INORGANIC ANALYSIS DATA SHEET

FORM VII

INSTRUMENT DETECTION LIMITS AND LABORATORY CONTROL SAMPLE

ORIGINAL (Red)

Lab Name : NANCO LABORATORIES, INC.

Case NO. : 7548

QC REPORT NO. : 558

LCS = EPA MADE

PAGE 1 OF 3

DATE: 7/27/87

E

	REQUIRED DETECTION LIMITS (CRDL) UG/L	INSTRUMENT DETECTION LIMITS (IDL) UG/L ICP: 1 **	FURNACE 1 ***	LAB CONTROL SAMPLE UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE) TRUE	FOUND	% R
1. ALUMINUM	200	100	NR	1980	2110	107
2. ANTIMONY	60	30	NR	807	719	89
3. ARSENIC	10	50	5	12.4	12.9	104
4. BARIUM	200	25	NR	1980	2044	103
5. BERYLLIUM	5	2	NR	481	476	99
6. CADMIUM	5	5	NR	489.0	496.0	101
7. CALCIUM	5000	1500	NR	49800	51200	103
8. CHROMIUM	10	10	NR	506.0	474.0	94
9. COBALT	50	25	NR	474.0	494.0	104
10. COPPER	25	15	NR	542.0	528	97
11. IRON	100	40	NR	1990	2034	102
12. LEAD	5	50	NR	NR	NR	NR
13. MAGNESIUM	5000	500	NR	25000	24600	98
14. MANGANESE	15	10	NR	513	517	101
15. MERCURY	0.2	NR	NR	NR	NR	NR
16. NICKEL	40	30	NR	496.0	477.0	96
17. POTASSIUM	5000	1000	NR	50200	52800	105
18. SELENIUM	5	NR	NR	NR	NR	NR
19. SILVER	10	10	NR	509	539	106
20. SODIUM	5000	1500	NR	50700	51800	102
21. THALLIUM	10	NR	NR	NR	NR	NR
22. VANADIUM	50	30	NR	511.0	521.0	102
23. ZINC	20	10	NR	3100	2962.0	96
24. CYANIDE		NR	NR	NR	NR	NR

NR = NOT REQUIRED

** = ALLIED ANALYTICAL PLASMA 200

*** = VARIAN SPECTRA AA 40

P 200 123914-00 8 JUL 87

0000069

SAMPLE	OPERATOR	PWR	TIME	NAME
4	MSHIELDS	3	03:38	CONTRACT

EL	NM	CH	CONC	UNIT	SD	RSD	SEC
AL	167.08	B	-0.01d	PPM	0.000	0.00	2.0
SB	206.83	B	~~20~~	~~PPB~~ ~~120~~	13.4	67.00	3.0
BA	493.41	A	-1d	PPB	0.0	0.00	1.0
BE	313.04	A	5	PPB - 10	1.0	20.00	1.0
CD	214.44	B	6	PPB - 10	2.8	46.66	1.0
CA	317.93	A	0.0d	PPM	0.00	0.00	1.0
CR	205.55	B	1	PPB - 20	3.6	360.00	2.0
CO	228.61	B	86	PPB - 100	1.0	1.16	1.0
CU	324.75	A	35	PPB - 50	1.0	2.85	2.0
FE	234.35	B	~~89~~	~~PPB~~ ~~200~~	9.8	25.12	1.0
MG	279.08	A	0.0d	PPM	0.10	0.00	1.0
MN	-257.61	A	28	PPB - 30	2.8	10.00	3.0
NI	231.60	B	50	PPB - 80	1.4	2.80	1.0
K	766.49	A	-0.2d	PPM	0.22	110.00	3.0
AG	328.07	A	-3d	PPB 20	9.8	326.66	5.0
NA	589.59	A	-0.1d	PPM	0.00	0.00	1.0
V	292.40	B	71	PPB - 100	2.2	3.09	1.0
ZN	213.86	B	30	PPB - 40	1.0	3.33	2.0
FE	234.35	A	-0.1d	PPM	0.00	0.00	3.0
PB	220.35	B	280	PPB	22.6	8.07	3.0

2X 1400

LINEAR RANGE

Pre-analysis run

ORIGINAL (Red)

200 123914-00 8 JUL 87

SAMPLE	OPERATOR	PWR	TIME	NAME
3	MSHIELDS	3	09:25	CONTRACT

EL	NM	CH	CONC	UNIT	2xCROL	SD	RSD	SEC
AL	167.08	B	0.00d	PPM		0.000	0.00	2.0
SB	206.83	B	-17	PPB	? 120	26.8	157.64	3.0
BA	493.41	A	-1d	PPB		3.6	360.00	1.0
BE	313.04	A	7	PPB	16	0.0	0.00	1.0
CD	214.44	B	2	PPB	10	5.6	280.00	1.0
CA	317.93	A	-0.2d	PPM		0.10	50.00	1.0
CR	205.55	B	15	PPB	20	1.4	9.33	2.0
CO	228.61	B	61	PPB	100	2.2	3.60	1.0
CU	324.75	A	41	PPB	50	0.0	0.00	2.0
FE	234.35	B	~~8~~	~~PPB~~		6.4	80.00	1.0
MG	279.08	A	-0.1d	PPM		0.14	140.00	1.0
MN	257.61	A	19	PPB	30	2.8	14.73	3.0
NI	231.60	B	66	PPB	80	16.9	25.60	1.0
K	766.49	A	-0.2d	PPM		0.28	140.00	3.0
AG	328.07	A	21	PPB	20	12.7	60.47	5.0
NA	589.59	A	-0.1d	PPM		0.10	100.00	1.0
V	292.40	B	32	PPB	100	13.4	41.87	1.0
ZN	213.86	B	30	PPB	40	3.6	12.00	2.0
FE	234.35	A	-0.1d	PPM		0.10	100.00	3.0
PB	220.35	B	152	PPB		35.3	23.22	3.0

F2

LINEAR RANGE

POST ANALYSIS RUN

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET
FORM IV
ICP INTERFERENCE CHECK SAMPLE

Lab Name : NANCO LABORATORIES, INC.

Case NO.: 7548

QC REPORT NO. : 558

Check Sample I.D. : ICS

PAGE 1 OF 1

Check Sample Source : EPA

DATE: 7/27/87

Units: ug/L

UNITS: UG/L

	2	INITIAL		FINAL	
	TRUE	OBSERVED	% R	OBSERVED	% R
1. ALUMINUM	503000.0	477000.0	94.8	502000.0	99.8
2. ANTIMONY	NP	30U		30U	
3. ARSENIC	NP	NR		NR	
4. BARIUM	472.0	490.0	103.8	467.0	98.9
5. BERYLLIUM	456.0	420.0	92.1	422.0	92.5
6. CADMIUM	964.0	815.0	84.5	801.0	83.1
7. CALCIUM	499000.0	462200.0	92.6	422700.0	84.7
8. CHROMIUM	985.0	927.0	94.1	891.0	90.5
9. COBALT	478.0	479.0	100.2	460.0	96.2
10.COPPER	509.0	578.0	113.6	551.0	108.3
11.IRON	198000.0	184400.0	93.1	188500.0	95.2
12.LEAD	4630.0	4439.0	95.9	4777.0	103.2
13.MAGNESIUM	497000.0	502000.0	101.0	491300.0	98.9
14.MANGANESE	522.0	438.0	83.9	459.0	87.9
15.MERCURY	NP	NR		NR	
16.NICKEL	913.0	885.0	96.9	886.0	97.0
17.POTASSIUM	NP	2100		3300	
18.SELENIUM	NP	NR		NR	
19.SILVER	986.0	940.0	95.3	1128.0	114.4
20.SODIUM	NP	1500U		1500U	
21.THALLIUM	NP	NR		NR	
22.VANADIUM	471.0	461.0	97.9	456.0	96.8
23.ZINC	948.0	907.0	95.7	812.0	85.7

2 = TRUE VALUE OF EPA ICP INTERFERENCE CHECK SAMPLE OR CONTRACTOR

NR = NOT REPORTED.
NP= NOT PRESENT
ND= NOT DETECTED

INORGANIC ANALYSIS DATA SHEET
FORM IX
ICP SERIAL DILUTIONS

0000029

ORIGINAL

H

Lab Name : NANCO LABORATORIES, INC.

Case NO. : 7548

QC REPORT NO. : 558

EPA SAMPLE NO: MCK-369

PAGE 1 OF 1

LAB SAMPLE ID: 7548-MCK-369-558

DATE: 7/27/87

UNITS: UG/L

MATRIX: WATER

	INITIAL SAMPLE CONCENTRATION	SERIAL DILUTION RESULTS	2 RPD
1. ALUMINUM	100U	100U	NR
2. ANTIMONY	30U	30U	NR
3. ARSENIC	NA	NA	NA
4. BARIUM	25U	25U	NR
5. BERYLLIUM	2U	2U	NR
6. CADMIUM	5U	5U	NR
7. CALCIUM	1500U	1500U	NR
8. CHROMIUM	10U	10U	NR
9. COBALT	30U	30U	NR
10. COPPER	15U	15U	NR
11. IRON	40U	40U	NR
12. LEAD	50U	50U	NR
13. MAGNESIUM	500U	1000U	NR
14. MANGANESE	10U	10U	NR
15. MERCURY	NA	NA	NA
16. NICKEL	30U	30U	NR
17. POTASSIUM	1000U	1000U	NR
18. SELENIUM	NA	NA	NA
19. SILVER	10U	10U	NR
20. SODIUM	1500U	1500U	NR
21. THALLIUM	NA	NA	NA
22. VANADIUM	30U	30U	NR
23. ZINC	17	10U	NR

NR - NOT REQUIRED, INITIAL SAMPLE CONCENTRATION LESS THAN 10 TIMES IDL

NA - NOT APPLICABLE, ANALYTE NOT DETERMIND BY ICP

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET
FORM VIII
STANDARD ADDITION RESULTS

Lab Name : NANCO LABORATORIES, INC.

