US EPA RECORDS CENTER REGION 5
459349

X Page 1 of 11

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 10/14/93

SUBJECT: Review of Region V CLP Data
Received for Review on Sept 29, 1993

FROM: Charles T. Elly, Director (SL-10C)
Central Regional Laboratory
MSP for CTE

TO: Data User: BHV

We have reviewed the data for the following case.

SITE NAME: Henry Hoffman UF (IL)

CASE and/or SAS NUMBER: 20663 SDG NUMBER: EQ677

Number and Type of Samples: 7 SOILS

CLP Sample Numbers: EQ677-83

CLP Laboratory: Pacific Hrs. for Review 12 + 1.5 = 13.5 wkw

Following are our findings:

The data are acceptable for use with qualification.

RECEIVED
NOV 3 1993

Mumtaz Pashai
10/14/93

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualification.
( ) Data are preliminary, pending verification by laboratory.
( ) Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

RECEIVED
DEC 20 1993

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 12/15/93

SUBJECT: Review of Region V CLP Data
Received for Review on Sept 30, 1993

FROM: Charles T. Elly, Director (SL-10C)
Central Regional Laboratory
RP Freeman for
CT Elly
12/15/93

TO: Data User: B+V

We have reviewed the data for the following case.

SITE NAME: Henry Hoffman LF (IL)

CASE and/or SAS NUMBER: 20663 SDG NUMBER: MEQD61

Number and Type of Samples: 10 (water + soil)

CLP Sample Numbers: MEQD 61-65, MEQQ88-91, MEQQ87 DMM

CLP Laboratory: SVL Hrs. for Review 9hrs +0.8 T.M.

Following are our findings:

DATA are acceptable for use with qualification. See attached data review for details.

RP Freeman
12/15/93

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualification.
( ) Data are preliminary, pending verification by laboratory.
( ) Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 11/02/93

SUBJECT: Review of Region V CLP Data
Received for Review on Oct 4, 1993

FROM: Charles T. Elly, Director (SL-10C)
Central Regional Laboratory
MSP for CTE

TO: Data User: B+V

We have reviewed the data for the following case.

SITE NAME: Henry Hoffman LF (IL)

CASE and/or SAS NUMBER: 20663 SDG NUMBER: EQL84

Number and Type of Samples: 11 (Soil & H_2O)

CLP Sample Numbers: EQL84-90, EQL92-95

CLP Laboratory: Gulf Hrs. for Review 11+1.5=12.5

Following are our findings:

The data are acceptable for use with qualification.

RECEIVED
NOV 5 1993

Mumtaz Pashar
11/02/93

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualification.
( ) Data are preliminary, pending verification by laboratory.
( ) Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

RECEIVED
MAR 30 1994

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data
Received for Review on Oct 15, 1993

FROM: Charles T. Elly, Director (SL-10C)
Central Regional Laboratory
12/17/93

TO: Data User: B+V

We have reviewed the data for the following case.

SITE NAME: Henry Hoffman IF (IL)

CASE and/or SAS NUMBER: 20663 SDG NUMBER: MEQD54

Number and Type of Samples: 7 (soil)

CLP Sample Numbers: MEQD54, 56-57, 59-60 MEQD55, 58

CLP Laboratory: AATS-La Hrs. for Review 6 0.8

Following are our findings:

Data are acceptable for use with qualifications. See attached data review for detail.

12/17/93

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualification.
( ) Data are preliminary, pending verification by laboratory.
( ) Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

NARRATIVE

SITE : HENRY HOFFMAN LF. (IL) CASE: 20663
CONTRACTOR: AATS-LA SDG : MEQD54

The laboratory's portion of this case contains 7 low level soil samples analyzed for total metals and cyanide. Below is a summary of the out of control audits and their possible effects on the data for this case.

The reviewer corrected the sample numbers for MEQD55 and 58 on Forms 1.

EVIDENTIAL AUDIT: All raw data, forms and documents are originals except CN raw data. The CN raw data are photocopies from the bound laboratory notebook which are acceptable. All original sample tags are included in the case. The reviewer corrected the sample tag number for MEQD56 on the DC-1 form (log-in sheet). All raw data, forms and documents are present in the order indicated on the DC-2 form (inventory sheet).

ICP ANALYSES: The duplicate audit for Al (128.2% RPD) and the ICP serial dilution audit for Al (402.9% difference) are out of control. All Al results are estimated (J) due to poor precision and interference.

The duplicate audit for Na (115.6% RPD) was flagged by the lab; however, the technical criterion (+/- 2xCRDL) for soil samples was not exceeded. All Na results are acceptable.

The duplicate audits for Cd (200.0% RPD) and Ni (200.0% RPD) were not flagged by the lab because the duplicate difference did not exceed the technical criterion (+/- 2xCRDL) for soil samples. All Cd and Ni results are acceptable.

The ICP serial dilution audit for Fe (97.7% difference) is out of control. All Fe results are estimated (J) due to interference.

The matrix spike recovery for Mn (48.7%) was not flagged by the lab because the sample concentration is greater than 4 times the spike amount added. All Mn results are acceptable.

GFAA ANALYSES: After recalculating the Tl raw data, the reviewer

Reviewed by: Lockheed/ESAT
Date: 11-30-93

removed the (E) flags for Tl for samples MEQD55, 56 and 60 and removed the (W) flags for Tl for samples MEQD54, 57 and 58 on Forms 1. All Tl results are acceptable.

The Se result for MEQD60 was flagged (W) by the lab and is estimated (UJ) due to interference.

After recalculating the As raw data, the reviewer added a (W) flag for As for MEQD58 and (M) flags for As for MEQD56 and 59 on Forms 1. The As results on MEQD56, 58 and 59 are estimated (J) due to interference.

OTHER QUALIFIERS: All Hg and CN results are acceptable.

Samples MEQD55/56 are field duplicates and the %RPDs for Ca (54.5%) and Mg (70.9%) are out of control. All Ca and Mg results are estimated (J) due to poor field precision.

Reviewed by: [signature] Lockheed/ESAT
Date: 11-30-93

QC EXCEPTION SUMMARY REPORT

CASE\SAS#: 20663
SITE: Henry Hoffman LF (IL)
MATRIX: Soil
WATER SAMPLE SPK: _____

DATA SET: _____
LAB: AATS-LA
CONC: Low
WATER SAMPLE DUP: _____

LAB QC # MEQD54
REVIEWED BY: Bari Lynn
SOIL SAMPLE SPK: _____

DATE: 11-23-93
SOIL SAMPLE DUP: _____

FORM #		FORM 2	FORM 2	FORM 3	FORM 3	FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 7	FORM 9	FORM 9	FORM 6	FORM 5	FIELD	FIELD	FIELD	FIELD	COMMENTS
ELEMENT	HOLD TIME	INITIAL CALIB	CONTIN CALIB	CALIB BLANK	PREP WATER BLANK	PREP SOIL BLANK	ICS %R	SOIL SPIKE %R	SOIL DUP RPD	ICS AQ	ICS SOIL	SERIAL DILUTION AQUBOUS	SERIAL DILUTION SOIL	AQ DUP %R	AQ SPIKE %R	BLANK	DUP RPD	BLANK	DUP RPD	
ALUMINUM									128.2				402.9							
ANTIMONY																				
ARSENIC																				
BARIUM																				
BERYLLIUM																				
CADMIUM																				
CALCIUM																	54.5			
CHROMIUM																				
COBALT																				
COPPER																				
IRON													97.7							
LEAD																				
MAGNESIUM																	70.4			
MANGANESE																				
MERCURY																				
NICKEL																				
POTASSIUM																				
SELENIUM																				
SILVER																				
SODIUM																				
THALLIUM																				
TIN																				
VANADIUM																				
ZINC																				
CYANIDE																				

GLOSSARY A

Data Qualifier Definitions

For the purposes of this document the following code letters and associated definitions are provided.

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J - The associated value is an estimated quantity.

R - The data are unusable. (Note: Analyte may or may not be present.)

UJ - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663 SAS No.: _____ SDG No.:MEQD54

SOW No.: ILM03

EPA Sample No.	Lab Sample ID
_MEDQ55_____	__4503.01_____
_MEDQ58_____	__4486.06_____
_MEQD54_____	__4486.01_____
_MEQD54D_____	__4486.03_____
_MEQD54S_____	__4486.02_____
_MEQD56_____	__4486.04_____
_MEQD57_____	__4486.05_____
_MEQD59_____	__4486.07_____
_MEQD60_____	__4486.08_____

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: Terry M Thomas Name: TERRY M THOMAS

Date: Oct 13, 1993 Title: Inorganics Program Manager

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD54

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Matrix (soil/water): SOIL_ Lab Sample ID: 4486.01___

Level (low/med): LOW__ Date Received: 08/25/93

% Solids: _88.4

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	7130	_	E*	P_	J unk bias
7440-36-0	Antimony_	5.4	U		P_	
7440-38-2	Arsenic__	0.45	U		F_	
7440-39-3	Barium___	104	_		P_	
7440-41-7	Beryllium	0.28	B		P_	
7440-43-9	Cadmium__	0.92	B		P_	
7440-70-2	Calcium__	8750	_		P_	
7440-47-3	Chromium_	10.6	_		P_	
7440-48-4	Cobalt___	5.7	B		P_	
7440-50-8	Copper___	7.8	_		P_	
7439-89-6	Iron____	11600	_	E J	P_	unk bias
7439-92-1	Lead____	0.45	U		F_	
7439-95-4	Magnesium	5620	_		P_	
7439-96-5	Manganese	686	_		P_	
7439-97-6	Mercury__	0.11	U		CV	
7440-02-0	Nickel___	4.9	B		P_	
7440-09-7	Potassium	923	B		P_	
7782-49-2	Selenium_	0.68	U		F_	
7440-22-4	Silver___	1.1	U		P_	
7440-23-5	Sodium___	1860	_	*	P_	
7440-28-0	Thallium_	0.68	U	W	F_	By 11-23-93
7440-62-2	Vanadium_	17.0	_		P_	
7440-66-6	Zinc____	37.4	_		P_	
	Cyanide__	0.57	U		CA	

Color Before: BROWN____ Clarity Before: _____ Texture: COARSE

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN

ILM02.1

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

~~MEDQ55~~
MEQD55
By 11-23-93

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Matrix (soil/water): SOIL_ Lab Sample ID: 4503.01___

Level (low/med): LOW__ Date Received: 08/26/93

% Solids: _80.6

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	4190	_	E*	P_	J unk bias
7440-36-0	Antimony_	6.0	U		P_	
7440-38-2	Arsenic__	1.5	B		F_	
7440-39-3	Barium___	64.3	_		P_	
7440-41-7	Beryllium	0.25	U		P_	
7440-43-9	Cadmium__	0.99	U		P_	
7440-70-2	Calcium__	10800	_		P_	
7440-47-3	Chromium_	5.8	_		P_	
7440-48-4	Cobalt___	2.1	B		P_	
7440-50-8	Copper___	5.9	B		P_	
7439-89-6	Iron_____	6840	_	E J	P_	unk bias
7439-92-1	Lead_____	0.50	U		F_	
7439-95-4	Magnesium	5290	_		P_	
7439-96-5	Manganese	385	_		P_	
7439-97-6	Mercury__	0.12	U		CV	
7440-02-0	Nickel___	3.4	B		P_	
7440-09-7	Potassium	505	B		P_	
7782-49-2	Selenium_	0.75	U		F_	
7440-22-4	Silver___	1.2	U		P_	
7440-23-5	Sodium___	2050	_	*	P_	
7440-28-0	Thallium_	0.75	U	~~E~~	F_	By 11-23-93
7440-62-2	Vanadium_	8.0	B		P_	
7440-66-6	Zinc_____	35.1	_		P_	
_____	Cyanide__	0.62	U		CA	
_____	_____	_____	_		__	

Color Before: BROWN____ Clarity Before: _____ Texture: FINE__

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD56

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Matrix (soil/water): SOIL_ Lab Sample ID: 4486.04___

Level (low/med): LOW__ Date Received: 08/25/93

% Solids: _89.8

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	5470		E*	P	J unk bias
7440-36-0	Antimony	5.3	U		P	
7440-38-2	Arsenic	1.8	B	M J	F	By 11-29-93 unk bias
7440-39-3	Barium	87.2			P	
7440-41-7	Beryllium	0.22	U		P	
7440-43-9	Cadmium	1.4			P	
7440-70-2	Calcium	18900			P	
7440-47-3	Chromium	7.1			P	
7440-48-4	Cobalt	4.0	B		P	
7440-50-8	Copper	5.9			P	
7439-89-6	Iron	8880		E J	P	unk bias
7439-92-1	Lead	0.45	U		F	
7439-95-4	Magnesium	11100			P	
7439-96-5	Manganese	535			P	
7439-97-6	Mercury	0.11	U		CV	
7440-02-0	Nickel	4.8	B		P	
7440-09-7	Potassium	554	B		P	
7782-49-2	Selenium	0.67	U		F	
7440-22-4	Silver	1.1	U		P	
7440-23-5	Sodium	2290		*	P	
7440-28-0	Thallium	0.67	U	E	F	By 11-23-93
7440-62-2	Vanadium	12.3			P	
7440-66-6	Zinc	35.9			P	
	Cyanide	0.56			CA	

Color Before: BROWN____ Clarity Before: _____ Texture: COARSE

Color After: ✓ YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD57

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Matrix (soil/water): SOIL_ Lab Sample ID: 4486.05___

Level (low/med): LOW__ Date Received: 08/25/93

% Solids: _89.3

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	6230	_	E*	P_	J unk bias
7440-36-0	Antimony_	5.4	U		P_	
7440-38-2	Arsenic__	0.45	U		F_	
7440-39-3	Barium___	85.0	_		P_	
7440-41-7	Beryllium	0.22	U		P_	
7440-43-9	Cadmium__	0.90	U		P_	
7440-70-2	Calcium__	16200	_		P_	
7440-47-3	Chromium_	11.6	_		P_	
7440-48-4	Cobalt___	3.8	B		P_	
7440-50-8	Copper___	5.8	_		P_	
7439-89-6	Iron____	9520	_	E J	P_	unk bias
7439-92-1	Lead____	0.45	U		F_	
7439-95-4	Magnesium	9890	_		P_	
7439-96-5	Manganese	575	_		P_	
7439-97-6	Mercury__	0.11	U		CV	
7440-02-0	Nickel___	4.4	B		P_	
7440-09-7	Potassium	845	B		P_	
7782-49-2	Selenium_	0.67	U		F_	
7440-22-4	Silver___	1.1	U		P_	
7440-23-5	Sodium___	1550	_	*	P_	
7440-28-0	Thallium_	0.67	U	~~W~~	F_	By 11-23-93
7440-62-2	Vanadium_	13.5	_		P_	
7440-66-6	Zinc____	41.7	_		P_	
_____	Cyanide__	0.56	U		CA	
_____	_____	_____	_		__	

Color Before: BROWN____ Clarity Before: _____ Texture: COARSE

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

~~MEDQ58~~
MEQD58
By 11-23-93

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Matrix (soil/water): SOIL_ Lab Sample ID: 4486.06___

Level (low/med): LOW__ Date Received: 08/25/93

% Solids: _89.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	5310	_	E*	P_	J unk bias
7440-36-0	Antimony_	5.3	U		P_	
7440-38-2	Arsenic__	0.51	B	W J	F_	By 11-23-93 unk bias
7440-39-3	Barium___	77.7	_		P_	
7440-41-7	Beryllium	0.22	U		P_	
7440-43-9	Cadmium__	0.89	U		P_	
7440-70-2	Calcium__	12100	_		P_	
7440-47-3	Chromium_	7.4	_		P_	
7440-48-4	Cobalt___	1.5	B		P_	
7440-50-8	Copper___	7.1	_		P_	
7439-89-6	Iron_____	7610	_	E J	P_	unk bias
7439-92-1	Lead_____	0.44	U		F_	
7439-95-4	Magnesium	6640	_		P_	
7439-96-5	Manganese	267	_		P_	
7439-97-6	Mercury__	0.11	U		CV	
7440-02-0	Nickel___	5.6	B		P_	
7440-09-7	Potassium	605	B		P_	
7782-49-2	Selenium_	0.67	U		F_	
7440-22-4	Silver___	1.1	U		P_	
7440-23-5	Sodium___	2350	_	*	P_	
7440-28-0	Thallium_	0.67	U	W	F_	By 11-23-93
7440-62-2	Vanadium_	9.9	B		P_	
7440-66-6	Zinc_____	35.5	_		P_	
_____	Cyanide__	0.56	U		CA	

Color Before: BROWN____ Clarity Before: _____ Texture: COARSE

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD59

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Matrix (soil/water): SOIL_ Lab Sample ID: 4486.07___

Level (low/med): LOW__ Date Received: 08/25/93

% Solids: _93.6

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	2770	_	E*	P_	J unk bias
7440-36-0	Antimony_	5.1	U		P_	
7440-38-2	Arsenic__	2.4	_	MJ	F_	BY 11-23-93 unk bias
7440-39-3	Barium___	38.1	B		P_	
7440-41-7	Beryllium	0.21	U		P_	
7440-43-9	Cadmium__	1.3	_		P_	
7440-70-2	Calcium__	69600	_		P_	
7440-47-3	Chromium_	5.6	_		P_	
7440-48-4	Cobalt___	1.1	U		P_	
7440-50-8	Copper___	3.5	B		P_	
7439-89-6	Iron_____	6630	_	E J	P_	unk bias
7439-92-1	Lead_____	0.43	U		F_	
7439-95-4	Magnesium	40700	_		P_	
7439-96-5	Manganese	322	_		P_	
7439-97-6	Mercury__	0.11	U		CV	
7440-02-0	Nickel___	4.3	B		P_	
7440-09-7	Potassium	431	B		P_	
7782-49-2	Selenium_	0.64	U		F_	
7440-22-4	Silver___	1.1	U		P_	
7440-23-5	Sodium___	2020	_	*	P_	
7440-28-0	Thallium_	0.64	U		F_	
7440-62-2	Vanadium_	8.1	B		P_	
7440-66-6	Zinc_____	36.2	_		P_	
_____	Cyanide__	0.53	U		CA	

Color Before: BROWN____ Clarity Before: _____ Texture: COARSE

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD60

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Matrix (soil/water): SOIL_ Lab Sample ID: 4486.08___

Level (low/med): LOW__ Date Received: 08/25/93

% Solids: _84.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	10400	_	E*	P_	J unk bias
7440-36-0	Antimony_	5.7	U		P_	
7440-38-2	Arsenic__	0.47	U		F_	
7440-39-3	Barium___	118	_		P_	
7440-41-7	Beryllium	0.37	B		P_	
7440-43-9	Cadmium__	1.8	_		P_	
7440-70-2	Calcium__	3520	_		P_	
7440-47-3	Chromium_	10.4	_		P_	
7440-48-4	Cobalt___	8.1	B		P_	
7440-50-8	Copper___	8.5	_		P_	
7439-89-6	Iron____	14100	_	E J	P_	unk bias
7439-92-1	Lead____	0.47	U		F_	
7439-95-4	Magnesium	3000	_		P_	
7439-96-5	Manganese	794	_		P_	
7439-97-6	Mercury__	0.12	U		CV	
7440-02-0	Nickel___	7.6	B		P_	
7440-09-7	Potassium	657	B		P_	
7782-49-2	Selenium_	0.71	U	W J	F_	unk bias
7440-22-4	Silver___	1.2	U		P_	
7440-23-5	Sodium___	2430	_	*	P_	
7440-28-0	Thallium_	0.71	U	~~E~~	F_	BY 11-23-93
7440-62-2	Vanadium_	20.7	_		P_	
7440-66-6	Zinc____	40.0	_		P_	
_____	Cyanide__	0.60	U		CA	

Color Before: BROWN____ Clarity Before: _____ Texture: COARSE

Color After: ✓ YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN

ILM02.1

3
BLANKS

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Preparation Blank Matrix (soil/water): SOIL_

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	94.0	U	94.0	U	94.0	U	94.0	U	18.800	U	P
Antimony	24.0	U	24.0	U	26.5	B	24.0	U	4.800	U	P
Arsenic	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	F
Barium	14.0	U	14.0	U	14.0	U	14.0	U	2.800	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Calcium	57.0	U	89.0	B	92.9	B	86.0	B	11.748	B	P
Chromium	7.0	U	7.0	U	7.0	U	7.0	U	1.400	U	P
Cobalt	5.0	U	-5.7	B	-8.2	B	-7.7	B	-1.697	B	P
Copper	-17.1	B	-18.4	B	-19.1	B	-17.9	B	-3.788	B	P
Iron	-19.4	B	11.0	U	16.2	B	11.0	U	-2.235	B	P
Lead	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	F
Magnesium	-43.0	B	29.0	U	29.0	U	29.0	U	5.800	U	P
Manganese	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	CV
Nickel	-15.2	B	-7.8	B	-18.7	B	-10.6	B	1.400	U	P
Potassium	128.0	U	128.0	U	128.0	U	128.0	U	25.600	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	F
Silver	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Sodium	322.0	U	322.0	U	322.0	U	322.0	U	64.400	U	P
Thallium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	F
Vanadium	-11.4	B	-13.3	B	-14.4	B	-13.4	B	-2.912	B	P
Zinc	5.0	U	5.0	U	5.1	B	5.0	U	1.000	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.500	U	CA

U.S. EPA - CLP

000018

3
BLANKS

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Preparation Blank Matrix (soil/water): _____

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic	2.0	U	2.0	U	2.0	U	2.0	U			F
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead			2.0	U							F
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium			3.0	U							F
Silver											NR
Sodium											NR
Thallium			3.0	U							F
Vanadium											NR
Zinc											NR
Cyanide											NR

FORM III - IN

ILMO2.1

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEQD54S

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663 SAS No.: _____ SDG No.: MEQD54

Matrix (soil/water): SOIL__ Level (low/med): LOW___

% Solids for Sample: _88.4

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	107.2018		5.4299	U	113.120	94.8		P
Arsenic	75-125	9.5543		0.4525	U	9.050	105.6		F
Barium	75-125	531.5154		103.6210		452.490	94.6		P
Beryllium	75-125	11.0206		0.2751	B	11.310	95.0		P
Cadmium	75-125	12.4430		0.9242	B	11.310	101.8		P
Calcium									NR
Chromium	75-125	50.8455		10.5595		45.250	89.0		P
Cobalt	75-125	114.5090		5.7271	B	113.120	96.2		P
Copper	75-125	61.1846		7.7995		56.560	94.4		P
Iron									NR
Lead	75-125	4.6425		0.4525	U	4.520	102.7		F
Magnesium									NR
Manganese		741.0032		685.8729		113.120	48.7		P
Mercury	75-125	0.5882		0.1131	U	0.570	103.2		CV
Nickel	75-125	119.5518		4.8756	B	113.120	101.4		P
Potassium									NR
Selenium	75-125	2.3975		0.6787	U	2.260	106.1		F
Silver	75-125	10.9217		1.1312	U	11.310	96.6		P
Sodium									NR
Thallium	75-125	9.7240		0.6787	U	11.310	86.0		F
Vanadium	75-125	123.7167		17.0032		113.120	94.3		P
Zinc	75-125	143.6328		37.4124		113.120	93.9		P
Cyanide	75-125	29.0724		0.5656	U	28.280	102.8		CA

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEQD54D

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

Matrix (soil/water): SOIL_ Level (low/med): _LOW__

% Solids for Sample: _88.4 % Solids for Duplicate: __88.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		7128.2229		1559.1518		128.2	*	P
Antimony		5.4299	U	5.4299	U			P
Arsenic		0.4525	U	0.4480	U			F
Barium	45.2	103.6210		103.6235		0.0		P
Beryllium		0.2751	B	0.2595	B	5.8		P
Cadmium		0.9242	B	0.9050	U	200.0		P
Calcium		8745.3645		8712.1731		0.4		P
Chromium	2.3	10.5595		10.0690		4.8		P
Cobalt		5.7271	B	5.6950	B	0.6		P
Copper	5.7	7.7995		6.5704		17.1		P
Iron		11629.8758		11538.3896		0.8		P
Lead		0.4525	U	0.4480	U			F
Magnesium	1131.2	5617.5676		5601.1093		0.3		P
Manganese		685.8729		686.6690		0.1		P
Mercury		0.1131	U	0.1131	U			CV
Nickel		4.8756	B	1.5837	U	200.0		P
Potassium		922.9934	B	912.0136	B	1.2		P
Selenium		0.6787	U	0.6720	U			F
Silver		1.1312	U	1.1312	U			P
Sodium	1131.2	1863.7738		498.4916	B	115.6	*	P
Thallium		0.6787	U	0.6720	U			F
Vanadium	11.3	17.0032		16.7199		1.7		P
Zinc		37.4124		37.0914		0.9		P
Cyanide		0.5656	U	0.5656	U			CA

U.S. EPA - CLP

~~C00043~~
000026
10/13/93

10
Instrument Detection Limits (Quarterly)

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

ICP ID Number: ACC101_____ Date: 07/29/93

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	94.0	P
Antimony	217.59		60	24.0	P
Arsenic			10		NR
Barium	445.40		200	14.0	P
Beryllium	313.40		5	1.0	P
Cadmium	226.50		5	4.0	P
Calcium	317.92		5000	57.0	P
Chromium	267.72		10	7.0	P
Cobalt	228.62		50	5.0	P
Copper	324.75		25	5.0	P
Iron	259.61		100	11.0	P
Lead			3		NR
Magnesium	279.08		5000	29.0	P
Manganese	257.61		15	3.0	P
Mercury			0.2		NR
Nickel	231.60		40	7.0	P
Potassium	766.49		5000	128.0	P
Selenium			5		NR
Silver	328.07		10	5.0	P
Sodium	589.00		5000	322.0	P
Thallium			10		NR
Vanadium	292.40		50	4.0	P
Zinc	213.86		20	5.0	P

Comments:

U.S. EPA - CLP

~~000044~~
000029
V 10/13/93

10
Instrument Detection Limits (Quarterly)

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

ICP ID Number: _____ Date: 07/30/93

Flame AA ID Number : _____

Furnace AA ID Number : TJA4000_____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic	193.70	BS	10	2.0	F
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead	283.30	BS	3	2.0	F
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium	196.00	BS	5	3.0	F
Silver			10		NR
Sodium			5000		NR
Thallium	276.80	BS	10	3.0	F
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

~~000045~~
000028
VD 10/13/93

10
Instrument Detection Limits (Quarterly)

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D3-0051

Lab Code: AATSLA Case No.: 20663_ SAS No.: _____ SDG No.: MEQD54

ICP ID Number: _____ Date: 08/03/93

Flame AA ID Number : LEEMAN_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No. _____ CERCLIS No. (IL)

Case No. 20663 Site Name Location: Henry Hoffman

Contractor or EPA Lab: AATS-Lenexa Data User: BTV

No. of Samples: 7 Date Samples or Data Received: 10-15-93

Have Chain-of-Custody records been received? YES ✓ NO ___
Have traffic reports or packing lists been received? YES ✓ NO ___
If no, are traffic report or packing list numbers written on the chain-of-custody record? YES ✓ NO ___
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? YES ✓ NO ___
No. of samples claimed: 7 No. of samples received: 7

Received by: Lynette Burnett Date: 10-15-93

Received by LSSS: Dorothy M. May Date: 10/18/93

Review started: 11-23-93 Reviewer Signature: B. Lynn

Total time spent on review: 6 (0.8 JR) Date review completed: 11-23-93

Copied by: Patrick Henry Date: 12-20-93

Mailed to user by: A D Mars Date: 12-21-93

DATA USERS:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ESCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____
Inorganic Data Complete( ) Suitable for Intended Purpose( ) ✓ if OK
Organic Data Complete ( ) Suitable for Intended Purpose( ) list
Dioxin Data Complete ( ) Suitable for Intended Purpose( ) prblms
SAS Data Complete ( ) Suitable for Intended Purpose( ) below.
PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files Date: _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No. _____ CERCLIS No. IL

Case No. 20663 Site Name Location: Henry Hoffman

Contractor or EPA Lab: Pacific Data User: PST

No. of Samples: 7 Date Samples or Data Received: 9-29-93

Have Chain-of-Custody records been received? YES ✓ NO ____
Have traffic reports or packing lists been received? YES ✓ NO ____
If no, are traffic report or packing list numbers written on the chain-of-custody record? YES ✓ NO ____
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? YES ✓ NO ____
No. of samples claimed: 7 No. of samples received: 7

