1606694

RFW LOT # 91101097

QC SUMMARY
FORMS II - VIII
BNA

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE

RFW Lot No.: 9110L097

	CLIENT SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	SBMW-16-FB-3	51	58	78	27	42	55		0
02	SBLKLE1386-MB1	45	59	76	27	42	47		0
03	SBLKLE1386-MB1 BS	61	62	71	31	45	66		0
04	SBLKLE1386-MB1 BSD	62	68	81	30	44	78		0

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = p-Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(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 QC limits
D Surrogates diluted out

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE

RFW Lot No.: 9110L097

	CLIENT SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	SBMW-16-1(5-7)-1	55	66	64	69	79	36		0
02	SBMW-16-1(5-7)-1DL	D	D	D	D	D	D		0
03	SBMW-16-1(5-7)-1MS	58	67	64	89	87	39		0
04	SBMW-16-1(5-7)-1MSD	56	64	62	80	78	36		0
05	SBLKLE1378-MB1	78	88	90	90	93	77		0
06	SBLKLE1378-MB1 BS	71	82	85	83	87	73		0

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(23-120)
S2 (FBP) = 2-Fluorobiphenyl	(30-115)
S3 (TPH) = p-Terphenyl-d14	(18-137)
S4 (PHL) = Phenol-d5	(24-113)
S5 (2FP) = 2-Fluorophenol	(25-121)
S6 (TBP) = 2,4,6-Tribromophenol	(19-122)

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

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot No.: 9110L097-003

MATRIX Spike - Sample No.: SBMW-16-1(5-7)-1 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	#	QC LIMITS REC
Phenol	3860	0	3760	97	*	26- 90
2-Chlorophenol	3860	0	3600	93		25-102
1,4-Dichlorobenzene	1930	193000	656000	***	*	28-104
N-Nitroso-Di-n-propylamine	1930	0	1500	78		41-126
1,2,4-Trichlorobenzene	1930	19800	77200	***	*	38-107
4-Chloro-3-methylphenol	3860	0	2190	57		26-103
Acenaphthene	1930	0	1500	78		31-137
4-Nitrophenol	3860	0	0	D		11-114
2,4-Dinitrotoluene	1930	0	481	D		28- 89
Pentachlorophenol	3860	0	932	24		17-109
Pyrene	1930	0	1260	65		35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC
Phenol	3880	3350	86		12		35	26- 90
2-Chlorophenol	3880	3120	80		15		50	25-102
1,4-Dichlorobenzene	1940	476000	***	*	48	*	27	28-104
N-Nitroso-Di-n-propylamine	1940	1450	75		3		38	41-126
1,2,4-Trichlorobenzene	1940	55600	***	*	46	*	23	38-107
4-Chloro-3-methylphenol	3880	2010	52		9		33	26-103
Acenaphthene	1940	1410	73		6		19	31-137
4-Nitrophenol	3880	0	D		0		50	11-114
2,4-Dinitrotoluene	1940	504	D		0		47	28- 89
Pentachlorophenol	3880	1280	33		32		47	17-109
Pyrene	1940	1290	67		3		36	35-142

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

RPD: 2 out of 11 outside limits
Spike Recovery: 5 out of 22 outside limits

COMMENTS:

3C

WATER SEMIVOLATILE BLANK SPIKE/BLANK SPIKE DUPLICATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: NONE

Case No.: STANDARD CHLORINE RFW Lot No.: 9110L097

BLANK Spike - Sample No.: SBLKLE1386-MB1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC
Phenol	100	0	35.7	36	12- 89
2-Chlorophenol	100	0	69.4	69	27-123
1,4-Dichlorobenzene	50.0	0	27.2	54	36- 97
N-Nitroso-Di-n-propylamine	50.0	0	31.2	62	41-116
1,2,4-Trichlorobenzene	50.0	0	29.4	59	39- 98
4-Chloro-3-methylphenol	100	0	75.1	75	23- 97
Acenaphthene	50.0	0	32.7	65	46-118
4-Nitrophenol	100	0	24.1	24	10- 80
2,4-Dinitrotoluene	50.0	0	31.0	62	24- 96
Pentachlorophenol	100	0	49.5	49	9-103
Pyrene	50.0	0	37.0	74	26-127

COMPOUND	SPIKE ADDED (ug/L)	BSD CONCENTRATION (ug/L)	BSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
Phenol	100	34.6	35	2	42	12- 89
2-Chlorophenol	100	72.5	73	5	40	27-123
1,4-Dichlorobenzene	50.0	28.2	56	3	28	36- 97
N-Nitroso-Di-n-propylamine	50.0	33.8	68	9	38	41-116
1,2,4-Trichlorobenzene	50.0	30.4	61	3	28	39- 98
4-Chloro-3-methylphenol	100	81.4	81	7	42	23- 97
Acenaphthene	50.0	37.0	74	13	31	46-118
4-Nitrophenol	100	24.2	24	0	50	10- 80
2,4-Dinitrotoluene	50.0	36.8	74	17	38	24- 96
Pentachlorophenol	100	74.3	74	40	50	9-103
Pyrene	50.0	42.0	84	12	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:

3D

SOIL SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: NONE

Case No.: STANDARD CHLORINE RFW Lot No.: 9110L097

BLANK Spike - Sample No.: SBLKLE1378-MB1

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC
Phenol	3330	0	2660	80	26- 90
2-Chlorophenol	3330	0	2870	86	25-102
1,4-Dichlorobenzene	1660	207	1240	62	28-104
N-Nitroso-Di-n-propylamine	1660	0	1250	75	41-126
1,2,4-Trichlorobenzene	1660	0	1290	78	38-107
4-Chloro-3-methylphenol	3330	0	2700	81	26-103
Acenaphthene	1660	0	1360	82	31-137
4-Nitrophenol	3330	0	2150	64	11-114
2,4-Dinitrotoluene	1660	0	1180	71	28- 89
Pentachlorophenol	3330	0	3250	98	17-109
Pyrene	1660	0	1700	102	35-142

Column to be used to flag recovery value with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE

Lab File ID: S103016 Lab Sample ID: 91LE1386-MB1

Date Extracted: 10/25/91 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 10/30/91 Time Analyzed: 2147

Matrix:(Soil/Water) WATER Level:(low/med) LOW

Instrument ID: 5100SP

THIS METHOD

BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBMW-16-FB-3	9110L097-002	S103019	10/31/91
02	SBLKLE1386-MB1 BS	91LE1386-MB1S	S103106	10/31/91
03	SBLKLE1386-MB1 BSD	91LE1386-MB1T	S103107	10/31/91

COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE

Lab File ID: S103020 Lab Sample ID: 91LE1378-MB1

Date Extracted: 10/24/91 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 10/31/91 Time Analyzed: 0051

Matrix:(Soil/Water) SOIL Level:(low/med) LOW

Instrument ID: 5100SP

THIS METHOD

BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLKLE1378-MB1 BS	91LE1378-MB1S	S103021	10/31/91
02	SBMW-16-1(5-7)-1	9110L097-003	S103108	10/31/91
03	SBMW-16-1(5-7)-1DL	9110L097-003	S103109	10/31/91
04	SBMW-16-1(5-7)-1MS	9110L097-003S	S103110	10/31/91
05	SBMW-16-1(5-7)-1MSD	9110L097-003T	S103111	10/31/91

COMMENTS:

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

[redacted] No.: STANDARD CHLORINE

Lab File ID: S102504 DFTPP Injection Date: 10/25/91

Instrument ID: 5100SP DFTPP Injection Time: 1550

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	52.0
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	57.1
70	Less than 2.0% of mass 69	0.0(0.0)1
127	40.0 - 60.0% of mass 198	48.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.0
275	10.0 - 30.0% of mass 198	17.0
365	Greater than 1.00% of mass 198	1.63
441	Present, but less than mass 443	6.6
442	Greater than 40.0% of mass 198	50.5
443	17.0 - 23.0% of mass 442	9.1(18.0)2

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

pcg 11/13/91

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	SSTD50	S102505	10/25/91	1620
02	SSTD80	SSTD80	S102506	10/25/91	1706
03	SSTD120	SSTD120	S102507	10/25/91	1753
04	SSTD160	SSTD160	S102508	10/25/91	1839
05	SSTD20	SSTD20	S102509	10/25/91	1925
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000002 SB3

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE

Lab File ID: S103009 DFTPP Injection Date: 10/30/91

Instrument ID: 5100SP DFTPP Injection Time: 1645

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	53.4
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	47.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	5.8
275	10.0 - 30.0% of mass 198	17.4
365	Greater than 1.00% of mass 198	1.90
441	Present, but less than mass 443	7.8
442	Greater than 40.0% of mass 198	55.2
443	17.0 - 23.0% of mass 442	9.5 (17.1)2

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

11/1/91

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	SSTD50	S103010	10/30/91	1711
02	SSTD50	SSTD50	S103011	10/30/91	1757
03	SSTD80	SSTD80	S103012	10/30/91	1843
04	SSTD120	SSTD120	S103013	10/30/91	1929
05	SSTD160	SSTD160	S103014	10/30/91	2015
06	SSTD20	SSTD20	S103015	10/30/91	2101
07	SBLKLE1386-MB1	91LE1386-MB1	S103016	10/30/91	2147
08	SBMW-16-FB-3	9110L097-002	S103019	10/31/91	0005
09	SBLKLE1378-MB1	91LE1378-MB1	S103020	10/31/91	0051
10	SBLKLE1378-MB1 BS	91LE1378-MB1S	S103021	10/31/91	0137
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11/4/91

AR305546

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

[redacted] No.: STANDARD CHLORINE

Lab File ID: S103103 DFTPP Injection Date: 10/31/91

Instrument ID: 5100SP DFTPP Injection Time: 1151

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	55.8
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	58.7
70	Less than 2.0% of mass 69	0.0(0.0)1
127	40.0 - 60.0% of mass 198	49.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	5.8
275	10.0 - 30.0% of mass 198	18.5
365	Greater than 1.00% of mass 198	1.59
441	Present, but less than mass 443	7.0
442	Greater than 40.0% of mass 198	53.2
443	17.0 - 23.0% of mass 442	9.1(17.1)2

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

[redacted] TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	SSTD50	S103104	10/31/91	1208
02	SSTD50	SSTD50	S103105	10/31/91	1310
03	SBLKLE1386-MB1 BS	91LE1386-MB1S	S103106	10/31/91	1421
04	SBLKLE1386-MB1 BSD	91LE1386-MB1T	S103107	10/31/91	1507
05	SBMW-16-1(5-7)-1	9110L097-003	S103108	10/31/91	1556
06	SBMW-16-1(5-7)-1DL	9110L097-003	S103109	10/31/91	1703
07	SBMW-16-1(5-7)-1MS	9110L097-003S	S103110	10/31/91	1749
08	SBMW-16-1(5-7)-1MSD	9110L097-003T	S103111	10/31/91	1835
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6B

SEMIVOLATILE ORGANICS INTITIAL CALIBRATION DATA

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Instrument ID: 5100SP Calibration Date(s): 10/25/91 10/25/91

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = S102509 RRF50 = S102505
RRF80 = S102506 RRF120= S102507 RRF160= S102508

Tom 10/31/91

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.683	1.879	1.819	1.768	1.775	1.785	4.0*
bis(2-Chloroethyl)ether	1.715	1.606	1.642	1.689	1.687	1.668	2.6
2-Chlorophenol	1.162	1.278	1.272	1.317	1.310	1.268	4.9
1,3-Dichlorobenzene	1.255	1.298	1.321	1.335	1.319	1.306	2.4
1,4-Dichlorobenzene *	1.476	1.452	1.442	1.483	1.452	1.461	1.2*
Benzyl alcohol	0.521	0.680	0.725	0.791	0.814	0.706	16.5
1,2-Dichlorobenzene	1.340	1.374	1.369	1.407	1.379	1.374	1.7
2-Methylphenol	1.231	1.232	1.274	1.328	1.292	1.271	3.2
bis(2-Chloroisopropyl)ether	2.286	2.255	2.278	2.432	2.467	2.344	4.2
4-Methylphenol	1.235	1.344	1.317	1.391	1.353	1.328	4.4
N-Nitroso-Di-n-propylamine #	1.202	1.204	1.262	1.330	1.339	1.267	5.2#
Hexachloroethane	0.623	0.682	0.695	0.709	0.696	0.681	5.0
Nitrobenzene	0.420	0.421	0.419	0.436	0.439	0.427	2.1
Isophorone	0.850	0.841	0.853	0.884	0.864	0.858	1.9
2-Nitrophenol *	0.159	0.191	0.195	0.207	0.205	0.191	10.1*
2,4-Dimethylphenol	0.291	0.320	0.327	0.345	0.351	0.327	7.2
Benzoic acid		0.086	0.097	0.129	0.161	0.118	28.6
bis(2-Chloroethoxy)methane	0.474	0.482	0.488	0.504	0.511	0.492	3.1
2,4-Dichlorophenol *	0.214	0.249	0.251	0.267	0.262	0.249	8.3*
1,2,4-Trichlorobenzene	0.254	0.263	0.261	0.267	0.261	0.261	1.8
Naphthalene	1.042	0.934	1.011	1.003	0.994	0.997	4.0
4-Chloroaniline	0.403	0.440	0.445	0.457	0.446	0.438	4.7
Hexachlorobutadiene *	0.129	0.127	0.128	0.132	0.129	0.129	1.5*
4-Chloro-3-methylphenol *	0.251	0.295	0.306	0.325	0.332	0.302	10.6*
2-Methylnaphthalene	0.575	0.584	0.570	0.580	0.549	0.572	2.4
Hexachlorocyclopentadiene #	0.138	0.196	0.216	0.235	0.233	0.204	19.6#
2,4,6-Trichlorophenol *	0.229	0.284	0.287	0.310	0.299	0.282	11.1*
2,4,5-Trichlorophenol		0.323	0.333	0.367	0.350	0.343	5.6
2-Chloronaphthalene	1.038	1.031	1.033	1.052	1.001	1.031	1.8
2-Nitroaniline		0.389	0.409	0.458	0.469	0.431	8.9
Dimethylphthalate	1.112	1.164	1.198	1.204	1.163	1.168	3.1
Acenaphthylene	1.700	1.562	1.573	1.565	1.509	1.582	4.5
2,6-Dinitrotoluene	0.269	0.301	0.301	0.302	0.286	0.292	4.9
3-Nitroaniline		0.373	0.378	0.397	0.391	0.385	2.9
Acenaphthene *	0.920	0.905	0.897	0.914	0.892	0.906	1.3*
2,4-Dinitrophenol #		0.090	0.102	0.137	0.151	0.120	23.9#
4-Nitrophenol #		0.089	0.089	0.106	0.112	0.099	11.9#

