START 9613478.1199

3000-08021-K25-030

0045338

January 4, 1991

JAN 1991 RECEIVED J.H. KESSNER

SEP 1996 RECEIVED EDMC

Ms. Joan Kessner
Westinghouse Hanford Company
Office of Sample Management
2355 Stevens Drive
Richland, Washington 99352

Dear Ms Kessner:

Additional Analytical Results Package on Projects 90-027, Tank Samples

Attached are the additional analytical results on sample from Project 90-027, Diesel Tank Samples received into the Analytical Chemistry Department (ACD) Laboratories on August 11, 1990. The samples from this project have been reported to OSM prior however, additional ICP metals and PCB analyses were requested. These samples were an oils or organic based matrix and were treated as Special Analytical Services (SAS) samples. SAS implies that there are no national approved sample preparation and analysis procedures for these samples and the laboratory will employ the best available technology to acquire the best quality results. In accordance with agreements between the OSM and K-25 ACD, the protocol shown in Table 1 was utilized in performing these analyses. The sample identification for this project is shown in Table 2. Also attached are the previously reported results from all samples for this project.

The results are reported on ACD's ANALIS report format, per letter dated November 8, 1990. All data quality objectives were satisfied on the project.

ICP (TCLP) Metals

The samples in this project were oils or organic based material, thereby not being applicable to any nationally approved procedures. The samples analyzed for ICP metals, were prepared using Parr Bomb digestion technique. All of the required quality control criteria was applied to samples in the SDG. For this analysis all instrument calibrations (SPCC and CCC) were within acceptance criteria. All internal matrix spike percent recoveries were within acceptance limits. Interference check samples results were within acceptable limits. Replicate analyses were conducted on samples in the SDG and all relative percent deviations were within acceptance limits. All internal controls and check standards run during these analyses were well within the acceptance limits. At present the ACD cannot report the ICP metals blank results through the ANALIS database.

5/30/96 M.H.

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Mercury

The samples were prepared for mercury analysis by Parr Bomb technique and analyzed by EPA-7470. All quality criteria were with acceptance limits.

Semi-Volatiles (BNAs)

This set of samples are oils and as such are not covered by CLP protocol. In order to analyze these samples, they were diluted by a large factor (i.e. 1000). The dilution was followed by direct injection. Therefore, there was no surrogate recoveries nor matrix spikes or method blanks since no extraction or sample concentration was performed. The CRQL limits are not applicable since no extraction was performed. Non-detected target compounds are marked with "NA" for the quantitation amount in the report, however, detection limits under the analytical conditions approach several million ug/Kg.

Hits are calculated from the continuing calibration response factors and multiplied by the dilution factor and finally reported as the resultant product in the report.

All DFTPP tune criteria were within acceptance criteria. All "CCC" and "SPCC" components met acceptance criteria for both the initial and continuing calibration check sample for water matrixes. All internal standard areas met water matrix acceptance criteria.

Volatiles (VOAs)

This set of samples are oils and as such are not covered by CLP protocol. In order to analyze these samples, they were diluted by a large factor (i.e. 1000). The dilution was followed by direct injection. Therefore, there was no surrogate recoveries nor matrix spikes or method blanks. A water blank was run with these samples. Non-detected target compounds are marked with "the detection limits" for the quantitation amount in the report, however, detection limits under the analytical conditions approach several million ug/Kg.

All BFB tune criteria were within acceptance criteria. All CCC and SPCC components met acceptance criteria for both the initial and continuing calibration check sample. All internal standard areas were within acceptance criteria for a water matrix.

Wet Chemistry (Flash Point)

All instrument calibrations were within acceptance criteria. All internal controls were within criteria.

PCB

All BFB tune criteria were within acceptance criteria. All CCC and SPCC components met acceptance criteria for both the initial and continuing calibration check sample. All internal standard areas were within acceptance criteria for a water matrix.

9613478.0201

I certify that this data package is in compliance with the terms and conditions of the OSM's revised Statement of Work and letter dated November 10, 1990, both technically and for completeness, for other than conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sincerely,

Clarence R. Kirkpatrick
Program Manager
Waste Management Analysis

Roy W. Morrow
Department Manager
Analytical Chemistry Department (K-25)

iii 5/30/96 M.H.

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Table 1. Analytical Protocol used for Project 90-027

Analysis	Protocol
A. Semi-Volatiles	BNA (CLP) protocol
B. Volatiles	VOA (CLP) protocol
C. TCLP Metals	ASTM-D-3761/EPA-6010
D. Mercury	ASTM-D-3761/EPA-7470
E. PCB	EPA-608
F. Flash Point	EPA-1010

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Table 2. Sample Identification in Project 90-027

OSM Sample ID	Lab Sample ID	Lab File ID	Matrix	Comments
3000-0802-1	900816-013	NA	Oil	Sample
3000-0802-3	900816-016	NA	Oil	Sample
3000-0802-4	900816-017	NA	Oil	Sample
325-0802-1	900816-018	NA	Oil	Sample & ICP & PCB
182N-0807-1	900816-019	NA	Oil	Sample
SS27-0806-1	900816-022	NA	Oil	Sample
N-LFT-0807-1	900816-023	NA	Oil	Sample
KWIA-0807-1	900816-024	NA	Oil	Sample & ICP & PCB
KWIB-0807-1	900816-025	NA	Oil	Sample & ICP & PCB
L39-0807-1	900816-026	NA	Oil	Sample & ICP & PCB
6652-P-0807-1	900816-027	NA	Oil	Sample & ICP & PCB

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Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-013 Project: G132 027 Customer Sample ID: 3000-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	75	degrees F	J GOODMAN JR	90-28	13-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

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Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-016 Project: G132 027 Customer Sample ID: 3000-0802-3
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	116	degrees F	J GOODMAN JR	90-29	20-SEP-1990
205109	TP-2051	Archive	REFRIG3	K10004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

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Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-017 Project: G132 027 Customer Sample ID: 3000-0802-4
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	109	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

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Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-018 Project: G132 027 Customer Sample ID: 325-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 12-DEC-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801 TP-0908	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Barium (Parr Bomb)	0.18	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Chromium (Parr Bomb)	39	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Silver (Parr Bomb)	<0.60	ug/g	DR WILSON	01108A	8-NOV-1990
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113-C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 13-DEC-1990

ANALYSIS DATA REPORT

AnaLIS ID: 900816-018
Laboratory: Gas / Liquid Chromatography Laboratory
File ID:
Instrument ID:
Authorized By: D. S. ZINGG

Customer Sample ID: 325-0802-1
Customer: J. KESSNER/R. SHUCK
Sample Matrix: OIL
Requisition Number:
Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
Preparation Procedure Number:
Percent Moisture:
Percent Moisture (decanted):
Associated Blank:
[] : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
Analysis Procedure Number: EPA-608
Dilution Factor: 1.0
Analyst: LC FELLERS
QA File Number: GC 0302

CAS		ug/g	CAS		ug/g
12674-11-2	Aroclor-1016	5U			
11104-28-2	Aroclor-1221	5U			
11141-16-5	Aroclor-1232	5U			
53469-21-9	Aroclor-1242	5U			
12672-29-6	Aroclor-1248	5U			
11097-69-1	Aroclor-1254	5U			
11096-82-5	Aroclor-1260	5U			

Data Reporting Qualifiers:

U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
B - Analyte was found in the reagent blank as well as the sample.
J - Indicates an estimated value.
ND - Not detected.
A - Aldol condensation product.
D - Secondary dilution.
E - Exceeds initial calibration range.