Case NO.: 7548

QC BATCH 558

DATE: 7/27/87

UNITS: ug/l

I

UNITS: UG/L

EPA SAMPLE #	ELEMENT	1 MATRIX	0 ADD ABS	1 ADD CON.	1 ADD ABS	2 ADD CON.	2 ADD ABS	3 ADD CON.	3 ADD ABS	FINAL 3 CON.	R
1. MCK-365 (1:5)	PB	WATER	0.062	9.8	0.128	19.2	0.193	28.3	0.237	10.3	0.996
2.											
3.											
4.											
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7548

108

8888158 ORIGINAL (Red)

Varian SpectrAA System Report

NCO LABS, INC., Unity St. & Rt. 376, Hopewell Junction, NY 12533
Metals Report-Atomic Absorption;direct aspiration

J

OPERATOR B O'REILLY
DATE 07/06/87
BATCH

PROGRAM 4 Hg VGA-76

INSTRUMENT MODE	ABSORBANCE
CALIBRATION MODE	CONCENTRATION
MEASUREMENT MODE	INTEGRATION
LAMP POSITION	4
LAMP CURRENT (mA)	8
SLIT WIDTH (nm)	0.5
SLIT HEIGHT	NORMAL
WAVELENGTH (nm)	253.7
FLAME	AIR ONLY
SAMPLE INTRODUCTION	MANUAL
DELAY TIME (sec)	45
TIME CONSTANT	0.05
MEASUREMENT TIME (sec)	5.0
REPLICATES	2
BACKGROUND CORRECTION	ON
RECALIBRATION RATE	0
RESLOPE RATE	0

CONDITIONS FOR Hg

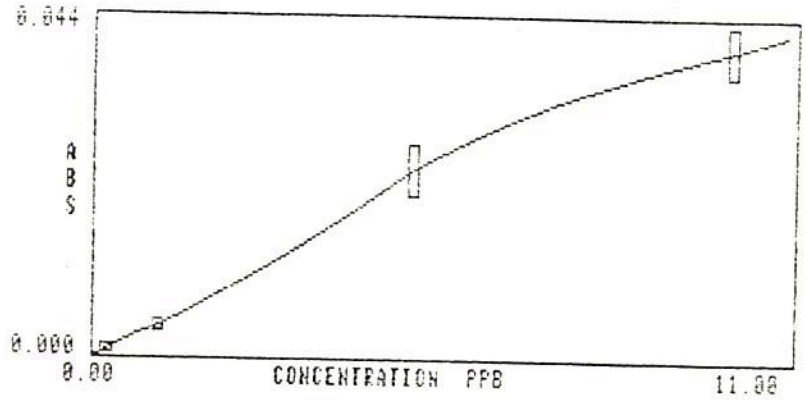
WAVELENGTH	SLIT WIDTH	CONC FOR 0.2 ABS	RELATIVE LAMP INTENSITY
nm	nm	mg/L	
253.7	0.5	70.0	

SAMPLE	CONC PPB	%RSD	MEAN ABS	READINGS		
BLANK	0.00 (-.1)		-0.000	-0.000	0.000	
STANDARD 1	0.20 (.11)	5.6	0.001	0.001	0.001	⟹ too low an absorbance reading for .20 ppb detection limit
STANDARD 2	1.00 (.84)	11.9	0.004	0.004	0.004	
STANDARD 3	5.00 (5.7)	13.0	0.024	0.022	0.026	
STANDARD 4	10.00 (9.6)	7.7	0.040	0.042	0.038	

least sq → .0014 abs = .20 ppb

0000159

ORIGINAL (Red)



	ppb	Addon.	$\bar{x}$	abs		
5PPB EPA	4.85	0.0	0.023	0.023	0.023	97%
C BLK	0.02	99.9	0.000	0.000	-0.000	
✓C CAL	3.12	0.8	0.014	0.014	0.014	104%
P BLK WATER	-1.90	0.8	-0.010	-0.010	-0.010	
P BLK WATER	-1.89	3.9	-0.010	-0.011	-0.010	
P BLK WATER	-1.86	0.0	-0.010	-0.010	-0.010	
P BLK SOIL	-1.93	2.3	-0.010	-0.010	-0.011	
P BLK SOIL	-1.95	0.0	-0.011	-0.011	-0.011	
LCS WATER	4.45	13.2	0.021	0.019	0.023	89%
LCS WATER	4.15	19.5	0.019	0.022	0.017	87%
LCS WATER	4.35	12.8	0.020	0.019	0.022	
LCS SOIL	2.84	13.3	0.012	0.011	0.014	14.2ppb
LCS SOIL	2.83	19.1	0.012	0.011	0.014	14.15ppb
C BLK	-0.01	0.0	-0.000	-0.000	-0.000	✓
✓C CAL	2.73	17.7	0.012	0.013	0.010	91%
365	0.19	8.3	0.001	0.001	0.001	← same abs as 0.20 ug/l standard
366	0.05	30.6	0.000	0.000	0.000	
366 DUP	-0.01	99.9	-0.000	0.000	-0.000	
366 MSPK	0.70	3.4	0.003	0.003	0.003	70%
367	0.01	99.9	0.000	0.000	-0.000	
368	-0.01	99.9	-0.000	-0.000	0.000	
369	-0.00	99.9	-0.000	0.000	-0.000	
370	0.00	0.0	0.000	0.000	0.000	
371	-0.00	99.9	-0.000	-0.000	0.000	
486	0.00	99.9	0.000	-0.000	0.000	
C BLK	-0.03	99.9	-0.000	-0.000	-0.000	
✓C CAL	2.99	14.3	0.013	0.015	0.012	99%
487	-0.01	99.9	-0.000	-0.000	0.000	
1004	0.00	99.9	0.000	0.000	-0.000	
1004 DUP	0.03	71.5	0.000	0.000	0.000	
1005	-0.01	0.0	-0.000	-0.000	-0.000	
1004 MSPK	1.42	7.3	0.006	0.006	0.006	
1005 DUP	-0.03	99.9	-0.000	0.000	-0.000	
1005 MSPK	1.26	12.5	0.005	0.005	0.006	
1014	0.01	0.0	0.000	0.000	0.000	
1014 DUP	-0.00	99.9	-0.000	-0.000	0.000	
1014 MSPK	1.27	20.4	0.005	0.006	0.004	

PROJECT NAME: Morrisville Trailer Park
TDD NO.: F3-8704-77

EPA SITE NO.: PA 1744
REGION: III

ORIGINAL (Red)

SUPPORT DOCUMENTATION FOR THE REVIEW OF ORGANIC ANALYSIS LAB DATA PACKAGE

CASE/SAS NO.: 7548
TYPE OF ANALYSIS: organic
CONTRACT LABORATORY: WCAS
APPLICABLE IFB OR SOW: 7/85
REVIEWER: Roy Cohen
REVIEW DATE: Aug, 1987

APPLICABLE SAMPLE NO's.: CJ365-CJ369

THE FOLLOWING TABLE INDICATES AREAS WHICH WERE EXAMINED IN DETAIL, THE IDENTIFIED PROBLEM AREAS, AND SUPPORT DOCUMENTATION ATTACHMENTS:

	AREAS EXAMINED IN DETAIL (CHECK (✓) IF YES OR FOOTNOTE LETTER FOR COMMENTS BELOW)				PROBLEM AREAS IDENTIFIED (CHECK (✓) IF YES OR FOOTNOTE NUMBER FOR COMMENTS BELOW)				SUPPORT DOCUMENTATION ATTACHMENTS (CHECK (✓) IF YES OR IDENTIFY ATTACHMENT NO.)			
	ALL APPLICABLE ANALYSES	VOA	BNA	PEST/PCB	ALL APPLICABLE ANALYSES	VOA	BNA	PEST/PCB	ALL APPLICABLE ANALYSES	VOA	BNA	PEST/PCB
HOLDING TIMES	✓											
BLANK ANALYSIS RESULTS: TARGET COMPOUNDS	✓						1		✓ A			
BLANK ANALYSIS RESULTS: TENTATIVE I.D.s	✓								✓ B			
SURROGATE SPIKE RESULTS	✓								✓ C			
MATRIX SPIKE RESULTS	✓								✓ D			
DUPLICATE ANALYSIS RESULTS	✓				4							
TARGET COMPOUND MATCHING QUALITY	✓					3			✓ E			
TENTATIVELY IDENTIFIED COMPOUNDs	✓								✓			
DFTPP & BFB SPECTRUM TUNE RESULTS	✓											
GC INSTRUMENT PERFORMANCE	✓											
NITIAL CALIBRATIONS	✓											
CONTINUING CALIBRATIONS	✓					2						
QUANTITATION OF RESULTS	✓											
OTHERS	✓											

COMMENTS: (1) Low levels of phthalates detected in blanks
(2) Continuing calibration response factor agreement out of control range for two compounds
(3) Reviewer added positive results for two volatile compounds to data summary
(4) Field duplicate results not precise for some compounds

7548

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

TDD Number F3-8704-77
EPA Number PA1749

Site Name Morrisville Trailer Park
Date of Sample 6/30/87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Trans, 1,2-dichloroethene	Chloroform	Trichloroethene	Tetrachloroethene	Di-n-butyl phthalate	bis-2-(ethylhexyl) phthalate	beta-BHC	1,1,1 Trichloro ethane	Benzene					Remarks
CJ365	MW-1							UJ◇ 2	UJ◇ 6								
CJ366	PW-1							UJ◇ 2	UJ◇ 9								
CJ367	R-1			J 3500	360	830	410	UJ◇ 1	UJ◇ 6	H .2	J 40	38					ran at 25x dilution
CJ368	R-2			J 4100	390	1000	510	UJ◇ 1	UJ◇ 7		J 110	J 25					dup CJ367 ran at 25x dilution
CJ369	Blank								6								

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

ORIGINAL (Red)

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

A

ORIGINAL (Red)

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
DA	Low water lab blank			VBL4 585	LAB	NONE DETECTED
BNA	Low water lab blank			↓	LAB	Di-n-butyl phthalate 3 ug/l Bis(2-ethylhexyl) phthalate 8 ug/l
VOA	Low water field blank			CJ369	NUS	Methylene Chloride - 2 ug/l (2) Acetone 2 ug/l (2)
BNA	Low water field blank			CJ369	NUS	Bis(2-ethylhexyl)phthalate 6 ug/l
P	Low water lab & field blanks					None detected

. BORATORY REPORTED FIELD BLANK DATA IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITHIN THE SAMPLE ANALYTICAL DATA SUMMARY. TENTATIVELY IDENTIFIED COMPOUNDS IN BLANKS ARE LISTED ON A SEPARATE FORM

: MMENTS:

(1) RESULT REPORTED BY LABORATORY AND CONFIRMED BY REVIEWER.

