02.08-03/01/97-02292

Contractor's Closeout Report for Sites 6 and 82 Source Removal Operable Unit No. 2 MCB Camp Lejeune Jacksonville, North Carolina

Volume VI of IX

Prepared for:

DEPARTMENT OF THE NAVY
Contract No. N62470-93-D-3032
Delivery Order 0032

Prepared by

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

5335 Triangle Parkway, Suite 450
Norcross, GA 30092

March 1997

OHM Project No. 15226

02.08-03/01/97-02292

SECTION ~~3b~~

4b.

Camp Lejeune 15226

SAMPLE SUMMARY REPORT

SAMPLE NUMBER	SAMPLE DATE	SAMPLE LOCATION	COC NUMBER	LAB ID	LAB SAMPLE ID	DQO LEVEL	PACKAGE ID	AIRBILL NUMBER
CLJ-DS-10	3/3/94	BATT. EXCAV.; STP (SAMPLE POINT #1)	127966	ASC	JM4367	IV	615321	7526016816
CLJ-DS-11	3/3/94	BATT. EXCAV.; STP (SAMPLE POINT #2)	127966	ASC	JM4368	IV	615321	7526016816
CLJ-DS-11d	3/3/94	BATT. EXCAV.; STP (SAMPLE POINT #2)	127966	ASC	JM4369	IV	615321	7526016816

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID:		**CLJ-DS-10**	**CLJ-DS-11**	**CLJ-DS-11D**
ASC Sample Number:		JM4367	JM4368	JM4369
Sample Date:		940303	940303	940303
Facility Code:		015226N	015226N	015226N
Parameters	Units			
Conventional Data (CV10)				
Flash Point, Seta Flash 60	Deg C	>60	>60	>60
Reactive Cyanide	mg/kg	<10.0	<10.0	<10.0
Reactive Sulfide	mg/kg	<10.0	<10.0	<10.0
pH (Electrode)	std	4.68	4.50	4.49
Total Petroleum Hydrocarbons Analysis, GC, (GS17)				
Light hydrocarbons(C2 - C10)	mg/kg	<4.46	<4.73	<4.22
Medium hydrocarbons(C10 - C21)	mg/kg	77.2	33.2	<16.4
Heavy hydrocarbons(C21 - C40)	mg/kg	382	717	131
RCRA TCLP Leachate Herbicide Analysis, GC, (GS52)				
2,4-D	mg/L	<.250	<.250	<.250
2,4,5-TP (Silvex)	mg/L	<.250	<.250	<.250
RCRA TCLP Leachate Pesticide Analysis, GC, (GS54)				
Chlordane	mg/L	<.020	<.020	<.020
Endrin	mg/L	<.002	<.002	<.002
Heptachlor	mg/L	<.002	<.002	<.002
Heptachlor epoxide	mg/L	<.002	<.002	<.002
Toxaphene	mg/L	<.040	<.040	<.040
alpha-Chlordane	mg/L	<.002	<.002	<.002
gamma-Chlordane	mg/L	<.002	<.002	<.002
RCRA TCLP Leachate Metals Analysis, (ME52)				
Arsenic	mg/L	<.010	<.010	<.010
Barium	mg/L	.379	.304	.108
Cadmium	mg/L	.006	.021	.01
Chromium	mg/L	<.020	<.020	<.020
Lead	mg/L	.038	1.68	.065
Mercury	mg/L	<.001	<.001	<.001
Selenium	mg/L	<.005	<.005	<.005
Silver	mg/L	<.020	<.020	<.020

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

	Sample Point ID:	**CLJ-DS-10**	**CLJ-DS-11**	**CLJ-DS-11D**
	ASC Sample Number:	JM4367	JM4368	JM4369
	Sample Date:	940303	940303	940303
	Facility Code:	015226N	015226N	015226N
Parameters	Units			
RCRA TCLP Leachate Base/Neutral/Acid Analysis, MS, (MS52)				
2,4-Dinitrotoluene	mg/L	<.100	<.100	<.100
Hexachlorobenzene	mg/L	<.100	<.100	<.100
Hexachloroethane	mg/L	<.100	<.100	<.100
Hexachlorobutadiene	mg/L	<.100	<.100	<.100
2-Methylphenol	mg/L	<.100	<.100	<.100
4-Methylphenol	mg/L	<.100	<.100	<.100
Nitrobenzene	mg/L	<.100	<.100	<.100
Pentachlorophenol	mg/L	<.100	<.100	<.100
Pyridine	mg/L	<.100	<.100	<.100
2,4,5-Trichlorophenol	mg/L	<.100	<.100	<.100
2,4,6-Trichlorophenol	mg/L	<.100	<.100	<.100
Lindane	mg/L	<.100	<.100	<.100
Methoxychlor	mg/L	<.100	<.100	<.100
RCRA TCLP Leachate (ZHE) Volatile Analysis, MS, (MV50)				
Benzene	mg/L	<.125	<.125	<.125
Carbon tetrachloride	mg/L	<.125	<.125	<.125
Chlorobenzene	mg/L	<.125	<.125	<.125
Chloroform	mg/L	<.125	<.125	<.125
1,4-Dichlorobenzene	mg/L	<.125	<.125	<.125
1,2-Dichloroethane	mg/L	<.125	<.125	<.125
1,1-Dichloroethylene	mg/L	<.125	<.125	<.125
Methyl ethyl ketone	mg/L	<.250	<.250	<.250
Tetrachloroethylene	mg/L	<.125	<.125	<.125
Trichloroethylene	mg/L	<.125	<.125	<.125
Vinyl chloride	mg/L	<.125	<.125	<.125

Analytical Services Corp

DS-10	Disposal Soil Sample#,
DS-11	" " " #1

ANALYTICAL REPORT

Client: OHM Remediation Services Corporation
Southern Region (Morrisville, NC)

Attn: Kent Geis
Bill Perry

Project: 15226N - NEESA; Camp LeJeune, Jacksonville, NC

Sample(s): CLJ-DS-10, CLJ-DS-11 and CLJ-DS-11D

Sample Type(s): Solid

Analysis Performed: Conventionals, Organics and RCRA TCLP Leachate Parameters

Date Sample Received: March 7, 1994

Date Order Received: March 7, 1994

Joblink(s): 615321

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. Analytical Services Corporation assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: _____ *Date:* 5/11/94
Thomas E. Gran, Ph.D., Vice President

16406 U.S. Route 224 East ■ P.O. Box 1404 ■ Findlay, Ohio 45839-1404 ■ 419-423-3526

SUMMARY OF ANALYTICAL METHODOLOGY

Parameter	Reference	Method
Conventionals		
RCRA Characteristics		
pH, Electrode	SW-846	9045
Reactive Sulfide	SW-846	7.3.4.2
Flash Point, Seta Flash	SW-846	1020
Reactive Cyanide	SW-846	7.3.3.2
Organics		
Total Petroleum Hydrocarbons (TPHC) by GC		
Total Volatile Hydrocarbons (TVH) by GC	SW-846	8015
Total Extractable Hydrocarbons (TEH) by GC	SW-846	8100
RCRA TCLP		
Leachate Preparation	SW-846	1311
Herbicides by GC	SW-846	8150 (1)
Pesticides by GC	SW-846	8080
Metals (except mercury)	SW-846	6010
Mercury by Cold Vapor	SW-846	7470
Semi-volatile Compounds by GC/MS	SW-846	8270
Volatile Compounds by GC/MS	SW-846	8240

SDG NARRATIVE

Conventionals

The pH results are in standard units not mg/kg.

The method qualifier for pH (Electrode) is "pH", for Flashpoint it is "FP", for Reactive Cyanide it is "RC" and for Reactive Sulfide it is "RS". The CLP manual does not address these results or this method for reporting.

The Flashpoint results are in °C not mg/kg.

Total Petroleum Hydrocarbons by Gas Chromatography (TPH/GC)

Total Volatile Hydrocarbons

The holding time was exceeded for this analysis following CLP protocol of 10 days from sample receipt. Analysis was performed within holding time following SW-846 protocol of 14 days from sampling date. This anlaysis is not discussed or addressed in the CLP-SOW.

All matrix and method spikes were within acceptability limits.

The initial and continuing calibration criteria were met.

Total Extractable Hydrocarbons

Due to the high amount of analyte detected in the unspiked sample, matrix spike samples do not provide valid recovery data. Batch acceptance is based on method spike recoveries which were within acceptability limits.

Due to the nonhomogenity of the sample CLJ-DS-11, a number of analyses did not duplicate within standard precision limits. Since CLJ-DS-11 and CLJ-DS-11D were field duplicates, further re-analysis was not conducted in the laboratory.

All initial and continuing calibration criteria were met.

TCLP Herbicides

All matrix and method spike recoveries were within acceptability limits.

The initial and continuing calibration criteria were met.

SDG NARRATIVE (continued)

TCLP Pesticides

Decachlorobiphenyl (DCB) was outside advisory limits in the confirmation analysis in samples CLJ-DS-11 and CLJ-DS-11D. Since no data was reported from the confirmation analysis and the samples involved are field duplicates with the same surrogate outside limits in the same direction, no further corrective action is required.The Toxaphene matrix and method spike recoveries were outside the established recovery criteria. The recoveries would lead to a high bias for any sample results reported.

Toxaphene was not detected in any of the samples associated with this sample batch, therefore, this anomaly does not impact the validity of the data as reported.

All initial and continuing calibration criteria were met.

TCLP Metals

Since the samples were analyzed for TCLP analytes the items listed (color before, artifacts, etc.) at the bottom of Form I-IN were not reported.

All of the Initial and Continuing Calibration verifications were inside the QC limits.

Due to the bottles used for the TCLP leachate preparation a small amount of Barium is present in the samples. The level is well below any level of concern for this project using this analysis. ASC believes that this will not affect the validity of data for this project.

The ICP Interference Check samples, the pre-digestion spike sample, and the duplicate sample analysis were within the required QC criteria.

The laboratory Control Sample exhibited good recoveries with a range between 92 to 105%.

Autosamplers were not utilized for the ICP analysis. The time sequence was kept manually and documented as close as possible to actual time. No problems were encountered.

Autosampler problems were encountered during the Arsenic LCS analysis. Some matrix intereferences were noted for Arsenic and Selenium analyses. All Lead analyses required a 5x dilution due to severe matrix interferences.

TCLP Semi-volatile Organics

The Pentachlorophenol matrix and method spike recoveries were outside the established recovery criteria. The recoveries would lead to a high bias for any sample results reported. Pentachlorophenol was not detected in any of the samples associated with this sample batch, therefore, this anomaly does not impact the validity of the data as reported.

SDG NARRATIVE (continued)

Nitrobenzene-d5 was outside established recovery criteria for the method blank. The recovery would lead to a high bias for any results reported in that fraction. No results were reported for any of the samples in this analytical batch, therefore, this anomaly does not impact the validity of the data as reported.

All initial and continuing calibration criteria were met.

TCLP Volatile Organics

All matrix and method spikes were within acceptability limits.

The initial and continuing calibration criteria were met.

SDG NARRATIVE (continued)

TCLP Volatile Organics

All matrix and method spikes were within acceptability limits.

The initial and continuing calibration criteria were met.

COVER PAGE
CONVENTIONAL ANALYSES DATA PACKAGE

Lab Name: *Analytical Services Corp* **Contract:** NEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-10~~ NA

DW No.:

EPA Sample No.	Lab Sample ID.
CLJ-DS-10	JM4367
CLJ-DS-11	JM4368
CLJ-DS-11D	JM4369

COMMENTS: See SDG Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's Designee, as verified by the following signature.

Signature: J. Hnatow **Name:** Joseph Hnatow

Date: 5/20/94 **Title:** Operations Manager

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** CLJ-DS-10

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-10~~ NA

Matrix: (soil/water) SOIL **Level:** (low/med) LOW **Lab Sample ID:** JM4367

% Solids: 86.0 **Date Received:** 03/07/94

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Reactive Cyanide	10.0	U		RC
	Reactive Sulfide	10.0	U		RS
	Flashpoint, 60°C	>60°C			FP
	pH (Electrode)	4.68			pH

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** CLT-DS-1

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLT-DS-1~~ NA

Matrix: (soil/water) SOIL **Level:** (low/med) LOW **Lab Sample ID:** IM4368

% Solids: 81.3 **Date Received:** 03/07/9

Concentration Units (ug/L or mg/kg dry weight): _____

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Reactive Cyanide	10.0	U		RC
	Reactive Sulfide	10.0	U		RS
	Flashpoint, 60°C	>60°C			FP
	pH (Electrode)	4.50			pH

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** CLJ-DS-1

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-1~~ NA

Matrix: (soil/water) SOIL **Level:** (low/med) LOW **Lab Sample ID:** IM4369

% Solids: 85.8 **Date Received:** 03/07/9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Reactive Cyanide	10.0	U		RC
	Reactive Sulfide	10.0	U		RS
	Flashpoint, 60°C	760°C			FP
	pH (Electrode)	4.49			pH

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

BLANKS (3)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **Lab Code:** NA

Case #: NA **SAS #:** NA **SDG #:** ~~CLJ-DS-10~~ NA

Prep Blank Matrix: (soil/water) WATER

Prep Blank Concentration Units: (ug/L or mg/kg) MG/KG

ANALYTE	Init Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L						Preparation Blank	C	M
			1	C	2	C	3	C			
Reactive Cyanide									0	U	RC
Reactive Sulfide									0	U	RS

SPIKE SAMPLE RECOVERY (5A)

0011

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA Sample #:** CLJ-DS-1

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-10~~ NA

Matrix: (soil/water) SOIL **Level** (low/med): LOW **% Solids for Sample:** 85.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

ANALYTE	CONTROL LIMIT %R	SPIKE SAMPLE RESULT (SSR)	C	SAMPLE RESULT (SR)	C	SPIKE ADDED (SA)	% R	Q	M
Reactive Cyanide									
Reactive Sulfide	50-100	5.29		10.0	U	6.99	76		RS

COMMENTS:

SPIKE SAMPLE RECOVERY (5A)

0012

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA Sample #:** CLJ-DS-1

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-1~~ NA

Matrix: (soil/water) SOIL **Level** (low/med): LOW **% Solids for Sample:** 86.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

ANALYTE	CONTROL LIMIT %R	SPIKE SAMPLE RESULT (SSR)	C	SAMPLE RESULT (SR)	C	SPIKE ADDED (SA)	% R	Q	M
Reactive Cyanide	50-100	141		10.0	U	188	75		RC
Reactive Sulfide									

COMMENTS:

LABORATORY CONTROL SAMPLE (7)

0013

Lab Name: *Analytical Services Corp* **Contract:** NEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-2~~ NA

Solid LCS Source: _____ **Aqueous LCS Source:** CV-0039

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)					
	True	Found	% R	True	Found	C	Limits		% R
Reactive Cyanide									
Reactive Sulfide	360	283	78.6						

LABORATORY CONTROL SAMPLE (7)

Lab Name: *Analytical Services Corp* **Contract:** NEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-AG~~ NA

Solid LCS Source: _____ **Aqueous LCS Source:** CV-0083

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)					
	True	Found	% R	True	Found	C	Limits		% R
Reactive Cyanide	188	176	93.6						
Reactive Sulfide									

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA TVBLK01

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: ~~345~~ MQW3369W

Sample wt/vol: 5.00 (g/mL) g Lab File ID: 345

Level: (low/med) low Date Received: 03/15/94

% Moisture: not dec. 0 Date Analyzed: 03/15/94

GC Column: * See Below ID: 2 (mm) Dilution Factor: 1

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
----NA----	Light hydrocarbons(C2-C10)	Ø 4.00	u

* Column used was 8' glass packed with 5% SP1200/1.75% Bentone 34, 2 mm ID

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA TVSP1Ø1

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: N2W336PW-8

Sample wt/vol: 5.00 (g/mL) g Lab File ID: S46

Level: (low/med) low Date Received: Ø3/15/94

% Moisture: not dec. 0 Date Analyzed: Ø3/15/94

GC Column: * See Below ID: 2 (mm) Dilution Factor: 1

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
----NA----	Light hydrocarbons(C2-C10)	2170	

* Column used was 8' glass packed with 5% SP1200/1.75% Bentone 34, 2 mm ID

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA CLJ-DC-10MS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: JM4367WS

Sample wt/vol: 0.55 (g/mL) g Lab File ID: 348

Level: (low/med) low Date Received: 03/07/94

% Moisture: not dec. 14.0 Date Analyzed: 03/15/94

GC Column: * See Below ID: 2 (mm) Dilution Factor: 1

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
----NA----	Light hydrocarbons(C2-C10)	16400	

* Column used was 8' glass packed with 5% SP1200/1.75% Bentone 34, 2 mm ID

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA CLJ-03-13MSD

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: JM43670UR

Sample wt/vol: 0.53 (g/mL) g Lab File ID: 349

Level: (low/med) low Date Received: 03/07/94

% Moisture: not dec. 14.0 Date Analyzed: 03/15/94

GC Column: * See Below ID: 2 (mm) Dilution Factor: 1

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
----NA----	Light hydrocarbons(C2-C10)	14900	

* Column used was 8' glass packed with 5% SP1200/1.75% Bentone 34, 2 mm ID

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

CLJ-D3-10

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: JM4367W

Sample wt/vol: 0.53 (g/mL) g Lab File ID: 347

Level: (low/med) low Date Received: 03/07/94

% Moisture: not dec. 14.0 Date Analyzed: 03/15/94

GC Column: * See Below ID: 2 (mm) Dilution Factor: 1

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
----NA----	Light hydrocarbons (C2-C10)	~~0~~ 4.46	u

* Column used was 8' glass packed with 5% SP1200/1.75% Bentone 34, 2 mm ID

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA CJL-DS-11

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: JM43880

Sample wt/vol: 0.50 (g/mL) g Lab File ID: 350

Level: (low/med) low Date Received: 03/07/94

% Moisture: not dec. 18.7 Date Analyzed: 03/15/94

GC Column: * See Below ID: 2 (mm) Dilution Factor: 1

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
----NA----	Light hydrocarbons(C2-C10)	4.22	U

* Column used was 8' glass packed with 5% SP1200/1.75% Bentone 34, 2 mm ID

0021

EPA SAMPLE NO.

CRGANICS ANALYSIS DATA SHEET

CLJ-03-11D

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: Jm4369W

Sample wt/vol: 0.56 (g/mL) g Lab File ID: 357

Level: (low/med) low Date Received: 03/07/94

% Moisture: not dec. ~~28.8~~ 14.2 Date Analyzed: 03/15/94

GC Column: * See Below ID: 2 (mm) Dilution Factor: 1

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
----NA----	Light hydrocarbons(C2-C10)	~~0~~ 4.73	u

* Column used was 8' glass packed with 5% SP1200/1.75% Bentone 34, 2 mm ID

FORM I TVH

TVH BLANK SPIKE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Blank Spike - EPA Sample No.: ~~[illegible]~~ TVSPK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
Light hydrocarbons(C2-C10)	2700	0	2170	80.4	30-130

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS:

TVH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix Spike - EPA Sample No.: _____

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Light hydrocarbons(C2-C10)	24500	0	16400	66.7	30-130
					30-130

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Light hydrocarbons(C2-C10)	24500	14900	58.5	9.33	30	30-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

EPA SAMPLE NO. 0024

TVH METHOD BLANK SUMMARY

TVBLK01

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab Sample ID: N2W3369W Lab File ID: 345

Matrix: (soil/water) soil Extraction: (SepF/Cont/Sonc) NA

Sulfur Cleanup: (Y/N) ~~Y~~N Date Extracted: NA

Date Analyzed (1): 03-15-94 Date Analyzed (2):

Time Analyzed (1): 1106 Time Analyzed (2):

Instrument ID (1): 04 Instrument ID (2):

GC Column (1): See Below ID: 2 (mm) GC Column (2): ____ ID: ____ (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	TVSPK01	N2W3369WS	03-15-94	
02	CLJ-DS-10	JM4367W	↓	
03	CLJ-DS-10MS	JM4367WS		
04	CLJ-DS-10MSD	JM4367WR		
05	CLJ-DS-11	JM4368W		
06	CLJ-DS-11D	JM4369W		
07	CLJ-DR-01	JM3967W		
08	CLJ-DP-01	JM3968W		
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS: 8' glass packed with 5% SP1200/1.75% Bentone 34, 2 mm ID

page ___ of ___

FORM IV TVH

TVH INITIAL CALIBRATION DATA

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: D4 Calibration Date (s): 01-13-94

Calibration Time (s): 2124

LAB FILE ID: CLOW = 204 CMEDL = 205
CMED = 206 CMEDH= 207 CHIGH = 208

COMPOUND	CLOW	CMEDL	CMED	CMEDH	CHIGH	$\overline{CF}$	% RSD
Light hydrocarbons(C2-C10)	2440000	1890000	2050000	1970000	1890000	2050000	11.2

TVH CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: D4 Calibration Date: 03-15-94 Time: 1023

Lab File ID: 344 Initial Calib Date(s): 01-13-94

Initial Calib Times: 2124

COMPOUND	$\overline{CF}$	CMED	MIN CF	% D	MAX % D
Light hydrocarbons(C2-C10)	2050000	1780000	NA	13.3	15

TVH CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: 04 Calibration Date: 03/15/94 Time: 1802

Lab File ID: 355 Initial Calib Date(s): 01-13-94

Initial Calib Times: 2124

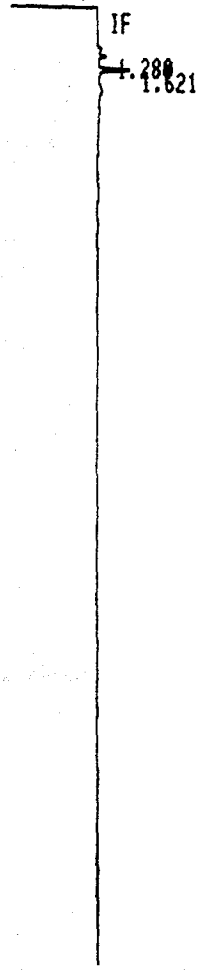
COMPOUND	$\overline{CF}$	CMED	MIN CF	% D	MAX % D
Light hydrocarbons(C2-C10)	2050000	1950000	NA	4.75	15

20.195	183754	VV	.476	2.62477
22.348	168485	PV	.357	2.40666
22.915	50238	VV	.260	.71761
24.270	35630	I VH	.497	.50894

TOTAL AREA=7000774
MUL FACTOR=1.0000E+00

* RUN # 347 MAR 15, 1994 12:33:10

START



CLJ-DS-10
JM4367W
N2W3369

ND

C.P.

TIMETABLE STOP

RUN# 347 MAR 15, 1994 12:33:10

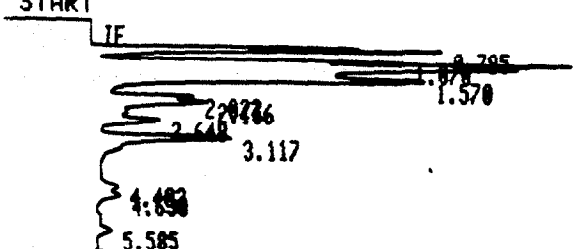
AREA%

RT	AREA	TYPE	WIDTH	AREA%
1.280	8565	VP	.082	22.09582
1.621	30198	PB	.069	77.90416

TOTAL AREA= 38763
MUL FACTOR=1.0000E+00

* RUN # 348 MAR 15, 1994 13:16:33

START



```
*
*
*
*
*  RUN #  350      MAR 15, 1994  14:43:18
START
      IF
      1.271
      1.610
```

CLJ-DS-11
JM4368W
N2W3369
ND
CP

```
TIMETABLE STOP
```

RUN# 350 MAR 15, 1994 14:43:18

AREA%

RT	AREA	TYPE	WIDTH	AREA%
1.271	9274	PB	.100	37.39214
1.610	15528	BB	.054	62.60786

TOTAL AREA= 24802
MUL FACTOR=1.0000E+00

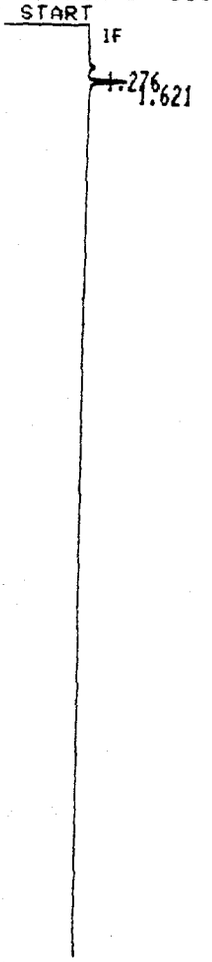
```
*  RUN #  351      MAR 15, 1994  15:26:46
START
      IF
      1.276
      1.621
```

[illegible]	9274	PB	.100	37.39214
1.610	15528	BB	.054	62.60786

TOTAL AREA= 24802
MUL FACTOR=1.0000E+00

0030

* RUN # 351 MAR 15, 1994 15:26:46



CLJ-DS-11D
JM4369W
N2W3369

ND
C.P.

TIMETABLE STOP

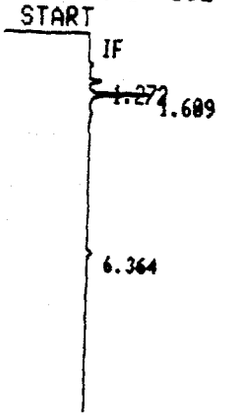
RUN# 351 MAR 15, 1994 15:26:46

AREA%

RT	AREA	TYPE	WIDTH	AREA%
1.276	8318	VP	.110	23.76639
1.621	26681	PB	.050	76.23360

TOTAL AREA= 34999
MUL FACTOR=1.0000E+00

* RUN # 352 MAR 15, 1994 16:10:11



EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA TEBLK01

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: N2F40227F

Sample wt/vol: 30.0 (g/mL) g Lab File ID: ^S9716

% Moisture: NA decanted: (Y/N) N Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SoX Date Extracted: 3/21/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
--NA------	Medium hydrocarbons (C10-C21)	3300	U
--NA------	Heavy hydrocarbons (C21-C40)	16700	U

EPA SAMPLE NO. 0032

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA TESPK 01

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: N2F40227FS

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 159615

% Moisture: NA decanted: (Y/N) ___ Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 3/21/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
--NA------	Medium hydrocarbons (C10-C21)	16900	
--NA------	Heavy hydrocarbons (C21-C40)	16700	U

FORM I TEH

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA CLJ-AS10MS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: JM4367FS

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 1S9717

% Moisture: 14 Eo decanted: (Y/N) N Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SDX Date Extracted: 3/21/94

Concentrated Extract Volume: ~~1000~~ 10,000 (uL) Date Analyzed: 3/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
--NA------	Medium hydrocarbons (C10-C21)	72100	
--NA------	Heavy hydrocarbons (C21-C40)	203000	

0034 ~~0034~~ 883

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA CLJ-DS-10MSD

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: JM4367FR

Sample wt/vol: 30.4 (g/mL) g Lab File ID: MS9718

% Moisture: 14% decanted: (Y/N) N Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 3/21/94

Concentrated Extract Volume: ~~1000~~ 10,000 (uL) Date Analyzed: 3/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
--NA------	Medium hydrocarbons (C10-C21)	88500	
--NA------	Heavy hydrocarbons (C21-C40)	194000	

FORM I TEH

0035

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA CLJ-DS-10

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: JN43607

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 159719

% Moisture: 14 % decanted: (Y/N) N Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SOX Date Extracted: 3/21/94

Concentrated Extract Volume: ~~1000~~ 10,000 (uL) Date Analyzed: 3/22/94

Injection Volume: 1.0 (uL) Dilution Factor: ~~1.0 = 10~~ 1.0 DU 3/23/94

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
--NA------	Medium hydrocarbons (C10-C21)	77200	
--NA------	Heavy hydrocarbons (C21-C40)	382000	

459200 mg/kg

0.04 %

FORM I TEH

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA CLJ-DS-11

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: JM43608

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 1S9720

% Moisture: 18.7 decanted: (Y/N) N Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SDX Date Extracted: 3/21/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/22/94

Injection Volume: 1.0 (uL) Dilution Factor: ~~1.0~~ 10

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
--NA------	Medium hydrocarbons (C10-C21)	332000	
--NA------	Heavy hydrocarbons (C21-C40)	717000	

1500000 mg/kg
0.08%

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

Lab Name: ASC Contract: NEESA CLJ-DS-11D

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) soil Lab Sample ID: JN4369

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 159721

% Moisture: 14.2 decanted: (Y/N) N Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SX Date Extracted: 3/21/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 3/25/94

Injection Volume: 1.0 (uL) Dilution Factor: ~~1.0~~ 5

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
--NA------	Medium hydrocarbons (C10-C21)	10500	J
--NA------	Heavy hydrocarbons (C21-C40)	131000	

TEH BLANK SPIKE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Blank Spike - EPA Sample No.: TEBLK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
Med hydrocarbons(C10-C21)	~~97900~~ 28000	0	16900	60.5	30-130

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS:

TEH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix Spike - EPA Sample No.: CLJ-DS-10

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Med hydrocarbons(C10-C21)	27900	77200	72100	0	30-130

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Med hydrocarbons(C10-C21)	27900	88500	40.5	20.4	30	30-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: ~~2~~ 1 out of 2 outside limits
NJ

COMMENTS: Due to the high amount of analyte detected in the unspiked sample, matrix spike samples do not provide valid recovery data. Batch acceptance is based on method spike recoveries which were within acceptability limits.

EPA SAMPLE NO.

TEH METHOD BLANK SUMMARY

TEBLK

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab Sample ID: N2F4C227F Lab File ID: ^597160

Matrix: (soil/water) soil Extraction: (SepF/Cont/Sonc) _____

Sulfur Cleanup: (Y/N) Y Date Extracted: 3/~~4~~21/94 DU

Date Analyzed (1): / /94 Date Analyzed (2): NA

Time Analyzed (1): ~~10:05~~ DU 3/23/94 10:59 Time Analyzed (2): ↓

Instrument ID (1): B1F Instrument ID (2): ↓

GC Column (1): DB-5 ID: .53 (mm) GC Column (2): NA ID: NA (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	~~CLJ-10-~~	UO1D	DU 3/23/94	
02	CLJ-DS-10MS	Jm4367FS	3/22/94	NA
03	CLJ-DS-10MSD	Jm4367FR	↓	↓
04	CLJ-DS-10	Jm4367		
05	CLJ-DS-11	Jm4368		
06	CLJ-DS-11D	Jm4369		
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS: _____

page __ of __

TEH INITIAL CALIBRATION DATA

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: B1F Calibration Date (s): 3/18/94

Calibration Time (s): 1421 1748

LAB FILE ID: CLOW = 159694 CMEDL = 159695
CMED = 159696 CMEDH= 159697 CHIGH = 159698

COMPOUND	CLOW	CMEDL	CMED	CMEDH	CHIGH	$\overline{CF}$	% RSD
Medium hydrocarbons(C10-21)	39400	37500	33000	35200	39100	36800	7.38
Heavy hydrocarbons(C21-C40)	40800	40000	40500	43600	41500	41300	3.38

TEH CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: 31F Calibration Date: 3/22/94 Time: 803

Lab File ID: ~~159713~~ 159714 3/23/94 Initial Calib Date(s): 3/18/94

Initial Calib Times: 1421 1748

COMPOUND	$\overline{CF}$	CMED	MIN CF	% D	MAX % D
Medium hydrocarbons (C10-C21)	36800	39700	NA	7.93	
Heavy hydrocarbons (C21-C40)	41300	41300	✓	~~100~~ 0.0248	

TEH CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

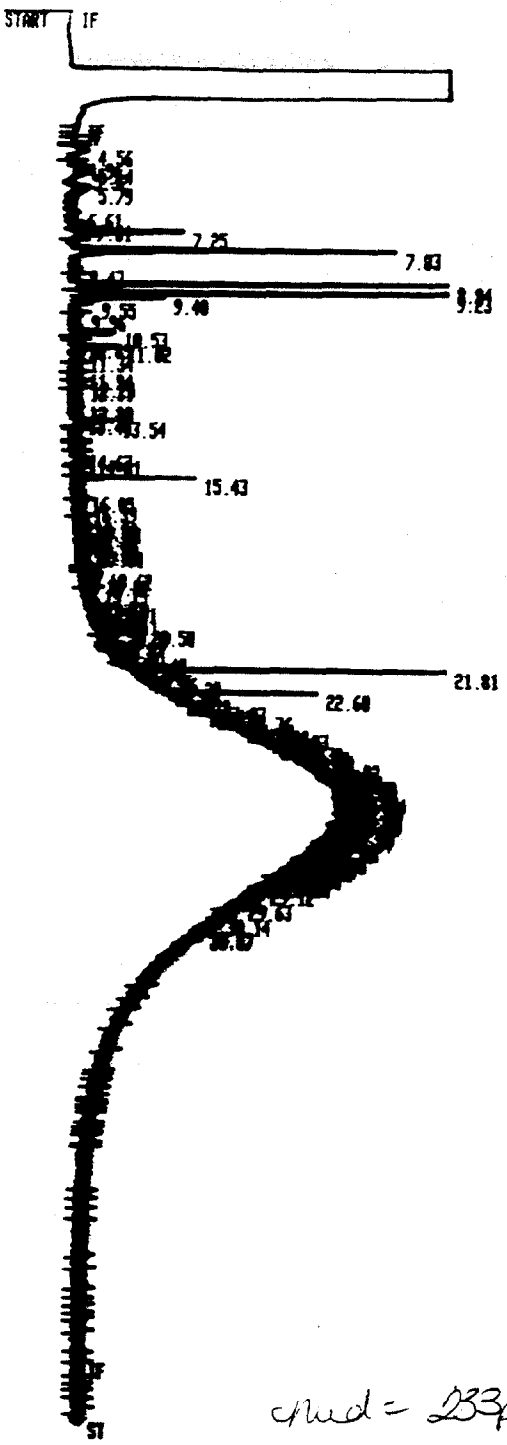
Instrument ID: R/F Calibration Date: 3/22/94 Time: 1740

Lab File ID: 159722 Initial Calib Date(s): 3/18/94 _____

Initial Calib Times: 1421 1748

COMPOUND	$\overline{CF}$	CMED	MIN CF	% D	MAX % D
Medium hydrocarbons (C10-C21)	36800	37100	NA	6.710	
Heavy hydrocarbons (C21-C40)	41300	42200	↓	2.27	

WORKFILE ID: A FROM GC # 7
WORKFILE NAME: NSFTEH::DB—ACQUIRE



Mud = 233ppm
Heavy = 1154 ppm

inj @ 1505
3/22/94

RUN # 566
WORKFILE ID: A FROM GC # 7
WORKFILE NAME: NSFTEH::DB—ACQUIRE

AREAZ

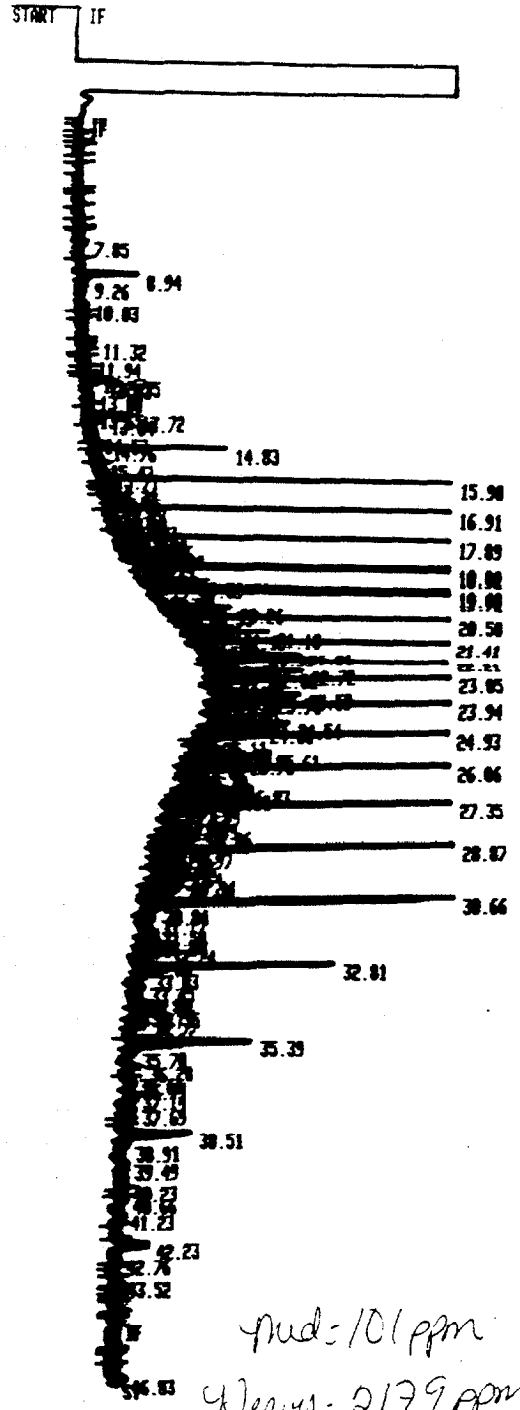
RT	AREA	TYPE	AR/HT	AREAZ
10.88	8618500	++	0.863	15.387
24.85	4.7640E+07	D ++	0.895	84.693

TOTAL AREA= 5.6250E+07
NUL FACTOR= 1.0000E+00

END Q-CHROM DATA ACQUIRE

FILE: >S9719::D4
NAME: 1522GN CLJ-DS-10 TEH
MISC: JM436/F,N2F402270,S:G1,30.2,10=1

WORKFILE ID: A FROM GC # 7
WORKFILE NAME: MSFTEH::DB—ACQUIRE



mud = 101 ppm
Heavy = 2179 ppm

inj @ 1557
3/22/94

RUN # 567
WORKFILE ID: A FROM GC # 7
WORKFILE NAME: MSFTEH::DB—ACQUIRE

AREA%

RT	AREA	TYPE	AR/HT	AREA%
12.55	3732900	++	0.053	3.967
30.42	8.9988E+07	D ++	0.179	95.626
46.83	383410	I HH	0.308	0.407

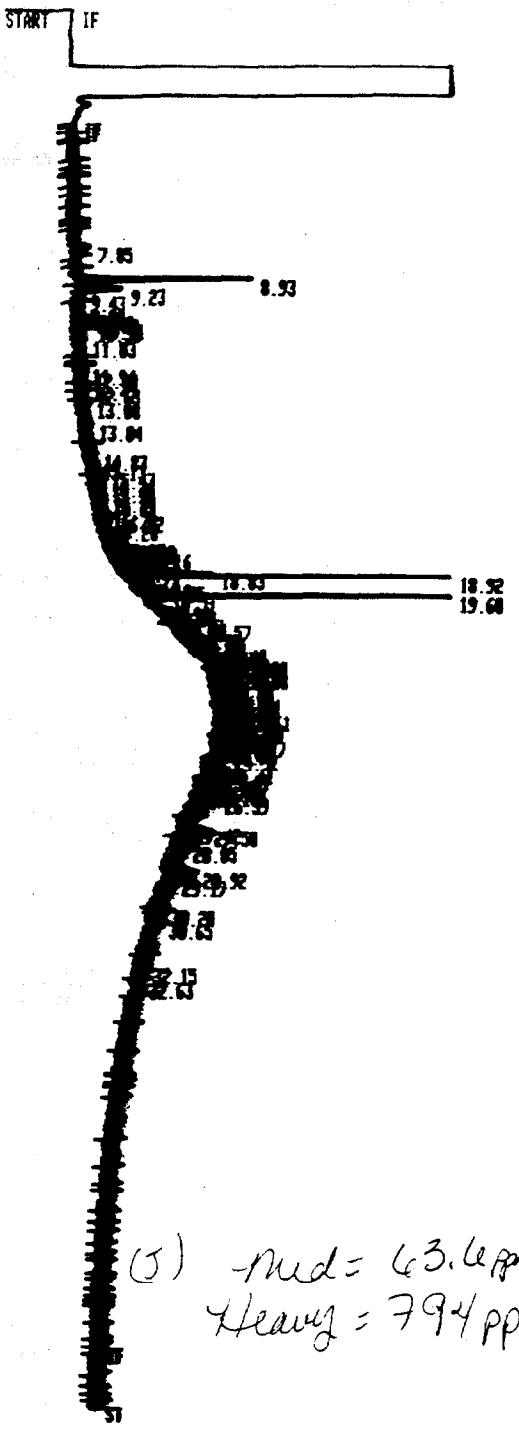
TOTAL AREA= 9.4104E+07
MUL FACTOR= 1.0000E+00

END Q-CHROM DATA ACQUIRE

FILE: >S9720::D4
NAME: 15226N CLJ-DS-11 TEM
MISC: JM4368F,H2F40227A,S:G1,30.4,1:10

WORKFILE ID: A FROM GC # 7
WORKFILE NAME: MSFTEH::DB—ACQWIRE

0046



(J) Mud = 63.6 ppm
Heavy = 794 ppm

inj @ 1649
3/22/94

RUN # 568
WORKFILE ID: A FROM GC # 7
WORKFILE NAME: MSFTEH::DB—ACQWIRE

AREA%

RT	AREA	TYPE	AR/HT	AREA%
12.52	2339980	D ++	0.089	6.662
25.23	3.2785E+07	D ++	0.091	93.338

TOTAL AREA= 3.5125E+07
MUL FACTOR= 1.0000E+00

END G-CHROM DATA ACQWIRE

FILE: >S9721::D4
NAME: 15226N CLJ-DS-11B
MISC: JM4369F,02F402270,S:G1,30.4,1:5

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

HBLK01

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) water Lab Sample ID: N7H40265H

Sample wt/vol: 2.0 (g/mL) mL Lab File ID: ^H9576

% Moisture: _____ decanted: (Y/N) ___ Date Received: 03/~~18~~ 07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/16/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/30/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
94-75-7----	2,4,D	350	U
93-72-1----	2,4,5-TP (SILVEX)	350	U

0048

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

HSPK01

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) water Lab Sample ID: N7H4026SHS

Sample wt/vol: 2.0 (g/mL) mL Lab File ID: 1H9577

% Moisture: _____ decanted: (Y/N) ___ Date Received: 03/~~18~~ 07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/16/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/30/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
94-75-7----	2,4,D	7650	
93-72-1----	2,4,5-TP (SILVEX)	3080	

FORM I HERB

0049 ~~0049~~ SB

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-10MSD

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) water Lab Sample ID: JM1436.7HR

Sample wt/vol: 2.0 (g/mL) mL Lab File ID: 7H9579

% Moisture: _____ decanted: (Y/N) ___ Date Received: 03/~~18~~ 07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/16/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/30/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
94-75-7----	2,4,D	4850	
93-72-1----	2,4,5-TP (SILVEX)	1920	

FORM I HERB

0050
EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-10MS

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) water Lab Sample ID: JM4367HS

Sample wt/vol: 2.0 (g/mL) mL Lab File ID: 7H9578

% Moisture: _____ decanted: (Y/N) ___ Date Received: 03/~~18~~ 07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/16/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/30/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
94-75-7----	2,4,D	4800	
93-72-1----	2,4,5-TP (SILVEX)	1880	

FORM I HERB

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

0051

CLJ-DS-10

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) water Lab Sample ID: JM4367H

Sample wt/vol: 2.0 (g/mL) mL Lab File ID: H9580

% Moisture: _____ decanted: (Y/N) ___ Date Received: 03/~~18~~ 07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/16/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/30/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
94-75-7----	2,4,D	250	U
93-72-1----	2,4,5-TP (SILVEX)	250	U

FORM I HERB

EPA SAMPLE NO.

0052

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) water Lab Sample ID: JM4368H

Sample wt/vol: 2.0 (g/mL) mL Lab File ID: 1H9581

% Moisture: _____ decanted: (Y/N) ___ Date Received: 03/~~18~~ 07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/16/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/30/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
94-75-7----	2,4,D	25	U
93-72-1----	2,4,5-TP (SILVEX)	25	U

FORM I HERB

EPA SAMPLE NO.
0053

ORGANICS ANALYSIS DATA SHEET

CWJ-DS-11D

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) water Lab Sample ID: JM14369H

Sample wt/vol: 2.0 (g/mL) mL Lab File ID: 1H9582

% Moisture: _____ decanted: (Y/N) ___ Date Received: 03/~~18~~ 07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/16/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/30/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
94-75-7----	2,4,D	250	U
93-72-1----	2,4,5-TP (SILVEX)	250	U

FORM I HERB

HERBICIDE SURROGATE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

GC Column(1): DB-5 ID: .53 GC Column(2): _____ ID: ____

	EPA SAMPLE NO.	DPAA % REC #		TOT OUT
01	HBLK01	89.7		0
02	HSPK01	101		0
03	CLJ-DS-10MS	104		0
04	CLJ-DS10MSD	109		0
05	CLJ-DS10	114		0
06	CLJ-DS-11	93.6		0
07	CLJ-DS-11D	79.4		0
08	HBLK01F	103		0
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

ADVISORY QC LIMITS

DPAA = 2,4-Dichlorophenylacetic acid (30 -130)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM II HERB

HERBICIDE BLANK SPIKE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Blank Spike - EPA Sample No.: HSPK01

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC.
2,4,D	10500	0	7650	72.9	30-130
2,4,5-TP (Silvex)	3830	0	3080	80.3	30-130

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

HERBICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix Spike - EPA Sample No.: CLJ-DS-10 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
2,4,D	5250	0	4800	91.4	30-130
2,4,5-TP (Silvex)	1920	0	1880	98.3	30-130
					30-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
2,4,D	5250	4850	92.4	1.04	30	30-130
2,4,5-TP (Silvex)	1920	1920	100	1.97	30	30-130
					30	30-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

COMMENTS:

EPA SAMPLE NO.

HBLK01

HERBICIDE METHOD BLANK SUMMARY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab Sample ID: N7H Lab File ID: ^H 9576

Matrix: (soil/water) water Extraction: (SepF/Cont/Sonc) SepF

Sulfur Cleanup: (Y/N) Y Date Extracted: 03/ /94

Date Analyzed (1): 03/30/94 Date Analyzed (2):

Time Analyzed (1): 15:22 Time Analyzed (2):

Instrument ID (1): C4F Instrument ID (2):

GC Column (1): DB-5 ID: .53 (mm) GC Column (2): ID: (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	HSPK01	N7H4026SHS	03/30/94	
02	CCJ-DS-10MS	JM4367HD		
03	CCJ-DS-10MSD	JM4367HR		
04	CCJ-DS-10	JM4367H		
05	CCJ-DS-11	JM4368H		
06	CCJ-DS-11D	JM4369H		
07	HBLK01F	JM0000H		
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS:

page __ of __

FORM IV HERB

HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ASC Contract: NEESA

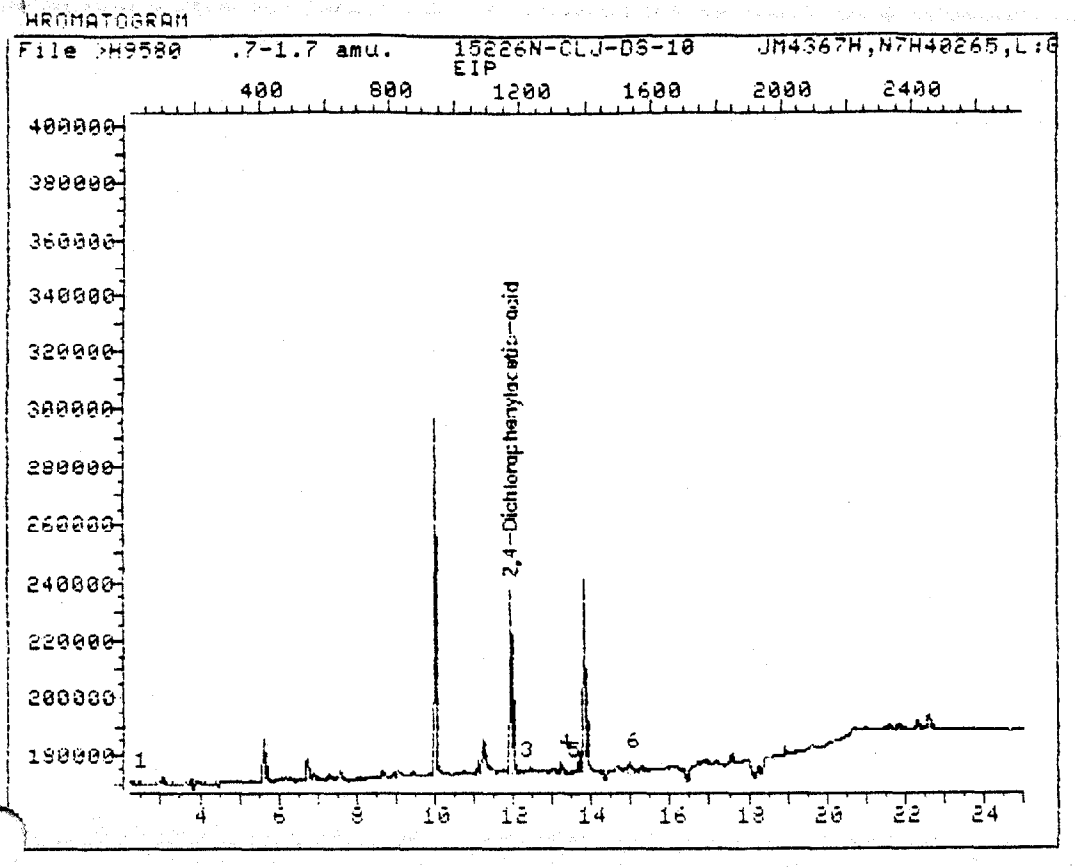
Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: C4F Calibration Date (s): 3/30/94

Calibration Time (s): 07:24

LAB FILE ID: CLOW = ^H9531 CMEDL = ^H9532
CMED = ^H9533 CMEDH= ^H9534 CHIGH = ^H9535

COMPOUND	CLOW	CMEDL	CMED	CMEDH	CHIGH	$\overline{CF}$	% RSD
2,4-D	1028320	912655.	818656.	720888.	654783.	827060.	18.021
2,4,5-TP (SILVEX)	3889820	3486725	3364942	3065619	2955686	3352559	11.027
DPAA (surr)	-	690715.	598784.	514781.	449870.	563538.	18.530



Data File: >H9580::D2 Quant Output File: ^H9580::D2
Name: 15226N-CLJ-DS-10 Instrument ID: H
Misc: JM4367H,N7H40265,L:G1,2,5:1,

Id File: IHH329::D2
Title: Herbicides by Method 8150 DB-5 ECD IHHD07
Last Calibration: 940330 07:31 Last Qcal Time: <none>

Operator ID: USER1
Quant Time : 940330 17:56
Injected at: 940330 17:31

0060
DL
3-31-94

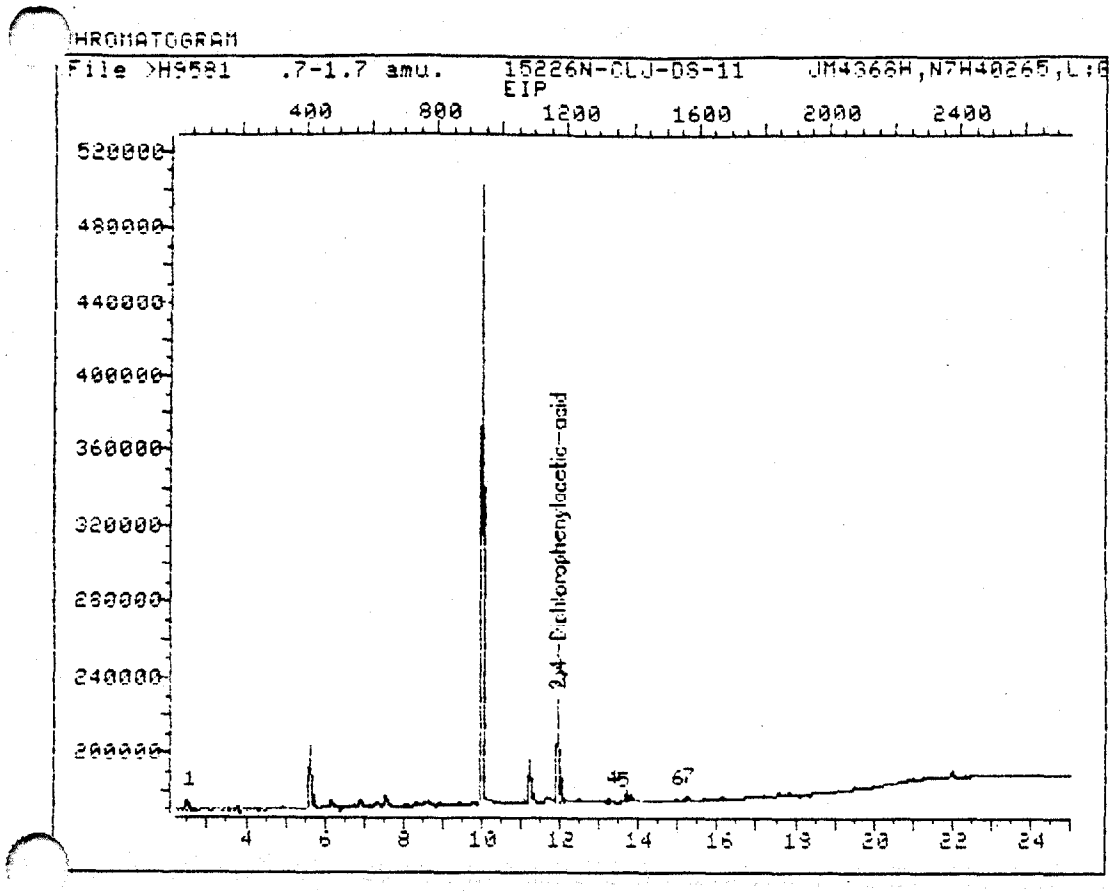
QUANT REPORT

Operator ID: USER1 Quant Rev: 7 Quant Time: 940330 17:56
Output File: ^H9580::D2 Injected at: 940330 17:31
Data File: >H9580::D2 Dilution Factor: 1.00000
Name: 15226N-CLJ-DS-10 Instrument ID: H
Misc: JM4367H,N7H40265,L:G1,2,5:1,

ID File: IHH329::D2
Title: Herbicides by Method 8150 DB-5 ECD IHHD07
Last Calibration: 940330 07:31 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Dalapon	2.43	29	4416	.00536	ug/ml	100
2)	#2,4-Dichlorophenylacetic-acid	11.92	1169	246788	.438	ug/ml	100
3)	#Dicamba	12.24	1207	4681	.00231	ug/ml	100
4)	#Dichloroprop	13.23	1326	17023	.0253	ug/ml	100
5)	#2,4-D	13.48	1355	1088	.00132	ug/ml	100
6)	#2,4,5-TP (Silvex)	14.95	1532	33522	.01008	ug/ml	100

Compound uses ESTD



Data File: >H9581::D2 Quant Output File: ^H9581::D2
Name: 15226N-CLJ-DS-11 Instrument ID: H
Misc: JM4368H,N7H40265,L:G1,2,5:1,

Id File: IHH329::D2
Title: Herbicides by Method 8150 DB-5 ECD IHH007
Last Calibration: 940330 07:31 Last Qcal Time: <none>

Operator ID: USER1
Quant Time : 940330 18:29
Injected at: 940330 18:03

0062

DL
3-31-94

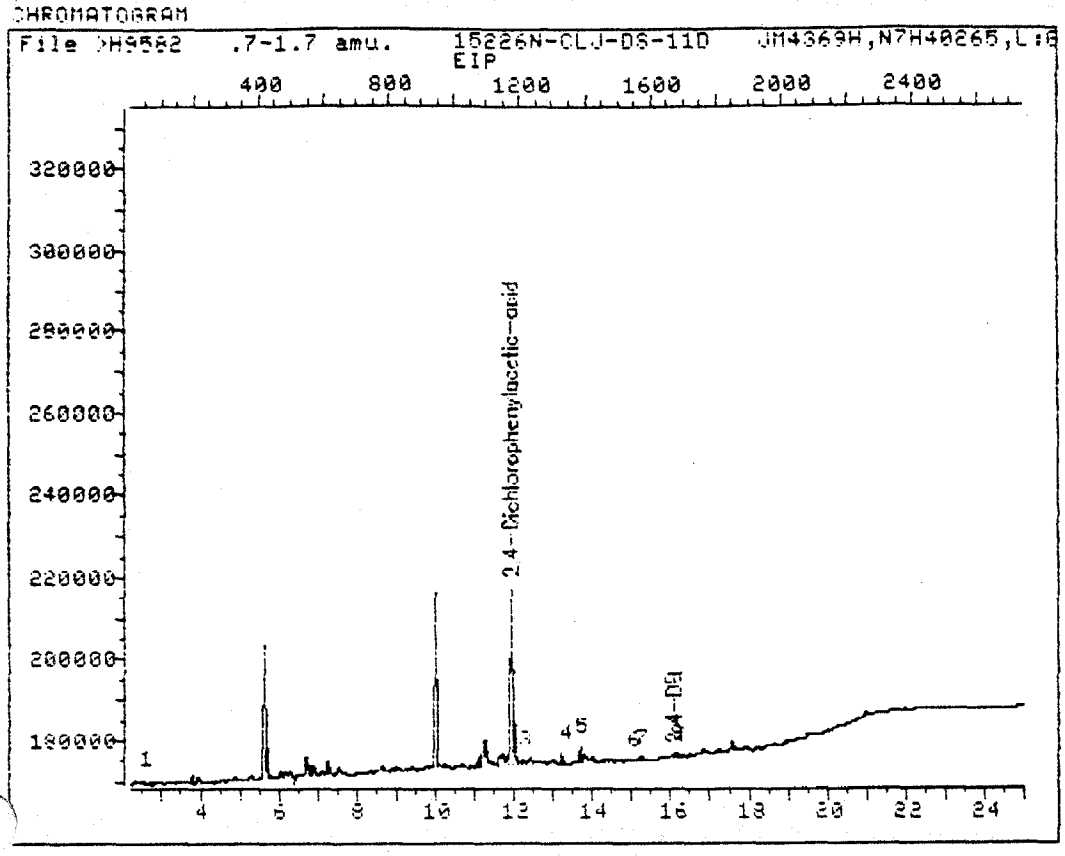
QUANT REPORT

Operator ID: USER1 Quant Rev: 7 Quant Time: 940330 18:29
Output File: ^H9581::D2 Injected at: 940330 18:03
Data File: >H9581::D2 Dilution Factor: 1.00000
Name: 15226N-CLJ-DS-11 Instrument ID: H
Misc: JM4368H,N7H40265,L:G1,2,5:1,

ID File: IHH329::D2
Title: Herbicides by Method 8150 DB-5 ECD IHH007
Last Calibration: 940330 07:31 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Dalapon	2.44	31	24104	~~.0292~~	~~ug~~/ml	100
2)	#2,4-Dichlorophenylacetic-acid	11.91	1167	216008	.361 ~~.383~~	ug/ml	100
3)	#Dicamba	11.91	1167	219640	~~.100~~	~~ug~~/ml	100
4)	#Dichloroprop	13.23	1325	9248	~~.0137~~	~~ug~~/ml	100
5)	#2,4-D	13.51	1359	1952	~~.00236~~	ug/ml	100
6)	#2,4,5-TP (Silvex)	14.92	1529	1600	.000477	ug/ml	100
7)	#2,4,5-T	15.17	1558	8639	~~.00278~~	~~ug~~/ml	100

Compound uses ESTD



Data File: >H9582::D2 Quant Output File: ^H9582::D2
Name: 15226N-CLJ-DS-11D Instrument ID: H
Misc: JM4369H,N7H40265,L:G1,2,5:1,

Id File: IHH329::D2
Title: Herbicides by Method 8150 DB-5 ECD IHHD07
Last Calibration: 940330 07:31 Last Qcal Time: <none>

Operator ID: USER1
Quant Time : 940330 19:01
Injected at: 940330 18:35

0064

DL
3-31-94

QUANT REPORT

Operator ID: USER1 Quant Rev: 7 Quant Time: 940330 19:01
Output File: ^H9582::D2 Injected at: 940330 18:35
Data File: >H9582::D2 Dilution Factor: 1.00000
Name: 15226N-CLJ-DS-11D Instrument ID: H
Misc: JM4369H,N7H40265,L:G1,2,5:1,

ID File: IHH329::D2
Title: Herbicides by Method 8150 DB-5 ECD IHHD07
Last Calibration: 940330 07:31 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Dalapon	2.51	39	2528	.00307	ug/ml	100
2)	#2,4-Dichlorophenylacetic-acid	11.91	1167	172269	.306	ug/ml	100
3)	#Dicamba	12.22	1204	4867	.00240	ug/ml	100
4)	#Dichloroprop	13.22	1324	10400	.0154	ug/ml	100
5)	#2,4-D	13.65	1376	13066	.0158	ug/ml	100
6)	#2,4,5-TP (Silvex)	14.94	1531	2752	.000821	ug/ml	100
7)	#2,4,5-T	15.16	1557	1856	.000597	ug/ml	100
8)	#2,4-DB	16.06	1665	10655	.0294	ug/ml	100
9)	#Dinoseb	16.06	1665	10655	.00414	ug/ml	100

Compound uses ESTD

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

PBLK01

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: N7P40266P

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: ^Z4147

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)	~~2.00~~ DL	~~U~~ DL
76-44-8----	Heptachlor	2.00	U
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	2.00	U
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	2.00	U
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	2.00	U
5103-74-2--	gamma-Chlordane	2.00	U
8001-35-2--	Toxaphene	40.0	U
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

0066

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

PSPK01

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: N7P40266PS

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: ^Z4148

% Moisture: NA decanted: (Y/N) NA Date Received: 3/17/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/23/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)		
76-44-8----	Heptachlor	17.0	
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	19.3	
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	19.1	
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	19.2	
5103-74-2--	gamma-Chlordane	19.1	
8001-35-2--	Toxaphene	400	U
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

FORM I PEST

0067
EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

PSPK01T

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: N7P40266PST

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: ^Y3905

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/23/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)		
76-44-8----	Heptachlor	2.00	U
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	2.00	U
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	2.00	U
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	2.00	U
5103-74-2--	gamma-Chlordane	2.00	U
8001-35-2--	Toxaphene	161	
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

FORM I PEST

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11MS

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4368PS

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: ^Z4149

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/23/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)		
76-44-8----	Heptachlor	14.8	
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	18.5	
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	19.3	
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	18.1	
5103-74-2--	gamma-Chlordane	17.8	
8001-35-2--	Toxaphene	400	U
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11MSD

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4368PR

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: ^Z4152

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/23/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)		
76-44-8----	Heptachlor	15.6	
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	19.4	
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	19.7	
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	18.8	
5103-74-2--	gamma-Chlordane	18.4	
8001-35-2--	Toxaphene	40.0	U
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

0070

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11MST

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4368PST

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: ^Y3906

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/23/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)		
76-44-8----	Heptachlor	2.00	U
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	2.00	U
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	2.00	U
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	2.00	U
5103-74-2--	gamma-Chlordane	2.00	U
8001-35-2--	Toxaphene	160	
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-10

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4367P

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: ^Z4153

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/23/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)	~~2.00~~ DL	~~U~~ DL
76-44-8----	Heptachlor	2.00	U
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	2.00	U
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	2.00	U
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	2.00	U
5103-74-2--	gamma-Chlordane	2.00	U
8001-35-2--	Toxaphene	40.0	U
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4368P

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: AZ4154

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/23/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)	~~2.00~~ DL	~~U~~ DL
76-44-8----	Heptachlor	2.00	U
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	2.00	U
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	2.00	U
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	2.00	U
5103-74-2--	gamma-Chlordane	2.00	U
8001-35-2--	Toxaphene	40.0	U
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11D

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4369P

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: ^Z4155

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/23/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)	~~2.00~~ DL	~~U~~ DL
76-44-8----	Heptachlor	2.00	U
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	2.00	U
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	2.00	U
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	2.00	U
5103-74-2--	gamma-Chlordane	2.00	U
8001-35-2--	Toxaphene	40.0	U
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

EPA SAMPLE NO.

ORGANICS ANALYSIS DATA SHEET

PBLK01F

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM0000P

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: ^Z4156

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/17/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 3/23/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6---	alpha-BHC		
319-85-7---	beta-BHC		
319-86-8---	delta-BHC		
58-89-9----	gamma-BHC (Lindane)	~~2.00~~ PL	~~U~~ U
76-44-8----	Heptachlor	2.00	U
309-00-2---	Aldrin		
1024-57-3--	Heptachlor Epoxide	2.00	U
959-98-8---	Endosulfan I		
60-57-1----	Dieldrin		
72-55-9----	4,4'-DDE		
72-20-8----	Endrin	2.00	U
33213-65-9-	Endosulfan II		
72-54-8----	4,4'-DDD		
1031-07-8--	Endosulfan sulfate		
50-29-3----	4,4'-DDT		
72-43-5----	Methoxychlor		
53494-70-5-	Endrin ketone		
7421-36-3--	Endrin aldehyde		
5103-71-9--	alpha-Chlordane	2.00	U
5103-74-2--	gamma-Chlordane	2.00	U
8001-35-2--	Toxaphene	40.0	U
12674-11-2-	Aroclor-1016		
11104-28-2-	Aroclor-1221		
11141-16-5-	Aroclor-1232		
53469-21-9-	Aroclor-1242		
12672-29-6-	Aroclor-1248		
11097-69-1-	Aroclor-1254		
11096-82-5-	Aroclor-1260		

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

GC Column(1): DB-608 ID: .53 (mm) GC Column(2): DB-5 ID: .53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK01	98.2	112	114	132			0
02	PSPK01	100	113	119	136			0
03	CLJ-DS-11MS	98.7	111	132	147			0
04	CLJ-DS-11MSD	104	116	133	146			0
05	CLJ-DS-10	96.0	106	132	147			0
06	CLJ-DS-11	104	117	136	151 *			1
07	CLJ-DS-11D	104	117	136	151 *			1
08	PBLK01F	105	117	135	150			0
09	PSPK01T	-	-	-	-			
10	CLJ-DS-11MST	-	-	-	-			
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(60-150)
DCB = Decachlorobiphenyl	(60-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

PESTICIDE BLANK SPIKE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: ~~CLJ CSS-01~~ NA DL

Matrix Spike - EPA Sample No.: PBLK01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)					56-120
Heptachlor	16.8	0	17.0	101	40-131
Heptachlor Epoxide	18.2	0	19.3	106	30-130
Toxaphene	95.6	0	161	168 *	30-130
Endrin	20.3	0	19.1	94.0	30-130
Methoxychlor			~~19.2~~		30-130
gamma-Chlordane	17.2	0	19.1	111	30-130
alpha-Chlordane	18.6	0	19.2	103	30-130
					30-130
					30-103
					30-130

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 8 outside limits

COMMENTS:

PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: ~~CLJ-CSS-01~~ NA DL

Matrix Spike - EPA Sample No.: CLJ-DS-11

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)					56-120
Heptachlor	16.8	0	14.8	88.1	40-131
Heptachlor Epoxide	18.2	0	18.5	102	30-130
Toxaphene	95.6	0	160	167 *	30-130
Endrin	20.3	0	19.3	95.4	30-130
Methoxychlor					30-130
gamma-Chlordane	17.2	0	17.8	104	30-130
alpha-Chlordane	18.6	0	18.1	97.4	30-130
					30-130
					30-103
					30-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)					15	56-120
Heptachlor	16.8	15.6	92.9	5.13	20	40-131
Heptachlor Epoxide	18.2	19.4	107	4.64	20	30-130
Toxaphene					20	30-130
Endrin	20.3	19.7	97.0	1.64	20	30-130
Methoxychlor					20	30-130
gamma-Chlordane	17.2	18.4	107	3.42	20	30-130
alpha-Chlordane	18.6	18.8	101	3.79	20	30-130
						30-130
						30-130
						30-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 8 outside limits
Spike Recovery: 1 out of 16 outside limits

COMMENTS: No toxaphene duplicate extracted

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO: PBLK01

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab Sample ID: N7P40266P Lab File ID:

Matrix: (soil/water) WATER Extraction: (SepF/Cont/Sonc) SepF

Sulfur Cleanup: (Y/N) N Date Extracted: 3-17-94

Date Analyzed (1): 3-22-94 Date Analyzed (2): 3-~~22~~ 23-94

Time Analyzed (1): 19:44 Time Analyzed (2): 7:16 DL

Instrument ID (1): 1 Instrument ID (2): 2

GC Column (1): DB-608 ID: .53 (mm) GC Column (2): DB-5 ID: .53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PSPK01	N7P40266PS	3-23-94	3-23-94
02	CLJ-DS-11MS	JM4368PS	↓	↓
03	CLJ-DS-11MSD	JM4368PR		
04	CLJ-DS-10	JM4367P		
05	CLJ-DS-11	JM4368P		
06	CLJ-DS-11D	JM4369P		
07	PBLK01F	JM0000P		
08	PSPK01T	N7P40266PST		
09	CLJ-DS-11MST	DL ~~N7~~ JM4368PST		
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

6D
PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ASC Contract: NEFSA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: 1 Level (x low): low 1.00 mid ~~2.5~~ 5.00 high 100

GC Column: DB-608 ID: .53 (mm) Date(s) Analyzed: 3-7-94 3-8-94

COMPOUND	RT OF STANDARDS LOW	MID	HIGH	MEAN RT	RT WINDOW FROM	TO
alpha-BHC						
beta-BHC						
delta-BHC						
gamma-BHC (Lindane)						
Heptachlor	11.42	11.42	11.42	11.42	11.37	11.47
Aldrin						
Heptachlor epoxide	14.47	14.47	14.47	14.47	14.40	14.54
Endosulfan I						
Dieldrin						
4,4'-DDE						
Endrin	17.96	17.96	17.96	17.96	17.89	18.03
Endosulfan II						
4,4'-DDD						
Endosulfan sulfate						
4,4'-DDT						
Methoxychlor						
Endrin ketone						
Endrin aldehyde						
alpha-Chlordane	15.57	15.57	15.57	15.57	15.50	15.64
gamma-Chlordane	15.02	15.02	15.02	15.02	14.95	15.09
Tetrachloro-m-xylene	6.69	6.69	6.69	6.69	6.64	6.74
Decachlorobiphenyl	31.11	31.12	31.13	31.12	31.02	31.22

* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are ± 0.05 minutes for all compounds that elute before Heptachlor epoxide, ±0.07 minutes for all other compounds, except ±0.10 minutes for Decachlorobiphenyl.

6D
PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

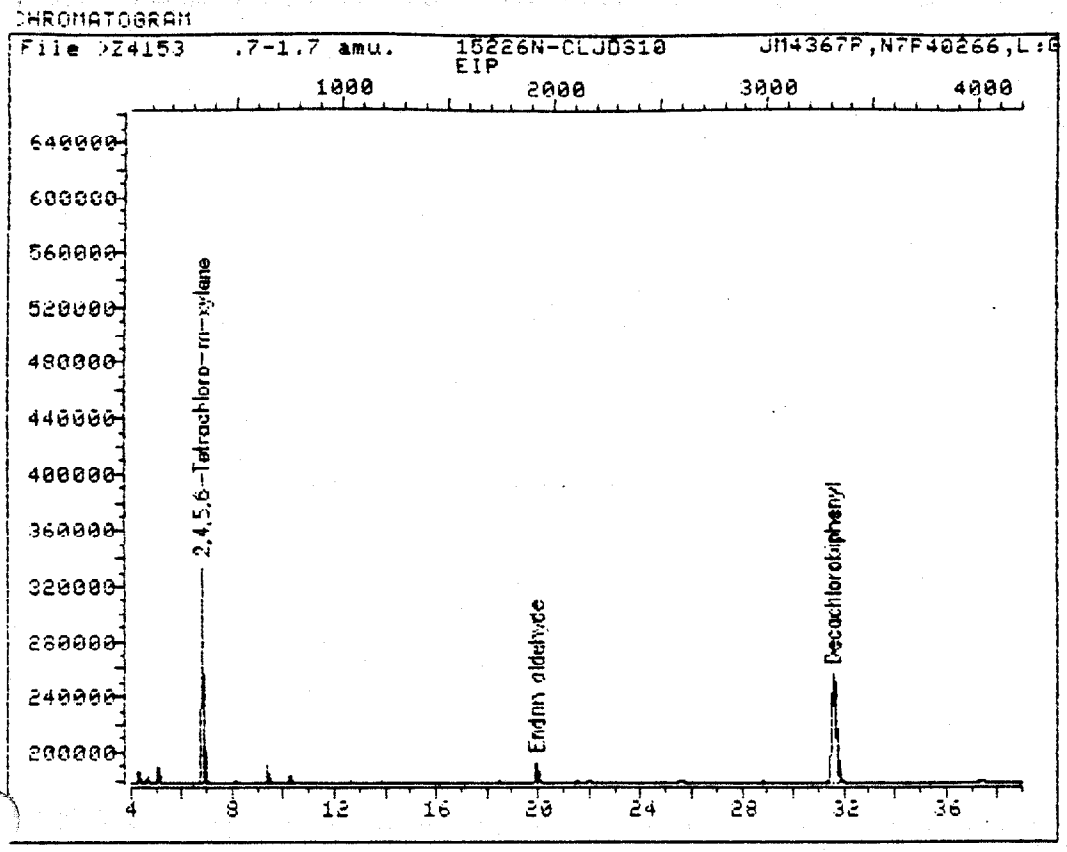
Instrument ID: 2 Level (x low): low 1.00 mid 5.00 high 10.0

GC Column: DB-5 ID: .53 (mm) Date(s) Analyzed: 3-7-94

COMPOUND	RT OF STANDARDS LOW	MID	HIGH	MEAN RT	RT WINDOW FROM	TO
alpha-BHC						
beta-BHC						
delta-BHC						
gamma-BHC (Lindane)						
Heptachlor	12.65	12.64	12.65	12.65	12.60	12.70
Aldrin						
Heptachlor epoxide	15.13	15.13	15.13	15.13	15.06	15.20
Endosulfan I						
Dieldrin						
4,4'-DDE						
Endrin	18.02	18.02	18.02	18.02	17.97	18.09
Endosulfan II						
4,4'-DDD						
Endosulfan sulfate						
4,4'-DDT						
Methoxychlor						
Endrin ketone						
Endrin aldehyde						
alpha-Chlordane	16.36	16.36	16.36	16.36	16.29	16.43
gamma-Chlordane	15.91	15.91	15.91	15.91	15.84	15.98
Tetrachloro-m-xylene	7.94	7.90	7.90	7.91	7.86	7.96
Decachlorobiphenyl	32.37	32.38	32.38	32.38	32.28	32.48

* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are ± 0.05 minutes for all compounds that elute before Heptachlor epoxide, ±0.07 minutes for all other compounds, except ±0.10 minutes for Decachlorobiphenyl.



Data File: >Z4153::D5 Quant Output File: ^Z4153::D5
Name: 15226N-CLJDS10 Instrument ID: Z
Misc: JM4367P,N7P40266,L:G2,25,5:1,

Id File: IZP307::D5
Title: PESTICIDES DB-608 BY GC B2 (FRONT)
Last Calibration: 940308 07:26 Last Qcal Time: <none>

Operator ID: USER1
Quant Time : 940323 11:40
Injected at: 940323 11:00

- 0082 DL
3-23-94

QUANT REPORT

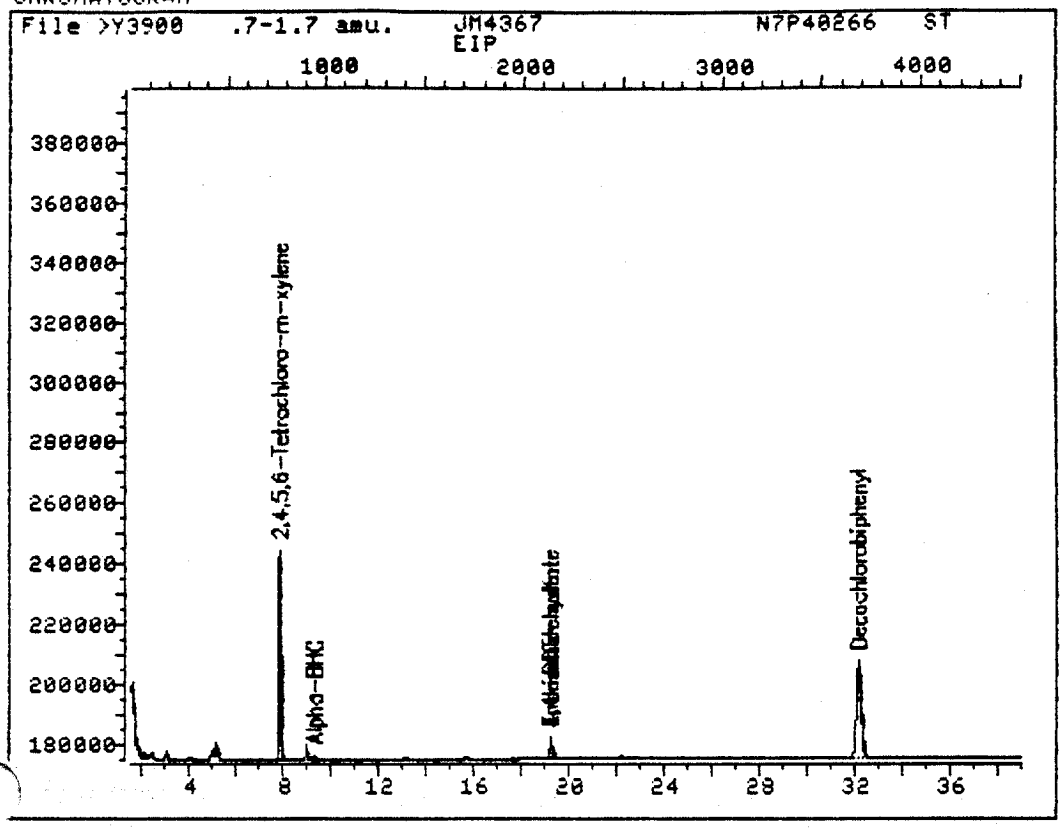
Operator ID: USER1 Quant Rev: 7 Quant Time: 940323 11:40
Output File: ^Z4153::D5 Injected at: 940323 11:00
Data File: >Z4153::D5 Dilution Factor: 1.00000
Name: 15226N-CLJDS10 Instrument ID: Z
Misc: JM4367P,N7P40266,L:G2,25,5:1,

ID File: IZP307::D5
Title: PESTICIDES DB-608 BY GC B2 (FRONT)
Last Calibration: 940308 07:26 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#2,4,5,6-Tetrachloro-m-xylene	6.78	335	687040	.215	ug/ml	100
19)	#Endrin aldehyde	19.92	1911	75903	~~.0330~~	~~ug/ml~~	100
23)	#Decachlorobiphenyl	31.54	3306	957107	.226	ug/ml	100

Compound uses ESTD

CHROMATOGRAM



Data File: >Y3900::D5 Quant Output File: ^Y3900::D5
Name: JM4367 Instrument ID: Y
Misc: N7P40266 ST

Id File: IYP307::D5
Title: 8080 PESTICIDES BY GC, COLUMN DB-5, ECD, B2R
Last Calibration: 940308 07:48 Last Qcal Time: <none>

Operator ID: USER1
Quant Time : 940323 12:25
Injected at: 940323 11:44

0084
DL
3-30-94

QUANT REPORT

Operator ID: USER1
Output File: ^Y3900::D5
Data File: >Y3900::D5
Name: JM4367
Misc: N7P40266 ST

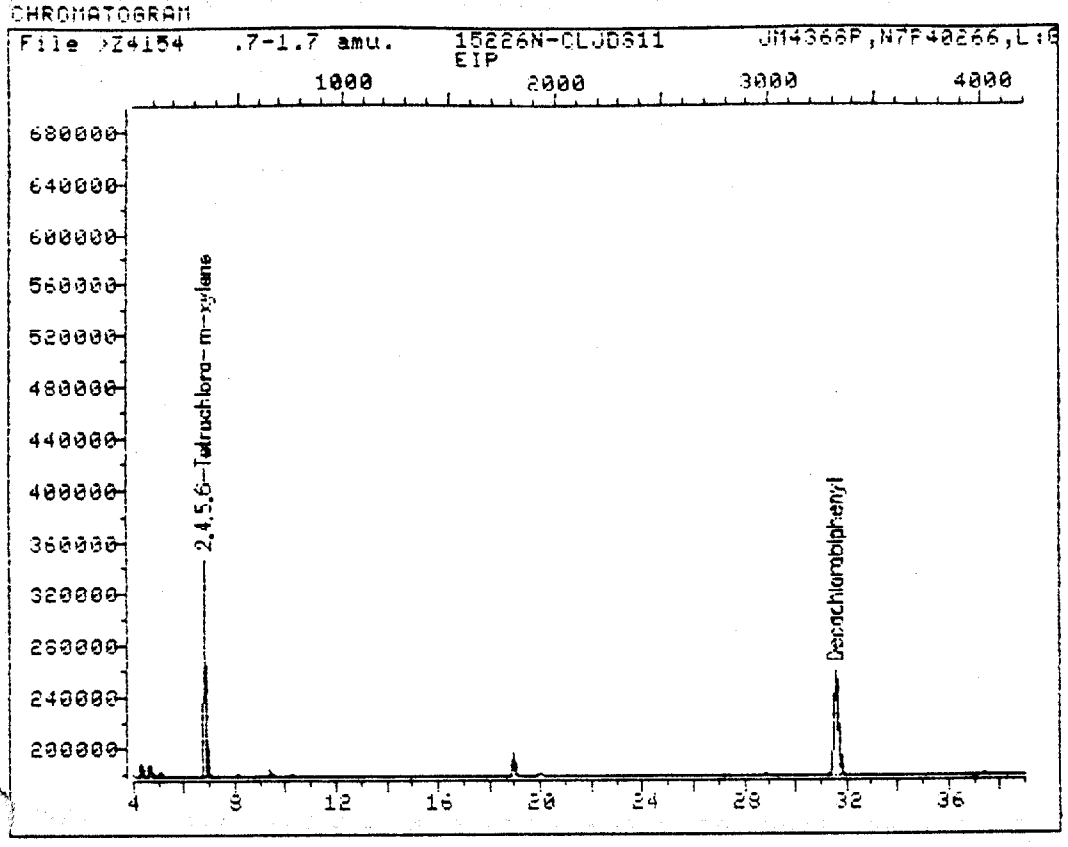
Quant Rev: 7
Quant Time: 940323 12:25
Injected at: 940323 11:44
Dilution Factor: 1.00000
Instrument ID: Y

ID File: IYP307::D5
Title: 8080 PESTICIDES BY GC, COLUMN DB-5, ECD, B2R
Last Calibration: 940308 07:48
Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#2,4,5,6-Tetrachloro-m-xylene	7.83	761	303135	.237	ug/ml	100
2)	#Alpha-BHC	9.27	934	8287	.00482	ug/ml	100
18)	#Endrin aldehyde	19.20	2125	36063	.0310	ug/ml	100
19)	#4,4'-DDT	19.20	2125	37055	.0369	ug/ml	100
20)	#Endosulfan sulfate	19.20	2125	37055	.0369	ug/ml	100
23)	#Decachlorobiphenyl	32.12	3675	420044	.251	ug/ml	100

Compound uses ESTD

CHROMATOGRAM



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Name: 15226N-CLJDS11 Instrument ID: Z
Misc: JM4368P,N7P40266,L:G2,25,5:1,

Id File: IZP307::D5
Title: PESTICIDES DB-608 BY GC B2 (FRONT)
Last Calibration: 940308 07:26 Last Qcal Time: <none>

Operator ID: USER1
Quant Time : 940323 12:24
Injected at: 940323 11:44

DL
3-23-94

QUANT REPORT

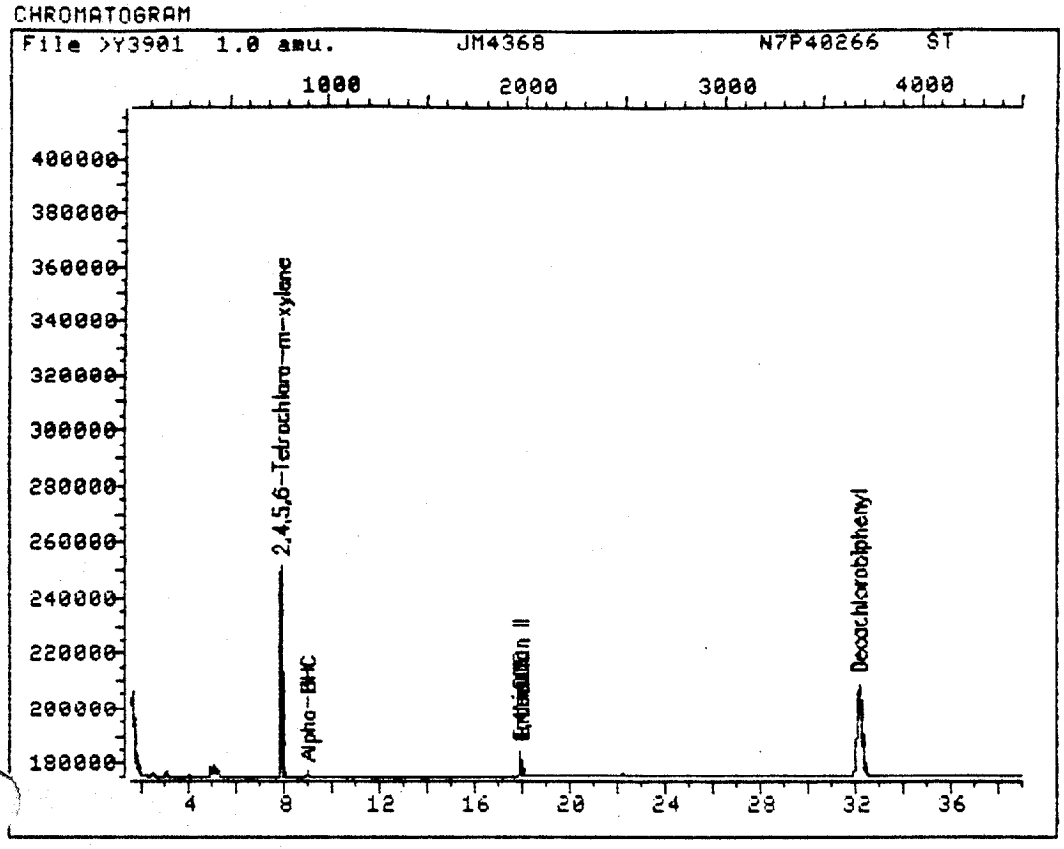
Operator ID: USER1 Quant Rev: 7 Quant Time: 940323 12:24
Output File: ^Z4154::D5 Injected at: 940323 11:44
Data File: >Z4154::D5 Dilution Factor: 1.00000
Name: 15226N-CLJDS11 Instrument ID: Z
Misc: JM4368P,N7P40266,L:G2,25,5:1,

ID File: IZP307::D5
Title: PESTICIDES DB-608 BY GC 82 (FRONT)
Last Calibration: 940308 07:26 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#2,4,5,6-Tetrachloro-m-xylene	6.78	335	743457	.232	ug/ml	100
23)	#Decachlorobiphenyl	31.55	3307	982547	.232	ug/ml	100

Compound uses ESTD

CHROMATOGRAM



Data File: >Y3901::D5 Quant Output File: ^Y3901::D5
Name: JM4368 Instrument ID: Y
Misc: N7P40266 ST

Id File: IYP307::D5
Title: 8080 PESTICIDES BY GC, COLUMN DB-5, ECD, B2R
Last Calibration: 940308 07:48 Last Qcal Time: <none>

Operator ID: USER1
Quant Time : 940323 13:10
Injected at: 940323 12:29

0088L

3-30-94

QUANT REPORT

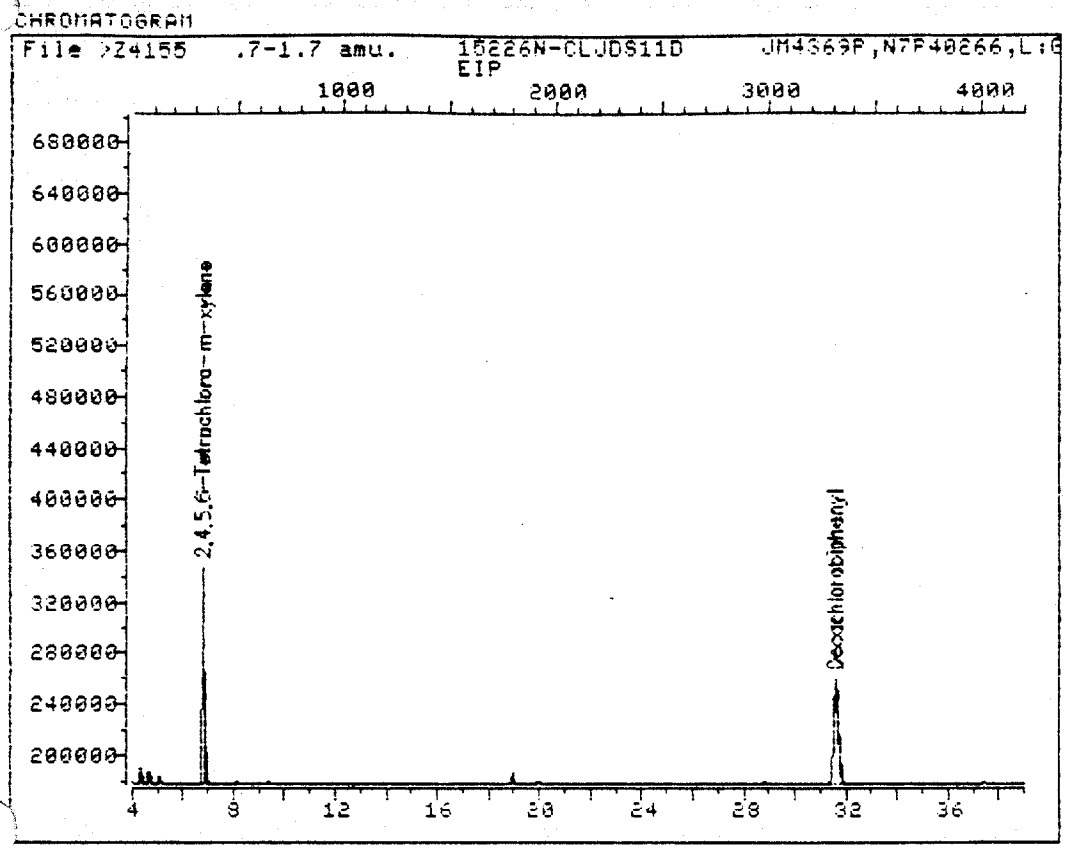
Operator ID: USER1
Output File: ^Y3901::D5
Data File: >Y3901::D5
Name: JM4368
Misc: N7P40266 ST

Quant Rev: 7
Quant Time: 940323 13:10
Injected at: 940323 12:29
Dilution Factor: 1.00000
Instrument ID: Y

ID File: IYP307::D5
Title: 8080 PESTICIDES BY GC, COLUMN DB-5, ECD, B2R
Last Calibration: 940308 07:48
Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#2,4,5,6-Tetrachloro-m-xylene	7.83	761	334367	.262	ug/ml	100
2)	#Alpha-BHC	8.95	895	9984	.00581	ug/ml	100
15)	#Endrin	17.88	1967	41407	.0309	ug/ml	100
16)	#Endosulfan II	17.88	1967	41407	.0325	ug/ml	100
17)	#4,4'-DDD	17.88	1967	41407	.0325	ug/ml	100
23)	#Decachlorobiphenyl	32.11	3674	434543	.259	ug/ml	100

Compound uses ESTD



Data File: >Z4155::D5 Quant Output File: ^Z4155::D5
Name: 15226N-CLJDS11D Instrument ID: Z
Misc: JM4369P,N7P40266,L:G2,25,5:1,

Id File: IZP307::D5
Title: PESTICIDES DB-608 BY GC B2 (FRONT)
Last Calibration: 940308 07:26 Last Qcal Time: <none>

Operator ID: USER1
Quant Time : 940323 13:09
Injected at: 940323 12:29

DL
3-23-94

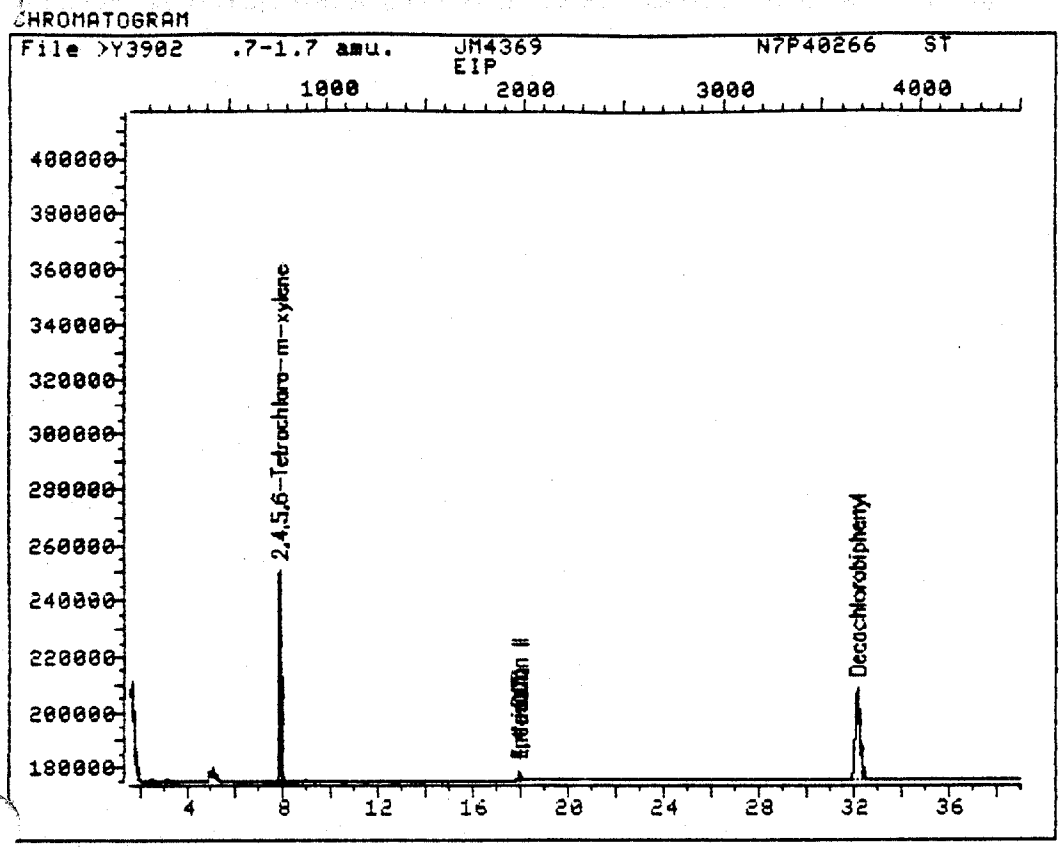
QUANT REPORT

Operator ID: USER1 Quant Rev: 7 Quant Time: 940323 13:09
Output File: ^Z4155::D5 Injected at: 940323 12:29
Data File: >Z4155::D5 Dilution Factor: 1.00000
Name: 15226N-CLJDS11D Instrument ID: Z
Misc: JM4369P,N7P40266,L:G2,25,5:1,

ID File: IZP307::D5
Title: PESTICIDES DB-608 BY GC B2 (FRONT)
Last Calibration: 940308 07:26 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#2,4,5,6-Tetrachloro-m-xylene	6.78	335	745217	.233	ug/ml	100
23)	#Decachlorobiphenyl	31.54	3306	985434	.233	ug/ml	100

Compound uses ESTD



Data File: >Y3902::D5 Quant Output File: ^Y3902::D5
Name: JM4369 Instrument ID: Y
Misc: N7P40266 ST

Id File: IYP307::D5
Title: 8080 PESTICIDES BY GC, COLUMN DB-5, ECD, B2R
Last Calibration: 940308 07:48 Last Qcal Time: <none>

Operator ID: USER1
Quant Time : 940323 13:54
Injected at: 940323 13:13

0092

DL
3-30-94

QUANT REPORT

Operator ID: USER1 Quant Rev: 7 Quant Time: 940323 13:54
Output File: ^Y3902::D5 Injected at: 940323 13:13
Data File: >Y3902::D5 Dilution Factor: 1.00000
Name: JM4369 Instrument ID: Y
Misc: N7P40266 ST

ID File: IYP307::D5
Title: 8080 PESTICIDES BY GC, COLUMN DB-5, ECD, B2R
Last Calibration: 940308 07:48 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#2,4,5,6-Tetrachloro-m-xylene	7.83	761	333375	.261	ug/ml	100
15)	#Endrin	17.89	1968	18719	.0140	ug/ml	100
16)	#Endosulfan II	17.89	1968	18719	.0147	ug/ml	100
17)	#4,4'-DDD	17.89	1968	18719	.0147	ug/ml	100
23)	#Decachlorobiphenyl	32.10	3673	433967	.259	ug/ml	100

Compound uses ESTD

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: *Analytical Services Corp* **Contract:** NeesA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** NA

DW No.: NA

EPA Sample No.	Lab Sample ID.
CLJ-CSS-43	JM4363
CLJ-CSS-44	JM4364
CLJ-CSS-45	JM4365
CLJ-CSS-46	JM4366
CLJ-DS-10	JM4367
CLJ-DS-11	JM4368
CLJ-DS-11D	JM4369

Were ICP interelement corrections applied? Yes/NO Yes

Were ICP background corrections applied? Yes/NO Yes

If YES - were raw data generated before application of background corrections? Yes/NO No

COMMENTS: See SDG Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's Designee, as verified by the following signature.