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-019 Project: G132 027 Customer Sample ID: 182N-3-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

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Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-022 Project: G132 027 Customer Sample ID: SS27-0806-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	77	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

9615479.1211

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-023 Project: G132 027 Customer Sample ID: N-LFT-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

9613478.1712

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-024 Project: G132 027 Customer Sample ID: KWIA-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 12-DEC-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801 TP-0908	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Barium (Parr Bomb)	<0.10	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Chromium (Parr Bomb)	51	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Silver (Parr Bomb)	<0.60	ug/g	DR WILSON	01108A	8-NOV-1990
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	82	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 13-DEC-1990

ANALYSIS DATA REPORT

AnaLIS ID: 900816-024
Laboratory: Gas / Liquid Chromatography Laboratory
File ID:
Instrument ID:
Authorized By: D. S. ZINGG

Customer Sample ID: KWIA-0807-1
Customer: J. KESSNER/R. SHUCK
Sample Matrix: OIL
Requisition Number:
Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
Preparation Procedure Number:
Percent Moisture:
Percent Moisture (decanted):
Associated Blank:
[] : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
Analysis Procedure Number: EPA-608
Dilution Factor: 1.0
Analyst: LC FELLERS
QA File Number: GC 0302

CAS		ug/g	CAS		ug/g
12674-11-2	Aroclor-1016	5U			
11104-28-2	Aroclor-1221	5U			
11141-16-5	Aroclor-1232	5U			
53469-21-9	Aroclor-1242	5U			
12672-29-6	Aroclor-1248	5U			
11097-69-1	Aroclor-1254	5U			
11096-82-5	Aroclor-1260	5U			

Data Reporting Qualifiers:

U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
B - Analyte was found in the reagent blank as well as the sample.
J - Indicates an estimated value.
ND - Not detected.
A - Aldol condensation product.
D - Secondary dilution.
E - Exceeds initial calibration range.

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Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-025 Project: G132 027 Customer Sample ID: KWIB-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 12-DEC-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801 TP-0908	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Barium (Parr Bomb)	<0.10	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Chromium (Parr Bomb)	160	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Silver (Parr Bomb)	2.4	ug/g	DR WILSON	01108A	8-NOV-1990
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	81	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 13-DEC-1990

9615978.1165

ANALYSIS DATA REPORT

AnaLIS ID: 900816-025
Laboratory: Gas / Liquid Chromatography Laboratory
File ID:
Instrument ID:
Authorized By: D. S. ZINGG

Customer Sample ID: KWIB-0807-1
Customer: J. KESSNER/R. SHUCK
Sample Matrix: OIL
Requisition Number:
Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
Preparation Procedure Number:
Percent Moisture:
Percent Moisture (decanted):
Associated Blank:
[] : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
Analysis Procedure Number: EPA-608
Dilution Factor: 1.0
Analyst: LC FELLERS
QA File Number: GC 0302

CAS		ug/g	CAS		ug/g
12674-11-2	Aroclor-1016	5U			
11104-28-2	Aroclor-1221	5U			
11141-16-5	Aroclor-1232	5U			
53469-21-9	Aroclor-1242	5U			
12672-29-6	Aroclor-1248	5U			
11097-69-1	Aroclor-1254	5U			
11096-82-5	Aroclor-1260	5U			

Data Reporting Qualifiers:

U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
B - Analyte was found in the reagent blank as well as the sample.
J - Indicates an estimated value.
ND - Not detected.
A - Aldol condensation product.
D - Secondary dilution.
E - Exceeds initial calibration range.

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-026 Project: G132 027 Customer Sample ID: L39-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 12-DEC-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801 TP-0908	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Barium (Parr Bomb)	<0.10	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Chromium (Parr Bomb)	31	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Silver (Parr Bomb)	0.73	ug/g	DR WILSON	01108A	8-NOV-1990
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 13-DEC-1990

9613478.1217

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ANALYSIS DATA REPORT

AnaLIS ID: 900816-026
Laboratory: Gas / Liquid Chromatography Laboratory
File ID:
Instrument ID:
Authorized By: D. S. ZINGG

Customer Sample ID: L39-0807-1
Customer: J. KESSNER/R. SHUCK
Sample Matrix: OIL
Requisition Number:
Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
Preparation Procedure Number:
Percent Moisture:
Percent Moisture (decanted):
Associated Blank:
[] : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
Analysis Procedure Number: EPA-608
Dilution Factor: 1.0
Analyst: LC FELLERS
QA File Number: GC 0302

CAS		ug/g	CAS		ug/g
12674-11-2	Aroclor-1016	5U			
11104-28-2	Aroclor-1221	5U			
11141-16-5	Aroclor-1232	5U			
53469-21-9	Aroclor-1242	5U			
12672-29-6	Aroclor-1248	5U			
11097-69-1	Aroclor-1254	5U			
11096-82-5	Aroclor-1260	5U			

Data Reporting Qualifiers:

U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
B - Analyte was found in the reagent blank as well as the sample.
J - Indicates an estimated value.
ND - Not detected.
A - Aldol condensation product.
D - Secondary dilution.
E - Exceeds initial calibration range.

9015979.1119

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Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-027 Project: G132 027 Customer Sample ID: 6652-P-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 12-DEC-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801 TP-0908	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Barium (Parr Bomb)	<0.10	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Chromium (Parr Bomb)	<1.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0801 TP-0908	Silver (Parr Bomb)	<0.60	ug/g	DR WILSON	01108A	8-NOV-1990
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Spike Recovery Data

Analysis	Amount Spiked	Amount Recovered	Percent Recovered
MERCURY (PARR BOMB)	2.00	2.05	102.50

Program Manager: C. R. Kirkpatrick
Date Approved: 13-DEC-1990

961478.219

67

ANALYSIS DATA REPORT

AnaLIS ID: 900816-027
Laboratory: Gas / Liquid Chromatography Laboratory
File ID:
Instrument ID:
Authorized By: D. S. ZINGG

Customer Sample ID: 6652-P-0807-1
Customer: J. KESSNER/R. SHUCK
Sample Matrix: OIL
Requisition Number:
Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
Preparation Procedure Number:
Percent Moisture:
Percent Moisture (decanted):
Associated Blank:
[] : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
Analysis Procedure Number: EPA-608
Dilution Factor: 1.0
Analyst: LC FELLERS
QA File Number: GC 0302

CAS		ug/g	CAS		ug/g
12674-11-2	Aroclor-1016	5U			
11104-28-2	Aroclor-1221	5U			
11141-16-5	Aroclor-1232	5U			
53469-21-9	Aroclor-1242	5U			
12672-29-6	Aroclor-1248	5U			
11097-69-1	Aroclor-1254	5U			
11096-82-5	Aroclor-1260	5U			

Data Reporting Qualifiers:

U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
B - Analyte was found in the reagent blank as well as the sample.
J - Indicates an estimated value.
ND - Not detected.
A - Aldol condensation product.
D - Secondary dilution.
E - Exceeds initial calibration range.

ANALYTICAL CHEMISTRY DEPARTMENT

Results of Analyses Reports

Project# - G132-027

(Flash Point, Volatiles, Semivolatiles Data)

ANALIS ID	CUSTOMER SAMPLE ID
900816-013	3000-0802-1
900816-016	3000-0802-3
900816-017	3000-0802-4
900816-018	325-0802-1
900816-019	182N-3-0807-1
900816-022	SS27-0806-1
900816-023	N-LFT-0807-1
900816-024	KWIA-0807-1
900816-025	KWIB-0807-1
900816-026	L39-0807-1
900816-027	6652-P-0807-1

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-013 Project: G132 027 Customer Sample ID: 3000-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	75	degrees F	J GOODMAN JR	90-28	13-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

9613478.1272

80

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-016 Project: G132 027 Customer Sample ID: 3000-0802-3
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	116	degrees F	J GOODMAN JR	90-29	20-SEP-1990
205109	TP-2051	Archive	REFRIG3	K10004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

7810976.1215

85

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-017 Project: G132 027 Customer Sample ID: 3000-0802-4
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 25-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	109	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 25-OCT-1990

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-018 Project: G132 027 Customer Sample ID: 325-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

9613478.1225

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-019 Project: G132 027 Customer Sample ID: 182N-3-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-022 Project: G132 027 Customer Sample ID: SS27-0806-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	77	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

9613478.1127

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-023 Project: G132 027 Customer Sample ID: N-LFT-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

9615478.1228

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-024 Project: G132 027 Customer Sample ID: KWIA-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	82	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

9814978.1129

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-025 Project: G132 027 Customer Sample ID: KWIB-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	81	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

8613479.1240

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-026 Project: G132 027 Customer Sample ID: L39-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

9613478.1151

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-027 Project: G132 027 Customer Sample ID: 6652-P-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

