FIRST GROUNDWATER SAMPLING EVENT
JULY 1992
NL/TARACORP SUPERFUND SITE

FIELD SAMPLE NUMBER	LABORATORY SAMPLE NUMBER
WMW103910GG00W	127967
WMW103910GG0WM	127968
WMW103910GG0WX	127969
WMW108-D0GG0WD	127963
WMW108-D0GG00W	127964
WMW109-10GG00W	127965
WMW110-10GG00W	127970
WMW114-10GG00W	127966
WMW114-10GG0TB	127971
WMW104-10GG00W	127945
WMW104920GG00W	127946
WMW107-S0GG00W	127944
WMW109920GG00W	127947
WMW101-10GG00W	127902
WMW106-D0GG00W	127897
WMW107-D0GG00W	127898
WMW111920GG00W	127900
WMW111920GG0WD	127901
WMW112-10GG0WB	127899
WMW113-10GG0TB	127903

ORGANIC DATA ASSESSMENT

PROJECT NO. 89MC1146
LABORATORY CRTEK
LAB PROJECT NO. 89MC1146
NO. OF SAMPLES/
MATRIX Helvinds

SITE NL/TARACORP SUPERFUND SITE
REVIEWER [illegible]
REVIEWER'S NAME [illegible]
COMPLETION DATE 9/14/92

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	HERB	METHOD ~~OTHER~~
1. HOLDING TIMES					✓
2. BLANKS					✓
3. SURROGATES					NA
4. SCS					✓
5. DCS					✓
6. MATRIX SPIKE/DUP					✓
7. DILUTION					✓
8. OVERALL ASSESSMENT					O

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS: CRTEK CLP DATA REVIEWED - NO DATA QUALIFIED
CLP DATA LIMITS

ORTEK
ENVIRONMENTAL LABORATORY
414-498-2222
FAX: 414-498-4067
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435

September 8, 1992

Ms. Wendy Reinbolt
Woodward-Clyde
101 South 108 th Avenue
Omaha, NE 68154

Subject: QC Data for Metals Analysis, NL Taracorp Project.

Dear Wendy,

As requested, attached is the raw QC data package for the NL Taracorp Metals Analysis. I will be assembling a CLP style package and forwarding it to you shortly. Should you have any questions, or need additional information, please call me at your earliest convenience.

Sincerely,

Kim J. Menominee, P.E.

ORTEK FAX

ENVIRONMENTAL LABORATORY
414-498-2222
FAX: 414-498-4067
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435

TO:

NAME: WENDY REINBOLT

COMPANY: WOODWARD-CLYDE

OF PAGES (Including this cover sheet): 12

FROM:

NAME: BILL JACKSON

TOPIC:

QC DATA ON NL TARACORP PROJECT
FOR METALS (BATCH# 9207103)

DATE: 9/3/92

FAX #: (314) 429-0462

SEP 03 '92 12:59PM ORTEK

7/2 1/8/8

NALYSIS Run: 07000319
RUN LOG By: man

	Lab#	Q	TestID	Calc	Result	C	Units	Rec/Diff	Alt.Result
1	127897		AGGW		0.4000	U	UG/L		
2	127897	D	AGGW		0.4000	U		0.0	
3	127897	S	AGGW		3.4000			75.0	85%
4	BLKS2853	C	AGGW		3.9000			97.5	
5	BLKS2853	D	AGGW		3.8000			2.6	
6	BLKS2853	C	AGGW		3.8000			95.0	
7	127898		AGGW		0.4000	U	UG/L		
8	127899		AGGW		0.4000	U	UG/L		
9	127900		AGGW		0.4000	U	UG/L		
10	127901		AGGW		0.4000	U	UG/L		
11	127902		AGGW		0.4000	U	UG/L		
12	127944		AGGW		0.4000	U	UG/L		
13	127945		AGGW		0.4000	U	UG/L		
14	127946		AGGW		0.4000	U	UG/L		

ntry: F4 blank F6 copy F8 print INS/DEL sample line
URSOR KEYS point F5 calc F7 increment F9 custom F10 finished-save RUN
rksheet: 07000319 Loc: r6c17 FN: Font: Standard

SEP 03 '93 13:59PM OFTEN

ANALYSIS Run: 07000339
RUN LOG By: man

	Lab#	Q	TestID	Calc Result	C	Units	Rec/Diff	Alt.Result
1	127897		PBGW	19.4000		UG/L		19
2	127897	D	PBGW	19.9000			2.5	
3	127897	S	PBGW	37.2000			89.0	
4	BLKS2853	C	PBGW	20.4000			102.0	
5	BLKS2853	D	PBGW	20.6000			1.0	
6	BLKS2853	C	PBGW	20.6000			103.0	
7	127898		PBGW	114.6000		UG/L		110
8	127899		PBGW	2.0000	U	UG/L		
9	127900		PBGW	3.0000		UG/L		
10	127901		PBGW	9.4000		UG/L		
11	127902		PBGW	125.4000		UG/L		130
12	127944		PBGW	139.2000		UG/L		140
13	127945		PBGW	467.5000		UG/L		470
14	127946		PBGW	440.0000		UG/L		440

Entry: F4 blank F6 copy F8 print INS/DEL sample line
CURSOR KEYS point F5 calc F7 increment F9 custom F10 finished-save
Worksheet: 07000339 Loc: r6c13 FN: 0 Font: Standard

ANALYSIS Run: 07000339
RUN LOG By: man

	Lab#	Q	TestID	Calc Result	C	Units	Rec/Diff	Alt.Result
12	127944		PBGW	139.2000		UG/L		140
13	127945		PBGW	467.5000		UG/L		470
14	127946		PBGW	440.0000		UG/L		440
15	127947		PBGW	17.8000		UG/L		18
16	127963		PBGW	25.7000		UG/L		26
17	127964		PBGW	22.7000		UG/L		23
18	127965		PBGW	4.6000		UG/L		
19	127966		PBGW	2.0000	U	UG/L		
20	127967		PBGW	2.7000		UG/L		
21	127970		PBGW	4.2000		UG/L		
22	127976		PBGW	2.0000	U	UG/L		
23	127980		PBGW	2.0000	U	UG/L		
24	127981		PBGW	2.0000	U	UG/L		
25	128017		PBGW	2.0000	U	UG/L		

Entry: F4 blank F6 copy F8 print INS/DEL sample line
CURSOR KEYS point F5 calc F7 increment F9 custom F10 finished-save
Worksheet: 07000339 Loc: r30c13 FN: 0 Font: Standard

SEP 03 '92 01:00PM ORTEK

ANALYSIS Run: 07000334
RUN LOG By: man

	Lab#	Q	TestID	Calc Result	C	Units	Rec/Diff	Alt.Result
1	127897		CRGW	2.0000	U	UG/L		
2	127897	D	CRGW	2.0000	U		0.0	
3	127897	S	CRGW	18.3000			81.5	21.570
4	127898		CRGW	43.8000		UG/L		44
5	127899		CRGW	2.0000	U	UG/L		
6	127900		CRGW	2.0000	U	UG/L		
7	127901		CRGW	2.0000	U	UG/L		
8	127902		CRGW	34.2000		UG/L		34
9	127944		CRGW	42.0000		UG/L		42
10	127945		CRGW	46.8000		UG/L		47
11	127946		CRGW	2.3000		UG/L		
12	127947		CRGW	3.0000		UG/L		
13	127963		CRGW	5.8000		UG/L		
14	127964		CRGW	5.9000		UG/L		

Entry: F4 blank F6 copy F8 print INS/DEL sample line
CURSOR KEYS point F5 calc F7 increment F9 custom F10 finished-save RU
Worksheet: 07000334 Loc: r6c17 FN: Font: Standard

ANALYSIS Run: 07000334
RUN LOG By: man

	Lab#	Q	TestID	Calc Result	C	Units	Rec/Diff	Alt.Result
9	127944		CRGW	42.0000		UG/L		42
10	127945		CRGW	46.8000		UG/L		47
11	127946		CRGW	2.3000		UG/L		
12	127947		CRGW	3.0000		UG/L		
13	127963		CRGW	5.8000		UG/L		
14	127964		CRGW	5.9000		UG/L		
15	127965		CRGW	2.0000	U	UG/L		
16	127966		CRGW	2.0000	U	UG/L		
17	127967		CRGW	2.0000	U	UG/L		
18	127970		CRGW	2.0000	U	UG/L		
19	128017		CRGW	2.0000	U	UG/L		
20	BLKS2853	C	CRGW	19.7000			98.5	
21	BLKS2853	D	CRGW	19.9000			1.0	
22	BLKS2853	C	CRGW	19.9000			99.5	

Entry: F4 blank F6 copy F8 print INS/DEL sample line
CURSOR KEYS point F5 calc F7 increment F9 custom F10 finished-save RU
Worksheet: 07000334 Loc: r27c17 FN: Font: Standard

7/22/9

ANALYSIS Run: 07000372
RUN LOG By: man

	Lab#	Q	TestID	Calc Result	C	Units	Rec/Diff	Alt.Result
1	127897		CDGW	0.5000		UG/L		
2	127897	D	CDGW	0.6000			18.2	
3	127897	S	CDGW	3.5000			100.0	
4	127898		CDGW	1.8000		UG/L		
5	127899		CDGW	0.3000	U	UG/L		
6	127900		CDGW	0.3000	U	UG/L		
7	127901		CDGW	0.4000		UG/L		
8	127902		CDGW	3.9000		UG/L		
9	127944		CDGW	3.2000		UG/L		
10	127945		CDGW	2.7000		UG/L		
11	127946		CDGW	3.3000		UG/L		
12	127947		CDGW	1.8000		UG/L		
13	127963		CDGW	9000.0000		UG/L		9000
14	127964		CDGW	8500.0000		UG/L		8500

Entry: F4 blank F6 copy F8 print INS/DEL sample
CURSOR KEYS point F5 calc F7 increment F9 custom F10 finished-save
Worksheet: 07000372 Loc: r6c17 FN: Font: Standard

ANALYSIS Run: 07000372
RUN LOG By: man

	Lab#	Q	TestID	Calc Result	C	Units	Rec/Diff	Alt.Result
9	127944		CDGW	3.2000		UG/L		
10	127945		CDGW	2.7000		UG/L		
11	127946		CDGW	3.3000		UG/L		
12	127947		CDGW	1.8000		UG/L		
13	127963		CDGW	9000.0000		UG/L		9000
14	127964		CDGW	8500.0000		UG/L		8500
15	127965		CDGW	2.8000		UG/L		
16	127966		CDGW	0.3000	U	UG/L		
17	127967		CDGW	1.7000		UG/L		
18	127970		CDGW	1.3000		UG/L		
19	128017		CDGW	1.6000		UG/L		
20	BLKS2853	C	CDGW	3.3000			110.0	
21	BLKS2853	D	CDGW	3.2000			3.1	
22	BLKS2853	C	CDGW	3.2000			106.7	

Entry: F4 blank F6 copy F8 print INS/DEL sample lin
CURSOR KEYS point F5 calc F7 increment F9 custom F10 finished-save
Worksheet: 07000372 Loc: r27c17 FN: Font: Standard

7/22/91

ANALYSIS Run: 07000335
RUN LOG By: man

	Lab#	Q	TestID	Calc Result	C	Units	Rec/Diff	Alt.Result
1	127897		TLGW	2.0000	U	UG/L		
2	127897	D	TLGW	2.0000	U		0.0	
3	127897	S	TLGW	45.0000			107.5	112.5
4	BLKS2853	C	TLGW	40.3000			100.8	
5	BLKS2853	D	TLGW	39.6000			1.8	
6	BLKS2853	C	TLGW	39.6000			99.0	
7	127898		TLGW	2.0000	U	UG/L		
8	127899		TLGW	2.0000	U	UG/L		
9	127900		TLGW	2.0000	U	UG/L		
10	127901		TLGW	2.0000	U	UG/L		
11	127902		TLGW	2.0000	U	UG/L		
12	127944		TLGW	2.0000	U	UG/L		
13	127945		TLGW	2.0000	U	UG/L		
14	127946		TLGW	2.0000	U	UG/L		

Entry: F4 blank F6 copy F8 print INS/DEL sample line
CURSOR KEYS point F5 calc F7 increment F9 custom F10 finished-save R
Worksheet: 07000335 Loc: r6c13 FN: 0 Font: Standard

ANALYSIS Run: 07000335
RUN LOG By: man

	Lab#	Q	TestID	Calc Result	C	Units	Rec/Diff	Alt.Result
8	127899		TLGW	2.0000	U	UG/L		
9	127900		TLGW	2.0000	U	UG/L		
10	127901		TLGW	2.0000	U	UG/L		
11	127902		TLGW	2.0000	U	UG/L		
12	127944		TLGW	2.0000	U	UG/L		
13	127945		TLGW	2.0000	U	UG/L		
14	127946		TLGW	2.0000	U	UG/L		
15	127947		TLGW	2.0000	U	UG/L		
16	127963		TLGW	48.1000		UG/L		48
17	127964		TLGW	45.8000		UG/L		46
18	127965		TLGW	2.0000	U	UG/L		
19	127966		TLGW	2.0000	U	UG/L		
20	127967		TLGW	2.0000	U	UG/L		
21	127970		TLGW	2.0000	U	UG/L		

Entry: F4 blank F6 copy F8 print INS/DEL sample line
CURSOR KEYS point F5 calc F7 increment F9 custom F10 finished-save R
Worksheet: 07000335 Loc: r26c13 FN: 0 Font: Standard

ANALYSIS Run: 07000414 Method: P Date: 07/29/92
RUN LOG By: man Instr.ID: P2 Time: 08:47

	Lab#	Q	TestID	Init Result	Std Dev	CV	Weight	Volume	Dil	%Solid	Spk/Ref	Calc Result	C	Unit
							1.0000	1.0000	1.0000	100.0000				
1	127897		BEGW	0.0000			1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
2	127897		CUGW	-0.4000			1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
3	127897		NIGW	13.3000			1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L
4	127897		ZNGW	19.2000			1.0000	1.0000	1.0000	100.0000		20.0000	U	UG/L
5	127898		BEGW	1.6000			1.0000	1.0000	1.0000	100.0000		1.6000		UG/L
6	127898		CUGW	51.5000			1.0000	1.0000	1.0000	100.0000		51.5000		UG/L
7	127898		NIGW	54.1000			1.0000	1.0000	1.0000	100.0000		54.1000		UG/L
8	127898		ZNGW	224.5000			1.0000	1.0000	1.0000	100.0000		224.5000		UG/L
9	127899		BEGW	0.1000			1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
10	127899		CUGW	-2.4000			1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
11	127899		NIGW	2.1000			1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L
12	127899		ZNGW	0.7000			1.0000	1.0000	1.0000	100.0000		20.0000	U	UG/L
13	127900		BEGW	0.1000			1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
14	127900		CUGW	-1.3000			1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
15	127900		NIGW	-2.1000			1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L
16	127900		ZNGW	43.4000			1.0000	1.0000	1.0000	100.0000		43.4000		UG/L
17	127901		BEGW	0.0000			1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
18	127901		CUGW	2.8000			1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
19	127901		NIGW	-5.8000			1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L
20	127901		ZNGW	59.2000			1.0000	1.0000	1.0000	100.0000		59.2000		UG/L
21	127902		BEGW	2.6000			1.0000	1.0000	1.0000	100.0000		2.6000		UG/L
22	127902		CUGW	60.3000			1.0000	1.0000	1.0000	100.0000		60.3000		UG/L
23	127902		NIGW	131.4000			1.0000	1.0000	1.0000	100.0000		131.4000		UG/L
24	127902		ZNGW	350.0000			1.0000	1.0000	1.0000	100.0000		350.0000		UG/L
25	127944		BEGW	2.0000			1.0000	1.0000	1.0000	100.0000		2.0000		UG/L
26	127944		CUGW	64.5000			1.0000	1.0000	1.0000	100.0000		64.5000		UG/L
27	127944		NIGW	113.5000			1.0000	1.0000	1.0000	100.0000		113.5000		UG/L
28	127944		ZNGW	251.0000			1.0000	1.0000	1.0000	100.0000		251.0000		UG/L
29	127945		BEGW	1.9000			1.0000	1.0000	1.0000	100.0000		1.9000		UG/L
30	127945		CUGW	63.7000			1.0000	1.0000	1.0000	100.0000		63.7000		UG/L
31	127945		NIGW	123.5000			1.0000	1.0000	1.0000	100.0000		123.5000		UG/L
32	127945		ZNGW	244.7000			1.0000	1.0000	1.0000	100.0000		244.7000		UG/L
33	127946		BEGW	0.0000			1.0000	1.0000	1.0000	100.0000		0.6000	U	UG
34	127946		CUGW	6.6000			1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
35	127946		NIGW	0.6000			1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L
36	127946		ZNGW	81.9000			1.0000	1.0000	1.0000	100.0000		81.9000		UG/L
37	127947		BEGW	-0.1000			1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
38	127947		CUGW	8.7000			1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
39	127947		NIGW	6.7000			1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L
40	127947		ZNGW	80.8000			1.0000	1.0000	1.0000	100.0000		80.8000		UG/L
41	127963		BEGW	0.7000			1.0000	1.0000	1.0000	100.0000		0.7000		UG/L
42	127963		CUGW	2.4000			1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
43	127963		NIGW	467.8000			1.0000	1.0000	1.0000	100.0000		467.8000		UG/L
44	127963		ZNGW	28121.0000			1.0000	1.0000	1.0000	100.0000		28121.0000		UG/L
45	127964		BEGW	0.4000			1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
46	127964		CUGW	0.1000			1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
47	127964		NIGW	461.5000			1.0000	1.0000	1.0000	100.0000		461.5000		UG/L
48	127964		ZNGW	27872.7000			1.0000	1.0000	1.0000	100.0000		27872.7000		UG/L
49	127965		BEGW	0.0000			1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
50	127965	D	BEGW	-0.1000			1.0000	1.0000	1.0000	100.0000		0.6000	U	
51	127965	S	BEGW	45.4000			1.0000	1.0000	1.0000	100.0000	50.0000	45.4000		
52	127965		CUGW	-2.8000			1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
53	127965	D	CUGW	-3.6000			1.0000	1.0000	1.0000	100.0000		14.0000	U	
54	127965	S	CUGW	226.2000			1.0000	1.0000	1.0000	100.0000	250.0000	226.2000		
55	127965		NIGW	-0.8000			1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L

Rec/Diff	Alt.Result	IDL	LoLimit	HiLimit	Comment
		0.6000			
		14.0000			
		23.0000			
		20.0000			
		0.6000			
	52	14.0000			
	54	23.0000			
	220	20.0000			
		0.6000			
		14.0000			
		23.0000			
		20.0000			
		0.6000			
		14.0000			
		23.0000			
	43	20.0000			
		0.6000			
		14.0000			
		23.0000			
	59	20.0000			
		0.6000			
	60	14.0000			
	130	23.0000			
	350	20.0000			
		0.6000			
	64	14.0000			
	110	23.0000			
	250	20.0000			
		0.6000			
	64	14.0000			
	120	23.0000			
	240	20.0000			
		0.6000			
		14.0000			
		23.0000			
	82	20.0000			
		0.6000			
		14.0000			
		23.0000			
	81	20.0000			
		0.6000			
		14.0000			
	470	23.0000			
	28000	20.0000			
		0.6000			
		14.0000			
	460	23.0000			
	28000	20.0000			
		0.6000			
0.0		0.6000			
89.6		0.6000			
		14.0000			
0.0		14.0000			
84.9		14.0000			
		23.0000			

56	127965	D NIGW	-0.5000	1.0000	1.0000	1.0000	100.0000		23.0000	U	
57	127965	S NIGW	447.8000	1.0000	1.0000	1.0000	100.0000	500.0000	447.8000		
58	127965	ZNGW	57.1000	1.0000	1.0000	1.0000	100.0000		57.1000		UG/L
59	127965	D ZNGW	51.7000	1.0000	1.0000	1.0000	100.0000		51.7000		
60	127965	S ZNGW	527.3000	1.0000	1.0000	1.0000	100.0000	500.0000	527.3000		
61	127965	FEGW	603.0000	1.0000	1.0000	1.0000	100.0000		603.0000		
62	127965	D FEGW	564.0000	1.0000	1.0000	1.0000	100.0000		564.0000		
63	127965	S FEGW	1516.2000	1.0000	1.0000	1.0000	100.0000	1000.0000	1516.2000		
64	127965	BAGW	118.6000	1.0000	1.0000	1.0000	100.0000		118.6000		
65	127965	MNGW	297.5000	1.0000	1.0000	1.0000	100.0000		297.5000		
66	127965	D MNGW	279.5000	1.0000	1.0000	1.0000	100.0000	500.0000	279.5000		
67	127965	S MNGW	732.8000	1.0000	1.0000	1.0000	100.0000		732.8000		
68	BLKS2856	C FEGW	1126.0000	1.0000	1.0000	1.0000	100.0000	1000.0000	1126.0000		
69	BLKS2856	D FEGW	990.3000	1.0000	1.0000	1.0000	100.0000		990.3000		
70	BLKS2856	C FEGW	990.3000	1.0000	1.0000	1.0000	100.0000	1000.0000	990.3000		
71	BLKS2856	C ZNGW	496.7000	1.0000	1.0000	1.0000	100.0000	500.0000	496.7000		
72	BLKS2856	D ZNGW	492.9000	1.0000	1.0000	1.0000	100.0000		492.9000		
73	BLKS2856	C ZNGW	492.9000	1.0000	1.0000	1.0000	100.0000	500.0000	492.9000		
74	BLKS2856	C MNGW	505.6000	1.0000	1.0000	1.0000	100.0000	500.0000	505.6000		
75	BLKS2856	D MNGW	494.4000	1.0000	1.0000	1.0000	100.0000		494.4000		
76	BLKS2856	C MNGW	494.4000	1.0000	1.0000	1.0000	100.0000	500.0000	494.4000		
77	BLKS2856	C BEGW	48.4000	1.0000	1.0000	1.0000	100.0000	50.0000	48.4000		
78	BLKS2856	D BEGW	47.0000	1.0000	1.0000	1.0000	100.0000		47.0000		
79	BLKS2856	C BEGW	47.0000	1.0000	1.0000	1.0000	100.0000	50.0000	47.0000		
80	BLKS2856	C CUGW	242.6000	1.0000	1.0000	1.0000	100.0000	250.0000	242.6000		
81	BLKS2856	D CUGW	237.1000	1.0000	1.0000	1.0000	100.0000		237.1000		
82	BLKS2856	C CUGW	237.1000	1.0000	1.0000	1.0000	100.0000	250.0000	237.1000		
83	BLKS2856	C NIGW	483.0000	1.0000	1.0000	1.0000	100.0000	500.0000	483.0000		
84	BLKS2856	D NIGW	480.4000	1.0000	1.0000	1.0000	100.0000		480.4000		
85	BLKS2856	C NIGW	480.4000	1.0000	1.0000	1.0000	100.0000	500.0000	480.4000		
86	127966	BEGW	0.1000	1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
87	127966	CUGW	-2.6000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
88	127966	NIGW	3.3000	1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L
89	127966	ZNGW	8.4000	1.0000	1.0000	1.0000	100.0000		20.0000	U	UG/L
90	127967	BEGW	-0.1000	1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
91	127967	CUGW	2.0000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
92	127967	NIGW	-4.6000	1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L
93	127967	ZNGW	36.1000	1.0000	1.0000	1.0000	100.0000		36.1000		UG.
94	127970	BEGW	0.0000	1.0000	1.0000	1.0000	100.0000		0.6000	U	UG/L
95	127970	CUGW	-3.7000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
96	127970	NIGW	7.3000	1.0000	1.0000	1.0000	100.0000		23.0000	U	UG/L
97	127970	ZNGW	43.4000	1.0000	1.0000	1.0000	100.0000		43.4000		UG/L
98	128006	FEGW	37.5000	1.0000	1.0000	1.0000	100.0000		55.0000	U	UG/L
99	128006	MNGW	5.6000	1.0000	1.0000	1.0000	100.0000		5.6000		UG/L
100	128006	CUGW	4.4000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
101	128007	FEGW	474.5000	1.0000	1.0000	1.0000	100.0000		474.5000		UG/L
102	128007	MNGW	732.3000	1.0000	1.0000	1.0000	100.0000		732.3000		UG/L
103	128007	CUGW	-2.4000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
104	128008	FEGW	5.2000	1.0000	1.0000	1.0000	100.0000		55.0000	U	UG/L
105	128008	MNGW	0.4000	1.0000	1.0000	1.0000	100.0000		4.0000	U	UG/L
106	128008	CUGW	-1.6000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
107	128009	FEGW	14.0000	1.0000	1.0000	1.0000	100.0000		55.0000	U	UG/L
108	128009	MNGW	0.2000	1.0000	1.0000	1.0000	100.0000		4.0000	U	UG/L
109	128009	CUGW	-4.2000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
110	128010	FEGW	59.2000	1.0000	1.0000	1.0000	100.0000		59.2000		UG/L
111	128010	MNGW	57.2000	1.0000	1.0000	1.0000	100.0000		57.2000		UG/L
112	128010	CUGW	-2.6000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
113	128011	FEGW	50.8000	1.0000	1.0000	1.0000	100.0000		55.0000	U	UG/L
114	128011	MNGW	1.5000	1.0000	1.0000	1.0000	100.0000		4.0000	U	UG/L
115	128011	CUGW	-1.2000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L

7/09/92

0.0		23.0000
85.0		23.0000
	57	20.0000
9.9		20.0000
94.0		20.0000
	600	55.0000
6.7		55.0000
91.3		55.0000
	120	10.0000
	300	4.0000
6.2		4.0000
		4.0000
112.6		
12.8		
99.0		
99.3		
0.8		
98.6		
101.1		
2.2		
98.9		
96.8		
2.9		
94.0		
97.0		
2.3		
94.8		
96.6		
0.5		
96.1		
		0.6000
		14.0000
		23.0000
		20.0000
		0.6000
		14.0000
		23.0000
	36	20.0000
		0.6000
		14.0000
		23.0000
	43	20.0000
		55.0000
		4.0000
		14.0000
	470	55.0000
	730	4.0000
		14.0000
		55.0000
		4.0000
		14.0000
		55.0000
		4.0000
		14.0000
	59	55.0000
	57	4.0000
		14.0000
		55.0000
		4.0000
		14.0000

7/23/93

116128012		FEGW	373.9000	1.0000	1.0000	1.0000	100.0000		373.9000		UG/L
117128012		MNGW	132.5000	1.0000	1.0000	1.0000	100.0000		132.5000		UG/L
118128012		CUGW	-2.8000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
119128013		FEGW	28.5000	1.0000	1.0000	1.0000	100.0000		55.0000	U	UG/L
120128013		MNGW	-0.3000	1.0000	1.0000	1.0000	100.0000		4.0000	U	UG/L
121128013		CUGW	-3.6000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
122128014		FEGW	19078.3000	1.0000	1.0000	1.0000	100.0000		19078.3000		UG/L
123128014		MNGW	443.8000	1.0000	1.0000	1.0000	100.0000		443.8000		UG/L
124128014		CUGW	-4.3000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
125128015		FEGW	4061.7000	1.0000	1.0000	1.0000	100.0000		4061.7000		UG/L
126128015		MNGW	210.5000	1.0000	1.0000	1.0000	100.0000		210.5000		UG/L
127128015		CUGW	-1.7000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
128128016		FEGW	949.2000	1.0000	1.0000	1.0000	100.0000		949.2000		UG/L
129128016		MNGW	152.1000	1.0000	1.0000	1.0000	100.0000		152.1000		UG/L
130128016		CUGW	-2.3000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
131128017		FEGW	-3.5000	1.0000	1.0000	1.0000	100.0000		55.0000	U	UG/L
132128017	D	FEGW	49.3000	1.0000	1.0000	1.0000	100.0000		55.0000	U	
133128017	S	FEGW	1011.6000	1.0000	1.0000	1.0000	100.0000	1000.0000	1011.6000		
134128017		MNGW	85.8000	1.0000	1.0000	1.0000	100.0000		85.8000		UG/L
135128017	D	MNGW	86.8000	1.0000	1.0000	1.0000	100.0000		86.8000		
136128017	S	MNGW	559.6000	1.0000	1.0000	1.0000	100.0000	500.0000	559.6000		
137128017		CUGW	0.6000	1.0000	1.0000	1.0000	100.0000		14.0000	U	UG/L
138128017	D	CUGW	-0.3000	1.0000	1.0000	1.0000	100.0000		14.0000	U	
139128017	S	CUGW	238.9000	1.0000	1.0000	1.0000	100.0000	250.0000	238.9000		
140128017		BAGW	62.1000	1.0000	1.0000	1.0000	100.0000		62.1000		UG/L
141128017	D	BAGW	68.9000	1.0000	1.0000	1.0000	100.0000		68.9000		
142128017	S	BAGW	1986.0000	1.0000	1.0000	1.0000	100.0000	2000.0000	1986.0000		
143128017		ZNGW	3.3000	1.0000	1.0000	1.0000	100.0000		20.0000	U	UG/L
144128017	D	ZNGW	2.1000	1.0000	1.0000	1.0000	100.0000		20.0000	U	
145128017	S	ZNGW	479.2000	1.0000	1.0000	1.0000	100.0000	500.0000	479.2000		
146BLKS2857	C	FEGW	1043.2000	1.0000	1.0000	1.0000	100.0000	1000.0000	1043.2000		
147BLKS2857	D	FEGW	1015.9000	1.0000	1.0000	1.0000	100.0000		1015.9000		
148BLKS2857	C	FEGW	1015.9000	1.0000	1.0000	1.0000	100.0000	1000.0000	1015.9000		
149BLKS2857	C	ZNGW	481.9000	1.0000	1.0000	1.0000	100.0000	500.0000	481.9000		
150BLKS2857	D	ZNGW	474.8000	1.0000	1.0000	1.0000	100.0000		474.8000		
151BLKS2857	C	ZNGW	474.8000	1.0000	1.0000	1.0000	100.0000	500.0000	474.8000		
152BLKS2857	C	BAGW	1184.6000	1.0000	1.0000	1.0000	100.0000	2000.0000	1184.6000		
153BLKS2857	D	BAGW	1890.9000	1.0000	1.0000	1.0000	100.0000		1890.9000		
154BLKS2857	C	BAGW	1890.9000	1.0000	1.0000	1.0000	100.0000	2000.0000	1890.9000		
155BLKS2857	C	MNGW	474.1000	1.0000	1.0000	1.0000	100.0000	500.0000	474.1000		
156BLKS2857	D	MNGW	474.5000	1.0000	1.0000	1.0000	100.0000		474.5000		
157BLKS2857	C	MNGW	474.5000	1.0000	1.0000	1.0000	100.0000	500.0000	474.5000		
158BLKS2857	C	CUGW	232.2000	1.0000	1.0000	1.0000	100.0000	250.0000	232.2000		
159BLKS2857	D	CUGW	229.1000	1.0000	1.0000	1.0000	100.0000		229.1000		
160BLKS2857	C	CUGW	229.1000	1.0000	1.0000	1.0000	100.0000	250.0000	229.1000		
161				1.0000	1.0000	1.0000	100.0000				

7/29/9

	380	55.0000
	130	4.0000
		14.0000
		55.0000
		4.0000
		14.0000
	19000	55.0000
	440	4.0000
		14.0000
	4100	55.0000
	210	4.0000
		14.0000
	950	55.0000
	150	4.0000
		14.0000
		55.0000
0.0		55.0000
95.7		55.0000
	86	4.0000
1.2		4.0000
94.8		4.0000
		14.0000
0.0		14.0000
90.0		14.0000
	62	10.0000
10.4		10.0000
96.2		10.0000
		20.0000
0.0		20.0000
91.8		20.0000
104.3		
2.7		
101.6		
96.4		
1.5		
95.0		
59.2		
45.9		
94.5		
[illegible]		
0.1		
94.9		
[illegible]		
1.3		
91.6		

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207103
Our lab # : 127897
Your sample ID: WMW-106-D0GG00W
Sample Matrix : WATER

Report Date: 08/05/92

COLLECTION INFORMATION

Date/Time/By: 07/13/92 10:02 C P
Location : 89MC114V-NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127897	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic		13	UG/L	07/17/92
	Cadmium		0.5	UG/L	07/23/92
	Chromium	<	2	UG/L	07/22/92
	Lead		19	UG/L	07/22/92
	Antimony		3	UG/L	07/29/92
	Selenium		7.7	UG/L	07/16/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc	<	20	UG/L	07/29/92

Signed Phil Rat Date 8-5-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street | P.O. Box 12435 | Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207103
Our lab # : 127898
Your sample ID: WMW-107-D0GG00W
Sample Matrix : WATER

Report Date: 08/05/92

COLLECTION INFORMATION

Date/Time/By: 07/13/92 11:00 C P
Location : 89MC114V-NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127898	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic		65	UG/L	07/17/92
	Cadmium		1.8	UG/L	07/23/92
	Chromium		44	UG/L	07/22/92
	Lead		110	UG/L	07/22/92
	Antimony		5	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/16/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium		1.6	UG/L	07/29/92
	Copper		52	UG/L	07/29/92
	Nickel		54	UG/L	07/29/92
	Zinc		220	UG/L	07/29/92

Signed [illegible] Date 8-5-92

Signed _____ Date _____

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ENVIRONMENTAL LABORATORY
2496 West Mason Street · P.O. Box 12435 · Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207103
Our lab # : 127899
Your sample ID: WMW-112-10GG0WB
Sample Matrix : WATER

Report Date: 08/05/92

COLLECTION INFORMATION

Date/Time/By: 07/13/92 14:10 C P
Location : 89MC114V-NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127899	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic		3.2	UG/L	07/17/92
	Cadmium	<	0.3	UG/L	07/23/92
	Chromium	<	2	UG/L	07/22/92
	Lead	<	2.0	UG/L	07/22/92
	Antimony	<	2	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/16/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc	<	20	UG/L	07/29/92

Signed [signature] Date 8-5-92

Signed _____ Date _____

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ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207103
Our lab # : 127900
Your sample ID: WMW-111920GG00W
Sample Matrix : WATER

Report Date: 08/05/92

COLLECTION INFORMATION

Date/Time/By: 07/13/92 14:55 C P
Location : 89MC114V-NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127900	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic		4.6	UG/L	07/17/92
	Cadmium	<	0.3	UG/L	07/23/92
	Chromium	<	2	UG/L	07/22/92
	Lead		3.0	UG/L	07/22/92
	Antimony	<	2	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/16/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc		43	UG/L	07/29/92