Signature: J Hnatow **Name:** Joseph Hnatow

Date: 5/20/94 **Title:** Operations Manager

INORGANIC ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NeesA **EPA SAMPLE #:** CLJ-DS-10

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-3~~ NA

Matrix: (soil/water) WATER **Level:** (low/med) LOW **Lab Sample ID:** JM4367

% Solids: ____ **Date Received:** 03/07/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
7429-90-5	Aluminum	NR			
7440-36-0	Antimony	NR			
7440-38-2	Arsenic	1.0	U	W	F
7440-39-3	Barium	379			P
7440-41-7	Beryllium	NR			
7440-42-8	Boron	NR			
7440-43-9	Cadmium	5.8			P
7440-47-3	Chromium	6.9	B		P
7440-48-4	Cobalt	NR			
7439-50-8	Copper	NR			
7439-89-6	Iron	NR			
7439-92-1	Lead	38.5		W	F
7439-96-5	Manganese	NR			
7439-97-6	Mercury	0.14	U		CV
7439-98-7	Molybdenum	NR			
7440-02-0	Nickel	NR			
7782-49-2	Selenium	1.3	U	W	F
7440-22-4	Silver	8.0	U		P
7440-24-6	Strontium	NR			
7440-28-0	Thallium	NR			
7440-62-2	Vanadium	NR			
7440-66-6	Zinc	NR			

Color Before: ____ **Clarity Before:** ____ **Texture:** ____

Color After: ____ **Clarity After:** ____ **Artifacts:** ____

COMMENTS: ____

INORGANIC ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NeesA **EPA SAMPLE #:** CLJ-DS-11

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-CSS-33~~ NA

Matrix: (soil/water) WATER **Level:** (low/med) LOW **Lab Sample ID:** _____

% Solids: _____ **Date Received:** 03/07/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
7429-90-5	Aluminum	NR			
7440-36-0	Antimony	NR			
7440-38-2	Arsenic	1.0	U	W	F
7440-39-3	Barium	304			P
7440-41-7	Beryllium	NR			
7440-42-8	Boron	NR			
7440-43-9	Cadmium	21.2			P
7440-47-3	Chromium	4.2	U		P
7440-48-4	Cobalt	NR			
7439-50-8	Copper	NR			
7439-89-6	Iron	NR			
7439-92-1	Lead	1680			F
7439-96-5	Manganese	NR			
7439-97-6	Mercury	0.14	U		CV
7439-98-7	Molybdenum	NR			
7440-02-0	Nickel	NR			
7782-49-2	Selenium	1.3	U	W	F
7440-22-4	Silver	8.0	U		P
7440-24-6	Strontium	NR			
7440-28-0	Thallium	NR			
7440-62-2	Vanadium	NR			
7440-66-6	Zinc	NR			

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

INORGANIC ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NeesA **EPA SAMPLE #:** CLJ-DS-110

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-CSS-3~~ NA

Matrix: (soil/water) WATER **Level:** (low/med) LOW **Lab Sample ID:** _____

% Solids: _____ **Date Received:** 03/07/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
7429-90-5	Aluminum	NR			
7440-36-0	Antimony	NR			
7440-38-2	Arsenic	1.0	U	W	F
7440-39-3	Barium	104			P
7440-41-7	Beryllium	NR			
7440-42-8	Boron	NR			
7440-43-9	Cadmium	9.4			P
7440-47-3	Chromium	4.2	U		P
7440-48-4	Cobalt	NR			
7439-50-8	Copper	NR			
7439-89-6	Iron	NR			
7439-92-1	Lead	64.8			F
7439-96-5	Manganese	NR			
7439-97-6	Mercury	0.14	U		CV
7439-98-7	Molybdenum	NR			
7440-02-0	Nickel	NR			
7782-49-2	Selenium	1.3	U	W	F
7440-22-4	Silver	8.0	U		P
7440-24-6	Strontium	NR			
7440-28-0	Thallium	NR			
7440-62-2	Vanadium	NR			
7440-66-6	Zinc	NR			

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

0097

Lab Name: *Analytical Services Corp* **Contract:** NEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~[illegible]~~ NA

Initial Calibration Source: NIST **Continuing Calibration Source:** NIST

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic	32.8	34.7	106	20.5	22.1	108	20.9	102	F
Barium	9240	9340	101	4740	4680	103	4660	98.3	P
Beryllium									
Boron									
Cadmium	2530	2630	104	1260	1320	105	1310	104	P
Chromium	973	1000	103	484	504	104	504	104	P
Cobalt									
Copper									
Iron									
Lead	35.3	37.6	107	21.2	20.2	95.3	20.7	97.6	F
Manganese									
Mercury	5.0	5.4	108	5.0	5.6	112	5.4	108	CV
Molybdenum									
Nickel									
Selenium									
Silver	1260	1280	102	579	598	103	600	104	P
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

0098

Lab Name: *Analytical Services Corp* **Contract:** Neesa

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-CSS-3~~ NA

Initial Calibration Source: NIST **Continuing Calibration Source:** NIST

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic				20.5	20.8	101	21.6	105	F
Barium				4740	4660	98.3	4650	98.2	P
Beryllium									
Boron									
Cadmium				1260	1290	102	1290	102	P
Chromium				484	502	104	498	103	P
Cobalt									
Copper									
Iron									
Lead				21.2	21.2	100	22.2	105	F
Manganese									
Mercury	5.0	5.0	100	5.0	4.6	92	4.6	92	CV
Molybdenum									
Nickel									
Selenium									
Silver				579	595	103	596	103	P
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

0099

Lab Name: *Analytical Services Corp* **Contract:** NeesA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-CSS-3~~ NA

Initial Calibration Source: NIST **Continuing Calibration Source:** NIST

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic				20.5	21.2	103	22.2	108	F
Barium				4740	4680	98.7			P
Beryllium									
Boron									
Cadmium				1260	1290	102			P
Chromium				484	506	105			P
Cobalt									
Copper									
Iron									
Lead				21.2	22.6	107	22.8	108	F
Manganese									
Mercury				5.0	5.2	104	5.2	104	CV
Molybdenum									
Nickel									
Selenium									
Silver				579	593	102			P
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

0100

Lab Name: *Analytical Services Corp* **Contract:** NeesA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~GLS-CSS-3~~ NA

Initial Calibration Source: NIST **Continuing Calibration Source:** NIST

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic				20.5	21.8	106			F
Barium									
Beryllium									
Boron									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				21.2	21.0	99.1	21.6	102	F
Manganese									
Mercury									
Molybdenum									
Nickel									
Selenium									
Silver									
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

- 0101

Lab Name: *Analytical Services Corp* **Contract:** Neesa

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~GLS 655~~ NA

Initial Calibration Source: _____ **Continuing Calibration Source:** NIST

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				21.2	21.6	102	21.9	103	F
Manganese									
Mercury									
Molybdenum									
Nickel									
Selenium									
Silver									
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

0102

Lab Name: *Analytical Services Corp* **Contract:** NeesA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-ESS~~ NA

Initial Calibration Source: _____ **Continuing Calibration Source:** NIST

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				21.2	22.2	105	23.2	109	F
Manganese									
Mercury									
Molybdenum									
Nickel									
Selenium									
Silver									
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

0103

Lab Name: *Analytical Services Corp* **Contract:** NeesA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~GLF-ESS-3~~ NA

Initial Calibration Source: _____ **Continuing Calibration Source:** NIST

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				21.2	21.2	100			
Manganese									
Mercury									
Molybdenum									
Nickel									
Selenium									
Silver									
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

0104

Lab Name: *Analytical Services Corp* **Contract:** Neesa

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-255-23~~ NA

Initial Calibration Source: APG **Continuing Calibration Source:** APG

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Manganese									
Mercury									
Molybdenum									
Nickel									
Selenium	39.1	38.5	98.5	23.5	25.5	109	24.2	103	F
Silver									
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

0105

Lab Name: *Analytical Services Corp* **Contract:** NeesA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLS-CSS-3~~ NA

Initial Calibration Source: _____ **Continuing Calibration Source:** APG

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Manganese									
Mercury									
Molybdenum									
Nickel									
Selenium				23.5	22.9	97.4	22.7	96.6	F
Silver									
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION
(2A)

0106

Lab Name: *Analytical Services Corp* **Contract:** NeesA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** NA

Initial Calibration Source: _____ **Continuing Calibration Source:** APG

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Manganese									
Mercury									
Molybdenum									
Nickel									
Selenium				23.5	23.1	98.3	24.1	103	F
Silver									
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION (2A)

0107

Lab Name: *Analytical Services Corp* **Contract:** NeesA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLS 665~~ NA

Initial Calibration Source: _____ **Continuing Calibration Source:** HPG

Concentration Units: ug/L

ANALYTE	INTIAL CALIBRATION True	Found	%R(1)	CONTINUING CALIBRATION True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Manganese									
Mercury									
Molybdenum									
Nickel									
Selenium				23.5	21.5	91.5	23.7	101	F
Silver									
Strontium									
Thallium									
Vanadium									
Zinc									

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

BLANKS (3)

Lab Name: *Analytical Services Corp* **Contract:** NeesA **Lab Code:** NA

Case #: NA **SAS #:** NA **SDG #:** ~~C25-C55-33~~ NA

Prep Blank Matrix: (soil/water) WATER

Prep Blank Concentration Units: (ug/L or mg/kg) ug/L

ANALYTE	INITIAL CALIBRATION BLANK (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum											
Antimony											
Arsenic			-0.1	U							
Barium											
Beryllium											
Boron											
Cadmium											
Chromium											
Cobalt											
Copper											
Iron											
Lead			-1.4	U	-1.0	U	-1.1	U			F
Manganese											
Mercury			.01	U							CV
Molybdenum											
Nickel											
Selenium			-0.8	U	-0.8	U	-0.2	U			F
Silver											
Strontium											
Thallium											
Vanadium											
Zinc											

BLANKS (3)

- 0114

Lab Name: *Analytical Services Corp* **Contract:** NeesA **Lab Code:** NA

Case #: NA **SAS #:** NA **SDG #:** ~~CLS-CSS-~~ NA

Prep Blank Matrix: (soil/water) WATER

Prep Blank Concentration Units: (ug/L or mg/kg) ug/L

ANALYTE	INITIAL CALIBRATION BLANK (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Boron											
Cadmium											
Chromium											
Cobalt											
Copper											
Iron											
Lead			-1.3	U	-1.3	U	-0.9	U			F
Manganese											
Mercury											
Molybdenum											
Nickel											
Selenium			-1.2	U							F
Silver											
Strontium											
Thallium											
Vanadium											
Zinc											

BLANKS (3)

0115

Lab Name: *Analytical Services Corp* **Contract:** NeesA **Lab Code:** NA

Case #: NA **SAS #:** NA **SDG #:** ~~[illegible]~~ NA

Prep Blank Matrix: (soil/water) WATER

Prep Blank Concentration Units: (ug/L or mg/kg) ug/L

ANALYTE	INITIAL CALIBRATION BLANK (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Boron											
Cadmium											
Chromium											
Cobalt											
Copper											
Iron											
Lead			-1.0	U							
Manganese											
Mercury											
Molybdenum											
Nickel											
Selenium											
Silver											
Strontium											
Thallium											
Vanadium											
Zinc											

ICP INTERFERENCE CHECK SAMPLE (4)

0116

Lab Name: *Analytical Services Corp* **Contract:** NeesA **Lab Code:** NA

Case #: NA **SAS #:** NA **SDG #:** ~~CLJ-CSS2~~ NA

ICP ID #: 61 **ISC Source:** Ventur

Concentration Units: ug/L

ANALYTE	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum								
Antimony								
Arsenic								
Barium	Ø	471	2.0	420	99.6	1.7	462	98.0
Beryllium								
Boron								
Cadmium	Ø	874	-7.9	929	106	-8.4	898	103
Chromium	Ø	462	-5.3	477	103	-6.8	464	100
Cobalt								
Copper								
Iron								
Lead								
Manganese								
Mercury								
Molybdenum								
Nickel								
Selenium								
Silver	Ø	923	-9.7	943	102	-7.2	921	99.8
Strontium								
Thallium								
Vanadium								
Zinc								

SPIKE SAMPLE RECOVERY (5A) · 0117

Lab Name: *Analytical Services Corp* **Contract:** NeesA **EPA Sample #:** CLJ-CSS-4

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-CSS-3~~ NA

Matrix: (soil/water) WATER **Level** (low/med): LOW **% Solids for Sample:** NA

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

ANALYTE	CONTROL LIMIT %R	SPIKE SAMPLE RESULT (SSR)	C	SAMPLE RESULT (SR)	C	SPIKE ADDED (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic	75-125	20.8		-0.7	U	20	104		F
Barium	75-125	9700		300		10400	90.4		P
Beryllium									
Boron									
Cadmium	75-125	995		1.2	B	1050	94.6		P
Chromium	75-125	5110		3.5	U	5430	94.1		P
Cobalt									
Copper									
Iron									
Lead	75-125	34.3		11.1		20.0	116		F
Manganese									
Mercury	75-125	1.86		-.12	U	2.0	93		CV
Molybdenum									
Nickel									
Selenium	75-125	14.0		-0.7	U	20.0	70	N	F
Silver	75-125	86.0		-3.0	U	93.5	92.0		P
Strontium									
Thallium									
Vanadium									
Zinc									

COMMENTS:

SPIKE SAMPLE RECOVERY (5A) - 0118

Lab Name: *Analytical Services Corp* **Contract:** NeesA **EPA Sample #:** UJ-DS-11

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** NA

Matrix: (soil/water) WATER **Level** (low/med): LOW **% Solids for Sample:** NA

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

ANALYTE	CONTROL LIMIT %R	SPIKE SAMPLE RESULT (SSR)	C	SAMPLE RESULT (SR)	C	SPIKE ADDED (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic	75-125	13.1		-.3	U	20	65.5	N	F
Barium	75-125	9410		108		10400	89.4		P
Beryllium									
Boron									
Cadmium	75-125	977		9.9		1050	92.1		P
Chromium	75-125	5030		6.9		5430	92.5		P
Cobalt									
Copper									
Iron									
Lead	75-125	85.2		64.8		20	102		F
Manganese									
Mercury	75-125	2.47		.05	U	2.0	124		CV
Molybdenum									
Nickel									
Selenium	75-125	16.7		0.1	U	20.0	83.5		F
Silver	75-125	89.4		-1.8	U	93.5	95.6		P
Strontium									
Thallium									
Vanadium									
Zinc									

COMMENTS:

POST DIGEST SPIKE SAMPLE RECOVERY (5B)

0119

Lab Name: *Analytical Services Corp* **Contract:** NeesA **EPA Sample #:** CLJ-DS-11D

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-11~~ NA

IC Matrix: (soil/water) WATER **Level** (low/med): LOW

Concentration Units: ug/L

ANALYTE	CONTROL LIMIT %R	SPIKE SAMPLE RESULT (SSR)	C	SAMPLE RESULT (SR)	C	SPIKE ADDED (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic	75-125	13.1		-0.3	U	20	65.5		F
Barium	75-125	9410		108		10400	89.4		P
Beryllium									
Boron									
Cadmium	75-125	977		9.9		1050	92.1		P
Chromium	75-125	5030		6.9		5430	92.5		P
Cobalt									
Copper									
Iron									
Lead									
Manganese									
Mercury									
Molybdenum									
Nickel									
Selenium									
Silver	75-125	89.4		-1.8	U	93.5	95.6		P
Srontium									
Thallium									
Vanadium									
Zinc									

COMMENTS:

DUPLICATES (6)

Lab Name: *Analytical Services Corp* **Contract:** NeesA **EPA Sample #:** CLJ-CSS-

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-CSS~~ NA

Matrix: (soil/water) WATER **% Solids for Sample:** ____

Level (low/med): LOW **% Solids for Duplicate:** ____

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

ANALYTE	CONTROL LIMIT	SAMPLE (S)	C	DUPLICATE (D)	C	RPD	Q	M
Aluminum								
Antimony								
Arsenic		-0.7	U	-0.7	U			F
Barium	20	300		298		0.7		P
Beryllium								
Boron								
Cadmium		1.2		1.1		8.7		P
Chromium		3.5	U	3.3	U			P
Cobalt								
Copper								
Iron								
Lead		11.1	B	19.2		53		P
Manganese								
Mercury		-.12	U	-.06	U			CV
Molybdenum								
Nickel								
Selenium		-0.7	U	-0.5	U			F
Silver		-3.0	U	-1.7	U			P
Strontium								
Thallium								
Vanadium								
Zinc								

DUPLICATES (6)

0121

Lab Name: *Analytical Services Corp* **Contract:** NeesA **EPA Sample #:** CLJ-DS-1

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-DS-3~~ NA

Matrix: (soil/water) WATER **% Solids for Sample:** ___

Level (low/med): LOW **% Solids for Duplicate:** ___

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

ANALYTE	CONTROL LIMIT	SAMPLE (S)	C	DUPLICATE (D)	C	RPD	Q	M
Aluminum								
Antimony								
Arsenic		-0.3	U	0.1	U			F
Barium	20	108		104		3.8		P
Beryllium								
Boron								
Cadmium	20	9.9		9.4		5.2		P
Chromium		6.9	B	2.4	U			P
Cobalt								
Copper								
Iron								
Lead	20	64.8		63.1		3.0		P
Manganese								
Mercury		.05	U	.07	U			CV
Molybdenum								
Nickel								
Selenium		0.1	U	0.2	U			F
Silver		-1.8	U	-4.3	U			P
Strontium								
Thallium								
Vanadium								
Zinc								

LABORATORY CONTROL SAMPLE (7) - 0122

Lab Name: *Analytical Services Corp* **Contract:** NeesA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLP-CSSA~~ NA

Liquid LCS Source: Ventures **Aqueous LCS Source:** _____

ANALYTE	AQUEOUS (ug/L) True	Found	%R	SOLID (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic	20.0	20.0	100						
Barium	10400	9194	88.4						
Beryllium									
Boron									
Cadmium	1050	948	90.3						
Chromium	5430	4910	90.4						
Cobalt									
Copper									
Iron									
Lead	20.0	21.4	107						
Manganese									
Mercury	2.0	2.0	100						
Molybdenum									
Nickel									
Selenium	20.0	19.3	96.5						
Silver	93.5	89.8	96.0						
Strontium									
Thallium									
Vanadium									
Zinc									

LABORATORY CONTROL SAMPLE (7)

Lab Name: *Analytical Services Corp* **Contract:** Neesa

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-255C-3~~ NA

Liquid LCS Source: Ventures **Aqueous LCS Source:** _____

ANALYTE	AQUEOUS (ug/L) True	Found	%R	SOLID (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic	20.0	20.9	105						
Barium	10400	9596	92.3						
Beryllium									
Boron									
Cadmium	1050	974	92.8						
Chromium	5430	5070	93.4						
Cobalt									
Copper									
Iron									
Lead	20.0	19.8	99.0						
Manganese									
Mercury	2.0	1.8	90.0						
Molybdenum									
Nickel									
Selenium	20.0	20.9	105						
Silver	93.5	89.5	95.7						
Strontium									
Thallium									
Vanadium									
Zinc									

ICP SERIAL DILUTIONS (9)

Lab Name: *Analytical Services Corp* **Lab Code:** NA **EPA SAMPLE #:** CLJ DS 11

Contract: NeesA **Case #:** NA **SAS #:** NA **SDG #:** ~~CLJ-CSS-3~~ NA

Matrix (soil/water): WATER **Level (low/med):** LOW

Concentration Units: ug/L

ANALYTE	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum							
Antimony							
Arsenic							
Barium	304		312		2.6		P
Beryllium							
Boron							
Cadmium	21.2		23.0		8.1		P
Chromium	4.1	U	8.0	U			P
Cobalt							
Copper							
Iron							
Lead							
Manganese							
Mercury							
Molybdenum							
Nickel							
Selenium							
Silver	-3.5	U	-7.5	U			P
Strontium							
Thallium							
Vanadium							
Zinc							

EPA SAMPLE NO.

0125

ORGANICS ANALYSIS DATA SHEET

SBIK1

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: N7C40264

Sample wt/vol: 400 (g/mL) mL Lab File ID: A1005

% Moisture: NA decanted: (Y/N) NA Date Received: 03/07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/18/94

Concentrated Extract Volume: 4000 (uL) Date Analyzed: 03/26/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
95-48-7----	2-Methylphenol	100	U
106-44-5---	4-Methylphenol	100	U
67-72-1----	Hexachloroethane	100	U
98-95-3----	Nitrobenzene	100	U
87-68-3----	Hexachlorobutadiene	100	U
88-06-2----	2,4,6-Trichlorophenol	100	U
95-95-4----	2,4,5-Trichlorophenol	100	U
121-14-2---	2,4-Dinitrotoluene	100	U
118-74-1---	Hexachlorobenzene	100	U
87-86-5----	Pentachlorophenol	100	U
110-86-1---	Pyridine	100	U
72-43-5----	Methoxychlor	100	U
58-89-9----	gamma-BHC (Lindane)	100	U

EPA SAMPLE NO.

0126

ORGANICS ANALYSIS DATA SHEET

SBLKIBS

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: N7C4026HBS

Sample wt/vol: 400 (g/mL) mL Lab File ID: A1006

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/8/94

Concentrated Extract Volume: 4000 (uL) Date Analyzed: 3/26/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
95-48-7----	2-Methylphenol	172	
106-44-5---	4-Methylphenol	566	
67-72-1----	Hexachloroethane	596	
98-95-3----	Nitrobenzene	467	
87-68-3----	Hexachlorobutadiene	194	
88-06-2----	2,4,6-Trichlorophenol	844	
95-95-4----	2,4,5-Trichlorophenol	888	
121-14-2---	2,4-Dinitrotoluene	234	
118-74-1---	Hexachlorobenzene	320	
87-86-5----	Pentachlorophenol	1550	
110-86-1---	Pyridine	517	
72-43-5----	Methoxychlor	1320	
58-89-9----	gamma-BHC (Lindane)	300	

EPA SAMPLE NO.

0127

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-10MS

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 1M4367CS

Sample wt/vol: 400 (g/mL) mL Lab File ID: A1007

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/8/94

Concentrated Extract Volume: 4000 (uL) Date Analyzed: 3/26/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
95-48-7----	2-Methylphenol	182	
106-44-5---	4-Methylphenol	588	
67-72-1----	Hexachloroethane	514	
98-95-3----	Nitrobenzene	464	
87-68-3----	Hexachlorobutadiene	160	
88-06-2----	2,4,6-Trichlorophenol	818	
95-95-4----	2,4,5-Trichlorophenol	863	
121-14-2---	2,4-Dinitrotoluene	202	
118-74-1---	Hexachlorobenzene	251	
87-86-5----	Pentachlorophenol	1540	
110-86-1---	Pyridine	548	
72-43-5----	Methoxychlor	160	
58-89-9----	gamma-BHC (Lindane)	271	

EPA SAMPLE NO. 0128

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-10MSD

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4367CR

Sample wt/vol: 400 (g/mL) mL Lab File ID: A1009

% Moisture: NA decanted: (Y/N) NA Date Received: 3/7/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 3/8/94

Concentrated Extract Volume: 4000 (uL) Date Analyzed: 3/26/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
95-48-7----	2-Methylphenol	155	
106-44-5---	4-Methylphenol	549	
67-72-1----	Hexachloroethane	556	
98-95-3----	Nitrobenzene	417	
87-68-3----	Hexachlorobutadiene	157	
88-06-2----	2,4,6-Trichlorophenol	817	
95-95-4----	2,4,5-Trichlorophenol	837	
121-14-2---	2,4-Dinitrotoluene	215	
118-74-1---	Hexachlorobenzene	251	
87-86-5----	Pentachlorophenol	1520	
110-86-1---	Pyridine	501	
72-43-5----	Methoxychlor	1170	
58-89-9----	gamma-BHC (Lindane)	273	

EPA SAMPLE NO.

0129

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-10

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4367

Sample wt/vol: 400 (g/mL) mL Lab File ID: A1008

% Moisture: NA decanted: (Y/N) NA Date Received: 03/07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/18/94

Concentrated Extract Volume: 4000 (uL) Date Analyzed: 03/26/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
95-48-7----	2-Methylphenol	100	U
106-44-5---	4-Methylphenol	100	U
67-72-1----	Hexachloroethane	100	U
98-95-3----	Nitrobenzene	100	U
87-68-3----	Hexachlorobutadiene	100	U
88-06-2----	2,4,6-Trichlorophenol	100	U
95-95-4----	2,4,5-Trichlorophenol	100	U
121-14-2---	2,4-Dinitrotoluene	100	U
118-74-1---	Hexachlorobenzene	100	U
87-86-5----	Pentachlorophenol	100	U
110-86-1---	Pyridine	100	U
72-43-5----	Methoxychlor	100	U
58-89-9----	gamma-BHC (Lindane)	100	U

EPA SAMPLE NO.

0130

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4368

Sample wt/vol: 400 (g/mL) mL Lab File ID: A1010

% Moisture: NA decanted: (Y/N) NA Date Received: 03/07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/18/94

Concentrated Extract Volume: 4000 (uL) Date Analyzed: 03/26/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
95-48-7----	2-Methylphenol	100	U
106-44-5---	4-Methylphenol	100	U
67-72-1----	Hexachloroethane	100	U
98-95-3----	Nitrobenzene	100	U
87-68-3----	Hexachlorobutadiene	100	U
88-06-2----	2,4,6-Trichlorophenol	100	U
95-95-4----	2,4,5-Trichlorophenol	100	U
121-14-2---	2,4-Dinitrotoluene	100	U
118-74-1---	Hexachlorobenzene	100	U
87-86-5----	Pentachlorophenol	100	U
110-86-1---	Pyridine	100	U
72-43-5----	Methoxychlor	100	U
58-89-9----	gamma-BHC (Lindane)	100	U

EPA SAMPLE NO.

0131

ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11D

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4369

Sample wt/vol: 400 (g/mL) mL Lab File ID: A1011

% Moisture: NA decanted: (Y/N) NA Date Received: 03/07/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 03/18/94

Concentrated Extract Volume: 4000 (uL) Date Analyzed: 03/26/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
95-48-7----	2-Methylphenol	100	U
106-44-5---	4-Methylphenol	100	U
67-72-1----	Hexachloroethane	100	U
98-95-3----	Nitrobenzene	100	U
87-68-3----	Hexachlorobutadiene	100	U
88-06-2----	2,4,6-Trichlorophenol	100	U
95-95-4----	2,4,5-Trichlorophenol	100	U
121-14-2---	2,4-Dinitrotoluene	100	U
118-74-1---	Hexachlorobenzene	100	U
87-86-5----	Pentachlorophenol	100	U
110-86-1---	Pyridine	100	U
72-43-5----	Methoxychlor	100	U
58-89-9----	gamma-BHC (Lindane)	100	U

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: _____

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) =	TOT OUT
01	SBIKI	* 119	106	35.6	77.4	83.6	101			1
02	SBIKLBS	111	90.1	81.4	69.8	77.7	104			0
03	CLJ-DS-10MS	110	85.1	87.4	75.5	79.5	96.8			0
04	CLJ-DS-10	106	106	90.7	78.0	81.8	103			0
05	CLJ-DS-10MSD	105	86.5	81.4	76.6	80.4	99.0			0
06	CLJ-DS-11	104	96.8	91.5	72.1	77.7	92.9			0
07	CLJ-DS-11D	95.2	94.0	76.5	69.3	72.3	86.3			0
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		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(35-114)	
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)	
S3 (TPH)	= Terphenyl-d14	(33-141)	
S4 (PHL)	= Phenol-d5	(10-110)	
S5 (2FP)	= 2-Fluorophenol	(21-110)	
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)	
S7 (2CP)	= 2-Chlorophenol-d4	(33-110)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(16-110)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM II SV-1

SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:

Blank Spike - EPA Sample No.: SBIK1BS

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
2,4,5-Trichlorophenol	100750	0	88800	88.1	30-130
2,4,6-Trichlorophenol	103000	0	84400	81.9	30-130
2,4-Dinitrotoluene	25750	0	23400	90.9	24- 96
2-Methylphenol	26250	0	17200	65.5	30-130
4-Methylphenol	50750	0	56600	112	30-130
Hexachlorobenzene	29250	0	32000	109	30-130
Hexachlorobutadiene	27500	0	19400	70.5	30-130
Hexachloroethane	100750	0	59600	59.2	30-130
Nitrobenzene	50750	0	46700	92.0	30-130
Pentachlorophenol	102000	0	155000	* 152	9-103
Pyridine	73250	0	51700	70.6	30-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 11 outside limits

COMMENTS:

SEMIVOLATILE MATRIX SPIKE MATRIX SPIKE DUPLICATE RECOVERY

0134

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:

Matrix Spike - EPA Sample No.: CLJ-DS-10

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
2,4,5-Trichlorophenol	100750	0	86300	85.7	30-130
2,4,6-Trichlorophenol	103000	0	81800	79.4	30-130
2,4-Dinitrotoluene	25750	0	20200	78.4	24- 96
2-Methylphenol	26250	0	18200	69.3	30-130
4-Methylphenol	50750	0	58800	116	30-130
Hexachlorobenzene	29250	0	25100	85.8	30-130
Hexachlorobutadiene	27500	0	16000	58.2	30-130
Hexachloroethane	100750	0	51400	51.0	30-130
Nitrobenzene	50750	0	46400	91.4	30-130
Pentachlorophenol	102000	0	154000	* 151	9-103
Pyridine	73250	0	54800	74.8	30-130

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
2,4,5-Trichlorophenol	100750	83700	83.1	3.06		30-130
2,4,6-Trichlorophenol	103000	81700	79.3	0.122		30-130
2,4-Dinitrotoluene	25750	21500	83.5	6.24		24- 96
2-Methylphenol	26250	15500	59.0	16.0		30-130
4-Methylphenol	50750	54900	108.2	6.86		30-130
Hexachlorobenzene	29250	25100	85.8	0		30-130
Hexachlorobutadiene	27500	15700	57.1	1.89		30-130
Hexachloroethane	100750	55600	55.2	7.85		30-130
Nitrobenzene	50750	41700	82.2	10.7		30-130
Pentachlorophenol	102000	152000	149 *	1.31		9-103
Pyridine	73250	50100	68.4	8.96		30-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: _____ out of 11 outside limits
Spike Recovery: 2 out of 22 outside limits

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO. SB1K1

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab File ID: A1005 Lab Sample ID: N7C40264

Instrument ID: MSD-A Date Extracted: 03-18-94

Matrix: (soil/water) _____ Date Analyzed: 03-26-94

Level: (low/med) _____ Time Analyzed: 1358

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	CLJ-DS-10MS	JM4367MS	A1007	03-26-94
02	CLJ-DS-10	JM4367	A1008	03-26-94
03	CLJ-DS-10MSD	JM4367MSD	A1009	03-26-94
04	CLJ-DS-11	JM4368	A1010	03-26-94
05	CLJ-DS-11D	JM4369	A1011	03-26-94
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COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0136

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab File ID: A0997 DFTPP Injection Date: 3-26-94

Instrument ID: MSD-A DFTPP Injection Time: 08:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	70.4
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	67
70	Less than 2.0% of mass 69	0.3 (0.4) 1
127	25.0 - 75.0% of mass 198	45.1
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.1
275	10.0 - 30.0% of mass 198	18.9
365	Greater than 0.75% of mass 198	1.7
441	Present, but less than mass 443	82.3
442	40.0 - 110.0% of mass 198	42.1
443	15.0 - 24.0% of mass 442	8.0 (19.1) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SStd20	SStd20	A0998	3-26-94	8:34
02	SStd50	SStd50	A0999	3-26-94	9:25
03	SStd80	SStd80	A1000	3-26-94	10:16
04	SStd120	SStd120	A1001	3-26-94	11:07
05	SStd160	SStd160	A1002	3-26-94	11:58
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FORM V SV 3/90

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab File ID: A1003 DFTPP Injection Date: 03-26-94

Instrument ID: MSD-A DFTPP Injection Time: 1245

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	61.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.7
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	25.0 - 75.0% of mass 198	46.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	20.1
365	Greater than 0.75% of mass 198	1.7
441	Present, but less than mass 443	82.3
442	40.0 - 110.0% of mass 198	46.3
443	15.0 - 24.0% of mass 442	9.1 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	SSTD50	A1004	03-26-94	1307
02	SBLK1	N7C40264	A1005	03-26-94	1358
03	SBLKBS	N7C40264BS	A1006	03-26-94	1440
04	CLJ-DS-10MS	(DA) ~~JM36~~, JM4367MS	A1007	03-26-94	1512
05	CLJ-DS-10	JM4367	A1008	03-26-94	1604
06	CLJ-DS-10MSD	JM4367MSD	A1009	03-26-94	1646
07	CLJ-DS-11	JM4368	A1010	03-26-94	1728
08	CLJ-DS-11D	JM4369	A1011	03-26-94	1810
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6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

0138

Lab Name: ASC Contract: MEEGA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: MSD-A Calibration Date(s): 03-26-94 03-26-94

Calibration Times: 0834 1158

LAB FILE ID: RRF20 = A0012 RRF50 = A0093

RRF80 = A1000 RRF120= A1001 RRF160= A1002

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.52	1.53	1.42	1.85	1.79	1.62	11.6
bis(2-Chloroethyl)ether *	3.13	3.24	3.03	3.38	3.19	3.19	4.02
2-Chlorophenol *	1.34	1.24	1.17	1.27	1.32	1.27	5.21
1,3-Dichlorobenzene *	1.48	1.34	1.23	1.32	1.29	1.33	7.07
1,4-Dichlorobenzene *	1.79	1.55	1.56	1.62	1.67	1.64	6.07 *
1,2-Dichlorobenzene *	1.57	1.36	1.30	1.32	1.31	1.37	8.21 *
2-Methylphenol *	2.14	1.65	1.42	1.52	1.45	1.64	18.0 *
2,2'-oxybis(1-Chloropropane)	4.52	3.99	3.79	4.06	3.98	4.07	6.62
4-Methylphenol *	1.68	1.51	1.45	1.42	1.45	1.49	4.66 *
N-Nitroso-di-n-propylamine *	1.47	1.31	1.16	1.24	1.26	1.29	8.96 *
Hexachloroethane *	0.755	0.701	0.634	0.699	0.687	0.696	6.19 *
Nitrobenzene *	0.373	0.362	0.379	0.347	0.359	0.368	3.96 *
Isophorone *	0.812	0.872	0.823	0.771	0.791	0.814	4.67 *
2-Nitrophenol *	0.191	0.186	0.196	0.171	0.175	0.181	4.98 *
2,4-Dimethylphenol *	0.325	0.329	0.335	0.307	0.311	0.321	3.71 *
bis(2-Chloroethoxy)methane *	0.498	0.476	0.487	0.463	0.473	0.479	2.84 *
2,4-Dichlorophenol *	0.309	0.293	0.291	0.271	0.269	0.287	5.98 *
1,2,4-Trichlorobenzene *	0.331	0.329	0.328	0.318	0.298	0.321	4.33 *
Naphthalene *	1.11	0.969	0.984	0.942	0.769	0.954	12.7 *
4-Chloroaniline	0.354	0.404	0.419	0.371	0.384	0.386	6.63
Hexachlorobutadiene	0.213	0.197	0.208	0.192	0.177	0.197	7.08
4-Chloro-3-methylphenol *	0.313	0.334	0.338	0.316	0.333	0.326	3.45 *
2-Methylnaphthalene *	0.738	0.714	0.675	0.606	0.612	0.669	8.85 *
Hexachlorocyclopentadiene	0.110	0.167	0.188	0.201	0.183	0.170	20.8
2,4,6-Trichlorophenol *	0.321	0.332	0.324	0.308	0.282	0.314	6.22 *
2,4,5-Trichlorophenol *	0.358	0.363	0.345	0.331	0.282	0.336	9.67 *
2-Chloronaphthalene *	0.971	0.926	0.891	0.921	0.788	0.899	7.61 *
2-Nitroaniline	0.323	0.333	0.342	0.333	0.326	0.332	2.20
Dimethylphthalate	1.31	1.29	1.27	1.15	0.992	1.20	11.1
Acenaphthylene *	1.67	1.58	1.56	1.38	1.05	1.45	16.9 *
2,6-Dinitrotoluene *	0.287	0.302	0.299	0.281	0.273	0.288	4.26 *
3-Nitroaniline	0.232	0.234	0.266	0.247	0.248	0.245	5.58
Acenaphthene *	1.22	1.09	1.01	0.946	0.821	1.01	14.9 *
2,4-Dinitrophenol	0.041	0.081	0.094	0.099	0.108	0.085	29.6
4-Nitrophenol	0.066	0.086	0.090	0.087	0.089	0.084	12.3
Dibenzofuran *	1.62	1.59	1.46	1.26	1.03	1.39	17.8 *
2,4-Dinitrotoluene *	0.375	0.373	0.366	0.329	0.282	0.345	11.5 *

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: MSD-A Calibration Date(s): 3-26-94 3-26-94

Calibration Times: 0934 1158

LAB FILE ID: RRF20 = A0996 RRF50 = A0999
RRF80 = A1000 RRF120 = A1001 RRF160 = A1002

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Diethylphthalate	1.57	1.48	1.43	1.26	0.984	1.34	17.6
4-Chlorophenyl-phenylether *	0.687	0.679	0.612	0.578	0.529	0.617	10.9 *
Fluorene *	1.38	1.25	1.21	1.12	0.955	1.18	13.4 *
4-Nitroaniline	0.235	0.222	0.242	0.235	0.255	0.237	5.18
4,6-Dinitro-2-methylphenol	0.073	0.098	0.097	0.098	0.093	0.092	11.6
N-Nitrosodiphenylamine (1)	0.411	0.400	0.389	0.395	0.364	0.379	7.43
4-Bromophenyl-phenylether *	0.190	0.185	0.188	0.179	0.171	0.184	5.63 *
Hexachlorobenzene *	0.238	0.216	0.213	0.199	0.199	0.213	7.51 *
Pentachlorophenol *	0	0.080	0.085	0.088	0.091	0.086	5.72 *
Phenanthrene *	1.04	0.902	0.852	0.787	0.627	0.843	18.0 *
Anthracene *	1.05	0.970	0.923	0.797	0.610	0.877	20.7
Carbazole	0.933	0.796	0.775	0.759	0.577	0.762	16.1
Di-n-butylphthalate	1.54	1.32	1.04	0.804	0.618	1.07	35.2
Fluoranthene *	1.12	0.993	0.933	0.815	0.646	0.903	20.3
Pyrene *	1.52	1.38	1.41	1.33	1.16	1.36	9.63
Butylbenzylphthalate	0.911	0.771	0.727	0.692	0.625	0.745	14.3
3,3'-Dichlorobenzidine	0.507	0.453	0.426	0.408	0.379	0.435	11.5
Benzo(a)anthracene *	1.38	1.21	1.29	1.26	1.14	1.27	5.79 *
Chrysene *	1.32	1.19	1.14	1.13	1.09	1.17	7.43 *
bis(2-Ethylhexyl)phthalate	1.36	1.24	1.18	1.10	1.00	1.17	11.6
Di-n-octylphthalate	3.15	3.00	2.91	2.86	2.47	2.89	9.27
Benzo(b)fluoranthene *	1.91	1.51	1.56	2.25	1.60	1.76	17.8
Benzo(k)fluoranthene *	1.64	1.74	1.90	1.46	1.42	1.73	10.9
Benzo(a)pyrene *	1.39	1.33	1.36	1.41	1.40	1.38	2.50 *
Indeno(1,2,3-cd)pyrene *	1.30	1.24	1.26	1.45	1.61	1.37	11.5 *
Dibenz(a,h)anthracene *	1.07	0.998	1.034	1.13	1.34	1.11	12.2 *
Benzo(g,h,i)perylene *	1.05	0.939	1.02	1.13	1.34	1.09	13.7 *
Nitrobenzene-d5	0.372	0.374	0.374	0.334	0.359	0.363	4.69 *
2-Fluorobiphenyl *	1.16	1.09	0.949	0.895	0.750	0.969	16.7 *
Terphenyl-d14 *	1.25	1.01	1.02	1.01	0.897	0.997	5.81 *
Phenol-d5 *	1.40	1.40	1.31	1.33	1.45	1.38	3.85 *
2-Fluorophenol *	1.01	0.924	0.913	1.02	1.04	0.987	5.10 *
2,4,6-Tribromophenol	0.145	0.172	0.166	0.167	0.162	0.163	6.34
2-Chlorophenol-d4 *							
1,2-Dichlorobenzene-d4 *							

(1) Cannot be separated from Diphenylamine

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: MSD-A Calibration Date: 03-26-94 Time: 13:07

Lab File ID: A1004 Init. Calib. Date(s): 03-26-94 03-26-94

Init. Calib. Times: 0834 1158

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.62	1.44	0.800	11.1	25.0
bis(2-Chloroethyl)ether	3.20	3.38	0.700	5.80	25.0
2-Chlorophenol	1.27	1.24	0.800	2.50	25.0
1,3-Dichlorobenzene	1.33	1.52	0.600	13.9	25.0
1,4-Dichlorobenzene	1.64	1.52	0.500	7.50	25.0
1,2-Dichlorobenzene	1.37	1.41	0.400	2.80	25.0
2-Methylphenol	1.64	1.65	0.700	0.60	25.0
2,2'-oxybis(1-Chloropropane)	4.07	4.14		1.7	
4-Methylphenol	1.49	1.46	0.600	1.90	25.0
N-Nitroso-di-n-propylamine	1.29	1.42	0.500	10.0	25.0
Hexachloroethane	0.696	0.650	0.300	6.60	25.0
Nitrobenzene	0.368	0.367	0.200	0.30	25.0
Isophorone	0.814	0.870	0.400	6.90	25.0
2-Nitrophenol	0.181	0.193	0.100	6.70	25.0
2,4-Dimethylphenol	0.321	0.326	0.200	1.40	25.0
bis(2-Chloroethoxy)methane	0.479	0.528	0.300	10.1	25.0
2,4-Dichlorophenol	0.287	0.285	0.200	0.50	25.0
1,2,4-Trichlorobenzene	0.321	0.333	0.200	3.70	25.0
Naphthalene	0.954	1.028	0.700	7.80	25.0
4-Chloroaniline	0.386	0.408		5.70	
Hexachlorobutadiene	0.197	0.207		5.20	
4-Chloro-3-methylphenol	0.327	0.318	0.200	2.70	25.0
2-Methylnaphthalene	0.669	0.671	0.400	0.30	25.0
Hexachlorocyclopentadiene	0.170	0.165		3.00	
2,4,6-Trichlorophenol	0.314	0.321	0.200	2.40	25.0
2,4,5-Trichlorophenol	0.336	0.328	0.200	2.30	25.0
2-Chloronaphthalene	0.900	0.922	0.300	2.50	25.0
2-Nitroaniline	0.332	0.320		3.40	
Dimethylphthalate	1.20	1.34		11.7	
Acenaphthylene	1.45	1.52	1.000	5.20	25.0
2,6-Dinitrotoluene	0.288	0.286	0.200	0.90	25.0
3-Nitroaniline	0.246	0.227		7.50	
Acenaphthene	1.02	1.06	0.800	3.70	25.0
2,4-Dinitrophenol	0.085	0.066		22.5	
4-Nitrophenol	0.084	0.067		20.3	
Dibenzofuran	1.40	1.48	0.800	6.20	25.0
2,4-Dinitrotoluene	0.345	0.376	0.200	8.80	25.0

All other compounds must meet a minimum RRF of 0.010.

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: MSD-A Calibration Date: 03-26-94 Time: 13:07

Lab File ID: A1004 Init. Calib. Date(s): 03-26-94 03-26-94

Init. Calib. Times: 0834 1158

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.34	1.46		8.70	
4-Chlorophenyl-phenylether	0.617	0.556	0.400	6.40	25.0
Fluorene	1.18	1.32	0.900	11.4	25.0
4-Nitroaniline	0.237	0.243		2.20	
4,6-Dinitro-2-methylphenol	0.092	0.088		4.10	
N-Nitrosodiphenylamine (1)	0.399	0.291		27.0	
4-Bromophenyl-phenylether	0.185	0.205	0.100	11.0	25.0
Hexachlorobenzene	0.213	0.219	0.100	2.50	25.0
Pentachlorophenol	0.086	0.069	0.050	20.1	25.0
Phenanthrene	0.843	0.938	0.700	11.2	25.0
Anthracene	0.877	0.944	0.700	7.60	25.0
Carbazole	0.762	0.783		2.70	
Di-n-butylphthalate	1.07	1.37		28.6	
Fluoranthene	0.904	1.00	0.600	10.8	25.0
Pyrene	1.36	1.43	0.600	4.70	25.0
Butylbenzylphthalate	0.745	0.801		7.50	
3,3'-Dichlorobenzidine	0.436	0.462		6.20	
Benzo(a)anthracene	1.27	1.23	0.800	3.3	25.0
Chrysene	1.18	1.18	0.700	0.2	25.0
bis(2-Ethylhexyl)phthalate	1.18	1.31		11.2	
Di-n-octylphthalate	2.90	3.47		19.8	
Benzo(b)fluoranthene	1.77	1.41	0.700	20.2	25.0
Benzo(k)fluoranthene	1.73	1.99	0.700	15.1	25.0
Benzo(a)pyrene	1.38	1.37	0.700	0.5	25.0
Indeno(1,2,3-cd)pyrene	1.38	1.24	0.500	9.80	25.0
Dibenz(a,h)anthracene	1.11	0.998	0.400	10.4	25.0
Benzo(g,h,i)perylene	1.10	0.937	0.500	14.5	25.0
Nitrobenzene-d5	0.363	0.339	0.200	6.40	25.0
2-Fluorobiphenyl	0.987	1.064	0.700	7.80	25.0
Terphenyl-d14	0.998	1.03	0.500	2.80	25.0
Phenol-d5	1.38	1.42	0.800	2.80	25.0
2-Fluorophenol	0.987	1.06	0.600	7.80	25.0
2,4,6-Tribromophenol	0.163	0.164		0.5	
2-Chlorophenol-d4			0.800		25.0
1,2-Dichlorobenzene-d4			0.400		25.0

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: _____

Lab File ID (Standard): A1004 Date Analyzed: 03-26-94

Instrument ID: MSD-A Time Analyzed: 1307

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT
	12 HOUR STD	48946	10.20	224982	12.77	190807	16.68
	UPPER LIMIT	97892	10.70	449964	13.27	381614	17.18
	LOWER LIMIT	24473	9.70	112491	12.27	95403	16.18
	EPA SAMPLE NO.						
01	SB1K1	48937	10.20	196293	12.76	152185	16.70
02	SB1K1BS	52650	10.20	224521	12.76	173782	16.70
03	CLJ-DS-10	51081	10.20	213640	12.76	162822	16.70
04	CLJ-DS-10MS	52176	10.20	209382	12.76	171916	16.70
05	CLJ-DS-10MSD	53558	10.20	225605	12.76	178586	16.70
06	CLJ-DS-11	52400	10.20	211786	12.76	161883	16.70
07	CLJ-DS-11D	55045	10.20	224228	12.76	172117	16.70
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

page __ of __

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ASC Contract: NEESA

Lab Code: . Case No.: SAS No.: SDG No.:

Lab File ID (Standard): A1004 Date Analyzed: 03-26-94

Instrument ID: MSD-A Time Analyzed: 1307

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	402948	20.08	285731	26.41	194161	31.91
	UPPER LIMIT	805896	20.58	571462	26.91	388322	32.41
	LOWER LIMIT	201474	19.58	142865	25.91	97080	31.41
	EPA SAMPLE NO.						
01	SB1K1	286426	20.07	249730	26.39	164775	31.91
02	SB1K1BS	354874	20.09	330395	26.40	216800	31.91
03	CLJ-DS-10	320701	20.09	305169	26.41	209767	31.93
04	CLJ-DS-10 MS	339940	20.07	277329	26.40	202197	31.92
05	CLJ-DS-10 MSD	369416	20.10	308022	26.40	216011	31.92
06	CLJ-DS-11	314105	20.09	290440	26.41	205481	31.93
07	CLJ-DS-11D	336345	20.09	333968	26.41	219456	31.93
08							
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21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

page __ of __

Data File: /chem/a900.i/a032694.b/a1008.d
Report Date: 31-Mar-1994 11:32

Analytical Services Corp.

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/a900.i/a032694.b/a1008.d
Lab. Id. : Quant Type: ISTD
Inj Date : 26-MAR-94 16:04 Autotune Date: {
Operator : Tom Inst ID: a900.i
Smp Info : 15226N CLJ-DS-10
Misc Info : JM4367C,N7C40264,L:M1,400,4:1, BTL#1
Comment :
Method : /chem/a900.i/a032694.b/bnaclpa.m
Meth Date : 31-Mar-1994 10:55
Cal Date : 26-MAR-94 13:07 Cal File: a1004.d
Als bottle: 0
Dil Factor: 1.000 Target Version: Target 3.00
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER

3.31.94

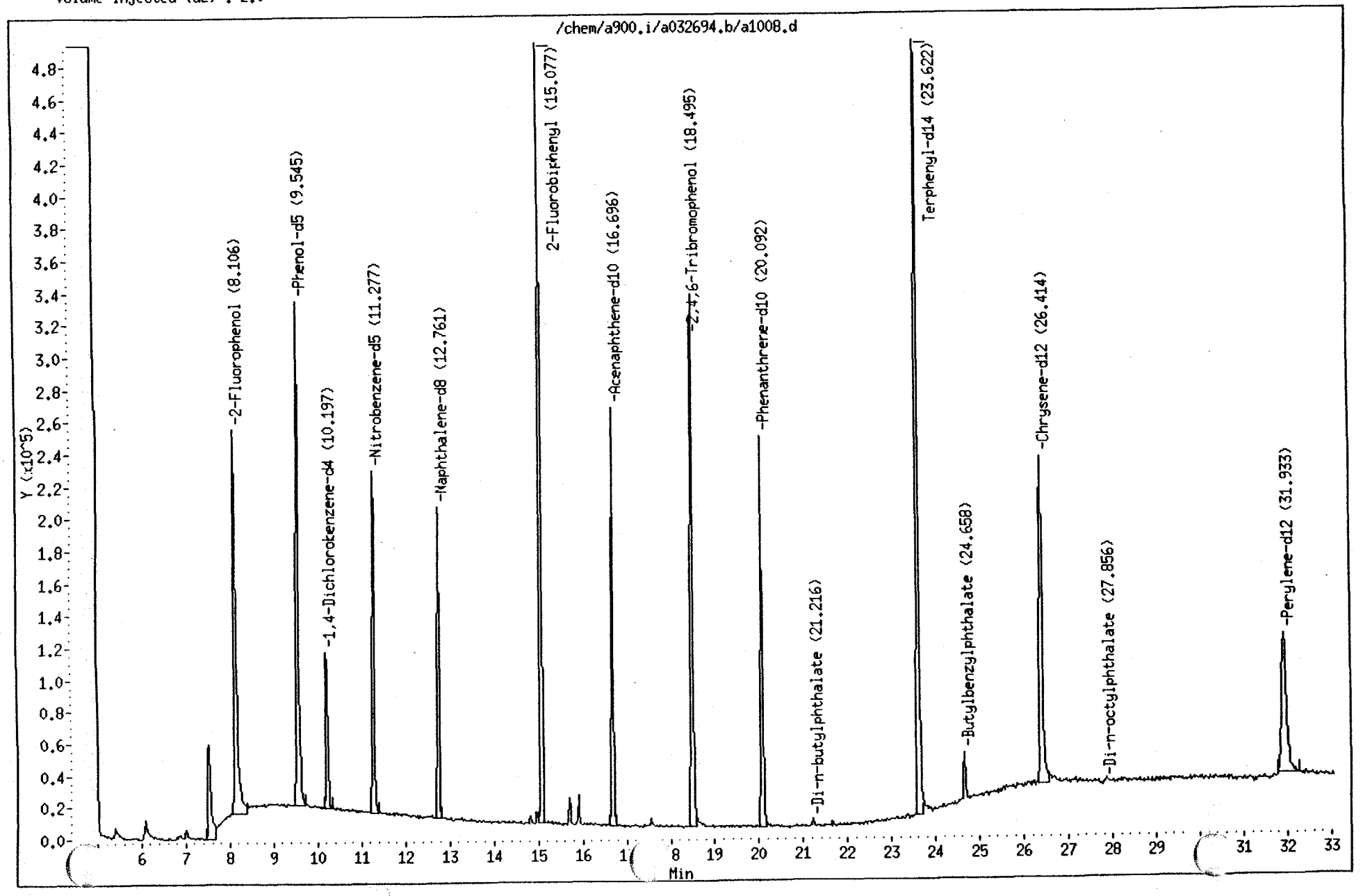
	Compounds	QUANT SIG MASS	RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
	3 2-Fluorophenol	112.00	8.106	(0.795)	222381	164	81.8(AR)
$	4 Phenol-d5	99.00	9.545	(0.936)	288292	159	79.6(R)
*	9 1,4-Dichlorobenzene-d4	152.00	10.197	(1.000)	51081	40.0	
$	17 Nitrobenzene-d5	82.00	11.277	(0.884)	192646	106	53.1(R)
*	25 Naphthalene-d8	136.00	12.761	(1.000)	213640	40.0	
$	35 2-Fluorobiphenyl	172.00	15.077	(0.903)	405032	107	53.3(R)
*	42 Acenaphthene-d10	164.00	16.696	(1.000)	162822	40.0	
$	54 2,4,6-Tribromophenol	330.00	18.495	(1.108)	138330	208	104(AR)
*	59 Phenanthrene-d10	188.00	20.092	(1.000)	320701	40.0	
	63 Di-n-butylphthalate	149.00	21.216	(1.056)	9231	0.839	~~0.420(a)~~
$	67 Terphenyl-d14	244.00	23.622	(0.894)	718167	91.8	45.9(R)
	68 Butylbenzylphthalate	149.00	24.658	(0.933)	26325	4.30	2.15(a)
*	73 Chrysene-d12	240.00	26.414	(1.000)	305169	40.0	
	75 Di-n-octylphthalate	149.00	27.856	(0.872)	610	0.0335	~~0.0168(a)~~
*	79 Perylene-d12	264.00	31.933	(1.000)	209767	40.0	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/a900.i/a032694.b/a1008.d
Date : 26-MAR-94 16:04
Instrument : a900.i
Sample ID :
Column phase : J&W DB-5
Volume Injected (uL) : 2.0

Column diameter : 0.25



Data File: /chem/a900.i/a032694.b/a1008.d

Date : 26-MAR-94 16:04

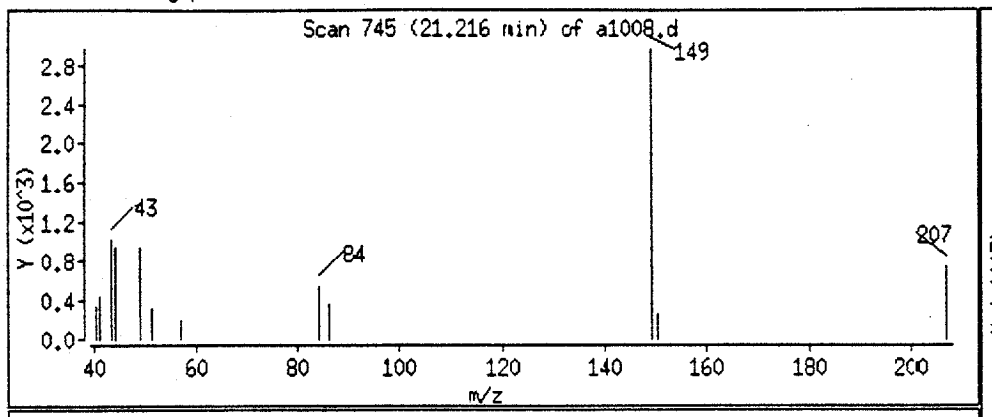
Instrument : a900.i

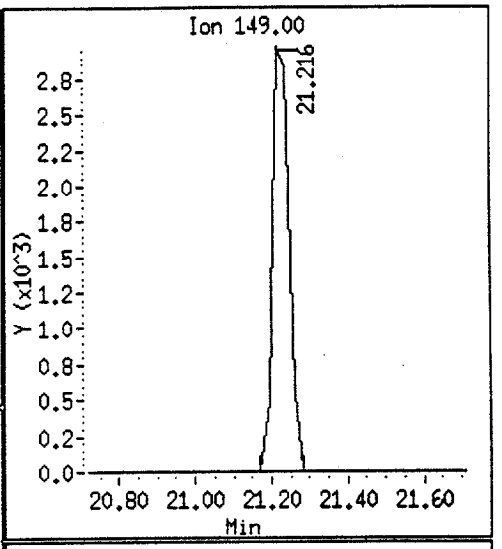
Sample ID :

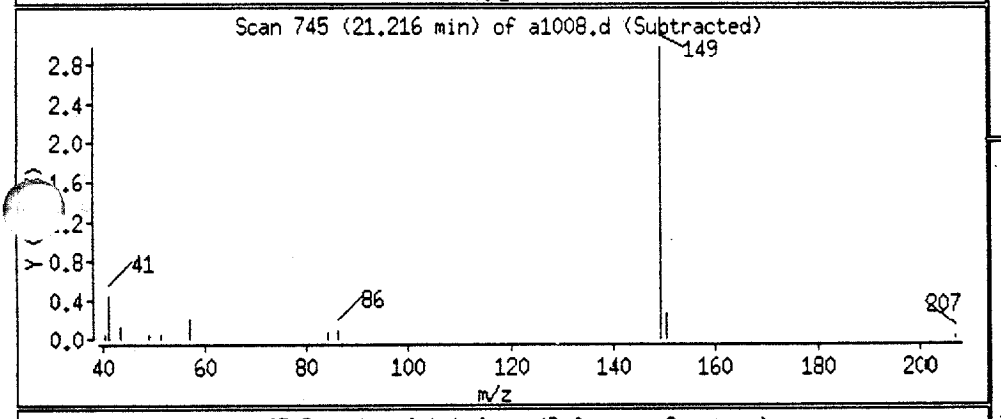
Column phase : J&W DB-5 Column diameter : 0.25

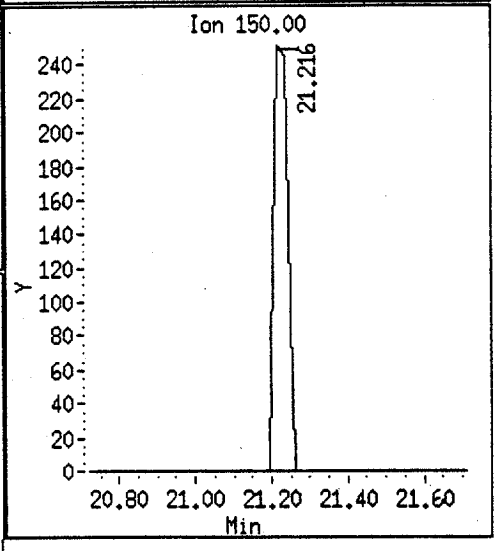
Volume Injected (uL) : 2.0

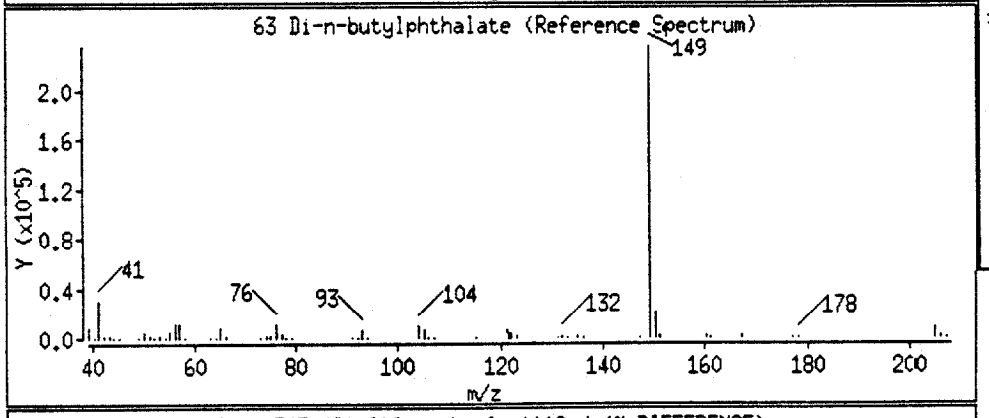
63 Di-n-butylphthalate

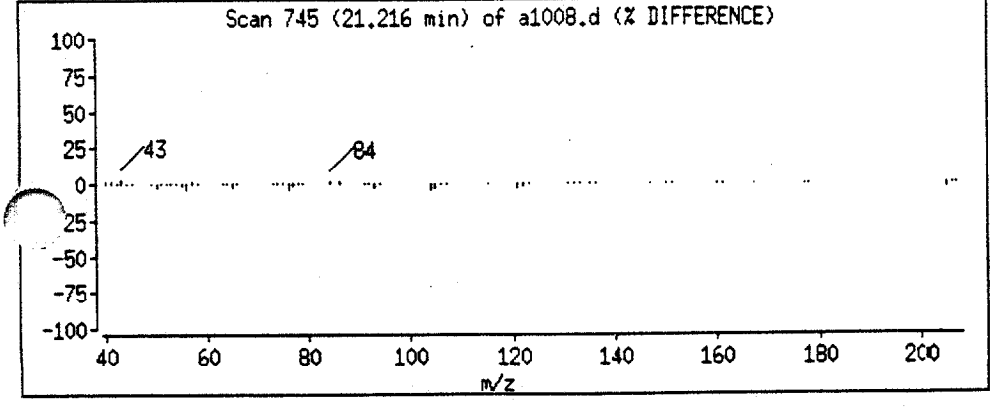












Data File: /chem/a900.i/a032694.b/a1008.d

Date : 26-MAR-94 16:04

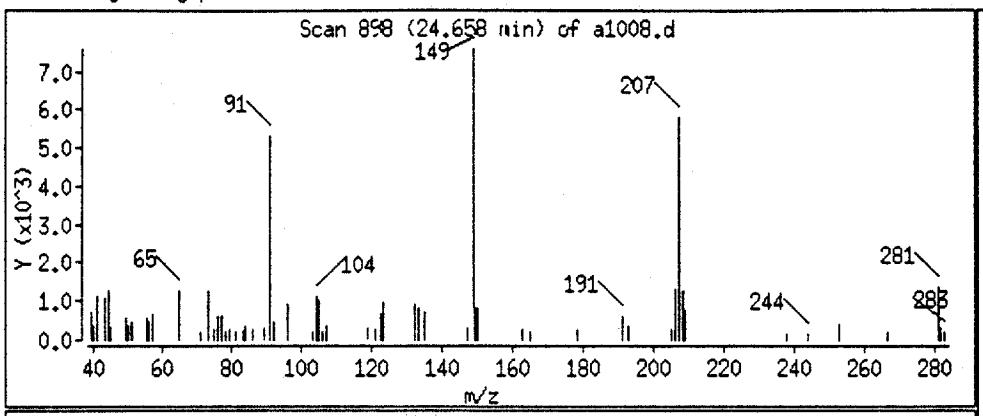
Instrument : a900.i

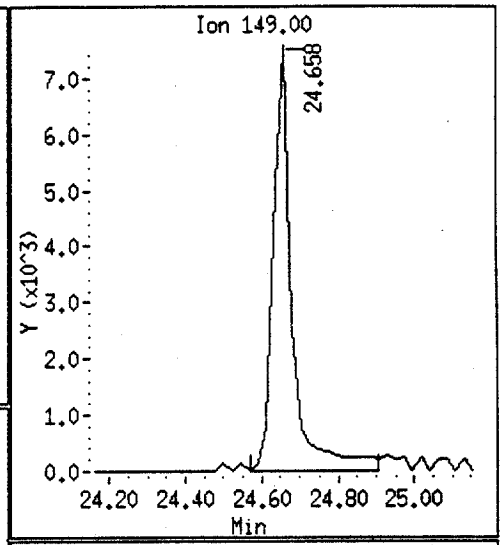
Sample ID :

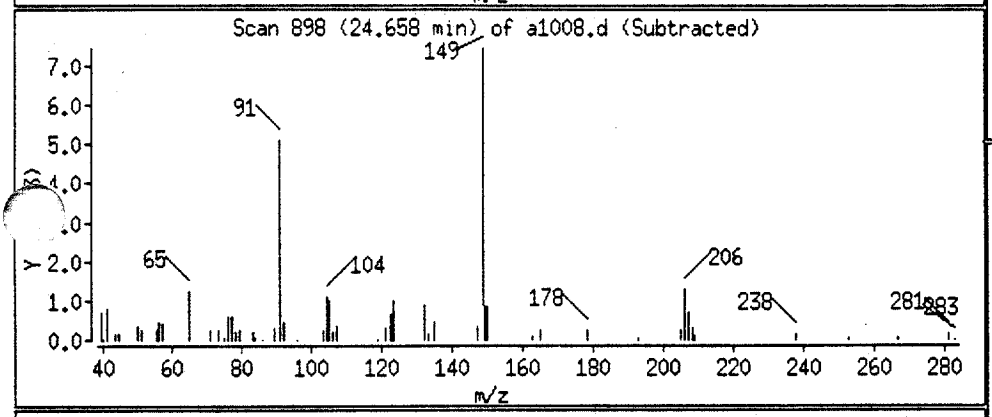
Column phase : J&W DB-5 Column diameter : 0.25

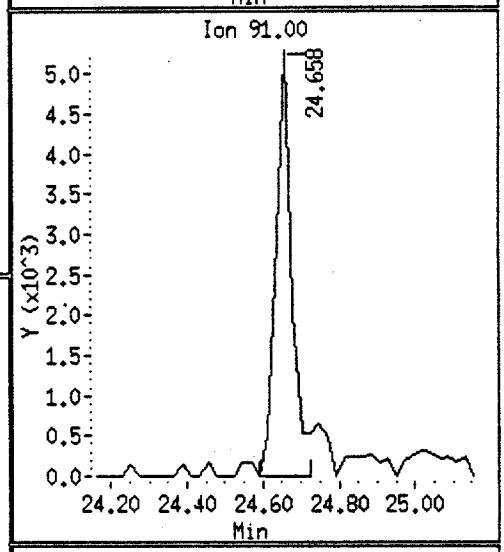
Volume Injected (uL) : 2.0

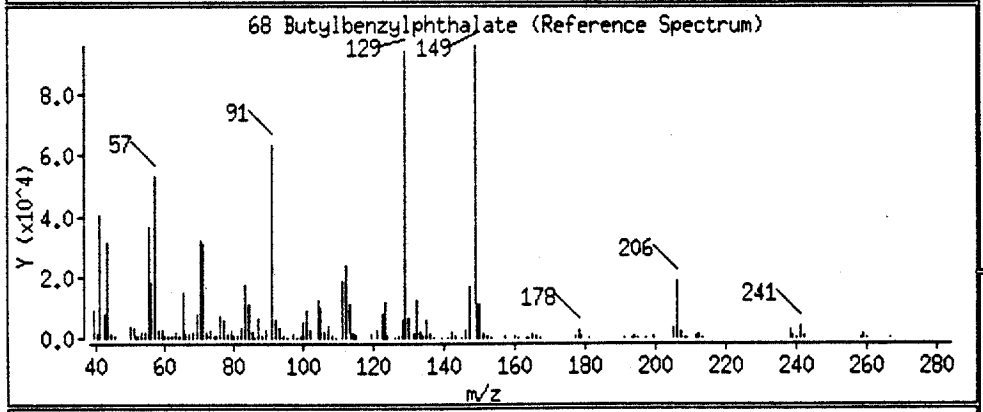
68 Butylbenzylphthalate

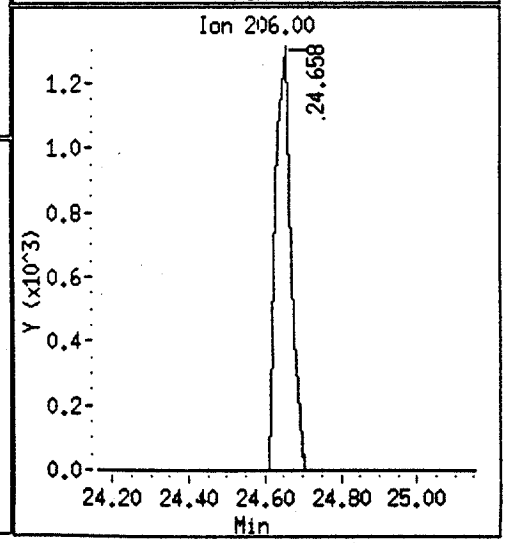


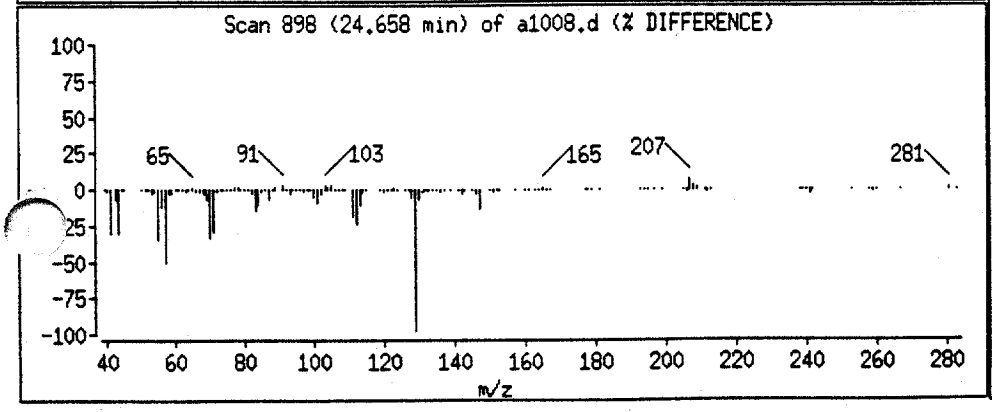












Data File: /chem/a900.i/a032694.b/a1008.d

Date : 26-MAR-94 16:04

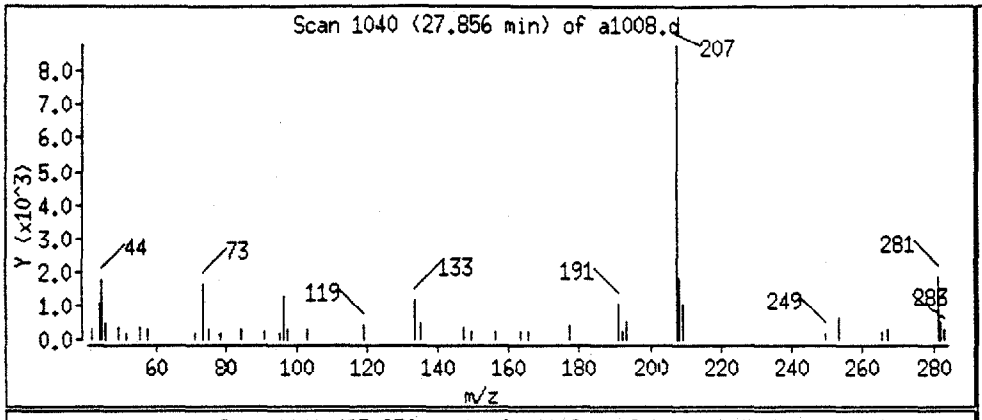
Instrument : a900.i

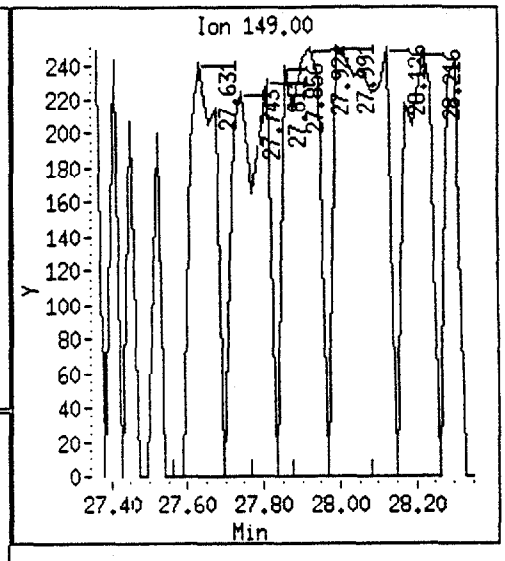
Sample ID :

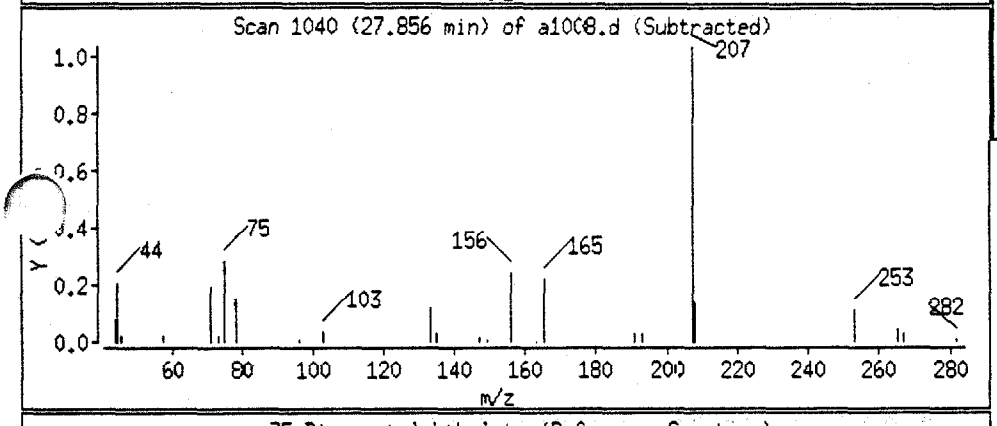
Column phase : J&W DB-5 Column diameter : 0.25

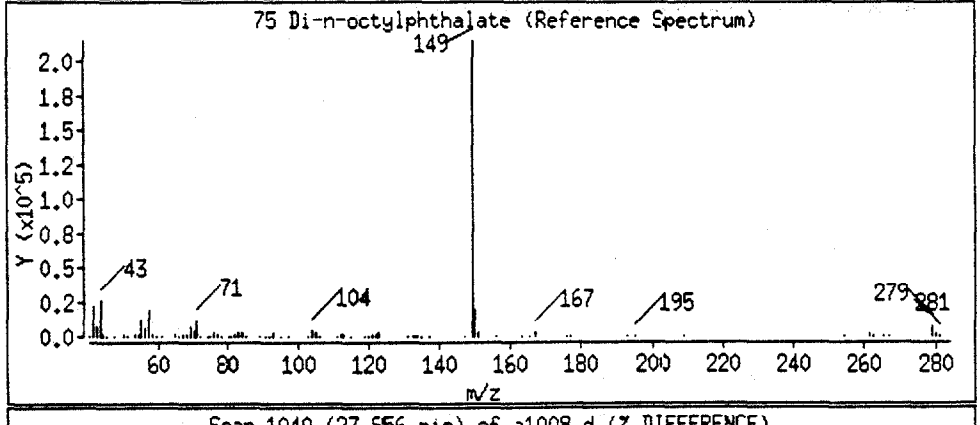
Volume Injected (uL) : 2.0

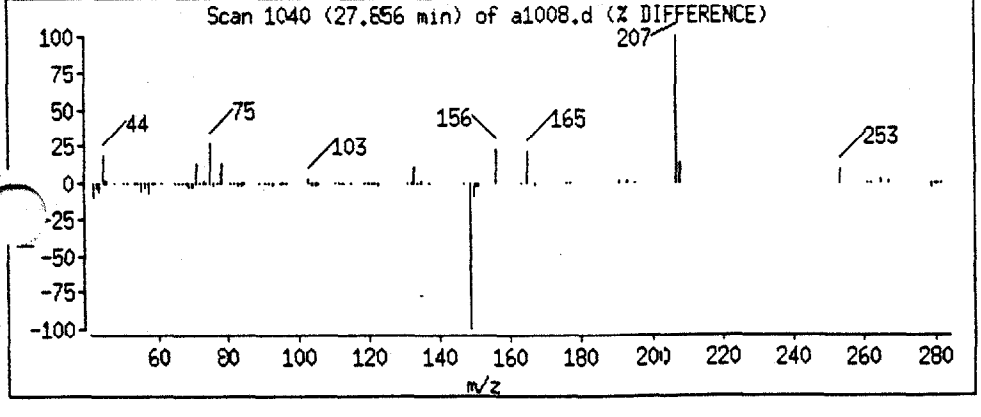
75 Di-n-octylphthalate











Data File: /chem/a900.i/a032694.b/a1010.d
Report Date: 31-Mar-1994 11:18

Analytical Services Corp.

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/a900.i/a032694.b/a1010.d
Lab. Id. : Quant Type: ISTD
Inj Date : 26-MAR-94 17:28 Autotune Date: {
Operator : Tom Inst ID: a900.i
Smp Info : 15226N CLJ-DS-11
Misc Info : JM4368C,N7C40264,L:M1,400,4:1, BTL#1
Comment :
Method : /chem/a900.i/a032694.b/bnaclpa.m
Meth Date : 31-Mar-1994 10:55
Cal Date : 26-MAR-94 13:07 Cal File: a1004.d
Als bottle: 0
Dil Factor: 1.000 Target Version: Target 3.00
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER

15 3.31.94

		Compounds	QUANT SIG MASS	RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
	3	2-Fluorophenol	112.00	8.107	(0.795)	216688	155	77.7(R)
$	4	Phenol-d5	99.00	9.546	(0.936)	272980	147	73.5(R)
*	9	1,4-Dichlorobenzene-d4	152.00	10.198	(1.000)	52400	40.0	
$	17	Nitrobenzene-d5	82.00	11.277	(0.884)	187037	104	52.0(R)
*	25	Naphthalene-d8	136.00	12.761	(1.000)	211786	40.0	
$	35	2-Fluorobiphenyl	172.00	15.077	(0.903)	367841	97.4	48.7(R)
*	42	Acenaphthene-d10	164.00	16.696	(1.000)	161883	40.0	
$	54	2,4,6-Tribromophenol	330.00	18.495	(1.108)	124222	188	93.8(AR)
*	59	Phenanthrene-d10	188.00	20.092	(1.000)	314105	40.0	
$	67	Terphenyl-d14	244.00	23.622	(0.894)	690161	92.7	46.3(R)
*	73	Chrysene-d12	240.00	26.414	(1.000)	290440	40.0	
	75	Di-n-octylphthalate	149.00	27.856	(0.872)	655	0.0368	~~0.0184(a)~~
*	79	Perylene-d12	264.00	31.931	(1.000)	205481	40.0	

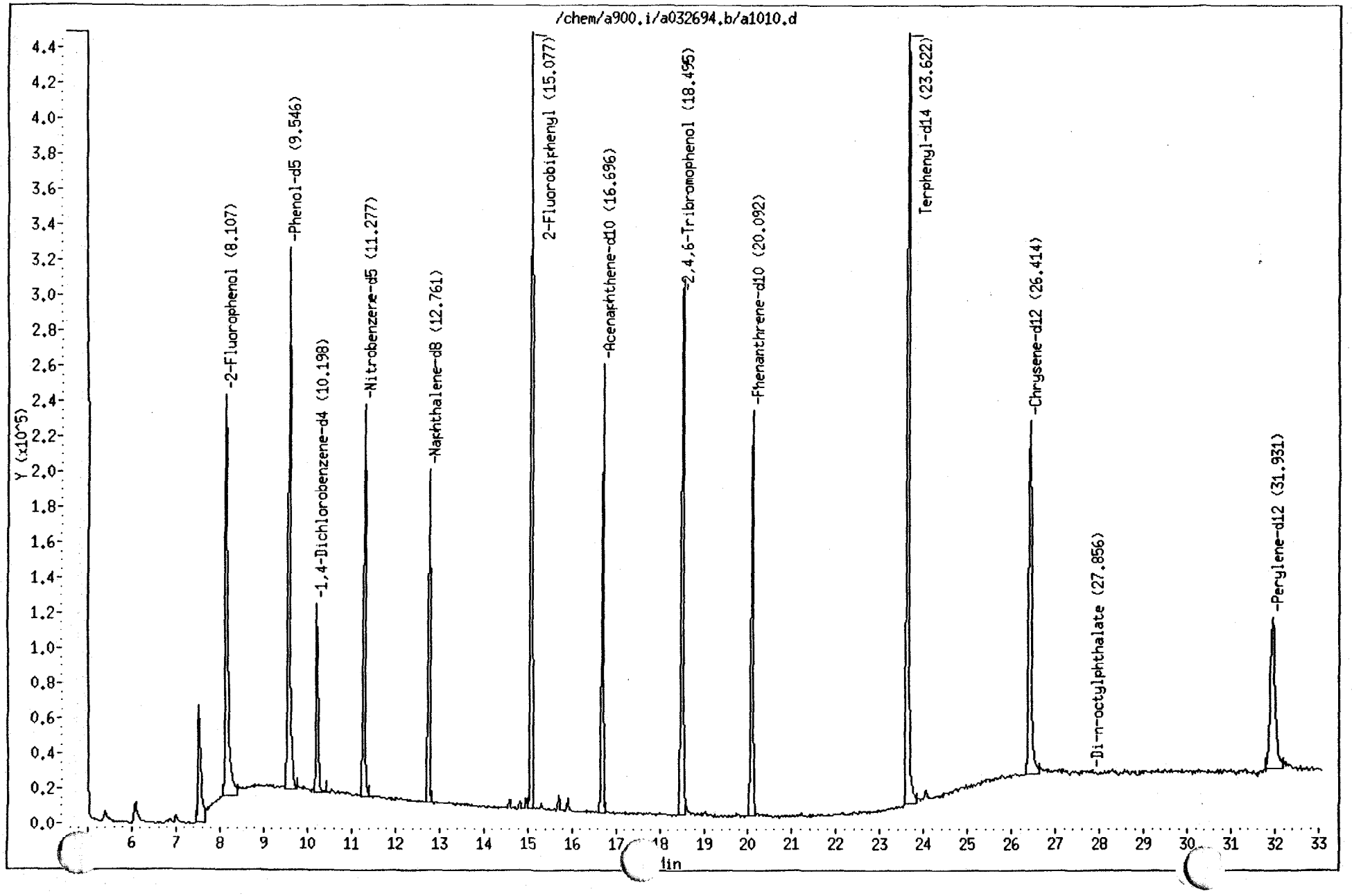
QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

0150

Data File: /chem/a900.i/a032694.b/a1010.d
Date : 26-MAR-94 17:28
Instrument : a900.i
Sample ID :
Column phase : J&W DB-5
Volume Injected (uL) : 2.0

Column diameter : 0.25



Data File: /chem/a900.i/a032694.b/a1010.d

Date : 26-MAR-94 17:28

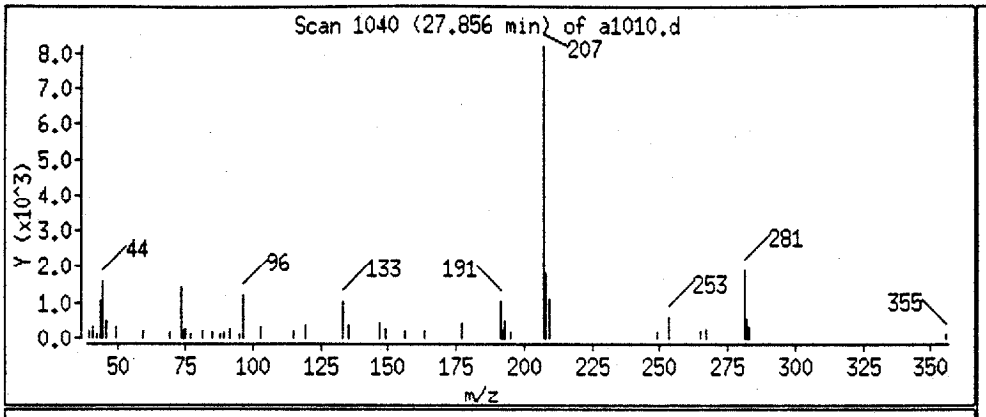
Instrument : a900.i

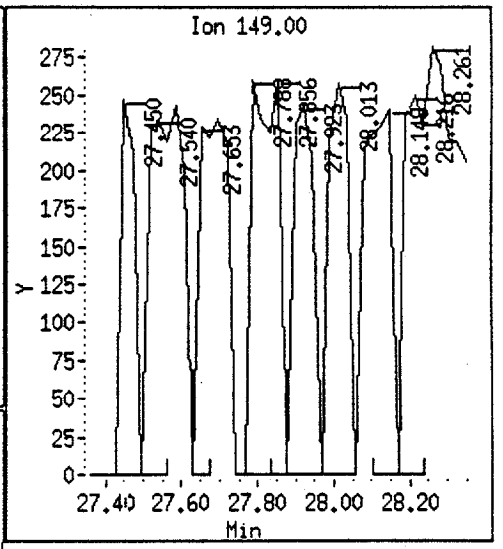
Sample ID :

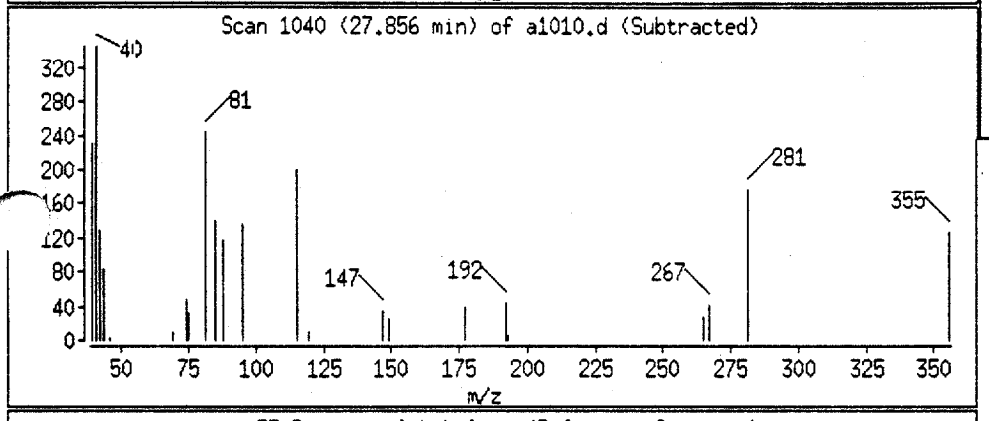
Column phase : J&W DB-5 Column diameter : 0.25

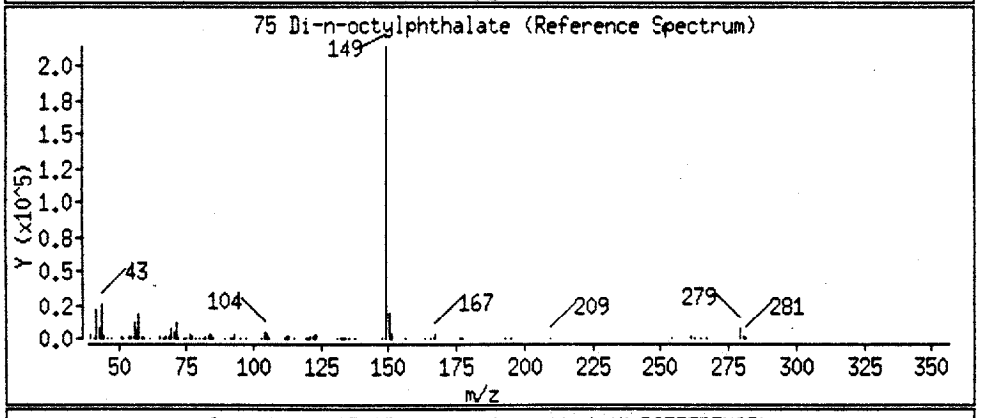
Volume Injected (uL) : 2.0

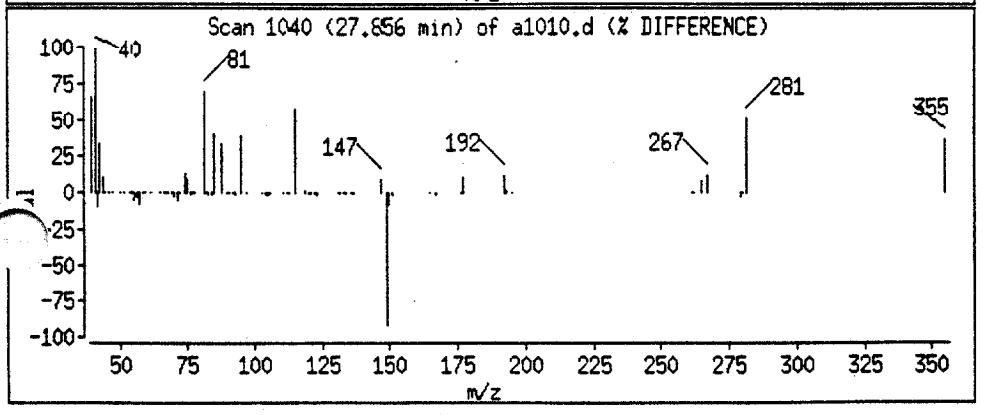
75 Di-n-octylphthalate











Data File: /chem/a900.i/a032694.b/a1011.d
Report Date: 31-Mar-1994 11:18

Analytical Services Corp.