Received by: AD Harris Date: 9-29-93

Received by LSSS: Dorothy M. May Date: 9/30/93

Review started: 10-7-93 Reviewer Signature: Al Kenuto

Total time spent on review: 12 hr Date review completed: 10-8-93

Copied by: Jeanette Pritchell Date: Oct 15, 1993

Mailed to user by: Lynette Burnett Date: 10-19-93

DATA USERS:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, SSCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____
Inorganic Data Complete( ) Suitable for Intended Purpose( ) ✓ if OK
Organic Data Complete ( ) Suitable for Intended Purpose( ) list
Dioxin Data Complete ( ) Suitable for Intended Purpose( ) prblms
SAS Data Complete ( ) Suitable for Intended Purpose( ) below.
PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files Date: _____

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL83

Lab Name: PACIFIC ANALYTICAL, INC. Contract: 68-D1-0098

Lab Code: PACIF Case No. 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64707PS

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 14 decanted: (Y/N) N Date Received: 8/25/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 8/30/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 9/17/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC(Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	1.7	JP
959-98-8	Endosulfan I	1.6	JP
60-57-1	Dieldrin	7.8	B
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	~~0.46~~ 3.5	JPBU
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	20.	U
53494-70-5	Endrin ketone	3.8	U
7421-36-3	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200.	U
12674-11-2	Aroclor-1016	38.	U
11104-28-2	Aroclor-1221	78.	U
11141-16-5	Aroclor-1232	38.	U
53469-21-9	Aroclor-1242	38.	U
12672-29-6	Aroclor-1248	38.	U
11097-69-1	Aroclor-1254	38.	U
11096-82-5	Aroclor-1260	38.	U

JN 1/28/94
AV
10-8-94

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL82

Lab Name: PACIFIC ANALYTICAL, INC. Contract: 68-D1-0098

Lab Code: PACIF Case No. 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64706PS

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 7 decanted: (Y/N) N Date Received: 8/25/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 8/30/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 9/18/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC(Lindane)	1.8	U
76-44-8	Heptachlor	0.55	J
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	2.0	JPB
72-55-9	4,4'-DDE	0.26	JPB
72-20-8	Endrin	~~0.92~~ 3.5	JPBV
33213-65-9	Endosulfan II	0.51	JP
72-54-8	4,4'-DDD	3.5	U
1031-07-8	Endosulfan sulfate	3.5	U
50-29-3	4,4'-DDT	1.1	JP
72-43-5	Methoxychlor	18.	U
53494-70-5	Endrin ketone	3.5	U
7421-36-3	Endrin aldehyde	3.5	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	35.	U
11104-28-2	Aroclor-1221	72.	U
11141-16-5	Aroclor-1232	35.	U
53469-21-9	Aroclor-1242	35.	U
12672-29-6	Aroclor-1248	35.	U
11097-69-1	Aroclor-1254	35.	U
11096-82-5	Aroclor-1260	35.	U

JN 10/20/94

AL 10-8-94

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL81

Lab Name: PACIFIC ANALYTICAL, INC. Contract: 68-D1-0098

Lab Code: PACIF Case No. 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64705PS

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 9 decanted: (Y/N) N Date Received: 8/25/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 8/30/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 9/17/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	0.27	JP
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC(Lindane)	1.9	U
76-44-8	Heptachlor	0.20	JP
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	2.4	JPB
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6 ~~0.51~~	JPBU
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	0.76	JP
72-43-5	Methoxychlor	0.53	JP
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190.	U
12674-11-2	Aroclor-1016	36.	U
11104-28-2	Aroclor-1221	74.	U
11141-16-5	Aroclor-1232	36.	U
53469-21-9	Aroclor-1242	36.	U
12672-29-6	Aroclor-1248	36.	U
11097-69-1	Aroclor-1254	36.	U
11096-82-5	Aroclor-1260	36.	U

JN 1/28/94 AV 10-5-

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL80

Lab Name: PACIFIC ANALYTICAL, INC. Contract: 68-D1-0098

Lab Code: PACIF Case No. 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64704PS

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 8/25/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 8/30/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 9/17/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	0.19	JP
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC(Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	0.50	JP
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	5.5	BJ
72-55-9	4,4'-DDE	0.78	JP
72-20-8	Endrin	~~0.37~~ 3.7	JPBU
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	1.3	J
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	1.6	JP
72-43-5	Methoxychlor	0.90	JP
53494-70-5	Endrin ketone	0.86	JP
7421-36-3	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190.	U
12674-11-2	Aroclor-1016	37.	U
11104-28-2	Aroclor-1221	75.	U
11141-16-5	Aroclor-1232	37.	U
53469-21-9	Aroclor-1242	37.	U
12672-29-6	Aroclor-1248	37.	U
11097-69-1	Aroclor-1254	37.	U
11096-82-5	Aroclor-1260	37.	U

JN 1/28/94

JN 1/28/94

10-8-9

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL79

Lab Name: PACIFIC ANALYTICAL, INC. Contract: 68-D1-0098

Lab Code: PACIF Case No. 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64703PS

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 8/25/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 8/30/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 9/18/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	0.59	JP
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC(Lindane)	1.9	U
76-44-8	Heptachlor	0.28	J
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	6.0	BJ ↑ JN 1/28/94
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	2.9	JPB ↑ JN 1/28/94
33213-65-9	Endosulfan II	0.65	JP
72-54-8	4,4'-DDD	0.87	JP
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	2.1	JP
72-43-5	Methoxychlor	3.3	J
53494-70-5	Endrin ketone	3.7	U
7421-36-3	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	0.59	JP
5103-74-2	gamma-Chlordane	1.3	JP
8001-35-2	Toxaphene	190.	U
12674-11-2	Aroclor-1016	37.	U
11104-28-2	Aroclor-1221	74.	U
11141-16-5	Aroclor-1232	37.	U
53469-21-9	Aroclor-1242	37.	U
12672-29-6	Aroclor-1248	37.	U
11097-69-1	Aroclor-1254	37.	U
11096-82-5	Aroclor-1260	37.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL78

Lab Name: PACIFIC ANALYTICAL, INC. Contract: 68-D1-0098

Lab Code: PACIF Case No. 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64702PS

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 9 decanted: (Y/N) N Date Received: 8/25/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 8/30/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 9/18/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	0.49	JP
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC(Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	5.8	PBJ
72-55-9	4,4'-DDE	0.94	JP
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	0.71	JP
72-54-8	4,4'-DDD	3.0	JP
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.0	JP
72-43-5	Methoxychlor	19.	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	2.5	P
5103-74-2	gamma-Chlordane	2.5	
8001-35-2	Toxaphene	190.	U
12674-11-2	Aroclor-1016	36.	U
11104-28-2	Aroclor-1221	74.	U
11141-16-5	Aroclor-1232	36.	U
53469-21-9	Aroclor-1242	36.	U
12672-29-6	Aroclor-1248	36.	U
11097-69-1	Aroclor-1254	36.	U
11096-82-5	Aroclor-1260	36.	U

JN 1/28/94

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL77

Lab Name: PACIFIC ANALYTICAL, INC. Contract: 68-D1-0098

Lab Code: PACIF Case No. 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64701PS

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 8/25/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 8/30/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 9/18/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC(Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	6.5	BJ
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	0.73	JP
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	1.5	JP
72-43-5	Methoxychlor	2.0	JP
53494-70-5	Endrin ketone	3.7	U
7421-36-3	Endrin aldehyde	3.7	P
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190.	U
12674-11-2	Aroclor-1016	37.	U
11104-28-2	Aroclor-1221	74.	U
11141-16-5	Aroclor-1232	37.	U
53469-21-9	Aroclor-1242	37.	U
12672-29-6	Aroclor-1248	37.	U
11097-69-1	Aroclor-1254	37.	U
11096-82-5	Aroclor-1260	37.	U

JN 1/28/94

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK81

Lab Name: PACIFIC ANALYTICAL, INC. Contract: 68-D1-0098

Lab Code: PACIF Case No. 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 4681PB

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 1/01/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 8/30/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 9/17/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 0.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC(Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	0.37	JP
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	0.25	JP
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17.	U
53494-70-5	Endrin ketone	3.3	U
7421-36-3	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	33.	U
11104-28-2	Aroclor-1221	67.	U
11141-16-5	Aroclor-1232	33.	U
53469-21-9	Aroclor-1242	33.	U
12672-29-6	Aroclor-1248	33.	U
11097-69-1	Aroclor-1254	33.	U
11096-82-5	Aroclor-1260	33.	U

1.85
1.25

300311

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK81

Lab Name: PACIFIC ANALYTICAL, INC. Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Lab Sample ID: 4681PB Lab File ID:

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

Sulfur Cleanup: (Y/N) Y Date Extracted: 8/30/93

Date Analyzed (1): 9/17/93 Date Analyzed (2): 9/17/93

Time Analyzed (1): 1630 Time Analyzed (2): 1630

Instrument ID (1): GC # 1 Instrument ID (2): GC # 1

GC Column (1): RTX-1701 ID: 0.53(mm) GC Column (2): DB-608 ID: 0.53(mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EQL77	64701PS	9/18/93	9/18/93
02	EQL77MS	64701PM	9/18/93	9/18/93
03	EQL77MSD	64701PD	9/18/93	9/18/93
04	EQL78	64702PS	9/18/93	9/18/93
05	EQL79	64703PS	9/18/93	9/18/93
06	EQL80	64704PS	9/17/93	9/17/93
07	EQL81	64705PS	9/17/93	9/17/93
08	EQL82	64706PS	9/18/93	9/18/93
09	EQL83	64707PS	9/17/93	9/17/93
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:PACIFIC ANALYTICAL, INC. Contract:68-D1-0098

Lab Code:PACIF Case No.:20663 SAS No.: SDG No.:EQL77

Matrix Spike - EPA Sample No.: EQL77

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC(Lindane)	19.	0.0	19.	100	46-127
Heptachlor	19.	0.0	15.	79	35-130
Aldrin	19.	0.0	15.	79	34-132
Dieldrin	37.	6.5	36.	80	31-134
Endrin	37.	0.0	30.	81	42-139
4,4'-DDT	37.	1.5	33.	85	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC(Lindane)	19.	22.	116	15	50	46-127
Heptachlor	19.	18.	95	18	31	35-130
Aldrin	19.	18.	95	18	43	34-132
Dieldrin	37.	44.	101	23	38	31-134
Endrin	37.	37.	100	21	45	42-139
4,4'-DDT	37.	39.	101	17	50	23-134

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

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name:PACIFIC ANALYTICAL, INC. Contract:68-D1-0098

Lab Code:PACIF Case No.:20663 SAS No.: SDG No.:EQL77

GC Column(1):RTX-1701 ID: 0.53 (mm) GC Column(2):DB-608 ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	EQL77	135	122	81	95			0
02	EQL77MS	122	122	108	88			0
03	EQL77MSD	142	142	135	102			0
04	EQL78	137	116	82	116			0
05	EQL79	115	108	74	88			0
06	EQL80	147	154*	94	107			1
07	EQL81	137	130	75	89			0
08	EQL82	189*	154*	84	119			2
09	EQL83	155*	168*	110	123			2
10	PBLK81	143	128	90	98			0
11								
12								
13								
14								
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25								
26								
27								
28								
29								
30								

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

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

FORM II PEST-2 3/90

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL83

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64707 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I20A09

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 14 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/21/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs Found: 6 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MEI	9.02	9600.	JANB ✓
2.		UNKNOWN AMIDE	37.79	920.	JB ✓
3.		UNKNOWN COOH	29.07	220.	J
4.		UNKNOWN	47.15	186.	J
5.		UNKNOWN AMIDE	30.84	146.	JB ✓
6.	56836-06-2	2-CYCLOHEXEN-1-ONE, 3,5-DIME	7.60	82.	JN
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
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18.					
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27.					
28.					
29.					
30.					

AV 10-8-93

200190

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL83

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64707 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I20A09

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 14 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/21/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	930.	U
100-02-7	4-Nitrophenol	930.	U
132-64-9	Dibenzofuran	380.	U
121-14-2	2,4-Dinitrotoluene	380.	U
84-66-2	Diethylphthalate	380.	U
7005-72-3	4-Chlorophenyl-phenylether	380.	U
86-73-7	Fluorene	380.	U
100-01-6	4-Nitroaniline	930.	U
534-52-1	4,6-Dinitro-2-methylphenol	930.	U
86-30-6	N-Nitrosodiphenylamine (1)	380.	U
101-55-3	4-Bromophenyl-phenylether	380.	U
118-74-1	Hexachlorobenzene	380.	U
87-86-5	Pentachlorophenol	930.	U
85-01-8	Phenanthrene	380.	U
120-12-7	Anthracene	380.	U
86-74-8	Carbazole	380.	U
84-74-2	Di-n-butylphthalate	380.	U
206-44-0	Fluoranthene	380.	U
129-00-0	Pyrene	380.	U
85-68-7	Butylbenzylphthalate	380.	U
91-94-1	3,3'-Dichlorobenzidine	380.	U
56-55-3	Benzo(a)anthracene	380.	U
218-01-9	Chrysene	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate	380.	U
117-84-0	Di-n-octylphthalate	380.	U
205-99-2	Benzo(b)fluoranthene	380.	U
207-08-9	Benzo(k)fluoranthene	380.	U
50-32-8	Benzo(a)pyrene	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U
53-70-3	Dibenz(a,h)anthracene	380.	U
191-24-2	Benzo(g,h,i)perylene	380.	U

(1) - Cannot be separated from Diphenylamine

200189

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 10/14/93

SUBJECT: Review of Region V CLP Data
Received for Review on Sept 29, 1993

FROM: Charles T. Elly, Director (SL-10C)
Central Regional Laboratory
MSP for CTE

TO: Data User: B+V

We have reviewed the data for the following case.

SITE NAME: Henry Hoffman (F (IL)

CASE and/or SAS NUMBER: 20663 SDG NUMBER: EQ677

Number and Type of Samples: 7 - soils

CLP Sample Numbers: EQ677-83

CLP Laboratory: Pacific Hrs. for Review 12+1.5 = 13.5 wkw

Following are our findings:

The data are acceptable for use with qualification.

RECEIVED
NOV - 3 1993

Mumtaz Pashai
10/14/93

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualification.
( ) Data are preliminary, pending verification by laboratory.
( ) Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

Site: Henry Hoffman L.F. (IL)

CONTRACTOR: PACIFIC ANALYTICAL CASE 20663

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

This review covers seven soil samples (EQL77 through EQL83) for complete organic analysis at low levels.

The reviewer's narrative and data qualifiers follow.

Reviewed by: Al Venuto (Lockheed/ESAT)

Date: 8 Oct. 1993

Hrs. Required for Review: 12

Case 20663

Site: Henry Hoffman L.F. (IL)

PACIFIC ANALYTICAL

1. Holding Times:

All samples were very promptly analyzed for volatiles and very easily met the fourteen day holding time from date of sampling for volatiles in soils.

All samples were promptly extracted for both semi-volatiles and pesticides/PCBs and easily met the fourteen day holding times for these fractions. All extracts were promptly analyzed.

2. GC/MS Tuning and GC Instrument Performance:

The GC tuning and mass calibration were all within the required Q.C. limits. All pesticide breakdown results were at or near zero, which is ideal. All pesticide resolution checks were at or near the ideal 100%.

3. Calibration:

The very few volatile and semi-volatile calibration outliers are listed on the outliers forms; there were no pesticide calibration outliers, but the forms are included for reference. All RPDs in the pesticide calibration verification summaries (Pest-1) were far below the maximum permissible 25%.

4. Method Blanks:

Both volatile method blanks were completely clean.

The semi-volatile method blank contained no TCL compounds, but did contain seven TICs; all samples also contained the two most prominent TICs, but none contained the two least prominent and most samples contained the intermediate three.

The pesticide method blank contained the target compounds Dieldrin and Endrin (both at levels only a small fraction of CRQL); all samples also contained Dieldrin and all except EQL77 and EQL78 contained Endrin.

5. Surrogate Recoveries:

All volatile and semi-volatile surrogate recoveries were well within the Q.C. limits.

For the pesticide fraction, the recoveries of tetrachloro-m-xylene in EQL82 and EQL83 (both columns) and in EQL80 (column 2 only) were slightly above the upper limit; no qualifications are recommended on this basis.

Al Venuto
8 Oct. 1993

6. Matrix Spikes and Matrix Spike Duplicates:

All MS and MSD recoveries and RPDs for all fractions were well within the Q.C. limits.

7. Field Duplicates and Field Blanks:

Sample EQL79 was identified as a duplicate of EQL78. Both contained the same volatile target compounds, but the levels in EQL79 were much higher. Comparing the semi-volatile and pesticide fractions, the results were somewhat similar, but not really good matches.

No samples in this case were identified as field blanks.

8. Internal Standards Performance:

All volatile and semi-volatile IS areas were well within the Q.C. limits.

9. Compound Identification:

The compound identifications for all fractions appear to be satisfactory.

10. Compound Quantitation and Reported Detection Limits:

The correct limits were used and the proper adjustments were made for percent moisture and effective dilution (sample size).

11. System Performance:

All aspects of the system performance appear to be satisfactory.

12. Additional Case-Specific Problems:

The volatile fraction of sample EQL82 was reanalyzed at an effective dilution (smaller sample size) because the value for toluene in the original analysis exceeded the calibration range. The value for toluene only should therefore be taken from the EQL82DL analysis; for all other compouds, the results from the original analysis should be used. (This is actually a moot point since both values for toluene are identical.)

Al Venuto (Lockheed/ESAT)
8 Oct. 1993

CALIBRATION OUTLIERS
VOLATILE TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 20663
COLUMN: SP1000

CONTRACTOR: PACIFIC ANALYT.
SITE NAME: Henry Hoffman L.F. (IL)

Instrument# VG08		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time: 8-23-93		8-23-93 12:57			8-26-93 9:59			8-27-93 14:33								
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane	0.01															
Bromomethane	0.10															
Vinyl chloride	0.10															
Chloroethane	0.01	.502	32.3	J	.514			.743	48.0	J						
Methylene chloride	0.01															
Acetone	0.01															
Carbon disulfide	0.01															
1,1-Dichloroethene	0.10															
1,1-Dichloroethane	0.20															
1,2-Dichloroethene (total)																
Chloroform	0.20															
1,2-Dichloroethane	0.10															
2-Butanone	0.01															
1,1,1-Trichloroethane	0.10															
Carbon tetrachloride	0.10															
Bromodichloromethane	0.20															
1,2-Dichloropropane																
cis-1,3-Dichloropropene	0.20															
Trichloroethene	0.30															
Dibromochloromethane	0.10															
1,1,2-Trichloroethane	0.10															
Benzene	0.50															
tran-1,3-Dichloropropene	0.10															
Bromoform	0.10															
4-Methyl-2-pentanone	0.01															
2-Hexanone	0.01															
Tetrachloroethene	0.20															
1,1,2,2-Tetrachloroethane	0.50															
Toluene	0.40															
Chlorobenzene	0.50															
Ethylbenzene	0.10															
Styrene	0.30															
Xylene (total)	0.30															
Toluene-d8																
Bromofluorobenzene																
1,2-Dichloroethane-d4																

Samples affected:

		VBLK73	VBLK74	
		EQL77	EQL82DL	
		through	EQL83	
		EQL82		
		EQL77MS		
		EQL77MSD		

Reviewer's Init/Date: AV 10-7-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 1 of 2)

CASE\SAS#: 20663
COLUMN: —

CONTRACTOR: PACIFIC ANALYT.
SITE NAME: ~~Henry Hoffman LF~~ (IL)

Instrument#	VG04		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:	9-10-93		9-10-93 14:54			9-11-93 3:25			9-16-93 12:52								
		#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Phenol		0.80															
bis(2-chloroethyl) Ether		0.70															
2-Chlorophenol		0.70															
1,3-Dichlorobenzene																	
1,4-Dichlorobenzene																	
1,2-Dichlorobenzene																	
2-Methylphenol		0.70															
2,2'-Oxybis(1-chl-propane)		0.01		31.5	J												
4-Methylphenol		0.60															
N-nitroso-di-n-propylamine		0.50															
Hexachloroethane		0.30															
Nitrobenzene		0.20															
Isophorone		0.40															
2-Nitrophenol		0.10															
2,4-Dimethylphenol		0.20															
bis-(2-chloroethoxyl)methane		0.30															
2,4-Dichlorophenol		0.20															
1,2,4-Trichlorobenzene		0.20															
Naphthalene		0.70															
4-Chloroaniline		0.01															
Hexachlorobutadiene		0.01															
4-Chloro-3-methylphenol		0.20															
2-Methylnaphthalene		0.40															
Hexachlorocyclopentadiene		0.01															
2,4,6-Trichlorophenol		0.20															
2,4,5-Trichlorophenol		0.20															
2-Chloronaphthalene		0.80															
2-Nitroaniline		0.01															
Dimethyl phthlate		0.01															
Acenaphthylene		1.30															
2,6-Dinitrotoluene		0.20															
3-Nitroaniline		0.01															
Acenaphthene		0.30															
2,4-Dinitrophenol		0.01	.144	45.5	J	.088	38.9	J	.140								
4-Nitrophenol		0.01															
Dibenzofuran		0.80															
2,4-Dinitrotoluene		0.20															

Affected samples:

	SBLK45	EQL77	EQL79		
		EQL77MS	EQL80		
		EQL77MSD	EQL81		
		EQL78	EQL82		

Reviewer's Init/Date: AV 10-7-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\SAS#: 20663
COLUMN: —

CONTRACTOR: PACIFIC ANALYT.
SITE NAME: ~~Henry Hoffman~~ L.F. (IL)

Instrument# VG04		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time: 9-10-93		9-10-93 14:54			9-11-93 3:25			9-16-93 12:52								
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Diethylphthalate	0.01															
4-Chlorophenyl-phenylether	0.40															
Fluorene	0.90															
4-Nitroaniline	0.01															
4,6-Dinitro-2-methylphenol	0.01															
N-nitrosodiphenylamine	0.01															
4-Bromophenyl-phenylether	0.10															
Hexachlorobenzene	0.10															
Pentachlorophenol	0.05															
Phenanthrene	0.70															
Anthracene	0.70															
Carbazole																
Di-n-butylphthalate	0.01															
Fluoranthene	0.60															
Pyrene	0.60															
Butylbenzylphthalate	0.01															
3,3'-Dichlorobenzidine	0.01															
Benzo(a)anthracene	0.80															
Chrysene	0.70															
bis(2-Ethylhexyl)phthalate	0.01															
Di-n-octyl phthalate	0.01															
Benzo(b)fluoranthene	0.70															
Benzo(k)fpuoranthene	0.70															
Benzo(a)pyrene	0.70															
Indeno(1,2,3-cd)pyrene	0.50															
Dibenz(a,h)anthrancene	0.40															
Benzo(g,h,i)perylene	0.50															
Nitrobenzene-d5	0.01															
2-Fluorobiphenyl	0.70															
Terphenyl-d14	0.50															
Phenol-d5	0.80															
2-Fluorophenol	0.60															
2,4,6-Tribromophenol	0.01															
2-Chlorophenol-d4																
1,2-Dichlorobenzene-d4																

Reviewer's Init/Date: AV 10-7-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 1 of 2)

CASE\SAS#: 20663
COLUMN: —

CONTRACTOR: PACIFIC ANALYT.
SITE NAME: ~~Henry Hoffman L.F.~~ (IL)

Instrument#	V604		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:	9-20-93		9-20-93 17:50														
		#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Phenol		0.80															
bis(2-chloroethyl) Ether		0.70															
2-Chlorophenol		0.70															
1,3-Dichlorobenzene																	
1,4-Dichlorobenzene																	
1,2-Dichlorobenzene																	
2-Methylphenol		0.70															
2,2'-Oxybis(1-chl-propane)		0.01															
4-Methylphenol		0.60															
N-nitroso-di-n-propylamine		0.50															
Hexachloroethane		0.30															
Nitrobenzene		0.20															
Isophorone		0.40															
2-Nitrophenol		0.10															
2,4-Dimethylphenol		0.20															
bis-(2-chloroethoxyl)methane		0.30															
2,4-Dichlorophenol		0.20															
1,2,4-Trichlorobenzene		0.20															
Naphthalene		0.70															
4-Chloroaniline		0.01															
Hexachlorobutadiene		0.01															
4-Chloro-3-methylphenol		0.20															
2-Methylnaphthalene		0.40															
Hexachlorocyclopentadiene		0.01															
2,4,6-Trichlorophenol		0.20															
2,4,5-Trichlorophenol		0.20															
2-Chloronaphthalene		0.80															
2-Nitroaniline		0.01															
Dimethyl phthlate		0.01															
Acenaphthylene		1.30															
2,6-Dinitrotoluene		0.20															
3-Nitroaniline		0.01															
Acenaphthene		0.30															
2,4-Dinitrophenol		0.01															
4-Nitrophenol		0.01															
Dibenzofuran		0.80															
2,4-Dinitrotoluene		0.20															

Affected samples: ELQ83

Reviewer's Init/Date: AV 10-7-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\SAS#: 20663
COLUMN: —

CONTRACTOR: PACIFIC ANALYT.
SITE NAME: ~~Henry Hoffman L.F.~~ (IL)

Instrument# VG 04		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time: 9-20-93		9-20-93 17:50														
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Diethylphthalate	0.01															
4-Chlorophenyl-phenylether	0.40															
Fluorene	0.90															
4-Nitroaniline	0.01															
4,6-Dinitro-2-methylphenol	0.01															
N-nitrosodiphenylamine	0.01															
4-Bromophenyl-phenylether	0.10															
Hexachlorobenzene	0.10															
Pentachlorophenol	0.05															
Phenanthrene	0.70															
Anthracene	0.70															
Carbazole																
Di-n-butylphthalate	0.01															
Fluoranthene	0.60															
Pyrene	0.60															
Butylbenzylphthalate	0.01															
3,3'-Dichlorobenzidine	0.01															
Benzo(a)anthracene	0.80															
Chrysene	0.70															
bis(2-Ethylhexyl)phthalate	0.01															
Di-n-octyl phthalate	0.01															
Benzo(b)fluoranthene	0.70															
Benzo(k)fpuoranthene	0.70															
Benzo(a)pyrene	0.70															
Indeno(1,2,3-cd)pyrene	0.50															
Dibenz(a,h)anthrancene	0.40															
Benzo(g,h,i)perylene	0.50															
Nitrobenzene-d5	0.01															
2-Fluorobiphenyl	0.70															
Terphenyl-d14	0.50															
Phenol-d5	0.80															
2-Fluorophenol	0.60															
2,4,6-Tribromophenol	0.01															
2-Chlorophenol-d4																
1,2-Dichlorobenzene-d4																

Reviewer's Init/Date: AV 10-7-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIERS
PESTICIDE/PCB TCL COMPOUNDS

CASE\SAS#: 20663 CONTRACTOR: PACIFIC ANALYT.

Column: DB-608 Site Name: Henry Hoffman LF (IL)

Instrument#: GC#1	Initial Cal.		Continue Cal.		Continue Cal.		Continue Ca	
Date/Time 9-16-93	9-16-93	16:37	9-17-93	3:35	9-18-93	2:47	9-19-93	1:10
	%RSD	*	%RPD	*	%RPD	*	%RPD	*
Alpha-BHC								
Beta-BHC								
Delta-BHC								
Gamma-BHC								
Heptachlor								
Aldrin								
Heptachlor epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endosulfan sulfate								
4,4'-DDT								
Methoxychlor								
Endrin ketone								
Endrin aldehyde								
Alpha chlordane								
Gamma chlordane								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								
Toxaphene								

Affected samples:

		PBLK81	EQL78
		EQL77	EQL79
		EQL77MS	EQL82
		EQL77MSD	
		EQL80	
		EQL81	
		EQL83	

Reviewer's Init/Date: AV 10-8-93

ESAT-5-024.2 1/93

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
PESTICIDE/PCB TCL COMPOUNDS

CASE\SAS#: 20663 CONTRACTOR: PACIFIC ANALYT.