MCC 11/13/91

6C

SEMIVOLATILE ORGANICS INTITIAL CALIBRATION DATA

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Instrument ID: 5100SP Calibration Date(s): 10/25/91 10/25/91

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = S102509 RRF50 = S102505
RRF80 = S102506 RRF120= S102507 RRF160= S102508

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Dibenzofuran	1.346	1.329	1.340	1.341	1.312	1.334	1.0
2,4-Dinitrotoluene	0.308	0.379	0.372	0.395	0.376	0.366	9.2
Diethylphthalate	1.109	1.062	1.147	1.228	1.206	1.150	5.9
4-Chlorophenyl-phenylether	0.499	0.509	0.498	0.490	0.460	0.491	3.8
Fluorene	1.041	1.076	1.034	1.025	0.957	1.027	4.2
4-Nitroaniline		0.351	0.326	0.345	0.333	0.339	3.3
4,6-Dinitro-2-methylphenol		0.098	0.103	0.124	0.133	0.114	14.6
N-Nitrosodiphenylamine (1) *	0.501	0.507	0.522	0.519	0.515	0.513	1.7
4-Bromophenyl-phenylether	0.170	0.178	0.186	0.187	0.195	0.183	5.2
Hexachlorobenzene	0.195	0.187	0.194	0.196	0.198	0.194	2.2
Pentachlorophenol *		0.080	0.084	0.097	0.109	0.092	14.2
Phenanthrene	1.047	1.011	1.028	1.005	0.991	1.016	2.1
Anthracene	1.004	1.005	1.027	1.032	1.014	1.016	1.3
Di-n-Butylphthalate	1.205	1.341	1.339	1.299	1.282	1.293	4.3
Fluoranthene *	0.767	0.940	0.862	0.879	0.888	0.867	7.3
Pyrene	1.961	1.846	1.854	1.927	1.943	1.906	2.8
Butylbenzylphthalate	0.851	0.883	0.960	1.022	1.073	0.958	9.7
3,3'-Dichlorobenzidine	0.271	0.266	0.309	0.336	0.391	0.315	16.4
Benzo(a)anthracene	1.130	1.142	1.165	1.240	1.290	1.193	5.8
Chrysene	1.095	1.010	1.050	1.082	1.222	1.092	7.3
bis(2-Ethylhexyl)phthalate	1.195	1.204	1.286	1.434	1.497	1.323	10.3
Di-n-Octyl phthalate *	2.017	2.653	2.250	2.420	2.953	2.459	14.7
Benzo(b)fluoranthene	1.032	1.226	1.128	1.283	1.451	1.224	13.0
Benzo(k)fluoranthene	1.086	1.484	1.199	1.310	1.254	1.267	11.6
Benzo(a)pyrene *	0.799	1.023	1.030	1.256	1.188	1.059	16.7
Indeno(1,2,3-cd)pyrene	0.612	0.743	0.849	0.954	1.053	0.842	20.5
Dibenzo(a,h)anthracene	0.486	0.588	0.733	0.776	0.823	0.681	20.6
Benzo(g,h,i)perylene	0.600	0.781	0.780	0.931	0.928	0.804	16.9
Aniline	1.932	2.040	2.015	2.169	2.146	2.060	4.7
N-Nitrosodimethylamine	0.782	0.975	0.758	0.810	0.917	0.848	11.0
Benzidine	0.173	0.228	0.174	0.191	0.193	0.192	11.6

(1) Cannot be separated from Diphenylamine

6D

SEMIVOLATILE ORGANICS INTITIAL CALIBRATION DATA

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Instrument ID: 5100SP Calibration Date(s): 10/25/91 10/25/91

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = S102509 RRF50 = S102505
RRF80 = S102506 RRF120= S102507 RRF160= S102508

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Nitrobenzene-d5	0.381	0.393	0.386	0.411	0.414	0.397	3.7
2-Fluorobiphenyl	1.063	1.012	1.028	1.055	0.982	1.028	3.2
p-Terphenyl-d14	1.346	1.412	1.552	1.463	1.579	1.470	6.6
Phenol-d5	1.529	1.778	1.674	1.792	1.824	1.719	7.0
2-Fluorophenol	0.922	1.131	1.011	1.111	1.148	1.065	9.0
2,4,6-Tribromophenol	0.076	0.116	0.110	0.120	0.123	0.109	17.5

FORM VI SV-3 01/89 Rev.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Instrument ID: 5100SP Calibration Date: 10/30/91 Time: 1711

Lab File ID: S103010 Init. Calib. Date(s): 10/25/91 10/25/91

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Phenol	*	1.785	2.060	-15.4	*
bis(2-Chloroethyl)ether		1.668	1.804	-8.2	
2-Chlorophenol		1.268	1.360	-7.3	
1,3-Dichlorobenzene		1.306	1.466	-12.3	
1,4-Dichlorobenzene	*	1.461	1.593	-9.0	*
Benzyl alcohol		0.706	0.774	-9.6	
1,2-Dichlorobenzene		1.374	1.501	-9.2	
2-Methylphenol		1.271	1.278	-0.6	
bis(2-Chloroisopropyl)ether		2.344	2.378	-1.5	
4-Methylphenol		1.328	1.424	-7.2	
N-Nitroso-Di-n-propylamine	#	1.267	1.357	-7.1	#
Hexachloroethane		0.681	0.771	-13.2	
Nitrobenzene		0.427	0.490	-14.8	
Isophorone		0.858	1.002	-16.8	
2-Nitrophenol	*	0.191	0.205	-7.3	*
2,4-Dimethylphenol		0.327	0.312	4.6	
Benzoic acid		0.118	0.141	-19.5	
bis(2-Chloroethoxy)methane		0.492	0.536	-8.9	
2,4-Dichlorophenol	*	0.249	0.273	-9.6	*
1,2,4-Trichlorobenzene		0.261	0.302	-15.7	
Naphthalene		0.997	1.130	-13.3	
4-Chloroaniline		0.438	0.488	-11.4	
Hexachlorobutadiene	*	0.129	0.151	-17.1	*
4-Chloro-3-methylphenol	*	0.302	0.326	-7.9	*
2-Methylnaphthalene		0.572	0.625	-9.3	
Hexachlorocyclopentadiene	#	0.204	0.177	13.2	#
2,4,6-Trichlorophenol	*	0.282	0.269	4.6	*
2,4,5-Trichlorophenol		0.343	0.305	11.1	
2-Chloronaphthalene		1.031	0.989	4.1	
2-Nitroaniline		0.431	0.403	6.5	
Dimethylphthalate		1.168	1.150	1.5	
Acenaphthylene		1.582	1.519	4.0	
2,6-Dinitrotoluene		0.292	0.301	-3.1	
3-Nitroaniline		0.385	0.360	6.5	
Acenaphthene	*	0.906	0.903	0.3	*
2,4-Dinitrophenol	#	0.120	0.103	14.2	#
4-Nitrophenol	#	0.099	0.073	26.3	#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Instrument ID: 5100SP Calibration Date: 10/30/91 Time: 1711

Lab File ID: S103010 Init. Calib. Date(s): 10/25/91 10/25/91

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Dibenzofuran		1.334	1.302	2.4	
2,4-Dinitrotoluene		0.366	0.361	1.4	
Diethylphthalate		1.150	1.157	-0.6	
4-Chlorophenyl-phenylether		0.491	0.547	-11.4	
Fluorene		1.027	1.070	-4.2	
4-Nitroaniline		0.339	0.310	8.6	
4,6-Dinitro-2-methylphenol		0.114	0.115	-0.9	
N-Nitrosodiphenylamine (1)	*	0.513	0.495	3.5	*
4-Bromophenyl-phenylether		0.183	0.195	-6.6	
Hexachlorobenzene		0.194	0.213	-9.8	
Pentachlorophenol	*	0.092	0.085	7.6	*
Phenanthrene		1.016	1.107	-9.0	
Anthracene		1.016	1.128	-11.0	
Di-n-Butylphthalate		1.293	1.475	-14.1	
Fluoranthene	*	0.867	1.073	-23.8	*
Pyrene		1.906	2.046	-7.3	
Butylbenzylphthalate		0.958	0.934	2.5	
3,3'-Dichlorobenzidine		0.315	0.310	1.6	
Benzo(a)anthracene		1.193	1.317	-10.4	
Chrysene		1.092	1.376	-26.0	
bis(2-Ethylhexyl)phthalate		1.323	1.221	7.7	
Di-n-Octyl phthalate	*	2.459	2.247	8.6	*
Benzo(b)fluoranthene		1.224	1.284	-4.9	
Benzo(k)fluoranthene		1.267	1.569	-23.8	
Benzo(a)pyrene	*	1.059	1.147	-8.3	*
Indeno(1,2,3-cd)pyrene		0.842	0.812	3.6	
Dibenzo(a,h)anthracene		0.681	0.634	6.9	
Benzo(g,h,i)perylene		0.804	0.743	7.6	
Aniline		2.060	2.431	-18.0	
N-Nitrosodimethylamine		0.848	1.188	-40.1	
Benzidine		0.192	0.132	31.2	
Nitrobenzene-d5		0.397	0.457	-15.1	
2-Fluorobiphenyl		1.028	0.992	3.5	
p-Terphenyl-d14		1.470	1.612	-9.7	
Phenol-d5		1.719	1.886	-9.7	
2-Fluorophenol		1.065	1.259	-18.2	
2,4,6-Tribromophenol		0.109	0.123	-12.8	

(1) Cannot be separated from Diphenylamine

6B

SEMIVOLATILE ORGANICS INTITIAL CALIBRATION DATA

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Instrument ID: 5100SP Calibration Date(s): 10/30/91 10/30/91

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = S103015 RRF50 = S103011
RRF80 = S103012 RRF120= S103013 RRF160= S103014

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
1,2,3-Trichlorobenzene	0.292	0.299	0.292	0.260	0.265	0.282	6.3
1,3,5-Trichlorobenzene	0.288	0.296	0.294	0.263	0.269	0.282	5.3
1,2,4,5-Tetrachlorobenzene	0.633	0.675	0.633	0.557	0.562	0.612	8.3
1,2,3,4-Tetrachlorobenzene	0.491	0.525	0.493	0.432	0.426	0.473	9.0
Pentachlorobenzene	0.175	0.194	0.186	0.165	0.171	0.178	6.8
1-Chloro-3-nitrobenzene	0.113	0.144	0.152	0.140	0.145	0.139	10.8

MCC 11/12/91

SM 10/31/91

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Instrument ID: 5100SP Calibration Date: 10/31/91 Time: 1208

Lab File ID: S103104 Init. Calib. Date(s): 10/25/91 10/25/91

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Phenol	*	1.785	2.008	-12.5	*
bis(2-Chloroethyl)ether		1.668	1.906	-14.3	
2-Chlorophenol		1.268	1.465	-15.5	
1,3-Dichlorobenzene		1.306	1.488	-13.9	
1,4-Dichlorobenzene	*	1.461	1.591	-8.9	*
Benzyl alcohol		0.706	0.870	-23.2	
1,2-Dichlorobenzene		1.374	1.485	-8.1	
2-Methylphenol		1.271	1.368	-7.6	
bis(2-Chloroisopropyl)ether		2.344	2.465	-5.2	
4-Methylphenol		1.328	1.447	-9.0	
N-Nitroso-Di-n-propylamine	#	1.267	1.322	-4.3	#
Hexachloroethane		0.681	0.737	-8.2	
Nitrobenzene		0.427	0.471	-10.3	
Isophorone		0.858	0.976	-13.8	
2-Nitrophenol	*	0.191	0.211	-10.5	*
2,4-Dimethylphenol		0.327	0.347	-6.1	
Benzoic acid		0.118	0.175	-48.3	
bis(2-Chloroethoxy)methane		0.492	0.546	-11.0	
2,4-Dichlorophenol	*	0.249	0.279	-12.0	*
1,2,4-Trichlorobenzene		0.261	0.293	-12.3	
Naphthalene		0.997	1.139	-14.2	
4-Chloroaniline		0.438	0.485	-10.7	
Hexachlorobutadiene	*	0.129	0.145	-12.4	*
4-Chloro-3-methylphenol	*	0.302	0.322	-6.6	*
2-Methylnaphthalene		0.572	0.601	-5.1	
Hexachlorocyclopentadiene	#	0.204	0.260	-27.5	#
2,4,6-Trichlorophenol	*	0.282	0.307	-8.9	*
2,4,5-Trichlorophenol		0.343	0.345	-0.6	
2-Chloronaphthalene		1.031	1.056	-2.4	
2-Nitroaniline		0.431	0.395	8.4	
Dimethylphthalate		1.168	1.182	-1.2	
Acenaphthylene		1.582	1.876	-18.6	
2,6-Dinitrotoluene		0.292	0.308	-5.5	
3-Nitroaniline		0.385	0.352	8.6	
Acenaphthene	*	0.906	0.945	-4.3	*
2,4-Dinitrophenol	#	0.120	0.129	-7.5	#
4-Nitrophenol	#	0.099	0.076	23.2	#