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/a900.i/a032694.b/a1011.d
Lab. Id. : Quant Type: ISTD
Inj Date : 26-MAR-94 18:10 Autotune Date: {
Operator : Tom Inst ID: a900.i
Smp Info : 15226N CLJ-DS-11D
Misc Info : JM4369C,N7C40264,L:M1,400,4:1, BTL#1
Comment :
Method : /chem/a900.i/a032694.b/bnaclpa.m
Meth Date : 31-Mar-1994 10:55
Cal Date : 26-MAR-94 13:07 Cal File: a1004.d
Als bottle: 0
Dil Factor: 1.000 Target Version: Target 3.00
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER

JSC 3-31-94

		QUANT SIG MASS	RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)
	3 2-Fluorophenol	112.00	8.106	(0.795)	211908	145	72.3(R)
$	4 Phenol-d5	99.00	9.546	(0.936)	275800	141	70.7(R)
*	9 1,4-Dichlorobenzene-d4	152.00	10.198	(1.000)	55045	40.0	
$	17 Nitrobenzene-d5	82.00	11.277	(0.884)	181670	95.5	47.7(R)
*	25 Naphthalene-d8	136.00	12.761	(1.000)	224228	40.0	
$	35 2-Fluorobiphenyl	172.00	15.077	(0.903)	379963	94.7	47.3(R)
*	42 Acenaphthene-d10	164.00	16.696	(1.000)	172117	40.0	
$	54 2,4,6-Tribromophenol	330.00	18.495	(1.108)	122827	174	87.2(AR)
*	59 Phenanthrene-d10	188.00	20.092	(1.000)	336345	40.0	
$	67 Terphenyl-d14	244.00	23.622	(0.894)	663502	77.5	38.7(R)
*	73 Chrysene-d12	240.00	26.414	(1.000)	333968	40.0	
	75 Di-n-octylphthalate	149.00	27.832	(0.872)	298	0.0156	0 ~~.00783(a)~~
*	79 Perylene-d12	264.00	31.931	(1.000)	219456	40.0	

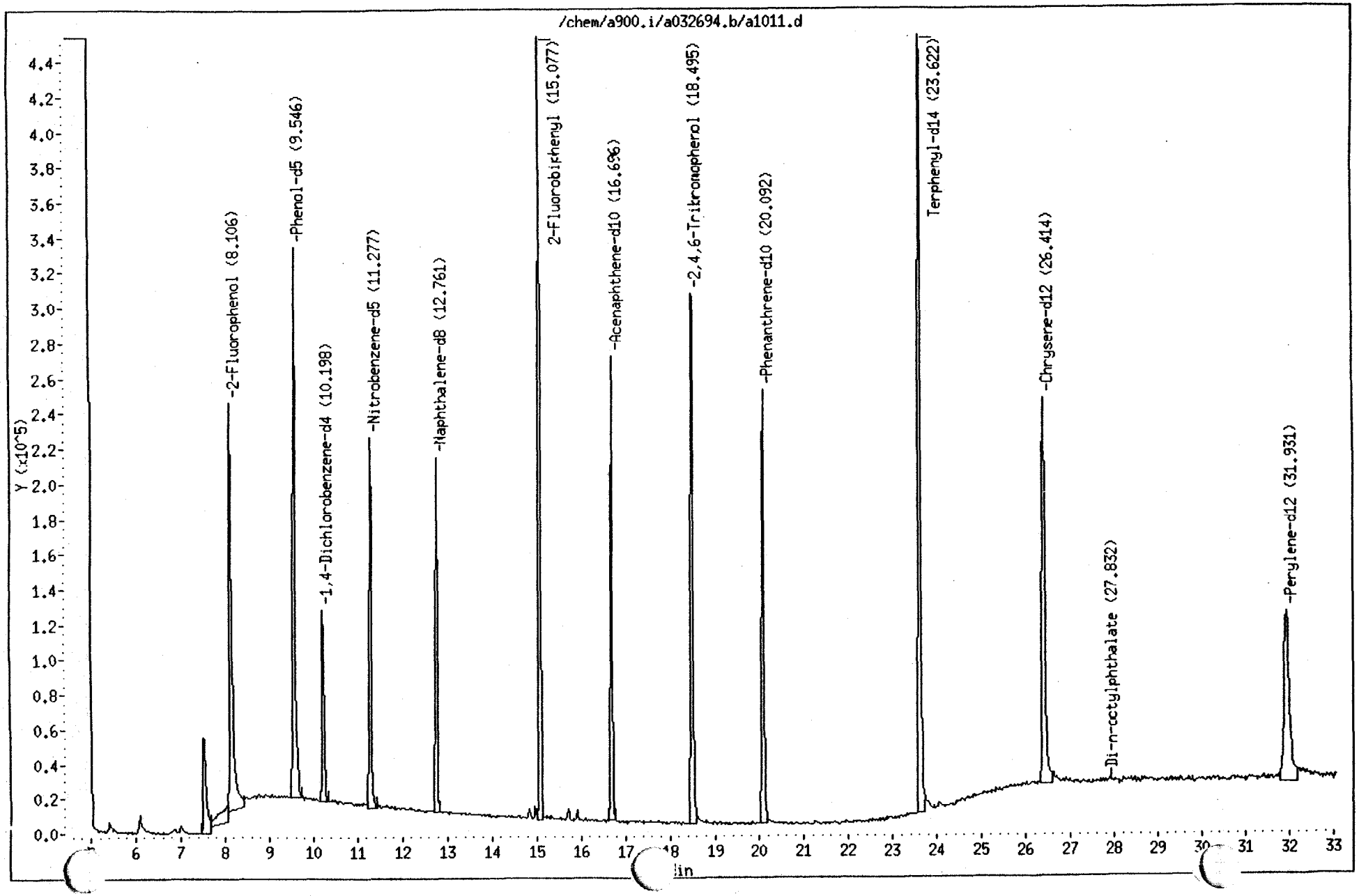
QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

0153

Data File: /chem/a900.i/a032694.b/a1011.d
Date : 26-MAR-94 18:10
Instrument : a900.i
Sample ID :
Column phase : J&W DB-5
Volume Injected (uL) : 2.0

Column diameter : 0.25



Data File: /chem/a900.i/a032694.b/a1011.d

Date : 26-MAR-94 18:10

Instrument : a900.i

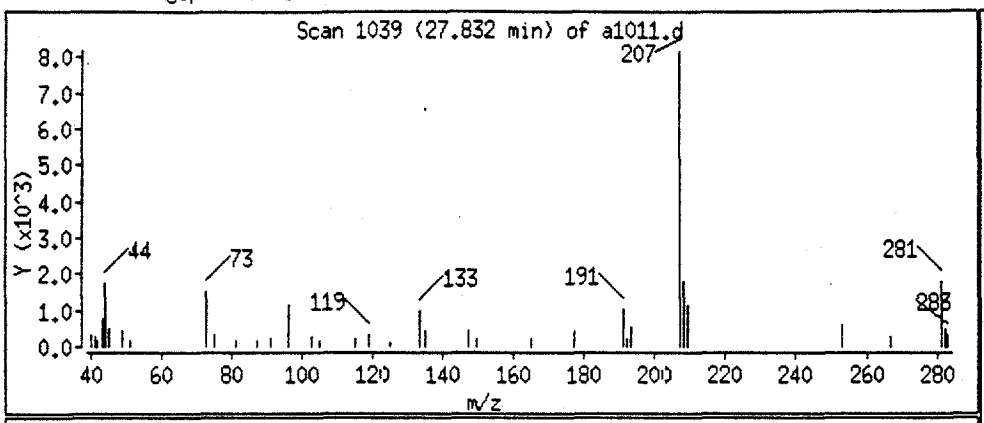
Sample ID :

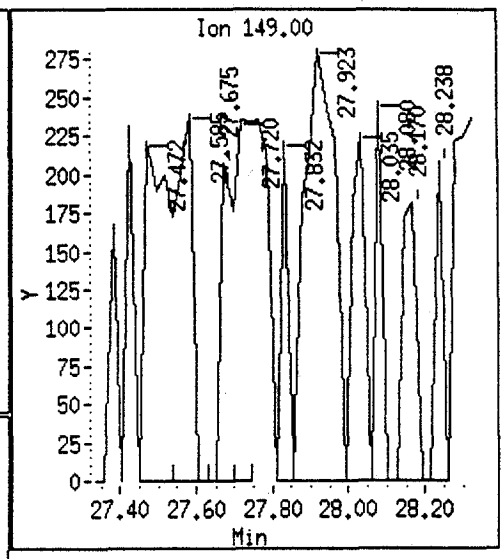
Column phase : J&W DB-5

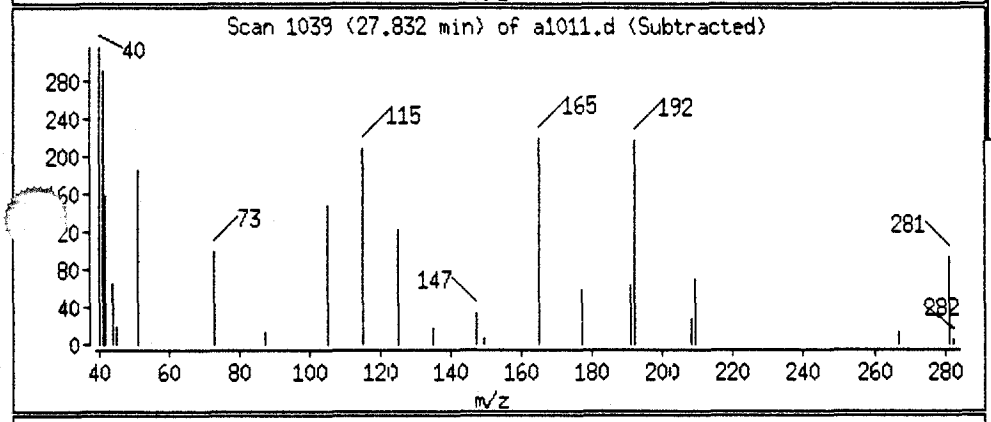
Column diameter : 0.25

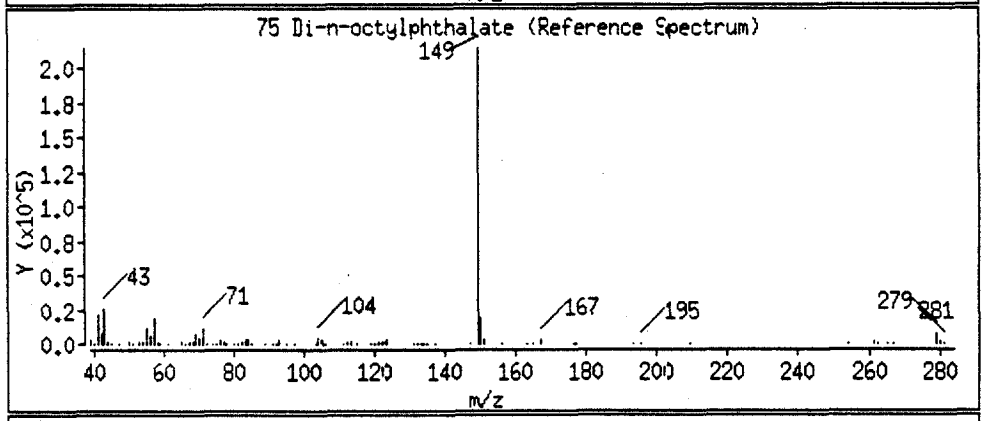
Volume Injected (uL) : 2.0

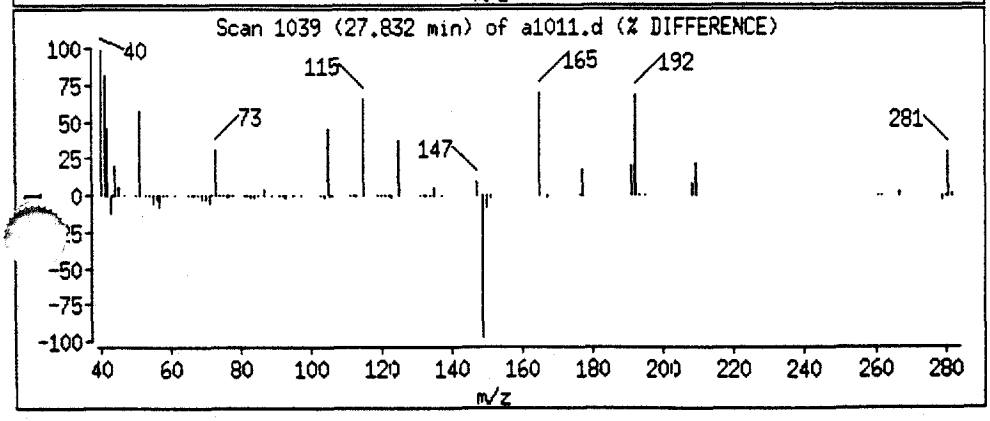
75 Di-n-octylphthalate











1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: NV3403V

Sample wt/vol: 300 (g/mL) mL Lab File ID: B3180

Level: (low/med) NA Date Received: 3-7-94

% Moisture: not dec. NA Date Analyzed: 3-25-94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	NA	
74-83-9	Bromomethane	NA	
75-01-4	Vinyl Chloride	125	U
75-00-3	Chloroethane	NA	
75-09-2	Methylene Chloride	NA	
67-64-1	Acetone	NA	
75-15-0	Carbon Disulfide	NA	
75-35-4	1,1-Dichloroethene	125	U
75-34-3	1,1-Dichloroethane	NA	
540-59-0	1,2-Dichloroethene (total)	NA	
67-66-3	Chloroform	125	U
107-06-2	1,2-Dichloroethane	125	U
78-93-3	2-Butanone	250	U
71-55-6	1,1,1-Trichloroethane	NA	
56-23-5	Carbon Tetrachloride	125	U
75-27-4	Bromodichloromethane	NA	
78-87-5	1,2-Dichloropropane	NA	
10061-01-5	cis-1,3-Dichloropropene	NA	
79-01-6	Trichloroethene	125	U
124-48-1	Dibromochloromethane	NA	
79-00-5	1,1,2-Trichloroethane	NA	
71-43-2	Benzene	125	U
10061-02-6	trans-1,3-Dichloropropene	NA	
75-25-2	Bromoform	NA	
108-10-1	4-Methyl-2-Pentanone	NA	
591-78-6	2-Hexanone	NA	
127-18-4	Tetrachloroethene	125	U
79-34-5	1,1,2,2-Tetrachloroethane	NA	
108-88-3	Toluene	NA	
108-90-7	Chlorobenzene	125	U
100-41-4	Ethylbenzene	NA	
100-42-5	Styrene	NA	
1330-20-7	Xylene (total)	NA	
106-46-7	1,4-Dichlorobenzene	125	U

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

VSPK01

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: NV3403VS

Sample wt/vol: 300 (g/mL) mL Lab File ID: B3181

Level: (low/med) NA Date Received: 3-7-94

% Moisture: not dec. NA Date Analyzed: 3-25-94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	NA	
74-83-9	Bromomethane	NA	
75-01-4	Vinyl Chloride	2650	
75-00-3	Chloroethane	NA	
75-09-2	Methylene Chloride	NA	
67-64-1	Acetone	NA	
75-15-0	Carbon Disulfide	NA	
75-35-4	1,1-Dichloroethene	2300	
75-34-3	1,1-Dichloroethane	NA	
540-59-0	1,2-Dichloroethene (total)	NA	
67-66-3	Chloroform	2580	
107-06-2	1,2-Dichloroethane	2650	
78-93-3	2-Butanone	5180	
71-55-6	1,1,1-Trichloroethane	NA	
56-23-5	Carbon Tetrachloride	2430	
75-27-4	Bromodichloromethane	NA	
78-87-5	1,2-Dichloropropane	NA	
10061-01-5	cis-1,3-Dichloropropene	NA	
79-01-6	Trichloroethene	2380	
124-48-1	Dibromochloromethane	NA	
79-00-5	1,1,2-Trichloroethane	NA	
71-43-2	Benzene	2460	
10061-02-6	trans-1,3-Dichloropropene	NA	
75-25-2	Bromoform	NA	
108-10-1	4-Methyl-2-Pentanone	NA	
591-78-6	2-Hexanone	NA	
127-18-4	Tetrachloroethene	2420	
79-34-5	1,1,2,2-Tetrachloroethane	NA	
108-88-3	Toluene	NA	
108-90-7	Chlorobenzene	2420	
100-41-4	Ethylbenzene	NA	
100-42-5	Styrene	NA	
1330-20-7	Xylene (total)	NA	
106-46-7	1,4-Dichlorobenzene	2290	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLJ-DS-10MS

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4367VS

Sample wt/vol: 300 (g/mL) mL Lab File ID: B3183

Level: (low/med) NA Date Received: 3-7-94

% Moisture: not dec. NA Date Analyzed: 3-25-94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	NA	
74-83-9	Bromomethane	NA	
75-01-4	Vinyl Chloride	2530	
75-00-3	Chloroethane	NA	
75-09-2	Methylene Chloride	NA	
67-64-1	Acetone	NA	
75-15-0	Carbon Disulfide	NA	
75-35-4	1,1-Dichloroethene	2340	
75-34-3	1,1-Dichloroethane	NA	
540-59-0	1,2-Dichloroethene (total)	NA	
67-66-3	Chloroform	2650	
107-06-2	1,2-Dichloroethane	2650	
78-93-3	2-Butanone	4450	
71-55-6	1,1,1-Trichloroethane	NA	
56-23-5	Carbon Tetrachloride	2480	
75-27-4	Bromodichloromethane	NA	
78-87-5	1,2-Dichloropropane	NA	
10061-01-5	cis-1,3-Dichloropropene	NA	
79-01-6	Trichloroethene	2380	
124-48-1	Dibromochloromethane	NA	
79-00-5	1,1,2-Trichloroethane	NA	
71-43-2	Benzene	2470	
10061-02-6	trans-1,3-Dichloropropene	NA	
75-25-2	Bromoform	NA	
108-10-1	4-Methyl-2-Pentanone	NA	
591-78-6	2-Hexanone	NA	
127-18-4	Tetrachloroethene	2420	
79-34-5	1,1,2,2-Tetrachloroethane	NA	
108-88-3	Toluene	NA	
108-90-7	Chlorobenzene	2410	
100-41-4	Ethylbenzene	NA	
100-42-5	Styrene	NA	
1330-20-7	Xylene (total)	NA	
106-46-7	1,4-Dichlorobenzene	2260	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLJ-DS-10MSD

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4367VR

Sample wt/vol: 300 (g/mL) mL Lab File ID: B3184

Level: (low/med) NA Date Received: 3-7-94

% Moisture: not dec. NA Date Analyzed: 3-25-94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	NA	
74-83-9	Bromomethane	NA	
75-01-4	Vinyl Chloride	2530	
75-00-3	Chloroethane	NA	
75-09-2	Methylene Chloride	NA	
67-64-1	Acetone	NA	
75-15-0	Carbon Disulfide	NA	
75-35-4	1,1-Dichloroethene	2350	
75-34-3	1,1-Dichloroethane	NA	
540-59-0	1,2-Dichloroethene (total)	NA	
67-66-3	Chloroform	2650	
107-06-2	1,2-Dichloroethane	2650	
78-93-3	2-Butanone	4550	
71-55-6	1,1,1-Trichloroethane	NA	
56-23-5	Carbon Tetrachloride	2420	
75-27-4	Bromodichloromethane	NA	
78-87-5	1,2-Dichloropropane	NA	
10061-01-5	cis-1,3-Dichloropropene	NA	
79-01-6	Trichloroethene	2270	
124-48-1	Dibromochloromethane	NA	
79-00-5	1,1,2-Trichloroethane	NA	
71-43-2	Benzene	2380	
10061-02-6	trans-1,3-Dichloropropene	NA	
75-25-2	Bromoform	NA	
108-10-1	4-Methyl-2-Pentanone	NA	
591-78-6	2-Hexanone	NA	
127-18-4	Tetrachloroethene	2340	
79-34-5	1,1,2,2-Tetrachloroethane	NA	
108-88-3	Toluene	NA	
108-90-7	Chlorobenzene	2370	
100-41-4	Ethylbenzene	NA	
100-42-5	Styrene	NA	
1330-20-7	Xylene (total)	NA	
106-46-7	1,4-Dichlorobenzene	2220	

0159

EPA SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ-DS-10

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4367V

Sample wt/vol: 300 (g/mL) mL Lab File ID: B3182

Level: (low/med) NA Date Received: 3-7-94

% Moisture: not dec. NA Date Analyzed: 3-25-94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	NA	
74-83-9	Bromomethane	NA	
75-01-4	Vinyl Chloride	125	U
75-00-3	Chloroethane	NA	
75-09-2	Methylene Chloride	NA	
67-64-1	Acetone	NA	
75-15-0	Carbon Disulfide	NA	
75-35-4	1,1-Dichloroethene	125	U
75-34-3	1,1-Dichloroethane	NA	
540-59-0	1,2-Dichloroethene (total)	NA	
67-66-3	Chloroform	125	U
107-06-2	1,2-Dichloroethane	125	U
78-93-3	2-Butanone	250	U
71-55-6	1,1,1-Trichloroethane	NA	
56-23-5	Carbon Tetrachloride	125	U
75-27-4	Bromodichloromethane	NA	
78-87-5	1,2-Dichloropropane	NA	
10061-01-5	cis-1,3-Dichloropropene	NA	
79-01-6	Trichloroethene	125	U
124-48-1	Dibromochloromethane	NA	
79-00-5	1,1,2-Trichloroethane	NA	
71-43-2	Benzene	125	U
10061-02-6	trans-1,3-Dichloropropene	NA	
75-25-2	Bromoform	NA	
108-10-1	4-Methyl-2-Pentanone	NA	
591-78-6	2-Hexanone	NA	
127-18-4	Tetrachloroethene	125	U
79-34-5	1,1,2,2-Tetrachloroethane	NA	
108-88-3	Toluene	NA	
108-90-7	Chlorobenzene	125	U
100-41-4	Ethylbenzene	NA	
100-42-5	Styrene	NA	
1330-20-7	Xylene (total)	NA	
106-46-7	1,4-Dichlorobenzene	125	U

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4368V

Sample wt/vol: 300 (g/mL) mL Lab File ID: B3185

Level: (low/med) NA Date Received: 3-7-94

% Moisture: not dec. NA Date Analyzed: 3-25-94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 250

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	NA	
74-83-9	Bromomethane	NA	
75-01-4	Vinyl Chloride	125	U
75-00-3	Chloroethane	NA	
75-09-2	Methylene Chloride	NA	
67-64-1	Acetone	NA	
75-15-0	Carbon Disulfide	NA	
75-35-4	1,1-Dichloroethene	125	U
75-34-3	1,1-Dichloroethane	NA	
540-59-0	1,2-Dichloroethene (total)	NA	
67-66-3	Chloroform	125	U
107-06-2	1,2-Dichloroethane	125	U
78-93-3	2-Butanone	250	U
71-55-6	1,1,1-Trichloroethane	NA	
56-23-5	Carbon Tetrachloride	125	U
75-27-4	Bromodichloromethane	NA	
78-87-5	1,2-Dichloropropane	NA	
10061-01-5	cis-1,3-Dichloropropene	NA	
79-01-6	Trichloroethene	125	U
124-48-1	Dibromochloromethane	NA	
79-00-5	1,1,2-Trichloroethane	NA	
71-43-2	Benzene	125	U
10061-02-6	trans-1,3-Dichloropropene	NA	
75-25-2	Bromoform	NA	
108-10-1	4-Methyl-2-Pentanone	NA	
591-78-6	2-Hexanone	NA	
127-18-4	Tetrachloroethene	125	U
79-34-5	1,1,2,2-Tetrachloroethane	NA	
108-88-3	Toluene	NA	
108-90-7	Chlorobenzene	125	U
100-41-4	Ethylbenzene	NA	
100-42-5	Styrene	NA	
1330-20-7	Xylene (total)	NA	
106-46-7	1,4-Dichlorobenzene	125	U

0161

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLJ-DS-11D

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: JM4369V

Sample wt/vol: 300 (g/mL) mL Lab File ID: B3186

Level: (low/med) NA Date Received: 3-7-94

% Moisture: not dec. NA Date Analyzed: 3-25-94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	NA	
74-83-9	Bromomethane	NA	
75-01-4	Vinyl Chloride	125	U
75-00-3	Chloroethane	NA	
75-09-2	Methylene Chloride	NA	
67-64-1	Acetone	NA	
75-15-0	Carbon Disulfide	NA	
75-35-4	1,1-Dichloroethene	125	U
75-34-3	1,1-Dichloroethane	NA	
540-59-0	1,2-Dichloroethene (total)	NA	
67-66-3	Chloroform	125	U
107-06-2	1,2-Dichloroethane	125	U
78-93-3	2-Butanone	250	U
71-55-6	1,1,1-Trichloroethane	NA	
56-23-5	Carbon Tetrachloride	125	U
75-27-4	Bromodichloromethane	NA	
78-87-5	1,2-Dichloropropane	NA	
10061-01-5	cis-1,3-Dichloropropene	NA	
79-01-6	Trichloroethene	125	U
124-48-1	Dibromochloromethane	NA	
79-00-5	1,1,2-Trichloroethane	NA	
71-43-2	Benzene	125	U
10061-02-6	trans-1,3-Dichloropropene	NA	
75-25-2	Bromoform	NA	
108-10-1	4-Methyl-2-Pentanone	NA	
591-78-6	2-Hexanone	NA	
127-18-4	Tetrachloroethene	125	U
79-34-5	1,1,2,2-Tetrachloroethane	NA	
108-88-3	Toluene	NA	
108-90-7	Chlorobenzene	125	U
100-41-4	Ethylbenzene	NA	
100-42-5	Styrene	NA	
1330-20-7	Xylene (total)	NA	
106-46-7	1,4-Dichlorobenzene	125	U

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

0162

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLK01	92.8	95.7	97.2		0
02	VSPK01	97.4	101	113		0
03	CLJ-DS-10MS	97.6	100	101		0
04	CLJ-DS-10MSD	97.3	99.5	104		0
05	CLJ-DS-10	90.9	93.5	101		0
06	CLJ-DS-11	88.7	92.7	102		0
07	CLJ-DS-11D	88.5	91.6	98.6		0
08						
09						
10						
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12						
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30						

	QC LIMITS
SMC1 (TOL) = Toluene-d8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

VOLATILE BLANK SPIKE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: CLJ-CSS-01

Blank Spike - EPA Sample No.: VSPK01

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC.
1,1-Dichloroethene	100	0	91.8	91.8	61-145
Trichloroethene	100	0	95.2	95.2	71-120
Benzene	100	0	98.3	98.3	76-127
Chlorobenzene	100	0	96.7	96.7	75-130
1,2-Dichloroethane	100	0	106	106	30-130
1,4-dichlorobenzene	100	0	91.5	91.5	30-130
Carbon Tetrachloride	100	0	97.3	97.3	30-130
Chloroform	100	0	103	103	30-130
2-Butanone	200	0	206	103	30-130
Tetrachloroethene	100	0	96.9	96.9	30-130
Vinyl Chloride	100	0	106	106	30-130

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix Spike - EPA Sample No.: CLJ-DS-10

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	100	0	93.7	93.7	61-145
Trichloroethene	100	0	95.2	95.2	71-120
Benzene	100	0	98.9	98.9	76-127
Chlorobenzene	100	0	96.3	96.3	75-130
1,2-Dichloroethane	100	0	106	106	30-130
1,4-dichlorobenzene	100	0	90.2	90.2	30-130
Carbon Tetrachloride	100	0	99.1	99.1	30-130
Chloroform	100	0	106	106	30-130
2-Butanone	200	0	178	89.1	30-130
Tetrachloroethene	100	0	96.8	96.8	30-130
Vinyl Chloride	100	0	101	101	30-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	100	93.9	93.9	.213	14	61-145
Trichloroethene	100	90.9	90.9	2.31	14	71-120
Benzene	100	95.3	95.3	1.93	11	76-127
Chlorobenzene	100	94.7	94.7	1.68	13	75-130
1,2-Dichloroethane	100	106	106	~~106~~ 0	20	30-130
1,4-dichlorobenzene	100	88.7	88.7	1.68	20	30-130
Carbon Tetrachloride	100	96.7	96.7	2.45	20	30-130
Chloroform	100	106	106	0	20	30-130
2-Butanone	200	182	91.0	2.22	20	30-130
Tetrachloroethene	100	93.6	93.6	3.36	20	30-130
Vinyl Chloride	100	101	101	0	20	30-130

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS:

0165

EPA SAMPLE NO.

4A

VOLATILE METHOD BLANK SUMMARY

VBLK01

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab File ID: B3180 Lab Sample ID: NV3403V

Date Analyzed: 3-25-94 Time Analyzed: 11:55

GC Column: DB-624 ID: .53 (mm) Heated Purge: (Y/N) N

Instrument ID: MSD-B

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	CLJ-DS-10MS	JM4367VS	B3183	13:48
02	CLJ-DS-10MSD	JM4367VR	B3184	14:26
03	CLJ-DS-10	JM4367V	B3182	13:09
04	CLJ-DS-11	JM4368V	B3185	15:04
05	CLJ-DS-11D	JM4369V	B3186	15:43
06	VSI			
07				
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COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab File ID: B3178 BFB Injection Date: 3-25-94

Instrument ID: MSD-B BFB Injection Time: 8:45

GC Column: DB624 ID: .53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	17.32
75	30.0 - 66.0% of mass 95	42.75
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.12
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	50.0 - 120.0% of mass 95	71.53
175	4.0 - 9.0 % of mass 174	6.07 (8.48) 1
176	93.0 - 101.0% of mass 174	70.52 (98.59) 1
177	5.0 - 9.0% of mass 176	4.64 (6.58) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK01	~~N7V~~ NV3403V	B3180	3-25-94	11:55
02	VSPK01	NV3403VS	B3181	3-25-94	12:31
03	CLJ-DS-10MS	JM4367VS	B3183	3-25-94	13:48
04	CLJ-DS-10MSD	JM4367VR	B3184	3-25-94	14:26
05	CLJ-DS-10	JM4367V	B3182	3-25-94	13:09
06	CLJ-DS-11	JM4368V	B3185	3-25-94	15:04
07	CLJ-DS-11D	JM4369V	B3186	3-25-94	15:43
08	VSTD50	CHK STD	B3179	3-25-94	10:09
09					
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6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: _____

Instrument ID: MSD-B Calibration Date(s): 02-21-94 02-21-94

Heated Purge: (Y/N) ___ Calibration Times: 1013 1242

GC Column: DB624 ID: 0.53 (mm)

LAB FILE ID: RRF10 = B2817 RRF20 = B2818
RRF50 = B2819 RRF100 = B2820 RRF200 = B2821

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	0.456	0.457	0.469	0.499	0.515	0.479	5.56
* Bromomethane	1.22	1.06	0.868	0.714	0.631	0.899	27.0 *
* Vinyl Chloride	1.42	1.40	1.34	1.39	1.43	1.39	2.66 *
Chloroethane	0.771	0.850	0.715	0.587	0.436	0.693	26.6
Methylene Chloride	1.44	1.44	1.38	1.33	1.29	1.37	4.68
Acetone	0.651	0.463	0.516	0.383	0.260	0.455	32.1
Carbon Disulfide	4.18	4.28	4.10	4.12	4.02	4.14	2.32
1,1-Dichloroethene		1.52	1.34	1.30	1.12	1.33	10.7 *
1,1-Dichloroethane	2.74	2.86	2.76	2.81	2.76	2.79	1.80 *
1,2-Dichloroethene (Trans) ~~(total)~~	1.43	1.44	1.37	1.35	1.28	1.37	4.65
* Chloroform	2.79	2.94	2.86	2.87	2.77	2.85	2.46 *
* 1,2-Dichloroethane	2.11	2.15	2.06	2.04	1.94	2.06	3.89 *
2-Butanone	0.021	0.023	0.022	0.032	0.029	0.025	19.7
* 1,1,1-Trichloroethane	0.485	0.500	0.478	0.471	0.438	0.475	4.89 *
* Carbon Tetrachloride	0.471	0.499	0.472	0.476	0.427	0.469	5.65 *
* Bromodichloromethane	0.633	0.650	0.665	0.664	0.607	0.646	3.95 *
1,2-Dichloropropane	0.423	0.453	0.444	0.441	0.413	0.435	3.76
* cis-1,3-Dichloropropene	0.632	0.648	0.651	0.650	0.618	0.640	2.27 *
* Trichloroethene	0.457	0.467	0.465	0.444	0.398	0.446	6.31 *
* Dibromochloromethane	0.633	0.640	0.665	0.664	0.607	0.646	3.95 *
* 1,1,2-Trichloroethane	0.350	0.362	0.359	0.353	0.318	0.342	5.11 *
* Benzene	0.986	1.01	0.974	0.943	0.851	0.955	6.58 *
* trans-1,3-Dichloropropene	0.417	0.456	0.433	0.441	0.437	0.456	3.25 *
* Bromoform	0.481	0.518	0.517	0.512	0.463	0.498	5.01 *
4-Methyl-2-Pentanone	0.138	0.136	0.131	0.146	0.132	0.136	4.47
2-Hexanone	0	0.304	0.242	0.356	0.362	0.318	17.5
* Tetrachloroethene	0.567	0.578	0.561	0.552	0.498	0.551	5.67 *
* 1,1,2,2-Tetrachloroethane	0.498	0.537	0.535	0.516	0.479	0.513	4.88 *
* Toluene	0.795	0.814	0.829	0.803	0.759	0.800	3.24 *
* Chlorobenzene	1.07	1.11	1.10	1.09	1.01	1.08	3.85 *
* Ethylbenzene	0.480	0.503	0.484	0.473	0.426	0.473	6.05 *
* Styrene	0.979	1.01	0.993	0.936	0.823	0.948	7.07 *
* Xylene (~~total~~) M+P	1.25	1.27	1.22	1.14	1.01	1.18	9.23
Toluene-d8	1.23	1.28	1.26	1.27	1.22	1.25	1.92
Bromofluorobenzene	0.959	0.996	0.983	0.971	0.917	0.965	3.15 *
1,2-Dichloroethane-d4	1.76	1.87	1.81	1.83	1.79	1.81	2.27
1,2-cis-Dichloroethylene	1.61	1.69	1.59	1.59	1.52	1.60	3.48

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

O-Xylene	0.582	0.626	0.595	0.570	0.488	0.572	8.97

7A

VOLATILE CONTINUING CALIBRATION CHECK

0168

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: MSD-B Calibration Date: 3-25-94 Time: 10:09

Lab File ID: B3179 Init. Calib. Date(s): 02-21-94 02-21-94

Heated Purge: (Y/N) N Init. Calib. Times: 10:13 12:42

GC Column: DB624 ID: .53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	.47921	.34533		27.94	
Bromomethane	.99857	.79280	0.100	11.77	25.0
Vinyl Chloride	1.39502	1.07596	0.100	22.87	25.0
Chloroethane	.69301	.66161		4.53	
Methylene Chloride	1.37474	1.28322		6.66	
Acetone	.43489	.44568		2.02	
Carbon Disulfide	4.14133	3.79875		8.27	
1,1-Dichloroethene	1.33310	1.31341	0.100	1.48	25.0
1,1-Dichloroethane cis	2.78654	2.49330	0.200	10.52	25.0
1,2-Dichloroethene (~~total~~)	1.60306	1.48226		7.54	
Chloroform	2.84881	2.72948	0.200	4.19	25.0
1,2-Dichloroethane	2.06100	1.84230	0.100	10.61	25.0
2-Butanone	.08530	.03207		26.74	
1,1,1-Trichloroethane	.47466	.48204	0.100	1.56	25.0
Carbon Tetrachloride	.46911	.50232	0.100	7.08	25.0
Bromodichloromethane	.64586	.57932	0.200	10.30	25.0
1,2-Dichloropropane	.43471	.38511		11.41	
cis-1,3-Dichloropropene	.63993	.60780	0.200	5.02	25.0
Trichloroethene	.44619	.43434	0.300	1.83	25.0
Dibromochloromethane	.56612	.54735	0.100	3.42	25.0
1,1,2-Trichloroethane	.34841	.34315	0.100	1.51	25.0
Benzene	.95455	.90579	0.500	5.11	25.0
trans-1,3-Dichloropropene	.45642	.44683	0.100	2.10	25.0
Bromoform	.49823	.46644	0.100	6.38	25.0
4-Methyl-2-Pentanone	.13647	.12612		7.58	
2-Hexanone	.31769	.27358		13.79	
Tetrachloroethene	.55113	.51623	0.200	2.56	25.0
1,1,2,2-Tetrachloroethane	.69739	.69059	0.500	.98	25.0
Toluene	.80084	.80272	0.400	.31	25.0
Chlorobenzene	1.07590	.98064	0.500	8.85	25.0
Ethylbenzene	.47340	.48323	0.100	2.08	25.0
Styrene	.94833	.91940	0.300	2.22	25.0
o-Xylene (~~total~~)	.57240	.55646	0.300	2.78	25.0
Toluene-d8	1.25274	1.28820		2.83	
Bromofluorobenzene	.96552	.95568	0.200	1.02	25.0
1,2-Dichloroethane-d4	1.81444	1.59776		11.94	
1,2-Trans-dichloroethylene	1.37615	1.29399		5.97	

All other compounds must meet a minimum RRF of 0.010.

m+p-Xylenes 1.17721 1.19398 1.42

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0169

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab File ID (Standard): ~~B3178~~ DL B3179 Date Analyzed: 3-25-94

Instrument ID: MSD-B Time Analyzed: 8:45

GC Column: DB624 ID: .53 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	33746	9.74	139346	11.66	108891	17.64
	UPPER LIMIT	67492	9.24	278692	12.16	216582	17.14
	LOWER LIMIT	16873	10.24	69673	11.16	54146	18.14
	EPA SAMPLE NO.						
01	VBLK01	31201	9.65	136186	11.58	109816	17.57
02	VSPK01	28414	9.61	124668	11.50	101823	17.50
03	CLI-DS-10MS	27319	9.57	120469	11.49	98984	17.48
04	CLI-DS-10MSD	26569	9.58	120775	11.49	97669	17.49
05	CLI-DS-10	28371	9.57	122973	11.49	104626	17.48
06	CLI-DS-11	27152	9.60	122015	11.50	104027	17.49
07	CLI-DS-11D	26950	9.58	122507	11.47	103223	17.47
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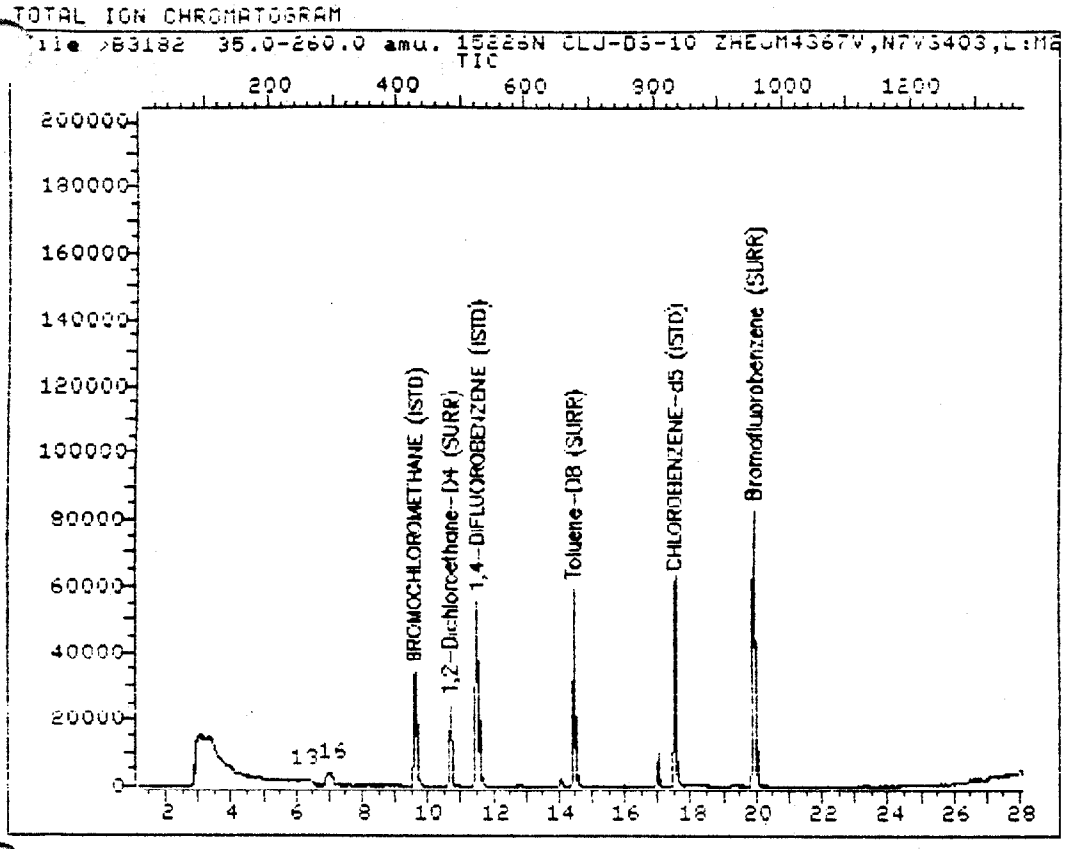
IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

page __ of __



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Misc: JM4367V,N7V3403,L:M2,0.200,5.00:1, 200ul/5ML

Id File: IB325A::D4
Title: MSD-B DB624 0.53mmX75m VOLATILES BY GC/MS
Last Calibration: 940325 12:04

Operator ID: STEVE
Quant Time: 940325 13:46
Injected at: 940325 13:09

QUANT REPORT

Operator ID: STEVE
Output File: ^B3182::QT
Data File: >B3182::D4
Name: 15226N CLJ-DS-10 ZHE
Misc: JM4367U,N7U3403,L:M2,0.200,5.00:1, 200ul/5ML

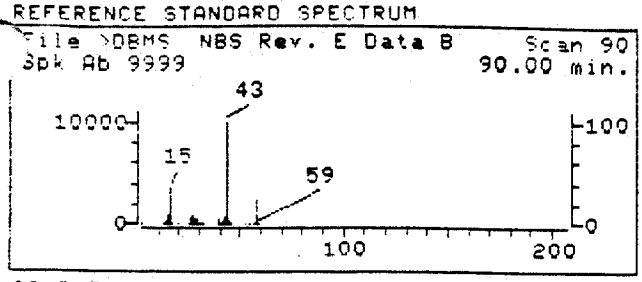
Quant Rev: 7
Quant Time: 940325 13:46
Injected at: 940325 13:09
Dilution Factor: 1.00000

ID File: IB325A::D4
Title: MSD-B DB624 0.53mmX75m VOLATILES BY GC/MS
Last Calibration: 940325 12:04

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (ISTD)	9.57	128.0	28371	50.00	ug/l	87
13)	Acetone	6.12	43.0	2419	9.81	ug/l	90
16)	Methylene chloride	6.98	84.0	11283	15.50	ug/l	80
26)	1,2-Dichloroethane-D4 (SURR)	10.65	65.0	45843	50.57	ug/l	93
29)	*1,4-DIFLUOROBENZENE (ISTD)	11.49	114.0	122973	50.00	ug/l	92
48)	*CHLOROBENZENE-d5 (ISTD)	17.48	117.0	104026	50.00	ug/l	93
49)	Toluene-D8 (SURR)	14.42	98.0	121775	45.44	ug/l	83
60)	Bromofluorobenzene (SURR)	19.91	95.0	93216	46.88	ug/l	97

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



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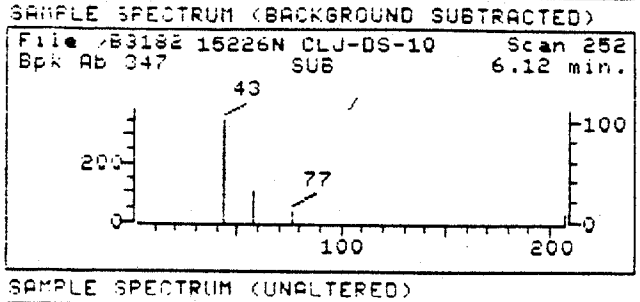

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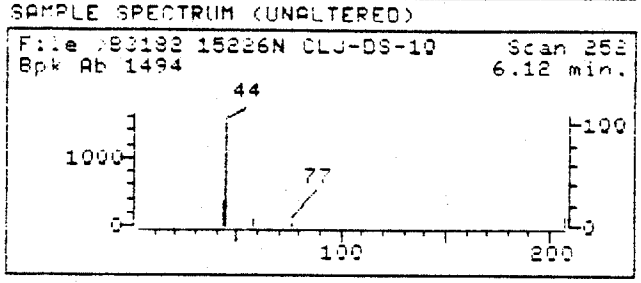

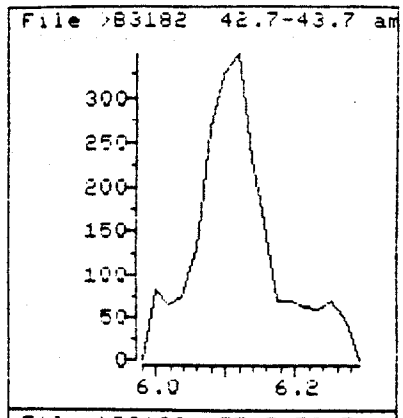

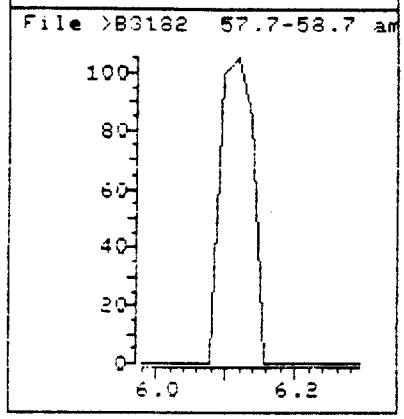

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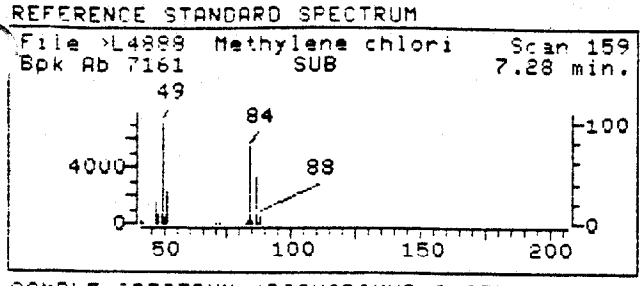
Name: 15226N CLJ-DS-10 ZHE
Misc: JM4367U,N7U3403,L:M2,0.200,5.00:1, 200ul/5ML
Quant Time: 940325 13:46 Quant ID File: IB325A::D4
Injected at: 940325 13:09 Last Calibration: 940325 12:04

Compound No: 13
Compound Name: Acetone
Scan Number: 252
Retention Time: 6.12 min.
Quant Ion: 43.0
Area: 2419
Concentration: 9.81 ug/l
q-value: 90

REFERENCE STANDARD SPECTRUM



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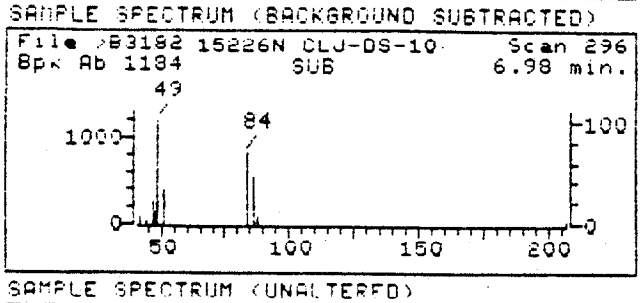
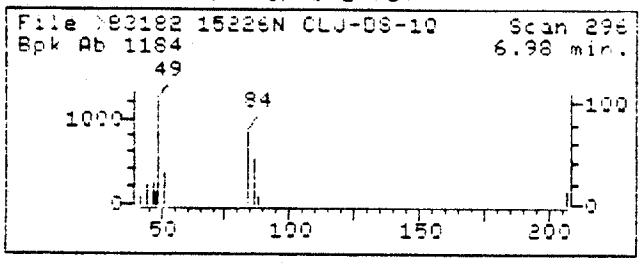
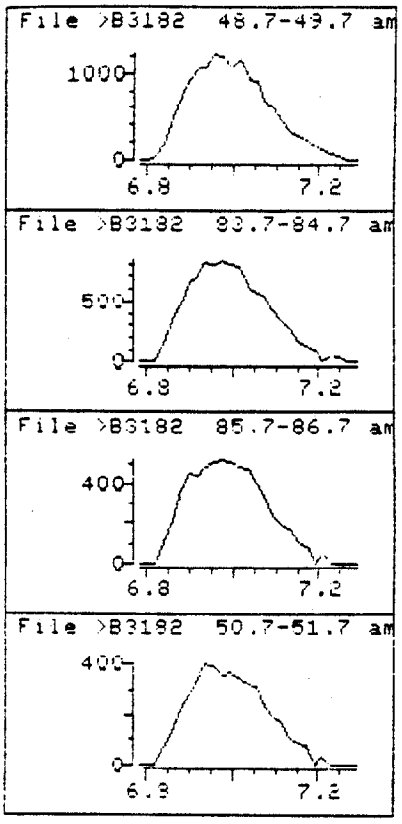


SAMPLE SPECTRUM (UNALTERED)





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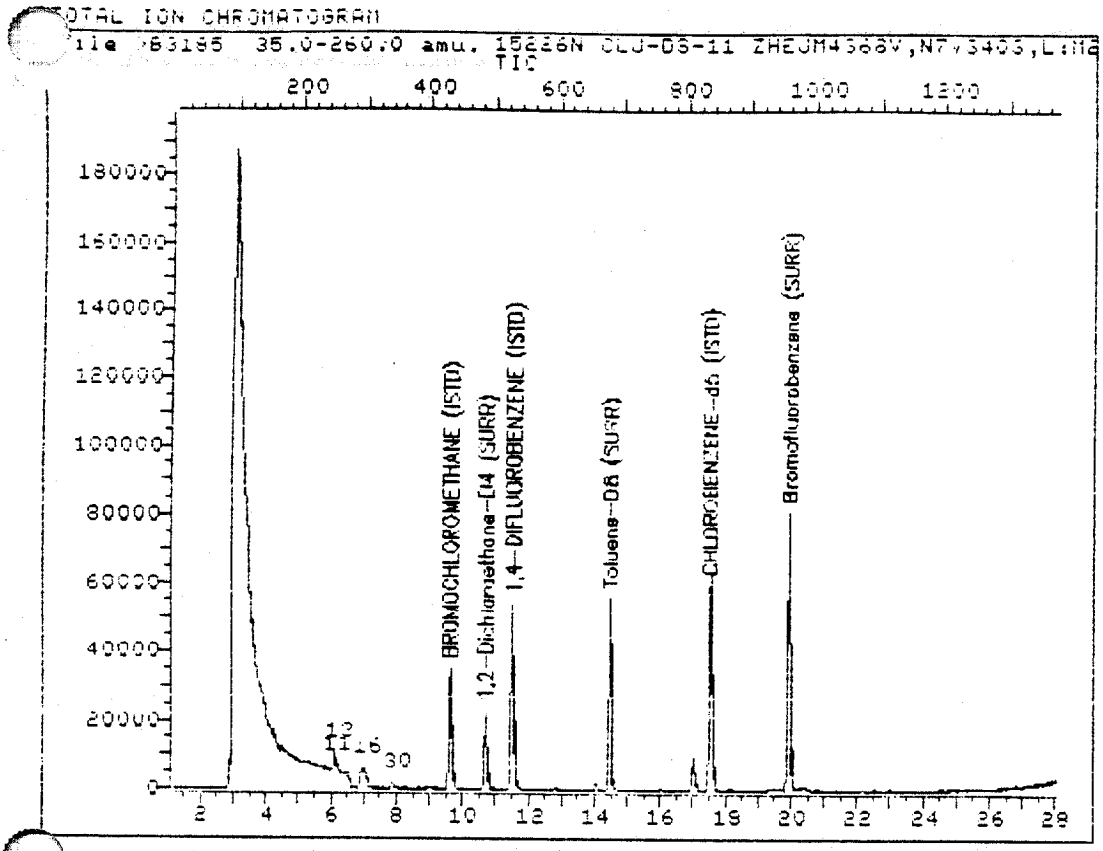
Name: 15226N CLJ-DS-10 ZHE
Misc: JM4367V,N7V3403,L:M2,0.200,5.00:1, 200ul/5ML
Quant Time: 940325 13:46 Quant ID File: IB325A::D4
Injected at: 940325 13:09 Last Calibration: 940325 12:04

Compound No: 16
Compound Name: Methylene chloride
Scan Number: 296
Retention Time: 6.98 min.
Quant Ion: 84.0
Area: 11283
Concentration: 15.50 ug/l
q-value: 80



Data File: >B3185::D4 Quant Output File: ^B3185::QT
Name: 15224N CLJ-DS-11 ZHE
Misc: JM4368V,N7V3403,L:M2,0.200,5.00:1, 200ul/5ML

Id File: IB325A::D4
Title: MSD-B DB624 0.53mmX75m VOLATILES BY GC/MS
Last Calibration: 940325 12:04

Operator ID: STEVE
Quant Time: 940325 15:37
Injected at: 940325 15:04

QUANT REPORT

Operator ID: STEVE
Output File: ^B3185::QT
Data File: >B3185::D4
Name: 15226N CLJ-DS-11 ZHE
Misc: JM4368V,NZV3403,L:M2,0.200,5.00:1, 200ul/5ML

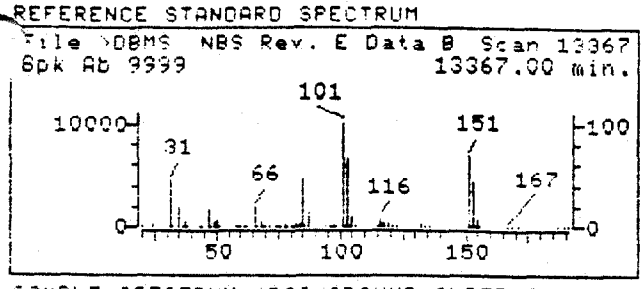
Quant Rev: 7
Quant Time: 940325 15:37
Injected at: 940325 15:04
Dilution Factor: 1.00000

ID File: IB325A::D4
Title: MSD-B DB624 0.53mmX75m VOLATILES BY GC/MS
Last Calibration: 940325 12:04

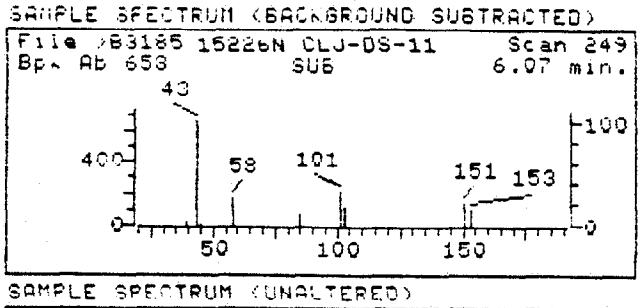
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (ISTD)	9.60	128.0	27152	50.00	ug/l	93
11)	1,1,2-Trichlorotrifluoroethane	6.07	101.0	2436	1.91	ug/l	82
13)	Acetone	6.12	43.0	17388	73.71	ug/l	81
16)	Methylene chloride	6.94	84.0	16788	24.09	ug/l	85
26)	1,2-Dichloroethane-D4 (SURR)	10.68	65.0	44260	51.01	ug/l	88
29)	*1,4-DIFLUOROBENZENE (ISTD)	11.50	114.0	122018	50.00	ug/l	95
30)	~~Vinyl acetate~~	~~7.86~~	~~47.0~~	~~2442~~	~~3.89~~	~~ug/l~~	68
48)	*CHLOROBENZENE-d5 (ISTD)	17.49	117.0	104027	50.00	ug/l	94
49)	Toluene-D8 (SURR)	14.44	98.0	118823	44.33	ug/l	81
60)	Bromofluorobenzene (SURR)	19.91	95.0	92113	46.33	ug/l	97

Compound is ISTD

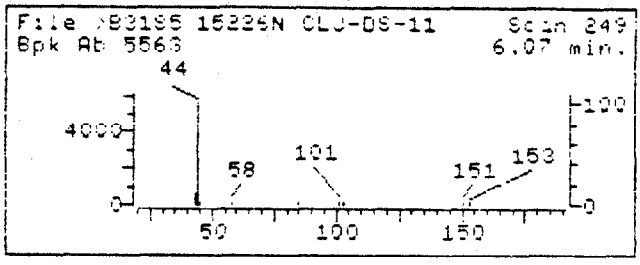
REFERENCE STANDARD SPECTRUM

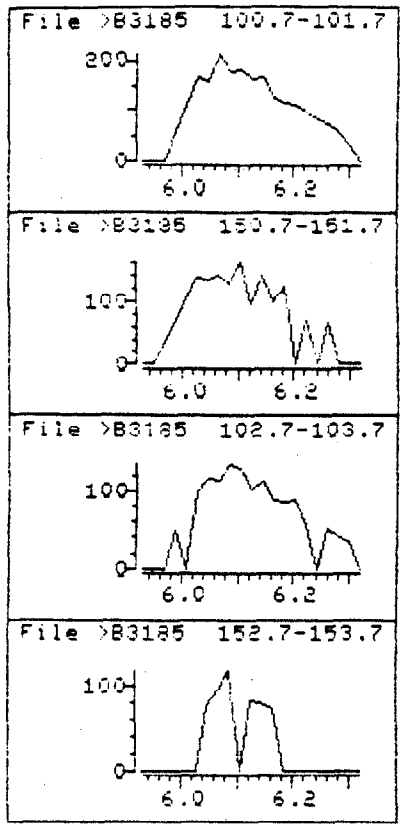


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

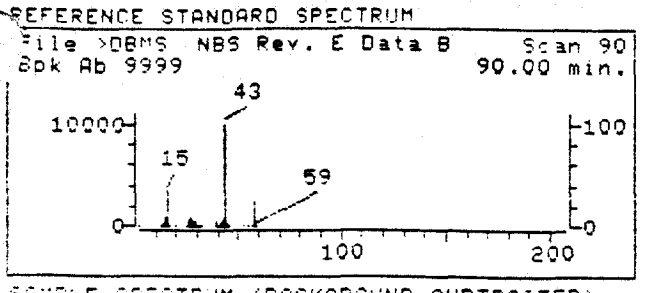




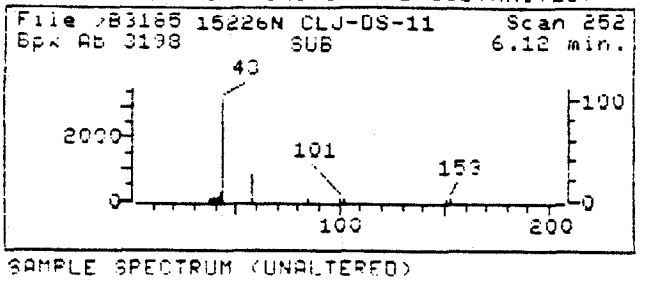
Data File: >B3185::D4 Quant Output File: ^B3185::QT
Name: 15226N CLJ-DS-11 ZHE
Misc: JM4368U,N7U3403,L:M2,0.200,5.00:1, 200ul/5ML
Quant Time: 940325 15:37 Quant ID File: IB325A::D4
Injected at: 940325 15:04 Last Calibration: 940325 12:04

Compound No: 11
Compound Name: 1,1,2-Trichlorotrifluoroethane
Scan Number: 249
Retention Time: 6.07 min.
Quant Ion: 101.0
Area: 2436
Concentration: 1.91 ug/l
q-value: 82

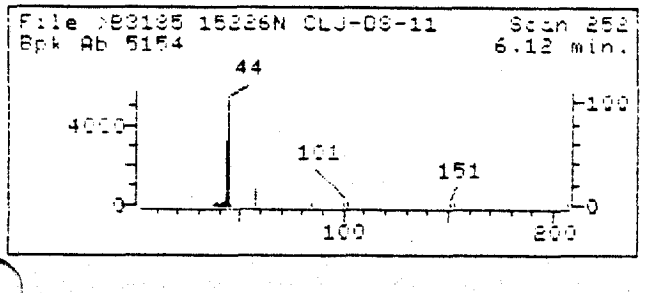
REFERENCE STANDARD SPECTRUM

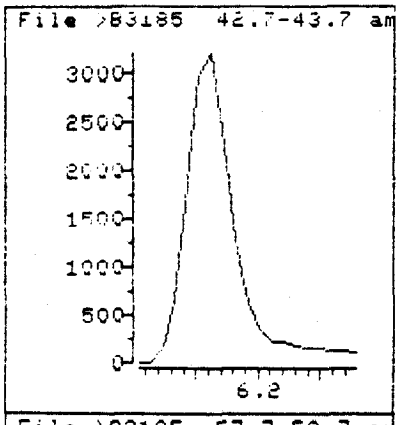


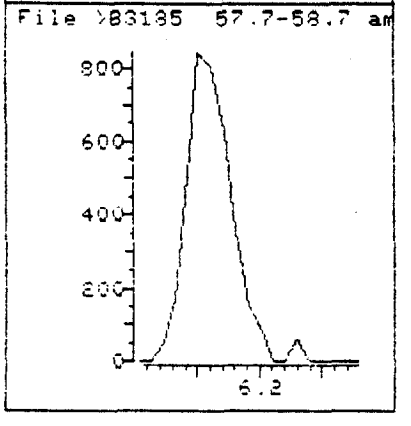
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



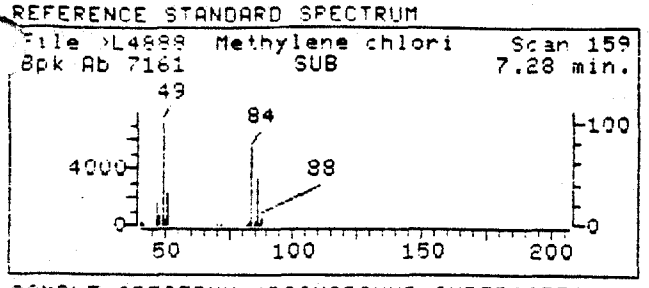




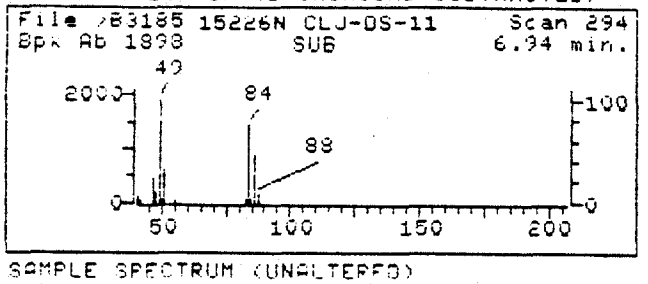
Data File: >B3185::D4 Quant Output File: ^B3185::QT
Name: 15226N CLJ-DS-11 34E
Misc: JM4368U,N7U3403,L:M2,0.200,5.00:1, 200ul/5ML
Quant Time: 940325 15:37 Quant ID File: IB325A::D4
Injected at: 940325 15:04 Last Calibration: 940325 12:04

Compound No: 13
Compound Name: Acetone
Scan Number: 252
Retention Time: 6.12 min.
Quant Ion: 43.0
Area: 17388
Concentration: 73.71 ug/l
q-value: 81

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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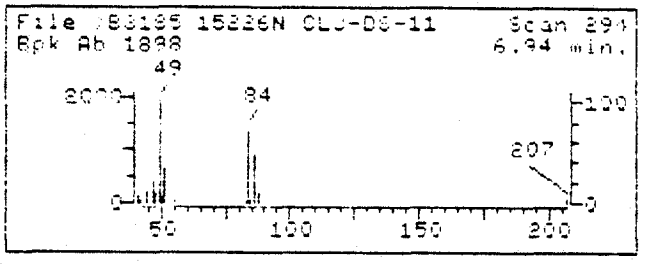
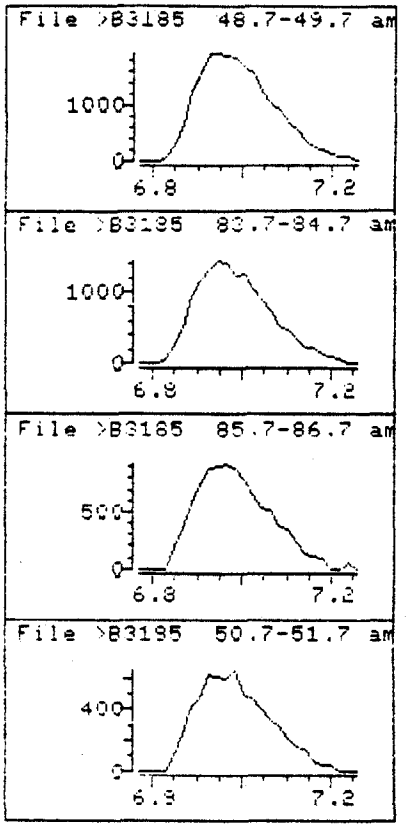
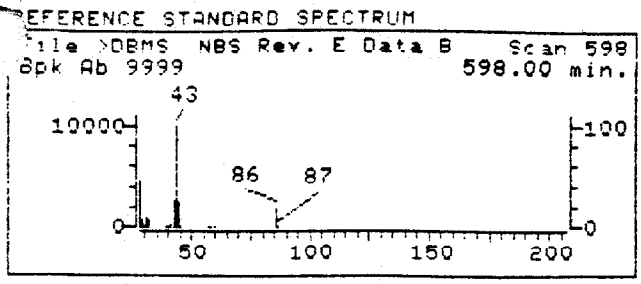
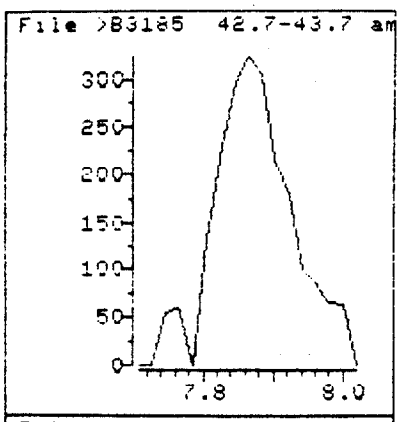


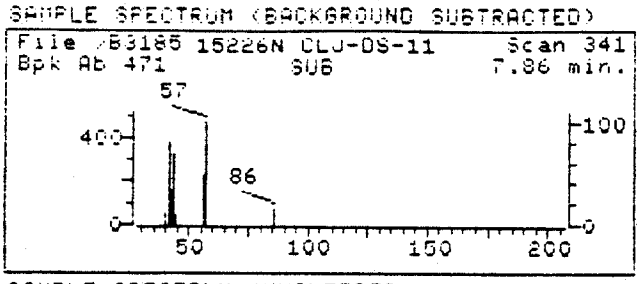


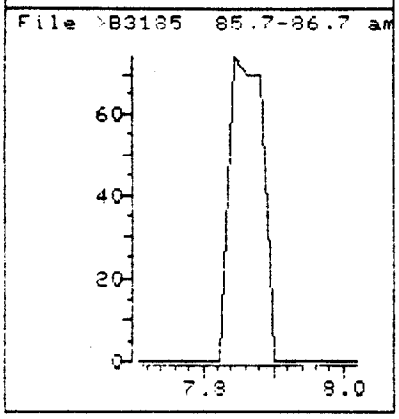
Data File: >B3185::D4 Quant Output File: ^B3185::QT
Name: 15226N CLJ-DS-11 THE
Misc: JM4368U,NPU3403,L:M2,0.200,5.00:1, 200ul/5ML
Quant Time: 940325 15:37 Quant ID File: IB325A::D4
Injected at: 940325 15:04 Last Calibration: 940325 12:04

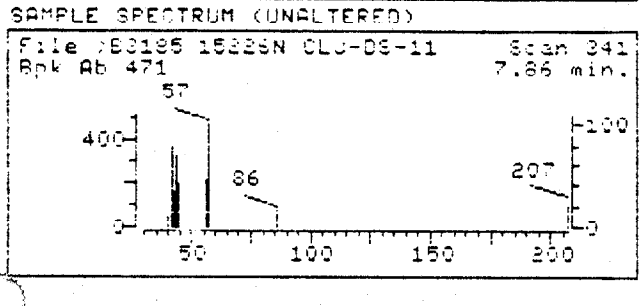
Compound No: 16
Compound Name: Methylene chloride
Scan Number: 294
Retention Time: 6.94 min.
Quant Ion: 84.0
Area: 16788
Concentration: 24.09 ug/l
q-value: 85









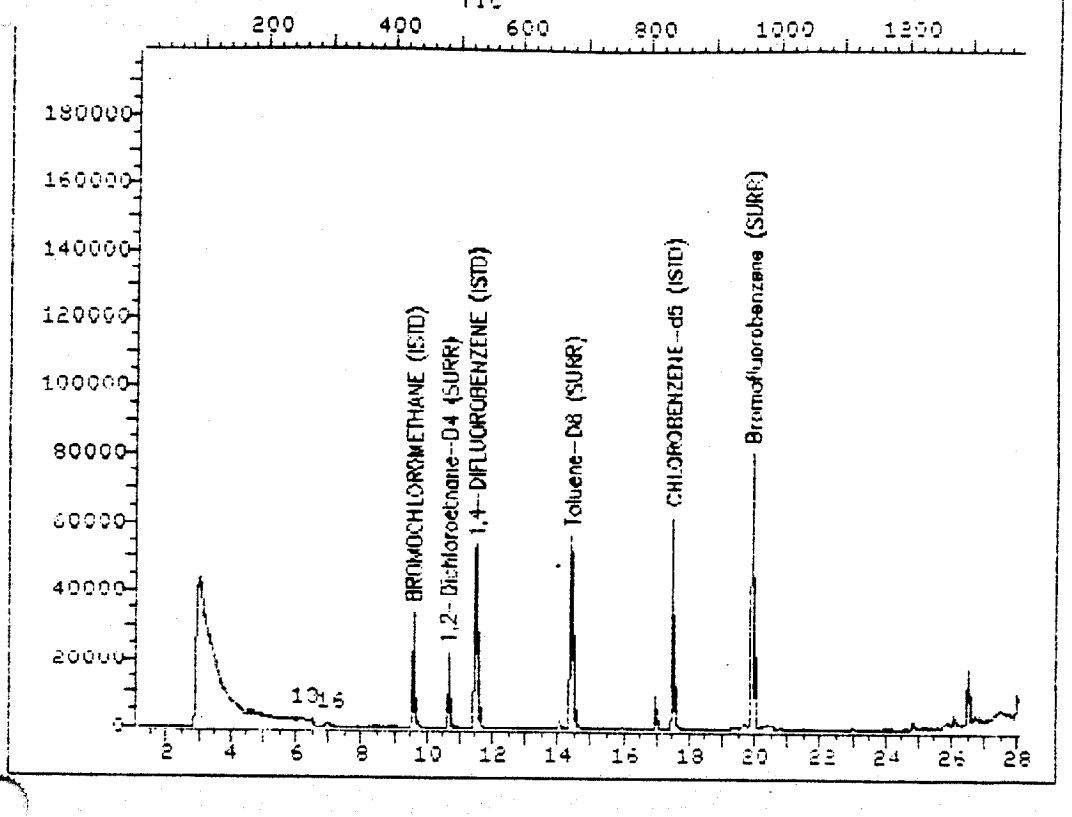


Data File: >B3185::D4 Quant Output File: ^B3185::QT
Name: 15226N CLJ-DS-11 ZHE
Misc: JM4368V,N2U3403,L:M2,0.200,5.00:1, 200ul/5ML
Quant Time: 940325 15:37 Quant ID File: IB325A::D4
Injected at: 940325 15:04 Last Calibration: 940325 12:04

Compound No: 30
Compound Name: Vinyl acetate
Scan Number: 341
Retention Time: 7.86 min.
Quant Ion: 43.0
Area: 2462
Concentration: 3.39 ug/l
q-value: 68

TOTAL ION CHROMATOGRAM

File >B3186 35.0-260.0 amu. 15226N DLJ-DS-11DZHEJM4369V,N7V3403,L:M2
TIC



Data File: >B3186::D4 Quant Output File: ^B3186::QT
Name: 15226N DLJ-DS-11DZHE
Misc: JM4369V,N7V3403,L:M2,0.200,5.00:1, 200ul/5ML

Id File: IB325A::D4
Title: MSD-B DB624 0.53mmX75m VOLATILES BY GC/MS
Last Calibration: 940325 12:04

Operator ID: STEVE
Quant Time: 940325 16:15
Injected at: 940325 15:43

QUANT REPORT

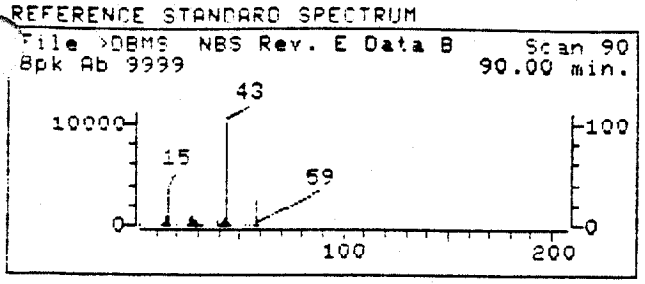
Operator ID: STEVE Quant Rev: 7 Quant Time: 940325 16:15
Output File: ^B3186::QT Injected at: 940325 15:43
Data File: >B3196::D4 Dilution Factor: 1.00000
Name: 15026N CLJ-DS-11DZHE
Misc: JM4369U,N7U3403,L:M2,0.200,5.00:1, 200ul/5ML

ID File: IB325A::D4
Title: MSD-B DB624 0.53mmX75m VOLATILES BY GC/MS
Last Calibration: 940325 12:04

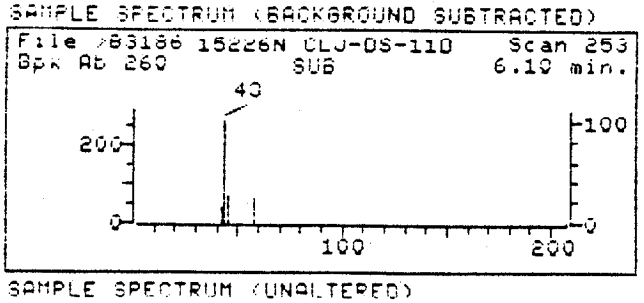
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (ISTD)	9.58	128.0	26950	50.00	ug/l	90
13)	Acetone	6.10	43.0	1514	6.47	ug/l	79
16)	Methylene chloride	6.92	84.0	3246	4.69	ug/l	83
26)	1,2-Dichloroethane-D4 (SURR)	10.63	65.0	42449	49.29	ug/l	92
29)	*1,4-DIFLUOROBENZENE (ISTD)	11.47	114.0	122507	50.00	ug/l	95
48)	*CHLOROBENZENE-d5 (ISTD)	17.47	117.0	103223	50.00	ug/l	90
49)	Toluene-D8 (SURR)	14.40	98.0	117645	44.24	ug/l	77
60)	Bromofluorobenzene (SURR)	19.99	95.0	90409	45.82	ug/l	95

* Compound is ISTD

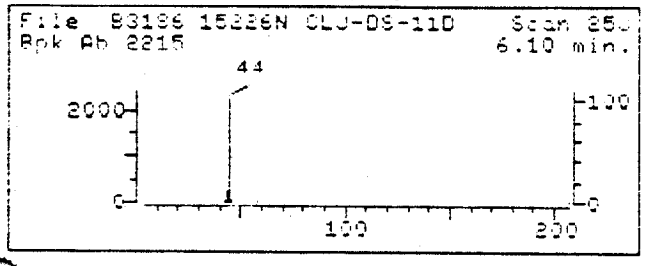
REFERENCE STANDARD SPECTRUM

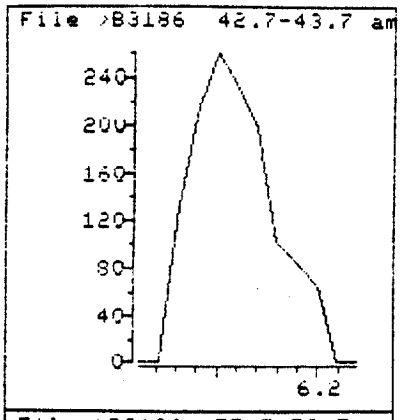


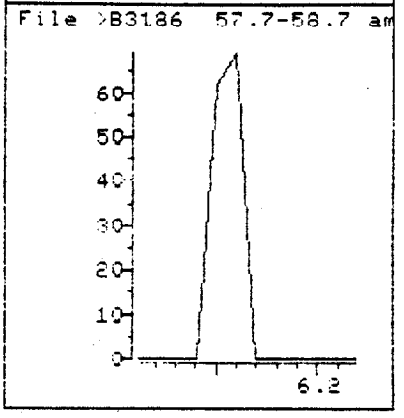
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



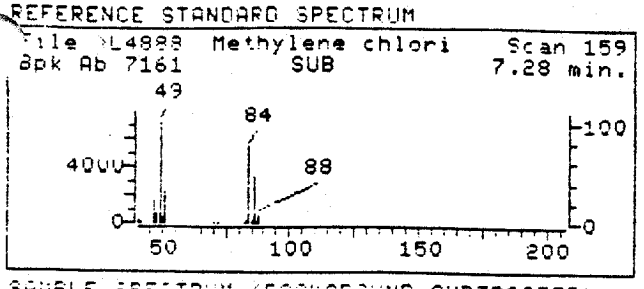




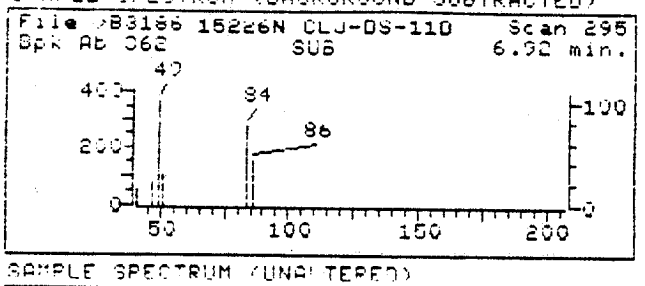
Data File: >B3186::D4 Quant Output File: ^B3186::QT
Name: 15226N CLJ-DS-11DZHE
Misc: JM4369U,N7U3403,L:M2,0.200,5.00:1, 200ul/5ML
Quant Time: 940325 16:15 Quant ID File: IB325A::D4
Injected at: 940325 15:43 Last Calibration: 940325 12:04

Compound No: 13
Compound Name: Acetone
Scan Number: 253
Retention Time: 6.10 min.
Quant Ion: 43.0
Area: 1514
Concentration: 6.47 ug/l
q-value: 79

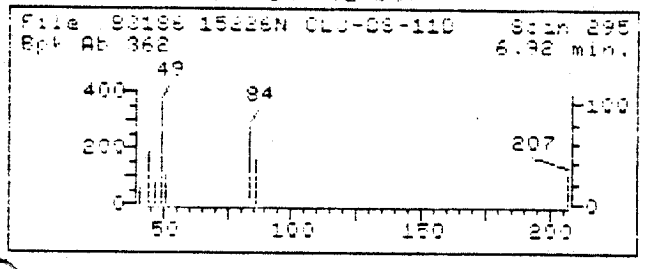
REFERENCE STANDARD SPECTRUM

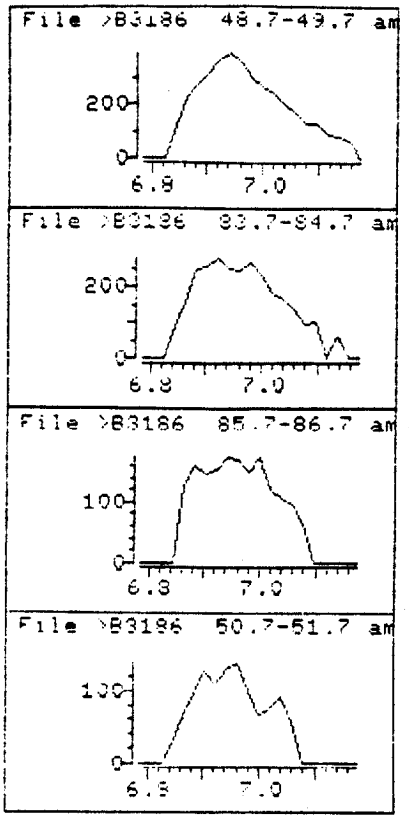


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)





Data File: >B3186::D4 Quant Output File: ^B3186::QT
Name: 15226N CLJ-DS-110Z4E
Misc: JM4369U,N7U3403,L:M2,0.200,5.00:1, 200ul/5ML
Quant Time: 940325 16:15 Quant ID File: IB325A::D4
Injected at: 940325 15:43 Last Calibration: 940325 12:04

Compound No: 16
Compound Name: Methylene chloride
Scan Number: 295
Retention Time: 6.92 min.
Quant Ion: 84.0
Area: 3246
Concentration: 4.49 ug/l
q-value: 83

OPY

OHM Corporation

CHAIN-OF-CUSTODY RECORD

Form 0019
Field Technical Services
Rev. 08/89

127969

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: CAMP LEJUENE
PROJECT LOCATION: JACKSONVILLE, NC
PROJ. NO.: 15226
PROJECT CONTACT: W. Perry
PROJECT TELEPHONE NO.:
CLIENT'S REPRESENTATIVE: J. Cotton
PROJECT MANAGER/SUPERVISOR: J. Shepard

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	TCLP-Metals	pH	TCLP-Full	IGNITABILITY	CN/S (REACT.)	TPH-GC	Compatability 601 (CCl4)	REMARKS
1	CLJ-CSS-043	3/3	1300	X		EAST TRENCH - BATTERY AREA: EAST WALL - FOURTH FLAG	1-32oz	X	X						
2	CLJ-CSS-044	3/3	1300	X		EAST TRENCH - BATTERY AREA: FLOOR - FOURTH FLAG	1-32oz	X	X						
3	CLJ-CSS-045	3/3	1300	X		EAST TRENCH - BATTERY AREA: WEST WALL - FOURTH FLAG	1-32oz	X	X						
4	CLJ-CSS-046	3/3	1300	X		EAST TRENCH - BATTERY AREA: SOUTH WALL	1-32oz	X	X						
5	CLJ-DS-10	3/3	1300	X		BATTERY AREA - SOIL STOCKPILE SAMPLE POINT #1	1-32oz		X	X	X	X	X		
6	CLJ-DS-11	3/3	1300	X		BATTERY AREA - SOIL STOCKPILE SAMPLE POINT #2	1-32oz		X	X	X	X	X		
7	CLJ-DS-11d	3/3	1300	X		BATTERY AREA - SOIL STOCKPILE SAMPLE POINT #2 (duplicate)	1-32oz		X	X	X	X	X		QA DUPLICATE } one sample jar
8	~~TRIP BLANK~~														
9	CLJ-DFE-01	3/3	1600		X	SAMPLE OF FIRE EXTENGWSHER Drum #148 (55H-	1-32oz						X	X	use waste dilution
10	CLJ-DS-143,01	3/3	1600		X	Drum Sample #143 .01	1x8oz						X		see attached drum log.

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-7, 9-10	[signature] 1289	FE 7526016816	3/3	1800
2	1-7,9,10	FedEX 7526016816	Donita Jensen	3-6-94	1427
3					
4					

REMARKS
ASC
Split CLJ-DS-11 to make CLJ-DS-11d

NOTE: ITEM #9 possibly very hot w/ CCl4

SAMPLER'S SIGNATURE: [signature] 1289

0184

SECTION 5a

DRUM WASTE SAMPLES (DWS)

Camp Lejeune 15226

SAMPLE SUMMARY REPORT

SAMPLE NUMBER	SAMPLE DATE	SAMPLE LOCATION	COC NUMBER	LAB ID	LAB SAMPLE ID	DQO LEVEL	PACKAGE ID	AIRBILL NUMBER
CLJ-DWS-001	2/24/94	DRUM COMP. (DRUM #001)	137075	ASC	JM4078	II	615277	5927355626
CLJ-DWS-002	2/24/94	DRUM COMP. (DRUM #002)	137075	ASC	JM4079	II	615277	5927355626
CLJ-DWS-003	2/24/94	DRUM COMP. (DRUM #003)	137075	ASC	JM4080	II	615277	5927355626
CLJ-DWS-004	2/24/94	DRUM COMP. (DRUM #004)	137075	ASC	JM4081	II	615277	5927355626
CLJ-DWS-005	2/24/94	DRUM COMP. (DRUM #005)	137075	ASC	JM4082	II	615277	5927355626
CLJ-DWS-005d	2/24/94	DRUM COMP. (DRUM #005)	137075	ASC	JM4083	II	615277	5927355626
CLJ-DWS-006	2/24/94	DRUM COMP. (DRUM #006)	137075	ASC	JM4084	II	615277	5927355626
CLJ-DWS-007	2/24/94	DRUM COMP. (DRUM #007)	137075	ASC	JM4085	II	615277	5927355626
CLJ-DWS-008	2/24/94	DRUM COMP. (DRUM #008)	137075	ASC	JM4086	II	615277	5927355626
CLJ-DWS-009	2/24/94	DRUM COMP. (DRUM #009)	137075	ASC	JM4087	II	615277	5927355626
CLJ-DWS-010	2/24/94	DRUM COMP. (DRUM #010)	137076	ASC	JM4088	II	615277	5927355626
CLJ-DWS-011	2/24/94	DRUM COMP. (DRUM #011)	137076	ASC	JM4089	II	615277	5927355626
CLJ-DWS-012	2/24/94	DRUM COMP. (DRUM #012)	137076	ASC	JM4090	II	615277	5927355626
CLJ-DWS-013	2/24/94	DRUM COMP. (DRUM #013)	137076	ASC	JM4091	II	615277	5927355626
CLJ-DWS-014	2/24/94	DRUM COMP. (DRUM #014)	137076	ASC	JM4092	II	615277	5927355626
CLJ-DWS-015	2/24/94	DRUM COMP. (DRUM #015)	137076	ASC	JM4093	II	615277	5927355626
CLJ-DWS-017	2/24/94	DRUM COMP. (DRUM #017)	137076	ASC	JM4094	II	615277	5927355626
CLJ-DWS-018	2/24/94	DRUM COMP. (DRUM #018)	137076	ASC	JM4095	II	615277	5927355626
CLJ-DWS-019	2/24/94	DRUM COMP. (DRUM #019)	137076	ASC	JM4096	II	615277	5927355626
CLJ-DWS-020	2/24/94	DRUM COMP. (DRUM #020)	137076	ASC	JM4097	II	615277	5927355626
CLJ-DWS-021	2/24/94	DRUM COMP. (DRUM #021)	137078	ASC	JM4102	II	615277	5927355626

Camp Lejeune 15226

SAMPLE SUMMARY REPORT

SAMPLE NUMBER	SAMPLE DATE	SAMPLE LOCATION	COC NUMBER	LAB ID	LAB SAMPLE ID	DQO LEVEL	PACKAGE ID	AIRBILL NUMBER
CLJ-DWS-022	2/24/94	DRUM COMP. (DRUM #022)	137078	ASC	JM4103	II	615278	5927355626
CLJ-DWS-023	2/24/94	DRUM COMP. (DRUM #023)	137078	ASC	JM4104/4105	II	615278	5927355626
CLJ-DWS-024	2/24/94	DRUM COMP. (DRUM #024)	137078	ASC	JM4106	II	615278	5927355626
CLJ-DWS-025	2/24/94	DRUM COMP. (DRUM #025)	137078	ASC	JM4107	II	615278	5927355626
CLJ-DWS-026	2/24/94	DRUM COMP. (DRUM #026)	137078	ASC	JM4108	II	615278	5927355626
CLJ-DWS-032	2/24/94	DRUM COMP. (DRUM #032)	137078	ASC	JM4109	II	615278	5927355626
CLJ-DWS-043	2/24/94	DRUM COMP. (DRUM #043)	137078	ASC	JM4110	II	615278	5927355626
CLJ-DWS-043d	2/24/94	DRUM COMP. (DRUM #043)	137078	ASC	JM4111	II	615278	5927355626
CLJ-DWS-063	2/24/94	DRUM COMP. (DRUM #063)	137078	ASC	JM4112	II	615278	5927355626
CLJ-DWS-072	2/24/94	DRUM COMP. (DRUM #072)	137077	ASC	JM4113	II	615278	5927355626
CLJ-DWS-072d	2/24/94	DRUM COMP. (DRUM #072)	137077	ASC	JM4114	II	615278	5927355626
CLJ-DWS-074	2/24/94	DRUM COMP. (DRUM #074)	137077	ASC	JM4115	II	615278	5927355626
CLJ-DWS-076	2/24/94	DRUM COMP. (DRUM #076)	137077	ASC	JM4116	II	615278	5927355626
CLJ-DWS-077	2/24/94	DRUM COMP. (DRUM #077)	137077	ASC	JM4117	II	615278	5927355626
CLJ-DWS-078	2/24/94	DRUM COMP. (DRUM #078)	137077	ASC	JM4118	II	615278	5927355626
CLJ-DWS-079	2/24/94	DRUM COMP. (DRUM #079)	137077	ASC	JM4119	II	615278	5927355626
CLJ-DWS-080	2/24/94	DRUM COMP. (DRUM #080)	137077	ASC	JM4120	II	615278	5927355626
CLJ-DWS-099	2/24/94	DRUM COMP. (DRUM #099)	137077	ASC	JM4121	II	615278	5927355626

OHM Corporation

CHAIN-OF-CUSTODY RECORD

SFER 2

Form 0019
Field Technical Services
Rev. 08/89

137075

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME	PROJECT LOCATION
[illegible] LEJEUNE	JACKSONVILLE NC.

PROJ. NO.	PROJECT CONTACT	PROJECT TELEPHONE NO.
15226	W. PERRY	910-451-1809

CLIENT'S REPRESENTATIVE	PROJECT MANAGER/SUPERVISOR
J. Cotton	J. Sheppard

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS): COMPATABILITY TEST

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	COMPATABILITY TEST								REMARKS
1	CLJ-DWS-001	2/24	0800	✓		Drum # 001	1x 8oz	X								
2	CLJ-DWS 002	2/24	0800	✓		Drum # 002	1x 8oz	X								
3	CLJ-DWS #003	2/24	0800	✓		Drum # 003	1x 8oz	X								
4	CLJ-DWS #004	2/24	0800	✓		Drum # 004	1x 8oz.	X								
5	CLJ-DWS #005	2/24	0800	✓		Drum # 005	1x 8oz.	X								
6	CLJ-DWS #005 D	2/24	0800	✓		Drum #005 Duplicate	1x 8oz	X								
7	CLJ-DWS #006	2/24	0800	✓		Drum #006	1x 8oz.	X								
8	CLJ-DWS #007	2/24	0800	✓		Drum #007	1x 8oz.	X								
9	CLJ-DWS #008	2/24	0800	✓		Drum #008	1x 8oz	X								
10	CJJ-DWS #009	2/24	0800	✓		Drum # 009	1x 8oz.	X								

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-~~16~~ 9	[signature] 1289	Fed Exp. 5927355626	2/24	1700
2					
3					
4					

REMARKS

Drum samples are composites of all drums found within overpack.

See attached drum logs for greater detail (9 pages).

SAMPLER'S SIGNATURE

[signature] 1289

OHM Corporation

CHAIN-OF-CUSTODY RECORD

NSFER 1

Form 0019
Field Technical Services
Rev. 08/89

137076

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME	Camp Lejeune
PROJECT LOCATION	Jacksonville, NC
PROJ. NO.	15226
PROJECT CONTACT	W. Perry
PROJECT TELEPHONE NO.	910-451-1809
CLIENT'S REPRESENTATIVE	J. Cotton
PROJECT MANAGER/SUPERVISOR	J. Sheppard

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS): Compatability Test

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	Compatability Test							REMARKS
1	CLJ-DWS-010	2/24	0800	X		Drum #10	1x8oz	X							
2	CLJ-DWS-011	2/24	0800	X		Drum #11	1x8oz	X							
3	CLJ-DWS-012	2/24	0800	X		Drum #12	1x8oz	X							
4	CLJ-DWS-013	2/24	0800	X		Drum #13	1x8oz	X							
5	CLJ-DWS-014	2/24	0800	X		Drum #14	1x8oz	X							
6	CLJ-DWS-015	2/24	0800	X		Drum #15	1x8oz	X							
7	CLJ-DWS-017	2/24	0800	X		Drum #17	1x8oz	X							
8	CLJ-DWS-018	2/24	0800	X		Drum #18	1x8oz	X							
9	CLJ-DWS-019	2/24	0800	X		Drum #19	1x8oz	X							
10	CLJ-DWS-020	2/24	0800	X		Drum #20	1x8oz	X							

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-10	[signature] 1789	FED EX [illegible]	2/24	1700
2					
3					
4					

REMARKS

Drum samples are composites of all drums found within [illegible]

See attached Drum [illegible] detail. (10 pp).

SAMPLER'S SIGNATURE

[signature]

OHM Corporation

CHAIN-OF-CUSTODY RECORD

SFER 1

Form 0019
Field Technical Services
Rev. 08/89

137077

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: [illegible] Tiere
PROJECT LOCATION: Trenton Ville NC
PROJ. NO.: 15276
PROJECT CONTACT: [illegible]
PROJECT TELEPHONE NO.: 410-451-1819
CLIENT'S REPRESENTATIVE: J. T. [illegible]
PROJECT MANAGER/SUPERVISOR: J. Shepard

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS): Nonpotability Test; VOA; ~~[illegible]~~; LST/TCP; CVD; ~~[illegible]~~; [illegible]; [illegible]; Liquid Toxicity (96 hr. Mod. [illegible])

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	Nonpotability Test	VOA	LST/TCP	CVD	[illegible]	[illegible]	[illegible]	Liquid Toxicity (96 hr. Mod. [illegible])	REMARKS
1	LJ-DWS-072	2/24	0800	X		Drum # 72	1x8oz	X								
2	LJ-DWS-072d	2/24	0800	X		Drum # 72 (Duplicate)	1x8oz	X								
3	LJ-DWS-074	2/24	0800	X		Drum # 74	1x8oz	X								
4	LJ-DWS-76	2/24	0800	X		Drum # 76	1x8oz	X								
5	LJ-DWS-77	2/24	0800	X		Drum # 77	1x8oz	X								
6	LJ-DWS-078	2/24	0800	X		Drum # 78	1x8oz	X								
7	LJ-DWS-079	2/24	0800	X		Drum # 79	1x8oz	X								
8	LJ-DWS-080	2/24	0800	X		Drum # 80	1x8oz	X								
9	LJ-DWS-099	2/24	0800	X		Drum # 99	1x8oz	X								
10	LJ-TB-01	2/24	0800	X		Coolers & grease cutter from [illegible]	1x[illegible]		X	X	X	X	X	X	X	

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-10	[illegible]	[illegible]	2/24	[illegible]
2					
3					
4					

REMARKS: Drum samples are composites of all drums and water samples. See attached Drum log & sampler [illegible] (8 pages)

SAMPLER'S SIGNATURE: [illegible]

OHM Corporation

NSFER 1

CHAIN-OF-CUSTODY RECORD

Form 0019
Field Technical Services
Rev. 08/89

137078

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME	PROJECT LOCATION

PROJ. NO.	PROJECT CONTACT	PROJECT TELEPHONE NO.

CLIENT'S REPRESENTATIVE	PROJECT MANAGER/SUPERVISOR

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS									REMARKS
1				✓				✓								
2				✓				✓								
3				✓				✓								
4				✓				✓								
5				✓				✓								
6				✓				✓								
7				✓				✓								
8				✓				✓								
9				✓				✓								
10				✓				✓								

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				3/24	
2					
3					
4					

REMARKS

SAMPLER'S SIGNATURE

Analytical Services Corp.

Drum Samples after PCB check by GC/MS

ANALYTICAL REPORT

REVISED 05/26/94

Client: OHM Remediation Services Corporation
Southern Region (Morrisville, NC)

Attn: Kent Geis
Bill Perry

Project: 15226N - NEESA; Camp Lejeune, Jacksonville, NC

Sample Type(s): Drums

Analysis Performed: Compatibility Testing

Date Sample Received: February 25, 1994

Date Order Received: February 25, 1994

Joblink(s): 615277 and 615278

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. Analytical Services Corporation assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: T E Gran *Date:* 5/27/94

Thomas E. Gran, Ph.D., Vice President

16406 U.S. Route 224 East ■ P.O. Box 1404 ■ Findlay, Ohio 45839-1404 ■ 419-423-3526

PROJECT NARRATIVE

The following items relate to the samples and analytical data contained in this report.

- All sample results are reported on an as received "wet weight" basis.
- Note any and all comments at the bottom of the tables in Appendix C.
- **ASC** will retain samples for a maximum of thirty (30) days after completion of the analysis, samples will be held for a longer period of time, if appropriate arrangements are made in advance. A nominal disposal charge of $5.00/ sample will be imposed for unreturned samples.

Reason for Revision:

- This report was revised to edit the PCB screen results. Elevated detection limits had been reported for some samples for the PCB's analysis due to matrix interferences on the GC.

APPENDIX A

COMPATIBILITY TABLES
SORTED IN DRUM NUMBER ORDER

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4078	CLJ-DWS-01	OS	1	Solid	BROWN	PS	-	6	PS	-	-	-	-	-	-	-
JM4079	CLJ-DWS-02	OS	1	Solid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-
JM4080	CLJ-DWS-03	OS	1	Solid	BROWN/YELL	PS	-	6	PS	-	-	-	-	-	-	-
JM4081	CLJ-DWS-04	OS	1	Solid	BLACK	IH	-	6	S	-	-	-	-	-	-	-
JM4082	CLJ-DWS-05	COS	1	Solid	BROWN/WHT	IH	-	6	PS	-	-	-	-	+	-	-
JM4084	CLJ-DWS-06	COS	1	Solid	BRWN/MULTI	PS	-	6	PS	-	-	-	-	+	-	-
JM4085	CLJ-DWS-07	O	1	Liquid	BROWN	PS	-	6	PS	-	-	-	-	-	-	-
JM4086	CLJ-DWS-08	OS	1	Solid	BROWN	PS	-	6	PS	-	-	-	-	-	-	-
JM4087	CLJ-DWS-09	COS	1	Sludge	GREEN/BRWN	PS	-	6	PS	-	-	-	-	+	-	-
JM4088	CLJ-DWS-10	COS	1	Solid	TAN	IH	-	6	PS	-	-	-	-	+	-	-
JM4089	CLJ-DWS-11	COS	1	Solid	BROWN	PS	-	6	PS	-	-	-	-	+	-	-
JM4090	CLJ-DWS-12	XCOS	1	Solid	BROWN	PS	-	6	PS	-	+	-	-	+	-	-
JM4091	CLJ-DWS-13	COS	1	Sludge	BROWN	PS	-	6	PS	-	-	-	-	+	-	-
JM4092	CLJ-DWS-14	OS	1	Solid	BROWN	PS	-	6	PS	-	-	-	-	-	-	-
JM4093	CLJ-DWS-15	XOS	1	Solid	WHITE	PS	-	6	PS	-	+	-	-	-	-	-
JM4094	CLJ-DWS-17	BN	1	Liquid	BROWN	S	-	6	I	-	-	-	-	-	-	-
JM4095	CLJ-DWS-18	OS	1	Solid	BROWN	IH	-	6	PS	-	-	-	-	-	-	-
JM4096	CLJ-DWS-19	OS	1	Solid	BLUE	PS	-	6	PS	-	-	-	-	-	-	-
JM4097	CLJ-DWS-20	BS	1	Solid	GREY	PS	-	12	I	-	-	-	-	-	-	-
JM4102	CLJ-DWS-21	OS	1	Solid	WHT/BRN/BL	PS	-	7	PS	-	-	-	-	-	-	-
JM4103	CLJ-DWS-22	OS	1	Solid	MULTI	PS	-	7	PS	-	-	-	-	-	-	-
JM4106	CLJ-DWS-24	OS	1	Solid	BL/BRN/WHT	PS	-	6	PS	-	-	-	-	-	-	-
JM4107	CLJ-DWS-25	OS	1	Solid	MULTI	IH	-	6	PS	-	-	-	-	-	-	-
JM4108	CLJ-DWS-26	OS	1	Solid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-
JM4109	CLJ-DWS-32	OS	1	Solid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-
JM4110	CLJ-DWS-43	OS	1	Solid	BLACK	IH	-	6	PS	-	-	-	-	-	-	-
JM4083	CLJ-DWS-5D	COS	1	Solid	TAN	IH	-	5	S	-	-	-	-	+	-	-
JM4112	CLJ-DWS-63	COS	1	Solid	WHITE/TAN	PS	-	7	PS	-	-	-	-	+	-	-
JM4113	CLJ-DWS-72	COS	1	Solid	WHITE/TAN	PS	-	7	S	-	-	-	-	+	-	-
JM4115	CLJ-DWS-74	FOS	1	Solid	BLACK	IL	-	7	S	-	-	-	-	-	+	-
JM4116	CLJ-DWS-76	FCOS	1	Gel	WHITE/TAN	PS	-	7	PS	-	-	-	-	+	+	-
JM4117	CLJ-DWS-77	COS	1	Solid	WHITE/BLK	IH	-	7	PS	-	-	-	-	+	-	-
JM4118	CLJ-DWS-78	COS	1	Gel	TAN/ORANGE	PS	-	6	PS	-	-	-	-	+	-	-
JM4119	CLJ-DWS-79	COS	1	Gel	BLACK	IH	-	5	PS	-	-	-	-	+	-	-
JM4120	CLJ-DWS-80	FOS	1	Sludge	BLACK	PS	-	7	PS	-	-	-	-	-	+	-
JM4121	CLJ-DWS-99	BN	1	Liquid	COLORLESS	S	-	7	I	-	-	-	-	-	-	-
JM4111	CLJDWS-43D	FOS	1	Sludge	BROWN	PS	-	6	S	-	-	-	-	-	+	-
JM4104	CLJDWS23.1	BN	1	Liquid	COLORLESS	S	-	6	I	-	-	-	-	-	-	-
JM4105	CLJDWS23.2	OS	2	Solid	BROWN	IH	-	6	PS	-	-	-	-	-	-	-
JM4114	CLJDWS72D	COS	1	Solid	TAN	PS	-	7	PS	-	-	-	-	+	-	-

COMPATIBILITY LEGENDS

Categories

BN	=	Base/Neutral liquid
BS	=	Base solid
COS	=	Chlorinated organic solid
FCOS	=	Flammable Chlorinated organic solid
FOS	=	Flammable organic solid
O	=	Organic liquid
OS	=	Organic solid
XCOS	=	Oxidizing Chlorinated organic solid
XOS	=	Oxidizing organic solid

Water/Hexane Soluble

I	=	Insoluble
IH	=	Insoluble heavy
IL	=	Insoluble light
PS	=	Partially soluble
S	=	Soluble

General

N/A	=	Test not applicable
-	=	Negative Test
+	=	Positive Test

APPENDIX B

COMPATIBILITY TABLES
SORTED BY COMPATIBILITY CATEGORIES

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4094	CLJ-DWS-17	BN	1	Liquid	BROWN	S	-	6	I	-	-	-	-	-	-	-
JM4121	CLJ-DWS-99	BN	1	Liquid	COLORLESS	S	-	7	I	-	-	-	-	-	-	-
JM4104	CLJDWS23.1	BN	1	Liquid	COLORLESS	S	-	6	I	-	-	-	-	-	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4097	CLJ-DWS-20	BS	1	Solid	GREY	PS	-	12	I	-	-	-	-	-	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4082	CLJ-DWS-05	COS	1	Solid	BROWN/WHT	IH	-	6	PS	-	-	-	-	+	-	-
JM4084	CLJ-DWS-06	COS	1	Solid	BRWN/MULTI	PS	-	6	PS	-	-	-	-	+	-	-
JM4087	CLJ-DWS-09	COS	1	Sludge	GREEN/BRWN	PS	-	6	PS	-	-	-	-	+	-	-
JM4088	CLJ-DWS-10	COS	1	Solid	TAN	IH	-	6	PS	-	-	-	-	+	-	-
JM4089	CLJ-DWS-11	COS	1	Solid	BROWN	PS	-	6	PS	-	-	-	-	+	-	-
JM4091	CLJ-DWS-13	COS	1	Sludge	BROWN	PS	-	6	PS	-	-	-	-	+	-	-
JM4083	CLJ-DWS-5D	COS	1	Solid	TAN	IH	-	5	S	-	-	-	-	+	-	-
JM4112	CLJ-DWS-63	COS	1	Solid	WHITE/TAN	PS	-	7	PS	-	-	-	-	+	-	-
JM4113	CLJ-DWS-72	COS	1	Solid	WHITE/TAN	PS	-	7	S	-	-	-	-	+	-	-
JM4117	CLJ-DWS-77	COS	1	Solid	WHITE/BLK	IH	-	7	PS	-	-	-	-	+	-	-
JM4118	CLJ-DWS-78	COS	1	Gel	TAN/ORANGE	PS	-	6	PS	-	-	-	-	+	-	-
JM4119	CLJ-DWS-79	COS	1	Gel	BLACK	IH	-	5	PS	-	-	-	-	+	-	-
JM4114	CLJDWS72D	COS	1	Solid	TAN	PS	-	7	PS	-	-	-	-	+	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4116	CLJ-DWS-76	FCOS	1	Gel	WHITE/TAN	PS	-	7	PS	-	-	-	-	+	+	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4115	CLJ-DWS-74	FOS	1	Solid	BLACK	IL	-	7	S	-	-	-	-	-	+	-
JM4120	CLJ-DWS-80	FOS	1	Sludge	BLACK	PS	-	7	PS	-	-	-	-	-	+	-
JM4111	CLJDWS-43D	FOS	1	Sludge	BROWN	PS	-	6	S	-	-	-	-	-	+	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4085	CLJ-DWS-07	0	1	Liquid	BROWN	PS	-	6	PS	-	-	-	-	-	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4078	CLJ-DWS-01	OS	1	Solid	BROWN	PS	-	6	PS	-	-	-	-	-	-	-
JM4079	CLJ-DWS-02	OS	1	Solid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-
JM4080	CLJ-DWS-03	OS	1	Solid	BROWN/YELL	PS	-	6	PS	-	-	-	-	-	-	-
JM4081	CLJ-DWS-04	OS	1	Solid	BLACK	IH	-	6	S	-	-	-	-	-	-	-
JM4086	CLJ-DWS-08	OS	1	Solid	BROWN	PS	-	6	PS	-	-	-	-	-	-	-
JM4092	CLJ-DWS-14	OS	1	Solid	BROWN	PS	-	6	PS	-	-	-	-	-	-	-
JM4095	CLJ-DWS-18	OS	1	Solid	BROWN	IH	-	6	PS	-	-	-	-	-	-	-
JM4096	CLJ-DWS-19	OS	1	Solid	BLUE	PS	-	6	PS	-	-	-	-	-	-	-
JM4102	CLJ-DWS-21	OS	1	Solid	WHT/BRN/BL	PS	-	7	PS	-	-	-	-	-	-	-
JM4103	CLJ-DWS-22	OS	1	Solid	MULTI	PS	-	7	PS	-	-	-	-	-	-	-
JM4106	CLJ-DWS-24	OS	1	Solid	BL/BRN/WHT	PS	-	6	PS	-	-	-	-	-	-	-
JM4107	CLJ-DWS-25	OS	1	Solid	MULTI	IH	-	6	PS	-	-	-	-	-	-	-
JM4108	CLJ-DWS-26	OS	1	Solid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-
JM4109	CLJ-DWS-32	OS	1	Solid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-
JM4110	CLJ-DWS-43	OS	1	Solid	BLACK	IH	-	6	PS	-	-	-	-	-	-	-
JM4105	CLJDWS23.2	OS	2	Solid	BROWN	IH	-	6	PS	-	-	-	-	-	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4090	CLJ-DWS-12	XCOS	1	Solid	BROWN	PS	-	6	PS	-	+	-	-	+	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4093	CLJ-DWS-15	XOS	1	Solid	WHITE	PS	-	6	PS	-	+	-	-	-	-	-

APPENDIX C

COMPATIBILITY COMMENTS
SORTED BY DRUM NUMBER ORDER

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Sample Number	Comments
CLJDWS-43D	CONFIRMED FLASHPOINT.