9613478.1132

ANALYTICAL CHEMISTRY DEPARTMENT

Results of Analyses Reports

Project# - G132-027

ANALIS ID	CUSTOMER SAMPLE ID
900816-013	3000-0802-1
900816-016	3000-0802-3
900816-017	3000-0802-4
900816-018	325-0802-1
900816-019	182N-3-0807-1
900816-022	SS27-0806-1
900816-023	N-LFT-0807-1
900816-024	KWIA-0807-1
900816-025	KWIB-0807-1
900816-026	L39-0807-1
900816-027	6652-P-0807-1
900819-019	VBLK01
900820-023	VBLK02
900822-115	3000-0802-1MS
900822-116	3000-0802-1MSD

9613478.1138

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-013 Project: G132 027 Customer Sample ID: 3000-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	————	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	75	degrees F	J GOODMAN JR	90-28	13-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9615028.1214

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-016 Project: G132 027 Customer Sample ID: 3000-0802-3
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	----------	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	116	degrees F	J GOODMAN JR	90-29	20-SEP-1990
205109	TP-2051	Archive	REFRIG3	K10004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9613478.1235

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-017 Project: G132 027 Customer Sample ID: 3000-0802-4
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	----------	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	109	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9613478.1236

148

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-018 Project: G132 027 Customer Sample ID: 325-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	————	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9613478.1237

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-019 Project: G132 027 Customer Sample ID: 182N-3-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	----------	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9613478.1238

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-022 Project: G132 027 Customer Sample ID: SS27-0806-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	————	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	77	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9613478.1239

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-023 Project: G132 027 Customer Sample ID: N-LFT-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	————	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9613478.1240

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-024 Project: G132 027 Customer Sample ID: KWIA-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	————	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	82	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9613478.1291

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-025 Project: G132 027 Customer Sample ID: KWIB-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	————	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	81	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9411478.1742

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-026 Project: G132 027 Customer Sample ID: L39-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	————	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

9614478.1293

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-027 Project: G132 027 Customer Sample ID: 6652-P-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	————	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

CASE NARRATIVE
for BNA GC/MS data

Laboratory Name: MARTIN MARIETTA
Case # : G132-027
SDG # : KWIA-0807-1
Contract # : 0288

Sample Identification in SDG batch KWIA-0807-1:

EPA SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	MATRIX	COMMENT
Semivolatile oil samples (SDG # KWIA-0807-1)				
3000-0802-1	900816-013	>14123	oil	
3000-0802-4	900816-017	>14125	oil	
SS27-0806-1	900816-022	>14128	oil	
3000-0802-3	900816-016	>14124	oil	
325-0802-1	900816-018	>14126	oil	
182N-3-0807-1	900816-019	>14127	oil	
6652-P-0807-1	900816-027	>14133	oil	
N-LFT-0807-1	900816-023	>14129	oil	
KWIA-0807-1	900816-024	>14130	oil	
KWIB-0807-1	900816-025	>14131	oil	
L39-0807-1	900816-026	>14132	oil	

SEMIVOLATILE OIL SDG # KWIA-0807-1:

NOTE: THIS SET OF SAMPLES ARE OILS AND AS SUCH ARE NOT COVERED BY CLP PROTOCOL! CLP FORMS WILL BE REPORTED WHERE APPLICABLE. IN ORDER TO ANALYZE THESE SAMPLES, THEY WERE DILUTED BY A LARGE FACTOR (I.E., 667). THE DILUTION WAS FOLLOWED BY DIRECT INJECTION. THEREFORE, THERE WAS NO SURROGATE RECOVERIES NOR MATRIX SPIKES NOR METHOD BLANKS SINCE NO EXTR

ACTION OR SAMPLE CONCENTRATION WAS PERFORMED. THE CRQL LIMITS ARE NOT APPLICABLE SINCE NO EXTRACTION WAS PERFORMED. THEREFORE NON-DETECTED TARGET COMPOUNDS ARE MARKED WITH "NA" FOR THE QUANTITATION AMOUNT ON FORM 1. HOWEVER, DETECTION LIMITS UNDER THE ABOVE CONDITIONS APPROACH SEVERAL MILLION ug/L (WELL ABOVE ANY REGULATED LEVELS OF ANY TARGET COMPOUNDS).

HITS ARE CALCULATED FROM THE CONTINUING CALIBRATION RESPONSE FACTORS AND MULTIPLIED BY THE DILUTION FACTOR AND FINALLY REPORTED AS THE RESULTANT PRODUCT ON FORM 1.

FOR THIS SEMIVOLATILE OIL DATA PACKAGE THERE WILL BE NO FORM 2, FORM 3, OR FORM 4 BECAUSE THESE FORMS ARE JUST NOT APPLICABLE.

All BFB tune criteria were within acceptance criteria. All "CCC" and "SPCC" components met acceptance criteria for both the initial and continuing calibration check sample for water matrixes. Most internal standard areas fall outside water matrix acceptance criteria.

I certify that this data package is in compliance with the terms and conditions of the USEPA 2/88 CLP contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

SIGNATURE David C Canado DATE 10/29/90

David C. Canada, Ph.D.
Supervisor, Organic GC/MS

October 29,1990

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

KWIA-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ oil SAS 10/29/90 Lab Sample ID: 900816-024

Sample wt/vol: NA (g/mL) ML Lab File ID: >14130

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
KWIA-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ oil SAS 10/29/90 Lab Sample ID: 900816-024

Sample wt/vol: NA (g/mL) ML Lab File ID: >14130

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
KWIA-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ oil SAS 10/29/90 Lab Sample ID: 900816-024

Sample wt/vol: NA (g/mL) ML Lab File ID: >14130

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl hydrocarbon	11.92	7.8E+3	J
02.		Unknown alkyl hydrocarbon	13.97	9.3E+3	J
03.		Unknown alkyl hydrocarbon	14.25	4.8E+3	J
04.		Unknown alkyl hydrocarbon	15.37	5.8E+3	J
05.		Unknown	15.62	5.4E+3	J
06.		Unknown alkyl hydrocarbon	15.87	1.1E+4	J
07.		Unknown alkyl hydrocarbon	17.25	8.3E+3	J
08.		Unknown alkyl hydrocarbon	17.65	2.2E+4	J
09.		Unknown alkyl hydrocarbon	18.68	1.1E+4 SAS 10/29/90	J
10.		Unknown alkyl hydrocarbon	19.28	2.2E+4	J
11.		Unknown alkyl hydrocarbon	20.84	2.5E+4	J
12.		Unknown alkyl hydrocarbon	21.58	1.6E+4	J
13.		Unknown alkyl hydrocarbon	22.33	3.2E+4	J
14.		Unknown alkyl hydrocarbon	22.40	2.4E+4	J
15.		Unknown alkyl hydrocarbon	23.72	2.4E+4	J
16.		Unknown alkyl hydrocarbon	23.86	1.9E+4	J
17.		Unknown alkyl hydrocarbon	25.05	2.0E+4	J
18.		Unknown alkyl hydrocarbon	26.33	1.4E+4	J
19.		Unknown alkyl hydrocarbon	27.53	9.9E+3	J
20.		Unknown alkyl hydrocarbon	28.69	7.9E+3	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

KWIB-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ oil

Lab Sample ID: 900816-025

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14131

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

9613478.1250

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

KWIB-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ SAS 10/29/90 0.1 Lab Sample ID: 900816-025

Sample wt/vol: NA (g/mL) ML Lab File ID: >14131

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: KWIB-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ SAS 10/29/90 OIL Lab Sample ID: 900816-025

Sample wt/vol: NA (g/mL) ML Lab File ID: >14131

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl hydrocarbon	10.17	4600.	J
02.		Unknown alkyl hydrocarbon	11.90	2.2E+4	J
03.		Unknown	12.30	5100.	J
04.		Unknown alkyl hydrocarbon	13.07	5600.	J
05.		Unknown alkyl hydrocarbon	13.24	5800.	J
06.		Unknown alkyl hydrocarbon	13.96	3.2E+4	J
07.		Unknown alkyl hydrocarbon	14.24	1.1E+4	J
08.		Unknown alkyl hydrocarbon	14.98	5400.	J
09.		Unknown alkyl hydrocarbon	15.19	4800.	J
10.		Unknown alkyl hydrocarbon	15.36	1.4E+4	J
11.		Unknown	15.63	5000.	J
12.		Unknown alkyl hydrocarbon	15.86	2.8E+4	J
13.		Unknown alkyl hydrocarbon	17.01	5700.	J
14.		Unknown alkyl hydrocarbon	17.25	1.2E+4	J
15.		Unknown alkyl hydrocarbon	17.64	2.7E+4	J
16.		Unknown alkyl hydrocarbon	18.67	1.2E+4	J
17.		Unknown alkyl hydrocarbon	19.28	2.0E+4	J
18.		Unknown alkyl hydrocarbon	20.85	1.1E+4	J
19.		Unknown alkyl hydrocarbon	21.58	9.0E+3	J
20.		Unknown alkyl hydrocarbon	22.32	8.0E+3	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L39-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ OIL