SMC 10/31/91

JCC 11/3/91

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Instrument ID: 5100SP Calibration Date: 10/31/91 Time: 1208

Lab File ID: S103104 Init. Calib. Date(s): 10/25/91 10/25/91

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Dibenzofuran		1.334	1.415	-6.1	
2,4-Dinitrotoluene		0.366	0.369	-0.8	
Diethylphthalate		1.150	1.142	0.7	
4-Chlorophenyl-phenylether		0.491	0.564	-14.9	
Fluorene		1.027	1.079	-5.1	
4-Nitroaniline		0.339	0.286	15.6	
4,6-Dinitro-2-methylphenol		0.114	0.125	-9.6	
N-Nitrosodiphenylamine (1)	*	0.513	0.501	2.3	*
4-Bromophenyl-phenylether		0.183	0.195	-6.6	
Hexachlorobenzene		0.194	0.214	-10.3	
Pentachlorophenol	*	0.092	0.100	-8.7	*
Phenanthrene		1.016	1.075	-5.8	
Anthracene		1.016	1.098	-8.1	
Di-n-Butylphthalate		1.293	1.291	0.2	
Fluoranthene	*	0.867	0.980	-13.0	*
Pyrene		1.906	2.119	-11.2	
Butylbenzylphthalate		0.958	0.881	8.0	
3,3'-Dichlorobenzidine		0.315	0.395	-25.4	
Benzo(a)anthracene		1.193	1.305	-9.4	
Chrysene		1.092	1.298	-18.9	
bis(2-Ethylhexyl)phthalate		1.323	1.231	7.0	
Di-n-Octyl phthalate	*	2.459	2.034	17.3	*
Benzo(b)fluoranthene		1.224	1.339	-9.4	
Benzo(k)fluoranthene		1.267	1.099	13.3	
Benzo(a)pyrene	*	1.059	1.106	-4.4	*
Indeno(1,2,3-cd)pyrene		0.842	1.018	-20.9	
Dibenzo(a,h)anthracene		0.681	0.834	-22.5	
Benzo(g,h,i)perylene		0.804	0.973	-21.0	
Aniline		2.060	2.677	-30.0	
N-Nitrosodimethylamine		0.848	1.213	-43.0	
Benzidine		0.192	0.233	-21.4	
Nitrobenzene-d5		0.397	0.448	-12.8	
2-Fluorobiphenyl		1.028	1.066	-3.7	
p-Terphenyl-d14		1.470	1.605	-9.2	
Phenol-d5		1.719	2.108	-22.6	
2-Fluorophenol		1.065	1.428	-34.1	
2,4,6-Tribromophenol		0.109	0.123	-12.8	

(1) Cannot be separated from Diphenylamine

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Instrument ID: 5100SP Calibration Date: 10/31/91 Time: 1310

Lab File ID: S103105 Init. Calib. Date(s): 10/30/91 10/30/91

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	$\overline{RRF}$	RRF50	%D
1,2,3-Trichlorobenzene	0.282	0.282	0.0
1,3,5-Trichlorobenzene	0.282	0.282	0.0
1,2,4,5-Tetrachlorobenzene	0.612	0.626	-2.3
1,2,3,4-Tetrachlorobenzene	0.473	0.483	-2.1
Pentachlorobenzene	0.178	0.177	0.6
1-Chloro-3-nitrobenzene	0.139	0.144	-3.6

FORM VII SV-1 5/88 Rev.

SMC 10/31/91

nec 11/1/91

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Lab File ID (Standard): S103010 Date Analyzed: 10/30/91

Instrument ID: 5100SP Time Analyzed: 1711

	IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
12 HOUR STD	17565	6.87	68792	9.77	42541	14.22
UPPER LIMIT	35130	7.37	137584	10.27	85082	14.72
LOWER LIMIT	8783	6.37	34396	9.27	21271	13.72
CLIENT SAMPLE NO.						
01 SBMW-16-FB-3	17330	6.87	62666	9.78	41640	14.23
02 SBLKLE1386-MB1	17323	6.87	60238	9.78	37362	14.22
03 SBLKLE1378-MB1	27247	6.87	102523	9.78	63235	14.22
04 SBLKLE1378-MB1 BS	24914	6.87	95284	9.78	58460	14.22

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = 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

11/4/91

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Lab File ID (Standard): S103010 Date Analyzed: 10/30/91

Instrument ID: 5100SP Time Analyzed: 1711

	IS4(PHN) AREA	#	RT	IS5(CRY) AREA	#	RT	IS6(PRY) AREA	#	RT
12 HOUR STD	65366		17.93	33772		22.92	19662		27.10
UPPER LIMIT	130732		18.43	67544		23.42	39324		27.60
LOWER LIMIT	32683		17.43	16886		22.42	9831		26.60
CLIENT SAMPLE NO.									
01 SBMW-16-FB-3	58458		17.97	24909		23.03	19991		27.25
02 SBLKLE1386-MB1	54479		17.95	23878		23.03	18045		27.25
03 SBLKLE1378-MB1	87466		17.95	36723		22.88	27711		27.07
04 SBLKLE1378-MB1 BS	73646		17.95	32395		22.90	25373		27.08

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = 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

11/4/91

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Lab File ID (Standard): S103104 Date Analyzed: 10/31/91

Instrument ID: 5100SP Time Analyzed: 1208

	IS1(DCB) AREA	#	RT	IS2(NPT) AREA	#	RT	IS3(ANT) AREA	#	RT
12 HOUR STD	19029		6.67	73267		9.55	41989		13.97
UPPER LIMIT	38058		7.17	146534		10.05	83978		14.47
LOWER LIMIT	9515		6.17	36634		9.05	20995		13.47
CLIENT SAMPLE NO.									
01 SBMW-16-1(5-7)-1	17907		6.65	70816		9.55	41607		13.97
02 SBMW-16-1(5-7)-1DL	19814		6.65	73567		9.53	40496		13.93
03 SBMW-16-1(5-7)-1MS	12908		6.65	64968		9.55	40602		13.95
04 SBMW-16-1(5-7)-1MSD	14331		6.67	65308		9.55	39632		13.97
05 SBLKLE1386-MB1 BS	24302		6.65	89955		9.53	52995		13.93
06 SBLKLE1386-MB1 BSD	18326		6.65	69994		9.55	44806		13.97

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = 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

11/4/91

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot: 9110L097

Lab File ID (Standard): S103104 Date Analyzed: 10/31/91

Instrument ID: 5100SP Time Analyzed: 1208

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	63295	17.70	26216	22.85	22604	26.83
	UPPER LIMIT	126590	18.20	52432	23.35	45208	27.33
	LOWER LIMIT	31648	17.20	13108	22.35	11302	26.33
	CLIENT SAMPLE NO.						
01	SBMW-16-1(5-7)-1	57271	17.70	23766	22.67	20033	26.63
02	SBMW-16-1(5-7)-1DL	54836	17.68	22285	22.77	18847	26.73
03	SBMW-16-1(5-7)-1MS	51138	17.70	21004	22.88	18106	26.87
04	SBMW-16-1(5-7)-1MSD	53439	17.70	21087	22.88	19511	26.85
05	SBLKLE1386-MB1 BS	67132	17.68	29307	22.85	20308	26.83
06	SBLKLE1386-MB1 BSD	56901	17.70	25273	22.82	18574	26.80

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = 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

11/4/91

RFW LOT # 9110L097

QC SUMMARY
FORMS II - IX

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE

RFW Lot No.: 9110L097

	CLIENT SAMPLE NO.	S1 (DBC)#	OTHER
01	SBMW-16-FB-3	129	
02	SBMW-17-FB-3	114	
03	PBLKLE1382-MB1	99	
04	PBLKLE1382-MB1 BS	141	
05	PBLKLE1382-MB1 BSD	122	

ADVISORY QC LIMITS
(24-154)

S1 (DBC) = Di-n-butylchlorendate

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

2F

SOIL PESTICIDE SURROGATE RECOVERY

Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE

RFW Lot No.: 9110L097

	CLIENT SAMPLE NO.	S1 (DBC)#	OTHER
01	SBMW-16-1(5-7)-1	100	
02	SBMW-16-1(5-7)-1MS	90	
03	SBMW-16-1(5-7)-1MSD	102	
04	SBMW-16-1(5-7)-2	80	
05	SBMW-16-3(15-17)-1	88	
06	SBMW-16-5(25-27)-1	105	
07	SBMW-17-2(8-10)-1	108	
08	PBLKLE1389-MB1	89	
09	PBLKLE1389-MB1 BS	128	

ADVISORY QC LIMITS

S1 (DBC) = Di-n-butylchlorendate (20-150)

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

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot No.: 9110L097

MATRIX Spike - Sample No.: PBLKLE1382-MB1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC
Aroclor-1254	3.75	0	3.17	85	50-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
Aroclor-1254	3.75	2.91	78	8	50	50-150

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

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

COMMENTS:

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot No.: 9110L097-003

MATRIX Spike - Sample No.: SBMW-16-1(5-7)-1 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
Aroclor-1254	292	0	162	55	50-150

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
Aroclor-1254	295	222	75	30	50	50-150

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

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

COMMENTS:

3F

SOIL PESTICIDE MATRIX SPIKE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE RFW Lot No.: 9110L097

MATRIX Spike - Sample No.: PBLKLE1389-MB1

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)'	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
Aroclor-1254	248	0	180	73	50-150

Column to be used to flag recovery value with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE

Lab Sample ID: 91LE1382-MB1 Lab File ID: 11259103 .34

Matrix:(Soil/Water) WATER Level:(low/med) LOW

Date Extracted: 10/24/91 Extraction:(SepF/Cont/Sonc) CONT

Date Analyzed (1): 11/26/91 Date Analyzed (2): 11/26/91

Time Analyzed (1): 0925 Time Analyzed (2): 0928

Instrument ID (1): 03 Instrument ID (2): 04

GC Column ID (1): 2250/2401 GC Column ID (2): SP2100

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	SBMW-16-FB-3	9110L097-002	11/26/91	11/26/91
02	SBMW-17-FB-3	9110L097-007	11/26/91	11/26/91
03	PBLKLE1382-MB1 BS	91LE1382-MB1S	11/26/91	11/26/91
04	PBLKLE1382-MB1 BSD	91LE1382-MB1T	11/26/91	11/26/91

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE

Lab Sample ID: 91LE1389-MB1 Lab File ID: 11259103 .45

Matrix:(Soil/Water) SOIL Level:(low/med) LOW

Date Extracted: 10/25/91 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed (1): 11/26/91 Date Analyzed (2): 11/26/91

Time Analyzed (1): 1529 Time Analyzed (2): 1531

Instrument ID (1): 03 Instrument ID (2): 04

GC Column ID (1): 2250/2401 GC Column ID (2): SP2100

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	SBMW-16-1(5-7)-1	9110L097-003	11/26/91	11/26/91
02	SBMW-16-1(5-7)-1MS	9110L097-003S	11/26/91	11/26/91
03	SBMW-16-1(5-7)-1MSD	9110L097-003T	11/26/91	11/26/91
04	SBMW-16-1(5-7)-2	9110L097-004	11/26/91	11/26/91
05	SBMW-16-3(15-17)-1	9110L097-005	11/27/91	11/27/91
06	SBMW-16-5(25-27)-1	9110L097-006	11/27/91	11/27/91
07	SBMW-17-2(8-10)-1	9110L097-008	11/27/91	11/27/91
08	PBLKLE1389-MB1 BS	91LE1389-MB1S	11/27/91	11/27/91

COMMENTS:

0000037
8D

PESTICIDE EVALUATION STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

Dates of Analyses: 11/25/91 to 11/27/91

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)	
ALDRIN	4218683	4429527	4643509	4.8	
ENDRIN	1033074	1039146	1069707	1.9	
4,4'-DDT	827080	877326	920022	5.3	(1)
DBC	538572	538867	539002	0.0	

(1) If > 10.0% RSD, plot a standard curve and determine the ng for each sample in that set from the curve.

Evaluation Check for 4,4'-DDT/Endrin Breakdown (percent breakdown expressed as total degradation)

		DATE ANALYZED	TIME ANALYZED	ENDRIN	4,4'-DDT	COMBINED (2)
01	INIT. EVAL MIX B	11/25/91	1547	0.0	2.8	
02	EVAL MIX B	11/26/91	0110	0.0	1.9	
03	EVAL MIX B	11/26/91	0853	0.0	2.5	
04	EVAL MIX B	11/26/91	1707	0.0	1.1	
05	EVAL MIX B	11/27/91	0052	0.0	4.1	
06	EVAL MIX B	11/27/91	0835	0.0	2.0	

(2) See Form Instructions.

