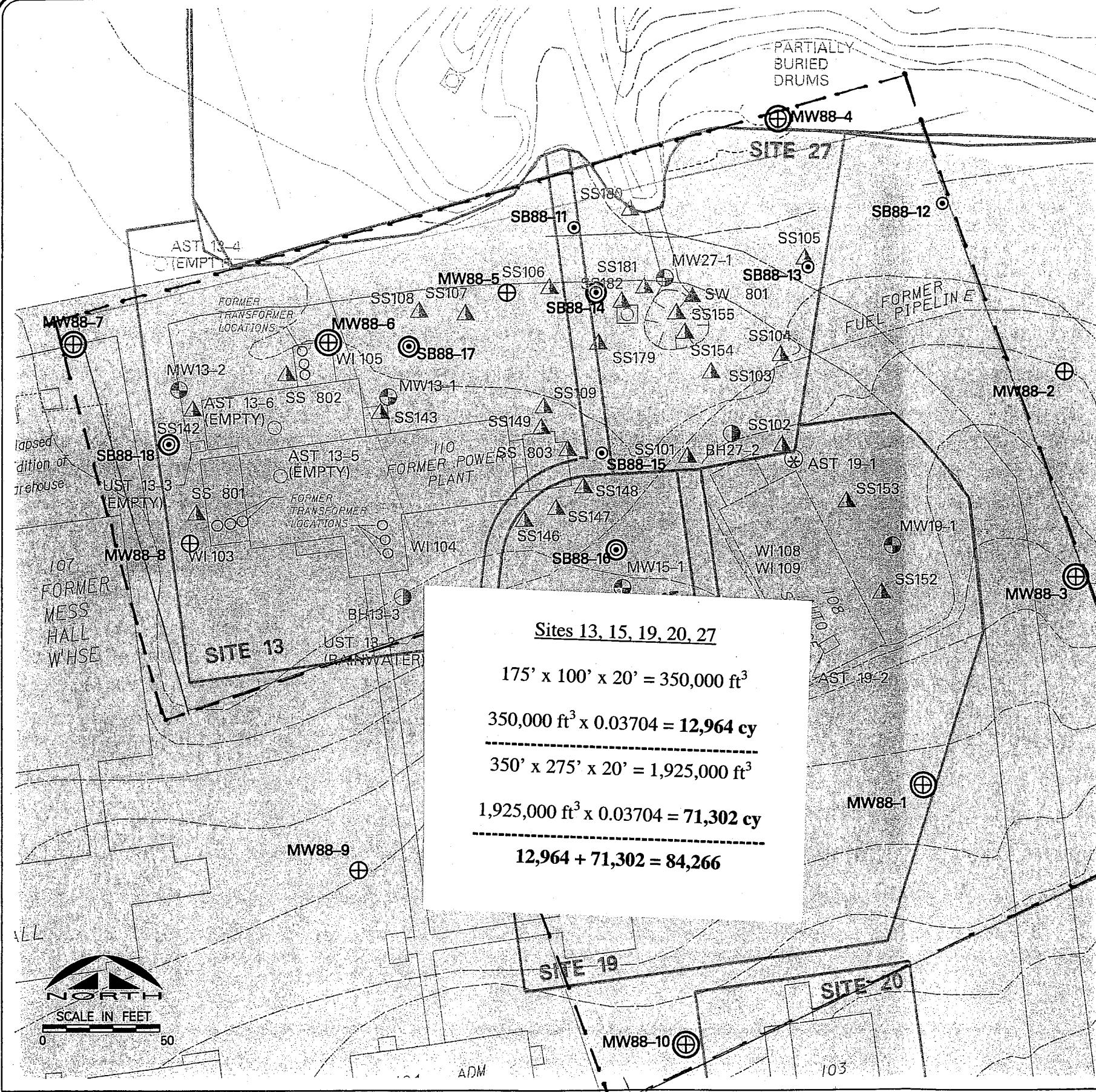
FIGURE 2-3

U. S. ARMY ENGINEER DISTRICT, ALASKA – N. E. CAPE, ALASKA  
2002 PHASE III REMEDIAL INVESTIGATION  
**SITE 6 – CARGO BEACH ROAD DRUM FIELD**  
**2001 SAMPLING LOCATIONS & SELECTED RESULTS**