Column: RTX-1701 Site Name: Henry Hoffman LF (FL)

Instrument#: GC#1	Initial Cal.		Continue Cal.		Continue Cal.		Continue Ca	
Date/Time 9-16-93	9-16-93	16:37	9-17-93	3:35	9-18-93	2:47	9-19-93	1:10
	%RSD	*	%RPD	*	%RPD	*	%RPD	*
Alpha-BHC								
Beta-BHC								
Delta-BHC								
Gamma-BHC								
Heptachlor								
Aldrin								
Heptachlor epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endosulfan sulfate								
4,4'-DDT								
Methoxychlor								
Endrin ketone								
Endrin aldehyde								
Alpha chlordane								
Gamma chlordane								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								
Toxaphene								

Affected samples:

		PBLK81	EQL78
		EQL77	EQL79
		EQL77MS	EQL82
		EQL77MSD	
		EQL80	
		EQL81	
		EQL83	

Reviewer's Init/Date: AV 10-8-93

ESAT-5-024.2 1/93

* These flags should be applied to the analytes on the sample data sheets.

DATA REPORTING QUALIFIERS
(page 1)

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE-if the results is a value greater than or equal to the Contract Required Quantitation Limit (CRQL), report the value.

U - Indicates compound was analyzed for but not detected. The sample Quantitation Limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if thee sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the Sample Quantitation Limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U) \times df}{D} \qquad \text{where } D = \frac{100 - \%\ moisture}{100}$$

and df = dilution factor

$$\text{at } 24\%\ \text{moisture, } D = \frac{100 - 24}{100} = 0.76$$

$$\frac{(330\ U) \times 10}{.76} = 4300\ U \text{ rounded to the appropriate number of significant figures}$$

For soil samples subjected to GPC clean-up procedures, the extract must be concentrated to 0.5 ml, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume, this fact be accounted for in reporting the Sample Quantitation Limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit bur greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it is as 3J. The Sample Quantitation Limit must be adjusted for dilution as discussed for the U flag. The J flag is also applied to pesticide/Aroclor results where the pesticide/Aroclor is confirmed to be present but the concentration is less than the CRQL.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds. Where the identification is based on a mass spectral library search. It is applied to all TIC results.

DATA REPORTING QUALIFIERS
(page 2)

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".

C - This flag applies to pesticide results where identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but unsuccessful, do not apply this flag, instead use a laboratory-defined, discussed below.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for the specific analysis. This flag will not apply to pesticide/PCBs analyzed by GC/MS methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG Narrative. If more than one flag is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B" and "D" flags for some sample. The laboratory-defined are limited to letters "X", "Y" and "Z".

Pacific Analytical, Inc.

6349 Paseo Del Lago • Carlsbad, CA 92009
(619) 438-3100 • FAX: 931-9479

SDG NARRATIVE

Pacific Analytical, Inc		Contract No.	68-D1-0098
Case No. 20663		SDG No.	EQL77
Samples:	EQL77 - EQL83		
VOA pH list:	N/A		

Comments:

The sample aliquot designated for metals and cyanide analysis for sample EQL78 (MEQD55) was received by the laboratory. Per instructions from Nina Kuchar at SMO, the sample aliquot was sent to another laboratory. See copy of Telephone Record Log.

Sample EQL82 was diluted for volatiles analysis due to a high concentration of toluene in the sample.

Pesticide chromatograms consist of two pages with some of the header information appearing only on the integration report sheet. A unique chromatogram identifying code is found on each page following the word "Analysis".

Our British GC data system prints dates on pesticide chromatograms in international format: DD-MM-YY.

A key to the peak labels on the GC/MS chromatograms follows the narrative.

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

Lee Helms

Lee Helms
Project Manager 9/23/93

In Reference to Case No(s):

20663

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call: 8/25/93

Laboratory Name: Pacific Analytical

Lab Contact: Lee Helms

Region: V

Regional Contact: Nina Kuchar / SMO

Call Initiated By: ✓ Laboratory ___ Region

In reference to data for the following sample number(s):

ELQ78 (MEQD55)

Summary of Questions/Issues Discussed:

The laboratory received sample digest marked for metals/cn analysis.

Summary of Resolution:

Send to another laboratory.

Lee Helms
Signature

8/25/93
Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:PACIFIC ANALYTICAL Contract:68-D1-0098

Lab Code:PACIF Case No.:20663 SAS No.: SDG No.:EQL77

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	EQL77	106	92	90		0
02	EQL77MS	103	88	88		0
03	EQL77MSD	106	90	86		0
04	EQL78	109	91	93		0
05	EQL79	108	88	90		0
06	EQL80	110	89	89		0
07	EQL81	106	93	91		0
08	EQL82	108	89	86		0
09	EQL82DL	101	94	92		0
10	EQL83	101	95	89		0
11	VBLK73	103	93	96		0
12	VBLK74	100	94	90		0
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene-d8	(84-138)
SMC2 (BFB) = Bromofluorobenzene	(59-113)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

100001

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:PACIFIC ANALYTICAL Contract:68-D1-0098

Lab Code:PACIF Case No.:20663 SAS No.: SDG No.:EQL77

Matrix Spike - EPA Sample No.: EQL77 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	56.	0.	58.	104	59-172
Trichloroethene	56.	0.	55.	98	62-137
Benzene	56.	0.	55.	98	66-142
Toluene	56.	24.	87.	112	59-139
Chlorobenzene	56.	0.	54.	96	60-133

=S

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	56.	56.	100	4	22	59-172
Trichloroethene	56.	55.	98	0	24	62-137
Benzene	56.	53.	95	3	21	66-142
Toluene	56.	86.	111	1	21	59-139
Chlorobenzene	56.	53.	95	1	21	60-133

=D

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

100002

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK73

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Lab File ID: 8H26B02 Lab Sample ID: 00000

Date Analyzed: 8/26/93 Time Analyzed: 1105

GC Column: SP-1000 ID: 2.00 (mm) Heated Purge: (Y/N) Y

Instrument ID: VG08

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EQLZZ	44701	8H26B03	1200
02	EQLZZDS	44701	8H26B04	1304
03	EQLZZMSD	44701	8H26B05	1359
04	EQL78	44702	8H26B06	1455
05	EQL79	44703	8H26B07	1556
06	EQL80	44704	8H26B08	1652
07	EQL81	44705	8H26B09	1747
08	EQL82	44706	8H26B10	1843
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COMMENTS:

MEC 9/14/93

100003

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK74

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Lab File ID: 8H27B02 Lab Sample ID: 00000

Date Analyzed: 8/27/93 Time Analyzed: 1545

GC Column: SP-1000 ID: 2.00 (mm) Heated Purge: (Y/N) Y

Instrument ID: VG08

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EQL82DL	A4706	8H27B03	1640
02	EQL83	A4707	8H27B04	1735
03				
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COMMENTS:

100004

9/14/93

FORM IV VOA 3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK73

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 00000

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B02

Level: (low/med) LOW Date Received: 8/26/93

% Moisture: not dec. 0 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

unbias

100105

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK73

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 00000

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B02

Level: (low/med) LOW Date Received: 8/26/93

% Moisture: not dec. 0 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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100106

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK74

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 00000

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H27B02

Level: (low/med) LOW Date Received: 8/27/93

% Moisture: not dec. 0 Date Analyzed: 8/27/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

unk bias
JH 1/4/94

100111

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK74

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 00000

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H27B02

Level: (low/med) LOW Date Received: 8/27/93

% Moisture: not dec. 0 Date Analyzed: 8/27/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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100112

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL77

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64701

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B03

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 10 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U J unk bias
75-09-2	Methylene Chloride	46.	
67-64-1	Acetone	15.	
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
540-59-0	1,2-Dichloroethene (total)	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	29.	
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
1330-20-7	Xylene (total)	11.	U

100010

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL77

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64701

Sample wt/vol: 5.00 (g/ml) G Lab File ID: SH26B03

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 10 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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100011

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL78

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64702

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B06

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 9 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	11.	
67-64-1	Acetone	9.	J
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
540-59-0	1,2-Dichloroethene (total)	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	62.	
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
1330-20-7	Xylene (total)	11.	U

100019

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL78

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64702

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B06

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 9 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL79

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64703

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B07

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 10 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	30.	
67-64-1	Acetone	20.	
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
540-59-0	1,2-Dichloroethene (total)	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	180.	
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
1330-20-7	Xylene (total)	11.	U

100028

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL79

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64703

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B07

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 10 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL80

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64704

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B08

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 11 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	35.	
67-64-1	Acetone	10.	J
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
540-59-0	1,2-Dichloroethene (total)	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	83.	
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
1330-20-7	Xylene (total)	11.	U

100037

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL80

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64704

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B08

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 11 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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100038

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL81

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64705

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B09

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 9 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	14.	
67-64-1	Acetone	17.	
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
540-59-0	1,2-Dichloroethene (total)	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	82.	
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
1330-20-7	Xylene (total)	11.	U

100046

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL81

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64705

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B09

Level: (low/med) LOW Date Received: 9/25/93

% Moisture: not dec. 9 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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100047

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL82

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64706

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B10

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 7 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	UJ
75-09-2	Methylene Chloride	17.	
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
540-59-0	1,2-Dichloroethene (total)	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	360.	E
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
1330-20-7	Xylene (total)	11.	U

JN 1/28/94 unknown bias

100055

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL82

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20668 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64706

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H26B10

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 7 Date Analyzed: 8/26/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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100056

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL82DL

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64706

Sample wt/vol: 2.50 (g/ml) G Lab File ID: 8H27B03

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 7 Date Analyzed: 8/27/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	22.	U
74-83-9	Bromomethane	22.	U
75-01-4	Vinyl Chloride	22.	U
75-00-3	Chloroethane	22.	UJ
75-09-2	Methylene Chloride	14.	BJ
67-64-1	Acetone	22.	U
75-15-0	Carbon Disulfide	22.	U
75-35-4	1,1-Dichloroethene	22.	U
75-34-3	1,1-Dichloroethane	22.	U
540-59-0	1,2-Dichloroethene (total)	22.	U
67-66-3	Chloroform	22.	U
107-06-2	1,2-Dichloroethane	22.	U
78-93-3	2-Butanone	22.	U
71-55-6	1,1,1-Trichloroethane	22.	U
56-23-5	Carbon Tetrachloride	22.	U
75-27-4	Bromodichloromethane	22.	U
78-87-5	1,2-Dichloropropane	22.	U
10061-01-5	cis-1,3-Dichloropropene	22.	U
79-01-6	Trichloroethene	22.	U
124-48-1	Dibromochloromethane	22.	U
79-00-5	1,1,2-Trichloroethane	22.	U
71-43-2	Benzene	22.	U
10061-02-6	trans-1,3-Dichloropropene	22.	U
75-25-2	Bromoform	22.	U
108-10-1	4-Methyl-2-Pentanone	22.	U
591-78-6	2-Hexanone	22.	U
127-18-4	Tetrachloroethene	22.	U
79-34-5	1,1,2,2-Tetrachloroethane	22.	U
108-88-3	Toluene	360.	D
108-90-7	Chlorobenzene	22.	U
100-41-4	Ethylbenzene	22.	U
100-42-5	Styrene	22.	U
1330-20-7	Xylene (total)	22.	U

JH 1/4/94

100063

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL82DL

Lab Name: PACIFIC ANALYTICAL Contract: 68-01-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64706

Sample wt/vol: 2.50 (g/ml) G Lab File ID: 8H27B03

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 7 Date Analyzed: 8/27/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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100064

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL83

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64707

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H27B04

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 14 Date Analyzed: 8/27/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	UJ
75-09-2	Methylene Chloride	11.	J
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	12.	U
75-35-4	1,1-Dichloroethene	12.	U
75-34-3	1,1-Dichloroethane	12.	U
540-59-0	1,2-Dichloroethene (total)	12.	U
67-66-3	Chloroform	12.	U
107-06-2	1,2-Dichloroethane	12.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	12.	U
56-23-5	Carbon Tetrachloride	12.	U
75-27-4	Bromodichloromethane	12.	U
78-87-5	1,2-Dichloropropane	12.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U
79-01-6	Trichloroethene	12.	U
124-48-1	Dibromochloromethane	12.	U
79-00-5	1,1,2-Trichloroethane	12.	U
71-43-2	Benzene	12.	U
10061-02-6	trans-1,3-Dichloropropene	12.	U
75-25-2	Bromoform	12.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	12.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U
108-88-3	Toluene	120.	
108-90-7	Chlorobenzene	12.	U
100-41-4	Ethylbenzene	12.	U
100-42-5	Styrene	12.	U
1330-20-7	Xylene (total)	12.	U

unk bias
JN 1/4/94

100071

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL83

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64707

Sample wt/vol: 5.00 (g/ml) G Lab File ID: 8H27B04

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: not dec. 14 Date Analyzed: 8/27/93

GC Column: SP-1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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100072

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name:PACIFIC ANALYTICAL Contract:68-D1-0098

Lab Code:PACIF Case No.:20663 SAS No.: SDG No.:EQL77

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	EQL77	76	86	81	97	90	72	90	74	0
02	EQL77MS	70	86	76	86	83	68	83	74	0
03	EQL77MSD	70	86	81	86	86	79	83	74	0
04	EQL78	76	93	82	91	87	66	84	75	0
05	EQL79	81	70	81	94	83	97	90	74	0
06	EQL80	91	80	91	103	89	103	96	79	0
07	EQL81	82	71	82	91	84	66	84	75	0
08	EQL82	78	73	89	89	74	93	82	71	0
09	EQL83	77	77	77	93	93	72	89	76	0
10	SBLK45	84	90	90	100	96	80	88	76	0
11										
12										
13										
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		QC LIMITS	
S1 (NBZ) =	Nitrobenzene-d5	(23-120)	
S2 (FBP) =	2-Fluorobiphenyl	(30-115)	
S3 (TPH) =	Terphenyl-d14	(18-137)	
S4 (PHL) =	Phenol-d5	(24-113)	
S5 (2FP) =	2-Fluorophenol	(25-121)	
S6 (TBP) =	2,4,6-Tribromophenol	(19-122)	
S7 (2CP) =	2-Chlorophenol-d4	(20-130)	(advisory)
S8 (DCB) =	1,2-Dichlorobenzene-d4	(20-130)	(advisory)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

200001

FORM II SV-2 3/90

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix Spike - EPA Sample No.: EQL77 Level: (low/med) LOW 9.22.93 SAM

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	2800.	0.	2200.	79	26-90
2-Chlorophenol	2800.	0.	2000.	71	25-102
1,4-Dichlorobenzene	1900.	0.	1400.	74	28-104
N-Nitroso-di-n-prop.(1)	1900.	0.	1500.	79	41-126
1,2,4-Trichlorobenzene	1900.	0.	1300.	68	38-107
4-Chloro-3-methylphenol	2800.	0.	2300.	82	26-103
Acenaphthene	1900.	0.	1500.	79	31-137
4-Nitrophenol	2800.	0.	2300.	82	11-114
2,4-Dinitrotoluene	1900.	0.	1400.	74	28-89
Pentachlorophenol	2800.	0.	1300.	46	17-109
Pyrene	1900.	0.	1400.	74	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2800.	2300.	82	4	35	26-90
2-Chlorophenol	2800.	2000.	71	0	50	25-102
1,4-Dichlorobenzene	1900.	1300.	68	8	27	28-104
N-Nitroso-di-n-prop.(1)	1900.	1500.	79	0	38	41-126
1,2,4-Trichlorobenzene	1900.	1300.	68	0	23	38-107
4-Chloro-3-methylphenol	2800.	2300.	82	0	33	26-103
Acenaphthene	1900.	1500.	79	0	19	31-137
4-Nitrophenol	2800.	2400.	86	5	50	11-114
2,4-Dinitrotoluene	1900.	1500.	79	7	47	28-89
Pentachlorophenol	2800.	840.	30	42	47	17-109
Pyrene	1900.	1500.	79	7	36	35-142

(1) N-Nitroso-di-n-propylamine

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

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS:

200002

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK45

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Lab File ID: 4I10A08 Lab Sample ID: 4679 SB

Instrument ID: VG04 Date Extracted: 8/30/93

Matrix: (soil/water) SOIL Date Analyzed: 9/10/93

Level: (low/med) LOW Time Analyzed: 2135

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EQLZZ	64701 SS	4I10A16	9/11/93
02	EQLZZMS	64701 SM	4I10A17	9/11/93
03	EQLZZMSD	64701 SD	4I10A18	9/11/93
04	EQL78	64702 SS	4I10A19	9/11/93
05	EQL79	64703 SS	4I16A08	9/16/93
06	EQL80	64704 SS	4I16A06	9/16/93
07	EQL81	64705 SS	4I16A05	9/16/93
08	EQL82	64706 SS	4I16A09	9/16/93
09	EQL83	64707 SS	4I20A09	9/21/93
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COMMENTS:

200003

FORM IV SV 3/90

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK45

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 4679 SB

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I10A08

Level: (low/med) LOW Date Received: 8/20/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/10/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 0.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330.	U
111-44-4	bis(2-Chloroethyl)ether	330.	U
95-57-8	2-Chlorophenol	330.	U
541-73-1	1,3-Dichlorobenzene	330.	U
106-46-7	1,4-Dichlorobenzene	330.	U
95-50-1	1,2-Dichlorobenzene	330.	U
95-48-7	2-Methylphenol	330.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330.	U J
106-44-5	4-Methylphenol	330.	U
621-64-7	N-Nitroso-di-n-propylamine	330.	U
67-72-1	Hexachloroethane	330.	U
98-95-3	Nitrobenzene	330.	U
78-59-1	Isophorone	330.	U
88-75-5	2-Nitrophenol	330.	U
105-67-9	2,4-Dimethylphenol	330.	U
111-91-1	bis(2-Chloroethoxy)methane	330.	U
120-83-2	2,4-Dichlorophenol	330.	U
120-82-1	1,2,4-Trichlorobenzene	330.	U
91-20-3	Naphthalene	330.	U
106-47-8	4-Chloroaniline	330.	U
87-68-3	Hexachlorobutadiene	330.	U
59-50-7	4-Chloro-3-methylphenol	330.	U
91-57-6	2-Methylnaphthalene	330.	U
77-47-4	Hexachlorocyclopentadiene	330.	U
88-06-2	2,4,6-Trichlorophenol	330.	U
95-95-4	2,4,5-Trichlorophenol	800.	U
91-58-7	2-Chloronaphthalene	330.	U
88-74-4	2-Nitroaniline	800.	U
131-11-3	Dimethylphthalate	330.	U
208-96-8	Acenaphthylene	330.	U
606-20-2	2,6-Dinitrotoluene	330.	U
99-09-2	3-Nitroaniline	800.	U
83-32-9	Acenaphthene	330.	U

unk bias
JN 04/94

200269

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK45

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 4679 SB

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I10A08

Level: (low/med) LOW Date Received: 8/20/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/10/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 0.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	800.	UJ
100-02-7	4-Nitrophenol	800.	U
132-64-9	Dibenzofuran	330.	U
121-14-2	2,4-Dinitrotoluene	330.	U
84-66-2	Diethylphthalate	330.	U
7005-72-3	4-Chlorophenyl-phenylether	330.	U
86-73-7	Fluorene	330.	U
100-01-6	4-Nitroaniline	800.	U
534-52-1	4,6-Dinitro-2-methylphenol	800.	U
86-30-6	N-Nitrosodiphenylamine (1)	330.	U
101-55-3	4-Bromophenyl-phenylether	330.	U
118-74-1	Hexachlorobenzene	330.	U
87-86-5	Pentachlorophenol	800.	U
85-01-8	Phenanthrene	330.	U
120-12-7	Anthracene	330.	U
86-74-8	Carbazole	330.	U
84-74-2	Di-n-butylphthalate	330.	U
206-44-0	Fluoranthene	330.	U
129-00-0	Pyrene	330.	U
85-68-7	Butylbenzylphthalate	330.	U
91-94-1	3,3'-Dichlorobenzidine	330.	U
56-55-3	Benzo(a)anthracene	330.	U
218-01-9	Chrysene	330.	U
117-81-7	bis(2-Ethylhexyl)phthalate	330.	U
117-84-0	Di-n-octylphthalate	330.	U
205-99-2	Benzo(b)fluoranthene	330.	U
207-08-9	Benzo(k)fluoranthene	330.	U
50-32-8	Benzo(a)pyrene	330.	U
193-39-5	Indeno(1,2,3-cd)pyrene	330.	U
53-70-3	Dibenz(a,h)anthracene	330.	U
191-24-2	Benzo(g,h,i)perylene	330.	U

unk bias 1/4/94 JM

(1) - Cannot be separated from Diphenylamine

200270

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK45

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 4679 SB

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I10A08

Level: (low/med) LOW Date Received: 8/20/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/10/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 0.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	9.05	8000.	JAN
2.		UNKNOWN AMIDE	37.53	760.	J
3.	111-46-6	ETHANOL, 2,2'-OXYBIS-	12.23	280.	JN
4.		UNKNOWN AMIDE	33.53	200.	J
5.		UNKNOWN AMIDE	30.80	104.	J
6.		UNKNOWN	37.94	92.	J
7.	98-86-2	ETHANONE, 1-PHENYL-	14.75	84.	JN
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200271

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL77

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64701 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I10A16

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 10 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/11/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370.	UJ
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	890.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	890.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U
99-09-2	3-Nitroaniline	890.	U
83-32-9	Acenaphthene	370.	U

JN 1/28/94 unknown bias

200016

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL77

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64701 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I10A16

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 10 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/11/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	890.	UJ
100-02-7	4-Nitrophenol	890.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	890.	U
534-52-1	4,6-Dinitro-2-methylphenol	890.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	890.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
86-74-8	Carbazole	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	370.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

UNK bias
JN 1/4/94

(1) - Cannot be separated from Diphenylamine

200017

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL77

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64701 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I10A16

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 10 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/11/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs Found: 19 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	9.08	11200.	JANB✓
2.		UNKNOWN AMIDE	37.53	720.	JB✓
3.		UNKNOWN ALKANE	38.50	560.	J
4.		UNKNOWN ALKANE	41.35	500.	J
5.		UNKNOWN	46.54	360.	J
6.		UNKNOWN	43.47	280.	J
7.		UNKNOWN COOH	29.02	280.	J
8.		UNKNOWN AMIDE	33.53	260.	JB✓
9.		UNKNOWN	47.17	220.	J
10.		UNKNOWN	48.17	220.	J
11.		UNKNOWN	21.43	220.	J
12.		UNKNOWN ALKANE	36.40	196.	J
13.		UNKNOWN HYDROCARBON	37.92	176.	J
14.		UNKNOWN AMIDE	30.80	152.	JB✓
15.	54334-06-2	2-CYCLOHEXEN-1-ONE, 3,5-DIME	7.65	122.	JN
16.		UNKNOWN ALKANE	34.59	122.	J
17.		UNKNOWN ALKANE	35.50	108.	J
18.		UNKNOWN COOH	31.29	92.	J
19.		UNKNOWN HYDROCARBON	38.85	88.	J
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AV 10-4-93

200018

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL78

Lab Name: PACIFIC ANALYTICAL Contract: 68-01-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64702 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I10A19

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 9 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/11/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360.	U
111-44-4	bis(2-Chloroethyl)ether	360.	U
95-57-8	2-Chlorophenol	360.	U
541-73-1	1,3-Dichlorobenzene	360.	U
106-46-7	1,4-Dichlorobenzene	360.	U
95-50-1	1,2-Dichlorobenzene	360.	U
95-48-7	2-Methylphenol	360.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360.	UJ
106-44-5	4-Methylphenol	360.	U
621-64-7	N-Nitroso-di-n-propylamine	360.	U
67-72-1	Hexachloroethane	360.	U
98-95-3	Nitrobenzene	360.	U
78-59-1	Isophorone	360.	U
88-75-5	2-Nitrophenol	360.	U
105-67-9	2,4-Dimethylphenol	360.	U
111-91-1	bis(2-Chloroethoxy)methane	360.	U
120-83-2	2,4-Dichlorophenol	360.	U
120-82-1	1,2,4-Trichlorobenzene	360.	U
91-20-3	Naphthalene	360.	U
106-47-8	4-Chloroaniline	360.	U
87-68-3	Hexachlorobutadiene	360.	U
59-50-7	4-Chloro-3-methylphenol	360.	U
91-57-6	2-Methylnaphthalene	360.	U
77-47-4	Hexachlorocyclopentadiene	360.	U
88-06-2	2,4,6-Trichlorophenol	360.	U
95-95-4	2,4,5-Trichlorophenol	880.	U
91-58-7	2-Chloronaphthalene	360.	U
88-74-4	2-Nitroaniline	880.	U
131-11-3	Dimethylphthalate	360.	U
208-96-8	Acenaphthylene	360.	U
606-20-2	2,6-Dinitrotoluene	360.	U
99-09-2	3-Nitroaniline	880.	U
83-32-9	Acenaphthene	360.	U

JN 1/28/94 unk bias

200042

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL78

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64702 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I10A19

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 9 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/11/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	880.	UJ
100-02-7	4-Nitrophenol	880.	U
132-64-9	Dibenzofuran	360.	U
121-14-2	2,4-Dinitrotoluene	360.	U
84-66-2	Diethylphthalate	360.	U
7005-72-3	4-Chlorophenyl-phenylether	360.	U
86-73-7	Fluorene	360.	U
100-01-6	4-Nitroaniline	880.	U
534-52-1	4,6-Dinitro-2-methylphenol	880.	U
86-30-6	N-Nitrosodiphenylamine (1)	360.	U
101-55-3	4-Bromophenyl-phenylether	360.	U
118-74-1	Hexachlorobenzene	360.	U
87-86-5	Pentachlorophenol	880.	U
85-01-8	Phenanthrene	190.	J
120-12-7	Anthracene	360.	U
86-74-8	Carbazole	360.	U
84-74-2	Di-n-butylphthalate	360.	U
206-44-0	Fluoranthene	340.	J
129-00-0	Pyrene	300.	J
85-68-7	Butylbenzylphthalate	360.	U
91-94-1	3,3'-Dichlorobenzidine	360.	U
56-55-3	Benzo(a)anthracene	160.	J
218-01-9	Chrysene	170.	J
117-81-7	bis(2-Ethylhexyl)phthalate	360.	U
117-84-0	Di-n-octylphthalate	360.	U
205-99-2	Benzo(b)fluoranthene	280.	J
207-08-9	Benzo(k)fluoranthene	360.	U
50-32-8	Benzo(a)pyrene	160.	J
193-39-5	Indeno(1,2,3-cd)pyrene	360.	U
53-70-3	Dibenz(a,h)anthracene	360.	U
191-24-2	Benzo(g,h,i)perylene	360.	U

unk bias 1/4/94 JN

(1) - Cannot be separated from Diphenylamine

200043

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL78

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64702 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I10A19

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 9 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/11/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs Found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	9.08	10400.	JANBV
2.		UNKNOWN AMIDE	37.52	580.	JBV
3.		UNKNOWN COOH	29.00	300.	J
4.		UNKNOWN ALKANE	41.34	300.	J
5.		UNKNOWN	46.52	260.	J
6.		UNKNOWN ALKANE	38.50	240.	J
7.		UNKNOWN	43.47	220.	J
8.		UNKNOWN AMIDE	33.53	182.	JBV
9.		UNKNOWN HYDROCARBON	37.92	150.	J
10.	111-46-6	ETHANOL, 2,2'-OXYBIS-	12.20	148.	JNBV
11.	56386-06-2	2-CYCLOHEXEN-1-ONE, 3,5-DIME	7.63	118.	JN
12.		UNKNOWN ALKANE	34.59	118.	J
13.		UNKNOWN COOH	31.27	108.	J
14.		UNKNOWN AMIDE	30.79	106.	JBV
15.		UNKNOWN PNA	39.85	106.	J
16.		UNKNOWN	48.12	100.	J
17.		UNKNOWN PNA	36.00	98.	J
18.		UNKNOWN ALKANE	36.39	94.	J
19.		UNKNOWN PNA	36.64	92.	J
20.		UNKNOWN PNA	29.34	84.	J
21.		UNKNOWN HYDROCARBON	35.90	82.	J
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AV 10-5-93

200044

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL79

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64703 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A08

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 10 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370.	U J
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	890.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	890.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U
99-09-2	3-Nitroaniline	890.	U
83-32-9	Acenaphthene	370.	U

JW 1/28/94 Unk blks

200077

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL79

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64703 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A08

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 10 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	890.	UJ
100-02-7	4-Nitrophenol	890.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	890.	U
534-52-1	4,6-Dinitro-2-methylphenol	890.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	890.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
86-74-8	Carbazole	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	130.	J
129-00-0	Pyrene	140.	J
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	370.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	120.	J
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