0000655

8E

PESTICIDE EVALUATION STANDARD SUMMARY

Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103

Instrument ID: 03 GC Column ID: 2250/2401

Dates of Analyses: 11/25/91 to 11/26/91 (7) by 12/9/91

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	EVALA	16-60	11/25/91	1514	0.0	
02	EVALB	20-60	11/25/91	1547	-0.1	
03	EVALC	18-60	11/25/91	1619	-0.1	
04	INDA	14-55	11/25/91	1652	-0.2	
05	INDB	27-56	11/25/91	1725	-0.1	
06	TOXAPH	03-270	11/25/91	1758	-0.2	
07	AR1660	03-52	11/25/91	1831	-0.2	
08	AR1221	01-280	11/25/91	1905	0.1	
09	AR1232	03-265	11/25/91	1938	-0.2	
10	AR1242	04-266	11/25/91	2011	0.1	
11	AR1248	02-277	11/25/91	2045	-0.2	
12	AR1254	02-271	11/25/91	2119	0.3	
13	ZZZZZ	9110L074-001	11/25/91	2152	0.0	
14	ZZZZZ	9110L074-002	11/25/91	2226	0.2	
15	ZZZZZ	9110L074-003	11/25/91	2259	0.1	
16	ZZZZZ	9110L074-001S	11/25/91	2332	0.3	
17	ZZZZZ	9110L074-001T	11/26/91	0005	-0.1	
18	ZZZZZ	HEXANE	11/26/91	0038	-1.5	
19	EVALB	23-60	11/26/91	0110	0.0	
20	ZZZZZ	91LE1377-MB1	11/26/91	0143	-0.1	
21	ZZZZZ	91LE1377-MB1S	11/26/91	0216	0.2	
22	ZZZZZ	9111L268-001	11/26/91	0249	0.0	
23	ZZZZZ	9111L268-001S	11/26/91	0323	0.1	
24	ZZZZZ	9111L268-001T	11/26/91	0356	-0.2	
25	ZZZZZ	HEXANE	11/26/91	0430		
26	INDA	11-67	11/26/91	0502	-0.1	
27	AR1254	02-271	11/26/91	0535	-0.2	
28	ZZZZZ	91LE1476-MB1	11/26/91	0608	-0.2	
29	ZZZZZ	91LE1476-MB1S	11/26/91	0641	0.2	
30	SBMW-16-FB-3	9110L097-002	11/26/91	0714	0.2	
31	SBMW-17-FB-3	9110L097-007	11/26/91	0748	-0.1	
32	ZZZZZ	HEXANE	11/26/91	0821		
33	EVALB	23-60	11/26/91	0853	-0.1	
34	PBLKLE1382	91LE1382-MB1	11/26/91	0925		*
35	PBLKLE1382 MS	91LE1382-MB1S	11/26/91	0957	0.1	
36	PBLKLE1382 MSD	91LE1382-MB1T	11/26/91	1031	0.1	
37	SBMW-16-1(5-7)-1	9110L097-003	11/26/91	1105	0.1	
38	SBMW-16-1(5-7)-2	9110L097-004	11/26/91	1138	-0.1	

* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

8E

PESTICIDE EVALUATION STANDARDS SUMMARY

Evaluation of Retention Time Shift for Dibutylchlorendate

[redacted]: ROY F. WESTON Contract: 2267-12-01-0000

Code: _____ Case No.: Standard Chlorine SAS No.: _____ SDG No.: _____

trument ID: 03 GC Column ID: 2250/240 11259103

es of Analyses: 11/25/91 to 11/26/91

DS 12-7-91

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
3901		Hexane	11/26/91	12:01	—	
4002	Evnl B	11-67		12:33	-0.2	
4103	AR 1254	02-271		13:06	-0.1	
4204	SBMW-16-3(15-17)-I	9110L127-001		13:39	-0.1	
4305	SBMW-16-5(25-27)-I	002		14:12	0.0	
4406	SBMW-17-2(8-10)-I	003		14:45	0.2	
4507	PBLKF389-	9110L/389-MBI		13:15	-0.1	
4608	PBLKLE1389 MS	MBIS		15:57	-0.2	
4709		Hexane		16:24	—	
4810	Evnl B	23-60		16:56	-0.1	
4911	SBMW-16-1(5-7)-I	9110L127-003S		17:29	-0.1	
5012	SBMW-16-1(5-7)-IMSD	003T		18:03	0.2	
5113		9110L127-001		18:36	0.2	
5214		9110L1401-MBI		19:10	-0.1	
5315		MBS		19:43	0.3	
5416	AR 1254	02-271		20:17	0.0	
5517	EVNLB	11-67		20:50	0.2	
5618		9110L1401-MBIT	11/26/91	2133	0.0	
5719		9110L127-002		2207	0.3	
5820		9110L127-002		2240	0.0	
5921		9110L127-002S		2313	0.3	
6022		9110L127-003T		2346	0.0	
0123		Hexane		0020		
6224	EVALB	23-60	11/27/91	0052	-0.1	
6325		9110L1397-MBI		0125	-0.5	
6426		9110L1397-MBIS		0158	0.0	
6527		9110L088-001		0231	-0.1	
6628		9110L088-001S		0305	-0.2	
6729		9110L088-001T		0338	-0.1	
6830		Hexane		0412		
6931	AR1254	02-271		0444	-0.1	
7032		9110L1390-MBI		0517	-0.1	
7133		9110L1396-MBIS		0550	-0.1	
7234		9110L130-001		0623		
7335		9110L130-002		0656		
7436		9110L130-003		0729	0.1	
7537		Hexane		0803	-0.5	
7638	EVALB	23-60		0835	0.1	

* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

__ of __

000004

8E

PESTICIDE EVALUATION STANDARDS SUMMARY
Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: Roy F Weston Contract: 2267-12-01-0000

Lab Code: _____ Case No.: Standard Chlorine SAS No.: _____ SDG No.: _____

Instrument ID: 03 GC Column ID: 2250/240i 11259103

Dates of Analyses: 11/25/91 to 11/27/91

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
77 01		9110L130-002S	11/27/91	0907	0.0	
78 02		9110L130-002T		0941	0.0	
79 03		9ILE1408-MB1		1209	0.2	
80 04		9ILE1408-MB15		1242	-0.1	
81 05	SBMW-16-3(15-17)-1	9110L097-005		1315	0.0	
82 06		Hexane		1428		
83 07	AR1244	02-271		1511	-0.2	
84 08	SBMW-16-5(25-27)-1	9110L097-006		1544	0.1	
85 09	SBMW-17-28-10)-1	9110L097-008		1617	0.0	
86 10	PBLK MS	9ILE1384-MB15		1650	-0.2	
87 11		9110L130-001		1723		
88 12		9110L130-003		1757	-0.1	
89 13	Ind A	14-55		1830	0.2	
90 14	Ind B	27-56		1903	0.0	
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12-7-91

* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.26

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91 TO: 11/25/91
TIME(S) OF ANALYSIS FROM: 1652 TO: 2119
DATE OF ANALYSIS 11/26/91
TIME OF ANALYSIS 0502
EPA SAMPLE NO. (STANDARD) INDA 11-67

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689	1.98	7891785	Y	1.2
Beta-BHC	2.73	2.70	2.76	2376369				
Delta-BHC	3.17	3.14	3.20	4808969				
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757	2.45	6593001	Y	2.1
Heptachlor	2.98	2.96	3.02	5619629	2.98	5921833	Y	5.4
Aldrin	3.56	3.53	3.59	4379925				
Heptachlor epoxide	5.14	5.10	5.18	2965519				
Endosulfan I	6.42	6.36	6.48	2366231	6.41	2408817	Y	1.8
Dieldrin	7.75	7.68	7.82	1949125	7.73	2007259	Y	3.0
4,4'-DDE	7.22	7.16	7.28	2281089				
Endrin	9.34	9.26	9.42	1026140	9.32	1199801	Y	16.9
Endosulfan II	11.12	11.02	11.24	1307415				
4,4'-DDD	10.80	10.70	10.90	929857	10.77	944850	Y	1.6
Endosulfan sulfate	17.06	16.92	17.20	741266				
4,4'-DDT	12.94	12.80	13.08	861376	12.91	846925	Y	1.7
Methoxychlor	23.85	23.59	24.11	282560	23.81	278092	Y	1.6
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263				
gamma-Chlordane	5.68	5.63	5.73	2291817				
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432				
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.27

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91	DATE OF ANALYSIS 11/26/91
TO: 11/25/91	TIME OF ANALYSIS 0535
TIME(S) OF ANALYSIS FROM: 1652	EPA SAMPLE NO.
TO: 2119	(STANDARD) AR1254 02-27

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689				
Beta-BHC	2.73	2.70	2.76	2376369				
Delta-BHC	3.17	3.14	3.20	4808969				
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757				
Heptachlor	2.98	2.96	3.02	5619629				
Aldrin	3.56	3.53	3.59	4379925				
Heptachlor epoxide	5.14	5.10	5.18	2965519				
Endosulfan I	6.42	6.36	6.48	2366231				
Dieldrin	7.75	7.68	7.82	1949125				
4,4'-DDE	7.22	7.16	7.28	2281089				
Endrin	9.34	9.26	9.42	1026140				
Endosulfan II	11.12	11.02	11.24	1307415				
4,4'-DDD	10.80	10.70	10.90	929857				
Endosulfan sulfate	17.06	16.92	17.20	741266				
4,4'-DDT	12.94	12.80	13.08	861376				
Methoxychlor	23.85	23.59	24.11	282560				
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263				
gamma-Chlordane	5.68	5.63	5.73	2291817				
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432	8.99	807633	Y	1.1
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.40

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91
TO: 11/25/91
TIME(S) OF ANALYSIS FROM: 1652
TO: 2119

DATE OF ANALYSIS 11/26/91
TIME OF ANALYSIS 1244
EPA SAMPLE NO.
(STANDARD) INDB 11-68

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689				
Beta-BHC	2.73	2.70	2.76	2376369	2.74	2579767	Y	8.6
Delta-BHC	3.17	3.14	3.20	4808969	3.17	5239751	Y	9.0
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757				
Heptachlor	2.98	2.96	3.02	5619629				
Aldrin	3.56	3.53	3.59	4379925	3.57	4755067	Y	8.6
Heptachlor epoxide	5.14	5.10	5.18	2965519	5.15	3226701	Y	8.8
Endosulfan I	6.42	6.36	6.48	2366231				
Dieldrin	7.75	7.68	7.82	1949125				
,4'-DDE	7.22	7.16	7.28	2281089	7.23	2450733	Y	7.4
Endrin	9.34	9.26	9.42	1026140				
Endosulfan II	11.12	11.02	11.24	1307415	11.14	1467093	Y	12.2
4,4'-DDD	10.80	10.70	10.90	929857				
Endosulfan sulfate	17.06	16.92	17.20	741266	17.08	811200	Y	9.4
4,4'-DDT	12.94	12.80	13.08	861376				
Methoxychlor	23.85	23.59	24.11	282560				
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263	6.18	2460283	Y	7.0
gamma-Chlordane	5.68	5.63	5.73	2291817	5.69	2466167	Y	7.6
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432				
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.41

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91
TO: 11/25/91
TIME(S) OF ANALYSIS FROM: 1652
TO: 2119

DATE OF ANALYSIS 11/26/91
TIME OF ANALYSIS 1317
EPA SAMPLE NO. (STANDARD) AR1254 02-27

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689				
Beta-BHC	2.73	2.70	2.76	2376369				
Delta-BHC	3.17	3.14	3.20	4808969				
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757				
Heptachlor	2.98	2.96	3.02	5619629				
Aldrin	3.56	3.53	3.59	4379925				
Heptachlor epoxide	5.14	5.10	5.18	2965519				
Endosulfan I	6.42	6.36	6.48	2366231				
Dieldrin	7.75	7.68	7.82	1949125				
4,4'-DDE	7.22	7.16	7.28	2281089				
Endrin	9.34	9.26	9.42	1026140				
Endosulfan II	11.12	11.02	11.24	1307415				
4,4'-DDD	10.80	10.70	10.90	929857				
Endosulfan sulfate	17.06	16.92	17.20	741266				
4,4'-DDT	12.94	12.80	13.08	861376				
Methoxychlor	23.85	23.59	24.11	282560				
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263				
gamma-Chlordane	5.68	5.63	5.73	2291817				
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432	8.99	854716	Y	4.7
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.54

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91
TO: 11/25/91
TIME(S) OF ANALYSIS FROM: 1652
TO: 2119

DATE OF ANALYSIS 11/26/91
TIME OF ANALYSIS 2027
EPA SAMPLE NO. (STANDARD) AR1254 02-27

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689				
Beta-BHC	2.73	2.70	2.76	2376369				
Delta-BHC	3.17	3.14	3.20	4808969				
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757				
Heptachlor	2.98	2.96	3.02	5619629				
Aldrin	3.56	3.53	3.59	4379925				
Heptachlor epoxide	5.14	5.10	5.18	2965519				
Endosulfan I	6.42	6.36	6.48	2366231				
Dieldrin	7.75	7.68	7.82	1949125				
4,4'-DDE	7.22	7.16	7.28	2281089				
Endrin	9.34	9.26	9.42	1026140				
Endosulfan II	11.12	11.02	11.24	1307415				
4,4'-DDD	10.80	10.70	10.90	929857				
Endosulfan sulfate	17.06	16.92	17.20	741266				
4,4'-DDT	12.94	12.80	13.08	861376				
Methoxychlor	23.85	23.59	24.11	282560				
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263				
gamma-Chlordane	5.68	5.63	5.73	2291817				
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432	8.97	843850	Y	3.4
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.55

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91 TO: 11/25/91
TIME(S) OF ANALYSIS FROM: 1652 TO: 2119

DATE OF ANALYSIS 11/26/91
TIME OF ANALYSIS 2100
EPA SAMPLE NO. (STANDARD) INDA 11-67

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689	1.99	8927535	Y	14.5
Beta-BHC	2.73	2.70	2.76	2376369				
Delta-BHC	3.17	3.14	3.20	4808969				
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757	2.45	7359833	Y	14.0
Heptachlor	2.98	2.96	3.02	5619629	2.98	6593901	Y	17.3
Aldrin	3.56	3.53	3.59	4379925				
Heptachlor epoxide	5.14	5.10	5.18	2965519				
Endosulfan I	6.42	6.36	6.48	2366231	6.41	2785851	Y	17.7
Dieldrin	7.75	7.68	7.82	1949125	7.72	2307651	Y	18.4
4,4'-DDE	7.22	7.16	7.28	2281089				
Endrin	9.34	9.26	9.42	1026140	9.31	1281575	Y	24.9
Endosulfan II	11.12	11.02	11.24	1307415				
4,4'-DDD	10.80	10.70	10.90	929857	10.76	1088401	Y	17.1
Endosulfan sulfate	17.06	16.92	17.20	741266				
4,4'-DDT	12.94	12.80	13.08	861376	12.89	1014883	Y	17.8
Methoxychlor	23.85	23.59	24.11	282560	23.74	332103	Y	17.5
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263				
gamma-Chlordane	5.68	5.63	5.73	2291817				
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432				
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.69