Signed [signature] Date 8-5-92

Signed _____ Date _____

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ENVIRONMENTAL LABORATORY
2496 West Mason Street · P.O. Box 12435 · Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207103
Our lab # : 127901
Your sample ID: WMW-111920GG0WD
Sample Matrix : WATER

Report Date: 08/05/92

COLLECTION INFORMATION

Date/Time/By: 07/13/92 151000 C P
Location : 89MC114V-NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127901	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic		4.0	UG/L	07/17/92
	Cadmium		0.4	UG/L	07/23/92
	Chromium	<	2	UG/L	07/22/92
	Lead		9.4	UG/L	07/22/92
	Antimony	<	2	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/16/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc		59	UG/L	07/29/92

Signed [signature] Date 8-5-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207103
Our lab # : 127902
Your sample ID: WMW-101-10GG00W
Sample Matrix : WATER

Report Date: 08/05/92

COLLECTION INFORMATION

Date/Time/By: 07/13/92 15:45 C P
Location : 89MC114V-NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127902	Mercury		0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic		4200	UG/L	07/17/92
	Cadmium		3.9	UG/L	07/23/92
	Chromium		34	UG/L	07/22/92
	Lead		130	UG/L	07/22/92
	Antimony		14	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/16/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium		2.6	UG/L	07/29/92
	Copper		60	UG/L	07/29/92
	Nickel		130	UG/L	07/29/92
	Zinc		350	UG/L	07/29/92

Signed [signature] Date 8-5-92

Signed _____ Date _____

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ENVIRONMENTAL LABORATORY
2496 West Mason Street · P.O. Box 12435 · Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207111
Our lab # : 127944
Your sample ID: WMW107-S0GG00W
Sample Matrix : WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/14/92 09:15 CP/DZ
Location : 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127944	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic		44	UG/L	07/29/92
	Cadmium		3.2	UG/L	07/23/92
	Chromium		42	UG/L	07/22/92
	Lead		140	UG/L	07/22/92
	Antimony		8	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/29/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium		2.0	UG/L	07/29/92
	Copper		64	UG/L	07/29/92
	Nickel		110	UG/L	07/29/92
	Zinc		250	UG/L	07/29/92

Signed Earl B Kimball Date 9-6-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street | P.O. Box 12435 | Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207111
Our lab # : 127945
Your sample ID: WMW104-10GG00W
Sample Matrix : WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/14/92 09:15 CP/DZ
Location : 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127945	Mercury		0.3	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic		86	UG/L	07/29/92
	Cadmium		2.7	UG/L	07/23/92
	Chromium		47	UG/L	07/22/92
	Lead		470	UG/L	07/22/92
	Antimony		23	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/29/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium		1.9	UG/L	07/29/92
	Copper		64	UG/L	07/29/92
	Nickel		120	UG/L	07/29/92
	Zinc		240	UG/L	07/29/92

Signed Earl G. Schmidt Date 8-6-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207111
Our lab # : 127946
Your sample ID: WMW104920GG00W
Sample Matrix : WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/14/92 11:10 CP/DZ
Location : 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127946	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/31/92
	Arsenic		8.8	UG/L	07/29/92
	Cadmium		3.3	UG/L	07/23/92
	Chromium		2	UG/L	07/22/92
	Lead		440	UG/L	07/22/92
	Antimony		7	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/29/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc		82	UG/L	07/29/92

Signed Earl F. Schmidt Date 8-6-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207111
Our lab # : 127947
Your sample ID: WMW109920GG00W
Sample Matrix : WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/14/92 14:10 CP/DZ
Location : 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127947	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic	<	3.0	UG/L	07/29/92
	Cadmium		1.8	UG/L	07/23/92
	Chromium		3	UG/L	07/22/92
	Lead		18	UG/L	07/22/92
	Antimony	<	2	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/29/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc		81	UG/L	07/29/92

Signed Earl J. Kilmoll Date 8-6-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207122
Our lab # : 127963
Your sample ID: WMW108-DOGGOWD
Sample Matrix : WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/15/92 08:50 E P
Location : 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127963	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic	<	3.0	UG/L	07/29/92
	Cadmium		9000	UG/L	07/23/92
	Chromium		6	UG/L	07/22/92
	Lead		26	UG/L	07/22/92
	Antimony	<	2	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/29/92
	Thallium		48	UG/L	07/22/92
	Beryllium		0.7	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel		470	UG/L	07/29/92
	Zinc		28000	UG/L	07/29/92

Signed Earl G. Klimek Date 8-6-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54310-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

TO: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

ATTN: DAVE PATE

Batch ID: 9207122
Our Lab #: 127964
Your Sample ID: WMW108-DOGGOOW
Sample Matrix: WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/15/92 08:50 E P
Location: 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127964	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic	<	3.0	UG/L	07/29/92
	Cadmium		8500	UG/L	07/23/92
	Chromium		6	UG/L	07/22/92
	Lead		23	UG/L	07/22/92
	Antimony	<	8.0	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/29/92
	Thallium		46	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel		460	UG/L	07/29/92
	Zinc		28000	UG/L	07/29/92

Signed: _____ Date: 9/23/92

Signed: _____ Date: _____

Revision 09/23/92 vrg

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207122
Our lab # : 127965
Your sample ID: WMW109-10GG00W
Sample Matrix : WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/15/92 10:05 E P
Location : 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127965	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic	<	3.0	UG/L	07/29/92
	Cadmium		2.8	UG/L	07/23/92
	Chromium	<	2	UG/L	07/22/92
	Lead		4.6	UG/L	07/22/92
	Antimony	<	2	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/29/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc		57	UG/L	07/29/92

Signed [signature] Date 8-6-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207122
Our lab # : 127966
Your sample ID: WMW114-10GG00W
Sample Matrix : WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/15/92 11:10 E P
Location : 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127966	Mercury		0.3	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic	<	3.0	UG/L	07/29/92
	Cadmium	<	0.3	UG/L	07/23/92
	Chromium	<	2	UG/L	07/22/92
	Lead	<	2.0	UG/L	07/22/92
	Antimony	<	2	UG/L	07/29/92
	Selenium		<3.0 *	UG/L	07/29/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc	<	20	UG/L	07/29/92

* - SPIKE OUT OF CONTROL. SAMPLE MATRIX PROBLEMS

Signed [signature] Date 8-6-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207122
Our lab # : 127967
Your sample ID: WMW103910GG00W
Sample Matrix : WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/15/92 11:40 E P
Location : 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127967	Mercury		0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic	<	3.0	UG/L	07/29/92
	Cadmium		1.7	UG/L	07/23/92
	Chromium	<	2	UG/L	07/22/92
	Lead		2.7	UG/L	07/22/92
	Antimony	<	2	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/29/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc		36	UG/L	07/29/92

Signed Earl G. Schmidt Date 8-6-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

- SAMPLE ANALYSIS REPORT -

To: WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR
MARYLAND HEIGHTS MO 63043

Attn: DAVE PATE

Batch ID : 9207122
Our lab # : 127970
Your sample ID: WMW110-10GG00W
Sample Matrix : WATER

Report Date: 08/06/92

COLLECTION INFORMATION

Date/Time/By: 07/15/92 13:30 E P
Location : 89MC114V NL/TARACORP

Lab#	Test		Result	Units	Analysis Date
127970	Mercury	<	0.2	UG/L	07/27/92
	Silver	<	0.4	UG/L	07/21/92
	Arsenic	<	3.0	UG/L	07/29/92
	Cadmium		1.3	UG/L	07/23/92
	Chromium	<	2	UG/L	07/22/92
	Lead		4.2	UG/L	07/22/92
	Antimony	<	2	UG/L	07/29/92
	Selenium	<	3.0	UG/L	07/29/92
	Thallium	<	2.0	UG/L	07/22/92
	Beryllium	<	0.6	UG/L	07/29/92
	Copper	<	14	UG/L	07/29/92
	Nickel	<	23	UG/L	07/29/92
	Zinc		43	UG/L	07/29/92

Signed Earl Schmalz Date 8-6-92

Signed _____ Date _____

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

CASE NARRATIVE

Lab Name: ORTEK
Case No.: 89MC114V
SDG No. WMW-101

Contract:
SAS No.:

VOLATILE ORGANIC ANALYSIS

Sample No.	EPA Sample No.	Lab Sample ID
WMW101-10GGOOW	0110GGOOW	127902
WMW101-10GGOOWMS	0110GMS	127902MS
WMW101-10GGOOWMSD	0110GMSD	127902MSD
WMW106-DOGGOOW	06DOGGOOW	127897
WMW106-DOGGOOWRE	06DOGOWRE	127897RE
WMW107-DOGGOOW	07DOGGOOW	127898
WMW107-DOGGOOWRE	07DOGOWRE	127898RE
WMW111920GGOOW	1920GGOOW	127900
WMW111920GGOWD	1910GGOWD	127901
WMW112-10GGOWB	1210GGOWB	127899
WMW113-10GGOTB	1310GGOTB	127903

1.) The instrument ID for Volatile Organic Analysis is MSD2. The blanks associated with the samples were VBLK24, VBLK33, and VBLK04.

2.) In the first analysis, traces of all five matrix spike compounds were found in sample number WMW101-10GGOOW. The sample was reanalyzed to show that the matrix spike compounds had come from the matrix spike duplicate run previously. The second analysis was reported.

3.) Sample number WMW106-DOGGOOW exhibited surrogate recoveries which were outside the QC limits in the first analysis. It was reanalyzed with similar results. Both analyses were submitted.

4.) Acetone was over the calibration range in sample number WMW107-DOGGOOW. It was reanalyzed, outside the hold time, and the concentration was within the calibration range. Since the reanalysis was so far outside the hold time, both results were reported. The second analysis was given a "RE" (even though it was not diluted) to signify it from the original analysis.

5.) The Data Summary was collated in accordance with CLP/SOW 2/88 sections B-9 to B-22.

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

Signature: David L. Schumacher
Name: David L. Schumacher
Date: 8-4-92
Title: Technical Director

ORGANIC DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY Ortek
LAB PROJECT NO. WMW-101
NO. OF SAMPLES/ MATRIX 9/Water

SITE NLTSS
REVIEWER Dana Doerfler
REVIEWER'S NAME Dana Doerfler
COMPLETION DATE 8/13/92

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	HERB	OTHER
1. HOLDING TIMES	(1)				
2. BLANKS	(2)				
3. SURROGATES	(3)				
4. INSTR. CALIBRATIONS	✓				
5. INTERNAL STDS.	✓				
6. GC/MS TUNING	✓				
7. MATRIX SPIKE/DUP	(4)				
8. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) Acetone was outside calib. range for sample WMW107; sample reanalyzed outside holding time (labeled as RE). Data qualified as estimated (2) Acetone detected in each of the method blanks; the concentrations of acetone in samples WMW107-DOGGOOW, WMW112-10GGOWB, and WMW113-10GGOTB should be qualified as estimated quantities. (3) Surrogate recoveries low for WMW106-DOGGOOW and WMW101-10GGOOW. Data for each of these samples should be considered estimated.

COMMENTS: (4) Matrix spike RPD out of control for trichloroethene. Data for WMW101-10GGOW affected by matrix interference. Data has been qualified as estimated

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0110GG00W

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127902

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7T04

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/29/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

06DOGGOOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127897

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P01

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

06DOGOWRE

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127897RE

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** A8302

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 08/03/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or 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	6	B
67-64-1	Acetone	5	BJ
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

07DOGGOOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127898

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P02

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	2	BJ
74-83-9	Bromomethane	6	BJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	220 J	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

07DOGOWRE

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127898RE

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** A8303

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 08/03/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or 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	6	B
67-64-1	Acetone	93	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11920GOOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127900

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P04

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11920GOWD

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127901

Sample wt/vol: 5 **(g/mL) mL** **Lab File ID:** B7P05

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1210GGOWB

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127899

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P03

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1310GGOTB

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127903

Sample wt/vol: 5 (g/mL) mL **Lab File ID:** B7P07

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	2	BJ
74-83-9	Bromomethane	5	BJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	24	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0110GMS

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127902MS

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7T10

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/29/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	2	BJ
74-83-9	Bromomethane	5	BJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	BJ
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
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0110GMSD

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** 127902MSD

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7T11

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/29/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	8	BJ
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
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.:WMW-101

	EPA SAMPLE NO.	(TOL)#	(BFB)#	(DCE)#	OTHER	TOT OUT
01	VBLK24	100	98	107		
02	06DOGGOOW	95	83 *	106		1
03	07DOGGOOW	102	86	101		
04	1210GGOWB	97	89	101		
05	11920GOOW	94	86	100		
06	11920GOWD	97	87	105		
07	1310GGOTB	97	91	101		
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA 1/87 Rev.

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.:WMW-101

	EPA SAMPLE NO.	(TOL)#	(BFB)#	(DCE)#	OTHER	TOT OUT
01	VBLK33	96	97	77		
02	0110GG00W	100	96	72 *		1
03	0110GMS	95	98	74 *		1
04	0110GMSD	98	96	75 *		1
05						
06						
07						
08						
09						
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29						
30						

		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA 1/87 Rev.

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.:WMW-101

	EPA SAMPLE NO.	(TOL)#	(BFB)#	(DCE)#	OTHER	TOT OUT
01	VBLK04	106	104	103		
02	06DOGOWRE	111 *	105	107		1
03	07DOGOWRE	108	108	111		
04						
05						
06						
07						
08						
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27						
28						
29						
30						

		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA 1/87 Rev.

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114V SAS No.: SDG No.: WMW-101

Matrix Spike - EPA Sample No.: 0110GG00W

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMIT REC.
1,1-Dichloroethene	50	0	38	75	61-145
Trichloroethene	50	0	47	94	71-1[illegible]
Benzene	50	0	54	108	76-12[illegible]
Toluene	50	0	46	93	76-125
Chlorobenzene	50	0	50	101	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	38	75	0	14	61-145
Trichloroethene	50	34	67 *	33 *	14	71-1[illegible]
Benzene	50	58	115	6	11	76-1[illegible]
Toluene	50	49	98	5	13	76-125
Chlorobenzene	50	53	105	3	13	75-130

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

* Values outside of QC limits

RPD: 1 out of 5 outside limits
Spike Recovery: 1 out of 10 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-101

Lab File ID: B7PB2 Lab Sample ID: VBLK24

Date Analyzed: 07/25/92 Time Analyzed: 14:47

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

Instrument ID: MSD2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	06DOGGOOW	127897	B7P01	15:26
02	07DOGGOOW	127898	B7P02	16:05
03	1210GGOWB	127899	B7P03	16:44
04	11920GOOW	127900	B7P04	17:24
05	11920GOWD	127901	B7P05	18:03
06	1310GGOTB	127903	B7P07	19:21
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COMMENTS: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK24

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** VBLK24

Sample wt/vol: 5 **(g/mL) mL** **Lab File ID:** B7PB2

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-101

Lab File ID: B7TB2 Lab Sample ID: VBLK33

Date Analyzed: 07/29/92 Time Analyzed: 09:50

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

Instrument ID: MSD2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	0110GG00W	127902	B7T04	13:13
02	0110GMS	127902MS	B7T10	16:32
03	0110GMSD	127902MSD	B7T11	17:22
04				
05				
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COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK33

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** VBLK33

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7TB2

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 07/29/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	4	J
74-83-9	Bromomethane	8	J
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	16	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-101

Lab File ID: A83B2 Lab Sample ID: VBLK04

Date Analyzed: 08/03/92 Time Analyzed: 14:07

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

Instrument ID: MSD1

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	06DOGOWRE	127897RE	A8302	16:42
02	07DOGOWRE	127898RE	A8303	17:36
03				
04				
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COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK04

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-101

Matrix: (soil/water) WATER **Lab Sample ID:** VBLK04

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** A83B2

Level: (low/med) LOW **Date Received:** 7/13/92

% Moisture: not dec. **Date Analyzed:** 08/03/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or 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	9	
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-101

Lab File ID: B7PF1 BFB Injection Date: 07/25/92

Instrument ID: MSD2 BFB Injection Time: 12:34

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.2
75	30.0 - 60.0% of mass 95	47.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	68.4
175	5.0 - 9.0% of mass 174	5.6 (8.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	66.4 (97.1)1
177	5.0 - 9.0% of mass 176	4.4 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK24	VBLK24	B7PB2	07/25/92	14:47
02	06DOGGOOW	127897	B7P01	07/25/92	15:26
03	07DOGGOOW	127898	B7P02	07/25/92	16:05
04	1210GGOWB	127899	B7P03	07/25/92	16:44
05	11920GOOW	127900	B7P04	07/25/92	17:24
06	11920GOWD	127901	B7P05	07/25/92	18:03
07	1310GGOTB	127903	B7P07	07/25/92	19:21
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5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-101

Lab File ID: B7TF1 BFB Injection Date: 07/29/92

Instrument ID: MSD2 BFB Injection Time: 07:54

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.6
75	30.0 - 60.0% of mass 95	49.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	73.3
175	5.0 - 9.0% of mass 174	5.3 (7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	70.7 (96.3)1
177	5.0 - 9.0% of mass 176	4.8 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK33	VBLK33	B7TB2	07/29/92	09:50
02	0110GG00W	127902	B7T04	07/29/92	13:13
03	0110GMS	127902MS	B7T10	07/29/92	16:32
04	0110GMSD	127902MSD	B7T11	07/29/92	17:22
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5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-101

Lab File ID: A83F1 BFB Injection Date: 08/03/92

Instrument ID: MSD2 BFB Injection Time: 11:34

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.1
75	30.0 - 60.0% of mass 95	48.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	77.5
175	5.0 - 9.0% of mass 174	4.8 (6.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	77.7 (100.2)1
177	5.0 - 9.0% of mass 176	4.9 (6.3)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK04	VBLK04	A83B2	08/03/92	14:07
02	06DOGOWRE	127897RE	A8302	08/03/92	16:42
03	07DOGOWRE	127898RE	A8303	08/03/92	17:36
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6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW-101

Instument ID: MSD2 Calibration Date(s): 07/25/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = >B7OI1 RRF50 = >B7OI2
RRF100= >B7OI3 RRF150= >B7OI4 RRF200= >B7OI5

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane	#2.078	1.953	1.806	2.032	1.501	1.874	12.[illegible]
Bromomethane	1.351	1.123	1.048	1.228	.928	1.136	14[illegible]
Vinyl Chloride	*2.269	2.121	1.892	2.157	1.556	1.999	14.1*
Chloroethane	1.196	1.089	.955	1.136	.813	1.038	14.8
Methylene Chloride	3.372	2.782	2.288	2.667	1.924	2.607	20.9
Acetone	1.008	.500	.333	.293	.239	.475	66.0
Carbon Disulfide	5.629	5.292	5.101	5.580	4.578	5.236	8.1
1,1-Dichloroethene	*1.835	1.603	1.551	1.301	1.342	1.526	14.1*
1,1-Dichloroethane	#3.[illegible]74	3.098	2.761	2.483	2.310	2.825	16.6#
1,2-Dichloroethene (total)	.895	.806	.755	.615	.635	.741	15.8
Chloroform	*3.281	3.066	2.783	2.437	2.283	2.770	15.0*
1,2-Dichloroethane	1.754	1.723	1.551	1.353	1.287	1.534	13.7
2-Butanone	.017	.019	.015	.017	.017	.017	8.6
1,1,1-Trichloroethane	.477	.512	.421	.479	.462	.470	7.0
Carbon Tetrachloride	.404	.450	.363	.412	.412	.408	7.5
Vinyl Acetate	.221	.231	.153	.169	.190	.193	17.2
Bromodichloromethane	.507	.569	.468	.522	.523	.518	7.0
1,2-Dichloropropane	* .368	.408	.348	.399	.392	.383	6[illegible]
cis-1,3-Dichloropropene	.359	.382	.307	.363	.352	.353	7.[illegible]
Trichloroethene	.393	.415	.385	.424	.432	.410	4.9
Dibromochloromethane	.424	.480	.403	.482	.466	.451	7.9
1,1,2-Trichloroethane	.307	.323	.265	.308	.298	.300	7.2
Benzene	1.026	1.079	.987	1.127	1.100	1.064	5.3
trans-1,3-Dichloropropene	.462	.508	.431	.498	.488	.477	6.5
Bromoform	# .298	.339	.285	.366	.342	.326	10.2#
4-Methyl-2-Pentanone	.364	.315	.276	.261	.292	.302	13.3
2-Hexanone	.289	.222	.186	.186	.196	.216	20.0
Tetrachloroethene	.434	.407	.413	.410	.427	.418	2.7
1,1,2,2-Tetrachloroethane	# .520	.539	.453	.502	.517	.506	6.3#
Toluene	* .920	.864	.839	.871	.859	.871	3.4*
Chlorobenzene	#1.129	1.090	1.046	1.109	1.025	1.080	4.0#
Ethylbenzene	* .574	.548	.502	.552	.509	.537	5.6*
Styrene	1.173	1.223	1.123	1.304	1.064	1.177	7.8
Xylene (total)	.681	.690	.630	.720	.643	.673	5.4
Toluene-d8	1.389	1.228	1.220	1.260	1.151	1.250	7.0
Bromofluorobenzene	1.036	.946	.851	.949	.860	.929	8.1
1,2-Dichloroethane-d4	1.643	1.473	1.329	1.142	1.082	1.334	17.3

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW-101

Instument ID: HP MSD Calibration Date(s): 07/31/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = >A7UI1 RRF50 = >A7UI2
RRF100= >A7UI3 RRF150= >A7UI4 RRF200= >A7UI5

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane	#1.923	1.811	1.878	1.874	1.813	1.860	2.5#
Bromomethane	.313	.299	.257	.281	.250	.280	9.5
Vinyl Chloride	*1.045	1.210	1.309	1.342	1.333	1.248	9.9*
Chloroethane	.471	.847	.641	.939	.907	.761	26.1
Methylene Chloride	1.728	1.559	1.507	1.609	1.548	1.590	5.3
Acetone	1.736	.757	.500	.468	.626	.817	64.3
Carbon Disulfide	4.575	4.229	4.436	4.468	4.332	4.408	2.9
1,1-Dichloroethene	* .872	.834	.840	.875	.859	.856	2.1*
1,1-Dichloroethane	#3.[illegible]12	3.397	3.444	3.578	3.515	3.469	2.1#
1,2-Dichloroethene (total)	.880	.863	.873	.904	.886	.881	1.7
Chloroform	*3.540	3.600	3.706	3.768	3.698	3.662	2.4*
1,2-Dichloroethane	2.712	2.756	2.820	2.857	2.844	2.798	2.2
2-Butanone	.028	.032	.028	.026	.033	.030	9.9
1,1,1-Trichloroethane	.645	.623	.614	.616	.605	.620	2.4
Carbon Tetrachloride	.558	.584	.595	.573	.565	.575	2.5
Vinyl Acetate	.208	.224	.220	.237	.235	.225	5.1
Bromodichloromethane	.678	.744	.758	.727	.733	.728	4.1
1,2-Dichloropropane	* .422	.445	.445	.447	.452	.442	2.6*
cis-1,3-Dichloropropene	.534	.610	.618	.633	.639	.607	6.9
Trichloroethene	.404	.420	.412	.401	.402	.408	1.9
Dibromochloromethane	.491	.553	.572	.540	.568	.545	6.0
1,1,2-Trichloroethane	.295	.311	.317	.318	.335	.315	4.4
Benzene	1.168	1.207	1.210	1.184	1.175	1.189	1.5
trans-1,3-Dichloropropene	.534	.610	.618	.633	.639	.607	6.9
Bromoform	# .325	.368	.386	.366	.3[illegible]0	.367	7.0#
4-Methyl-2-Pentanone	.331	.357	.364	.343	.375	.354	4.8
2-Hexanone	.196	.253	.238	.234	.284	.241	13.2
Tetrachloroethene	.432	.443	.444	.403	.388	.422	6.0
1,1,2,2-Tetrachloroethane	# .502	.546	.561	.500	.52[illegible]	.527	5.0#
Toluene	* .884	.894	.892	.819	.804	.858	5.0*
Chlorobenzene	# .967	.983	1.013	.969	.954	.977	2.3#
Ethylbenzene	* .474	.476	.478	.434	.427	.458	5.4*
Styrene	.874	.992	1.004	.889	.850	.922	7.7
Xylene (total)	.486	.539	.546	.501	.491	.512	5.4
Toluene-d8	1.272	1.311	1.313	1.244	1.197	1.268	3.8
Bromofluorobenzene	.686	.746	.747	.723	.693	.719	3.9
1,2-Dichloroethane-d4	2.384	2.407	2.422	2.488	2.456	2.431	1.6

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW-101

Instument ID: MSD2 Calibration Date: 07/25/92 Time: 12:58

Lab File ID: B7PC1 Init. Calib. Date(s): 07/25/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	$\overline{RRF}$	RRF50	%D
Chloromethane	#1.874	1.878	.2 #
Bromomethane	1.136	1.233	8.5
Vinyl Chloride	*1.999	1.994	.2 *
Chloroethane	1.038	1.148	10.6
Methylene Chloride	2.607	2.715	4.1
Acetone	.475	.550	15.8
Carbon Disulfide	5.236	5.489	4.8
1,1-Dichloroethene	*1.526	1.755	15.0 *
1,1-Dichloroethane	#2.825	3.328	17.7 #
1,2-Dichloroethene (total)	.741	.901	21.5
Chloroform	*2.770	3.352	21.0 *
1,2-Dichloroethane	1.534	1.830	19.3
2-Butanone	.017	.020	17.7
1,1,1-Trichloroethane	.470	.526	11.8
Carbon Tetrachloride	.408	.441	8.0
Vinyl Acetate	.193	.202	4.5
Bromodichloromethane	.518	.581	12.1
1,2-Dichloropropane	* .383	.409	6.8 *
cis-1,3-Dichloropropene	.353	.388	9.8
Trichloroethene	.410	.428	4.3
Dibromochloromethane	.451	.477	5.8
1,1,2-Trichloroethane	.300	.321	7.0
Benzene	1.064	1.095	2.9
trans-1,3-Dichloropropene	.477	.532	11.5
Bromoform	# .326	.327	.4 #
4-Methyl-2-Pentanone	.302	.336	11.3
2-Hexanone	.216	.235	9.0
Tetrachloroethene	.418	.468	11.9
1,1,2,2-Tetrachloroethane	# .506	.552	8.9 #
Toluene	* .871	.940	7.9 *
Chlorobenzene	#1.080	1.159	7.2 #
Ethylbenzene	* .537	.568	5.7 *
Styrene	1.177	1.260	7.0
Xylene (total)	.673	.709	5.4
Toluene-d8	1.250	1.294	3.5
Bromofluorobenzene	.929	.918	1.1
1,2-Dichloroethane-d4	1.334	1.553	16.4

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW-101

Instument ID: MSD2 Calibration Date: 07/29/92 Time: 08:17

Lab File ID: B7TC1 Init. Calib. Date(s): 07/25/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	$\overline{RRF}$	RRF50	%D
Chloromethane	#1.874	1.827	2.5 #
Bromomethane	1.136	1.329	17.0
Vinyl Chloride	*1.999	2.280	14.0 *
Chloroethane	1.038	1.412	36.0
Methylene Chloride	2.607	3.713	42.4
Acetone	.475	.700	47.3
Carbon Disulfide	5.236	6.118	16.8
1,1-Dichloroethene	*1.526	1.477	3.2 *
1,1-Dichloroethane	#2.825	2.708	4.1 #
1,2-Dichloroethene (total)	.741	.734	1.01
Chloroform	*2.770	2.813	1.5 *
1,2-Dichloroethane	1.534	1.507	1.7
2-Butanone	.017	.016	5.5
1,1,1-Trichloroethane	.470	.390	17.0
Carbon Tetrachloride	.408	.372	8.8
Vinyl Acetate	.193	.176	8.9
Bromodichloromethane	.518	.444	14.2
1,2-Dichloropropane	* .383	.302	21.0 *
cis-1,3-Dichloropropene	.353	.301	14.7
Trichloroethene	.410	.319	22.1
Dibromochloromethane	.451	.385	14.5
1,1,2-Trichloroethane	.300	.249	17.0
Benzene	1.064	.857	19.4
trans-1,3-Dichloropropene	.477	.405	15.2
Bromoform	# .326	.278	14.6 #
4-Methyl-2-Pentanone	.302	.225	25.2
2-Hexanone	.216	.181	16.1
Tetrachloroethene	.418	.367	12.2
1,1,2,2-Tetrachloroethane	# .506	.457	9.7 #
Toluene	* .871	.763	12.3 *
Chlorobenzene	#1.080	.954	11.6 #
Ethylbenzene	* .537	.482	10.2 *
Styrene	1.177	1.139	3.2
Xylene (total)	.673	.640	4.8
Toluene-d8	1.250	1.245	.3
Bromofluorobenzene	.929	.970	4.5
1,2-Dichloroethane-d4	1.334	1.478	10.8

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW-101

Instument ID: HP MSD Calibration Date: 08/03/92 Time: 12:01

Lab File ID: A83C1 Init. Calib. Date(s): 07/31/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	$\overline{RRF}$	RRF50	%D
Chloromethane	#1.860	1.861	.0 #
Bromomethane	.280	.215	23.2
Vinyl Chloride	*1.248	1.085	13.0 *
Chloroethane	.761	.464	39.0
Methylene Chloride	1.590	1.894	19.1
Acetone	.817	1.761	115.3
Carbon Disulfide	4.408	4.236	3.9
1,1-Dichloroethene	* .856	.831	2.9 *
1,1-Dichloroethane	#3.469	3.329	4.0 #
1,2-Dichloroethene (total)	.881	.863	2.09
Chloroform	*3.662	3.628	.9 *
1,2-Dichloroethane	2.798	2.962	5.8
2-Butanone	.030	.047	56.8
1,1,1-Trichloroethane	.620	.642	3.4
Carbon Tetrachloride	.575	.610	6.1
Vinyl Acetate	.225	.263	16.9
Bromodichloromethane	.728	.756	3.8
1,2-Dichloropropane	* .442	.448	1.2 *
cis-1,3-Dichloropropene	.607	.615	1.3
Trichloroethene	.408	.429	5.1
Dibromochloromethane	.545	.600	10.1
1,1,2-Trichloroethane	.315	.367	16.4
Benzene	1.189	1.234	3.7
trans-1,3-Dichloropropene	.607	.615	1.3
Bromoform	# .367	.463	26.2 #
4-Methyl-2-Pentanone	.354	.485	37.0
2-Hexanone	.241	.374	55.0
Tetrachloroethene	.422	.432	2.4
1,1,2,2-Tetrachloroethane	# .527	.682	29.3 #
Toluene	* .858	.855	.3 *
Chlorobenzene	# .977	1.028	5.2 #
Ethylbenzene	* .458	.498	8.7 *
Styrene	.922	.936	1.6
Xylene (total)	.512	.513	.2
Toluene-d8	1.268	1.253	1.1
Bromofluorobenzene	.719	.711	1.1
1,2-Dichloroethane-d4	2.431	2.488	2.3

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-101

Lab File ID (Standard): B7PC1 Date Analyzed: 07/25/92

Instrument ID: MSD2 Time Analyzed: 12:58

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	60347	10.98	300036	13.14	257553	17.93
	UPPER LIMIT	120694		600072		515106	
	LOWER LIMIT	30173		150018		128776	
	EPA SAMPLE NO.						
01	VBLK24	49843	10.97	257309	13.13	242846	17.93
02	06DOGGOOW	55424	10.98	317794	13.15	270603	17.94
03	07DOGGOOW	54345	10.98	290688	13.15	255908	17.94
04	1210GGOWB	48417	10.98	263642	13.14	229395	17.94
05	11920GOOW	52015	10.98	245814	13.15	233454	17.94
06	11920GOWD	54274	10.99	284616	13.14	239795	17.93
07	1310GGOTB	54286	10.98	257081	13.14	232552	17.94
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22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-101

Lab File ID (Standard): B7TC1 Date Analyzed: 07/29/92

Instrument ID: MSD2 Time Analyzed: 08:17

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	39173	10.97	208757	13.13	193140	17.93
	UPPER LIMIT	78346		417514		386280	
	LOWER LIMIT	19586		104378		96570	
	EPA SAMPLE NO.						
01	VBLK33	29961	10.97	131323	13.13	149088	17.93
02	0110GG00W	32193	10.97	123222	13.14	142455	17.93
03	0110GMS	26932	10.96	99811 *	13.13	111020	17.93
04	0110GMSD	21294	10.99	136100	13.15	149266	17.93
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22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII VOA 1/87 Rev.

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-101

Lab File ID (Standard): A83C1 Date Analyzed: 08/03/92

Instrument ID: MSD1 Time Analyzed: 12:01

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	19386	14.88	82233	16.61	68384	21.02
	UPPER LIMIT	38772		164466		136768	
	LOWER LIMIT	9693		41116		34192	
	EPA SAMPLE NO.						
01	VBLK04	14900	14.9	63136	16.63	52685	21.04
02	06DOGOWRE	13439	14.86	56529	16.59	42945	21.04
03	07DOGOWRE	13488	14.85	58105	16.58	43507	21.03
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

ORTEK
ENVIRONMENTAL LABORATORY
414-498-2222
FAX: 414-498-4067
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435

CASE NARRATIVE

Lab Name: ORTEK
Case No.: 89MC114V
SDG No. WMW-104

Contract:
SAS No.:
Sample Analysis Price:

VOLATILE ORGANIC ANALYSIS

Sample No.	EPA Sample No.	Lab Sample ID
WMW104-10GGOOW	0410GGOOW	127945
WMW104920GGOOW	04920GG0W	127946
WMW107-SOGGOOW	07SOGGOOW	127944
WMW109920GGOOW	0992OGGOW	127947
WMW109920GGOOWMS	0992MS	127947MS
WMW109920GGOOWMSD	0992MSD	127947MSD

1.) The instrument ID for Volatile Organic Analysis is MSD2. The blank associated with the samples were VBLK24.

2.) The Data Summary and Data Package was collated in accordance with CLP/SOW 2/88 sections B-9 to B-22.