**MWH**

MONTGOMERY WATSON HARZA  
Anchorage, Alaska



**MWH**  
MONTGOMERY WATSON HARZA

Anchorage, Alaska

## SOILS RESULTS

Soil Sample Location	Sample (feet bgs)	GRO (mg/Kg)	DRO (mg/Kg)	RRO (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	o-Xylene (mg/Kg)	m & p-Xylene (mg/Kg)	Naphthalene (mg/Kg)	Chromium (mg/Kg)
MW 88-1	15.5-17.5	19	<b>5000</b>	39 VJ	ND (0.012)	ND (0.027)	ND (0.027)	ND (0.027)	0.0022 VJ	6.5
MW 88-1	17.5-20	4.9	<b>1400</b>	16 VJ	ND (0.011)	ND (0.025)	ND (0.025)	ND (0.025)	0.00038 VJ	4.38
MW 88-2	8-10	ND (3)	<b>ND (12)</b>	6 VJ	ND (0.014)	ND (0.035)	ND (0.035)	ND (0.035)	0.001 VJ	16.1
MW 88-2	10-12	ND (3.6)	<b>ND (11)</b>	7.1 VJ	ND (0.015)	ND (0.037)	ND (0.037)	ND (0.037)	0.00056 VJ	8
MW 88-3	4-6	ND (6)	<b>7.6 VJ</b>	120 VJ	ND (0.023)	ND (0.058)	ND (0.058)	ND (0.058)	0.00081 VJ	22.3
MW 88-3	16-18	51	<b>3700</b>	24 VJ	ND (0.021)	ND (0.051)	ND (0.051)	0.31 VJ	1.5	13.1
MW 88-4	9-11	44	<b>12000</b>	3700	<b>0.047</b>	0.083	0.89	1.6	5.9 VHB	17.3
MW 88-4	11-13	54 VHB	<b>2800</b>	16 VJ	ND (0.018)	ND (0.044)	0.01 VJ	0.29	2.3	3.73
MW 88-5	1-3	ND (2.8)	<b>380</b>	3400	ND (0.012)	ND (0.025)	ND (0.025)	ND (0.025)	0.0041 VJ	42.3
MW 88-5	11-13	ND (4)	21	25 VJ	ND (0.014)	ND (0.034)	ND (0.034)	ND (0.034)	0.0037 VJ	4.5
MW 88-6	7-9	130 VHB	<b>3100</b>	23 VJ	ND (0.012)	ND (0.026)	0.044	0.44	4.1	12.8
MW 88-6	11-13	83 VHB	<b>1200</b>	30 VJ	ND (0.012)	ND (0.028)	0.013 VJ	0.15	1.1	8.3
MW 88-7	7-9	140 VHB	<b>12000</b>	55 VJ	ND (0.012)	ND (0.027)	0.13	1.5	7.9	17
MW 88-7	11-13	130 VHB	<b>9200</b>	54 VJ	ND (0.011)	ND (0.026)	0.38	2.2	8.4	11.6
MW 88-8	10-12	68 VHB	<b>6200</b>	11 VJ	ND (0.018)	ND (0.044)	ND (0.044)	0.17	3.3	9.63
MW 88-8	14-16	73 VHB	<b>2300</b>	7.4 VJ	ND (0.018)	ND (0.045)	ND (0.045)	0.18	2.3	8.34
MW 88-9	8-10	ND (3.5)	7 VJ	8.7 VJ	ND (0.015)	ND (0.038)	ND (0.036)	ND (0.036)	0.00045 VJ	7.04
MW 88-9	20-22	ND (4.8)	7.6 VJ	12 VJ	ND (0.016)	ND (0.038)	ND (0.038)	ND (0.038)	0.0019 VJ	12.5
MW 88-10	22-24	31	<b>1400</b>	ND (110)	ND (0.015)	ND (0.038)	ND (0.038)	ND (0.038)	0.48	10
MW 88-10	24-26	19	<b>760</b>	ND (110)	ND (0.015)	ND (0.038)	ND (0.038)	ND (0.038)	0.11	4.8
SB 88-11	3-5	70	<b>13000</b>	5100	<b>0.12</b>	3.2	2.7	5.1	12	16.5
SB 88-11	7-9	99	<b>51000</b>	6000	<b>0.19</b>	4.5	6.2	12	81	23.7
SB 88-12	4-6	ND (5.2)	190	1500	ND (0.022)	ND (0.054)	ND (0.054)	ND (0.054)	0.0045 VJ	12.4
SB 88-12	10-12	ND (3.8)	20	33 VJ	ND (0.017)	ND (0.043)	ND (0.043)	ND (0.043)	0.0011 VJ	9.62
SB 88-13	6-8	11 VJ	<b>490</b>	4600	<b>0.37</b>	ND (0.18)	0.071 VJ	0.19	0.042	16.5
SB 88-13	14-16	ND (6.1)	77	420	ND (0.022)	ND (0.054)	ND (0.054)	ND (0.054)	0.0018 VJ	14.3
SB 88-14	2-4	220 VHB	<b>47000</b>	3000	0.019	0.036 VJ	1.7	0.71	79	22.7
SB 88-14	12-14	62	<b>210</b>	900	<b>0.24</b>	1.4	1.7	1.3	0.41	22.8
SB 88-15	10-12	ND (4.9)	33	150	ND (0.018)	ND (0.044)	0.01 VJ	ND (0.044)	0.016	23
SB 88-15	12-14	ND (4.4)	79	590	ND (0.021)	ND (0.052)	ND (0.052)	ND (0.052)	0.0047 VJ	23.4
SB 88-16	6-8	110 VHB	<b>18000</b>	33 VJ	ND (0.015)	0.032 VJ	0.015 VJ	1.8	28	15.6
SB 88-16	10-12	60 VHB	<b>4200</b>	12 VJ	ND (0.017)	ND (0.041)	ND (0.041)	ND (0.041)	0.9 VLB	6.7
SB 88-17	8-10	130 VHB	<b>4700</b>	450	ND (0.013)	0.05 VHB	1.5 VHB	4 VHB	12	18.2
SB 88-17	12-14	140 VHB	<b>4300</b>	110 VJ	ND (0.012)	ND (0.023)	0.34 VHB	3 VHB	3.6	8.31
SB 88-18	8-10	100 VHB	<b>7300</b>	24 VJ	0.018 VHB	0.018 VJ	0.019 VJ	0.95 VHB	10	14
SB 88-18	10-12	170 VHB	<b>4000</b>	226	0.062 VJ	0.041	1.3 VJ	4.4 VJ	6.9 VJ	16.7 VJ