APPENDIX D

QUALITY ASSURANCE DATA

SUMMARY OF ANALYTICAL METHODOLOGY

Parameter	Reference	Method
Conventionals		
Solubility	N/A	N/A
pH, Test Strip	SW-846	9041
Peroxide Screen	N/A	Test Strip
Oxidizer Screen	STOA	N/A
Cyanide Screen	STOA	N/A
Sulfide Screen	STOA	N/A
Beilstein Test	STOA	N/A
Flash Point, Seta-Flash	SW-846	1020
Organics		
Polychlorinated Biphenyls (PCBs) Screen	SW-846	8080

METHODOLOGY REFERENCES

ASTM	*American Society for Testing and Materials*, 1985 edition.
CAWW	*Methods for Chemical Analysis of Water and Wastes*, April 1979 and Updated #1 March 1983.
CLP	*USEPA Contract Laboratory Program*, Document #OLMO1.0, updates December 1990 #OLMO1.1 and February 1991 #OLMO1.1.1.
NIOSH	*National Instituted for Occupational Safety and Health*, 3rd edition, 1984.
SMEWW	*Standard Methods for the Examination of Water and Wastewater*, 17th edition, 1989.
STOA	*Spot Tests In Organic Analysis*, 7th edition, 1966.
SW-846	*Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, 3rd edition, September 1986 and Updated #1 January 1989.
(1)	This method was modified to incorporate the use of Boron Trifluoride (BF3) as the derivatizing reagent according to Method 509B in *SMEWW*, 17th edition, 1989.
Title 22	*Waste Extraction Test*, Title 22, Section 66261.126 Appendix 2 of the California Administrative Code, May 1991.

APPENDIX E

CHAIN-OF-CUSTODY RECORD(S)
AND
PROJECT INFORMATION SHEET(S)

DRUM NO. 001

PROJECT INFORMATION

PROJECT LOCATION Camp LeJeune PROJECT NUMBER 15226

PROJECT CONTACT William Perry PHONE 910-451-1809

LOGGER Susan Montrie SAMPLER Michael Wiellz

WEATHER Cloudy 38°-40° DATE ~~JAN~~ Feb 31, 1994 TIME 1530

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			*			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7-7 SU PID 40-70 ppm

DOSIMETER < 3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * Color varies - Black, Yellow, Green

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 05

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL. S OR I	PER.	OXID.	CN	SUL	BIEL-STEIN	FLASH POINT: <60°C	PCBs (25 ppm)	PCB TEST COMP.
					USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL. S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUMBER
TOP		Y			Brown	OP	PS	—	6	PS	—	—	—	—	—	—	—	
MIDDLE		Y																
BOTTOM		Y																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTP Data Review Date: 3/23/94

Field Reviewer: ____ Field Review Date: ____

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The Environmental Services Company

DRUM NO. 002

PROJECT INFORMATION

PROJECT LOCATION CAMP LeJeune PROJECT NUMBER 15226

PROJECT CONTACT William Perry PHONE 910-451-1809

LOGGER Susan Montrie SAMPLER Michael Wells

WEATHER Cloudy 38°-41° DATE ~~Jan~~ Feb 31, 1994 TIME 1530

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			☆			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7-7 SU PID 120-100 ppm

DOSIMETER <-3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ☆ Color varies - Brown, Tan, Black

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. DS

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX. SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP		X			Black	OP	PS	-	6	PS	-	-	-	-	-	-	-	
MIDDLE		X																
BOTTOM		X																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: MW Data Review Date: 3/23/94

Field Reviewer: ____ Field Review Date: ____

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The Environmental Services Company

DRUM NO. 008

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT William Perry PHONE (910)-451-1809

LOGGER Susan Moutrie SAMPLER Michael Wells

WEATHER Cloudy 38-41° DATE ~~FAB~~ FEB 1 1994 TIME 1530

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			☆			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7-7 SU PID 120-130 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ☆ COLOR VARIES - YELLOW, BROWN

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. DS

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER. ◆ OR -	COND. ◆ OR -	CN ◆ OR -	SUL ◆ OR -	BIEL-STEIN ◆ OR -	FLASH POINT <60°C ◆ or -	PCBs (25 ppm) ◆ OR -	PCB TEST COMP. NUMBER
TOP		X			Brown Yellow	OP	SED ~~IA~~ PS	-	6	PS	-	-	-	-	-	-	-	
MIDDLE		X																
BOTTOM		X																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: NW Data Review Date: 3/23/94

Field Reviewer: ____ Field Review Date: ____

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DRUM NO. OCT

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910) - 451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER CLOUDY 38°-41° DATE ~~JAN~~ FEB 01 1994 TIME 1530

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			☆			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7-7 SU PID 90 - 100 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ☆ COLOR VARIES - BLACK, BROWN

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 05

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER: + OR -	OXID: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <100°C + OR -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP		X			Black	OP	IH	—	6	S	—	—	—	—	—	—	—	
MIDDLE		X																
BOTTOM		X																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD Data Review Date: 3/23/94

Field Reviewer: ____ Field Review Date: ____

DRUM NO. 000

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910)-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER CLOUDY 38°-41° DATE FEB 1994 TIME 1530

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			☆			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7-7-7-7-7 SU PID <1<1<1<1 15 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ☆ COLOR VARIES - WHITE, BROWN, ORANGE

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ ~~GAS~~ CO

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER. + OR -	COND. + OR -	CN + OR -	SUL + OR -	BIEL-STEIN + OR -	FLASH POINT <60°C + or -	PCBs (25 ppm) + OR -	PCB TEST COMP. NUMBER
TOP		x			Brown & white	OP	IH	—	6	PS	—	—	—	—	+	—	+ 5000ppm	
MIDDLE		x												No PCBs Confirmed by GC/MS				
BOTTOM		x																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WMD Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

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OHM Corporation

DRUM INVENTORY LOG

DRUM NO. CLJ-DWS-SD
PROJECT NUMBER 15226N
PAGE _____ OF _____

PROJECT LOCATION _____ LOGGER _____ DATE _____
PROJECT CONTACT _____ SAMPLER _____ TIME _____
PHONE _____ WEATHER _____

Drum Type: FIBER ☐ STEEL ☐ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ PINTOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEET DOT SPEC. ☐ GOOD ☐ FAIR ☐ POOR ☐

Drum Size: 85 ☐ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ☐

DRUM CONTENTS: AMOUNT FULL ☐ 3/4 ☐ 1/2 ☐ 1/4 ☐ <1/4 ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	NOTES
T									
M									
B									

FIELD ANALYSIS

pH _____ SU PID _____ ppm
COS METER _____
OTHER _____

DRUM LABELS MARKINGS

DOT HAZ _____ UN/NA _____

MFG NAME _____
CHEMICAL NAME _____
ADDITIONAL INFORMATION _____

LABORATORY COMPATABILITY DATA

☐ MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.

COMPATABILITY CAT: ~~COS-PCBS~~ TWK COS
ANALYSTS: TW
DATE PERFORMED: 3-31-94

RADIATION: POS ☐ NEG ☐ ____ MREM/HR

	PHYS. STATE				COLOR	CLARITY			WATER SOL	REACT	pH	HEX. SOL	PER OXID		CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25ppm)	PCB TEST COMP
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	SOLUBILITY SPSI DENSITY H OR L	A=AIR W=WATER	STD. UNIT	S OR I	+ OR −	+ OR −	+ OR −	+ OR −	+ OR −	<60°C + OR −	+ OR −	NUMBER
T		X			TAN			X	IH	—	5	S	—	—	—	—	+	—	+ 5000ppm	
M																	No PCBs			
B																	Confirmed by GC/MS			

COMMENTS: CONFIRMED BIELSTEIN - TW

PCB CONC. _____ PPM FLASH POINT _____ °C COMPATABILITY COMP. BULK # _____
DATA REVIEWER: _____ DATA REVIEW DATE: _____
FIELD REVIEWER: _____ FIELD REVIEW DATE: _____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
2				
3				

F-212 10-10-90

DRUM NO. 006

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910)-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER CLOUDY 38°-41° DATE FEB 11 1994 TIME 1530

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			☆			X	24
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7-7-7-7 SU PID <1,<1,<1,40 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ☆ COLOR VARIES - ORANGE, GRAY, BLACK, TAN, WHITE

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~COS~~ COS ~~PCBS INR~~

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL S OR I	PER. + OR -	COND. + OR -	CN + OR -	SUL + OR -	SIEL-STEIN + OR -	FLASH POINT <60°C + OR -	PCBs (25 ppm) + OR -	PCB TEST COMP. NUMBER
TOP		X			multi colors Brown	OP	PS	-	6	PS	-	-	-	-	+	-	+ 500 ppm LOD	
MIDDLE		X												No	PCBs			
BOTTOM		X													Confirmed			by GC/MS

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MLK Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

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DRUM NO. 001

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910)-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER CLOUDY 38°-41° DATE ~~JAN~~ FEB 1, 1994 TIME 1530

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD COLORS)	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS (INCHES)
T		X			*			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7 SU PID ~~<1~~ <1 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * COLOR VARIES - BLACK, TAN, BROWN

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for. Shake Sample well

COMPATABILITY CAT. 0

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD. COLOR)	CLARITY (CLEAR, CLOUDY, OPAQUE)	WATER SOL (SOLUBILITY S, PS, I DENSITY H OR L)	REACT (A - AIR W - WATER)	pH (STP UNIT)	HEX SOL (SOL S OR I)	PER. (+ OR -)	OXID. (+ OR -)	CN (+ OR -)	SUL (+ OR -)	BIEL-STEIN (+ OR -)	FLASH POINT (<60°C +or-)	PCBs (25 ppm) (+ OR -)	PCB TEST COMP. (NUMBER)
TOP	X	SP / X			Brown	opaque ~~Brown~~ SD	PS	-	6	PS	-	-	-	-	-	-	-	
MIDDLE	Y	SP / X																
BOTTOM	Y	SP / X																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WDD / MK Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 008

PROJECT INFORMATION

PROJECT LOCATION Camp Lejeune PROJECT NUMBER 15226

PROJECT CONTACT William Perry PHONE 910-451-1809

LOGGER Susan Montrie SAMPLER Michael Wells

WEATHER Cloudy 38-41° DATE FEB 1, 1994 TIME 1530

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			★			X	7
M		X						X	36
B		X						X	

FIELD ANALYSIS

pH 7-7 SU PID 80-120 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ★ Color varies - Green Gray, Brown

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 05

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX. SOL: SOL. S OR I	PER.	OXID.	CN	SUL	BIEL-STEIN	FLASH POINT <60°C	PCBs (25 ppm)	PCB TEST COMP.
											+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	+ or -	+ OR -	NUMBER
TOP		X			Brown	OP	PS	—	6	PS	—	—	—	—	—	—	—	
MIDDLE		X																
BOTTOM		X																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: UTD Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 009

PROJECT INFORMATION

PROJECT LOCATION CAMP LeJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE 910-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER CLOUDY 38°-41° DATE FEB 01 1994 TIME 1530

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			☆			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7 SU PID <1 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ☆ COLOR VARIES - GREEN, BROWN

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ ~~COS~~ COS

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER. + OR -	COND. + OR -	CN + OR -	SUL + OR -	BIEL-STEIN + OR -	FLASH POINT <60°C + or -	PCBs (25 ppm) + OR -	PCB TEST COMP. NUMBER
TOP	SD	X		X	Green Brown	OP	PS	–	6	PS	–	–	–	–	+	–	+ 5000 ppm LO	
MIDDLE		X		X												No PCBs Confirmed GC/MS		
BOTTOM		X		X		mixed	Sample	befor	testing.									

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WYD/MK Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 000

PROJECT INFORMATION

PROJECT LOCATION CAMP LE JUNE PROJECT NUMBER 15226
PROJECT CONTACT WILLIAM PERRY PHONE (910) - 451-1809
LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS
WEATHER SUNNY DATE FEB 2 1994 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			*			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7 SU PID ~~30,3,50,3,<1~~ ppm
DOSIMETER <3 mrem/hr
OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____
CHEMICAL NAME ____
ADDITIONAL INFORMATION * COLOR VARIES - TAN, WHITE, BROWN, GRAY

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ ~~LOS~~ CC
ANALYSTS: SEN
DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER. + OR -	OXID. + OR -	CN + OR -	SUL + OR -	BIEL-STEIN + OR -	FLASH POINT <60°C + OR -	PCBs (GC ppm) + OR -	PCB TEST COMP. NUMBER
TOP		+			TAN	OP	IH	—	6	PS	—	—	—	—	+	—	+ 10,000ppm	
MIDDLE		+												No PCBs				
BOTTOM		+													Confirmed			GC/MS

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____
Data Reviewer: WTD/MM Data Review Date: 3/24/94
Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 8011

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226
PROJECT CONTACT WILLIAM PERRY PHONE (910) - 451-1809
LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS
WEATHER SUNNY DATE FEB 2 1994 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			*			X	2
M		X						X	36
B		X						X	1

FIELD ANALYSIS
pH 7, 5, 5 SU PID <1, <1, 1 ppm
DOSIMETER < 3 mrem/hr
OTHER ____

DRUM LABELS/MARKINGS
DOT HAZ ____ UN/NA ____

MFG NAME ____
CHEMICAL NAME ____
ADDITIONAL INFORMATION * COLOR VARIES - GREEN, BROWN, TAN

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ ~~COS~~ CO
ANALYSTS: SED
DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER. OR -	COND. OR -	CN OR -	SUL OR -	BIEL-STEIN OR -	FLASH POINT <60°C OR -	PCBs GC ppm OR -	PCB TEST COMP. NUMBER
TOP		+			Brown	OP	PS	—	6	PS	—	—	—	—	+	—	+ 500ppm LO	
MIDDLE		+													No PCBs Confirmed			GC/MS
BOTTOM		+																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____
Data Reviewer: WTD/MW Data Review Date: 3/24/94
Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 8016

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUNE PROJECT NUMBER 15226
PROJECT CONTACT WILLIAM PERRY PHONE (910)-451-1809
LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS
WEATHER SUNNY DATE FEB 2 1994 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			☆			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7, 6, 6, 7 SU PID <1 ppm
DOSIMETER <3 mrem/hr
OTHER

DRUM LABELS/MARKINGS

DOT HAZ UN/NA

MFG NAME
CHEMICAL NAME
ADDITIONAL INFORMATION ☆ COLOR VARIES - YELLOW, TAN, WHITE, BLACK.

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ ~~XCOS~~ XCC
ANALYSTS: SED
DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.	REACT	pH	HEX SOL.	PER.	COOD.	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (GC ppm)	PCB TEST COMP.
							SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + OR -	+ OR -	NUMBER
TOP		✓			Brown	OP	PS	-	6	PS	—	+	—	—	+	—	+ 500 ppm LOD	
MIDDLE		✓												No	PCBs			
BOTTOM		✓													CONFIRMED GC/MS			

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____
Data Reviewer: WD Data Review Date: 3/24/94
Field Reviewer: Field Review Date:

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 5012

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910)-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY DATE FEB 2 1994 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			☆			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 6, 7, 7 SU PID <1.5 <1 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ☆ COLOR VARIES - BROWN, GRAY, WHITE

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ ~~COS~~ COS

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP	SD	X		X	Brown	OP	PS	-	6	PS	-	-	-	-	+	-	+	5000 ppm LC
MIDDLE		X		P										No PCB				
BOTTOM		X		P											CONFIRMED			GC/MS

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MR Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 2014

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910) - 451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY DATE FEB 2 1994 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			*			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7 SU PID <1 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * - COLOR VARIES - GRAY, BROWN, WHITE, BLACK

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ ~~05~~ 05

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER: + OR -	OXID: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP. NUMBER
TOP		X			Brown	OP	PS	–	6	PS	–	–	–	–	–	–	+ 500 ppm UC	
MIDDLE		X												No PCB				
BOTTOM		X													Confirmed			GC/MS

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WYD/MK Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM I.D. 0015

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910) - 451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY DATE FEB 2 1994 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			*			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7,7,7,7 SU PID <1,<1,<1,80 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * COLOR VARIES - WHITE, BROWN, BLACK, GREEN

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. X05

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL S OR I	PER. + OR -	COND. + OR -	CN + OR -	SUL + OR -	SIEL-STEIN + OR -	FLASH POINT <60°C + OR -	PCBs (25 ppm) + OR -	PCB TEST COMP. NUMBER
TOP		✓			White	op	PS	–	6	PS	–	+	–	–	–	–	–	
MIDDLE		✓																
BOTTOM		✓																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD | MR Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 8017

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910) - 451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY 60°-65° DATE FEB 7 1994 TIME 1630

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T					BROWN				3
M									36
B	X							X	3

FIELD ANALYSIS

pH 7 SU PID 4 ppm

DOSIMETER < 3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. BN

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER. + OR -	OXID. + OR -	CN + OR -	SUL + OR -	BIEL-STEIN + OR -	FLASH POINT <60°C + OR -	PCBs (25 ppm) + OR -	PCB TEST COMP. NUMBER
TOP																		
MIDDLE																		
BOTTOM	+				BRN	Cloudy	S	–	6	I	–	–	–	–	–	–	–	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM I.D. 6010

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJ NE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910)-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY 60°-65° DATE FEB 7 1994 TIME 1630

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			~~COLOR~~ ☆			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER <3 mrem/hr

~~OTHER~~ PID <1, <1, 110, 130, 4, 100, 3, <1, 120, 110

PH - 7, 7, 6, 7, 7, 5, 7, 7, 7.

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ☆ COLOR VARIES - BROWN, BLUE/GREEN, BLACK, GRAY WHITE.

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 05

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX. SOL: SOL S OR I	PER. + OR -	OXID. + OR -	CN + OR -	SUL + OR -	BIEL-STEIN + OR -	FLASH POINT <60°C + OR -	PCBs (25 ppm) + OR -	PCB TEST COMP. NUMBER
TOP		✓			Brown	OP	IH	—	6	PS	—	—	—	—	—	—	—	
MIDDLE		✓																
BOTTOM		✓																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 2011

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT William Perry PHONE (910) - 451-1809

LOGGER Susan Montrie SAMPLER Michael Wells

WEATHER Sunny 60°-65° DATE Feb 7 1994 TIME 1630

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T		X			★			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH ~~7, 7, 5, 7~~ SU PID ~~40, 130, 130, 50~~ ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ★ COLOR VARIES - BROWN WHITE, GRAY, BLACK

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 05

ANALYSTS: SEN

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL	REACT	pH	HEX SOL	PER.	COOD.	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25 ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL. S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUMBER
TOP		X			Blue	OP	PS	-	6	PS	—	—	—	—	—	—	—	
MIDDLE		X																
BOTTOM		X																

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MC Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 8OLC

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910)-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY 60°-65° DATE _____ TIME _____

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER _____

DRUM CONTENTS: AMOUNT FULL ■ ¾ ☐ ½ ☐ ¼ ☒ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			★				36
M		X							
B		X						X	

FIELD ANALYSIS

pH 13 SU PID 4 ppm

DOSIMETER < 3 mrem/hr

OTHER _____

DRUM LABELS/MARKINGS

DOT HAZ _____ UN/NA _____

MFG NAME _____

CHEMICAL NAME _____

ADDITIONAL INFORMATION COLOR VARIES - BLACK, White

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. BS

ANALYSTS: SED

DATE PERFORMED: 3-8-94

RADIATION: POS ☐ NEG ☐ _____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP		+			GREY	OP	PS	-	12	I	-	-	-	-	-	-	-	
MIDDLE		+																
BOTTOM		+																

PCB Conc. _____ PPM Flash Point _____ °C Compatability Comp. Bulk # _____

Data Reviewer: WTD/MW Data Review Date: 3/12/94

Field Reviewer: _____ Field Review Date: _____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 0011

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910)-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY 60°-65° DATE FEB, 7, 1994 TIME 1630

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			*			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7 SU PID 100 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION *COLOR VARIES - WHITE, BROWN, BLACK

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 05

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER. + OR -	OXID. + OR -	CN + OR -	SUL + OR -	BIEL-STEIN + OR -	FLASH POINT <60°C + OR -	PCBs (25 ppm) + OR -	PCB TEST COMP. NUMBER
TOP																		
MIDDLE																		
BOTTOM		X			White Brown Black	op	PS	-	7	PS	-	-	-	-	-	-	-	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD Field Reviewer: ____

Data Review Date: 3/24/94

Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 80L2

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910) - 451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY 60-65° DATE FEB 7 1994 TIME 1630

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD COLORS)	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS (INCHES)
T		X			*			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 9.7 SU PID 30-130 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * COLOR VARIES - WHITE, BLACK, BROWN, GRAY

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. OS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD. COLOR)	CLARITY (CLEAR, CLOUDY, OPAQUE)	WATER SOL (SOLUBILITY S, PS, I DENSITY H OR L)	REACT (A - AIR W - WATER)	pH (STP UNIT)	HEX SOL (SOL S OR I)	PER. (+ OR -)	OXID. (+ OR -)	CN (+ OR -)	SUL (+ OR -)	BIEL-STEIN (+ OR -)	FLASH POINT (<60°C +or-)	PCBs (>50 ppm) (+ OR -)	PCB TEST COMP. (NUMBER)
TOP																		
MIDDLE																		
BOTTOM		X			White Black Brown Gray	OP	~~FH~~ PS	—	7	PS	—	—	—	—	—	—	—	

PCB Conc. ____ PPM Flash Point ____ °C (SED) Compatability Comp. Bulk # ____

Data Reviewer: WTD/MW Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 8013

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT William Perry PHONE (910)-451-1809

LOGGER Susan Montrie SAMPLER Michael Wells

WEATHER Sunny 60-65° DATE Feb 7 1994 TIME 1630

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			☆			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 6, 7, 7 SU PID 4, 7, 80 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ☆ Color varies - Brown, White

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. BN/OS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER. + OR -	OXID. + OR -	CN + OR -	SUL + OR -	BIEL-STEIN + OR -	FLASH POINT <60°C + or -	PCBs (25 ppm) + OR -	PCB TEST COMP.: NUMBER
TOP	X				Clear colorles	clear	S	—	6	I	—	—	—	—	—	—		
MIDDLE	X																	
BOTTOM	X	X			BRN	OP	IH	—	6	PS	—	—	—	—	—	—	—	

STD

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____ two layers

Data Reviewer: WTD/MK Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 0014

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910) - 451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY 60°-65° DATE FEB 7 1994 TIME 1630

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			*			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7.7 SU PID 80.7 ppm

DOSIMETER < 3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * COLOR VARIES - WHITE, GREEN, BLACK, BROWN

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. OS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER: + OR -	OXID: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C +or-	PCBs (GS ppm): + OR -	PCB TEST COMP. NUMBER
TOP																		
MIDDLE																		
BOTTOM		X			Black Brown white	OP	PS	—	6	PS	—	—	—	—	—	—	—	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MK Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 2015

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE (910)-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY 60°-65° DATE FEB 7 1994 TIME 1630

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T		X			*			X	36
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7 SU PID 40 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * COLOR VARIES - BROWN, GREEN, WHITE, BLACK

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. DS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL	REACT	pH	HEX SOL	PER.	OXID.	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25 ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUMBER
TOP																		
MIDDLE																		
BOTTOM		X			Brown Green White Black	OP	FH	–	6	PS	–	–	–	–.	–	–	–	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WAD/MK Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM NO. 026

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montine SAMPLER W. Perry

WEATHER ~~Sunny 80°F~~ (WP) CLOUDY/RAIN 65°F DATE 2/8/94 TIME 1630

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☒

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☒ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			BLK			X	(8")
M		X						X	30
B		X						X	

FIELD ANALYSIS

pH 7 SU PID >5 ppm

DOSIMETER <2 mrem/hr

OTHER PID(+) w/ PLASTIC

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 05

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER. + OR -	COND. + OR -	CN + OR -	SUL + OR -	BIEL-STEIN + OR -	FLASH POINT <60°C + OR -	PCBs (GS ppm) + OR -	PCB TEST COMP. NUMBER
TOP																		
MIDDLE																		
BOTTOM		X			BLK	OP	PS	—	6	PS	—	—	—	—	—	—	—	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WD / WM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

DRUM NO. 032

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJEUNE PROJECT NUMBER 15226

PROJECT CONTACT WILLIAM PERRY PHONE 910-451-1809

LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS

WEATHER SUNNY 80° DATE FEB, 9, 1994 TIME 1600

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T		X			~~BLUE GREEN~~			X	
M		X			BLK			X	36"
B		X						X	

FIELD ANALYSIS

pH 7 SU PID <1 ppm

DOSIMETER <3 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. D5

ANALYSTS: SEN

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL.	REACT	pH	HEX SOL.	PER.	OXID.	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25 ppm)	PCB TES COM
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL. S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUME
TOP																		
MIDDLE																		
BOTTOM		X			BLK	OP	PS	–	6	PS	–	–	–	–	–	–	–	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp/ Bulk # ____

Data Reviewer: WTD / MM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

DRUM NO. 043

PROJECT INFORMATION

PROJECT LOCATION CAMP LeJEUNE PROJECT NUMBER 15226
PROJECT CONTACT WILLIAM PERRY PHONE 910-451-1809
LOGGER SUSAN MONTRIE SAMPLER MICHAEL WELLS
WEATHER SUNNY 80° DATE FEB, 9, 1994 TIME 1600

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			~~Blue/Green~~ up			X	36"
M		X			BLK			X	
B		X						X	

FIELD ANALYSIS

pH 7 SU PID <1 ppm
DOSIMETER <3 mrem/hr
OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____
CHEMICAL NAME ____
ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 05
ANALYSTS: SED
DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER: + OR -	COND: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + OR -	PCBs (25 ppm): + OR -	PCB TES COM: NUMB
TOP																		
MIDDLE																		
BOTTOM		X			BLK	OP	ILT	—	6	PS	—	—	—	—	—	—	—	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____
Data Reviewer: WTD/MM Data Review Date: 3/24/94
Field Reviewer: ____ Field Review Date: ____

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DRUM INVENTORY LOG

DRUM NO. CLUDWS-43D
PROJECT NUMBER 15226N
PAGE _____ OF _____

PROJECT LOCATION _____ LOGGER _____ DATE _____
PROJECT CONTACT _____ SAMPLER _____ TIME _____
PHONE _____ WEATHER _____

Drum Type: FIBER ☐ STEEL ☐ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ PINTOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEET DOT SPEC. ☐ GOOD ☐ FAIR ☐ POOR ☐

Drum Size: 85 ☐ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ☐

DRUM CONTENTS: AMOUNT FULL ☐ 3/4 ☐ 1/2 ☐ 1/4 ☐ <1/4 ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	NOTES
T									
M									
B									

FIELD ANALYSIS

pH _____ SU PID _____ ppm
DOS METER _____
OTHER _____

DRUM LABELS MARKINGS

DOT HAZ _____ UN/NA _____

MFG NAME _____
CHEMICAL NAME _____
ADDITIONAL INFORMATION _____

LABORATORY COMPATABILITY DATA

☐ MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.

COMPATABILITY CAT: FOS
ANALYSTS: TW
DATE PERFORMED: 3-31-94

RADIATION: POS ☐ NEG ☐ ____ MREM/HR

	PHYS. STATE				COLOR	CLARITY			WATER SOL	REACT	pH	HEX. SOL	PER OXID		CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25ppm)	PCB TEST COMP
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	SOLUBILITY SPSI DENSITY H OR L	A=AIR W=WATER	STD. UNIT	S OR I	+ OR −	+ OR −	+ OR −	+ OR −	+ OR −	<60°C + OR −	+ OR −	NUMBER
T				X	BRN			X	PS	—	6	S	—	—	—	—	—	+	—	
M																				
B																				

COMMENTS: CONFIRMED FLASHPOINT-TW

PCB CONC. _____ PPM FLASH POINT _____ °C COMPATABILITY COMP. BULK # _____
DATA REVIEWER: _____ DATA REVIEW DATE: _____
FIELD REVIEWER: _____ FIELD REVIEW DATE: _____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
2				
3				

F-212 10-10-90

DRUM No. 063

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226
PROJECT CONTACT W. Perry PHONE 910-451-1809
LOGGER W. Perry / Susan Montrie SAMPLER W. Perry
WEATHER Sunny - 80°F DATE 2/14/94 TIME 1600

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☒

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☒ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			CONT			X	
M		X						X	30"
B		X						X	

FIELD ANALYSIS
pH 7 SU PID <1 ppm
DOSIMETER <2 mrem/hr
OTHER PINK SOLID W/ PLASTIC

DRUM LABELS/MARKINGS
DOT HAZ ____ UN/NA ____

MFG NAME ____
CHEMICAL NAME ____
ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. COS
ANALYSTS: SED
DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER. + OR -	OXID. + OR -	CN + OR -	SUL + OR -	BEL-STEIN + OR -	FLASH POINT <60°C + or -	PCBs (≥5 ppm) + OR -	PCB TEST COMP. NUMBER
TOP																		
MIDDLE																		
BOTTOM					WHT/ TAN	OP	PS	–	7	PS	–	–	–	–	+	–	–	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____
Data Reviewer: WTD/WM Data Review Date: 3/24/94
Field Reviewer: ____ Field Review Date: ____

DRUM No. 072

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montrie SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 2/15/94 TIME 1100

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☒ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			WHT			X	18"
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7 SU PID <1 ppm

DOSIMETER <2 mrem/hr

OTHER WHT PWD

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ ~~PDS~~ COS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP		X			WHT/TAN	OP	PS ~~IH~~ SD	-	7	S	-	-	-	-	+	-	+ 5000 ppm LOD	
MIDDLE		X			WHT/TAN									No PCBs CONFIRMED				GC/MS
BOTTOM		X			WHT/TAN													

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

OHM Corporation

DRUM INVENTORY LOG

DRUM NO. CLJDWS72D
PROJECT NUMBER 15226N
PAGE ____ OF ____

PROJECT LOCATION ____ LOGGER ____ DATE ____
PROJECT CONTACT ____ SAMPLER ____ TIME ____
PHONE ____ WEATHER ____

Drum Type: FIBER ☐ STEEL ☐ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RINGTOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEET DOT SPEC. ☐ GOOD ☐ FAIR ☐ POOR ☐

Drum Size: 85 ☐ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ☐

DRUM CONTENTS: AMOUNT FULL ☐ 3/4 ☐ 1/2 ☐ 1/4 ☐ <1/4 ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T									
M									
B									

FIELD ANALYSIS
pH ____ SG ____ PID ____ ppm
DOS METER ____
OTHER ____

DRUM LABELS MARKINGS
DOT HAZ ____ UN/NA ____

MFG NAME ____
CHEMICAL NAME ____
ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.

COMPATABILITY CAT: ~~COS PCBS~~ COS
ANALYSTS: TW
DATE PERFORMED: 3-31-94

RADIATION: POS ☐ NEG ☐ ____ MREM/HR

	PHYS. STATE				COLOR	CLARITY			WATER SOL	REACT	pH	HEX. SOL	PER OXID		CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25ppm)	PCB TEST COMP
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	SOLUBILITY SPSI DENSITY H OR L	A=AIR W=WATER	STD UNIT	S OR I	+ OR −	+ OR −	+ OR −	+ OR −	+ OR −	<60°C + OR −	+ OR −	NUMBER
T		X			TAN			X	PS	—	7	PS	—	—	—	—	+	—	+ 5000ppm	
M																		No PCBs		
B																		Confirmed GC/MS		

COMMENTS. ____

PCB CONC. ____ PPM FLASH POINT ____ °C COMPATABILITY COMP. BULK # ____
DATA REVIEWER: ____ DATA REVIEW DATE: ____
FIELD REVIEWER: ____ FIELD REVIEW DATE: ____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
2				
3				

DRUM No. 074

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJUENE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montine — SAMPLER: W. Perry

WEATHER: Sunny - 80°F — DATE: 2/15/94 — TIME: 1100

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☒ OVERPACKED ☒ poly

DRUM CONDITION: MEETS DOT SPEC ☐ GOOD ☐ FAIR ☐ POOR ☒

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☒ ¼ ☒ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T									
M									
B		X			BLK			X	6"

FIELD ANALYSIS

pH 7 SU — PID 200 ppm

DOSIMETER <2 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. FOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL.	REACT	pH	HEX SOL.	PER.	COOD.	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25 ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUMBER
TOP																		
MIDDLE																		
BOTTOM		X			BLK	OP	IL	—	7	S	—	—	—	—	—	+	—	

PCB Conc. ____ PPM — Flash Point ____ °C — Compatability Comp. Bulk # ____

Data Reviewer: WTP/MM — Data Review Date: 3/24/94

Field Reviewer: ____ — Field Review Date: ____

DRUM No. 076

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montrie SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 2/15/94 TIME 1100

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☒ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			WHT			X	18"
M		X						X	
B		X						X	

FIELD ANALYSIS

pH 7 SU PID <1 ppm

DOSIMETER <2 mrem/hr

OTHER WHT PWD

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~FCOS-PCB~~ FCOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP																		
MIDDLE															No PCBs CONFIRMED			GC/MS
BOTTOM					WHT/TAN	OP	PS	—	7	PS	—	—	—	—	+	+	+ 5000 ppm	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

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DRUM No. 077

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montrie SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 2/15/94 TIME 1100

DRUM TYPE: FIBER ☐ ~~STEEL~~ ☒ W POLY ☐ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☒ POLY

DRUM CONDITION: MEETS DOT SPEC ☐ GOOD ☐ FAIR ☐ POOR ☒

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T									
M		X			WHT			X	? 36"
B		X			BLK			X	)

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER PACKED w/ WHT SOLID (powder) & Soil

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ MM ~~COS~~ COS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP																		
MIDDLE															No PCB CONFIRMED			GC/MS
BOTTOM		+			WHT/BLK	OP	IH	—	7	PS	—	—	—	—	+	—	+ 5000ppm	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

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The Environmental Services Company

DRUM NO. 078

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJUENE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montne — SAMPLER: W. Perry

WEATHER: Sunny - 80°F — DATE: 2/16/94 — TIME: 1400

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☒ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☒ poly

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☒ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD COLORS)	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS (INCHES)
T		X			WHT			X	11
M		X			WHT			X	18
B		X			W/ORG			X	

FIELD ANALYSIS

pH 7 SU — PID <1 ppm

DOSIMETER <2 mrem/hr

OTHER: WHT SOLID

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. ~~PCBS~~ ~~LOS~~ COS

ANALYSTS: SEA

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD. COLOR)	CLARITY (CLEAR, CLOUDY, OPAQUE)	WATER SOL (SOLUBILITY S, PS, I DENSITY H OR L)	REACT (A - AIR W - WATER)	pH (STP UNIT)	HEX SOL (SOL S OR I)	PER (+ OR -)	OXID (+ OR -)	CN (+ OR -)	SUL (+ OR -)	BIEL-STEIN (+ OR -)	FLASH POINT (<60°C +/-)	PCBs (25 ppm) (+ OR -)	PCB TEST COMP. (NUMBER)
TOP																		
MIDDLE															No	PCB CONFIRMED		GC/M
BOTTOM			X		TAN w/ ORG	OP	PS	—	6	PS	—	—	—	—	+	—	+ 5000 ppm	

PCB Conc. ____ PPM — Flash Point ____ °C — Compatability Comp. Bulk # ____

Data Reviewer: WTD/JWL — Data Review Date: 3/24/94

Field Reviewer: ____ — Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM No. 079

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJUENE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montine — SAMPLER: W. Perry

WEATHER: Sunny - 80°F — DATE: 2/16/94 — TIME: 1400

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☒ poly

DRUM CONDITION: MEETS DOT SPEC ☐ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ → MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T									
M									
B		X			BLK			X	2"

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. COS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL.	REACT	pH	HEX SOL.	PER.	COOD.	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25 ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL. S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUMBER
TOP																		
MIDDLE																		
BOTTOM			x		BLK	OP	IH	—	5	PS	—	—	—	TW + —	+	—	—	

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD Data Review Date: ____

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM No. 080

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJUENE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montine — SAMPLER: W. Perry

WEATHER: Sunny - 80°F — DATE: 2/16/94 — TIME: 1400

DRUM TYPE: FIBER ☐ STEEL ☒ ~~POLY ☒~~ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☒ OVERPACKED ☒

DRUM CONDITION: MEETS DOT SPEC ☐ GOOD ☐ FAIR ☐ POOR ☒

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD COLORS)	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS (INCHES)
T									
M									
B				X	BLK			X	4"

FIELD ANALYSIS

pH 7 SU — PID >50 ppm

DOSIMETER <2 mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. FOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr more soluble in DCM/Hex

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD. COLOR)	CLARITY (CLEAR, CLOUDY, OPAQUE)	WATER SOL. (SOLUBILITY S, PS, I DENSITY H OR L)	REACT (A - AIR W - WATER)	pH (STP UNIT)	HEX SOL. (SOL. S OR I)	PER. (+ OR -)	OXID. (+ OR -)	CN (+ OR -)	SUL (+ OR -)	BIEL-STEIN (+ OR -)	FLASH POINT (<60°C +OR-)	PCBs (25 ppm) (+ OR -)	PCB TEST COMP. (NUMBER)
TOP																		
MIDDLE																		
BOTTOM				X	BLK	OP	PS	—	7	PS	—	—	—	—	—	+	—	

PCB Conc. ____ PPM — Flash Point ____ °C — Compatability Comp. Bulk # ____

Data Reviewer: WTD/MM — Data Review Date: 3/24/94

Field Reviewer: ____ — Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM No. 099

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJUENE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montne — SAMPLER: W. Perry

WEATHER: Sunny - 80°F — DATE: 3/24/94 — TIME: 0800

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☒ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☒ - POLY

DRUM CONDITION: MEETS DOT SPEC ☐ GOOD ☒ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ → MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T									
M									
B	X				CLS	X			2"

FIELD ANALYSIS

pH 7 SU — PID <1 ppm

DOSIMETER <2 mrem/hr

OTHER: Fiberglass carboy w/ side bung

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. BN

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL.	REACT	pH	HEX SOL.	PER.	OXID.	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25 ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL. S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUMBER
TOP																		
MIDDLE																		
BOTTOM	X				CLS	CLR	S	—	7	I	—	—	—	—	—	—	—	

PCB Conc. ____ PPM — Flash Point ____ °C — Compatability Comp. Bulk # ____

Data Reviewer: WTD/MM — Data Review Date: 3/24/94

Field Reviewer: ____ — Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

5b

Camp Lejeune 15226

SAMPLE SUMMARY REPORT

SAMPLE NUMBER	SAMPLE DATE	SAMPLE LOCATION	COC NUMBER	LAB ID	LAB SAMPLE ID	DQO LEVEL	PACKAGE ID	AIRBILL NUMBER
CLJ-DWS-143	3/3/94	DRUM COMP. (DRUM #143)	127969	ASC	JM4374	II	615323	7526016816
CLJ-DWS-145	3/3/94	DRUM COMP. (DRUM #145)	137068	ASC	JM4375	II	615323	7526016816
CLJ-DWS-146	3/3/94	DRUM COMP. (DRUM #146)	137068	ASC	JM4376	II	615323	7526016816
CLJ-DWS-147	3/3/94	DRUM COMP. (DRUM #147)	137068	ASC	JM4377	II	615323	7526016816
CLJ-DWS-149	3/3/94	DRUM COMP. (DRUM #149)	137068	ASC	JM4378	II	615323	7526016816
CLJ-DWS-150	3/3/94	DRUM COMP. (DRUM #150)	137028	ASC	JM4379	II	615323	7526016816

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DFE-01**
ASC Sample Number: JM4370
Sample Date: 940303
Facility Code: 015226N

Priority Pollutant Halogenated Volatile Analysis, GC, (GV10)

Parameters	Units	
Bromoform	mg/L	<.005
Bromomethane	mg/L	<.005
Carbon tetrachloride	mg/L	<.005
Chlorobenzene	mg/L	<.005
Chlorodibromomethane	mg/L	<.005
Chloroethane	mg/L	<.005
2-Chloroethylvinyl ether	mg/L	<.005
Chloroform	mg/L	<.005
Chloromethane	mg/L	<.005
1,2-Dichlorobenzene	mg/L	<.005
1,3-Dichlorobenzene	mg/L	<.005
1,4-Dichlorobenzene	mg/L	<.005
Dichlorobromomethane	mg/L	<.005
Dichlorodifluoromethane	mg/L	<.005
1,1-Dichloroethane	mg/L	<.005
1,2-Dichloroethane	mg/L	<.005
1,1-Dichloroethylene	mg/L	<.005
trans-1,2-Dichloroethene	mg/L	<.005
1,2-Dichloropropane	mg/L	<.005
cis-1,3-Dichloropropylene	mg/L	<.005
trans-1,3-Dichloropropylene	mg/L	<.005
Methylene chloride	mg/L	.142
1,1,2,2-Tetrachloroethane	mg/L	<.005
Tetrachloroethylene	mg/L	<.005
1,1,1-Trichloroethane	mg/L	<.005
1,1,2-Trichloroethane	mg/L	<.005
Trichloroethylene	mg/L	<.005
Trichlorofluoromethane	mg/L	<.005
Vinyl chloride	mg/L	<.005

DFE-01 Disposal Fire Exting. Sample #1

DS-143.1, 145, 146, 147, 149, 150

Drum Samples

Analytical Services Corp.

ANALYTICAL REPORT

Client: OHM Remediation Services Corporation
Southern Region (Morrisville, NC)

Attn: Kent Geis
Bill Perry

Project: 15226N - NEESA; Camp LeJuene, Jacksonville, NC

Sample(s): CLJ-DFE-01, CLJDS143.1, CLJ-DS-145 through CLJ-DS-147, CLJ-DS-149 and CLJ-DS-150

Sample Type(s): Drum

Analysis Performed: Compatibility Testing

ND for CCl_4 - per MR 6-16
ASKED FOR
601 on DFE-01
615322 next week 6-20?

Date Sample Received: March 6, 1994

Date Order Received: March 7, 1994

Joblink(s): 615323

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. Analytical Services Corporation assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: _____ *Date:* 3/31/94
Thomas E. Gran, Ph.D., Vice President

16406 U.S. Route 224 East ■ P.O. Box 1404 ■ Findlay, Ohio 45839-1404 ■ 419-423-3526

PROJECT NARRATIVE

The following items relate to the samples and analytical data contained in this report.

- All sample results are reported on an as received "wet weight" basis.
- Note any and all comments at the bottom of the tables in Appendix C.
- **ASC** will retain samples for a maximum of thirty (30) days after completion of the analysis, samples will be held for a longer period of time, if appropriate arrangements are made in advance. A nominal disposal charge of $5.00/ sample will be imposed for unreturned samples.

APPENDIX A

COMPATIBILITY TABLES
SORTED IN DRUM NUMBER ORDER

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4373	CLJ-DFE-01	BN	1	Liquid	GREEN/YELL	S	-	6	I	-	-	-	-	-	-	-
JM4375	CLJ-DS-145	XCOS	1	Solid	BROWN	PS	-	5	PS	-	+	-	-	+	-	-
JM4376	CLJ-DS-146	XCOS	1	Solid	BROWN/BLK	PS	-	6	PS	-	+	-	-	+	-	-
JM4377	CLJ-DS-147	PXCOS	1	Solid	WHITE	PS	-	6	PS	+	+	-	-	+	-	-
JM4378	CLJ-DS-149	FOS	1	Solid	BROWN	IH	-	7	S	-	-	-	-	-	+	-
JM4379	CLJ-DS-150	O	1	Liquid	BROWN	PS	-	7	S	-	-	-	-	-	-	-
JM4374	CLJDS143.1	O	1	Liquid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-

APPENDIX B

COMPATIBILITY TABLES
SORTED BY COMPATIBILITY CATEGORIES

COMPATIBILITY LEGENDS

Categories

BN	=	Base/Neutral liquid
FOS	=	Flammable organic solid
O	=	Organic liquid
PXCOS	=	Peroxide oxidizing chlorinated organic solid
XCOS	=	Oxidizing chlorinated organic solid

Water/Hexane Soluble

I	=	Insoluble
IH	=	Insoluble heavy
IL	=	Insoluble light
PS	=	Partially soluble
S	=	Soluble

General

N/A	=	Test not applicable
-	=	Negative Test
+	=	Positive Test

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4373	CLJ-DFE-01	BN	1	Liquid	GREEN/YELL	S	-	6	I	-	-	-	-	-	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4378	CLJ-DS-149	FOS	1	Solid	BROWN	IH	-	7	S	-	-	-	-	-	+	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4379	CLJ-DS-150	0	1	Liquid	BROWN	PS	-	7	S	-	-	-	-	-	-	-
JM4374	CLJDS143.1	0	1	Liquid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4377	CLJ-DS-147	PXCOS	1	Solid	WHITE	PS	-	6	PS	+	+	-	-	+	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4375	CLJ-DS-145	XCOS	1	Solid	BROWN	PS	-	5	PS	-	+	-	-	+	-	-
JM4376	CLJ-DS-146	XCOS	1	Solid	BROWN/BLK	PS	-	6	PS	-	+	-	-	+	-	-

APPENDIX C

COMPATIBILITY COMMENTS
SORTED BY DRUM NUMBER ORDER

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Sample Number	Comments
CLJ-DS-147	PEROXIDE = >2000 PPM. (POSITIVE ONLY IN HX/DCM)

APPENDIX D

QUALITY ASSURANCE DATA

SUMMARY OF ANALYTICAL METHODOLOGY

Parameter	Reference	Method
Conventionals		
Solubility	N/A	N/A
pH, Test Strip	SW-846	9041
Peroxide Screen	N/A	Test Strip
Oxidizer Screen	STOA	N/A
Cyanide Screen	STOA	N/A
Sulfide Screen	STOA	N/A
Beilstein Test	STOA	N/A
Flash Point, Seta-Flash	SW-846	1020
Organics		
Polychlorinated Biphenyls (PCBs) Screen	SW-846	8080

METHODOLOGY REFERENCES

ASTM *American Society for Testing and Materials*, 1985, edition.

CAWW *Methods for Chemical Analysis of Water and Wastes*, April 1979 and Updated #1 March 1983.

CLP *USEPA Contract Laboratory Program*, Document #OLMO1.0, updates December 1990 #OLMO1.1 and February 1991 #OLMO1.1.1.

NIOSH *National Instituted for Occupational Safety and Health*, 3rd edition, 1984.

SMEWW *Standard Methods for the Examination of Water and Wastewater*, 17th edition, 1989.

STOA *Spot Tests In Organic Analysis*, 7th edition, 1966.

SW-846 *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, 3rd edition, September 1986 and Updated #1 January 1989.

(1) This method was modified to incorporate the use of Boron Trifluoride (BF3) as the derivatizing reagent according to Method 509B in *SMEWW*, 17th edition, 1989.

Title 22 *Waste Extraction Test*, Title 22, Section 66261.126 Appendix 2 of the California Administrative Code, May 1991.

APPENDIX E

PROJECT INFORMATION SHEET(S)
and
CHAIN-OF-CUSTODY RECORD(S)

DRUM No. 0148

CLJ-DFE-01

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montrie SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 3/4/94 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T									
M									
B	X				Green/yellow		X		~4"

FIELD ANALYSIS

pH 7 SU PID <1 ppm

DOSIMETER — mrem/hr

OTHER —

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION Fire Extenguishers?

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. BN

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP	X				GREEN/YELLOW	OPAQUE	S	—	6	I	-	—	—	—	—	—	—	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WD/WM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

DRUM No. 145

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montrie SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 3/3/94 TIME 0800

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☒ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☒ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		X			BRN *			X	36"
M									
B									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER SM

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * Color varies: BRN → BLK w/ some WHT AND ORANGE

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for. (Double checked Oxidizer)

COMPATABILITY CAT. YCOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX. SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP		X			BRN	OPAQUE	PS	-	5	PS	-	+	-	-	+	-	-	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/WM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM No. 146

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montrie SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 3/3/94 TIME 0830

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☒ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		✓	✓		BRNX			X	14"
M									
B									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER SM

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * Color Varies: BRN, ORG, WHT, BLK

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. XCOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP		X	X		BRN/BLK	OPAQUE	PS	—	6	PS	—	+	—	—	+	—	—	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD / [illegible] Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

DRUM No. 147

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJEUNE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montne — SAMPLER: W. Perry

WEATHER: Sunny - 80°F — DATE: 3/3/94 — TIME: 0830

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☑ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☑ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☑ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☑ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD COLORS)	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS (INCHES)
T		✓			WHT*			✓	26"
M									
B									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER SM

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION: Color is WHT & GRAY

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. PXCOS

ANALYSTS: SED

DATE PERFORMED: 3994

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD. COLOR)	CLARITY (CLEAR, CLOUDY, OPAQUE)	WATER SOL. (SOLUBILITY S, PS, I DENSITY H OR L)	REACT (A - AIR W - WATER)	pH (STP UNIT)	HEX SOL. (SOL. S OR I)	PER. (+ OR -)	OXID. (+ OR -)	CN (+ OR -)	SUL (+ OR -)	BEL-STEIN (+ OR -)	FLASH POINT (<60°C + OR -)	PCBs (OR ppm) (+ OR -)	PCB TEST COMP. (NUMBER)
TOP		X			WHITE	OP	PS	—	6	PS	+	+	—	—	+	—	—	
MIDDLE											↓ app. 2000 ppm							
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

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The Environmental Services Company

*peroxide test positive only in the Hx/DCM portion of extract. WTD.

DRUM NO. 149

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJEUNE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montine — SAMPLER: W. Perry

WEATHER: Sunny 80°F — DATE: 3/3/94 — TIME: 0830

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☐ STAINLESS STEEL ☑ NICKEL ☐
POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☑

DRUM CONDITION: MEETS DOT SPEC ☑ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☑ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☑ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		✓			BRN*			X	30"
M									
B									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER ____ SW

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION *Color VARIES: BRN → WHT, ORANGE, Green

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. FOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL: SOL S OR I	PER: + OR -	OXID: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP		X			BRN	OPAQUE	IH	—	7	S	—	—	—	—	—	+	—	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: [illegible] Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

DRUM NO. 150

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226
PROJECT CONTACT W. Perry PHONE 910-451-1809
LOGGER W. Perry / Susan Montne SAMPLER W. Perry
WEATHER Sunny - 80°F DATE 3/4/94 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☐ GOOD ☐ FAIR ☐ POOR ☒

DRUM SIZE: 85 ☐ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☒ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☒ ¼ ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T									
M									
B	X				BRN			X	8"

FIELD ANALYSIS

pH — SU PID — ppm
DOSIMETER — mrem/hr
OTHER —

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____
CHEMICAL NAME ____
ADDITIONAL INFORMATION LABELED Super Tropical Bleach

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 0
ANALYSTS: SFD
DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL.	REACT	pH	HEX SOL.	PER.	OXID.	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (GS ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + OR -	+ OR -	NUMBER
TOP	X				BRN	OPAQUE	PS	—	7	S	—	—	—	—	—	—	—	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____
Data Reviewer: MK Data Review Date: 3/24/94
Field Reviewer: ____ Field Review Date: ____

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The Environmental Services Company

DRUM No. 143.01

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJUENE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montne — SAMPLER: W. Perry

WEATHER: Sunny - 80°F — DATE: 3/1/94 — TIME: 3:55

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☒ OVERPACKED ☒

DRUM CONDITION: MEETS DOT SPEC ☐ GOOD ☐ FAIR ☐ POOR ☒

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T	X				BLK	OR		X	
M									
B									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 0

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL.	REACT	pH	HEX SOL.	PER.	OXID.	CN	SUL	SNEL-STEIN	FLASH POINT	PCBs (25 ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL. S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + OR -	+ OR -	NUMBER
TOP	X				BLK	OPAQUE	PS	–	6	PS	–	–	–	–	–	–	–	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WD/MK Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

Analytical Services Corp.

ANALYTICAL REPORT

Client: OHM Remediation Services Corporation
Southern Region (Morrisville, NC)

Attn: Kent Geis
Bill Perry

Project: 15226N - NEESA; Camp LeJuene, Jacksonville, NC

Sample(s): CLJ-DFE-01, CLJDS143.1, CLJ-DS-145 through CLJ-DS-147, CLJ-DS-149 and CLJ-DS-150

Sample Type(s): Drum

Analysis Performed: Compatibility Testing

Date Sample Received: March 6, 1994

Date Order Received: March 7, 1994

Joblink(s): 615323

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. Analytical Services Corporation assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: _____ *Date:* 3/31/94
Thomas E. Gran, Ph.D., Vice President

16406 U.S. Route 224 East ■ P.O. Box 1404 ■ Findlay, Ohio 45839-1404 ■ 419-423-3526

PROJECT NARRATIVE

The following items relate to the samples and analytical data contained in this report.

- All sample results are reported on an as received "wet weight" basis.
- Note any and all comments at the bottom of the tables in Appendix C.
- **ASC** will retain samples for a maximum of thirty (30) days after completion of the analysis, samples will be held for a longer period of time, if appropriate arrangements are made in advance. A nominal disposal charge of $5.00/ sample will be imposed for unreturned samples.

APPENDIX A

COMPATIBILITY TABLES
SORTED IN DRUM NUMBER ORDER

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4373	CLJ-DFE-01	BN	1	Liquid	GREEN/YELL	S	-	6	I	-	-	-	-	-	-	-
JM4375	CLJ-DS-145	XCOS	1	Solid	BROWN	PS	-	5	PS	-	+	-	-	+	-	-
JM4376	CLJ-DS-146	XCOS	1	Solid	BROWN/BLK	PS	-	6	PS	-	+	-	-	+	-	-
JM4377	CLJ-DS-147	PXCOS	1	Solid	WHITE	PS	-	6	PS	+	+	-	-	+	-	-
JM4378	CLJ-DS-149	FOS	1	Solid	BROWN	IH	-	7	S	-	-	-	-	-	+	-
JM4379	CLJ-DS-150	O	1	Liquid	BROWN	PS	-	7	S	-	-	-	-	-	-	-
JM4374	CLJDS143.1	O	1	Liquid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-

APPENDIX B

COMPATIBILITY TABLES
SORTED BY COMPATIBILITY CATEGORIES

COMPATIBILITY LEGENDS

Categories

BN	=	Base/Neutral liquid
FOS	=	Flammable organic solid
O	=	Organic liquid
PXCOS	=	Peroxide oxidizing chlorinated organic solid
XCOS	=	Oxidizing chlorinated organic solid

Water/Hexane Soluble

I	=	Insoluble
IH	=	Insoluble heavy
IL	=	Insoluble light
PS	=	Partially soluble
S	=	Soluble

General

N/A	=	Test not applicable
-	=	Negative Test
+	=	Positive Test

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4373	CLJ-DFE-01	BN	1	Liquid	GREEN/YELL	S	-	6	I	-	-	-	-	-	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4378	CLJ-DS-149	FOS	1	Solid	BROWN	IH	-	7	S	-	-	-	-	-	+	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4379	CLJ-DS-150	O	1	Liquid	BROWN	PS	-	7	S	-	-	-	-	-	-	-
JM4374	CLJDS143.1	O	1	Liquid	BLACK	PS	-	6	PS	-	-	-	-	-	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4377	CLJ-DS-147	PXCOS	1	Solid	WHITE	PS	-	6	PS	+	+	-	-	+	-	-

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Lab #	Sample Number	Compat. Category	Layer #	Physical Matrix	Color	Water Soluble	W/A Reactive	pH Units	Hexane Soluble	Per-oxide	Oxidizer	Cyanide	Sulfide	Beil-stein	FP	PCB Screen
JM4375	CLJ-DS-145	XCOS	1	Solid	BROWN	PS	-	5	PS	-	+	-	-	+	-	-
JM4376	CLJ-DS-146	XCOS	1	Solid	BROWN/BLK	PS	-	6	PS	-	+	-	-	+	-	-

APPENDIX C

COMPATIBILITY COMMENTS
SORTED BY DRUM NUMBER ORDER

PROJECT- 015226N

TABLE 1 - COMPATIBILITY TABLE

Sample Number	Comments
CLJ-DS-147	PEROXIDE = >2000 PPM. (POSITIVE ONLY IN HX/DCM)

APPENDIX D

QUALITY ASSURANCE DATA

SUMMARY OF ANALYTICAL METHODOLOGY

Parameter	Reference	Method
Conventionals		
Solubility	N/A	N/A
pH, Test Strip	SW-846	9041
Peroxide Screen	N/A	Test Strip
Oxidizer Screen	STOA	N/A
Cyanide Screen	STOA	N/A
Sulfide Screen	STOA	N/A
Beilstein Test	STOA	N/A
Flash Point, Seta-Flash	SW-846	1020
Organics		
Polychlorinated Biphenyls (PCBs) Screen	SW-846	8080

METHODOLOGY REFERENCES

ASTM	*American Society for Testing and Materials*, 1985, edition.
CAWW	*Methods for Chemical Analysis of Water and Wastes*, April 1979 and Updated #1 March 1983.
CLP	*USEPA Contract Laboratory Program*, Document #OLMO1.0, updates December 1990 #OLMO1.1 and February 1991 #OLMO1.1.1.
NIOSH	*National Instituted for Occupational Safety and Health*, 3rd edition, 1984.
SMEWW	*Standard Methods for the Examination of Water and Wastewater*, 17th edition, 1989.
STOA	*Spot Tests In Organic Analysis*, 7th edition, 1966.
SW-846	*Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, 3rd edition, September 1986 and Updated #1 January 1989.
(1)	This method was modified to incorporate the use of Boron Trifluoride (BF3) as the derivatizing reagent according to Method 509B in *SMEWW*, 17th edition, 1989.
Title 22	*Waste Extraction Test*, Title 22, Section 66261.126 Appendix 2 of the California Administrative Code, May 1991.

APPENDIX E

PROJECT INFORMATION SHEET(S)
and
CHAIN-OF-CUSTODY RECORD(S)

DRUM NO. 0148

CLJ-DFE-01

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montrie SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 3/4/94 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T									
M									
B	X				Green/yellow		X		~4"

FIELD ANALYSIS

pH 7 SU PID <1 ppm

DOSIMETER — mrem/hr

OTHER —

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION Fire Extenguishers?

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. BN

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP	X				GREEN/YELLOW	OPAQUE	S	—	6	I	-	—	—	—	—	—	—	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTP/WM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

DRUM No. 145

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montne SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 3/3/94 TIME 0800

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☒ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☒ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☒ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T		X			BRN *			X	36"
M									
B									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER SM

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * Color varies: BRN → BLK w/ some WHT AND ORANGE

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for. (Bottle checked Oxidizer)

COMPATABILITY CAT. YCOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL	REACT	pH	HEX SOL	PER.	OXID.	CN	SUL	BIEL. STEIN	FLASH POINT	PCBs (25 ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUMBER
TOP		X			BRN	OPAQUE	PS	-	5	PS	-	+	-	-	+	-	-	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

DRUM No. 146

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montrie SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 3/3/94 TIME 08:30

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☒ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD COLORS	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS: INCHES
T		✓	✓		BRNX			X	14"
M									
B									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER SM

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION * Color Varies: BRN, ORG, WHT, BLK

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. XCOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR: USE STD. COLOR	CLARITY: CLEAR, CLOUDY, OPAQUE	WATER SOL.: SOLUBILITY S, PS, I DENSITY H OR L	REACT: A - AIR W - WATER	pH: STP UNIT	HEX SOL.: SOL. S OR I	PER.: + OR -	OXID.: + OR -	CN: + OR -	SUL: + OR -	BIEL-STEIN: + OR -	FLASH POINT: <60°C + or -	PCBs (25 ppm): + OR -	PCB TEST COMP.: NUMBER
TOP		X	X		BRN/BLK	OPAQUE	PS	—	6	PS	—	+	—	—	+	—	—	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD / WM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

DRUM No. 147

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJUENE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montrie — SAMPLER: W. Perry

WEATHER: Sunny - 80°F — DATE: 3/3/94 — TIME: 0830

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☒ STAINLESS STEEL ☐ NICKEL ☐ POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☒ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☒ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☒ ½ ☐ ¼ ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T.		✓			WHT*			✓	26"
M.									
B.									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER SM

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION: Color in WHT & GRAY

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. PXCOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL.	REACT	pH	HEX. SOL.	PER.	COOD.	CN	SUL	SUL. STAIN	FLASH POINT	PCBs (25 ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUMBER
TOP		X			WHITE	OP	PS	—	6	PS	+	+	—	—	+	—	—	
MIDDLE											↓ — app. 2000 ppm							
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD/MM Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

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The Environmental Services Company

*peroxide test positive only in the Hx/DCM portion of extract. WTD.

DRUM No. 149

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montne SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 3/3/94 TIME 0830

DRUM TYPE: FIBER ☐ STEEL ☐ POLY ☐ STAINLESS STEEL ☑ NICKEL ☐
POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☐ OVERPACKED ☑

DRUM CONDITION: MEETS DOT SPEC ☑ GOOD ☐ FAIR ☐ POOR ☐

DRUM SIZE: 85 ☑ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☑ ¾ ☐ ½ ☐ ¼ ☐ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD COLORS)	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS (INCHES)
T		✓			BRN*			X	30"
M									
B									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER ____ SW

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION *Color VARIES: BRN → WHT, ORANGE, Green

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. FOS

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD. COLOR)	CLARITY (CLEAR, CLOUDY, OPAQUE)	WATER SOL (SOLUBILITY S, PS, I DENSITY H OR L)	REACT (A - AIR W - WATER)	pH (STP UNIT)	HEX SOL (SOL S OR I)	PER. (+ OR -)	COND. (+ OR -)	CN (+ OR -)	SUL (+ OR -)	BIEL-STEIN (+ OR -)	FLASH POINT (<60°C + or -)	PCBs (25 ppm) (+ OR -)	PCB TEST COMP. (NUMBER)
TOP		X			BRN	OPAQUE	IH	—	7	S	—	—	—	—	—	+	—	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: MAR Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

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The Environmental Services Company

DRUM NO. 150

PROJECT INFORMATION

PROJECT LOCATION CAMP LEJUENE, NC PROJECT NUMBER 15226

PROJECT CONTACT W. Perry PHONE 910-451-1809

LOGGER W. Perry / Susan Montine SAMPLER W. Perry

WEATHER Sunny - 80°F DATE 3/4/94 TIME 1300

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☒ CLOSED TOP ☐ OVERPACKED ☐

DRUM CONDITION: MEETS DOT SPEC ☐ GOOD ☐ FAIR ☐ POOR ☒

DRUM SIZE: 85 ☐ 55 ☐ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☒ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☒ ¼ ☐ MT ☐

	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD COLORS	CLEAR	CLOUDY	OPAQUE	INCHES
T									
M									
B	X				BRN			X	8"

FIELD ANALYSIS

pH — SU PID — ppm

DOSIMETER — mrem/hr

OTHER —

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION LABELED Super Tropical Bleach

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 0

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

	PHYSICAL STATE				COLOR	CLARITY	WATER SOL.	REACT	pH	HEX SOL.	PER.	OXID.	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25 ppm)	PCB TEST COMP.
LAYERS	LIQUID	SOLID	GEL	SLUDGE	USE STD. COLOR	CLEAR, CLOUDY, OPAQUE	SOLUBILITY S, PS, I DENSITY H OR L	A - AIR W - WATER	STP UNIT	SOL. S OR I	+ OR -	+ OR -	+ OR -	+ OR -	+ OR -	<60°C + or -	+ OR -	NUMBER
TOP	X				BRN	OPAQUE	PS	—	7	S	—	—	—	—	—	—	—	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: MJL Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

DRUM No. 143.01

PROJECT INFORMATION

PROJECT LOCATION: CAMP LEJUENE, NC — PROJECT NUMBER: 15226

PROJECT CONTACT: W. Perry — PHONE: 910-451-1809

LOGGER: W. Perry / Susan Montne — SAMPLER: W. Perry

WEATHER: Sunny - 80°F — DATE: 3/1/94 — TIME: 3:55

DRUM TYPE: FIBER ☐ STEEL ☒ POLY ☐ STAINLESS STEEL ☐ NICKEL ☐
POLY-LINED ☐ RING TOP ☐ CLOSED TOP ☒ OVERPACKED ☒

DRUM CONDITION: MEETS DOT SPEC ☐ GOOD ☐ FAIR ☐ POOR ☒

DRUM SIZE: 85 ☐ 55 ☒ 42 ☐ 30 ☐ 16 ☐ 10 ☐ 5 ☐ OTHER ____

DRUM CONTENTS: AMOUNT FULL ☐ ¾ ☐ ½ ☐ ¼ ☒ MT ☐

LAYERS	PHYS. STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD COLORS)	CLARITY: CLEAR	CLOUDY	OPAQUE	LAYER THICKNESS (INCHES)
T	X				BLK	~~X~~		X	
M									
B									

FIELD ANALYSIS

pH ____ SU PID ____ ppm

DOSIMETER ____ mrem/hr

OTHER ____

DRUM LABELS/MARKINGS

DOT HAZ ____ UN/NA ____

MFG NAME ____

CHEMICAL NAME ____

ADDITIONAL INFORMATION ____

LABORATORY COMPATABILITY DATA

☐ Mark if Physical State and Color matches the above information. If not, stop analysis and notify project contact. Further work will not be paid for.

COMPATABILITY CAT. 0

ANALYSTS: SED

DATE PERFORMED: 3-9-94

RADIATION: POS ☐ NEG ☐ ____ mrem/hr

LAYERS	PHYSICAL STATE: LIQUID	SOLID	GEL	SLUDGE	COLOR (USE STD. COLOR)	CLARITY (CLEAR, CLOUDY, OPAQUE)	WATER SOL. (SOLUBILITY S, PS, I DENSITY H OR L)	REACT (A - AIR W - WATER)	pH (STP UNIT)	HEX. SOL. (SOL S OR I)	PER. (+ OR -)	OXID. (+ OR -)	CN (+ OR -)	SUL (+ OR -)	BEL-STEIN (+ OR -)	FLASH POINT (<60°C +or-)	PCBs (≥5 ppm) (+ OR -)	PCB TEST COMP. NUMBER
TOP	X				BLK	OPAQUE	PS	—	6	PS	—	—	—	—	—	—	—	
MIDDLE																		
BOTTOM																		

PCB Conc. ____ PPM Flash Point ____ °C Compatability Comp. Bulk # ____

Data Reviewer: WTD / MIL Data Review Date: 3/24/94

Field Reviewer: ____ Field Review Date: ____

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The Environmental Services Company

6 C.

Camp Lejeune 15226

QA/QC SUMMARY REPORT

SAMPLE NUMBER	SAMPLE DATE	SAMPLE LOCATION	COC NUMBER	LAB ID	LAB SAMPLE ID	DQO LEVEL	PACKAGE ID	AIRBILL NUMBER
CLJ-DWW-03	3/15/94	12K POOL SAMPLE: BATCH #3	137074	ASC	JM4781	IV	615381	7526016820
CLJ-TBLK-8	3/15/94	TRIP BLANK	137074	ASC		-	-	7526016820

DATA SUMMARY REPORT

DATE: 11/02/94

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Conventional Data (CV10)		
Cyanide, Total	mg/L	<.010
Oil and Grease	mg/L	<5.00
Solids, total suspended	mg/L	26.0
Total Dissolved Solids (TDS)	mg/L	451
pH (Electrode)	std	6.51
Total Pesticide and PCB Analysis, GC, (GS05)		
Aldrin	mg/L	<.0002
Alpha-BHC	mg/L	<.0002
Beta-BHC	mg/L	<.0002
Chlordane	mg/L	<.001
4,4'-DDD	mg/L	<.0002
4,4'-DDE	mg/L	.0006
4,4'-DDT	mg/L	.008
Delta-BHC	mg/L	<.0002
Dieldrin	mg/L	<.0002
Endosulfan sulfate	mg/L	<.0002
Endosulfan I	mg/L	<.0002
Endosulfan II	mg/L	<.0002
Endrin	mg/L	<.0002
Endrin aldehyde	mg/L	<.0002
Endrin ketone	mg/L	<.0002
Gamma-BHC	mg/L	<.0002
Heptachlor	mg/L	<.0002
Heptachlor epoxide	mg/L	<.0002
Methoxychlor	mg/L	<.0002
Toxaphene	mg/L	<.004
Aroclor 1016	mg/L	<.002
Aroclor 1221	mg/L	<.002
Aroclor 1232	mg/L	<.002
Aroclor 1242	mg/L	<.002
Aroclor 1248	mg/L	<.002
Aroclor 1254	mg/L	<.002
Aroclor 1260	mg/L	<.002

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
RCRA Total Metals Analysis, (ME50)		
Arsenic	mg/L	<.100
Barium	mg/L	.338
Cadmium	mg/L	.549
Chromium	mg/L	<.010
Lead	mg/L	.089
Mercury	mg/L	<.001
Selenium	mg/L	<.100
Silver	mg/L	<.010
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Acenaphthene	mg/L	<.010
Acenaphthylene	mg/L	<.010
Anthracene	mg/L	<.010
Benzidine	mg/L	<.010
Benzo(a)anthracene	mg/L	<.010
Benzo(b)fluoranthene	mg/L	<.010
Benzo(k)fluoranthene	mg/L	<.010
Benzo(ghi)perylene	mg/L	<.010
Benzo(a)pyrene	mg/L	<.010
bis(2-Chloroethyl) ether	mg/L	<.010
bis(2-Chloroethoxy)methane	mg/L	<.010
bis(2-Chloroisopropyl)ether	mg/L	<.010
bis(2-Ethylhexyl)phthalate	mg/L	<.010
4-Bromophenyl phenyl ether	mg/L	<.010
Butyl benzyl phthalate	mg/L	<.010
Carbazole	mg/L	<.010
4-Chloroaniline	mg/L	<.010
p-Chloro-m-cresol	mg/L	<.010
2-Chloronaphthalene	mg/L	<.010
2-Chlorophenol	mg/L	<.010
4-Chlorophenyl phenyl ether	mg/L	<.010
Chrysene	mg/L	<.010
Dibenzo(a,h)anthracene	mg/L	<.010
Dibenzofuran	mg/L	<.010
Di-n-butyl phthalate	mg/L	<.010

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Total Base/Neutral/Acid Analysis, MS, (MS02)

Parameters	Units	
1,2-Dichlorobenzene	mg/L	<.010
1,3-Dichlorobenzene	mg/L	<.010
1,4-Dichlorobenzene	mg/L	<.010
3,3'-Dichlorobenzidine	mg/L	<.010
2,4-Dichlorophenol	mg/L	<.010
Diethyl phthalate	mg/L	<.010
Dimethyl phthalate	mg/L	<.010
2,4-Dimethylphenol	mg/L	<.010
4,6-Dinitro-o-cresol	mg/L	<.026
2,4-Dinitrophenol	mg/L	<.052
2,4-Dinitrotoluene	mg/L	<.010
2,6-Dinitrotoluene	mg/L	<.010
Di-n-octyl phthalate	mg/L	<.010
Fluoranthene	mg/L	<.010
Fluorene	mg/L	<.010
Hexachlorobenzene	mg/L	<.010
Hexachlorobutadiene	mg/L	<.010
Hexachlorocyclopentadiene	mg/L	<.010
Hexachloroethane	mg/L	<.010
Isophorone	mg/L	<.010
2-Methylnaphthalene	mg/L	<.010
2-Methylphenol	mg/L	<.010
4-Methylphenol	mg/L	<.010
N-Nitrosodimethylamine	mg/L	<.010
N-Nitrosodi-n-propylamine	mg/L	<.010
N-Nitrosodiphenylamine	mg/L	<.010
Naphthalene	mg/L	<.010
2-Nitroaniline	mg/L	<.010
3-Nitroaniline	mg/L	<.010
4-Nitroaniline	mg/L	<.010
Nitrobenzene	mg/L	<.010
2-Nitrophenol	mg/L	<.010
4-Nitrophenol	mg/L	<.052
Pentachlorophenol	mg/L	<.010
Phenanthrene	mg/L	<.010

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Phenol	mg/L	<.010
Pyrene	mg/L	<.010
Pyridine	mg/L	<.010
1,2,4-Trichlorobenzene	mg/L	<.010
2,4,5-Trichlorophenol	mg/L	<.010
2,4,6-Trichlorophenol	mg/L	<.010
1,2,4,5-Tetrachlorobenzene	mg/L	<.010
2,3,4,6-Tetrachlorophenol	mg/L	<.010
2,6-Dichlorophenol	mg/L	<.010
2-Ethoxyethanol	mg/L	<.010
2-Nitropropane	mg/L	<.010
3-Chloropropionitrile	mg/L	<.010
4,4'-Methylenebis(2-chloroanil	mg/L	<.010
Benzoic acid	mg/L	<.026
Benzyl alcohol	mg/L	<.010
Cyclohexanone	mg/L	<.010
Hexachloropropene	mg/L	<.010
Indeno(1,2,3-c,d)pyrene	mg/L	<.010
Pentachlorobenzene	mg/L	<.010
Pentachloroethane	mg/L	<.010
Pentachloronitrobenzene	mg/L	<.010
Pronamide	mg/L	<.010
bis(2-Chloroethoxy)ethane	mg/L	<.010
Total Volatile Analysis, MS, (MV00)		
Acetone	mg/L	.079
Acrolein	mg/L	<.025
Acrylonitrile	mg/L	<.013
Benzene	mg/L	<.005
Bromoform	mg/L	<.005
Carbon disulfide	mg/L	<.005
Carbon tetrachloride	mg/L	<.005
Chlorobenzene	mg/L	<.005
Chlorodibromomethane	mg/L	<.005
Chloroethane	mg/L	<.005

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Volatile Analysis, MS, (MV00)		
Chloroform	mg/L	<.005
2-Chloroethylvinyl ether	mg/L	<.005
3-Chloropropene	mg/L	<.005
1,2-Dibromo-3-chloropropane	mg/L	<.005
Dichlorobromomethane	mg/L	<.005
Dichlorodifluoromethane	mg/L	<.005
1,1-Dichloroethane	mg/L	<.005
1,2-Dichloroethane	mg/L	<.005
1,1-Dichloroethylene	mg/L	<.005
1,2-Dichloropropane	mg/L	<.005
cis-1,3-Dichloropropylene	mg/L	<.005
trans-1,3-Dichloropropylene	mg/L	<.005
Dibromomethane	mg/L	<.005
Ethylbenzene	mg/L	<.005
Ethylene dibromide	mg/L	<.005
Ethyl acetate	mg/L	<.050
Ethyl ether	mg/L	<.005
2-Hexanone	mg/L	<.005
Iodomethane	mg/L	<.005
Methyl bromide	mg/L	<.005
Methyl chloride	mg/L	<.005
Methylene chloride	mg/L	<.005
Methyl ethyl ketone	mg/L	<.010
Methyl-iso-butyl ketone	mg/L	.024
Styrene	mg/L	<.005
1,1,1,2-Tetrachloroethane	mg/L	<.005
1,1,2,2-Tetrachloroethane	mg/L	<.005
Tetrachloroethylene	mg/L	<.005
Tetrahydrofuran	mg/L	<.005
Toluene	mg/L	<.005
1,1,1-Trichloroethane	mg/L	<.005
1,1,2-Trichloroethane	mg/L	<.005
Trichloroethylene	mg/L	<.005
1,2-Trans-dichloroethylene	mg/L	<.005
Trichlorofluoromethane	mg/L	<.005

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Volatile Analysis, MS, (MV00)		
1,2,3-Trichloropropane	mg/L	<.005
1,1,2-Trichlorotrifluoroethane	mg/L	<.010
Vinyl acetate	mg/L	<.025
Vinyl chloride	mg/L	<.005
Xylenes	mg/L	<.005

Analytical Services Corp.

ANALYTICAL REPORT

Client: OHM Remediation Services Corporation
Southern Region (Morrisville, NC)

Attn: Kent Geis
Bill Perry

Project: 15226N - NEESA; Camp LeJuene, Jacksonville, NC

Sample(s): CLJ-DWW-003

Sample Type(s): Liquid

Analysis Performed: Conventionals, Metals and Organics

Date Sample Received: March 16, 1994

Date Order Received: March 16, 1994

Joblink(s): 615381

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Reviewed and Approved by: _____ *Date:* 4/1/94
Thomas E. Gran, Ph.D., Vice President

16406 U.S. Route 224 East ■ P.O. Box 1404 ■ Findlay, Ohio 45839-1404 ■ 419-423-3526

PROJECT NARRATIVE

The following items relate to the samples and analytical data contained in this report.

- Note any and all comments at the bottom of the tables in Appendix C.
- **ASC** will retain samples for a maximum of thirty (30) days after completion of the analysis, samples will be held for a longer period of time, if appropriate arrangements are made in advance. A nominal disposal charge of $5.00/ sample will be imposed for unreturned samples.

APPENDIX A

DATA SUMMARY REPORT

NOTE: The GC/MS screen data, if applicable, is included in Appendix B.

DATA SUMMARY REPORT

DATE: 03/31/94

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Conventional Data (CV10)		
Cyanide, Total	mg/L	<.010
Oil and Grease	mg/L	<5.00
Solids, total suspended	mg/L	26.0
Total Dissolved Solids (TDS)	mg/L	451
pH (Electrode)	std	6.51
Total Pesticide and PCB Analysis, GC, (GS05)		
Aldrin	mg/L	<.0002
Alpha-BHC	mg/L	<.0002
Beta-BHC	mg/L	<.0002
Chlordane	mg/L	<.001
4,4'-DDD	mg/L	<.0002
4,4'-DDE	mg/L	.0006
4,4'-DDT	mg/L	.008
Delta-BHC	mg/L	<.0002
Dieldrin	mg/L	<.0002
Endosulfan sulfate	mg/L	<.0002
Endosulfan I	mg/L	<.0002
Endosulfan II	mg/L	<.0002
Endrin	mg/L	<.0002
Endrin aldehyde	mg/L	<.0002
Endrin ketone	mg/L	<.0002
Gamma-BHC	mg/L	<.0002
Heptachlor	mg/L	<.0002
Heptachlor epoxide	mg/L	<.0002
Methoxychlor	mg/L	<.0002
Toxaphene	mg/L	<.004
Aroclor 1016	mg/L	<.002
Aroclor 1221	mg/L	<.002
Aroclor 1232	mg/L	<.002
Aroclor 1242	mg/L	<.002
Aroclor 1248	mg/L	<.002
Aroclor 1254	mg/L	<.002
Aroclor 1260	mg/L	<.002

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DWW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
RCRA Total Metals Analysis, (ME50)		
Arsenic	mg/L	<.100
Barium	mg/L	.338
Cadmium	mg/L	.549
Chromium	mg/L	<.010
Lead	mg/L	.089
Mercury	mg/L	<.001
Selenium	mg/L	<.100
Silver	mg/L	<.010
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Acenaphthene	mg/L	<.010
Acenaphthylene	mg/L	<.010
Anthracene	mg/L	<.010
Benzidine	mg/L	<.010
Benzoic acid	mg/L	<.026
Benzyl alcohol	mg/L	<.010
Benzo(a)anthracene	mg/L	<.010
Benzo(b)fluoranthene	mg/L	<.010
Benzo(k)fluoranthene	mg/L	<.010
Benzo(ghi)perylene	mg/L	<.010
Benzo(a)pyrene	mg/L	<.010
bis(2-Chloroethoxy)ethane	mg/L	<.010
bis(2-Chloroethyl) ether	mg/L	<.010
bis(2-Chloroethoxy)methane	mg/L	<.010
bis(2-Chloroisopropyl)ether	mg/L	<.010
bis(2-Ethylhexyl)phthalate	mg/L	<.010
4-Bromophenyl phenyl ether	mg/L	<.010
Butyl benzyl phthalate	mg/L	<.010
Carbazole	mg/L	<.010
4-Chloroaniline	mg/L	<.010
p-Chloro-m-cresol	mg/L	<.010
2-Chloronaphthalene	mg/L	<.010
2-Chlorophenol	mg/L	<.010
4-Chlorophenyl phenyl ether	mg/L	<.010
3-Chloropropionitrile	mg/L	<.010

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Total Base/Neutral/Acid Analysis, MS, (MS02)

Parameters	Units	
Chrysene	mg/L	<.010
Cyclohexanone	mg/L	<.010
Dibenzo(a,h)anthracene	mg/L	<.010
Dibenzofuran	mg/L	<.010
Di-n-butyl phthalate	mg/L	<.010
1,2-Dichlorobenzene	mg/L	<.010
1,3-Dichlorobenzene	mg/L	<.010
1,4-Dichlorobenzene	mg/L	<.010
3,3'-Dichlorobenzidine	mg/L	<.010
2,4-Dichlorophenol	mg/L	<.010
2,6-Dichlorophenol	mg/L	<.010
Diethyl phthalate	mg/L	<.010
Dimethyl phthalate	mg/L	<.010
2,4-Dimethylphenol	mg/L	<.010
4,6-Dinitro-o-cresol	mg/L	<.026
2,4-Dinitrophenol	mg/L	<.052
2,4-Dinitrotoluene	mg/L	<.010
2,6-Dinitrotoluene	mg/L	<.010
Di-n-octyl phthalate	mg/L	<.010
2-Ethoxyethanol	mg/L	<.010
Fluoranthene	mg/L	<.010
Fluorene	mg/L	<.010
Hexachlorobenzene	mg/L	<.010
Hexachlorobutadiene	mg/L	<.010
Hexachlorocyclopentadiene	mg/L	<.010
Hexachloroethane	mg/L	<.010
Hexachloropropene	mg/L	<.010
Indeno(1,2,3-c,d)pyrene	mg/L	<.010
Isophorone	mg/L	<.010
4,4'-Methylenebis(2-chloroaniline)	mg/L	<.010
2-Methylnaphthalene	mg/L	<.010
2-Methylphenol	mg/L	<.010
4-Methylphenol	mg/L	<.010
2-Nitropropane	mg/L	<.010
N-Nitrosodimethylamine	mg/L	<.010

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DWW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Base/Neutral/Acid Analysis, MS, (MS02)		
N-Nitrosodi-n-propylamine	mg/L	<.010
N-Nitrosodiphenylamine	mg/L	<.010
Naphthalene	mg/L	<.010
2-Nitroaniline	mg/L	<.010
3-Nitroaniline	mg/L	<.010
4-Nitroaniline	mg/L	<.010
Nitrobenzene	mg/L	<.010
2-Nitrophenol	mg/L	<.010
4-Nitrophenol	mg/L	<.052
Pentachlorobenzene	mg/L	<.010
Pentachloronitrobenzene	mg/L	<.010
Pentachlorophenol	mg/L	<.010
Pentachloroethane	mg/L	<.010
Phenanthrene	mg/L	<.010
Phenol	mg/L	<.010
Pronamide	mg/L	<.010
Pyrene	mg/L	<.010
Pyridine	mg/L	<.010
1,2,4,5-Tetrachlorobenzene	mg/L	<.010
2,3,4,6-Tetrachlorophenol	mg/L	<.010
1,2,4-Trichlorobenzene	mg/L	<.010
2,4,5-Trichlorophenol	mg/L	<.010
2,4,6-Trichlorophenol	mg/L	<.010
Total Volatile Analysis, MS, (MV00)		
Acetone	mg/L	.079
Acrolein	mg/L	<.025
Acrylonitrile	mg/L	<.013
Benzene	mg/L	<.005
Bromoform	mg/L	<.005
Carbon disulfide	mg/L	<.005
Carbon tetrachloride	mg/L	<.005
Chlorobenzene	mg/L	<.005
Chlorodibromomethane	mg/L	<.005
Chloroethane	mg/L	<.005

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DWW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Volatile Analysis, MS, (MV00)		
Chloroform	mg/L	<.005
2-Chloroethylvinyl ether	mg/L	<.005
3-Chloropropene	mg/L	<.005
1,2-Dibromo-3-chloropropane	mg/L	<.005
Dichlorobromomethane	mg/L	<.005
Dichlorodifluoromethane	mg/L	<.005
1,1-Dichloroethane	mg/L	<.005
1,2-Dichloroethane	mg/L	<.005
1,1-Dichloroethylene	mg/L	<.005
1,2-Dichloropropane	mg/L	<.005
cis-1,3-Dichloropropylene	mg/L	<.005
trans-1,3-Dichloropropylene	mg/L	<.005
Dibromomethane	mg/L	<.005
Ethylbenzene	mg/L	<.005
Ethylene dibromide	mg/L	<.005
Ethyl acetate	mg/L	<.050
Ethyl ether	mg/L	<.005
2-Hexanone	mg/L	<.005
Iodomethane	mg/L	<.005
Methyl bromide	mg/L	<.005
Methyl chloride	mg/L	<.005
Methylene chloride	mg/L	<.005
Methyl ethyl ketone	mg/L	<.010
Methyl-iso-butyl ketone	mg/L	.024
Styrene	mg/L	<.005
1,1,1,2-Tetrachloroethane	mg/L	<.005
1,1,2,2-Tetrachloroethane	mg/L	<.005
Tetrachloroethylene	mg/L	<.005
Tetrahydrofuran	mg/L	<.005
Toluene	mg/L	<.005
1,1,1-Trichloroethane	mg/L	<.005
1,1,2-Trichloroethane	mg/L	<.005
Trichloroethylene	mg/L	<.005
1,2-Trans-dichloroethylene	mg/L	<.005
Trichlorofluoromethane	mg/L	<.005

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Volatile Analysis, MS, (MV00)		
1,2,3-Trichloropropane	mg/L	<.005
1,1,2-Trichlorotrifluoroethane	mg/L	<.010
Vinyl acetate	mg/L	<.025
Vinyl chloride	mg/L	<.005
Xylenes	mg/L	<.005

APPENDIX B

QUANTITATIVE RESULTS

CONVENTIONAL DATA (CV10)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds		**Sample Results**	Detection Limits	Blank Results	Batch Number
Cyanide, Total	mg/L	ND	.010	ND	Q1I3366
Oil and Grease	mg/L	ND	5.00	ND	Q1I3363
Solids, total suspended	mg/L	26.0	10.0	-	
Total Dissolved Solids (TDS)	mg/L	451	10.0	-	
pH (Electrode)	std	6.51	-	-	

RCRA Total Metals Analysis, (ME50)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	**Sample Results** mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Arsenic	ND	.100	ND	Q1M3962
Barium	.338	.020	ND	Q1M3962
Cadmium	.549	.005	ND	Q1M3962
Chromium	ND	.010	ND	Q1M3962
Lead	.089	.075	ND	Q1M3962
Mercury	ND	.001	ND	Q1G3961
Selenium	ND	.100	ND	Q1M3962
Silver	ND	.010	ND	Q1M3962

TOTAL PESTICIDE AND PCB ANALYSIS, GC, (GS05)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	Sample Results mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Aldrin	ND	.0002	ND	Q1P40286
Alpha-BHC	ND	.0002	ND	Q1P40286
Beta-BHC	ND	.0002	ND	Q1P40286
Chlordane	ND	.001	ND	Q1P40286
4,4'-DDD	ND	.0002	ND	Q1P40286
4,4'-DDE	.0006	.0002	ND	Q1P40286
4,4'-DDT	.008	.0002	ND	Q1P40286
Delta-BHC	ND	.0002	ND	Q1P40286
Dieldrin	ND	.0002	ND	Q1P40286
Endosulfan sulfate	ND	.0002	ND	Q1P40286
Endosulfan I	ND	.0002	ND	Q1P40286
Endosulfan II	ND	.0002	ND	Q1P40286
Endrin	ND	.0002	ND	Q1P40286
Endrin aldehyde	ND	.0002	ND	Q1P40286
Endrin ketone	ND	.0002	ND	Q1P40286
Gamma-BHC	ND	.0002	ND	Q1P40286
Heptachlor	ND	.0002	ND	Q1P40286
Heptachlor epoxide	ND	.0002	ND	Q1P40286
Methoxychlor	ND	.0002	ND	Q1P40286
Toxaphene	ND	.004	ND	Q1P40286
Aroclor 1016	ND	.002	ND	Q1P40286
Aroclor 1221	ND	.002	ND	Q1P40286
Aroclor 1232	ND	.002	ND	Q1P40286
Aroclor 1242	ND	.002	ND	Q1P40286
Aroclor 1248	ND	.002	ND	Q1P40286
Aroclor 1254	ND	.002	ND	Q1P40286
Aroclor 1260	ND	.002	ND	Q1P40286

TOTAL BASE/NEUTRAL/ACID ANALYSIS, MS, (MS02)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	**Sample Results** mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Acenaphthene	ND	.010	ND	Q1C40274
Acenaphthylene	ND	.010	ND	Q1C40274
Anthracene	ND	.010	ND	Q1C40274
Benzidine	ND	.010	ND	Q1C40274
Benzoic acid	ND	.026	ND	Q1C40274
Benzyl alcohol	ND	.010	ND	Q1C40274
Benzo(a)anthracene	ND	.010	ND	Q1C40274
Benzo(b)fluoranthene	ND	.010	ND	Q1C40274
Benzo(k)fluoranthene	ND	.010	ND	Q1C40274
Benzo(ghi)perylene	ND	.010	ND	Q1C40274
Benzo(a)pyrene	ND	.010	ND	Q1C40274
bis(2-Chloroethoxy)ethane	ND	.010	ND	Q1C40274
bis(2-Chloroethyl) ether	ND	.010	ND	Q1C40274
bis(2-Chloroethoxy)methane	ND	.010	ND	Q1C40274
bis(2-Chloroisopropyl)ether	ND	.010	ND	Q1C40274
bis(2-Ethylhexyl)phthalate	ND	.010	ND	Q1C40274
4-Bromophenyl phenyl ether	ND	.010	ND	Q1C40274
Butyl benzyl phthalate	ND	.010	ND	Q1C40274
Carbazole	ND	.010	ND	Q1C40274
4-Chloroaniline	ND	.010	ND	Q1C40274
p-Chloro-m-cresol	ND	.010	ND	Q1C40274
2-Chloronaphthalene	ND	.010	ND	Q1C40274
2-Chlorophenol	ND	.010	ND	Q1C40274
4-Chlorophenyl phenyl ether	ND	.010	ND	Q1C40274
3-Chloropropionitrile	ND	.010	ND	Q1C40274
Chrysene	ND	.010	ND	Q1C40274
Cyclohexanone	ND	.010	ND	Q1C40274
Dibenzo(a,h)anthracene	ND	.010	ND	Q1C40274
Dibenzofuran	ND	.010	ND	Q1C40274
Di-n-butyl phthalate	ND	.010	ND	Q1C40274
1,2-Dichlorobenzene	ND	.010	ND	Q1C40274
1,3-Dichlorobenzene	ND	.010	ND	Q1C40274
1,4-Dichlorobenzene	ND	.010	ND	Q1C40274
3,3'-Dichlorobenzidine	ND	.010	ND	Q1C40274
2,4-Dichlorophenol	ND	.010	ND	Q1C40274
2,6-Dichlorophenol	ND	.010	ND	Q1C40274
Diethyl phthalate	ND	.010	ND	Q1C40274
Dimethyl phthalate	ND	.010	ND	Q1C40274
2,4-Dimethylphenol	ND	.010	ND	Q1C40274
4,6-Dinitro-o-cresol	ND	.026	ND	Q1C40274
2,4-Dinitrophenol	ND	.052	ND	Q1C40274
2,4-Dinitrotoluene	ND	.010	ND	Q1C40274
2,6-Dinitrotoluene	ND	.010	ND	Q1C40274
Di-n-octyl phthalate	ND	.010	ND	Q1C40274
2-Ethoxyethanol	ND	.010	ND	Q1C40274
Fluoranthene	ND	.010	ND	Q1C40274
Fluorene	ND	.010	ND	Q1C40274
Hexachlorobenzene	ND	.010	ND	Q1C40274
Hexachlorobutadiene	ND	.010	ND	Q1C40274
Hexachlorocyclopentadiene	ND	.010	ND	Q1C40274

TOTAL BASE/NEUTRAL/ACID ANALYSIS, MS, (MS02)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	**Sample Results** mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Hexachloroethane	ND	.010	ND	Q1C40274
Hexachloropropene	ND	.010	ND	Q1C40274
Indeno(1,2,3-c,d)pyrene	ND	.010	ND	Q1C40274
Isophorone	ND	.010	ND	Q1C40274
4,4'-Methylenebis(2-chloroani- line)	ND	.010	ND	Q1C40274
2-Methylnaphthalene	ND	.010	ND	Q1C40274
2-Methylphenol	ND	.010	ND	Q1C40274
4-Methylphenol	ND	.010	ND	Q1C40274
2-Nitropropane	ND	.010	ND	Q1C40274
N-Nitrosodimethylamine	ND	.010	ND	Q1C40274
N-Nitrosodi-n-propylamine	ND	.010	ND	Q1C40274
N-Nitrosodiphenylamine	ND	.010	ND	Q1C40274
Naphthalene	ND	.010	ND	Q1C40274
2-Nitroaniline	ND	.010	ND	Q1C40274
3-Nitroaniline	ND	.010	ND	Q1C40274
4-Nitroaniline	ND	.010	ND	Q1C40274
Nitrobenzene	ND	.010	ND	Q1C40274
2-Nitrophenol	ND	.010	ND	Q1C40274
4-Nitrophenol	ND	.052	ND	Q1C40274
Pentachlorobenzene	ND	.010	ND	Q1C40274
Pentachloronitrobenzene	ND	.010	ND	Q1C40274
Pentachlorophenol	ND	.010	ND	Q1C40274
Pentachloroethane	ND	.010	ND	Q1C40274
Phenanthrene	ND	.010	ND	Q1C40274
Phenol	ND	.010	ND	Q1C40274
Pronamide	ND	.010	ND	Q1C40274
Pyrene	ND	.010	ND	Q1C40274
Pyridine	ND	.010	ND	Q1C40274
1,2,4,5-Tetrachlorobenzene	ND	.010	ND	Q1C40274
2,3,4,6-Tetrachlorophenol	ND	.010	ND	Q1C40274
1,2,4-Trichlorobenzene	ND	.010	ND	Q1C40274
2,4,5-Trichlorophenol	ND	.010	ND	Q1C40274
2,4,6-Trichlorophenol	ND	.010	ND	Q1C40274

3-Methyl- and 4-Methylphenol coelute and are reported as the total

TOTAL VOLATILE ANALYSIS, MS, (MV00)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	Sample Results mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Acetone	.079	.005	ND	N1V3377
Acrolein	ND	.025	ND	N1V3377
Acrylonitrile	ND	.013	ND	N1V3377
Benzene	ND	.005	ND	N1V3377
Bromoform	ND	.005	ND	N1V3377
Carbon disulfide	ND	.005	ND	N1V3377
Carbon tetrachloride	ND	.005	ND	N1V3377
Chlorobenzene	ND	.005	ND	N1V3377
Chlorodibromomethane	ND	.005	ND	N1V3377
Chloroethane	ND	.005	ND	N1V3377
Chloroform	ND	.005	ND	N1V3377
2-Chloroethylvinyl ether	ND	.005	ND	N1V3377
3-Chloropropene	ND	.005	ND	N1V3377
1,2-Dibromo-3-chloropropane	ND	.005	ND	N1V3377
Dichlorobromomethane	ND	.005	ND	N1V3377
Dichlorodifluoromethane	ND	.005	ND	N1V3377
1,1-Dichloroethane	ND	.005	ND	N1V3377
1,2-Dichloroethane	ND	.005	ND	N1V3377
1,1-Dichloroethylene	ND	.005	ND	N1V3377
1,2-Dichloropropane	ND	.005	ND	N1V3377
cis-1,3-Dichloropropylene	ND	.005	ND	N1V3377
trans-1,3-Dichloropropylene	ND	.005	ND	N1V3377
Dibromomethane	ND	.005	ND	N1V3377
Ethylbenzene	ND	.005	ND	N1V3377
Ethylene dibromide	ND	.005	ND	N1V3377
Ethyl acetate	ND	.050	ND	N1V3377
Ethyl ether	ND	.005	ND	N1V3377
2-Hexanone	ND	.005	ND	N1V3377
Iodomethane	ND	.005	ND	N1V3377
Methyl bromide	ND	.005	ND	N1V3377
Methyl chloride	ND	.005	ND	N1V3377
Methylene chloride	ND	.005	ND	N1V3377
Methyl ethyl ketone	ND	.010	ND	N1V3377
Methyl-iso-butyl ketone	.024	.010	ND	N1V3377
Styrene	ND	.005	ND	N1V3377
1,1,1,2-Tetrachloroethane	ND	.005	ND	N1V3377
1,1,2,2-Tetrachloroethane	ND	.005	ND	N1V3377
Tetrachloroethylene	ND	.005	ND	N1V3377
Tetrahydrofuran	ND	.005	ND	N1V3377
Toluene	ND	.005	ND	N1V3377
1,1,1-Trichloroethane	ND	.005	ND	N1V3377
1,1,2-Trichloroethane	ND	.005	ND	N1V3377
Trichloroethylene	ND	.005	ND	N1V3377
1,2-Trans-dichloroethylene	ND	.005	ND	N1V3377
Trichlorofluoromethane	ND	.005	ND	N1V3377
1,2,3-Trichloropropane	ND	.005	ND	N1V3377
1,1,2-Trichlorotrifluoroethane	ND	.010	ND	N1V3377
Vinyl acetate	ND	.025	ND	N1V3377
Vinyl chloride	ND	.005	ND	N1V3377
Xylenes	ND	.005	ND	N1V3377

APPENDIX C

QUALITY ASSURANCE DATA

SUMMARY OF ANALYTICAL METHODOLOGY

Parameter	Reference	Method
Conventionals		
Solids, Total Suspended (liquid)	CAWW	160.2
Solids, Total Dissolved (liquid)	CAWW	160.1
pH, Electrode (liquid)	SW-846	9040
Cyanide, Total	CLP	335.2
Oil & Grease (liquid)	CAWW	413.1
Metals		
RCRA Total Metals (except mercury)	SW-846	6010
RCRA Total Mercury by Cold Vapor	SW-846	7470
Organics		
Pesticides and PCBs by GC	SW-846	8080
Volatile Compounds by GC/MS	SW-846	8240
Semi-volatile Compounds by GC/MS	SW-846	8270

METHODOLOGY REFERENCES

ASTM *American Society for Testing and Materials*, 1985 edition.