JN 1/28/94 unkbias

(1) - Cannot be separated from Diphenylamine

200078

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL79

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64703 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A08

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 10 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs Found: 16 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	9.05	9400.	JANBV
2.		UNKNOWN	39.62	720.	J
3.		UNKNOWN	35.70	580.	J
4.	82-05-3	7H-BENZ DE ANTHRACEN-7-ONE	34.97	520.	JN
5.		UNKNOWN AMIDE	37.65	460.	JBV
6.		UNKNOWN COOH	29.09	340.	J
7.		UNKNOWN AMIDE	33.62	300.	JBV
8.		UNKNOWN ALKANE	41.57	280.	J
9.		UNKNOWN	46.90	280.	J
10.		UNKNOWN ALKANE	38.65	260.	J
11.	54338-06-2	2-CYCLOHEXEN-1-ONE, 3,5-DIME	7.60	182.	JN
12.		UNKNOWN HYDROCARBON	35.99	130.	J
13.	111-46-6	ETHANOL, 2,2'-OXYBIS-	12.20	126.	JNBV
14.		UNKNOWN ALKANE	36.50	98.	J
15.		UNKNOWN ALKANE	34.67	86.	J
16.		UNKNOWN COOH	31.35	74.	J
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AV 10-8-93

200079

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL80

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64704 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A06

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 11 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370.	UJ
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	900.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	900.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U
99-09-2	3-Nitroaniline	900.	U
83-32-9	Acenaphthene	370.	U

JN 1/28/94 unk bias

200103

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL80

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64704 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A06

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 11 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900.	UJ
100-02-7	4-Nitrophenol	900.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	900.	U
534-52-1	4,6-Dinitro-2-methylphenol	900.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	900.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
86-74-8	Carbazole	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	370.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

JN 1/28/94 unk bias

(1) - Cannot be separated from Diphenylamine

200104

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL80

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64704 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A06

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 11 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs Found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-BENTANONE, 4-HYDROXY-4-MET	9.07	11600.	JANBU
2.		UNKNOWN ALKANE	38.65	820.	J
3.		UNKNOWN ALKANE	41.59	580.	J
4.		UNKNOWN COOH	29.09	540.	J
5.		UNKNOWN	38.74	520.	J
6.		UNKNOWN	48.59	400.	J
7.		UNKNOWN HYDROCARBON	41.84	320.	J
8.		UNKNOWN ALKANE	36.50	320.	J
9.		UNKNOWN	46.94	280.	J
10.		UNKNOWN AMIDE	37.64	280.	JBU
11.		UNKNOWN COOH	31.35	260.	J
12.		UNKNOWN AMIDE	33.62	260.	JBU
13.	111-46-6	ETHANOL, 2,2'-OXYBIS-	12.22	240.	JNBU
14.		UNKNOWN	46.22	220.	J
15.		UNKNOWN COOH	36.09	178.	J
16.		UNKNOWN AMIDE	30.87	160.	JBU
17.		UNKNOWN ALKANE	38.05	126.	J
18.	56336-06-2	2-CYCLOHEXEN-1-ONE, 3,5-DIME	7.60	116.	JN
19.		UNKNOWN ALKANE	34.67	114.	J
20.		UNKNOWN HYDROCARBON	29.84	112.	J
21.		UNKNOWN COOH	27.37	110.	J
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AV 10-8-93

200105

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL81

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64705 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A05

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 9 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
108-95-2	Phenol	360.	U	
111-44-4	bis(2-Chloroethyl)ether	360.	U	
95-57-8	2-Chlorophenol	360.	U	
541-73-1	1,3-Dichlorobenzene	360.	U	
106-46-7	1,4-Dichlorobenzene	360.	U	
95-50-1	1,2-Dichlorobenzene	360.	U	
95-48-7	2-Methylphenol	360.	U	1/28/94
108-60-1	2,2'-oxybis(1-Chloropropane)	360.	UJ	unk bias
106-44-5	4-Methylphenol	360.	U	
621-64-7	N-Nitroso-di-n-propylamine	360.	U	
67-72-1	Hexachloroethane	360.	U	
98-95-3	Nitrobenzene	360.	U	
78-59-1	Isophorone	360.	U	
88-75-5	2-Nitrophenol	360.	U	
105-67-9	2,4-Dimethylphenol	360.	U	
111-91-1	bis(2-Chloroethoxy)methane	360.	U	
120-83-2	2,4-Dichlorophenol	360.	U	
120-82-1	1,2,4-Trichlorobenzene	360.	U	
91-20-3	Naphthalene	360.	U	
106-47-8	4-Chloroaniline	360.	U	
87-68-3	Hexachlorobutadiene	360.	U	
59-50-7	4-Chloro-3-methylphenol	360.	U	
91-57-6	2-Methylnaphthalene	360.	U	
77-47-4	Hexachlorocyclopentadiene	360.	U	
88-06-2	2,4,6-Trichlorophenol	360.	U	
95-95-4	2,4,5-Trichlorophenol	880.	U	
91-58-7	2-Chloronaphthalene	360.	U	
88-74-4	2-Nitroaniline	880.	U	
131-11-3	Dimethylphthalate	360.	U	
208-96-8	Acenaphthylene	360.	U	
606-20-2	2,6-Dinitrotoluene	360.	U	
99-09-2	3-Nitroaniline	880.	U	
83-32-9	Acenaphthene	360.	U	

200131

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL81

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64705 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A05

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 9 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	880.	UJ
100-02-7	4-Nitrophenol	880.	U
132-64-9	Dibenzofuran	360.	U
121-14-2	2,4-Dinitrotoluene	360.	U
84-66-2	Diethylphthalate	360.	U
7005-72-3	4-Chlorophenyl-phenylether	360.	U
86-73-7	Fluorene	360.	U
100-01-6	4-Nitroaniline	880.	U
534-52-1	4,6-Dinitro-2-methylphenol	880.	U
86-30-6	N-Nitrosodiphenylamine (1)	360.	U
101-55-3	4-Bromophenyl-phenylether	360.	U
118-74-1	Hexachlorobenzene	360.	U
87-86-5	Pentachlorophenol	880.	U
85-01-8	Phenanthrene	360.	U
120-12-7	Anthracene	360.	U
86-74-8	Carbazole	360.	U
84-74-2	Di-n-butylphthalate	360.	U
206-44-0	Fluoranthene	360.	U
129-00-0	Pyrene	360.	U
85-68-7	Butylbenzylphthalate	360.	U
91-94-1	3,3'-Dichlorobenzidine	360.	U
56-55-3	Benzo(a)anthracene	360.	U
218-01-9	Chrysene	360.	U
117-81-7	bis(2-Ethylhexyl)phthalate	360.	U
117-84-0	Di-n-octylphthalate	360.	U
205-99-2	Benzo(b)fluoranthene	360.	U
207-08-9	Benzo(k)fluoranthene	360.	U
50-32-8	Benzo(a)pyrene	360.	U
193-39-5	Indeno(1,2,3-cd)pyrene	360.	U
53-70-3	Dibenz(a,h)anthracene	360.	U
191-24-2	Benzo(g,h,i)perylene	360.	U

JN 1/28/94 unk bias

(1) - Cannot be separated from Diphenylamine

200132

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL81

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64705 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A05

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 9 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs Found: 15 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	9.07	11800.	JANBV
2.		UNKNOWN AMIDE	37.65	520.	JBV
3.		UNKNOWN AMIDE	33.62	260.	JBV
4.		UNKNOWN COOH	31.35	260.	J
5.	111-46-6	ETHANOL, 2,2'-OXYBIS-	12.22	260.	JNBV
6.		UNKNOWN	46.87	220.	J
7.		UNKNOWN HYDROCARBON	34.10	220.	J
8.		UNKNOWN COOH	29.07	194.	J
9.		UNKNOWN ALKANE	36.49	156.	J
10.		UNKNOWN	36.12	146.	J
11.		UNKNOWN COOH	38.80	128.	J
12.	56336-06-2	2-CYCLOHEXEN-1-ONE, 3,5-DIME	7.60	118.	JN
13.		UNKNOWN AMIDE	30.87	110.	JBV
14.		UNKNOWN ALKANE	41.55	106.	J
15.		UNKNOWN ALKANE	38.65	94.	J
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30.					

AV 10-8-93

200133

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL82

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64706 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A09

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 7 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350.	U
111-44-4	bis(2-Chloroethyl)ether	350.	U
95-57-8	2-Chlorophenol	350.	U
541-73-1	1,3-Dichlorobenzene	350.	U
106-46-7	1,4-Dichlorobenzene	350.	U
95-50-1	1,2-Dichlorobenzene	350.	U
95-48-7	2-Methylphenol	350.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350.	UJ
106-44-5	4-Methylphenol	350.	U
621-64-7	N-Nitroso-di-n-propylamine	350.	U
67-72-1	Hexachloroethane	350.	U
98-95-3	Nitrobenzene	350.	U
78-59-1	Isophorone	350.	U
88-75-5	2-Nitrophenol	350.	U
105-67-9	2,4-Dimethylphenol	350.	U
111-91-1	bis(2-Chloroethoxy)methane	350.	U
120-83-2	2,4-Dichlorophenol	350.	U
120-82-1	1,2,4-Trichlorobenzene	350.	U
91-20-3	Naphthalene	350.	U
106-47-8	4-Chloroaniline	350.	U
87-68-3	Hexachlorobutadiene	350.	U
59-50-7	4-Chloro-3-methylphenol	350.	U
91-57-6	2-Methylnaphthalene	350.	U
77-47-4	Hexachlorocyclopentadiene	350.	U
88-06-2	2,4,6-Trichlorophenol	350.	U
95-95-4	2,4,5-Trichlorophenol	860.	U
91-58-7	2-Chloronaphthalene	350.	U
88-74-4	2-Nitroaniline	860.	U
131-11-3	Dimethylphthalate	350.	U
208-96-8	Acenaphthylene	350.	U
606-20-2	2,6-Dinitrotoluene	350.	U
99-09-2	3-Nitroaniline	860.	U
83-32-9	Acenaphthene	350.	U

JN 1/28/94 unk bias

200153

IC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL82

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64706 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A09

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 7 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860.	U J
100-02-7	4-Nitrophenol	860.	U
132-64-9	Dibenzofuran	350.	U
121-14-2	2,4-Dinitrotoluene	350.	U
84-66-2	Diethylphthalate	350.	U
7005-72-3	4-Chlorophenyl-phenylether	350.	U
86-73-7	Fluorene	350.	U
100-01-6	4-Nitroaniline	860.	U
534-52-1	4,6-Dinitro-2-methylphenol	860.	U
86-30-6	N-Nitrosodiphenylamine (1)	350.	U
101-55-3	4-Bromophenyl-phenylether	350.	U
118-74-1	Hexachlorobenzene	350.	U
87-86-5	Pentachlorophenol	860.	U
85-01-8	Phenanthrene	210.	J
120-12-7	Anthracene	350.	U
86-74-8	Carbazole	350.	U
84-74-2	Di-n-butylphthalate	350.	U
206-44-0	Fluoranthene	310.	J
129-00-0	Pyrene	320.	J
85-68-7	Butylbenzylphthalate	350.	U
91-94-1	3,3'-Dichlorobenzidine	350.	U
56-55-3	Benzo(a)anthracene	160.	J
218-01-9	Chrysene	170.	J
117-81-7	bis(2-Ethylhexyl)phthalate	350.	U
117-84-0	Di-n-octylphthalate	350.	U
205-99-2	Benzo(b)fluoranthene	290.	J
207-08-9	Benzo(k)fluoranthene	350.	U
50-32-8	Benzo(a)pyrene	150.	J
193-39-5	Indeno(1,2,3-cd)pyrene	350.	U
53-70-3	Dibenz(a,h)anthracene	350.	U
191-24-2	Benzo(g,h,i)perylene	350.	U

JN 1/28/94 unk bias

(1) - Cannot be separated from Diphenylamine

200154

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL82

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64706 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I16A09

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 7 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/16/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs Found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MEI	9.03	7800.	JANBV
2.		UNKNOWN ALKANE	38.65	340.	J
3.		UNKNOWN COOH	29.09	320.	J
4.		UNKNOWN ALKANE	41.57	260.	J
5.		UNKNOWN	38.05	260.	J
6.		UNKNOWN ALKANE + PNA	36.12	240.	J
7.		UNKNOWN AMIDE	37.65	220.	JBV
8.		UNKNOWN	38.34	220.	J
9.		UNKNOWN ALKANE + PNA	37.15	200.	J
10.		UNKNOWN	37.74	186.	J
11.		UNKNOWN ALKANE	34.67	176.	J
12.		UNKNOWN	35.99	152.	J
13.		UNKNOWN	36.85	150.	J
14.		UNKNOWN ALKANE	36.50	144.	J
15.		UNKNOWN	46.97	126.	J
16.		UNKNOWN AMIDE	33.62	126.	JBV
17.		UNKNOWN PNA	34.37	110.	J
18.		UNKNOWN	46.20	110.	J
19.		UNKNOWN PNA	35.78	110.	J
20.		UNKNOWN PNA	34.99	108.	J
21.	56336-06-2	2-CYCLOHEXEN-1-ONE, 3,5-DIME	7.60	100.	JN
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AV 10-4-93

200155

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL83

Lab Name: PACIFIC ANALYTICAL Contract: 68-D1-0098

Lab Code: PACIF Case No.: 20663 SAS No.: SDG No.: EQL77

Matrix: (soil/water) SOIL Lab Sample ID: 64707 SS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 4I20A09

Level: (low/med) LOW Date Received: 8/25/93

% Moisture: 14 decanted: (Y/N) N Date Extracted: 8/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 9/21/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380.	U
111-44-4	bis(2-Chloroethyl)ether	380.	U
95-57-8	2-Chlorophenol	380.	U
541-73-1	1,3-Dichlorobenzene	380.	U
106-46-7	1,4-Dichlorobenzene	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U
95-48-7	2-Methylphenol	380.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380.	U
106-44-5	4-Methylphenol	380.	U
621-64-7	N-Nitroso-di-n-propylamine	380.	U
67-72-1	Hexachloroethane	380.	U
98-95-3	Nitrobenzene	380.	U
78-59-1	Isophorone	380.	U
88-75-5	2-Nitrophenol	380.	U
105-67-9	2,4-Dimethylphenol	380.	U
111-91-1	bis(2-Chloroethoxy)methane	380.	U
120-83-2	2,4-Dichlorophenol	380.	U
120-82-1	1,2,4-Trichlorobenzene	380.	U
91-20-3	Naphthalene	380.	U
106-47-8	4-Chloroaniline	380.	U
87-68-3	Hexachlorobutadiene	380.	U
59-50-7	4-Chloro-3-methylphenol	380.	U
91-57-6	2-Methylnaphthalene	380.	U
77-47-4	Hexachlorocyclopentadiene	380.	U
88-06-2	2,4,6-Trichlorophenol	380.	U
95-95-4	2,4,5-Trichlorophenol	930.	U
91-58-7	2-Chloronaphthalene	380.	U
88-74-4	2-Nitroaniline	930.	U
131-11-3	Dimethylphthalate	380.	U
208-96-8	Acenaphthylene	380.	U
606-20-2	2,6-Dinitrotoluene	380.	U
99-09-2	3-Nitroaniline	930.	U
83-32-9	Acenaphthene	380.	U

200188

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 11/02/93

SUBJECT: Review of Region V CLP Data Received for Review on Oct 4, 1993

FROM: Charles T. Elly, Director (SL-10C) MSP for CTE
Central Regional Laboratory

TO: Data User: B+V

We have reviewed the data for the following case.

SITE NAME: Henry Hoffman LF (IL)

CASE and/or SAS NUMBER: 20663 SDG NUMBER: EQL84

Number and Type of Samples: 11 (Soil/H2O)

CLP Sample Numbers: EQL84-90, EQL92-95

CLP Laboratory: Gulf Hrs. for Review 11+1.5=12.5 wdw

Following are our findings:

The data are acceptable for use with qualification.

RECEIVED NOV - 5 1993

Mumtaz Pashan
11/02/93

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualification.
( ) Data are preliminary, pending verification by laboratory.
( ) Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

NARRATIVE

CONTRACTOR: **GULF**
CASE: **20663** **SDG: EQL84**
SITE: **HENRY HOFFMAN LANDFILL (IL)**

Case 20663 consisted of seven (7) water samples (labeled EQL84 - 90) and four (4) soil samples (labeled EQL92 - 95). All samples were received by ETC/Gulf South of New Orleans, Louisiana on August 28, 1993 intact and in good condition following CLP SOW OLM01.8 (8/91). Ten (10) samples were analyzed for full organics and the remaining sample, EQL90 was analyzed for VOAs only.

Water sample EQL85 and soil sample EQL92 were used as the low level matrix spikes for all three fractions.

No samples were identified as either trip blanks, field blanks or field duplicates.

All VOA preserved water samples were analyzed within the holding time of fourteen (14) days, therefore the results are acceptable. All VOA soil samples were analyzed within the holding time of fourteen (14) days, therefore the results are acceptable. The SV and PEST/PCB water samples were extracted within holding time of seven (7) days and the extracts were then promptly analyzed within the 40-day holding time, therefore the results are acceptable. The SV and PEST/PCB soil samples were extracted within holding time of fourteen (14) days and the extracts were then promptly analyzed within the 40-day holding time, therefore the results are acceptable.

The reviewer's narrative and data qualifiers are noted in the following pages.

Reviewed by: Allison C. Harvey_____ Lockheed/ESAT
Date: October , 1993

NARRATIVE

Below is a summary of the out-of-control audits and the possible effect on the data for this case.

1. HOLDING TIME.

Seven (7) water samples (labeled EQL84 - EQL90) and four (4) soil samples (labeled EQL92 - 95) were collected on August 25 and 26, 1993 and shipped to ETC/Gulf South of New Orleans, Louisiana. Gulf South received all eleven (11) samples of sample delivery group (SDG) EQL84 intact and in good condition following CLP SOW OLM01.8 (8/91).

All VOA analyses for the water samples were conducted August 31, 1993 well within the 14-day holding time for preserved water samples, therefore the results are acceptable. All VOA analyses for the soil samples were conducted September 3, 1993 well within the 14-day holding time for unpreserved soil samples, therefore the results are acceptable. The SV and PEST/PCB extractions for the water samples were conducted on August 30, 1993 well within the seven (7) day holding time for water samples. The SV and PEST/PCB extractions for the soil samples were conducted on August 31 and September 2, 1993 well within the fourteen (14) day holding time for soil samples. Extractions were then promptly analyzed within 40-days, therefore the results are acceptable.

2. GC/MS TUNING AND GC PERFORMANCE.

VOA BFB (Bromofluorobenzene) tune checks met the required mass list (normalized to m/z 95) and ion abundance criteria. All samples were analyzed within the twelve (12) hour periods for instrument performance; therefore results are acceptable.

All SV DFTPP (Decafluorotriphenylphosphine) tune checks met the required mass list (normalized to m/z 198) and ion abundance criteria. All samples were analyzed within the twelve (12) hour periods for instrument performance; therefore the results are acceptable.

Pesticide resolution check mixtures and performance evaluation mixtures were conducted at the appropriate frequency on both G.C. columns and met the requirements for percent (%) resolution, retention times (RT), percent (%) breakdown and relative percent difference (%RPD). Both the Florisil Cartridge

Check and GPC Calibration met the required QC criteria; therefore, the results are acceptable.

3. CALIBRATION.

Initial and continuing calibrations of the Semi-Volatile and PEST/PCB standards were evaluated for the Target Compounds List (TCLs) and outliers were recorded on the outlier forms included as a part of this narrative.

All volatile and semi-volatile target compounds are qualified by using the following criteria: If the %RSD is greater than (>) 30.0% and all initial calibration RRFs are greater than or equal to ≥ 0.05, postive results are qualified as estimated, "J". If the %D is outside the ± 25.0% criteria and the continuing RRFs are ≥ 0.05, positive results are qualified "J" and non-detected compounds "UJ".

4. METHOD BLANK.

VOA: VBLKW1 is the volatile water method blank and VBLKL1 is the volatile soil method blank. VBLKW1 reported no TCLs and no TICs. VBLKL1 reported one (1) TCL - Methylene Chloride, a common laboratory contaminant and no TICs. The presence of the common laboratory contaminant, Methylene Chloride is flagged as non-detected "U" when the concentration in the sample is less than (<) ten times (10x) the blank result.

SV: SBLKW1 is the semi-volatile water method blank and SBLKL1 in the semi-volatile soil method blank. Both method blanks reported one (1) TCL - bis(2-Ethylhexyl)Phthalate. SBLKW1 reported no TICS and SBLKL1 reported four (4) TICs. The presence of the common laboratory contaminant, bis(2-Ethylhexyl)Phthalate is flagged non-detected "U" when the concentration in the sample is less than (<) ten times (10x) the blank result. The presence of the TICs is flagged non-detected "U" when the concentration in the sample is less than (<) five (5x) the blank result.

PEST: PBLKW1 is the pesticide water method blank and PBLKL1 is the pesticide soil method blank. PIBLK00 - 30 are the thirty-one (31) instrument blanks. No TCLs were detected in any of the blanks, therefore the results are acceptable.

Reviewed by: Allison C. Harvey_____ Lockheed/ESAT
Date: October , 1993

Please refer to Form-IVs for a list of the samples associated with each blank.

5. SURROGATE (SYSTEM MONITORING COMPOUND) RECOVERY.

Surrogate recoveries for VOA and SV water and soil samples were within QC limits, therefore the results are acceptable.

PEST: Surrogate TCX = Tetrachloro-m-xylene reported % recoveries low outside QC limits (60-150%) on both GC columns for the following water samples: EQL84 (44,38), EQL87 (53,49), EQL85MS (58,52), EQL85MSD (56,48), EQL88 (55,50), EQL89 (58,53) and method blank PBLKW1 (36,33). DCB = Decachlorobiphenyl reported % recovery high outside QC limits (60-150%) on GC column DB-1701 for water sample EQL86 (202).

Surrogate DCB = Decachlorobiphenyl reported % recovery high outside QC limits (60-150%) on GC column DB-1701 for soil sample, EQL93DL (235). DCB reported zero (0) % recovery for soil sample EQL93 on GC column DB-1701.

The low recoveries (i.e., 10%< and <60%) may indicate a low bias in the sample results, therefore all associated positives should be qualified as estimated, "J" and quantitation limits "UJ" for the following samples: ~~EQL84~~, ~~EQL85~~, ~~EQL85MS/MSD~~, ~~EQL87~~, ~~EQL88~~, ~~EQL89~~ and the water method blank ~~PBLKW1~~. The low recoveries in the method blank may indicate a fundamental problem with the analytical process, therefore positive detects should be qualified "J" and non-detects "UJ". The high recoveries (i.e., greater than 150%) observed on GC column DB-1701 in samples EQL86 and EQL93DL may be an indication of a high bias due to co-eluting interferences, therefore detected compounds should be qualified "J". Soil sample EQL93 reported zero % recovery of DCB, therefore non-detected target compounds should be qualified as unusable, "R".
J-low-detects

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE.

Sample EQL92 was used as the soil matrix spike and sample EQL85 as the water matrix spike for all three fractions.

The MS/MSD %recoveries and %RPD values for the VOA soil, VOA water, SV soil, PEST water, and PEST soil fractions were well within the required QC limits; therefore the results are acceptable.

Reviewed by: Allison C. Harvey_____ Lockheed/ESAT
Date: October , 1993

SV: The MS % recovery for the water sample EQL85 was reported low outside QC limits (36-97%) for 1,4-Dichlorobenzene (32). The presence of this compound in the unspiked sample should be qualified as estimated, "J" and non-detects as "UJ".

7. FIELD BLANK AND FIELD DUPLICATE.

No samples were identified as either trip blanks, field blanks, or field duplicates.

8. INTERNAL STANDARDS.

The internal standard retention time and area counts for the VOA water, SV soil and SV water fractions were all within the required QC limits; therefore the results are acceptable.

9. COMPOUND IDENTIFICATION.

Target compounds and TICs were identified by "best fit" library search method.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS.

VOA, SV, and Pest/PCB Target Compounds (TCLs) and Tentatively Identified Compounds (TICs) were properly quantitated; therefore, the results are acceptable.

11. SYSTEM PERFORMANCE.

GC/MS baseline indicated acceptable performance.

GC baseline counts indicated acceptable performance.

12. OVERALL CASE ASSESSMENT.

The table below summarizes the number of target compounds (TCLs) outside the Contract Required Quantitation Limit (CRQL) and the number of tentatively identified compounds (TICs) associated with these samples.

PEST: Sample EQL93 was reanalyzed at a 10:1 dilution after a zero percent surrogate recovery was observed for Decachlorobiphenyl. The results from both analyses were

presented with this package and the package was validated using the results of the diluted sample, EQL93DL.

Sample ID #	# of Hits				
	VOA		SV		Pest/PCB
	TCL	TIC	TCL	TIC	TCL
EQL84	2	0	0	0	0
EQL85	1	0	0	0	0
EQL86	1	0	0	0	0
EQL87	1	0	0	0	0
EQL88	1	0	0	0	0
EQL89	1	0	0	0	0
EQL90	1	0	-	-	-
EQL92	0	0	0	1	0
EQL93	2	0	15	20	7
EQL93DL	-	-	-	-	0
EQL94	1	0	8	10	0
EQL95	0	0	10	21	2

(-) No analysis was performed.
(DL) Sample analyzed at secondary dilution.