(2) RESULT INFERRED FROM QUANTITATION LIST, DIAGNOSTICS, CHROMATOGRAM AND/OR SPECTRA.

ORIGINAL (Red)

METHOD BLANK SUMMARY

CASE NUMBER: 7548 LABORATORY: WCAS CONTRACT: 68-01-7110

FILE ID	DATE	FRACTION	MATRIX	LEVEL	INST ID

CAS NO	COMPOUND	CONC	UNITS	CRDL

VBLK585 07/07/87 VOA WATER LOW 5100

NONE FOUND

FORM IV

ORIGINAL (Red)

METHOD BLANK SUMMARY

CASE NUMBER: 7548 LABORATORY: WCAS CONTRACT: 68-01-7110

FILE ID:	DATE	FRACTION	MATRIX	LEVEL	INST ID			
	CAS NO	COMPOUND				CONC	UNITS	CRDL
6395B1	07/21/87	BNA	WATER	LOW	4500			
	84-74-2	DI-N-BUTYLPHTHALATE				3.	UG/L	10.
	117-81-7	BIS (2-ETHYLHEXYL) PHTHALATE				8.	UG/L	10.
A395017	7/17/87	PEST	WATER	LOW	GC2			
	NONE FOUND							

FORM IV

BLANK ANALYSIS RESULTS FOR TENTATIVELY IDENTIFIED COMPOUNDS

ORIGINAL (Red) B

ALL TENTATIVELY IDENTIFIED COMPOUNDS FOUND IN BLANK ANALYSES ARE LISTED BELOW:

SAMPLE #	FRACTION	SCAN #(S) OR R.T	ESTIMATED CONCENTRATION	COMPOUND NAME	COMMENTS
VBlk585	VOA	18	10 ug/l	CO_2	
	"	37	12 ug/l	CO_2	
	BNA	1080	2 ug/l	unknown – No library search	
		1164	4 ug/l	unknown – NLS	
		1676	2 ug/l	unknown NLS	
CJ369	VOA	18	14 ug/l	CO_2	
	"	37	8 ug/l	CO_2	
	BNA	556	2 ug/l	unknown - NLS	
		680	2 ug/l		
		872	3 ug/l		
		1267	1 ug/l		
		1475	1 ug/l		

7548-3-1

WATER SURROGATE PERCENT RECOVERY SUMMARY

00001

ORIGINAL (Red)

CASE NUMBER: 7548 LABORATORY: WCAS CONTRACT: 68-01-7110

LEVEL: LOW
VOLATILE SURROGATES

SMO NUMBER	TOLUENE-D8 (88-110)	BFB (86-115)	1,2-DICHLORO-ETHANE-D4 (76-114)
LAB BLANK	100	100	100
CJ365	108	98	94
CJ366	108	94	98
CJ367	102	94	102
CJ368	90	87	98
CJ369	88	92	98
CJ367MS	92	86	102
CJ367MSD	104	90	107

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS
RESULTS ARE REPORTED ON A WET WEIGHT BASIS.

VOLATILES: 0 OUT OF 24 ; OUTSIDE QC LIMITS

FORM II

ORIGINAL (Red)

WATER SURROGATE PERCENT RECOVERY SUMMARY

CASE NUMBER: 7548 LABORATORY: WCAS CONTRACT: 68-01-7110

LEVEL: LOW
SEMI-VOLATILE SURROGATES

SMO NUMBER	NITRO-BENZENE-D5 (35-114)	2-FLUORO-BIPHENYL (43-116)	TERPHENYL-D14 (33-141)	PHENOL-D5 (10-94)	2-FLUORO-PHENOL (21-100)	TRIBROMO-PHENOL (10-123)
METHOD BLANK	52	52	64	48	59	52
CJ365	66	58	74	61	56	67
CJ366	54	52	68	55	57	56
CJ367	60	54	74	59	55	67
CJ367 MS	58	62	66	58	58	71
CJ367 MSD	58	54	64	56	59	67
CJ368	64	60	68	63	64	64
CJ369	58	52	70	55	54	52

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS
RESULTS ARE REPORTED ON A WET WEIGHT BASIS.

SEMI-VOLATILES: 0 OUT OF 48 ; OUTSIDE QC LIMITS

FORM II

WATER [illegible]

Case No. 7548 Contract Laboratory WCHD Contract No. [illegible]

	VOLATILE				SEMI-VOLATILE							PESTICIDE
BNO TRAFFIC NO.	TOLUENE-D8 (88-110)	BFB (86-115)	1,2 DICHLORO-ETHANE-D4 (76-114)	NITRO-BENZENE-D5 (35-114)	2-FLUORO-BIPHENYL (43-116)	TERPHENYL-D14 (33-141)			PHENOL-D5 (10-94)	2-FLUORO-PHENOL (21-100)	2,4,6 TRIBROMO-PHENOL (10-123)	✱✱ DIBUTYL-CHLORENDATE (24-154)
												41
Blank												85
CJ368												86
CJ367												83
CJ367MS												80
CJ367MSD												83
CJ365												80
CJ369												70
CJ366												

✱ VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

✱✱ ADVISORY LIMITS ONLY

Volatiles: _____ out of _____ ; outside of QC limits

Semi-Volatiles: _____ out of _____ ; outside of QC limits

Pesticides: 0 out of 8 ; outside of QC limits

Comments:

ORIGINAL (Red)

00003

7/88

FORM II

ORIGINAL (Red)

MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: WCAS

CASE #/SAS #: 7548
LEVEL: LOW
MATRIX: WATER
G.C. REPORT #: 7548-1

SMO #: CJ367
CONTRACT #: 68-01-7110
UNITS: UG/L

VOLATILE COMPOUNDS

COMPOUND	CONC SPIKED	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
DICHLOROETHYLENE	1250.	125. U	1000.	80	1200.	96	-18*
TRICHLOROETHYLENE	1250.	830.	2200.	109	2300.	117	-4
CHLOROBENZENE	1250.	125. U	1000.	80	1200.	96	-18*
TOLUENE	1250.	125. U	870.	69*	1200.	96	-32*
BENZENE	1250.	125. U	1500.	120	1500.	120	0

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS
RPD=(MS-MSD)/((MS+MSD)/2)*100
SULTS ARE REPORTED ON A WET WEIGHT BASIS

RPD: VOA 3 OUT OF 5 RECOVERY: VOA 1 OUT OF 10 OUTSIDE QC LIMITS

WATER QUALITY CONTROL LIMITS

	RPD	RECOVERY
DICHLOROETHYLENE	14	61-145
TRICHLOROETHYLENE	14	71-120
CHLOROBENZENE	13	75-130
TOLUENE	13	76-125
BENZENE	11	76-127

FORM III

MATRIX SPIKE (MS AND MSD)
% RECOVERY AND RPD SUMMARY
LABORATORY: WCAS

00005
ORIGINAL
(Red)

CASE #/SAS #:	7548	SMO #:	CJ367
LEVEL:	LOW	CONTRACT #:	68-01-7110
MATRIX:	WATER	UNITS:	UG/L
Q.C. REPORT #:	7548-2		

SEMI-VOLATILE COMPOUNDS

COMPOUND	CONC SPIKED	CONC SAMPLE	CONC MS	% REC MS	CONC MSD	% REC MSD	RPD
TRICHLOROBENZENE	50.	10. U	30.	60	26.	52	14
ACENAPHTHENE	50.	10. U	36.	72	36.	72	0
2,4-DINITROTOLUENE	50.	10. U	40.	80	41.	82	-2
PYRENE	50.	10. U	40.	80	40.	80	0
NITROSOPROPYLAMINE	50.	10. U	29.	58	33.	66	-13
1,4-DICHLOROBENZENE	50.	10. U	23.	46	20.	40	14
PENTACHLOROPHENOL	100.	10. U	100.	100	110.	110*	-10
PHENOL	100.	10. U	68.	68	73.	73	-7
2-CHLOROPHENOL	100.	10. U	74.	74	78.	78	-5
P-CHLORO-M-CRESOL	100.	10. U	90.	90	92.	92	-2
4-NITROPHENOL	100.	10. U	69.	69	78.	78	-12

* - ASTERISKED VALUES ARE OUTSIDE QC LIMITS
RPD=(MS-MSD)/((MS+MSD)/2)*100
RESULTS ARE REPORTED ON A WET WEIGHT BASIS

RPD: B/N 0 OUT OF 6 RECOVERY: B/N 0 OUT OF 12 OUTSIDE QC LIMITS
ACID 0 OUT OF 5 ACID 1 OUT OF 10 OUTSIDE QC LIMITS

WATER QUALITY CONTROL LIMITS

	RPD	RECOVERY
TRICHLOROBENZENE	28	39-98
ACENAPHTHENE	31	46-118
2,4-DINITROTOLUENE	38	24-96
PYRENE	31	26-127
N-NITROSO-DI-N-PROPYLAMINE	38	41-116
1,4-DICHLOROBENZENE	28	36-97
PENTACHLOROPHENOL	50	9-103
PHENOL	42	12-89
2-CHLOROPHENOL	40	27-123
P-CHLORO-M-CRESOL	42	23-97
4-NITROPHENOL	50	10-80

FORM III

ORIGINAL (Red)

WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

se No. : 7548 Contractor: WCAS Contract No. 68-01-7110

evel : LOW

esticide SMO Sample No. CJ367MS CJ367MSD
A395020 A395021

ompound	Spike ug	Sample ug	MS ug	% Rec	MSD ug	% Rec	RPD %	QC Limits RPD	Recover
indane	.182	.000	.368	202.2*	.474	260.6*	25.2*	15	56- 123
eptachlor	.204	.000	.275	134.9*	.325	159.5*	16.7	20	40- 131
ldrin	.222	.000	.352	158.5*	.424	191.1*	18.6	22	40- 120
eldrin	.5166	.000	1.601	309.9*	1.893	366.4*	16.7	18	52- 126
drin	.65	.000	.963	148.2*	1.136	174.8*	16.5	21	56- 121
,4'-DDT	.51	.000	.673	132*	.771	151.1*	13.5	27	38- 127

Asterisked Values are outside QC Limits

'D

1 out of 6

utside QC limits

Recovery

12 out of 12

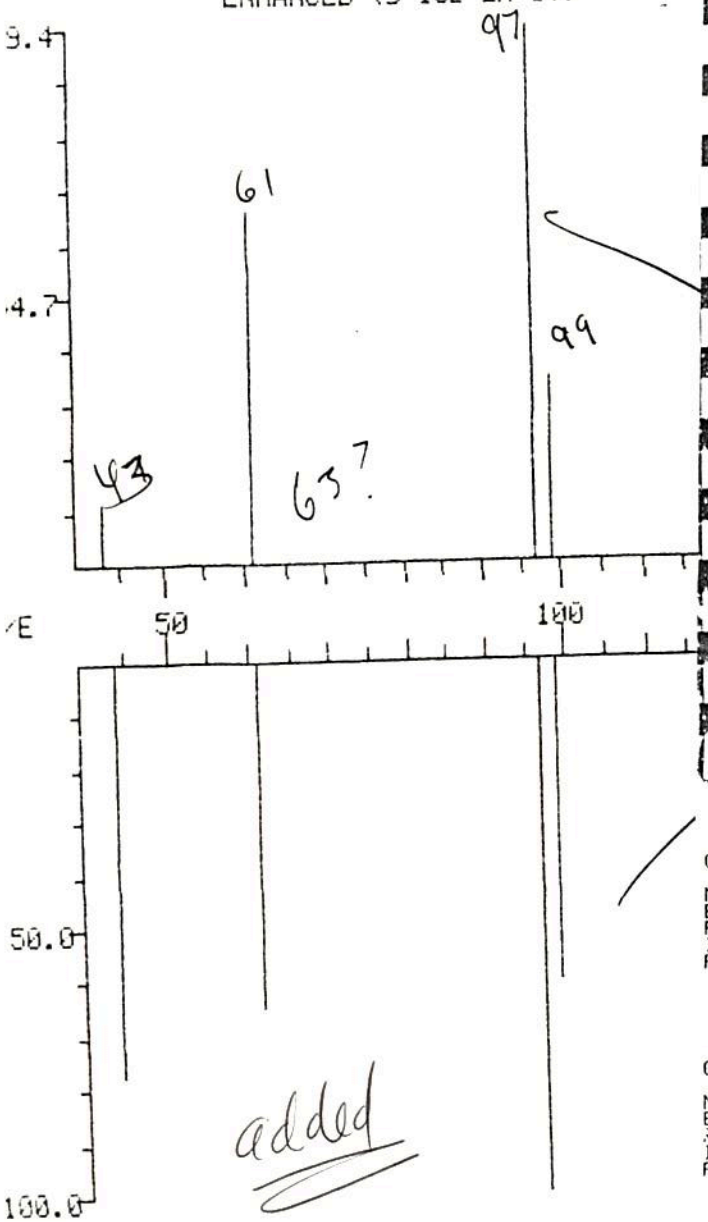
outside QC limits

omments: Indane and heptachlor recoveries high due to matrix interference

Form III

ORIGINAL (Red)

DUAL MASS SPECTRUM
07/07/87 16:29:00 + 8:26
SAMPLE: EPA,CJ367,200UL
CONDS.: 1.8M X 2MM SP-1000
GC TEMP: 132 DEG. C
ENHANCED (S 15B 2N 0T)