Ethylbenzene results did not exceed ADEC Method 2

## WATER RESULTS

Sample Location	GRO (mg/L)	DRO (mg/L)	RRO (mg/L)	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	o-Xylene (mg/L)	m & p-Xylene (mg/L)
MW 88-1	0.024 VJ	1.2	0.43	0.00058	ND (0.0005)	0.00061 VB	0.00013 VJ	0.00022 VJ
MW 88-2	ND (0.05)	0.71	1.3	0.00092	0.00034 VJ	0.00038 VB	0.0001 VJ	0.00035 VJ
MW 88-3	0.42	34	0.22	0.00057	0.025	0.00024 VB	0.00008 VJ	0.022
MW 88-4	1.2	72	1.9	0.03	0.12	0.0032	0.007	0.085
MW 88-5	1.3	9.8	2.3	<b>0.019</b>	0.035	0.12	0.071	0.14
MW 88-6	1.1	69	2.1	0.00074	0.052	0.00019 VB	0.0038	0.055
MW 88-7	1.5	6.1 VLB	0.32	<b>0.014</b>	0.072	0.0012 VB	0.024	0.13
MW 88-8	0.52	20	0.18 VJ	0.00012 VJ	0.018	0.0001 VB	0.00084	0.016
MW 88-9	0.084	0.71	ND (0.2)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)
MW 88-10	0.12	55	1.3	0.0027	0.0017	0.0014	0.00015 VJ	0.00079

## LEGEND

- ⊕ Monitoring Well/Soil Sample Location (2002)
- Borehole/Soil Sample Location (2002)
- Borehole (BH)
- ◐ Monitoring Well (MW)
- ▲ Surface Soil Sample (SS)
- ▲ Surface Water/Sediment Sample (SW/SD)
- Gravel Pad
- Tundra or Wetland
- Surface Water Drainage
- DRO Results Exceed ADEC Table B at Static Water Interface

FIGURE 2-6

U. S. ARMY ENGINEER DISTRICT, ALASKA - N. E. CAPE, ALASKA

2002 PHASE III REMEDIAL INVESTIGATION

SITE 88 (SITES 13, 15, 19, 20, & 27) - MAIN OPERATIONS COMPLEX  
SAMPLING LOCATIONS & SELECTED RESULTS

**LEGEND**

- 2001 Surface Soil Sample Location (SS)
- 2001 Surface-Soil/Subsurface Soil Sample Location (SS/SB)
- 2001 Surface Water/Sediment Sample Location (SW/SD)
- DRO Diesel Range Organics
- mgKg Milligrams per Kilogram
- mgL Milligrams per Liter
- ND Not Detected
- PCB Polychlorinated Biphenyls
- RRO Residual Range Organics
- VQQ PQL Approximate Due to QC or Matrix Effects
- Gravel Pad
- Tundra or Wetland

Note: Bolded text indicates results that exceed ADEC Clean Up Levels Table B (soil) or C (water).

**SWSD113**

	21SW113	21SD113
	(mgL)	(mgKg)
DRO	0.3	<b>310</b>
RRO	ND	2,000
PCB	ND	ND

**SS172**

	21SS172 (mgKg)
DRO	140
RRO	<b>390</b>
PCB	ND
AS	<b>11.5</b>

**SWSD114**

	21SW114	21SD114
	(mgL)	(mgKg)
DRO	ND VQQ	<b>310</b>
RRO	ND VQQ	2,000
PCB	ND	ND
CR	36	50

**SSSB169**

	21SS169	21SB169
	(mgKg)	(mgKg)
Depth	0-5'	<b>1.5-2'</b>
DRO	<b>270</b>	<b>640</b>
RRO	<b>2,800</b>	<b>3,700</b>
PCB	ND	ND
AS	<b>7.4</b>	<b>3.0</b>
CR	ND	<b>27.4</b>