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

Signature: David C. Schumacher
Name: David C. Schumacher
Date: 7-29-92
Title: Technical Director

ORGANIC DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY Ortek
LAB PROJECT NO. WMW-104
NO. OF SAMPLES/ MATRIX 4/water

SITE NLTSS
REVIEWER Dana Doerfler
REVIEWER'S NAME Dana Doerfler
COMPLETION DATE 8/13/92

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	HERB	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	(1)				
3. SURROGATES	✓				
4. INSTR. CALIBRATIONS	✓				
5. INTERNAL STDS.	✓				
6. GC/MS TUNING	✓				
7. MATRIX SPIKE/DUP	✓				
8. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) Acetone detected in blank; concentrations in samples WMW-104-100GGOW and WMW104920GGOOW should be considered estimated.

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

041OGGOOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-104

Matrix: (soil/water) WATER **Lab Sample ID:** 127945

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P09

Level: (low/med) LOW **Date Received:** 7/14/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

04920GGOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-104

Matrix: (soil/water) WATER **Lab Sample ID:** 127946

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P10

Level: (low/med) LOW **Date Received:** 7/14/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

07SOGGOOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-104

Matrix: (soil/water) WATER **Lab Sample ID:** 127944

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P08

Level: (low/med) LOW **Date Received:** 7/14/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	2	BJ
74-83-9	Bromomethane	6	BJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
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
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	1	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

09920GGOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-104

Matrix: (soil/water) WATER **Lab Sample ID:** 127947

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P11

Level: (low/med) LOW **Date Received:** 7/14/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0992MS

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-104

Matrix: (soil/water) WATER **Lab Sample ID:** 127947MS

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P12

Level: (low/med) LOW **Date Received:** 7/14/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	5	BJ
74-83-9	Bromomethane	11	B
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	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
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0992MSD

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-104

Matrix: (soil/water) WATER **Lab Sample ID:** 127947MSD

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7P13

Level: (low/med) LOW **Date Received:** 7/14/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	5	BJ
74-83-9	Bromomethane	9	BJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	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
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.:WMW-104

	EPA SAMPLE NO.	(TOL)#	(BFB)#	(DCE)#	OTHER	TOT OUT
01	VBLK24	100	98	107		
02	07SOGGOOW	95	92	97		
03	0410GGOOW	98	90	96		
04	0492OGGOW	99	88	99		
05	0992OGGOW	101	94	106		
06	0992MS	95	89	94		
07	0992MSD	94	96	97		
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30						

		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA 1/87 Rev.

3A
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114V SAS No.: SDG No.: WMW-104

Matrix Spike - EPA Sample No.: 09920GGOW

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMIT REC.
1,1-Dichloroethene	50	0	45	90	61-145
Trichloroethene	50	0	39	78	71-120
Benzene	50	0	43	86	76-127
Toluene	50	0	42	84	76-125
Chlorobenzene	50	0	44	88	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	46	91	1	14	61-145
Trichloroethene	50	42	83	6	14	71-120
Benzene	50	44	88	2	11	76-127
Toluene	50	43	85	1	13	76-125
Chlorobenzene	50	45	89	1	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:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-104

Lab File ID: B7PB2 Lab Sample ID: VBLK24

Date Analyzed: 07/25/92 Time Analyzed: 14:47

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

Instrument ID: MSD2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	07SOGGOOW	127944	B7P08	20:00
02	0410GGOOW	127945	B7P09	20:39
03	0492OGGOW	127946	B7P10	21:18
04	0992OGGOW	127947	B7P11	21:56
05	0992MS	127947MS	B7P12	22:35
06	0992MSD	127947MSD	B7P13	23:13
07				
08				
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COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK24

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW-104

Matrix: (soil/water) WATER **Lab Sample ID:** VBLK24

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7PB2

Level: (low/med) LOW **Date Received:** 7/14/92

% Moisture: not dec. **Date Analyzed:** 07/25/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-104

Lab File ID: B7PF1 BFB Injection Date: 07/25/92

Instrument ID: MSD2 BFB Injection Time: 12:34

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.2
75	30.0 - 60.0% of mass 95	47.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	68.4
175	5.0 - 9.0% of mass 174	5.6 (8.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	66.4 (97.1)1
177	5.0 - 9.0% of mass 176	4.4 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK24	VBLK24	B7PB2	07/25/92	14:47
02	07SOGGOOW	127944	B7P08	07/25/92	20:00
03	0410GGOOW	127945	B7P09	07/25/92	20:39
04	0492OGGOW	127946	B7P10	07/25/92	21:18
05	0992OGGOW	127947	B7P11	07/25/92	21:56
06	0992MS	127947MS	B7P12	07/25/92	22:35
07	0992MSD	127947MSD	B7P13	07/25/92	23:13
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6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW-104

Instument ID: MSD2 Calibration Date(s): 07/25/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = >B70I1 RRF50 = >B70I2
RRF100= >B70I3 RRF150= >B70I4 RRF200= >B70I5

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane	#2.078	1.953	1.806	2.032	1.501	1.874	12.4#
Bromomethane	1.351	1.123	1.048	1.228	.928	1.136	14.3
Vinyl Chloride	*2.269	2.121	1.892	2.157	1.556	1.999	14.1*
Chloroethane	1.196	1.089	.955	1.136	.813	1.038	14.8
Methylene Chloride	3.372	2.782	2.288	2.667	1.924	2.607	20.9
Acetone	1.008	.500	.333	.293	.239	.475	66.0
Carbon Disulfide	5.629	5.292	5.101	5.580	4.578	5.236	8.1
1,1-Dichloroethene	*1.835	1.603	1.551	1.301	1.342	1.526	14.1*
1,1-Dichloroethane	#3.474	3.098	2.761	2.483	2.310	2.825	16.6#
1,2-Dichloroethene (total)	.895	.806	.755	.615	.635	.741	15.8
Chloroform	*3.281	3.066	2.783	2.437	2.283	2.770	15.0*
1,2-Dichloroethane	1.754	1.723	1.551	1.353	1.287	1.534	13.7
2-Butanone	.017	.019	.015	.017	.017	.017	8.6
1,1,1-Trichloroethane	.477	.512	.421	.479	.462	.470	7.0
Carbon Tetrachloride	.404	.450	.363	.412	.412	.408	7.5
Vinyl Acetate	.221	.231	.153	.169	.190	.193	17.2
Bromodichloromethane	.507	.569	.468	.522	.523	.518	7.0
1,2-Dichloropropane	* .368	.408	.348	.399	.392	.383	6.4*
cis-1,3-Dichloropropene	.359	.382	.307	.363	.352	.353	7.8
Trichloroethene	.393	.415	.385	.424	.432	.410	4.9
Dibromochloromethane	.424	.480	.403	.482	.466	.451	7.9
1,1,2-Trichloroethane	.307	.323	.265	.308	.298	.300	7.2
Benzene	1.026	1.079	.987	1.127	1.100	1.064	5.3
trans-1,3-Dichloropropene	.462	.508	.431	.498	.488	.477	6.5
Bromoform	# .298	.339	.285	.366	.342	.326	10.2#
4-Methyl-2-Pentanone	.364	.315	.276	.261	.292	.302	13.3
2-Hexanone	.289	.222	.186	.186	.196	.216	20.0
Tetrachloroethene	.434	.407	.413	.410	.427	.418	2.7
1,1,2,2-Tetrachloroethane	# .520	.539	.453	.502	.517	.506	6.3#
Toluene	* .920	.864	.839	.871	.859	.871	3.4*
Chlorobenzene	#1.129	1.090	1.046	1.109	1.025	1.080	4.0#
Ethylbenzene	* .574	.548	.502	.552	.509	.537	5.6*
Styrene	1.173	1.223	1.123	1.304	1.064	1.177	7.8
Xylene (total)	.681	.690	.630	.720	.643	.673	5.4
Toluene-d8	1.389	1.228	1.220	1.260	1.151	1.250	7.0
Bromofluorobenzene	1.036	.946	.851	.949	.860	.929	8.1
1,2-Dichloroethane-d4	1.643	1.473	1.329	1.142	1.082	1.334	17.3

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW-104

Instument ID: MSD2 Calibration Date: 07/25/92 Time: 12:58

Lab File ID: B7PC1 Init. Calib. Date(s): 07/25/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	$\overline{RRF}$	RRF50	%D
Chloromethane	#1.874	1.878	.2 #
Bromomethane	1.136	1.233	8.5
Vinyl Chloride	*1.999	1.994	.2 *
Chloroethane	1.038	1.148	10.6
Methylene Chloride	2.607	2.715	4.1
Acetone	.475	.550	15.8
Carbon Disulfide	5.236	5.489	4.8
1,1-Dichloroethene	*1.526	1.755	15.0 *
1,1-Dichloroethane	#2.825	3.328	17.7 #
1,2-Dichloroethene (total)	.741	.901	21.5
Chloroform	*2.770	3.352	21.0 *
1,2-Dichloroethane	1.534	1.830	19.3
2-Butanone	.017	.020	17.7
1,1,1-Trichloroethane	.470	.526	11.8
Carbon Tetrachloride	.408	.441	8.0
Vinyl Acetate	.193	.202	4.5
Bromodichloromethane	.518	.581	12.1
1,2-Dichloropropane	* .383	.409	6.8 *
cis-1,3-Dichloropropene	.353	.388	9.8
Trichloroethene	.410	.428	4.3
Dibromochloromethane	.451	.477	5.8
1,1,2-Trichloroethane	.300	.321	7.0
Benzene	1.064	1.095	2.9
trans-1,3-Dichloropropene	.477	.532	11.5
Bromoform	# .326	.327	.4 #
4-Methyl-2-Pentanone	.302	.336	11.3
2-Hexanone	.216	.235	9.0
Tetrachloroethene	.418	.468	11.9
1,1,2,2-Tetrachloroethane	# .506	.552	8.9 #
Toluene	* .871	.940	7.9 *
Chlorobenzene	#1.080	1.159	7.2 #
Ethylbenzene	* .537	.568	5.7 *
Styrene	1.177	1.260	7.0
Xylene (total)	.673	.709	5.4
Toluene-d8	1.250	1.294	3.5
Bromofluorobenzene	.929	.918	1.1
1,2-Dichloroethane-d4	1.334	1.553	16.4

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW-104

Lab File ID (Standard): B7PC1 Date Analyzed: 07/25/92

Instrument ID: MSD2 Time Analyzed: 12:58

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	60347	10.98	300036	13.14	257553	17.93
	UPPER LIMIT	120694		600072		515106	
	LOWER LIMIT	30173		150018		128776	
	EPA SAMPLE NO.						
01	VBLK24	49843	10.97	257309	13.13	242846	17.93
02	07SOGGOOW	51041	10.98	246107	13.14	225983	17.94
03	0410GGOOW	52729	10.98	242893	13.14	227677	17.94
04	0492OGGOW	61327	10.98	286198	13.14	246492	17.94
05	0992OGGOW	42633	10.97	236406	13.14	220432	17.93
06	0992MS	31425	10.98	188128	13.15	193001	17.93
07	0992MSD	33179	10.97	184625	13.13	198101	17.93
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII VOA 1/87 Rev.

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

CASE NARRATIVE

Lab Name: ORTEK
Case No.: 89MC114V
SDG No. WMW-103

Contract:
SAS No.:

VOLATILE ORGANIC ANALYSIS

Sample No.	EPA Sample No.	Lab Sample ID
WMW103910GGOOW	03910GGOW	127967
WMW103910GGOWM	03910GGWM	127968
WMW103910GGOWX	03910GGWX	127969
WMW108-DOGGOWD	08DOGGOWD	127963
WMW108-DOGGOOW	08DOGGOOW	127964
WMW109-10GGOOW	0910GGOOW	127965
WMW110-10GGOOW	1010GGOOW	127970
WMW110-10GGOOWMS	1010GMS	127970MS
WMW110-10GGOOWMSD	1010GMSD	127970MSD
WMW114-10GGOOW	1410GGOOW	127966
WMW114-10GGOTB	1410GGOTB	127971

1.) The instrument ID for Volatile Organic Analysis is MSD2. The blanks associated with the samples were VBLK26 and VBLK33.

2.) Samples WMW108-DOGGOWD, WMW114-10GGOOW, and WMW114-10GGOTB were analyzed outside the hold time. The first analysis of these samples were within the hold time but the surrogate recoveries did not pass.

3.) The Data Summary and Data Package was collated in accordance with CLP/SOW 2/88 sections B-9 to B-22.

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

Signature: David L. Schumacher
Name: David L. Schumacher
Date: 8-4-92
Title: Technical Director

ORGANIC DATA ASSESSMENT

PROJECT NO. 89MC14V
LABORATORY Ortek
LAB PROJECT NO. WMW-103
NO. OF SAMPLES/ MATRIX 9/water

SITE NLTSS
REVIEWER Dana Doeffler
REVIEWER'S NAME Dana Doeffler
COMPLETION DATE 8/13/92

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	HERB	OTHER
1. HOLDING TIMES	(1)				
2. BLANKS	(2)				
3. SURROGATES	(3)				
4. INSTR. CALIBRATIONS	✓				
5. INTERNAL STDS.	✓				
6. GC/MS TUNING	✓				
7. MATRIX SPIKE/DUP	(4)				
8. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) Samples WMW108-DOGGOWD, WMW114-10GGOW, WMW114-10GGOTB reanalyzed outside of hold time due to low surrogate recovery. Data accepted without qualification. (2) Acetone detected in blank; Data for samples WMW114-10GGOW and WMW114-10GGOTB (acetone) qualified as estimated. (3) Surrogate recovery low for sample WMW108-DOGGOOW; data should be qualified as estimated.

COMMENTS: (4) recovery outside limits for benzene; all other QC in control so data not affected.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

03910GGOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127967

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7R06

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/28/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	2	BJ
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	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

03910GGWM

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127968

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7R07

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/28/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	2	BJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	J
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
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

03910GGWX

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127969

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7R08

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/28/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	2	BJ
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	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

FINAL REPORT
APPENDIX B

160

NL/TARACORP SUPERFUND SITE GRANITE CITY, ILLINOIS

Prepared for

U.S. Envrionmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

March, 1993

U.S. Department of the Army
Corps of Engineers, Omaha District
Omaha, Nebraska

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street · P.O. Box 12435 · Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

CASE NARRATIVE

Lab Name: ORTEK
Case No.: 89MC1
SDG No. 1041W

Contract:
SAS No.:
Sample Analysis Price:

SEMIVOLATILE ORGANIC ANALYSIS

Sample No.	EPA Sample No.	Lab Sample ID
1041W	1041W	127945
10492W	10492W	127946
107SW	107SW	127944
10992W	10992W	127947

SEMIVOLATILE ORGANIC ANALYSIS

1.) The instrument ID for Semivolatile Organic Analysis is HPMSD-D. The blank associated with the samples was SBLK06 and did not contain any detectable semivolatile organic compounds. The analysis was perfomed on an HPMSD on a DB-5MS capillary column.

2.) The original extractions performed on the 17th of July were out of control because the blank did not pass criteria for Terpheny d-14 thus all samples were re-extracted.

4.) Because of quantitation problems in the analysis of SBLK05 which were inherant in the data processing system and could not be rectified, the blank extracted 07/20/92 was re-run as SBLK06 and this result was used as the blank for all data generation.

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

Signature: [signature]
Name: David P. Schumacher
Date: 7-30-92
Title: Technical Director

ORGANIC DATA ASSESSMENT

PROJECT NO. 89MC14V
LABORATORY Ortek
LAB PROJECT NO. 1041W
NO. OF SAMPLES/ MATRIX 4/water

SITE NLTSS
REVIEWER Dana Doerfler
REVIEWER'S NAME Dana Doerfler
COMPLETION DATE 8/13/92

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	HERB	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. SURROGATES		✓			
4. INSTR. CALIBRATIONS		✓			
5. INTERNAL STDS.		✓			
6. GC/MS TUNING		✓			
7. MATRIX SPIKE/DUP		✓			
8. OVERALL ASSESSMENT		O			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1041W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 127945

Sample wt/vol: 900 (g/ml) ML Lab File ID: >D7M04

Level: (low/med) LOW Date Received: 07/15/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	55	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	55	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	55	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

7-30-92

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1041W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 127945

Sample wt/vol: 900 (g/ml) ML Lab File ID: >D7M04

Level: (low/med) LOW Date Received: 07/15/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	55	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	55	U
100-02-7	4-Nitrophenol	55	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	1	J
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	55	U
534-52-1	4,6-Dinitro-2-methylphenol	55	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	55	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	2	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

08DOGGOWD

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127963

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7T07

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/29/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	1	BJ
74-83-9	Bromomethane	4	BJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	8	BJ
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

08DOGGOOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127964

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7R03

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/27/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	1	BJ
74-83-9	Bromomethane	3	BJ
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	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

091OGGOOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127965

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7R04

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/27/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	1	BJ
74-83-9	Bromomethane	2	BJ
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	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1010GGOOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127970

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7R09

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/28/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)		Q
74-87-3	Chloromethane	10	J	U
74-83-9	Bromomethane	1		BJ
75-01-4	Vinyl Chloride	10		U
75-00-3	Chloroethane	10		U
75-09-2	Methylene Chloride	1		J
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
540-59-0	1,2-Dichloroethene (total)	5		U
67-66-3	Chloroform	5		U
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
78-87-5	1,2-Dichloropropane	5		U
10061-01-5	cis-1,3-Dichloropropene	5		U
79-01-6	Trichloroethene	5		U
124-48-1	Dibromochloromethane	5		U
79-00-5	1,1,2-Trichloroethane	5		U
71-43-2	Benzene	5		U
10061-02-6	trans-1,3-Dichloropropene	5		U
75-25-2	Bromoform	5		U
108-10-1	4-Methyl-2-pentanone	10		U
591-78-6	2-Hexanone	10		U
127-18-4	Tetrachloroethene	5		U
79-34-5	1,1,2,2-Tetrachloroethane	5		U
108-88-3	Toluene	5		U
108-90-7	Chlorobenzene	5		U
100-41-4	Ethylbenzene	5		U
100-42-5	Styrene	5		U
1330-02-7	Xylene (total)	5		U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

141OGGOOW

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127966

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7T08

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/29/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)		Q
74-87-3	Chloromethane	4		BJ
74-83-9	Bromomethane	10		BJ
75-01-4	Vinyl Chloride	10		U
75-00-3	Chloroethane	10		U
75-09-2	Methylene Chloride	6		B
67-64-1	Acetone	22	J	B
75-15-0	Carbon Disulfide	5		U
75-35-4	1,1-Dichloroethene	5		U
75-34-3	1,1-Dichloroethane	5		U
540-59-0	1,2-Dichloroethene (total)	5		U
67-66-3	Chloroform	5		U
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
78-87-5	1,2-Dichloropropane	5		U
10061-01-5	cis-1,3-Dichloropropene	5		U
79-01-6	Trichloroethene	5		U
124-48-1	Dibromochloromethane	5		U
79-00-5	1,1,2-Trichloroethane	5		U
71-43-2	Benzene	5		U
10061-02-6	trans-1,3-Dichloropropene	5		U
75-25-2	Bromoform	5		U
108-10-1	4-Methyl-2-pentanone	10		U
591-78-6	2-Hexanone	10		U
127-18-4	Tetrachloroethene	5		U
79-34-5	1,1,2,2-Tetrachloroethane	5		U
108-88-3	Toluene	5		U
108-90-7	Chlorobenzene	5		U
100-41-4	Ethylbenzene	5		U
100-42-5	Styrene	5		U
1330-02-7	Xylene (total)	5		U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1410GGOTB

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127971

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7T09

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/29/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1010GMS

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127970MS

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7R10

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/28/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	2	BJ
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	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1010GMSD

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** 127970MSD

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7R11

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/28/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	1	BJ
74-83-9	Bromomethane	3	BJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
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
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.:WMW103

	EPA SAMPLE NO.	(TOL)#	(BFB)#	(DCE)#	OTHER	TOT OUT
01	VBLK26	100	100	90		
02	1410GGOTB	6 *	6 *	6 *		3
03	08DOGGOWD	91	78 *	111		1
04	08DOGGOOW	105	87	112		
05	0910GGOOW	107	90	114		
06	1410GGOOW	110	85 *	114		1
07	03910GGOW	106	89	113		
08	03910GGWM	109	87	101		
09	03910GGWX	110	88	97		
10	1010GGOOW	110	85 *	101		1
11	1010GMS	107	85 *	95		1
12	1010GMSD	107	82 *	97		1
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30						

		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA 1/87 Rev.

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.:WMW103

	EPA SAMPLE NO.	(TOL)#	(BFB)#	(DCE)#	OTHER	TOT OUT
01	VBLK33	96	97	77		
02	08DOGGOWD	102	93	105		
03	1410GGOOW	99	97	76		
04	1410GGOTB	102	96	83		
05						
06						
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		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA 1/87 Rev.

3A
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114V SAS No.: SDG No.: WMW103

Matrix Spike - EPA Sample No.: 1010GGOOW

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMIT REC.
1,1-Dichloroethene	50	0	50	99	61-145
Trichloroethene	50	0	37	74	71-120
Benzene	50	0	37	74 *	76-127
Toluene	50	0	42	84	76-125
Chlorobenzene	50	0	42	84	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	55	110	10	14	61-145
Trichloroethene	50	38	75	1	14	71-120
Benzene	50	41	82	10	11	76-127
Toluene	50	46	92	9	13	76-125
Chlorobenzene	50	46	91	8	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: 1 out of 10 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW103

Lab File ID: B7RB3 Lab Sample ID: VBLK26

Date Analyzed: 07/27/92 Time Analyzed: 20:39

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

Instrument ID: MSD2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	1410GGOTB	127971	B7R01	21:19
02	08DOGGOWD	127963	B7R02	21:59
03	08DOGGOOW	127964	B7R03	22:38
04	0910GGOOW	127965	B7R04	23:17
05	1410GGOOW	127966	B7R05	23:55
06	03910GGOW	127967	B7R06	00:34
07	03910GGWM	127968	B7R07	01:12
08	03910GGWX	127969	B7R08	01:51
09	1010GGOOW	127970	B7R09	02:30
10	1010GMS	127970MS	B7R10	03:08
11	1010GMSD	127970MSD	B7R11	03:47
12				
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COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK26

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** VBLK26

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7RB3

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/27/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

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

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW103

Lab File ID: B7TB2 Lab Sample ID: VBLK33

Date Analyzed: 07/29/92 Time Analyzed: 09:50

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

Instrument ID: MSD2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	08DOGGOWD	127963	B7T07	14:03
02	1410GGOOW	127966	B7T08	14:52
03	1410GGOTB	127971	B7T09	15:42
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COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK33

Lab Name: ORTEK **Contract:**

Lab Code: ORTEK **Case No.:** 89MC114 **SAS No.:** **SDG No.:** WMW103

Matrix: (soil/water) WATER **Lab Sample ID:** VBLK33

Sample wt/vol: 5 **(g/mL)** mL **Lab File ID:** B7TB2

Level: (low/med) LOW **Date Received:** 7/15/92

% Moisture: not dec. **Date Analyzed:** 07/29/92

Column: (pack/cap) CAP **Dilution Factor:** 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	(ug/L or ug/Kg)	Q
74-87-3	Chloromethane	4	J
74-83-9	Bromomethane	8	J
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	16	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
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
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-02-7	Xylene (total)	5	U

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW103

Lab File ID: B7RF1 BFB Injection Date: 07/27/92

Instrument ID: MSD2 BFB Injection Time: 17:19

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.7
75	30.0 - 60.0% of mass 95	47.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	69.1
175	5.0 - 9.0% of mass 174	3.7 (5.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	67.4 (97.6)1
177	5.0 - 9.0% of mass 176	3.8 (5.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK26	VBLK26	B7RB3	07/27/92	20:39
02	1410GGOTB	127971	B7R01	07/27/92	21:19
03	08DOGGOWD	127963	B7R02	07/27/92	21:59
04	08DOGGOOW	127964	B7R03	07/27/92	22:38
05	0910GGOOW	127965	B7R04	07/27/92	23:17
06	1410GGOOW	127966	B7R05	07/27/92	23:55
07	03910GGOW	127967	B7R06	07/28/92	00:34
08	03910GGWM	127968	B7R07	07/28/92	01:12
09	03910GGWX	127969	B7R08	07/28/92	01:51
10	1010GGOOW	127970	B7R09	07/28/92	02:30
11	1010GMS	127970MS	B7R10	07/28/92	03:08
12	1010GMSD	127970MSD	B7R11	07/28/92	03:47
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5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW103

Lab File ID: B7TF1 BFB Injection Date: 07/29/92

Instrument ID: MSD2 BFB Injection Time: 07:54

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.6
75	30.0 - 60.0% of mass 95	49.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	73.3
175	5.0 - 9.0% of mass 174	5.3 (7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	70.7 (96.3)1
177	5.0 - 9.0% of mass 176	4.8 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK33	VBLK33	B7TB2	07/29/92	09:50
02	08DOGGOWD	127963	B7T07	07/29/92	14:03
03	1410GGOOW	127966	B7T08	07/29/92	14:52
04	1410GGOTB	127971	B7T09	07/29/92	15:42
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6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW103

Instument ID: MSD2 Calibration Date(s): 07/25/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = >B7OI1 RRF50 = >B7OI2
RRF100= >B7OI3 RRF150= >B7OI4 RRF200= >B7OI5

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane	#2.078	1.953	1.806	2.032	1.501	1.874	12.4
Bromomethane	1.351	1.123	1.048	1.228	.928	1.136	14.[illegible]
Vinyl Chloride	*2.269	2.121	1.892	2.157	1.556	1.999	14.1*
Chloroethane	1.196	1.089	.955	1.136	.813	1.038	14.8
Methylene Chloride	3.372	2.782	2.288	2.667	1.924	2.607	20.9
Acetone	1.008	.500	.333	.293	.239	.475	66.0
Carbon Disulfide	5.629	5.292	5.101	5.580	4.578	5.236	8.1
1,1-Dichloroethene	*1.835	1.603	1.551	1.301	1.342	1.526	14.1*
1,1-Dichloroethane	#3.[illegible]74	3.098	2.761	2.483	2.310	2.825	16.6#
1,2-Dichloroethene (total)	.895	.806	.755	.615	.635	.741	15.8
Chloroform	*3.281	3.066	2.783	2.437	2.283	2.770	15.0*
1,2-Dichloroethane	1.754	1.723	1.551	1.353	1.287	1.534	13.7
2-Butanone	.017	.019	.015	.017	.017	.017	8.6
1,1,1-Trichloroethane	.477	.512	.421	.479	.462	.470	7.0
Carbon Tetrachloride	.404	.450	.363	.412	.412	.408	7.5
Vinyl Acetate	.221	.231	.153	.169	.190	.193	17.2
Bromodichloromethane	.507	.569	.468	.522	.523	.518	7.0
1,2-Dichloropropane	* .368	.408	.348	.399	.392	.383	6.[illegible]
cis-1,3-Dichloropropene	.359	.382	.307	.363	.352	.353	7.[illegible]
Trichloroethene	.393	.415	.385	.424	.432	.410	4.9
Dibromochloromethane	.424	.480	.403	.482	.466	.451	7.9
1,1,2-Trichloroethane	.307	.323	.265	.308	.298	.300	7.2
Benzene	1.026	1.079	.987	1.127	1.100	1.064	5.3
trans-1,3-Dichloropropene	.462	.508	.431	.498	.488	.477	6.5
Bromoform	# .298	.339	.285	.366	.342	.326	10.2#
4-Methyl-2-Pentanone	.364	.315	.276	.261	.292	.302	13.3
2-Hexanone	.289	.222	.186	.186	.196	.216	20.0
Tetrachloroethene	.434	.407	.413	.410	.427	.418	2.7
1,1,2,2-Tetrachloroethane	# .520	.539	.453	.502	.517	.506	6.3#
Toluene	* .920	.864	.839	.871	.859	.871	3.4*
Chlorobenzene	#1.129	1.090	1.046	1.109	1.025	1.080	4.0#
Ethylbenzene	* .574	.548	.502	.552	.509	.537	5.6*
Styrene	1.173	1.223	1.123	1.304	1.064	1.177	7.8
Xylene (total)	.681	.690	.630	.720	.643	.673	5.4
Toluene-d8	1.389	1.228	1.220	1.260	1.151	1.250	7.0
Bromofluorobenzene	1.036	.946	.851	.949	.860	.929	8.1
1,2-Dichloroethane-d4	1.643	1.473	1.329	1.142	1.082	1.334	17.3

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW103

Instument ID: MSD2 Calibration Date: 07/27/92 Time: 18:48

Lab File ID: B7RC3 Init. Calib. Date(s): 07/25/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	$\overline{RRF}$	RRF50	%D
Chloromethane	#1.874	2.031	8.4 #
Bromomethane	1.136	1.109	2.3
Vinyl Chloride	*1.999	1.940	2.9 *
Chloroethane	1.038	1.266	21.9
Methylene Chloride	2.607	3.146	20.6
Acetone	.475	.611	28.7
Carbon Disulfide	5.236	5.596	6.8
1,1-Dichloroethene	*1.526	1.228	19.5 *
1,1-Dichloroethane	#2.825	2.189	22.5 #
1,2-Dichloroethene (total)	.741	.595	19.7
Chloroform	*2.770	2.154	22.2 *
1,2-Dichloroethane	1.534	1.257	18.0
2-Butanone	.017	.023	34.4
1,1,1-Trichloroethane	.470	.449	4.4
Carbon Tetrachloride	.408	.401	1.8
Vinyl Acetate	.193	.230	19.3
Bromodichloromethane	.518	.517	.1
1,2-Dichloropropane	* .383	.371	3.0 *
cis-1,3-Dichloropropene	.353	.371	5.0
Trichloroethene	.410	.395	3.5
Dibromochloromethane	.451	.459	1.8
1,1,2-Trichloroethane	.300	.330	9.7
Benzene	1.064	1.171	10.0
trans-1,3-Dichloropropene	.477	.468	2.0
Bromoform	# .326	.346	6.1 #
4-Methyl-2-Pentanone	.302	.297	1.5
2-Hexanone	.216	.238	10.3
Tetrachloroethene	.418	.402	3.8
1,1,2,2-Tetrachloroethane	# .506	.588	16.0 #
Toluene	* .871	.880	1.0 *
Chlorobenzene	#1.080	1.132	4.8 #
Ethylbenzene	* .537	.567	5.5 *
Styrene	1.177	1.320	12.1
Xylene (total)	.673	.756	12.3
Toluene-d8	1.250	1.175	5.9
Bromofluorobenzene	.929	.991	6.6
1,2-Dichloroethane-d4	1.334	1.095	17.8

FORM VII VOA

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC114VSAS No.: SDG No.:WMW103

Instument ID: MSD2 Calibration Date: 07/29/92 Time: 08:17

Lab File ID: B7TC1 Init. Calib. Date(s): 07/25/92

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	$\overline{RRF}$	RRF50	%D
Chloromethane	#1.874	1.827	2.5 #
Bromomethane	1.136	1.329	17.0
Vinyl Chloride	*1.999	2.280	14.0 *
Chloroethane	1.038	1.412	36.0
Methylene Chloride	2.607	3.713	42.4
Acetone	.475	.700	47.3
Carbon Disulfide	5.236	6.118	16.8
1,1-Dichloroethene	*1.526	1.477	3.2 *
1,1-Dichloroethane	#2.825	2.708	4.1 #
1,2-Dichloroethene (total)	.741	.734	1.01
Chloroform	*2.770	2.813	1.5 *
1,2-Dichloroethane	1.534	1.507	1.7
2-Butanone	.017	.016	5.5
1,1,1-Trichloroethane	.470	.390	17.0
Carbon Tetrachloride	.408	.372	8.8
Vinyl Acetate	.193	.176	8.9
Bromodichloromethane	.518	.444	14.2
1,2-Dichloropropane	* .383	.302	21.0 *
cis-1,3-Dichloropropene	.353	.301	14.7
Trichloroethene	.410	.319	22.1
Dibromochloromethane	.451	.385	14.5
1,1,2-Trichloroethane	.300	.249	17.0
Benzene	1.064	.857	19.4
trans-1,3-Dichloropropene	.477	.405	15.2
Bromoform	# .326	.278	14.6 #
4-Methyl-2-Pentanone	.302	.225	25.2
2-Hexanone	.216	.181	16.1
Tetrachloroethene	.418	.367	12.2
1,1,2,2-Tetrachloroethane	# .506	.457	9.7 #
Toluene	* .871	.763	12.3 *
Chlorobenzene	#1.080	.954	11.6 #
Ethylbenzene	* .537	.482	10.2 *
Styrene	1.177	1.139	3.2
Xylene (total)	.673	.640	4.8
Toluene-d8	1.250	1.245	.3
Bromofluorobenzene	.929	.970	4.5
1,2-Dichloroethane-d4	1.334	1.478	10.8

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW103

Lab File ID (Standard): B7RC3 Date Analyzed: 07/27/92

Instrument ID: MSD2 Time Analyzed: 18:48

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	40848	10.99	142865	13.14	156560	17.93
	UPPER LIMIT	81696		285730		313120	
	LOWER LIMIT	20424		71432		78280	
	EPA SAMPLE NO.						
01	VBLK26	36212	10.97	95781	13.13	119805	17.93
02	1410GGOTB	40250	10.98	161730	13.14	161582	17.93
03	08DOGGOWD	35208	10.98	183105	13.14	168113	17.93
04	08DOGGOOW	38518	10.98	176518	13.14	163750	17.93
05	0910GGOOW	34287	10.97	138199	13.13	144421	17.93
06	1410GGOOW	46107	10.98	229184	13.14	196886	17.93
07	03910GGOW	34513	10.97	146641	13.14	146845	17.92
08	03910GGWM	46699	10.98	173514	13.13	167792	17.93
09	03910GGWX	38376	10.98	146141	13.13	147309	17.93
10	1010GGOOW	54127	10.98	192073	13.14	177562	17.93
11	1010GMS	48285	10.98	189234	13.15	182867	17.93
12	1010GMSD	45254	10.98	221846	13.14	196936	17.93
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Ortek Contract:

Lab Code: Ortek Case no.: 89MC114VSAS No.: SDG No.: WMW103

Lab File ID (Standard): B7TC1 Date Analyzed: 07/29/92

Instrument ID: MSD2 Time Analyzed: 08:17

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	39173	10.97	208757	13.13	193140	17.93
	UPPER LIMIT	78346		417514		386280	
	LOWER LIMIT	19586		104378		96570	
	EPA SAMPLE NO.						
01	VBLK33	29961	10.97	131323	13.13	149088	17.93
02	08DOGGOWD	32505	10.97	212449	13.14	191283	17.93
03	1410GGOOW	21881	10.97	128113	13.14	146896	17.93
04	1410GGOTB	41714	10.96	173294	13.14	174858	17.93
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII VOA 1/87 Rev.