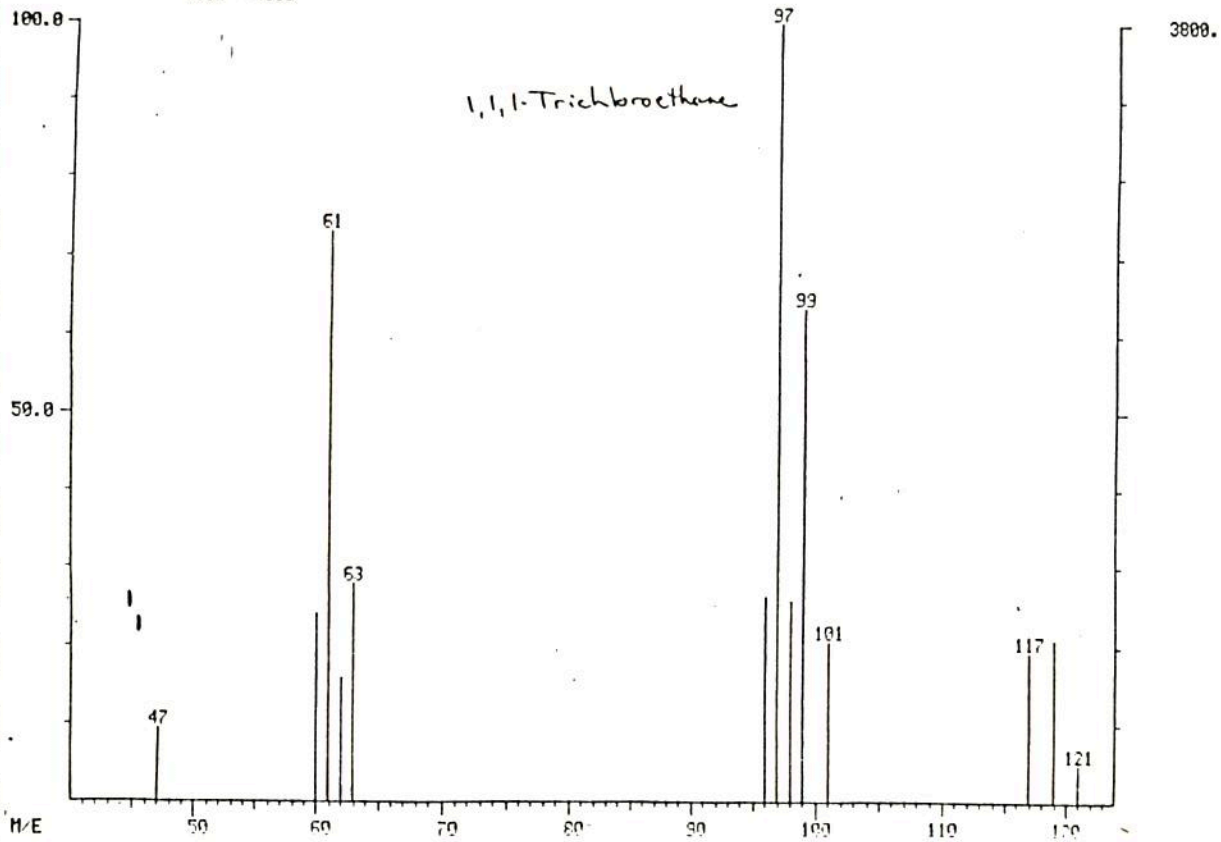
added

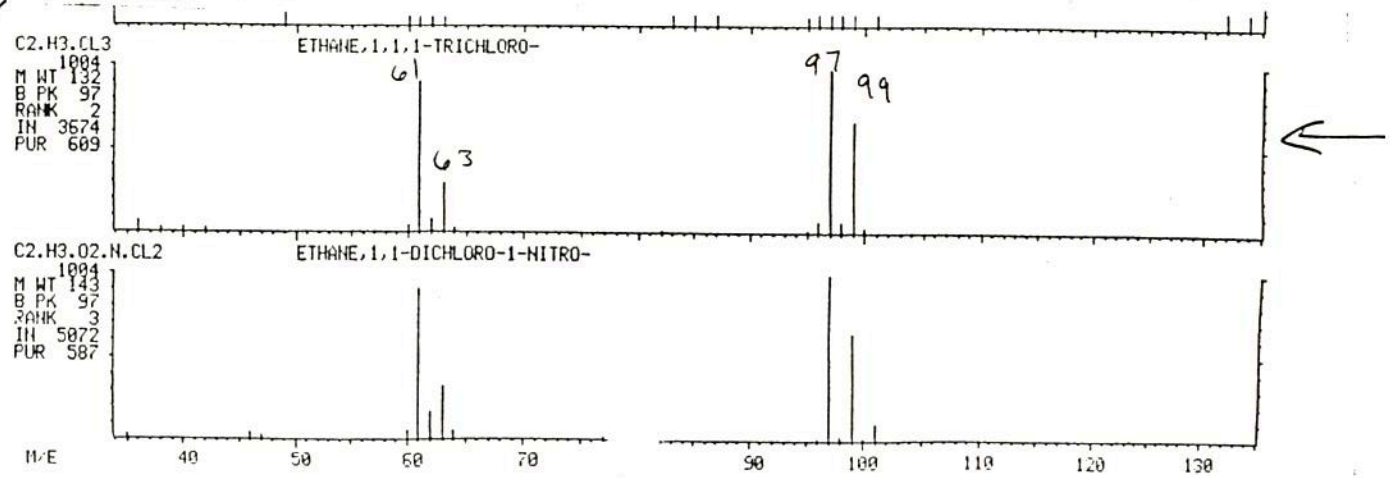
40 ppb

MASS SPECTRUM
03/07/84 6:32:00 + 7:26
SAMPLE: SRUG-L VOA SCREENING STANDARD
#152 - #150

DATA: VOA155 #152
CALI: FF030584 #1

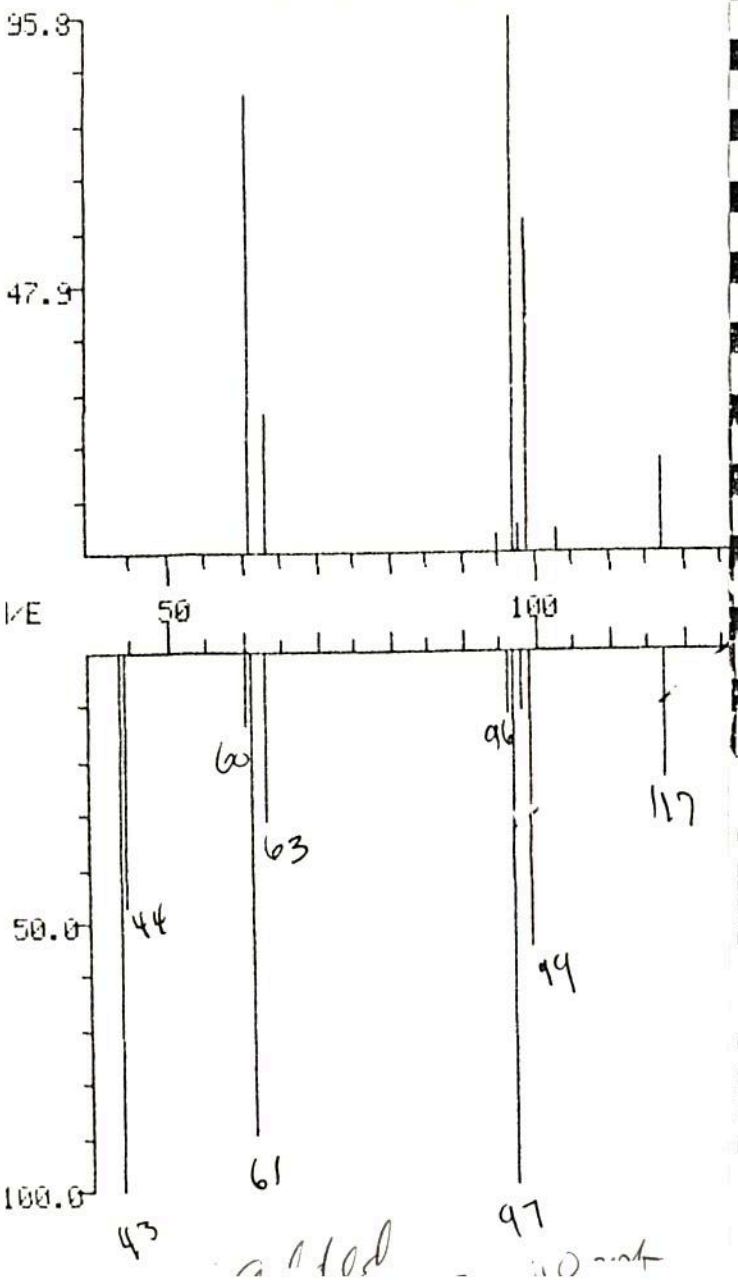
BASE M/E: 97
RIC: 16576.





00127

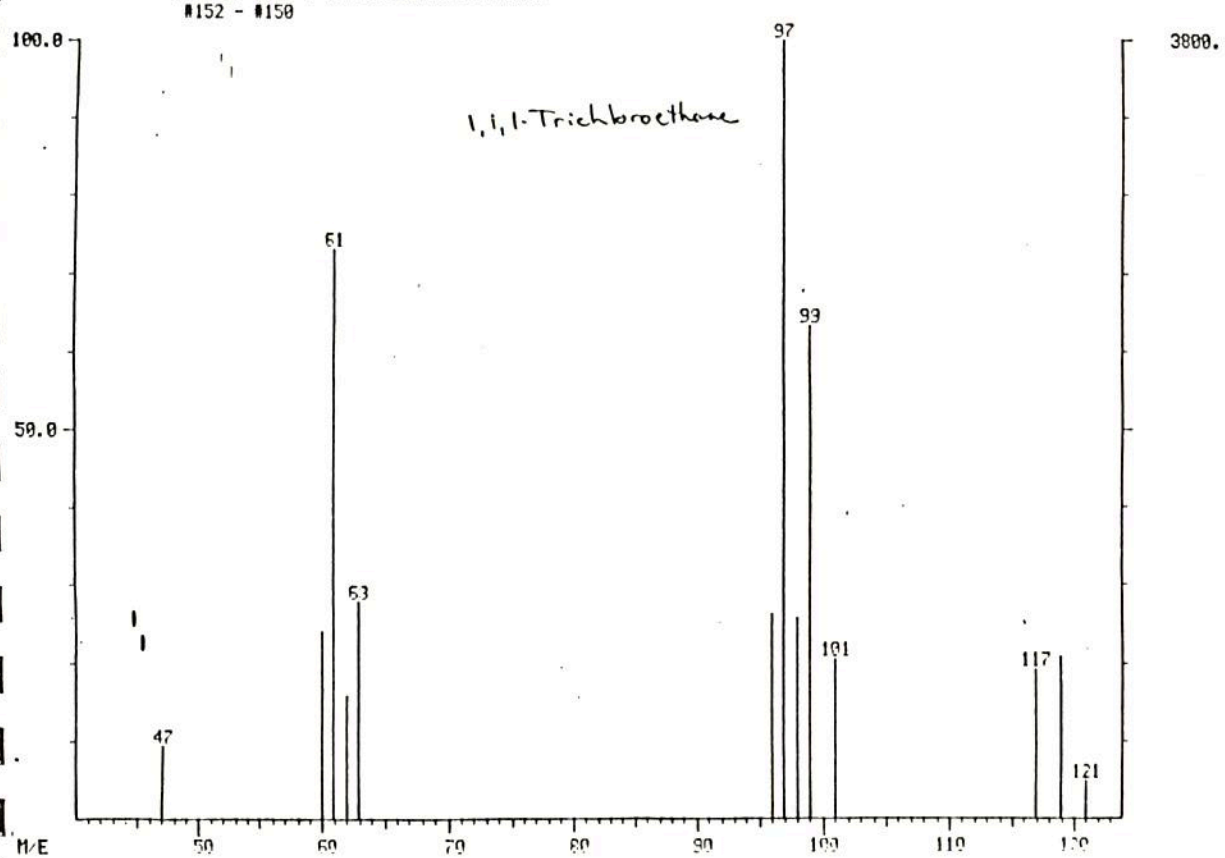
DUAL MASS SPECTRUM
07/07/87 18:07:00 + 8:04
SAMPLE: EPA,CJ368,200UL
CONDS.: 1.8M X 2MM SP-1000
GC TEMP: 128 DEG. C
ENHANCED (S 158 2N 0T)

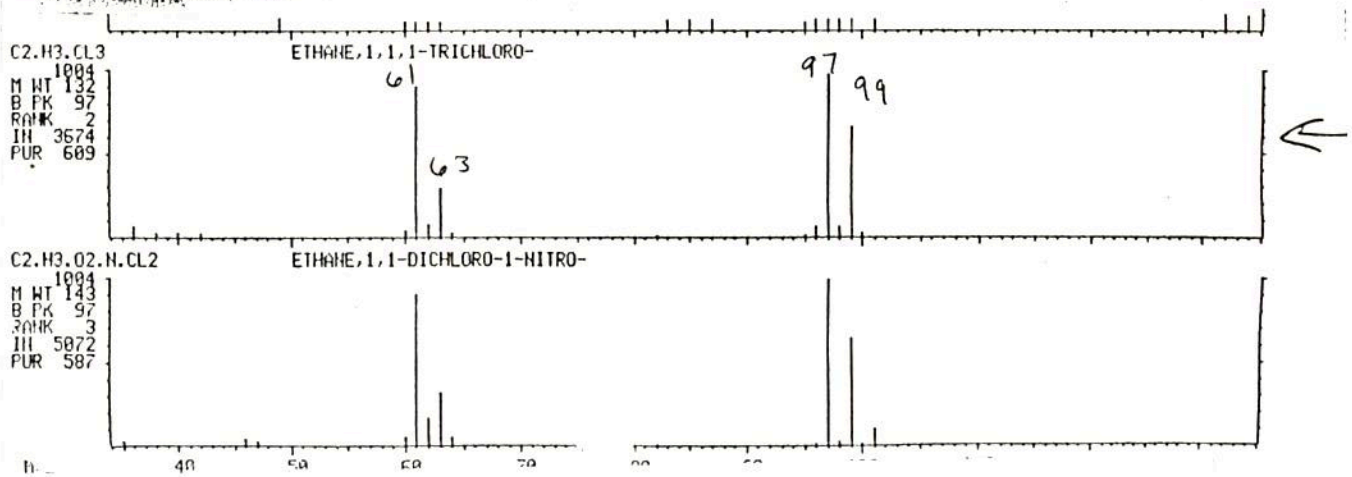


MASS SPECTRUM
03/07/84 6:32:00 + 7:36
SAMPLE: 50UG/L VOA SCREENING STANDARD
#152 - #150

DATA: VOA165 #152
CALI: FF030584 #1

BASE M/E: 97
RIC: 16576.