Lab Sample ID: 900816-026

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14132

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
L39-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ oil (K25 10/29/90)

Lab Sample ID: 900816-026

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14132

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
L39-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ oil SAS 10/29/90 Lab Sample ID: 900816-026

Sample wt/vol: NA (g/mL) ML Lab File ID: >14132

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl hydrocarbon	11.92	8.6E+3	J
02.		Unknown alkyl hydrocarbon	13.96	1.3E+4	J
03.		Unknown alkyl hydrocarbon	14.24	3.9E+3	J
04.		Unknown	15.36	4.9E+3	J
05.		Unknown PAH	15.62	4.5E+3	J
06.		Unknown alkyl hydrocarbon	15.86	1.3E+4	J
07.		Unknown	16.77	3.3E+3	J
08.		Unknown alkyl hydrocarbon	17.65	1.6E+4	J
09.		Unknown alkyl hydrocarbon	18.67	6.1E+3	J
10.		Unknown alkyl hydrocarbon	19.28	1.5E+4	J
11.		Unknown	20.05	4.9E+3	J
12.		Unknown alkyl hydrocarbon	20.84	1.5E+4	J
13.		Unknown alkyl hydrocarbon	21.58	6.9E+3	J
14.		Unknown alkyl hydrocarbon	22.33	2.7E+4	J
15.		Unknown alkyl hydrocarbon	22.42	1.0E+4	J
16.		Unknown alkyl hydrocarbon	23.72	1.8E+4	J
17.		Unknown alkyl hydrocarbon	23.86	6.9E+3	J
18.		Unknown alkyl hydrocarbon	25.05	1.5E+4	J
19.		Unknown alkyl hydrocarbon	26.33	1.1E+4	J
20.		Unknown alkyl hydrocarbon	27.55	1.0E+4	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N-LFT-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ oil SAS 10/29/90

Lab Sample ID: 900816-023

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14129

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

961978.1256

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N-LFT-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ oil 10/29/90

Lab Sample ID: 900816-023

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14129

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
N-LFT-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ soil Lab Sample ID: 900816-023

Sample wt/vol: NA (g/mL) ML Lab File ID: >14129

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl hydrocarbon	7.02	4800.	J
02.		Unknown alkyl hydrocarbon	11.92	1.3E+4	J
03.		Unknown alkyl hydrocarbon	13.96	1.5E+4	J
04.		Unknown alkyl hydrocarbon	15.36	5300.	J
05.		Unknown PAH	15.61	3700.	J
06.		Unknown alkyl hydrocarbon	15.86	1.6E+4	J
07.		Unknown alkyl hydrocarbon	17.24	4500.	J
08.		Unknown alkyl hydrocarbon	17.65	2.1E+4	J
09.		Unknown PAH	17.88	3800.	J
10.		Unknown alkyl hydrocarbon	18.68	7900.	J
11.		Unknown alkyl hydrocarbon	19.27	2.4E+4	J
12.		Unknown alkyl hydrocarbon	20.83	2.2E+4	J
13.		Unknown alkyl hydrocarbon	21.57	7800.	J
14.		Unknown alkyl hydrocarbon	22.32	2.1E+4	J
15.		Unknown alkyl hydrocarbon	22.41	1.4E+4	J
16.		Unknown alkyl hydrocarbon	23.71	1.6E+4	J
17.		Unknown alkyl hydrocarbon	23.85	5400.	J
18.		Unknown alkyl hydrocarbon	25.05	1.3E+4	J
19.		Unknown alkyl hydrocarbon	26.32	7900.	J
20.		Unknown alkyl hydrocarbon	27.52	5000.	J
21.					
22.					
23.					
24.					
25.					
26.					
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28.					
29.					
30.					

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS27-0806-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ SAS 10/29/90 O;I Lab Sample ID: 900816-022

Sample wt/vol: NA (g/mL) ML Lab File ID: >14128

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

9613478.1259

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SS27-0806-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ OIL SAS 10/29/90

Lab Sample ID: 900816-022

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14128

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

961378.1260

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: SS27-0806-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-022

Sample wt/vol: NA (g/mL) ML Lab File ID: >14128

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

Number TICs found: 7

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl benzene	5.78	4900.	J
02.		Unknown alkyl benzene	6.01	2.7E+4	J
03.		Unknown alkyl benzene	6.66	8500.	J
04.		Unknown alkyl benzene	8.56	8800.	J
05.		Unknown alkyl hydrocarbon	8.65	3100.	J
06.		Unknown alkyl benzene	8.73	4100.	J
07.		Unknown alkyl benzene	9.34	1.1E+4	J
08.					
09.					
10.					
11.					
12.					
13.					
14.					
15.					
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
182N-3-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ SAS 10/29/90 oil Lab Sample ID: 900816-019

Sample wt/vol: NA (g/mL) ML Lab File ID: >14127

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

9613478.1262

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
182N-3-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil SAS 10/29/90 Lab Sample ID: 900816-019

Sample wt/vol: NA (g/mL) ML Lab File ID: >14127

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
182N-3-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil Lab Sample ID: 900816-019

Sample wt/vol: NA (g/mL) ML Lab File ID: >14127

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl hydrocarbon	11.92	1.3E+4	J
02.		Unknown alkyl hydrocarbon	13.96	1.6E+4	J
03.		Unknown alkyl hydrocarbon	14.24	4000.	J
04.		Unknown alkyl hydrocarbon	15.36	4700.	J
05.		Unknown	15.62	4900.	J
06.		Unknown alkyl hydrocarbon	15.86	1.4E+4	J
07.		Unknown alkyl hydrocarbon	17.24	3700.	J
08.		Unknown alkyl hydrocarbon	17.64	1.9E+4	J
09.		Unknown alkyl hydrocarbon	18.45	3900.	J
10.		Unknown alkyl hydrocarbon	18.67	5800.	J
11.		Unknown alkyl hydrocarbon	19.27	1.9E+4	J
12.		Unknown alkyl hydrocarbon	20.83	1.7E+4	J
13.		Unknown alkyl hydrocarbon	21.57	8300.	J
14.		Unknown alkyl hydrocarbon	22.30	1.5E+4	J
15.		Unknown alkyl hydrocarbon	22.39	7000.	J
16.		Unknown alkyl hydrocarbon	23.72	1.3E+4	J
17.		Unknown alkyl hydrocarbon	23.85	4800.	J
18.		Unknown alkyl hydrocarbon	25.05	8900.	J
19.		Unknown alkyl hydrocarbon	26.32	7200.	J
20.		Unknown alkyl hydrocarbon	27.54	5700.	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
325-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil SAS 10/29/90 Lab Sample ID: 900816-018

Sample wt/vol: NA (g/mL) ML Lab File ID: >14126

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

9613478.1265

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

325-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ OIL

Lab Sample ID: 900816-018

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14126

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

9013478.1366

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
325-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil (325 10/29/90) Lab Sample ID: 900816-018

Sample wt/vol: NA (g/mL) ML Lab File ID: >14126

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl hydrocarbon	11.92	1.1E+4	J
02.		Unknown alkyl hydrocarbon	13.96	1.4E+4	J
03.		Unknown alkyl hydrocarbon	14.24	5400.	J
04.		Unknown alkyl hydrocarbon	15.36	6500.	J
05.		Unknown PAH	15.62	7600.	J
06.		Unknown alkyl hydrocarbon	15.86	1.5E+4	J
07.		Unknown alkyl hydrocarbon	17.24	6300.	J
08.		Unknown alkyl hydrocarbon	17.64	2.3E+4	J
09.		Unknown alkyl hydrocarbon	18.67	9700.	J
10.		Unknown alkyl hydrocarbon	19.27	2.2E+4	J
11.		Unknown alkyl hydrocarbon	20.83	2.2E+4	J
12.		Unknown alkyl hydrocarbon	21.57	6700.	J
13.		Unknown alkyl hydrocarbon	22.32	1.9E+4	J
14.		Unknown alkyl hydrocarbon	22.41	9500.	J
15.		Unknown alkyl hydrocarbon	23.71	1.4E+4	J
16.		Unknown alkyl hydrocarbon	23.85	8400.	J
17.		Unknown alkyl hydrocarbon	25.04	1.3E+4	J
18.		Unknown alkyl hydrocarbon	26.32	9300.	J
19.		Unknown alkyl hydrocarbon	27.54	4500.	J
20.		Unknown alkyl hydrocarbon	28.70	4000.	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
3000-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ OIL SAS 10/29/90