CAWW *Methods for Chemical Analysis of Water and Wastes*, April 1979 and Updated #1 March 1983.

CLP *USEPA Contract Laboratory Program*, Document #OLMO1.0, updates December 1990 #OLMO1.1 and February 1991 #OLMO1.1.1.

EPA-500 *USEPA Methods for the Determination of Organic Compounds in Drinking Water,* EPA-600/4-88/039 December 1988.

EPA-600 *USEPA Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*, EPA-600/4-82-057 July 1982.

NIOSH *National Institute for Occupational Safety and Health*, 3rd edition, 1984.

SMEWW *Standard Methods for the Examination of Water and Wastewater*, 17th edition, 1989.

STOA *Spot Tests In Organic Analysis*, 7th edition, 1966.

SW-846 *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, 3rd edition, September 1986 and Update #1 July 1992.

(1) This method was modified to incorporate the use of Boron Trifluoride (BF3) as the derivatizing reagent according to Method 6640 in *SMEWW*, 17th edition, 1989.

Title 22 *Waste Extraction Test*, Title 22, Section 66261.126 Appendix 2 of the California Administrative Code, May 1991.

ASC Certifications

State	Agency	Certification #
Alabama	ADEM	40830
California	CADOH	1178
Colorado	CODOH	OH113
Delaware	DEHSS	OH113
Kansas	KSDHE	E-202 & E-1173
Louisiana	LADOHH	92-10
Maryland	MDDHMH	210
Massachusetts	MADEP	M-OH113
New Jersey	NJDEPE	74603
New York	NYDOH	10712
North Carolina	NCDEM	392
Ohio	OHEPA	OH113
Oklahoma	OKDEQ	9216
Pennsylvania	PADER	68-450
South Carolina	SCDEHNR	92002
Tennessee	TNDOH/TNDEC	2978
Virginia	VADGS	00011
Washington	WADOE	C154
Wisconsin	WIDNR	999037160

Validated by:

- US Army Corps of Engineers ..... Chemical Analysis in Various Matrices

Approvals:

- Chemical Waste Management ..... Waste Characterization Analysis
- Envirosafe ..... Waste Characterization Analysis
- USDA ..... Permit for Importing Soils
- Florida DEP ..... Quality Assurance Plan #930034G
- Naval Energy and Environmental Support Activity ..... Chemical Analysis in Various Matrices

REPORT KEY

mg/kg	=	milligram per kilogram (ppm)
Mg/m^3	=	milligram per cubic meter
ug/kg	=	microgram per kilogram (ppb)
mg/L	=	milligram per liter (ppm)
ug/L	=	microgram per liter (ppb)
mg/W	=	milligram per wipe
ug/W	=	microgram per wipe
mg/SMP	=	milligram per sample
ug/SMP	=	microgram per sample
um/cm	=	microMho per centimeter
pCi/l	=	picocurie per liter
gm/cc	=	grams per cubic centimeter
ppm	=	parts per million
ppb	=	parts per billion
ND	=	Not detected at or above stated detection limit
<	=	less than
>	=	greater than
%	=	percent
BTU/lb	=	British Thermal Units per pound
Deg. C	=	Degrees Celsius
n/a	=	not applicable
Unk	=	unknown
std	=	result is relative to standard pH units
CV	=	Conventionals
IR	=	Infrared Spectrophotometric
GC	=	Gas Chromatograph Instrument
GC/MS	=	Gas Chromatography/Mass Spectrometer Instrument
GRO	=	Gasoline Range Organics
DRO	=	Diesel Range Organics
PCB	=	Polychlorinated Biphenyls (PCBs)
EP TOX	=	Extraction Procedure Toxicity
TCLP	=	Toxicity Characteristic Leaching Procedure
RCRA	=	Resource Conservation and Recovery Act

QUALITY ASSURANCE DATA

CONVENTIONAL DATA (CV10)

Compounds		Blank Results	Blank Spike Recov	Unspiked Sample Results	Matrix Spike Recov	Relative Percent Diff	Batch Number
Cyanide, Total	mg/L	ND	145	ND	100	10	Q1I3366
Oil and Grease	mg/L	ND	96	-	-	-	Q1I3363

QUALITY ASSURANCE DATA

RCRA TOTAL METALS ANALYSIS, (ME50)

Compounds	Blank Results mg/L	Blank Spike Recov	Unspiked Sample Results mg/L	Matrix Spike Recov	Relative Percent Diff	Batch Number
Arsenic	ND	94	ND	93	1	Q1M3962
Barium	ND	95	.338	91	1	Q1M3962
Cadmium	ND	92	.549	33	3	Q1M3962
Chromium	ND	97	ND	92	1	Q1M3962
Lead	ND	96	.089	89	1	Q1M3962
Mercury	ND	98	ND	100	4	Q1G3961
Selenium	ND	94	ND	91	2	Q1M3962
Silver	ND	95	ND	70	6	Q1M3962

- Cadmium: Because the analyte was present in the unspiked sample at a high level, the spiked sample does not provide valid spike recovery data.

QUALITY ASSURANCE DATA

TOTAL PESTICIDE AND PCB ANALYSIS, GC, (GS05)

Compounds	Blank Results mg/L	Blank Spike Recov	Unspiked Sample Results mg/L	Matrix Spike Recov	Relative Percent Diff	Batch Number
Aldrin	ND	70	ND	78	3	Q1P40286
Alpha-BHC	ND	82	ND	82	6	Q1P40286
Beta-BHC	ND	80	ND	89	3	Q1P40286
Chlordane	ND	81	ND	94	2	Q1P40286
4,4'-DDD	ND	80	ND	124	3	Q1P40286
4,4'-DDE	ND	82	.0006	74	0	Q1P40286
4,4'-DDT	ND	91	.008	-	6	Q1P40286
Delta-BHC	ND	82	ND	74	4	Q1P40286
Dieldrin	ND	82	ND	99	3	Q1P40286
Endosulfan sulfate	ND	72	ND	82	8	Q1P40286
Endosulfan I	ND	85	ND	98	2	Q1P40286
Endosulfan II	ND	77	ND	85	3	Q1P40286
Endrin	ND	84	ND	95	2	Q1P40286
Endrin aldehyde	ND	56	ND	69	8	Q1P40286
Endrin ketone	ND	76	ND	81	3	Q1P40286
Gamma-BHC	ND	73	ND	79	4	Q1P40286
Heptachlor	ND	66	ND	85	1	Q1P40286
Heptachlor epoxide	ND	77	ND	89	3	Q1P40286
Methoxychlor	ND	95	ND	106	6	Q1P40286

QUALITY ASSURANCE DATA

TOTAL BASE/NEUTRAL/ACID ANALYSIS, MS, (MS02)

Compounds	Blank Results mg/L	Blank Spike Recov	Unspiked Sample Results mg/L	Matrix Spike Recov	Relative Percent Diff	Batch Number
Acenaphthene	ND	79	ND	76	1	Q1C40274
Benzidine	ND	107	ND	-	-	Q1C40274
bis(2-Chloroethoxy)ethane	ND	73	ND	70	2	Q1C40274
bis(2-Chloroethyl) ether	ND	64	ND	62	6	Q1C40274
bis(2-Chloroethoxy)methane	ND	57	ND	58	6	Q1C40274
bis(2-Chloroisopropyl)ether	ND	63	ND	61	6	Q1C40274
p-Chloro-m-cresol	ND	83	ND	60	23	Q1C40274
2-Chloronaphthalene	ND	75	ND	73	1	Q1C40274
2-Chlorophenol	ND	70	ND	55	5	Q1C40274
Cyclohexanone	ND	16	ND	17	5	Q1C40274
Dibenzo(a,h)anthracene	ND	83	ND	77	4	Q1C40274
Di-n-butyl phthalate	ND	79	ND	75	2	Q1C40274
1,3-Dichlorobenzene	ND	60	ND	56	1	Q1C40274
1,4-Dichlorobenzene	ND	58	ND	56	14	Q1C40274
2,6-Dichlorophenol	ND	71	ND	56	10	Q1C40274
Diethyl phthalate	ND	78	ND	77	5	Q1C40274
4,6-Dinitro-o-cresol	ND	91	ND	96	1	Q1C40274
2,4-Dinitrotoluene	ND	94	ND	89	3	Q1C40274
Fluoranthene	ND	83	ND	81	1	Q1C40274
Fluorene	ND	77	ND	74	4	Q1C40274
Hexachlorobenzene	ND	93	ND	86	3	Q1C40274
Hexachlorocyclopentadiene	ND	47	ND	66	25	Q1C40274
Hexachloropropene	ND	61	ND	68	8	Q1C40274
2-Methylphenol	ND	60	ND	40	26	Q1C40274
4-Methylphenol	ND	58	ND	28	41	Q1C40274
N-Nitrosodimethylamine	ND	54	ND	44	8	Q1C40274
N-Nitrosodi-n-propylamine	ND	80	ND	78	5	Q1C40274
4-Nitroaniline	ND	75	ND	58	10	Q1C40274
2-Nitrophenol	ND	65	ND	67	4	Q1C40274
4-Nitrophenol	ND	29	ND	58	20	Q1C40274
Pentachlorobenzene	ND	98	ND	94	3	Q1C40274
Pentachlorophenol	ND	95	ND	114	3	Q1C40274
Pentachloroethane	ND	14	ND	21	1	Q1C40274
Phenol	ND	43	ND	34	30	Q1C40274
Pronamide	ND	84	ND	78	3	Q1C40274
Pyrene	ND	81	ND	80	1	Q1C40274
1,2,4-Trichlorobenzene	ND	63	ND	68	4	Q1C40274

3-Methyl- and 4-Methylphenol coelute and are reported as the total

QUALITY ASSURANCE DATA

TOTAL VOLATILE ANALYSIS, MS, (MV00)

Compounds	Blank Results mg/L	Blank Spike Recov	Unspiked Sample Results mg/L	Matrix Spike Recov	Relative Percent Diff	Batch Number
Acetone	ND	88	.079	106	1	N1V3377
Acrolein	ND	86	ND	16	-	N1V3377
Acrylonitrile	ND	73	ND	91	6	N1V3377
Benzene	ND	100	ND	103	1	N1V3377
Bromoform	ND	89	ND	105	1	N1V3377
Carbon disulfide	ND	103	ND	102	1	N1V3377
Carbon tetrachloride	ND	98	ND	104	1	N1V3377
Chlorobenzene	ND	96	ND	103	1	N1V3377
Chlorodibromomethane	ND	93	ND	103	2	N1V3377
Chloroethane	ND	108	ND	99	1	N1V3377
Chloroform	ND	101	ND	109	1	N1V3377
2-Chloroethylvinyl ether	ND	80	ND	100	1	N1V3377
3-Chloropropene	ND	92	ND	101	1	N1V3377
1,2-Dibromo-3-chloropropane	ND	74	ND	98	3	N1V3377
Dichlorobromomethane	ND	93	ND	103	1	N1V3377
Dichlorodifluoromethane	ND	97	ND	89	1	N1V3377
1,1-Dichloroethane	ND	99	ND	104	1	N1V3377
1,2-Dichloroethane	ND	99	ND	106	2	N1V3377
1,1-Dichloroethylene	ND	105	ND	106	1	N1V3377
1,2-Dichloropropane	ND	95	ND	106	3	N1V3377
cis-1,3-Dichloropropylene	ND	89	ND	98	2	N1V3377
trans-1,3-Dichloropropylene	ND	96	ND	110	2	N1V3377
Dibromomethane	ND	100	ND	106	1	N1V3377
Ethylbenzene	ND	97	ND	104	1	N1V3377
Ethylene dibromide	ND	93	ND	102	1	N1V3377
Ethyl acetate	ND	79	ND	87	3	N1V3377
Ethyl ether	ND	102	ND	102	1	N1V3377
2-Hexanone	ND	66	ND	94	1	N1V3377
Iodomethane	ND	101	ND	102	1	N1V3377
Methyl bromide	ND	125	ND	100	4	N1V3377
Methyl chloride	ND	74	ND	91	1	N1V3377
Methylene chloride	ND	122	ND	106	2	N1V3377
Methyl ethyl ketone	ND	63	ND	129	3	N1V3377
Methyl-iso-butyl ketone	ND	74	.024	98	2	N1V3377
Styrene	ND	100	ND	105	1	N1V3377
1,1,1,2-Tetrachloroethane	ND	99	ND	102	1	N1V3377
1,1,2,2-Tetrachloroethane	ND	90	ND	105	1	N1V3377
Tetrachloroethylene	ND	97	ND	102	1	N1V3377
Tetrahydrofuran	ND	76	ND	99	1	N1V3377
Toluene	ND	94	ND	103	1	N1V3377
1,1,1-Trichloroethane	ND	100	ND	105	1	N1V3377
1,1,2-Trichloroethane	ND	95	ND	102	1	N1V3377
Trichloroethylene	ND	94	ND	101	1	N1V3377
1,2-Trans-dichloroethylene	ND	105	ND	107	1	N1V3377
Trichlorofluoromethane	ND	114	ND	103	3	N1V3377
1,2,3-Trichloropropane	ND	88	ND	103	2	N1V3377
1,1,2-Trichlorotrifluoroethane	ND	201	ND	103	1	N1V3377
Vinyl acetate	ND	85	ND	69	15	N1V3377
Vinyl chloride	ND	95	ND	92	2	N1V3377
Xylenes	ND	99	ND	103	1	N1V3377

Matrix spike recoveries below the detection limits were observed for the analytes designated with a dash for the RPD of replicate matrix spikes.

QUALITY ASSURANCE DATA
SURROGATE SUMMARY REPORT

SURROGATE ID	A159	B732	A121	A884	A158	B142	# OUT
QC BATCH: Q1C40274 **Aqueous (Semi-Volatile organics by MS)**							
SAMPLE ID							
BLANK	53	42	85	75	82	79	0
BLANK SPIKE	54	41	105	80	90	85	0
CLJ-DWW-03	18 *	16	54	78	82	74	1
CLJ-DWW-03 MD	45	43	92	76	87	72	0
CLJ-DWW-03 MS	37	32	76	82	86	76	0
QC LIMITS	(21-110)	(10-110)	(10-123)	(35-114)	(43-116)	(33-141)	

SURROGATE ID	B816	A500	# OUT
QC BATCH: Q1P40286 **Aqueous (Pesticide compounds by GC)**			
SAMPLE ID			
BLANK	61	55	0
BLANK SPIKE	63	60	0
CLJ-DWW-03	76	63	0
CLJ-DWW-03 MD	64	68	0
CLJ-DWW-03 MS	69	66	0
QC LIMITS	(37-116)	(14-147)	

SURROGATE ID	A047	B185	B668	# OUT
QC BATCH: N1V3377 **Aqueous (Volatile organics by MS)**				
SAMPLE ID				
CLJ-DWW-03	101	103	101	0
CLJ-DWW-03 MD	105	100	101	0
CLJ-DWW-03 MS	104	99	101	0
QC LIMITS	(76-114)	(88-110)	(86-115)	

SURROGATE ID

A047 = 1,2-Dichloroethane-D4
B185 = Toluene-D8
B668 = Bromofluorobenzene
A159 = 2-Fluorophenol
B732 = Phenol-D6
A121 = 2,4,6-Tribromophenol
A884 = Nitrobenzene-D5
A158 = 2-Fluorobiphenyl
B142 = Terphenyl-D14
B816 = 2,4,5,6-Tetrachloro-m-xylene
A500 = Decachlorobiphenyl

* Values outside of method quality control limits
D Surrogate diluted out

It is ASC's laboratory policy to allow one surrogate per sample fraction (acid, base-neutral or pesticide) to exceed the stated QC limits. This policy is based upon the USEPA SOW for the Contract Laboratory Program (CLP).

Inst

7N/CLPMET/TCLP - 0307

QC BATCH # N7M3946

0047

Analyst: BJF Date: 3/15/94 Method #: 3010 Notebook: _____

Reagent Codes:

HNO_3 G41050 H_2SO_4 _____ NH_2OH HCL _____

HCl HX06031-2 $KMNO_4$ _____ NaCl _____

H_2O_2 _____ $K_2S_2O_8$ _____ $SnCl_2$ _____

DI _____

Spike Codes:

ICP _____ mL ____

HGA _____ mL ____

Stock Hg _____

TCLP 0770 mL 5.0mO

ASC #	Job #	Sample ID	Vi/Wi	Vf	F	Filtered	Comments
MTH BLK			50	50			
MTH SPK							
1 JM4363	15226N	CLJCSS43					
2 4364		44					
* 3 4365		45					
4 4366		46					
5 4367		CLJDS10					
6 4368		11					
7 4369		11D					
8						Replicate	
9 —	TCLP	BLANK					
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20						Bennett	Firestone
MTX SPK	15226N	CLJDS11D	50	50			3-15-94
JM4369							
MTX SPK DUP							

Hg Standard	mL Stock	Vf	ug/L	ug/kg	Comments
#1				*	fix JM4365
#2					
#3					
#4					
#5					

Water Bath Temp.: _____

Read and Understood By Date

7N/CLP NVOT/TCLP 0308
0046

QC BATCH # N7M3943

Analyst: RJF Date: 3/15/94 Method #: 3010 Notebook: _____

Reagent Codes:

HNO_3 G41050
HCl Nx0603T·2
H_2O_2 _____
H_2SO_4 _____
$KMNO_4$ _____
$K_2S_2O_8$ _____
NH_2OH HCL _____
NaCl _____
$SnCl_2$ _____
DI _____

Spike Codes:

ICP _____ mL ____
HGA _____ mL ____
Stock Hg _____
TCLP 0770mL 5.0mL

ASC #	Job #	Sample ID	Vi/Wi	Vf	F	Filtered	Comments
MTH BLK			50	50			
MTH SPK							
1 JM4353	15226N	CLJC5533					
2 4354		34					
3 4355		35					
4 4356		36					
5 4357		37					
6 4358		38					
7 4359		39					
8 4360		40					
9 4361		41					
10 4362		42					
11						Replicate	
12	TCLP	Blank					
13							
14							
15							
16							
17							
18							
19							
20							Renee Firestone, 3-15-94
MTX SPK	15226N	CLJC5542	50	50			
JM4362							
MTX SPK DUP							

Hg Standard	mL Stock	Vf	ug/L	ug/kg	Comments
#1					
#2					
#3					
#4					
#5					

Water Bath Temp.: _____

Read and Understood By _____ Date

7N/CLPNE/F/TCLP
7N/CLPB/F/TCLP
7N/CLPSE/F/TCLP

0019

QC BATCH # N7A3945

Analyst: RJF Date: 3/15/94 Method #: 3020 Notebook: 0309

Reagent Codes:

HNO_3 G41050
HCl
H_2O_2 G17802
H_2SO_4
$KMNO_4$
$K_2S_2O_8$
NH_2OH HCL
NaCl
$SnCl_2$
DI

Spike Codes:

ICP mL
HGA 0776 mL 5 ml
Stock Hg
TCLP mL

ASC #	Job #	Sample ID	Vi/Wi	Vf	F	Filtered	Comments
MTH BLK			50	50			
MTH SPK							
1	TCLP	BLK					
2 JM4353	15226N	CLXSS33					
3 4354		34					
4 4355		35					
5 4356		36					
6 4357		37					
7 4358		38					
8 4359		39					
9 4360		40					
10 4361		41					
11 4362		42					
12						Replicate	
13	PROF						
14							
15							
16							
17							
18							
19							
20						Remeasure	
MTX SPK	15226N	CLXSS42	50	50			3-15-94
JM4362							
MTX SPK DUP							

Hg Standard	mL Stock	Vf	ug/L	ug/kg	Comments
#1					
#2					
#3					
#4					
#5					

Water Bath Temp.: _____

Read and Understood By Date

7N/CLPAS/F/TCLP
7N/CLPPb/F/TCLP
7N/CLPSE/F/TCLP

QC BATCH # N7B3948

0020 - 031

Analyst: BJF Date: 3/15/94 Method #: 3020 Notebook: _____

Reagent Codes:

HNO_3 641050 H_2SO_4 _____ NH_2OH HCL _____

HCl _____ $KMNO_4$ _____ NaCl _____

H_2O_2 617802 $K_2S_2O_8$ _____ $SnCl_2$ _____

DI _____

Spike Codes:

ICP _____ mL ___

HGA 0776 mLs on

Stock Hg _____

TCLP _____ mL ___

ASC #	Job #	Sample ID	Vi/Wi	Vf	F	Filtered	Comments
MTH BLK			50	50			
MTH SPK							
1 —	TCLP	Blank					
2 JN4363	15226N	CWCSS43					
3 4364		44					
4 4365		45					
5 4366		46					
6 4367		CWDS10					
7 4368		11					
8 4369		11D					
9						Replicate	
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20						Renee J. Firestone	
MTX SPK	15226N	CWDS11D	50	50			3-15-94
JN4369							
MTX SPK DUP							

Hg Standard	mL Stock	Vf	ug/L	ug/kg	Comments
#1					
#2					
#3					
#4					
#5					

Water Bath Temp.: _____

Read and Understood By Date

0311
000.

QC BATCH # N7G3944 R

Analyst: RJF Date: 3/17/94 Method #: 7470 Notebook: _____

Reagent Codes:

HNO_3 _____ H_2SO_4 30350 NH_2OH HCL E38717

HCl _____ $KMNO_4$ G13718 NaCl F49704

H_2O_2 _____ $K_2S_2O_8$ D03710 $SnCl_2$ 926783

DI _____

Spike Codes:

ICP _____ mL ___

HGA _____ mL ___

Stock Hg 0798

TCLP _____ mL ___

ASC #	Job #	Sample ID	V/W	Vf	F	Filtered	Comments
MTH BLK			50	50			
MTH SPK							
1 JM4353	15226N	CLJCSS33					
2 4354		34					
3 4355		35					
4 4356		36					
5 4357		37					
6 4358		38					
7 4359		39					
8 4360		40					
9 4361		41					
10 4362		42					
11						Replicate	
12 —	TCLP	Blank					
13							
14							
15							
16							
17							
18							
19							
20						Bence J Firestone	
MTX SPK	15226N	CLJCSS42	50	50			3-17-94
JM4362							
MTX SPK DUP							

Hg Standard	mL Stock	Vf	ug/L	ug/kg	Comments
#1					
#2					
#3					
#4					
#5					

Water Bath Temp.: _____

Read and Understood By _____ Date

QC BATCH # N76-3947

0040

0312

Analyst: BJF Date: 3/15/94 Method #: 7470 Notebook: _____

Reagent Codes:

HNO_3 _____ H_2SO_4 30350 $NH_2OH\ HCL$ E38717

HCl _____ $KMNO_4$ G13718 NaCl F49704

H_2O_2 _____ $K_2S_2O_8$ D03710 $SnCl_2$ 976783

DI _____

Spike Codes:

ICP _____ mL ___

HGA _____ mL ___

Stock Hg 0798

TCLP _____ mL ___

ASC #	Job #	Sample ID	Vi/Wi	Vf	F	Filtered	Comments
MTH BLK			50	50			
MTH SPK							
UM 4363	15226N	CLJCSS43					
2 4364		44					
3 4365		45					
4 4366		46					
5 4367		CLJDS11D					
6 4368		11					
7 4369		11D					
8						Replicate	
9	TCLP	B117					
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							Renee J. Firestone 3-15-94
MTX SPK	15226N	CLJDS11D	50	50			
UM 4369							
MTX SPK DUP							

Hg Standard	mL Stock	Vf	ug/L	ug/kg	Comments
#1					
#2					
#3					
#4					
#5					

Water Bath Temp.: _____

Read and Understood By Date

(C:\WP51\FORMS\QC-BATCH.645) (Revised: 2/24/93)

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DATA SUMMARY REPORT

DATE: 03/18/94

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DWW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Conventional Data (CV10)		
Cyanide, Total	mg/L	<.010
Oil and Grease	mg/L	<5.00
Solids, total suspended	mg/L	26.0
Total Dissolved Solids (TDS)	mg/L	451
pH (Electrode)	std	6.51
RCRA Total Metals Analysis, (ME50)		
Arsenic	mg/L	<.100
Barium	mg/L	.338
Cadmium	mg/L	.549
Chromium	mg/L	<.010
Lead	mg/L	.089
Mercury	mg/L	<.001
Selenium	mg/L	<.100
Silver	mg/L	<.010
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Acenaphthene	mg/L	<.010
Acenaphthylene	mg/L	<.010
Anthracene	mg/L	<.010
Benzidine	mg/L	<.010
Benzoic acid	mg/L	<.026
Benzyl alcohol	mg/L	<.010
Benzo(a)anthracene	mg/L	<.010
Benzo(b)fluoranthene	mg/L	<.010
Benzo(k)fluoranthene	mg/L	<.010
Benzo(ghi)perylene	mg/L	<.010
Benzo(a)pyrene	mg/L	<.010
bis(2-Chloroethoxy)ethane	mg/L	<.010
bis(2-Chloroethyl) ether	mg/L	<.010
bis(2-Chloroethoxy)methane	mg/L	<.010
bis(2-Chloroisopropyl)ether	mg/L	<.010
bis(2-Ethylhexyl)phthalate	mg/L	<.010
4-Bromophenyl phenyl ether	mg/L	<.010
Butyl benzyl phthalate	mg/L	<.010

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To Kent Geis | From Melanie
Co./Dept. | Co.
Phone # | Phone #
Fax # | Fax #

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DWW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Carbazole	mg/L	<.010
4-Chloroaniline	mg/L	<.010
p-Chloro-m-cresol	mg/L	<.010
2-Chloronaphthalene	mg/L	<.010
2-Chlorophenol	mg/L	<.010
4-Chlorophenyl phenyl ether	mg/L	<.010
3-Chloropropionitrile	mg/L	<.010
Chrysene	mg/L	<.010
Cyclohexanone	mg/L	<.010
Dibenzo(a,h)anthracene	mg/L	<.010
Dibenzofuran	mg/L	<.010
Di-n-butyl phthalate	mg/L	<.010
1,2-Dichlorobenzene	mg/L	<.010
1,3-Dichlorobenzene	mg/L	<.010
1,4-Dichlorobenzene	mg/L	<.010
3,3'-Dichlorobenzidine	mg/L	<.010
2,4-Dichlorophenol	mg/L	<.010
2,6-Dichlorophenol	mg/L	<.010
Diethyl phthalate	mg/L	<.010
Dimethyl phthalate	mg/L	<.010
2,4-Dimethylphenol	mg/L	<.010
4,6-Dinitro-o-cresol	mg/L	<.026
2,4-Dinitrophenol	mg/L	<.052
2,4-Dinitrotoluene	mg/L	<.010
2,6-Dinitrotoluene	mg/L	<.010
Di-n-octyl phthalate	mg/L	<.010
2-Ethoxyethanol	mg/L	<.010
Fluoranthene	mg/L	<.010
Fluorene	mg/L	<.010
Hexachlorobenzene	mg/L	<.010
Hexachlorobutadiene	mg/L	<.010
Hexachlorocyclopentadiene	mg/L	<.010
Hexachloroethane	mg/L	<.010
Hexachloropropene	mg/L	<.010
Indeno(1,2,3-c,d)pyrene	mg/L	<.010

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DMW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Isophorone	mg/L	<.010
4,4'-Methylenebis(2-chloroaniline)	mg/L	<.010
2-Methylnaphthalene	mg/L	<.010
2-Methylphenol	mg/L	<.010
4-Methylphenol	mg/L	<.010
2-Nitropropane	mg/L	<.010
N-Nitrosodimethylamine	mg/L	<.010
N-Nitrosodi-n-propylamine	mg/L	<.010
N-Nitrosodiphenylamine	mg/L	<.010
Naphthalene	mg/L	<.010
2-Nitroaniline	mg/L	<.010
3-Nitroaniline	mg/L	<.010
4-Nitroaniline	mg/L	<.010
Nitrobenzene	mg/L	<.010
2-Nitrophenol	mg/L	<.010
4-Nitrophenol	mg/L	<.052
Pentachlorobenzene	mg/L	<.010
Pentachloronitrobenzene	mg/L	<.010
Pentachlorophenol	mg/L	<.010
Pentachloroethane	mg/L	<.010
Phenanthrene	mg/L	<.010
Phenol	mg/L	<.010
Pronamide	mg/L	<.010
Pyrene	mg/L	<.010
Pyridine	mg/L	<.010
1,2,4,5-Tetrachlorobenzene	mg/L	<.010
2,3,4,6-Tetrachlorophenol	mg/L	<.010
1,2,4-Trichlorobenzene	mg/L	<.010
2,4,5-Trichlorophenol	mg/L	<.010
2,4,6-Trichlorophenol	mg/L	<.010

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DMW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Volatile Analysis, MS, (MV00)		
Acetone	mg/L	.079
Acrolein	mg/L	<.025
Acrylonitrile	mg/L	<.013
Benzene	mg/L	<.005
Bromoform	mg/L	<.005
Carbon disulfide	mg/L	<.005
Carbon tetrachloride	mg/L	<.005
Chlorobenzene	mg/L	<.005
Chlorodibromomethane	mg/L	<.005
Chloroethane	mg/L	<.005
Chloroform	mg/L	<.005
2-Chloroethylvinyl ether	mg/L	<.005
3-Chloropropene	mg/L	<.005
1,2-Dibromo-3-chloropropane	mg/L	<.005
Dichlorobromomethane	mg/L	<.005
Dichlorodifluoromethane	mg/L	<.005
1,1-Dichloroethane	mg/L	<.005
1,2-Dichloroethane	mg/L	<.005
1,1-Dichloroethylene	mg/L	<.005
1,2-Dichloropropane	mg/L	<.005
cis-1,3-Dichloropropylene	mg/L	<.005
trans-1,3-Dichloropropylene	mg/L	<.005
Dibromomethane	mg/L	<.005
Ethylbenzene	mg/L	<.005
Ethylene dibromide	mg/L	<.005
Ethyl acetate	mg/L	<.050
Ethyl ether	mg/L	<.005
2-Hexanone	mg/L	<.005
Iodomethane	mg/L	<.005
Methyl bromide	mg/L	<.005
Methyl chloride	mg/L	<.005
Methylene chloride	mg/L	<.005
Methyl ethyl ketone	mg/L	<.010
Methyl-iso-butyl ketone	mg/L	.024
Styrene	mg/L	<.005

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DMW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Volatile Analysis, MS, (MV00)		
1,1,1,2-Tetrachloroethane	mg/L	<.005
1,1,2,2-Tetrachloroethane	mg/L	<.005
Tetrachloroethylene	mg/L	<.005
Tetrahydrofuran	mg/L	<.005
Toluene	mg/L	<.005
1,1,1-Trichloroethane	mg/L	<.005
1,1,2-Trichloroethane	mg/L	<.005
Trichloroethylene	mg/L	<.005
1,2-Trans-dichloroethylene	mg/L	<.005
Trichlorofluoromethane	mg/L	<.005
1,2,3-Trichloropropane	mg/L	<.005
1,1,2-Trichlorotrifluoroethane	mg/L	<.010
Vinyl acetate	mg/L	<.025
Vinyl chloride	mg/L	<.005
Xylenes	mg/L	<.005

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DATE: 03/18/94

PRELIMINARY DATA
TOTAL PESTICIDE AND PCB ANALYSIS, GC, (GS05)

ASC Batch # Q1P40286

JM4781	015226N	CLJ-DWW-03	mg/l	JM4781
ASC Sample #	Facility Code	Sample Point	Units	Mspk Id

Compound	Sample Result	Report DL	Blank Result	Blank Spike Recov.	Unspiked Sample Result	Matrix Spike Recov.	Matrix Result	MS Duplicate Result	RPD	TC Bias Correction
Aldrin	ND	.000200	ND	69.8	ND	77.9	.00187	.00182	2.93	-
Alpha-BHC	ND	.000200	7.45-06 J	82.1	ND	81.8	.00195	.00183	5.93	-
Beta-BHC	ND	.000200	ND	79.8	ND	88.8	.00188	.00182	3.13	-
Chlordane	ND	.00100	ND	81.3	ND	93.6	.00389	.00381	2.18	-
4,4'-DDD	ND	.000200	ND	80.5	ND	124	.00308	.00318	3.19	-
4,4'-DDE	.000640	.000200	ND	82.1	.000640	74.0	.00246	.00246	0	-
4,4'-DDT	.00846	.000200	ND	91.4	.00846	0<M	.00610	.00646	5.73	-
Delta-BHC	ND	.000200	ND	82.0	ND	74.0	.00166	.00160	3.56	-
Dieldrin	ND	.000200	ND	81.6	ND	99.2	.00242	.00234	3.36	-
Endosulfan sulfate	ND	.000200	ND	72.3	ND	82.3	.00214	.00232	8.07	-
Endosulfan I	ND	.000200	ND	84.6	ND	98.2	.00224	.00220	1.80	-
Endosulfan II	ND	.000200	ND	77.0	ND	84.6	.00208	.00202	2.93	-
Endrin	ND	.000200	ND	83.8	ND	94.6	.00246	.00242	1.64	-
Endrin aldehyde	ND	.000200	ND	55.7	ND	68.9	.00145	.00134	7.61	-
Endrin ketone	ND	.000200	ND	75.5	ND	80.8	.00202	.00197	2.71	-
Gamma-BHC	ND	.000200	ND	73.0	ND	78.9	.00202	.00195	3.73	-
Heptachlor	ND	.000200	ND	65.7	ND	85.1	.00179	.00178	.336	-
Heptachlor epoxide	ND	.000200	ND	77.4	ND	89.4	.00197	.00191	2.89	-
Methoxychlor	ND	.000200	ND	95.1	ND	106	.00258	.00274	6.02	-
Toxaphene	ND	.00400	ND	-	-	-	-	-	-	-
Aroclor 1016	ND	.00200	ND	-	-	-	-	-	-	-
Aroclor 1221	ND	.00200	ND	-	-	-	-	-	-	-
Aroclor 1232	ND	.00200	ND	-	-	-	-	-	-	-
Aroclor 1242	ND	.00200	ND	-	-	-	-	-	-	-
Aroclor 1248	ND	.00200	ND	-	-	-	-	-	-	-
Aroclor 1254	ND	.00200	ND	-	-	-	-	-	-	-
Aroclor 1260	ND	.00200	ND	-	-	-	-	-	-	-
Lindane	-	-	ND	73.0	ND	78.9	.00202	.00195	3.73	-
alpha-Chlordane	-	-	ND	79.4	ND	94.2	.00200	.00195	2.43	-
gamma-Chlordane	-	-	ND	83.3	ND	93.0	.00190	.00186	1.91	-
Surrogate										
2,4,5,6-Tetrachloro-m-xylene	76.4	NA	61.4	63.3	NA	68.9	NA	NA	63.5	NA
Decachlorobiphenyl	62.5	NA	54.7	60.4	NA	66.3	NA	NA	67.7	NA

NC - No Control Limits have been defined
D - Surrogate has been diluted out
<L,>L - Recovery is < or > in-house Lab Control Limit
<M,>M - Recovery is < or > Method Control Limit
NA - Not Applicable

T1 - One point outside Control Limits
T2 - Three consecutive points outside Warning Limits
T3 - Eight consecutive points same side of Mean
T4 - Six consecutive points same direction

Analytical Services Corp.

ANALYTICAL REPORT

Client: OHM Remediation Services Corporation
Southern Region (Morrisville, NC)

Attn: Kent Geis
Bill Perry

Project: 15226N - NEESA; Camp LeJuene, Jacksonville, NC

Sample(s): CLJ-DWW-003

Sample Type(s): Liquid

Analysis Performed: Conventionals, Metals and Organics

Date Sample Received: March 16, 1994

Date Order Received: March 16, 1994

Joblink(s): 615381

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. Analytical Services Corporation assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: _____ *Date:* 4/1/94
Thomas E. Gran, Ph.D., Vice President

16406 U.S. Route 224 East ■ P.O. Box 1404 ■ Findlay, Ohio 45839-1404 ■ 419-423-3526

PROJECT NARRATIVE

The following items relate to the samples and analytical data contained in this report.

- Note any and all comments at the bottom of the tables in Appendix C.
- **ASC** will retain samples for a maximum of thirty (30) days after completion of the analysis, samples will be held for a longer period of time, if appropriate arrangements are made in advance. A nominal disposal charge of $5.00/ sample will be imposed for unreturned samples.

APPENDIX A

DATA SUMMARY REPORT

NOTE: The GC/MS screen data, if applicable, is included in Appendix B.

DATA SUMMARY REPORT

DATE: 03/31/94

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Conventional Data (CV10)		
Cyanide, Total	mg/L	<.010
Oil and Grease	mg/L	<5.00
Solids, total suspended	mg/L	26.0
Total Dissolved Solids (TDS)	mg/L	451
pH (Electrode)	std	6.51
Total Pesticide and PCB Analysis, GC, (GS05)		
Aldrin	mg/L	<.0002
Alpha-BHC	mg/L	<.0002
Beta-BHC	mg/L	<.0002
Chlordane	mg/L	<.001
4,4'-DDD	mg/L	<.0002
4,4'-DDE	mg/L	.0006
4,4'-DDT	mg/L	.008
Delta-BHC	mg/L	<.0002
Dieldrin	mg/L	<.0002
Endosulfan sulfate	mg/L	<.0002
Endosulfan I	mg/L	<.0002
Endosulfan II	mg/L	<.0002
Endrin	mg/L	<.0002
Endrin aldehyde	mg/L	<.0002
Endrin ketone	mg/L	<.0002
Gamma-BHC	mg/L	<.0002
Heptachlor	mg/L	<.0002
Heptachlor epoxide	mg/L	<.0002
Methoxychlor	mg/L	<.0002
Toxaphene	mg/L	<.004
Aroclor 1016	mg/L	<.002
Aroclor 1221	mg/L	<.002
Aroclor 1232	mg/L	<.002
Aroclor 1242	mg/L	<.002
Aroclor 1248	mg/L	<.002
Aroclor 1254	mg/L	<.002
Aroclor 1260	mg/L	<.002

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
RCRA Total Metals Analysis, (ME50)		
Arsenic	mg/L	<.100
Barium	mg/L	.338
Cadmium	mg/L	.549
Chromium	mg/L	<.010
Lead	mg/L	.089
Mercury	mg/L	<.001
Selenium	mg/L	<.100
Silver	mg/L	<.010
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Acenaphthene	mg/L	<.010
Acenaphthylene	mg/L	<.010
Anthracene	mg/L	<.010
Benzidine	mg/L	<.010
Benzoic acid	mg/L	<.026
Benzyl alcohol	mg/L	<.010
Benzo(a)anthracene	mg/L	<.010
Benzo(b)fluoranthene	mg/L	<.010
Benzo(k)fluoranthene	mg/L	<.010
Benzo(ghi)perylene	mg/L	<.010
Benzo(a)pyrene	mg/L	<.010
bis(2-Chloroethoxy)ethane	mg/L	<.010
bis(2-Chloroethyl) ether	mg/L	<.010
bis(2-Chloroethoxy)methane	mg/L	<.010
bis(2-Chloroisopropyl)ether	mg/L	<.010
bis(2-Ethylhexyl)phthalate	mg/L	<.010
4-Bromophenyl phenyl ether	mg/L	<.010
Butyl benzyl phthalate	mg/L	<.010
Carbazole	mg/L	<.010
4-Chloroaniline	mg/L	<.010
p-Chloro-m-cresol	mg/L	<.010
2-Chloronaphthalene	mg/L	<.010
2-Chlorophenol	mg/L	<.010
4-Chlorophenyl phenyl ether	mg/L	<.010
3-Chloropropionitrile	mg/L	<.010

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Base/Neutral/Acid Analysis, MS, (MS02)		
Chrysene	mg/L	<.010
Cyclohexanone	mg/L	<.010
Dibenzo(a,h)anthracene	mg/L	<.010
Dibenzofuran	mg/L	<.010
Di-n-butyl phthalate	mg/L	<.010
1,2-Dichlorobenzene	mg/L	<.010
1,3-Dichlorobenzene	mg/L	<.010
1,4-Dichlorobenzene	mg/L	<.010
3,3'-Dichlorobenzidine	mg/L	<.010
2,4-Dichlorophenol	mg/L	<.010
2,6-Dichlorophenol	mg/L	<.010
Diethyl phthalate	mg/L	<.010
Dimethyl phthalate	mg/L	<.010
2,4-Dimethylphenol	mg/L	<.010
4,6-Dinitro-o-cresol	mg/L	<.026
2,4-Dinitrophenol	mg/L	<.052
2,4-Dinitrotoluene	mg/L	<.010
2,6-Dinitrotoluene	mg/L	<.010
Di-n-octyl phthalate	mg/L	<.010
2-Ethoxyethanol	mg/L	<.010
Fluoranthene	mg/L	<.010
Fluorene	mg/L	<.010
Hexachlorobenzene	mg/L	<.010
Hexachlorobutadiene	mg/L	<.010
Hexachlorocyclopentadiene	mg/L	<.010
Hexachloroethane	mg/L	<.010
Hexachloropropene	mg/L	<.010
Indeno(1,2,3-c,d)pyrene	mg/L	<.010
Isophorone	mg/L	<.010
4,4'-Methylenebis(2-chloroani-line)	mg/L	<.010
2-Methylnaphthalene	mg/L	<.010
2-Methylphenol	mg/L	<.010
4-Methylphenol	mg/L	<.010
2-Nitropropane	mg/L	<.010
N-Nitrosodimethylamine	mg/L	<.010

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DWW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Base/Neutral/Acid Analysis, MS, (MS02)		
N-Nitrosodi-n-propylamine	mg/L	<.010
N-Nitrosodiphenylamine	mg/L	<.010
Naphthalene	mg/L	<.010
2-Nitroaniline	mg/L	<.010
3-Nitroaniline	mg/L	<.010
4-Nitroaniline	mg/L	<.010
Nitrobenzene	mg/L	<.010
2-Nitrophenol	mg/L	<.010
4-Nitrophenol	mg/L	<.052
Pentachlorobenzene	mg/L	<.010
Pentachloronitrobenzene	mg/L	<.010
Pentachlorophenol	mg/L	<.010
Pentachloroethane	mg/L	<.010
Phenanthrene	mg/L	<.010
Phenol	mg/L	<.010
Pronamide	mg/L	<.010
Pyrene	mg/L	<.010
Pyridine	mg/L	<.010
1,2,4,5-Tetrachlorobenzene	mg/L	<.010
2,3,4,6-Tetrachlorophenol	mg/L	<.010
1,2,4-Trichlorobenzene	mg/L	<.010
2,4,5-Trichlorophenol	mg/L	<.010
2,4,6-Trichlorophenol	mg/L	<.010
Total Volatile Analysis, MS, (MV00)		
Acetone	mg/L	.079
Acrolein	mg/L	<.025
Acrylonitrile	mg/L	<.013
Benzene	mg/L	<.005
Bromoform	mg/L	<.005
Carbon disulfide	mg/L	<.005
Carbon tetrachloride	mg/L	<.005
Chlorobenzene	mg/L	<.005
Chlorodibromomethane	mg/L	<.005
Chloroethane	mg/L	<.005

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: CLJ-DWW-03
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Volatile Analysis, MS, (MV00)		
Chloroform	mg/L	<.005
2-Chloroethylvinyl ether	mg/L	<.005
3-Chloropropene	mg/L	<.005
1,2-Dibromo-3-chloropropane	mg/L	<.005
Dichlorobromomethane	mg/L	<.005
Dichlorodifluoromethane	mg/L	<.005
1,1-Dichloroethane	mg/L	<.005
1,2-Dichloroethane	mg/L	<.005
1,1-Dichloroethylene	mg/L	<.005
1,2-Dichloropropane	mg/L	<.005
cis-1,3-Dichloropropylene	mg/L	<.005
trans-1,3-Dichloropropylene	mg/L	<.005
Dibromomethane	mg/L	<.005
Ethylbenzene	mg/L	<.005
Ethylene dibromide	mg/L	<.005
Ethyl acetate	mg/L	<.050
Ethyl ether	mg/L	<.005
2-Hexanone	mg/L	<.005
Iodomethane	mg/L	<.005
Methyl bromide	mg/L	<.005
Methyl chloride	mg/L	<.005
Methylene chloride	mg/L	<.005
Methyl ethyl ketone	mg/L	<.010
Methyl-iso-butyl ketone	mg/L	.024
Styrene	mg/L	<.005
1,1,1,2-Tetrachloroethane	mg/L	<.005
1,1,2,2-Tetrachloroethane	mg/L	<.005
Tetrachloroethylene	mg/L	<.005
Tetrahydrofuran	mg/L	<.005
Toluene	mg/L	<.005
1,1,1-Trichloroethane	mg/L	<.005
1,1,2-Trichloroethane	mg/L	<.005
Trichloroethylene	mg/L	<.005
1,2-Trans-dichloroethylene	mg/L	<.005
Trichlorofluoromethane	mg/L	<.005

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **CLJ-DWW-03**
ASC Sample Number: JM4781
Sample Date: 940315
Facility Code: 015226N

Parameters	Units	
Total Volatile Analysis, MS, (MV00)		
1,2,3-Trichloropropane	mg/L	<.005
1,1,2-Trichlorotrifluoroethane	mg/L	<.010
Vinyl acetate	mg/L	<.025
Vinyl chloride	mg/L	<.005
Xylenes	mg/L	<.005

APPENDIX B

QUANTITATIVE RESULTS

CONVENTIONAL DATA (CV10)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds		Sample Results	Detection Limits	Blank Results	Batch Number
Cyanide, Total	mg/L	ND	.010	ND	Q1I3366
Oil and Grease	mg/L	ND	5.00	ND	Q1I3363
Solids, total suspended	mg/L	26.0	10.0	-	
Total Dissolved Solids (TDS)	mg/L	451	10.0	-	
pH (Electrode)	std	6.51	-	-	

RCRA Total Metals Analysis, (ME50)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	**Sample Results** mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Arsenic	ND	.100	ND	Q1M3962
Barium	.338	.020	ND	Q1M3962
Cadmium	.549	.005	ND	Q1M3962
Chromium	ND	.010	ND	Q1M3962
Lead	.089	.075	ND	Q1M3962
Mercury	ND	.001	ND	Q1G3961
Selenium	ND	.100	ND	Q1M3962
Silver	ND	.010	ND	Q1M3962

TOTAL PESTICIDE AND PCB ANALYSIS, GC, (GS05)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	**Sample Results** mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Aldrin	ND	.0002	ND	Q1P40286
Alpha-BHC	ND	.0002	ND	Q1P40286
Beta-BHC	ND	.0002	ND	Q1P40286
Chlordane	ND	.001	ND	Q1P40286
4,4'-DDD	ND	.0002	ND	Q1P40286
4,4'-DDE	.0006	.0002	ND	Q1P40286
4,4'-DDT	.008	.0002	ND	Q1P40286
Delta-BHC	ND	.0002	ND	Q1P40286
Dieldrin	ND	.0002	ND	Q1P40286
Endosulfan sulfate	ND	.0002	ND	Q1P40286
Endosulfan I	ND	.0002	ND	Q1P40286
Endosulfan II	ND	.0002	ND	Q1P40286
Endrin	ND	.0002	ND	Q1P40286
Endrin aldehyde	ND	.0002	ND	Q1P40286
Endrin ketone	ND	.0002	ND	Q1P40286
Gamma-BHC	ND	.0002	ND	Q1P40286
Heptachlor	ND	.0002	ND	Q1P40286
Heptachlor epoxide	ND	.0002	ND	Q1P40286
Methoxychlor	ND	.0002	ND	Q1P40286
Toxaphene	ND	.004	ND	Q1P40286
Aroclor 1016	ND	.002	ND	Q1P40286
Aroclor 1221	ND	.002	ND	Q1P40286
Aroclor 1232	ND	.002	ND	Q1P40286
Aroclor 1242	ND	.002	ND	Q1P40286
Aroclor 1248	ND	.002	ND	Q1P40286
Aroclor 1254	ND	.002	ND	Q1P40286
Aroclor 1260	ND	.002	ND	Q1P40286

TOTAL BASE/NEUTRAL/ACID ANALYSIS, MS, (MS02)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	**Sample Results** mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Acenaphthene	ND	.010	ND	Q1C40274
Acenaphthylene	ND	.010	ND	Q1C40274
Anthracene	ND	.010	ND	Q1C40274
Benzidine	ND	.010	ND	Q1C40274
Benzoic acid	ND	.026	ND	Q1C40274
Benzyl alcohol	ND	.010	ND	Q1C40274
Benzo(a)anthracene	ND	.010	ND	Q1C40274
Benzo(b)fluoranthene	ND	.010	ND	Q1C40274
Benzo(k)fluoranthene	ND	.010	ND	Q1C40274
Benzo(ghi)perylene	ND	.010	ND	Q1C40274
Benzo(a)pyrene	ND	.010	ND	Q1C40274
bis(2-Chloroethoxy)ethane	ND	.010	ND	Q1C40274
bis(2-Chloroethyl) ether	ND	.010	ND	Q1C40274
bis(2-Chloroethoxy)methane	ND	.010	ND	Q1C40274
bis(2-Chloroisopropyl)ether	ND	.010	ND	Q1C40274
bis(2-Ethylhexyl)phthalate	ND	.010	ND	Q1C40274
4-Bromophenyl phenyl ether	ND	.010	ND	Q1C40274
Butyl benzyl phthalate	ND	.010	ND	Q1C40274
Carbazole	ND	.010	ND	Q1C40274
4-Chloroaniline	ND	.010	ND	Q1C40274
p-Chloro-m-cresol	ND	.010	ND	Q1C40274
2-Chloronaphthalene	ND	.010	ND	Q1C40274
2-Chlorophenol	ND	.010	ND	Q1C40274
4-Chlorophenyl phenyl ether	ND	.010	ND	Q1C40274
3-Chloropropionitrile	ND	.010	ND	Q1C40274
Chrysene	ND	.010	ND	Q1C40274
Cyclohexanone	ND	.010	ND	Q1C40274
Dibenzo(a,h)anthracene	ND	.010	ND	Q1C40274
Dibenzofuran	ND	.010	ND	Q1C40274
Di-n-butyl phthalate	ND	.010	ND	Q1C40274
1,2-Dichlorobenzene	ND	.010	ND	Q1C40274
1,3-Dichlorobenzene	ND	.010	ND	Q1C40274
1,4-Dichlorobenzene	ND	.010	ND	Q1C40274
3,3'-Dichlorobenzidine	ND	.010	ND	Q1C40274
2,4-Dichlorophenol	ND	.010	ND	Q1C40274
2,6-Dichlorophenol	ND	.010	ND	Q1C40274
Diethyl phthalate	ND	.010	ND	Q1C40274
Dimethyl phthalate	ND	.010	ND	Q1C40274
2,4-Dimethylphenol	ND	.010	ND	Q1C40274
4,6-Dinitro-o-cresol	ND	.026	ND	Q1C40274
2,4-Dinitrophenol	ND	.052	ND	Q1C40274
2,4-Dinitrotoluene	ND	.010	ND	Q1C40274
2,6-Dinitrotoluene	ND	.010	ND	Q1C40274
Di-n-octyl phthalate	ND	.010	ND	Q1C40274
2-Ethoxyethanol	ND	.010	ND	Q1C40274
Fluoranthene	ND	.010	ND	Q1C40274
Fluorene	ND	.010	ND	Q1C40274
Hexachlorobenzene	ND	.010	ND	Q1C40274
Hexachlorobutadiene	ND	.010	ND	Q1C40274
Hexachlorocyclopentadiene	ND	.010	ND	Q1C40274

TOTAL BASE/NEUTRAL/ACID ANALYSIS, MS, (MS02)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	**Sample Results** mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Hexachloroethane	ND	.010	ND	Q1C40274
Hexachloropropene	ND	.010	ND	Q1C40274
Indeno(1,2,3-c,d)pyrene	ND	.010	ND	Q1C40274
Isophorone	ND	.010	ND	Q1C40274
4,4'-Methylenebis(2-chloroaniline)	ND	.010	ND	Q1C40274
2-Methylnaphthalene	ND	.010	ND	Q1C40274
2-Methylphenol	ND	.010	ND	Q1C40274
4-Methylphenol	ND	.010	ND	Q1C40274
2-Nitropropane	ND	.010	ND	Q1C40274
N-Nitrosodimethylamine	ND	.010	ND	Q1C40274
N-Nitrosodi-n-propylamine	ND	.010	ND	Q1C40274
N-Nitrosodiphenylamine	ND	.010	ND	Q1C40274
Naphthalene	ND	.010	ND	Q1C40274
2-Nitroaniline	ND	.010	ND	Q1C40274
3-Nitroaniline	ND	.010	ND	Q1C40274
4-Nitroaniline	ND	.010	ND	Q1C40274
Nitrobenzene	ND	.010	ND	Q1C40274
2-Nitrophenol	ND	.010	ND	Q1C40274
4-Nitrophenol	ND	.052	ND	Q1C40274
Pentachlorobenzene	ND	.010	ND	Q1C40274
Pentachloronitrobenzene	ND	.010	ND	Q1C40274
Pentachlorophenol	ND	.010	ND	Q1C40274
Pentachloroethane	ND	.010	ND	Q1C40274
Phenanthrene	ND	.010	ND	Q1C40274
Phenol	ND	.010	ND	Q1C40274
Pronamide	ND	.010	ND	Q1C40274
Pyrene	ND	.010	ND	Q1C40274
Pyridine	ND	.010	ND	Q1C40274
1,2,4,5-Tetrachlorobenzene	ND	.010	ND	Q1C40274
2,3,4,6-Tetrachlorophenol	ND	.010	ND	Q1C40274
1,2,4-Trichlorobenzene	ND	.010	ND	Q1C40274
2,4,5-Trichlorophenol	ND	.010	ND	Q1C40274
2,4,6-Trichlorophenol	ND	.010	ND	Q1C40274

3-Methyl- and 4-Methylphenol coelute and are reported as the total

TOTAL VOLATILE ANALYSIS, MS, (MV00)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-DWW-03	JM4781

Compounds	**Sample Results** mg/L	Detection Limits mg/L	Blank Results mg/L	Batch Number
Acetone	.079	.005	ND	N1V3377
Acrolein	ND	.025	ND	N1V3377
Acrylonitrile	ND	.013	ND	N1V3377
Benzene	ND	.005	ND	N1V3377
Bromoform	ND	.005	ND	N1V3377
Carbon disulfide	ND	.005	ND	N1V3377
Carbon tetrachloride	ND	.005	ND	N1V3377
Chlorobenzene	ND	.005	ND	N1V3377
Chlorodibromomethane	ND	.005	ND	N1V3377
Chloroethane	ND	.005	ND	N1V3377
Chloroform	ND	.005	ND	N1V3377
2-Chloroethylvinyl ether	ND	.005	ND	N1V3377
3-Chloropropene	ND	.005	ND	N1V3377
1,2-Dibromo-3-chloropropane	ND	.005	ND	N1V3377
Dichlorobromomethane	ND	.005	ND	N1V3377
Dichlorodifluoromethane	ND	.005	ND	N1V3377
1,1-Dichloroethane	ND	.005	ND	N1V3377
1,2-Dichloroethane	ND	.005	ND	N1V3377
1,1-Dichloroethylene	ND	.005	ND	N1V3377
1,2-Dichloropropane	ND	.005	ND	N1V3377
cis-1,3-Dichloropropylene	ND	.005	ND	N1V3377
trans-1,3-Dichloropropylene	ND	.005	ND	N1V3377
Dibromomethane	ND	.005	ND	N1V3377
Ethylbenzene	ND	.005	ND	N1V3377
Ethylene dibromide	ND	.005	ND	N1V3377
Ethyl acetate	ND	.050	ND	N1V3377
Ethyl ether	ND	.005	ND	N1V3377
2-Hexanone	ND	.005	ND	N1V3377
Iodomethane	ND	.005	ND	N1V3377
Methyl bromide	ND	.005	ND	N1V3377
Methyl chloride	ND	.005	ND	N1V3377
Methylene chloride	ND	.005	ND	N1V3377
Methyl ethyl ketone	ND	.010	ND	N1V3377
Methyl-iso-butyl ketone	.024	.010	ND	N1V3377
Styrene	ND	.005	ND	N1V3377
1,1,1,2-Tetrachloroethane	ND	.005	ND	N1V3377
1,1,2,2-Tetrachloroethane	ND	.005	ND	N1V3377
Tetrachloroethylene	ND	.005	ND	N1V3377
Tetrahydrofuran	ND	.005	ND	N1V3377
Toluene	ND	.005	ND	N1V3377
1,1,1-Trichloroethane	ND	.005	ND	N1V3377
1,1,2-Trichloroethane	ND	.005	ND	N1V3377
Trichloroethylene	ND	.005	ND	N1V3377
1,2-Trans-dichloroethylene	ND	.005	ND	N1V3377
Trichlorofluoromethane	ND	.005	ND	N1V3377
1,2,3-Trichloropropane	ND	.005	ND	N1V3377
1,1,2-Trichlorotrifluoroethane	ND	.010	ND	N1V3377
Vinyl acetate	ND	.025	ND	N1V3377
Vinyl chloride	ND	.005	ND	N1V3377
Xylenes	ND	.005	ND	N1V3377

APPENDIX C

QUALITY ASSURANCE DATA

SUMMARY OF ANALYTICAL METHODOLOGY

Parameter	Reference	Method
Conventionals		
Solids, Total Suspended (liquid)	CAWW	160.2
Solids, Total Dissolved (liquid)	CAWW	160.1
pH, Electrode (liquid)	SW-846	9040
Cyanide, Total	CLP	335.2
Oil & Grease (liquid)	CAWW	413.1
Metals		
RCRA Total Metals (except mercury)	SW-846	6010
RCRA Total Mercury by Cold Vapor	SW-846	7470
Organics		
Pesticides and PCBs by GC	SW-846	8080
Volatile Compounds by GC/MS	SW-846	8240
Semi-volatile Compounds by GC/MS	SW-846	8270

METHODOLOGY REFERENCES

ASTM	*American Society for Testing and Materials*, 1985 edition.
CAWW	*Methods for Chemical Analysis of Water and Wastes*, April 1979 and Updated #1 March 1983.
CLP	*USEPA Contract Laboratory Program*, Document #OLMO1.0, updates December 1990 #OLMO1.1 and February 1991 #OLMO1.1.1.
EPA-500	*USEPA Methods for the Determination of Organic Compounds in Drinking Water,* EPA-600/4-88/039 December 1988.
EPA-600	*USEPA Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*, EPA-600/4-82-057 July 1982.
NIOSH	*National Institute for Occupational Safety and Health*, 3rd edition, 1984.
SMEWW	*Standard Methods for the Examination of Water and Wastewater*, 17th edition, 1989.
STOA	*Spot Tests In Organic Analysis*, 7th edition, 1966.
SW-846	*Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, 3rd edition, September 1986 and Update #1 July 1992.
(1)	This method was modified to incorporate the use of Boron Trifluoride (BF3) as the derivatizing reagent according to Method 6640 in *SMEWW*, 17th edition, 1989.
Title 22	*Waste Extraction Test*, Title 22, Section 66261.126 Appendix 2 of the California Administrative Code, May 1991.

ASC Certifications

State	Agency	Certification #
Alabama	ADEM	40830
California	CADOH	1178
Colorado	CODOH	OH113
Delaware	DEHSS	OH113
Kansas	KSDHE	E-202 & E-1173
Louisiana	LADOHH	92-10
Maryland	MDDHMH	210
Massachusetts	MADEP	M-OH113
New Jersey	NJDEPE	74603
New York	NYDOH	10712
North Carolina	NCDEM	392
Ohio	OHEPA	OH113
Oklahoma	OKDEQ	9216
Pennsylvania	PADER	68-450
South Carolina	SCDEHNR	92002
Tennessee	TNDOH/TNDEC	2978
Virginia	VADGS	00011
Washington	WADOE	C154
Wisconsin	WIDNR	999037160

Validated by:

- US Army Corps of Engineers ..... Chemical Analysis in Various Matrices

Approvals:

- Chemical Waste Management ..... Waste Characterization Analysis
- Envirosafe ..... Waste Characterization Analysis
- USDA ..... Permit for Importing Soils
- Florida DEP ..... Quality Assurance Plan #930034G
- Naval Energy and Environmental Support Activity ..... Chemical Analysis in Various Matrices

REPORT KEY

mg/kg	=	milligram per kilogram (ppm)
Mg/m^3	=	milligram per cubic meter
ug/kg	=	microgram per kilogram (ppb)
mg/L	=	milligram per liter (ppm)
ug/L	=	microgram per liter (ppb)
mg/W	=	milligram per wipe
ug/W	=	microgram per wipe
mg/SMP	=	milligram per sample
ug/SMP	=	microgram per sample
um/cm	=	microMho per centimeter
pCi/l	=	picocurie per liter
gm/cc	=	grams per cubic centimeter
ppm	=	parts per million
ppb	=	parts per billion
ND	=	Not detected at or above stated detection limit
<	=	less than
>	=	greater than
%	=	percent
BTU/lb	=	British Thermal Units per pound
Deg. C	=	Degrees Celsius
n/a	=	not applicable
Unk	=	unknown
std	=	result is relative to standard pH units
CV	=	Conventionals
IR	=	Infrared Spectrophotometric
GC	=	Gas Chromatograph Instrument
GC/MS	=	Gas Chromatography/Mass Spectrometer Instrument
GRO	=	Gasoline Range Organics
DRO	=	Diesel Range Organics
PCB	=	Polychlorinated Biphenyls (PCBs)
EP TOX	=	Extraction Procedure Toxicity
TCLP	=	Toxicity Characteristic Leaching Procedure
RCRA	=	Resource Conservation and Recovery Act

QUALITY ASSURANCE DATA

CONVENTIONAL DATA (CV10)

Compounds		Blank Results	Blank Spike Recov	Unspiked Sample Results	Matrix Spike Recov	Relative Percent Diff	Batch Number
Cyanide, Total	mg/L	ND	145	ND	100	10	Q1I3366
Oil and Grease	mg/L	ND	96	-	-	-	Q1I3363

QUALITY ASSURANCE DATA

RCRA TOTAL METALS ANALYSIS, (ME50)

Compounds	Blank Results mg/L	Blank Spike Recov	Unspiked Sample Results mg/L	Matrix Spike Recov	Relative Percent Diff	Batch Number
Arsenic	ND	94	ND	93	1	Q1M3962
Barium	ND	95	.338	91	1	Q1M3962
Cadmium	ND	92	.549	33	3	Q1M3962
Chromium	ND	97	ND	92	1	Q1M3962
Lead	ND	96	.089	89	1	Q1M3962
Mercury	ND	98	ND	100	4	Q1G3961
Selenium	ND	94	ND	91	2	Q1M3962
Silver	ND	95	ND	70	6	Q1M3962

- Cadmium: Because the analyte was present in the unspiked sample at a high level, the spiked sample does not provide valid spike recovery data.

Quality Assurance Data

Total Pesticide and PCB Analysis, GC, (GS05)

Compounds	Blank Results mg/L	Blank Spike Recov	Unspiked Sample Results mg/L	Matrix Spike Recov	Relative Percent Diff	Batch Number
Aldrin	ND	70	ND	78	3	Q1P40286
Alpha-BHC	ND	82	ND	82	6	Q1P40286
Beta-BHC	ND	80	ND	89	3	Q1P40286
Chlordane	ND	81	ND	94	2	Q1P40286
4,4'-DDD	ND	80	ND	124	3	Q1P40286
4,4'-DDE	ND	82	.0006	74	0	Q1P40286
4,4'-DDT	ND	91	.008	-	6	Q1P40286
Delta-BHC	ND	82	ND	74	4	Q1P40286
Dieldrin	ND	82	ND	99	3	Q1P40286
Endosulfan sulfate	ND	72	ND	82	8	Q1P40286
Endosulfan I	ND	85	ND	98	2	Q1P40286
Endosulfan II	ND	77	ND	85	3	Q1P40286
Endrin	ND	84	ND	95	2	Q1P40286
Endrin aldehyde	ND	56	ND	69	8	Q1P40286
Endrin ketone	ND	76	ND	81	3	Q1P40286
Gamma-BHC	ND	73	ND	79	4	Q1P40286
Heptachlor	ND	66	ND	85	1	Q1P40286
Heptachlor epoxide	ND	77	ND	89	3	Q1P40286
Methoxychlor	ND	95	ND	106	6	Q1P40286

Quality Assurance Data

Total Base/Neutral/Acid Analysis, MS, (MS02)

Compounds	Blank Results mg/L	Blank Spike Recov	Unspiked Sample Results mg/L	Matrix Spike Recov	Relative Percent Diff	Batch Number
Acenaphthene	ND	79	ND	76	1	Q1C40274
Benzidine	ND	107	ND	-	-	Q1C40274
bis(2-Chloroethoxy)ethane	ND	73	ND	70	2	Q1C40274
bis(2-Chloroethyl) ether	ND	64	ND	62	6	Q1C40274
bis(2-Chloroethoxy)methane	ND	57	ND	58	6	Q1C40274
bis(2-Chloroisopropyl)ether	ND	63	ND	61	6	Q1C40274
p-Chloro-m-cresol	ND	83	ND	60	23	Q1C40274
2-Chloronaphthalene	ND	75	ND	73	1	Q1C40274
2-Chlorophenol	ND	70	ND	55	5	Q1C40274
Cyclohexanone	ND	16	ND	17	5	Q1C40274
Dibenzo(a,h)anthracene	ND	83	ND	77	4	Q1C40274
Di-n-butyl phthalate	ND	79	ND	75	2	Q1C40274
1,3-Dichlorobenzene	ND	60	ND	56	1	Q1C40274
1,4-Dichlorobenzene	ND	58	ND	56	14	Q1C40274
2,6-Dichlorophenol	ND	71	ND	56	10	Q1C40274
Diethyl phthalate	ND	78	ND	77	5	Q1C40274
4,6-Dinitro-o-cresol	ND	91	ND	96	1	Q1C40274
2,4-Dinitrotoluene	ND	94	ND	89	3	Q1C40274
Fluoranthene	ND	83	ND	81	1	Q1C40274
Fluorene	ND	77	ND	74	4	Q1C40274
Hexachlorobenzene	ND	93	ND	86	3	Q1C40274
Hexachlorocyclopentadiene	ND	47	ND	66	25	Q1C40274
Hexachloropropene	ND	61	ND	68	8	Q1C40274
2-Methylphenol	ND	60	ND	40	26	Q1C40274
4-Methylphenol	ND	58	ND	28	41	Q1C40274
N-Nitrosodimethylamine	ND	54	ND	44	8	Q1C40274
N-Nitrosodi-n-propylamine	ND	80	ND	78	5	Q1C40274
4-Nitroaniline	ND	75	ND	58	10	Q1C40274
2-Nitrophenol	ND	65	ND	67	4	Q1C40274
4-Nitrophenol	ND	29	ND	58	20	Q1C40274
Pentachlorobenzene	ND	98	ND	94	3	Q1C40274
Pentachlorophenol	ND	95	ND	114	3	Q1C40274
Pentachloroethane	ND	14	ND	21	1	Q1C40274
Phenol	ND	43	ND	34	30	Q1C40274
Pronamide	ND	84	ND	78	3	Q1C40274
Pyrene	ND	81	ND	80	1	Q1C40274
1,2,4-Trichlorobenzene	ND	63	ND	68	4	Q1C40274

3-Methyl- and 4-Methylphenol coelute and are reported as the total

QUALITY ASSURANCE DATA

TOTAL VOLATILE ANALYSIS, MS, (MV00)

Compounds	Blank Results mg/L	Blank Spike Recov	Unspiked Sample Results mg/L	Matrix Spike Recov	Relative Percent Diff	Batch Number
Acetone	ND	88	.079	106	1	N1V3377
Acrolein	ND	86	ND	16	-	N1V3377
Acrylonitrile	ND	73	ND	91	6	N1V3377
Benzene	ND	100	ND	103	1	N1V3377
Bromoform	ND	89	ND	105	1	N1V3377
Carbon disulfide	ND	103	ND	102	1	N1V3377
Carbon tetrachloride	ND	98	ND	104	1	N1V3377
Chlorobenzene	ND	96	ND	103	1	N1V3377
Chlorodibromomethane	ND	93	ND	103	2	N1V3377
Chloroethane	ND	108	ND	99	1	N1V3377
Chloroform	ND	101	ND	109	1	N1V3377
2-Chloroethylvinyl ether	ND	80	ND	100	1	N1V3377
3-Chloropropene	ND	92	ND	101	1	N1V3377
1,2-Dibromo-3-chloropropane	ND	74	ND	98	3	N1V3377
Dichlorobromomethane	ND	93	ND	103	1	N1V3377
Dichlorodifluoromethane	ND	97	ND	89	1	N1V3377
1,1-Dichloroethane	ND	99	ND	104	1	N1V3377
1,2-Dichloroethane	ND	99	ND	106	2	N1V3377
1,1-Dichloroethylene	ND	105	ND	106	1	N1V3377
1,2-Dichloropropane	ND	95	ND	106	3	N1V3377
cis-1,3-Dichloropropylene	ND	89	ND	98	2	N1V3377
trans-1,3-Dichloropropylene	ND	96	ND	110	2	N1V3377
Dibromomethane	ND	100	ND	106	1	N1V3377
Ethylbenzene	ND	97	ND	104	1	N1V3377
Ethylene dibromide	ND	93	ND	102	1	N1V3377
Ethyl acetate	ND	79	ND	87	3	N1V3377
Ethyl ether	ND	102	ND	102	1	N1V3377
2-Hexanone	ND	66	ND	94	1	N1V3377
Iodomethane	ND	101	ND	102	1	N1V3377
Methyl bromide	ND	125	ND	100	4	N1V3377
Methyl chloride	ND	74	ND	91	1	N1V3377
Methylene chloride	ND	122	ND	106	2	N1V3377
Methyl ethyl ketone	ND	63	ND	129	3	N1V3377
Methyl-iso-butyl ketone	ND	74	.024	98	2	N1V3377
Styrene	ND	100	ND	105	1	N1V3377
1,1,1,2-Tetrachloroethane	ND	99	ND	102	1	N1V3377
1,1,2,2-Tetrachloroethane	ND	90	ND	105	1	N1V3377
Tetrachloroethylene	ND	97	ND	102	1	N1V3377
Tetrahydrofuran	ND	76	ND	99	1	N1V3377
Toluene	ND	94	ND	103	1	N1V3377
1,1,1-Trichloroethane	ND	100	ND	105	1	N1V3377
1,1,2-Trichloroethane	ND	95	ND	102	1	N1V3377
Trichloroethylene	ND	94	ND	101	1	N1V3377
1,2-Trans-dichloroethylene	ND	105	ND	107	1	N1V3377
Trichlorofluoromethane	ND	114	ND	103	3	N1V3377
1,2,3-Trichloropropane	ND	88	ND	103	2	N1V3377
1,1,2-Trichlorotrifluoroethane	ND	201	ND	103	1	N1V3377
Vinyl acetate	ND	85	ND	69	15	N1V3377
Vinyl chloride	ND	95	ND	92	2	N1V3377
Xylenes	ND	99	ND	103	1	N1V3377

Matrix spike recoveries below the detection limits were observed for the analytes designated with a dash for the RPD of replicate matrix spikes.

QUALITY ASSURANCE DATA
SURROGATE SUMMARY REPORT

SURROGATE ID	A159	B732	A121	A884	A158	B142	# OUT
QC BATCH: Q1C40274 **Aqueous (Semi-Volatile organics by MS)**							
SAMPLE ID							
BLANK	53	42	85	75	82	79	0
BLANK SPIKE	54	41	105	80	90	85	0
CLJ-DWW-03	18 *	16	54	78	82	74	1
CLJ-DWW-03 MD	45	43	92	76	87	72	0
CLJ-DWW-03 MS	37	32	76	82	86	76	0
QC LIMITS	(21-110)	(10-110)	(10-123)	(35-114)	(43-116)	(33-141)	

SURROGATE ID	B816	A500	# OUT
QC BATCH: Q1P40286 **Aqueous (Pesticide compounds by GC)**			
SAMPLE ID			
BLANK	61	55	0
BLANK SPIKE	63	60	0
CLJ-DWW-03	76	63	0
CLJ-DWW-03 MD	64	68	0
CLJ-DWW-03 MS	69	66	0
QC LIMITS	(37-116)	(14-147)	

SURROGATE ID	A047	B185	B668	# OUT
QC BATCH: N1V3377 **Aqueous (Volatile organics by MS)**				
SAMPLE ID				
CLJ-DWW-03	101	103	101	0
CLJ-DWW-03 MD	105	100	101	0
CLJ-DWW-03 MS	104	99	101	0
QC LIMITS	(76-114)	(88-110)	(86-115)	

SURROGATE ID

A047 = 1,2-Dichloroethane-D4
B185 = Toluene-D8
B668 = Bromofluorobenzene
A159 = 2-Fluorophenol
B732 = Phenol-D6
A121 = 2,4,6-Tribromophenol
A884 = Nitrobenzene-D5
A158 = 2-Fluorobiphenyl
B142 = Terphenyl-D14
B816 = 2,4,5,6-Tetrachloro-m-xylene
A500 = Decachlorobiphenyl

* Values outside of method quality control limits
D Surrogate diluted out

It is ASC's laboratory policy to allow one surrogate per sample fraction (acid, base-neutral or pesticide) to exceed the stated QC limits. This policy is based upon the USEPA SOW for the Contract Laboratory Program (CLP).

APPENDIX D

CHAIN-OF-CUSTODY RECORD(S)

DATA SUMMARY REPORT

DATE: 11/02/94

Company: OHM REMEDIATION SERVICES CORPORATION

	Sample Point ID:	**C6617**	**C6619**
	ASC Sample Number:	JM9434	JM9436
	Sample Date:		
	Facility Code:	015226N	015226N
Parameters	Units		
Volatile Tentatively Identified Compounds , GC/MS, (CL1E)			
Benzene, 1-ethyl-2-methyl-	mg/kg	440 J	30.9 J
Benzene, 1-methyl-3-(1-methyle	mg/kg	849 J	-
Benzene, 1-methyl-3-propyl-	mg/kg	316 J	-
Cyclohexane, butyl-	mg/kg	358 J	-
Decane	mg/kg	938 J	99.9 J
Nonane	mg/kg	575 J	82.3 J
Undecane	mg/kg	513 J	82.0 J
unknown	mg/kg	310 J	57.8 J
unknown	mg/kg	-	43.1 J
unknown	mg/kg	-	47.9 J
Benzene, 2-chloro-1,3,5-trimet	mg/kg	-	38.8 J
Naphthalene, decahydro-, trans	mg/kg	-	57.3 J
cis-1-Ethyl-3-methyl-cyclohexa	mg/kg	-	42.8 J

	Sample Point ID:	**C6617**	**C6618**	**C6619**	**C6620**
	ASC Sample Number:	JM9434	JM9435	JM9436	JM9437
	Sample Date:				
	Facility Code:	015226N	015226N	015226N	015226N
Parameters	Units				
Semivolatile Tentatively Identified Compounds, GC/MS, (CL1F)					
1,1-Dichloro-2,2-bis(p-chlorop	mg/kg	.870 J	-	-	-
1,4-Cyclohexadiene, 1-methyl-4	mg/kg	.569 J	-	-	-
Benzene, 1,2,3-trimethyl-	mg/kg	.499 J	-	-	-
Benzene, 1-methyl-4-(1-methyle	mg/kg	.821 J	-	-	-
Chlorophenothane	mg/kg	.373 J	-	-	.941 J
Cyclohexane, butyl-	mg/kg	.596 J	-	-	-
DDMU	mg/kg	.421 J	-	-	-
Decane	mg/kg	1.64 J	-	.687 J	-
Dodecane	mg/kg	.667 J	-	-	-
Mitotane	mg/kg	3.06 J	-	-	.182 J
Naphthalene, decahydro-2-methy	mg/kg	.302 J	-	-	-
Nonane	mg/kg	.554 J	-	-	-

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID:		**C6617**	**C6618**	**C6619**	**C6620**
ASC Sample Number:		JM9434	JM9435	JM9436	JM9437
Sample Date:					
Facility Code:		015226N	015226N	015226N	015226N
Parameters	Units				
Semivolatile Tentatively Identified Compounds, GC/MS, (CL1F)					
Undecane	mg/kg	1.67 J	-	.716 J	-
o,p'-DDT	mg/kg	4.36 J	-	-	.342 J
unknown	mg/kg	.501 J	-	.771 J	.653 J
unknown	mg/kg	.551 J	-	.284 J	.182 J
unknown	mg/kg	.437 J	-	.270 J	2.62 J
unknown	mg/kg	1.01 J	-	4.43 J	-
unknown	mg/kg	.335 J	-	-	-
unknown	mg/kg	3.27 J	-	-	-
2-Pentanone, 4-hydroxy-4-methy	mg/kg	-	5.64 J	-	-
Technical chlorophenothane	mg/kg	-	1.50 J	-	-
Benzenamine, 2,4,6-trichloro-	mg/kg	-	-	4.09 J	2.32 J
Decane, 3-methyl-	mg/kg	-	-	.150 J	-
Decane, 4-methyl-	mg/kg	-	-	.256 J	-
Docosane	mg/kg	-	-	1.19 J	-
Eicosane	mg/kg	-	-	.431 J	-
Heneicosane	mg/kg	-	-	.873 J	-
Heptadecane	mg/kg	-	-	.917 J	-
Heptadecane, 9-octyl-	mg/kg	-	-	.359 J	-
Nonadecane	mg/kg	-	-	.997 J	-
Octadecane	mg/kg	-	-	.528 J	-
Tetracosane	mg/kg	-	-	1.26 J	-
Tricosane	mg/kg	-	-	1.48 J	-
Unk hydrocarbon	mg/kg	-	-	.452 J	-
Unk hydrocarbon	mg/kg	-	-	.225 J	-
Unk hydrocarbon	mg/kg	-	-	.257 J	-
Conventional Data (CV10)					
BTU/lb	BTU/lb	6240	<200	3000	1470
Chloride	mg/kg	492	<300	2410	13.6
Density	gm/cc	1.36	.880	.549	.942
Flash Point, Seta Flash 60	Deg C	>60	>60	>60	>60
Nitrate as N	mg/kg	<125	<125	<250	<1.25
Phosphate, Dissolved	mg/kg	<163	<163	<326	1.91
Sulfate as SO4	mg/kg	1570	<500	<1000	<5.00
pH (Electrode)	std	8.60	10.8	3.93	2.75

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID:		**C6617**	**C6618**	**C6619**	**C6620**
ASC Sample Number:		JM9434	JM9435	JM9436	JM9437
Sample Date:					
Facility Code:		015226N	015226N	015226N	015226N
Parameters	Units				
Target Compound List Pesticide and PCB Analysis, GC, (GS25)					
Aldrin	mg/kg	<2130	<.224	<1.29	<106
Alpha-BHC	mg/kg	<2130	<.224	<1.29	<106
Beta-BHC	mg/kg	<2130	<.224	<1.29	<106
alpha-Chlordane	mg/kg	<2130	<.224	<1.29	<106
gamma-Chlordane	mg/kg	<2130	<.224	<1.29	<106
4,4'-DDD	mg/kg	15600	<.448	<2.58	<212
4,4'-DDE	mg/kg	<4250	<.448	<2.58	<212
4,4'-DDT	mg/kg	50600	2.03	21.0	1940
Delta-BHC	mg/kg	<2130	<.224	<1.29	<106
Dieldrin	mg/kg	<4250	<.448	<2.58	<212
Endosulfan sulfate	mg/kg	<4250	<.448	<2.58	<212
Endosulfan I	mg/kg	<2130	<.224	<1.29	<106
Endosulfan II	mg/kg	<4250	<.448	<2.58	<212
Endrin	mg/kg	<4250	<.448	<2.58	<212
Endrin ketone	mg/kg	<4250	<.448	<2.58	<212
Endrin aldehyde	mg/kg	<4250	<.448	<2.58	<212
Gamma-BHC	mg/kg	<2130	<.224	<1.29	<106
Heptachlor	mg/kg	<2130	<.224	<1.29	<106
Heptachlor epoxide	mg/kg	<2130	<.224	<1.29	<106
Methoxychlor	mg/kg	<21300	<2.24	<12.9	<1060
Toxaphene	mg/kg	<213000	<22.4	<129	<10600
Aroclor 1016	mg/kg	<42500	<4.48	<25.8	<2120
Aroclor 1221	mg/kg	<85000	<8.97	<51.5	<4240
Aroclor 1232	mg/kg	<42500	<4.48	<25.8	<2120
Aroclor 1242	mg/kg	<42500	<4.48	<25.8	<2120
Aroclor 1248	mg/kg	<42500	<4.48	<25.8	<2120
Aroclor 1254	mg/kg	<42500	<4.48	<25.8	<2120
Aroclor 1260	mg/kg	<42500	<4.48	<25.8	<2120
Target Analyte List Total Metals Analysis, (ME20)					
Aluminum	mg/kg	2400	339	947	350
Antimony	mg/kg	<.943	<1.75	<1.10	<1.83
Arsenic	mg/kg	-	.655	<.317	.937
Barium	mg/kg	274	30.2	7.44	12.5
Beryllium	mg/kg	.135	.067	<.018	<.031

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID:		**C6617**	**C6618**	**C6619**	**C6620**
ASC Sample Number:		JM9434	JM9435	JM9436	JM9437
Sample Date:					
Facility Code:		015226N	015226N	015226N	015226N
Parameters	Units				
Target Analyte List Total Metals Analysis, (ME20)					
Cadmium	mg/kg	1.89	<.065	.803	.781
Calcium	mg/kg	19500	322	158	162
Chromium	mg/kg	67.7	.957	24.9	10.1
Cobalt	mg/kg	17.2	.396	.279	<.227
Copper	mg/kg	34.5	2.40	9.25	8.54
Iron	mg/kg	10700	810	3550	18900
Lead	mg/kg	4190	14.6	67.4	115
Magnesium	mg/kg	2680	140	24.7	20.5
Manganese	mg/kg	95.9	7.45	61.5	51.1
Mercury	mg/kg	<.047	<.052	<.049	.040
Nickel	mg/kg	33.9	1.10	1.40	1.79
Potassium	mg/kg	87.0	<87.4	<54.9	<91.6
Selenium	mg/kg	.118	<1.15	<.175	<.209
Silver	mg/kg	<.184	<.340	<.214	<.356
Sodium	mg/kg	3860	26100	91.8	27.2
Thallium	mg/kg	<.211	<.211	<.317	<.380
Vanadium	mg/kg	2.93	.751	.623	<.258
Zinc	mg/kg	1930	35.5	7260	2690
Target Compound List Base/Neutral/Acid Analysis, MS, (MS22)					
Acenaphthene	mg/kg	<327	<1.92	<331	<331
Acenaphthylene	mg/kg	<327	<1.92	<331	<331
Anthracene	mg/kg	<327	<1.92	<331	<331
Benzo(a)anthracene	mg/kg	<327	<1.92	<331	<331
Benzo(b)fluoranthene	mg/kg	<327	<1.92	<331	<331
Benzo(k)fluoranthene	mg/kg	<327	<1.92	<331	<331
Benzo(ghi)perylene	mg/kg	<327	<1.92	<331	<331
Benzo(a)pyrene	mg/kg	<327	<1.92	<331	<331
bis(2-Chloroethyl) ether	mg/kg	<327	<1.92	<331	<331
bis(2-Chloroethoxy)methane	mg/kg	<327	<1.92	<331	<331
bis(2-Chloroisopropyl)ether	mg/kg	<327	<1.92	<331	<331
bis(2-Ethylhexyl)phthalate	mg/kg	<327	<1.92	<331	<331
4-Bromophenyl phenyl ether	mg/kg	<327	<1.92	<331	<331
Butyl benzyl phthalate	mg/kg	<327	<1.92	<331	<331
Carbazole	mg/kg	<327	<1.92	<331	<331

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID:		**C6617**	**C6618**	**C6619**	**C6620**
ASC Sample Number:		JM9434	JM9435	JM9436	JM9437
Sample Date:					
Facility Code:		015226N	015226N	015226N	015226N
Parameters	Units				
Target Compound List Base/Neutral/Acid Analysis, MS, (MS22)					
4-Chloroaniline	mg/kg	<327	<1.92	<331	<331
p-Chloro-m-cresol	mg/kg	<327	<1.92	<331	<331
2-Chloronaphthalene	mg/kg	<327	<1.92	<331	<331
2-Chlorophenol	mg/kg	<327	<1.92	<331	<331
4-Chlorophenyl phenyl ether	mg/kg	<327	<1.92	<331	<331
Chrysene	mg/kg	<327	<1.92	<331	<331
Dibenzo(a,h)anthracene	mg/kg	<327	<1.92	<331	<331
Dibenzofuran	mg/kg	<327	<1.92	<331	<331
Di-n-butyl phthalate	mg/kg	<327	<1.92	<331	<331
1,2-Dichlorobenzene	mg/kg	<327	<1.92	<331	<331
1,3-Dichlorobenzene	mg/kg	<327	<1.92	<331	<331
1,4-Dichlorobenzene	mg/kg	<327	<1.92	<331	<331
3,3'-Dichlorobenzidine	mg/kg	<327	<1.92	<331	<331
2,4-Dichlorophenol	mg/kg	<327	<1.92	<331	<331
Diethyl phthalate	mg/kg	<327	<1.92	<331	<331
Dimethyl phthalate	mg/kg	<327	<1.92	<331	<331
2,4-Dimethylphenol	mg/kg	<327	<1.92	<331	<331
4,6-Dinitro-o-cresol	mg/kg	<817	<4.79	<828	<828
2,4-Dinitrophenol	mg/kg	<1630	<9.58	<1660	<1660
2,4-Dinitrotoluene	mg/kg	<327	<1.92	<331	<331
2,6-Dinitrotoluene	mg/kg	<327	<1.92	<331	<331
Di-n-octyl phthalate	mg/kg	<327	<1.92	<331	<331
Fluoranthene	mg/kg	<327	<1.92	<331	<331
Fluorene	mg/kg	<327	<1.92	<331	<331
Hexachlorobenzene	mg/kg	<327	<1.92	<331	<331
Hexachlorobutadiene	mg/kg	<327	<1.92	<331	<331
Hexachlorocyclopentadiene	mg/kg	<327	<1.92	<331	<331
Hexachloroethane	mg/kg	<327	<1.92	<331	<331
Isophorone	mg/kg	<327	<1.92	<331	<331
2-Methylnaphthalene	mg/kg	<327	<1.92	<331	<331
2-Methylphenol	mg/kg	<327	<1.92	<331	<331
4-Methylphenol	mg/kg	<327	<1.92	<331	<331
N-Nitrosodi-n-propylamine	mg/kg	<327	<1.92	<331	<331
N-Nitrosodiphenylamine	mg/kg	<327	<1.92	<331	<331
Naphthalene	mg/kg	<327	<1.92	<331	<331

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Parameters	Units	C6617	C6618	C6619	C6620
Sample Point ID:		**C6617**	**C6618**	**C6619**	**C6620**
ASC Sample Number:		JM9434	JM9435	JM9436	JM9437
Sample Date:					
Facility Code:		015226N	015226N	015226N	015226N
Target Compound List Base/Neutral/Acid Analysis, MS, (MS22)					
2-Nitroaniline	mg/kg	<327	<1.92	<331	<331
3-Nitroaniline	mg/kg	<327	<1.92	<331	<331
4-Nitroaniline	mg/kg	<327	<1.92	<331	<331
Nitrobenzene	mg/kg	<327	<1.92	<331	<331
2-Nitrophenol	mg/kg	<327	<1.92	<331	<331
4-Nitrophenol	mg/kg	<1630	<9.58	<1660	<1660
Pentachlorophenol	mg/kg	<327	<1.92	<331	<331
Phenanthrene	mg/kg	<327	<1.92	<331	<331
Phenol	mg/kg	<327	<1.92	<331	<331
Pyrene	mg/kg	<327	<1.92	<331	<331
1,2,4-Trichlorobenzene	mg/kg	<327	<1.92	<331	<331
2,4,5-Trichlorophenol	mg/kg	<327	<1.92	<331	<331
2,4,6-Trichlorophenol	mg/kg	<327	<1.92	<331	<331
Indeno(1,2,3-c,d)pyrene	mg/kg	<327	<1.92	<331	<331
Target Compound List Volatile Analysis, MS, (MV20)					
Acetone	mg/kg	<15.0	.119	2.72	1.34
Benzene	mg/kg	<15.0	<.011	<.768	<.125
Bromoform	mg/kg	<15.0	<.011	<.768	<.125
Carbon disulfide	mg/kg	<15.0	<.011	<.768	<.125
Carbon tetrachloride	mg/kg	<15.0	<.011	6.27	.216
Chlorobenzene	mg/kg	<15.0	<.011	<.768	.198
Chlorodibromomethane	mg/kg	<15.0	<.011	<.768	<.125
Chloroethane	mg/kg	<15.0	<.011	<.768	<.125
Chloroform	mg/kg	<15.0	<.011	17.5	.654
Dichlorobromomethane	mg/kg	<15.0	<.011	<.768	<.125
1,1-Dichloroethane	mg/kg	<15.0	<.011	<.768	<.125
1,2-Dichloroethane	mg/kg	<15.0	<.011	<.768	<.125
1,1-Dichloroethylene	mg/kg	<15.0	<.011	<.768	<.125
1,2-Dichloropropane	mg/kg	<15.0	<.011	<.768	<.125
cis-1,3-Dichloropropylene	mg/kg	<15.0	<.011	<.768	<.125
trans-1,3-Dichloropropylene	mg/kg	<15.0	<.011	<.768	<.125
Ethylbenzene	mg/kg	27.9	<.011	.966	<.125
2-Hexanone	mg/kg	<15.0	<.011	<.768	<.125
Methyl bromide	mg/kg	<15.0	<.011	<.768	<.125
Methyl chloride	mg/kg	<15.0	<.011	12.9	<.125

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID:		**C6617**	**C6618**	**C6619**	**C6620**
ASC Sample Number:		JM9434	JM9435	JM9436	JM9437
Sample Date:					
Facility Code:		015226N	015226N	015226N	015226N
Parameters	Units				
Target Compound List Volatile Analysis, MS, (MV20)					
Methylene chloride	mg/kg	<15.0	<.011	<.768	<.125
Methyl ethyl ketone	mg/kg	<30.0	<.022	<1.54	<.250
Methyl-iso-butyl ketone	mg/kg	<30.0	<.022	<1.54	<.250
Styrene	mg/kg	<15.0	<.011	<.768	<.125
1,1,2,2-Tetrachloroethane	mg/kg	<15.0	<.011	<.768	<.125
Tetrachloroethylene	mg/kg	<15.0	<.011	<.768	<.125
Toluene	mg/kg	<15.0	<.011	<.768	<.125
1,2-Trans-dichloroethylene	mg/kg	<15.0	<.011	<.768	<.125
1,1,1-Trichloroethane	mg/kg	<15.0	<.011	<.768	<.125
1,1,2-Trichloroethane	mg/kg	<15.0	<.011	<.768	<.125
Trichloroethylene	mg/kg	<15.0	<.011	<.768	<.125
Vinyl chloride	mg/kg	<15.0	<.011	<.768	<.125
Xylenes	mg/kg	255	<.011	5.52	.228

DATA SUMMARY REPORT

DATE: 11/02/94

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6621**
ASC Sample Number: JM9438
Sample Date:
Facility Code: 015226N

Parameters	Units	
Volatile Tentatively Identified Compounds , GC/MS, (CL1E)		
Benzene, 1,2,3-trimethyl-	mg/kg	527 J
Unk substituted aromatic	mg/kg	452 J
Unk substituted aromatic	mg/kg	241 J
Unk substituted aromatic	mg/kg	475 J
Semivolatile Tentatively Identified Compounds, GC/MS, (CL1F)		
Docosane	mg/kg	1500 J
Dodecane	mg/kg	2570 J
Dodecane, 2,6,10-trimethyl-	mg/kg	1960 J
Eicosane	mg/kg	2760 J
Heneicosane	mg/kg	2150 J
Heptadecane	mg/kg	4860 J
Hexadecane	mg/kg	5490 J
Hydrazine, 1,1-diphenyl-	mg/kg	1640 J
Naphthalene, 1,4,6-trimethyl-	mg/kg	1220 J
Nonadecane	mg/kg	3390 J
Nonane, 3-methyl-	mg/kg	1550 J
Octadecane	mg/kg	3880 J
Pentadecane	mg/kg	5920 J
Pentadecanoic acid	mg/kg	1640 J
Tetradecane	mg/kg	4780 J
Tridecane	mg/kg	3300 J
Undecane	mg/kg	3730 J
Undecane, 3,5-dimethyl-	mg/kg	2230 J
unknown	mg/kg	6800 J
unknown	mg/kg	3550 J
Conventional Data (CV10)		
BTU/lb	BTU/lb	10600
Chloride	mg/kg	94.4
Density	gm/cc	.893
Flash Point, Seta Flash 60	Deg C	>60
Nitrate as N	mg/kg	28.6
Phosphate, Dissolved	mg/kg	<32.6
Sulfate as SO4	mg/kg	261

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6621**
ASC Sample Number: JM9438
Sample Date:
Facility Code: 015226N

Parameters	Units	
Conventional Data (CV10)		
pH (Electrode)	std	7.31
Target Compound List Pesticide and PCB Analysis, GC, (GS25)		
Aldrin	mg/kg	.708
Alpha-BHC	mg/kg	<.613
Beta-BHC	mg/kg	<.613
alpha-Chlordane	mg/kg	<.613
gamma-Chlordane	mg/kg	<.613
4,4'-DDD	mg/kg	<1.23
4,4'-DDE	mg/kg	<1.23
4,4'-DDT	mg/kg	7.52
Delta-BHC	mg/kg	<.613
Dieldrin	mg/kg	<1.23
Endosulfan sulfate	mg/kg	<1.23
Endosulfan I	mg/kg	<.613
Endosulfan II	mg/kg	<1.23
Endrin	mg/kg	<1.23
Endrin ketone	mg/kg	<1.23
Endrin aldehyde	mg/kg	<1.23
Gamma-BHC	mg/kg	<.613
Heptachlor	mg/kg	1.48
Heptachlor epoxide	mg/kg	.931
Methoxychlor	mg/kg	<6.13
Toxaphene	mg/kg	<61.3
Aroclor 1016	mg/kg	<12.3
Aroclor 1221	mg/kg	<24.5
Aroclor 1232	mg/kg	<12.3
Aroclor 1242	mg/kg	<12.3
Aroclor 1248	mg/kg	<12.3
Aroclor 1254	mg/kg	<12.3
Aroclor 1260	mg/kg	<12.3

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6621**
ASC Sample Number: JM9438
Sample Date:
Facility Code: 015226N

Parameters	Units	
Target Analyte List Total Metals Analysis, (ME20)		
Aluminum	mg/kg	166
Antimony	mg/kg	1.08
Arsenic	mg/kg	.947
Barium	mg/kg	11.6
Beryllium	mg/kg	.018
Cadmium	mg/kg	.621
Calcium	mg/kg	222
Chromium	mg/kg	1.74
Cobalt	mg/kg	<.093
Copper	mg/kg	2.35
Iron	mg/kg	15100
Lead	mg/kg	26.9
Magnesium	mg/kg	15.5
Manganese	mg/kg	40.5
Mercury	mg/kg	<.050
Nickel	mg/kg	1.04
Potassium	mg/kg	<37.4
Selenium	mg/kg	<.982
Silver	mg/kg	<.146
Sodium	mg/kg	222
Thallium	mg/kg	1.35
Vanadium	mg/kg	.714
Zinc	mg/kg	22.6
Target Compound List Base/Neutral/Acid Analysis, MS, (MS22)		
Acenaphthene	mg/kg	<943
Acenaphthylene	mg/kg	<943
Anthracene	mg/kg	<943
Benzo(a)anthracene	mg/kg	<943
Benzo(b)fluoranthene	mg/kg	<943
Benzo(k)fluoranthene	mg/kg	<943
Benzo(ghi)perylene	mg/kg	<943
Benzo(a)pyrene	mg/kg	<943
bis(2-Chloroethyl) ether	mg/kg	<943
bis(2-Chloroethoxy)methane	mg/kg	<943

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6621**
ASC Sample Number: JM9438
Sample Date:
Facility Code: 015226N

Target Compound List Base/Neutral/Acid Analysis, MS, (MS22)

Parameters	Units	
bis(2-Chloroisopropyl)ether	mg/kg	<943
bis(2-Ethylhexyl)phthalate	mg/kg	<943
4-Bromophenyl phenyl ether	mg/kg	<943
Butyl benzyl phthalate	mg/kg	<943
Carbazole	mg/kg	<943
4-Chloroaniline	mg/kg	<943
p-Chloro-m-cresol	mg/kg	<943
2-Chloronaphthalene	mg/kg	<943
2-Chlorophenol	mg/kg	<943
4-Chlorophenyl phenyl ether	mg/kg	<943
Chrysene	mg/kg	<943
Dibenzo(a,h)anthracene	mg/kg	<943
Dibenzofuran	mg/kg	<943
Di-n-butyl phthalate	mg/kg	<943
1,2-Dichlorobenzene	mg/kg	<943
1,3-Dichlorobenzene	mg/kg	<943
1,4-Dichlorobenzene	mg/kg	<943
3,3'-Dichlorobenzidine	mg/kg	<943
2,4-Dichlorophenol	mg/kg	<943
Diethyl phthalate	mg/kg	<943
Dimethyl phthalate	mg/kg	<943
2,4-Dimethylphenol	mg/kg	1170
4,6-Dinitro-o-cresol	mg/kg	<2360
2,4-Dinitrophenol	mg/kg	<4720
2,4-Dinitrotoluene	mg/kg	<943
2,6-Dinitrotoluene	mg/kg	<943
Di-n-octyl phthalate	mg/kg	<943
Fluoranthene	mg/kg	<943
Fluorene	mg/kg	<943
Hexachlorobenzene	mg/kg	<943
Hexachlorobutadiene	mg/kg	<943
Hexachlorocyclopentadiene	mg/kg	<943
Hexachloroethane	mg/kg	<943
Isophorone	mg/kg	<943
2-Methylnaphthalene	mg/kg	2190

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6621**
ASC Sample Number: JM9438
Sample Date:
Facility Code: 015226N

Parameters	Units	
Target Compound List Base/Neutral/Acid Analysis, MS, (MS22)		
2-Methylphenol	mg/kg	4160
4-Methylphenol	mg/kg	<943
N-Nitrosodi-n-propylamine	mg/kg	<943
N-Nitrosodiphenylamine	mg/kg	1170
Naphthalene	mg/kg	<943
2-Nitroaniline	mg/kg	<943
3-Nitroaniline	mg/kg	<943
4-Nitroaniline	mg/kg	<943
Nitrobenzene	mg/kg	<943
2-Nitrophenol	mg/kg	<943
4-Nitrophenol	mg/kg	<4720
Pentachlorophenol	mg/kg	<943
Phenanthrene	mg/kg	<943
Phenol	mg/kg	991
Pyrene	mg/kg	<943
1,2,4-Trichlorobenzene	mg/kg	<943
2,4,5-Trichlorophenol	mg/kg	<943
2,4,6-Trichlorophenol	mg/kg	<943
Indeno(1,2,3-c,d)pyrene	mg/kg	<943
Target Compound List Volatile Analysis, MS, (MV20)		
Acetone	mg/kg	<12.0
Benzene	mg/kg	<12.0
Bromoform	mg/kg	<12.0
Carbon disulfide	mg/kg	<12.0
Carbon tetrachloride	mg/kg	<12.0
Chlorobenzene	mg/kg	<12.0
Chlorodibromomethane	mg/kg	<12.0
Chloroethane	mg/kg	<12.0
Chloroform	mg/kg	<12.0
Dichlorobromomethane	mg/kg	<12.0
1,1-Dichloroethane	mg/kg	<12.0
1,2-Dichloroethane	mg/kg	<12.0
1,1-Dichloroethylene	mg/kg	<12.0
1,2-Dichloropropane	mg/kg	<12.0
cis-1,3-Dichloropropylene	mg/kg	<12.0

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6621**
ASC Sample Number: JM9438
Sample Date:
Facility Code: 015226N

Target Compound List Volatile Analysis, MS, (MV20)

Parameters	Units	
trans-1,3-Dichloropropylene	mg/kg	<12.0
Ethylbenzene	mg/kg	<12.0
2-Hexanone	mg/kg	<12.0
Methyl bromide	mg/kg	<12.0
Methyl chloride	mg/kg	<12.0
Methylene chloride	mg/kg	<12.0
Methyl ethyl ketone	mg/kg	<24.0
Methyl-iso-butyl ketone	mg/kg	<24.0
Styrene	mg/kg	<12.0
1,1,2,2-Tetrachloroethane	mg/kg	<12.0
Tetrachloroethylene	mg/kg	<12.0
Toluene	mg/kg	<12.0
1,2-Trans-dichloroethylene	mg/kg	<12.0
1,1,1-Trichloroethane	mg/kg	<12.0
1,1,2-Trichloroethane	mg/kg	<12.0
Trichloroethylene	mg/kg	<12.0
Vinyl chloride	mg/kg	<12.0
Xylenes	mg/kg	83.7

DATA SUMMARY REPORT

DATE: 11/02/94

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6622**
ASC Sample Number: JM9439
Sample Date:
Facility Code: 015226N

Parameters	Units	
Volatile Tentatively Identified Compounds , GC/MS, (CL1E)		
3-Pentanone	mg/L	.040 J
Benzene, 1,2,3-trimethyl-	mg/L	.067 J
Benzene, 1,2,4,5-tetramethyl-	mg/L	.042 J
Benzene, 1-ethyl-3-methyl-	mg/L	.030 J
Semivolatile Tentatively Identified Compounds, GC/MS, (CL1F)		
Octanoic Acid	mg/L	.816 J
Unk organic acid	mg/L	1.70 J
unknown	mg/L	1.20 J
unknown	mg/L	1.41 J
unknown	mg/L	1.39 J
unknown	mg/L	1.26 J
unknown	mg/L	.986 J
unknown	mg/L	2.94 J
unknown	mg/L	1.04 J
unknown	mg/L	1.11 J
unknown	mg/L	2.25 J
Conventional Data (CV10)		
BTU/lb	BTU/lb	<200
Chloride	mg/L	35.5
Density	gm/cc	.912
Flash Point, Seta Flash 60	Deg C	>60
Nitrate as N	mg/L	<6.25
Phosphate, Dissolved	mg/L	<8.15
Sulfate as SO4	mg/L	44.0
pH (Electrode)	std	6.57
Target Compound List Pesticide and PCB Analysis, GC, (GS25)		
Aldrin	mg/L	<.005
Alpha-BHC	mg/L	<.005
Beta-BHC	mg/L	<.005
alpha-Chlordane	mg/L	<.005
gamma-Chlordane	mg/L	<.005
4,4'-DDD	mg/L	<.010

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6622**
ASC Sample Number: JM9439
Sample Date:
Facility Code: 015226N

Parameters	Units	
Target Compound List Pesticide and PCB Analysis, GC, (GS25)		
4,4'-DDE	mg/L	<.010
4,4'-DDT	mg/L	<.010
Delta-BHC	mg/L	<.005
Dieldrin	mg/L	<.010
Endosulfan sulfate	mg/L	<.010
Endosulfan I	mg/L	<.005
Endosulfan II	mg/L	<.010
Endrin	mg/L	<.010
Endrin ketone	mg/L	<.010
Endrin aldehyde	mg/L	<.010
Gamma-BHC	mg/L	<.005
Heptachlor	mg/L	<.005
Heptachlor epoxide	mg/L	<.005
Methoxychlor	mg/L	<.050
Toxaphene	mg/L	<.500
Aroclor 1016	mg/L	<.100
Aroclor 1221	mg/L	<.200
Aroclor 1232	mg/L	<.100
Aroclor 1242	mg/L	<.100
Aroclor 1248	mg/L	<.100
Aroclor 1254	mg/L	<.100
Aroclor 1260	mg/L	<.100
Target Analyte List Total Metals Analysis, (ME20)		
Aluminum	mg/L	<.295
Antimony	mg/L	1.66
Arsenic	mg/L	<.010
Barium	mg/L	.409
Beryllium	mg/L	<.003
Cadmium	mg/L	.505
Calcium	mg/L	35.5
Chromium	mg/L	<.030
Cobalt	mg/L	5.60
Copper	mg/L	.241
Iron	mg/L	5.75

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6622**
ASC Sample Number: JM9439
Sample Date:
Facility Code: 015226N

Parameters	Units	
Target Analyte List Total Metals Analysis, (ME20)		
Lead	mg/L	91.5
Magnesium	mg/L	15.3
Manganese	mg/L	8.00
Mercury	mg/L	<.0001
Nickel	mg/L	3.48
Potassium	mg/L	9.30
Selenium	mg/L	<.006
Silver	mg/L	<.029
Sodium	mg/L	9.80
Thallium	mg/L	<.010
Vanadium	mg/L	<.021
Zinc	mg/L	268
Target Compound List Base/Neutral/Acid Analysis, MS, (MS22)		
Acenaphthene	mg/L	<2.00
Acenaphthylene	mg/L	<2.00
Anthracene	mg/L	<2.00
Benzo(a)anthracene	mg/L	<2.00
Benzo(b)fluoranthene	mg/L	<2.00
Benzo(k)fluoranthene	mg/L	<2.00
Benzo(ghi)perylene	mg/L	<2.00
Benzo(a)pyrene	mg/L	<2.00
bis(2-Chloroethyl) ether	mg/L	<2.00
bis(2-Chloroethoxy)methane	mg/L	<2.00
bis(2-Chloroisopropyl)ether	mg/L	<2.00
bis(2-Ethylhexyl)phthalate	mg/L	<2.00
4-Bromophenyl phenyl ether	mg/L	<2.00
Butyl benzyl phthalate	mg/L	<2.00
Carbazole	mg/L	<2.00
4-Chloroaniline	mg/L	<2.00
p-Chloro-m-cresol	mg/L	<2.00
2-Chloronaphthalene	mg/L	<2.00
2-Chlorophenol	mg/L	<2.00
4-Chlorophenyl phenyl ether	mg/L	<2.00
Chrysene	mg/L	<2.00

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6622**
ASC Sample Number: JM9439
Sample Date:
Facility Code: 015226N

Parameters	Units	
Target Compound List Base/Neutral/Acid Analysis, MS, (MS22)		
Dibenzo(a,h)anthracene	mg/L	<2.00
Dibenzofuran	mg/L	<2.00
Di-n-butyl phthalate	mg/L	<2.00
1,2-Dichlorobenzene	mg/L	<2.00
1,3-Dichlorobenzene	mg/L	<2.00
1,4-Dichlorobenzene	mg/L	<2.00
3,3'-Dichlorobenzidine	mg/L	<2.00
2,4-Dichlorophenol	mg/L	<2.00
Diethyl phthalate	mg/L	<2.00
Dimethyl phthalate	mg/L	<2.00
2,4-Dimethylphenol	mg/L	<2.00
4,6-Dinitro-o-cresol	mg/L	<5.00
2,4-Dinitrophenol	mg/L	<10.0
2,4-Dinitrotoluene	mg/L	<2.00
2,6-Dinitrotoluene	mg/L	<2.00
Di-n-octyl phthalate	mg/L	<2.00
Fluoranthene	mg/L	<2.00
Fluorene	mg/L	<2.00
Hexachlorobenzene	mg/L	<2.00
Hexachlorobutadiene	mg/L	<2.00
Hexachlorocyclopentadiene	mg/L	<2.00
Hexachloroethane	mg/L	<2.00
Isophorone	mg/L	<2.00
2-Methylnaphthalene	mg/L	<2.00
2-Methylphenol	mg/L	<2.00
4-Methylphenol	mg/L	<2.00
N-Nitrosodi-n-propylamine	mg/L	<2.00
N-Nitrosodiphenylamine	mg/L	<2.00
Naphthalene	mg/L	<2.00
2-Nitroaniline	mg/L	<2.00
3-Nitroaniline	mg/L	<2.00
4-Nitroaniline	mg/L	<2.00
Nitrobenzene	mg/L	<2.00
2-Nitrophenol	mg/L	<2.00
4-Nitrophenol	mg/L	<10.0

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6622**
ASC Sample Number: JM9439
Sample Date:
Facility Code: 015226N

Parameters	Units	
Target Compound List Base/Neutral/Acid Analysis, MS, (MS22)		
Pentachlorophenol	mg/L	<2.00
Phenanthrene	mg/L	<2.00
Phenol	mg/L	<2.00
Pyrene	mg/L	<2.00
1,2,4-Trichlorobenzene	mg/L	<2.00
2,4,5-Trichlorophenol	mg/L	<2.00
2,4,6-Trichlorophenol	mg/L	<2.00
Indeno(1,2,3-c,d)pyrene	mg/L	<2.00
Target Compound List Volatile Analysis, MS, (MV20)		
Acetone	mg/L	.208
Benzene	mg/L	<.005
Bromoform	mg/L	<.005
Carbon disulfide	mg/L	<.005
Carbon tetrachloride	mg/L	<.005
Chlorobenzene	mg/L	<.005
Chlorodibromomethane	mg/L	<.005
Chloroethane	mg/L	<.005
Chloroform	mg/L	<.005
Dichlorobromomethane	mg/L	<.005
1,1-Dichloroethane	mg/L	<.005
1,2-Dichloroethane	mg/L	<.005
1,1-Dichloroethylene	mg/L	<.005
1,2-Dichloropropane	mg/L	<.005
cis-1,3-Dichloropropylene	mg/L	<.005
trans-1,3-Dichloropropylene	mg/L	<.005
Ethylbenzene	mg/L	.007
2-Hexanone	mg/L	<.005
Methyl bromide	mg/L	<.005
Methyl chloride	mg/L	<.005
Methylene chloride	mg/L	.032
Methyl ethyl ketone	mg/L	.085
Methyl-iso-butyl ketone	mg/L	<.010
Styrene	mg/L	<.005
1,1,2,2-Tetrachloroethane	mg/L	<.005

DATA SUMMARY REPORT

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID: **C6622**
ASC Sample Number: JM9439
Sample Date:
Facility Code: 015226N

Parameters	Units	
Target Compound List Volatile Analysis, MS, (MV20)		
Tetrachloroethylene	mg/L	<.005
Toluene	mg/L	<.005
1,2-Trans-dichloroethylene	mg/L	<.005
1,1,1-Trichloroethane	mg/L	<.005
1,1,2-Trichloroethane	mg/L	<.005
Trichloroethylene	mg/L	<.005
Vinyl chloride	mg/L	<.005
Xylenes	mg/L	.159

Analytical Services Corp.