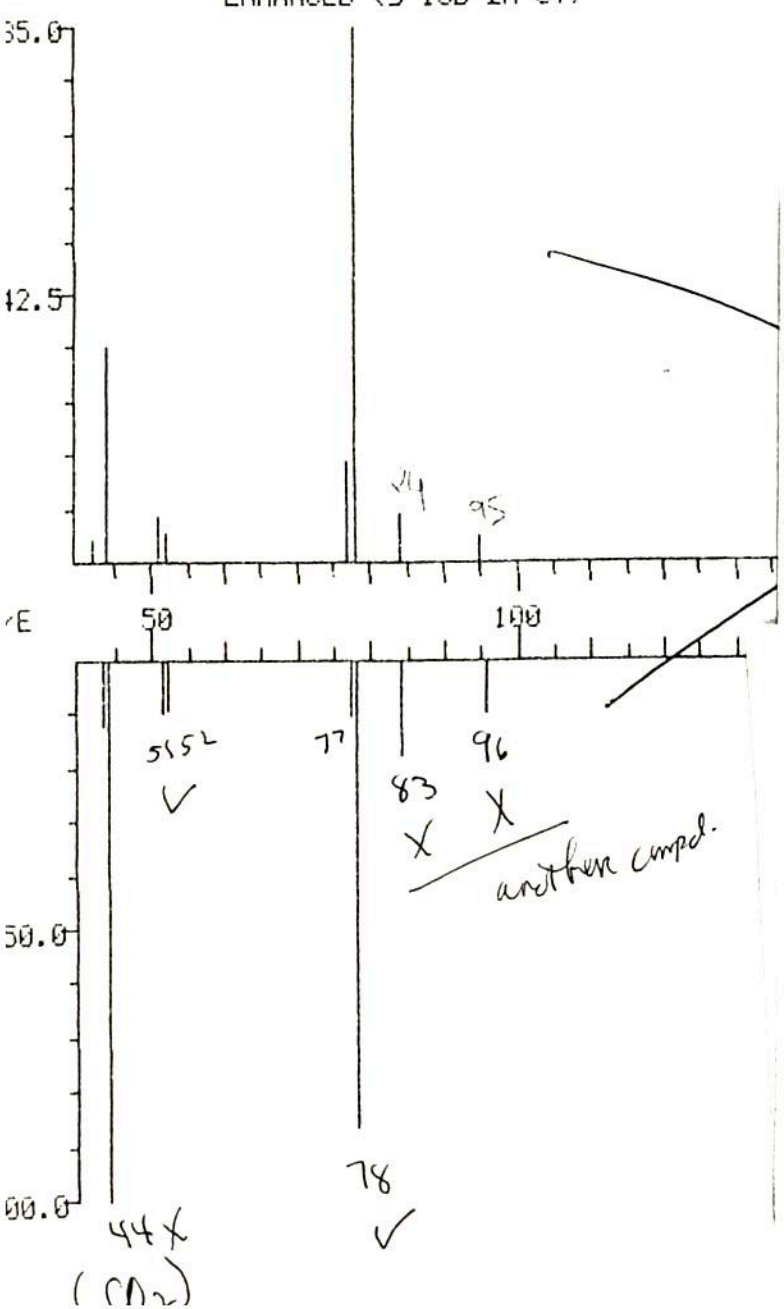




CO130

DUAL MASS SPECTRUM
07/07/87 18:07:00 + 11:00
SAMPLE: EPA/CJ368/200UL
CONDS.: 1.8M X 2MM SP-1000 CASE 7548
GC TEMP: 158 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6385U6 #322 BASE M/Z: 78/ 44
CALI: 6228701 #1 RIC: 2295./ 4431.

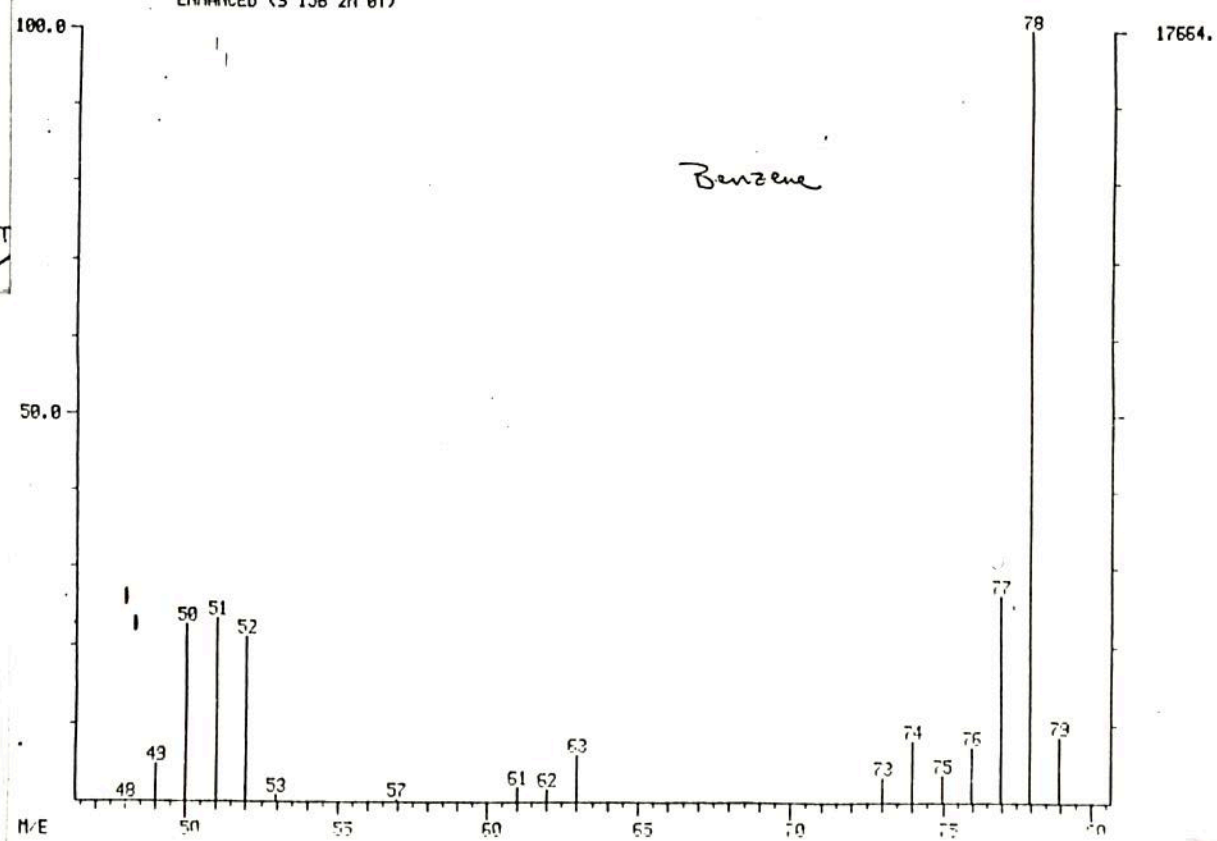


benzene + other cmpd

another cmpd.

MASS SPECTRUM
03/02/84 13:48:00 + 10:15
SAMPLE: S2610 MATRIX SPIKE DUPLICATE
ENHANCED (S 15B 2N 0T)

DATA: 2883SU5 #205 BASE M/E: 78
CALI: FF022784 #4 RIC: 42304.



Benzene

ORIGINAL (Red)

ORIGINAL
(Red)

APPENDIX B

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ352RE

ORIGINAL (Red)

LABORATORY: EA ENG.
LABORATORY ID: AA02724
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: AA02724
CONTRACT #: 68-01-7099
DATE RECEIVED: 5/29/87

DATA RELEASE AUTHORIZED BY: Mohan Chare

SEMIVOLATILE COMPOUNDS (PAGE 2)

LEVEL: LOW
DATE EXT/PREP: 7/6/87
DATE ANALYZED: 07/07/87
CONC/DIL FACTOR: 1
PH: NA
% MOISTURE: NA
% MOISTURE (DECANTED): NA
STANDARD ID: AA02722
SENSITIVITY ID: AA02721

GPC CLEANUP __YES ✓NO
SEPARATORY EXTRACTION ✓YES
CONTINUOUS EXTRACTION __YES

CAS #		UG/L
121-14-2	2,4-DINITROTOLUENE	10. U
606-20-2	2,6-DINITROTOLUENE	10. U
84-66-2	DIETHYL PHTHALATE	10. U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	10. U
86-73-7	FLUORENE	10. U
100-01-6	4-NITROANILINE	50. U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	50. U
86-30-6	N-NITROSODIPHENYLAMINE	10. U
101-55-3	4-BROMOPHENYL PHENYL ETHER	10. U
118-74-1	HEXACHLOROBENZENE	10. U
87-86-5	PENTACHLOROPHENOL	50. U
85-01-8	PHENANTHRENE	10. U
120-12-7	ANTHRACENE	10. U
84-74-2	DI-N-BUTYL PHTHALATE	10. U
206-44-0	FLUORANTHENE	10. U
129-00-0	PYRENE	10. U
85-68-7	BUTYL BENZYL PHTHALATE	10. U
91-94-1	3,3'-DICHLOROBENZIDINE	20. U
56-55-3	BENZO(A)ANTHRACENE	10. U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	10. U
218-01-9	CHRYSENE	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	DIBENZO(A,H)ANTHRACENE	10. U
191-24-2	BENZO(GHI)PERYLENE	10. U

RESULTS ARE REPORTED ON A WET WEIGHT BASIS.