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

CASE NARRATIVE

Lab Name: ORTEK
Case No.: 89MC1
SDG No. 1011W

Contract:
SAS No.:
Sample Analysis Price:

SEMIVOLATILE ORGANIC ANALYSIS

Sample No.	EPA Sample No.	Lab Sample ID
1011W	1011W	127902
1011WRE	1011WRE	127902RE
106DW	106DW	127897
107DW	107DW	127898
11192W	11192W	127900
11192WD	11192WD	127901
112WB	112WB	127899

SEMIVOLATILE ORGANIC ANALYSIS

1.) The instrument ID for Semivolatile Organic Analysis is HPMSD-D. The blanks associated with the samples were SBLK04 and SBLK05 and did not contain any detectable semivolatile organic compounds. The analysis was perfomed on an HPMSD on a DB-5MS capillary column.

2.) The original extractions performed on the 15th of July were out of control because the blank did not pass criteria for Terpheny d-14 thus all samples were re-extracted.

3.) The acid fraction surrogates for sample 1011W were out of control as they were low or non-existant in the re-extraction. Because insufficient sample existed for another re-extract the out of control sample extracted on 07/15/92 was used as the first extraction and the sample extracted on 07/20/92 became the re-extract. This was done to confirm that the surrogate loss was due to matrix effect as the out of control blank was acceptable for its acid surrogate recovery. All forms were changed to reflect this case.

4.) Because of quantitation problems in the analysis of SBLK05 which were inherant in the data processing system and could not be rectified, the blank extracted 07/20/92 was re-run as SBLK06 and this result was used as the blank for all data generation.

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

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

Signature: David L. Schumacher Name: David L. Schumacher

Date: 7-30-92 Title: Technical Director

ORGANIC DATA ASSESSMENT

PROJECT NO. 89HC14V
LABORATORY Ortek
LAB PROJECT NO. 1011W
NO. OF SAMPLES/ MATRIX 6/Water

SITE NLTSS
REVIEWER Dana Doerfler
REVIEWER'S NAME Dana Doerfler
COMPLETION DATE 8/13/92

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	HERB	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. SURROGATES		(1)			
4. INSTR. CALIBRATIONS		✓			
5. INTERNAL STDS.		✓			
6. GC/MS TUNING		✓			
7. MATRIX SPIKE/DUP		✓			
8. OVERALL ASSESSMENT		O/Z*			

*see note (1) below.

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) Surrogate recoveries out of control for sample 1011W. Reanalysis confirmed matrix effects. Data qualified as unusable (R).

COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1011W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127902

Sample wt/vol: 870 (g/ml) ML Lab File ID: >D7G09

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/15/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/16/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	12 R	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	58	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	58	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	58	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1011W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127902

Sample wt/vol: 870 (g/ml) ML Lab File ID: >D7G09

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/15/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/16/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	58	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	58	U
100-02-7	4-Nitrophenol	58	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	58	U
534-52-1	4,6-Dinitro-2-methylphenol	58	U
86-30-6	N-Nitrosodiphenylamine	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	58	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-butylphthalate	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	23	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	Bis(2-Ethylhexyl)phthalate	4	BJ
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1011WRE DAC 7-30-92

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127902RE 7-30-92

Sample wt/vol: 925 (g/ml) ML Lab File ID: >D7M02

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	54	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	54	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	54	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1011WRE BAC 7-30-92

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: B9MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127902RE BAC 7-30-92

Sample wt/vol: 925 (g/ml) ML Lab File ID: >D7M02

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	54	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	54	U
100-02-7	4-Nitrophenol	54	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	54	U
534-52-1	4,6-Dinitro-2-methylphenol	54	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	54	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	9	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

106DW

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127897

Sample wt/vol: 890 (g/ml) ML Lab File ID: >D7L04

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	56	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	56	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	56	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

106DW

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127897

Sample wt/vol: 890 (g/ml) ML Lab File ID: >D7L04

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	56	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	56	U
100-02-7	4-Nitrophenol	56	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	56	U
534-52-1	4,6-Dinitro-2-methylphenol	56	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	56	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	2	J
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	2	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

107DW

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127898

Sample wt/vol: 915 (g/ml) ML Lab File ID: >D7L05

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	54	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	54	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	54	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

107DW

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127898

Sample wt/vol: 915 (g/ml) ML Lab File ID: >D7L05

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	54	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	54	U
100-02-7	4-Nitrophenol	54	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	54	U
534-52-1	4,6-Dinitro-2-methylphenol	54	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	54	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11192W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127900

Sample wt/vol: 870 (g/ml) ML Lab File ID: >D7L07

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	58	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	58	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	58	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11192W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127900

Sample wt/vol: 870 (g/ml) ML Lab File ID: >D7L07

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	58	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	58	U
100-02-7	4-Nitrophenol	58	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	58	U
534-52-1	4,6-Dinitro-2-methylphenol	58	U
86-30-6	N-Nitrosodiphenylamine	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	58	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	23	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	Bis(2-Ethylhexyl)phthalate	51	B
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11192WD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127901

Sample wt/vol: 870 (g/ml) ML Lab File ID: >D7L08

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	58	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	58	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	58	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11192WD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127901

Sample wt/vol: 870 (g/ml) ML Lab File ID: >D7L08

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	58	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	58	U
100-02-7	4-Nitrophenol	58	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	58	U
534-52-1	4,6-Dinitro-2-methylphenol	58	U
86-30-6	N-Nitrosodiphenylamine	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	58	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	23	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	Bis(2-Ethylhexyl)phthalate	37	B
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1121WB

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127899

Sample wt/vol: 890 (g/ml) ML Lab File ID: >D7L06

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	56	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	56	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	56	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1121WB

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 127899

Sample wt/vol: 890 (g/ml) ML Lab File ID: >D7L06

Level: (low/med) LOW Date Received: 07/14/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	56	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	56	U
100-02-7	4-Nitrophenol	56	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	56	U
534-52-1	4,6-Dinitro-2-methylphenol	56	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	56	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MS

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L02

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MS

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L02

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	5	BJ
117-84-0	Di-n-octylphthalate	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

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MSD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L03

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MSD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L03

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	SBLK04	68	72	24 *	49	61	69		1
02	1011W	67	72	24 *	0	3 *	13		2
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	SBLK05MS	68	81	104	29	47	78		0
02	SBLK05MSD	70	85	109	30	47	79		0
03	106DW	60	79	102	27	36	58		0
04	107DW	62	83	104	30	43	72		0
05	1121WB	64	84	109	32	49	77		0
06	11192W	60	79	105	11	29	47		0
07	11192WD	60	78	101	19	28	40		0
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	SBLK06	66	79	107	31	46	66		0
02	1011WRE DAC 7-30-14	54	69	95	0	0	4 *		1
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix Spike - EPA Sample No.: SBLK06

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	100	0	39	39	12- 89
2-Chlorophenol	100	0	79	79	27-123
1,4-Dichlorobenzene	50	0	41	83	36- 97
N-Nitroso-di-n-propylam	50	0	48	96	41-116
1,2,4-Trichlorobenzene	50	0	43	85	39- 98
4-Chloro-3-methylphenol	100	0	86	86	23- 97
Acenaphthene	50	0	47	95	46-118
4-Nitrophenol	100	0	39	39	10- 80
2,4-Dinitrotoluene	50	0	42	84	24- 96
Pentachlorophenol	100	0	61	61	9-103
Pyrene	50	0	42	84	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	100	39	39	1	42	12- 89
2-Chlorophenol	100	79	79	0	40	27-123
1,4-Dichlorobenzene	50	42	84	2	28	36- 97
N-Nitroso-di-n-propylam	50	47	94	2	38	41-116
1,2,4-Trichlorobenzene	50	44	88	3	28	39- 98
4-Chloro-3-methylphenol	100	86	86	0	42	23- 97
Acenaphthene	50	49	98	4	31	46-118
4-Nitrophenol	100	40	40	2	50	10- 80
2,4-Dinitrotoluene	50	43	86	2	38	24- 96
Pentachlorophenol	100	65	65	6	50	9-103
Pyrene	50	43	85	2	31	26-127

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:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID: >D7G01 Lab Sample ID: 0715BLK

Date Extracted: 07/15/92 Extraction:(Sepf/Cont/Sonc) SEPF

Date Analyzed: 07/16/92 Time Analyzed: 08:51

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

Instrument ID: HPMSD-D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	1011W	127902	>D7G09	07/16/92
3				
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COMMENTS: _____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK04

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 0715BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7G01

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/15/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/16/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK04

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 0715BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7G01

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/15/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/16/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-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	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	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

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID: >D7M01 Lab Sample ID: 0720BLK

Date Extracted: 07/20/92 Extraction:(Sepf/Cont/Sonc) SEPF

Date Analyzed: 07/22/92 Time Analyzed: 10:37

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

Instrument ID: HPMSD-D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	SBLK05MS	0720BS	>D7L02	07/21/92
2	SBLK05MSD	0720BSD	>D7L03	07/21/92
3	106DW	127897	>D7L04	07/21/92
4	107DW	127898	>D7L05	07/21/92
5	1121WB	127899	>D7L06	07/21/92
6	11192W	127900	>D7L07	07/21/92
7	11192WD	127901	>D7L08	07/21/92
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COMMENTS: _____

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID: >D7M01 Lab Sample ID: 0720BLK

Date Extracted: 07/20/92 Extraction:(Sepf/Cont/Sonc) SEPF

Date Analyzed: 07/22/92 Time Analyzed: 10:37

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

Instrument ID: HPMSDD

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	1011WRE BAC 7-30-92	127902	>D7M09-2 BAC 7-27-92	07/22/92
3				
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COMMENTS: _____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK06

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 0720BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7M01

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK06

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Matrix: (soil/water) WATER Lab Sample ID: 0720BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7M01

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-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	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	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

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID: >D5SD1 DFTPP Injection Date: 5/28/92

Instrument ID: HPMSD-D DFTPP Injection Time: 8:38

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	75.1
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	50.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.4
275	10.0 - 30.0% of mass 198	18.2
365	Greater than 1.00% of mass 198	1.7
441	Present, but less than mass 443	10.6
442	Greater than 40.0% of mass 198	74.3
443	17.0 - 23.0% of mass 442	13.8 (18.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	160UG/MLBNA	>D5SI5	05/28/92	08:57
02	SSTD120	120UG/MLBNA	>D5SI4	05/28/92	12:42
03	SSTD080	80UG/MLBNA	>D5SI3	05/28/92	11:53
04	SSTD050	50UG/MLBNA	>D5SI2	05/28/92	11:03
05	SSTD020	20UG/MLBNA	>D5SI1	05/28/92	10:13
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID: >D7GD1 DFTPP Injection Date: 7/16/92

Instrument ID: HPMSD-D DFTPP Injection Time: 6:59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	51.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.0
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	43.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.8
275	10.0 - 30.0% of mass 198	19.1
365	Greater than 1.00% of mass 198	1.5
441	Present, but less than mass 443	8.8
442	Greater than 40.0% of mass 198	57.1
443	17.0 - 23.0% of mass 442	10.8 (18.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50CCCBNA	50CCCBNA	>D7GC1	07/16/92	07:19
02	SBLK04	0715BLK	>D7G01	07/16/92	08:51
03	1011W	127902	>D7G09	07/16/92	15:33
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID: >D7LD1 DFTPP Injection Date: 7/21/92

Instrument ID: HPMSD-D DFTPP Injection Time: 7:44

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	53.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.8
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	45.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.2
275	10.0 - 30.0% of mass 198	17.9
365	Greater than 1.00% of mass 198	1.5
441	Present, but less than mass 443	7.9
442	Greater than 40.0% of mass 198	56.5
443	17.0 - 23.0% of mass 442	10.5 (18.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50CCCBNA	50CCCBNA	>D7LC1	07/21/92	08:03
02	SBLK05MS	0720BS	>D7L02	07/21/92	09:44
03	SBLK05MSD	0720BSD	>D7L03	07/21/92	10:34
04	106DW	127897	>D7L04	07/21/92	11:24
05	107DW	127898	>D7L05	07/21/92	12:14
06	1121WB	127899	>D7L06	07/21/92	13:04
07	11192W	127900	>D7L07	07/21/92	13:54
08	11192WD	127901	>D7L08	07/21/92	15:09
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID: >D7MD1 DFTPP Injection Date: 7/22/92

Instrument ID: HPMSDD DFTPP Injection Time: 9:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	50.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.7
70	Less then 2.0% of mass 69	.3 (.5)1
127	40.0 - 60.0% of mass 198	42.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.2
275	10.0 - 30.0% of mass 198	18.7
365	Greater than 1.00% of mass 198	1.7
441	Present, but less than mass 443	8.7
442	Greater than 40.0% of mass 198	62.3
443	17.0 - 23.0% of mass 442	11.6 (18.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50CCCBNA	50CCCBNA	>D7MC1	07/22/92	09:37
02	SBLK06	0720BLK	>D7M01	07/22/92	10:37
03	1011WRE DAC 7-30-92	127902RE DAC 7-30-92	>D7M09 DAC 7-30-92	07/22/92	17:15
04					
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FORM V SV 1/87 Rev.

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Instrument ID: HPMSD- Calibration Date(s): 05/28/92

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF020= >D5SI1 RRF050= >D5SI2
RRF080= >D5SI3 RRF120= >D5SI4 RRF160= >D5SI5

COMPOUND		RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	RSD
Phenol	*	2.247	2.041	1.886	1.709	1.714	1.919	11.9*
bis(2-Chloroethyl)ether		1.790	1.511	1.360	1.228	1.188	1.415	17.3
2-Chlorophenol		1.523	1.325	1.204	1.117	1.105	1.255	13.9
1,3-Dichlorobenzene		1.642	1.487	1.353	1.205	1.120	1.361	15.5
1,4-Dichlorobenzene	*	1.671	1.464	1.316	1.154	1.048	1.331	18.6*
Benzyl alcohol		.972	.932	.917	.726	.719	.853	14.2
1,2-Dichlorobenzene		1.606	1.430	1.287	1.137	1.052	1.303	17.1
2-Methylphenol		1.374	1.262	1.155	1.068	1.047	1.181	11.6
bis(2-Chloroisopropyl)ether		.643	.639	.617	.559	.536	.599	8.1
4-Methylphenol		1.433	1.277	1.125	.619	1.151	1.121	27.3
N-Nitroso-di-n-propylamine	#	1.140	1.050	.953	.807	.845	.959	14.5#
Hexachloroethane		.508	.453	.356	.288	.294	.380	25.7
Nitrobenzene		.497	.473	.452	.439	.438	.460	5.4
Isophorone		1.021	.979	.944	.916	.949	.962	4.1
2-Nitrophenol	*	.209	.199	.189	.176	.189	.192	6.5*
2,4-Dimethylphenol		.308	.297	.289	.290	.294	.296	2.5
Benzoic acid		.234	.247	.072	.152	.308	.203	45.3
bis(2-Chloroethoxy)methane		.609	.558	.537	.521	.516	.548	6.9
2,4-Dichlorophenol		.318	.300	.288	.279	.266	.290	6.9
1,2,4-Trichlorobenzene		.357	.311	.276	.257	.244	.289	15.7
Naphthalene		1.142	1.005	.926	.852	.751	.935	15.9
4-Chloroaniline		.443	.461	.433	.429	.428	.439	3.2
Hexachlorobutadiene	*	.186	.161	.144	.131	.115	.147	18.6*
4-Chloro-3-methylphenol	*	.395	.374	.359	.351	.344	.365	5.7*
2-Methylnaphthalene		.716	.623	.572	.528	.483	.585	15.4
Hexachlorocyclopentadiene	#	.234	.272	.277	.267	.257	.261	6.5#
2,4,6-Trichlorophenol	*	.487	.439	.422	.430	.428	.441	5.9*
2,4,5-Trichlorophenol		.487	.464	.436	.358	.323	.414	16.9
2-Chloronaphthalene		1.377	1.281	1.180	1.055	.985	1.176	13.6
2-Nitroaniline		.521	.551	.555	.537	.541	.541	2.4
Dimethylphthalate		1.610	1.592	1.556	1.455	1.391	1.521	6.2
Acenaphthylene		2.035	1.938	1.726	1.544	1.389	1.726	15.5
2,6-Dinitrotoluene		.362	.100	.561	.534	.276	.367	51.9
3-Nitroaniline		.169	.317	.377	.388	.380	.326	28.2
Acenaphthene	*	1.363	1.265	1.183	1.044	.912	1.153	15.5*
2,4-Dinitrophenol	#	.145	.208	.228	.240	.248	.214	19.4#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Instrument ID: HPMSD- Calibration Date(s): 05/28/92

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF020= >D5SI1 RRF050= >D5SI2
RRF080= >D5SI3 RRF120= >D5SI4 RRF160= >D5SI5

COMPOUND		RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	RSD
4-Nitrophenol	#	.345	1.022	.936	.893	.853	.810	33.0#
Dibenzofuran		1.846	1.694	1.512	1.367	1.250	1.534	15.7
2,4-Dinitrotoluene		.522	.553	.561	.534	.512	.537	3.8
Diethylphthalate		1.832	1.779	1.680	1.444	1.206	1.588	16.[illegible]
4-Chlorophenyl-phenylether		.680	.639	.592	.521	.463	.579	15.1
Fluorene		1.504	1.418	1.304	1.095	.876	1.239	20.5
4-Nitroaniline		.205	.221	.244	.270	.292	.247	14.3
4,6-Dinitro-2-methylphenol		.142	.149	.151	.149	.148	.148	2.4
N-Nitrosodiphenylamine	*	.463	.455	.437	.417	.393	.433	6.6*
4-Bromophenyl-phenylether		.240	.202	.177	.158	.152	.186	19.4
Hexachlorobenzene		.334	.286	.258	.237	.231	.269	15.8
Pentachlorophenol	*	.191	.188	.179	.173	.169	.180	5.2*
Phenanthrene		1.243	1.062	.948	.839	.793	.977	18.6
Anthracene		1.245	1.074	.962	.851	.781	.983	18.7
Di-n-butylphthalate		1.926	1.668	1.464	1.253	1.092	1.480	22.3
Fluoranthene	*	1.310	1.151	1.013	.881	.800	1.031	19.9*
Pyrene		1.703	1.494	1.451	1.440	1.565	1.530	7.1
Butylbenzylphthalate		1.063	.984	.962	.953	1.028	.998	4.7
3,3'-Dichlorobenzidine		.249	.303	.274	.244	.229	.260	11.2
Benzo(a)anthracene		1.330	1.165	1.076	1.032	1.048	1.130	10.[illegible]
Chrysene		1.337	1.214	1.037	.858	.766	1.042	22.6
Bis(2-Ethylhexyl)phthalate		1.544	1.341	1.208	.931	.775	1.160	26.7
Di-n-octylphthalate	*	3.426	2.883	2.784	2.193	2.020	2.661	21.2*
Benzo(b)fluoranthene		1.711	1.469	1.805	1.656	1.633	1.655	7.5
Benzo(k)fluoranthene		1.636	1.431	1.198	.813	.589	1.133	38.1
Benzo(a)pyrene	*	1.526	1.421	1.342	1.227	1.211	1.346	9.9*
Indeno(1,2,3-cd)pyrene		1.545	1.570	1.490	1.444	1.432	1.496	4.0
Dibenz(a,h)anthracene		1.210	1.248	1.164	1.104	1.073	1.160	6.2
Benzo(g,h,i)perylene		1.373	1.391	1.320	1.307	1.306	1.339	3.0
Nitrobenzene-d5		.579	.566	.550	.538	.534	.553	3.4
2-Fluorobiphenyl		1.583	1.452	1.326	1.168	1.025	1.311	16.9
Terphenyl-d14		1.090	.906	.857	.819	.879	.910	11.6
Phenol-d6		2.194	2.008	1.890	1.733	1.717	1.908	10.5
2-Fluorophenol		1.648	1.536	1.438	1.349	1.391	1.472	8.2
2,4,6-Tribromophenol		.185	.167	.151	.143	.138	.157	12.1

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Instrument ID: HPMSD-D Calibration Date: 07/16/92 Time: 07:19

Lab File ID: >D7GC1 Init. Calib. Date(s): 05/28/92 07/16/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Phenol	*	1.919	1.643	14.4*
bis(2-Chloroethyl)ether		1.415	1.452	2.6
2-Chlorophenol		1.255	1.315	4.8
1,3-Dichlorobenzene		1.361	1.434	5.4
1,4-Dichlorobenzene	*	1.331	1.430	7.5*
Benzyl alcohol		.853	.687	19.5
1,2-Dichlorobenzene		1.303	1.448	11.1
2-Methylphenol		1.181	1.223	3.6
bis(2-Chloroisopropyl)ether		.599	.644	7.5
4-Methylphenol		1.121	1.230	9.7
N-Nitroso-di-n-propylamine	#	.959	1.037	8.2#
Hexachloroethane		.380	.461	21.3
Nitrobenzene		.460	.418	9.2
Isophorone		.962	.897	6.7
2-Nitrophenol	*	.192	.215	11.7*
2,4-Dimethylphenol		.296	.290	2.0
Benzoic acid		.203	.104	48.5
bis(2-Chloroethoxy)methane		.548	.503	8.3
2,4-Dichlorophenol		.290	.317	9.3
1,2,4-Trichlorobenzene		.289	.333	15.2
Naphthalene		.935	.963	2.9
4-Chloroaniline		.439	.467	6.3
Hexachlorobutadiene	*	.147	.179	21.1*
4-Chloro-3-methylphenol	*	.365	.372	2.0*
2-Methylnaphthalene		.585	.631	8.0
Hexachlorocyclopentadiene	#	.261	.285	9.0#
2,4,6-Trichlorophenol	*	.441	.417	5.4*
2,4,5-Trichlorophenol		.414	.498	20.3
2-Chloronaphthalene		1.176	1.227	4.4
2-Nitroaniline		.541	.554	2.4
Dimethylphthalate		1.521	1.530	.6
Acenaphthylene		1.726	1.789	3.6
2,6-Dinitrotoluene		.367	.563	53.6
3-Nitroaniline		.326	.397	21.7
Acenaphthene	*	1.153	1.182	2.5*
2,4-Dinitrophenol	#	.214	.237	11.0#
4-Nitrophenol	#	.810	.408	49.7#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Instrument ID: HPMSD-D Calibration Date: 07/16/92 Time: 07:19

Lab File ID: >D7GC1 Init. Calib. Date(s): 05/28/92 07/16/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		RRF	RRF050	%D
Dibenzofuran		1.534	1.738	13.3
2,4-Dinitrotoluene		.537	.563	5.0
Diethylphthalate		1.588	1.658	4.4
4-Chlorophenyl-phenylether		.579	.652	12.6
Fluorene		1.239	1.407	13.5
4-Nitroaniline		.247	.433	75.7
4,6-Dinitro-2-methylphenol		.148	.167	13.3
N-Nitrosodiphenylamine	*	.433	.467	7.9*
4-Bromophenyl-phenylether		.186	.186	.0
Hexachlorobenzene		.269	.254	5.6
Pentachlorophenol	*	.180	.178	1.2*
Phenanthrene		.977	1.003	2.7
Anthracene		.983	1.036	5.4
Di-n-butylphthalate		1.480	1.268	14.3
Fluoranthene	*	1.031	1.105	7.1*
Pyrene		1.530	1.428	6.7
Butylbenzylphthalate		.998	.841	15.7
3,3'-Dichlorobenzidine		.260	.341	31.0
Benzo(a)anthracene		1.130	1.130	.0
Chrysene		1.042	1.096	5.2
Bis(2-Ethylhexyl)phthalate		1.160	.959	17.3
Di-n-octylphthalate	*	2.661	2.247	15.6*
Benzo(b)fluoranthene		1.655	1.654	.0
Benzo(k)fluoranthene		1.133	1.524	34.5
Benzo(a)pyrene	*	1.346	1.500	11.5*
Indeno(1,2,3-cd)pyrene		1.496	1.606	7.3
Dibenz(a,h)anthracene		1.160	1.278	10.2
Benzo(g,h,i)perylene		1.339	1.378	2.9
Nitrobenzene-d5		.553	.498	10.0
2-Fluorobiphenyl		1.311	1.395	6.4
Terphenyl-d14		.910	.873	4.1
Phenol-d6		1.908	1.866	2.2
2-Fluorophenol		1.472	1.354	8.0
2,4,6-Tribromophenol		.157	.130	16.9

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Instrument ID: HPMSD- Calibration Date: 07/21/92 Time: 08:03

Lab File ID: >D7LC1 Init. Calib. Date(s): 05/28/92 07/22/92 D+C 7-27-92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		RRF	RRF050	%D
Phenol	*	1.919	1.825	4.9*
bis(2-Chloroethyl)ether		1.415	1.537	8.6
2-Chlorophenol		1.255	1.364	8.7
1,3-Dichlorobenzene		1.361	1.438	5.6
1,4-Dichlorobenzene	*	1.331	1.426	7.2*
Benzyl alcohol		.853	.907	6.3
1,2-Dichlorobenzene		1.303	1.453	11.5
2-Methylphenol		1.181	1.194	1.1
bis(2-Chloroisopropyl)ether		.599	.625	4.4
4-Methylphenol		1.121	1.403	25.2
N-Nitroso-di-n-propylamine	#	.959	1.003	4.6#
Hexachloroethane		.380	.540	42.2
Nitrobenzene		.460	.438	4.7
Isophorone		.962	.902	6.3
2-Nitrophenol	*	.192	.231	20.2*
2,4-Dimethylphenol		.296	.301	1.8
Benzoic acid		.203	.031	84.6
bis(2-Chloroethoxy)methane		.548	.523	4.6
2,4-Dichlorophenol		.290	.340	17.3
1,2,4-Trichlorobenzene		.289	.337	16.7
Naphthalene		.935	.977	4.5
4-Chloroaniline		.439	.486	10.7
Hexachlorobutadiene	*	.147	.183	24.1*
4-Chloro-3-methylphenol	*	.365	.384	5.3*
2-Methylnaphthalene		.585	.624	6.8
Hexachlorocyclopentadiene	#	.261	.261	.2#
2,4,6-Trichlorophenol	*	.441	.424	3.8*
2,4,5-Trichlorophenol		.414	.481	16.2
2-Chloronaphthalene		1.176	1.179	.3
2-Nitroaniline		.541	.543	.4
Dimethylphthalate		1.521	1.441	5.3
Acenaphthylene		1.726	1.678	2.8
2,6-Dinitrotoluene		.367	.567	54.7
3-Nitroaniline		.326	.014	95.7
Acenaphthene	*	1.153	1.056	8.4*
2,4-Dinitrophenol	#	.214	.218	2.1#
4-Nitrophenol	#	.810	.407	49.7#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Instrument ID: HPMSD- Calibration Date: 07/21/92 Time: 08:03

Lab File ID: >D7LC1 Init. Calib. Date(s): 05/28/92 07/22/92

Min RRF050 for SPCC(\$) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Dibenzofuran		1.534	1.648	7.5
2,4-Dinitrotoluene		.537	.567	5.7
Diethylphthalate		1.588	1.544	2.8
4-Chlorophenyl-phenylether		.579	.630	8.9
Fluorene		1.239	1.331	7.4
4-Nitroaniline		.247	.387	56.9
4,6-Dinitro-2-methylphenol		.148	.153	3.4
N-Nitrosodiphenylamine	*	.433	.460	6.2*
4-Bromophenyl-phenylether		.186	.186	.0
Hexachlorobenzene		.269	.257	4.3
Pentachlorophenol	*	.180	.183	1.6*
Phenanthrene		.977	.998	2.1
Anthracene		.983	1.039	5.7
Di-n-butylphthalate		1.480	1.279	13.6
Fluoranthene	*	1.031	1.116	8.2*
Pyrene		1.530	1.441	5.9
Butylbenzylphthalate		.998	.864	13.4
3,3'-Dichlorobenzidine		.260	.336	29.3
Benzo(a)anthracene		1.130	1.158	2.5
Chrysene		1.042	.993	4.8
Bis(2-Ethylhexyl)phthalate		1.160	.845	27.1
Di-n-octylphthalate	*	2.661	2.265	14.9*
Benzo(b)fluoranthene		1.655	1.993	20.4
Benzo(k)fluoranthene		1.133	1.304	15.0
Benzo(a)pyrene	*	1.346	1.543	14.6*
Indeno(1,2,3-cd)pyrene		1.496	1.607	7.4
Dibenz(a,h)anthracene		1.160	1.274	9.8
Benzo(g,h,i)perylene		1.339	1.386	3.5
Nitrobenzene-d5		.553	.524	5.2
2-Fluorobiphenyl		1.311	1.291	1.5
Terphenyl-d14		.910	.896	1.6
Phenol-d6		1.908	1.942	1.8
2-Fluorophenol		1.472	1.385	6.0
2,4,6-Tribromophenol		.157	.133	15.4

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Instrument ID: HPMSDD Calibration Date: 07/22/92 Time: 09:37

Lab File ID: >D7MC1 Init. Calib. Date(s): 05/28/92 07/22/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		RRF	RRF050	%D
Phenol	*	1.919	1.759	8.3*
bis(2-Chloroethyl)ether		1.415	1.486	5.0
2-Chlorophenol		1.255	1.364	8.7
1,3-Dichlorobenzene		1.361	1.423	4.5
1,4-Dichlorobenzene	*	1.331	1.414	6.3*
Benzyl alcohol		.853	.836	2.1
1,2-Dichlorobenzene		1.303	1.434	10.1
2-Methylphenol		1.181	1.194	1.1
bis(2-Chloroisopropyl)ether		.599	.630	5.2
4-Methylphenol		1.121	1.318	17.6
N-Nitroso-di-n-propylamine	#	.959	.987	2.9#
Hexachloroethane		.380	.500	31.7
Nitrobenzene		.460	.426	7.4
Isophorone		.962	.901	6.4
2-Nitrophenol	*	.192	.228	18.5*
2,4-Dimethylphenol		.296	.300	1.6
Benzoic acid		.203	.166	18.2
bis(2-Chloroethoxy)methane		.548	.518	5.6
2,4-Dichlorophenol		.290	.341	17.6
1,2,4-Trichlorobenzene		.289	.337	16.7
Naphthalene		.935	.984	5.2
4-Chloroaniline		.439	.456	3.9
Hexachlorobutadiene	*	.147	.184	24.7*
4-Chloro-3-methylphenol	*	.365	.375	2.9*
2-Methylnaphthalene		.585	.647	10.7
Hexachlorocyclopentadiene	#	.261	.182	30.5#
2,4,6-Trichlorophenol	*	.441	.417	5.5*
2,4,5-Trichlorophenol		.414	.486	17.6
2-Chloronaphthalene		1.176	1.173	.2
2-Nitroaniline		.541	.549	1.5
Dimethylphthalate		1.521	1.459	4.0
Acenaphthylene		1.726	1.697	1.7
2,6-Dinitrotoluene		.367	.560	52.8
3-Nitroaniline		.326	.395	21.1
Acenaphthene	*	1.153	1.106	4.1*
2,4-Dinitrophenol	#	.214	.114	46.9#
4-Nitrophenol	#	.810	.401	50.5#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Instrument ID: HPMSDD Calibration Date: 07/22/92 Time: 09:37

Lab File ID: >D7MC1 Init. Calib. Date(s): 05/28/92 07/22/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Dibenzofuran		1.534	1.680	9.5
2,4-Dinitrotoluene		.537	.560	4.4
Diethylphthalate		1.588	1.557	2.0
4-Chlorophenyl-phenylether		.579	.638	10.2
Fluorene		1.239	1.327	7.1
4-Nitroaniline		.247	.383	55.2
4,6-Dinitro-2-methylphenol		.148	.108	27.1
N-Nitrosodiphenylamine	*	.433	.472	9.0*
4-Bromophenyl-phenylether		.186	.190	2.4
Hexachlorobenzene		.269	.266	1.2
Pentachlorophenol	*	.180	.142	21.1*
Phenanthrene		.977	.991	1.4
Anthracene		.983	1.024	4.2
Di-n-butylphthalate		1.480	1.148	22.5
Fluoranthene	*	1.031	1.087	5.4*
Pyrene		1.530	1.430	6.5
Butylbenzylphthalate		.998	.823	17.5
3,3'-Dichlorobenzidine		.260	.357	37.3
Benzo(a)anthracene		1.130	1.084	4.1
Chrysene		1.042	1.013	2.8
Bis(2-Ethylhexyl)phthalate		1.160	.850	26.7
Di-n-octylphthalate	*	2.661	2.128	20.0*
Benzo(b)fluoranthene		1.655	1.819	9.9
Benzo(k)fluoranthene		1.133	1.373	21.1
Benzo(a)pyrene	*	1.346	1.478	9.9*
Indeno(1,2,3-cd)pyrene		1.496	1.526	2.0
Dibenz(a,h)anthracene		1.160	1.220	5.2
Benzo(g,h,i)perylene		1.339	1.297	3.2
Nitrobenzene-d5		.553	.509	8.1
2-Fluorobiphenyl		1.311	1.323	1.0
Terphenyl-d14		.910	.888	2.5
Phenol-d6		1.908	1.913	.2
2-Fluorophenol		1.472	1.349	8.4
2,4,6-Tribromophenol		.157	.139	11.3

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID (Standard): >D7GC1 Date Analyzed: 07/16/92

Instrument ID: HPMSD-D Time Analyzed: 07:19

7-27-92

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	104892	10.85	401123	14.57	216093	20.05
	UPPER LIMIT	209784	11.35	802246	15.07	432186	20.55
	LOWER LIMIT	52446	10.35	200561	14.07	108047	19.55
	EPA SAMPLE NO.						
1	SBLK04	100638	10.84	389889	14.55	230916	20.03
2	1011W	96446	10.85	381454	14.56	209109	20.05
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID (Standard): >D7GC1 Date Analyzed: 07/16/92

Instrument ID: HPMSD-D Time Analyzed: 07:19

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	430176	24.69	340832	30.61	291214	33.85
	UPPER LIMIT	860352	25.19	681664	31.11	582428	34.35
	LOWER LIMIT	215088	24.19	170416	30.11	145607	33.35
	EPA SAMPLE NO.						
1	SBLK04	429121	24.68	376247	30.58	263994	33.83
2	1011W	386315	24.70	360393	30.61	257242	33.87
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IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

page 1 of 1.