Lab Sample ID: 900816-013

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14123

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	3.1E+3	D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	3.1E+3	D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
3000-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ SAS 10/29/90 Oil Lab Sample ID: 900816-013

Sample wt/vol: NA (g/mL) ML Lab File ID: >14123

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

9613478.1269

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
3000-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ OIL (SAS 10/29/90) Lab Sample ID: 900816-013

Sample wt/vol: NA (g/mL) ML Lab File ID: >14123

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl hydrocarbon	4.29	4.7E+3	J
02.		Unknown alkyl benzene	5.91	1.5E+4	J
03.		Unknown alkyl benzene	6.14	6.1E+4	J
04.		Unknown alkyl benzene	6.75	2.1E+4	J
05.		Unknown alkyl benzene	8.38	4.7E+3	J
06.		Unknown alkyl benzene	8.60	2.6E+4	J
07.		Unknown alkyl benzene	8.76	9.9E+3	J
08.		Unknown alkyl benzene	9.03	5.2E+3	J
09.		Unknown alkyl benzene	9.37	2.7E+4	J
10.		Unknown alkyl benzene	10.01	6.4E+3	J
11.		Unknown alkyl benzene	10.75	5.3E+3	J
12.		Unknown alkyl benzene	11.34	6.1E+3	J
13.		Unknown alkyl benzene	11.49	4.7E+3	J
14.		Unknown alkyl hydrocarbon	13.95	4.5E+3	J
15.		Unknown alkyl hydrocarbon	15.85	5.2E+3	J
16.		Unknown alkyl hydrocarbon	17.61	9.1E+3	J
17.		Unknown alkyl hydrocarbon	19.25	8.2E+3	J
18.		Unknown alkyl hydrocarbon	20.81	8.5E+3	J
19.	126-73-8	Tributyl Phosphate	21.57	2.1E+4	J
20.		Unknown alkyl hydrocarbon	22.28	1.0E+4	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

361378.1270

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-3

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil SAS 10/29/90

Lab Sample ID: 900816-016

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14124

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

9613478.1271

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
3000-0802-3

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ OIL SAS 10/29/90

Lab Sample ID: 900816-016

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14124

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

9615478.1272

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
3000-0802-3

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil

Lab Sample ID: 900816-016

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14124

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

Number TICs found: 2

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown	4.62	3300.	J
02.		Unknown	21.62	3800.	J
03.					
04.					
05.					
06.					
07.					
08.					
09.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

9615078L173

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-4

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil SAS 10/29/90

Lab Sample ID: 900816-017

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14125

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

9613478.1274

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
3000-0802-4

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil SAS 10/29/90

Lab Sample ID: 900816-017

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14125

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

901979.125

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
3000-0802-4

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil SAS 10/29/90

Lab Sample ID: 900816-017

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14125

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl benzene	5.75	1.0E+4	J
02.		Unknown alkyl benzene	5.99	5.7E+4	J
03.		Unknown alkyl benzene	6.64	2.3E+4	J
04.		Unknown alkyl benzene	8.54	3.3E+4	J
05.		Unknown alkyl benzene	8.70	1.6E+4	J
06.		Unknown alkyl benzene	8.96	7500.	J
07.		Unknown alkyl benzene	9.32	4.4E+4	J
08.		Unknown alkyl benzene	10.73	7800.	J
09.		Unknown alkyl benzene	10.82	6800.	J
10.		Unknown alkyl benzene	11.33	1.0E+4	J
11.		Unknown alkyl benzene	11.48	8700.	J
12.		Unknown alkyl hydrocarbon	11.90	6200.	J
13.		Unknown alkyl hydrocarbon	15.86	7600.	J
14.		Unknown alkyl hydrocarbon	17.64	1.1E+4	J
15.		Unknown alkyl hydrocarbon	19.27	1.2E+4	J
16.		Unknown alkyl hydrocarbon	20.83	9700.	J
17.		Unknown alkyl hydrocarbon	22.32	1.1E+4	J
18.		Unknown alkyl hydrocarbon	22.41	7000.	J
19.		Unknown alkyl hydrocarbon	23.71	9800.	J
20.		Unknown alkyl hydrocarbon	25.05	6400.	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

961478.176

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
6652-P-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil

Lab Sample ID: 900816-027

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14133

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	U D
111-44-4	bis(2-Chloroethyl)Ether	NA	U D
95-57-8	2-Chlorophenol	NA	U D
541-73-1	1,3-Dichlorobenzene	NA	U D
106-46-7	1,4-Dichlorobenzene	NA	U D
100-51-6	Benzyl alcohol	NA	U D
95-50-1	1,2-Dichlorobenzene	NA	U D
95-48-7	2-Methylphenol (o-cresol)	NA	U D
108-60-1	bis(2-chloroisopropyl)ether	NA	U D
106-44-5	4-Methylphenol (p-cresol)	NA	U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	U D
67-72-1	Hexachloroethane	NA	U D
98-95-3	Nitrobenzene	NA	U D
78-59-1	Isophorone	NA	U D
88-75-5	2-Nitrophenol	NA	U D
105-67-9	2,4-Dimethylphenol	NA	U D
65-85-0	benzoic acid	NA	U D
111-91-1	bis(2-Chloroethoxy)methane	NA	U D
120-83-2	2,4-Dichlorophenol	NA	U D
120-82-1	1,2,4-Trichlorobenzene	NA	U D
91-20-3	Naphthalene	NA	U D
106-47-8	4-Chloroaniline	NA	U D
87-68-3	Hexachlorobutadiene	NA	U D
59-50-7	4-Chloro-3-methylphenol	NA	U D
91-57-6	2-Methylnaphthalene	NA	U D
77-47-4	Hexachlorocyclopentadiene	NA	U D
88-06-2	2,4,6-Trichlorophenol	NA	U D
95-95-4	2,4,5-Trichlorophenol	NA	U D
91-58-7	2-Chloronaphthalene	NA	U D
88-74-4	2-Nitroaniline	NA	U D
131-11-3	Dimethylphthalate	NA	U D
208-96-8	Acenaphthylene	NA	U D
606-20-2	2,6-Dinitrotoluene	NA	U D

9615478.1277

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

6652-P-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil SAS 10/29/90

Lab Sample ID: 900816-027

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14133

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

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

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	U D
83-32-9	Acenaphthene	NA	U D
51-28-5	2,4-dinitrophenol	NA	U D
100-02-7	4-nitrophenol	NA	U D
132-64-9	Dibenzofuran	NA	U D
121-14-2	2,4-Dinitrotoluene	NA	U D
84-66-2	Diethylphthalate	NA	U D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	U D
86-73-7	Fluorene	NA	U D
100-01-6	4-Nitroaniline	NA	U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	U D
101-55-3	4-bromophenyl_phenyl_ether	NA	U D
118-74-1	Hexachlorobenzene	NA	U D
87-86-5	Pentachlorophenol	NA	U D
85-01-8	Phenanthrene	NA	U D
120-12-7	Anthracene	NA	U D
84-74-2	Di-n-butylphthalate	NA	U D
206-44-0	Fluoranthene	NA	U D
129-00-0	Pyrene	NA	U D
85-68-7	Butylbenzylphthalate	NA	U D
91-94-1	3,3'-Dichlorobenzidine	NA	U D
56-55-3	Benzo(a)anthracene	NA	U D
218-01-9	Chrysene	NA	U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	U D
117-84-0	Di-n-octylphthalate	NA	U D
205-99-2	Benzo(b)fluoranthene	NA	U D
207-08-9	Benzo(k)fluoranthene	NA	U D
50-32-8	Benzo(a)pyrene	NA	U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	U D
53-70-3	Dibenz(a,h)anthracene	NA	U D
191-24-2	Benzo(g,h,i)perylene	NA	U D