FORM I

Laboratory Name E·A·ENGINEERING

Case No 7352

Sample Number CJ352

ORIGINAL (Red)

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 1 JUNE 87

Date Analyzed: 26 June 87

Conc/Dil Factor: 1

Percent Moisture (decanted) ——

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 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	0.5 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.5 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.5 U
11104-28-2	Aroclor-1221	0.5 U
11141-16-5	Aroclor-1232	0.5 U
53469-21-9	Aroclor-1242	0.5 U
12672-29-6	Aroclor-1248	0.5 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 or W_s —— V_t 10,000 V_i 50

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ352RE

ORIGINAL (Red)

LABORATORY: EA ENG.
CASE #/SAS #: 7352

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan	Estimated Conc(J) µg/L
1.	—	UNKNOWN	BNA	702	13 (B)
2.		NO VOA'S FOUND			
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I, PART B

ORIGINAL (Red)

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ-353

LABORATORY: EA ENG.
LABORATORY ID: HP27377
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: HP27373
CONTRACT #: 68-01-7099
DATE RECEIVED: 5-29-87

DATA RELEASE AUTHORIZED BY: Mohan Ghore

VOLATILE COMPOUNDS

LEVEL:	LOW
DATE EXT/PREP:	6-3-87
DATE ANALYZED:	06/03/87
CONC/DIL FACTOR:	1
PH:	NA
% MOISTURE:	NA
% MOISTURE (DECANTED):	NA
STANDARD ID:	HP27373
SENSITIVITY ID:	HP27372

CAS #		UG/L
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	7. B
67-64-1	ACETONE	10. U
75-15-0	CARBON DISULFIDE	5. U
75-35-4	1,1-DICHLOROETHENE	5. U
75-34-3	1,1-DICHLOROETHANE	5. U
156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
67-66-3	CHLOROFORM	4. J
107-06-2	1,2-DICHLOROETHANE	5. U
78-93-3	2-BUTANONE	10. U
71-55-6	1,1,1-TRICHLOROETHANE	5. U
56-23-5	CARBON TETRACHLORIDE	5. U
108-05-4	VINYL ACETATE	10. U
75-27-4	BROMODICHLOROMETHANE	5. U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
78-87-5	1,2-DICHLOROPROPANE	5. U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
79-01-6	TRICHLOROETHENE	8.
124-48-1	CHLORODIBROMOMETHANE	5. U
79-00-5	1,1,2-TRICHLOROETHANE	5. U
71-43-2	BENZENE	5. U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U
110-75-8	2-CHLOROETHYLVINYL ETHER	10. U
75-25-2	BROMOFORM	5. U
591-78-6	2-HEXANONE	10. U
108-10-1	4-METHYL-2-PENTANONE	10. U
127-18-4	TETRACHLOROETHENE	3. J
108-88-3	TOLUENE	5. U
108-90-7	CHLOROBENZENE	5. U
100-41-4	ETHYLBENZENE	5. U
100-42-5	STYRENE	5. U
95-47-6	M-XYLENE	5. U
95-47-6	O & P-XYLENES	5. U

RESULTS ARE REPORTED ON A WET WEIGHT BASIS.

FORM I

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ353RE

LABORATORY: EA ENG.
LABORATORY ID: AA02725
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: AA02725
CONTRACT #: 68-01-7099
DATE RECEIVED: 5/29/87

ORIGINAL (Red)

DATA RELEASE AUTHORIZED BY: Mohan Olere

SEMIVOLATILE COMPOUNDS (PAGE 1)

LEVEL:	LOW	GPC CLEANUP	__YES ✓NO
DATE EXT/PREP:	7/6/87	SEPARATORY EXTRACTION	✓YES
DATE ANALYZED:	07/07/87	CONTINUOUS EXTRACTION	__YES
CONC/DIL FACTOR:	1		
PH:	NA		
% MOISTURE:	NA		
% MOISTURE (DECANTED):	NA		
STANDARD ID:	AA02722		
SENSITIVITY ID:	AA02721		

CAS #		UG/L	
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
100-51-6	BENZYL ALCOHOL	10.	U
95-50-1	1,2-DICHLOROBENZENE	10.	U
95-48-7	2-METHYLPHENOL	10.	U
39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	10.	U
106-44-5	4-METHYLPHENOL	10.	U
621-64-7	N-NITROSODIPROPLYAMINE	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
65-85-0	BENZOIC ACID	50.	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	10.	U
120-33-2	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	50.	U
91-58-7	2-CHLORONAPHTHALENE	10.	U
88-74-4	2-NITROANILINE	50.	U
131-11-3	DIMETHYL PHTHALATE	10.	U
208-96-8	ACENAPHTHYLENE	10.	U
99-09-2	3-NITROANILINE	50.	U
83-32-9	ACENAPHTHENE	10.	U
51-28-5	2,4-DINITROPHENOL	50.	U
100-02-7	4-NITROPHENOL	50.	U
132-64-9	DIBENZOFURAN	10.	U

FORM I

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ353RE

ORIGINAL (Red)

LABORATORY: EA ENG.
LABORATORY ID: AA02725
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: AA02725
CONTRACT #: 68-01-7099
DATE RECEIVED: 5/29/87

DATA RELEASE AUTHORIZED BY: Mohan Ohare

SEMIVOLATILE COMPOUNDS (PAGE 2)

LEVEL:	LOW	GPC CLEANUP	__YES ✓NO
DATE EXT/PREP:	7/6/87	SEPARATORY EXTRACTION	✓YES
DATE ANALYZED:	07/07/87	CONTINUOUS EXTRACTION	__YES
CONC/DIL FACTOR:	1		
PH:	NA		
% MOISTURE:	NA		
% MOISTURE (DECANTED):	NA		
STANDARD ID:	AA02722		
SENSITIVITY ID:	AA02721		

CAS #		UG/L
121-14-2	2,4-DINITROTOLUENE	10. U
606-20-2	2,6-DINITROTOLUENE	10. U
84-66-2	DIETHYL PHTHALATE	10. U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	10. U
86-73-7	FLUORENE	10. U
100-01-6	4-NITROANILINE	50. U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	50. U
86-30-6	N-NITROSODIPHENYLAMINE	10. U
101-55-3	4-BROMOPHENYL PHENYL ETHER	10. U
118-74-1	HEXACHLOROBENZENE	10. U
87-86-5	PENTACHLOROPHENOL	50. U
85-01-8	PHENANTHRENE	10. U
120-12-7	ANTHRACENE	10. U
84-74-2	DI-N-BUTYL PHTHALATE	10. U
206-44-0	FLUORANTHENE	10. U
129-00-0	PYRENE	10. U
85-68-7	BUTYL BENZYL PHTHALATE	10. U
91-94-1	3,3'-DICHLOROBENZIDINE	20. U
56-55-3	BENZO(A)ANTHRACENE	10. U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	10. U
218-01-9	CHRYSENE	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	DIBENZO(A,H)ANTHRACENE	10. U
191-24-2	BENZO(GHI)PERYLENE	10. U

RESULTS ARE REPORTED ON A WET WEIGHT BASIS.

FORM I

Laboratory Name E.A. ENGINEERING

Case No 7352

ORIGINAL (Red)

Sample Number
CJ 353

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 1 JUNE 87

Date Analyzed: 26 JUNE 87

Conc/Dil Factor: 1

Percent Moisture (decanted) ——

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 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	0.5 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.5 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.5 U
11104-28-2	Aroclor-1221	0.5 U
11141-16-5	Aroclor-1232	0.5 U
53469-21-9	Aroclor-1242	0.5 U
12672-29-6	Aroclor-1248	0.5 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 or W_s —— V_t 10,000 V_i 50

LABORATORY: EA ENG.
CASE #/SAS #: 7352

ORIGINAL (Red)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan	Estimated Conc(J) µg/L
1.	—	UNKNOWN	BNA	594	13
2.	64-67-5	SULFURIC ACID, Diethyl ESTER	BNA	723	12 B
3.		NO VOA'S FOUND			
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.		Re-extract	BNA	590.	12
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I, PART B

ORIGINAL (Red)

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ-354

LABORATORY: EA ENG.
LABORATORY ID: HP27378
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: HP27373
CONTRACT #: 68-01-7099
DATE RECEIVED: 5-29-87

DATA RELEASE AUTHORIZED BY: Mohan Choore

VOLATILE COMPOUNDS

LEVEL:	LOW
DATE EXT/PREP:	6-3-87
DATE ANALYZED:	06/03/87
CONC/DIL FACTOR:	1
PH:	NA
% MOISTURE:	NA
% MOISTURE (DECANTED):	NA
STANDARD ID:	HP27373
SENSITIVITY ID:	HP27372

CAS #		UG/L
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	7. B
67-64-1	ACETONE	10. U
75-15-0	CARBON DISULFIDE	5. U
75-35-4	1,1-DICHLOROETHENE	2. J
75-34-3	1,1-DICHLOROETHANE	5. U
156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
67-66-3	CHLOROFORM	5.
107-06-2	1,2-DICHLOROETHANE	5. U
78-93-3	2-BUTANONE	10. U
71-55-6	1,1,1-TRICHLOROETHANE	5. U
56-23-5	CARBON TETRACHLORIDE	5. U
108-05-4	VINYL ACETATE	10. U
75-27-4	BROMODICHLOROMETHANE	5. U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
78-87-5	1,2-DICHLOROPROPANE	5. U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
79-01-6	TRICHLOROETHENE	4. J
124-48-1	CHLORODIBROMOMETHANE	5. U
79-00-5	1,1,2-TRICHLOROETHANE	5. U
71-43-2	BENZENE	5. U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U
110-75-8	2-CHLOROETHYLVINYL ETHER	10. U
75-25-2	BROMOFORM	5. U
591-78-6	2-HEXANONE	10. U
108-10-1	4-METHYL-2-PENTANONE	10. U
127-18-4	TETRACHLOROETHENE	2. J
108-88-3	TOLUENE	5. U
108-90-7	CHLOROBENZENE	5. U
100-41-4	ETHYLBENZENE	5. U
100-42-5	STYRENE	5. U
95-47-6	M-XYLENE	5. U
95-47-6	O & P-XYLENES	5. U

RESULTS ARE REPORTED ON A WET WEIGHT BASIS.