FORM VIII SV-2 1/87 Rev

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID (Standard): >D7LC1 Date Analyzed: 07/21/92

Instrument ID: HPMSD-D Time Analyzed: 08:03

7-27-92

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	102646	10.82	393808	14.55	225127	20.03
	UPPER LIMIT	205292	11.32	787616	15.05	450254	20.53
	LOWER LIMIT	51323	10.32	196904	14.05	112564	19.53
	EPA SAMPLE NO.						
1	SBLK05MS	101731	10.82	386339	14.53	221872	20.01
2	SBLK05MSD	100231	10.82	374505	14.54	205575	20.01
3	106DW	99531	10.80	387675	14.52	211743	20.01
4	107DW	100371	10.82	400955	14.54	218172	20.03
5	1121WB	98376	10.82	381546	14.53	211713	20.02
6	11192W	105064	10.82	415719	14.54	226804	20.03
7	11192WD	103963	10.82	412397	14.55	222374	20.04
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

page 1 of 1.

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID (Standard): >D7LC1 Date Analyzed: 07/21/92

Instrument ID: HPMSD- Time Analyzed: 08:03

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	434883	24.67	342336	30.59	296314	33.83
	UPPER LIMIT	869766	25.17	684672	31.09	592628	34.33
	LOWER LIMIT	217441	24.17	171168	30.09	148157	33.33
	EPA SAMPLE NO.						
1	SBLK05MS	415392	24.66	373846	30.56	257888	33.80
2	SBLK05MSD	396859	24.66	362915	30.56	251720	33.80
3	106DW	408678	24.66	368771	30.56	261786	33.81
4	107DW	419956	24.68	370525	30.58	264444	33.83
5	1121WB	398837	24.67	361329	30.57	252618	33.82
6	11192W	432148	24.67	385919	30.58	244840	33.85
7	11192WD	421532	24.70	374647	30.60	241799	33.88
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IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

page 1 of 1.

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8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID (Standard): >D7MC1 Date Analyzed: 07/22/92

Instrument ID: HPMSDD Time Analyzed: 09:37

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	115307	10.82	434846	14.55	249566	20.02
	UPPER LIMIT	230614	11.32	869692	15.05	499132	20.52
	LOWER LIMIT	57654	10.32	217423	14.05	124783	19.52
	EPA SAMPLE NO.						
1	SBLK06	109517	10.79	427598	14.51	241290	20.00
2	1011WRE DAC 7-30-92	113440	10.80	447309	14.52	246105	20.01
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

page __ of __.

FORM VIII SV-1 1/87 Rev

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1011W

Lab File ID (Standard): >D7MC1 Date Analyzed: 07/22/92

Instrument ID: HPMSDD Time Analyzed: 09:37

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	480986	24.66	373324	30.57	319213	33.82
	UPPER LIMIT	961972	25.16	746648	31.07	638426	34.32
	LOWER LIMIT	240493	24.16	186662	30.07	159606	33.32
	EPA SAMPLE NO.						
1	SBLK06	450318	24.64	385254	30.56	257825	33.79
2	1011W RE DAC 7-24-92	461553	24.64	399136	30.55	277842	33.79
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IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

page __ of __.

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FINAL REPORT
APPENDIX B

NL/TARACORP SUPERFUND SITE GRANITE CITY, ILLINOIS

Prepared for

U.S. Department of the Army
Corps of Engineers, Omaha District
Omaha, Nebraska

March, 1993

Woodward-Clyde

Woodward-Clyde Consultants
2318 Millpark Drive
St. Louis, Missouri 63043

WCC Project No. 89MC114V

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10492W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 127946

Sample wt/vol: 860 (g/ml) ML Lab File ID: >D7M05

Level: (low/med) LOW Date Received: 07/15/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	58	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	58	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	58	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10492W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 127946

Sample wt/vol: 860 (g/ml) ML Lab File ID: >D7M05

Level: (low/med) LOW Date Received: 07/15/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	58	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	58	U
100-02-7	4-Nitrophenol	58	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	58	U
534-52-1	4,6-Dinitro-2-methylphenol	58	U
86-30-6	N-Nitrosodiphenylamine	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	58	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	23	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	Bis(2-Ethylhexyl)phthalate	18	B
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

107SW

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 127944

Sample wt/vol: 850 (g/ml) ML Lab File ID: >D7M03

Level: (low/med) LOW Date Received: 07/15/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	59	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	59	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	59	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

107SW

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 127944

Sample wt/vol: 850 (g/ml) ML Lab File ID: >D7M03

Level: (low/med) LOW Date Received: 07/15/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	59	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	59	U
100-02-7	4-Nitrophenol	59	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	59	U
534-52-1	4,6-Dinitro-2-methylphenol	59	U
86-30-6	N-Nitrosodiphenylamine	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	59	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	24	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10992W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 127947

Sample wt/vol: 915 (g/ml) ML Lab File ID: >D7M06

Level: (low/med) LOW Date Received: 07/15/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	54	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	54	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	54	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10992W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 127947

Sample wt/vol: 915 (g/ml) ML Lab File ID: >D7M06

Level: (low/med) LOW Date Received: 07/15/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	54	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	54	U
100-02-7	4-Nitrophenol	54	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	54	U
534-52-1	4,6-Dinitro-2-methylphenol	54	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	54	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	30	B
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MS

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L02

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MS

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L02

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	5	BJ
117-84-0	Di-n-octylphthalate	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

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MSD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L03

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup:* (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MSD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L03

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup:* (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	SBLK05MS	68	81	104	29	47	78		0
02	SBLK05MSD	70	85	109	30	47	79		0
03									
04									
05									
06									
07									
08									
09									
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11									
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27									
28									
29									
30									

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	SBLK06	66	79	107	31	46	66		0
02	107SW	52	68	95	17	23	40		0
03	1041W	66	82	106	27	38	66		0
04	10492W	56	74	101	19	27	45		0
05	10992W	61	79	107	21	32	57		0
06									
07									
08									
09									
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30									

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix Spike - EPA Sample No.: SBLK06

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	100	0	39	39	12- 89
2-Chlorophenol	100	0	79	79	27-123
1,4-Dichlorobenzene	50	0	41	83	36- 97
N-Nitroso-di-n-propylam	50	0	48	96	41-116
1,2,4-Trichlorobenzene	50	0	43	85	39- 98
4-Chloro-3-methylphenol	100	0	86	86	23- 97
Acenaphthene	50	0	47	95	46-118
4-Nitrophenol	100	0	39	39	10- 80
2,4-Dinitrotoluene	50	0	42	84	24- 96
Pentachlorophenol	100	0	61	61	9-103
Pyrene	50	0	42	84	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	100	39	39	1	42	12- 89
2-Chlorophenol	100	79	79	0	40	27-123
1,4-Dichlorobenzene	50	42	84	2	28	36- 97
N-Nitroso-di-n-propylam	50	47	94	2	38	41-116
1,2,4-Trichlorobenzene	50	44	88	3	28	39- 98
4-Chloro-3-methylphenol	100	86	86	0	42	23- 97
Acenaphthene	50	49	98	4	31	46-118
4-Nitrophenol	100	40	40	2	50	10- 80
2,4-Dinitrotoluene	50	43	86	2	38	24- 96
Pentachlorophenol	100	65	65	6	50	9-103
Pyrene	50	43	85	2	31	26-127

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

Values outside of QC limits

PD: 0 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

COMMENTS: _____

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Lab File ID: >D7M01 Lab Sample ID: 0720BLK

Date Extracted: 07/20/92 Extraction:(Sepf/Cont/Sonc) SEPF

Date Analyzed: 07/22/92 Time Analyzed: 10:37

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

Instrument ID: HPMSDD

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	SBLK05MS	0720BS	>D7L02	07/21/92
2	SBLK05MSD	0720BSD	>D7L03	07/21/92
4				
5				
6				
7				
8				
9				
10				
11				
12				
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27				
28				
29				
30				

COMMENTS:

00016

FORM IV SV 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Lab File ID: >D7M01 Lab Sample ID: 0720BLK

Date Extracted: 07/20/92 Extraction:(Sepf/Cont/Sonc) SEPF

Date Analyzed: 07/22/92 Time Analyzed: 10:37

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

Instrument ID: HPMSDD

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	107SW	127944	>D7M03	07/22/92
2	1041W	127945	>D7M04	07/22/92
3	10492W	127946	>D7M05	07/22/92
4	10992W	127947	>D7M06	07/22/92
6				
7				
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COMMENTS: _____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK06

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 0720BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7M01

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK06

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Matrix: (soil/water) WATER Lab Sample ID: 0720BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7M01

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup:' (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-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	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	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

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Lab File ID: >D5SD1 DFTPP Injection Date: 5/28/92

Instrument ID: HPMSD-D DFTPP Injection Time: 8:38

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	75.1
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	50.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.4
275	10.0 - 30.0% of mass 198	18.2
365	Greater than 1.00% of mass 198	1.7
441	Present, but less than mass 443	10.6
442	Greater than 40.0% of mass 198	74.3
443	17.0 - 23.0% of mass 442	13.8 (18.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	160UG/MLBNA	>D5SI5	05/28/92	08:57
02	SSTD120	120UG/MLBNA	>D5SI4	05/28/92	12:42
03	SSTD080	80UG/MLBNA	>D5SI3	05/28/92	11:53
04	SSTD050	50UG/MLBNA	>D5SI2	05/28/92	11:03
05	SSTD020	20UG/MLBNA	>D5SI1	05/28/92	10:13
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07					
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Lab File ID: >D7LD1 DFTPP Injection Date: 7/21/92

Instrument ID: HPMSD-D DFTPP Injection Time: 7:44

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	53.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.8
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	45.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.2
275	10.0 - 30.0% of mass 198	17.9
365	Greater than 1.00% of mass 198	1.5
441	Present, but less than mass 443	7.9
442	Greater than 40.0% of mass 198	56.5
443	17.0 - 23.0% of mass 442	10.5 (18.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50CCCBNA	50CCCBNA	>D7LC1	07/21/92	08:03
02	SBLK05MS	0720BS	>D7L02	07/21/92	09:44
03	SBLK05MSD	0720BSD	>D7L03	07/21/92	10:34
04					
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Lab File ID: >D7MD1 DFTPP Injection Date: 7/22/92

Instrument ID: HPMSDD DFTPP Injection Time: 9:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	50.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.7
70	Less then 2.0% of mass 69	.3 (.5)1
127	40.0 - 60.0% of mass 198	42.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.2
275	10.0 - 30.0% of mass 198	18.7
365	Greater than 1.00% of mass 198	1.7
441	Present, but less than mass 443	8.7
442	Greater than 40.0% of mass 198	62.3
443	17.0 - 23.0% of mass 442	11.6 (18.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50CCCBNA	50CCCBNA	>D7MC1	07/22/92	09:37
02	SBLK06	0720BLK	>D7M01	07/22/92	10:37
03	107SW	127944	>D7M03	07/22/92	12:17
04	1041W	127945	>D7M04	07/22/92	13:07
05	10492W	127946	>D7M05	07/22/92	13:56
06	10992W	127947	>D7M06	07/22/92	14:46
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6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Instrument ID: HPMSD- Calibration Date(s): 05/28/92

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF020= >D5SI1 RRF050= >D5SI2
RRF080= >D5SI3 RRF120= >D5SI4 RRF160= >D5SI5

COMPOUND		RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	RSD
Phenol	*	2.247	2.041	1.886	1.709	1.714	1.919	11.9*
bis(2-Chloroethyl)ether		1.790	1.511	1.360	1.228	1.188	1.415	17.3
2-Chlorophenol		1.523	1.325	1.204	1.117	1.105	1.255	13.9
1,3-Dichlorobenzene		1.642	1.487	1.353	1.205	1.120	1.361	15.5
1,4-Dichlorobenzene	*	1.671	1.464	1.316	1.154	1.048	1.331	18.6*
Benzyl alcohol		.972	.932	.917	.726	.719	.853	14.2
1,2-Dichlorobenzene		1.606	1.430	1.287	1.137	1.052	1.303	17.1
2-Methylphenol		1.374	1.262	1.155	1.068	1.047	1.181	11.6
bis(2-Chloroisopropyl)ether		.643	.639	.617	.559	.536	.599	8.1
4-Methylphenol		1.433	1.277	1.125	.619	1.151	1.121	27.3
N-Nitroso-di-n-propylamine	#	1.140	1.050	.953	.807	.845	.959	14.5#
Hexachloroethane		.508	.453	.356	.288	.294	.380	25.7
Nitrobenzene		.497	.473	.452	.439	.438	.460	5.4
Isophorone		1.021	.979	.944	.916	.949	.962	4.1
2-Nitrophenol	*	.209	.199	.189	.176	.189	.192	6.5*
2,4-Dimethylphenol		.308	.297	.289	.290	.294	.296	2.5
Benzoic acid		.234	.247	.072	.152	.308	.203	45.3
bis(2-Chloroethoxy)methane		.609	.558	.537	.521	.516	.548	6.9
2,4-Dichlorophenol		.318	.300	.288	.279	.266	.290	6.9
1,2,4-Trichlorobenzene		.357	.311	.276	.257	.244	.289	15.7
Naphthalene		1.142	1.005	.926	.852	.751	.935	15.9
4-Chloroaniline		.443	.461	.433	.429	.428	.439	3.2
Hexachlorobutadiene	*	.186	.161	.144	.131	.115	.147	18.6*
4-Chloro-3-methylphenol	*	.395	.374	.359	.351	.344	.365	5.7*
2-Methylnaphthalene		.716	.623	.572	.528	.483	.585	15.4
Hexachlorocyclopentadiene	#	.234	.272	.277	.267	.257	.261	6.5#
2,4,6-Trichlorophenol	*	.487	.439	.422	.430	.428	.441	5.9*
2,4,5-Trichlorophenol		.487	.464	.436	.358	.323	.414	16.9
2-Chloronaphthalene		1.377	1.281	1.180	1.055	.985	1.176	13.6
2-Nitroaniline		.521	.551	.555	.537	.541	.541	2.4
Dimethylphthalate		1.610	1.592	1.556	1.455	1.391	1.521	6.2
Acenaphthylene		2.035	1.938	1.726	1.544	1.389	1.726	15.5
2,6-Dinitrotoluene		.362	.100	.561	.534	.276	.367	51.9
3-Nitroaniline		.169	.317	.377	.388	.380	.326	28.2
Acenaphthene	*	1.363	1.265	1.183	1.044	.912	1.153	15.5*
2,4-Dinitrophenol	#	.145	.208	.228	.240	.248	.214	19.4#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Instrument ID: HPMSD- Calibration Date(s): 05/28/92

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF020= >D5SI1 RRF050= >D5SI2
RRF080= >D5SI3 RRF120= >D5SI4 RRF160= >D5SI5

COMPOUND		RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	RSD
4-Nitrophenol	#	.345	1.022	.936	.893	.853	.810	33.0#
Dibenzofuran		1.846	1.694	1.512	1.367	1.250	1.534	15.7
2,4-Dinitrotoluene		.522	.553	.561	.534	.512	.537	3.8
Diethylphthalate		1.832	1.779	1.680	1.444	1.206	1.588	16.4
4-Chlorophenyl-phenylether		.680	.639	.592	.521	.463	.579	15.1
Fluorene		1.504	1.418	1.304	1.095	.876	1.239	20.5
4-Nitroaniline		.205	.221	.244	.270	.292	.247	14.3
4,6-Dinitro-2-methylphenol		.142	.149	.151	.149	.148	.148	2.4
N-Nitrosodiphenylamine	*	.463	.455	.437	.417	.393	.433	6.6*
4-Bromophenyl-phenylether		.240	.202	.177	.158	.152	.186	19.4
Hexachlorobenzene		.334	.286	.258	.237	.231	.269	15.8
Pentachlorophenol	*	.191	.188	.179	.173	.169	.180	5.2*
Phenanthrene		1.243	1.062	.948	.839	.793	.977	18.6
Anthracene		1.245	1.074	.962	.851	.781	.983	18.7
Di-n-butylphthalate		1.926	1.668	1.464	1.253	1.092	1.480	22.3
Fluoranthene	*	1.310	1.151	1.013	.881	.800	1.031	19.9*
Pyrene		1.703	1.494	1.451	1.440	1.565	1.530	7.1
Butylbenzylphthalate		1.063	.984	.962	.953	1.028	.998	4.7
3,3'-Dichlorobenzidine		.249	.303	.274	.244	.229	.260	11.2
Benzo(a)anthracene		1.330	1.165	1.076	1.032	1.048	1.130	10.9
Chrysene		1.337	1.214	1.037	.858	.766	1.042	22.8
Bis(2-Ethylhexyl)phthalate		1.544	1.341	1.208	.931	.775	1.160	26.7
Di-n-octylphthalate	*	3.426	2.883	2.784	2.193	2.020	2.661	21.2*
Benzo(b)fluoranthene		1.711	1.469	1.805	1.656	1.633	1.655	7.5
Benzo(k)fluoranthene		1.636	1.431	1.198	.813	.589	1.133	38.1
Benzo(a)pyrene	*	1.526	1.421	1.342	1.227	1.211	1.346	9.9*
Indeno(1,2,3-cd)pyrene		1.545	1.570	1.490	1.444	1.432	1.496	4.0
Dibenz(a,h)anthracene		1.210	1.248	1.164	1.104	1.073	1.160	6.2
Benzo(g,h,i)perylene		1.373	1.391	1.320	1.307	1.306	1.339	3.0
Nitrobenzene-d5		.579	.566	.550	.538	.534	.553	3.4
2-Fluorobiphenyl		1.583	1.452	1.326	1.168	1.025	1.311	16.9
Terphenyl-d14		1.090	.906	.857	.819	.879	.910	11.6
Phenol-d6		2.194	2.008	1.890	1.733	1.717	1.908	10.5
2-Fluorophenol		1.648	1.536	1.438	1.349	1.391	1.472	8.2
2,4,6-Tribromophenol		.185	.167	.151	.143	.138	.157	12.1

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Instrument ID: HPMSD- Calibration Date: 07/21/92 Time: 08:03

Lab File ID: >D7LC1 Init. Calib. Date(s): 05/28/92 07/21/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		RRF	RRF050	%D
Phenol	*	1.919	1.825	4.9*
bis(2-Chloroethyl)ether		1.415	1.537	8.6
2-Chlorophenol		1.255	1.364	8.7
1,3-Dichlorobenzene		1.361	1.438	5.6
1,4-Dichlorobenzene	*	1.331	1.426	7.2*
Benzyl alcohol		.853	.907	6.3
1,2-Dichlorobenzene		1.303	1.453	11.5
2-Methylphenol		1.181	1.194	1.1
bis(2-Chloroisopropyl)ether		.599	.625	4.4
4-Methylphenol		1.121	1.403	25.2
N-Nitroso-di-n-propylamine	#	.959	1.003	4.6#
Hexachloroethane		.380	.540	42.2
Nitrobenzene		.460	.438	4.7
Isophorone		.962	.902	6.3
2-Nitrophenol	*	.192	.231	20.2*
2,4-Dimethylphenol		.296	.301	1.8
Benzoic acid		.203	.031	84.6
bis(2-Chloroethoxy)methane		.548	.523	4.6
2,4-Dichlorophenol		.290	.340	17.3
1,2,4-Trichlorobenzene		.289	.337	16.7
Naphthalene		.935	.977	4.5
4-Chloroaniline		.439	.486	10.7
Hexachlorobutadiene	*	.147	.183	24.1*
4-Chloro-3-methylphenol	*	.365	.384	5.3*
2-Methylnaphthalene		.585	.624	6.8
Hexachlorocyclopentadiene	#	.261	.261	.2#
2,4,6-Trichlorophenol	*	.441	.424	3.8*
2,4,5-Trichlorophenol		.414	.481	16.2
2-Chloronaphthalene		1.176	1.179	.3
2-Nitroaniline		.541	.543	.4
Dimethylphthalate		1.521	1.441	5.3
Acenaphthylene		1.726	1.678	2.8
2,6-Dinitrotoluene		.367	.567	54.7
3-Nitroaniline		.326	.014	95.7
Acenaphthene	*	1.153	1.056	8.4*
2,4-Dinitrophenol	#	.214	.218	2.1#
4-Nitrophenol	#	.810	.407	49.7#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Instrument ID: HPMSD- Calibration Date: 07/21/92 Time: 08:03

Lab File ID: >D7LC1 Init. Calib. Date(s): 05/28/92 07/21/92

Min RRF050 for SPCC(\$) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Dibenzofuran		1.534	1.648	7.5
2,4-Dinitrotoluene		.537	.567	5.7
Diethylphthalate		1.588	1.544	2.8
4-Chlorophenyl-phenylether		.579	.630	8.9
Fluorene		1.239	1.331	7.4
4-Nitroaniline		.247	.387	56.9
4,6-Dinitro-2-methylphenol		.148	.153	3.4
N-Nitrosodiphenylamine	*	.433	.460	6.2*
4-Bromophenyl-phenylether		.186	.186	.0
Hexachlorobenzene		.269	.257	4.3
Pentachlorophenol	*	.180	.183	1.6*
Phenanthrene		.977	.998	2.1
Anthracene		.983	1.039	5.7
Di-n-butylphthalate		1.480	1.279	13.6
Fluoranthene	*	1.031	1.116	8.2*
Pyrene		1.530	1.441	5.9
Butylbenzylphthalate		.998	.864	13.4
3,3'-Dichlorobenzidine		.260	.336	29.3
Benzo(a)anthracene		1.130	1.158	2.5
Chrysene		1.042	.993	4.8
Bis(2-Ethylhexyl)phthalate		1.160	.845	27.1
Di-n-octylphthalate	*	2.661	2.265	14.9*
Benzo(b)fluoranthene		1.655	1.993	20.4
Benzo(k)fluoranthene		1.133	1.304	15.0
Benzo(a)pyrene	*	1.346	1.543	14.6*
Indeno(1,2,3-cd)pyrene		1.496	1.607	7.4
Dibenz(a,h)anthracene		1.160	1.274	9.8
Benzo(g,h,i)perylene		1.339	1.386	3.5
Nitrobenzene-d5		.553	.524	5.2
2-Fluorobiphenyl		1.311	1.291	1.5
Terphenyl-d14		.910	.896	1.6
Phenol-d6		1.908	1.942	1.8
2-Fluorophenol		1.472	1.385	6.0
2,4,6-Tribromophenol		.157	.133	15.4

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Instrument ID: HPMSDD Calibration Date: 07/22/92 Time: 09:37

Lab File ID: >D7MC1 Init. Calib. Date(s): 05/28/92 07/22/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		RRF	RRF050	%D
Phenol	*	1.919	1.759	8.3*
bis(2-Chloroethyl)ether		1.415	1.486	5.0
2-Chlorophenol		1.255	1.364	8.7
1,3-Dichlorobenzene		1.361	1.423	4.5
1,4-Dichlorobenzene	*	1.331	1.414	6.3*
Benzyl alcohol		.853	.836	2.1
1,2-Dichlorobenzene		1.303	1.434	10.1
2-Methylphenol		1.181	1.194	1.1
bis(2-Chloroisopropyl)ether		.599	.630	5.2
4-Methylphenol		1.121	1.318	17.6
N-Nitroso-di-n-propylamine	#	.959	.987	2.9#
Hexachloroethane		.380	.500	31.7
Nitrobenzene		.460	.426	7.4
Isophorone		.962	.901	6.4
2-Nitrophenol	*	.192	.228	18.5*
2,4-Dimethylphenol		.296	.300	1.6
Benzoic acid		.203	.166	18.2
bis(2-Chloroethoxy)methane		.548	.518	5.6
2,4-Dichlorophenol		.290	.341	17.6
1,2,4-Trichlorobenzene		.289	.337	16.7
Naphthalene		.935	.984	5.2
4-Chloroaniline		.439	.456	3.9
Hexachlorobutadiene	*	.147	.184	24.7*
4-Chloro-3-methylphenol	*	.365	.375	2.9*
2-Methylnaphthalene		.585	.647	10.7
Hexachlorocyclopentadiene	#	.261	.182	30.5#
2,4,6-Trichlorophenol	*	.441	.417	5.5*
2,4,5-Trichlorophenol		.414	.486	17.6
2-Chloronaphthalene		1.176	1.173	.2
2-Nitroaniline		.541	.549	1.5
Dimethylphthalate		1.521	1.459	4.0
Acenaphthylene		1.726	1.697	1.7
2,6-Dinitrotoluene		.367	.560	52.8
3-Nitroaniline		.326	.395	21.1
Acenaphthene	*	1.153	1.106	4.1*
2,4-Dinitrophenol	#	.214	.114	46.9#
4-Nitrophenol	#	.810	.401	50.5#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Instrument ID: HPMSDD Calibration Date: 07/22/92 Time: 09:37

Lab File ID: >D7MC1 Init. Calib. Date(s): 05/28/92 07/22/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Dibenzofuran		1.534	1.680	9.5
2,4-Dinitrotoluene		.537	.560	4.4
Diethylphthalate		1.588	1.557	2.0
4-Chlorophenyl-phenylether		.579	.638	10.2
Fluorene		1.239	1.327	7.1
4-Nitroaniline		.247	.383	55.2
4,6-Dinitro-2-methylphenol		.148	.108	27.1
N-Nitrosodiphenylamine	*	.433	.472	9.0*
4-Bromophenyl-phenylether		.186	.190	2.4
Hexachlorobenzene		.269	.266	1.2
Pentachlorophenol	*	.180	.142	21.1*
Phenanthrene		.977	.991	1.4
Anthracene		.983	1.024	4.2
Di-n-butylphthalate		1.480	1.148	22.5
Fluoranthene	*	1.031	1.087	5.4*
Pyrene		1.530	1.430	6.5
Butylbenzylphthalate		.998	.823	17.5
3,3'-Dichlorobenzidine		.260	.357	37.3
Benzo(a)anthracene		1.130	1.084	4.1
Chrysene		1.042	1.013	2.8
Bis(2-Ethylhexyl)phthalate		1.160	.850	26.7
Di-n-octylphthalate	*	2.661	2.128	20.0*
Benzo(b)fluoranthene		1.655	1.819	9.9
Benzo(k)fluoranthene		1.133	1.373	21.1
Benzo(a)pyrene	*	1.346	1.478	9.9*
Indeno(1,2,3-cd)pyrene		1.496	1.526	2.0
Dibenz(a,h)anthracene		1.160	1.220	5.2
Benzo(g,h,i)perylene		1.339	1.297	3.2
Nitrobenzene-d5		.553	.509	8.1
2-Fluorobiphenyl		1.311	1.323	1.0
Terphenyl-d14		.910	.888	2.5
Phenol-d6		1.908	1.913	.2
2-Fluorophenol		1.472	1.349	8.4
2,4,6-Tribromophenol		.157	.139	11.3

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Lab File ID (Standard): >D7LC1 Date Analyzed: 07/21/92

Instrument ID: HPMSD- Time Analyzed: 08:03

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	102646	10.82	393808	14.55	225127	20.03
	UPPER LIMIT	205292	11.32	787616	15.05	450254	20.53
	LOWER LIMIT	51323	10.32	196904	14.05	112564	19.53
	EPA SAMPLE NO.						
1	SBLK05MS	101731	10.82	386339	14.53	221872	20.01
2	SBLK05MSD	100231	10.82	374505	14.54	205575	20.01
3							
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22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

page 1 of 1.

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Lab File ID (Standard): >D7LC1 Date Analyzed: 07/21/92

Instrument ID: HPMSD- Time Analyzed: 08:03

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	434883	24.67	342336	30.59	296314	33.83
	UPPER LIMIT	869766	25.17	684672	31.09	592628	34.33
	LOWER LIMIT	217441	24.17	171168	30.09	148157	33.33
	EPA SAMPLE NO.						
1	SBLK05MS	415392	24.66	373846	30.56	257888	33.80
2	SBLK05MSD	396859	24.66	362915	30.56	251720	33.80
3							
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22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

page 1 of 1.

FORM VIII SV-2 1/87 Rev

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Lab File ID (Standard): >D7MC1 Date Analyzed: 07/22/92

Instrument ID: HPMSDD Time Analyzed: 09:37

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	115307	10.82	434846	14.55	249566	20.02
	UPPER LIMIT	230614	11.32	869692	15.05	499132	20.52
	LOWER LIMIT	57654	10.32	217423	14.05	124783	19.52
	EPA SAMPLE NO.						
1	SBLK06	109517	10.79	427598	14.51	241290	20.00
2	107SW	110720	10.81	431386	14.52	236425	20.00
3	1041W	109967	10.81	438092	14.52	236149	20.01
4	10492W	107723	10.81	423018	14.52	226397	20.01
5	10992W	107119	10.82	418581	14.54	221944	20.03
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 1041W

Lab File ID (Standard): >D7MC1 Date Analyzed: 07/22/92

Instrument ID: HPMSDD Time Analyzed: 09:37

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	480986	24.66	373324	30.57	319213	33.82
	UPPER LIMIT	961972	25.16	746648	31.07	638426	34.32
	LOWER LIMIT	240493	24.16	186662	30.07	159606	33.32
	EPA SAMPLE NO.						
1	SBLK06	450318	24.64	385254	30.56	257825	33.79
2	107SW	438817	24.65	381503	30.56	268400	33.80
3	1041W	441444	24.66	381320	30.56	266872	33.80
4	10492W	413378	24.66	362773	30.56	249464	33.82
5	10992W	416293	24.67	367677	30.58	252778	33.84
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22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-2 1/87 Rev

ORTEK
ENVIRONMENTAL LABORATORY
414-498-2222
FAX: 414-498-4067
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435

CASE NARRATIVE

Lab Name: ORTEK
Case No.: 89MC1
SDG No. 10391W

Contract:
SAS No.:
Sample Analysis Price:

SEMIVOLATILE ORGANIC ANALYSIS

Sample No.	EPA Sample No.	Lab Sample ID
10391W	10391W	127967
10391WM	10391WM	127968
10391WX	10391WX	127969
108DW	108DW	127964
108DWRE	108DWRE	127964RE
108DWD	108DWD	127963
108DWDRE	108DWDRE	127963RE
1091W	1091W	127965
1101W	1101W	127970
1101WRE	1101WRE	127970RE
1141W	1141W	127966

SEMIVOLATILE ORGANIC ANALYSIS

1.) The instrument IDs for Semivolatile Organic Analysis are HPMSD-C and HPMSD-D. The blanks associated with the samples were SBLK07 and SBLK06 and did not contain any detectable semivolatile organic compounds. The analysis was perfomed on HPMSDs on DB-5MS capillary columns.

2.) The original extractions performed on the 17th of July were out of control because the blank did not pass criteria for Terpheny d-14 thus all samples were re-extracted.

3.) The acid fraction surrogates for samples 108DW and 108DWD were out of control as they were low or non-existant in the re-extraction. Because insufficient sample existed for another re-extract the out of control samples extracted on 07/17/92 were used as the first extraction and the samples extracted on 07/20/92 became the re-extracts. This was done to confirm that the surrogate loss was due to matrix effect as the out of control blank was acceptable for its acid surrogate recovery. All forms were changed to reflect this case.

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4.) Because of quantitation problems in the analysis of SBLK05 which were inherant in the data processing system and could not be rectified, the blank extracted 07/20/92 was re-run as SBLK06 and this result was used as the blank for all data generation.

5.) Sample 1101W was not spiked with surrogates in the re-extract performed on 07/20/92. The out of control sample extracted 07/17/92 was thus used as t first extraction and the 07/20/92 re-extract included as confirmation of any positive hits or lack there of. The 07/17/92 sample was only out of control for Terpheny d-14 and, since no further sample remained for an additional re-extract, both results were reported. All forms were changed to reflect n case.

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

Signature: David L. Schumacher Name: David L. Schumacher

Date: 7-31-92 Title: ~~Assist~~ Technical Director DLS 7.31.92

ORGANIC DATA ASSESSMENT

PROJECT NO. 89MC14V
LABORATORY Orter
LAB PROJECT NO. 10391W
NO. OF SAMPLES/ MATRIX 8/Water

SITE NLTSS
REVIEWER Dana Doerfler
REVIEWER'S NAME Dana Doerfler
COMPLETION DATE 8/13/92

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	HERB	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. SURROGATES		(1)(2)			
4. INSTR. CALIBRATIONS		✓			
5. INTERNAL STDS.		✓			
6. GC/MS TUNING		✓			
7. MATRIX SPIKE/DUP		✓			
8. OVERALL ASSESSMENT		O/Z*			

*see note (1) below

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) Acid fraction surrogates out of control for samples 108DWD and 108DW. Reanalysis confirmed matrix interference. Recoveries <10% so data qualified as unusable (R).