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91 TO: 11/25/91
TIME(S) OF ANALYSIS FROM: 1652 TO: 2119
DATE OF ANALYSIS 11/27/91
TIME OF ANALYSIS 0444
EPA SAMPLE NO. (STANDARD) AR1254 02-27

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689				
Beta-BHC	2.73	2.70	2.76	2376369				
Delta-BHC	3.17	3.14	3.20	4808969				
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757				
Heptachlor	2.98	2.96	3.02	5619629				
Aldrin	3.56	3.53	3.59	4379925				
Heptachlor epoxide	5.14	5.10	5.18	2965519				
Endosulfan I	6.42	6.36	6.48	2366231				
Dieldrin	7.75	7.68	7.82	1949125				
4,4'-DDE	7.22	7.16	7.28	2281089				
Endrin	9.34	9.26	9.42	1026140				
Endosulfan II	11.12	11.02	11.24	1307415				
4,4'-DDD	10.80	10.70	10.90	929857				
Endosulfan sulfate	17.06	16.92	17.20	741266				
4,4'-DDT	12.94	12.80	13.08	861376				
Methoxychlor	23.85	23.59	24.11	282560				
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263				
gamma-Chlordane	5.68	5.63	5.73	2291817				
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432	8.99	844805	Y	3.5
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

* For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.83

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91 TO: 11/25/91
TIME(S) OF ANALYSIS FROM: 1652 TO: 2119
DATE OF ANALYSIS 11/27/91
TIME OF ANALYSIS 1511
EPA SAMPLE NO. (STANDARD) AR1254 02-27

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689				
Beta-BHC	2.73	2.70	2.76	2376369				
Delta-BHC	3.17	3.14	3.20	4808969				
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757				
Heptachlor	2.98	2.96	3.02	5619629				
Aldrin	3.56	3.53	3.59	4379925				
Heptachlor epoxide	5.14	5.10	5.18	2965519				
Endosulfan I	6.42	6.36	6.48	2366231				
Dieldrin	7.75	7.68	7.82	1949125				
4,4'-DDE	7.22	7.16	7.28	2281089				
Endrin	9.34	9.26	9.42	1026140				
Endosulfan II	11.12	11.02	11.24	1307415				
4,4'-DDD	10.80	10.70	10.90	929857				
Endosulfan sulfate	17.06	16.92	17.20	741266				
4,4'-DDT	12.94	12.80	13.08	861376				
Methoxychlor	23.85	23.59	24.11	282560				
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263				
gamma-Chlordane	5.68	5.63	5.73	2291817				
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432	8.99	885381	Y	8.4
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.89

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91 TO: 11/25/91
TIME(S) OF ANALYSIS FROM: 1652 TO: 2119
DATE OF ANALYSIS 11/27/91
TIME OF ANALYSIS 1830
EPA SAMPLE NO. (STANDARD) INDA 14-55

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689	1.98	8514385	Y	9.2
Beta-BHC	2.73	2.70	2.76	2376369				
Delta-BHC	3.17	3.14	3.20	4808969				
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757	2.45	7115333	Y	10.2
Heptachlor	2.98	2.96	3.02	5619629	2.98	6443951	Y	14.7
Aldrin	3.56	3.53	3.59	4379925				
Heptachlor epoxide	5.14	5.10	5.18	2965519				
Endosulfan I	6.42	6.36	6.48	2366231	6.40	2648383	Y	11.9
Dieldrin	7.75	7.68	7.82	1949125	7.72	2223443	Y	14.1
4,4'-DDE	7.22	7.16	7.28	2281089				
Endrin	9.34	9.26	9.42	1026140	9.31	1333275	Y	29.9
Endosulfan II	11.12	11.02	11.24	1307415				
4,4'-DDD	10.80	10.70	10.90	929857	10.76	1030758	Y	10.9
Endosulfan sulfate	17.06	16.92	17.20	741266				
4,4'-DDT	12.94	12.80	13.08	861376	12.89	975700	Y	13.3
Methoxychlor	23.85	23.59	24.11	282560	23.74	314070	Y	11.2
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263				
gamma-Chlordane	5.68	5.63	5.73	2291817				
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432				
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARD SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-12-01-0000

Case No.: STANDARD CHLORINE GC Sample ID: 11259103.90

RFW Lot No.: 9110L097

Instrument ID: 03 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 11/25/91 TO: 11/25/91
TIME(S) OF ANALYSIS FROM: 1652 TO: 2119
DATE OF ANALYSIS 11/27/91
TIME OF ANALYSIS 1903
EPA SAMPLE NO. (STANDARD) INDB 27-56

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
Alpha-BHC	1.99	1.97	2.01	7797689				
Beta-BHC	2.73	2.70	2.76	2376369	2.73	3238401	Y	36.3
Delta-BHC	3.17	3.14	3.20	4808969	3.16	6899133	Y	43.5
gamma-BHC (Lindane)	2.46	2.43	2.49	6454757				
Heptachlor	2.98	2.96	3.02	5619629				
Aldrin	3.56	3.53	3.59	4379925	3.56	6199017	Y	41.5
Heptachlor epoxide	5.14	5.10	5.18	2965519	5.14	4196433	Y	41.5
Endosulfan I	6.42	6.36	6.48	2366231				
Dieldrin	7.75	7.68	7.82	1949125				
4,4'-DDE	7.22	7.16	7.28	2281089	7.21	3144509	Y	37.9
Endrin	9.34	9.26	9.42	1026140				
Endosulfan II	11.12	11.02	11.24	1307415	11.11	1861617	Y	42.4
4,4'-DDD	10.80	10.70	10.90	929857				
Endosulfan sulfate	17.06	16.92	17.20	741266	17.02	1075125	Y	45.0
4,4'-DDT	12.94	12.80	13.08	861376				
Methoxychlor	23.85	23.59	24.11	282560				
Endrin ketone	******	******	******	COELUTES *				
alpha-Chlordane	6.17	6.12	6.22	2300263	6.16	3168883	Y	37.8
gamma-Chlordane	5.68	5.63	5.73	2291817	5.68	3159501	Y	37.9
Toxaphene	11.38	11.29	11.47	149675				
Aroclor-1016	2.92	2.89	2.95	853905				
Aroclor-1221	1.85	1.83	1.87	255888				
Aroclor-1232	2.92	2.90	2.94	472837				
Aroclor-1242	2.91	2.88	2.94	802917				
Aroclor-1248	2.92	2.89	2.95	1044875				
Aroclor-1254	8.95	8.86	9.04	816432				
Aroclor-1260	10.04	9.97	10.11	747611				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

RFW LOT # 9102L442
VOA
BNA

DATA SUMMARY
CORRESPONDING FORM I
VOA

Roy F. Weston, Inc. - Lionville Laboratory
VOA ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 02/06/91 RFW LOT # :9102L442

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SB-20-3-4	001	W	91LVK025	02/05/91	N/A	02/07/91
SB-20-3-3	002	W	91LVK025	02/05/91	N/A	02/07/91
SB-1A-3-1	003 M1	S	91LVK027	02/05/91	N/A	02/11/91
SB-1A-3-1	003 MS M1	S	91LVK028	02/05/91	N/A	02/12/91
SB-1A-3-1	003 MSD M1	S	91LVK028	02/05/91	N/A	02/12/91
SB-1A-3-2	004 M1	S	91LVK027	02/05/91	N/A	02/11/91
SB-15A-2-1	006 M1	S	91LVK027	02/05/91	N/A	02/11/91
SB-15A-2-1	006 M2	S	91LVK028	02/05/91	N/A	02/12/91
SB-35-5-1	007	S	91LVB236	02/05/91	N/A	02/12/91
LAB QC:						
VBLK	MB1	W	91LVK025	N/A	N/A	02/07/91
VBLK	MB1	S	91LVK027	N/A	N/A	02/11/91
VBLK	MB1	S	91LVK028	N/A	N/A	02/12/91
VBLK	MB1	S	91LVB236	N/A	N/A	02/12/91

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles By GC/MS, Special List
Report Date: 04/17/91 17:00

RFW Batch Number: 9102L442 Client: STANDARD CHLORINE Work Order: 2267-09-02-0000 Page: 1a

	Cust ID:	SB-20-3-4	SB-20-3-3	SB-1A-3-1	SB-1A-3-1	SB-1A-3-1	SB-1A-3-2
Sample Information	RFW#:	001	002	003	003 MS	003 MSD	004
	Matrix:	WATER	WATER	SOIL	SOIL	SOIL	SOIL
	D.F.:	1.00	1.00	6.25	6.25	6.25	12.5
	Units:	ug/L	ug/L	ug/Kg	ug/Kg	ug/Kg	ug/Kg
	Level:	LOW	LOW	MED	MED	MED	MED
Surrogate Recovery	Toluene-d8	106 %	100 %	73 * %	92 %	91 %	90 %
	Bromofluorobenzene	103 %	97 %	76 %	96 %	91 %	90 %
	1,2-Dichloroethane-d4	105 %	90 %	85 %	100 %	104 %	100 %
Benzene		5 U	5 U	3500 U	86 %	91 %	7100 U
Chlorobenzene		5 U	5 U	3500 U	96 %	96 %	7100 U

	Cust ID:	SB-15A-2-1	SB-15A-2-1	SB-35-5-1	VBLK	VBLK	VBLK
Sample Information	RFW#:	006	006 DL	007	91LVK025-MB1	91LVK027-MB1	91LVK028-MB1
	Matrix:	SOIL	SOIL	SOIL	WATER	SOIL	SOIL
	D.F.:	24.4	244	1.00	1.00	1.25	1.25
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/L	ug/Kg	ug/Kg
	Level:	MED	MED	LOW	LOW	MED	MED
Surrogate Recovery	Toluene-d8	130 * %	D %	100 %	105 %	103 %	97 %
	Bromofluorobenzene	119 %	D %	99 %	99 %	97 %	99 %
	1,2-Dichloroethane-d4	102 %	D %	112 %	105 %	112 %	106 %
Benzene		23000 E	NA	6 U	5 U	620 U	620 U
Chlorobenzene			2700000	9	5 U	620 U	620 U

*= Outside of EPA CLP QC limits.

AR305585

AR305586

Cust ID: VBLK

Sample Information

RFW#: 91LVB236-MB1
Matrix: SOIL
D.F.: 1.00
Units: ug/Kg
Level: LOW

Surrogate Recovery	Toluene-d8	97	%
	Bromofluorobenzene	93	%
	1,2-Dichloroethane-d4	104	%

Benzene	5	U
Chlorobenzene	5	U

*= Outside of EPA CLP QC limits.

1A

VOLATILE ORGANICS ANALYSIS SHEET 000002

CLIENT SAMPLE NO.

SB-20-3-4

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: WATER

Lab Sample ID: 9102L442-001

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK2715

Level: (low/med) LOW

Date Received: 02/06/91

% Moisture: not dec. _____

Date Analyzed: 02/07/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
71-43-2	Benzene	5	U
108-90-7	Chlorobenzene	5	U

FORM 1 V-1 12/88 Rev.

AR305587

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000029

CLIENT SAMPLE NO.

SB-20-3-3

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: WATER

Lab Sample ID: 9102L442-002

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK2716

Level: (low/med) LOW

Date Received: 02/06/91

% Moisture: not dec. _____

Date Analyzed: 02/07/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
71-43-2	Benzene	5	U
108-90-7	Chlorobenzene	5	U

FORM 1 V-1 12/88 Rev.

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000033 CLIENT SAMPLE NO.

SB-1A-3-1

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

nt: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-003

Sample wt/vol: 4.00 (g/mL) G Lab File ID: AK2B08

Level: (low/med) MED Date Received: 02/06/91

% Moisture: not dec. 10 Date Analyzed: 02/11/91

Column: (pack/cap) PACK Dilution Factor: 6.25

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
71-43-2	Benzene	3500	U
108-90-7	Chlorobenzene	3500	U

FORM 1 V-1 12/88 Rev.

AR305589

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000037

CLIENT SAMPLE NO.

SB-1A-3-2

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL

Lab Sample ID: 9102L442-004

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AK2B09

Level: (low/med) MED

Date Received: 02/06/91

% Moisture: not dec. 12

Date Analyzed: 02/11/91

Column: (pack/cap) PACK

Dilution Factor: 12.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
71-43-2	Benzene	7100	U
108-90-7	Chlorobenzene	7100	U

FORM 1 V-1 12/88 Rev.

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000041

CLIENT SAMPLE NO.

SB-15A-2-1

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-006

Sample wt/vol: 4.10 (g/mL) G Lab File ID: AK2B10

Level: (low/med) MED Date Received: 02/06/91

% Moisture: not dec. 14 Date Analyzed: 02/11/91

Column: (pack/cap) PACK Dilution Factor: 24.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
71-43-2	Benzene	23000	
108-90-7	Chlorobenzene		E

FORM 1 V-1 12/88 Rev.

AR305591

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000047

CLIENT SAMPLE NO.

SB-15A-2-1DL

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL

Lab Sample ID: 9102L442-006 DL

Sample wt/vol: 4.10 (g/mL) G

Lab File ID: AK2C05

Level: (low/med) MED

Date Received: 02/06/91

% Moisture: not dec. 14

Date Analyzed: 02/12/91

Column: (pack/cap) PACK

Dilution Factor: 244

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
71-43-2	Benzene	NA	
108-90-7	Chlorobenzene	2700000	

FORM 1 V-1 12/88 Rev.

AR305592

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000052

CLIENT SAMPLE NO.