Reviewed by: Allison C. Harvey_____ Lockheed/ESAT
Date: October , 1993

CALIBRATION OUTLIERS
VOLATILE TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 20663
COLUMN: RTX-502.2

CONTRACTOR: ETC/GULF SOUTH
SITE NAME: HENRY HOFFMAN LF (IL)

Instrument# E		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		08/27/93 1235			08/31/93 1139											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane	0.01	0.486			0.257	55.8	J									
Bromomethane	0.10															
Vinyl chloride	0.10	0.694			0.897	29.2	J									
Chloroethane	0.01															
Methylene chloride	0.01															
Acetone	0.01	0.255	36.2	J												
Carbon disulfide	0.01															
1,1-Dichloroethene	0.10															
1,1-Dichloroethane	0.20															
1,2-Dichloroethene (total)																
Chloroform	0.20															
1,2-Dichloroethane	0.10															
2-Butanone	0.01	0.312			0.231	26.0	J									
1,1,1-Trichloroethane	0.10															
Carbon tetrachloride	0.10															
Bromodichloromethane	0.20															
1,2-Dichloropropane																
cis-1,3-Dichloropropene	0.20															
Trichloroethene	0.30															
Dibromochloromethane	0.10															
1,1,2-Trichloroethane	0.10															
Benzene	0.50															
tran-1,3-Dichloropropene	0.10															
Bromoform	0.10															
4-Methyl-2-pentanone	0.01															
2-Hexanone	0.01	0.248			0.179	27.8	J									
Tetrachloroethene	0.20															
1,1,2,2-Tetrachloroethane	0.50															
Toluene	0.40															
Chlorobenzene	0.50															
Ethylbenzene	0.10															
Styrene	0.30															
Xylene (total)	0.30															
Toluene-d8																
Bromofluorobenzene																
1,2-Dichloroethane-d4																

Samples affected:
VBLKW1
EQL84
EQL85
EQL85MS
EQL85MSD
EQL86
EQL87
EQL88
EQL89
EQL90

Reviewer's Init/Date: aoH / 10-25-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIERS
VOLATILE TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 20663
COLUMN: RTX-502.2

CONTRACTOR: ETC/GULF SOUTH
SITE NAME: HENRY HOFFMAN LF (IL)

Instrument# F		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		09/02/93 1640			09/03/93 1205											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane	0.01															
Bromomethane	0.10															
Vinyl chloride	0.10															
Chloroethane	0.01															
Methylene chloride	0.01															
Acetone	0.01															
Carbon disulfide	0.01															
1,1-Dichloroethene	0.10															
1,1-Dichloroethane	0.20															
1,2-Dichloroethene (total)																
Chloroform	0.20															
1,2-Dichloroethane	0.10															
2-Butanone	0.01	0305	36.9	J												
1,1,1-Trichloroethane	0.10															
Carbon tetrachloride	0.10															
Bromodichloromethane	0.20															
1,2-Dichloropropane																
cis-1,3-Dichloropropene	0.20															
Trichloroethene	0.30															
Dibromochloromethane	0.10															
1,1,2-Trichloroethane	0.10															
Benzene	0.50															
tran-1,3-Dichloropropene	0.10															
Bromoform	0.10															
4-Methyl-2-pentanone	0.01															
2-Hexanone	0.01															
Tetrachloroethene	0.20															
1,1,2,2-Tetrachloroethane	0.50															
Toluene	0.40															
Chlorobenzene	0.50															
Ethylbenzene	0.10															
Styrene	0.30															
Xylene (total)	0.30															
Toluene-d8																
Bromofluorobenzene																
1,2-Dichloroethane-d4																

Samples affected:
VBLKL1
EQL92MS
EQL92MSD
EQL92
EQL93
EQL94
EQL95

Reviewer's Init/Date: aoA/10-25-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 1 of 2)

CASE\SAS#: 20663
COLUMN:

CONTRACTOR: ETC / GULF SOUTH
SITE NAME: HENRY HOFFMAN LF (IL)

Instrument# B		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		08/25/93 132			09/16/93 1053											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Phenol	0.80															
bis(2-chloroethyl) Ether	0.70															
2-Chlorophenol	0.70															
1,3-Dichlorobenzene																
1,4-Dichlorobenzene																
1,2-Dichlorobenzene																
2-Methylphenol	0.70															
2,2'-Oxybis(1-chl-propane)	0.01															
4-Methylphenol	0.60															
N-nitroso-di-n-propylamine	0.50															
Hexachloroethane	0.30															
Nitrobenzene	0.20															
Isophorone	0.40															
2-Nitrophenol	0.10															
2,4-Dimethylphenol	0.20															
bis-(2-chloroethoxyl)methane	0.30															
2,4-Dichlorophenol	0.20															
1,2,4-Trichlorobenzene	0.20															
Naphthalene	0.70															
4-Chloroaniline	0.01	0.354			0.183	48.3	J									
Hexachlorobutadiene	0.01															
4-Chloro-3-methylphenol	0.20															
2-Methylnaphthalene	0.40															
Hexachlorocyclopentadiene	0.01															
2,4,6-Trichlorophenol	0.20															
2,4,5-Trichlorophenol	0.20															
2-Chloronaphthalene	0.80															
2-Nitroaniline	0.01															
Dimethyl phthlate	0.01															
Acenaphthylene	1.30															
2,6-Dinitrotoluene	0.20															
3-Nitroaniline	0.01	0.267			0.061	77.2	J									
Acenaphthene	0.30															
2,4-Dinitrophenol	0.01															
4-Nitrophenol	0.01															
Dibenzofuran	0.80															
2,4-Dinitrotoluene	0.20															

Affected samples:
SBLKL1
EQL92
EQL92MS
EQL92MSD
EQL95
EQL94
EQL93

Reviewer's Init/Date: ACH / 10-26-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\SAS#: 20663
COLUMN:

CONTRACTOR: ETC/GULF SOUTH
SITE NAME: HENRY HOFFMAN LF (IL)

Instrument# B		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		08/25/93 1321			09/16/93 1053											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Diethylphthalate	0.01															
4-Chlorophenyl-phenylether	0.40															
Fluorene	0.90															
4-Nitroaniline	0.01															
4,6-Dinitro-2-methylphenol	0.01															
N-nitrosodiphenylamine	0.01	0.512			0.356	30.5	J									
4-Bromophenyl-phenylether	0.10															
Hexachlorobenzene	0.10															
Pentachlorophenol	0.05															
Phenanthrene	0.70															
Anthracene	0.70															
Carbazole		0.693	33.5	J	0.455	34.3	J									
Di-n-butylphthalate	0.01															
Fluoranthene	0.60															
Pyrene	0.60															
Butylbenzylphthalate	0.01															
3,3'-Dichlorobenzidine	0.01															
Benzo(a)anthracene	0.80															
Chrysene	0.70															
bis(2-Ethylhexyl)phthalate	0.01	1.197			1.524	27.3	J									
Di-n-octyl phthalate	0.01	2.091			2.954	41.3	J									
Benzo(b)fluoranthene	0.70															
Benzo(k)fpuoranthene	0.70															
Benzo(a)pyrene	0.70															
Indeno(1,2,3-cd)pyrene	0.50															
Dibenz(a,h)anthrancene	0.40															
Benzo(g,h,i)perylene	0.50															
Nitrobenzene-d5	0.01															
2-Fluorobiphenyl	0.70															
Terphenyl-d14	0.50															
Phenol-d5	0.80															
2-Fluorophenol	0.60															
2,4,6-Tribromophenol	0.01															
2-Chlorophenol-d4																
1,2-Dichlorobenzene-d4																

Reviewer's Init/Date: ACH/10-26-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

ESAT-5-023.2 1/93

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 1 of 2)

CASE\SAS#: 20663
COLUMN:

CONTRACTOR: ETC / GULF SOUTH
SITE NAME: HENRY HOFFMAN LF (IL)

Instrument# C		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		09/07/93 1249			09/13/93 1617											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Phenol	0.80															
bis(2-chloroethyl) Ether	0.70															
2-Chlorophenol	0.70															
1,3-Dichlorobenzene																
1,4-Dichlorobenzene																
1,2-Dichlorobenzene																
2-Methylphenol	0.70															
2,2'-Oxybis(1-chl-propane)	0.01															
4-Methylphenol	0.60															
N-nitroso-di-n-propylamine	0.50															
Hexachloroethane	0.30															
Nitrobenzene	0.20															
Isophorone	0.40															
2-Nitrophenol	0.10															
2,4-Dimethylphenol	0.20															
bis-(2-chloroethoxyl)methane	0.30															
2,4-Dichlorophenol	0.20															
1,2,4-Trichlorobenzene	0.20															
Naphthalene	0.70															
4-Chloroaniline	0.01															
Hexachlorobutadiene	0.01															
4-Chloro-3-methylphenol	0.20															
2-Methylnaphthalene	0.40															
Hexachlorocyclopentadiene	0.01															
2,4,6-Trichlorophenol	0.20															
2,4,5-Trichlorophenol	0.20															
2-Chloronaphthalene	0.80															
2-Nitroaniline	0.01															
Dimethyl phthlate	0.01															
Acenaphthylene	1.30															
2,6-Dinitrotoluene	0.20															
3-Nitroaniline	0.01															
Acenaphthene	0.30															
2,4-Dinitrophenol	0.01															
4-Nitrophenol	0.01															
Dibenzofuran	0.80															
2,4-Dinitrotoluene	0.20															

Affected samples:
SBLKW1
EQL84
EQL86
EQL87
EQL88

Reviewer's Init/Date: ACH/10-26-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\SAS#: 20663
COLUMN:

CONTRACTOR: ETC / GULF SOUTH
SITE NAME: HENRY HOFFMAN LF (IL)

Instrument# C		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		09/07/93 1249			09/13/93 1617											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Diethylphthalate	0.01															
4-Chlorophenyl-phenylether	0.40															
Fluorene	0.90															
4-Nitroaniline	0.01															
4,6-Dinitro-2-methylphenol	0.01															
N-nitrosodiphenylamine	0.01															
4-Bromophenyl-phenylether	0.10															
Hexachlorobenzene	0.10															
Pentachlorophenol	0.05															
Phenanthrene	0.70															
Anthracene	0.70															
Carbazole																
Di-n-butylphthalate	0.01															
Fluoranthene	0.60															
Pyrene	0.60															
Butylbenzylphthalate	0.01															
3,3'-Dichlorobenzidine	0.01															
Benzo(a)anthracene	0.80															
Chrysene	0.70															
bis(2-Ethylhexyl)phthalate	0.01															
Di-n-octyl phthalate	0.01															
Benzo(b)fluoranthene	0.70															
Benzo(k)fpuoranthene	0.70															
Benzo(a)pyrene	0.70															
Indeno(1,2,3-cd)pyrene	0.50															
Dibenz(a,h)anthrancene	0.40															
Benzo(g,h,i)perylene	0.50															
Nitrobenzene-d5	0.01															
2-Fluorobiphenyl	0.70															
Terphenyl-d14	0.50															
Phenol-d5	0.80															
2-Fluorophenol	0.60															
2,4,6-Tribromophenol	0.01															
2-Chlorophenol-d4																
1,2-Dichlorobenzene-d4																

Reviewer's Init/Date: aoH / 10-26-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 1 of 2)

CASE\SAS#: 20663
COLUMN:

CONTRACTOR: ETC / GULF SOUTH
SITE NAME: HENRY HOFFMAN LF (IL)

Instrument# C		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		09/16/93 1125			09/16/93 1125											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Phenol	0.80															
bis(2-chloroethyl) Ether	0.70															
2-Chlorophenol	0.70															
1,3-Dichlorobenzene																
1,4-Dichlorobenzene																
1,2-Dichlorobenzene																
2-Methylphenol	0.70															
2,2'-Oxybis(1-chl-propane)	0.01															
4-Methylphenol	0.60															
N-nitroso-di-n-propylamine	0.50															
Hexachloroethane	0.30															
Nitrobenzene	0.20															
Isophorone	0.40															
2-Nitrophenol	0.10															
2,4-Dimethylphenol	0.20															
bis-(2-chloroethoxyl)methane	0.30															
2,4-Dichlorophenol	0.20															
1,2,4-Trichlorobenzene	0.20															
Naphthalene	0.70															
4-Chloroaniline	0.01															
Hexachlorobutadiene	0.01															
4-Chloro-3-methylphenol	0.20															
2-Methylnaphthalene	0.40															
Hexachlorocyclopentadiene	0.01															
2,4,6-Trichlorophenol	0.20															
2,4,5-Trichlorophenol	0.20															
2-Chloronaphthalene	0.80															
2-Nitroaniline	0.01															
Dimethyl phthlate	0.01															
Acenaphthylene	1.30															
2,6-Dinitrotoluene	0.20															
3-Nitroaniline	0.01															
Acenaphthene	0.30															
2,4-Dinitrophenol	0.01															
4-Nitrophenol	0.01															
Dibenzofuran	0.80															
2,4-Dinitrotoluene	0.20															

Affected samples:
EQL85
EQL85MS
EQL85MSD
EQL89

Reviewer's Init/Date: [illegible] / 10-26-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\SAS#: 20663
COLUMN:

CONTRACTOR: ETC / GULF SOUTH
SITE NAME: HENRY HOFFMAN LF (IL)

Instrument# C		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		09/16/93 1125			09/16/93 1125											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Diethylphthalate	0.01															
4-Chlorophenyl-phenylether	0.40															
Fluorene	0.90															
4-Nitroaniline	0.01															
4,6-Dinitro-2-methylphenol	0.01															
N-nitrosodiphenylamine	0.01															
4-Bromophenyl-phenylether	0.10															
Hexachlorobenzene	0.10															
Pentachlorophenol	0.05															
Phenanthrene	0.70															
Anthracene	0.70															
Carbazole																
Di-n-butylphthalate	0.01															
Fluoranthene	0.60															
Pyrene	0.60															
Butylbenzylphthalate	0.01															
3,3'-Dichlorobenzidine	0.01															
Benzo(a)anthracene	0.80															
Chrysene	0.70															
bis(2-Ethylhexyl)phthalate	0.01															
Di-n-octyl phthalate	0.01															
Benzo(b)fluoranthene	0.70															
Benzo(k)fpuoranthene	0.70															
Benzo(a)pyrene	0.70															
Indeno(1,2,3-cd)pyrene	0.50															
Dibenz(a,h)anthrancene	0.40															
Benzo(g,h,i)perylene	0.50															
Nitrobenzene-d5	0.01															
2-Fluorobiphenyl	0.70															
Terphenyl-d14	0.50															
Phenol-d5	0.80															
2-Fluorophenol	0.60															
2,4,6-Tribromophenol	0.01															
2-Chlorophenol-d4																
1,2-Dichlorobenzene-d4																

Reviewer's Init/Date: ACH / 10-26-93

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIERS
PESTICIDE/PCB TCL COMPOUNDS

CASE\SAS#: 20663 **CONTRACTOR:** ETC/GULF SOUTH

Column: DB-608 **Site Name:** HENRY HOFFMAN LF (IL

Instrument#: GCF-O	Initial Cal.		Continue Cal.		Continue Cal.		Continue Ca	
Date/Time	08/10/93 - 08/11/93		09/03/93 0829		09/11/93 0950		09/12/93 031	
	%RSD	*	%RPD	*	%RPD	*	%RPD	*
Alpha-BHC								
Beta-BHC								
Delta-BHC								
Gamma-BHC								
Heptachlor								
Aldrin								
Heptachlor epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endosulfan sulfate								
4,4'-DDT								
Methoxychlor								
Endrin ketone								
Endrin aldehyde								
Alpha chlordane								
Gamma chlordane								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								
Toxaphene								

Affected samples:			
	PBLKW1	PBLKL1	EQL93
	EQL84	EQL92	
	EQL85	EQL92MS	
	EQL85MS	EQL92MSD	
	EQL85MSD	EQL93DL	
	EQL86	EQL94	
	EQL87	EQL95	
	EQL88		
	EQL89		

Reviewer's Init/Date: aff / 10-26-93 **ESAT-5-024.2 1/93**

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
PESTICIDE/PCB TCL COMPOUNDS

CASE\SAS#: 20663 CONTRACTOR: ETC/GULF SOUTH

Column: DB-1701 Site Name: HENRY HOFFMAN LF

Instrument#: GCF-P	Initial Cal.		Continue Cal.		Continue Cal.		Continue Ca	
Date/Time	08/10/93 - 08/11/93		09/03/93 0829		09/11/93 0950		09/12/93 031	
	%RSD	*	%RPD	*	%RPD	*	%RPD	*
Alpha-BHC								
Beta-BHC								
Delta-BHC								
Gamma-BHC								
Heptachlor								
Aldrin								
Heptachlor epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endosulfan sulfate								
4,4'-DDT								
Methoxychlor								
Endrin ketone								
Endrin aldehyde								
Alpha chlordane								
Gamma chlordane								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								
Toxaphene								

Affected samples:

PBLKW1	PBLKL1	EQL93
EQL84	EQL92	
EQL85	EQL92MS	
EQL85MS	EQL92MSD	
EQL85MSD	EQL93DL	
EQL86	EQL94	
EQL87	EQL95	
EQL88		
EQL89		

Reviewer's Init/Date: ach/10-26-93

ESAT-5-024.2 1/93

* These flags should be applied to the analytes on the sample data sheets.

DATA REPORTING QUALIFIERS
(page 1)

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE-if the results is a value greater than or equal to the Contract Required Quantitation Limit (CRQL), report the value.

U - Indicates compound was analyzed for but not detected. The sample Quantitation Limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if thee sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the Sample Quantitation Limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U) \times df}{D} \qquad \text{where } D = \frac{100 - \%\ moisture}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100 - 24}{100} = 0.76$$

$$\frac{(330\ U) \times 10}{.76} = 4300\ U \text{ rounded to the appropriate number of significant figures}$$

For soil samples subjected to GPC clean-up procedures, the extract must be concentrated to 0.5 ml, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume, this fact be accounted for in reporting the Sample Quantitation Limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit bur greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it is as 3J. The Sample Quantitation Limit must be adjusted for dilution as discussed for the U flag. The J flag is also applied to pesticide/Aroclor results where the pesticide/Aroclor is confirmed to be present but the concentration is less than the CRQL.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds. Where the identification is based on a mass spectral library search. It is applied to all TIC results.

DATA REPORTING QUALIFIERS
(page 2)

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".

C - This flag applies to pesticide results where identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but unsuccessful, do not apply this flag, instead use a laboratory-defined, discussed below.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for the specific analysis. This flag will not apply to pesticide/PCBs analyzed by GC/MS methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG Narrative. If more than one flag is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B" and "D" flags for some sample. The laboratory-defined are limited to letters "X", "Y" and "Z".

ETC/Gulf South
Contract 68-D1-0097

Case 20663
SDG No. EQL84

Narrative

Case 20663 consisted of seven (7) water and four (4) soil samples which were received by ETC/Gulf South on August 28, 1993, and logged in as Episode NTE. The samples were identified as follows:

EQL84	EQL87	EQL90	EQL94
EQL85	EQL88	EQL92	EQL95
EQL86	EQL89	EQL93	

US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

The samples were analyzed for volatile and semivolatile organics and pesticides/PCBs.

Manual integrations for volatile and semivolatile organics are occasionally necessary due to co-elution, interferences and/or inadequacies of the software; such integrations are indicated by the initials of the analyst and the date on the quantitation report.

Because volatile standards and blanks are routinely utilized for protocols other than the one used in this report, separate libraries and automatic processing routines are maintained to facilitate data processing and minimize errors. The data files are in now way affected by any file copying procedures used.

Volatile:

Because volatile standards and blanks are routinely utilized for protocols other than the one used in this report, separate libraries and automatic processing routines are maintained to facilitate data processing and minimize errors. The data files are in no way affected by any file copying procedures used.

The pH of each water sample was found to be 1. No problems were encountered with the water or soil analyses.

Semivolatile:

No problems were encountered with these analyses. Soils were analyzed according to the low level procedure.

For quantitation of tentatively identified compounds in sample EQL93, interferences precluded the use of the nearest internal standard for reference and another standard was chosen.

Pesticide:

No problems were encountered with the analyses.

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

Shelley R. Antoine
GC/MS Laboratory Manager

October 1, 1993
Date

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	EQL84	101	103	110	0	0
02	EQL85	100	98	104	0	0
03	EQL86	101	97	97	0	0
04	EQL87	100	95	97	0	0
05	EQL88	101	96	96	0	0
06	EQL89	101	96	100	0	0
07	EQL90	100	96	97	0	0
08	EQL85MS	99	97	102	0	0
09	EQL85MSD	97	97	99	0	0
10	VBLKW1	100	99	102	0	0

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(88-110)
SMC2 (BFB)	= Bromofluorobenzene	(86-115)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	EQL92	103	101	96	0	0
02	EQL93	103	98	101	0	0
03	EQL94	102	96	99	0	0
04	EQL95	110	86	95	0	0
05	EQL92MS	102	101	98	0	0
06	EQL92MSD	101	99	96	0	0
07	VBLKL1	103	101	97	0	0

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(84-138)
SMC2 (BFB)	= Bromofluorobenzene	(59-113)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix Spike - EPA Sample No.: EQL85

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	50.14	100	61-145
Trichloroethene	50.00	0	45.66	91	71-120
Benzene	50.00	0	46.13	92	76-127
Toluene	50.00	0	45.72	91	76-125
Chlorobenzene	50.00	0	46.46	93	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	49.80	46.42	93	7	14	61-145
Trichloroethene	49.80	47.12	95	4	14	71-120
Benzene	49.80	47.96	96	4	11	76-127
Toluene	49.80	47.75	96	5	13	76-125
Chlorobenzene	49.80	49.87	100	7	13	75-130

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: EQL85 5MLS WATER CASE 20663
RTX-502.2 60M X .53MM 40/3-220@8 INST E

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix Spike - EPA Sample No.: EQL92 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	57.50	0	49.41	86	59-172
Trichloroethene	57.50	0	53.55	93	62-137
Benzene	57.50	0	56.87	99	66-142
Toluene	57.50	0	54.61	95	59-139
Chlorobenzene	57.50	0	57.10	99	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	57.50	53.01	92	7	22	59-172
Trichloroethene	57.50	53.68	93	0	24	62-137
Benzene	57.50	56.02	97	2	21	66-142
Toluene	57.50	54.34	94	1	21	59-139
Chlorobenzene	57.50	55.98	97	2	21	60-133

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: EQL92 5G LOW SOIL CASE:20663
RTX-502.2 60M X 0.53 MM 40/3-22068 INST:F

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKW1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Lab File ID: ENB083193A Lab Sample ID: VBLKW1

Date Analyzed: 08/31/93 Time Analyzed: 1234

GC Column: RTX-502.2 ID: 0.530(mm) Heated Purge: (Y/N) N

Instrument ID: E

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EQL84	NTE001	VONTE01	1624
02	EQL85	NTE002	VONTE02	1653
03	EQL86	NTE005	VONTE05	1819
04	EQL87	NTE006	VONTE06	1848
05	EQL88	NTE007	VONTE07	1917
06	EQL89	NTE008	VONTE08	1945
07	EQL90	NTE009	VONTE09	2014
08	EQL85MS	NTE002MS	VONTE03MS	1722
09	EQL85MSD	NTE004MSD	VONTE04MSD	1751

COMMENTS: VBLKW 5MLS WATER CASE/SAS/CLIENT
RTX-502.2 60M X .53MM 40/3-220@8 INST E

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKL1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Lab File ID: FNB090393A Lab Sample ID: VBLKL1

Date Analyzed: 09/03/93 Time Analyzed: 1318

GC Column: RTX-502.2 ID: 0.530(mm) Heated Purge: (Y/N) Y

Instrument ID: F

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EQL92	NTE010	VONTE10	1513
02	EQL93	NTE013	VONTE13	1551
03	EQL94	NTE014	VONTE14	1637
04	EQL95	NTE015	VONTE15	1708
05	EQL92MS	NTE011MS	VONTE11MS	1415
06	EQL92MSD	NTE012MSD	VONTE12MSD	1448

COMMENTS: VBLKL LOW SOIL CASE/SAS/CLIENT:
RTX-502.2 60M X 0.53 MM 40/3-22008 INST:F

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: VBLKW1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: ENB083193A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	Q		
74-87-3	Chloromethane	10	UJ	JN 1/14/94 unkbias
74-83-9	Bromomethane	10	U	JN 1/14/94
75-01-4	Vinyl Chloride	10	UJ	unkbias
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	10	U	JN 1/14/94
67-64-1	Acetone	10	UJ	unkbias
75-15-0	Carbon Disulfide	10	U	
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene(total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	JN 1/14/94
78-93-3	2-Butanone	10	UJ	unkbias
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	JN 1/14/94
591-78-6	2-Hexanone	10	UJ	unkbias
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKW1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: VBLKW1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: ENB083193A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKL1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: VBLKL1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FNB090393A

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

JN 1/14/94 unk bias

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKL1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: VBLKL1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FNB090393A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL84

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE001

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE01

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10	UJ	JN 1/14/94 unkbias
74-83-9	Bromomethane	10	U	JN 1/14/94
75-01-4	Vinyl Chloride	10	UJ	unkbias
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	5	J	JN 1/14/94
67-64-1	Acetone	7	J	unkbias
75-15-0	Carbon Disulfide	10	U	
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene(total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	JN 1/14/94
78-93-3	2-Butanone	10	UJ	unkbias
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	JN 1/14/94
591-78-6	2-Hexanone	10	UJ	unkbias
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL84

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE001

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE01

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL85

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE002

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE02

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10	UJ	JN 1/14/94 unk bias
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	UJ	JN 1/14/94 unk bias
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	2	JU	JN 1/14/94
67-64-1	Acetone	10	UJ	unk bias
75-15-0	Carbon Disulfide	10	U	
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene(total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	JN 1/14/94
78-93-3	2-Butanone	10	UJ	unk bias
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	JN 1/14/94
591-78-6	2-Hexanone	10	UJ	unk bias
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL85

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE002

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE02

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL86

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE005

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE05

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10	UJ	JN 1/14/94 unk bias
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	UJ	JN 1/14/94 unk bias
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	1	J	JN 1/14/94
67-64-1	Acetone	10	UJ	unk bias
75-15-0	Carbon Disulfide	10	U	
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene(total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	JN 1/14/94
78-93-3	2-Butanone	10	UJ	unk bias
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	JN 1/14/94
591-78-6	2-Hexanone	10	UJ	unk bias
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL86

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE005

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE05

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL87

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE006

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE06

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10	UJ	JN 1/14/94 unk bias
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	UJ	JN 1/14/94 unk bias
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	2	J	
67-64-1	Acetone	10	UJ	JN 1/14/94 unk bias
75-15-0	Carbon Disulfide	10	U	
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene(total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	
78-93-3	2-Butanone	10	UJ	JN 1/14/94 unk bias
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	
591-78-6	2-Hexanone	10	UJ	JN 1/14/94 unk bias
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL87

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE006

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE06

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL88

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE007

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE07

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10	UJ	JN 1/14/94 Unk bias
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	UJ	JN 1/14/94 Unk bias
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	2	J	JN 1/14/94
67-64-1	Acetone	10	UJ	Unk bias
75-15-0	Carbon Disulfide	10	U	
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene(total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	JN 1/14/94
78-93-3	2-Butanone	10	UJ	Unk bias
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	JN 1/14/94
591-78-6	2-Hexanone	10	UJ	Unk bias
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL88

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE007

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE07

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL89

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE008

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE08

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10	UJ	JN 1/14/94 unkbias
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	UJ	JN 1/14/94 unkbias
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	4	J	JN 1/14/94
67-64-1	Acetone	10	UJ	unkbias
75-15-0	Carbon Disulfide	10	U	
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene(total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	JN 1/14/94
78-93-3	2-Butanone	10	UJ	unkbias
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	JN 1/14/94
591-78-6	2-Hexanone	10	UJ	unkbias
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL89

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE008

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE08

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL90

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE009

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE09

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND		Q	
74-87-3	Chloromethane	10	UJ	JN 1/14/94 unkbias
74-83-9	Bromomethane	10	U	
75-01-4	Vinyl Chloride	10	UJ	JN 1/14/94 unkbias
75-00-3	Chloroethane	10	U	
75-09-2	Methylene Chloride	5	J	
67-64-1	Acetone	10	UJ	JN 1/14/94 unkbias
75-15-0	Carbon Disulfide	10	U	
75-35-4	1,1-Dichloroethene	10	U	
75-34-3	1,1-Dichloroethane	10	U	
540-59-0	1,2-Dichloroethene(total)	10	U	
67-66-3	Chloroform	10	U	
107-06-2	1,2-Dichloroethane	10	U	
78-93-3	2-Butanone	10	UJ	JN 1/14/94 unkbias
71-55-6	1,1,1-Trichloroethane	10	U	
56-23-5	Carbon Tetrachloride	10	U	
75-27-4	Bromodichloromethane	10	U	
78-87-5	1,2-Dichloropropane	10	U	
10061-01-5	cis-1,3-Dichloropropene	10	U	
79-01-6	Trichloroethene	10	U	
124-48-1	Dibromochloromethane	10	U	
79-00-5	1,1,2-Trichloroethane	10	U	
71-43-2	Benzene	10	U	
10061-02-6	trans-1,3-Dichloropropene	10	U	
75-25-2	Bromoform	10	U	
108-10-1	4-Methyl-2-Pentanone	10	U	
591-78-6	2-Hexanone	10	UJ	JN 1/14/94 unkbias
127-18-4	Tetrachloroethene	10	U	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	
108-88-3	Toluene	10	U	
108-90-7	Chlorobenzene	10	U	
100-41-4	Ethylbenzene	10	U	
100-42-5	Styrene	10	U	
1330-20-7	Xylene (total)	10	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL90

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE009

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VONTE09

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. _____ Date Analyzed: 08/31/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL92

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VONTE10

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. 13 Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	12.5	BJ u
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene(total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	UJ
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

ACH 10-25-93

JN 1/14/94 unk bias

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL92

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VONTE10

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. 13 Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL93

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VONTE13

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. 12 Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND		Q	
74-87-3	Chloromethane	11	U	
74-83-9	Bromomethane	11	U	
75-01-4	Vinyl Chloride	11	U	
75-00-3	Chloroethane	11	U	
75-09-2	Methylene Chloride	16	BM	acH 10-25-93
67-64-1	Acetone	6	J	
75-15-0	Carbon Disulfide	11	U	
75-35-4	1,1-Dichloroethene	11	U	
75-34-3	1,1-Dichloroethane	11	U	
540-59-0	1,2-Dichloroethene(total)	11	U	
67-66-3	Chloroform	11	U	
107-06-2	1,2-Dichloroethane	11	U	JN 1/14/94
78-93-3	2-Butanone	11	UJ	UNKbias
71-55-6	1,1,1-Trichloroethane	11	U	
56-23-5	Carbon Tetrachloride	11	U	
75-27-4	Bromodichloromethane	11	U	
78-87-5	1,2-Dichloropropane	11	U	
10061-01-5	cis-1,3-Dichloropropene	11	U	
79-01-6	Trichloroethene	11	U	
124-48-1	Dibromochloromethane	11	U	
79-00-5	1,1,2-Trichloroethane	11	U	
71-43-2	Benzene	11	U	
10061-02-6	trans-1,3-Dichloropropene	11	U	
75-25-2	Bromoform	11	U	
108-10-1	4-Methyl-2-Pentanone	11	U	
591-78-6	2-Hexanone	11	U	
127-18-4	Tetrachloroethene	11	U	
79-34-5	1,1,2,2-Tetrachloroethane	11	U	
108-88-3	Toluene	3	J	
108-90-7	Chlorobenzene	11	U	
100-41-4	Ethylbenzene	11	U	
100-42-5	Styrene	11	U	
1330-20-7	Xylene (total)	11	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL93