COMMENTS: (2) surrogate recovery for terphenyl d14 low for 110IW; data does not require qualification as only one surrogate out of control. Surrogates mistakenly omitted from sample during reanalysis.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10391W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127967

Sample wt/vol: 885 (g/ml) ML Lab File ID: >C7L05

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10391W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127967

Sample wt/vol: 885 (g/ml) ML Lab File ID: >C7L05

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	57	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	57	U
100-02-7	4-Nitrophenol	57	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	57	U
534-52-1	4,6-Dinitro-2-methylphenol	57	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	57	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	4	J
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	23	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	31	B
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10391WM

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127968

Sample wt/vol: 860 (g/ml) ML Lab File ID: >C7L06

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	58	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	58	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	58	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10391WM

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127968

Sample wt/vol: 860 (g/ml) ML Lab File ID: >C7L06

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	58	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	58	U
100-02-7	4-Nitrophenol	58	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	58	U
534-52-1	4,6-Dinitro-2-methylphenol	58	U
86-30-6	N-Nitrosodiphenylamine	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	58	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	23	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	Bis(2-Ethylhexyl)phthalate	18	B
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: 10391WX

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 129769

Sample wt/vol: 980 (g/ml) ML Lab File ID: >D7M07

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	51	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	51	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	51	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10391WX

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 129769

Sample wt/vol: 980 (g/ml) ML Lab File ID: >D7M07

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	51	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	51	U
100-02-7	4-Nitrophenol	51	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	51	U
534-52-1	4,6-Dinitro-2-methylphenol	51	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	51	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	40	B
117-84-0	Di-n-octylphthalate	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

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

108DW

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127964

Sample wt/vol: 920 (g/ml) ML Lab File ID: >C7N03

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/17/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/23/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	54	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	54	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	54	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

108DW

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127964

Sample wt/vol: 920 (g/ml) ML Lab File ID: >C7N03

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/17/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/23/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	54	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	54	U
100-02-7	4-Nitrophenol	54	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	54	U
534-52-1	4,6-Dinitro-2-methylphenol	54	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	54	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	3	BJ
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	8	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

108DW RE DAC 7-30-92

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127964 RE DAC 7-30-92

Sample wt/vol: 925 (g/ml) ML Lab File ID: >C7L02

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11 R	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	54	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	54	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	54	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

108DWRE

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127964RE

Sample wt/vol: 925 (g/ml) ML Lab File ID: >C7L02

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	54	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	54	U
100-02-7	4-Nitrophenol	54	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	54	U
534-52-1	4,6-Dinitro-2-methylphenol	54	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	54	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	6	J
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	10	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

108DWD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127963

Sample wt/vol: 900 (g/ml) ML Lab File ID: >C7N02

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/17/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/23/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	55	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	55	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	55	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

108DWD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127963

Sample wt/vol: 900 (g/ml) ML Lab File ID: >C7N02

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/17/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/23/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	55	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	55	U
100-02-7	4-Nitrophenol	55	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	55	U
534-52-1	4,6-Dinitro-2-methylphenol	55	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	55	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	3	BJ
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	9	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

108DWDRE DAC 7-30-92

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127963RE DAC 7-30-92

Sample wt/vol: 910 (g/ml) ML Lab File ID: >C7L01

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11 R	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	55	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	55	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	55	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

108DWDRE DAC 7-30-92

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127963RE DAC 7-30-92

Sample wt/vol: 910 (g/ml) ML Lab File ID: >C7L01

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	55	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	55	U
100-02-7	4-Nitrophenol	55	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	55	U
534-52-1	4,6-Dinitro-2-methylphenol	55	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	55	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	4	J
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	7	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1091W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127965

Sample wt/vol: 865 (g/ml) ML Lab File ID: >C7L03

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	58	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	58	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	58	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1091W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127965

Sample wt/vol: 865 (g/ml) ML Lab File ID: >C7L03

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup:' (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	58	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	58	U
100-02-7	4-Nitrophenol	58	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	58	U
534-52-1	4,6-Dinitro-2-methylphenol	58	U
86-30-6	N-Nitrosodiphenylamine	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	58	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-butylphthalate	6	J
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	23	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	Bis(2-Ethylhexyl)phthalate	32	B
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1101W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127970

Sample wt/vol: 860 (g/ml) ML Lab File ID: >C7N04

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/17/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/23/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	58	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	58	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	58	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1101W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127970

Sample wt/vol: 860 (g/ml) ML Lab File ID: >C7N04

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/17/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/23/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	58	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	58	U
100-02-7	4-Nitrophenol	58	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	58	U
534-52-1	4,6-Dinitro-2-methylphenol	58	U
86-30-6	N-Nitrosodiphenylamine	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	58	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-butylphthalate	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	23	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	Bis(2-Ethylhexyl)phthalate	8	BJ
117-84-0	Di-n-octylphthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1101WRE DAC 7-30-92

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127970RE DAC 7-30-92

Sample wt/vol: 885 (g/ml) ML Lab File ID: >D7M08

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1101WBE OAC 7-30-92

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391WBE OAC 7-30-92

Matrix: (soil/water) WATER Lab Sample ID: 127970BE OAC 7-30-92

Sample wt/vol: 885 (g/ml) ML Lab File ID: >D7M08

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	57	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	57	U
100-02-7	4-Nitrophenol	57	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	57	U
534-52-1	4,6-Dinitro-2-methylphenol	57	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	57	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	23	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	6	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1141W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127966

Sample wt/vol: 955 (g/ml) ML Lab File ID: >C7L04

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	52	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	52	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	52	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1141W

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 127966

Sample wt/vol: 955 (g/ml) ML Lab File ID: >C7L04

Level: (low/med) LOW Date Received: 07/16/92

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	52	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	52	U
100-02-7	4-Nitrophenol	52	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	52	U
534-52-1	4,6-Dinitro-2-methylphenol	52	U
86-30-6	N-Nitrosodiphenylamine	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	52	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	21	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	Bis(2-Ethylhexyl)phthalate	4	BJ
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MS

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L02

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MS

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L02

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	5	BJ
117-84-0	Di-n-octylphthalate	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

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MSD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L03

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK05MSD

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 0720BS

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7L03

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/21/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	SBLK07	57	72	22 *	29	41	64		1
02									
03									
04									
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30									

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	SBLK05MS	68	81	104	29	47	78		0
02	SBLK05MSD	70	85	109	30	47	79		0
03									
04									
05									
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

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2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	108DWDLE AAC 7-30-92	64	74	100	2 *	0	10 *		2
02	108DWDLE AAC 7-30-92	64	75	97	0 *	0 *	11		0
03	1091W 7-30-92	63	73	102	30	41	67		0
04	1141W	75	78	102	32	49	73		0
05	10391W	67	78	114	17	22	48		0
06	10391WM	68	77	98	20	26	42		0
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30									

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	SBLK06	66	79	107	31	46	66		0
02	10391WX	61	78	103	17	21 *	46		1
03	1101W DE DAC 7-30-92	4 *	6 *	10 *	1 *	2 *	3 *		6
04									
05									
06									
07									
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 ( )#	TOT OUT
01	108DWD	69	72	24 *	3 *	0	0		2
02	108DW	73	75	27 *	6 *	2 *	0		3
03	1101W	70	72	25 *	18	24	31		1
04									
05									
06									
07									
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d6	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix Spike - EPA Sample No.: SBLK06

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	100	0	39	39	12- 89
2-Chlorophenol	100	0	79	79	27-123
1,4-Dichlorobenzene	50	0	41	83	36- 97
N-Nitroso-di-n-propylam	50	0	48	96	41-116
1,2,4-Trichlorobenzene	50	0	43	85	39- 98
4-Chloro-3-methylphenol	100	0	86	86	23- 97
Acenaphthene	50	0	47	95	46-118
4-Nitrophenol	100	0	39	39	10- 80
2,4-Dinitrotoluene	50	0	42	84	24- 96
Pentachlorophenol	100	0	61	61	9-103
Pyrene	50	0	42	84	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	100	39	39	1	42	12- 89
2-Chlorophenol	100	79	79	0	40	27-123
1,4-Dichlorobenzene	50	42	84	2	28	36- 97
N-Nitroso-di-n-propylam	50	47	94	2	38	41-116
1,2,4-Trichlorobenzene	50	44	88	3	28	39- 98
4-Chloro-3-methylphenol	100	86	86	0	42	23- 97
Acenaphthene	50	49	98	4	31	46-118
4-Nitrophenol	100	40	40	2	50	10- 80
2,4-Dinitrotoluene	50	43	86	2	38	24- 96
Pentachlorophenol	100	65	65	6	50	9-103
Pyrene	50	43	85	2	31	26-127

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: _____

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >D7I02 Lab Sample ID: 0717BLK

Date Extracted: 07/17/92 Extraction:(Sepf/Cont/Sonc) SEPF

Date Analyzed: 07/18/92 Time Analyzed: 10:34

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

Instrument ID: HPMSDC

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	108DWD	127963	>C7N02	07/23/92
2	108DW	127964	>C7N03	07/23/92
3	1101W	127970	>C7N04	07/23/92
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COMMENTS: _____

FORM IV SV 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK07

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 0717BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7I02

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/17/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/18/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK07

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 0717BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7102

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/17/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/18/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-butylphthalate	1	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	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

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >D7M01 Lab Sample ID: 0720BLK

Date Extracted: 07/20/92 Extraction:(Sepf/Cont/Sonc) SEPF

Date Analyzed: 07/22/92 Time Analyzed: 10:37

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

Instrument ID: HPMSD-D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	SBLK05MS	0720BS	>D7L02	07/21/92
2	SBLK05MSD	0720BSD	>D7L03	07/21/92
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COMMENTS: _____

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >D7M01 Lab Sample ID: 0720BLK

Date Extracted: 07/20/92 Extraction:(Sepf/Cont/Sonc) SEPF

Date Analyzed: 07/22/92 Time Analyzed: 10:37

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

Instrument ID: HPMSDC

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	108DWD RE DAC 7-30-92	127963 RE DAC 7-30-92	>C7L01	07/21/92
2	108DWRE DAC 7-30-92	127964RE DAC 7-30-92	>C7L02	07/21/92
3	1091W	127965	>C7L03	07/21/92
4	1141W	127966	>C7L04	07/21/92
5	10391W	127967	>C7L05	07/21/92
6	10391WM	127968	>C7L06	07/21/92
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COMMENTS: _____

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >D7M01 Lab Sample ID: 0720BLK

Date Extracted: 07/20/92 Extraction:(Sepf/Cont/Sonc) SEPF

Date Analyzed: 07/22/92 Time Analyzed: 10:37

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

Instrument ID: HPMSDD

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	10391WX	127969	>D7M07	07/22/92
2	1101W RE BMC 9-30-92	127970 RE DAC 7-30-92	>D7M08	07/22/92
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK06

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 0720BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7M01

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

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
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	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
65-85-0	Benzoic acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK06

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Matrix: (soil/water) WATER Lab Sample ID: 0720BLK

Sample wt/vol: 1000 (g/ml) ML Lab File ID: >D7M01

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 07/20/92

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 07/22/92

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
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	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	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-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	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1	BJ
117-84-0	Di-n-octylphthalate	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

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >D5SD1 DFTPP Injection Date: 5/28/92

Instrument ID: HPMSD-D DFTPP Injection Time: 8:38

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	75.1
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	50.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.4
275	10.0 - 30.0% of mass 198	18.2
365	Greater than 1.00% of mass 198	1.7
441	Present, but less than mass 443	10.6
442	Greater than 40.0% of mass 198	74.3
443	17.0 - 23.0% of mass 442	13.8 (18.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	160UG/MLBNA	>D5SI5	05/28/92	08:57
02	SSTD120	120UG/MLBNA	>D5SI4	05/28/92	12:42
03	SSTD080	80UG/MLBNA	>D5SI3	05/28/92	11:53
04	SSTD050	50UG/MLBNA	>D5SI2	05/28/92	11:03
05	SSTD020	20UG/MLBNA	>D5SI1	05/28/92	10:13
06					
07					
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >C78D2 DFTPP Injection Date: 7/08/92

Instrument ID: HPMSDD DFTPP Injection Time: 7:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	67.9
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.4
275	10.0 - 30.0% of mass 198	18.2
365	Greater than 1.00% of mass 198	1.6
441	Present, but less than mass 443	7.1
442	Greater than 40.0% of mass 198	45.5
443	17.0 - 23.0% of mass 442	9.0 (19.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	160UG/MLBNA	>C78I5	07/08/92	11:30
02	SSTD120	120UG/MLBNA	>C78I4	07/08/92	10:39
03	SSTD080	80UG/MLBNA	>C78I3	07/08/92	09:49
04	SSTD050	50UG/MLBNA	>C78I2	07/08/92	08:58
05	SSTD020	20UG/MLBNA	>C78I1	07/08/92	08:07
06					
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >D7ID1 DFTPP Injection Date: 7/18/92

Instrument ID: HPMSDD DFTPP Injection Time: 9:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	51.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	62.7
70	Less then 2.0% of mass 69	.3 (.5)1
127	40.0 - 60.0% of mass 198	44.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.6
275	10.0 - 30.0% of mass 198	18.0
365	Greater than 1.00% of mass 198	1.7
441	Present, but less than mass 443	7.7
442	Greater than 40.0% of mass 198	54.9
443	17.0 - 23.0% of mass 442	10.3 (18.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SBLK07	0717BLK	>D7I02	07/18/92	10:34
02					
03					
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >D7LD1 DFTPP Injection Date: 7/21/92

Instrument ID: HPMSD-D DFTPP Injection Time: 7:44

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	53.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.8
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	45.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.2
275	10.0 - 30.0% of mass 198	17.9
365	Greater than 1.00% of mass 198	1.5
441	Present, but less than mass 443	7.9
442	Greater than 40.0% of mass 198	56.5
443	17.0 - 23.0% of mass 442	10.5 (18.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50CCCBNA	50CCCBNA	>D7LC1	07/21/92	08:03
02	SBLK05MS	0720BS	>D7L02	07/21/92	09:44
03	SBLK05MSD	0720BSD	>D7L03	07/21/92	10:34
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >C7LD1 DFTPP Injection Date: 7/21/92

Instrument ID: HPMSDC DFTPP Injection Time: 7:49

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	52.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	56.2
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	43.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.5
275	10.0 - 30.0% of mass 198	19.5
365	Greater than 1.00% of mass 198	1.7
441	Present, but less than mass 443	7.9
442	Greater than 40.0% of mass 198	49.2
443	17.0 - 23.0% of mass 442	9.3 (19.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50CCCBNA	50CCCBNA	>C7LC1	07/21/92	08:09
02	108DWD RE 7-30-92	127963 RE 7-30-92	>C7L01	07/21/92	09:47
03	108DW RE 7-30-92	127964 RE 7-30-92	>C7L02	07/21/92	10:37
04	1091W 7-30-92	127965 7-30-92	>C7L03	07/21/92	11:27
05	1141W	127966	>C7L04	07/21/92	12:17
06	10391W	127967	>C7L05	07/21/92	13:07
07	10391WM	127968	>C7L06	07/21/92	15:10
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >D7MD1 DFTPP Injection Date: 7/22/92

Instrument ID: HPMSDD DFTPP Injection Time: 9:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	50.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.7
70	Less then 2.0% of mass 69	.3 (.5)1
127	40.0 - 60.0% of mass 198	42.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.2
275	10.0 - 30.0% of mass 198	18.7
365	Greater than 1.00% of mass 198	1.7
441	Present, but less than mass 443	8.7
442	Greater than 40.0% of mass 198	62.3
443	17.0 - 23.0% of mass 442	11.6 (18.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50CCCBNA	50CCCBNA	>D7MC1	07/22/92	09:37
02	SBLK06	0720BLK	>D7M01	07/22/92	10:37
03	10391WX	127969	>D7M07	07/22/92	15:36
04	1101W AE DAL 7-30-92	127970 AE DAL 7-30-92	>D7M08	07/22/92	16:26
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID: >C7ND1 DFTPP Injection Date: 7/23/92

Instrument ID: HPMSDC DFTPP Injection Time: 9:34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	56.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	62.9
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	47.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.8
275	10.0 - 30.0% of mass 198	18.1
365	Greater than 1.00% of mass 198	1.4
441	Present, but less than mass 443	6.6
442	Greater than 40.0% of mass 198	45.9
443	17.0 - 23.0% of mass 442	8.8 (19.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	50CCCBNA	50CCCBNA	>C7NC1	07/23/92	09:54
02	108DWD	127963	>C7N02	07/23/92	11:38
03	108DW	127964	>C7N03	07/23/92	12:28
04	1101W	127970	>C7N04	07/23/92	13:17
05					
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6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSD-0 Calibration Date(s): 05/28/92

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF020= >D5SI1 RRF050= >D5SI2
RRF080= >D5SI3 RRF120= >D5SI4 RRF160= >D5SI5

COMPOUND		RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	RSD
Phenol	*	2.247	2.041	1.886	1.709	1.714	1.919	11.9*
bis(2-Chloroethyl)ether		1.790	1.511	1.360	1.228	1.188	1.415	17.3
2-Chlorophenol		1.523	1.325	1.204	1.117	1.105	1.255	13.9
1,3-Dichlorobenzene		1.642	1.487	1.353	1.205	1.120	1.361	15.5
1,4-Dichlorobenzene	*	1.671	1.464	1.316	1.154	1.048	1.331	18.6*
Benzyl alcohol		.972	.932	.917	.726	.719	.853	14.2
1,2-Dichlorobenzene		1.606	1.430	1.287	1.137	1.052	1.303	17.1
2-Methylphenol		1.374	1.262	1.155	1.068	1.047	1.181	11.6
bis(2-Chloroisopropyl)ether		.643	.639	.617	.559	.536	.599	8.1
4-Methylphenol		1.433	1.277	1.125	.619	1.151	1.121	27.3
N-Nitroso-di-n-propylamine	#	1.140	1.050	.953	.807	.845	.959	14.5#
Hexachloroethane		.508	.453	.356	.288	.294	.380	25.7
Nitrobenzene		.497	.473	.452	.439	.438	.460	5.4
Isophorone		1.021	.979	.944	.916	.949	.962	4.1
2-Nitrophenol	*	.209	.199	.189	.176	.189	.192	6.5*
2,4-Dimethylphenol		.308	.297	.289	.290	.294	.296	2.5
Benzoic acid		.234	.247	.072	.152	.308	.203	45.3
bis(2-Chloroethoxy)methane		.609	.558	.537	.521	.516	.548	6.9
2,4-Dichlorophenol		.318	.300	.288	.279	.266	.290	6.9
1,2,4-Trichlorobenzene		.357	.311	.276	.257	.244	.289	15.7
Naphthalene		1.142	1.005	.926	.852	.751	.935	15.9
4-Chloroaniline		.443	.461	.433	.429	.428	.439	3.2
Hexachlorobutadiene	*	.186	.161	.144	.131	.115	.147	18.6*
4-Chloro-3-methylphenol	*	.395	.374	.359	.351	.344	.365	5.7*
2-Methylnaphthalene		.716	.623	.572	.528	.483	.585	15.4
Hexachlorocyclopentadiene	#	.234	.272	.277	.267	.257	.261	6.5#
2,4,6-Trichlorophenol	*	.487	.439	.422	.430	.428	.441	5.9*
2,4,5-Trichlorophenol		.487	.464	.436	.358	.323	.414	16.9
2-Chloronaphthalene		1.377	1.281	1.180	1.055	.985	1.176	13.6
2-Nitroaniline		.521	.551	.555	.537	.541	.541	2.4
Dimethylphthalate		1.610	1.592	1.556	1.455	1.391	1.521	6.2
Acenaphthylene		2.035	1.938	1.726	1.544	1.389	1.726	15.5
2,6-Dinitrotoluene		.362	.100	.561	.534	.276	.367	51.9
3-Nitroaniline		.169	.317	.377	.388	.380	.326	28.2
Acenaphthene	*	1.363	1.265	1.183	1.044	.912	1.153	15.5*
2,4-Dinitrophenol	#	.145	.208	.228	.240	.248	.214	19.4#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSD-D Calibration Date(s): 05/28/92

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF020= >D5SI1 RRF050= >D5SI2
RRF080= >D5SI3 RRF120= >D5SI4 RRF160= >D5SI5

COMPOUND		RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	RSD
4-Nitrophenol	#	.345	1.022	.936	.893	.853	.810	33.0#
Dibenzofuran		1.846	1.694	1.512	1.367	1.250	1.534	15.7
2,4-Dinitrotoluene		.522	.553	.561	.534	.512	.537	3.8
Diethylphthalate		1.832	1.779	1.680	1.444	1.206	1.588	16.[illegible]
4-Chlorophenyl-phenylether		.680	.639	.592	.521	.463	.579	15.1
Fluorene		1.504	1.418	1.304	1.095	.876	1.239	20.5
4-Nitroaniline		.205	.221	.244	.270	.292	.247	14.3
4,6-Dinitro-2-methylphenol		.142	.149	.151	.149	.148	.148	2.4
N-Nitrosodiphenylamine	*	.463	.455	.437	.417	.393	.433	6.6*
4-Bromophenyl-phenylether		.240	.202	.177	.158	.152	.186	19.4
Hexachlorobenzene		.334	.286	.258	.237	.231	.269	15.8
Pentachlorophenol	*	.191	.188	.179	.173	.169	.180	5.2*
Phenanthrene		1.243	1.062	.948	.839	.793	.977	18.6
Anthracene		1.245	1.074	.962	.851	.781	.983	18.7
Di-n-butylphthalate		1.926	1.668	1.464	1.253	1.092	1.480	22.3
Fluoranthene	*	1.310	1.151	1.013	.881	.800	1.031	19.9*
Pyrene		1.703	1.494	1.451	1.440	1.565	1.530	7.1
Butylbenzylphthalate		1.063	.984	.962	.953	1.028	.998	4.7
3,3'-Dichlorobenzidine		.249	.303	.274	.244	.229	.260	11.2
Benzo(a)anthracene		1.330	1.165	1.076	1.032	1.048	1.130	10.[illegible]
Chrysene		1.337	1.214	1.037	.858	.766	1.042	22.8
Bis(2-Ethylhexyl)phthalate		1.544	1.341	1.208	.931	.775	1.160	26.7
Di-n-octylphthalate	*	3.426	2.883	2.784	2.193	2.020	2.661	21.2*
Benzo(b)fluoranthene		1.711	1.469	1.805	1.656	1.633	1.655	7.5
Benzo(k)fluoranthene		1.636	1.431	1.198	.813	.589	1.133	38.1
Benzo(a)pyrene	*	1.526	1.421	1.342	1.227	1.211	1.346	9.9*
Indeno(1,2,3-cd)pyrene		1.545	1.570	1.490	1.444	1.432	1.496	4.0
Dibenz(a,h)anthracene		1.210	1.248	1.164	1.104	1.073	1.160	6.2
Benzo(g,h,i)perylene		1.373	1.391	1.320	1.307	1.306	1.339	3.0
Nitrobenzene-d5		.579	.566	.550	.538	.534	.553	3.4
2-Fluorobiphenyl		1.583	1.452	1.326	1.168	1.025	1.311	16.9
Terphenyl-d14		1.090	.906	.857	.819	.879	.910	11.6
Phenol-d6		2.194	2.008	1.890	1.733	1.717	1.908	10.5
2-Fluorophenol		1.648	1.536	1.438	1.349	1.391	1.472	8.2
2,4,6-Tribromophenol		.185	.167	.151	.143	.138	.157	12.1

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSDC Calibration Date(s): 07/08/92

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF020= >C78I1 RRF050= >C78I2
RRF080= >C78I3 RRF120= >C78I4 RRF160= >C78I5

COMPOUND		RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	RSD
Phenol	*	1.696	1.465	1.294	1.110	1.105	1.334	18.8*
bis(2-Chloroethyl)ether		1.262	1.010	.872	.778	.665	.918	25.1
2-Chlorophenol		1.333	1.114	1.017	.989	.975	1.086	13.7
1,3-Dichlorobenzene		1.661	1.403	1.250	1.089	1.036	1.288	19.7
1,4-Dichlorobenzene	*	1.674	1.371	1.176	1.019	.971	1.242	23.2*
Benzyl alcohol		.824	.801	.781	.752	.766	.785	3.6
1,2-Dichlorobenzene		1.612	1.358	1.193	1.041	.992	1.239	20.4
2-Methylphenol		1.129	.991	.886	.805	.774	.917	15.8
bis(2-Chloroisopropyl)ether		.811	.775	.698	.586	.599	.694	14.6
4-Methylphenol		1.152	.969	.547	.901	.900	.894	24.5
N-Nitroso-di-n-propylamine	#	.967	.899	.809	.764	.747	.837	11.2#
Hexachloroethane		.719	.520	.414	.380	.354	.477	31.2
Nitrobenzene		.433	.372	.353	.322	.313	.359	13.3
Isophorone		.895	.827	.777	.733	.744	.795	8.4
2-Nitrophenol	*	.249	.228	.216	.200	.197	.218	9.8*
2,4-Dimethylphenol		.301	.279	.275	.263	.267	.277	5.4
Benzoic acid		.304	.314	.321	.311	.322	.314	2.4
bis(2-Chloroethoxy)methane		.518	.455	.434	.391	.384	.436	12.5
2,4-Dichlorophenol		.373	.349	.337	.312	.306	.335	8.3
1,2,4-Trichlorobenzene		.435	.375	.361	.331	.326	.366	12.0
Naphthalene		1.117	.904	.807	.683	.654	.833	22.5
4-Chloroaniline		.498	.455	.443	.429	.424	.450	6.5
Hexachlorobutadiene	*	.240	.219	.210	.188	.181	.208	11.5*
4-Chloro-3-methylphenol	*	.389	.344	.339	.310	.311	.339	9.5*
2-Methylnaphthalene		.758	.630	.570	.504	.482	.589	18.9
Hexachlorocyclopentadiene	#	.293	.367	.338	.314	.300	.322	9.4#
2,4,6-Trichlorophenol	*	.489	.505	.476	.469	.463	.481	3.5*
2,4,5-Trichlorophenol		.520	.509	.440	.371	.341	.436	18.4
2-Chloronaphthalene		1.392	1.256	1.102	.930	.869	1.110	19.7
2-Nitroaniline		.538	.554	.527	.483	.469	.514	7.1
Dimethylphthalate		1.623	1.645	1.542	1.341	1.217	1.474	12.7
Acenaphthylene		2.092	1.741	1.506	1.246	1.084	1.534	26.1
2,6-Dinitrotoluene		.394	.333	.314	.307	.303	.330	11.4
3-Nitroaniline		.342	.381	.386	.332	.286	.345	11.8
Acenaphthene	*	1.375	1.238	1.066	.859	.736	1.055	24.9*
2,4-Dinitrophenol	#	.241	.307	.324	.314	.312	.300	11.2#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSDC Calibration Date(s): 07/08/92

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF020= >C78I1 RRF050= >C78I2
RRF080= >C78I3 RRF120= >C78I4 RRF160= >C78I5

COMPOUND		RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	RSD
4-Nitrophenol	#	.438	.346	.358	.367	.397	.381	9.7#
Dibenzofuran		1.923	1.657	1.482	1.287	1.216	1.513	18.9
2,4-Dinitrotoluene		.614	.651	.611	.549	.520	.589	9.0
Diethylphthalate		1.820	1.689	1.397	1.017	.854	1.355	30.[illegible]
4-Chlorophenyl-phenylether		.761	.730	.648	.559	.509	.641	16.8
Fluorene		1.598	1.427	1.120	.834	.695	1.135	33.7
4-Nitroaniline		.329	.430	.424	.375	.381	.388	10.6
4,6-Dinitro-2-methylphenol		.182	.189	.187	.182	.168	.182	4.6
N-Nitrosodiphenylamine	*	.517	.463	.422	.360	.329	.418	18.1*
4-Bromophenyl-phenylether		.230	.199	.184	.170	.173	.191	12.8
Hexachlorobenzene		.303	.277	.268	.254	.259	.273	7.1
Pentachlorophenol	*	.197	.198	.200	.195	.200	.198	1.1*
Phenanthrene		1.190	.959	.856	.765	.757	.905	19.7
Anthracene		1.237	.999	.867	.763	.727	.918	22.5
Di-n-butylphthalate		1.693	1.325	1.124	.958	.908	1.202	26.6
Fluoranthene	*	1.360	1.109	.990	.869	.834	1.032	20.6*
Pyrene		1.622	1.444	1.521	1.355	1.434	1.475	6.8
Butylbenzylphthalate		.910	.782	.803	.676	.683	.771	12.5
3,3'-Dichlorobenzidine		.363	.388	.374	.290	.286	.340	14.2
Benzo(a)anthracene		1.299	1.118	1.290	1.022	1.046	1.155	11.[illegible]
Chrysene		1.308	1.194	1.117	.815	.784	1.044	22.3
Bis(2-Ethylhexyl)phthalate		1.233	.992	.848	.529	.450	.810	40.1
Di-n-octylphthalate	*	3.081	2.379	2.035	1.822	1.683	2.200	25.4*
Benzo(b)fluoranthene		1.764	1.767	1.867	1.980	2.100	1.896	7.6
Benzo(k)fluoranthene		1.729	1.406	1.137	1.301	1.241	1.363	16.6
Benzo(a)pyrene	*	1.566	1.457	1.434	1.368	1.349	1.435	6.0*
Indeno(1,2,3-cd)pyrene		1.403	1.371	1.435	1.350	1.332	1.378	3.0
Dibenz(a,h)anthracene		1.089	1.081	1.116	1.048	1.034	1.073	3.0
Benzo(g,h,i)perylene		1.192	1.175	1.435	1.350	1.332	1.297	8.5
Nitrobenzene-d5		.496	.447	.432	.400	.393	.434	9.6
2-Fluorobiphenyl		1.614	1.457	1.254	1.056	.973	1.271	21.1
Terphenyl-d14		1.013	.925	.992	.871	.923	.945	6.1
Phenol-d6		1.688	1.478	1.335	1.220	1.193	1.383	14.8
2-Fluorophenol		1.352	1.173	1.022	.998	1.008	1.110	13.7
2,4,6-Tribromophenol		.153	.151	.147	.140	.143	.147	3.7

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSD-D Calibration Date: 07/21/92 Time: 08:03

Lab File ID: >D7LC1 Init. Calib. Date(s): 05/28/92 07/21/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		RRF	RRF050	%D
Phenol	*	1.919	1.825	4.9*
bis(2-Chloroethyl)ether		1.415	1.537	8.6
2-Chlorophenol		1.255	1.364	8.7
1,3-Dichlorobenzene		1.361	1.438	5.6
1,4-Dichlorobenzene	*	1.331	1.426	7.2*
Benzyl alcohol		.853	.907	6.3
1,2-Dichlorobenzene		1.303	1.453	11.5
2-Methylphenol		1.181	1.194	1.1
bis(2-Chloroisopropyl)ether		.599	.625	4.4
4-Methylphenol		1.121	1.403	25.2
N-Nitroso-di-n-propylamine	#	.959	1.003	4.6#
Hexachloroethane		.380	.540	42.2
Nitrobenzene		.460	.438	4.7
Isophorone		.962	.902	6.3
2-Nitrophenol	*	.192	.231	20.2*
2,4-Dimethylphenol		.296	.301	1.8
Benzoic acid		.203	.031	84.6
bis(2-Chloroethoxy)methane		.548	.523	4.6
2,4-Dichlorophenol		.290	.340	17.3
1,2,4-Trichlorobenzene		.289	.337	16.7
Naphthalene		.935	.977	4.5
4-Chloroaniline		.439	.486	10.7
Hexachlorobutadiene	*	.147	.183	24.1*
4-Chloro-3-methylphenol	*	.365	.384	5.3*
2-Methylnaphthalene		.585	.624	6.8
Hexachlorocyclopentadiene	#	.261	.261	.2#
2,4,6-Trichlorophenol	*	.441	.424	3.8*
2,4,5-Trichlorophenol		.414	.481	16.2
2-Chloronaphthalene		1.176	1.179	.3
2-Nitroaniline		.541	.543	.4
Dimethylphthalate		1.521	1.441	5.3
Acenaphthylene		1.726	1.678	2.8
2,6-Dinitrotoluene		.367	.567	54.7
3-Nitroaniline		.326	.014	95.7
Acenaphthene	*	1.153	1.056	8.4*
2,4-Dinitrophenol	#	.214	.218	2.1#
4-Nitrophenol	#	.810	.407	49.7#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSD-p Calibration Date: 07/21/92 Time: 08:03

Lab File ID: >D7LC1 Init. Calib. Date(s): 05/28/92 07/21/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Dibenzofuran		1.534	1.648	7.5
2,4-Dinitrotoluene		.537	.567	5.7
Diethylphthalate		1.588	1.544	2.8
4-Chlorophenyl-phenylether		.579	.630	8.9
Fluorene		1.239	1.331	7.4
4-Nitroaniline		.247	.387	56.9
4,6-Dinitro-2-methylphenol		.148	.153	3.4
N-Nitrosodiphenylamine	*	.433	.460	6.2*
4-Bromophenyl-phenylether		.186	.186	.0
Hexachlorobenzene		.269	.257	4.3
Pentachlorophenol	*	.180	.183	1.6*
Phenanthrene		.977	.998	2.1
Anthracene		.983	1.039	5.7
Di-n-butylphthalate		1.480	1.279	13.6
Fluoranthene	*	1.031	1.116	8.2*
Pyrene		1.530	1.441	5.9
Butylbenzylphthalate		.998	.864	13.4
3,3'-Dichlorobenzidine		.260	.336	29.3
Benzo(a)anthracene		1.130	1.158	2.5
Chrysene		1.042	.993	4.8
Bis(2-Ethylhexyl)phthalate		1.160	.845	27.1
Di-n-octylphthalate	*	2.661	2.265	14.9*
Benzo(b)fluoranthene		1.655	1.993	20.4
Benzo(k)fluoranthene		1.133	1.304	15.0
Benzo(a)pyrene	*	1.346	1.543	14.6*
Indeno(1,2,3-cd)pyrene		1.496	1.607	7.4
Dibenz(a,h)anthracene		1.160	1.274	9.8
Benzo(g,h,i)perylene		1.339	1.386	3.5
Nitrobenzene-d5		.553	.524	5.2
2-Fluorobiphenyl		1.311	1.291	1.5
Terphenyl-d14		.910	.896	1.6
Phenol-d6		1.908	1.942	1.8
2-Fluorophenol		1.472	1.385	6.0
2,4,6-Tribromophenol		.157	.133	15.4

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: B9MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSDC Calibration Date: 07/21/92 Time: 08:09

Lab File ID: >C7LC1 Init. Calib. Date(s): 07/08/92 07/21/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Phenol	*	1.334	1.595	19.6*
bis(2-Chloroethyl)ether		.918	1.209	31.7
2-Chlorophenol		1.086	1.315	21.1
1,3-Dichlorobenzene		1.288	1.397	8.4
1,4-Dichlorobenzene	*	1.242	1.375	10.7*
Benzyl alcohol		.785	.859	9.4
1,2-Dichlorobenzene		1.239	1.377	11.1
2-Methylphenol		.917	1.095	19.5
bis(2-Chloroisopropyl)ether		.694	.817	17.7
4-Methylphenol		.894	1.197	33.9
N-Nitroso-di-n-propylamine	#	.837	1.054	25.9#
Hexachloroethane		.477	.563	17.9
Nitrobenzene		.359	.399	11.2
Isophorone		.795	.827	4.0
2-Nitrophenol	*	.218	.232	6.5*
2,4-Dimethylphenol		.277	.305	10.3
Benzoic acid		.314	.187	40.5
bis(2-Chloroethoxy)methane		.436	.458	5.1
2,4-Dichlorophenol		.335	.371	10.6
1,2,4-Trichlorobenzene		.366	.370	1.2
Naphthalene		.833	.938	12.6
4-Chloroaniline		.450	.482	7.2
Hexachlorobutadiene	*	.208	.218	5.2*
4-Chloro-3-methylphenol	*	.339	.413	22.0*
2-Methylnaphthalene		.589	.648	10.0
Hexachlorocyclopentadiene	#	.322	.302	6.3#
2,4,6-Trichlorophenol	*	.481	.492	2.4*
2,4,5-Trichlorophenol		.436	.529	21.1
2-Chloronaphthalene		1.110	1.166	5.1
2-Nitroaniline		.514	.519	1.0
Dimethylphthalate		1.474	1.506	2.2
Acenaphthylene		1.534	1.632	6.4
2,6-Dinitrotoluene		.330	.313	5.3
3-Nitroaniline		.345	.360	4.4
Acenaphthene	*	1.055	1.108	5.0*
2,4-Dinitrophenol	#	.300	.250	16.5#
4-Nitrophenol	#	.381	.409	7.4#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSDC Calibration Date: 07/21/92 Time: 08:09