SB-35-5-1

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

nt: STANDARD CHLORINE

Matrix: SOIL

Lab Sample ID: 9102L442-007

Sample wt/vol: 5.00 (g/mL) G

Lab File ID: B021209

Level: (low/med) LOW

Date Received: 02/06/91

% Moisture: not dec. 12

Date Analyzed: 02/12/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
71-43-2	Benzene	6	U
108-90-7	Chlorobenzene	9	

FORM 1 V-1 12/88 Rev.

AR305593

RFW LOT # 9102L442

DATA SUMMARY
CORRESPONDING FORM I
BNA

Roy F. Weston, Inc. - Lionville Laboratory
BNA ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 02/06/91 RFW LOT # :9102L442

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SB-20-3-3	002	W	91LE0134	02/05/91	02/07/91	03/11/91
SB-1A-3-1	003	S	91LE0133	02/05/91	02/07/91	03/09/91
SB-1A-3-1	003 01	S	91LE0133	02/05/91	02/07/91	03/11/91
SB-1A-3-2	004	S	91LE0133	02/05/91	02/07/91	03/09/91
SB-1A-3-2	004 01	S	91LE0133	02/05/91	02/07/91	03/11/91
SB-15A-2-1	006	S	91LE0133	02/05/91	02/07/91	03/09/91
SB-15A-2-1	006 01	S	91LE0133	02/05/91	02/07/91	03/11/91
SB-35-5-1	007	S	91LE0133	02/05/91	02/07/91	03/08/91
SB-35-5-1	007 A1	S	91LE0133	02/05/91	02/07/91	05/10/91
SB-35-5-1	007 MS	S	91LE0133	02/05/91	02/07/91	05/10/91
SB-35-5-1	007 MSD	S	91LE0133	02/05/91	02/07/91	05/10/91
LAB QC:						
SBLK	MB1	W	91LE0134	N/A	02/07/91	03/08/91
SBLK	MB1 BS	W	91LE0134	N/A	02/07/91	03/08/91
SBLK	MB1 BSD	W	91LE0134	N/A	02/07/91	03/08/91
SBLK	MB1	S	91LE0133	N/A	02/07/91	03/08/91

Roy F. Weston, Inc. - Lionville Laboratory
Semivolatiles by GC/MS, Special List
Report Date: 05/14/91 10:34

RFW Batch Number: 9102L442 Client: STANDARD CHLORINE Work Order: 2267-09-02-0000 Page: 1a

	Cust ID:	SB-20-3-3		SB-1A-3-1		SB-1A-3-1		SB-1A-3-2		SB-1A-3-2		SB-15A-2-1	
Sample Information	RFW#:	002		003		003 DL		004		004 DL		006	
	Matrix:	WATER		SOIL		SOIL		SOIL		SOIL		SOIL	
	D.F.:	1.00		100		250		100		500		250	
	Units:	ug/L		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	Nitrobenzene-d5	102	%	D	%	D	%	D	%	D	%	D	%
	2-Fluorobiphenyl	90	%	D	%	D	%	D	%	D	%	D	%
	p-Terphenyl-d14	99	%	D	%	D	%	D	%	D	%	D	%
	Phenol-d5	47	%	D	%	D	%	D	%	D	%	D	%
	2-Fluorophenol	70	%	D	%	D	%	D	%	D	%	D	%
	2,4,6-Tribromophenol	124 *	%	D	%	D	%	D	%	D	%	D	%
			fl		fl		fl		fl		fl		fl
	1,3-Dichlorobenzene	11	U	36000	U	NA		36000	U	NA		17000	J
	1,4-Dichlorobenzene	11	U		E	1000000			E	1700000		240000	
	1,2-Dichlorobenzene	11	U	370000		NA			E	630000			E
	Nitrobenzene	11	U	76000		NA		180000		NA		92000	U
	1,2,4-Trichlorobenzene	11	U		E	770000			E	1100000		500000	
	Hexachlorobenzene	11	U	36000	U	NA		36000	U	NA		92000	U
	1,2,3-Trichlorobenzene	11	U	120000		NA		180000		NA		51000	J
	1,3,5-Trichlorobenzene	11	U	36000	U	NA		36000	U	NA		92000	U
	1,2,4,5-Tetrachlorobenzene	11	U	59000		NA		82000		NA		4600	J
	1,2,3,4-Tetrachlorobenzene	11	U	53000		NA		71000		NA		120000	J
	Pentachlorobenzene	11	U	36000	U	NA		36000	U	NA		92000	U
	1-Chloro-3-nitrobenzene	11	U	36000	U	NA		36000	U	NA		92000	U

*= Outside of EPA CLP QC limits.

AR305596

Roy F. Weston, Inc. [redacted] onville Laboratory
Semivolatiles by [redacted]/MS, Special List Report Date: 05/14/[redacted] 0:34
RFW Batch Number: 9102L442 Client: STANDARD CHLORINE Work Order: 2267-09-02-0000 Page: 2a

	Cust ID:	SB-15A-2-1	SB-35-5-1	SB-35-5-1	SB-35-5-1	SB-35-5-1	SBLK
Sample Information	RFW#:	006 DL	007	007 RE	007 MS	007 MSD	91LE0134-MB1
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
	D.F.:	500	10.0	1.00	1.00	1.00	1.00
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/L
Surrogate Recovery	Nitrobenzene-d5	D %	D %	93 %	94 %	88 %	84 %
	2-Fluorobiphenyl	D %	D %	83 %	88 %	82 %	73 %
	p-Terphenyl-d14	D %	D %	86 %	100 %	82 %	96 %
	Phenol-d5	D %	D %	98 %	91 %	93 %	39 %
	2-Fluorophenol	D %	D %	95 %	89 %	89 %	64 %
	2,4,6-Tribromophenol	D %	D %	73 %	84 %	95 %	89 %
1,2-Dichlorobenzene		NA	3500 U	350 U	360 U	340 U	10 U
1,4-Dichlorobenzene		NA	510 J	240 J	69 %	64 %	10 U
1,2-Dichlorobenzene		2900000	2400 J	630	110 J	44 J	10 U
Nitrobenzene		NA	3500 U	350 U	360 U	340 U	10 U
1,2,4-Trichlorobenzene		NA	3500 U	270 J	85 %	69 %	10 U
Hexachlorobenzene		NA	3500 U	350 U	360 U	340 U	10 U
1,2,3-Trichlorobenzene		NA	3500 U	350 U	57 J	340 U	10 U
1,3,5-Trichlorobenzene		NA	3500 U	350 U	360 U	340 U	10 U
1,2,4,5-Tetrachlorobenzene		NA	3500 U	350 U	73 J	340 U	10 U
1,2,3,4-Tetrachlorobenzene		NA	3500 U	93 J	430	100 J	10 U
Pentachlorobenzene		NA	3500 U	76 J	360 U	98 J	10 U
1-Chloro-3-nitrobenzene		NA	3500 U	350 U	360 U	340 U	10 U

*= Outside of EPA CLP QC limits.

AR305597

Roy F. Weston, Inc. - Lionville Laboratory
Semivolatiles by GC/MS, Special List
Report Date: 05/14/91 10:34

RFW Batch Number: 9102L442 Client: STANDARD CHLORINE Work Order: 2267-09-02-0000 Page: 3a

	Cust ID:	SBLK BS	SBLK BSD	SBLK
Sample Information	RFW#:	91LE0134-MB1	91LE0134-MB1	91LE0133-MB1
	Matrix:	WATER	WATER	SOIL
	D.F.:	1.00	1.00	1.00
	Units:	ug/L	ug/L	ug/Kg
Surrogate Recovery	Nitrobenzene-d5	40 %	22 * %	80 %
	2-Fluorobiphenyl	64 %	70 %	72 %
	p-Terphenyl-d14	94 %	122 %	82 %
	Phenol-d5	46 %	56 %	76 %
	2-Fluorophenol	76 %	96 %	77 %
	2,4,6-Tribromophenol	111 %	156 * %	64 %
1,3-Dichlorobenzene		10 U	10 U	330 U
1,4-Dichlorobenzene		7 * %	2 * %	330 U
1,2-Dichlorobenzene		10 U	10 U	330 U
Nitrobenzene		10 U	10 U	330 U
1,2,4-Trichlorobenzene		36 * %	20 * %	330 U
Hexachlorobenzene		10 U	10 U	330 U
1,2,3-Trichlorobenzene		10 U	10 U	330 U
1,3,5-Trichlorobenzene		10 U	10 U	330 U
1,2,4,5-Tetrachlorobenzene		10 U	10 U	330 U
1,2,3,4-Tetrachlorobenzene		10 U	10 U	330 U
Pentachlorobenzene		10 U	10 U	330 U
1-Chloro-3-nitrobenzene		10 U	10 U	330 U

*= Outside of EPA CLP QC limits.

AR305598

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000027

CLIENT SAMPLE NO.

SB-20-3-3

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: WATER Lab Sample ID: 9102L442-002

Sample wt/vol: 930 (g/mL) ML Lab File ID: S031107

Level: (low/med) LOW Date Received: 02/06/91

% Moisture: not dec. _____ dec. Date Extracted: 02/07/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/11/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
98-95-3	Nitrobenzene	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
118-74-1	Hexachlorobenzene	11	U
87-61-6	1,2,3-Trichlorobenzene	11	U
108-70-3	1,3,5-Trichlorobenzene	11	U
95-94-3	1,2,4,5-Tetrachlorobenzene	11	U
634-66-2	1,2,3,4-Tetrachlorobenzene	11	U
608-93-5	Pentachlorobenzene	11	U
121-73-3	1-Chloro-3-nitrobenzene	11	U

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0900029

CLIENT SAMPLE NO.

SB-1A-3-1

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-003

Sample wt/vol: 31.0 (g/mL) G Lab File ID: S030830

Level: (low/med) LOW Date Received: 02/06/91

% Moisture: not dec. 10 dec. Date Extracted: 02/07/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/09/91

GPC Cleanup: (Y/N) Y pH: 3.4 Dilution Factor: 100

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
541-73-1	1,3-Dichlorobenzene	36000	U
106-46-7	1,4-Dichlorobenzene		E
95-50-1	1,2-Dichlorobenzene	370000	
98-95-3	Nitrobenzene	76000	
120-82-1	1,2,4-Trichlorobenzene		E
118-74-1	Hexachlorobenzene	36000	U
87-61-6	1,2,3-Trichlorobenzene	120000	
108-70-3	1,3,5-Trichlorobenzene	36000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	59000	
634-66-2	1,2,3,4-Tetrachlorobenzene	53000	
608-93-5	Pentachlorobenzene	36000	U
121-73-3	1-Chloro-3-nitrobenzene	36000	U

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000048

CLIENT SAMPLE NO.

SB-1A-3-1DL

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-003 DL

Sample wt/vol: 31.0 (g/mL) G Lab File ID: S031114

Level: (low/med) LOW Date Received: 02/06/91

% Moisture: not dec. 10 dec. Date Extracted: 02/07/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/11/91

GPC Cleanup: (Y/N) Y pH: 3.4 Dilution Factor: 250

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
541-73-1	1,3-Dichlorobenzene	NA	
106-46-7	1,4-Dichlorobenzene	1000000	
95-50-1	1,2-Dichlorobenzene	NA	
98-95-3	Nitrobenzene	NA	
120-82-1	1,2,4-Trichlorobenzene	770000	
118-74-1	Hexachlorobenzene	NA	
87-61-6	1,2,3-Trichlorobenzene	NA	
108-70-3	1,3,5-Trichlorobenzene	NA	
95-94-3	1,2,4,5-Tetrachlorobenzene	NA	
634-66-2	1,2,3,4-Tetrachlorobenzene	NA	
608-93-5	Pentachlorobenzene	NA	
121-73-3	1-Chloro-3-nitrobenzene	NA	

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0900057

CLIENT SAMPLE NO.

SB-1A-3-2

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-004

Sample wt/vol: 31.9 (g/mL) G Lab File ID: S030831

Level: (low/med) LOW Date Received: 02/06/91

% Moisture: not dec. 12 dec. Date Extracted: 02/07/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/09/91

GPC Cleanup: (Y/N) Y pH: 3.4 Dilution Factor: 100

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
541-73-1	1,3-Dichlorobenzene	36000	U
106-46-7	1,4-Dichlorobenzene		E
95-50-1	1,2-Dichlorobenzene		E
98-95-3	Nitrobenzene	180000	
120-82-1	1,2,4-Trichlorobenzene		E
118-74-1	Hexachlorobenzene	36000	U
87-61-6	1,2,3-Trichlorobenzene	180000	
108-70-3	1,3,5-Trichlorobenzene	36000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	82000	
634-66-2	1,2,3,4-Tetrachlorobenzene	71000	
608-93-5	Pentachlorobenzene	36000	U
121-73-3	1-Chloro-3-nitrobenzene	36000	U

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0 1 0 0 0 7 6

CLIENT SAMPLE NO.

SB-1A-3-2DL

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-004 DL

Sample wt/vol: 31.9 (g/mL) G Lab File ID: S031117

Level: (low/med) LOW Date Received: 02/06/91

% Moisture: not dec. 12 dec. Date Extracted: 02/07/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/11/91

GPC Cleanup: (Y/N) Y pH: 3.4 Dilution Factor: 500

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
541-73-1	1,3-Dichlorobenzene	NA	
106-46-7	1,4-Dichlorobenzene	1700000	
95-50-1	1,2-Dichlorobenzene	630000	
98-95-3	Nitrobenzene	NA	
120-82-1	1,2,4-Trichlorobenzene	1100000	
118-74-1	Hexachlorobenzene	NA	
87-61-6	1,2,3-Trichlorobenzene	NA	
108-70-3	1,3,5-Trichlorobenzene	NA	
95-94-3	1,2,4,5-Tetrachlorobenzene	NA	
634-66-2	1,2,3,4-Tetrachlorobenzene	NA	
608-93-5	Pentachlorobenzene	NA	
121-73-3	1-Chloro-3-nitrobenzene	NA	

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000087

CLIENT SAMPLE NO.