(1) - Cannot be separated from Diphenylamine

9613478.178

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
6652-P-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ Oil (SLS 10/29/90) Lab Sample ID: 900816-027

Sample wt/vol: NA (g/mL) ML Lab File ID: >14133

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA dec. NA Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.		Unknown alkyl hydrocarbon	11.90	1.1E+4	J
02.		Unknown	13.05	3.0E+3	J
03.		Unknown alkyl hydrocarbon	13.96	1.1E+4	J
04.		Unknown alkyl hydrocarbon	14.24	4.9E+3	J
05.		Unknown alkyl hydrocarbon	15.36	5.5E+3	J
06.		Unknown alkyl hydrocarbon	15.86	9.6E+3	J
07.		Unknown alkyl hydrocarbon	17.02	3.2E+3	J
08.		Unknown alkyl hydrocarbon	17.24	6.3E+3	J
09.		Unknown alkyl hydrocarbon	17.65	1.5E+4	J
10.		Unknown	17.87	3.9E+3	J
11.		Unknown alkyl hydrocarbon	18.68	8.9E+3	J
12.		Unknown alkyl hydrocarbon	19.28	1.6E+4	J
13.		Unknown alkyl hydrocarbon	20.83	1.8E+4	J
14.		Unknown alkyl hydrocarbon	21.58	1.2E+4	J
15.		Unknown alkyl hydrocarbon	22.31	2.2E+4	J
16.		Unknown alkyl hydrocarbon	22.40	1.2E+4	J
17.		Unknown alkyl hydrocarbon	23.71	1.5E+4	J
18.		Unknown alkyl hydrocarbon	23.84	1.1E+4	J
19.		Unknown alkyl hydrocarbon	25.05	1.1E+4	J
20.		Unknown alkyl hydrocarbon	26.32	4.8E+3	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

9613479

CASE NARRATIVE
for VOA GC/MS data

Laboratory Name: MARTIN MARIETTA
Case # : G132-027
SDG # : 3000-0802-1
Contract # : 0288

Sample Identification in SDG batch 3000-0802-1:

EPA SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	MATRIX	COMMENT
Volatile oil samples (SDG # 3000-0802-1)				
VBLK01	900819-019	>06534	water	method blank (8/19/90)
3000-0802-1	900816-013	>06535	oil	assoc. unspiked samp
3000-0802-1MS	900816-014	>06536	oil	matrix spiked sample
3000-0802-1MSD	900816-015	>06537	oil	matrix spiked dup.
3000-0802-4	900816-017	>06539	oil	
SS27-0806-1	900816-022	>06544	oil	
VBLK02	900820-023	>06552	water	method blank (8/20/90)
3000-0802-3	900816-016	>06554	oil	
325-0802-1	900816-018	>06555	oil	
182N-3-0807-1	900816-019	>06556	oil	
6652-P-0807-1	900816-027	>06561	oil	
N-LFT-0807-1	900816-023	>06557	oil	
KWIA-0807-1	900816-024	>06558	oil	
KWIB-0807-1	900816-025	>06559	oil	
L39-0807-1	900816-026	>06560	oil	

VOLATILE OIL SDG # 3000-0802-1:

NOTE: THIS SET OF SAMPLES ARE OILS AND AS SUCH ARE NOT COVERED BY CLP PROTOCOL! FORMS WILL BE REPORTED WHERE APPLICABLE. IN ORDER TO ANALYZE THESE SAMPLES, THEY WERE DILUTED BY A LARGE FACTOR. THE SAMPLES WERE THEN TREATED USING NORMAL CLP PROTOCOL.

NOTE: THE BNA MATRIX SPIKE AND MATRIX SPIKE DUPLICATE WERE USED INSTEAD OF THE VOA MATRIX SPIKE AND MATRIX SPIKE DUPLICATE IN THIS BATCH. THIS CAUSES NO PROBLEMS IN THE DATA QA AND IS ACCEPTABLE TO THE PROJECT MANAGER. THE LAB SAMPLE ID WAS CHANGED ON THE MATRIX SPIKE AND MATRIX SPIKE DUPLICATE IN ORDER TO LOG THESE SAMPLES IN AS VOA MATRIX SPIKES AND MATRIX SPIKE DUPLICATES. THE DATA MAY NOT REFLECT THESE CHANGES, HOWEVER, THE FOLLOWING EQUIVALENCIES CAN BE USED WHERE QUESTIONS ARISE ON THE MATRIX SPIKE AND MATRIX SPIKE DUPLICATE LAB SAMPLE ID'S.

900816-014 (ORIGINAL BNA MS ID) = 900822-115
900816-015 (ORIGINAL BNA MSD ID) = 900822-116

9613478.1280

All surrogate standards were within percent recovery acceptance criteria. All matrix spike and matrix spike duplicate criteria were within acceptance limits. All BFB tune criteria were within acceptance criteria. All "CCC" and "SPCC" components met acceptance criteria for both the initial and continuing calibration check sample. All internal standard areas were within acceptance criteria. Although all criteria were within acceptance windows, it must be noted that this means nothing since the criteria were setup for a water matrix—not an oil matrix.

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 has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

SIGNATURE David C. Canada DATE 10/10/90

David C. Canada, Ph.D
Supervisor, Organic GC/MS

October 10, 1990

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
325-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1

9/7/90 AK

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-018

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06555

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: (pack/cap) CAP Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene_Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene_(total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	11000.	J
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	190000.	
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	120000.	
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	970000.	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
325-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1 9/7/90 DLL

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-018

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06555

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: CAP Dilution Factor: 10000

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108872	CYCLOHEXANE, METHYL	12.86	120000	J
2. 111659	OCTANE	15.57	140000	J
3. 1678917	CYCLOHEXANE, ETHYL	16.78	93000	J
4.	UNKNOWN	19.85	57000	J
5.	UNKNOWN	20.22	190000	J
6.	UNK. (BENZENE ISOMER)	20.69	97000	J
7.	UNKNOWN	22.19	96000	J
8.	UNK. (BENZENE ISOMER)	22.66	550000	J
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
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30.				

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
3000-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1

Matrix: (soil/water) ~~WATER~~ O/L Lab Sample ID: 900816-013 9/7/90 DPP

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06535

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/19/90

Column: (pack/cap) CAP Dilution Factor: 1000000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10000000.	U
74-83-9	Bromomethane	10000000.	U
75-01-4	Vinyl Chloride	10000000.	U
75-00-3	Chloroethane	10000000.	U
75-09-2	Methylene_Chloride	5000000.	U
67-64-1	Acetone	10000000.	U
75-15-0	Carbon Disulfide	5000000.	U
75-35-4	1,1-Dichloroethene	5000000.	U
75-34-3	1,1-Dichloroethane	5000000.	U
540-59-0	1,2-Dichloroethene_(total)	5000000.	U
67-66-3	Chloroform	5000000.	U
107-06-2	1,2-Dichloroethane	5000000.	U
78-93-3	2-Butanone	10000000.	U
71-55-6	1,1,1-Trichloroethane	5000000.	U
56-23-5	Carbon Tetrachloride	5000000.	U
108-05-4	Vinyl Acetate	10000000.	U
75-27-4	Bromodichloromethane	5000000.	U
78-87-5	1,2-Dichloropropane	5000000.	U
10061-01-5	cis-1,3-Dichloropropene	5000000.	U
79-01-6	Trichloroethene	5000000.	U
124-48-1	Dibromochloromethane	5000000.	U
79-00-5	1,1,2-Trichloroethane	5000000.	U
71-43-2	Benzene	6700000.	
10061-02-6	trans-1,3-Dichloropropene	5000000.	U
75-25-2	Bromoform	5000000.	U
108-10-1	4-Methyl-2-pentanone	10000000.	U
591-78-6	2-Hexanone	10000000.	U
127-18-4	Tetrachloroethene	5000000.	U
79-34-5	1,1,2,2-Tetrachloroethane	5000000.	U
108-88-3	Toluene	67000000.	
108-90-7	Chlorobenzene	5000000.	U
100-41-4	Ethylbenzene	19000000.	
100-42-5	Styrene	5000000.	U
1330-20-7	Xylene (total)	95000000.	