**SS/SB170**

	21SS170	21SB170
	(mgKg)	(mgKg)
Depth	0-5'	<b>1.5-2'</b>
DRO	<b>380</b>	<b>340</b>
RRO	2,200	2,300
PCB	0.29	ND
AS	<b>5.9</b>	<b>4.0</b>

Site 21

$$600' \times 150' \times 1.5' = 135,000 \text{ ft}^3$$

$$135,000 \text{ ft}^3 \times 0.03704 = 5,000 \text{ cy}$$

**SSSB171**

	21SS171	21SB171
	(mgKg)	(mgKg)
Depth	0-5'	<b>185-240'</b>
DRO	94	ND
RRO	530	25
PCB	ND	ND
AS	<b>6.1</b>	<b>4.3</b>
CR	<b>39.8</b>	<b>41.0</b>

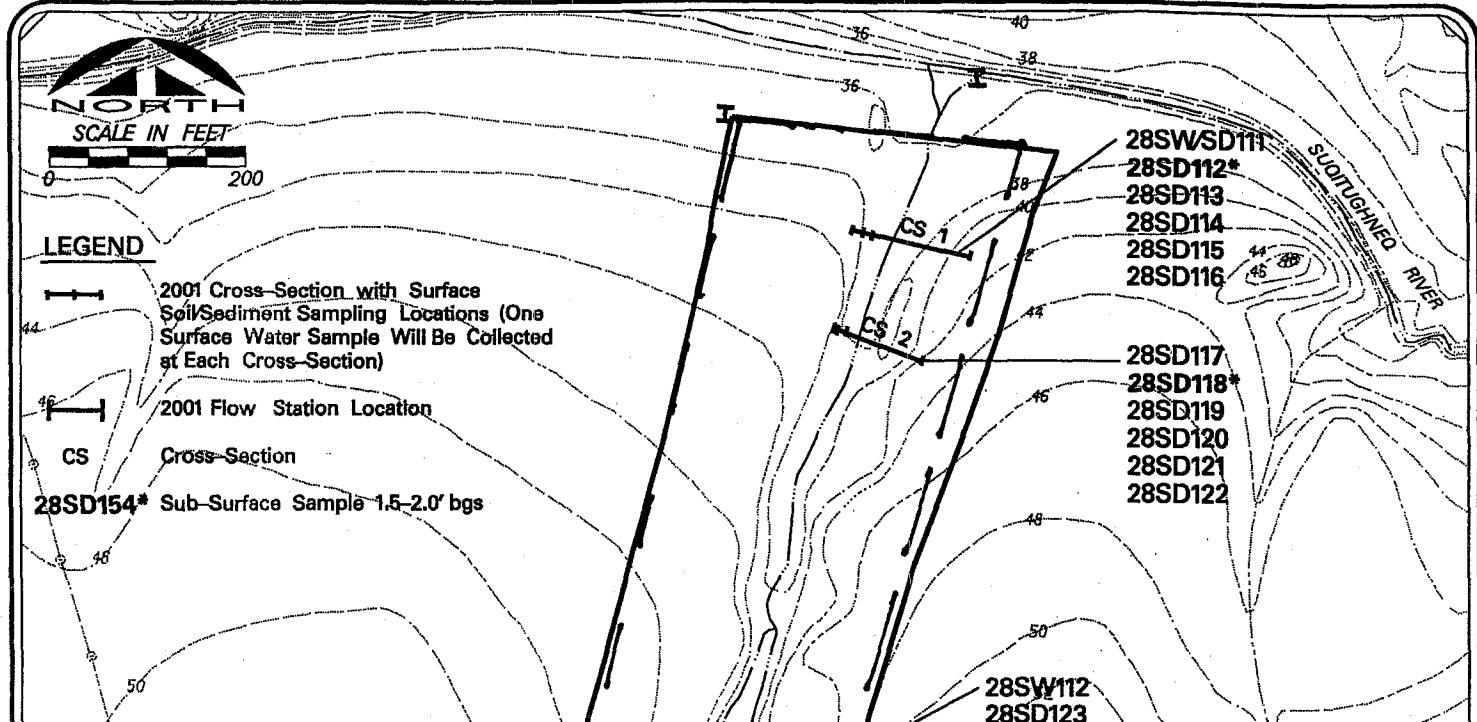


**MWH**

MONTGOMERY WATSON HARZA  
Anchorage, Alaska

**FIGURE 2-12**

U. S. ARMY ENGINEER DISTRICT, ALASKA - N. E. CAPE, ALASKA  
2002 PHASE III REMEDIAL INVESTIGATION  
**SITE 21 - WASTEWATER TREATMENT FACILITY**  
**2001 SAMPLING LOCATIONS & SELECTED RESULTS**