ANALYTICAL REPORT

Client: OHM Remediation Services Corporation
Southern Region (Morrisville, NC)

Attn: Kent Geis
Bill Perry

Project: 15226N - NEESA; Camp LeJuene, Jacksonville, NC

Sample(s): C6617 through C6622

Sample Type(s): Solid

Analysis Performed: Test Bulk, Conventionals, Metals and Organics

Date Sample Received: February 25 and March 6, 1994

Date Order Received: June 23, 1994

Joblink(s): 616083

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Reviewed and Approved by: _____ *Date:* *August 9, 1994*
Thomas E. Gran, Ph.D., Vice President

16406 U.S. Route 224 East ■ P.O. Box 1404 ■ Findlay, Ohio 45839-1404 ■ 419-423-3526

SUMMARY OF ANALYTICAL METHODOLOGY

Parameter	Reference	Method
Conventionals		
Acids by IC (Cl, NO_3, PO_4 and SO_4)	CAWW	300.0
Test Bulking	ASTM	D5058
BTU/lb	ASTM	D240-76
Bulk Density	ASTM	D5057
Oxidizer	ASTM	D4981
RCRA Characteristics		
pH, Electrode	SW-846	9045
Reactive Sulfide	SW-846	7.3.4.2
Flash Point, Seta Flash	SW-846	1020
Reactive Cyanide	SW-846	7.3.3.2
Metals		
Total Metals	SW-846	6010
Mercury by Cold Vapor	SW-846	7471
Organics		
Volatile Compounds by GC/MS	SW-846	8240
Semi-volatile Compounds by GC/MS	SW-846	8270
Pesticides and PCBs by GC	SW-846	8080

Test Bulking Results

Facility: 15226N
Sample Identifier: C6617
ASC Sample Number: JM9434

Test Bulking Parameters	Result
Date of Test Bulk:	June 24, 1994
Samples Bulked:	001, 002, 003, 004, 005, 006, 008, 009, 010, 011, 013, 014, 018, 019, 021, 022, 023, 024, 025, 026, 032, 043, 063, 072, 074, 076 077, 078, 079, 080 and 149
Temperature Rise:	< 2.0°C
Gas Evolved:	None observed
Precipitate:	None observed
Gelling or Solidification:	None observed

Test Bulking Results

Facility: 15226N
Sample Identifier: C6618
ASC Sample Number: JM9435

Test Bulking Parameters	Result
Date of Test Bulk:	June 24, 1994
Samples Bulked:	015 and 147
Temperature Rise:	< 2.0°C
Gas Evolved:	None observed
Precipitate:	None observed
Gelling or Solidification:	None observed

Test Bulking Results

Facility: 15226N
Sample Identifier: C6620
ASC Sample Number: JM9437

Test Bulking Parameters	Result
Date of Test Bulk:	June 24, 1994
Samples Bulked:	012, 145 and 146
Temperature Rise:	< 2.0°C
Gas Evolved:	None observed
Precipitate:	None observed
Gelling or Solidification:	None observed

Test Bulking Results

Facility: 15226N
Sample Identifier: C6621
ASC Sample Number: JM9438

Test Bulking Parameters	Result
Date of Test Bulk:	June 24, 1994
Samples Bulked:	007, 143 and 150
Temperature Rise:	< 2.0°C
Gas Evolved:	None observed
Precipitate:	None observed
Gelling or Solidification:	None observed

Test Bulking Results

Facility: 15226N
Sample Identifier: C6622
ASC Sample Number: JM9439

Test Bulking Parameters	Result
Date of Test Bulk:	June 24, 1994
Samples Bulked:	017, 099 and 148
Temperature Rise:	< 2.0°C
Gas Evolved:	None observed
Precipitate:	None observed
Gelling or Solidification:	None observed

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

SOW No.:

EPA Sample No.	Lab Sample ID.
C6617	JM9434
C6618	JM9435
C6619	JM9436
C6620	JM9437

Were ICP interelement corrections applied? Yes/No YES

Were ICP backgrounds corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

See Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: William A. Fithian

Date: 7/28/94 Title: Technical Project Manager

Narrative for SDG # C6617

Metals

All of the initial calibration criteria were within QC limits.

Sodium and Selenium did not pass all continuing calibration criteria but should not negatively impact the data validity.

The CRDL standard met all QC criteria.

Low levels of Calcium, Iron, Manganese and Zinc were detected in the Method Blank. All associated samples have been flagged with the appropriate qualifier. This anomaly should not impact the validity of the data generated.

Low spike recoveries were noted for Antimony, Arsenic, Cadmium, and Selenium. All Post Spike recoveries were within acceptable QC limits.

Aluminum, Copper, Iron and Manganese were outside QC limits due to the high levels of these elements present in the unspiked sample. Post spikes were not required.

Duplicate results were >10% for Antimony, Arsenic, Cadmium, Cobalt, Iron, Lead, Manganese, Mercury, Selenium and Silver. This will have minimal impact on the validity of the data submitted.

All Laboratory Control Samples (LCS) were within acceptable QC limits.

All holding times were met for this SDG.

No Quarterly Linearity Checks are available for this SDG.

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

C6617

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Matrix (soil/water): SOIL Lab Sample ID: JM9434

Level (low/med): LOW Date Received: 06/24/94

% Solids: 77.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2400		E	P
7440-36-0	Antimony	0.943	U	N	P
7440-38-2	Arsenic	16.25		N,*	F
7440-39-3	Barium	274			P
7440-41-7	Beryllium	0.135			P
7440-43-9	Cadmium	1.89		N	P
7440-70-2	Calcium	19500		E	P
7440-47-3	Chromium	67.7		E	P
7440-48-4	Cobalt	17.2		E	P
7440-50-8	Copper	34.5			P
7439-89-6	Iron	10700			P
7439-92-1	Lead	4190		E	P
7439-95-4	Magnesium	2680		E	P
7439-96-5	Manganese	95.9			P
7439-97-6	Mercury	0.047	U		CV
7440-02-0	Nickel	33.9		E	P
7440-09-7	Potassium	87			P
7782-49-2	Selenium	0.118	B	N	F
7440-22-4	Silver	0.184	U		P
7440-23-5	Sodium	3860			P
7440-28-0	Thallium	0.211	U		F
7440-62-2	Vanadium	2.93			P
7440-66-6	Zinc	1930		E	P
	Cyanide				

Color Before: Brown Clarity Before: Texture: Wet soil

Color After: Colorless Clarity After: Artifacts: Stones

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

C6618

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Matrix (soil/water): SOIL Lab Sample ID: JM9435

Level (low/med): LOW Date Received: 06/24/94

% Solids: 42.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	339		E	P
7440-36-0	Antimony	1.75	U	N	P
7440-38-2	Arsenic	0.655	B	N,*	F
7440-39-3	Barium	30.2			P
7440-41-7	Beryllium	0.067	B		P
7440-43-9	Cadmium	0.065	U	N	P
7440-70-2	Calcium	322		E	P
7440-47-3	Chromium	0.957		E	P
7440-48-4	Cobalt	0.396	B	E	P
7440-50-8	Copper	2.4	B		P
7439-89-6	Iron	810			P
7439-92-1	Lead	14.6		E	P
7439-95-4	Magnesium	140		E	P
7439-96-5	Manganese	7.45			P
7439-97-6	Mercury	0.052	U		CV
7440-02-0	Nickel	1.1	B	E	P
7440-09-7	Potassium	87.4	U		P
7782-49-2	Selenium	1.15	U	N	F
7440-22-4	Silver	0.34	U		P
7440-23-5	Sodium	26100			P
7440-28-0	Thallium	0.211	U		F
7440-62-2	Vanadium	0.751	B		P
7440-66-6	Zinc	35.5		E	P
	Cyanide				

Color Before: White Clarity Before: Texture: Fine sand

Color After: Colorless Clarity After: Artifacts: Stones

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

C6619

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Matrix (soil/water): SOIL Lab Sample ID: JM9436

Level (low/med): LOW Date Received: 06/24/94

% Solids: 64.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	947		E	P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	0.317	U	N,*	F
7440-39-3	Barium	7.44			P
7440-41-7	Beryllium	0.018	U		P
7440-43-9	Cadmium	0.803		N	P
7440-70-2	Calcium	158	B	E	P
7440-47-3	Chromium	24.9		E	P
7440-48-4	Cobalt	0.279	B	E	P
7440-50-8	Copper	9.25			P
7439-89-6	Iron	3550			P
7439-92-1	Lead	67.4		E	P
7439-95-4	Magnesium	24.7	B	E	P
7439-96-5	Manganese	61.5			P
7439-97-6	Mercury	0.049	U		CV
7440-02-0	Nickel	1.4	B	E	P
7440-09-7	Potassium	54.9	U		P
7782-49-2	Selenium	0.175	U	N	F
7440-22-4	Silver	0.214	U		P
7440-23-5	Sodium	91.8	B		P
7440-28-0	Thallium	0.317	U		F
7440-62-2	Vanadium	0.623	B		P
7440-66-6	Zinc	7260		E	P
	Cyanide				

Color Before: Gray Clarity Before: Texture: Sand

Color After: Colorless Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

C6620

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Matrix (soil/water): SOIL Lab Sample ID: JM9437

Level (low/med): LOW Date Received: 06/24/94

% Solids: 39.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	350		E	P
7440-36-0	Antimony	1.83	U	N	P
7440-38-2	Arsenic	0.937	B	N, *	F
7440-39-3	Barium	12.5	B		P
7440-41-7	Beryllium	0.031	U		P
7440-43-9	Cadmium	0.781		N	P
7440-70-2	Calcium	162	B	E	P
7440-47-3	Chromium	10.1		E	P
7440-48-4	Cobalt	0.227	U	E	P
7440-50-8	Copper	8.54	B		P
7439-89-6	Iron	18900			P
7439-92-1	Lead	115		E	P
7439-95-4	Magnesium	20.5	B	E	P
7439-96-5	Manganese	51.1			P
7439-97-6	Mercury	0.04	B		CV
7440-02-0	Nickel	1.79	B	E	P
7440-09-7	Potassium	91.6	U		P
7782-49-2	Selenium	0.209	U	N	F
7440-22-4	Silver	0.356	U		P
7440-23-5	Sodium	27.2	B		P
7440-28-0	Thallium	0.38	U		F
7440-62-2	Vanadium	0.258	U		P
7440-66-6	Zinc	2690		E	P
	Cyanide				

Color Before: BROWN Clarity Before: _____ Texture: Sponge like soil

Color After: Colorless Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Initial Calibration Source: NIST

Continuing Calibration Source: NIST

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	9415.0	9440.00	100.3	5051.0	4630.00	91.7	4660.00	92.3	P
Antimony	4511.0	4920.00	109.1	2289.0	2440.00	106.6	2400.00	104.8	P
Arsenic	32.8	32.61	99.4	20.5	19.91	97.1	21.63	105.5	F
Barium	9145.0	9390.00	102.7	4864.0	4690.00	96.4	4720.00	97.0	P
Beryllium	230.6	239.00	103.6	122.8	119.00	96.9	121.00	98.5	P
Cadmium	2430.0	2550.00	104.9	1322.0	1270.00	96.1	1270.00	96.1	P
Calcium	23530.0	24000.00	102.0	12580.0	12000.00	95.4	12000.00	95.4	P
Chromium	879.5	951.00	108.1	489.6	469.00	95.8	470.00	96.0	P
Cobalt	2407.0	2520.00	104.7	1306.0	1250.00	95.7	1260.00	96.5	P
Copper	1176.0	1190.00	101.2	655.7	596.00	90.9	589.00	89.8	P
Iron	4666.0	4790.00	102.7	2472.0	2400.00	97.1	2450.00	99.1	P
Lead	4972.0	4900.00	98.6	2505.0	2450.00	97.8	2440.00	97.4	P
Magnesium	22850.0	24000.00	105.0	12200.0	12000.00	98.4	12000.00	98.4	P
Manganese	2381.0	2520.00	105.8	2500.0	2390.00	95.6	2370.00	94.8	P
Mercury	5.0	4.99	99.8	5.0	4.90	98.0	4.81	96.2	CV
Nickel	2435.0	2480.00	101.8	1322.0	1250.00	94.6	1260.00	95.3	P
Potassium	23020.0	24700.00	107.3	12150.0	12500.00	102.9	12500.00	102.9	P
Selenium									
Silver	1155.0	1270.00	110.0	616.9	611.00	99.0	610.00	98.9	P
Sodium	23370.0	22400.00	95.8	12440.0	11000.00	88.4	12600.00	101.3	P
Thallium									
Vanadium	4656.0	4870.00	104.6	2508.0	2410.00	96.1	2420.00	96.5	P
Zinc	2426.0	2550.00	105.1	1287.0	1330.00	103.3	132.00	10.3	P
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Initial Calibration Source: NIST

Continuing Calibration Source: NIST

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum				5051.0	4810.00	95.2	4680.00	92.7	P
Antimony				2289.0	2510.00	109.7	2420.00	105.7	P
Arsenic				20.5	21.14	103.1	21.67	105.7	F
Barium				4864.0	4820.00	99.1	4710.00	96.8	P
Beryllium				122.8	124.00	101.0	121.00	98.5	P
Cadmium				1322.0	1310.00	99.1	1280.00	96.8	P
Calcium				12580.0	12500.00	99.4	12100.00	96.2	P
Chromium				489.6	481.00	98.2	469.00	95.8	P
Cobalt				1306.0	1290.00	98.8	1250.00	95.7	P
Copper				655.7	619.00	94.4	600.00	91.5	P
Iron				2472.0	2460.00	99.5	2400.00	97.1	P
Lead				2505.0	2490.00	99.4	2430.00	97.0	P
Magnesium				12200.0	12400.00	101.6	12000.00	98.4	P
Manganese				2500.0	2450.00	98.0	2360.00	94.4	P
Mercury				5.0	4.81	96.2			CV
Nickel				1322.0	1290.00	97.6	1260.00	95.3	P
Potassium				12150.0	12400.00	102.1	12600.00	103.7	P
Selenium									F
Silver				616.9	630.00	102.1	616.00	99.9	P
Sodium				12440.0	14600.00	117.4	1280.00	10.3	P
Thallium									F
Vanadium				2508.0	2490.00	99.3	2430.00	96.9	P
Zinc				1287.0	1320.00	102.6	1280.00	99.5	P
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Initial Calibration Source: APG

Continuing Calibration Source: APG

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium	19.6	18.68	95.3	11.7	11.25	95.9	10.53	89.8	F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Initial Calibration Source: APG

Continuing Calibration Source: APG

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium				11.7	11.41	97.3			F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Initial Calibration Source: SPEX

Continuing Calibration Source: SPEX

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium	25.0	25.98	103.9	25.0	26.09	104.4	26.25	105.0	F
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Initial Calibration Source: SPEX

Continuing Calibration Source: SPEX

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium				25.0	25.62	102.5			F
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
3
BLANKS

Lab Name: ANALYICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	59.9	U	59.9	U	59.9	U	59.9	U	59.900	U	P
Antimony	29.8	U	29.8	U	29.8	U	29.8	U	29.800	U	P
Arsenic	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	F
Barium	2.5	B	1.3	U	1.3	U	1.3	U	1.300	U	P
Beryllium	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Cadmium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Calcium	6.3	U	6.3	B	6.3	U	6.3	U	62.100	B	P
Chromium	5.9	U	5.9	U	5.9	U	5.9	U	5.900	U	P
Cobalt	3.7	U	3.7	U	3.7	U	3.7	U	3.700	U	P
Copper	5.5	U	5.5	U	5.5	U	5.5	U	5.500	U	P
Iron	13.9	U	13.9	U	13.9	U	13.9	U	135.000		P
Lead	17.9	U	17.9	U	17.9	U	17.9	U	17.900	U	P
Magnesium	33.5	U	33.5	U	33.5	U	33.5	U	33.500	U	P
Manganese	1.2	U	1.2	U	1.2	U	1.2	U	4.800	B	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.140	U	CV
Nickel	9.5	U	9.5	U	9.5	U	9.5	U	9.500	U	P
Potassium	1490.0	U	1490.0	U	1490.0	U	1490.0	U	999.000	U	P
Selenium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	F
Silver	6.6	B	5.8	U	5.8	U	5.8	U	5.800	U	P
Sodium	53.6	U	53.6	U	53.6	U	53.6	U	53.600	U	P
Thallium	2.1	U	2.1	U	2.1	U	2.1	U	2.100	U	F
Vanadium	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Zinc	4.1	U	4.1	U	4.1	U	4.1	U	6.300	B	P
Cyanide											

U.S. EPA - CLP
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

ICP ID Number: 61 ICS Source: VENTURES

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	494000	494000	470200	472600.0	95.7	479200	477700.0	96.7
Antimony	0	845	30	961.2	113.8	13	973.0	115.1
Arsenic	NR							
Barium	0	476	2	457.7	96.2	-2	458.9	96.4
Beryllium	0	476	0	468.4	98.4	0	476.3	100.1
Cadmium	0	445	-3	472.0	106.1	-3	472.6	106.2
Calcium	225000	225000	180800	225300.0	100.1	182900	222700.0	99.0
Chromium	0	444	-8	442.4	99.6	-6	439.2	98.9
Cobalt	0	457	-5	447.5	97.9	-5	442.7	96.9
Copper	0	510	8	462.5	90.7	2	469.5	92.1
Iron	176000	176000	177500	174600.0	99.2	181300	174900.0	99.4
Lead	0	984	20	939.1	95.4	22	917.2	93.2
Magnesium	250000	503000	249500	518900.0	103.2	225200	518600.0	103.1
Manganese	0	438	-3	447.4	102.1	-3	440.8	100.6
Mercury	NR							
Nickel	0	893	-4	863.7	96.7	-4	868.6	97.3
Potassium	NR							
Selenium	NR							
Silver	0	922	-9	942.0	102.2	-10	953.2	103.4
Sodium	0	907	-200	755.9	83.3	-231	726.8	80.1
Thallium	NR							
Vanadium	0	459	-1	450.9	98.2	-2	449.5	97.9
Zinc	0	960	23	953.6	99.3	25	978.8	102.0

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

C6620

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Matrix (soil/water) SOIL Level (low/med): LOW

% Solids for Sample _____

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		10300.0000		9230.0000		287.00	372.8		P
Antimony	75-125	1.7900		1.3700		13.70	3.1	N	P
Arsenic	75-125	2.1000		1.5900		1.96	26.0	N	F
Barium	75-125	136.0000		86.0000		56.00	89.3		P
Beryllium	75-125	2.4100		1.1500		1.42	88.7		P
Cadmium	75-125	0.7840		0.0000	U	1.46	53.7	N	P
Calcium		2400.0000		2870.0000		286.00	-164.3		P
Chromium	75-125	19.3000		14.2000		6.18	82.5		P
Cobalt	75-125	24.8000		12.0000		14.40	88.9		P
Copper	75-125	17.5000		9.2300		7.15	115.7		P
Iron		27200.0000		23100.0000		281.00	1459.1		P
Lead	75-125	36.5000		24.6000		14.50	82.1		P
Magnesium	75-125	842.0000		589.0000		284.00	89.1		P
Manganese		959.0000		869.0000		13.30	676.7		P
Mercury	75-125	0.2790		0.0398		0.20	120.8		CV
Nickel	75-125	22.1000		9.0200		15.30	85.5		P
Potassium	75-125	906.0000		670.0000		267.00	88.4		P
Selenium	75-125	0.3770		0.0000	U	1.96	19.2	N	F
Silver	75-125	1.0000		0.0000	U	1.27	78.7		P
Sodium	75-125	248.0000		18.9000		265.00	86.5		P
Thallium	75-125	1.7100		0.0000	U	1.96	87.2		F
Vanadium	75-125	35.1000		21.6000		14.30	94.4		P
Zinc	75-125	40.1000		24.8000		14.70	104.1		P
Cyanide									

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

DA001

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Matrix (soil/water) SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		288500.00		310100.00		9281.0	-232.7		P
Antimony		487.60		45.90		468.3	94.3		P
Arsenic									
Barium		4674.00		2892.00		1915.0	93.1		P
Beryllium		86.20		38.60		48.5	98.1		P
Cadmium		41.20		-9.10	U	50.0	100.6		P
Calcium		94510.00		96420.00		9802.0	-19.5		P
Chromium		642.20		477.90		211.2	77.8		P
Cobalt		856.10		401.70		493.3	92.1		P
Copper		532.10		309.90		244.5	90.9		P
Iron		713100.00		775900.00		9658.0	-650.2		P
Lead		1208.00		828.30		497.2	76.4		P
Magnesium		27590.00		19830.00		9724.0	79.8		P
Manganese		26370.00		29190.00		456.7	-617.5		P
Mercury									
Nickel		771.60		302.70		523.5	89.6		P
Potassium		30210.00		22480.00		9148.0	84.5		P
Selenium									
Silver		39.00		-3.90	U	43.5	98.6		P
Sodium		10320.00		634.50		9069.0	106.8		P
Thallium									
Vanadium		1152.00		727.10		489.8	86.7		P
Zinc		1344.00		834.30		503.5	101.2		P
Cyanide									

Comments:

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

DA001

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: % Solids for Duplicate:

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		10300.0000		9970.0000		3.3		P
Antimony	1.5	1.7900		2.9500		48.9		P
Arsenic	0.2	2.1000		1.6900		21.6	*	F
Barium		136.0000		136.0000		0.0		P
Beryllium		2.4100		2.4600		2.1		P
Cadmium		0.7840		0.8800		11.5		P
Calcium		2400.0000		2620.0000		8.8		P
Chromium		19.3000		19.3000		0.0		P
Cobalt		24.8000		21.5000		14.3		P
Copper		17.5000		16.5000		5.9		P
Iron		27200.0000		24500.0000		10.4		P
Lead		36.5000		31.9000		13.5		P
Magnesium		842.0000		860.0000		2.1		P
Manganese		959.0000		641.0000		39.8		P
Mercury		0.2790		0.2420		14.2		CV
Nickel		22.1000		21.5000		2.8		P
Potassium		906.0000		839.0000		7.7		P
Selenium	0.11	0.3770		0.2730		32.0		F
Silver		1.0000		0.8540		15.7		P
Sodium		248.0000		248.0000		0.0		P
Thallium	0.2	1.7100		1.5600		9.2		F
Vanadium		35.1000		34.2000		2.6		P
Zinc		40.1000		36.5000		9.4		P
Cyanide								

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6621

SOW No.:

EPA Sample No.	Lab Sample ID.
C6621	JM9438

Were ICP interelement corrections applied? Yes/No YES

Were ICP backgrounds corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

See Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: William A. Frithian

Date: 7/28/94 Title: Technical Project Manager

Narrative for SDG # C6621

Metals

All of the initial calibration criteria were within QC limits.

Copper, Sodium and Zinc did not pass all continuing calibration criteria but should not negatively impact the data validity.

Low levels of Calcium, Iron, Manganese and Zinc were detected in the Method Blank. All associated samples have been flagged with the appropriate qualifier. This anaomaly should not impact the validity of the data generated.

Low spike recoveries were noted for Antimony, Manganese, Mercury, Silver and Thallium. Post Spike recoveries were within QC limits.

Duplicate results were >10% for Thallium. This will have minimal impact on the validity of the data submitted.

All Laboratory Control Samples (LCS) were within acceptable QC limits.

All holding times were met for this SDG.

No Quarterly Linearity Checks are available for this SDG.

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

C6621

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6621

Matrix (soil/water): OIL Lab Sample ID: JM9438

Level (low/med): LOW Date Received: 06/24/94

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	166			P
7440-36-0	Antimony	1.08	B	N	P
7440-38-2	Arsenic	0.947			P
7440-39-3	Barium	11.6			P
7440-41-7	Beryllium	0.018	B		P
7440-43-9	Cadmium	0.621			P
7440-70-2	Calcium	222			P
7440-47-3	Chromium	1.74			P
7440-48-4	Cobalt	0.093	U		P
7440-50-8	Copper	2.35			P
7439-89-6	Iron	15100			P
7439-92-1	Lead	26.9			P
7439-95-4	Magnesium	15.5			P
7439-96-5	Manganese	40.5		N	P
7439-97-6	Mercury	0.05	U	N	CV
7440-02-0	Nickel	1.04			P
7440-09-7	Potassium	37.4	U		P
7782-49-2	Selenium	0.982	U		P
7440-22-4	Silver	0.146	U	N	P
7440-23-5	Sodium	222		E	P
7440-28-0	Thallium	1.35		N	P
7440-62-2	Vanadium	0.714			P
7440-66-6	Zinc	22.6		E	P
	Cyanide				

Color Before: BROWN Clarity Before: Texture: PAINT LIKE

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6621

Initial Calibration Source: NIST

Continuing Calibration Source: NIST

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	9415.0	9440.00	100.3	5051.0	4630.00	91.7	4660.00	92.3	P
Antimony	4511.0	4920.00	109.1	2289.0	2440.00	106.6	2400.00	104.8	P
Arsenic	4550.0	4810.00	105.7	2430.0	2420.00	99.6	2400.00	98.8	P
Barium	9145.0	9390.00	102.7	4864.0	4690.00	96.4	4720.00	97.0	P
Beryllium	230.6	239.00	103.6	122.8	119.00	96.9	121.00	98.5	P
Cadmium	2430.0	2550.00	104.9	1322.0	1270.00	96.1	1270.00	96.1	P
Calcium	23530.0	24000.00	102.0	12580.0	12000.00	95.4	12000.00	95.4	P
Chromium	879.5	951.00	108.1	489.6	469.00	95.8	470.00	96.0	P
Cobalt	2407.0	2520.00	104.7	1306.0	1250.00	95.7	1260.00	96.5	P
Copper	1176.0	1190.00	101.2	655.7	596.00	90.9	589.00	89.8	P
Iron	4666.0	4790.00	102.7	2472.0	2400.00	97.1	2450.00	99.1	P
Lead	4972.0	4900.00	98.6	2505.0	2450.00	97.8	2440.00	97.4	P
Magnesium	22850.0	24000.00	105.0	12200.0	12000.00	98.4	12000.00	98.4	P
Manganese	2381.0	2520.00	105.8	2500.0	2390.00	95.6	2370.00	94.8	P
Mercury	5.0	4.40	88.0	5.0	4.66	93.2	4.86	97.2	CV
Nickel	2435.0	2480.00	101.8	1322.0	1250.00	94.6	1260.00	95.3	P
Potassium	23020.0	24700.00	107.3	12150.0	12500.00	102.9	12500.00	102.9	P
Selenium	4610.0	4730.00	102.6	2430.0	2290.00	94.2	2320.00	95.5	P
Silver	1155.0	1270.00	110.0	616.9	611.00	99.0	610.00	98.9	P
Sodium	23370.0	22400.00	95.8	12440.0	11000.00	88.4	12600.00	101.3	P
Thallium	4460.0	4580.00	102.7	2370.0	2300.00	97.0	2280.00	96.2	P
Vanadium	4656.0	4870.00	104.6	2508.0	2410.00	96.1	2420.00	96.5	P
Zinc	2426.0	2550.00	105.1	1287.0	1330.00	103.3	132.00	10.3	P
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPTION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6621

Initial Calibration Source: NIST

Continuing Calibration Source: NIST

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum				5050.0	4810.00	95.2	4680.00	92.7	P
Antimony				2290.0	2510.00	109.6	2420.00	105.7	P
Arsenic				2430.0	2490.00	102.5	2410.00	99.2	P
Barium				4860.0	4820.00	99.2	4710.00	96.9	P
Beryllium				123.0	124.00	100.8	121.00	98.4	P
Cadmium				1320.0	1310.00	99.2	1280.00	97.0	P
Calcium				12600.0	12500.00	99.2	12100.00	96.0	P
Chromium				490.0	481.00	98.2	469.00	95.7	P
Cobalt				1310.0	1290.00	98.5	1250.00	95.4	P
Copper				656.0	619.00	94.4	600.00	91.5	P
Iron				2470.0	2460.00	99.6	2400.00	97.2	P
Lead				2510.0	2490.00	99.2	2430.00	96.8	P
Magnesium				12200.0	12400.00	101.6	12000.00	98.4	P
Manganese				2500.0	2450.00	98.0	2360.00	94.4	P
Mercury									
Nickel				1320.0	1290.00	97.7	1260.00	95.5	P
Potassium				12200.0	12400.00	101.6	12600.00	103.3	P
Selenium				2430.0	2410.00	99.2	2350.00	96.7	P
Silver				617.0	630.00	102.1	616.00	99.8	P
Sodium				12400.0	14600.00	117.7	12800.00	103.2	P
Thallium				2370.0	2360.00	99.6	2280.00	96.2	P
Vanadium				2510.0	2490.00	99.2	2430.00	96.8	P
Zinc				1290.0	1320.00	102.3	1280.00	99.2	P
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
3
BLANKS

Lab Name: ANALYICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6621

Preparation Blank Matrix (soil/water): OIL

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	59.9	U	59.9	U	59.9	U	59.9	U	59.900	U	P
Antimony	29.8	U	29.8	U	29.8	U	29.8	U	29.800	U	P
Arsenic	22.8	U	22.8	U	22.8	U	22.8	U	2.000	U	P
Barium	2.5	B	1.3	U	1.3	U	1.3	U	1.300	U	P
Beryllium	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Cadmium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Calcium	6.3	U	6.3	B	6.3	U	6.3	U	62.100	B	P
Chromium	5.9	U	5.9	U	5.9	U	5.9	U	5.900	U	P
Cobalt	3.7	U	3.7	U	3.7	U	3.7	U	3.700	U	P
Copper	5.5	U	5.5	U	5.5	U	5.5	U	5.500	U	P
Iron	13.9	U	13.9	U	13.9	U	13.9	U	135.000		P
Lead	17.9	U	17.9	U	17.9	U	17.9	U	17.900	U	P
Magnesium	33.5	U	33.5	U	33.5	U	33.5	U	33.500	U	P
Manganese	1.2	U	1.2	U	1.2	U	1.2	U	4.800	B	P
Mercury	0.1	U	0.1	U	0.1	U			0.140	U	CV
Nickel	9.5	U	9.5	U	9.5	U	9.5	U	9.500	U	P
Potassium	1490.0	U	1490.0	U	1490.0	U	1490.0	U	999.000	U	P
Selenium	39.1	U	39.1	U	39.1	U	39.1	U	39.100	U	P
Silver	6.6	B	5.8	U	5.8	U	5.8	U	5.800	U	P
Sodium	53.6	U	53.6	U	53.6	U	53.6	U	53.600	U	P
Thallium	15.3	U	15.3	U	15.3	U	15.3	U	2.030	U	P
Vanadium	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Zinc	4.1	U	4.1	U	4.1	U	4.1	U	6.300	B	P
Cyanide											

U.S. EPA - CLP
3
BLANKS

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6621

Preparation Blank Matrix (soil/water): OIL

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			59.9	U							P
Antimony			29.8	U							P
Arsenic			22.8	U							P
Barium			1.3	U							P
Beryllium			0.5	U							P
Cadmium			1.1	U							P
Calcium			6.3	U							P
Chromium			5.9	U							P
Cobalt			3.7	U							P
Copper			5.5	U							P
Iron			13.9	U							P
Lead			17.9	U							P
Magnesium			33.5	U							P
Manganese			1.2	U							P
Mercury											
Nickel			9.5	U							P
Potassium			1490.0	U							P
Selenium			39.1	U							P
Silver			5.8	U							P
Sodium			53.6	U							P
Thallium			15.3	U							P
Vanadium			4.2	U							P
Zinc			4.1	U							P
Cyanide											

U.S. EPA - CLP
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6621

ICP ID Number: 61 ICS Source: VENTURES

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	494000	494000	470200	472600.0	95.7	479200	477700.0	96.7
Antimony	0	845	30	961.2	113.8	13	973.0	115.1
Arsenic	NR							
Barium	0	476	2	457.7	96.2	-2	458.9	96.4
Beryllium	0	476	0	468.4	98.4	0	476.3	100.1
Cadmium	0	445	-3	472.0	106.1	-3	472.6	106.2
Calcium	225000	225000	180800	225300.0	100.1	182900	222700.0	99.0
Chromium	0	444	-8	442.4	99.6	-6	439.2	98.9
Cobalt	0	457	-5	447.5	97.9	-5	442.7	96.9
Copper	0	510	8	462.5	90.7	2	469.5	92.1
Iron	176000	176000	177500	174600.0	99.2	181300	174900.0	99.4
Lead	0	984	20	939.1	95.4	22	917.2	93.2
Magnesium	250000	503000	249500	518900.0	103.2	225200	518600.0	103.1
Manganese	0	438	-3	447.4	102.1	-3	440.8	100.6
Mercury	NR							
Nickel	0	893	-4	863.7	96.7	-4	868.6	97.3
Potassium	NR							
Selenium	NR							
Silver	0	922	-9	942.0	102.2	-10	953.2	103.4
Sodium	0	907	-200	755.9	83.3	-231	726.8	80.1
Thallium	NR							
Vanadium	0	459	-1	450.9	98.2	-2	449.5	97.9
Zinc	0	960	23	953.6	99.3	25	978.8	102.0

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

C6621

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6621

Matrix (soil/water) OIL Level (low/med): LOW

% Solids for Sample

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	452.0000		166.0000		248.00	115.3		P
Antimony	75-125	7.4200		1.0800	B	11.80	53.7	N	P
Arsenic	75-125	45.7000		0.9470	B	48.50	92.3		P
Barium	75-125	58.6000		11.6000		48.40	97.1		P
Beryllium	75-125	1.1400		0.0180	B	1.22	92.0		P
Cadmium	75-125	1.7500		0.6210		1.26	89.6		P
Calcium	75-125	444.0000		222.0000		248.00	89.5		P
Chromium	75-125	6.5200		1.7400		5.33	89.7		P
Cobalt	75-125	10.7000		0.0000	U	12.50	85.6		P
Copper	75-125	8.4300		2.3500		6.17	98.5		P
Iron	75-125	18100.0000		15100.0000		243.50	1232.0		P
Lead	75-125	41.9000		26.9000		12.60	119.0		P
Magnesium	75-125	223.0000		15.5000		246.00	84.3		P
Manganese	75-125	59.1000		40.5000		11.50	161.7	N	P
Mercury	75-125	0.1710		0.0000	U	0.25	68.4	N	CV
Nickel	75-125	11.6000		1.0400		13.20	80.0		P
Potassium	75-125	239.0000		0.0000	U	231.00	103.5		P
Selenium	75-125	46.2000		0.0000	U	48.40	95.5		P
Silver	75-125	0.7730		0.0000	U	1.10	70.3	N	P
Sodium	75-125	419.0000		222.0000		229.00	86.0		P
Thallium	75-125	28.5000		1.3500	B	48.30	56.2	N	P
Vanadium	75-125	11.2000		0.7140		12.40	84.6		P
Zinc	75-125	35.9000		22.6000		12.70	104.7		P
Cyanide									

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

C6621

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: B-005

Matrix (soil/water) OIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		16170.00		6593.00		9281.0	103.2		P
Antimony		511.70		42.80		468.3	100.1		P
Arsenic		2207.00		37.70		1922.0	112.9		P
Barium		2536.00		460.50		1915.0	108.4		P
Beryllium		53.60		0.00		48.5	110.5		P
Cadmium		72.50		24.70	U	50.0	95.6		P
Calcium		18290.00		8851.00		9802.0	96.3		P
Chromium		290.60		69.40		211.2	104.7		P
Cobalt		507.80		0.00		493.3	102.9		P
Copper		350.40		93.60		244.5	105.0		P
Iron		581900.00		601700.00		9658.0	-205.0		P
Lead		1500.00		1066.00		497.2	87.3		P
Magnesium		10390.00		615.70		9724.0	100.5		P
Manganese		2017.00		1612.00		456.7	88.7		P
Mercury									
Nickel		543.20		41.40		523.5	95.9		P
Potassium		10850.00		0.00	U	9148.0	118.6		P
Selenium		2210.00		19.20		1918.0	114.2		P
Silver		39.10		0.00	U	43.5	89.9		P
Sodium		15520.00		8826.00		9069.0	73.8		P
Thallium		2035.00		53.70		1914.0	103.5		P
Vanadium		548.20		28.40		489.8	106.1		P
Zinc		1343.00		897.90		503.5	88.4		P
Cyanide									

Comments:

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

C6621

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6621

Matrix (soil/water): OIL Level (low/med): LOW

% Solids for Sample: % Solids for Duplicate:

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		452.0000		437.0000		3.4		P
Antimony		7.4200		7.9800		7.3		P
Arsenic		45.7000		46.2000		1.1		P
Barium		58.6000		59.8000		2.0		P
Beryllium		1.1400		1.1300		0.9		P
Cadmium		1.7500		1.7600		0.6		P
Calcium		444.0000		437.0000		1.6		P
Chromium		6.5200		6.2900		3.6		P
Cobalt		10.7000		10.8000		0.9		P
Copper		8.4300		7.9800		5.5		P
Iron		18100.0000		16300.0000		10.5		P
Lead		41.9000		43.4000		3.5		P
Magnesium		223.0000		229.0000		2.7		P
Manganese		59.1000		54.8000		7.6		P
Mercury		0.1710		0.1900		10.5		CV
Nickel		11.6000		11.7000		0.9		P
Potassium		239.0000		238.0000		0.4		P
Selenium		46.2000		46.2000		0.0		P
Silver		0.7730		0.8360		7.8		P
Sodium		419.0000		389.0000		7.4		P
Thallium		28.5000		37.1000		26.2		P
Vanadium		11.2000		11.3000		0.9		P
Zinc		35.9000		34.6000		3.7		P
Cyanide								

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

SOW No.:

EPA Sample No.	Lab Sample ID.
C6622	JM9439

Were ICP interelement corrections applied? Yes/No YES

Were ICP backgrounds corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: William A. Fithian

Date: 7/28/91 Title: Technical Project Manager

Narrative for SDG # C6622

Metals

All of the initial calibration criteria were within QC limits.

Copper and Sodium did not pass all continuing calibration criteria but should not negatively impact the data validity.

The CRDL standard met all QC criteria.

Low levels of Barium were detected in the Method Blank. All associated samples have been flagged with the appropriate qualifier. This anaomaly should not impact the validity of the data generated.

Low spike recoveries were noted for Aluminum and Calcium. All Post Spike recoveries were within acceptable QC limits.

Duplicate results were within QC limits.

All Laboratory Control Samples (LCS) were within acceptable QC limits.

All holding times were met for this SDG.

No Quarterly Linearity Checks are available for this SDG.

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

C6622

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Matrix (soil/water): WATER Lab Sample ID: JM9439

Level (low/med): LOW Date Received: 06/23/94

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/l

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	295	U	E,N	P
7440-36-0	Antimony	1660			P
7440-38-2	Arsenic	10	U		F
7440-39-3	Barium	409			P
7440-41-7	Beryllium	2.5	U		P
7440-43-9	Cadmium	505			P
7440-70-2	Calcium	35500		N	P
7440-47-3	Chromium	29.5	U		P
7440-48-4	Cobalt	5600			P
7440-50-8	Copper	241			P
7439-89-6	Iron	5750		E	P
7439-92-1	Lead	91500			P
7439-95-4	Magnesium	15300			P
7439-96-5	Manganese	8000		E	P
7439-97-6	Mercury	1.4	U		CV
7440-02-0	Nickel	3480			P
7440-09-7	Potassium	9300			P
7782-49-2	Selenium	11.3	B	W	F
7440-22-4	Silver	29	U		P
7440-23-5	Sodium	9800			P
7440-28-0	Thallium	10	U	W	F
7440-62-2	Vanadium	21	U		P
7440-66-6	Zinc	268000			P
	Cyanide				

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Initial Calibration Source: NIST

Continuing Calibration Source: NIST

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum	9415.0	9359.00	99.4	5051.0	4553.00	90.1			P
Antimony	4511.0	4867.00	107.9	2289.0	2477.00	108.2			P
Arsenic	32.8	32.61	99.4	20.5	19.91	97.1	21.63	105.5	F
Barium	9145.0	9179.00	100.4	4864.0	4668.00	96.0			P
Beryllium	230.6	230.40	99.9	122.8	118.50	96.5			P
Cadmium	2430.0	2465.00	101.4	1322.0	1296.00	98.0			P
Calcium	23530.0	23820.00	101.2	12580.0	12190.00	96.9			P
Chromium	879.5	916.00	104.2	489.6	477.30	97.5			P
Cobalt	2407.0	2449.00	101.7	1306.0	1274.00	97.5			P
Copper	1176.0	1139.00	96.9	655.7	588.20	89.7			P
Iron	4666.0	4763.00	102.1	2472.0	2387.00	96.6			P
Lead	4972.0	4901.00	98.6	2505.0	2532.00	101.1			P
Magnesium	22850.0	23690.00	103.7	12200.0	12200.00	100.0			P
Manganese	2381.0	2438.00	102.4	2500.0	2452.00	98.1			P
Mercury	5.0	4.40	88.0	5.0	4.66	93.2	4.86	97.2	CV
Nickel	2435.0	2432.00	99.9	1322.0	1263.00	95.5			P
Potassium	23020.0	23800.00	103.4	12150.0	12220.00	100.6			P
Selenium									
Silver	1155.0	1210.00	104.8	616.9	616.50	99.9			P
Sodium	23370.0	22270.00	95.3	12440.0	10500.00	84.4			P
Thallium									
Vanadium	4656.0	4697.00	100.9	2508.0	2416.00	96.3			P
Zinc	2426.0	2457.00	101.3	1287.0	1274.00	99.0			P
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Initial Calibration Source: APG

Continuing Calibration Source: APG

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium	19.6	18.56	94.7	11.7	12.06	103.1	11.64	99.5	F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Initial Calibration Source: APG

Continuing Calibration Source: APG

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium				11.7	10.99	93.9	12.47	106.6	F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Initial Calibration Source: SPEX

Continuing Calibration Source: SPEX

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium	25.0	24.57	98.3	25.0	24.47	97.9	24.72	98.9	F
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Initial Calibration Source: SPEX

Continuing Calibration Source: SPEX

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium				25.0	24.58	98.3	24.71	98.8	F
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP
3
BLANKS

Lab Name: ANALYICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	59.9	U	59.9	U					59.900	U	P
Antimony	29.8	U	29.8	U					29.800	U	P
Arsenic	2.0	U	2.0	U	2.0	U			2.000	U	F
Barium	1.5	B	1.5	B					1.400	B	P
Beryllium	0.5	U	0.5	U					0.500	U	P
Cadmium	1.1	U	1.1	U					1.100	U	P
Calcium	9.2	B	7.3	B					6.300	U	P
Chromium	5.9	U	5.9	U					5.900	U	P
Cobalt	3.7	U	3.7	U					3.700	U	P
Copper	5.5	U	5.5	U					5.500	U	P
Iron	13.9	U	13.9	U					13.900	U	P
Lead	17.9	U	17.9	U					17.900	U	P
Magnesium	33.5	U	33.5	U					33.500	U	P
Manganese	1.2	U	1.2	U					1.200	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.140	U	CV
Nickel	9.5	U	9.5	U					9.500	U	P
Potassium	1490.0	U	1490.0	U					999.000	U	P
Selenium	1.3	U	1.3	U	1.3	U	1.3	U	1.300	U	F
Silver	5.8	U	5.8	U					5.800	U	P
Sodium	56.8	B	97.9	B					53.600	U	P
Thallium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	F
Vanadium	4.2	U	4.2	U					4.200	U	P
Zinc	4.1	U	4.1	U					4.100	U	P
Cyanide											

U.S. EPA - CLP
3
BLANKS

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			1.3	U							F
Silver											
Sodium											
Thallium			2.0	U							F
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

ICP ID Number: 61 ICS Source: VENTURES

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	494000	494000	491300	494400.0	100.1	493800	493800.0	100.0
Antimony	0	845	-9	837.4	99.1	6	968.9	114.7
Arsenic	NR							
Barium	0	476	-3	463.3	97.3	-3	460.7	96.8
Beryllium	0	476	0	462.0	97.1	0	469.3	98.6
Cadmium	0	445	-2	480.7	108.0	-1	489.3	110.0
Calcium	225000	225000	183100	228700.0	101.6	187100	230600.0	102.5
Chromium	0	444	-10	448.6	101.0	-10	481.6	108.5
Cobalt	0	457	-2	457.1	100.0	-3	458.0	100.2
Copper	0	510	-1	464.8	91.1	0	461.6	90.5
Iron	176000	176000	179900	174800.0	99.3	182100	177600.0	100.9
Lead	0	984	4	964.0	98.0	25	972.2	98.8
Magnesium	250000	503000	252800	528200.0	105.0	259500	533800.0	106.1
Manganese	0	438	-3	439.3	100.3	-4	455.3	103.9
Mercury	NR							
Nickel	0	893	0	873.3	97.8	-5	882.7	98.8
Potassium	NR							
Selenium	NR							
Silver	0	922	-6	959.9	104.1	-5	959.0	104.0
Sodium	NR							
Thallium	NR							
Vanadium	0	459	-1	456.8	99.5	0	457.5	99.7
Zinc	0	960	47	961.2	100.1	26	959.8	100.0

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

WW001

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Matrix (soil/water) WATER Level (low/med): LOW

% Solids for Sample: _____

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	14560.0000		2191.0000		9821.00	125.9	N	P
Antimony	75-125	431.8000		1.2000	U	468.30	91.9		P
Arsenic	75-125	21.9700		-1.2000	U	20.00	115.9		F
Barium	75-125	1952.0000		80.8000		1915.00	97.7		P
Beryllium	75-125	48.4000		1.2000		48.50	97.3		P
Cadmium	75-125	47.7000		0.5000	U	50.00	94.4		P
Calcium	75-125	34480.0000		18370.0000		9802.00	164.4	N	P
Chromium	75-125	194.5000		0.9000	U	211.20	91.7		P
Cobalt	75-125	478.3000		4.2000		493.30	96.1		P
Copper	75-125	240.0000		5.1000	U	244.50	96.1		P
Iron	75-125	15700.0000		3852.0000		9658.00	122.7		P
Lead	75-125	487.7000		17.9000	U	497.20	94.5		P
Magnesium	75-125	17750.0000		5973.0000		9724.00	121.1		P
Manganese	75-125	639.3000		116.3000		456.70	114.5		P
Mercury	75-125	6.7300		4.8400		2.00	94.5		CV
Nickel	75-125	474.9000		4.1000	U	523.50	89.9		P
Potassium	75-125	11450.0000		1652.0000		9148.00	107.1		P
Selenium	75-125	21.3600		0.4700	U	20.00	104.5		F
Silver	75-125	48.5000		2.5000	U	43.50	105.7		P
Sodium	75-125	13660.0000		2749.0000		9069.00	120.3		P
Thallium	75-125	21.0700		-0.9000		20.00	105.4		F
Vanadium	75-125	477.7000		7.1000		489.80	96.1		P
Zinc	75-125	522.9000		41.0000		503.50	95.7		P
Cyanide									

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

WW001

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Matrix (soil/water) WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		12430.00		2191.00		9281.0	110.3		P
Antimony		475.60		1.20	U	468.3	101.3		P
Arsenic									
Barium		2012.00		80.80		1915.0	100.8		P
Beryllium		49.70		1.20	B	48.5	100.0		P
Cadmium		50.30		0.50	U	50.0	99.6		P
Calcium		30750.00		18370.00		9802.0	126.3		P
Chromium		203.30		0.90	U	211.2	95.8		P
Cobalt		501.40		4.20	U	493.3	100.8		P
Copper		242.70		5.10	U	244.5	97.2		P
Iron		14100.00		3852.00		9658.0	106.1		P
Lead		540.60		14.90	U	497.2	105.7		P
Magnesium		16710.00		5973.00		9724.0	110.4		P
Manganese		635.20		116.30		456.7	113.6		P
Mercury									
Nickel		496.30		4.10	U	523.5	94.0		P
Potassium		11780.00		1652.00	B	9148.0	110.7		P
Selenium									
Silver		48.90		2.50	U	43.5	106.7		P
Sodium		13230.00		2749.00	B	9069.0	115.6		P
Thallium									
Vanadium		494.00		7.10		489.8	99.4		P
Zinc		612.80		41.00		503.5	113.6		P
Cyanide									

Comments:

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

C6622

Lab Name: ANALYTICAL SERVICES CORPORATION Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6622

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: % Solids for Duplicate:

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		14560.0000		14440.0000		0.8		P
Antimony		431.8000		414.1000		4.2		P
Arsenic		21.9700		21.6700		1.4		F
Barium		1952.0000		1933.0000		1.0		P
Beryllium		48.4000		47.5000		1.9		P
Cadmium		47.7000		46.6000		2.3		P
Calcium		34480.0000		34490.0000		0.0		P
Chromium		194.5000		193.0000		0.8		P
Cobalt		478.3000		474.0000		0.9		P
Copper		240.0000		237.1000		1.2		P
Iron		15700.0000		15600.0000		0.6		P
Lead		487.7000		475.9000		2.4		P
Magnesium		17750.0000		17610.0000		0.8		P
Manganese		639.3000		629.9000		1.5		P
Mercury		6.7300		6.3400		6.0		CV
Nickel		475.9000		469.0000		1.5		P
Potassium		11450.0000		11160.0000		2.6		P
Selenium		21.3600		19.6900		8.1		F
Silver		48.5000		45.6000		6.2		P
Sodium		13660.0000		13620.0000		0.3		P
Thallium		21.0700		21.1700		0.5		F
Vanadium		477.7000		471.2000		1.4		P
Zinc		522.9000		524.7000		0.3		P
Cyanide								

COVER PAGE
CONVENTIONAL ANALYSES DATA PACKAGE

Lab Name: *Analytical Services Corp* **Contract:** DEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~NA~~ C6617NT

DW No.:

EPA Sample No.	Lab Sample ID.
C6617	JM9434
C6618	JM9435
C6619	JM9436
C6620	JM9437
C6621	JM9438
C6622	JM9439

COMMENTS: See Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's Designee, as verified by the following signature.

Signature: [signature] **Name:** William A. Fithian

Date: 7 / 28 / 94 **Title:** Technical Project Manager

Narrative for SDG # C6617

Conventionals

CLP Forms and/or analytical requirements do not apply to all Conventional Level C deliverable requirements. Every effort was made to conform to the CLP format and all applicable CLP/Level C forms have been included.

The pH results are reported in standard units and not mg/kg.

The Flashpoint results are reported in °C not mg/kg.

The BTU results are reported in BTU/lb. not mg/kg.

The Density results are reported in g/cc not mg/kg.

The method qualifier for pH (Electrode) is "PH", for Flashpoint it is "FP", for BTU it is "BT", for Density it is "D" and for the IC Acids it is "IC". The CLP manual does not address these results or this method for reporting.

The Test Bulk data is reported on ASC's standard Test Bulk Table and can be found prior to the Metals analytical data.

The Method Blank contained low levels of target constituents. All associated samples have been flagged with the appropriate qualifier. This anomaly should not affect the validity of the data as reported.

All matrix spike recoveries were within acceptable QC limits.

All duplicates were within acceptable QC limits.

All initial and continuing calibration criteria were met for this SDG.

The LCS was within acceptable QC limits.

BLANKS (3)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **Lab Code:** NA

Case #: NA **SAS #:** NA **SDG #:** NA CW617

Prep Blank Matrix: (soil/water) SOIL

Prep Blank Concentration Units: (ug/L or mg/kg) ~~ug/kg~~

ANALYTE	Init Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L						Preparation Blank	C	M
			1	C	2	C	3	C			
Chloride									.008	B	IC
Nitrate as N									.055	B	IC
Phosphate as P									.167	B	IC
Sulfate									.102	B	IC

BLANKS (3)

Lab Name: *Analytical Services Corp* **Contract:** NFESA **Lab Code:** NA

Case #: NA **SAS #:** NA **SDG #:** ~~NA~~ CL6017AA

Prep Blank Matrix: (soil/water) OIL

Prep Blank Concentration Units: (ug/L or mg/kg) mg/kg

ANALYTE	Init Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Chloride									.095	B	IC
Nitrate as N									.165	B	IC
Phosphate as P									.165	B	IC
Sulfate									.323	B	IC

BLANKS (3)

0052

Lab Name: *Analytical Services Corp* **Contract:** NEESA **Lab Code:** NA

Case #: NA **SAS #:** NA **SDG #:** ~~NA~~ C6617 JA

Prep Blank Matrix: (soil/water) WATER

Prep Blank Concentration Units: (ug/L or mg/kg) mg/kg

ANALYTE	Init Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L						Preparation Blank	C	M
			1	C	2	C	3	C			
Chloride									.115	B	IC
Nitrate as N									.164	B	IC
Phosphate as P									.161	B	IC
Sulfate									.798	B	IC

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NFESA **EPA SAMPLE #:** C6617

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~NA~~ C6617

Matrix: (soil/water) SOIL **Level:** (low/med) LOW **Lab Sample ID:** JM9434

% Solids: 77.9 **Date Received:** 06/23/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Reactive Cyanide				
	Reactive Sulfide				
	Flashpoint, 60°C	> 60°C			FP
	pH (Electrode)	8.60			PH
	BTU, BTU/lb.	6,740.			BT
	DENSITY, g/cc	1.36			D

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** LDEEA **EPA SAMPLE #:** C6617

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~NA~~ C6617

Matrix: (soil/water) SOIL **Level:** (low/med) LOW **Lab Sample ID:** JM9434

% Solids: 77.9 **Date Received:** 06 / 23 / 94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Chloride	442			IC
	Nitrate as N	125	B		IC
	Phosphate as P	163	B		IC
	Sulfate	1570			IC

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** C6618

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** C6657 ~~AH~~ 27

Matrix: (soil/water) Soil **Level:** (low/med) Low **Lab Sample ID:** JM9435

% Solids: 42.6 **Date Received:** 06/23/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Reactive Cyanide				
	Reactive Sulfide				
	Flashpoint, 60°C	>60°C			FP
	pH (Electrode)	10.8			PH
	BTU, BTU/lb	200	U		BT
	DENSITY, g/cc	.880			D

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** [illegible]

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~NA~~ 66017

Matrix: (soil/water) SOIL **Level:** (low/med) LOW **Lab Sample ID:** JM 9435

% Solids: 42.6 **Date Received:** 06/23/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Chloride	300	B		IC
	Nitrate as N	125	B		IC
	Phosphate as P	163	B		C
	Sulfate	500	B		IC

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NFESA **EPA SAMPLE #:** C6614

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~NA~~ C6614

Matrix: (soil/water) Soil **Level:** (low/med) LOW **Lab Sample ID:** JM9436

% Solids: 64.3 **Date Received:** 06/23/94

Concentration Units (ug/L or mg/kg dry weight): _____

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Reactive Cyanide				
	Reactive Sulfide				
	Flashpoint, 60°C	>60°C			FP
	pH (Electrode)	3.93			PH
	BTU, BTU/lb.	3,000.			BT
	DENSITY, g/cc	.549			U

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1) 0058

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** [illegible]

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~[illegible]~~ C6617

Matrix: (soil/water) SOIL **Level:** (low/med) Low **Lab Sample ID:** [illegible]

% Solids: 64.3 **Date Received:** 10/22/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Chloride	2410			IC
	Nitrate as N	250	B		IC
	Phosphate as P	326	B		IC
	Sulfate	1000	B		IC

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** C6020

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~NA~~ C661

Matrix: (soil/water) SOIL **Level:** (low/med) LOW **Lab Sample ID:** JM9437

% Solids: 39.3 **Date Received:** 06/23/94

Concentration Units (ug/L or mg/kg dry weight): _____

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Reactive Cyanide				
	Reactive Sulfide				
	Flashpoint, 60°C	>60°C			FP
	pH (Electrode)	2.75			pH
	BTU, BTU/lb	1,470.			BT
	DENSITY, g/cc	.942			D

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** C6620

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** C6647 ~~NA~~ 23

Matrix: (soil/water) SOIL **Level:** (low/med) LOW **Lab Sample ID:** JM9437

% Solids: 39.3 **Date Received:** 06/23/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Chloride	13.6			IC
	Nitrate as N	1.25	B		IC
	Phosphate as P	1.91			IC
	Sulfate	5.00	B		IC

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** 06621

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~NA~~ 06607

Matrix: (soil/water) OIL **Level:** (low/med) LOW **Lab Sample ID:** JRA438

% Solids: NA **Date Received:** 06/23/94

Concentration Units (ug/L or mg/kg dry weight): _____

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Reactive Cyanide				
	Reactive Sulfide				
	Flashpoint, 60°C	>60°C			FP
	pH (Electrode)	7.31			PH
	BTU, Btu/lb	10,600.			BT
	DENSITY, g/cc	.893			D

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

0062

Lab Name: *Analytical Services Corp* **Contract:** LEESA **EPA SAMPLE #:** CC6-21

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** CC6-07

Matrix: (soil/water) OIL **Level:** (low/med) LOW **Lab Sample ID:** JM9438

% Solids: NA **Date Received:** 06/23/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Chloride	94.4			IC
	Nitrate as N	28.6			IC
	Phosphate as P	32.6	B		IC
	Sulfate	261			IC

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** C6622

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** C6617

Matrix: (soil/water) water **Level:** (low/med) low **Lab Sample ID:** JM9439

% Solids: NA **Date Received:** 06/23/94

Concentration Units (ug/L or mg/kg dry weight): _____

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Reactive Cyanide				
	Reactive Sulfide				
	Flashpoint, 60°C	>60°C			FP
	pH (Electrode)	6.57			PH
	BTU, ~~kg~~ BTU/lb	200	U		BT
	DENSITY, g/cc	.912			D

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

CONVENTIONAL ANALYSIS DATA SHEET (1)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA SAMPLE #:** CC612

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** CC617

Matrix: (soil/water) WATER **Level:** (low/med) LOW **Lab Sample ID:** JM9439

% Solids: NA **Date Received:** 01/23/94

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

CAS NO.	ANALYTE	CONCENTRATION	C	Q	M
	Chloride	35.5			IC
	Nitrate as N	6.25	B		IC
	Phosphate as P	3.15	B		IC
	Sulfate	44.0			IC

Color Before: _____ **Clarity Before:** _____ **Texture:** _____

Color After: _____ **Clarity After:** _____ **Artifacts:** _____

COMMENTS: _____

SPIKE SAMPLE RECOVERY (5A)

Lab Name: *Analytical Services Corp* **Contract:** NESA **EPA Sample #:** C6617

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** C6617

Matrix: (soil/water) SOIL **Level** (low/med): LOW **% Solids for Sample:** 77.9

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

ANALYTE	CONTROL LIMIT %R	SPIKE SAMPLE RESULT (SSR)	C	SAMPLE RESULT (SR)	C	SPIKE ADDED (SA)	% R	Q	M
Chloride		3200		492		2500	108		IC
Nitrate as N		570		29.4	B	565	95.7		IC
Phosphate as P		995		83.5	B	815	112		IC
Sulfate		4030		1570		2500	108		IC

COMMENTS:

SPIKE SAMPLE RECOVERY (5A)

Lab Name: *Analytical Services Corp* **Contract:** NFESA **EPA Sample #:** U621

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** NAC66

Matrix: (soil/water) OIL **Level** (low/med): LOW **% Solids for Sample:** _____

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

ANALYTE	CONTROL LIMIT %R	SPIKE SAMPLE RESULT (SSR)	C	SAMPLE RESULT (SR)	C	SPIKE ADDED (SA)	% R	Q	M
Chloride		636		94.4		500	108		IC
Nitrate as N		143		28.6		113	101		IC
Phosphate as P		204		19.8	B	163	113		IC
Sulfate		816		261		500	111		IC

COMMENTS: _____

SPIKE SAMPLE RECOVERY (5A)

Lab Name: *Analytical Services Corp* **Contract:** NFESA **EPA Sample #:** C6617

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** NA

Matrix: (soil/water) WATER **Level** (low/med): LOW **% Solids for Sample:** C6617

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

ANALYTE	CONTROL LIMIT %R	SPIKE SAMPLE RESULT (SSR)	C	SAMPLE RESULT (SR)	C	SPIKE ADDED (SA)	% R	Q	M
Chloride		143		35.5		125	110		IC
Nitrate as N		33.8		4.38		28.3	101		IC
Phosphate as P		35.8		4.70		40.8	76.2		IC
Sulfate		171		44.0		125	110		IC

COMMENTS:

DUPLICATES (6)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA Sample #:** C6617

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~NA~~ C6617

Matrix: (soil/water) Soil **% Solids for Sample:** 77.9

Level (low/med): Low **% Solids for Duplicate:** 77.9

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

ANALYTE	CONTROL LIMIT	SAMPLE(s)	C	DUPLICATE (D)	C	RPD	Q	M
Chloride		3200		3200		0.00		IC
Nitrate as N		565		570		.929		IC
Phosphate as P		1050		995		5.86		IC
Sulfate		4250		4280		.929		IC

DUPLICATES (6)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA Sample #:** C6621

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** (C6621) NA

Matrix: (soil/water) OIL **% Solids for Sample:** NA

Level (low/med): Low **% Solids for Duplicate:** NA

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

ANALYTE	CONTROL LIMIT	SAMPLE(s)	C	DUPLICATE (D)	C	RPD	Q	M
Chloride		636		636		0.00		IC
Nitrate as N		144		143		.870		IC
Phosphate as P		206		204		1.08		IC
Sulfate		812		816		.723		IC

DUPLICATES (6)

Lab Name: *Analytical Services Corp* **Contract:** NEESA **EPA Sample #:** C6022

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** C6027 ~~NA~~

Matrix: (soil/water) water **% Solids for Sample:** NA

Level (low/med): low **% Solids for Duplicate:** NA

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

ANALYTE	CONTROL LIMIT	SAMPLE(s)	C	DUPLICATE (D)	C	RPD	Q	M
Chloride		175		173		1.44		IC
Nitrate as N		33.8		33.8		0.00		IC
Phosphate as P		39.0		35.8		9.95		IC
Sulfate		185		181		2.52		IC

INITIAL AND CONTINUING CALIBRATION VERIFICATION (2A)

0071

Lab Name: *Analytical Services Corp* **Contract:** NEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** NA

Initial Calibration Source: AIC-375 **Continuing Calibration Source:** AIC-376

Concentration Units: ug/L

Analyte	INITAL CALIBRATION			CONTINUING CALIBRATION					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Chloride	5.00	5.06	101	5.00	4.89	97.8			IC
Nitrate as N	2.26	2.19	96.9	2.26	2.02	89.4			IC
Phosphate as P	3.26	3.65	112	3.26	3.64	112			IC
Sulfate	10.0	10.34	103	10.0	9.74	97.4			IC

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION (2A)

0072

Lab Name: *Analytical Services Corp* **Contract:** NEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** C6617 ~~NA~~

Initial Calibration Source: AIC-386 **Continuing Calibration Source:** AIC-386

Concentration Units: ug/L

Analyte	INITAL CALIBRATION			CONTINUING CALIBRATION					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Chloride	5.00	4.99	99.8	5.00	5.04	101			IC
Nitrate as N	2.26	2.19	96.9	2.26	2.26	100			IC
Phosphate as P	3.26	3.55	108.9	3.26	3.57	108			IC
Sulfate	10.0	9.56	95.6	10.0	9.73	97.3			IC

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

INITIAL AND CONTINUING CALIBRATION VERIFICATION (2A)

0073

Lab Name: *Analytical Services Corp* **Contract:** UFESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** C6612 NA

Initial Calibration Source: AIC-386 **Continuing Calibration Source:** AIC-386

Concentration Units: ug/L

Analyte	INITAL CALIBRATION			CONTINUING CALIBRATION					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Chloride	5.00	5.04	101	5.00	5.00	100			IC
Nitrate as N	2.26	2.26	100	2.26	2.39	106			IC
Phosphate as P	3.26	3.52	108	3.26	3.47	106			IC
Sulfate	10.0	9.73	97.3	10.0	10.2	102			IC

(1)Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

LABORATORY CONTROL SAMPLE (7)

0074

Lab Name: *Analytical Services Corp* **Contract:** NEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** ~~NA~~ CG017

Liquid LCS Source: AIC- **Aqueous LCS Source:** _____

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)					
	True	Found	% R	True	Found	C	Limits		% R
Chloride	5.00	5.48	110						
Nitrate as N	1.13	1.15	102						
Phosphate as P	1.63	2.09	125						
Sulfate	5.00	5.34	107						

LABORATORY CONTROL SAMPLE (7)

0075

Lab Name: *Analytical Services Corp* **Contract:** NEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** C6617 ~~NA~~

Liquid LCS Source: AIC- **Aqueous LCS Source:** _____

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)					
	True	Found	% R	True	Found	C	Limits		% R
Chloride	5.00	5.61	112						
Nitrate as N	1.13	1.31	116						
Phosphate as P	1.63	2.04	125						
Sulfate	5.00	5.57	111						

LABORATORY CONTROL SAMPLE (7)

Lab Name: *Analytical Services Corp* **Contract:** NEESA

Lab Code: NA **Case #:** NA **SAS #:** NA **SDG #:** C66017

Liquid LCS Source: AIC-387 **Aqueous LCS Source:** _____

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)					
	True	Found	% R	True	Found	C	Limits		% R
Chloride	5.00	5.56	111						
Nitrate as N	1.13	1.35	119						
Phosphate as P	1.63	1.86	114						
Sulfate	5.00	5.64	113						

Narrative for SDG # C6617

Laboratory: Analytical Services Corp.

Project #: OHM # 15226

Project Location: Camp Lejeune
Jacksonville, North Carolina

Samples in this Sample Delivery Group (SDG):

C6617	C6620
C6618	C6621
C6619	C6622

Volatiles by GC/MS

Elevated Practical Quantitation Limits (PQL) were reported due to high levels of target and/or nontarget compounds present in the samples.

Hexane appeared as an artifact that was known to be a laboratory contaminant. This compound elutes at approximately 8.8 minutes and was not included as part of the TIC screen data reported on Form I-VOA TIC.

ASC has increased the number of "target compounds" accurately quantitated to include additional compounds not on the CLP TCL compound list. These compounds would normally be reported as TIC data with an estimated quantitation. ASC has reported these constituents on the Form I-VOA TIC table with a quantitation value that was derived in the same fashion as the target compounds. This gives the data user a more accurate quantitation for these constituents. Data reported in this manner has been flagged with an "X" qualifier.

Volatile Organics by GC/MS (cont'd)

Zero of 66 surrogate recoveries were outside QC limits.

Two of 40 matrix spike recoveries and zero of 20 matrix RPD's were outside QC limits.

All internal standard area counts and retention times were within QC limits.

Initial calibration criteria were met.

Vinyl Chloride was outside calibration Check criteria on 6/27/94. This compound was not detected in any samples analyzed against this standard but would have been detected if present in any of the samples. All other compounds were within calibration check criteria, therefore, the calibration standard was accepted. All other calibration check standards were within acceptance criteria.

All internal standard criteria were met for this SDG.

All holding times were met for this SDG.

Semivolatile Organics by GC/MS

Elevated Practical Quantitation Limits (PQL) were reported due to high levels of target and/or nontarget compounds present in the samples.

ASC has increased the number of "target compounds" accurately quantitated to include additional compounds not on the CLP TCL compound list. These compounds would normally be reported as TIC data with an estimated quantitation. ASC has reported these constituents on the Form I-SVA TIC table with a quantitation value that was derived in the same fashion as the target compounds. This gives the data user a more accurate quantitation for these constituents. Data reported in this manner has been flagged with an "X" qualifier.

One of 84 surrogates were outside QC limits, 18 surrogates were diluted below detectable levels.

Zero of 22 matrix spike recoveries and zero of 11 matrix RPD's were outside QC limits. Other matrix spike/matrix spike duplicates were diluted below detectable levels. The samples associated with these are C6617 through C6621.

All method blanks were within QC criteria.

One internal standard area count was outside QC limits for samples C6619 and C6620 due to matrix interferences. All retention times were within QC limits.

All compounds met initial calibration criteria.

One compound was outside continuing calibration criteria on 6/30/94. All other constituents were within criteria and the one compound was not detected in any samples associated with the standard in question. The compound would have been detected in the samples, if present. Therefore, the calibration check standard was accepted. All other calibration check standards were within acceptance criteria.

No GPC cleanup was performed on the solid samples submitted in this SDG.

All holding times were met for this SDG.

Pesticides/PCB's by GC

Elevated Practical Quantitation Limits (PQL) were reported due to high levels of target and/or nontarget compounds present in the samples.

Seven of 60 surrogates were outside advisory QC limits, 20 surrogates were diluted below detectable levels.

Zero of 12 matrix spike recoveries and one of 6 matrix RPD's were outside QC limits. Other matrix spike/matrix spike duplicates were diluted below detectable levels. The samples associated with these are C6617 through C6621.

Low levels of 4,4'-DDT were detected in the Method Blanks and should therefore, be taken into consideration when assessing the data. All DDT data has been flagged with the appropriate qualifier.

Problems were encountered with the initial calibration for the Pesticide analysis. The initial calibration for the primary analysis had five constituents greater than the 20% RSD requirement. The confirmation had five constituents greater than the 20% RSD requirement. The primary continuing calibration criteria was not met for five constituents. The confirmation continuing calibration criteria was not met for five constituents.

The %RPD criteria were not met for any PEM standards analyzed in this SDG.

No GPC cleanup was performed on solid samples submitted in this SDG.

All holding times were met for this SDG.

Signature: [signature] Name: William A. Fithian
Date: 8/4/94 Title: Technical Project Manager

EPA SAMPLE NO.

CLL417

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: NSC Contract: NESA

Lab Code: — Case No.: — SAS No.: — SDG No.: CLL417

Matrix: (soil/water) Soil Lab Sample ID: JN9434

Sample wt/vol: 4.17 (g/mL) g Lab File ID: B4168

Level: (low/med) med Date Received: 062394

% Moisture: not dec. NA Date Analyzed: 062894

GC Column: DB624 ID: .53 (mm) Dilution Factor: 2500

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 5 (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	15000	U
74-83-9	Bromomethane		
75-01-4	Vinyl Chloride		
75-00-3	Chloroethane		
75-09-2	Methylene Chloride		
67-64-1	Acetone	8180	J
75-15-0	Carbon Disulfide	15000	U
75-35-4	1,1-Dichloroethene		
75-34-3	1,1-Dichloroethane		
540-59-0	1,2-Dichloroethene (total)		
67-66-3	Chloroform		
107-06-2	1,2-Dichloroethane		
78-93-3	2-Butanone	30000	
71-55-6	1,1,1-Trichloroethane	8240	J
56-23-5	Carbon Tetrachloride	15000	U
75-27-4	Bromodichloromethane		
78-87-5	1,2-Dichloropropane		
10061-01-5	cis-1,3-Dichloropropene		
79-01-6	Trichloroethene		
124-48-1	Dibromochloromethane		
79-00-5	1,1,2-Trichloroethane		
71-43-2	Benzene		
10061-02-6	trans-1,3-Dichloropropene		
75-25-2	Bromoform		
108-10-1	4-Methyl-2-Pentanone	30000	
591-78-6	2-Hexanone	15000	
127-18-4	Tetrachloroethene		
79-34-5	1,1,2,2-Tetrachloroethane		
108-88-3	Toluene	3840	J
108-90-7	Chlorobenzene	5760	J
100-41-4	Ethylbenzene	27960	
100-42-5	Styrene	15000	U
1330-20-7	Xylene (total)	255000	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: ASC Contract: NASA

Lab Code: — Case No.: — SAS No.: — SDG No.: CC6617

Matrix: (soil/water) Soil Lab Sample ID: JM9834

Sample wt/vol: 4.7 (g/mL) g Lab File ID: B4168

Level: (low/med) med Date Received: 06/23/94

% Moisture: not dec. NA Date Analyzed: 06/28/94

GC Column: DB624 ID: .53 (mm) Dilution Factor: 2500

Soil Extract Volume: 1000 (uL) Soil Aliquot Volume: 5 (uL)

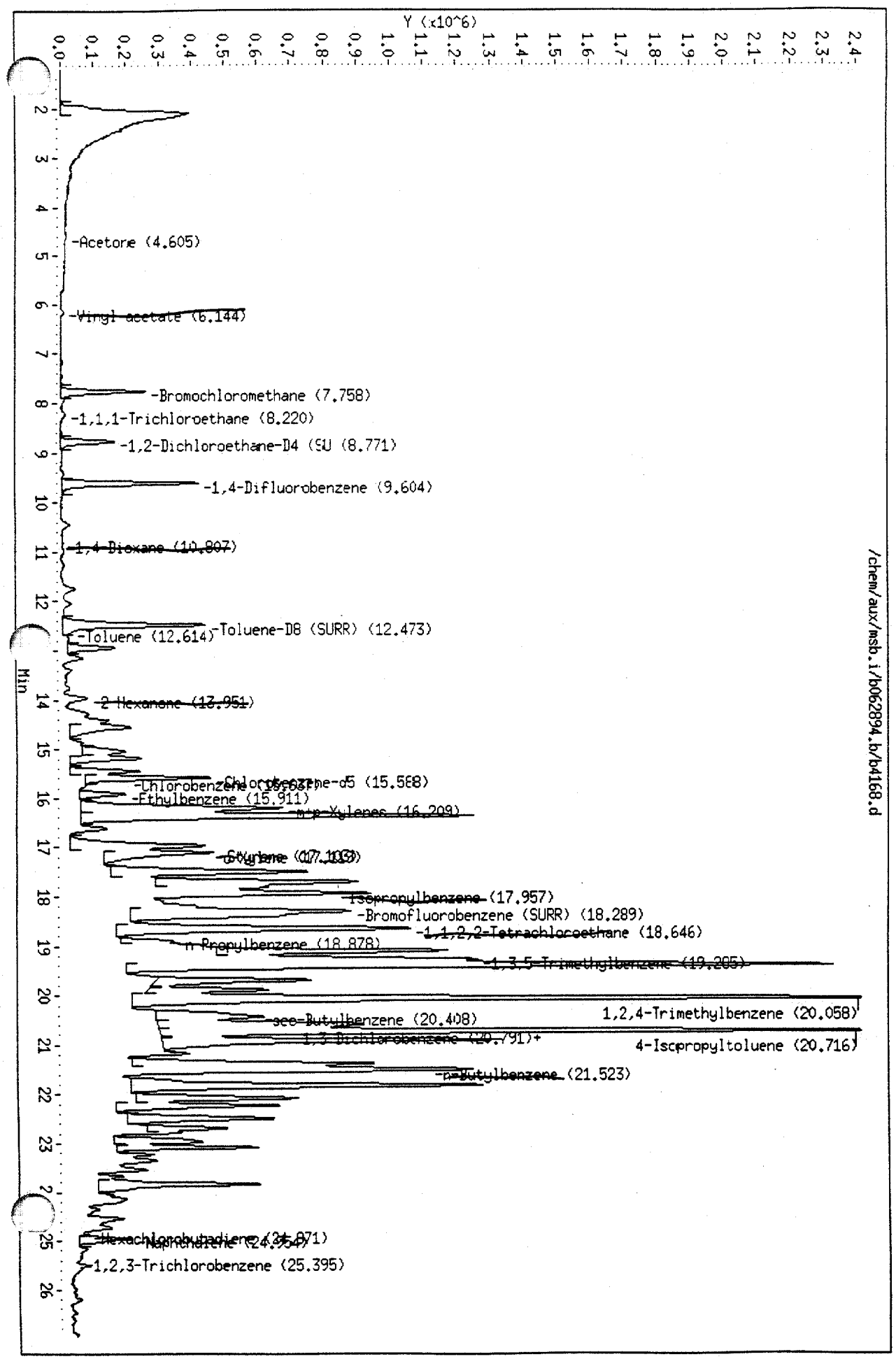
Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 611-14-3	Benzene, 1-ethyl-2-methyl	20.907	440 000	J
2. 535-77-3	Benzene, 1-methyl-3-(1-methylethyl)	20.724	245000	J
3. 1074-43-7	Benzene, 1-methyl-3-propyl	21.381	316 000	J
4. 768-93-9	Cyclohexane, butyl	20.536	358 000	J
5. 124-18-5	Decane	19.395	938 000	J
6. 111-84-2	Nonane	16.358	575000	J
7. 1120-21-4	Undecane	21.814	513 000	J
8. —	unknown	2.093	310 000	J
9.				
10.				
11.	1,3,5-Trimethylbenzene	19.285	185,000	X
12.	1,2,4-Trimethylbenzene	20.058	560,000	X
13.	4-Isopropyltoluene	20.716	570 000	X
14.	Naphthalene	24.954	51800	X
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/aux/msb.i/b062894.b/b4168.d
Date : 28-JUN-94 17:20
Instrument : msb.i
Sample ID :
Column phase : J&W DB_624
Volume Injected (uL) : 0.0

C6617



Column diameter : 0.53

Data File: /chem/aux/msb.i/b062894.b/b4168.d
Report Date: 29-Jun-1994 07:28

Analytical Services Corp.