SB-15A-2-1

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-006

Sample wt/vol: 31.6 (g/mL) G Lab File ID: S030829

Level: (low/med) LOW Date Received: 02/06/91

% Moisture: not dec. 14 dec. Date Extracted: 02/07/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/09/91

GPC Cleanup: (Y/N) Y pH: 4.7 Dilution Factor: 250

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
541-73-1	1,3-Dichlorobenzene	17000	J
106-46-7	1,4-Dichlorobenzene	240000	
95-50-1	1,2-Dichlorobenzene		E
98-95-3	Nitrobenzene	92000	U
120-82-1	1,2,4-Trichlorobenzene	500000	
118-74-1	Hexachlorobenzene	92000	U
87-61-6	1,2,3-Trichlorobenzene	51000	J
108-70-3	1,3,5-Trichlorobenzene	92000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	4600	J
634-66-2	1,2,3,4-Tetrachlorobenzene	120000	J
608-93-5	Pentachlorobenzene	92000	U
121-73-3	1-Chloro-3-nitrobenzene	92000	U

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0900106

CLIENT SAMPLE NO.

SB-15A-2-1DL

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-006 DL

Sample wt/vol: 31.6 (g/mL) G Lab File ID: S031116

Level: (low/med) LOW Date Received: 02/06/91

% Moisture: not dec. 14 dec. Date Extracted: 02/07/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/11/91

GPC Cleanup: (Y/N) Y pH: 4.7 Dilution Factor: 500

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
541-73-1	1,3-Dichlorobenzene	NA	
106-46-7	1,4-Dichlorobenzene	NA	
95-50-1	1,2-Dichlorobenzene	2900000	
98-95-3	Nitrobenzene	NA	
120-82-1	1,2,4-Trichlorobenzene	NA	
118-74-1	Hexachlorobenzene	NA	
87-61-6	1,2,3-Trichlorobenzene	NA	
108-70-3	1,3,5-Trichlorobenzene	NA	
95-94-3	1,2,4,5-Tetrachlorobenzene	NA	
634-66-2	1,2,3,4-Tetrachlorobenzene	NA	
608-93-5	Pentachlorobenzene	NA	
121-73-3	1-Chloro-3-nitrobenzene	NA	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0030117

CLIENT SAMPLE NO.

SB-35-5-1

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

ent: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-007

Sample wt/vol: 32.4 (g/mL) G Lab File ID: S030815

Level: (low/med) LOW Date Received: 02/06/91

% Moisture: not dec. 12 dec. Date Extracted: 02/07/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/08/91

GPC Cleanup: (Y/N) Y pH: 5.2 Dilution Factor: 10.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
541-73-1	1,3-Dichlorobenzene	3500	U
106-46-7	1,4-Dichlorobenzene	510	J
95-50-1	1,2-Dichlorobenzene	2400	J
98-95-3	Nitrobenzene	3500	U
120-82-1	1,2,4-Trichlorobenzene	3500	U
118-74-1	Hexachlorobenzene	3500	U
87-61-6	1,2,3-Trichlorobenzene	3500	U
108-70-3	1,3,5-Trichlorobenzene	3500	U
95-94-3	1,2,4,5-Tetrachlorobenzene	3500	U
634-66-2	1,2,3,4-Tetrachlorobenzene	3500	U
608-93-5	Pentachlorobenzene	3500	U
121-73-3	1-Chloro-3-nitrobenzene	3500	U

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000116

CLIENT SAMPLE NO.

SB-35-5-1RE

Lab Name: Roy F. Weston, Inc. Work Order: 2267-09-02-0000

Client: STANDARD CHLORINE

Matrix: SOIL Lab Sample ID: 9102L442-007 RE

Sample wt/vol: 32.4 (g/mL) G Lab File ID: S051005

Level: (low/med) LOW Date Received: 02/06/91

% Moisture: not dec. 12 dec. Date Extracted: 02/07/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/10/91

GPC Cleanup: (Y/N) Y pH: 5.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	240	J
95-50-1	1,2-Dichlorobenzene	630	
98-95-3	Nitrobenzene	350	U
120-82-1	1,2,4-Trichlorobenzene	270	J
118-74-1	Hexachlorobenzene	350	U
87-61-6	1,2,3-Trichlorobenzene	350	U
108-70-3	1,3,5-Trichlorobenzene	350	U
95-94-3	1,2,4,5-Tetrachlorobenzene	350	U
634-66-2	1,2,3,4-Tetrachlorobenzene	93	J
608-93-5	Pentachlorobenzene	76	J
121-73-3	1-Chloro-3-nitrobenzene	350	U

RFW LOT # 9102L442

QC SUMMARY
FORMS II - VIII
VOA

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

RFW Lot No.: 9102L442

	CLIENT SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	SB-20-3-4	106	103	105		0
02	SB-20-3-3	100	97	90		0
03	VBLKLVK025-MB1	105	99	105		0

	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 QC limits
D Surrogates diluted out

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE Level: (low/med) LOW

RFW Lot No.: 9102L442

	CLIENT SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	SB-35-5-1	100	99	112		0
02	VBLKLVB236-MB1	97	93	104		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

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

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE Level: (low/med) MED

RFW Lot No.: 9102L442

	CLIENT SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	SB-1A-3-1	73 *	76	85		1
02	SB-1A-3-1MS	92	96	100		0
03	SB-1A-3-1MSD	91	91	104		0
04	SB-1A-3-2	90	90	100		0
05	SB-15A-2-1	130 *	119	102		1
06	SB-15A-2-1DL	D	D	D		0
07	VBLKLVK027-MB1	103	97	112		0
08	VBLKLVK028-MB1	97	99	106		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

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

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot No.: 9102L442-003

MATRIX Spike - Sample No.: SB-1A-3-1 Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
Benzene	6930	0	5950	86	66-142
Chlorobenzene	6930	0	6630	96	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
Benzene	6930	6320	91	5	21	66-142
Chlorobenzene	6930	6660	96	0	21	60-133

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

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

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: AK2709 Lab Sample ID: 91LVK025-MB1

Date Analyzed: 02/07/91 Time Analyzed: 1454

Matrix:(Soil/Water) WATER Level:(low/med) LOW

Instrument ID: HP-MSD K

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-20-3-4	9102L442-001	AK2715	1828
02	SB-20-3-3	9102L442-002	AK2716	1902

COMMENTS:

4A 0000014

VOLATILE METHOD BLANK SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: AK2B03 Lab Sample ID: 91LVK027-MB1

Date Analyzed: 02/11/91 Time Analyzed: 1321

Matrix:(Soil/Water) SOIL Level:(low/med) MED

Instrument ID: HP-MSD K

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-1A-3-1	9102L442-003	AK2B08	1715
02	SB-1A-3-2	9102L442-004	AK2B09	1749
03	SB-15A-2-1	9102L442-006	AK2B10	1824

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: AK2C03 Lab Sample ID: 91LVK028-MB1

Date Analyzed: 02/12/91 Time Analyzed: 1214

Matrix:(Soil/Water) SOIL Level:(low/med) MED

Instrument ID: HP-MSD K

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-15A-2-1DL	9102L442-006	AK2C05	1411
02	SB-1A-3-1MS	9102L442-003S	AK2C06	1446
03	SB-1A-3-1MSD	9102L442-003T	AK2C08	1605

COMMENTS:

VOLATILE METHOD BLANK SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: B021207 Lab Sample ID: 91LVB236-MB1

Date Analyzed: 02/12/91 Time Analyzed: 1413

Matrix:(Soil/Water) SOIL Level:(low/med) LOW

Instrument ID: 5100B

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-35-5-1	9102L442-007	B021209	1610

COMMENTS:

5A

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

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: AK1301 BFB Injection Date: 1/03/91

Instrument ID: HP-MSD K BFB Injection Time: 953

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	18.9	✓
75	30.0 - 60.0% of mass 95	50.1	✓
95	Base peak, 100% relative abundance	100.0	✓
96	5.0 - 9.0% of mass 95	8.4	✓
173	Less than 2.0% of mass 174	1(1.1)1	✓
174	Greater than 50.0% of mass 95	86.0	✓
175	5.0 - 9.0% of mass 174	5.3(6.1)1	✓
176	Greater than 95.0% but less than 101.0% of mass 174	86.6(100.8)1	✓
177	5.0 - 9.0% of mass 176	6.9(8.0)2	✓ VKJF

VKJF

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD20	VSTD20	AK1304	01/03/91	1354
02	VSTD50	VSTD50	AK1305	01/03/91	1434
03	VSTD100	VSTD100	AK1306	01/03/91	1515
04	VSTD150	VSTD150	AK1307	01/03/91	1558
05	VSTD200	VSTD200	AK1308	01/03/91	1638
06					
07					
08					
09					
10					
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15					
16					
17					
18					
19					
20					

5A

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

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

[redacted] No.: STANDARD CHLORINE

Lab File ID: AK2707 BFB Injection Date: 2/07/91

Instrument ID: HP-MSD K BFB Injection Time: 1347

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	16.3	✓
75	30.0 - 60.0% of mass 95	50.8	✓
95	Base peak, 100% relative abundance	100.0	✓
96	5.0 - 9.0% of mass 95	7.2	✓
173	Less than 2.0% of mass 174	0.0(0.0)1	✓
174	Greater than 50.0% of mass 95	87.1	✓
175	5.0 - 9.0% of mass 174	6.3(7.3)1	✓
176	Greater than 95.0% but less than 101.0% of mass 174	85.6(98.3)1	✓
177	5.0 - 9.0% of mass 176	5.0(5.9)2	✓

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

VKJF

[redacted] TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	AK2708	02/07/91	1404
02	VBLKLVK025-MB1	91LVK025-MB1	AK2709.	02/07/91	1454
03	SB-20-3-4	9102L442-001	AK2715.	02/07/91	1828
04	SB-20-3-3	9102L442-002	AK2716.	02/07/91	1902
05					
06					
07					
08					
09					
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12					
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17					
18					
19					
20					

[redacted]

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

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: B020401 BFB Injection Date: 02/04/91

Instrument ID: 5100B BFB Injection Time: 831

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	21.0	✓
75	30.0 - 60.0% of mass 95	42.9	✓
95	Base peak, 100% relative abundance	100.0	✓
96	5.0 - 9.0% of mass 95	6.8	✓
173	Less than 2.0% of mass 174	0.0(0.0)1	✓
174	Greater than 50.0% of mass 95	77.4	✓
175	5.0 - 9.0% of mass 174	5.5(7.1)1	✓
176	Greater than 95.0% but less than 101.0% of mass 174	75.6(97.7)1	✓
177	5.0 - 9.0% of mass 176	4.7(6.2)2	✓

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

VKF JKF

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	B020403	02/04/91	1008
02	VSTD100	VSTD100	B020404	02/04/91	1201
03	VSTD150	VSTD150	B020405	02/04/91	1346
04	VSTD200	VSTD200	B020406	02/04/91	1420
05	VSTD20	VSTD20	B020407	02/04/91	1454
06					
07					
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5A

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

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

No.: STANDARD CHLORINE

Lab File ID: B021205 BFB Injection Date: 02/12/91

Instrument ID: 5100B BFB Injection Time: 1224

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	23.8	✓
75	30.0 - 60.0% of mass 95	44.6	✓
95	Base peak, 100% relative abundance	100.0	✓
96	5.0 - 9.0% of mass 95	6.9	✓
173	Less than 2.0% of mass 174	0.2(0.20)1	✓
174	Greater than 50.0% of mass 95	74.6	✓
175	5.0 - 9.0% of mass 174	4.9(6.5)1	✓
176	Greater than 95.0% but less than 101.0% of mass 174	72.6(97.4)1	✓
177	5.0 - 9.0% of mass 176	4.9(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: JKJF

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	B021206	02/12/91	1259
02	VBLKLVB236-MB1	91LVB236-MB1	B021207	02/12/91	1413
03	SB-35-5-1	9102L442-007	B021209	02/12/91	1610
04					
05					
06					
07					
08					
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10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

5A

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

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: AK2401 BFB Injection Date: 2/04/91

Instrument ID: HP-MSD K BFB Injection Time: 1354

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	22.6	✓
75	30.0 - 60.0% of mass 95	53.6	✓
95	Base peak, 100% relative abundance	100.0	✓
96	5.0 - 9.0% of mass 95	6.1	✓
173	Less than 2.0% of mass 174	0.0(0.0)1	✓
174	Greater than 50.0% of mass 95	91.7	✓
175	5.0 - 9.0% of mass 174	6.7(7.3)1	✓
176	Greater than 95.0% but less than 101.0% of mass 174	89.0(97.0)1	✓
177	5.0 - 9.0% of mass 176	5.9(6.6)2	✓

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

V KAF

V KAF

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD20	VSTD20	AK2402	02/04/91	1416
02	VSTD50	VSTD50	AK2403	02/04/91	1451
03	VSTD100	VSTD100	AK2404	02/04/91	1526
04	VSTD150	VSTD150	AK2405	02/04/91	1601
05	VSTD200	VSTD200	AK2406	02/04/91	1635
06					
07					
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17					
18					
19					
20					

5A

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

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Client No.: STANDARD CHLORINE

Lab File ID: AK2B01 BFB Injection Date: 2/11/91

Instrument ID: HP-MSD K BFB Injection Time: 1139

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	16.8	✓
75	30.0 - 60.0% of mass 95	50.3	✓
95	Base peak, 100% relative abundance	100.0	✓
96	5.0 - 9.0% of mass 95	7.7	✓
173	Less than 2.0% of mass 174	0.0(0.0)1	✓
174	Greater than 50.0% of mass 95	81.6	✓
175	5.0 - 9.0% of mass 174	6.5(8.0)1	✓
176	Greater than 95.0% but less than 101.0% of mass 174	81.2(99.5)1	✓
177	5.0 - 9.0% of mass 176	5.0(6.2)2	✓