9613478.1289

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

3000-0802-1

3000-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~

9/7/90 RPL

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-013

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06535

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/19/90

Column: CAP Dilution Factor: 1000000

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	1.589344	HEXANE,3-METHYL	10.71	9800000	J
2.	2.103651	BENZENE,PROPYL	22.20	5600000	J
3.	3.611143	BENZENE,1-ETHYL-2-METHYL	22.65	36000000	J
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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29.					
30.					

36139/8.1265

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-3

3000-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-016

Sample wt/vol: 5 (g/mL) ML Lab File ID: 06554

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: (pack/cap) CAP Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene (total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	50000.	U
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	50000.	U
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	50000.	U
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	50000.	U

9613478.1286

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
3000-0802-3

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1

9/7/90 DPP

Matrix: (soil/water) ~~WATER~~ oil Lab Sample ID: 900816-016

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06554

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: CAP Dilution Factor: 10000

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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9613478.1287

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-4

3000-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~

SAS 9/22/90

Matrix: (soil/water) ~~WATER~~ oil Lab Sample ID: 900816-017

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06539

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/19/90

Column: (pack/cap) CAP Dilution Factor: 1000000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10000000.		U
74-83-9	Bromomethane	10000000.		U
75-01-4	Vinyl Chloride	10000000.		U
75-00-3	Chloroethane	10000000.		U
75-09-2	Methylene Chloride	5000000.		U
67-64-1	Acetone	10000000.		U
75-15-0	Carbon Disulfide	5000000.		U
75-35-4	1,1-Dichloroethene	5000000.		U
75-34-3	1,1-Dichloroethane	5000000.		U
540-59-0	1,2-Dichloroethene (total)	5000000.		U
67-66-3	Chloroform	5000000.		U
107-06-2	1,2-Dichloroethane	5000000.		U
78-93-3	2-Butanone	10000000.		U
71-55-6	1,1,1-Trichloroethane	5000000.		U
56-23-5	Carbon Tetrachloride	5000000.		U
108-05-4	Vinyl Acetate	10000000.		U
75-27-4	Bromodichloromethane	5000000.		U
78-87-5	1,2-Dichloropropane	5000000.		U
10061-01-5	cis-1,3-Dichloropropene	5000000.		U
79-01-6	Trichloroethene	5000000.		U
124-48-1	Dibromochloromethane	5000000.		U
79-00-5	1,1,2-Trichloroethane	5000000.		U
71-43-2	Benzene	5000000.		U
10061-02-6	trans-1,3-Dichloropropene	5000000.		U
75-25-2	Bromoform	5000000.		U
108-10-1	4-Methyl-2-pentanone	10000000.		U
591-78-6	2-Hexanone	10000000.		U
127-18-4	Tetrachloroethene	5000000.		U
79-34-5	1,1,2,2-Tetrachloroethane	5000000.		U
108-88-3	Toluene	8200000.		
108-90-7	Chlorobenzene	5000000.		U
100-41-4	Ethylbenzene	8000000.		
100-42-5	Styrene	5000000.		U
1330-20-7	Xylene (total)	50000000.		

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 3000-0802-4

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132 SAS No.: NA SDG No.: 027

Matrix: (soil/water) ~~WATER~~ oil Lab Sample ID: 900816-017

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06539

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/19/90

Column: CAP Dilution Factor: 1000000

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (METHYLETHYLBENZENE)	22.64	24000000	J
2.					
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9613478.1289

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
6652-P-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1

9/7/90 DPP

Matrix: (soil/water) ~~WATER~~ O/L Lab Sample ID: 900816-027

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06561

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: (pack/cap) CAP Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene (total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	50000.	U
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	37000.	J
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	350000.	
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	330000.	

9613478.1290

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
6652-P-0807-1
3000-0802-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~

9/7/90 DPC

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-027

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06561

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: CAP Dilution Factor: 10000

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNK. (BENZENE ISOMER)	15.90	740000	J
2.		UNK. (BENZENE ISOMER)	18.38	220000	J
3.		UNKNOWN	21.50	910000	J
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9813478.1291

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

182N-3-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

3000-0802-1

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~

9/7/90 DCC

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-019

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06556

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: (pack/cap) CAP Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene (total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	55000.	
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	650000.	
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	550000.	
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	2200000.	

9615478.1292

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 182N-3-0807-11

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~827~~ 3000-0802-1

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-019 9/7/90

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06556

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: CAP Dilution Factor: 10000

Number TICs found: 10 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	10.50	130000	J
2.	108872	CYCLOHEXANE, METHYL	12.86	640000	J
3.		UNKNOWN	14.39	190000	J
4.	1678917	CYCLOHEXANE, ETHYL	16.79	740000	J
5.		UNKNOWN	19.89	130000	J
6.		UNKNOWN	20.24	350000	J
7.		UNK. (BENZENE ISOMER)	20.71	150000	J
8.		UNKNOWN	21.57	480000	J
9.		UNKNOWN	22.22	290000	J
10.		UNK. (BENZENE ISOMER)	22.75	220000	J
11.					
12.					
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9613478.1293

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
KW1A-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1

9/7/90 DPP

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-024

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06558

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: (pack/cap) CAP Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene_Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene_(total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	50000.	U
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	**100000.**	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	23000.	J
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	480000.	
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	340000.	

9613478.1294

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

KW1A-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

3000-0802-1

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~

9/7/90 DPP

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-024

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06558

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: CAP Dilution Factor: 10000

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	14.74	58000	J
2.		UNK. (BENZENE ISOMER)	18.87	810000	J
3.		UNKNOWN	21.52	3700000	J
4.					
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9613478.1295

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
KWIB-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

3000-0802-1

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 9/7/90 DLL

Matrix: (soil/water) ~~WATER~~ O/L Lab Sample ID: 900816-025

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06559

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: (pack/cap) CAP Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene_Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene_(total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	50000.	U
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	41000.	J
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	140000.	
100-42-5	Styrene	22000.	J
1330-20-7	Xylene (total)	120000.	

9613078.1296

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
KWIB-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-025 9/7/90 DLL

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06559

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: CAP Dilution Factor: 10000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	18.44	49000	J
2.	111842	NONANE	18.87	190000	J
3.		UNKNOWN	20.22	370000	J
4.		UNKNOWN	21.53	520000	J
5.					
6.					
7.					
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L39-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1 9/7/90 DTC

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-026

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06560

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: (pack/cap) CAP Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene (total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	45000.	J
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	490000.	
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	~~1200000.~~ 430000	
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	1200000.	

GLH 8/30/90

9613478 1.98

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: L39-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1

9/7/90 DPP

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-026

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06560

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: CAP Dilution Factor: 10000

Number TICs found: 7 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	9.12	64000	J
2.	110827	CYCLOHEXANE	10.48	110000	J
3.	142825	HEPTANE	11.97	54000	J
4.	108872	CYCLOHEXANE, METHYL	12.85	310000	J
5.	1678917	CYCLOHEXANE, ETHYL	16.80	340000	J
6.		UNKNOWN	20.05	55000	J
7.		UNKNOWN HYDROCARBON	21.48	330000	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N-LFT-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~U27~~ 3000-0802-1

9/7/90 DTP

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-023

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06557

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: (pack/cap) CAP Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene (total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	48000.	J
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	360000.	
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	880000.	
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	1600000.	