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msb.i/b062894.b/b4168.d
Lab. Id. : Quant Type: ISTD
Inj Date : 28-JUN-94 17:20 Autotune Date: {
Operator : steve Inst ID: msb.i
Smp Info : 15226n c6617
Misc Info : jm9434v,n2v3677,s:m2,4.17,5:2500,
Comment :
Method : /chem/aux/msb.i/b062894.b/8240b.m
Meth Date : 29-Jun-1994 07:23 tom
Cal Date : 28-JUN-94 10:30 Cal File: b4157.d
Als bottle: 14
Dil Factor: 1.000 Target Version: Target 3.00
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: WATER

ASC 6-30-94

Compounds	QUANT SIG MASS	RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
1 Acetone	43.00	4.605	(0.594)	3546	2.73	2.73(a)
20 Vinyl acetate	43.00	6.144	(0.640)	1712	0.888	~~0.888(aQ)~~
* 25 Bromochloromethane	128.00	7.758	(1.000)	196803	50.0	
28 1,1,1-Trichloroethane	97.00	8.220	(0.856)	31708	2.75	2.75(aQ)
$ 31 1,2-Dichloroethane-D4 (SURR)	65.00	8.763	(1.130)	314408	52.7	52.7
* 34 1,4-Difluorobenzene	114.00	9.604	(1.000)	918135	50.0	
38 1,4-Dioxane	88.00	10.807	(1.125)	3053	28.7	~~28.7(Q)~~
$ 43 Toluene-D8 (SURR)	98.00	12.473	(0.800)	852379	50.3	50.3
44 Toluene	92.00	12.614	(0.809)	14197	1.28	1.28(aQ)
49 2-Hexanone	43.00	13.951	(0.895)	52064	13.0	~~13.0(aQ)~~
* 52 Chlorobenzene-d5	117.00	15.588	(1.000)	723640	50.0	
53 Chlorobenzene	112.00	15.637	(1.003)	28255	1.92	1.92(aQ)
55 Ethylbenzene	106.00	15.919	(1.021)	62158	9.30	9.30(Q)
56 m+p-Xylenes	106.00	16.200	(1.039)	388734	48.0	48.0
57 o-Xylene	106.00	17.119	(1.098)	301032	37.1	37.1
58 Styrene	104.00	17.103	(1.097)	10046	0.786	~~0.786(aQ)~~
60 Isopropylbenzene	105.00	17.957	(1.152)	270053	11.4	~~11.4~~
$ 61 Bromofluorobenzene (SURR)	95.00	18.289	(1.173)	547699	48.2	48.2
63 1,1,2,2-Tetrachloroethane	83.00	18.654	(1.197)	217722	22.6	~~22.6(Q)~~
65 n-Propylbenzene	120.00	18.878	(1.211)	110816	17.5	~~17.5(Q)~~
67 1,3,5-Trimethylbenzene	105.00	19.285	(1.237)	1183404	61.8	61.8
70 1,2,4-Trimethylbenzene	105.00	20.058	(1.287)	3499338	190	190
71 sec-Butylbenzene	105.00	20.408	(1.309)	347271	12.7	~~12.7~~
72 1,3-Dichlorobenzene	146.00	20.791	(1.334)	26647	1.91	1.9 ~~1.91(aQ)~~
73 4-Isopropyltoluene	119.00	20.716	(1.329)	4543763	192	192
74 1,4-Dichlorobenzene	146.00	20.791	(1.334)	26647	1.88	~~1.88(aQ)~~
76 n-Butylbenzene	91.00	21.523	(1.381)	568003	25.6	~~25.6(Q)~~
79 Hexachlorobutadiene	225.00	24.871	(1.596)	2445	0.574	~~0.574(aQ)~~
80 Naphthalene	128.00	24.954	(1.601)	243328	17.3	17.3

Data File: /chem/aux/msb.i/b062894.b/b4168.d
Report Date: 29-Jun-1994 07:28

Compounds	QUANT SIG MASS	RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
81 1,2,3-Trichlorobenzene	180.00	25.395	(1.629)	7130	1.10	~~1.10 aQ~~

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

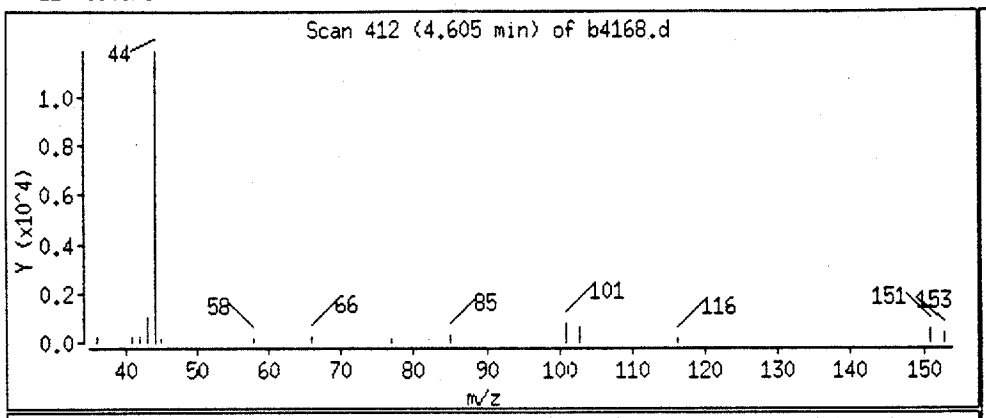
Instrument : msb.i

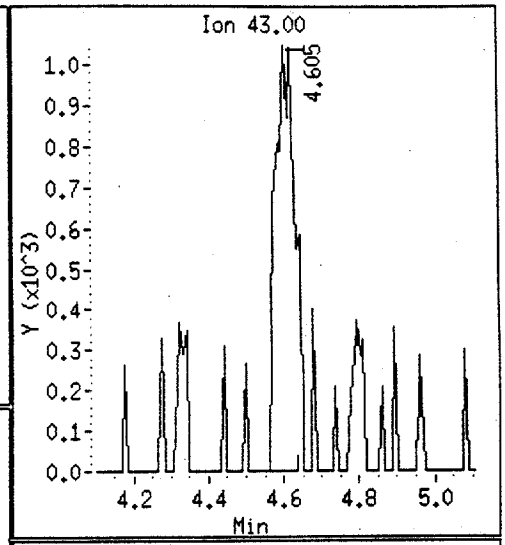
Sample ID :

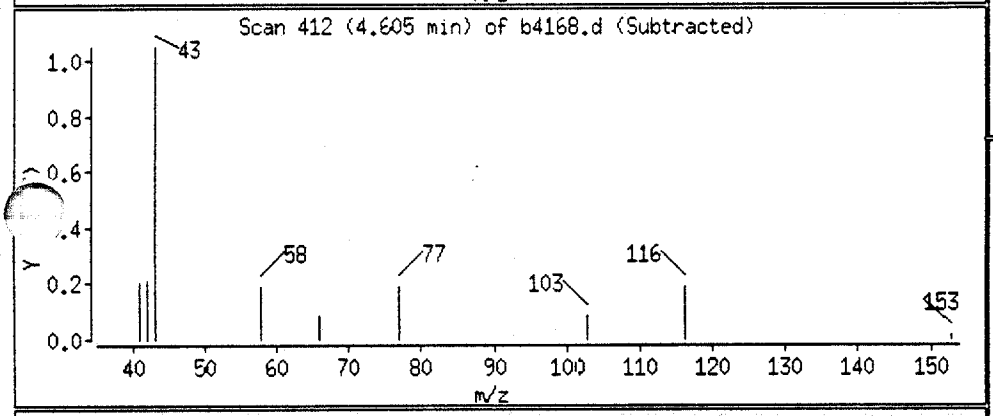
Column phase : J&W DB_624 Column diameter : 0.53

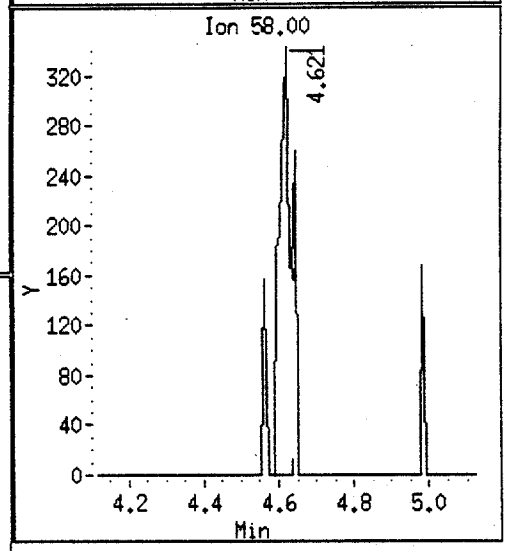
Volume Injected (uL) : 0.0

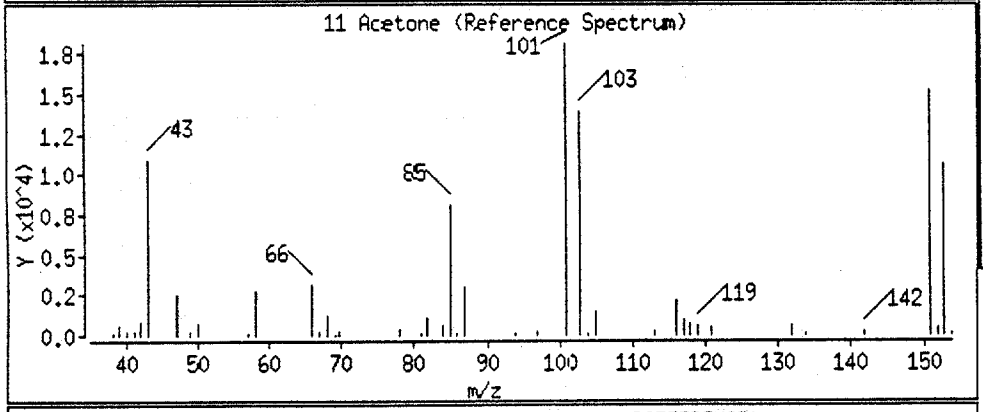
11 Acetone

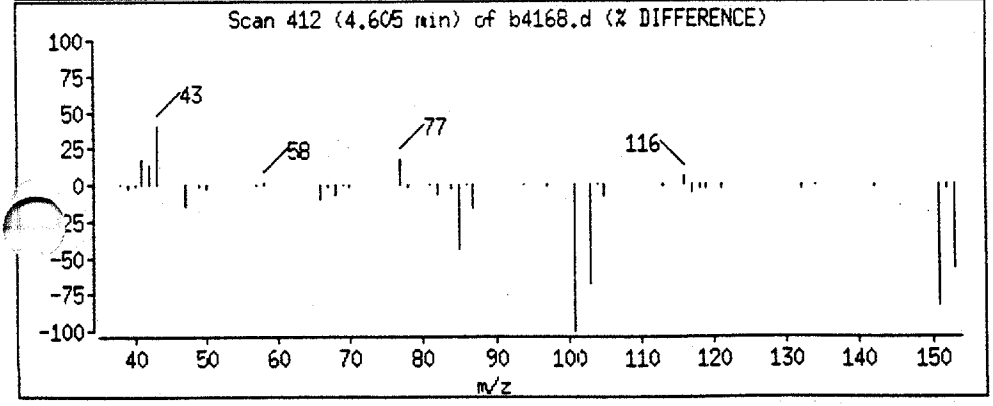












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

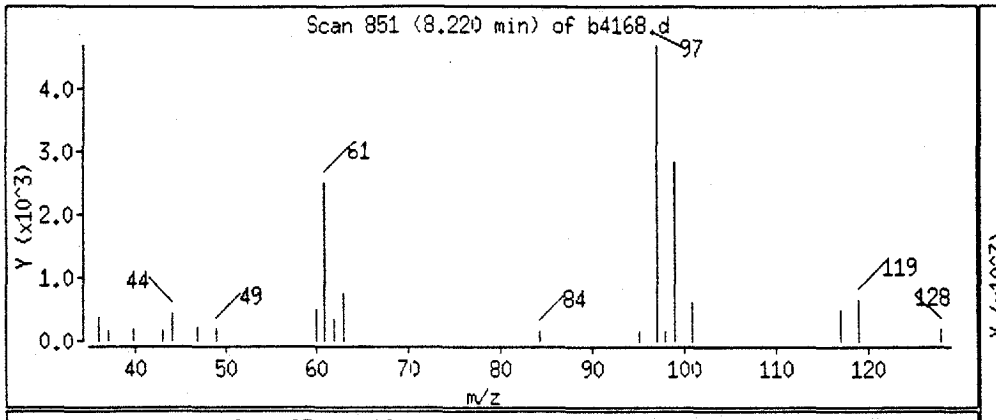
Instrument : msb.i

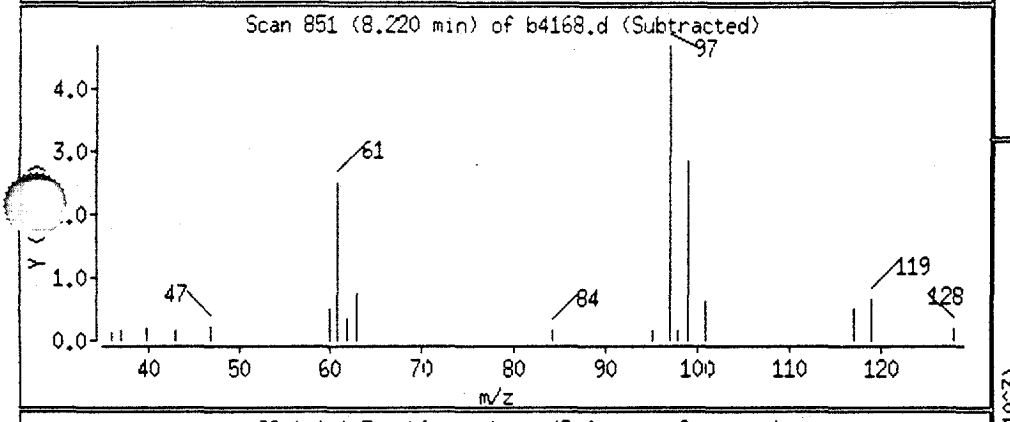
Sample ID :

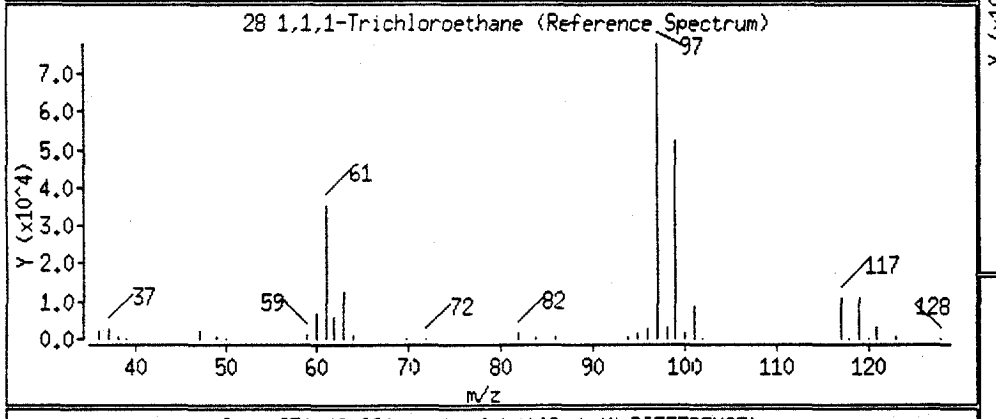
Column phase : J&W DB_624 Column diameter : 0.53

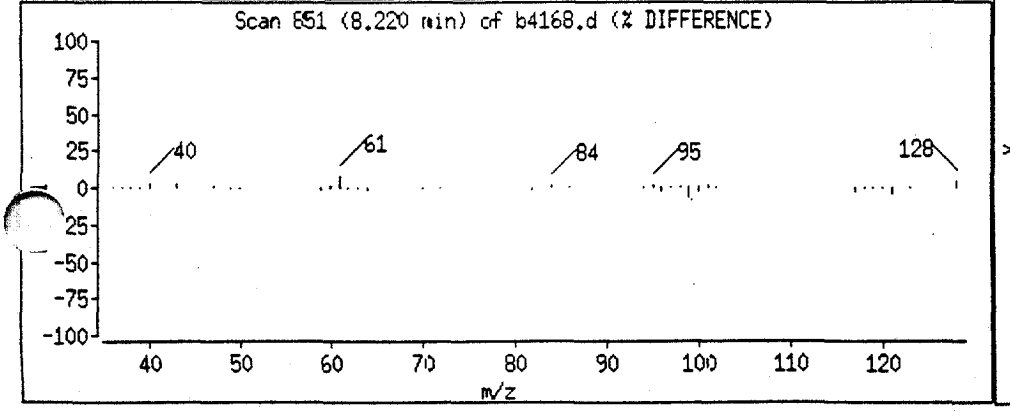
Volume Injected (uL) : 0.0

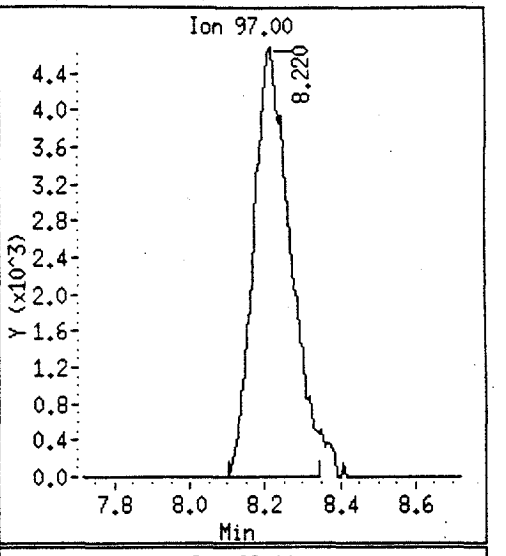
28 1,1,1-Trichloroethane

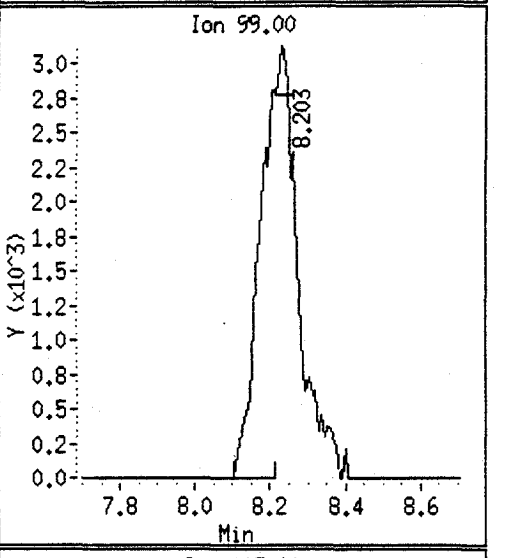


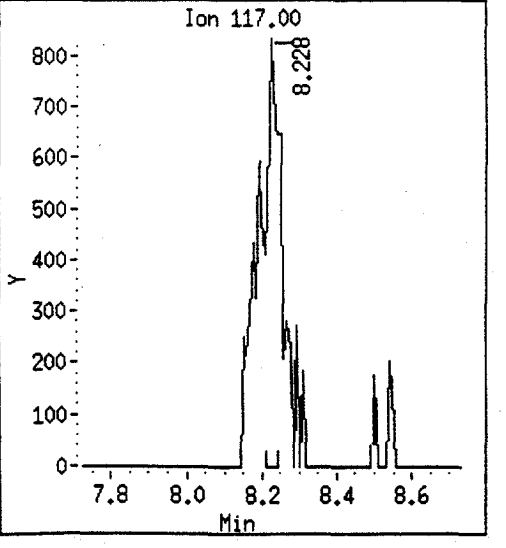












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

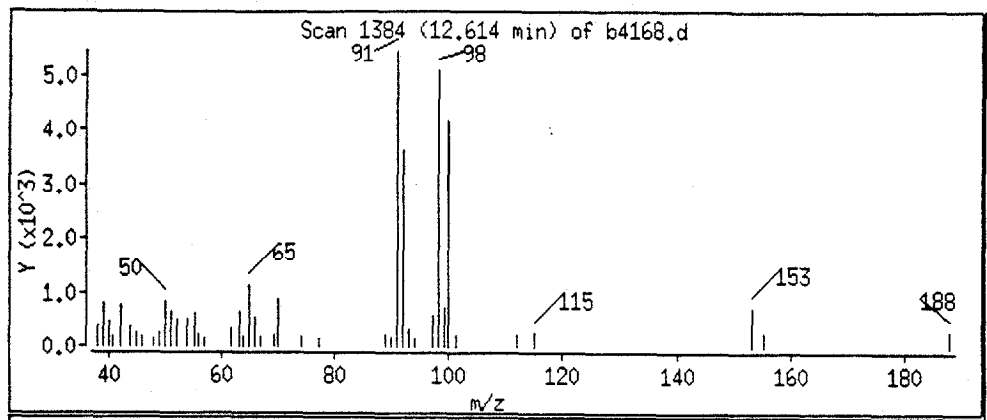
Instrument : msb.i

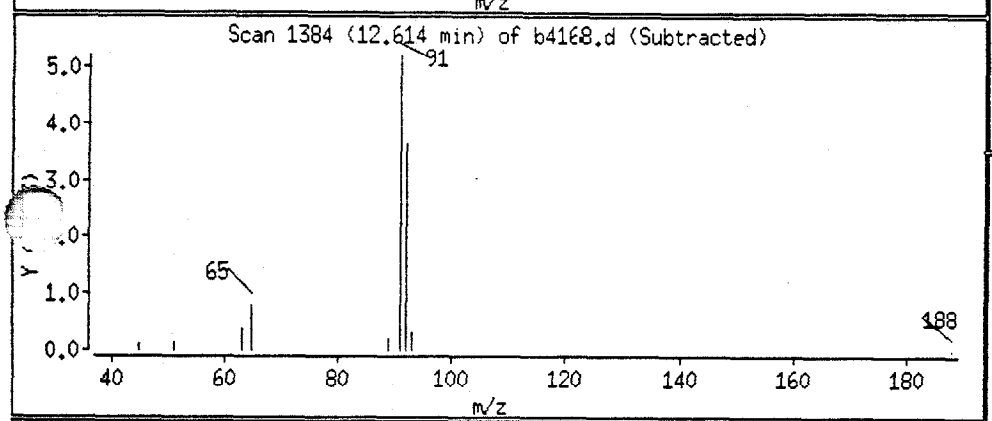
Sample ID :

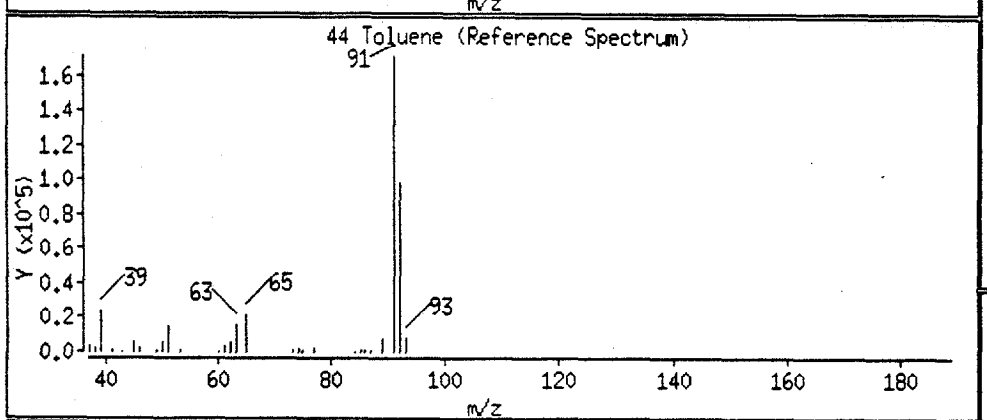
Column phase : J&W DB_624 Column diameter : 0.53

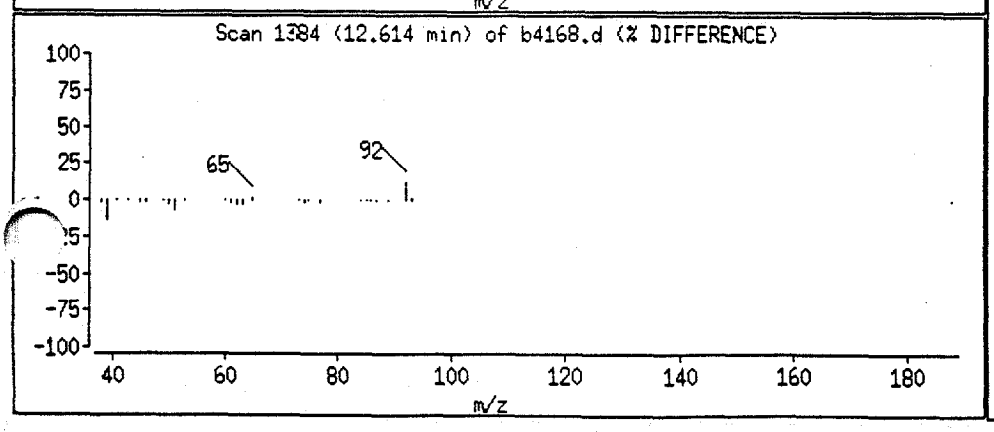
Volume Injected (uL) : 0.0

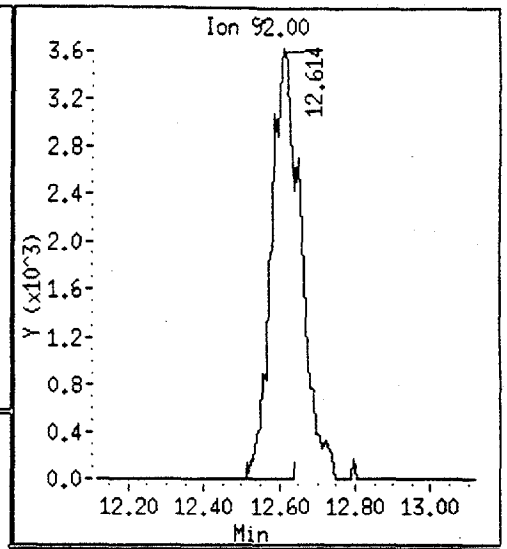
44 Toluene

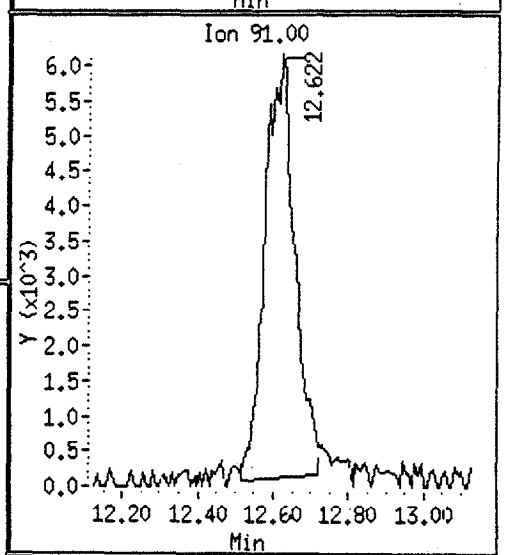


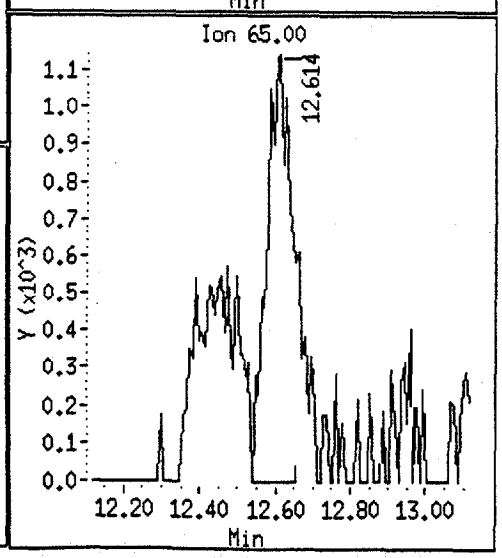












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

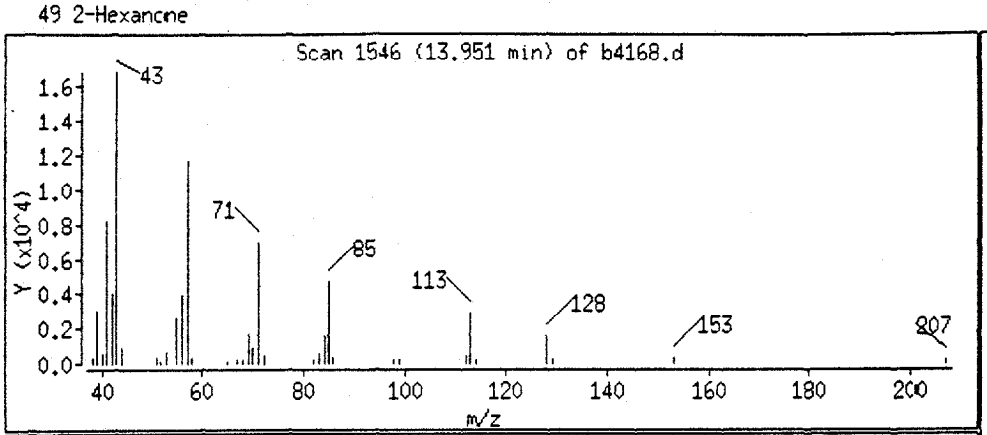
Instrument : msb.i

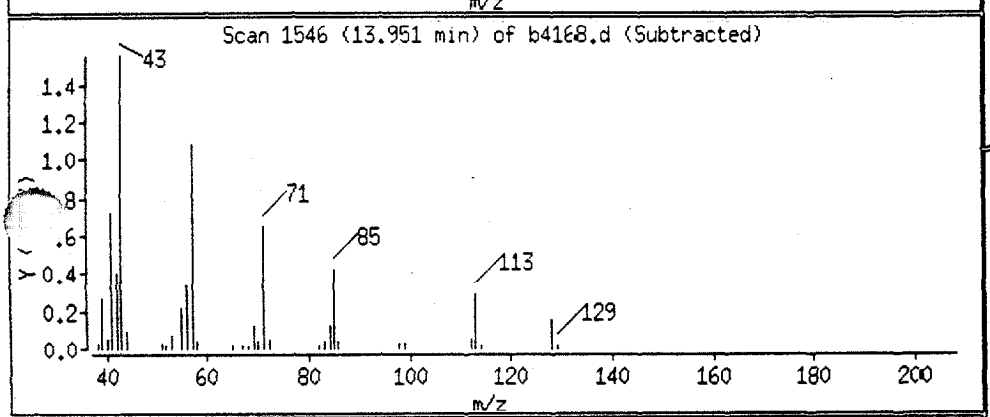
Sample ID :

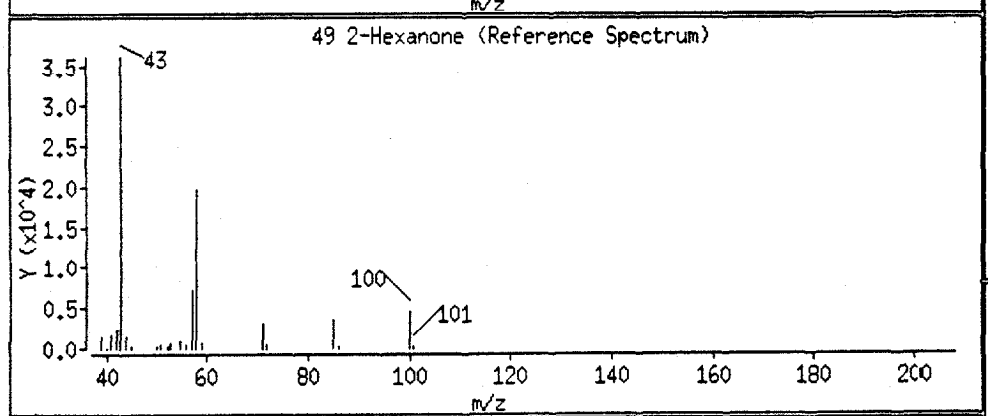
Column phase : J&W DB_624 Column diameter : 0.53

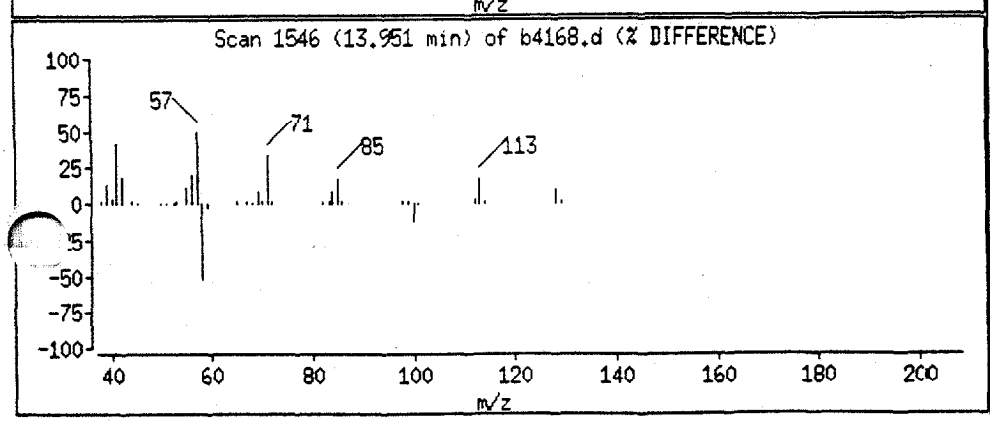
Volume Injected (uL) : 0.0

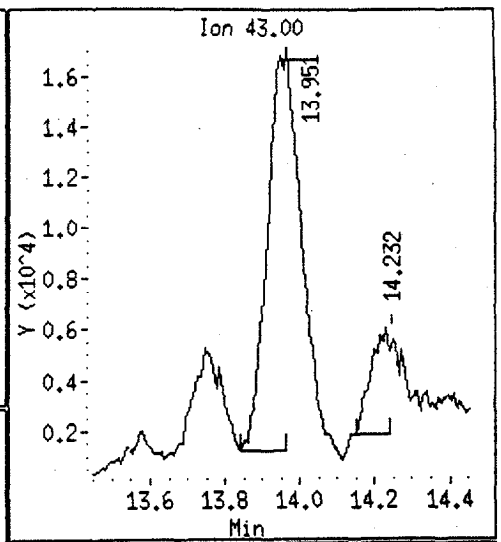
49 2-Hexanone

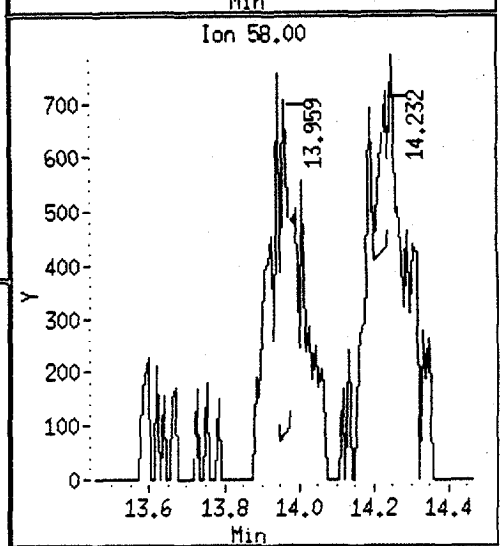


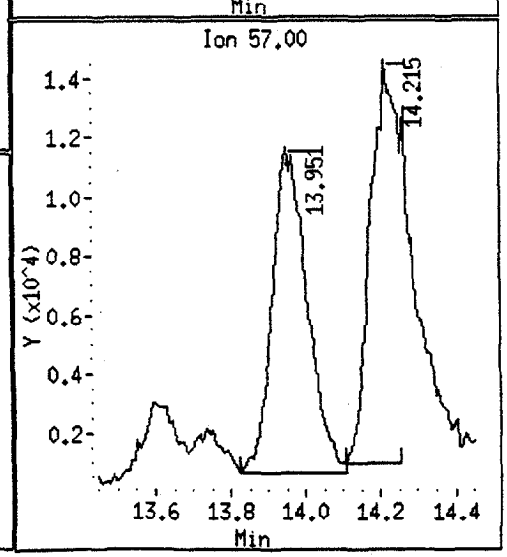












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

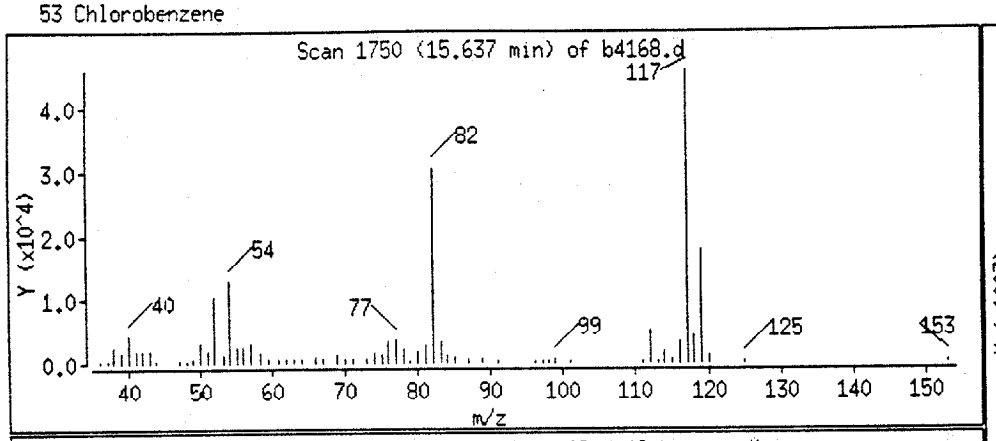
Instrument : msb.i

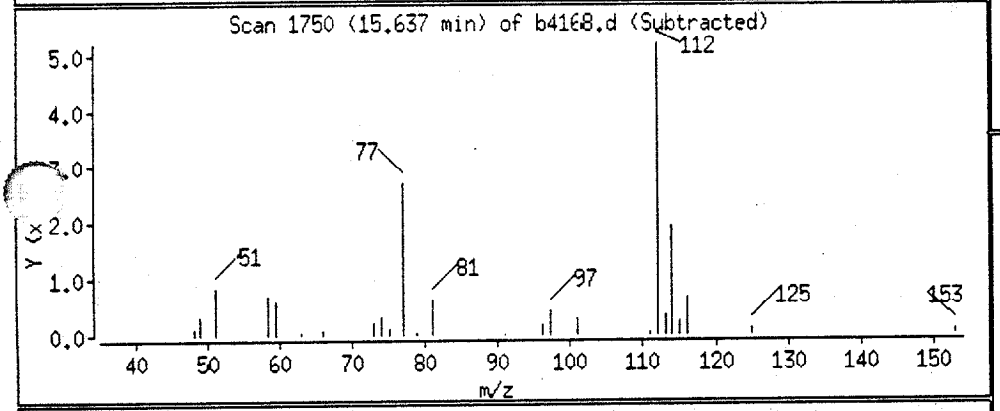
Sample ID :

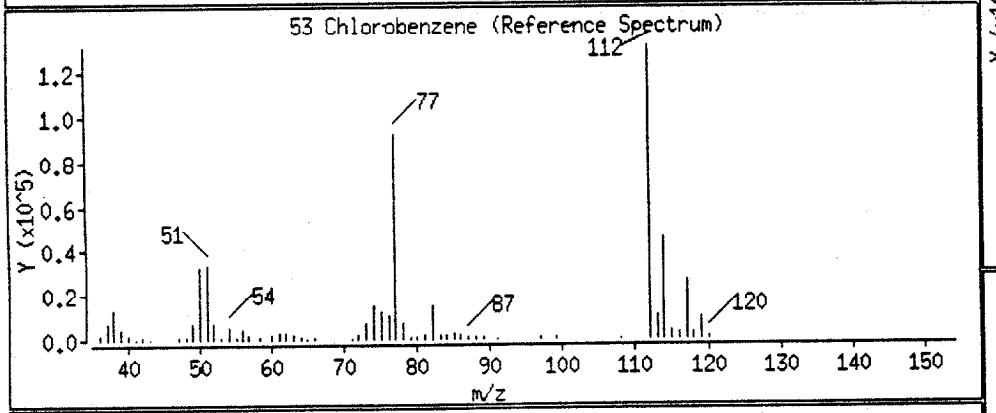
Column phase : J&W DB_624 Column diameter : 0.53

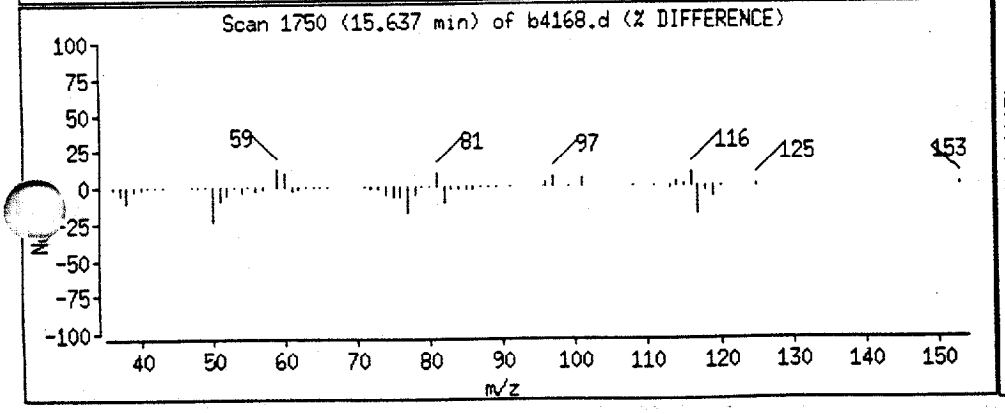
Volume Injected (uL) : 0.0

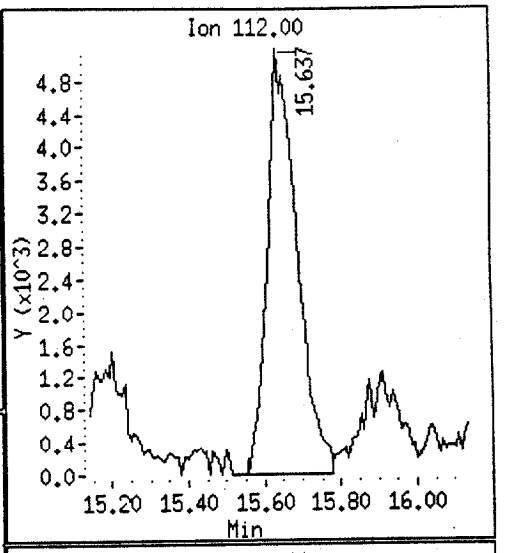
53 Chlorobenzene

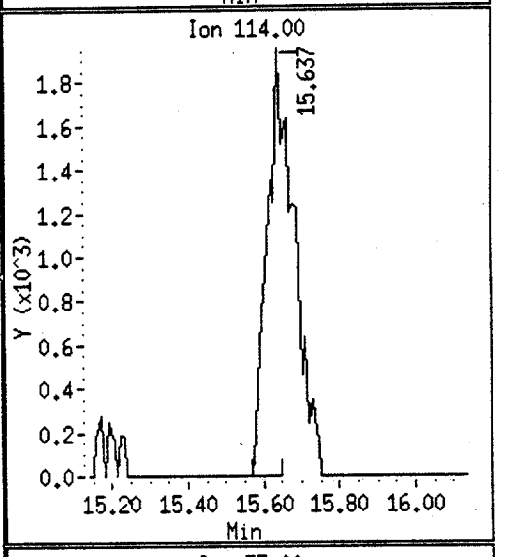


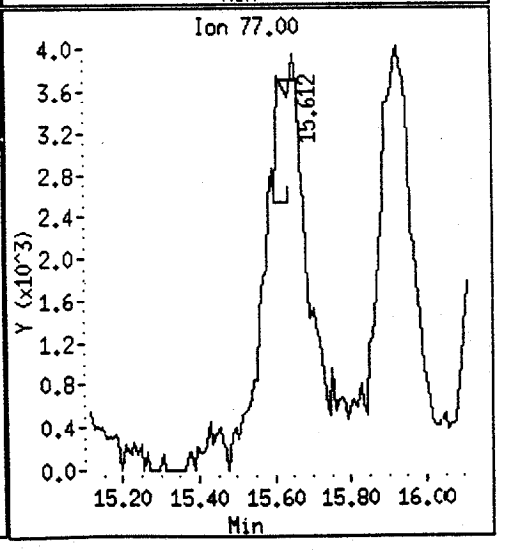












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

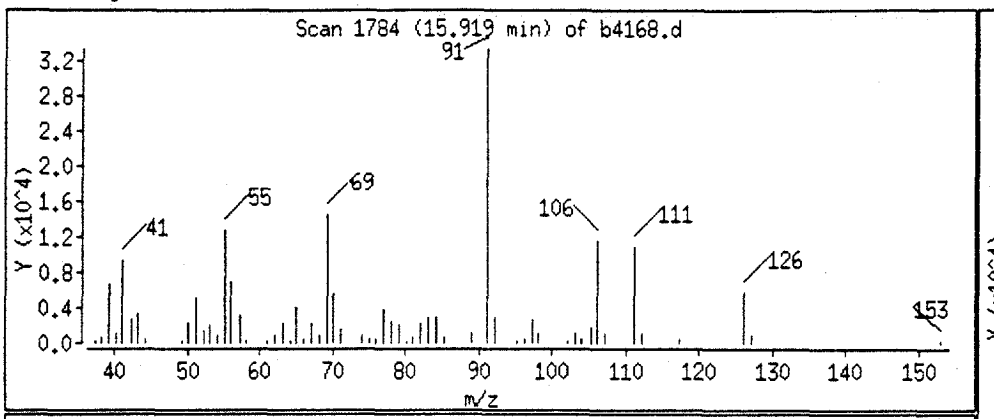
Instrument : msb.i

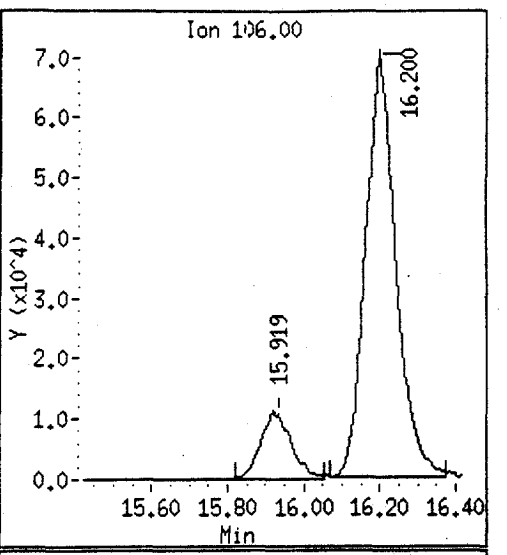
Sample ID :

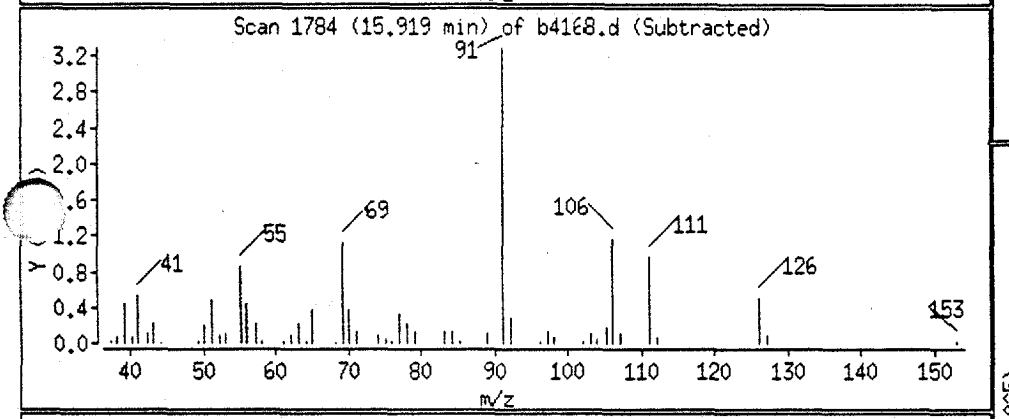
Column phase : J&W DB_624 Column diameter : 0.53

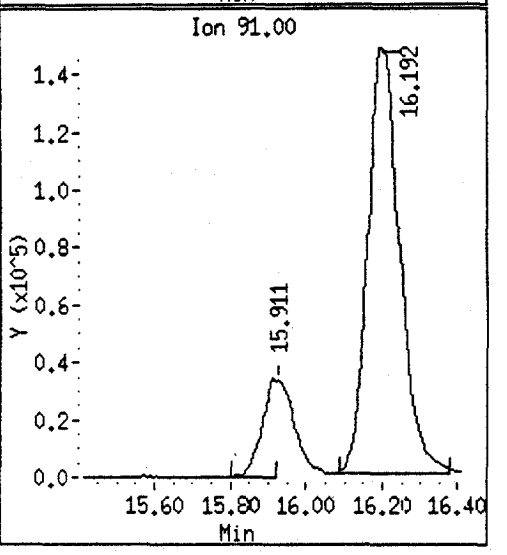
Volume Injected (uL) : 0.0

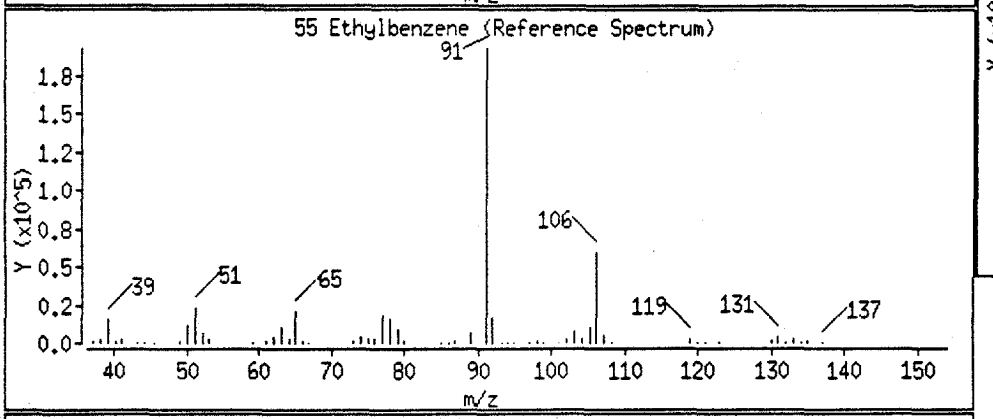
55 Ethylbenzene

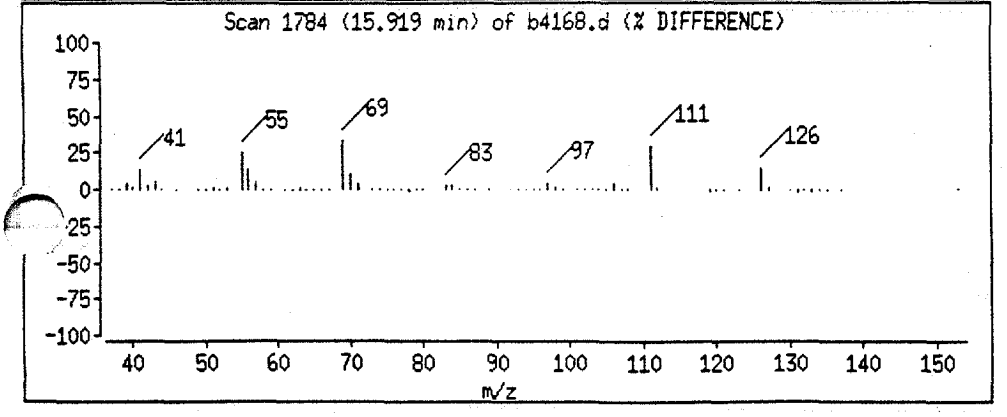












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

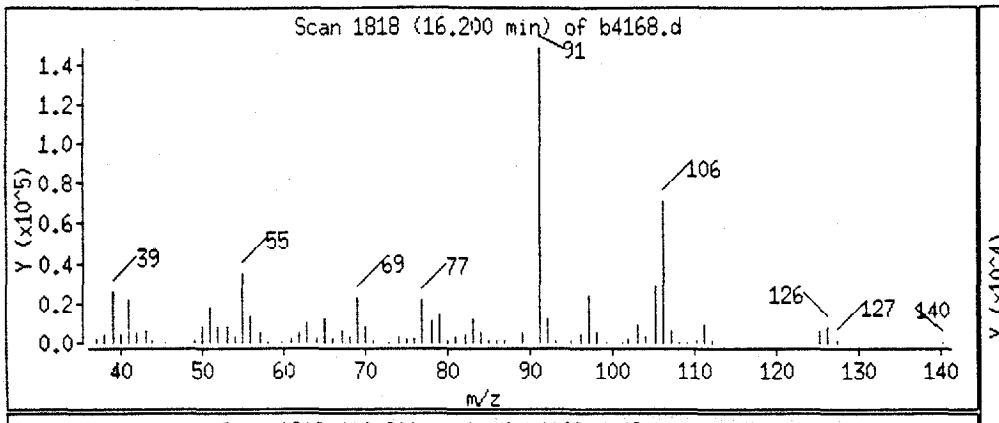
Instrument : msb.i

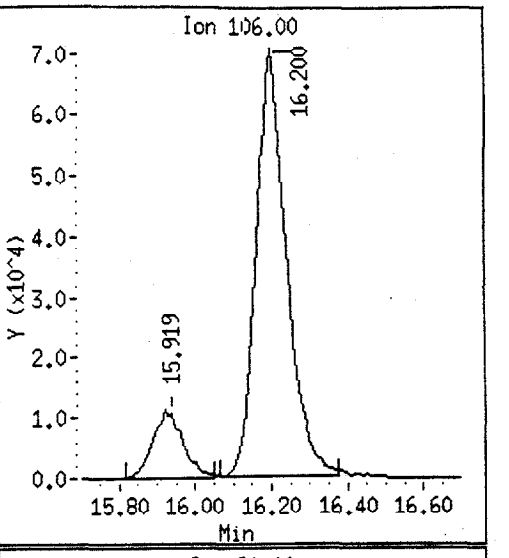
Sample ID :

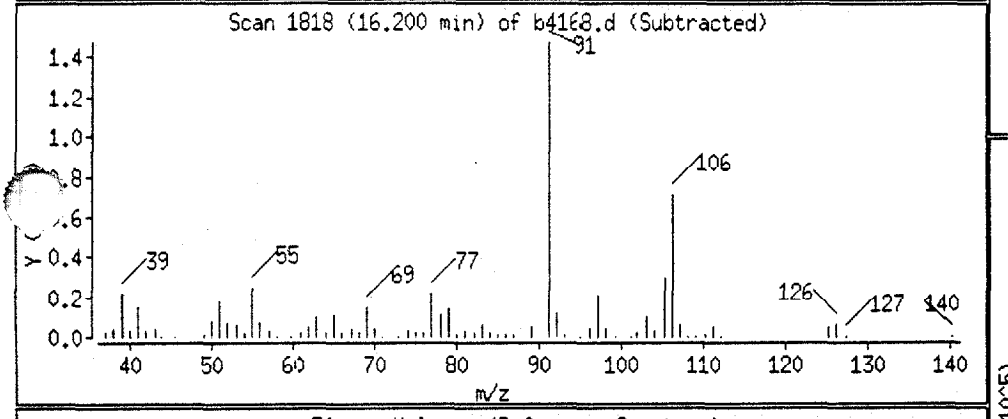
Column phase : J&W DB_624 Column diameter : 0.53

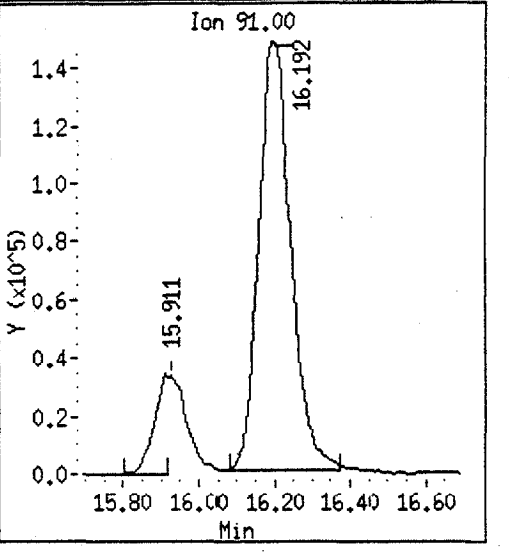
Volume Injected (uL) : 0.0

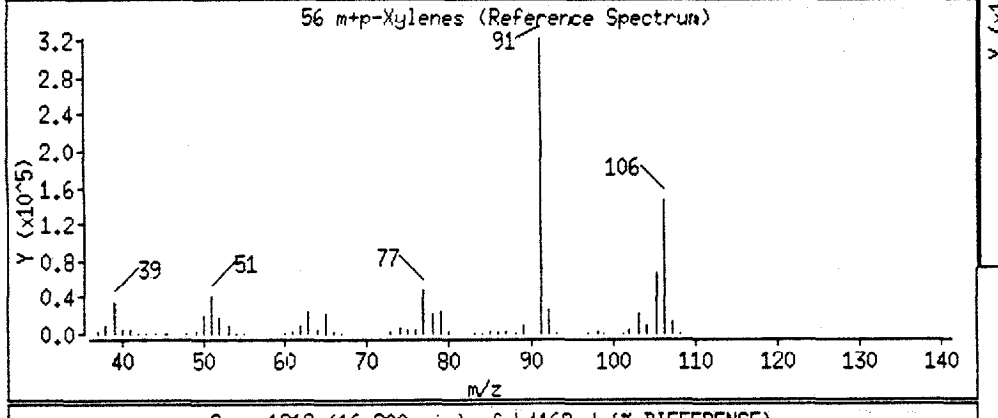
56 m+p-Xylenes

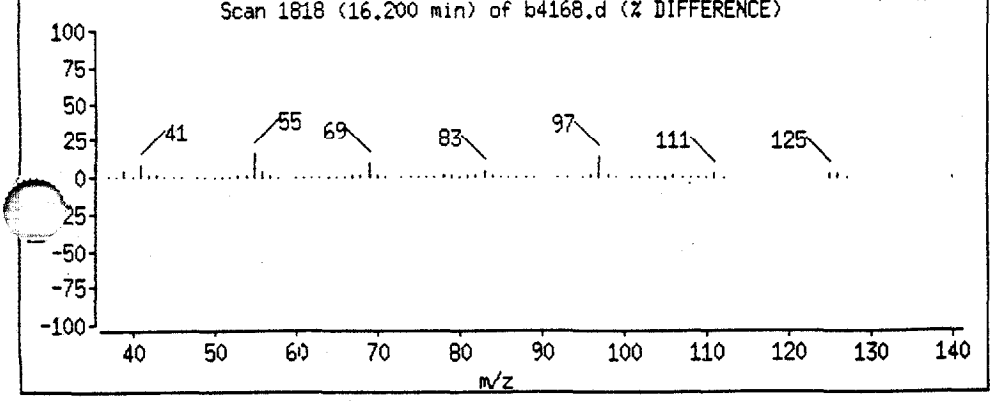












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

Instrument : msb.i

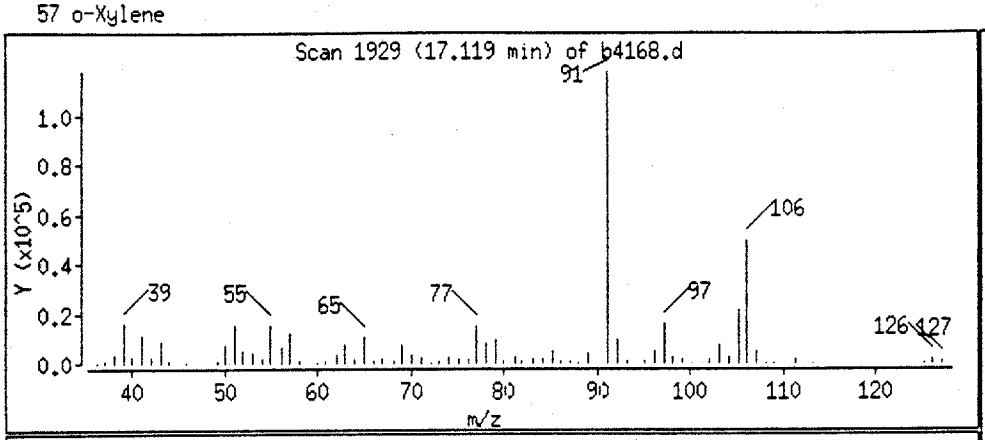
Sample ID :

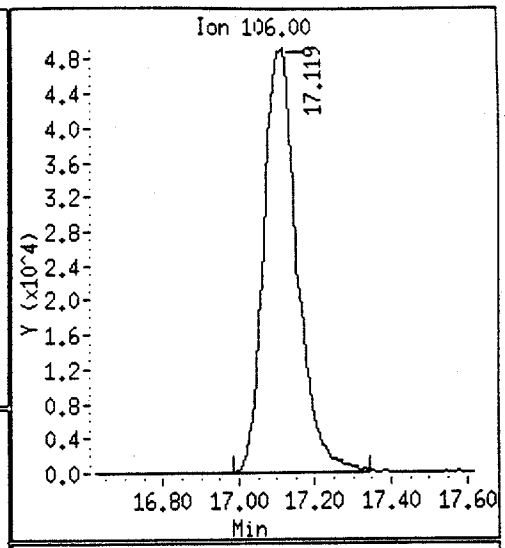
Column phase : J&W DB_624

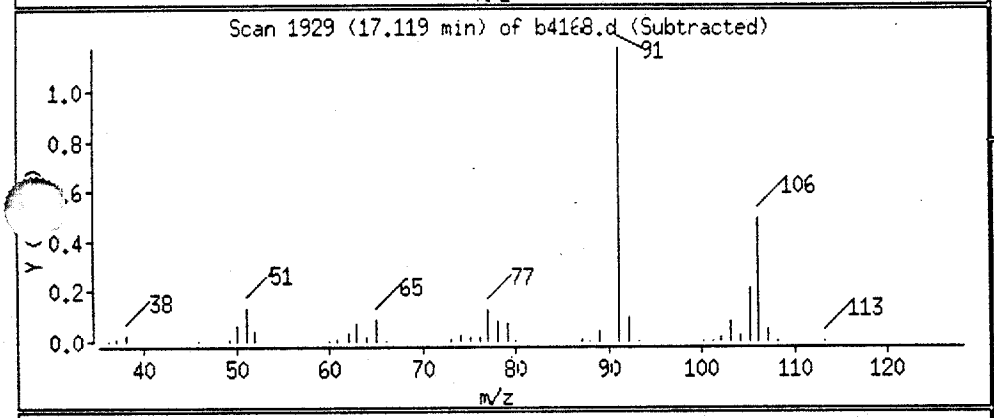
Column diameter : 0.53

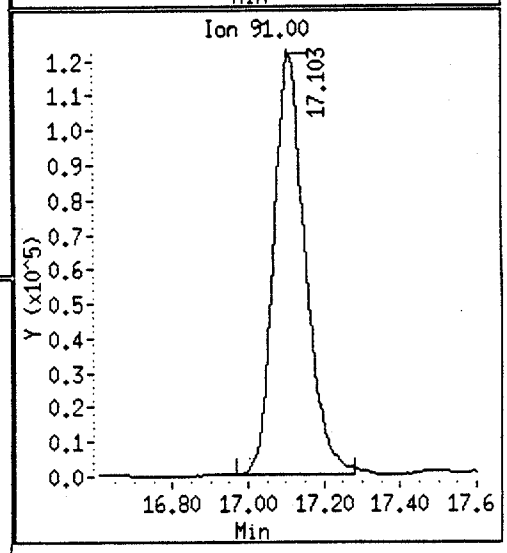
Volume Injected (uL) : 0.0

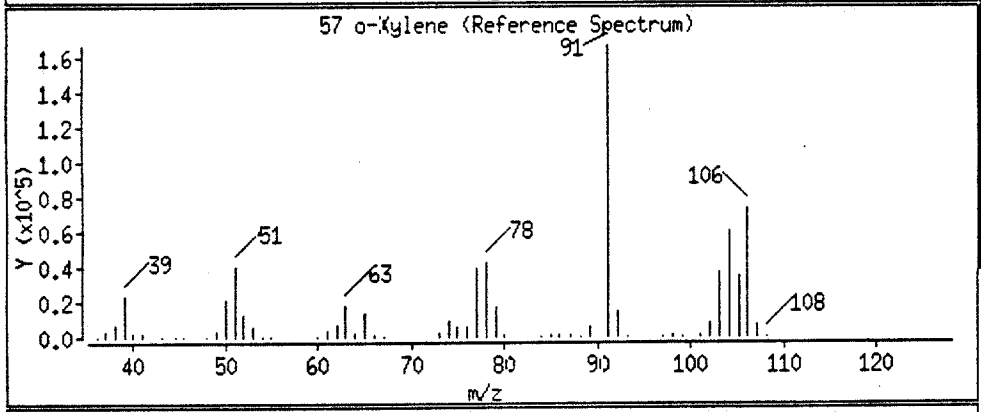
57 o-Xylene

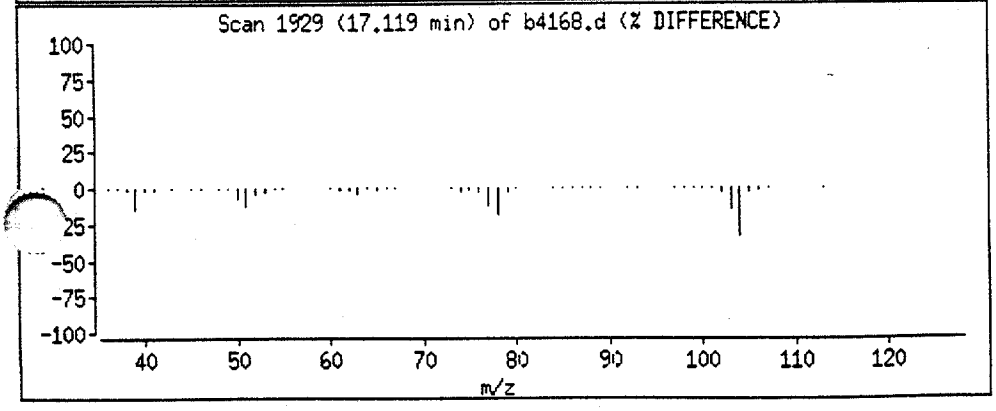












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

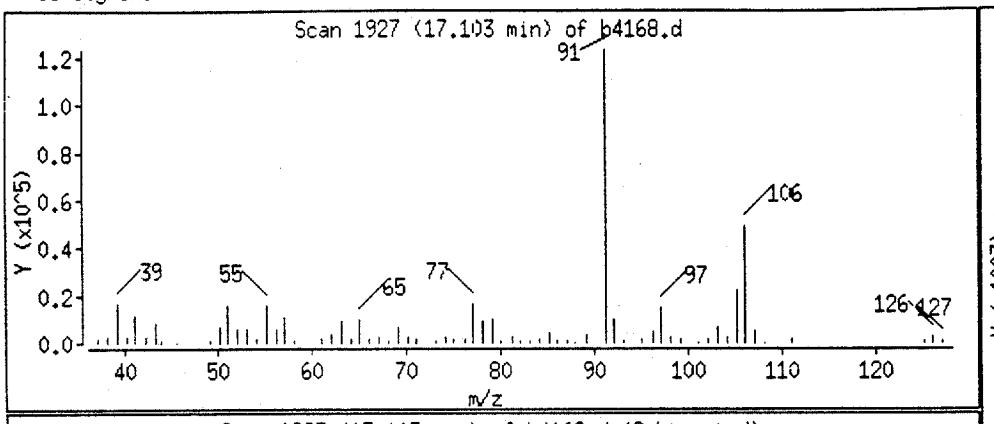
Instrument : msb.i

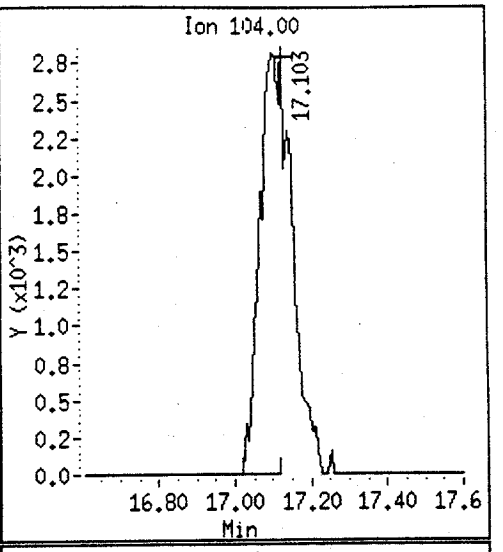
Sample ID :

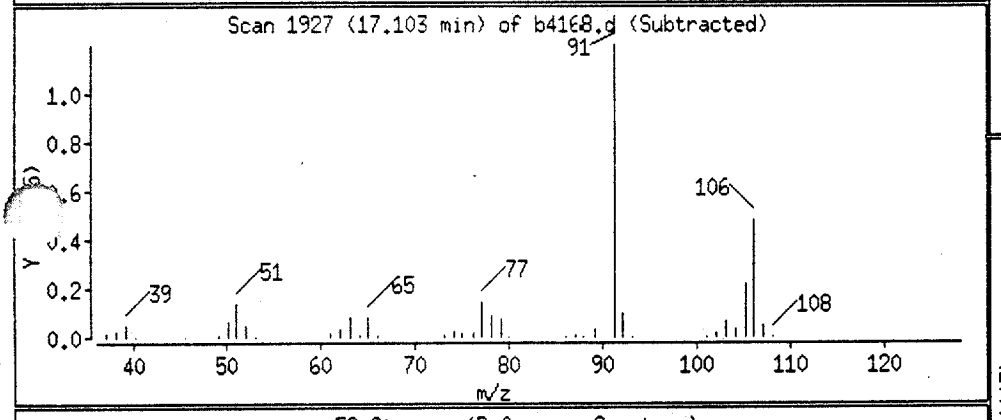
Column phase : J&W DB_624 Column diameter : 0.53

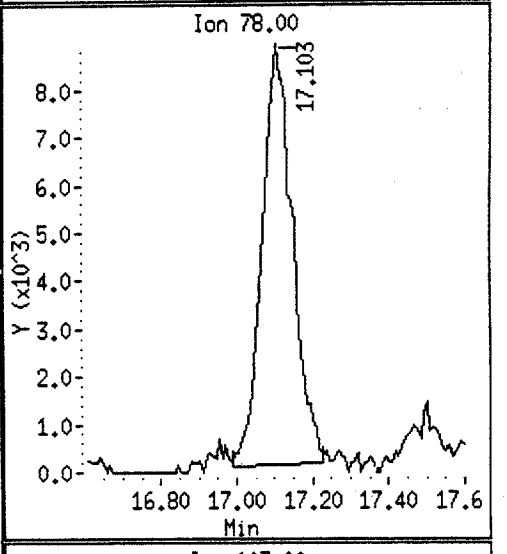
Volume Injected (uL) : 0.0

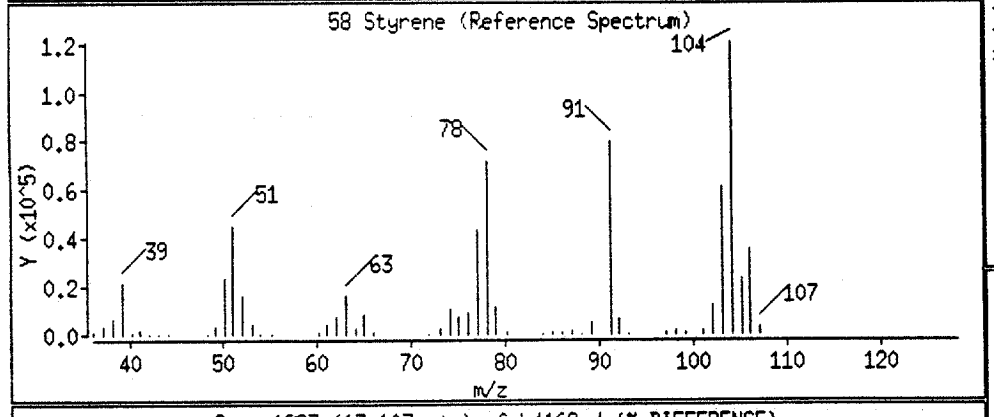
58 Styrene

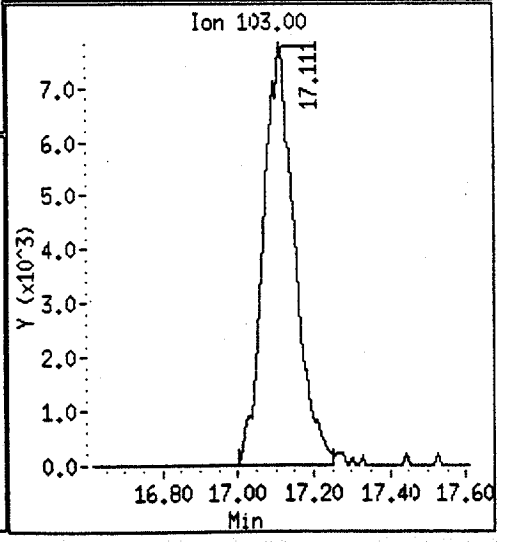


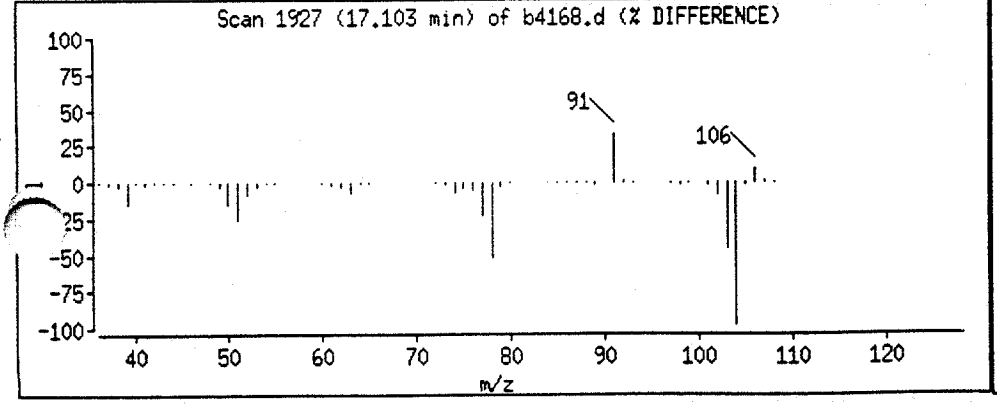












Data File: /chem/aux/msb.1/b062894.b/b4168.d

Date : 28-JUN-94 17:20

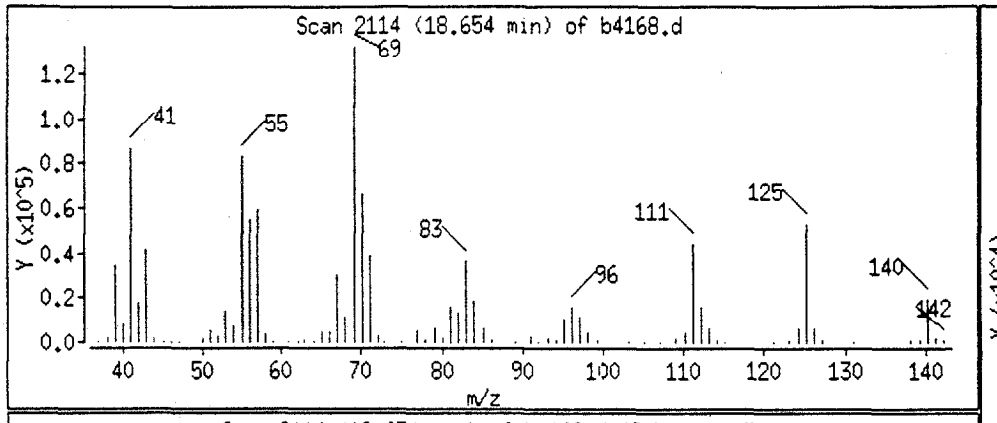
Instrument : msb.1

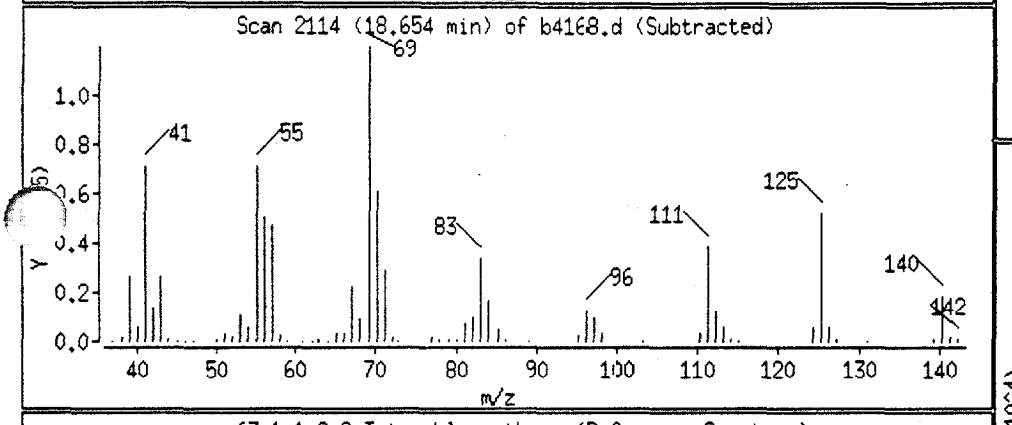
Sample ID :

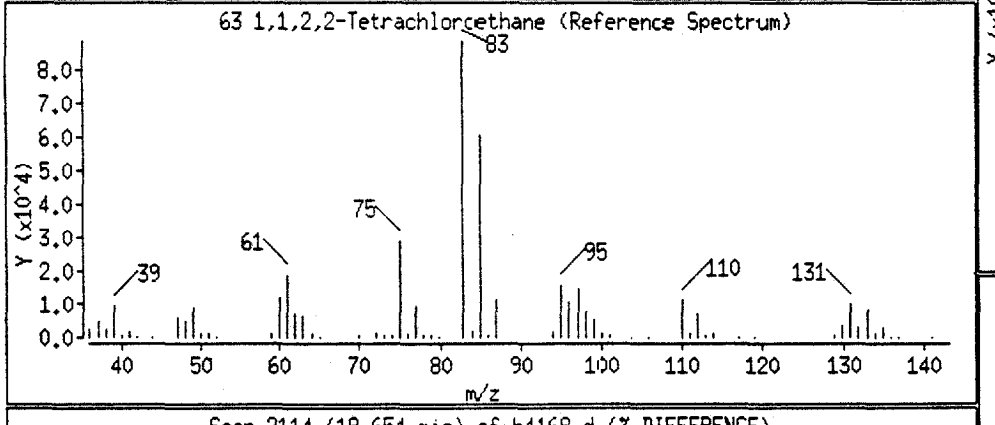
Column phase : J&W DB_624 Column diameter : 0.53

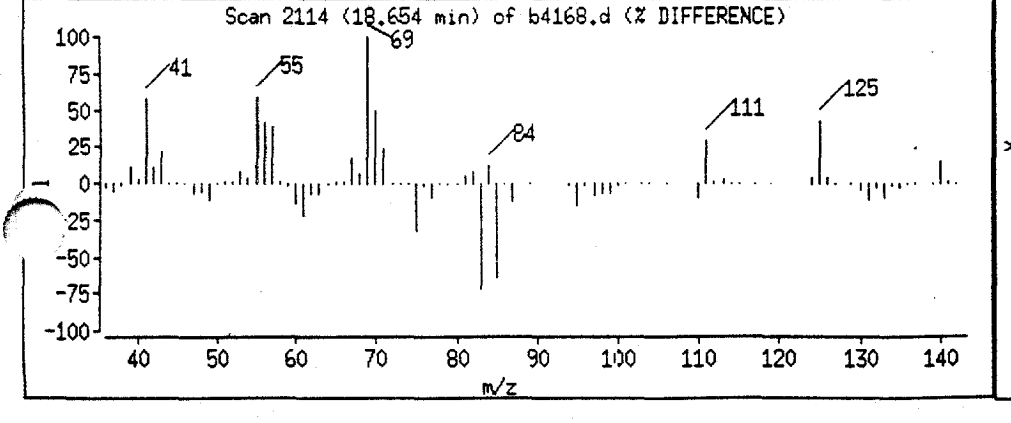
Volume Injected (uL) : 0.0

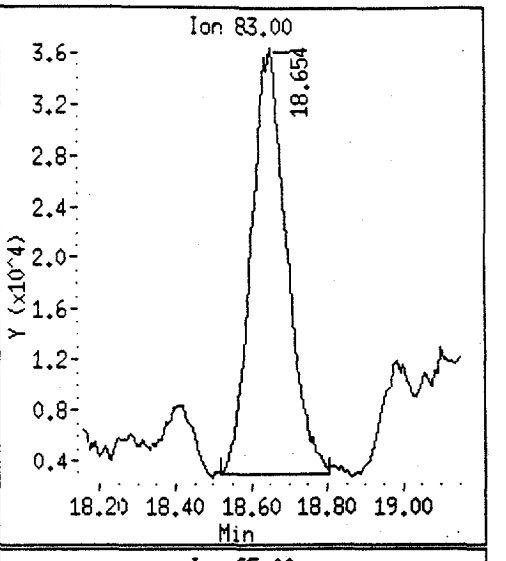
63 1,1,2,2-Tetrachloroethane

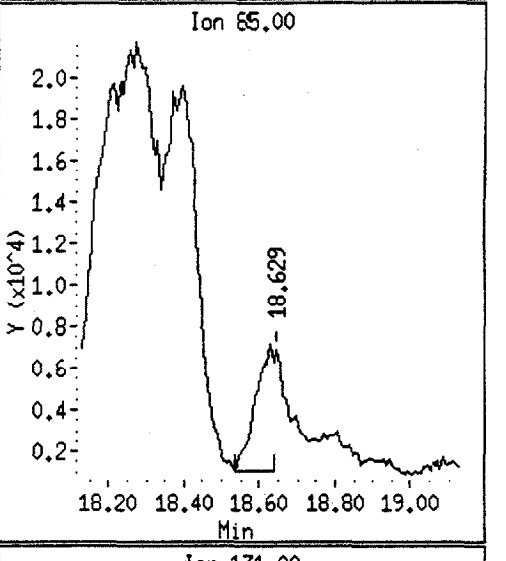


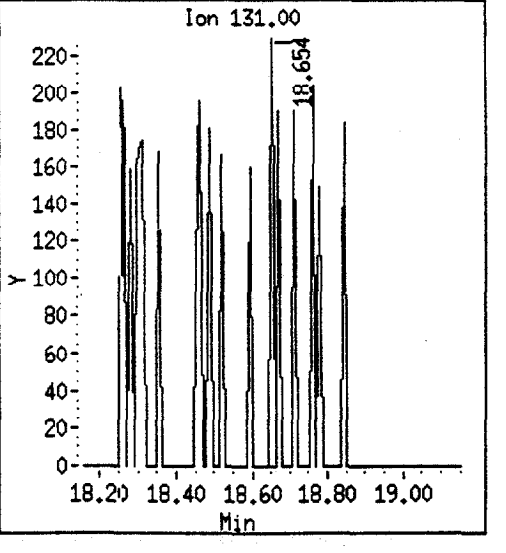












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

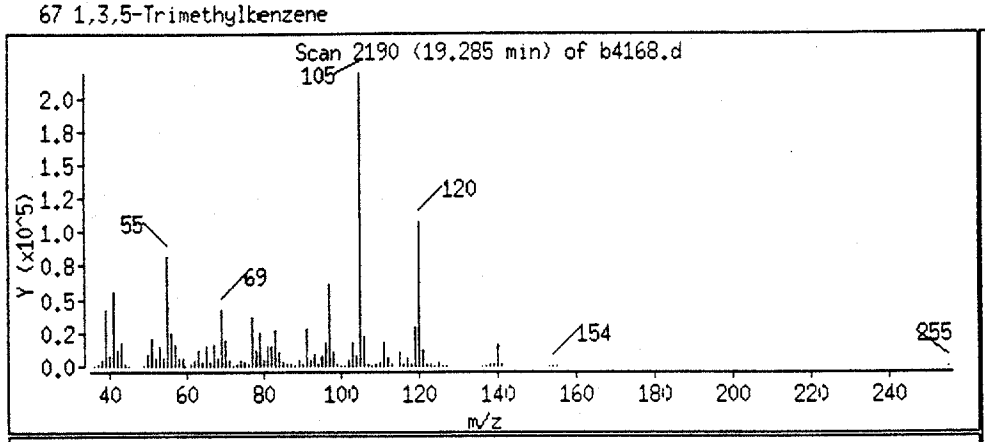
Instrument : msb.i

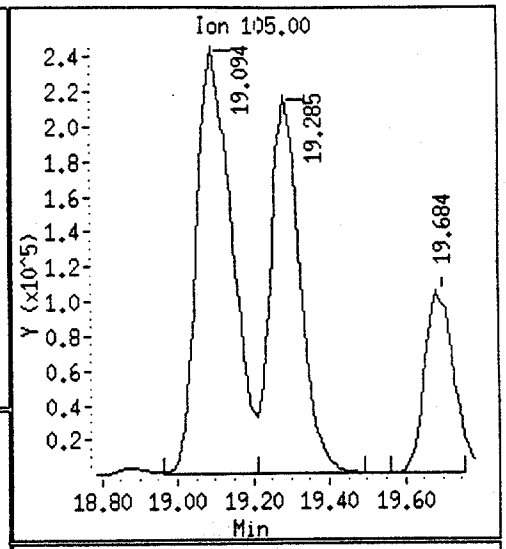
Sample ID :

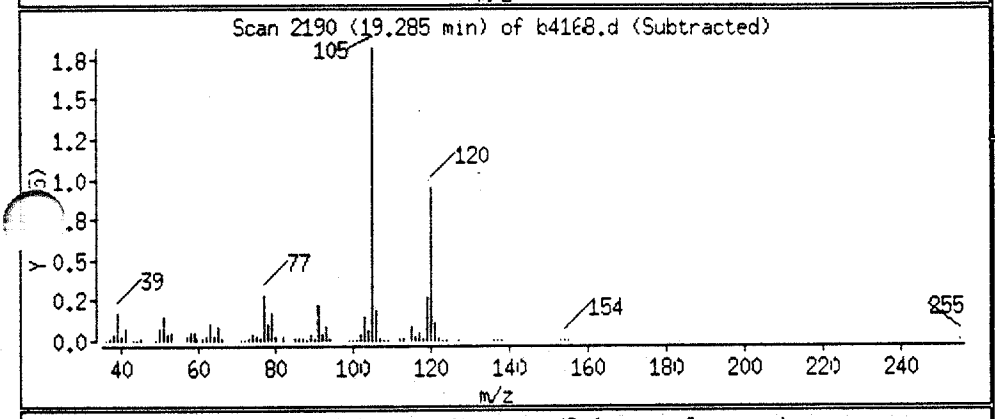
Column phase : J&W DB_624 Column diameter : 0.53

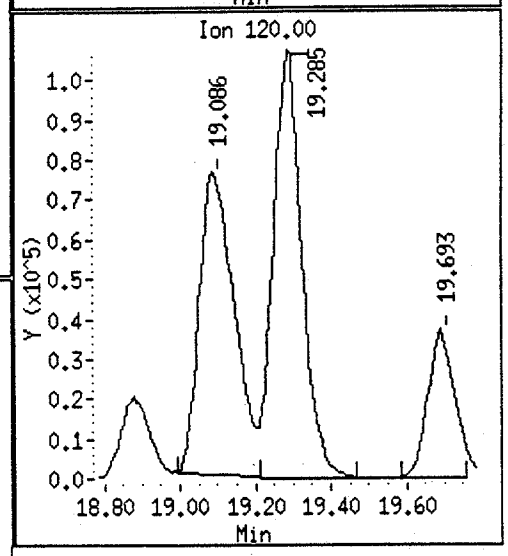
Volume Injected (uL) : 0.0

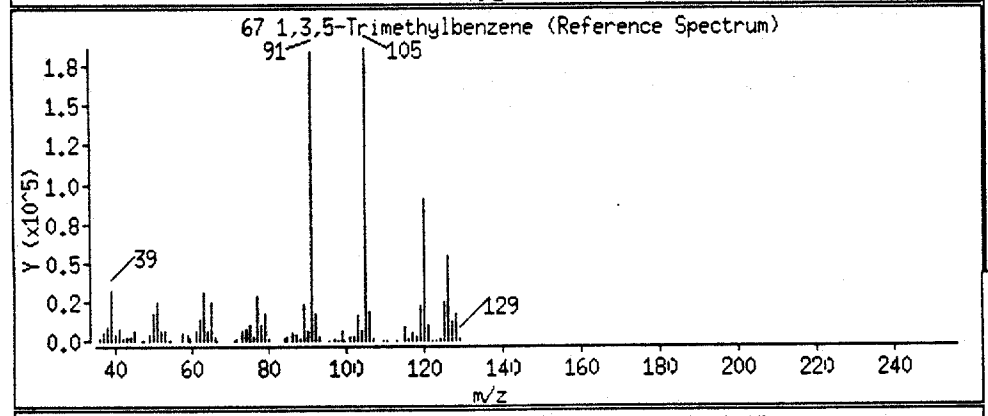
67 1,3,5-Trimethylbenzene

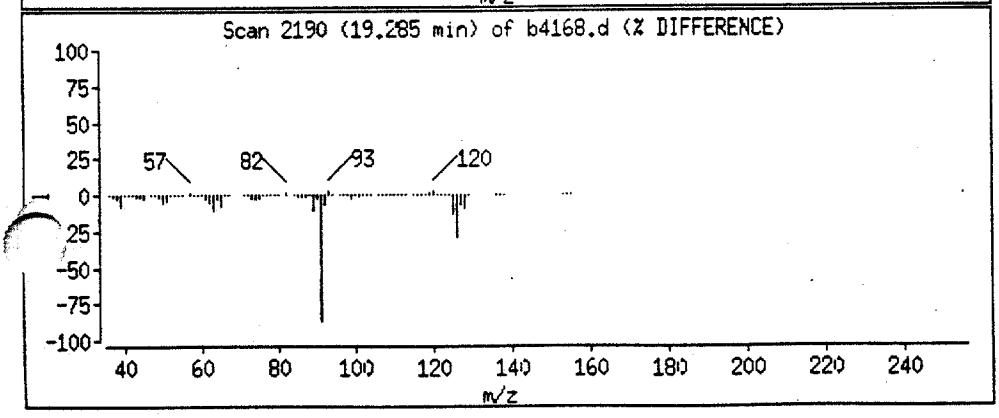












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

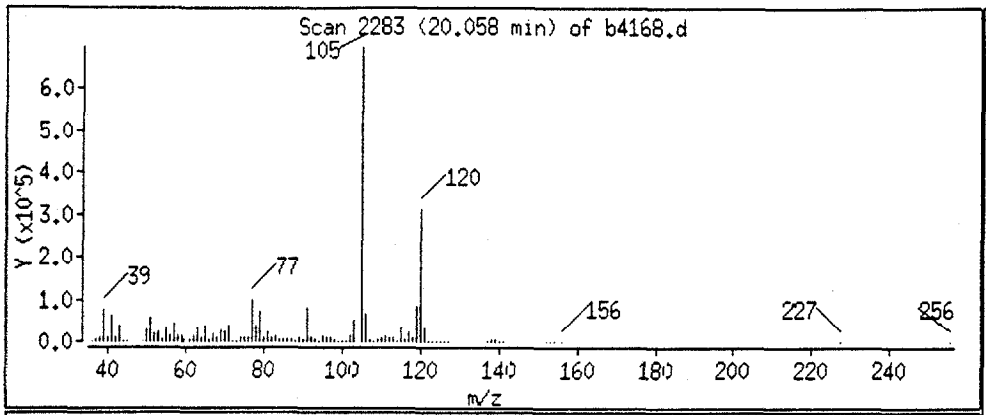
Instrument : msb.i

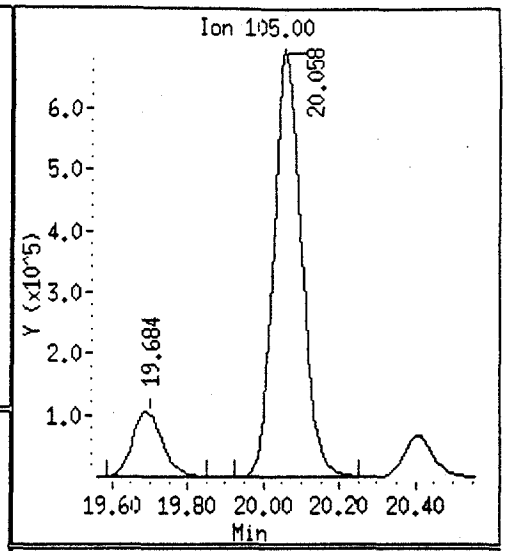
Sample ID :

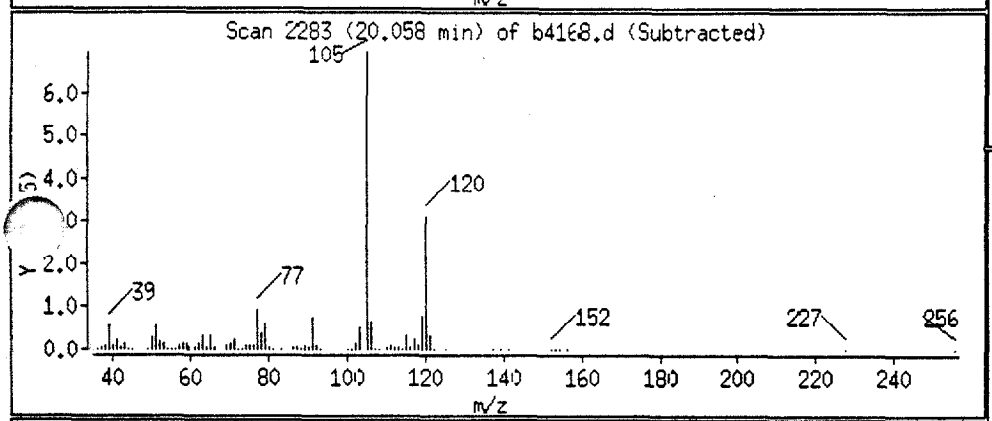
Column phase : J&W DB_624 Column diameter : 0.53

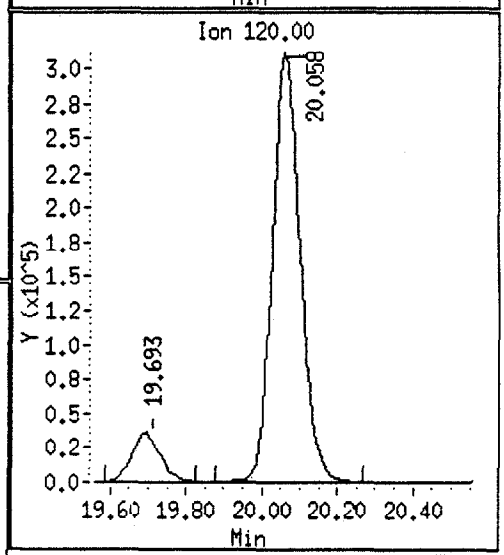
Volume Injected (uL) : 0.0

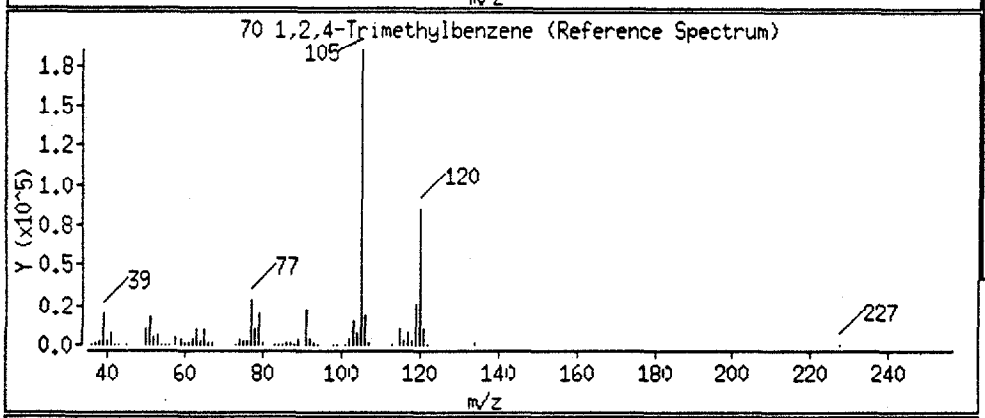
70 1,2,4-Trimethylbenzene

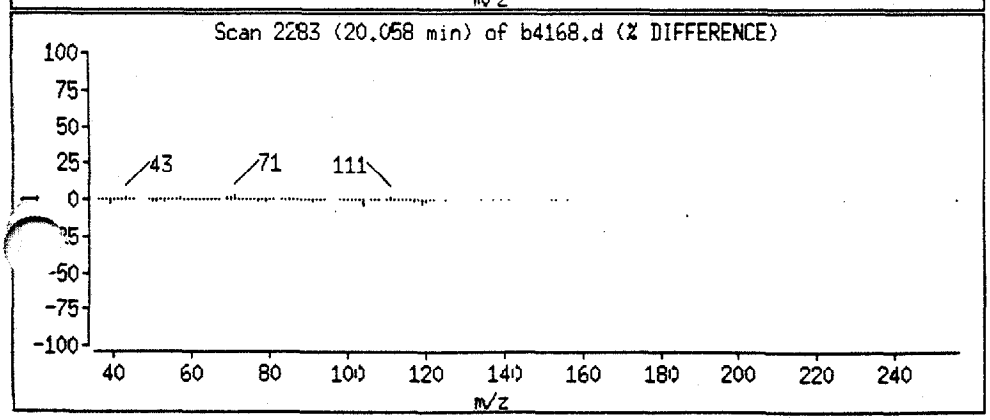












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

Instrument : msb.i

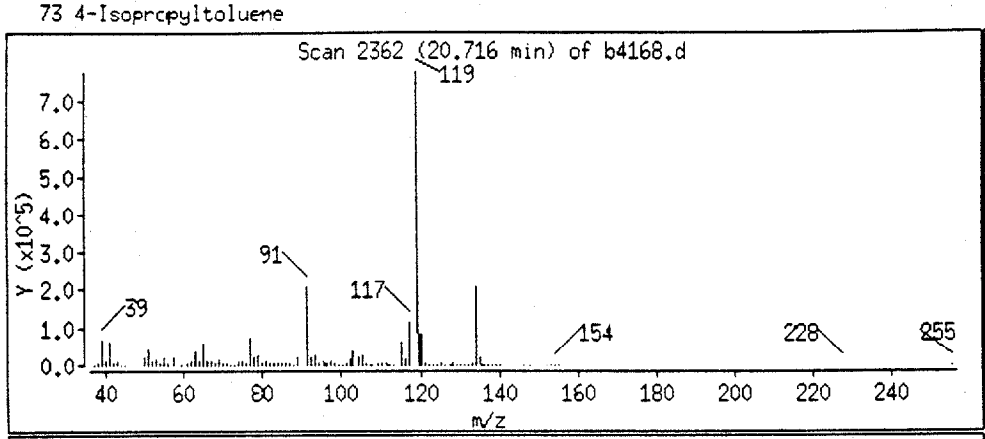
Sample ID :

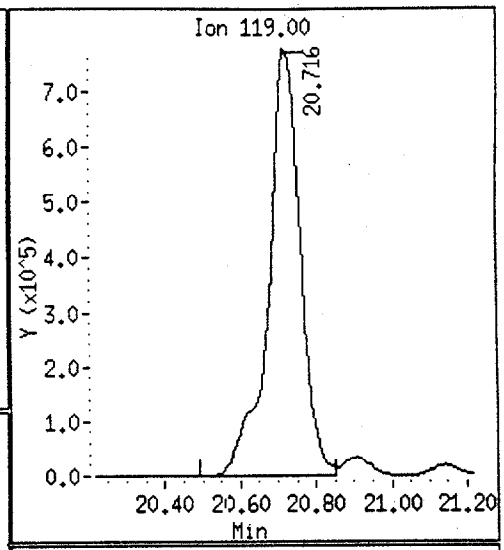
Column phase : J&W DB_624

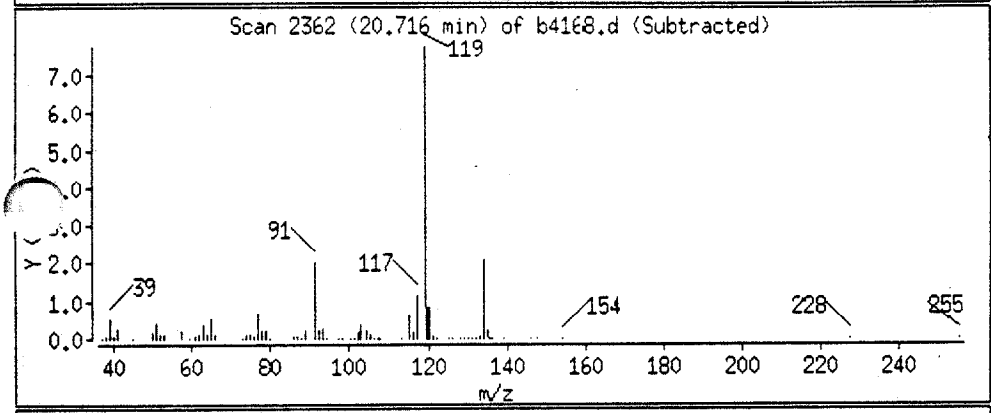
Column diameter : 0.53

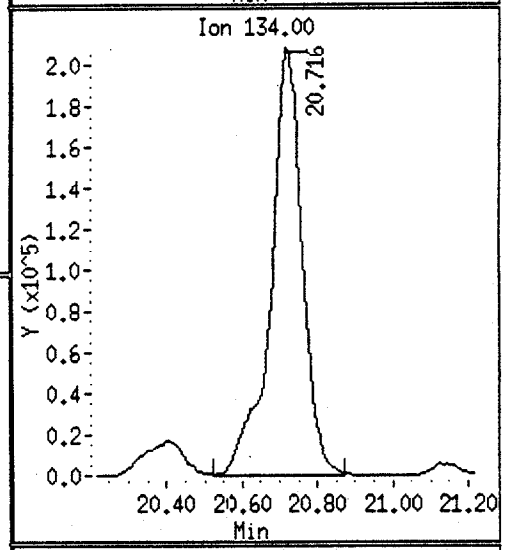
Volume Injected (uL) : 0.0

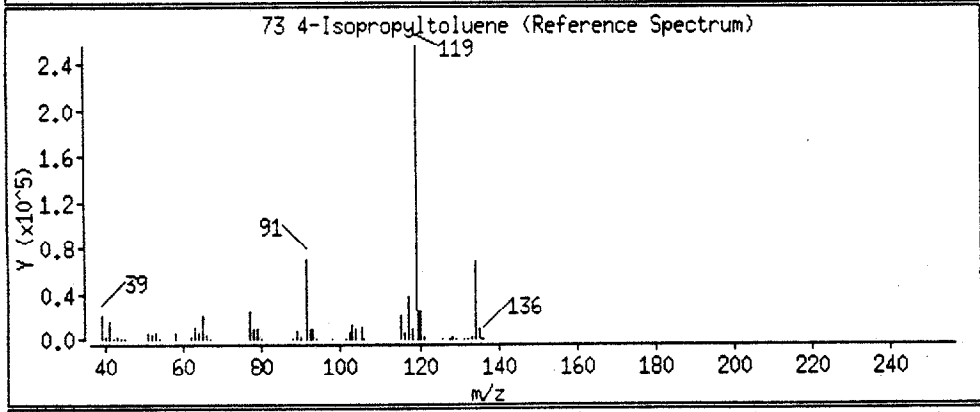
73 4-Isopropyltoluene

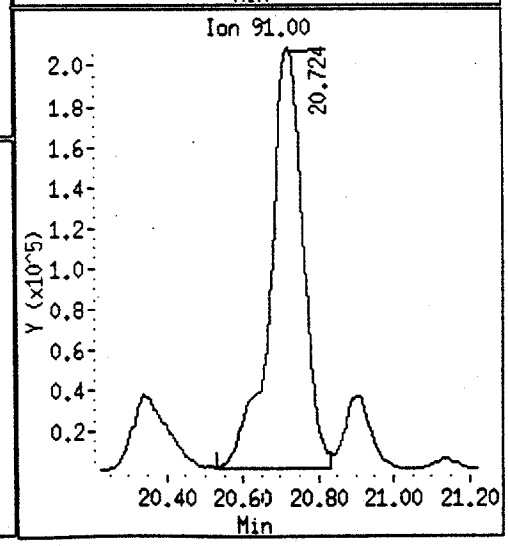


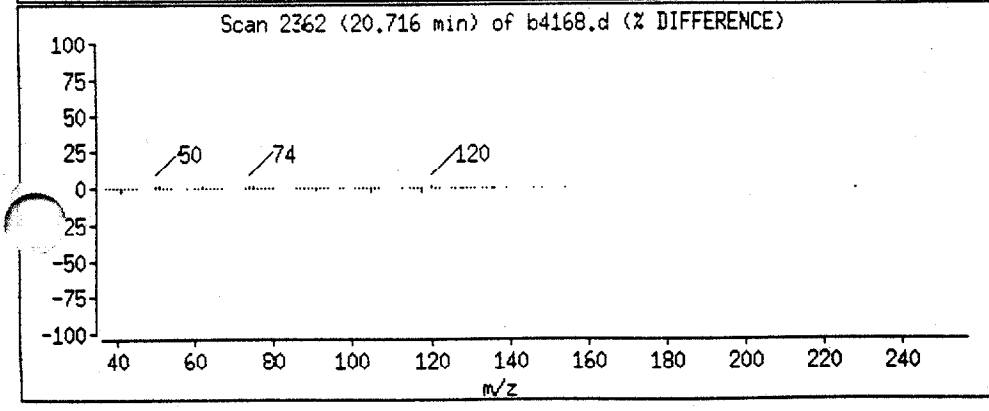












Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20

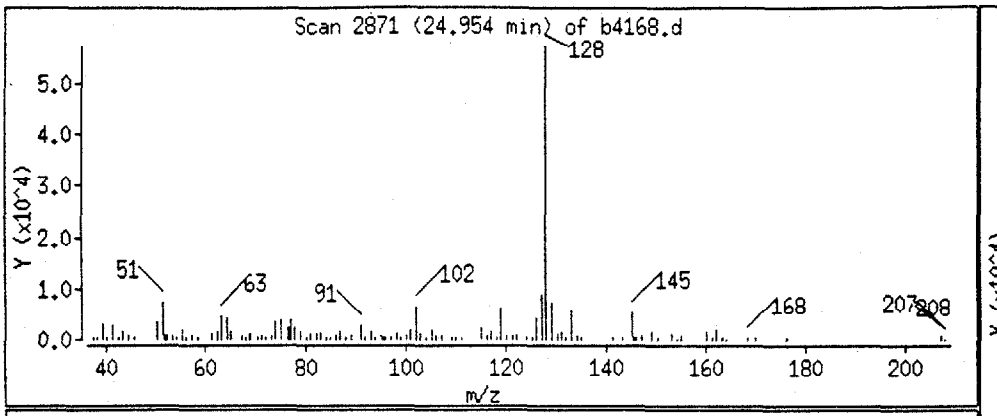
Instrument : msb.i

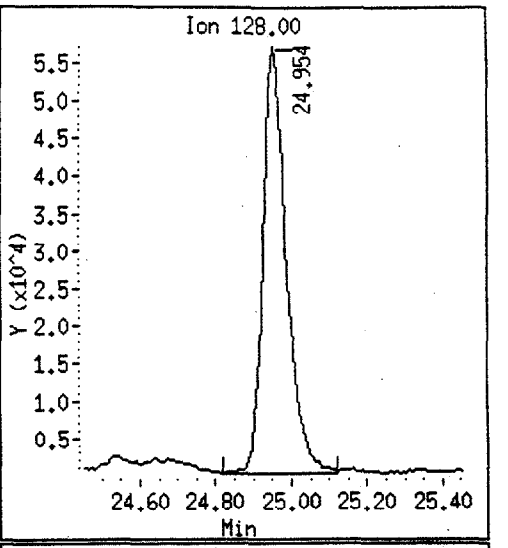
Sample ID :