$$250' \times 1,200' \times 1.5' = 450,000 \text{ ft}^3$$

$$450,000 \text{ ft}^3 \times 0.03704 = 16,668 \text{ cy}$$

$$800' \times 300' \times 1.5' = 360,000 \text{ ft}^3$$

$$360,000 \text{ ft}^3 \times 0.03704 = 13,334 \text{ cy}$$

$$13,334 + 16,668 = 30,002 \text{ cy}$$

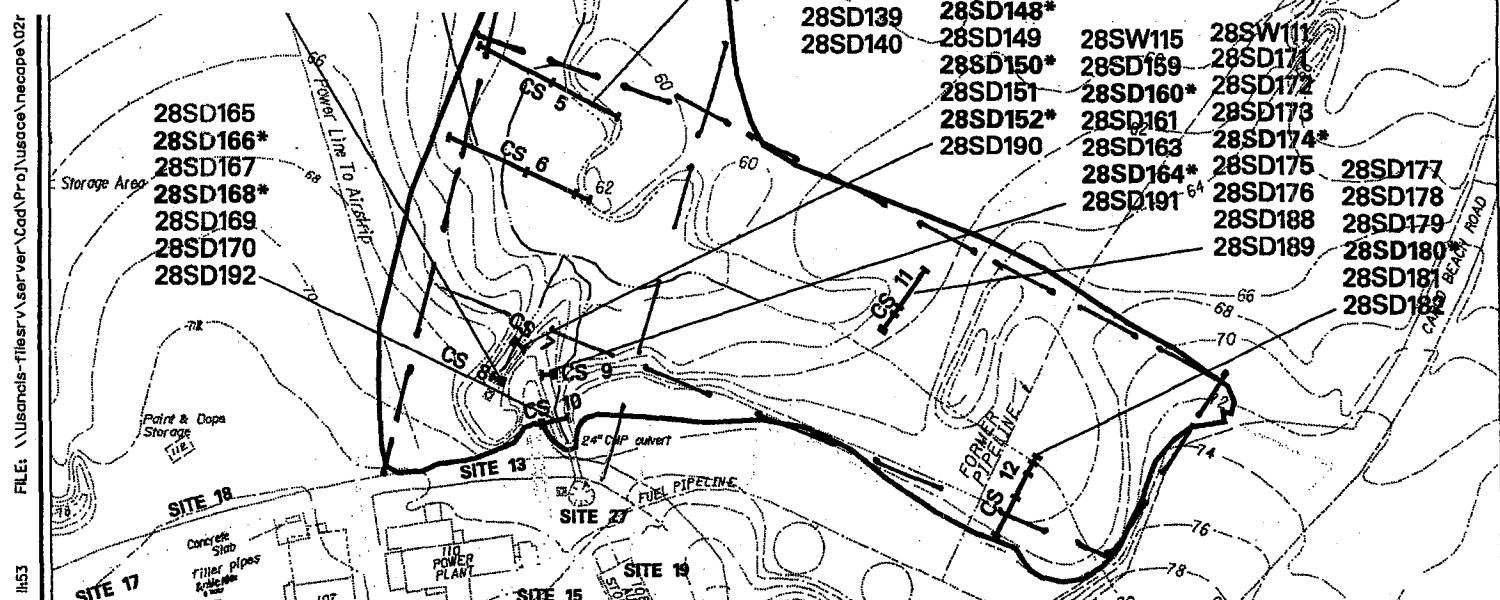


FIGURE 2-15

U. S. ARMY ENGINEER DISTRICT, ALASKA - N. E. CAPE, ALASKA  
2002 PHASE III REMEDIAL INVESTIGATION

**SITE 28 - DRAINAGE BASIN  
2001 SAMPLING LOCATIONS**



**MWH**

MONTGOMERY WATSON HARZA  
Anchorage, Alaska

**LEGEND**

- ▲ Previous Surface Water/Sediment Sample Location (SWSD)
- 2001 Cross-Section (SC) with Surface Water/Sediment (SWSD) Sampling Locations (One Surface Water Sample Was Collected at Each Cross-Section)
- ✗ 2001 Surface Soil/Sediment Sample Location
- SW Surface Water
- SD Sediment
- Gravel Pad
- Tundra or Wetland

Note: Bolded text indicates results that exceed ADEC Clean Up Levels Table B (soil) or C (water).

**SD129**

29SD129 (mg/Kg)	
DRO	15
RRO	73
AS	2.8

**SD128**

29SD128 (mg/Kg)	
DRO	180
RRO	1,000
AS	4.8

**SC-4**

	DRO (mg/Kg)	RRO (mg/Kg)
29SW117	ND	ND
29SD123	44	180 VLB
29SD124	4,400	580
29SD125	450	790

**SC-3**

	DRO (mg/Kg)	RRO (mg/Kg)
29SW116	ND	ND
29SD120	27	51
29SD121	ND	10
29SD122	37	50

**SC-2**

	DRO (mg/Kg)	RRO (mg/Kg)
29SW115	ND	ND
29SD117	9.3	ND
29SD118	18	45
29SD119	15	100