FORM I

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ354RE

ORIGINAL (Red)

LABORATORY: EA ENG.
LABORATORY ID: AA02726
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: AA02726
CONTRACT #: 68-01-7099
DATE RECEIVED: 5/29/87

DATA RELEASE AUTHORIZED BY: Mohan Chere

SEMIVOLATILE COMPOUNDS (PAGE 1)

LEVEL:	LOW	GPC CLEANUP	__YES ✓NO
DATE EXT/PREP:	7/6/87	SEPARATORY EXTRACTION	✓YES
DATE ANALYZED:	07/07/87	CONTINUOUS EXTRACTION	__YES
CONC/DIL FACTOR:	1		
PH:	NA		
% MOISTURE:	NA		
% MOISTURE (DECANTED):	NA		
STANDARD ID:	AA02722		
SENSITIVITY ID:	AA02721		

CAS #		UG/L	
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
100-51-6	BENZYL ALCOHOL	10.	U
95-50-1	1,2-DICHLOROBENZENE	10.	U
95-48-7	2-METHYLPHENOL	10.	U
39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	10.	U
106-44-5	4-METHYLPHENOL	10.	U
621-64-7	N-NITROSODIPROPLYAMINE	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
65-85-0	BENZOIC ACID	50.	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	10.	U
120-33-2	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	50.	U
91-58-7	2-CHLORONAPHTHALENE	10.	U
88-74-4	2-NITROANILINE	50.	U
131-11-3	DIMETHYL PHTHALATE	10.	U
208-96-8	ACENAPHTHYLENE	10.	U
99-09-2	3-NITROANILINE	50.	U
83-32-9	ACENAPHTHENE	10.	U
51-28-5	2,4-DINITROPHENOL	50.	U
100-02-7	4-NITROPHENOL	50.	U
132-64-9	DIBENZOFURAN	10.	U

FORM I

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ354RE

ORIGINAL (Red)

LABORATORY: EA ENG.
LABORATORY ID: AA02726
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: AA02726
CONTRACT #: 68-01-7099
DATE RECEIVED: 5/29/87

DATA RELEASE AUTHORIZED BY: Mohan Clare

SEMIVOLATILE COMPOUNDS (PAGE 2)

LEVEL:	LOW	GPC CLEANUP	__YES ✓NO
DATE EXT/PREP:	7/6/87	SEPARATORY EXTRACTION	✓YES
DATE ANALYZED:	07/07/87	CONTINUOUS EXTRACTION	__YES
CONC/DIL FACTOR:	1		
PH:	NA		
% MOISTURE:	NA		
% MOISTURE (DECANTED):	NA		
STANDARD ID:	AA02722		
SENSITIVITY ID:	AA02721		

CAS #		UG/L
121-14-2	2,4-DINITROTOLUENE	10. U
606-20-2	2,6-DINITROTOLUENE	10. U
84-66-2	DIETHYL PHTHALATE	10. U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	10. U
86-73-7	FLUORENE	10. U
100-01-6	4-NITROANILINE	50. U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	50. U
86-30-6	N-NITROSODIPHENYLAMINE	10. U
101-55-3	4-BROMOPHENYL PHENYL ETHER	10. U
118-74-1	HEXACHLOROBENZENE	10. U
87-86-5	PENTACHLOROPHENOL	50. U
85-01-8	PHENANTHRENE	10. U
120-12-7	ANTHRACENE	10. U
84-74-2	DI-N-BUTYL PHTHALATE	10. U
206-44-0	FLUORANTHENE	10. U
129-00-0	PYRENE	10. U
85-68-7	BUTYL BENZYL PHTHALATE	10. U
91-94-1	3,3'-DICHLOROBENZIDINE	20. U
56-55-3	BENZO(A)ANTHRACENE	10. U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	10. U
218-01-9	CHRYSENE	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	DIBENZO(A,H)ANTHRACENE	10. U
191-24-2	BENZO(GHI)PERYLENE	10. U

RESULTS ARE REPORTED ON A WET WEIGHT BASIS.

FORM I

ORIGINAL (Red)

Laboratory Name E.A. ENGINEERING

Case No 7352

Sample Number CJ 354

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 15 June 87

Date Analyzed: 26 June 87

Conc/Dil Factor: 1

Percent Moisture (decanted) —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☒Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 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	0.5 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.5 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.5 U
11104-28-2	Aroclor-1221	0.5 U
11141-16-5	Aroclor-1232	0.5 U
53469-21-9	Aroclor-1242	0.5 U
12672-29-6	Aroclor-1248	0.5 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 or W_s — V_t 10,000 V_i 50

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ354RE

ORIGINAL (Red)

LABORATORY: EA ENG.
CASE #/SAS #: 7352

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan	Estimated Conc(J)
1.		NO BNA COMPOUNDS FOUND			
2.		NO VOA'S FOUND			
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I, PART B

ORIGINAL (Red)

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ-355

LABORATORY: EA ENG.
LABORATORY ID: HP27379
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: HP27373
CONTRACT #: 68-01-7099
DATE RECEIVED: 5-29-87

DATA RELEASE AUTHORIZED BY: Mohan Chore

VOLATILE COMPOUNDS

LEVEL:	LOW
DATE EXT/PREP:	6-3-87
DATE ANALYZED:	06/03/87
CONC/DIL FACTOR:	1
PH:	NA
% MOISTURE:	NA
% MOISTURE (DECANTED):	NA
STANDARD ID:	HP27373
SENSITIVITY ID:	HP27372

CAS #		UG/L
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 B
67-64-1	ACETONE	10. U
75-15-0	CARBON DISULFIDE	5. U
75-35-4	1,1-DICHLOROETHENE	5. U
75-34-3	1,1-DICHLOROETHANE	5. U
156-60-5	TRANS-1,2-DICHLOROETHENE	5. U
67-66-3	CHLOROFORM	8.
107-06-2	1,2-DICHLOROETHANE	5. U
78-93-3	2-BUTANONE	10. U
71-55-6	1,1,1-TRICHLOROETHANE	5. U
56-23-5	CARBON TETRACHLORIDE	5. U
108-05-4	VINYL ACETATE	10. U
75-27-4	BROMODICHLOROMETHANE	5. U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5. U
78-87-5	1,2-DICHLOROPROPANE	5. U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5. U
79-01-6	TRICHLOROETHENE	28.
124-48-1	CHLORODIBROMOMETHANE	5. U
79-00-5	1,1,2-TRICHLOROETHANE	5. U
71-43-2	BENZENE	5. U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5. U
110-75-8	2-CHLOROETHYLVINYL ETHER	10. U
75-25-2	BROMOFORM	5. U
591-78-6	2-HEXANONE	10. U
108-10-1	4-METHYL-2-PENTANONE	10. U
127-18-4	TETRACHLOROETHENE	6.
108-88-3	TOLUENE	5. U
108-90-7	CHLOROBENZENE	5. U
100-41-4	ETHYLBENZENE	5. U
100-42-5	STYRENE	5. U
95-47-6	M-XYLENE	5. U
95-47-6	O & P-XYLENES	5. U

RESULTS ARE REPORTED ON A WET WEIGHT BASIS.

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ355RE

ORIGINAL (Red)

LABORATORY: EA ENG.
LABORATORY ID: AA02729
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: AA02729
CONTRACT #: 68-01-7099
DATE RECEIVED: 5/29/87

DATA RELEASE AUTHORIZED BY: Mohan Chase

SEMIVOLATILE COMPOUNDS (PAGE 1)

LEVEL: LOW
DATE EXT/PREP: 7/6/87
DATE ANALYZED: 07/07/87
CONC/DIL FACTOR: 1
PH: NA
% MOISTURE: NA
% MOISTURE (DECANTED): NA
STANDARD ID: AA02722
SENSITIVITY ID: AA02721

GPC CLEANUP __YES ✓NO
SEPARATORY EXTRACTION ✓YES
CONTINUOUS EXTRACTION __YES

CAS #		UG/L
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
100-51-6	BENZYL ALCOHOL	10. U
95-50-1	1,2-DICHLOROBENZENE	10. U
95-48-7	2-METHYLPHENOL	10. U
39638-32-9	BIS(2-CHLOROISOPROPYL)ETHER	10. U
106-44-5	4-METHYLPHENOL	10. U
621-64-7	N-NITROSODIPROPLYAMINE	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
65-85-0	BENZOIC ACID	50. U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	10. U
120-33-2	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	50. U
91-58-7	2-CHLORONAPHTHALENE	10. U
88-74-4	2-NITROANILINE	50. U
131-11-3	DIMETHYL PHTHALATE	10. U
208-96-8	ACENAPHTHYLENE	10. U
99-09-2	3-NITROANILINE	50. U
83-32-9	ACENAPHTHENE	10. U
51-28-5	2,4-DINITROPHENOL	50. U
100-02-7	4-NITROPHENOL	50. U
132-64-9	DIBENZOFURAN	10. U

FORM I

ORGANICS ANALYSIS DATA SHEET SAMPLE #: CJ355RE

ORIGINAL (Red)

LABORATORY: EA ENG.
LABORATORY ID: AA02729
MATRIX: WATER

CASE #/SAS #: 7352
QC REPORT #: AA02729
CONTRACT #: 68-01-7099
DATE RECEIVED: 5/29/87

DATA RELEASE AUTHORIZED BY: Mohan Ohare

SEMIVOLATILE COMPOUNDS (PAGE 2)

LEVEL:	LOW	GPC CLEANUP	__YES ✓NO
DATE EXT/PREP:	7/6/87	SEPARATORY EXTRACTION	✓YES
DATE ANALYZED:	07/07/87	CONTINUOUS EXTRACTION	__YES
CONC/DIL FACTOR:	1		
PH:	NA		
% MOISTURE:	NA		
% MOISTURE (DECANTED):	NA		
STANDARD ID:	AA02722		
SENSITIVITY ID:	AA02721		

CAS #		UG/L
121-14-2	2,4-DINITROTOLUENE	10. U
606-20-2	2,6-DINITROTOLUENE	10. U
84-66-2	DIETHYL PHTHALATE	10. U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	10. U
86-73-7	FLUORENE	10. U
100-01-6	4-NITROANILINE	50. U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	50. U
86-30-6	N-NITROSODIPHENYLAMINE	10. U
101-55-3	4-BROMOPHENYL PHENYL ETHER	10. U
118-74-1	HEXACHLOROBENZENE	10. U
87-86-5	PENTACHLOROPHENOL	50. U
85-01-8	PHENANTHRENE	10. U
120-12-7	ANTHRACENE	10. U
84-74-2	DI-N-BUTYL PHTHALATE	10. U
206-44-0	FLUORANTHENE	10. U
129-00-0	PYRENE	10. U
85-68-7	BUTYL BENZYL PHTHALATE	10. U
91-94-1	3,3'-DICHLOROBENZIDINE	20. U
56-55-3	BENZO(A)ANTHRACENE	10. U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	10. U
218-01-9	CHRYSENE	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	DIBENZO(A,H)ANTHRACENE	10. U
191-24-2	BENZO(GHI)PERYLENE	10. U

RESULTS ARE REPORTED ON A WET WEIGHT BASIS.

FORM I