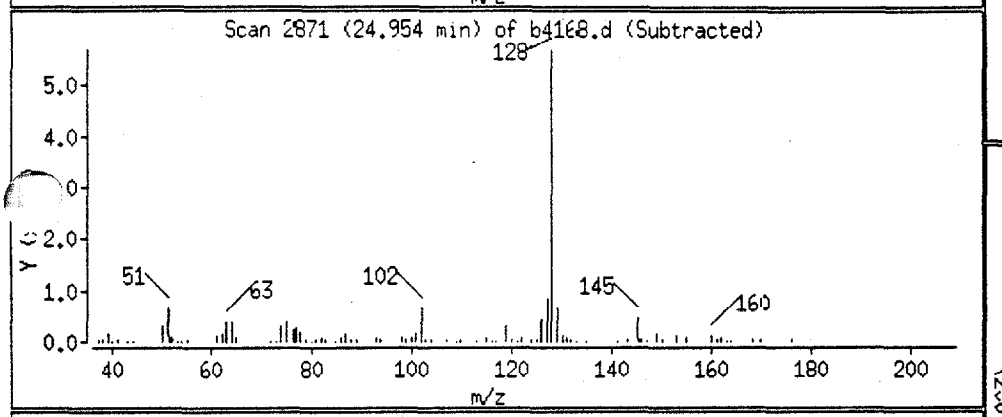
Column phase : J&W DB_624 Column diameter : 0.53

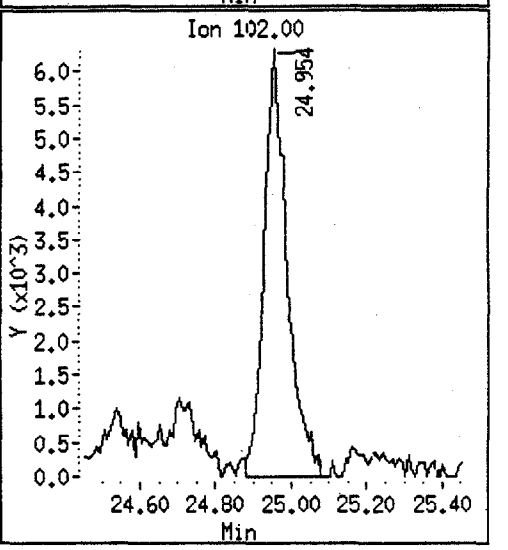
Volume Injected (uL) : 0.0

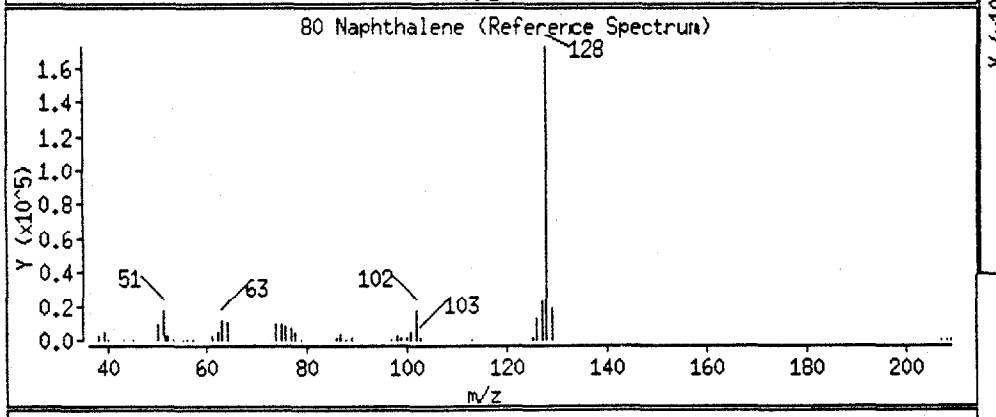
80 Naphthalene

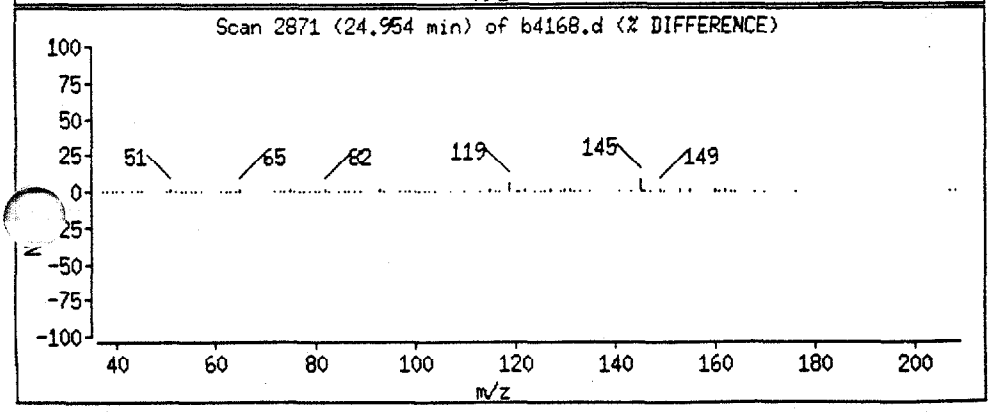








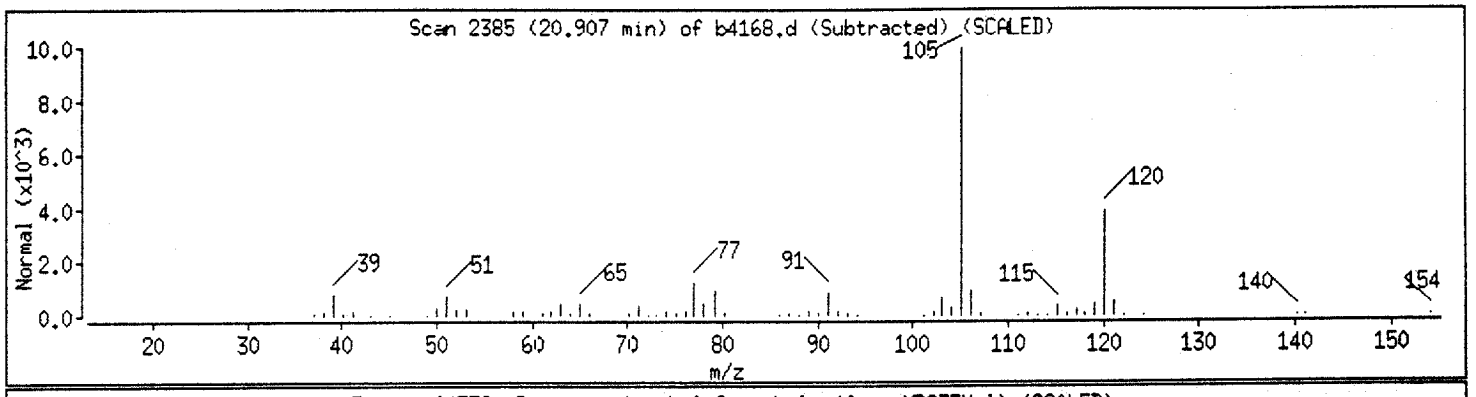


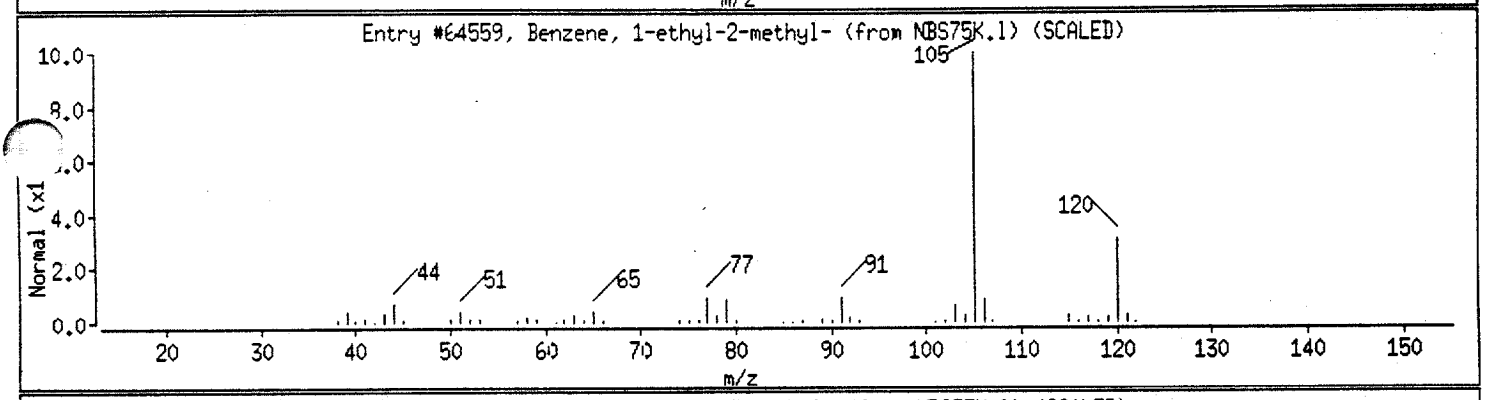


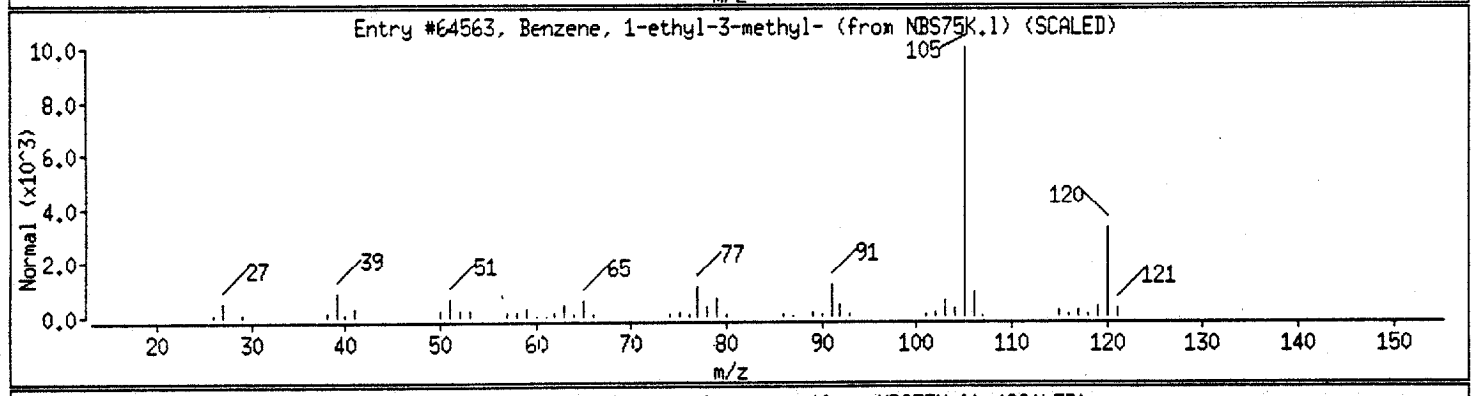
Data File: /chem/aux/msb.i/b062894.b/b4168.d

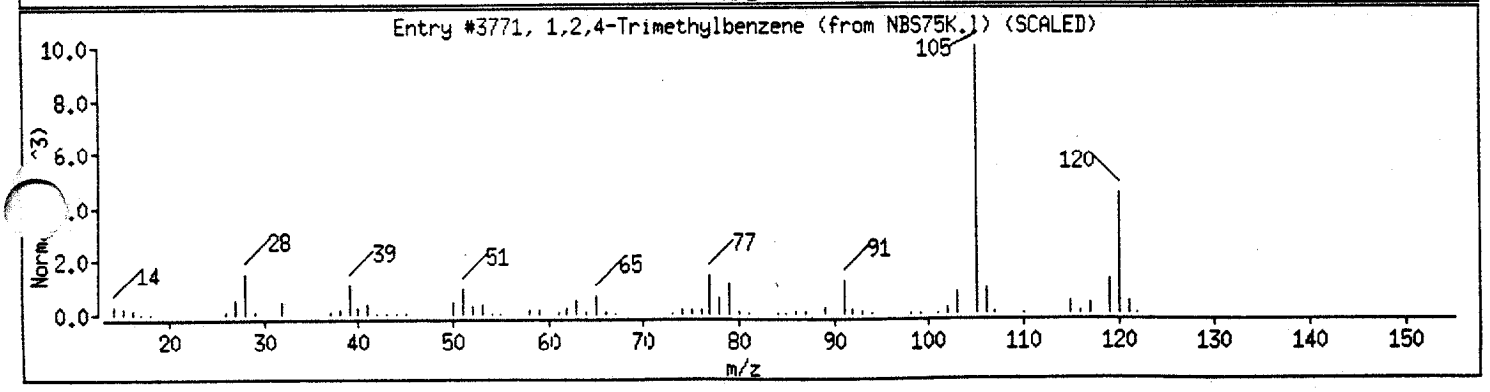
Date : 28-JUN-94 17:20
Instrument : msb.i
Sample ID :
Column phase : J&W DB_624 Column diameter : 0.53
Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.l	64559	94
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.l	64563	94
1,2,4-Trimethylbenzene	95-36-3	NBS75K.l	3771	93





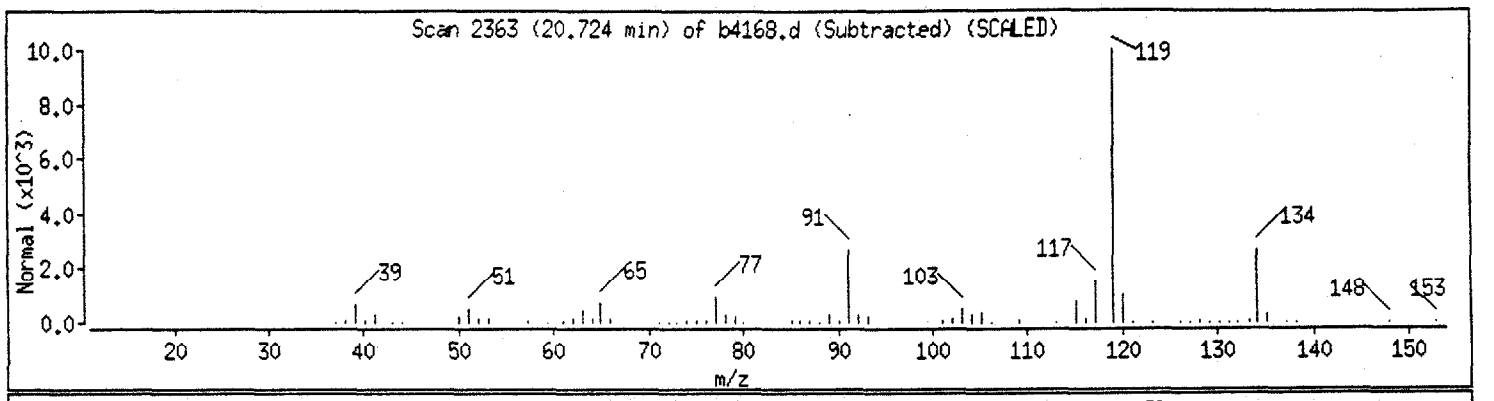


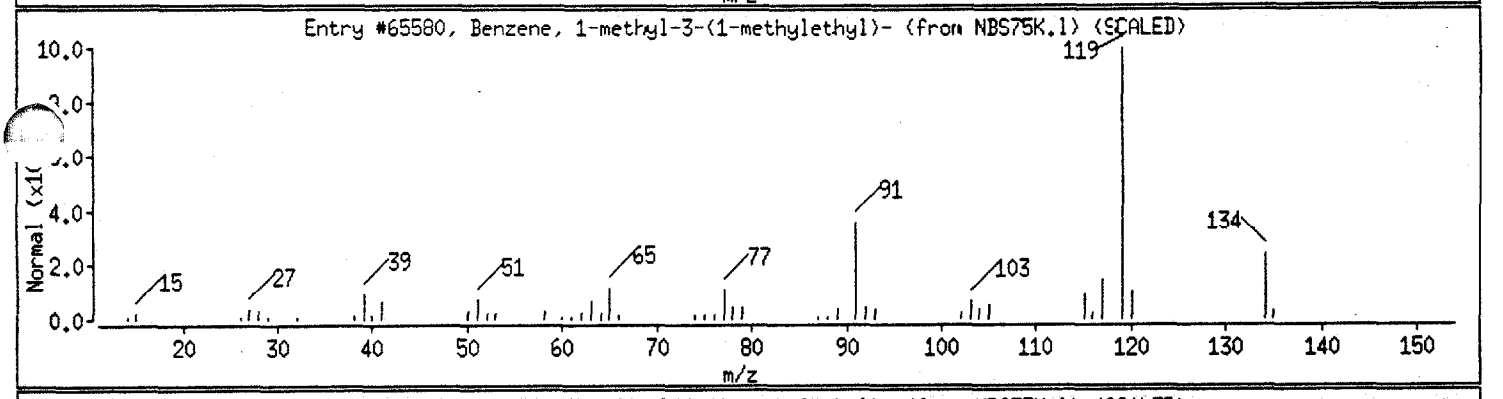


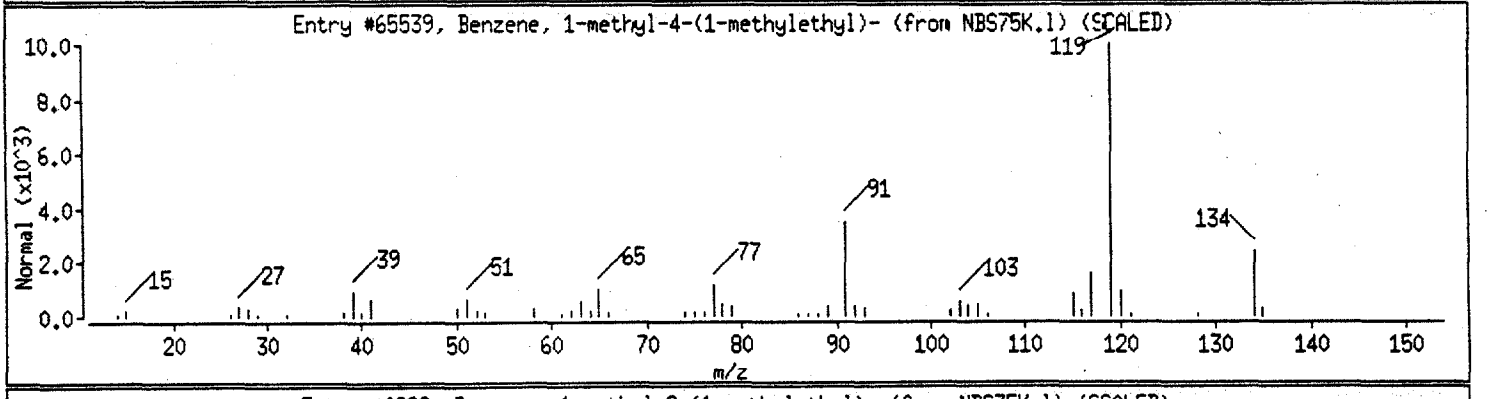
Data File: /chem/aux/msb.i/b062894.b/b4168.d

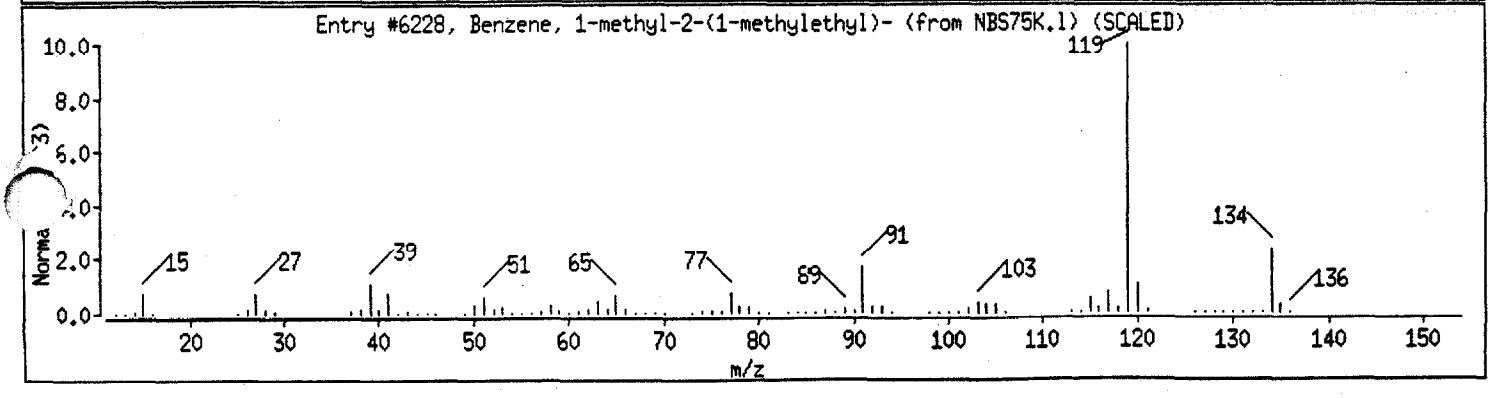
Date : 28-JUN-94 17:20
Instrument : msb.i
Sample ID :
Column phase : J&W DB_624 Column diameter : 0.53
Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NBS75K.l	65580	95
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NBS75K.l	65539	95
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NBS75K.l	6228	94





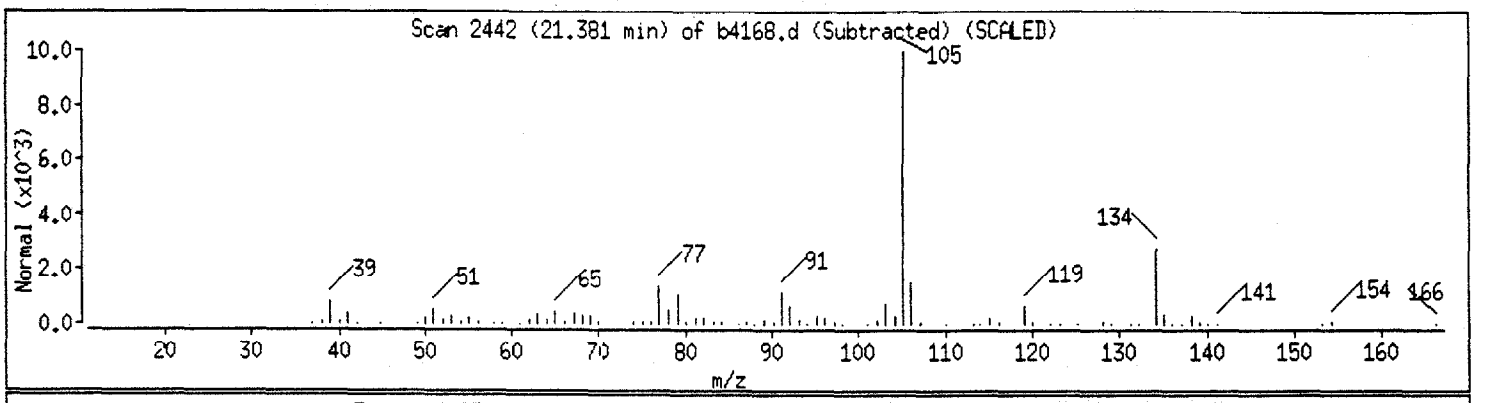


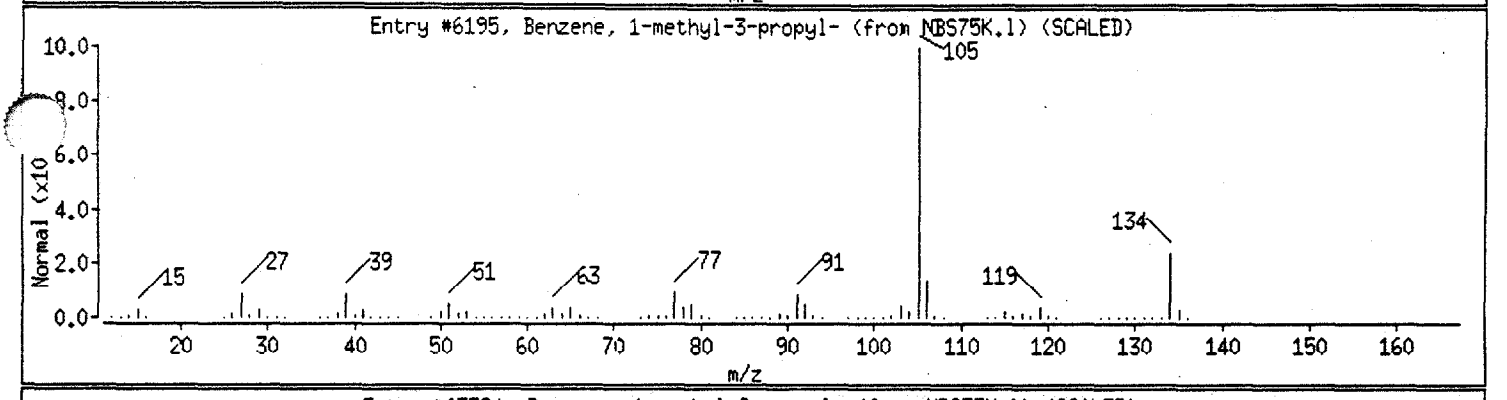


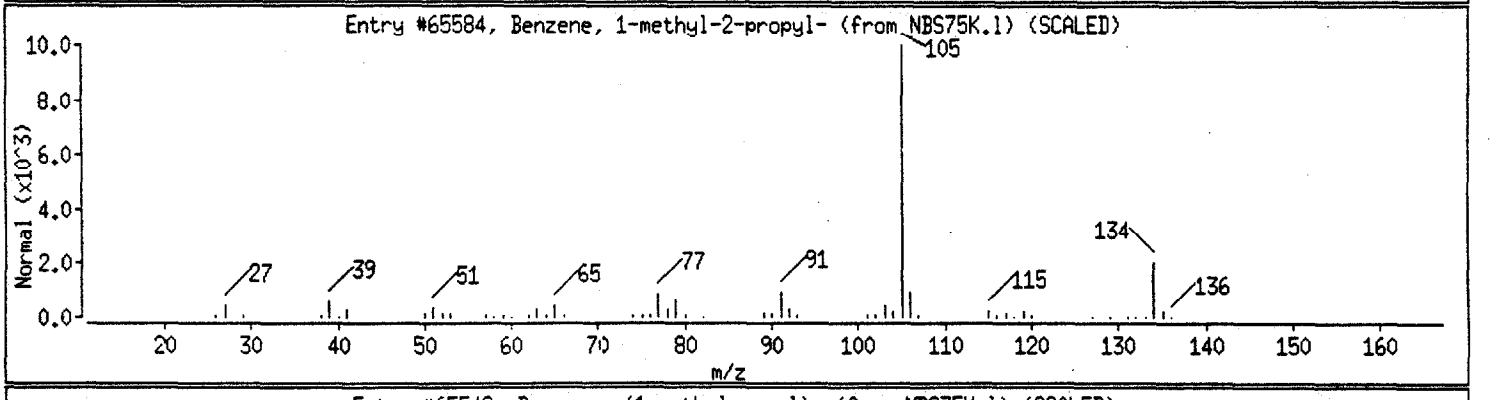
Data File: /chem/aux/msb.i/b062894.b/b4168.d

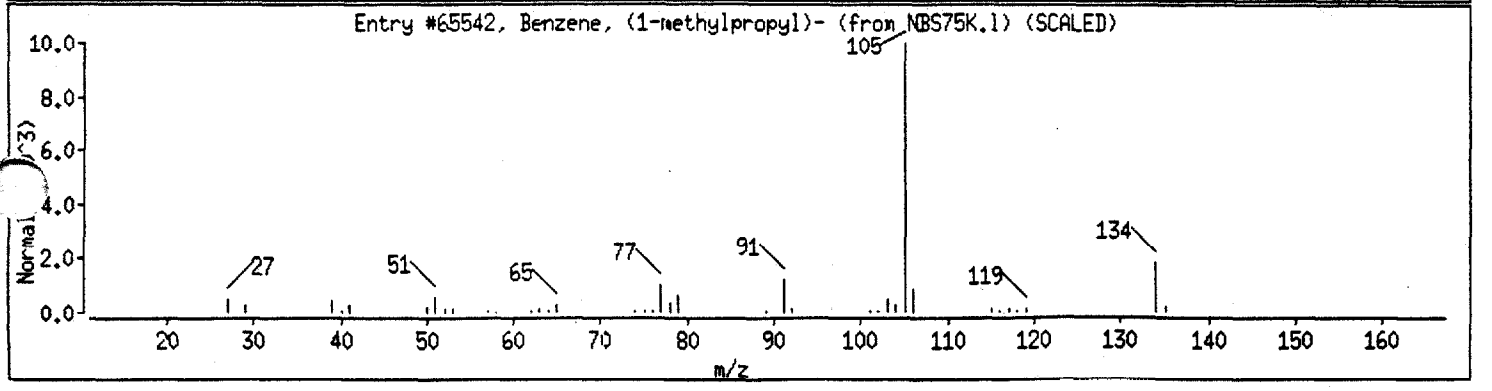
Date : 28-JUN-94 17:20
Instrument : msb.i
Sample ID :
Column phase : J&W DB_624 Column diameter : 0.53
Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-methyl-3-propyl-	1074-43-7	NBS75K.l	6195	95
Benzene, 1-methyl-2-propyl-	1074-17-5	NBS75K.l	65584	87
Benzene, (1-methylpropyl)-	135-98-8	NBS75K.l	65542	86



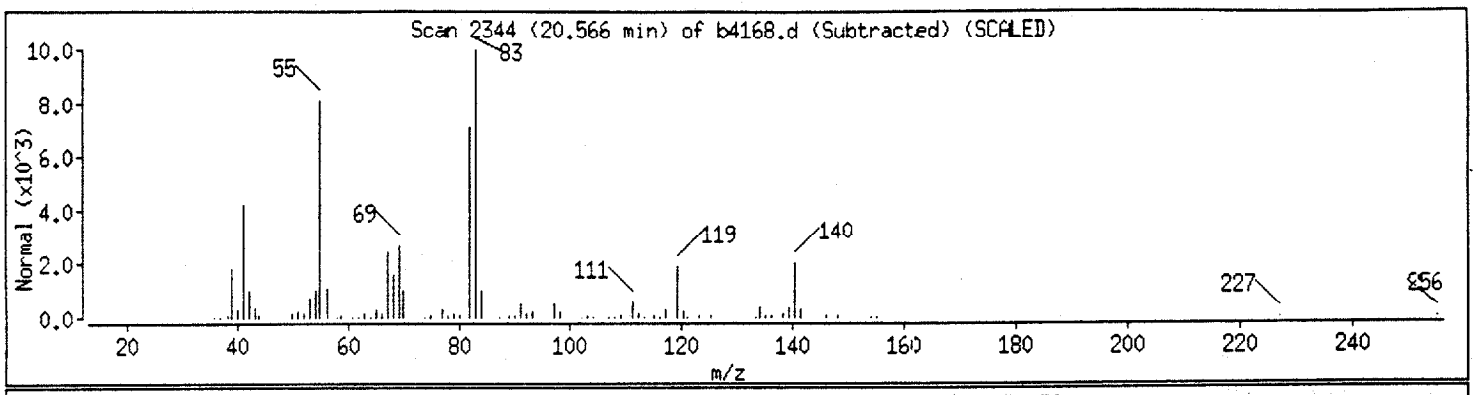


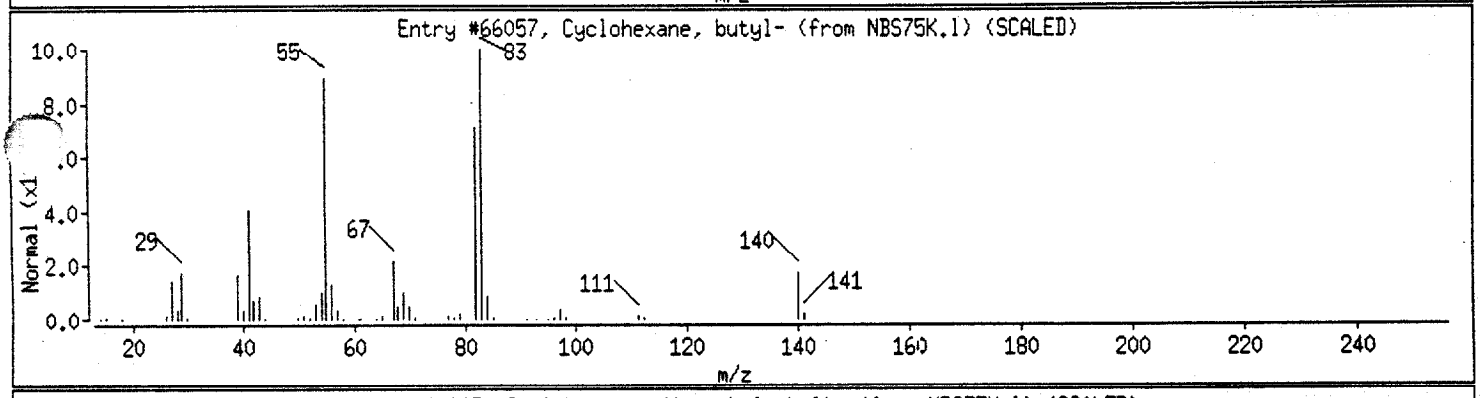


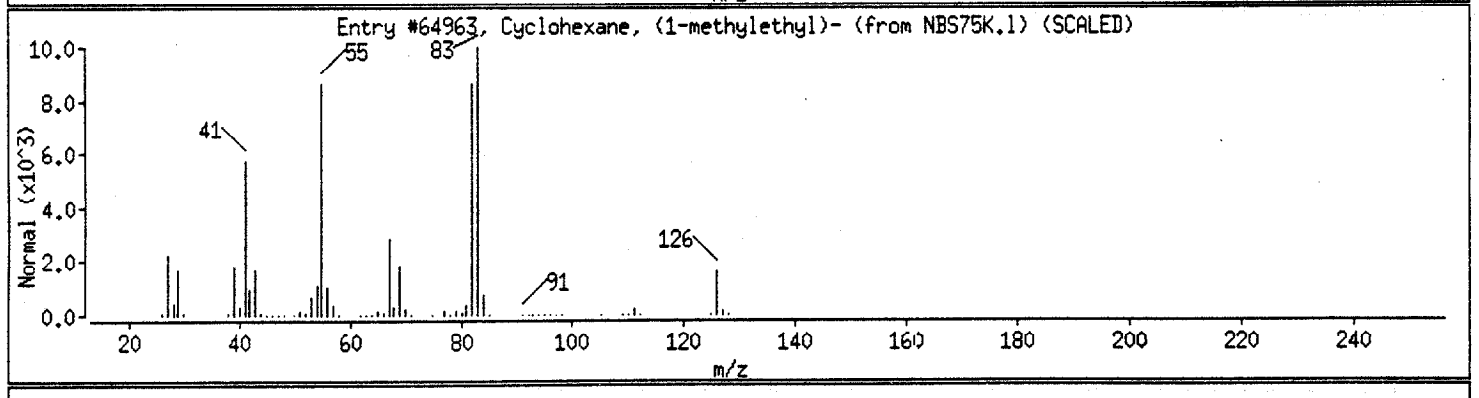


Data File: /chem/aux/msb.i/b062894.b/b4168.d
Date : 28-JUN-94 17:20
Instrument : msb.i
Sample ID :
Column phase : J&W DB_624 Column diameter : 0.53
Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclohexane, butyl-	1678-93-9	NBS75K.1	66057	90
Cyclohexane, (1-methylethyl)-	696-29-7	NBS75K.1	64963	64

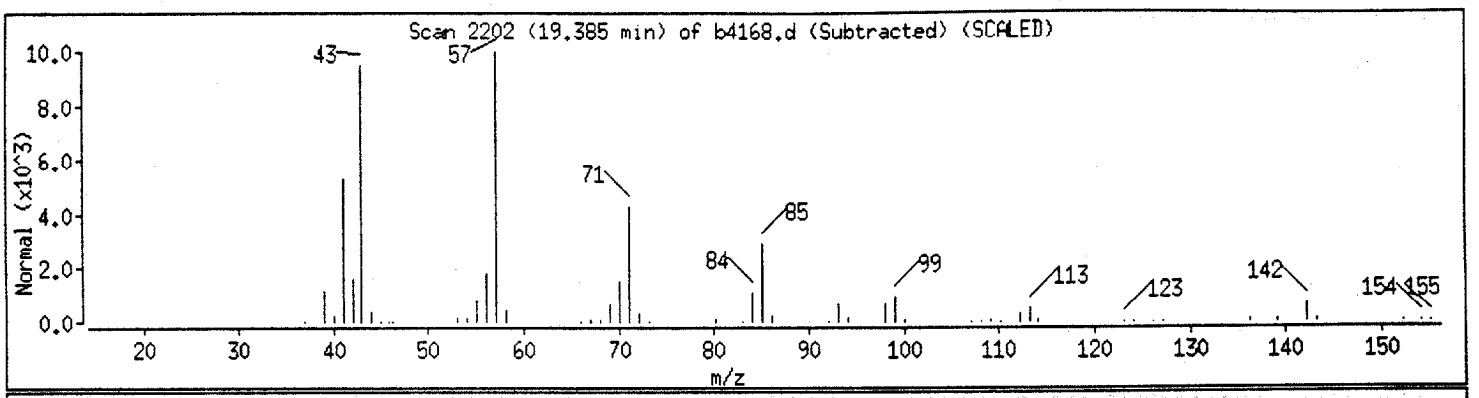


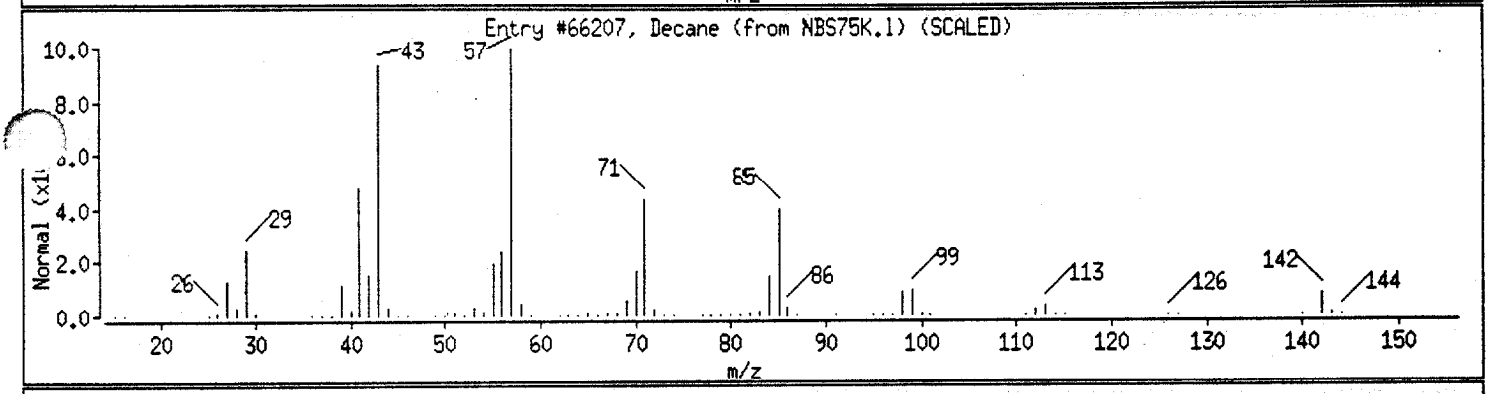




Data File: /chem/aux/msb.i/b062894.b/b4168.d
Date : 28-JUN-94 17:20
Instrument : msb.i
Sample ID :
Column phase : J&W DB_624 Column diameter : 0.53
Volume Injected (uL) : 0.0

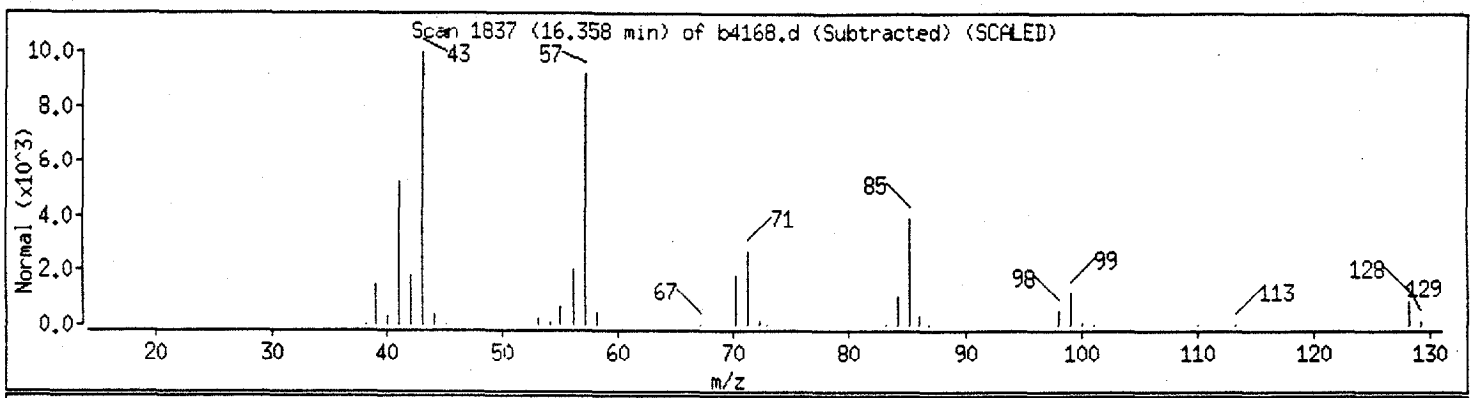
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Decane	124-18-5	NBS75K.1	66207	96

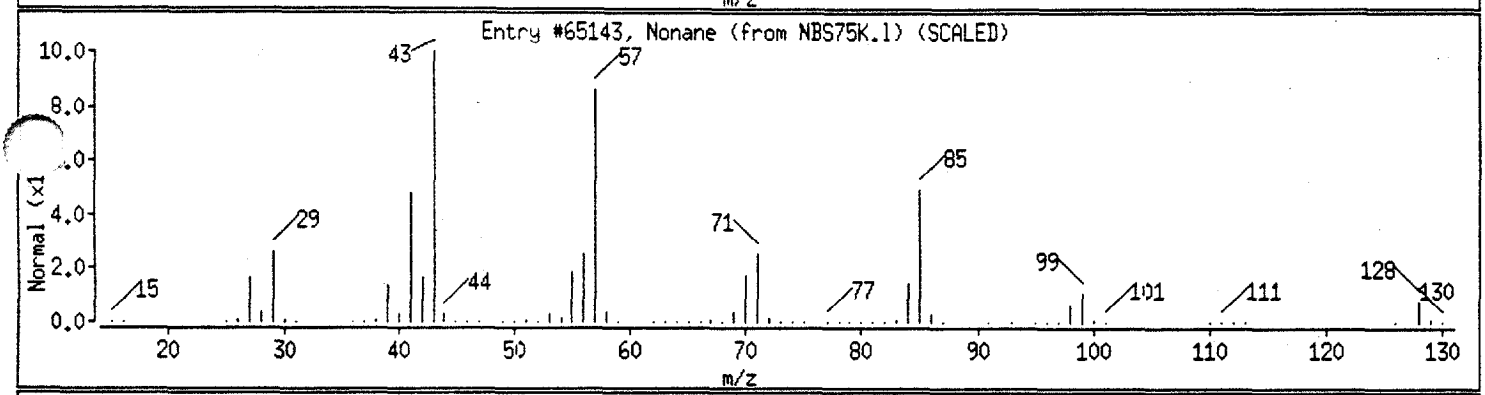




Data File: /chem/aux/msb.i/b062894.b/b4168.d
Date : 28-JUN-94 17:20
Instrument : msb.i
Sample ID :
Column phase : J&W DB_624 Column diameter : 0.53
Volume Injected (uL) : 0.0

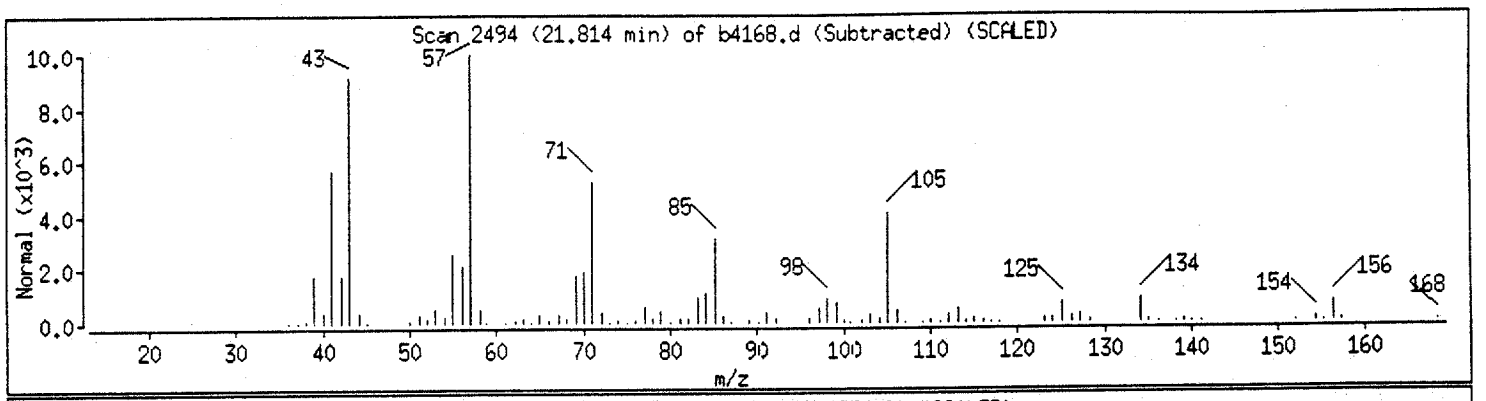
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Nonane	111-84-2	NBS75K.l	65143	97

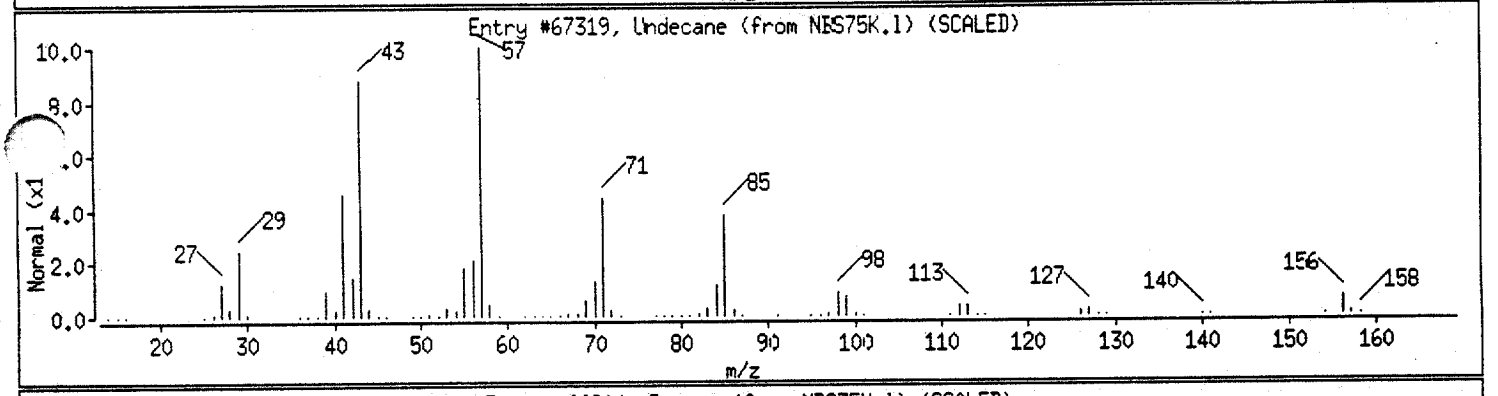


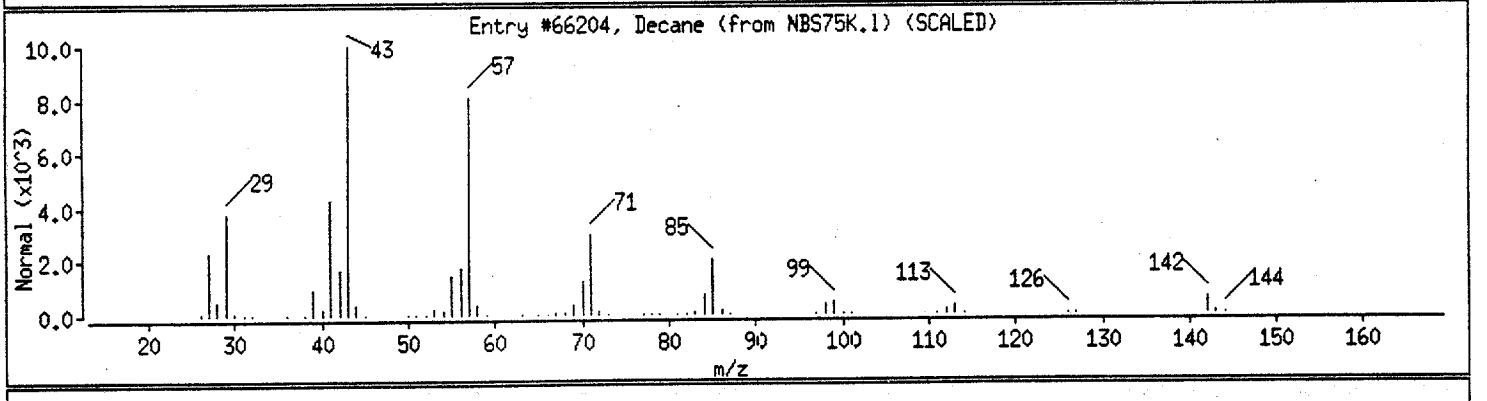


Data File: /chem/aux/msb.i/b062894.b/b4168.d
Date : 28-JUN-94 17:20
Instrument : msb.i
Sample ID :
Column phase : J&W DB_624 Column diameter : 0.53
Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Undecane	1120-21-4	NBS75K.1	67319	94
Decane	124-18-5	NBS75K.1	66204	86



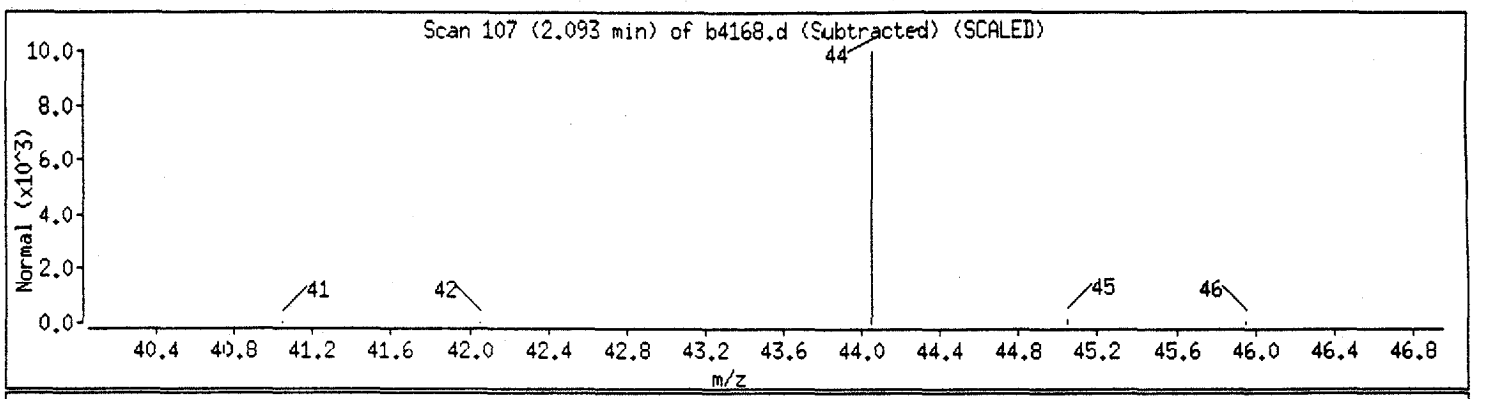




Data File: /chem/aux/msb.i/b062894.b/b4168.d

Date : 28-JUN-94 17:20
Instrument : msb.i
Sample ID :
Column phase : J&W DB_624 Column diameter : 0.53
Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C6618

Lab Name: ASC Contract: NESA

Lab Code: — Case No.: — SAS No.: — SDG No.: C6617

Matrix: (soil/water) Soil Lab Sample ID: JM9435

Sample wt/vol: 5.30 (g/mL) g Lab File ID: C8153

Level: (low/med) low Date Received: 062394

% Moisture: not dec. 42.7 Date Analyzed: 062794

GC Column: DB624 ID: .53 (mm) Dilution Factor: 1

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	11.1	U
74-83-9	Bromomethane		
75-01-4	Vinyl Chloride		
75-00-3	Chloroethane		
75-09-2	Methylene Chloride	442	BJ
67-64-1	Acetone	119	B
75-15-0	Carbon Disulfide	11.1	U
75-35-4	1,1-Dichloroethene		
75-34-3	1,1-Dichloroethane		
540-59-0	1,2-Dichloroethene (total)		
67-66-3	Chloroform		
107-06-2	1,2-Dichloroethane		
78-93-3	2-Butanone	22.1	
71-55-6	1,1,1-Trichloroethane	11.1	
56-23-5	Carbon Tetrachloride		
75-27-4	Bromodichloromethane		
78-87-5	1,2-Dichloropropane		
10061-01-5	cis-1,3-Dichloropropene		
79-01-6	Trichloroethene		
124-48-1	Dibromochloromethane		
79-00-5	1,1,2-Trichloroethane		
71-43-2	Benzene		
10061-02-6	trans-1,3-Dichloropropene		
75-25-2	Bromoform		
108-10-1	4-Methyl-2-Pentanone	22.1	
591-78-6	2-Hexanone	11.1	
127-18-4	Tetrachloroethene		
79-34-5	1,1,2,2-Tetrachloroethane		
108-88-3	Toluene		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
100-42-5	Styrene		
1330-20-7	Xylene (total)		

EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLU18

Lab Name: ASC Contract: NCSA

Lab Code: — Case No.: — SAS No.: — SDG No.: CLU17

Matrix: (soil/water) soil Lab Sample ID: JnA435

Sample wt/vol: 5.30 (g/mL) g Lab File ID: C8153

Level: (low/med) LOW Date Received: 062394

% Moisture: not dec. ~~AA~~ 42.7 Date Analyzed: 062794

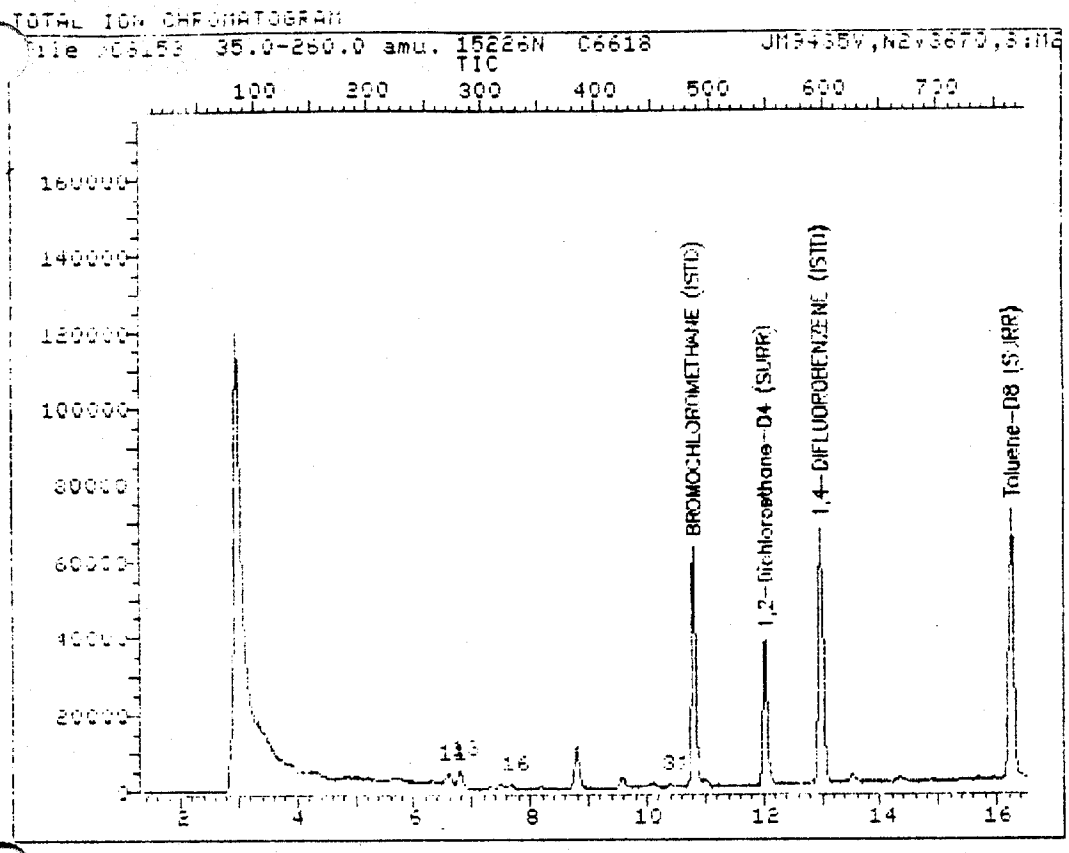
GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1

Soil Extract Volume: 2000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 104767	2-Ethyl-1-Hexanol	24.88	~~0.30~~ 30	J
2.	Unknown	27.11	~~0.13~~ 13	J
3.	Unknown	26.39	~~0.11~~ 11	J
4. 124185	Decane	23.07	~~0.06~~ 6.0	J
5. 99865	Alpha-Terpenene	24.08	~~0.05~~ 5.0	J
6.	Unknown	26.95	~~0.04~~ 4.0	J
7. 471841	Alpha-Fenchene	22.42	~~0.03~~ 3.0	J
8. 111842	Nonane	20.25	~~0.03~~ 3.0	J
9.	Unknown	21.60	~~0.03~~ 3.0	J
10.				
11.				
12.	1,1,2-Trichlorotrifluoroethane	6.60	6.18	X
13.	1,2,4-Trimethylbenzene	23.79	5.37	X
14.	4-Isopropyltoluene	24.43	4.52	X
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

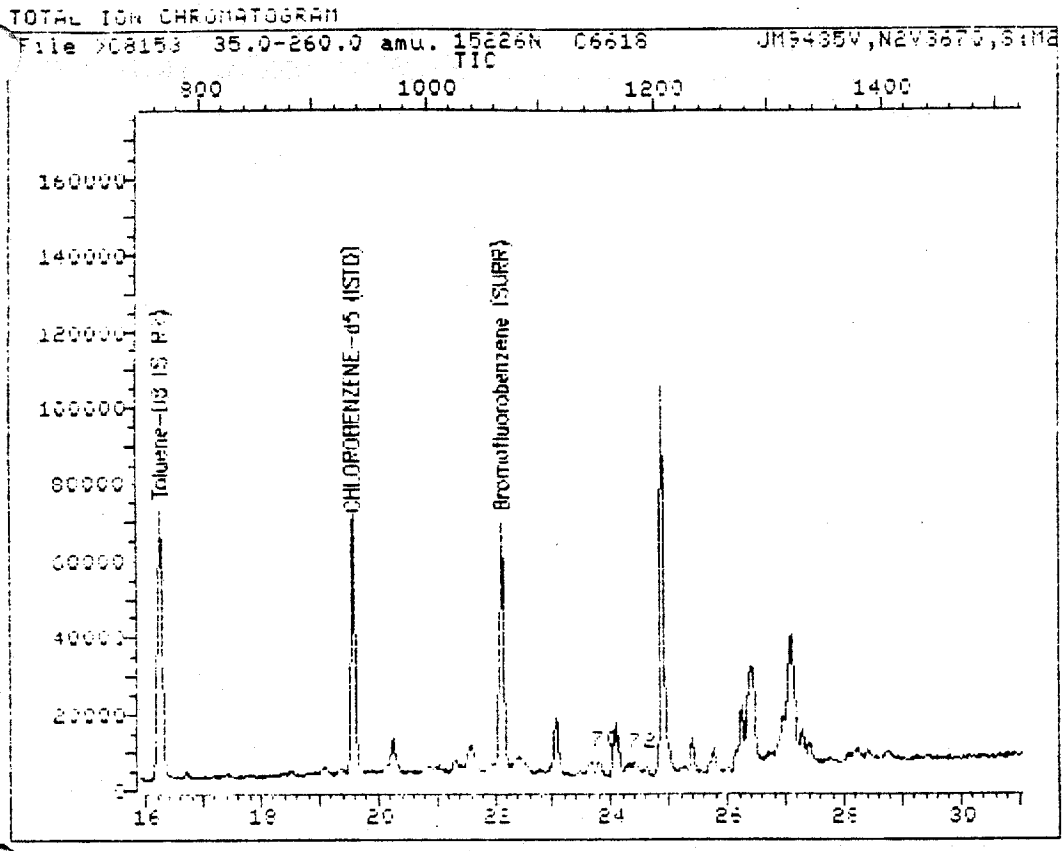


C6618

Data File: >C8153::D5 Quant Output File: ^C8153::QT
Name: 15226N C6618
Misc: JM9435V,N2V3670,S:M2,5.30,5:1,

Id File: IC627A::D4
Title: MSD-C DB624 0.53mmX75m VOLATILE GC/MS
Last Calibration: 940627 11:14

Operator ID: USERTSC
Quant Time: 940627 18:46
Injected at: 940627 18:10



Data File: >C8153::D5 Quant Output File: ^C8153::QT
Name: 15226N C6618
Misc: JM9435V,N2V3670,S:M2,5.30,5:1,

Id File: IC627A::D4
Title: MSD-C DB624 0.53mmX75m VOLATILE GC/MS
Last Calibration: 940627 11:14

Operator ID: USERTSC
Quant Time: 940627 18:46
Injected at: 940627 18:10

QUANT REPORT

Operator ID: USERTSC
Output File: ^C8153::QT
Data File: >C8153::D5
Name: 15226N C6618
Misc: JM9435V,N2V3670,S:M2,5.30,5:1,

Quant Rev: 7
Quant Time: 940627 18:46
Injected at: 940627 18:10
Dilution Factor: 1.00000

2.26 Dry wt.

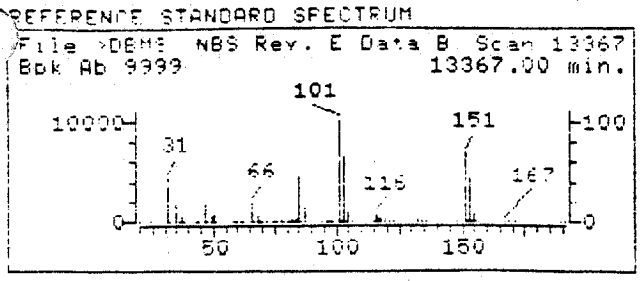
ID File: IC627A::D4
Title: MSD-C DB624 0.53mmX75m VOLATILE GC/MS
Last Calibration: 940627 11:14

TJC 7594

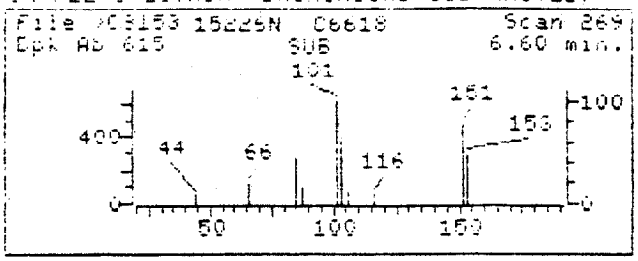
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (ISTD)	10.81	128.0	45565	50.00	ug/l	86
11)	1,1,2-Trichlorotrifluoroethane	6.60	101.0	7053	2.79	ug/l	86
13)	Acetone	6.79	43.0	21992	53.75	ug/l	81
16)	Methylene chloride	7.67	84.0	2372	2.00	ug/l	90
26)	1,2-Dichloroethane-D4 (SURR)	12.04	65.0	70150	58.47	ug/l	92
29)	*1,4-DIFLUOROBENZENE (ISTD)	12.98	114.0	161609	50.00	ug/l	93
31)	Methyl ethyl ketone	10.40	72.0	320	~~2.42~~	~~ug/l~~	70
48)	*CHLOROBENZENE-d5 (ISTD)	19.57	117.0	109705	50.00	ug/l	93
49)	Toluene-D8 (SURR)	16.25	98.0	139223	63.69	ug/l out	91
60)	Bromofluorobenzene (SURR)	22.13	95.0	58322	43.66	ug/l	93
70)	1,2,4-Trimethylbenzene	23.79	105.0	6707	2.43	ug/l	74
[illegible])	4-Isopropyltoluene	24.43	119.0	7532	2.04	ug/l	89

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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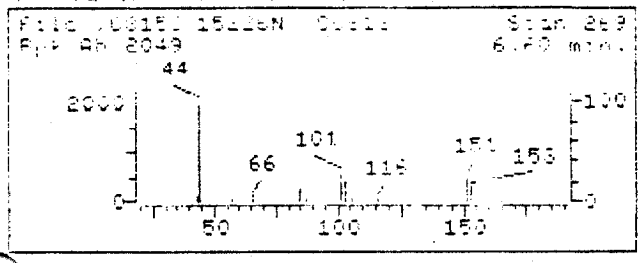
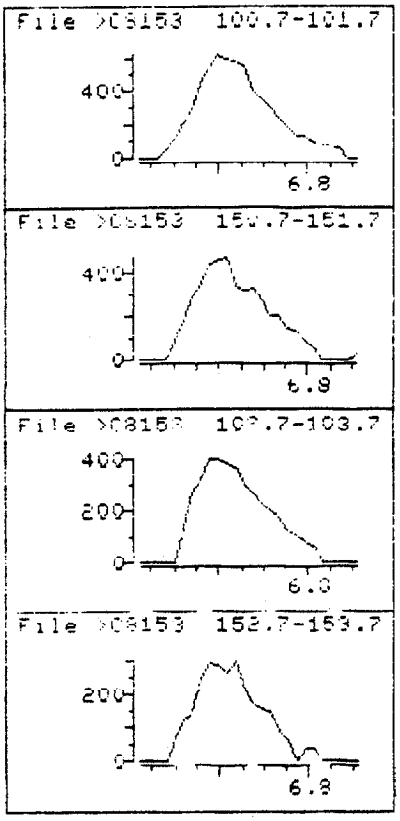
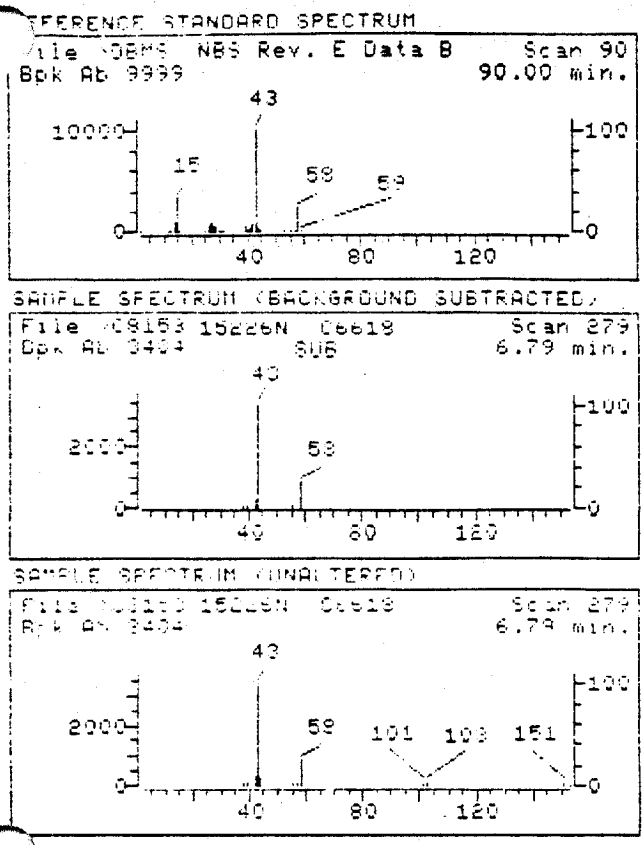
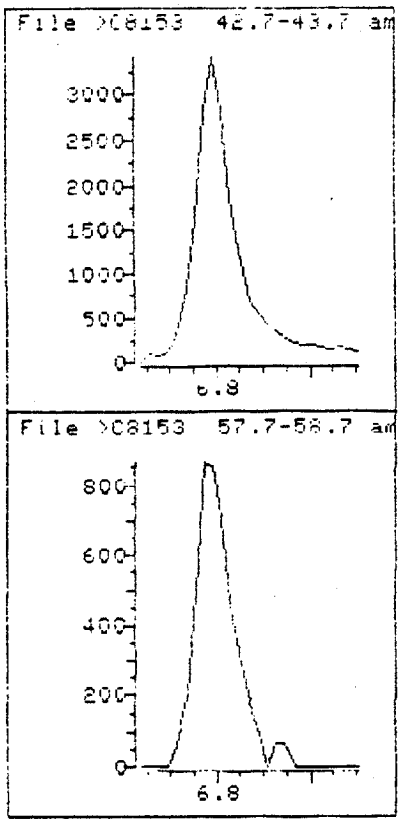




Data File: >C8153::D5 Quant Output File: ^C8153::QT
Name: 15226N C6618
Misc: JM9435U,NOU3670,S:M2,5.30,5:1,
Quant Time: 940627 18:46 Quant ID File: IC627A::D4
Injected at: 940627 18:10 Last Calibration: 940627 11:14

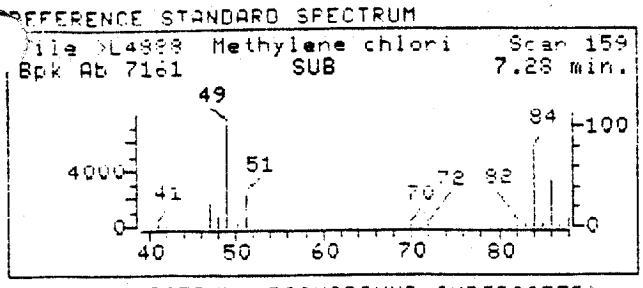
Compound No: 11
Compound Name: 1,1,2-Trichlorotrifluoroethane
Scan Number: 269
Retention Time: 6.60 min.
Quant Ion: 101.0
Area: 7053
Concentration: 2.79 ug/l
q-value: 86

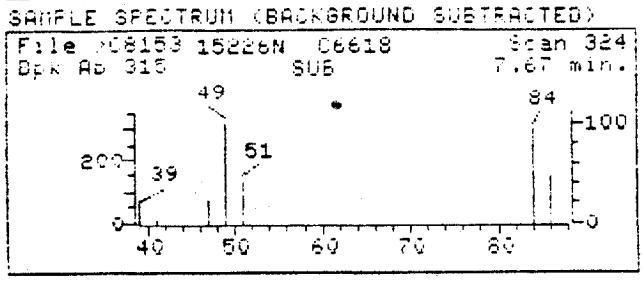


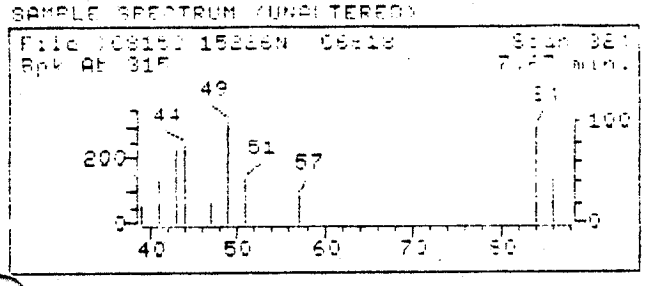


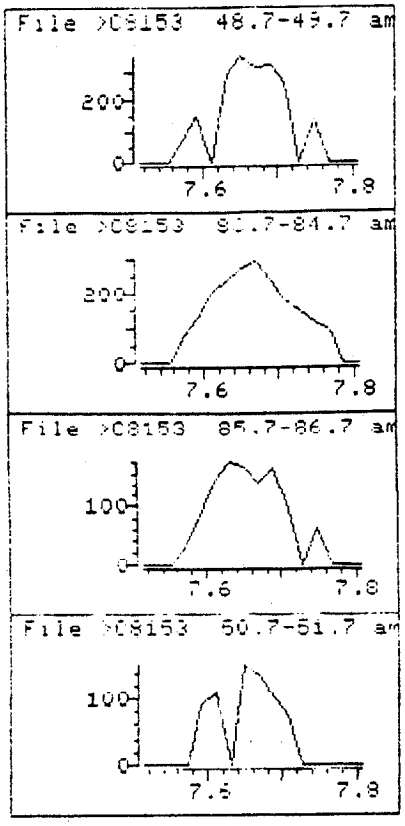
Data File: >C8153::D5 Quant Output File: ^C8153::QT
Name: 15226N C6618
Misc: JM9435U,N2U3670,S:M2,5.30,5:1,
Quant Time: 940627 18:46 Quant ID File: IC627A::D4
Injected at: 940627 18:10 Last Calibration: 940627 11:14

Compound No: 13
Compound Name: Acetone
Scan Number: 279
Retention Time: 6.79 min.
Quant Ion: 43.0
Area: 21992
Concentration: 53.75 ug/l
q-value: 81





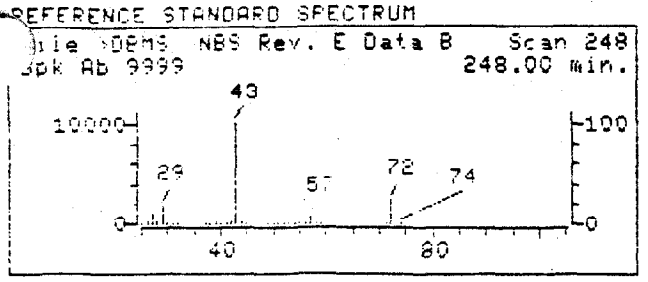




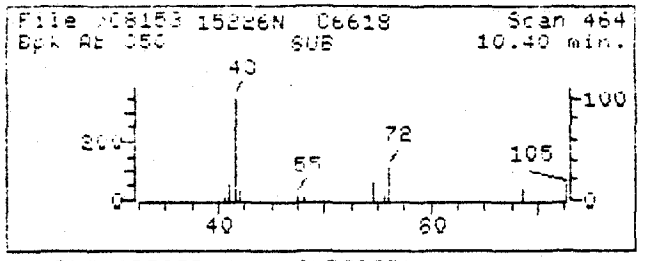
Data File: >C8153::DF Quant Output File: ^C8153::QT
Name: 15226N C6618
Misc: JM9435U,N2U3670,S:M2,5.30,5:1,
Quant Time: 940627 18:46 Quant ID File: IC627A::D4
Injected at: 940627 18:10 Last Calibration: 940627 11:14

Compound No: 16
Compound Name: Methylene chloride
Scan Number: 324
Retention Time: 7.67 min.
Quant Ion: 84.0
Area: 2372
Concentration: 2.00 ug/l
q-value: 90

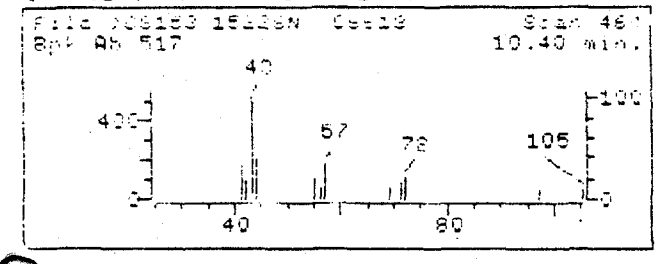
REFERENCE STANDARD SPECTRUM

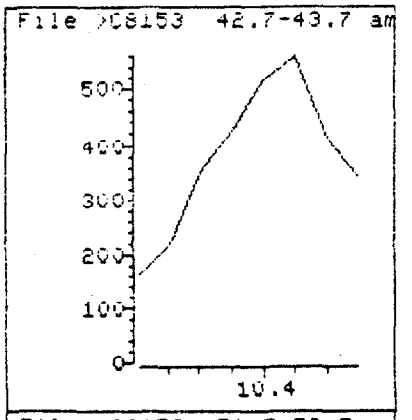


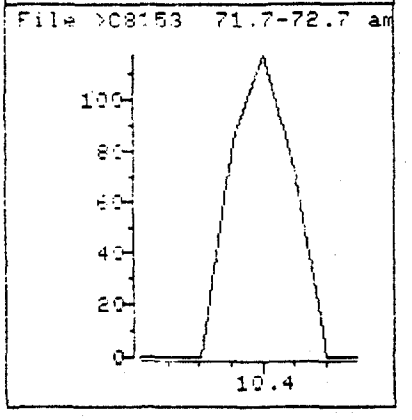
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



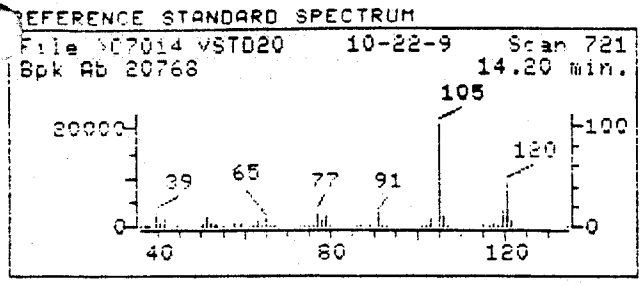




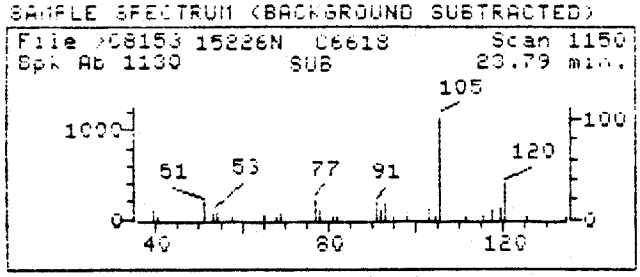
Data File: >C8153::D5 Quant Output File: ^C8153::QT
Name: 15226N C6618
Misc: JM9435U,N2U3670,S:M2,5.30,5:1,
Quant Time: 940627 18:46 Quant ID File: IC627A::D4
Injected at: 940627 18:10 Last Calibration: 940627 11:14

Compound No: 31
Compound Name: Methyl ethyl ketone
Scan Number: 464
Retention Time: 10.40 min.
Quant Ion: 72.0
Area: 300
Concentration: 2.42 ug/l
q-value: 70

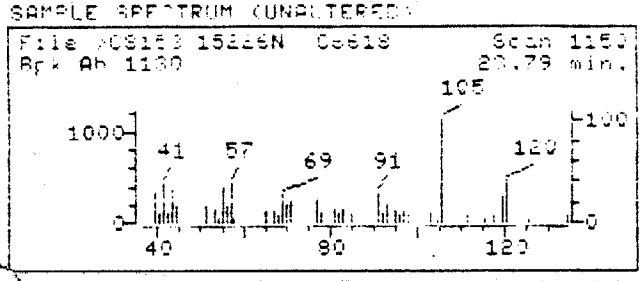
REFERENCE STANDARD SPECTRUM

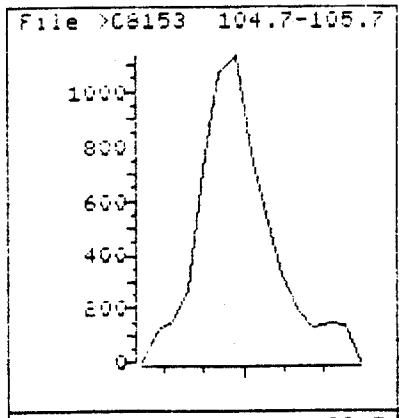


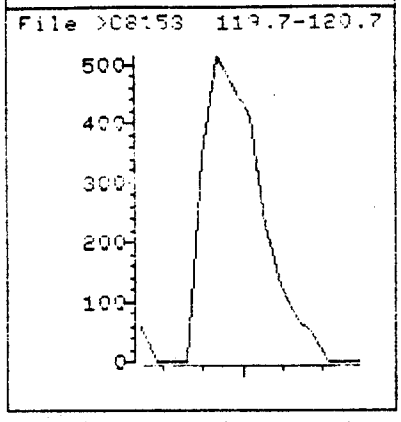
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

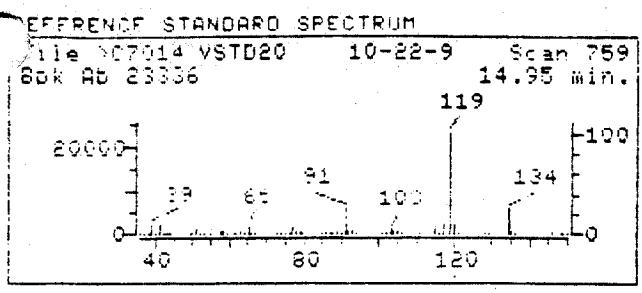


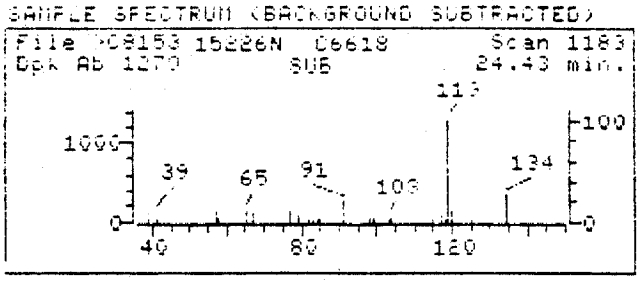


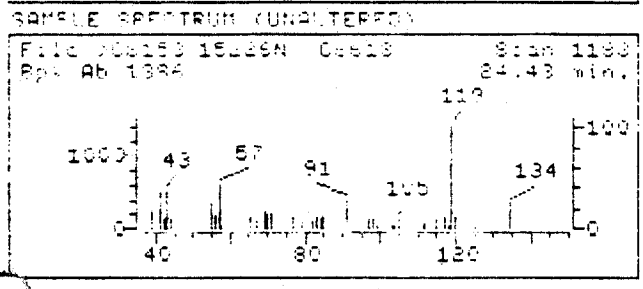


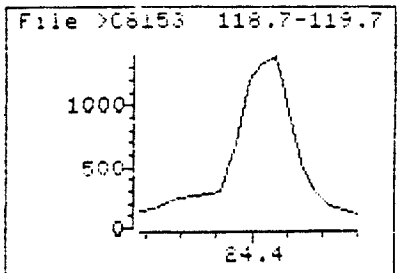
Data File: >C8153::D5 Quant Output File: ^C8153::QT
Name: 15226N C6618
Misc: JM9435U,N2U3670,S:M2,5.30,5:1,
Quant Time: 940627 18:46 Quant ID File: IC627A::D4
Injected at: 940627 18:10 Last Calibration: 940627 11:14

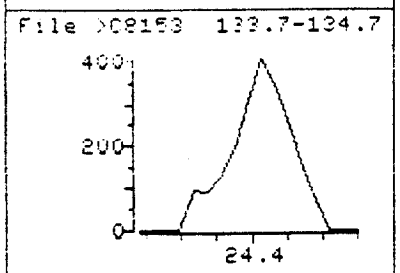
Compound No: 70
Compound Name: 1,2,4-Trimethylbenzene
Scan Number: 1150
Retention Time: 23.79 min.
Quant Ion: 105.0
Area: 6707
Concentration: 2.43 ug/l
q-value: 74

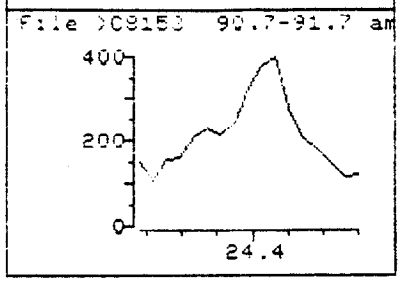






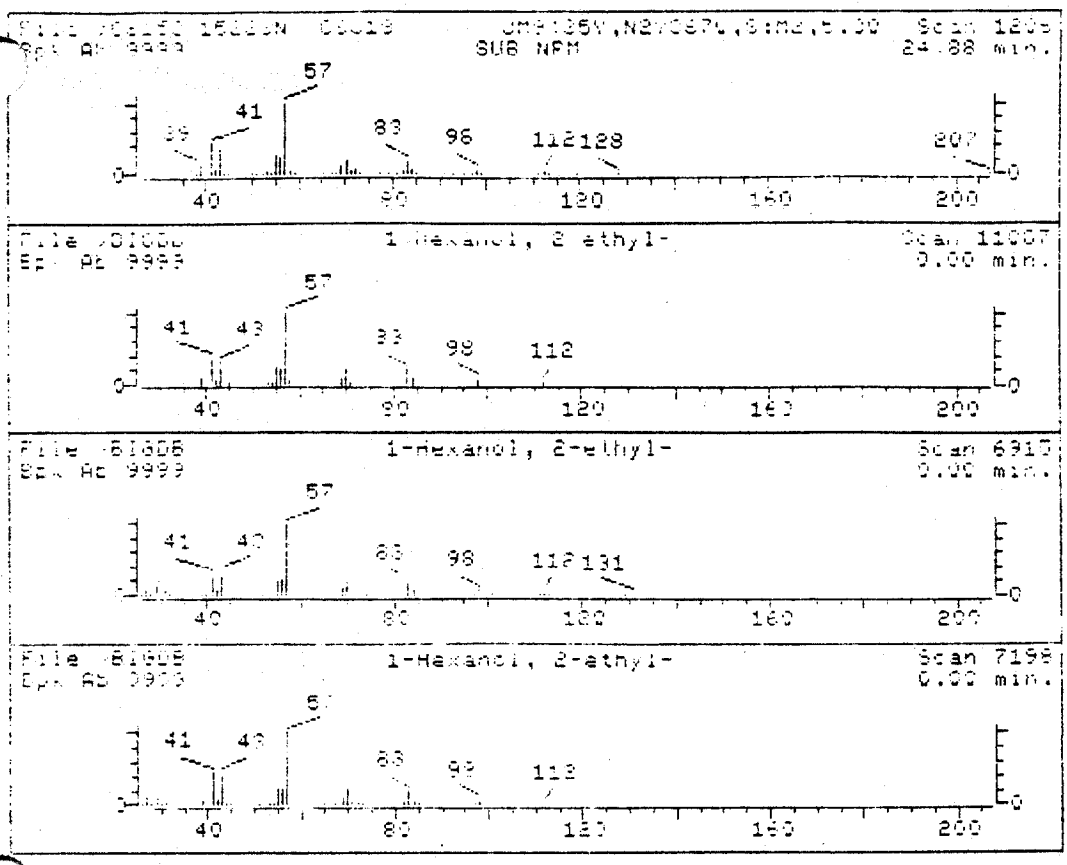






Data File: >C8153::D5 Quant Output File: ^C8153::QT
Name: 15226N C6618
Misc: JM9435U,N2U3670,S:M2,5.30,5:1,
Quant Time: 940627 18:46 Quant ID File: IC627A::D4
Injected at: 940627 18:10 Last Calibration: 940627 11:14

Compound No: 72
Compound Name: 4-Isopropyltoluene
Scan Number: 1183
Retention Time: 24.43 min.
Quant Ion: 119.0
Area: 7532
Concentration: 2.04 ug/l
q-value: 89



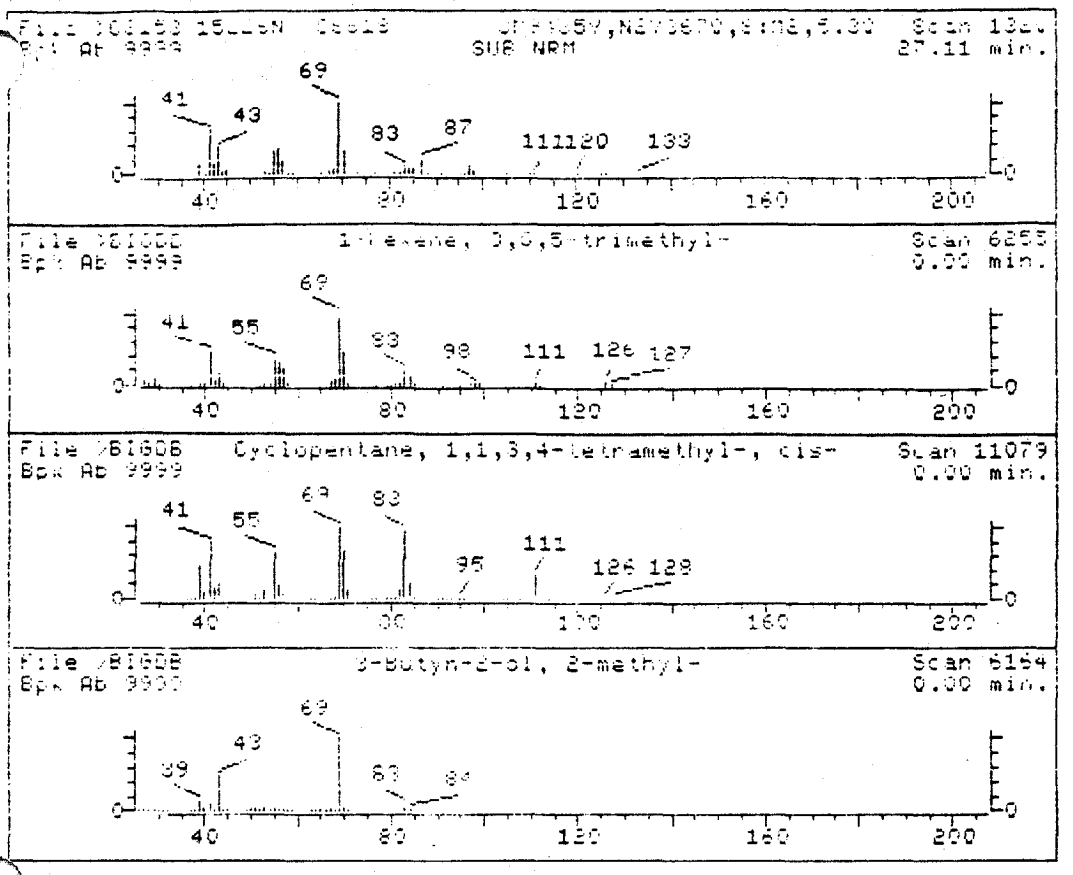
Data File: >C8153::D5
Name: 15226N C/618
Misc Data: JM9435U,N2U3670,S:M2,5.30,S:1,
RT (min): 24.88
Scan: 1206
Area: 502517 Rank: 2
Semi-quantitative Conc (uncorrected): 74.37 ug/l
Semi-quantitative Conc (corrected): 14.03 ug/kg
Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.59 minutes

.005 .42670 = .030

1. 1-Hexanol, 2-ethyl- 130 C8H18O
2. 1-Hexanol, 2-ethyl- 130 C8H18O
3. 1-Hexanol, 2-ethyl- 130 C8H18O

Sample file: >C8153 Spectrum #: 1206
Search speed: 2 Tilting option: S No. of ion ranges searched: 47

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
89	104767	11087	"BIGDB	80	4	0	0	99	2	66	72
86	104767	6915	"BIGDB	76	10	1	0	94	5	60	37
84	104767	7198	"BIGDB	74	18	0	0	81	7	55	65

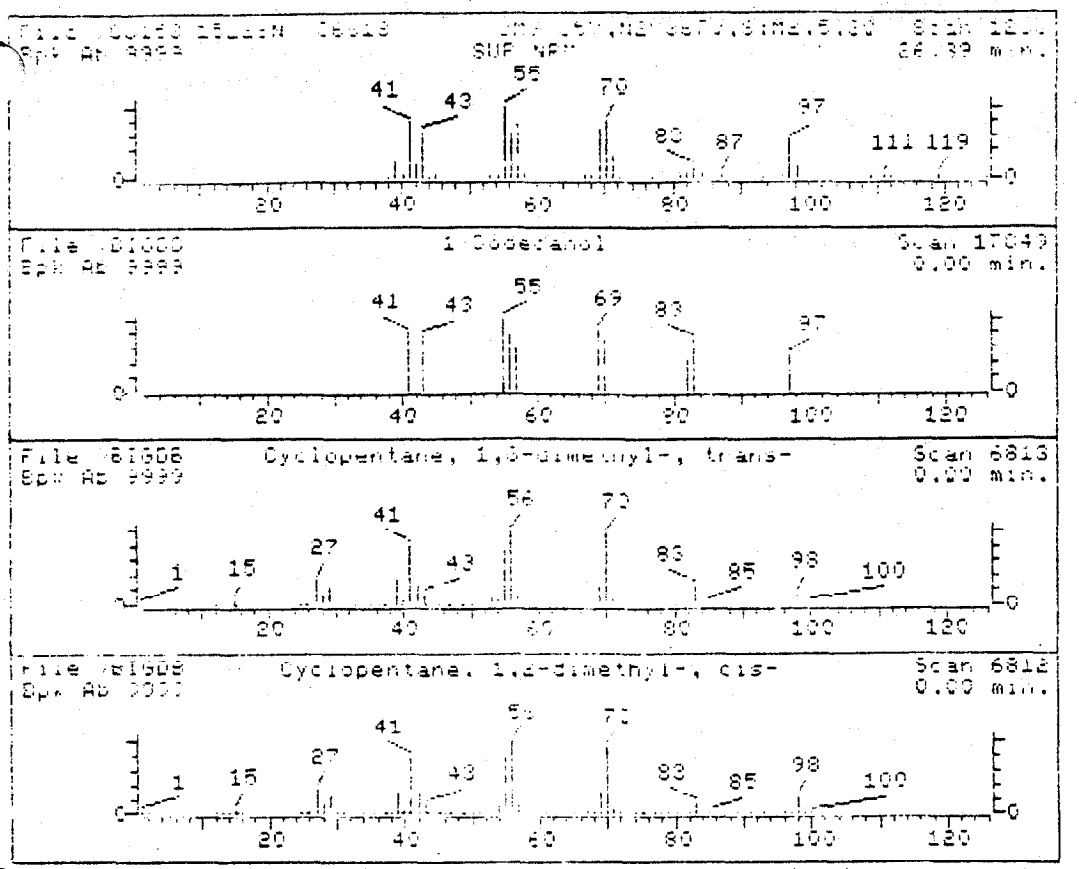


Data File: >C8153::DF
Name: 15226N C6618
Misc Data: JM9435V,N2V3670,S:M2,5.30,F:1,
RT (min): 27.11
Scan: 1320
Area: 211164 Rank: 5
Semi-quantitative Conc (uncorrected): 31.25 ug/l
Semi-quantitative Conc (corrected): 5.90 ug/kg .005 x .426 = .013
Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.59 minutes

1. 1-Hexene, 3,5,5-trimethyl- 126 C9H18
2. Cyclopentane, 1,1,3,4-tetramethyl-, cis- 126 C9H18
3. 3-Butyn-2-ol, 2-methyl- 84 C5H8O

Sample file: >C8153 Spectrum #: 1320
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IU
35	4316658	6255	"BIGDB	45	48	2	0	70	28	14	12



Data File: >C8153::DF
Name: 19226N C6613
Misc Data: JM9435U,N2U3570,S:M2,5.30,5:1,
RT (min): 26.39
Scan: 1283
Area: 191135 Rank: 7
Semi-quantitative Conc (uncorrected): 28.29 ug/l
Semi-quantitative Conc (corrected): 5.34 ug/kg .005 x .126 = .011
Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.59 minutes

1. 1-Dodecanol 186 C12H26O
2. Cyclopentane, 1,3-dimethyl-, trans- 98 C7H14
3. Cyclopentane, 1,2-dimethyl-, cis- 98 C7H14

Sample file: >C8153 Spectrum #: 1283
Search speed: 2 Tilting option: S No. of ion ranges searched: 47

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
42	112538	17849	"BIGDB	58	25	2	0	79	29	14	19
40*	1759586	6813	"BIGDB	40	62	0	0	58	50	12	41