Site 29

$$9,500' \times 4' \times 4 = 152,000 \text{ ft}^3$$

$$152,000 \text{ ft}^3 \times 0.03704 = 5,630 \text{ cy}$$

29SD127 (mg/Kg)	
DRO	69
RRO	440
AS	5.7

**SD126**

29SD126 (mg/Kg)	
DRO	240
RRO	1,000

**SC-1**

	DRO (mg/Kg)	RRO (mg/Kg)
29SW114	ND	ND
29SD114	410	770
29SD115	13	26
29SD116	95	250
SD11	25,000	

**FIGURE 2-20**

U. S. ARMY ENGINEER DISTRICT, ALASKA - N. E. CAPE, ALASKA  
2002 PHASE III REMEDIAL INVESTIGATION

**SITE 29 - SUQUITUGHNEQ RIVER  
2001 SAMPLING LOCATIONS & SELECTED RESULTS**


**MWH**

 MONTGOMERY WATSON HARZA  
Anchorage, Alaska

**LEGEND**

- 2001 Surface Soil Sample Location
- 2001 Surface Water Sample Location
- DRO Diesel Range Organics
- mgKg Milligrams per Kilogram
- mgL Milligrams per Liter
- ND Not Detected
- PCB Polychlorinated Biphenyls
- RRO Residual Range Organics
- VBL Analyte Present in Blank and in Sample
- Depth Sample Collect Feet Below Ground Surface
- Gravel Pad

**SW102**  
(approximately 500 ft.)

31SW102 (mgL)
DRO ND
RRO ND

**SS123**

31SS123 (mgKg)
DRO 240
RRO 1300
PCB 22

**SS109**

31SS109 (mgKg)	31SS110 (mgKg)
DRO 470	310
RRO ND	ND
DEPTH 0.5	1.5

**SS107**

31SS107 (mgKg)	31SS108 (mgKg)
DRO 690	550
RRO ND	ND
DEPTH 0.5	1.5

**Site 31**

Each Tank- 15' x 15' x 2' = 450 ft<sup>3</sup>

$$450 \text{ ft}^3 \times 0.03704 = 16.66 \text{ cy/tank} \times 3 = 49.98 \text{ cy}$$