Lab File ID: >C7LC1 Init. Calib. Date(s): 07/08/92 07/21/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Dibenzofuran		1.513	1.677	10.8
2,4-Dinitrotoluene		.589	.588	.1
Diethylphthalate		1.355	1.552	14.5
4-Chlorophenyl-phenylether		.641	.679	5.9
Fluorene		1.135	1.369	20.6
4-Nitroaniline		.388	.350	9.7
4,6-Dinitro-2-methylphenol		.182	.170	6.3
N-Nitrosodiphenylamine	*	.418	.455	8.8*
4-Bromophenyl-phenylether		.191	.200	4.5
Hexachlorobenzene		.273	.276	1.2
Pentachlorophenol	*	.198	.201	1.6*
Phenanthrene		.905	.975	7.7
Anthracene		.918	1.013	10.3
Di-n-butylphthalate		1.202	1.328	10.5
Fluoranthene	*	1.032	1.108	7.3*
Pyrene		1.475	1.505	2.0
Butylbenzylphthalate		.771	.830	7.6
3,3'-Dichlorobenzidine		.340	.411	20.8
Benzo(a)anthracene		1.155	1.204	4.2
Chrysene		1.044	1.182	13.2
Bis(2-Ethylhexyl)phthalate		.810	1.017	25.5
Di-n-octylphthalate	*	2.200	2.523	14.7*
Benzo(b)fluoranthene		1.896	2.037	7.4
Benzo(k)fluoranthene		1.363	1.201	11.9
Benzo(a)pyrene	*	1.435	1.475	2.8*
Indeno(1,2,3-cd)pyrene		1.378	1.410	2.3
Dibenz(a,h)anthracene		1.073	1.110	3.4
Benzo(g,h,i)perylene		1.297	1.190	8.3
Nitrobenzene-d5		.434	.485	11.8
2-Fluorobiphenyl		1.271	1.352	6.4
Terphenyl-d14		.945	.962	1.8
Phenol-d6		1.383	1.718	24.3
2-Fluorophenol		1.110	1.267	14.1
2,4,6-Tribromophenol		.147	.151	2.9

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSDD Calibration Date: 07/22/92 Time: 09:37

Lab File ID: >D7MC1 Init. Calib. Date(s): 05/28/92 07/22/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Phenol	*	1.919	1.759	8.3*
bis(2-Chloroethyl)ether		1.415	1.486	5.0
2-Chlorophenol		1.255	1.364	8.7
1,3-Dichlorobenzene		1.361	1.423	4.5
1,4-Dichlorobenzene	*	1.331	1.414	6.3*
Benzyl alcohol		.853	.836	2.1
1,2-Dichlorobenzene		1.303	1.434	10.1
2-Methylphenol		1.181	1.194	1.1
bis(2-Chloroisopropyl)ether		.599	.630	5.2
4-Methylphenol		1.121	1.318	17.6
N-Nitroso-di-n-propylamine	#	.959	.987	2.9#
Hexachloroethane		.380	.500	31.7
Nitrobenzene		.460	.426	7.4
Isophorone		.962	.901	6.4
2-Nitrophenol	*	.192	.228	18.5*
2,4-Dimethylphenol		.296	.300	1.6
Benzoic acid		.203	.166	18.2
bis(2-Chloroethoxy)methane		.548	.518	5.6
2,4-Dichlorophenol		.290	.341	17.6
1,2,4-Trichlorobenzene		.289	.337	16.7
Naphthalene		.935	.984	5.2
4-Chloroaniline		.439	.456	3.9
Hexachlorobutadiene	*	.147	.184	24.7*
4-Chloro-3-methylphenol	*	.365	.375	2.9*
2-Methylnaphthalene		.585	.647	10.7
Hexachlorocyclopentadiene	#	.261	.182	30.5#
2,4,6-Trichlorophenol	*	.441	.417	5.5*
2,4,5-Trichlorophenol		.414	.486	17.6
2-Chloronaphthalene		1.176	1.173	.2
2-Nitroaniline		.541	.549	1.5
Dimethylphthalate		1.521	1.459	4.0
Acenaphthylene		1.726	1.697	1.7
2,6-Dinitrotoluene		.367	.560	52.8
3-Nitroaniline		.326	.395	21.1
Acenaphthene	*	1.153	1.106	4.1*
2,4-Dinitrophenol	#	.214	.114	46.9#
4-Nitrophenol	#	.810	.401	50.5#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSDD Calibration Date: 07/22/92 Time: 09:37

Lab File ID: >D7MC1 Init. Calib. Date(s): 05/28/92 07/22/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Dibenzofuran		1.534	1.680	9.5
2,4-Dinitrotoluene		.537	.560	4.4
Diethylphthalate		1.588	1.557	2.0
4-Chlorophenyl-phenylether		.579	.638	10.2
Fluorene		1.239	1.327	7.1
4-Nitroaniline		.247	.383	55.2
4,6-Dinitro-2-methylphenol		.148	.108	27.1
N-Nitrosodiphenylamine	*	.433	.472	9.0*
4-Bromophenyl-phenylether		.186	.190	2.4
Hexachlorobenzene		.269	.266	1.2
Pentachlorophenol	*	.180	.142	21.1*
Phenanthrene		.977	.991	1.4
Anthracene		.983	1.024	4.2
Di-n-butylphthalate		1.480	1.148	22.5
Fluoranthene	*	1.031	1.087	5.4*
Pyrene		1.530	1.430	6.5
Butylbenzylphthalate		.998	.823	17.5
3,3'-Dichlorobenzidine		.260	.357	37.3
Benzo(a)anthracene		1.130	1.084	4.1
Chrysene		1.042	1.013	2.8
Bis(2-Ethylhexyl)phthalate		1.160	.850	26.7
Di-n-octylphthalate	*	2.661	2.128	20.0*
Benzo(b)fluoranthene		1.655	1.819	9.9
Benzo(k)fluoranthene		1.133	1.373	21.1
Benzo(a)pyrene	*	1.346	1.478	9.9*
Indeno(1,2,3-cd)pyrene		1.496	1.526	2.0
Dibenz(a,h)anthracene		1.160	1.220	5.2
Benzo(g,h,i)perylene		1.339	1.297	3.2
Nitrobenzene-d5		.553	.509	8.1
2-Fluorobiphenyl		1.311	1.323	1.0
Terphenyl-d14		.910	.888	2.5
Phenol-d6		1.908	1.913	.2
2-Fluorophenol		1.472	1.349	8.4
2,4,6-Tribromophenol		.157	.139	11.3

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSDC Calibration Date: 07/23/92 Time: 09:54

Lab File ID: >C7NC1 Init. Calib. Date(s): 07/08/92 07/23/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF050	%D
Phenol	*	1.334	1.313	1.6*
bis(2-Chloroethyl)ether		.918	1.123	22.4
2-Chlorophenol		1.086	1.184	9.1
1,3-Dichlorobenzene		1.288	1.432	11.2
1,4-Dichlorobenzene	*	1.242	1.393	12.1*
Benzyl alcohol		.785	.788	.5
1,2-Dichlorobenzene		1.239	1.389	12.1
2-Methylphenol		.917	1.041	13.6
bis(2-Chloroisopropyl)ether		.694	.846	22.0
4-Methylphenol		.894	1.015	13.5
N-Nitroso-di-n-propylamine	#	.837	.953	13.9#
Hexachloroethane		.477	.588	23.1
Nitrobenzene		.359	.392	9.3
Isophorone		.795	.851	7.0
2-Nitrophenol	*	.218	.219	.8*
2,4-Dimethylphenol		.277	.284	2.6
Benzoic acid		.314	.174	44.7
bis(2-Chloroethoxy)methane		.436	.464	6.5
2,4-Dichlorophenol		.335	.339	1.0
1,2,4-Trichlorobenzene		.366	.372	1.6
Naphthalene		.833	.950	14.1
4-Chloroaniline		.450	.443	1.5
Hexachlorobutadiene	*	.208	.218	5.1*
4-Chloro-3-methylphenol	*	.339	.381	12.4*
2-Methylnaphthalene		.589	.652	10.7
Hexachlorocyclopentadiene	#	.322	.246	23.8#
2,4,6-Trichlorophenol	*	.481	.469	2.5*
2,4,5-Trichlorophenol		.436	.520	19.3
2-Chloronaphthalene		1.110	1.211	9.1
2-Nitroaniline		.514	.528	2.7
Dimethylphthalate		1.474	1.561	5.9
Acenaphthylene		1.534	1.730	12.8
2,6-Dinitrotoluene		.330	.324	1.7
3-Nitroaniline		.345	.358	3.8
Acenaphthene	*	1.055	1.207	14.4*
2,4-Dinitrophenol	#	.300	.177	40.8#
4-Nitrophenol	#	.381	.282	26.0#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ORTEK Contract:

Lab Code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Instrument ID: HPMSDC Calibration Date: 07/23/92 Time: 09:54

Lab File ID: >C7NC1 Init. Calib. Date(s): 07/08/92 07/23/92

Min RRF050 for SPCC(#) = 0.050 Max %D for CCC(*) = ~~25%~~ 30

14C
7-30-9

COMPOUND		RRF	RRF050	%D
Dibenzofuran		1.513	1.726	14.1
2,4-Dinitrotoluene		.589	.573	2.7
Diethylphthalate		1.355	1.626	20.0
4-Chlorophenyl-phenylether		.641	.697	8.6
Fluorene		1.135	1.403	23.6
4-Nitroaniline		.388	.339	12.5
4,6-Dinitro-2-methylphenol		.182	.142	22.0
N-Nitrosodiphenylamine	*	.418	.467	11.6*
4-Bromophenyl-phenylether		.191	.201	5.2
Hexachlorobenzene		.273	.275	1.0
Pentachlorophenol	*	.198	.185	6.8*
Phenanthrene		.905	.993	9.7
Anthracene		.918	1.030	12.2
Di-n-butylphthalate		1.202	1.395	16.1
Fluoranthene	*	1.032	1.111	7.7*
Pyrene		1.475	1.489	1.0
Butylbenzylphthalate		.771	.817	6.0
3,3'-Dichlorobenzidine		.340	.372	9.3
Benzo(a)anthracene		1.155	1.155	.0
Chrysene		1.044	1.236	18.4
Bis(2-Ethylhexyl)phthalate		.810	1.048	29.3
Di-n-octylphthalate	*	2.200	2.813	27.8*
Benzo(b)fluoranthene		1.896	1.791	5.5
Benzo(k)fluoranthene		1.363	1.598	17.2
Benzo(a)pyrene	*	1.435	1.505	4.9*
Indeno(1,2,3-cd)pyrene		1.378	1.329	3.6
Dibenz(a,h)anthracene		1.073	1.067	.6
Benzo(g,h,i)perylene		1.297	1.141	12.0
Nitrobenzene-d5		.434	.469	8.1
2-Fluorobiphenyl		1.271	1.431	12.6
Terphenyl-d14		.945	.948	.3
Phenol-d6		1.383	1.593	15.2
2-Fluorophenol		1.110	1.208	8.8
2,4,6-Tribromophenol		.147	.142	3.3

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >D7HC1 Date Analyzed: 07/17/92

Instrument ID: HPMSDD Time Analyzed: 08:57

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	104878	10.86	393749	14.59	230844	20.08
	UPPER LIMIT	209756	11.36	787498	15.09	461688	20.58
	LOWER LIMIT	52439	10.36	196874	14.09	115422	19.58
	EPA SAMPLE NO.						
1	SBLK07	110611	10.84	458930	14.55	264339	20.03
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

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8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >D7HC1 Date Analyzed: 07/17/92

Instrument ID: HPMSDD Time Analyzed: 08:57

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	435803	24.73	331273	30.63	293407	33.91
	UPPER LIMIT	871606	25.23	662546	31.13	586814	34.41
	LOWER LIMIT	217902	24.23	165636	30.13	146703	33.41
	EPA SAMPLE NO.						
1	SBLK07	497184	24.68	435476	30.58	313597	33.84
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IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

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8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >D7LC1 Date Analyzed: 07/21/92

Instrument ID: HPMSD-D Time Analyzed: 08:03

	IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
12 HOUR STD	102646	10.82	393808	14.55	225127	20.03
UPPER LIMIT	205292	11.32	787616	15.05	450254	20.53
LOWER LIMIT	51323	10.32	196904	14.05	112564	19.53
EPA SAMPLE NO.						
1 SBLK05MS	101731	10.82	386339	14.53	221872	20.01
2 SBLK05MSD	100231	10.82	374505	14.54	205575	20.01
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >D7LC1 Date Analyzed: 07/21/92

Instrument ID: HPMSD-D Time Analyzed: 08:03

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	434883	24.67	342336	30.59	296314	33.83
	UPPER LIMIT	869766	25.17	684672	31.09	592628	34.33
	LOWER LIMIT	217441	24.17	171168	30.09	148157	33.33
	EPA SAMPLE NO.						
1	SBLK05MS	415392	24.66	373846	30.56	257888	33.80
2	SBLK05MSD	396859	24.66	362915	30.56	251720	33.80
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IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

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8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >C7LC1 Date Analyzed: 07/21/92

Instrument ID: HPMSDC Time Analyzed: 08:09

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	36498	10.73	131034	14.46	81782	19.95
	UPPER LIMIT	72996	11.23	262068	14.96	163564	20.45
	LOWER LIMIT	18249	10.23	65517	13.96	40891	19.45
	EPA SAMPLE NO.						
1	108DWD AE BAL 7-30-92	33832	10.71	117568	14.44	73422	19.93
2	108DW AE BAL 7-30-92	32442	10.72	116227	14.45	70470	19.94
3	1091W	33650	10.74	117814	14.46	73087	19.95
4	1141W	36183	10.75	120011	14.47	80121	19.96
5	10391W	37004	10.73	130953	14.45	81196	19.95
6	10391WM	34463	10.72	123131	14.44	75293	19.93
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

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8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >C7LC1 Date Analyzed: 07/21/92

Instrument ID: HPMSDC Time Analyzed: 08:09

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	164927	24.60	121988	30.51	96132	33.69
	UPPER LIMIT	329854	25.10	243976	31.01	192264	34.19
	LOWER LIMIT	82463	24.10	60994	30.01	48066	33.19
	EPA SAMPLE NO.						
1	108DWD	143414	24.58	122076	30.48	73510	33.67
2	108DW	139679	24.58	122207	30.49	73008	33.69
3	1091W	149336	24.61	125641	30.50	75225	33.70
4	1141W	155974	24.62	140100	30.52	86497	33.72
5	10391W	154982	24.61	103901	30.52	96429	33.72
6	10391WM	147499	24.58	129790	30.49	89400	33.68
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IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

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8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >D7MC1 Date Analyzed: 07/22/92

Instrument ID: HPMSDD Time Analyzed: 09:37

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	115307	10.82	434846	14.55	249566	20.02
	UPPER LIMIT	230614	11.32	869692	15.05	499132	20.52
	LOWER LIMIT	57654	10.32	217423	14.05	124783	19.52
	EPA SAMPLE NO.						
1	SBLK06	109517	10.79	427598	14.51	241290	20.00
2	10391WX	111962	10.83	439918	14.55	235580	20.03
3	1101WRE ARL 7-30-92	112399	10.83	445871	14.55	236684	20.03
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >D7MC1 Date Analyzed: 07/22/92

Instrument ID: HPMSDD Time Analyzed: 09:37

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	480986	24.66	373324	30.57	319213	33.82
	UPPER LIMIT	961972	25.16	746648	31.07	638426	34.32
	LOWER LIMIT	240493	24.16	186662	30.07	159606	33.32
	EPA SAMPLE NO.						
1	SBLK06	450318	24.64	385254	30.56	257825	33.79
2	10391WX	416402	24.68	363966	30.60	268190	33.86
3	1101W AE DAC 7-30-92	447151	24.69	394065	30.59	275390	33.86
4							
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17							
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19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

page 1 of 1.

FORM VIII SV-2 1/87 Rev

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >C7NC1 Date Analyzed: 07/23/92

Instrument ID: HPMSDC Time Analyzed: 09:54

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	36413	10.72	131349	14.45	78393	19.93
	UPPER LIMIT	72826	11.22	262698	14.95	156786	20.43
	LOWER LIMIT	18206	10.22	65675	13.95	39196	19.43
	EPA SAMPLE NO.						
1	108DWD	38585	10.72	133763	14.44	84127	19.92
2	108DW	39626	10.72	138678	14.44	88499	19.93
3	1101W	39876	10.75	139337	14.47	88256	19.96
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21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

page 1 of 1.

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ORTEK Contract:

Lab code: ORTEK Case No.: 89MC1 SAS No.: SDG No.: 10391W

Lab File ID (Standard): >C7NC1 Date Analyzed: 07/23/92

Instrument ID: HPMSDC Time Analyzed: 09:54

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	159433	24.56	120134	30.49	82195	33.64
	UPPER LIMIT	318866	25.06	240268	30.99	164390	34.14
	LOWER LIMIT	79716	24.06	60067	29.99	41098	33.14
	EPA SAMPLE NO.						
1	108DWD	167550	24.57	140155	30.47	85323	33.64
2	108DW	174595	24.57	141580	30.47	85868	33.65
3	1101W	176741	24.60	151863	30.50	93544	33.68
4							
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18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

page 1 of 1.

FORM VIII SV-2 1/87 Rev

ORTEK
ENVIRONMENTAL LABORATORY
2496 West Mason Street P.O. Box 12435 Green Bay, WI 54307-2435
414-498-2222
FAX: 414-498-4067

CASE NARRATIVE

Lab Name: ORTEK
Case No.: WOOD
SDG No. WMW106

Contract:
SAS No.:
Sample Analysis Price:

PCB/PESTICIDE ORGANIC ANALYSIS

Sample No.	EPA Sample No.	Lab Sample ID
BLK01	BLK01	0715WBLK1
BLK01MS	BLK01MS	0715WBLK1MS
BLK01MSD	BLK01MSD	0715WBLK1MSD
BLK02	BLK02	0716WBLK1
BLK02MS	BLK02MS	0716WBLK1MS
BLK02MSD	BLK02MSD	0716WBLK1MSD
WMW101-10GG00W	WMW101	127902
WMW103910GG00W	WMW10391	127967
WMW103910GG0WM	WMW10391M	127968
WMW103910GG0WX	WMW10391X	127969
WMW104-10GG00W	MWM104-1	127945
WMW104920GG00W	WMW10492	127946
WMW106-D0GG00W	WMW106	127897
WMW107-D0GG00W	WMW107	127898
WMW107-S0GGOOW	WMW107-S	127944
WMW108-D0GG0WD	WMW108-D	127963
WMW108-D0GG0W	WMW108-DW	127964
WMW109-10GG0W	WMW109	127965
WMW109-10GG0W	WMW109	127965R1-20
WMW109920GG00W	WMW10992	127947
WMW110-10GG00W	WMW110	127970
WMW110-10GG00W	WMW110	127970R1-20
WMW111920GG0WD	WMW11192D	127901
WMW111920GG00W	WMW11192W	127900
WMW112-10GG0WB	WMW112	127899
WMW114-10GG00W	WMW114	127966

1.) The instrument ID for Semivolatile PCB/Pesticide Organic Analysis is 390A. The analysis was performed simultaneously on two columns from a ingle injection. The primary analysis was performed on a PTE-5 capillary column and was confirmed on a SPB-608 capillary column.

2.) The Data Summary and Data Package was collated in accordance with CLP/SOW 1/91.

3.) Due to a defect in the surrogate spiking solution only TCMX was quantitated. The surrogate spiking solution has since been replaced.

4.) Samples 127965 and 127970 had peaks higher than the detectors' quantitatable limit (1000mV). These samples were submitted as preliminary data in this data package. Reanalysis of a dilution are also included as samples 127965R1-20 and 127970R1-20 in this data package.

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

Signature: David L. Schumacher Name: David L. Schumacher

Date: 9-23-92 Title: Organic Supervisor

ORGANIC DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY Ortek
LAB PROJECT NO. WMW106
NO. OF SAMPLES/
MATRIX 24/Water

SITE NLTSS
REVIEWER Dana Doerfler
REVIEWER'S NAME Dana Doerfler
COMPLETION DATE 8/13/02

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	HERB	OTHER
1. HOLDING TIMES			✓		
2. BLANKS			✓		
3. SURROGATES			(1)		
4. INSTR. CALIBRATIONS			✓		
5. INTERNAL STDS. Pest Analytical Sequence			(2)		
6. GC/MS TUNING			NA		
7. MATRIX SPIKE/DUP			✓		
8. OVERALL ASSESSMENT			O		

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) Surrogate recoveries outside control limits for samples WMW107 and WMW112. Data qualified as estimated.

COMMENTS: (2) Due to a defect in the surrogate spiking solution only TCMX was quantitated. No qualifiers necessary for data.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK01

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 0715WBLK1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/15/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/24/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK01MS

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 0715WBLK1MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/15/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/24/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK01MSD

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 0715WBLK1MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/15/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/24/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK02

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 0716WBLK1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/25/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK02MS

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 0716WBLK1MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/25/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK02MSD

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 0716WBLK1MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/25/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW101

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127902

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/15/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/24/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW10391

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127967

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/26/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW10391M

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127968

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/26/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW10391X

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127969

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/26/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW104-1

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127945

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/25/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW10492

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127946

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/25/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW106

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127897

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/15/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/24/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW107

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127898

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/15/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/24/92

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 5.0 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	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
7421-36-3	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

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW107-S

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127944

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/25/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW108-D

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127963

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/26/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW108-DW

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127964

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/26/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.035	
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0094	
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW109

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127965

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/26/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW109

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD2 SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127965R1-20

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/04/92

Injection Volume: 1.00 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.10	U
319-85-7	beta-BHC	0.10	U
319-86-8	delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)	0.10	U
76-44-8	Heptachlor	0.10	U
309-00-2	Aldrin	0.10	U
1024-57-3	Heptachlor epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin	0.20	U
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin	0.20	U
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT	0.20	U
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin ketone	0.20	U
7421-36-3	Endrin aldehyde	0.20	U
5103-71-9	alpha-Chlordane	0.10	U
5103-74-2	gamma-Chlordane	0.10	U
8001-35-2	Toxaphene	10	U
12674-11-2	Aroclor-1016	2.0	U
11104-28-2	Aroclor-1221	4.0	U
11141-16-5	Aroclor-1232	2.0	U
53469-21-9	Aroclor-1242	2.0	U
12672-29-6	Aroclor-1248	2.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW10992

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127947

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/25/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW110

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127970

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/26/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW110

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD2 SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127970R1-20

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/04/92

Injection Volume: 1.00 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.10	U
319-85-7	beta-BHC	0.10	U
319-86-8	delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)	0.10	U
76-44-8	Heptachlor	0.10	U
309-00-2	Aldrin	0.10	U
1024-57-3	Heptachlor epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin	0.20	U
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin	0.20	U
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT	0.20	U
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin ketone	0.20	U
7421-36-3	Endrin aldehyde	0.20	U
5103-71-9	alpha-Chlordane	0.10	U
5103-74-2	gamma-Chlordane	0.10	U
8001-35-2	Toxaphene	10	U
12674-11-2	Aroclor-1016	2.0	U
11104-28-2	Aroclor-1221	4.0	U
11141-16-5	Aroclor-1232	2.0	U
53469-21-9	Aroclor-1242	2.0	U
12672-29-6	Aroclor-1248	2.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW11192D

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127901

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/15/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/24/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW11192W

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127900

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/15/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/24/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW112

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127899

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/14/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/15/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/24/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMW114

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Matrix: (soil/water) WATER Lab Sample ID: 127966

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/15/92

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/16/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/26/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0050	U
319-85-7	beta-BHC	0.0050	U
319-86-8	delta-BHC	0.0050	U
58-89-9	gamma-BHC (Lindane)	0.0050	U
76-44-8	Heptachlor	0.0050	U
309-00-2	Aldrin	0.0050	U
1024-57-3	Heptachlor epoxide	0.0050	U
959-98-8	Endosulfan I	0.0050	U
60-57-1	Dieldrin	0.010	U
72-55-9	4,4'-DDE	0.010	U
72-20-8	Endrin	0.010	U
33213-65-9	Endosulfan II	0.010	U
72-54-8	4,4'-DDD	0.010	U
1031-07-8	Endosulfan sulfate	0.010	U
50-29-3	4,4'-DDT	0.010	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin ketone	0.010	U
7421-36-3	Endrin aldehyde	0.010	U
5103-71-9	alpha-Chlordane	0.0050	U
5103-74-2	gamma-Chlordane	0.0050	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.20	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column(1): PTE-5 ID: 0.25(mm) GC Column(2): SPB-608 ID: 0.25(mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	BLK01	71	70	0*	0*			2
02	BLK02	81	79	0*	0*			2
03	WMW101	67	64	0*	0*			2
04	WMW10391	77	76	0*	0*			2
05	WMW10391M	84	83	0*	0*			2
06	WMW10391X	81	82	0*	0*			2
07	WMW104-1	71	70	0*	0*			2
08	WMW10492	92	86	0*	0*			2
09	WMW106	83	76	0*	0*			2
10	WMW107	48*	46*	0D	0D			2
11	WMW107-S	78	77	0*	0*			2
12	WMW108-D	82	82	0*	0*			2
13	WMW108-DW	77	78	0*	0*			2
14	WMW109	103	87	0*	0*			2
15	WMW10992	84	82	0*	0*			2
16	WMW110	90	85	0*	0*			2
17	WMW11192D	88	82	0 ~~16~~* dym 7/27/92	~~19~~* 0 dym 7/27/92			2
18	WMW11192W	83	77	0*	0*			2
19	WMW112	59*	58*	0*	0*			4
20	WMW114	83	83	0*	0*			2
21	BLK01MS	79	78	0*	0*			2
22	BLK01MSD	70	69	0*	0*			2
23	BLK02MS	76	75	0*	0*			2
24	BLK02MSD	76	75	0*	0*			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

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:ORTEK Contract:
Lab Code:ORTEK Case No.:WOOD SDG:WMW106

Matrix Spike - EPA Sample No.:BLK01

COMPOUND	SPIKE ADDED (ug)	SAMPLE CONCENTRATION (ug)	MS CONCENTRATION (ug)	MS % REC	QC. LIMITS REC.
gamma-BHC (Lindane)	0.02	0.00	--------- 0.02 -	98.00	56-153
Heptachlor	0.02	0.00	--------- 0.02	91.00	40-131
Aldrin	0.02	0.00	--------- 0.02 -	86.00	40-120
Dieldrin	0.05	0.00	--------- 0.05 -	96.00	52-126
Endrin	0.05	0.00	--------- 0.05 -	96.00	56-121
4,4'-DDT	0.05	0.00	--------- 0.05 -	95.00	38-127

COMPOUND	SPIKE ADDED (ug)	MSD CONCENTRATION (ug)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.02	0.02	88.00	10.75	15	56-123
Heptachlor	0.02	0.02	84.00	8.00	20	40-131
Aldrin	0.02	0.02	77.00	11.04	22	40-120
Dieldrin	0.05	0.04	88.60	8.02	18	52-126
Endrin	0.05	0.05	97.60	1.65	21	56-121
4,4'-DDT	0.05	0.04	73.20	25.92	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: _____

FORM III PEST-1

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:ORTEK Contract:
Lab Code:ORTEK Case No.:WOOD SDG:WMW106

Matrix Spike - EPA Sample No.:BLK02

COMPOUND	SPIKE ADDED (ug)	SAMPLE CONCENTRATION (ug)	MS CONCENTRATION (ug)	MS % REC	QC. LIMITS REC.
gamma-BHC (Lindane)	0.02	0.00	--------- 0.02 -	114.00	56-153
Heptachlor	0.02	0.00	--------- 0.02	109.00	40-131
Aldrin	0.02	0.00	--------- 0.02 -	94.00	40-120
Dieldrin	0.05	0.00	--------- 0.06 -	112.00	52-126
Endrin	0.05	0.00	--------- 0.07 -	137.00	56-121
4,4'-DDT	0.05	0.00	--------- 0.05 -	102.00	38-127

COMPOUND	SPIKE ADDED (ug)	MSD CONCENTRATION (ug)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.02	0.02	104.00	9.17	15	56-123
Heptachlor	0.02	0.02	105.50	3.26	20	40-131
Aldrin	0.02	0.02	93.50	0.53	22	40-120
Dieldrin	0.05	0.05	109.00	2.71	18	52-126
Endrin	0.05	0.07	134.80	1.62	21	56-121
4,4'-DDT	0.05	0.05	103.80	1.75	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: __2_ out of _12_ outside limits

COMMENTS: _____

FORM III PEST-1

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK02

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Lab Sample ID: _____ Lab File ID: _____

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

Sulfur Cleanup: (Y/N) N Date Extracted: 07/16/92

Date Analyzed (1): _____ Date Analyzed (2): _____

Time Analyzed (1): _____ Time Analyzed (2): _____

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

GC Column (1): _____ ID: ____ (mm) GC Column (2): _____ ID: ____ (mm

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BLK02	0716WBLK1	07/25/92	07/25/92
02	WMW10391	127967	07/26/92	07/26/92
03	WMW10391M	127968	07/26/92	07/26/92
04	WMW10391X	127969	07/26/92	07/26/92
05	WMW104-1	127945	07/25/92	07/25/92
06	WMW10492	127946	07/25/92	07/25/92
07	WMW107-S	127944	07/25/92	07/25/92
08	WMW108-D	127963	07/26/92	07/26/92
09	WMW108-DW	127964	07/26/92	07/26/92
10	WMW109	127965	07/26/92	07/26/92
11	WMW10992	127947	07/25/92	07/25/92
12	WMW110	127970	07/26/92	07/26/92
13	WMW114	127966	07/26/92	07/26/92
14	BLK02MS	0716WBLK1MS	07/25/92	07/25/92
15	BLK02MSD	0716WBLK1MSD	07/25/92	07/25/92

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK01

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Lab Sample ID: _____ Lab File ID: _____

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

Sulfur Cleanup: (Y/N) N Date Extracted: 07/15/92

Date Analyzed (1): _____ Date Analyzed (2): _____

Time Analyzed (1): _____ Time Analyzed (2): _____

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

GC Column (1): _____ ID: ____ (mm) GC Column (2): _____ ID: ____ (mm

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BLK01	0715WBLK1	07/24/92	07/24/92
02	WMW101	127902	07/24/92	07/24/92
03	WMW106	127897	07/24/92	07/24/92
04	WMW107	127898	07/24/92	07/24/92
05	WMW11192D	127901	07/24/92	07/24/92
06	WMW11192W	127900	07/24/92	07/24/92
07	WMW112	127899	07/24/92	07/24/92
08	BLK01MS	0715WBLK1MS	07/24/92	07/24/92
09	BLK01MSD	0715WBLK1MSD	07/24/92	07/24/92

COMMENTS:

6D

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Instrument ID: 5890AP Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: PTE-5 ID: 0.25(mm) Date(s) Analyzed: 07/24/92 07/24/92

COMPOUND	RT OF STANDARDS LOW	MID	HIGH	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	9.51	9.51	9.51	9.51	9.46	9.56
beta-BHC	10.39	10.39	10.38	10.39	10.34	10.44
delta-BHC	11.44	11.44	11.43	11.44	11.39	11.49
gamma-BHC (Lindane)	10.63	10.63	10.62	10.63	10.58	10.68
Heptachlor	13.26	13.26	13.26	13.26	13.21	13.31
Aldrin	14.58	14.58	14.58	14.58	14.53	14.63
Heptachlor epoxide	16.06	16.06	16.06	16.06	15.99	16.13
Endosulfan I	17.45	17.44	17.44	17.44	17.37	17.51
Dieldrin	18.44	18.44	18.44	18.44	18.37	18.51
4,4'-DDE	18.30	18.30	18.30	18.30	18.23	18.37
Endrin	19.27	19.27	19.26	19.27	19.20	19.34
Endosulfan II	19.61	19.61	19.61	19.61	19.54	19.68
4,4'-DDD	19.90	19.90	19.89	19.90	19.83	19.97
Endosulfan sulfate	21.22	21.22	21.23	21.22	21.15	21.29
4,4'-DDT	21.33	21.33	21.32	21.33	21.26	21.40
Methoxychlor	23.48	23.48	23.47	23.48	23.41	23.55
Endrin ketone	23.00	23.00	23.00	23.00	22.93	23.07
Endrin aldehyde	20.31	20.30	20.31	20.31	20.24	20.38
alpha Chlordane	17.54	17.54	17.54	17.54	17.47	17.61
gamma Chlordane	16.96	16.96	16.96	16.96	16.89	17.03
Tetrachloro-m-xylene	8.26	8.26	8.26	8.26	8.21	8.31
Decachlorobiphenyl	29.93	29.93	29.93	29.93	29.83	30.03

* Surrogate retention times are measured from Standard Mix A analyses

Retention time windows are +/- 0.05 minutes for all compounds that elu
before Heptachlor epoxide, +/- 0.07 minutes for all other compounds,
except +/- 0.10 minutes for Decachlorobiphenyl.

6D

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Instrument ID: 5890AC Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: SPB-608 ID: 0.25(mm) Date(s) Analyzed: 07/24/92 07/24/92

COMPOUND	RT OF STANDARDS LOW	MID	HIGH	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	11.22	11.22	11.22	11.22	11.17	11.27
beta-BHC	13.13	13.13	13.13	13.13	13.08	13.18
* delta-BHC	14.55	14.54	14.54	14.54	14.49	14.59
gamma-BHC (Lindane)	12.75	12.75	12.74	12.75	12.70	12.80
Heptachlor	14.25	14.25	14.24	14.25	14.20	14.30
Aldrin	15.56	15.56	15.56	15.56	15.51	15.61
Heptachlor epoxide	17.76	17.76	17.76	17.76	17.69	17.83
Endosulfan I	19.20	19.20	19.20	19.20	19.13	19.27
Dieldrin	20.39	20.39	20.39	20.39	20.32	20.46
4,4'-DDE	20.08	20.08	20.08	20.08	20.01	20.15
Endrin	21.74	21.74	21.74	21.74	21.67	21.81
Endosulfan II	22.49	22.49	22.49	22.49	22.42	22.56
4,4'-DDD	22.26	22.26	22.25	22.26	22.19	22.33
Endosulfan sulfate	24.30	24.30	24.30	24.30	24.23	24.37
4,4'-DDT	23.45	23.45	23.44	23.45	23.38	23.52
Methoxychlor	26.57	26.57	26.56	26.57	26.50	26.64
Endrin ketone	27.05	27.05	27.05	27.05	26.98	27.12
Endrin aldehyde	23.68	23.68	23.68	23.68	23.61	23.75
alpha Chlordane	19.13	19.13	19.13	19.13	19.06	19.20
gamma Chlordane	18.53	18.53	18.53	18.53	18.46	18.60
Tetrachloro-m-xylene	8.70	8.70	8.70	8.70	8.65	8.75
Decachlorobiphenyl	31.85	31.84	31.85	31.85	31.75	31.95

* Surrogate retention times are measured from Standard Mix A analyses

Retention time windows are +/- 0.05 minutes for all compounds that elut before Heptachlor epoxide, +/- 0.07 minutes for all other compounds, except +/- 0.10 minutes for Decachlorobiphenyl.