9613478.1408

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
N-LFT-0807-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-~~027~~ SAS No.: NA SDG No.: ~~027~~ 3000-0802-1

9/7/90 dcc

Matrix: (soil/water) ~~WATER~~ 014 Lab Sample ID: 900816-023

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06557

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: CAP Dilution Factor: 10000

Number TICs found: 10 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	10.74	86000	J
2.	142825	HEPTANE	11.99	27000	J
3.	108872	CYCLOHEXANE, METHYL	12.89	350000	J
4.	592278	HEPTANE, 2-METHYL	14.41	110000	J
5.		UNKNOWN	16.82	690000	J
6.		UNKNOWN	18.89	860000	J
7.		UNKNOWN	19.91	140000	J
8.		UNKNOWN	21.52	140000	J
9.		UNK. (BENZENE ISOMER)	22.26	720000	J
10.		UNK. (BENZENE ISOMER)	22.69	820000	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS27-0806-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 3000-0802-1 9/7/90 DCC

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-022

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06544

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/19/90

Column: (pack/cap) CAP Dilution Factor: 1000000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10000000.	U
74-83-9	Bromomethane	10000000.	U
75-01-4	Vinyl Chloride	10000000.	U
75-00-3	Chloroethane	10000000.	U
75-09-2	Methylene Chloride	5000000.	U
67-64-1	Acetone	10000000.	U
75-15-0	Carbon Disulfide	5000000.	U
75-35-4	1,1-Dichloroethene	5000000.	U
75-34-3	1,1-Dichloroethane	5000000.	U
540-59-0	1,2-Dichloroethene (total)	5000000.	U
67-66-3	Chloroform	5000000.	U
107-06-2	1,2-Dichloroethane	5000000.	U
78-93-3	2-Butanone	10000000.	U
71-55-6	1,1,1-Trichloroethane	5000000.	U
56-23-5	Carbon Tetrachloride	5000000.	U
108-05-4	Vinyl Acetate	10000000.	U
75-27-4	Bromodichloromethane	5000000.	U
78-87-5	1,2-Dichloropropane	5000000.	U
10061-01-5	cis-1,3-Dichloropropene	5000000.	U
79-01-6	Trichloroethene	5000000.	U
124-48-1	Dibromochloromethane	5000000.	U
79-00-5	1,1,2-Trichloroethane	5000000.	U
71-43-2	Benzene	12000000.	
10061-02-6	trans-1,3-Dichloropropene	5000000.	U
75-25-2	Bromoform	5000000.	U
108-10-1	4-Methyl-2-pentanone	10000000.	U
591-78-6	2-Hexanone	10000000.	U
127-18-4	Tetrachloroethene	5000000.	U
79-34-5	1,1,2,2-Tetrachloroethane	5000000.	U
108-88-3	Toluene	53000000.	
108-90-7	Chlorobenzene	5000000.	U
100-41-4	Ethylbenzene	11000000.	
100-42-5	Styrene	5000000.	U
1330-20-7	Xylene (total)	58000000.	

9613978.1502

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
SS27-0806-1

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: ~~027~~ 7000-0802-1

Matrix: (soil/water) ~~WATER~~ OIL Lab Sample ID: 900816-022 9/7/90

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06544

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/19/90

Column: CAP Dilution Factor: 1000000

Number TICs found: 10 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.54	20000000	J
2.	109660	PENTANE	4.12	11000000	J
3.	107835	PENTANE,2-METHYL	6.58	31000000	J
4.		UNKNOWN	9.10	28000000	J
5.	565593	PENTANE,2,3-DIMETHYL	10.72	43000000	J
6.		UNKNOWN	11.44	37000000	J
7.	589435	HEXANE,2,4-DIMETHYL	13.14	12000000	J
8.		UNKNOWN	13.78	18000000	J
9.	62016379	OCTANE,2,4,6-TRIMETHYL	21.53	13000000	J
10.		UNK. (BENZENE ISOMER)	22.60	15000000	J
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9413478.1513

Westinghouse Hanford Company

CHAIN OF CUSTODY C-83

Company Contact Joan Kessner Telephone 3-3507

Sample Collected by R. Z. Steffler Date 8-3-90 Time 1028

Sample Locations 200 W Area, TX Tank Farms, Cross Site Transfer Line

Ice Chest No. # Field Logbook and Page No. WHC-N-205-9C Page 8

Remarks

Bill of Lading No. NA Offsite Property No. NA

Method of Shipment Hand Carried

Shipped to

Possible Sample Hazards Radionuclides

Sample Identification

Sample	Volume	Analysis
CSTL-0803-10 + 11	250 ml g	TCLP
	250 ml g	Semi Vol, Herb, PAH, [illegible], Sulfide, Arsenic,
	~~40 ml g~~ 125	Selenium, Mercury, Lead & Ammonia
	40 ml g	VOA
↓	40 ml g	VOA-d
CSTL-0803-10B + 11B	40 ml g	VOA-B
CSTL-0803-12 + 13	250 ml g	TCLP
	250 ml g	Semi Vol, Herb, PAH, [illegible], Sulfide, Arsenic
		Selenium, Mercury, Lead & Ammonia
	40 ml g	VOA
↓	40 ml g	VOA-d
CSTL-0803-12B + 13B	40 ml g	VOA-B

Chain of Possession

Relinquished by:	Received by:	Date/Time:
R. Z. Steffler [signature]	J. DEMAREST [signature]	8-9-90 14:18
J DEMAREST [signature]	[signature]	8-11-90 1100

9613478.1304

Westinghouse Hanford Company

CHAIN OF CUSTODY 1147

Company Contact: Joan Kessner / Ron Shuck Telephone: 3-3507 / 3-5525

Sample Collected by: R.Z. Steffler Date: 8-2-90 Time: 1044

Sample Locations: 3000 Area Tanks 1,2,3,4 + 325 Bldg Tank

Ice Chest No.: #86 Field Logbook and Page No.: WHC-N-205-5 Pg 32-35

Remarks:

Bill of Lading No.: NA Offsite Property No.: NA

Method of Shipment:

Shipped to:

Possible Sample Hazards: Flammable

Sample Identification

3000-0802-1	Unlaminated Hydrocarbon Equipment	
" "	VOA, Semi VOA	
3000-0802-3	" "	
" "	" "	
3000-0802-4	" "	
" "	" "	
325-0802-1	" "	
" "	" "	

Chain of Possession

Relinquished by:	Received by:	Date/Time:
R.Z. Steffler [signature]	J DEMAREST [signature]	8-9-90 14:18
J DEMAREST [signature]	[signature]	8-11-90 11:00

Westinghouse Hanford Company

CHAIN OF CUSTODY 1150

Company Contact: Joan Kessner / Ron Shuck Telephone: 3-3507 / 3-5525

Sample Collected by: R.Z. Stauffer Date: 8-6-90 Time: 1410

Sample Locations: 100 N Underground Storage Tanks, 100K, 100N ECC

Ice Chest No.: # 86 Field Logbook and Page No.: WHC-N-205-5 Pg 31

Remarks:

Bill of Lading No.: NA Offsite Property No.: NA

Method of Shipment: Hand Carried

Shipped to:

Possible Sample Hazards: Flammable

Sample Identification

5527 0806-1	Flammable Hydrocarbon Flashpoint, VOA, Gas VOA
182N-3-0807-1	" "
N-LFT-0807-1	" "
KWIH-0807-1	" "
KWIB-0807-1	" "
34.0807-1	" "
6528-0807-1	" "

Chain of Possession

Relinquished by:	Received by:	Date/Time:
R.Z. Stauffer	J DEMAREST	8-9-90 14:18
Relinquished by: J DEMAREST	Received by:	Date/Time: 8-11-90 (11?)
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

9613478.1306

Westinhouse Hanford Company	CHAIN OF CUSTODY 1152

Company Contact Joan Kessner / Ken Lane Telephone 3-3507

Sample Collected by R. Z. Steffler Date 8/8/90 Time 0800

Sample Locations Field East of 200E Area

Ice Chest No. N/A Field Logbook and Page No.

Remarks

Bill of Lading No. Offsite Property No.

Method of Shipment

Shipped to

Sample Identification

TP-4-3.5-4.0	60ml AG	Total Activity
TP-4-6.0-6.5	60ml AG	Total Activity
TP-4-11.0-11.5	60ml AG	Total Activity
TP-2-2.0-2.5	60ml AG	Total Activity
TP-2-3.5-4.0	60ml AG	Total Activity
TP-3-7.5-8.5	60ml AG	Total Activity
TP-1-3.5-4.0	60ml AG	Total Activity
TP-1-5.0-5.5	60ml AG	Total Activity
3-3.5-4.0	60mAG	Total Activity

Chain of Possession

Relinquised by:	Received by:	Date/Time:
R.Z. Steffler R.Z. Steffler	Judy K. Watts	8/9/90 @ 11:50
Relinquised by: Judy K Watts	Received by: RE [illegible]	Date/Time: 8/09/90 @ 1345
Relinquised by:	Received by:	Date/Time:
Relinquised by:	Received by:	Date/Time:

A-6000-407 (07/89)