Tank Impoundment- 50' x 50' x 2' = 5,000 ft<sup>3</sup>

$$5,000 \text{ ft}^3 \times 0.03704 = 185.2 \text{ cy}$$

$$185.2 + 49.98 = 235.18 \text{ cy}$$

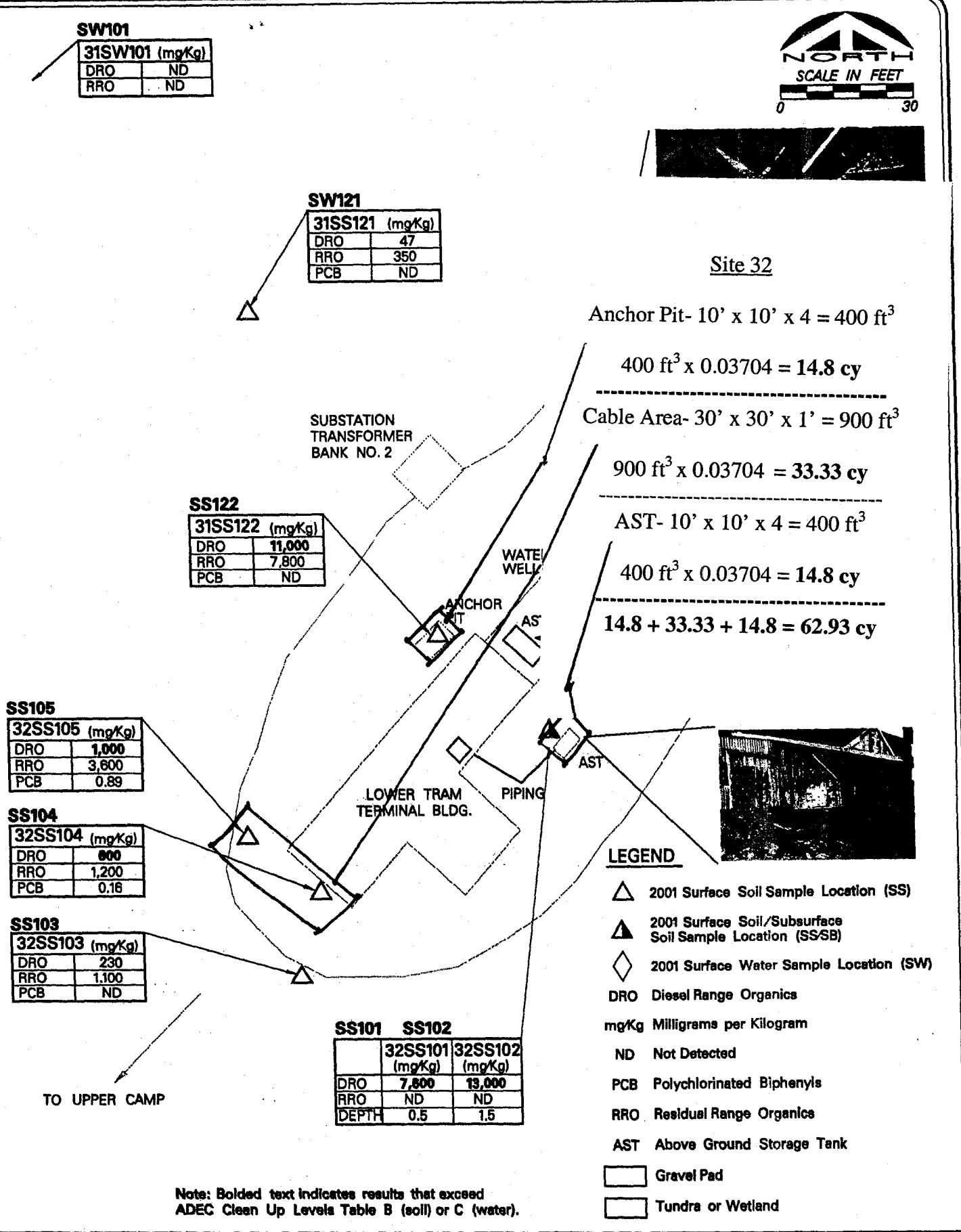

**MWH**  
 MONTGOMERY WATSON HARZA

Anchorage, Alaska

31SW101  
31SS121  
31SS122  
see FIGURE 2-18

**FIGURE 2-26**
 U. S. ARMY ENGINEER DISTRICT, ALASKA - N. E. CAPE, ALASKA  
 2002 PHASE III REMEDIAL INVESTIGATION

**SITE 31 - WHITE ALICE COMMUNICATIONS SITE**  
**2001 SAMPLING LOCATIONS & SELECTED RESULTS**

**FIGURE 2-27**

**U. S. ARMY ENGINEER DISTRICT, ALASKA - N. E. CAPE, ALASKA  
2002 PHASE III REMEDIAL INVESTIGATION**

**SITE 32 - LOWER TRAM TERMINAL  
2001 SAMPLING LOCATIONS & SELECTED RESULTS**

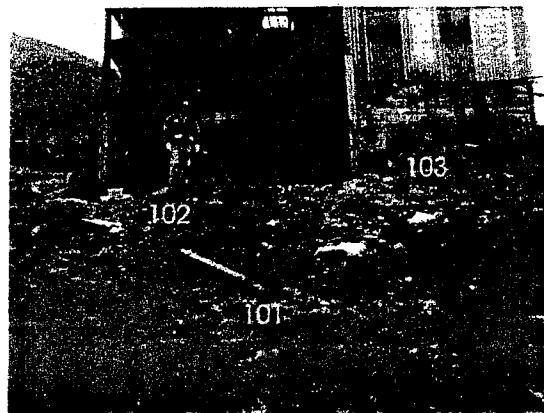


**MWH**

**MONTGOMERY WATSON HARZA**  
Anchorage, Alaska

Site 335' x 5' x 1' = 25 ft<sup>3</sup>

$$25 \text{ ft}^3 \times 0.03704 = 0.926 \text{ cy}$$

**SS103**

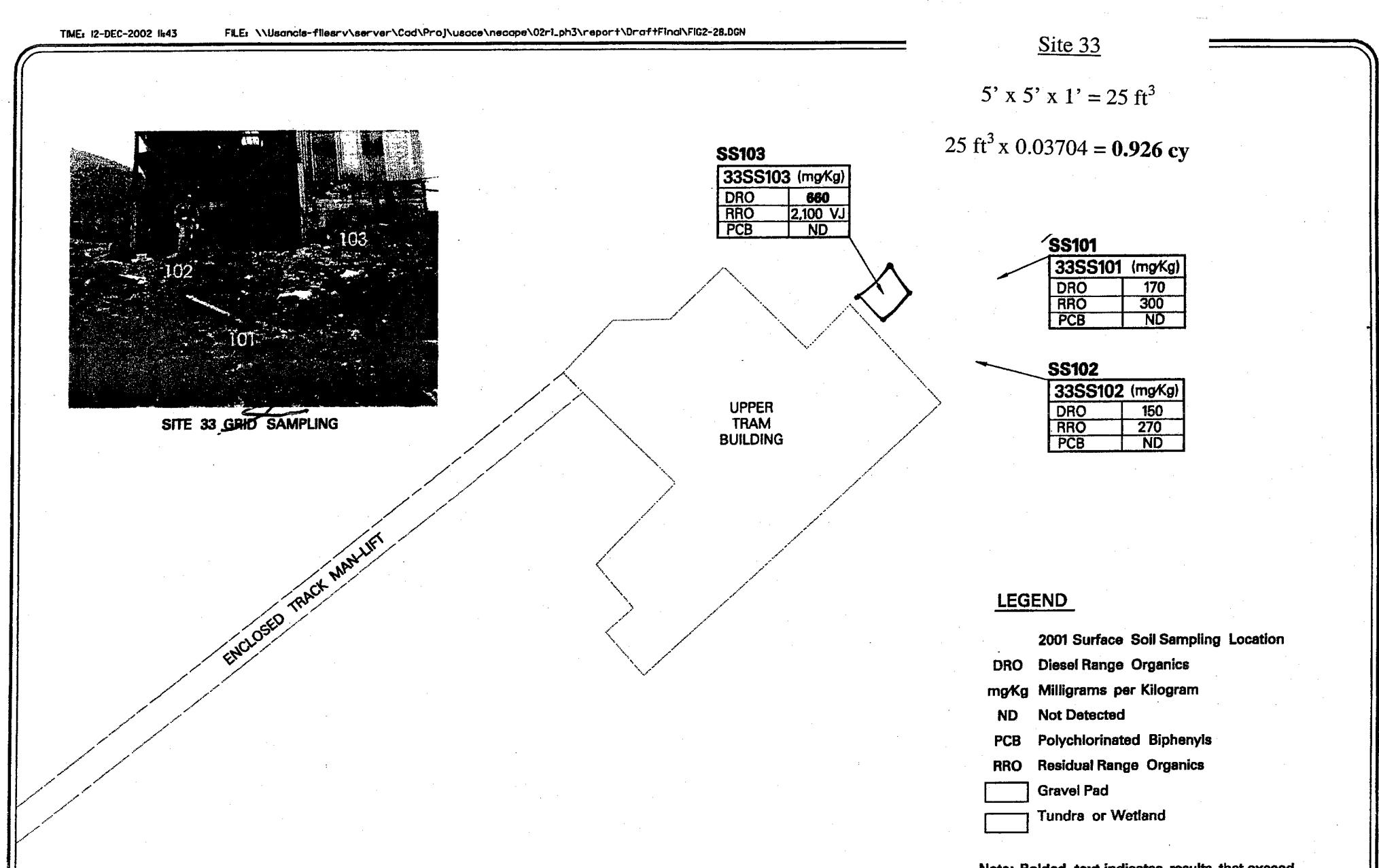
33SS103 (mg/Kg)	
DRO	<b>660</b>
RRO	2,100 VJ
PCB	ND

**SS101**

33SS101 (mg/Kg)	
DRO	170
RRO	300
PCB	ND

**SS102**

33SS102 (mg/Kg)	
DRO	150
RRO	270
PCB	ND

**FIGURE 2-28**

U. S. ARMY ENGINEER DISTRICT, ALASKA – N. E. CAPE, ALASKA  
2002 PHASE III REMEDIAL INVESTIGATION

**SITE 33 – UPPER TRAM TERMINAL**  
**2001 SAMPLING LOCATIONS & SELECTED RESULTS**

**MWH**MONTGOMERY WATSON HARZA  
Anchorage, Alaska