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VONTE13

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. 12 Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL94

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VONTE14

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. 23 Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	13	U	
74-83-9	Bromomethane	13	U	
75-01-4	Vinyl Chloride	13	U	
75-00-3	Chloroethane	13	U	
75-09-2	Methylene Chloride	19	B u	ac
67-64-1	Acetone	4	J	
75-15-0	Carbon Disulfide	13	U	
75-35-4	1,1-Dichloroethene	13	U	
75-34-3	1,1-Dichloroethane	13	U	
540-59-0	1,2-Dichloroethene(total)	13	U	
67-66-3	Chloroform	13	U	
107-06-2	1,2-Dichloroethane	13	U	JN 1/14/94
78-93-3	2-Butanone	13	UJ	unkbias
71-55-6	1,1,1-Trichloroethane	13	U	
56-23-5	Carbon Tetrachloride	13	U	
75-27-4	Bromodichloromethane	13	U	
78-87-5	1,2-Dichloropropane	13	U	
10061-01-5	cis-1,3-Dichloropropene	13	U	
79-01-6	Trichloroethene	13	U	
124-48-1	Dibromochloromethane	13	U	
79-00-5	1,1,2-Trichloroethane	13	U	
71-43-2	Benzene	13	U	
10061-02-6	trans-1,3-Dichloropropene	13	U	
75-25-2	Bromoform	13	U	
108-10-1	4-Methyl-2-Pentanone	13	U	
591-78-6	2-Hexanone	13	U	
127-18-4	Tetrachloroethene	13	U	
79-34-5	1,1,2,2-Tetrachloroethane	13	U	
108-88-3	Toluene	13	U	
108-90-7	Chlorobenzene	13	U	
100-41-4	Ethylbenzene	13	U	
100-42-5	Styrene	13	U	
1330-20-7	Xylene (total)	13	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL94

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VONTE14

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. 23 Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL95

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE015

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VONTE15

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. 40 Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	17	U	
74-83-9	Bromomethane	17	U	
75-01-4	Vinyl Chloride	17	U	
75-00-3	Chloroethane	17	U	
75-09-2	Methylene Chloride	17 ~~4~~	BJU	acH 10-25-93.
67-64-1	Acetone	17	U	
75-15-0	Carbon Disulfide	17	U	
75-35-4	1,1-Dichloroethene	17	U	
75-34-3	1,1-Dichloroethane	17	U	
540-59-0	1,2-Dichloroethene(total)	17	U	
67-66-3	Chloroform	17	U	
107-06-2	1,2-Dichloroethane	17	U	JH 1/14/94
78-93-3	2-Butanone	17	UJ	unk bias
71-55-6	1,1,1-Trichloroethane	17	U	
56-23-5	Carbon Tetrachloride	17	U	
75-27-4	Bromodichloromethane	17	U	
78-87-5	1,2-Dichloropropane	17	U	
10061-01-5	cis-1,3-Dichloropropene	17	U	
79-01-6	Trichloroethene	17	U	
124-48-1	Dibromochloromethane	17	U	
79-00-5	1,1,2-Trichloroethane	17	U	
71-43-2	Benzene	17	U	
10061-02-6	trans-1,3-Dichloropropene	17	U	
75-25-2	Bromoform	17	U	
108-10-1	4-Methyl-2-Pentanone	17	U	
591-78-6	2-Hexanone	17	U	
127-18-4	Tetrachloroethene	17	U	
79-34-5	1,1,2,2-Tetrachloroethane	17	U	
108-88-3	Toluene	17	U	
108-90-7	Chlorobenzene	17	U	
100-41-4	Ethylbenzene	17	U	
100-42-5	Styrene	17	U	
1330-20-7	Xylene (total)	17	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL95

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE015

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VONTE15

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: not dec. 40 Date Analyzed: 09/03/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	EQL84	67	78	92	58	59	95	61	57	0
02	EQL85	85	66	101	68	69	64	74	49	0
03	EQL86	72	78	92	70	68	96	72	65	0
04	EQL87	68	74	94	60	56	93	61	56	0
05	EQL88	71	71	88	61	58	82	64	57	0
06	EQL89	73	70	94	60	55	72	65	50	0
07	EQL85MS	70	63	89	62	55	62	62	48	0
08	EQL85MSD	67	66	85	54	47	70	58	49	0
09	SBLKW1	73	68	101	66	63	87	67	51	0

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(35-114)	
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)	
S3 (TPH)	= Terphenyl-d14	(33-141)	
S4 (PHL)	= Phenol-d5	(10-110)	
S5 (2FP)	= 2-Fluorophenol	(21-110)	
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)	
S7 (2CP)	= 2-Chlorophenol-d4	(33-110)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(16-110)	(advisory)

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

020002

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	EQL92	68	69	76	66	60	63	67	65	0
02	EQL93	66	68	85	63	58	59	64	61	0
03	EQL94	69	70	80	65	60	62	66	64	0
04	EQL95	64	65	76	61	57	56	61	60	0
05	EQL92MS	73	72	78	68	65	66	70	67	0
06	EQL92MSD	63	65	70	60	57	60	61	60	0
07	SBLKL1	67	68	70	64	59	61	64	63	0

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(23-120)	
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S3 (TPH)	= Terphenyl-d14	(18-137)	
S4 (PHL)	= Phenol-d5	(24-113)	
S5 (2FP)	= 2-Fluorophenol	(25-121)	
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S7 (2CP)	= 2-Chlorophenol-d4	(20-130)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	(advisory)

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

020003

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix Spike - EPA Sample No.: EQL85

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	75.00	0	43.88	59	12-110
2-Chlorophenol	75.00	0	42.00	56	27-123
1,4-Dichlorobenzene	50.00	0	16.04	32 *	36- 97
N-Nitroso-di-n-prop.(1)	50.00	0	31.96	64	41-116
1,2,4-Trichlorobenzene	50.00	0	20.91	42	39- 98
4-Chloro-3-methylphenol	75.00	0	46.05	61	23- 97
Acenaphthene	50.00	0	28.75	58	46-118
4-Nitrophenol	75.00	0	37.96	51	10- 80
2,4-Dinitrotoluene	50.00	0	31.80	64	24- 96
Pentachlorophenol	75.00	0	49.55	66	9-103
Pyrene	50.00	0	34.55	69	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	75.00	39.62	53	11	42	12-110
2-Chlorophenol	75.00	39.63	53	6	40	27-123
1,4-Dichlorobenzene	50.00	18.06	36	12	28	36- 97
N-Nitroso-di-n-prop.(1)	50.00	29.93	60	6	38	41-116
1,2,4-Trichlorobenzene	50.00	24.42	49	15	28	39- 98
4-Chloro-3-methylphenol	75.00	42.91	57	7	42	23- 97
Acenaphthene	50.00	27.85	56	4	31	46-118
4-Nitrophenol	75.00	34.14	46	10	50	10- 80
2,4-Dinitrotoluene	50.00	33.67	67	5	38	24- 96
Pentachlorophenol	75.00	49.20	66	0	50	9-103
Pyrene	50.00	34.28	69	0	31	26-127

(1) N-Nitroso-di-n-propylamine

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

RPD: 0 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS: EQL85 WATER CASE:20663
RTX-5 0.25MM X 30M 1.0U 45/4-310@12 INST C

020094

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix Spike - EPA Sample No.: EQL92 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	2870	0	1925	67	26- 90
2-Chlorophenol	2870	0	1803	63	25-102
1,4-Dichlorobenzene	1920	0	1237	64	28-104
N-Nitroso-di-n-prop.(1)	1920	0	1342	70	41-126
1,2,4-Trichlorobenzene	1920	0	1366	71	38-107
4-Chloro-3-methylphenol	2870	0	1793	62	26-103
Acenaphthene	1920	0	1245	65	31-137
4-Nitrophenol	2870	0	1802	63	11-114
2,4-Dinitrotoluene	1920	0	1267	66	28- 89
Pentachlorophenol	2870	0	1672	58	17-109
Pyrene	1920	0	1306	68	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2870	1636	57	16	35	26- 90
2-Chlorophenol	2870	1554	54	15	50	25-102
1,4-Dichlorobenzene	1920	1070	56	13	27	28-104
N-Nitroso-di-n-prop.(1)	1920	1192	62	12	38	41-126
1,2,4-Trichlorobenzene	1920	1234	64	10	23	38-107
4-Chloro-3-methylphenol	2870	1569	55	12	33	26-103
Acenaphthene	1920	1111	58	11	19	31-137
4-Nitrophenol	2870	1559	54	15	50	11-114
2,4-Dinitrotoluene	1920	1158	60	10	47	28- 89
Pentachlorophenol	2870	1580	55	5	47	17-109
Pyrene	1920	1177	61	11	36	35-142

(1) N-Nitroso-di-n-propylamine

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

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: EQL92 LOW SOIL CASE:20663
RTX-5 0.32MM X 30M 1.0UM 45/4-310@15 INST B

020095

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKW1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Lab File ID: SVNBW049B1 Lab Sample ID: SBLKW1

Instrument ID: C Date Extracted: 08/30/93

Matrix: (soil/water) WATER Date Analyzed: 09/13/93

Level:(low/med) LOW Time Analyzed: 2342

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EQL84	NTE001	SVNTE01	09/14/93
02	EQL85	NTE002	SVNTE02	09/16/93
03	EQL86	NTE005	SVNTE05	09/14/93
04	EQL87	NTE006	SVNTE06	09/14/93
05	EQL88	NTE007	SVNTE07	09/14/93
06	EQL89	NTE008	SVNTE08	09/16/93
07	EQL85MS	NTE003MS	SVNTE03MS	09/16/93
08	EQL85MSD	NTE004MSD	SVNTE04MSD	09/16/93

COMMENTS: SBLKW WATER-NBW049B1
RTX-5 0.25MM X 30M 1.0U 45/4-310@12 INST C

020003

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKL1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0027

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Lab File ID: SVNBSL028B1 Lab Sample ID: SBLKL1

Instrument ID: B Date Extracted: 09/02/93

Matrix: (soil/water) SOIL Date Analyzed: 09/16/93

Level:(low/med) LOW Time Analyzed: 1611

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EQL92	NTE010	SVNTE10	09/16/93
02	EQL93	NTE013	SVNTE13	09/16/93
03	EQL94	NTE014	SVNTE14	09/16/93
04	EQL95	NTE015	SVNTE15	09/16/93
05	EQL92MS	NTE011MS	SVNTE11MS	09/16/93
06	EQL92MSD	NTE012MSD	SVNTE12MSD	09/16/93

COMMENTS: SBLKL1 LOW SOIL-NBSL028B1 CASE:20663
RTX-5 0.32MM X 30M 1.0UM 45/4-310@15 INST B

020007

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: SBLKW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNBW049B1

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/13/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.8

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

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: SBLKW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNBW049B1

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/13/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKW1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: SBLKW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNBW049B1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/13/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.8

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKL1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: SBLKL1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNBSL028B1

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
108-95-2	Phenol	330	U	
111-44-4	bis(2-Chloroethyl)Ether	330	U	
95-57-8	2-Chlorophenol	330	U	
541-73-1	1,3-Dichlorobenzene	330	U	
106-46-7	1,4-Dichlorobenzene	330	U	
95-50-1	1,2-Dichlorobenzene	330	U	
95-48-7	2-Methylphenol	330	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U	
106-44-5	4-Methylphenol	330	U	
621-64-7	N-Nitroso-Di-n-Propylamine	330	U	
67-72-1	Hexachloroethane	330	U	
98-95-3	Nitrobenzene	330	U	
78-59-1	Isophorone	330	U	
88-75-5	2-Nitrophenol	330	U	
105-67-9	2,4-Dimethylphenol	330	U	
111-91-1	bis(2-Chloroethoxy)Methane	330	U	
120-83-2	2,4-Dichlorophenol	330	U	
120-82-1	1,2,4-Trichlorobenzene	330	U	
91-20-3	Naphthalene	330	U	JN 1/24/94
106-47-8	4-Chloroaniline	330	UJ	unkbias
87-68-3	Hexachlorobutadiene	330	U	
59-50-7	4-Chloro-3-Methylphenol	330	U	
91-57-6	2-Methylnaphthalene	330	U	
77-47-4	Hexachlorocyclopentadiene	330	U	
88-06-2	2,4,6-Trichlorophenol	330	U	
95-95-4	2,4,5-Trichlorophenol	800	U	
91-58-7	2-Chloronaphthalene	330	U	
88-74-4	2-Nitroaniline	800	U	
131-11-3	Dimethyl Phthalate	330	U	
208-96-8	Acenaphthylene	330	U	
606-20-2	2,6-Dinitrotoluene	330	U	JN 1/14/94
99-09-2	3-Nitroaniline	800	UJ	unkbias
83-32-9	Acenaphthene	330	U	

020523

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKL1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: SBLKL1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNBSL028B1

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	800	U	
100-02-7	4-Nitrophenol	800	U	
132-64-9	Dibenzofuran	330	U	
121-14-2	2,4-Dinitrotoluene	330	U	
84-66-2	Diethylphthalate	330	U	
7005-72-3	4-Chlorophenyl-phenylether	330	U	
86-73-7	Fluorene	330	U	
100-01-6	4-Nitroaniline	800	U	
534-52-1	4,6-Dinitro-2-Methylphenol	800	U	JN 1/14/94
86-30-6	N-Nitrosodiphenylamine (1)	330	UJ	unkbias
101-55-3	4-Bromophenyl-phenylether	330	U	
118-74-1	Hexachlorobenzene	330	U	
87-86-5	Pentachlorophenol	800	U	
85-01-8	Phenanthrene	330	U	
120-12-7	Anthracene	330	U	JN 1/14/94
86-74-8	Carbazole	330	UJ	unkbias
84-74-2	Di-n-Butylphthalate	330	U	
206-44-0	Fluoranthene	330	U	
129-00-0	Pyrene	330	U	
85-68-7	Butylbenzylphthalate	330	U	
91-94-1	3,3'-Dichlorobenzidine	330	U	
56-55-3	Benzo(a)Anthracene	330	U	
218-01-9	Chrysene	330	U	JN 1/14/94
117-81-7	bis(2-Ethylhexyl)Phthalate	35	J	unkbias
117-84-0	Di-n-Octyl Phthalate	330	UJ	unkbias,
205-99-2	Benzo(b)Fluoranthene	330	U	JN 1/14/94
207-08-9	Benzo(k)Fluoranthene	330	U	
50-32-8	Benzo(a)Pyrene	330	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U	
53-70-3	Dibenz(a,h)Anthracene	330	U	
191-24-2	Benzo(g,h,i)Perylene	330	U	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKL1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: SBLKL1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNBSL028B1

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	KETONE	6.47	1400	AJ
2.	KETONE	7.15	73	AJ
3.	UNKNOWN HYDROCARBON	14.03	64	J
4.	UNKNOWN HYDROCARBON	16.05	74	J

020534

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL84

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE01

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) ____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U J ↓ JN 1/14/94
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL84

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE01

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: decanted: (Y/N) Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.3

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

CAS NO.	COMPOUND		Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10 .6	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

aoH 10-26-93

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL84

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE01

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.3

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL85

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE002

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE02

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: decanted: (Y/N) Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U J ↓
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
75-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

JN 1/14/94

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL85

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE002

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE02

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7

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

CAS NO.	COMPOUND		Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10 ~~6~~	BJU
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

ACM 10-20-93

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL85

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE002

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE02

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) ____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

020030

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL86

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE005

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE05

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	UJ
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

JN 1/14/94

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL86

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE005

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE05

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: decanted: (Y/N) Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10 ~~2~~	BJ u
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

ACA 10-26-93

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL86

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE005

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE05

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) ____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL87

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE006

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE06

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: decanted: (Y/N) Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	UJ
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

JN 1/24/94

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL87

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE006

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE06

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9

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

CAS NO.	COMPOUND		Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL87

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE006

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE06

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

020047

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL88

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE007

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE07

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

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

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U J
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

JN 1/14/94

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL88

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE007

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE07

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: decanted: (Y/N) Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL88

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE007

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE07

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/14/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL89

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE08

Level: . (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	UJ
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

JN 1/14/94

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL89

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE08

Level: (low/med) LOW Date Received: 09/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10 ~~2~~	BJ u
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

ACH 10-26-93

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL89

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: SVNTE08

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 08/30/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.8

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL92

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE010

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE10

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 13 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
108-95-2	Phenol	380	U	
111-44-4	bis(2-Chloroethyl)Ether	380	U	
95-57-8	2-Chlorophenol	380	U	
541-73-1	1,3-Dichlorobenzene	380	U	
106-46-7	1,4-Dichlorobenzene	380	U	
95-50-1	1,2-Dichlorobenzene	380	U	
95-48-7	2-Methylphenol	380	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U	
106-44-5	4-Methylphenol	380	U	
621-64-7	N-Nitroso-Di-n-Propylamine	380	U	
67-72-1	Hexachloroethane	380	U	
98-95-3	Nitrobenzene	380	U	
78-59-1	Isophorone	380	U	
88-75-5	2-Nitrophenol	380	U	
105-67-9	2,4-Dimethylphenol	380	U	
111-91-1	bis(2-Chloroethoxy)Methane	380	U	
120-83-2	2,4-Dichlorophenol	380	U	
120-82-1	1,2,4-Trichlorobenzene	380	U	
91-20-3	Naphthalene	380	U	JN 1/14/94
106-47-8	4-Chloroaniline	380	UJ	unk bias
87-68-3	Hexachlorobutadiene	380	U	
59-50-7	4-Chloro-3-Methylphenol	380	U	
91-57-6	2-Methylnaphthalene	380	U	
77-47-4	Hexachlorocyclopentadiene	380	U	
88-06-2	2,4,6-Trichlorophenol	380	U	
95-95-4	2,4,5-Trichlorophenol	920	U	
91-58-7	2-Chloronaphthalene	380	U	
88-74-4	2-Nitroaniline	920	U	
131-11-3	Dimethyl Phthalate	380	U	
208-96-8	Acenaphthylene	380	U	
606-20-2	2,6-Dinitrotoluene	380	U	JN 1/14/94
99-09-2	3-Nitroaniline	920	UJ	unk bias
83-32-9	Acenaphthene	380	U	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL92

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE010

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE10

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 13 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	920	U	
100-02-7	4-Nitrophenol	920	U	
132-64-9	Dibenzofuran	380	U	
121-14-2	2,4-Dinitrotoluene	380	U	
84-66-2	Diethylphthalate	380	U	
7005-72-3	4-Chlorophenyl-phenylether	380	U	
86-73-7	Fluorene	380	U	
100-01-6	4-Nitroaniline	920	U	
534-52-1	4,6-Dinitro-2-Methylphenol	920	U	JN 1/14/94
86-30-6	N-Nitrosodiphenylamine (1)	380	UJ	unkbias
101-55-3	4-Bromophenyl-phenylether	380	U	
118-74-1	Hexachlorobenzene	380	U	
87-86-5	Pentachlorophenol	920	U	
85-01-8	Phenanthrene	380	U	
120-12-7	Anthracene	380	U	JN 1/14/94
86-74-8	Carbazole	380	UJ	unkbias
84-74-2	Di-n-Butylphthalate	380	U	
206-44-0	Fluoranthene	380	U	
129-00-0	Pyrene	380	U	
85-68-7	Butylbenzylphthalate	380	U	
91-94-1	3,3'-Dichlorobenzidine	380	U	
56-55-3	Benzo(a)Anthracene	380	U	
218-01-9	Chrysene	380	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	380 ~~43~~	BJ,U	acA
117-84-0	Di-n-Octyl Phthalate	380	UJ	unkbias JN 1/14/94
205-99-2	Benzo(b)Fluoranthene	380	U	
207-08-9	Benzo(k)Fluoranthene	380	U	
50-32-8	Benzo(a)Pyrene	380	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	380	U	
53-70-3	Dibenz(a,h)Anthracene	380	U	
191-24-2	Benzo(g,h,i)Perylene	380	U	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL92

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE010

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE10

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 13 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	KETONE	6.47	1200	ABJ u
2.	KETONE	7.15	100	ABJ u
3.	UNKNOWN HYDROCARBON	14.02	100	BJ u
4.	UNKNOWN HYDROCARBON	16.05	170	BJ u
5.	UNKNOWN	32.33	1000	J

ast 10-26-9

020063

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL93

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE013

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE13

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
108-95-2	Phenol	380	U	
111-44-4	bis(2-Chloroethyl)Ether	380	U	
95-57-8	2-Chlorophenol	380	U	
541-73-1	1,3-Dichlorobenzene	380	U	
106-46-7	1,4-Dichlorobenzene	380	U	
95-50-1	1,2-Dichlorobenzene	380	U	
95-48-7	2-Methylphenol	380	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U	
106-44-5	4-Methylphenol	380	U	
621-64-7	N-Nitroso-Di-n-Propylamine	380	U	
67-72-1	Hexachloroethane	380	U	
98-95-3	Nitrobenzene	380	U	
78-59-1	Isophorone	380	U	
88-75-5	2-Nitrophenol	380	U	
105-67-9	2,4-Dimethylphenol	380	U	
111-91-1	bis(2-Chloroethoxy)Methane	380	U	
120-83-2	2,4-Dichlorophenol	380	U	
120-82-1	1,2,4-Trichlorobenzene	380	U	
91-20-3	Naphthalene	380	U	
106-47-8	4-Chloroaniline	380	UJ	JN 1/14/94 unkbias
87-68-3	Hexachlorobutadiene	380	U	
59-50-7	4-Chloro-3-Methylphenol	380	U	
91-57-6	2-Methylnaphthalene	380	U	
77-47-4	Hexachlorocyclopentadiene	380	U	
88-06-2	2,4,6-Trichlorophenol	380	U	
95-95-4	2,4,5-Trichlorophenol	910	U	
91-58-7	2-Chloronaphthalene	380	U	
88-74-4	2-Nitroaniline	910	U	
131-11-3	Dimethyl Phthalate	380	U	
208-96-8	Acenaphthylene	380	U	
606-20-2	2,6-Dinitrotoluene	380	U	JN 1/14/94
99-09-2	3-Nitroaniline	910	UJ	unkbias
83-32-9	Acenaphthene	61	J	

RW 9.28.93

020092

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL93

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE013

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE13

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	910	U	
100-02-7	4-Nitrophenol	910	U	
132-64-9	Dibenzofuran	380	U	
121-14-2	2,4-Dinitrotoluene	380	U	
84-66-2	Diethylphthalate	380	U	
7005-72-3	4-Chlorophenyl-phenylether	380	U	
86-73-7	Fluorene	93	J	
100-01-6	4-Nitroaniline	910	U	
534-52-1	4,6-Dinitro-2-Methylphenol	910	U	JN 1/14/94
86-30-6	N-Nitrosodiphenylamine (1)	380	UJ	Unkbias
101-55-3	4-Bromophenyl-phenylether	380	U	
118-74-1	Hexachlorobenzene	380	U	
87-86-5	Pentachlorophenol	910	U	
85-01-8	Phenanthrene	940		
120-12-7	Anthracene	220	J	JN 1/14/94
86-74-8	Carbazole	470	J	Unkbias
84-74-2	Di-n-Butylphthalate	380	U	
206-44-0	Fluoranthene	950		
129-00-0	Pyrene	100		
85-68-7	Butylbenzylphthalate	380	U	
91-94-1	3,3'-Dichlorobenzidine	380	U	
56-55-3	Benzo(a)Anthracene	460		
218-01-9	Chrysene	460		
117-81-7	bis(2-Ethylhexyl)Phthalate	380 ~~34~~	BJ u	act 10-26
117-84-0	Di-n-Octyl Phthalate	380	UJ	Unkbias
205-99-2	Benzo(b)Fluoranthene	410		JN 1/14/94
207-08-9	Benzo(k)Fluoranthene	340	J	
50-32-8	Benzo(a)Pyrene	400		
193-39-5	Indeno(1,2,3-cd)Pyrene	380		
53-70-3	Dibenz(a,h)Anthracene	97	J	
191-24-2	Benzo(g,h,i)Perylene	270	J	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDL93

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EDL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE013

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE13

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

Number TICs found: 23

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	KETONE	6.45	1500	ABJ u
2.	KETONE	7.13	240	ABJ u
3.	UNKNOWN HYDROCARBON	14.02	68	BJ u
4.	ALKYL PNA (MW172)	18.25	57	J
5.	PNA (MW190)	18.42	170	J
6.	ISOQUINOLINE, 4-PHENYL	19.45	78	J
7.	PNA (MW208)	19.58	90	J
8.	BENZO[B]NAPHTHO-FURAN	20.13	81	J
9.	ALKYL PNA (MW214)	20.67	160	J
10.	ALKYL PNA (MW214)	20.78	100	J
11.	ALKYL PNA (MW232)	20.87	70	J
12.	ALKYL PNA (MW226)	22.00	290	J
13.	PNA (MW228)	22.77	160	J
14.	UNKNOWN HYDROCARBON	23.72	160	J
15.	UNKNOWN HYDROCARBON	25.48	160	J
16.	UNKNOWN HYDROCARBON	26.27	510	J
17.	PNA (MW250)	26.40	200	J
18.	PNA (MW250)	27.13	250	J
19.	PNA (MW250)	27.77	97	J
20.	UNKNOWN HYDROCARBON	30.00	340	J
21.	UNKNOWN	32.25	150	J
22.	UNKNOWN	32.32	240	J
23.	UNKNOWN	33.68	230	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL94

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE014

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE14

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 23 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
108-95-2	Phenol	430	U	
111-44-4	bis(2-Chloroethyl)Ether	430	U	
95-57-8	2-Chlorophenol	430	U	
541-73-1	1,3-Dichlorobenzene	430	U	
106-46-7	1,4-Dichlorobenzene	430	U	
95-50-1	1,2-Dichlorobenzene	430	U	
95-48-7	2-Methylphenol	430	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U	
106-44-5	4-Methylphenol	430	U	
621-64-7	N-Nitroso-Di-n-Propylamine	430	U	
67-72-1	Hexachloroethane	430	U	
98-95-3	Nitrobenzene	430	U	
78-59-1	Isophorone	430	U	
88-75-5	2-Nitrophenol	430	U	
105-67-9	2,4-Dimethylphenol	430	U	
111-91-1	bis(2-Chloroethoxy)Methane	430	U	
120-83-2	2,4-Dichlorophenol	430	U	
120-82-1	1,2,4-Trichlorobenzene	430	U	
91-20-3	Naphthalene	430	U	JN 1/14/94
106-47-8	4-Chloroaniline	430	UJ	unkbias
87-68-3	Hexachlorobutadiene	430	U	
59-50-7	4-Chloro-3-Methylphenol	430	U	
91-57-6	2-Methylnaphthalene	430	U	
77-47-4	Hexachlorocyclopentadiene	430	U	
88-06-2	2,4,6-Trichlorophenol	430	U	
95-95-4	2,4,5-Trichlorophenol	1000	U	
91-58-7	2-Chloronaphthalene	430	U	
88-74-4	2-Nitroaniline	1000	U	
131-11-3	Dimethyl Phthalate	430	U	
208-96-8	Acenaphthylene	430	U	
606-20-2	2,6-Dinitrotoluene	430	U	JN 1/14/94
99-09-2	3-Nitroaniline	1000	UJ	unkbias
83-32-9	Acenaphthene	430	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL94