6E

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Instrument ID: 5890AP Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: PTE-5 ID: 0.25(mm) Date(s) Analyzed: 07/24/92 07/24/92

COMPOUND	CALIBRATION FACTORS LOW	MID	HIGH	MEAN	%RSD
alpha-BHC	6120000	4990000	7440000	6180000	19.8
beta-BHC	4300000	3720000	3960000	3990000	7.3
delta-BHC	4400000	4150000	5020000	4520000	9.9
gamma-BHC (Lindane)	6020000	5190000	6650000	5950000	12.3
Heptachlor	6050000	5430000	5490000	5660000	6.0
Aldrin	5820000	5780000	6650000	6080000	8.1
Heptachlor epoxide	6070000	5740000	5940000	5920000	2.8
Endosulfan I	5130000	4850000	5090000	5020000	3.0
Dieldrin	4890000	5030000	5500000	5140000	6.2
4,4'-DDE	4600000	4790000	5300000	4900000	7.4
Endrin	3390000	3320000	3620000	3440000	4.6
Endosulfan II	4210000	4070000	3990000	4090000	2.7
4,4'-DDD	3380000	3290000	3480000	3380000	2.8
Endosulfan sulfate	3040000	2870000	2930000	2950000	2.9
4,4'-DDT	2650000	2540000	2680000	2620000	2.8
Methoxychlor	1480000	1290000	1110000	1290000	14.3
Endrin ketone	3590000	3480000	3280000	3450000	4.6
Endrin aldehyde	3650000	3330000	3120000	3370000	7.9
alpha Chlordane	6700000	6360000	6530000	6530000	2.6
gamma Chlordane	6590000	6210000	6260000	6350000	3.2
Tetrachloro-m-xylene	7810000	7480000	7370000	7550000	3.0
Decachlorobiphenyl	4560000	4150000	3560000	4090000	12.3

* Surrogate calibration factors are measured from Standard Mix A analyses

%RSD must be less than or equal 20.0% for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

6E

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Instrument ID: 5890AC Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: SPB-608 ID: 0.25(mm) Date(s) Analyzed: 07/24/92 07/24/92

COMPOUND	CALIBRATION FACTORS LOW	MID	HIGH	MEAN	%RSD
alpha-BHC	10200000	8450000	12600000	10400000	20.0
beta-BHC	5940000	5190000	5840000	5660000	7.2
delta-BHC	6900000	7100000	8940000	7650000	14.7
gamma-BHC (Lindane)	9770000	8630000	11300000	9900000	13.5
Heptachlor	10800000	10000000	10400000	10400000	3.[illegible]
Aldrin	10500000	9420000	10200000	10000000	5.6
Heptachlor epoxide	10100000	9360000	9340000	9600000	4.5
Endosulfan I	8350000	7860000	8040000	8080000	3.1
Dieldrin	7630000	7690000	8150000	7820000	3.6
4,4'-DDE	6490000	6770000	7460000	6910000	7.2
Endrin	4340000	4070000	4260000	4220000	3.3
Endosulfan II	7130000	6900000	6660000	6900000	3.4
4,4'-DDD	4590000	4620000	5210000	4810000	7.3
Endosulfan sulfate	5320000	5150000	5000000	5160000	3.1
4,4'-DDT	4200000	4430000	5100000	4580000	10.2
Methoxychlor	2610000	2450000	2250000	2440000	7.4
Endrin ketone	5780000	5880000	5650000	5770000	2.0
Endrin aldehyde	5370000	4950000	4680000	5000000	7.0
alpha Chlordane	10700000	10200000	9850000	10200000	4.2
gamma Chlordane	10400000	9640000	9510000	9850000	4.9
Tetrachloro-m-xylene	11500000	10900000	10400000	10900000	5.0
Decachlorobiphenyl	8000000	7290000	6120000	7140000	13.3

* Surrogate calibration factors are measured from Standard Mix A analyses

%RSD must be less than or equal 20.0% for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

6F

PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Instrument ID: 5890AP Date(s) Analyzed: 07/23/92 07/24/92

GC Column: PTE-5 ID: 0.25(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	0.500	*1	18.26	18.19	18.33	468000
		*2	19.23	19.16	19.30	662000
		*3	20.05	19.98	20.12	771000
		4	22.13	22.06	22.20	357000
		5	22.88	22.81	22.95	438000
Aroclor 1016	0.100	*1	12.65	12.58	12.72	983000
		*2	13.02	12.95	13.09	424000
		*3	13.30	13.23	13.37	253000
		4	14.70	14.63	14.77	348000
		5	14.84	14.77	14.91	161000
Aroclor 1221	0.200	*1	6.38	6.31	6.45	156000
		*2	7.97	7.90	8.04	87600
		*3	8.95	8.88	9.02	179000
		4	9.29	9.22	9.36	140000
		5	9.50	9.43	9.57	436000
Aroclor 1232	0.100	*1	12.65	12.58	12.72	394000
		*2	13.01	12.94	13.08	167000
		*3	13.30	13.23	13.37	93600
		4	14.70	14.63	14.77	123000
		5				
Aroclor 1242	0.100	*1	12.65	12.58	12.72	803000
		*2	13.01	12.94	13.08	336000
		*3	13.30	13.23	13.37	183000
		4	14.70	14.63	14.77	240000
		5	15.17	15.10	15.24	254000
Aroclor 1248	0.100	*1	12.65	12.58	12.72	689000
		*2	13.02	12.95	13.09	212000
		*3	13.30	13.23	13.37	91600
		4	14.70	14.63	14.77	391000
		5	15.17	15.10	15.24	407000
Aroclor 1254	0.100	*1	16.36	16.29	16.43	512000
		*2	17.21	17.14	17.28	765000
		*3	18.62	18.55	18.69	686000
		4	19.61	19.54	19.68	440000
		5	21.51	21.44	21.58	480000
Aroclor 1260	0.100	*1	17.90	17.83	17.97	539000
		*2	19.09	19.02	19.16	248000
		*3	19.54	19.47	19.61	564000
		4	20.45	20.38	20.52	572000
		5	21.50	21.43	21.57	693000

* Denotes required peaks

6F

PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Instrument ID: 5890AC Date(s) Analyzed: 07/23/92 07/24/92

GC Column: SPB-608 ID: 0.25(mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	0.500	*1	21.25	21.18	21.32	373000
		*2	22.31	22.24	22.38	784000
		*3	23.65	23.58	23.72	667000
		4	24.74	24.67	24.81	264000
		5	25.85	25.78	25.92	949000
Aroclor 1016	0.100	*1	14.22	14.15	14.29	1320000
		*2	14.79	14.72	14.86	385000
		*3	15.29	15.22	15.36	321000
		4	15.67	15.60	15.74	363000
		5	16.68	16.61	16.75	1120000
Aroclor 1221	0.200	*1	7.40	7.33	7.47	180000
		*2	9.69	9.62	9.76	76500
		*3	10.15	10.08	10.22	353000
		4	10.71	10.64	10.78	157000
		5	10.97	10.90	11.04	506000
Aroclor 1232	0.100	*1	14.22	14.15	14.29	496000
		*2	14.79	14.72	14.86	126000
		*3	15.29	15.22	15.36	112000
		4	15.67	15.60	15.74	121000
		5	16.67	16.60	16.74	711000
Aroclor 1242	0.100	*1	14.22	14.15	14.29	1030000
		*2	14.79	14.72	14.86	280000
		*3	15.29	15.22	15.36	247000
		4	15.67	15.60	15.74	330000
		5	16.68	16.61	16.75	870000
Aroclor 1248	0.100	*1	14.23	14.16	14.30	852000
		*2	14.80	14.73	14.87	193000
		*3	15.29	15.22	15.36	145000
		4	15.78	15.71	15.85	194000
		5	16.68	16.61	16.75	882000
Aroclor 1254	0.100	*1	18.72	18.65	18.79	844000
		*2	20.25	20.18	20.32	434000
		*3	20.69	20.62	20.76	971000
		4	21.88	21.81	21.95	419000
		5	22.94	22.87	23.01	429000
Aroclor 1260	0.100	*1	21.39	21.32	21.46	776000
		*2	21.88	21.81	21.95	779000
		*3	23.48	23.41	23.55	791000
		4	23.69	23.62	23.76	543000
		5	23.92	23.85	23.99	275000

00036

* Denotes required peaks

6G

PESTICIDE ANALYTE RESOLUTION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column (1): SPB-608 ID: 0.25(mm) Instrument ID (1): 5890AC

EPA Sample No. (Standard 1): RESC01 Lab Sample ID (1): RESC

Date Analyzed (1): 07/23/92 Time Analyzed (1): 2228

	ANALYTE	RT	RESOLUTION (%)
01	Tetrachloro-m-xylene	8.70	100.0
02	gamma-Chlordane	18.55	100.0
03	Endosulfan I	19.22	100.0
04	4,4'-DDE	20.09	100.0
05	Dieldrin	20.41	100.0
06	Endosulfan sulfate	24.32	100.0
07	Methoxychlor	26.58	100.0
08	Endrin ketone	27.07	100.0
09	Decachlorobiphenyl	31.86	

GC Column (2): PTE-5 ID: 0.25(mm) Instrument ID (2): 5890AP

EPA Sample No. (Standard 2): RESC01 Lab Sample ID (2): RESC

Date Analyzed (2): 07/23/92 Time Analyzed (2): 2228

	ANALYTE	RT	RESOLUTION (%)
01	Tetrachloro-m-xylene	8.32	100.0
02	gamma-Chlordane	17.01	100.0
03	Endosulfan I	17.49	100.0
04	4,4'-DDE	18.35	100.0
05	Dieldrin	18.49	100.0
06	Endosulfan sulfate	21.27	100.0
07	Endrin ketone	23.04	100.0
08	Methoxychlor	23.51	100.0
09	Decachlorobiphenyl	29.96	

Resolution of two adjacent peaks must be calculated as a percentage of the height of the smaller peak, and must be greater than or equal to 60.0%.

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: PTE-5 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/9

EPA Sample No. (PIBLK): PIBLK01 Date Analyzed : 07/24/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 0840

EPA Sample No. (PEM): PEM02 Date Analyzed : 07/24/92

Lab Sample ID (PEM): PEM Time Analyzed : 0922

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	9.51	9.46	9.56	0.009	0.010	10.0
beta-BHC	10.39	10.34	10.44	0.008	0.010	20.0
gamma-BHC (Lindane)	10.63	10.58	10.68	0.008	0.010	20.0
Endrin	19.27	19.20	19.34	0.043	0.050	14.0
4,4'-DDT	21.33	21.26	21.40	0.086	0.100	14.0
Methoxychlor	23.48	23.41	23.55	0.224	0.250	10.4

4,4'-DDT % breakdown (1): 4.6 Endrin % breakdown (1): 18.0

Combined % breakdown (1): 22.6

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: SPB-608 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/92

EPA Sample No. (PIBLK): PIBLK01 Date Analyzed : 07/24/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 0840

EPA Sample No. (PEM): PEM02 Date Analyzed : 07/24/92

Lab Sample ID (PEM): PEM Time Analyzed : 0922

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.22	11.17	11.27	0.009	0.010	10.0
beta-BHC	13.14	13.08	13.18	0.009	0.010	10.0
gamma-BHC (Lindane)	12.75	12.70	12.80	0.009	0.010	10.0
Endrin	21.75	21.67	21.81	0.042	0.050	16.0
4,4'-DDT	23.45	23.38	23.52	0.089	0.100	11.0
Methoxychlor	26.57	26.50	26.64	0.225	0.250	10.0

4,4'-DDT % breakdown (1): 6.0 Endrin % breakdown (1): 15.8

Combined % breakdown (1): 21.8

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: PTE-5 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/9

EPA Sample No. (PIBLK): PIBLK03 Date Analyzed : 07/25/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 1452

EPA Sample No. (PEM): PEM03 Date Analyzed : 07/25/92

Lab Sample ID (PEM): PEM Time Analyzed : 1534

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	9.53	9.46	9.56	0.008	0.010	20.0
beta-BHC	10.43	10.34	10.44	0.008	0.010	20.0
gamma-BHC (Lindane)	10.65	10.58	10.68	0.008	0.010	20.0
Endrin	19.29	19.20	19.34	0.046	0.050	8.0
4,4'-DDT	21.35	21.26	21.40	0.079	0.100	21.0
Methoxychlor	23.50	23.41	23.55	0.227	0.250	9.2

4,4'-DDT % breakdown (1): 8.8 Endrin % breakdown (1): 13.0

Combined % breakdown (1): 21.8

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: SPB-608 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/9

EPA Sample No. (PIBLK): PIBLK03 Date Analyzed : 07/25/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 1452

EPA Sample No. (PEM): PEM03 Date Analyzed : 07/25/92

Lab Sample ID (PEM): PEM Time Analyzed : 1534

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.22	11.17	11.27	0.008	0.010	20.0
beta-BHC	13.14	13.08	13.18	0.008	0.010	20.0
gamma-BHC (Lindane)	12.75	12.70	12.80	0.008	0.010	20.0
Endrin	21.75	21.67	21.81	0.047	0.050	6.0
4,4'-DDT	23.45	23.38	23.52	0.084	0.100	16.0
Methoxychlor	26.57	26.50	26.64	0.218	0.250	12.8

4,4'-DDT % breakdown (1): 9.8 Endrin % breakdown (1): 11.8

Combined % breakdown (1): 21.6

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: PTE-5 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/9

EPA Sample No. (PIBLK): PIBLK05 Date Analyzed : 07/26/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 0635

EPA Sample No. (PEM): PEM04 Date Analyzed : 07/26/92

Lab Sample ID (PEM): PEM Time Analyzed : 0716

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	9.54	9.46	9.56	0.009	0.010	10.0
beta-BHC	10.45	10.34	10.44	0.009	0.010	10.0
gamma-BHC (Lindane)	10.66	10.58	10.68	0.009	0.010	10.0
Endrin	19.31	19.20	19.34	0.051	0.050	2.0
4,4'-DDT	21.37	21.26	21.40	0.081	0.100	19.0
Methoxychlor	23.52	23.41	23.55	0.248	0.250	0.8

4,4'-DDT % breakdown (1): 14.8 Endrin % breakdown (1): 9.0

Combined % breakdown (1): 23.8

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: SPB-608 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/9

EPA Sample No. (PIBLK): PIBLK05 Date Analyzed : 07/26/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 0635

EPA Sample No. (PEM): PEM04 Date Analyzed : 07/26/92

Lab Sample ID (PEM): PEM Time Analyzed : 0716

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.23	11.17	11.27	0.009	0.010	10.0
beta-BHC	13.15	13.08	13.18	0.009	0.010	10.0
gamma-BHC (Lindane)	12.76	12.70	12.80	0.009	0.010	10.0
Endrin	21.75	21.67	21.81	0.056	0.050	12.0
4,4'-DDT	23.46	23.38	23.52	0.087	0.100	13.0
Methoxychlor	26.57	26.50	26.64	0.225	0.250	10.0

4,4'-DDT % breakdown (1): 18.6 Endrin % breakdown (1): 9.4

Combined % breakdown (1): 28.0

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: PTE-5 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/92

EPA Sample No. (PIBLK): PIBLK02 Date Analyzed : 07/24/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 1805

EPA Sample No. (INDA): INDAM02 Date Analyzed : 07/25/92

Lab Sample ID (INDA): INDAM Time Analyzed : 0203

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	9.59	9.46	9.56	0.0244	0.0200	22.0
gamma-BHC (Lindane)	10.71	10.58	10.68	0.0228	0.0200	14.0
Heptachlor	13.34	13.21	13.31	0.0206	0.0200	3.0
Endosulfan I	17.52	17.37	17.51	0.0205	0.0200	2.5
Dieldrin	18.52	18.37	18.51	0.0416	0.0400	4.0
Endrin	19.35	19.20	19.34	0.0478	0.0400	19.5
4,4'-DDD	19.98	19.83	19.97	0.0462	0.0400	15.5
4,4'-DDT	21.40	21.26	21.40	0.0405	0.0400	1.2
Methoxychlor	23.55	23.41	23.55	0.235	0.200	17.5
Tetrachloro-m-xylene	8.33	8.21	8.31	0.0193	0.0200	3.5
Decachlorobiphenyl	30.00	29.83	30.03	0.0396	0.0400	1.0

EPA Sample No. (INDB): INDBM02 Date Analyzed : 07/25/92

Lab Sample ID (INDB): INDBM Time Analyzed : 0244

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	10.44	10.34	10.44	0.0238	0.0200	19.0
delta-BHC	11.49	11.39	11.49	0.0233	0.0200	16.5
Aldrin	14.62	14.53	14.63	0.0212	0.0200	6.0
Heptachlor epoxide	16.10	15.99	16.13	0.0220	0.0200	10.0
4,4'-DDE	18.35	18.23	18.37	0.0480	0.0400	20.0
Endosulfan II	19.67	19.54	19.68	0.0478	0.0400	19.5
Endosulfan sulfate	21.29	21.15	21.29	0.0473	0.0400	18.2
Endrin ketone	23.06	22.93	23.07	0.0494	0.0400	23.5
Endrin aldehyde	20.37	20.24	20.38	0.0486	0.0400	21.5
alpha-Chlordane	17.59	17.47	17.61	0.0218	0.0200	9.0
gamma-Chlordane	17.01	16.89	17.03	0.0218	0.0200	9.0
Tetrachloro-m-xylene	8.28	8.21	8.31	0.0206	0.0200	3.0
Decachlorobiphenyl	29.99	29.83	30.03	0.0451	0.0400	12.8

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: SPB-608 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/9

EPA Sample No. (PIBLK): PIBLK02 Date Analyzed : 07/24/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 1805

EPA Sample No. (INDA): INDAM02 Date Analyzed : 07/25/92

Lab Sample ID (INDA): INDAM Time Analyzed : 0203

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.25	11.17	11.27	0.0246	0.0200	23.0
gamma-BHC (Lindane)	12.78	12.70	12.80	0.0225	0.0200	12.5
Heptachlor	14.28	14.20	14.30	0.0196	0.0200	2.0
Endosulfan I	19.24	19.13	19.27	0.0200	0.0200	0.0
Dieldrin	20.43	20.32	20.46	0.0404	0.0400	1.0
Endrin	21.78	21.67	21.81	0.0493	0.0400	23.2
4,4'-DDD	22.29	22.19	22.33	0.0477	0.0400	19.2
4,4'-DDT	23.49	23.38	23.52	0.0397	0.0400	0.8
Methoxychlor	26.60	26.50	26.64	0.218	0.200	9.0
Tetrachloro-m-xylene	8.71	8.65	8.75	0.0196	0.0200	2.0
Decachlorobiphenyl	31.89	31.75	31.95	0.0437	0.0400	9.2

EPA Sample No. (INDB): INDBM02 Date Analyzed : 07/25/92

Lab Sample ID (INDB): INDBM Time Analyzed : 0244

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	13.16	13.08	13.18	0.0245	0.0200	22.5
delta-BHC	14.57	14.49	14.59	0.0234	0.0200	17.0
Aldrin	15.59	15.51	15.61	0.0214	0.0200	7.0
Heptachlor epoxide	17.79	17.69	17.83	0.0216	0.0200	8.0
4,4'-DDE	20.10	20.01	20.15	0.0499	0.0400	24.8
Endosulfan II	22.52	22.42	22.56	0.0457	0.0400	14.2
Endosulfan sulfate	24.34	24.23	24.37	0.0478	0.0400	19.5
Endrin ketone	27.08	26.98	27.12	0.0445	0.0400	11.2
Endrin aldehyde	23.71	23.61	23.75	0.0482	0.0400	20.5
alpha-Chlordane	19.16	19.06	19.20	0.0215	0.0200	7.5
gamma-Chlordane	18.56	18.46	18.60	0.0223	0.0200	11.5
Tetrachloro-m-xylene	8.71	8.65	8.75	0.0209	0.0200	4.5
Decachlorobiphenyl	31.89	31.75	31.95	0.0407	0.0400	1.8

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: PTE-5 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/9

EPA Sample No. (PIBLK): PIBLK04 Date Analyzed : 07/25/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 2224

EPA Sample No. (INDA): INDAM03 Date Analyzed : 07/25/92

Lab Sample ID (INDA): INDAM Time Analyzed : 2304

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	9.54	9.46	9.56	0.0236	0.0200	18.0
gamma-BHC (Lindane)	10.66	10.58	10.68	0.0224	0.0200	12.0
Heptachlor	13.29	13.21	13.31	0.0202	0.0200	1.0
Endosulfan I	17.48	17.37	17.51	0.0196	0.0200	2.0
Dieldrin	18.48	18.37	18.51	0.0450	0.0400	12.5
Endrin	19.30	19.20	19.34	0.0449	0.0400	12.2
4,4'-DDD	19.94	19.83	19.97	0.0491	0.0400	22.8
4,4'-DDT	21.36	21.26	21.40	0.0367	0.0400	8.2
Methoxychlor	23.51	23.41	23.55	0.238	0.200	19.0
Tetrachloro-m-xylene	8.28	8.21	8.31	0.0175	0.0200	12.5
Decachlorobiphenyl	29.97	29.83	30.03	0.0423	0.0400	5.8

EPA Sample No. (INDB): INDBM03 Date Analyzed : 07/25/92

Lab Sample ID (INDB): INDBM Time Analyzed : 2346

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	10.44	10.34	10.44	0.0221	0.0200	10.5
delta-BHC	11.49	11.39	11.49	0.0229	0.0200	14.5
Aldrin	14.60	14.53	14.63	0.0191	0.0200	4.5
Heptachlor epoxide	16.09	15.99	16.13	0.0198	0.0200	1.0
4,4'-DDE	18.33	18.23	18.37	0.0420	0.0400	5.0
Endosulfan II	19.65	19.54	19.68	0.0437	0.0400	9.2
Endosulfan sulfate	21.27	21.15	21.29	0.0447	0.0400	11.8
Endrin ketone	23.05	22.93	23.07	0.0435	0.0400	8.8
Endrin aldehyde	20.35	20.24	20.38	0.0436	0.0400	9.0
alpha-Chlordane	17.57	17.47	17.61	0.0193	0.0200	3.5
gamma-Chlordane	17.00	16.89	17.03	0.0197	0.0200	1.5
Tetrachloro-m-xylene	8.28	8.21	8.31	0.0185	0.0200	7.5
Decachlorobiphenyl	29.97	29.83	30.03	0.0420	0.0400	5.0

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: SPB-608 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/9

EPA Sample No. (PIBLK): PIBLK04 Date Analyzed : 07/25/92

Lab Sample ID (PIBLK): PIBLK Time Analyzed : 2224

EPA Sample No. (INDA): INDAM03 Date Analyzed : 07/25/92

Lab Sample ID (INDA): INDAM Time Analyzed : 2304

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.23	11.17	11.27	0.0238	0.0200	19.0
gamma-BHC (Lindane)	12.75	12.70	12.80	0.0216	0.0200	8.0
Heptachlor	14.25	14.20	14.30	0.0189	0.0200	5.5
Endosulfan I	19.21	19.13	19.27	0.0194	0.0200	3.0
Dieldrin	20.40	20.32	20.46	0.0407	0.0400	1.8
Endrin	21.75	21.67	21.81	0.0474	0.0400	18.5
4,4'-DDD	22.26	22.19	22.33	0.0484	0.0400	21.0
4,4'-DDT	23.46	23.38	23.52	0.0404	0.0400	1.0
Methoxychlor	26.57	26.50	26.64	0.210	0.200	5.0
Tetrachloro-m-xylene	8.70	8.65	8.75	0.0181	0.0200	9.5
Decachlorobiphenyl	31.86	31.75	31.95	0.0413	0.0400	3.2

EPA Sample No. (INDB): INDBM03 Date Analyzed : 07/25/92

Lab Sample ID (INDB): INDBM Time Analyzed : 2346

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	13.14	13.08	13.18	0.0230	0.0200	15.0
delta-BHC	14.55	14.49	14.59	0.0233	0.0200	16.5
Aldrin	15.57	15.51	15.61	0.0195	0.0200	2.5
Heptachlor epoxide	17.77	17.69	17.83	0.0189	0.0200	5.5
4,4'-DDE	20.08	20.01	20.15	0.0447	0.0400	11.8
Endosulfan II	22.50	22.42	22.56	0.0431	0.0400	7.8
Endosulfan sulfate	24.32	24.23	24.37	0.0447	0.0400	11.8
Endrin ketone	27.06	26.98	27.12	0.0405	0.0400	1.2
Endrin aldehyde	23.69	23.61	23.75	0.0442	0.0400	10.5
alpha-Chlordane	19.14	19.06	19.20	0.0189	0.0200	5.5
gamma-Chlordane	18.54	18.46	18.60	0.0192	0.0200	4.0
Tetrachloro-m-xylene	8.70	8.65	8.75	0.0189	0.0200	5.5
Decachlorobiphenyl	31.86	31.75	31.95	0.0415	0.0400	3.8

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: SPB-608 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/92

Instrument ID: 5890AC

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.70 DCB: 31.85

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	RESC01	RESC	07/23/92	2228	8.70		31.86	
02	PEM01	PEM	07/23/92	2310	8.70		31.85	
03	AR166001	AR1660	07/23/92	2350	8.70		31.85	
04	AR122101	AR1221	07/24/92	0031	8.70		31.84	
05	AR123201	AR1232	07/24/92	0112	8.69		31.84	
06	AR124201	AR1242	07/24/92	0153	8.70		31.84	
07	AR124801	AR1248	07/24/92	0234	8.70		31.85	
08	AR125401	AR1254	07/24/92	0315	8.70		31.84	
09	TOXAPH01	TOXAPH	07/24/92	0356	8.69		31.84	
10	INDAL01	INDAL	07/24/92	0437	8.70		31.85	
11	INDBL01	INDBL	07/24/92	0518	8.70		31.85	
12	INDAM01	INDAM	07/24/92	0559	8.70		31.84	
13	INDBM01	INDBM	07/24/92	0640	8.70		31.85	
14	INDAH01	INDAH	07/24/92	0721	8.70		31.85	
15	INDBH01	INDBH	07/24/92	0801	8.70		31.85	
16	PIBLK01	PIBLK	07/24/92	0840	8.70		31.85	
17	PEM02	PEM	07/24/92	0922	8.70		31.85	
18	BLK01	0715WBLK1	07/24/92	1040	8.70			*
19	BLK01MS	0715WBLK1MS	07/24/92	1121	8.70			*
20	BLK01MSD	0715WBLK1MSD	07/24/92	1202	8.70			*
21	WMW106	127897	07/24/92	1243	8.70			*
22	WMW107	127898	07/24/92	1324	8.70			*
23	WMW112	127899	07/24/92	1405	8.70			*
24	WMW11192W	127900	07/24/92	1446	8.70			*
25	WMW11192D	127901	07/24/92	1530	8.70		~~31.87~~	* dm 7/2
26	WMW101	127902	07/24/92	1611	8.71			*
27	PIBLK02	PIBLK	07/24/92	1805	8.71		31.89	
28	INDAM02	INDAM	07/25/92	0203	8.71		31.89	
29	INDBM02	INDBM	07/25/92	0244	8.71		31.89	
30	PIBLK03	PIBLK	07/25/92	1452	8.70		31.86	
31	PEM03	PEM	07/25/92	1534	8.70		31.85	
32	BLK02	0716WBLK1	07/25/92	1615	8.70			*

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: SPB-608 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/92

Instrument ID: 5890AC

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.70 DCB: 31.85

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	BLK02MS	0716WBLK1MS	07/25/92	1656	8.69			*
02	BLK02MSD	0716WBLK1MSD	07/25/92	1737	8.69			*
03	WMW107-S	127944	07/25/92	1859	8.69			*
04	WMW104-1	127945	07/25/92	1940	8.69			*
05	WMW10492	127946	07/25/92	2021	8.69			*
06	WMW10992	127947	07/25/92	2102	8.70			*
07	PIBLK04	PIBLK	07/25/92	2224	8.70		31.86	
08	INDAM03	INDAM	07/25/92	2304	8.70		31.86	
09	INDBM03	INDBM	07/25/92	2346	8.70		31.86	
10	WMW108-D	127963	07/26/92	0026	8.70			*
11	WMW108-DW	127964	07/26/92	0108	8.70			*
12	WMW109	127965	07/26/92	0149	8.70			*
13	WMW114	127966	07/26/92	0230	8.71			*
14	WMW10391	127967	07/26/92	0310	8.71			*
15	WMW10391M	127968	07/26/92	0351	8.71			*
16	WMW10391X	127969	07/26/92	0433	8.70			*
17	WMW110	127970	07/26/92	0514	8.70			*
18	PIBLK05	PIBLK	07/26/92	0635	8.70		31.86	
19	PEM04	PEM	07/26/92	0716	8.70		31.86	

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: PTE-5 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/92

Instrument ID: 5890AP

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.26 DCB: 29.93

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	RESC01	RESC	07/23/92	2228	8.32	*	29.96	
02	PEM01	PEM	07/23/92	2310	8.26		29.93	
03	AR166001	AR1660	07/23/92	2350	8.26		29.92	
04	AR122101	AR1221	07/24/92	0031	8.26		29.92	
05	AR123201	AR1232	07/24/92	0112	8.26		29.92	
06	AR124201	AR1242	07/24/92	0153	8.26		29.92	
07	AR124801	AR1248	07/24/92	0234	8.26		29.93	
08	AR125401	AR1254	07/24/92	0315	8.26		29.93	
09	TOXAPH01	TOXAPH	07/24/92	0356	8.26		29.93	
10	INDAL01	INDAL	07/24/92	0437	8.26		29.93	
11	INDBL01	INDBL	07/24/92	0518	8.26		29.93	
12	INDAM01	INDAM	07/24/92	0559	8.26		29.93	
13	INDBM01	INDBM	07/24/92	0640	8.26		29.93	
14	INDAH01	INDAH	07/24/92	0721	8.26		29.93	
15	INDBH01	INDBH	07/24/92	0801	8.26		29.93	
16	PIBLK01	PIBLK	07/24/92	0840	8.26		29.93	
17	PEM02	PEM	07/24/92	0922	8.26		29.93	
18	BLK01	0715WBLK1	07/24/92	1040	8.32	*		*
19	BLK01MS	0715WBLK1MS	07/24/92	1121	8.26			*
20	BLK01MSD	0715WBLK1MSD	07/24/92	1202	8.26			*
21	WMW106	127897	07/24/92	1243	8.26			*
22	WMW107	127898	07/24/92	1324	8.26			*
23	WMW112	127899	07/24/92	1405	8.26			*
24	WMW11192W	127900	07/24/92	1446	8.26			*
25	WMW11192D	127901	07/24/92	1530	8.30		~~29.97~~	7/27
26	WMW101	127902	07/24/92	1611	8.28			*
27	PIBLK02	PIBLK	07/24/92	1805	8.33	*	30.00	
28	INDAM02	INDAM	07/25/92	0203	8.33	*	30.00	
29	INDBM02	INDBM	07/25/92	0244	8.28		29.99	
30	PIBLK03	PIBLK	07/25/92	1452	8.31		29.98	
31	PEM03	PEM	07/25/92	1534	8.28		29.95	
32	BLK02	0716WBLK1	07/25/92	1615	8.27			*

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

GC Column: PTE-5 ID: 0.25(mm) Init. Calib. Date(s): 07/23/92 07/24/92

Instrument ID: 5890AP

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.26 DCB: 29.93

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	BLK02MS	0716WBLK1MS	07/25/92	1656	8.26			*
02	BLK02MSD	0716WBLK1MSD	07/25/92	1737	8.26			*
03	WMW107-S	127944	07/25/92	1859	8.27			*
04	WMW104-1	127945	07/25/92	1940	8.27			*
05	WMW10492	127946	07/25/92	2021	8.27			*
06	WMW10992	127947	07/25/92	2102	8.27			*
07	PIBLK04	PIBLK	07/25/92	2224	8.28		29.97	
08	INDAM03	INDAM	07/25/92	2304	8.28		29.97	
09	INDBM03	INDBM	07/25/92	2346	8.28		29.97	
10	WMW108-D	127963	07/26/92	0026	8.28			*
11	WMW108-DW	127964	07/26/92	0108	8.28			*
12	WMW109	127965	07/26/92	0149	8.28			*
13	WMW114	127966	07/26/92	0230	8.28			*
14	WMW10391	127967	07/26/92	0310	8.28			*
15	WMW10391M	127968	07/26/92	0351	8.29			*
16	WMW10391X	127969	07/26/92	0433	8.29			*
17	WMW110	127970	07/26/92	0514	8.28			*
18	PIBLK05	PIBLK	07/26/92	0635	8.28		29.97	
19	PEM04	PEM	07/26/92	0716	8.28		29.97	

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

WMW108-DW

Lab Name: ORTEK Contract: _____

Lab Code: ORTEK Case No.: WOOD SAS No.: _____ SDG No.: WMW106

Lab Sample ID : 127964 Dates(s) Analyzed: 07/26/92 07/26/92

Instrument ID (1): 5890AP Instrument ID (2): 5890AC

GC Column(1): PTE-5 ID: 0.25(mm) GC Column(2): SPB-608 ID: 0.25(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
delta-BHC	1	11.48	11.39	11.49	0.035	
	2	14.50	14.49	14.59	0.041	17.1
alpha-Chlordane	1	17.58	17.47	17.61	0.0094	
	2	19.10	19.06	19.20	0.0094	0.0

FORM X PEST-1