LEGEND

- 2001 Surface Soil Sample
- 2001 Surface Soil/Subsurf. Sample Location
- DRO Diesel Range Organics mg/Kg Milligrams per Kilogram
- ND Not Detected
- PCB Polychlorinated Biphenyl
- RRO Residual Range Organics
- Gravel Pad
- Tundra or Wetland

Site 34Outfall- 40' x 40' x 1' = 1,600 ft<sup>3</sup>

$$1,600 \text{ ft}^3 \times 0.03704 = 59.26 \text{ cy}$$

AST- 10' x 10' x 2' = 200 ft<sup>3</sup>

$$200 \text{ ft}^3 \times 0.03704 = 7.4 \text{ cy}$$

$$59.26 + 7.4 = 66.66 \text{ cy}$$

34SS102 (mg/Kg)			
DRO	14		
RRO	77		
PCB	ND		

34SS103 (mg/Kg)			
DRO	13		
RRO	76		
PCB	ND		

SS104	
34SS104 (mg/Kg)	
PCB	1.06



OUTFALL  
FUEL TANK

SS106	
34SS106 (mg/Kg)	
DRO	1,100
RRO	58
DEPTH	1.5

SS105	
34SS105 (mg/Kg)	
DRO	980
RRO	ND VOO

SS107	
34SS107 (mg/Kg)	
DRO	41
RRO	95
PCB	0.05

SS110	
34SS110 (mg/Kg)	
DRO	230
RRO	620
PCB	0.23

SS109	
34SS109 (mg/Kg)	
DRO	300
RRO	1,200
PCB	0.21

SS108	
34SS108 (mg/Kg)	
DRO	220
RRO	280
PCB	0.36



SITE 34  
GRID  
SAMPLING



Note: Bolded text indicates results that exceed ADEC Clean Up Levels Table B (soil) or C (water).



MWH

MONTGOMERY WATSON HARZA  
Anchorage, Alaska

FIGURE 2-29

U. S. ARMY ENGINEER DISTRICT, ALASKA - N. E. CAPE, ALASKA  
2002 PHASE III REMEDIAL INVESTIGATIONSITE 34 - UPPER CAMP  
2001 SAMPLING LOCATIONS & SELECTED RESULTS