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE014

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE14

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 23 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1000	U	
100-02-7	4-Nitrophenol	1000	U	
132-64-9	Dibenzofuran	430	U	
121-14-2	2,4-Dinitrotoluene	430	U	
84-66-2	Diethylphthalate	430	U	
7005-72-3	4-Chlorophenyl-phenylether	430	U	
86-73-7	Fluorene	430	U	
100-01-6	4-Nitroaniline	1000	U	
534-52-1	4,6-Dinitro-2-Methylphenol	1000	U	JN 1/14/94
86-30-6	N-Nitrosodiphenylamine (1)	430	UJ	unkbias
101-55-3	4-Bromophenyl-phenylether	430	U	
118-74-1	Hexachlorobenzene	430	U	
87-86-5	Pentachlorophenol	1000	U	
85-01-8	Phenanthrene	430	U	
120-12-7	Anthracene	430	U	JN 1/14/94
86-74-8	Carbazole	430	UJ	unkbias
84-74-2	Di-n-Butylphthalate	430	U	
206-44-0	Fluoranthene	80	J	
129-00-0	Pyrene	88	J	
85-68-7	Butylbenzylphthalate	430	U	
91-94-1	3,3'-Dichlorobenzidine	430	U	
56-55-3	Benzo(a)Anthracene	44	J	
218-01-9	Chrysene	49	J	
117-81-7	bis(2-Ethylhexyl)Phthalate	430 ~~37~~	BJ u	acm 10-26
117-84-0	Di-n-Octyl Phthalate	430	UJ	unkbias
205-99-2	Benzo(b)Fluoranthene	41	J	JN 1/14/94
207-08-9	Benzo(k)Fluoranthene	31	J	
50-32-8	Benzo(a)Pyrene	49	J	
193-39-5	Indeno(1,2,3-cd)Pyrene	430	U	
53-70-3	Dibenz(a,h)Anthracene	430	U	
191-24-2	Benzo(g,h,i)Perylene	38	J	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL94

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE014

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE14

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 23 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	KETONE	6.47	1500	ABJ u
2.	KETONE	7.17	210	ABJ u
3.	KETONE	8.97	130	J
4.	UNKNOWN HYDROCARBON	19.13	180	J
5.	UNKNOWN HYDROCARBON	21.98	96	J
6.	UNKNOWN HYDROCARBON	23.72	90	J
7.	UNKNOWN HYDROCARBON	25.47	210	J
8.	UNKNOWN HYDROCARBON	26.25	370	J
9.	UNKNOWN HYDROCARBON	26.42	130	J
10.	UNKNOWN HYDROCARBON	28.93	140	J
11.	UNKNOWN HYDROCARBON	30.07	160	J
12.	UNKNOWN	32.28	360	J

acpt 10-26-4

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL95

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE015

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE15

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 40 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
108-95-2	Phenol	550	U	
111-44-4	bis(2-Chloroethyl)Ether	550	U	
95-57-8	2-Chlorophenol	550	U	
541-73-1	1,3-Dichlorobenzene	550	U	
106-46-7	1,4-Dichlorobenzene	550	U	
95-50-1	1,2-Dichlorobenzene	550	U	
95-48-7	2-Methylphenol	550	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	550	U	
106-44-5	4-Methylphenol	550	U	
621-64-7	N-Nitroso-Di-n-Propylamine	550	U	
67-72-1	Hexachloroethane	550	U	
98-95-3	Nitrobenzene	550	U	
78-59-1	Isophorone	550	U	
88-75-5	2-Nitrophenol	550	U	
105-67-9	2,4-Dimethylphenol	550	U	
111-91-1	bis(2-Chloroethoxy)Methane	550	U	
120-83-2	2,4-Dichlorophenol	550	U	
120-82-1	1,2,4-Trichlorobenzene	550	U	
91-20-3	Naphthalene	550	U	JN 1/14/94
106-47-8	4-Chloroaniline	550	UJ	unkbias
87-68-3	Hexachlorobutadiene	550	U	
59-50-7	4-Chloro-3-Methylphenol	550	U	
91-57-6	2-Methylnaphthalene	550	U	
77-47-4	Hexachlorocyclopentadiene	550	U	
88-06-2	2,4,6-Trichlorophenol	550	U	
95-95-4	2,4,5-Trichlorophenol	1300	U	
91-58-7	2-Chloronaphthalene	550	U	
88-74-4	2-Nitroaniline	1300	U	
131-11-3	Dimethyl Phthalate	550	U	
208-96-8	Acenaphthylene	550	U	
606-20-2	2,6-Dinitrotoluene	550	U	
99-09-2	3-Nitroaniline	1300	UJ	JN 1/14/94 unkbias
83-32-9	Acenaphthene	550	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL95

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE015

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE15

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 40 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1300	U	
100-02-7	4-Nitrophenol	1300	U	
132-64-9	Dibenzofuran	550	U	
121-14-2	2,4-Dinitrotoluene	550	U	
84-66-2	Diethylphthalate	550	U	
7005-72-3	4-Chlorophenyl-phenylether	550	U	
86-73-7	Fluorene	550	U	
100-01-6	4-Nitroaniline	1300	U	
534-52-1	4,6-Dinitro-2-Methylphenol	1300	U	JN 1/14/94
86-30-6	N-Nitrosodiphenylamine (1)	550	UJ	unkbias
101-55-3	4-Bromophenyl-phenylether	550	U	
118-74-1	Hexachlorobenzene	550	U	
87-86-5	Pentachlorophenol	1300	U	
85-01-8	Phenanthrene	76	J	
120-12-7	Anthracene	550	U	JN 1/14/94
86-74-8	Carbazole	550	UJ	unkbias
84-74-2	Di-n-Butylphthalate	550	U	
206-44-0	Fluoranthene	130	J	
129-00-0	Pyrene	210	J	
85-68-7	Butylbenzylphthalate	37	J	
91-94-1	3,3'-Dichlorobenzidine	550	U	
56-55-3	Benzo(a)Anthracene	100	J	
218-01-9	Chrysene	120	J	
117-81-7	bis(2-Ethylhexyl)Phthalate	550 ~~BJ~~	BJ	act 10-26-93
117-84-0	Di-n-Octyl Phthalate	550	UJ	unkbias JN 1/14/94
205-99-2	Benzo(b)Fluoranthene	130	J	
207-08-9	Benzo(k)Fluoranthene	77	J	
50-32-8	Benzo(a)Pyrene	120	J	
193-39-5	Indeno(1,2,3-cd)Pyrene	110	J	
53-70-3	Dibenz(a,h)Anthracene	550	U	
191-24-2	Benzo(g,h,i)Perylene	550	U	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQL95

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE015

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SVNTE15

Level: (low/med) LOW Date Received: 08/28/93

% Moisture: 40 decanted: (Y/N) N Date Extracted: 09/02/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

Number TICs found: 23

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	KETONE	6.47	1100	ABJ
2.	KETONE	7.17	490	ABJ
3.	UNKNOWN HYDROCARBON	11.83	150	J
4.	UNKNOWN HYDROCARBON	19.13	590	J
5.	UNKNOWN HYDROCARBON	21.98	410	J
6.	UNKNOWN HYDROCARBON	22.28	180	J
7.	UNKNOWN HYDROCARBON	23.13	220	J
8.	UNKNOWN HYDROCARBON	23.48	210	J
9.	UNKNOWN HYDROCARBON	23.72	700	J
10.	UNKNOWN HYDROCARBON	24.13	520	J
11.	UNKNOWN HYDROCARBON	24.57	940	J
12.	UNKNOWN HYDROCARBON	25.35	670	J
13.	UNKNOWN HYDROCARBON	25.47	760	J
14.	UNKNOWN HYDROCARBON	25.88	1100	J
15.	UNKNOWN HYDROCARBON	26.25	1300	J
16.	UNKNOWN HYDROCARBON	26.42	300	J
17.	UNKNOWN HYDROCARBON	26.85	890	J
18.	UNKNOWN HYDROCARBON	27.48	1300	J
19.	UNKNOWN HYDROCARBON	28.95	310	J
20.	UNKNOWN HYDROCARBON	29.50	270	J
21.	UNKNOWN HYDROCARBON	30.08	1200	J
22.	UNKNOWN	31.97	520	J
23.	UNKNOWN	35.63	370	J

acA 10-26-

020243

2E

WATER PESTICIDE SURROGATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

GC Column(1): DB-608 ID: 0.53(mm) GC Column(2): DB-1701 ID: 0.53(mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLKW1	36*	33*	95	92			2
02	EQL84	44*	38*	97	92			2
03	EQL85	68	60	129	124			0
04	EQL86	86	78	112	202*			1
05	EQL87	53*	49*	90	86			2
06	EQL88	55*	50*	94	88			2
07	EQL89	58*	53*	85	80			2
08	EQL85MS	58*	52*	99	94			2
09	EQL85MSD	56*	48*	96	94			2

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

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

39002

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

GC Column(1): DB-608 ID: 0.53(mm) GC Column(2): DB-1701 ID: 0.53(mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	PBLKL1	106		99		106		102				0
02	EQL92	100		94		117		113				0
03	EQL93	109		97		0*		125				1
04	EQL93DL	100		90		235*		74				1
05	EQL94	114		112		122		134				0
06	EQL95	124		111		121		108				0
07	EQL92MS	110		105		109		106				0
08	EQL92MSD	120		114		120		117				0

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

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

030003

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix Spike - EPA Sample No.: EQL85

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	0.500	0	0.386	77	56-123
Heptachlor	0.500	0	0.351	70	40-131
Aldrin	0.500	0	0.420	84	40-120
Dieldrin	1.000	0	0.844	84	52-126
Endrin	1.000	0	0.765	76	56-121
4,4'-DDT	1.000	0	0.834	83	38-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.500	0.369	74	4	15	56-123
Heptachlor	0.500	0.358	72	3	20	40-131
Aldrin	0.500	0.395	79	6	22	40-120
Dieldrin	1.000	0.802	80	5	18	52-126
Endrin	1.000	0.774	77	1	21	56-121
4,4'-DDT	1.000	0.772	77	8	27	38-127

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

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

030004

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix Spike - EPA Sample No.: EQL92

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	19.100	0	16.5	86	46-127
Heptachlor	19.100	0	16.9	88	35-130
Aldrin	19.100	0	18.9	99	34-132
Dieldrin	38.300	0	36.3	95	31-134
Endrin	38.300	0	35.4	92	42-139
4,4'-DDT	38.300	0	35.0	91	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	19.100	18.2	95	10	50	46-127
Heptachlor	19.100	18.4	96	9	31	35-130
Aldrin	19.100	20.7	108	9	43	34-132
Dieldrin	38.300	40.2	105	10	38	31-134
Endrin	38.300	39.3	103	11	45	42-139
4,4'-DDT	38.300	39.3	103	12	50	23-134

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

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

030005

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKW1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Lab Sample ID: NPPW029B1 Lab File ID: _____

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

Sulfur Cleanup: (Y/N) N Date Extracted: 08/30/93

Date Analyzed (1): 09/03/93 Date Analyzed (2): 09/03/93

Time Analyzed (1): 1246 Time Analyzed (2): 1246

Instrument ID (1): GCF-O Instrument ID (2): GCF-P

GC Column (1): DB-608 ID: 0.53 (mm) GC Column (2): DB-1701 ID: 0.53 (mm

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EQL84	NTE001	09/03/93	09/03/93
02	EQL85	NTE002	09/03/93	09/03/93
03	EQL86	NTE005	09/03/93	09/03/93
04	EQL87	NTE006	09/03/93	09/03/93
05	EQL88	NTE007	09/03/93	09/03/93
06	EQL89	NTE008	09/03/93	09/03/93
07	EQL85MS	NTE003MS	09/03/93	09/03/93
08	EQL85MSD	NTE004MSD	09/03/93	09/03/93

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKL1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Lab Sample ID: NPPS022B1 Lab File ID: _____

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

Sulfur Cleanup: (Y/N) N Date Extracted: 08/31/93

Date Analyzed (1): 09/11/93 Date Analyzed (2): 09/11/93

Time Analyzed (1): 1057 Time Analyzed (2): 1057

Instrument ID (1): GCF-O Instrument ID (2): GCF-P

GC Column (1): DB-608 ID: 0.53 (mm) GC Column (2): DB-1701 ID: 0.53 (mm

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EQL92	NTE010	09/11/93	09/11/93
02	EQL93	NTE013	09/12/93	09/12/93
03	EQL93DL	NTE013DL	09/11/93	09/11/93
04	EQL94	NTE014	09/11/93	09/11/93
05	EQL95	NTE015	09/11/93	09/11/93
06	EQL92MS	NTE011MS	09/11/93	09/11/93
07	EQL92MSD	NTE012MSD	09/11/93	09/11/93

COMMENTS:

030007

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKW1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NPPW029B1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: _____

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 08/30/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/03/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.8 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U J
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JN 1/14/94

030488

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKL1

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NPPS022B1

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/31/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/11/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin Aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

030491

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL84

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 08/30/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/03/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.3 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	UJ
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JN 1/14/94

030010

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL85

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE002

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 08/30/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/03/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.7 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	UJ
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JN 1/14/94

030015

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL86

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE005

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 08/30/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/03/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

030020

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL87

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE006

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 08/30/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/03/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.9 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U J
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JN 1/14/94

030026

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL88

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE007

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 08/30/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/03/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	UJ
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JN 1/14/94

030031

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL89

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) WATER Lab Sample ID: NTE008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 08/30/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/03/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.8 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U J
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin Aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JN 1/14/94

030036

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL92

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE010

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

% Moisture: 13 decanted: (Y/N) N Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/31/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/11/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.8	U
7421-93-4	Endrin Aldehyde	3.8	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	77	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

030041

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL93

Lab Name: G S E L I Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE013

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

% Moisture: 12 decanted: (Y/N) N Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/31/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/12/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
319-84-6	alpha-BHC	1.9	U R	JN 1/14/93
319-85-7	beta-BHC	1.9	U	
319-86-8	delta-BHC	1.9	U	
58-89-9	gamma-BHC (Lindane)	1.9	U R	
76-44-8	Heptachlor	3.6	P J	↓
309-00-2	Aldrin	1.9	U R	
1024-57-3	Heptachlor epoxide	2.4	J ↓	↓ JN 1/14/93
959-98-8	Endosulfan I	1.9	U R	
60-57-1	Dieldrin	3.9	P J ↓	JN 1/14/93
72-55-9	4,4'-DDE	3.7	U R	
72-20-8	Endrin	30	P J ↓	
33213-65-9	Endosulfan II	3.7	U R	
72-54-8	4,4'-DDD	3.7	U R	
1031-07-8	Endosulfan sulfate	3.7	U R	
50-29-3	4,4'-DDT	4.9	P J ↓	
72-43-5	Methoxychlor	19	U R	
53494-70-5	Endrin ketone	3.7	U R	
7421-93-4	Endrin Aldehyde	3.7	U R	
5103-71-9	alpha-Chlordane	2.5	P J ↓	
5103-74-2	gamma-Chlordane	2.1	P J ↓	
8001-35-2	Toxaphene	190	U R	
12674-11-2	Aroclor-1016	37	U	
11104-28-2	Aroclor-1221	76	U	
11141-16-5	Aroclor-1232	37	U	
53469-21-9	Aroclor-1242	37	U	
12672-29-6	Aroclor-1248	37	U	
11097-69-1	Aroclor-1254	37	U	
11096-82-5	Aroclor-1260	37	U R	

030047

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL93DL

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE013DL

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

% Moisture: 12 decanted: (Y/N) N Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/31/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/11/93

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	19	U
319-85-7	beta-BHC	19	U
319-86-8	delta-BHC	19	U
58-89-9	gamma-BHC (Lindane)	19	U
76-44-8	Heptachlor	19	U
309-00-2	Aldrin	19	U
1024-57-3	Heptachlor epoxide	19	U
959-98-8	Endosulfan I	19	U
60-57-1	Dieldrin	37	U
72-55-9	4,4'-DDE	37	U
72-20-8	Endrin	37	U
33213-65-9	Endosulfan II	37	U
72-54-8	4,4'-DDD	37	U
1031-07-8	Endosulfan sulfate	37	U
50-29-3	4,4'-DDT	37	U
72-43-5	Methoxychlor	190	U
53494-70-5	Endrin ketone	37	U
7421-93-4	Endrin Aldehyde	37	U
5103-71-9	alpha-Chlordane	19	U
5103-74-2	gamma-Chlordane	19	U
8001-35-2	Toxaphene	1900	U
12674-11-2	Aroclor-1016	370	U
11104-28-2	Aroclor-1221	760	U
11141-16-5	Aroclor-1232	370	U
53469-21-9	Aroclor-1242	370	U
12672-29-6	Aroclor-1248	370	U
11097-69-1	Aroclor-1254	370	U
11096-82-5	Aroclor-1260	370	U

030063

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL94

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE014

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

% Moisture: 23 decanted: (Y/N) N Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/31/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/11/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.21	U
319-85-7	beta-BHC	2.21	U
319-86-8	delta-BHC	2.21	U
58-89-9	gamma-BHC (Lindane)	2.21	U
76-44-8	Heptachlor	2.21	U
309-00-2	Aldrin	2.21	U
1024-57-3	Heptachlor epoxide	2.21	U
959-98-8	Endosulfan I	2.21	U
60-57-1	Dieldrin	4.31	U
72-55-9	4,4'-DDE	4.31	U
72-20-8	Endrin	4.31	U
33213-65-9	Endosulfan II	4.31	U
72-54-8	4,4'-DDD	4.31	U
1031-07-8	Endosulfan sulfate	4.31	U
50-29-3	4,4'-DDT	4.31	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.31	U
7421-93-4	Endrin Aldehyde	4.31	U
5103-71-9	alpha-Chlordane	2.21	U
5103-74-2	gamma-Chlordane	2.21	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	87	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

130070

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQL95

Lab Name: ETC/GULF SOUTH Contract: 68-D1-0097

Lab Code: GULF Case No.: 20663 SAS No.: _____ SDG No.: EQL84

Matrix: (soil/water) SOIL Lab Sample ID: NTE015

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

% Moisture: 40 decanted: (Y/N) N Date Received: 08/28/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 08/31/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/11/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.8	U
319-85-7	beta-BHC	2.8	U
319-86-8	delta-BHC	2.8	U
58-89-9	gamma-BHC (Lindane)	2.8	U
76-44-8	Heptachlor	2.8	U
309-00-2	Aldrin	2.8	U
1024-57-3	Heptachlor epoxide	2.8	U
959-98-8	Endosulfan I	2.8	U
60-57-1	Dieldrin	8.7	P
72-55-9	4,4'-DDE	5.5	U
72-20-8	Endrin	5.5	U
33213-65-9	Endosulfan II	5.5	U
72-54-8	4,4'-DDD	5.5	U
1031-07-8	Endosulfan sulfate	5.5	U
50-29-3	4,4'-DDT	5.5	U
72-43-5	Methoxychlor	28	U
53494-70-5	Endrin ketone	5.5	U
7421-93-4	Endrin Aldehyde	12	P
5103-71-9	alpha-Chlordane	2.8	U
5103-74-2	gamma-Chlordane	2.8	U
8001-35-2	Toxaphene	280	U
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	55	U
11096-82-5	Aroclor-1260	55	U

030078

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No. _____ CERCLIS No. IL

Case No. 20663 Site Name Location: Henry Hoffman LF

Contractor or EPA Lab: Guly Data User: BTV

No. of Samples: 11 Date Samples or Data Received: 10-4-93

Have Chain-of-Custody records been received? YES ✓ NO ___
Have traffic reports or packing lists been received? YES ✓ NO ___
If no, are traffic report or packing list numbers written on the chain-of-custody record? YES ✓ NO ___
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? YES ✓ NO ___
No. of samples claimed: 11 No. of samples received: 11

Received by: Lynette Burnett Date: 10-4-93

Received by LSSS: Dorothy M. May Date: 10/13/93

Review started: 10-25-93 Reviewer Signature: Allison C Harvey

Total time spent on review: 11 hrs. Date review completed: 10-28-93

Copied by: Jeanette Tuckett Date: Nov 3, 1993

Mailed to user by: Lynette Burnett Date: 11-4-93

DATA USERS:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ESCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____
Inorganic Data Complete( ) Suitable for Intended Purpose( ) ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose( ) list
Dioxin Data Complete [ ] Suitable for Intended Purpose( ) prblms
SAS Data Complete [ ] Suitable for Intended Purpose( ) below.
PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files Date: _____

RECEIVED
DEC 20 1993

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 12/15/93

SUBJECT: Review of Region V CLP Data
Received for Review on Sept 30, 1993

FROM: Charles T. Elly, Director (SL-10C)
Central Regional Laboratory
RD Freeman for CT Elly 12/15/93

TO: Data User: B+V

We have reviewed the data for the following case.

SITE NAME: Henry Hoffman LF (IL)

CASE and/or SAS NUMBER: 20663 SDG NUMBER: MEQD61

Number and Type of Samples: 10 (water + soil)

CLP Sample Numbers: MEQD 61-65, MEQQ88-91, MEQQ87 DMM

CLP Laboratory: SVL Hrs. for Review 9hrs +0.8 T.M.

Following are our findings:

DATA are acceptable for use with qualification. See attached data review for details.

RD Freeman
12/15/93

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualification.
( ) Data are preliminary, pending verification by laboratory.
( ) Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

NARRATIVE

SITE: Henry Hoffman L.F.(Il) CASE: 20663
LABORATORY: SVL Analytical Inc. SDG: MEQD61

The laboratory's portion of case 20663 contains six (6) low level water and four (4) low level soil samples assayed for total metals and total cyanide. The following narrative lists the out of control audits and their possible effects on the results.

EVIDENTIAL AUDIT: All forms are originals. Most of the raw data sheets are originals, those photocopied state where the originals can be found. The ICP, As, Pb, Se, Tl and CN raw data are originals. The original Hg raw data are with case 20672, SDG: MADJ61. The original sample tags are present. The Federal Express Airbills and the Chain of Custody Forms are originals. All forms are present and in the order indicated on the Form DC-2 [inventory sheet].

WATER SAMPLES: MEQD61, 62, 63, 64, 65 and MEQQ87.

ICP ANALYSES: The duplicate RPD for Fe (160.3%) was not flagged by the laboratory because the duplicate difference did not exceed the technical criterion (±CRDL) for water samples. The Fe data for water samples MEQD61, 62, 63, 64, 65 and MEQQ87 are acceptable.

The preparation blank contains Mg (43.395 µg/L). The Mg result for MEQQ87 is estimated (J) due to contamination.

GFAA ANALYSES: The duplicate RPD for Pb (45.9%) was not flagged by the laboratory because the duplicate differences did not exceed the technical criterion (±CRDL) for water samples. The Pb data for MEQQ87 is acceptable. The Pb data for MEQD61, 62, 63, 64 and 65 are not qualified on this basis. The Pb data for MEQD61, 62, 63, 64 and 65 were flagged (W) by the laboratory and are estimated (J) due to interference.

The duplicate RPD for Se (200%) was not flagged by the laboratory because the duplicate difference did not exceed the technical criterion (±CRDL) for water samples. The Se data are not qualified on this basis. The matrix spike recovery for Se (71.4%) was flagged (N) by the laboratory and is out of control. The Se data for MEQD61 and 62 were also flagged (W) by the laboratory. The Se data for MEQD61 and 62 are estimated (J) due to low bias and interference. The Se data for MEQD63, 64, 65 and MEQQ87 are estimated (UJ) due to possible elevation of the detection limit.

Reviewed by: _____ST_____Steffanie Tobin, Lockheed/ESAT
Date: _____November 10th, 1993

The duplicate RPD for Tl (200%) was not flagged by the laboratory because the duplicate difference did not exceed the technical criterion (±CRDL) for water samples. The Tl data for water samples MEQD61, 63, 64, 65 and MEQQ87 are acceptable. The Tl result for MEQD62 is qualified below.

The CCB contains Pb (1.5 & 2.0 µg/L), Se (1.8 & 1.7 µg/L) and Tl 1.0 µg/L). The Pb data for MEQD61, 62, 63, 64, 65 are affected by contamination but remain qualified as stated above. The Pb result for MEQQ87 is estimated (J) due to contamination. The Se data for MEQD61, 62 are affected by contamination but remain qualified as stated above. The Tl result for MEQD62 is estimated (J) due to contamination.

OTHER ANALYSES: The Hg and CN data for water samples MEQD61, 62, 63, 64, 65 and MEQQ87 are acceptable.

<u>SOIL SAMPLES</u> MEQQ88, 89, 90 and 91.

ICP ANALYSES: The duplicate RPDs for Ba (47.3%) and Co (36.1%) were not flagged by the laboratory because the duplicate differences did not exceed the technical criterion (±2X CRDL) for soil samples. The Ba and Co data for MEQQ88, 89, 90 and 91 are acceptable.

The duplicate RPD for Fe (26.6%) was flagged (*) by the laboratory. However, the duplicate difference did not exceed the technical criterion (±2X CRDL) for soil samples. The Fe data for MEQQ88, 89, 90 and 91 are acceptable.

The duplicate RPD for Mn (20.4%) was flagged (*) by the laboratory. However, the duplicate difference did not exceed the technical criterion (±2X CRDL) for soil samples. The Mn data for MEQQ88, 89, 90 and 91 are not qualified on this basis. The matrix spike recovery for Mn (49.7%) was flagged (N) by the laboratory and is out of control. The Mn data for the soil samples MEQQ88, 89, 90 and 91 are estimated (J) due to low bias.

GFAA ANALYSES: The As result for MEQQ88 was flagged (W) by the laboratory and is estimated (J) due to interference.

The CCB contains Pb (1.5 µg/L), Tl (1.6 µg/L) and Se (1.3 µg/L). The Pb result for MEQQ88 is estimated (J) due to contamination. The Tl data for MEQQ89, 90 and 91 are estimated (J) due to contamination. The Se data for MEQQ89 and 91 are estimated (J) due to contamination.

Reviewed by: ST Steffanie Tobin, Lockheed/ESAT
Date: November 10th, 1993

OTHER ANALYSES: The Hg and CN data for the soil samples MEQQ88, 89, 90 and 91 are acceptable.

Reviewed by: _____ST_____Steffanie Tobin, Lockheed/ESAT
Date: _____November 10th, 1993

GLOSSARY A

Data Qualifier Definitions

For the purposes of this document the following code letters and associated definitions are provided.

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J - The associated value is an estimated quantity.

R - The data are unusable. (Note: Analyte may or may not be present.)

UJ - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

QC EXCEPTION SUMMARY REPORT

CASE\SAS#: 20663
SITE: Henry Hoffman LF (I)
MATRIX: water/soil
WATER SAMPLE SPK: MEQD62

DATA SET: MEQD61
LAB: SVL Analytical Inc
CONC: low
WATER SAMPLE DUP: MEQD62

LAB QC #
REVIEWED BY: Stephanie N. Tobin
SOIL SAMPLE SPK: MEQQ88

DATE: 11/9/93
SOIL SAMPLE DUP: MEQQ88

FORM #		FORM 2	FORM 2	FORM 3	FORM 3	FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 7	FORM 9	FORM 9	FORM 6	FORM 5	FIELD	FIELD	FIELD	FIELD		
ELEMENT	HOLD TIME	INITIAL CALIB	CONTI N CALIB	CALIB BLANK	PREP WATER BLANK	PREP SOIL BLANK	ICB %R	SOIL SPIKE %R	SOIL DUP RPD	LCS AQ	LCS SOIL	SERIAL DILUTION AQUEOUS	SERIAL DILUTION SOIL	AQ DUP RPD	AQ SPIKE %R	BLANK	DUP RPD	BLANK	DUP RPD	GFAA DUP	GFAA ANALYT SPIKE
ALUMINUM	OK	OK	OK				OK			OK	OK	OK	OK								
ANTIMONY																					
ARSENIC						~~1.1~~															
BARIUM									~~47.3~~												
BERYLLIUM																					
CADMIUM																					
CALCIUM																					
CHROMIUM																					
COBALT									~~36.1~~												
COPPER																					
IRON									~~26.67~~					~~160.3~~							
LEAD				15										~~45.9~~							
MAGNESIUM				~~13.715~~	43.715																
MANGANESE								49.7 N	~~20.4~~												
MERCURY																					
NICKEL																					
POTASSIUM																					
SELENIUM				1.8 & 1.7		~~0.217~~								~~200~~	114						
SILVER																					
SODIUM																					
THALLIUM														~~200~~							
TIN																					
VANADIUM																					
ZINC																					
CYANIDE																					

In Reference to Case No(s):
Case . 20663
SDG MEQD61

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call: 11/10/93

Laboratory Name: SVL Analytical Inc.

Lab Contact: Melba Benciuli / Brenda Rinaldi

Region: V

Regional Contact: (Lockheed/ESAT) Stephanie N. Tobin

Call Initiated By: ___ Laboratory x Region

In reference to data for the following sample number(s):

[illegible] data & CN data

Summary of Questions/Issues Discussed:

1 Where are the original raw data for Hg?

2 Did the lab distill the midpoint (ICV) STD for CN?

Summary of Resolution:

[illegible] call back

(1) Case 20673, DG MADT61

(2) [illegible] pg 245 & 246

Stephanie N. Tobin
Signature

11/10/93
Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663 SAS No.: _____ SDG No.:MEQD61

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
MEQD61	MEQD61
MEQD62	MEQD62
MEQD62D	MEQD62D
MEQD62S	MEQD62S
MEQD63	MEQD63
MEQD64	MEQD64
MEQD65	MEQD65
MEQQ87	MEQQ87
MEQQ88	MEQQ88
MEQQ88D	MEQQ88D
MEQQ88S	MEQQ88S
MEQQ89	7EQQ89
MEQQ90	MEQQ90
MEQQ91	MEQQ91

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: Melba Bencich Name: MELBA BENCICH

Date: SEPTEMBER 20, 1993 Title: DOCUMENT CONTROL OFFICER

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD61

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): WATER Lab Sample ID: MEQD61____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	31.0	U		P_	
7440-36-0	Antimony_	38.0	U		P_	
7440-38-2	Arsenic__	38.4			F_	
7440-39-3	Barium___	241			P_	
7440-41-7	Beryllium	1.0	U		P_	
7440-43-9	Cadmium__	4.0	U		P_	
7440-70-2	Calcium__	237000		J	P_	↑
7440-47-3	Chromium_	4.0	U		P_	
7440-48-4	Cobalt___	15.8	B		P_	
7440-50-8	Copper___	14.4	B		P_	
7439-89-6	Iron_____	50600		J	P_	↑
7439-92-1	Lead_____	5.1		UW J	F_	unk bias
7439-95-4	Magnesium	61700		J	P_	↑
7439-96-5	Manganese	5940			P_	
7439-97-6	Mercury__	0.20	U		CV	
7440-02-0	Nickel___	15.0	U		P_	
7440-09-7	Potassium	1800	B		P_	
7782-49-2	Selenium_	1.0	B	WN J	F_	↓
7440-22-4	Silver___	6.0	U		P_	
7440-23-5	Sodium___	34900		J	P_	↑
7440-28-0	Thallium_	1.0	U		F_	
7440-62-2	Vanadium_	4.0	U		P_	
7440-66-6	Zinc_____	21.3		U	P_	
_____	Cyanide__	10.0	U		CA	
_____	_____	_____				

Color Before: BROWN____ Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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3

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD62

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): WATER Lab Sample ID: MEQD62____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	31.0	U		P_	
7440-36-0	Antimony_	38.0	U		P_	
7440-38-2	Arsenic__	1.0	U		F_	
7440-39-3	Barium___	68.2	B		P_	
7440-41-7	Beryllium	1.0	U		P_	
7440-43-9	Cadmium__	4.0	U		P_	
7440-70-2	Calcium__	64100		J	P_	↑
7440-47-3	Chromium_	4.0	U		P_	
7440-48-4	Cobalt___	6.0	U		P_	
7440-50-8	Copper___	4.0	U		P_	
7439-89-6	Iron_____	66.6	B	U	P_	
7439-92-1	Lead_____	2.1	B	U.W J	F_	unbias
7439-95-4	Magnesium	29000		J	P_	↑
7439-96-5	Manganese	132			P_	
7439-97-6	Mercury__	0.20	U		CV	
7440-02-0	Nickel___	15.0	U		P_	
7440-09-7	Potassium	2040	B		P_	
7782-49-2	Selenium_	2.4	B	WN J	F_	↓
7440-22-4	Silver___	6.0	U		P_	
7440-23-5	Sodium___	11600		J	P_	↑
7440-28-0	Thallium_	1.2	B	J	F_	↑
7440-62-2	Vanadium_	4.0	U		P_	
7440-66-6	Zinc_____	6.0	U		P_	
_____	Cyanide__	10.0	U		CA	

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD63

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): WATER Lab Sample ID: MEQD63____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	31.0	U		P_	
7440-36-0	Antimony_	38.0	U		P_	
7440-38-2	Arsenic__	7.4	B		F_	
7440-39-3	Barium___	146	B		P_	
7440-41-7	Beryllium	1.0	U		P_	
7440-43-9	Cadmium__	4.0	U		P_	
7440-70-2	Calcium__	34500		J	P_	↑
7440-47-3	Chromium_	4.0	U		P_	
7440-48-4	Cobalt___	6.0	U		P_	
7440-50-8	Copper___	7.3	B		P_	
7439-89-6	Iron____	459		J	P_	↑
7439-92-1	Lead____	6.0		U W J	F_	unbias
7439-95-4	Magnesium	16800		J	P_	↑
7439-96-5	Manganese	370			P_	
7439-97-6	Mercury__	0.20	U		CV	
7440-02-0	Nickel___	15.0	U		P_	
7440-09-7	Potassium	2210	B		P_	
7782-49-2	Selenium_	1.0	U	N J	F_	↓
7440-22-4	Silver___	6.0	U		P_	
7440-23-5	Sodium___	14100		J	P_	↑
7440-28-0	Thallium_	1.0	U		F_	
7440-62-2	Vanadium_	4.0	U		P_	
7440-66-6	Zinc____	22.3		U	P_	
_____	Cyanide__	10.0	U		CA	

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD64

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): WATER Lab Sample ID: MEQD64____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	31.0	U		P_	
7440-36-0	Antimony_	38.0	U		P_	
7440-38-2	Arsenic__	7.4	B		F_	
7440-39-3	Barium___	143	B		P_	
7440-41-7	Beryllium	1.0	U		P_	
7440-43-9	Cadmium__	4.0	U		P_	
7440-70-2	Calcium__	34800	_	J	P_	↑
7440-47-3	Chromium_	4.0	U		P_	
7440-48-4	Cobalt___	6.0	U		P_	
7440-50-8	Copper___	4.4	B		P_	
7439-89-6	Iron____	406	_	J	P_	↑
7439-92-1	Lead____	3.4	_	U W J	F_	unk bias
7439-95-4	Magnesium	17000	_	J	P_	↑
7439-96-5	Manganese	370	_		P_	
7439-97-6	Mercury__	0.20	U		CV	
7440-02-0	Nickel___	15.0	U		P_	
7440-09-7	Potassium	2120	B		P_	
7782-49-2	Selenium_	1.0	U	N J	F_	↓
7440-22-4	Silver___	6.0	U		P_	
7440-23-5	Sodium___	14500	_	J	P_	↑
7440-28-0	Thallium_	1.0	U		F_	
7440-62-2	Vanadium_	4.0	U		P_	
7440-66-6	Zinc____	10.7	B	U	P_	
_____	Cyanide__	10.0	U		CA	
_____	_____	_____	_	_____	__	

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD65

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): WATER Lab Sample ID: MEQD65____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	31.0	U		P_	
7440-36-0	Antimony_	38.0	U		P_	
7440-38-2	Arsenic__	1.0	U		F_	
7440-39-3	Barium___	41.2	B		P_	
7440-41-7	Beryllium	1.0	U		P_	
7440-43-9	Cadmium__	4.0	U		P_	
7440-70-2	Calcium__	53400		J	P_	↑
7440-47-3	Chromium_	4.0	U		P_	
7440-48-4	Cobalt___	6.0	U		P_	
7440-50-8	Copper___	4.0	U		P_	
7439-89-6	Iron____	78.4	B	J	P_	↑
7439-92-1	Lead____	3.1		UW J	F_	unlabias
7439-95-4	Magnesium	22300		J	P_	↑
7439-96-5	Manganese	672			P_	
7439-97-6	Mercury__	0.20	U		CV	
7440-02-0	Nickel___	15.0	U		P_	
7440-09-7	Potassium	2080	B		P_	
7782-49-2	Selenium_	1.0	U	N J	F_	↓
7440-22-4	Silver___	6.0	U		P_	
7440-23-5	Sodium___	16700		J	P_	↑
7440-28-0	Thallium_	1.0	U		F_	
7440-62-2	Vanadium_	4.0	U		P_	
7440-66-6	Zinc____	77.6		J	P_	↑
	Cyanide__	10.0	U		CA	

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BLANK MEQQ87

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): WATER Lab Sample ID: MEQQ87____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	31.0	U		P_
7440-36-0	Antimony_	38.0	U		P_
7440-38-2	Arsenic__	1.0	U		F_
7440-39-3	Barium___	2.0	U		P_
7440-41-7	Beryllium	1.0	U		P_
7440-43-9	Cadmium__	4.0	U		P_
7440-70-2	Calcium__	66.0	B		P_
7440-47-3	Chromium_	4.0	U		P_
7440-48-4	Cobalt___	6.0	U		P_
7440-50-8	Copper___	4.0	U		P_
7439-89-6	Iron_____	23.0	B		P_
7439-92-1	Lead_____	2.9	B	J	F_
7439-95-4	Magnesium	46.0	B	U	P_
7439-96-5	Manganese	2.0	U		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	15.0	U		P_
7440-09-7	Potassium	549	U		P_
7782-49-2	Selenium_	1.0	U	N J	F_
7440-22-4	Silver___	6.0	U		P_
7440-23-5	Sodium___	247	B		P_
7440-28-0	Thallium_	1.0	U		F_
7440-62-2	Vanadium_	4.0	U		P_
7440-66-6	Zinc_____	6.8	B		P_
_____	Cyanide__	10.0	U		CA

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQQ88

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): SOIL_ Lab Sample ID: MEQQ88____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: _88.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	1390	_		P_
7440-36-0	Antimony_	8.6	U		P_
7440-38-2	Arsenic__	1.3	B	W J	F_
7440-39-3	Barium___	19.5	B		P_
7440-41-7	Beryllium	0.23	U		P_
7440-43-9	Cadmium__	0.91	U		P_
7440-70-2	Calcium__	36100	_		P_
7440-47-3	Chromium_	4.5	_		P_
7440-48-4	Cobalt___	2.9	B		P_
7440-50-8	Copper___	4.5	B		P_
7439-89-6	Iron_____	3760	_	*	P_
7439-92-1	Lead_____	2.9	_		F_
7439-95-4	Magnesium	17300	_		P_
7439-96-5	Manganese	274	_	N* J	P_
7439-97-6	Mercury__	0.11	U		CV
7440-02-0	Nickel___	4.2	B		P_
7440-09-7	Potassium	270	B		P_
7782-49-2	Selenium_	0.23	U		F_
7440-22-4	Silver___	1.4	U		P_
7440-23-5	Sodium___	73.6	B		P_
7440-28-0	Thallium_	0.25	B		F_
7440-62-2	Vanadium_	7.2	B		P_
7440-66-6	Zinc_____	11.2	_		P_
_____	Cyanide__	0.57	U		CA
_____	_____	_____	_		__

unknown

Color Before: BROWN____ Clarity Before: _____ Texture: COARSE

Color After: COLORLESS Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN ILM02.1

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQQ89

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): SOIL_ Lab Sample ID: 7EQQ89____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: _83.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	7490	_		P_
7440-36-0	Antimony_	9.1	U		P_
7440-38-2	Arsenic__	3.5	_	S	F_
7440-39-3	Barium___	107	_		P_
7440-41-7	Beryllium	0.45	B		P_
7440-43-9	Cadmium__	0.96	U		P_
7440-70-2	Calcium__	18100	_		P_
7440-47-3	Chromium_	33.5	_		P_
7440-48-4	Cobalt___	8.0	B		P_
7440-50-8	Copper___	14.8	_		P_
7439-89-6	Iron_____	13000	_	*	P_
7439-92-1	Lead_____	38.1	_	S	F_
7439-95-4	Magnesium	9740	_		P_
7439-96-5	Manganese	855	_	N*J	P_ ↓
7439-97-6	Mercury__	0.12	U		CV
7440-02-0	Nickel___	10.2	_		P_
7440-09-7	Potassium	695	B		P_
7782-49-2	Selenium_	0.59	B	J	F_ ↑
7440-22-4	Silver___	1.4	U		P_
7440-23-5	Sodium___	59.2	B		P_
7440-28-0	Thallium_	0.27	B	J	F_ ↑
7440-62-2	Vanadium_	21.7	_		P_
7440-66-6	Zinc_____	44.5	_		P_
_____	Cyanide__	0.60	U		CA
_____	_____	_____	_		__

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

PB_=_8X_DILUTION

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQQ90

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): SOIL_ Lab Sample ID: MEQQ90____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: _80.4

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	1980	_		P_
7440-36-0	Antimony_	9.5	U		P_
7440-38-2	Arsenic__	1.4	B		F_
7440-39-3	Barium___	15.8	B		P_
7440-41-7	Beryllium	0.25	U		P_
7440-43-9	Cadmium__	1.00	U		P_
7440-70-2	Calcium__	23600	_		P_
7440-47-3	Chromium_	6.1	_		P_
7440-48-4	Cobalt___	2.0	B		P_
7440-50-8	Copper___	4.4	B		P_
7439-89-6	Iron____	3920	_	*	P_
7439-92-1	Lead____	7.0	_	S	F_
7439-95-4	Magnesium	13700	_		P_
7439-96-5	Manganese	90.7	_	N*J	P_
7439-97-6	Mercury__	0.12	U		CV
7440-02-0	Nickel___	6.0	B		P_
7440-09-7	Potassium	259	B		P_
7782-49-2	Selenium_	0.25	U		F_
7440-22-4	Silver___	1.5	U		P_
7440-23-5	Sodium___	55.3	B		P_
7440-28-0	Thallium_	0.38	B	J	F_
7440-62-2	Vanadium_	6.7	B		P_
7440-66-6	Zinc____	21.4	_		P_
_____	Cyanide__	0.62	U		CA
_____	_____	_____	_		__

Color Before: BROWN____ Clarity Before: _____ Texture: COARSE

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

PB_=_2X_DILUTION

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQQ91

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): SOIL_ Lab Sample ID: MEQQ91____

Level (low/med): LOW__ Date Received: 08/31/93

% Solids: _58.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	16600	_		P_
7440-36-0	Antimony_	13.1	U		P_
7440-38-2	Arsenic__	6.0	_	S	F_
7440-39-3	Barium___	177	_		P_
7440-41-7	Beryllium	0.88	B		P_
7440-43-9	Cadmium__	2.0	_		P_
7440-70-2	Calcium__	37800	_		P_
7440-47-3	Chromium_	27.7	_		P_
7440-48-4	Cobalt___	10.7	B		P_
7440-50-8	Copper___	26.4	_		P_
7439-89-6	Iron____	21600	_	*	P_
7439-92-1	Lead____	30.5	_	S	F_
7439-95-4	Magnesium	8390	_		P_
7439-96-5	Manganese	984	_	N* J	P_
7439-97-6	Mercury__	0.17	U		CV
7440-02-0	Nickel___	22.2	_		P_
7440-09-7	Potassium	1810	_		P_
7782-49-2	Selenium_	0.97	B	J	F_
7440-22-4	Silver___	2.7	B		P_
7440-23-5	Sodium___	118	B		P_
7440-28-0	Thallium_	0.53	B	J	F_
7440-62-2	Vanadium_	35.0	_		P_
7440-66-6	Zinc____	121	_		P_
_____	Cyanide__	0.86	U		CA
_____	_____	_____	_	_____	__

Color Before: BROWN____ Clarity Before: _____ Texture: FINE__

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

PB_=_6X_DILUTION

U.S. EPA - CLP

3
BLANKS

20

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	31.0	U	31.0	U	31.0	U	31.0	U	31.000	U	P
Antimony	38.0	U	38.0	U	38.0	U	38.0	U	38.000	U	P
Arsenic	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	F
Barium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	4.1	B	4.0	U	4.0	U	4.0	U	4.000	U	P
Calcium	45.0	U	45.0	U	45.0	U	45.0	U	45.000	U	P
Chromium	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Cobalt	6.0	U	6.0	U	6.0	U	6.0	U	6.000	U	P
Copper	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Iron	7.0	U	7.0	U	7.0	U	7.0	U	7.000	U	P
Lead	1.0	U	1.0	U	1.5	B	2.0	B	1.000	U	F
Magnesium	47.3	B	39.0	U	39.0	U	39.0	U	43.395	B	P
Manganese	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	15.0	U	15.0	U	15.0	U	15.0	U	15.000	U	P
Potassium	549.0	U	549.0	U	549.0	U	549.0	U	549.000	U	P
Selenium	2.2	B	1.8	B	1.8	B	1.0	U	1.000	U	F
Silver	6.0	U	6.0	U	6.0	U	6.0	U	6.000	U	P
Sodium	37.0	U	37.0	U	37.0	U	37.0	U	37.000	U	P
Thallium	1.2	B	1.0	U	1.0	B			1.000	U	F
Vanadium	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Zinc	6.0	U	6.0	U	6.0	U	6.0	U	6.000	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	CA

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3
BLANKS

21

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Preparation Blank Matrix (soil/water): SOIL_

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			31.0	U					6.200	U	P
Antimony			38.0	U					7.600	U	P
Arsenic			1.0	U	1.0	U			0.200	U	F
Barium			2.0	U					0.400	U	P
Beryllium			1.0	U					0.200	U	P
Cadmium			4.0	U					0.800	U	P
Calcium			45.0	U					9.000	U	P
Chromium			4.0	U					0.800	U	P
Cobalt			6.0	U					1.200	U	P
Copper			4.0	U					0.800	U	P
Iron			7.0	U					1.400	U	P
Lead			1.0	U					0.200	U	F
Magnesium			39.0	U					7.800	U	P
Manganese			2.0	U					0.400	U	P
Mercury	0.2	U	0.2	U	0.2	U			0.100	U	CV
Nickel			15.0	U					3.000	U	P
Potassium			549.0	U					109.800	U	P
Selenium			1.7	B					0.217	B	F
Silver			6.0	U					1.200	U	P
Sodium			37.0	U					7.400	U	P
Thallium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	F
Vanadium			4.0	U					0.800	U	P
Zinc			6.0	U					1.200	U	P
Cyanide			10.0	U	10.0	U	10.0	U	0.500	U	CA

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3
BLANKS

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Preparation Blank Matrix (soil/water): _____

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic	1.2	B	1.1	B	1.0	U					F
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead	1.0	U	1.0	U	1.0	U	1.0	U			F
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium	1.8	B	1.3	B	1.0	U					F
Silver											NR
Sodium											NR
Thallium			1.6	B							F
Vanadium											NR
Zinc											NR
Cyanide			10.0	U	10.0	U	10.0	U			CA

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3
BLANKS

23

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Preparation Blank Matrix (soil/water): _____

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead	1.0	U	1.0	U	1.0	U					F
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEQD62S

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): WATER_ Level (low/med): LOW___

% Solids for Sample: __0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	1945.9690		31.0000	U	2000.00	97.3		P
Antimony	75-125	500.6230		38.0000	U	500.00	100.1		P
Arsenic	75-125	40.2070		1.0000	U	40.00	100.5		F
Barium	75-125	2007.0400		68.1710	B	2000.00	96.9		P
Beryllium	75-125	50.2080		1.0000	U	50.00	100.4		P
Cadmium	75-125	56.6630		4.0000	U	50.00	113.3		P
Calcium									NR
Chromium	75-125	195.9430		4.0000	U	200.00	98.0		P
Cobalt	75-125	481.8870		6.0000	U	500.00	96.4		P
Copper	75-125	248.1840		4.0000	U	250.00	99.3		P
Iron	75-125	1081.5310		66.6160	B	1000.00	101.5		P
Lead	75-125	26.6510		2.0600	B	20.00	123.0		F
Magnesium									NR
Manganese	75-125	621.2450		132.3940		500.00	97.8		P
Mercury	75-125	1.1900		0.2000	U	1.00	119.0		CV
Nickel	75-125	486.0350		15.0000	U	500.00	97.2		P
Potassium									NR
Selenium	75-125	9.5260		2.3880	B	10.00	71.4	N	F
Silver	75-125	50.7630		6.0000	U	50.00	101.5		P
Sodium									NR
Thallium	75-125	59.0360		1.2470	B	50.00	115.6		F
Vanadium	75-125	485.0660		4.0000	U	500.00	97.0		P
Zinc	75-125	493.1970		6.0000	U	500.00	98.6		P
Cyanide	75-125	97.4810		10.0000	U	100.00	97.5		CA

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEQQ88S

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): SOIL__ Level (low/med): LOW___

% Solids for Sample: _88.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	105.2723		8.6364	U	113.64	92.6		P
Arsenic	75-125	12.1182		1.2652	B	9.09	119.4		F
Barium	75-125	456.6518		19.5441	B	454.55	96.2		P
Beryllium	75-125	10.8018		0.2273	U	11.36	95.1		P
Cadmium	75-125	12.3991		0.9091	U	11.36	109.1		P
Calcium									NR
Chromium	75-125	45.9720		4.5282		45.45	91.2		P
Cobalt	75-125	105.3382		2.9030	B	113.64	90.1		P
Copper	75-125	58.1159		4.5373	B	56.82	94.3		P
Iron									NR
Lead	75-125	7.7973		2.8886		4.55	107.9		F
Magnesium									NR
Manganese	75-125	330.4880		274.0411		113.64	49.7	N	P
Mercury	75-125	0.5449		0.1136	U	0.57	95.6		CV
Nickel	75-125	107.7341		4.2207	B	113.64	91.1		P
Potassium									NR
Selenium	75-125	2.2800		0.2273	U	2.27	100.4		F
Silver	75-125	12.1655		1.3636	U	11.36	107.1		P
Sodium									NR
Thallium	75-125	13.2795		0.2523	B	11.36	114.7		F
Vanadium	75-125	112.9695		7.2020	B	113.64	93.1		P
Zinc	75-125	117.8255		11.2136		113.64	93.8		P
Cyanide	75-125	6.0268		0.5682	U	5.68	106.1		CA

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEQQ88A

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water) : SOIL__ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese		4175.54		1205.78		2400.0	123.7		P
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEQD62D

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): WATER Level (low/med): _LOW__

% Solids for Sample: __0.0 % Solids for Duplicate: ___0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		31.0000	U	31.0000	U			P
Antimony		38.0000	U	38.0000	U			P
Arsenic		1.0000	U	1.0000	U			F
Barium		68.1710	B	69.0620	B	1.3		P
Beryllium		1.0000	U	1.0000	U			P
Cadmium		4.0000	U	4.0000	U			P
Calcium		64061.1250		64445.9100		0.6		P
Chromium		4.0000	U	4.0000	U			P
Cobalt		6.0000	U	6.0000	U			P
Copper		4.0000	U	4.0000	U			P
Iron		66.6160	B	7.3470	B	160.3		P
Lead	3.0	2.0600	B	3.2880		45.9		F
Magnesium		28970.0330		28975.2990		0.0		P
Manganese		132.3940		132.9920		0.5		P
Mercury		0.2000	U	0.2000	U			CV
Nickel		15.0000	U	15.0000	U			P
Potassium		2035.5530	B	1863.6210	B	8.8		P
Selenium		2.3880	B	1.0000	U	200.0		F
Silver		6.0000	U	6.0000	U			P
Sodium	5000.0	11629.6000		11527.7500		0.9		P
Thallium		1.2470	B	1.0000	U	200.0		F
Vanadium		4.0000	U	4.0000	U			P
Zinc		6.0000	U	6.0000	U			P
Cyanide		10.0000	U	10.0000	U			CA

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEQQ88D

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

Matrix (soil/water): SOIL_ Level (low/med): _LOW__

% Solids for Sample: _88.0 % Solids for Duplicate: __88.6

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		1385.6184		1418.1457		2.3		P
Antimony		8.6364	U	8.6364	U			P
Arsenic		1.2652	B	1.5307	B	19.0		F
Barium		19.5441	B	31.6452	B	47.3		P
Beryllium		0.2273	U	0.2273	U			P
Cadmium		0.9091	U	0.9091	U			P
Calcium		36142.2620		37813.8280		4.5		P
Chromium	2.3	4.5282		5.2536		14.8		P
Cobalt		2.9030	B	4.1805	B	36.1		P
Copper		4.5373	B	5.4400	B	18.1		P
Iron		3764.2409		4916.7743		26.6	*	P
Lead	0.7	2.8886		2.7416		5.2		F
Magnesium		17326.5625		20834.9823		18.4		P
Manganese		274.0411		336.4618		20.4	*	P
Mercury		0.1136	U	0.1136	U			CV
Nickel		4.2207	B	5.4386	B	25.2		P
Potassium		270.0395	B	310.5105	B	13.9		P
Selenium		0.2273	U	0.2273	U			F
Silver		1.3636	U	1.3636	U			P
Sodium		73.5766	B	69.5611	B	5.6		P
Thallium		0.2523	B	0.2773	B	9.4		F
Vanadium		7.2020	B	8.7291	B	19.2		P
Zinc	4.5	11.2136		14.9536		28.6		P
Cyanide		0.5682	U	0.5682	U			CA

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36

10
Instrument Detection Limits (Quarterly)

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

ICP ID Number: ICP61E_____ Date: 07/20/93

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	31.0	P
Antimony	206.84		60	38.0	P
Arsenic			10		NR
Barium	493.41		200	2.0	P
Beryllium	313.04		5	1.0	P
Cadmium	228.80		5	4.0	P
Calcium	317.93		5000	45.0	P
Chromium	267.72		10	4.0	P
Cobalt	228.62		50	6.0	P
Copper	324.75		25	4.0	P
Iron	259.94		100	7.0	P
Lead			3		NR
Magnesium	279.08		5000	39.0	P
Manganese	257.61		15	2.0	P
Mercury			0.2		NR
Nickel	231.60		40	15.0	P
Potassium	766.49		5000	549.0	P
Selenium			5		NR
Silver	328.07		10	6.0	P
Sodium	589.00		5000	37.0	P
Thallium			10		NR
Vanadium	292.40		50	4.0	P
Zinc	213.86		20	6.0	P

Comments:

U.S. EPA - CLP

37

10
Instrument Detection Limits (Quarterly)

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

ICP ID Number: _____ Date: 07/15/93

Flame AA ID Number : _____

Furnace AA ID Number : AA30_____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead	283.30	BD	3	1.0	F
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

30

10
Instrument Detection Limits (Quarterly)

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

ICP ID Number: _____ Date: 07/15/93

Flame AA ID Number : _____

Furnace AA ID Number : AA40Z_____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead	283.30	BZ	3	1.0	F
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium	276.80	BZ	10	1.0	F
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

39

10
Instrument Detection Limits (Quarterly)

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

ICP ID Number: _____ Date: 07/15/93

Flame AA ID Number : _____

Furnace AA ID Number : 300Z-1_____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic	193.70	BZ	10	1.0	F
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

240

10

Instrument Detection Limits (Quarterly)

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

ICP ID Number: _____ Date: 07/15/93

Flame AA ID Number : _____

Furnace AA ID Number : 300Z-2_____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium	196.00	BZ	5	1.0	F
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: SVL_ANALYTICAL_INC._____ Contract: 68-D20042_

Lab Code: SILVER Case No.: 20663_ SAS No.: _____ SDG No.: MEQD61

ICP ID Number: _____ Date: 07/15/93

Flame AA ID Number : VGA76_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70	BD	0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No. _____ CERCLIS No. IL

Case No. 20663 Site Name Location: Henry Hoffman

Contractor or EPA Lab: SVL Data User: B+V

No. of Samples: 10 Date Samples or Data Received: 9-30-93

Have Chain-of-Custody records been received? YES ✓ NO ___
Have traffic reports or packing lists been received? YES ✓ NO ___
If no, are traffic report or packing list numbers written on the chain-of-custody record? YES ✓ NO ___
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? YES ✓ NO ___
No. of samples claimed: 10 No. of samples received: 10

Received by: Lynette Burnett Date: 9-30-93

Received by LSSS: Dorothy M. May Date: 10/12/93

Review started: 11/9/93 Reviewer Signature: Stephanie N Tobin

Total time spent on review: 9 hrs Date review completed: 11/10/93

Copied by: Jeanette Rockell for S.F.M. Date: 12/15/93

Mailed to user by: Lynette Burnett Date: 12-16-93

DATA USERS:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, SSCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____
Inorganic Data Complete( ) Suitable for Intended Purpose( ) ✓ if OK
Organic Data Complete ( ) Suitable for Intended Purpose( ) list
Dioxin Data Complete ( ) Suitable for Intended Purpose( ) prblms
SAS Data Complete ( ) Suitable for Intended Purpose( ) below.
PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files Date: _____