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

VKJF

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	AK2B02	02/11/91	1159
02	VBLKLVK027-MB1	91LVK027-MB1	AK2B03.	02/11/91	1321
03	SB-1A-3-1	9102L442-003	AK2B08.	02/11/91	1715
04	SB-1A-3-2	9102L442-004	AK2B09.	02/11/91	1749
05	SB-15A-2-1	9102L442-006	AK2B10.	02/11/91	1824
06					
07					
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18					
19					
20					

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

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: AK2C01 BFB Injection Date: 2/12/91

Instrument ID: HP-MSD K BFB Injection Time: 1104

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	19.2	✓
75	30.0 - 60.0% of mass 95	50.8	✓
95	Base peak, 100% relative abundance	100.0	✓
96	5.0 - 9.0% of mass 95	7.5	✓
173	Less than 2.0% of mass 174	0.0(0.0)1	✓
174	Greater than 50.0% of mass 95	91.4	✓
175	5.0 - 9.0% of mass 174	5.5(6.1)1	✓
176	Greater than 95.0% but less than 101.0% of mass 174	92.2(100.9)1	✓
177	5.0 - 9.0% of mass 176	7.0(7.6)2	✓

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

JKdF ✓KdF

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	AK2C02	02/12/91	1125
02	VBLKLVK028-MB1	91LVK028-MB1	AK2C03.	02/12/91	1214
03	SB-15A-2-1DL	9102L442-006	AK2C05.	02/12/91	1411
04	SB-1A-3-1MS	9102L442-003S	AK2C06.	02/12/91	1446
05	SB-1A-3-1MSD	9102L442-003T	AK2C08.	02/12/91	1605
06					
07					
08					
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11					
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15					
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18					
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20					

6A

VOLATILE ORGANICS INTITIAL CALIBRATION DATA

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: HP-MSD K Calibration Date(s): 01/03/91 01/03/91

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

Min RRF for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = AK1304 RRF50 = AK1305
RRF100= AK1306 RRF150= AK1307 RRF200= AK1308

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	RRF	% RSD	
Benzene	0.813	0.785	0.704	0.719	0.660	0.736	8.5	
Chlorobenzene #	1.021	0.962	0.944	0.949	0.919	0.959	4.0#	✓
Toluene-d8	1.160	1.065	1.043	1.017	1.008	1.059	5.8	KJ
Bromofluorobenzene	0.878	0.804	0.784	0.779	0.752	0.799	6.0	
1,2-Dichloroethane-d4	0.496	0.448	0.413	0.402	0.398	0.431	9.5	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: HP-MSD K Calibration Date: 02/07/91 Time: 1404

Lab File ID: AK2708 Init. Calib. Date(s): 01/03/91 01/03/91

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 JKF	RRF	RRF50	%D
Benzene	0.736	0.712	3.3
Chlorobenzene #	0.959	0.923	3.8 # ✓ KJF
Toluene-d8	1.059	0.999	5.6
Bromofluorobenzene	0.799	0.756	5.4
1,2-Dichloroethane-d4	0.431	0.408	5.2

FORM VII VOA 5/88 Rev.

6A

VOLATILE ORGANICS INTITIAL CALIBRATION DATA

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: 5100B Calibration Date(s): 02/04/91 02/04/91

Matrix:(soil/water) SOIL 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 = B020407 RRF50 = B020403
RRF100= B020404 RRF150= B020405 RRF200= B020406

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Benzene	1.234	1.357	1.307	1.313	1.211	1.284	4.7
Chlorobenzene #	1.024	1.063	0.998	0.946	0.853	0.977	8.3#
Toluene-d8	1.160	1.049	1.147	1.142	1.071	1.114	4.5
Bromofluorobenzene	0.826	0.696	0.704	0.708	0.640	0.715	9.5
1,2-Dichloroethane-d4	0.658	0.529	0.520	0.569	0.561	0.567	9.6

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: 5100B Calibration Date: 02/12/91 Time: 1259

Lab File ID: B021206 Init. Calib. Date(s): 02/04/91 02/04/91

Matrix:(soil/water) SOIL 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
Benzene	1.284	1.296	-0.9
Chlorobenzene #	0.977	1.015	-3.9 #
Toluene-d8	1.114	1.186	-6.5
Bromofluorobenzene	0.715	0.714	0.1
1,2-Dichloroethane-d4	0.567	0.566	0.2

6A

VOLATILE ORGANICS INTITIAL CALIBRATION DATA

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: HP-MSD K Calibration Date(s): 02/04/91 02/04/91

Matrix:(soil/water) SOIL Level:(low/med) MED 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 = AK2402 RRF50 = AK2403
RRF100= AK2404 RRF150= AK2405 RRF200= AK2406

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Benzene	0.806	0.692	0.622	0.623	0.616	0.672	12.1
Chlorobenzene #	1.037	0.904	0.836	0.879	0.870	0.905	8.6#
Toluene-d8	1.075	1.035	0.952	0.931	0.904	0.979	7.4
Bromofluorobenzene	0.790	0.768	0.713	0.698	0.680	0.730	6.5
1,2-Dichloroethane-d4	0.419	0.396	0.355	0.337	0.333	0.368	10.3

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: HP-MSD K Calibration Date: 02/11/91 Time: 1159

Lab File ID: AK2B02 Init. Calib. Date(s): 02/04/91 02/04/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

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

COMPOUND VKJF	RRF	RRF50	%D
Benzene	0.672	0.684	-1.8
Chlorobenzene #	0.905	0.941	-4.0 #
Toluene-d8	0.979	1.035	-5.8
Bromofluorobenzene	0.730	0.803	-10.0
1,2-Dichloroethane-d4	0.368	0.387	-5.2

KJF ✓

FORM VII VOA 5/88 Rev.

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VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: HP-MSD K Calibration Date: 02/12/91 Time: 1125

Lab File ID: AK2C02 Init. Calib. Date(s): 02/04/91 02/04/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

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

COMPOUND	RRF	RRF50	%D
Benzene	0.672	0.737	-9.7
Chlorobenzene #	0.905	0.925	-2.2 #
Toluene-d8	0.979	1.056	-7.8
Bromofluorobenzene	0.730	0.793	-8.6
1,2-Dichloroethane-d4	0.368	0.426	-15.8

FORM VII VOA 5/88 Rev.

8A 0000142

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): AK2708 Date Analyzed: 02/07/91

Instrument ID: HP-MSD K Time Analyzed: 1404

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	34306	7.58	145944	10.16	134679	16.85
	UPPER LIMIT	68612	8.08	291888	10.66	269358	17.35
	LOWER LIMIT	17153	7.08	72972	9.66	67340	16.35
	CLIENT SAMPLE NO.						
01	SB-20-3-4	30721	7.57	132238	10.17	122831	16.85
02	SB-20-3-3	28047	7.58	129177	10.18	121929	16.83
03	VBLKLVK025-MB1	31707	7.57	139255	10.17	132540	16.85

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: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): AK2B02 Date Analyzed: 02/11/91

Instrument ID: HP-MSD K Time Analyzed: 1159

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	39301	7.60	169623	10.18	145489	16.82
UPPER LIMIT	78602	8.10	339246	10.68	290978	17.32
LOWER LIMIT	19651	7.10	84812	9.68	72745	16.32
CLIENT SAMPLE NO.						
01 SB-1A-3-1	34820	7.60	145467	10.18	139102	16.85
02 SB-1A-3-2	31293	7.57	135793	10.16	138953	16.83
SB-15A-2-1	33743	7.58	140284	10.17	98182	16.85
BLKLVK027-MB1	37567	7.59	156159	10.18	149926	16.87

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: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): AK2C02 Date Analyzed: 02/12/91

Instrument ID: HP-MSD K Time Analyzed: 1125

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	38685	7.60	160911	10.16	147916	16.84
	UPPER LIMIT	77370	8.10	321822	10.66	295832	17.34
	LOWER LIMIT	19343	7.10	80456	9.66	73958	16.34
	CLIENT SAMPLE NO.						
01	SB-1A-3-1MS	34758	7.58	143325	10.14	133487	16.83
02	SB-1A-3-1MSD	34761	7.57	145516	10.13	135314	16.83
03	SB-15A-2-1DL	35455	7.59	146279	10.17	132009	16.83
04	VBLKLVK028-MB1	36634	7.60	147279	10.16	142016	16.83

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: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): B021206 Date Analyzed: 02/12/91

Instrument ID: 5100B Time Analyzed: 1259

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

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	21043	12.77	159492	15.13	181702	20.90
UPPER LIMIT	42086	13.27	318984	15.63	363404	21.40
LOWER LIMIT	10522	12.27	79746	14.63	90851	20.40
CLIENT SAMPLE NO.						
01 SB-35-5-1	17165	12.73	124860	15.12	136880	20.90
02 VBLKLVB236-MB1	22447	12.77	171194	15.13	186024	20.92

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

RFW LOT # 9102L442

QC SUMMARY
FORMS II - VIII
BNA

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

RFW Lot No.: 9102L442

	CLIENT SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	SB-20-3-3	102	90	99	47	70	124 *		1
02	SBLKLE0134-MB1	84	73	96	39	64	89		0
03	SBLKLE0134-MB1 BS	40	64	94	46	76	111		0
04	SBLKLE0134-MB1 BSD	22 *	70	122	56	96	156 *		2

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = p-Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(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 QC limits
D Surrogates diluted out

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

RFW Lot No.: 9102L442

	CLIENT SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	SB-1A-3-1	D	D	D	D	D	D		0
02	SB-1A-3-1DL	D	D	D	D	D	D		0
03	SB-1A-3-2	D	D	D	D	D	D		0
04	SB-1A-3-2DL	D	D	D	D	D	D		0
05	SB-15A-2-1	D	D	D	D	D	D		0
06	SB-15A-2-1DL	D	D	D	D	D	D		0
07	SB-35-5-1	D	D	D	D	D	D		0
08	SB-35-5-1RE	93	83	86	98	95	73		0
09	SB-35-5-1MS	94	88	100	91	89	84		0
10	SB-35-5-1MSD	88	82	82	93	89	95		0
11	SBLKLE0133-MB1	80	72	82	76	77	64		0

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(23-120)
S2 (FBP) = 2-Fluorobiphenyl	(30-115)
S3 (TPH) = p-Terphenyl-d14	(18-137)
S4 (PHL) = Phenol-d5	(24-113)
S5 (2FP) = 2-Fluorophenol	(25-121)
S6 (TBP) = 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot No.: 9102L442-007

MATRIX Spike - Sample No.: SB-35-5-1 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
1,4-Dichlorobenzene	1780	241	1460	69	28-104
1,2,4-Trichlorobenzene	1780	269	1790	85	38-107

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
1,4-Dichlorobenzene	1700	1320	64	7	27	28-104
1,2,4-Trichlorobenzene	1700	1450	69	20	23	38-107

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

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

COMMENTS:

WATER SEMIVOLATILE BLANK SPIKE/BLANK SPIKE DUPLICATE RECOVERY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot No.: 9102L442

BLANK Spike - Sample No.: SBLKLE0134-MB1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC
1,4-Dichlorobenzene	50.0	0	3.29	7 *	36- 97
1,2,4-Trichlorobenzene	50.0	0	17.8	36 *	39- 98

COMPOUND	SPIKE ADDED (ug/L)	BSD CONCENTRATION (ug/L)	BSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
1,4-Dichlorobenzene	50.0	1.10	2 *	125 *	28	36- 97
1,2,4-Trichlorobenzene	50.0	10.1	20 *	57 *	28	39- 98

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

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

COMMENTS:

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: S030806 Lab Sample ID: 91LE0134-MB1

Date Extracted: 02/07/91 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 03/08/91 Time Analyzed: 1432

Matrix:(Soil/Water) WATER Level:(low/med) LOW

Instrument ID: 5100SP

THIS METHOD

BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLKLE0134-MB1 BS	91LE0134-MB1S	S030813	03/08/91
02	SBLKLE0134-MB1 BSD	91LE0134-MB1T	S030814	03/08/91
03	SB-20-3-3	9102L442-002	S031107	03/11/91

COMMENTS:

SEMIVOLATILE METHOD BLANK SUMMARY

Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: S030807 Lab Sample ID: 91LE0133-MB1

Date Extracted: 02/07/91 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 03/08/91 Time Analyzed: 1513

Matrix:(Soil/Water) SOIL Level:(low/med) LOW

Instrument ID: 5100SP

THIS METHOD

BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SB-35-5-1	9102L442-007	S030815	03/08/91
02	SB-15A-2-1	9102L442-006	S030829	03/09/91
03	SB-1A-3-1	9102L442-003	S030830	03/09/91
04	SB-1A-3-2	9102L442-004	S030831	03/09/91
05	SB-1A-3-1DL	9102L442-003	S031114	03/11/91
06	SB-15A-2-1DL	9102L442-006	S031116	03/11/91
07	SB-1A-3-2DL	9102L442-004	S031117	03/11/91
08	SB-35-5-1RE	9102L442-007	S051005	05/10/91
09	SB-35-5-1MS	9102L442-007S	S051006	05/10/91
10	SB-35-5-1MSD	9102L442-007T	S051007	05/10/91

COMMENTS:

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: S030701 DFTPP Injection Date: 03/07/91

Instrument ID: 5100SP DFTPP Injection Time: 0831

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	31.2
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	42.6
70	Less than 2.0% of mass 69	0.0(0.0)1
127	40.0 - 60.0% of mass 198	44.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	20.0
365	Greater than 1.00% of mass 198	2.02
441	Present, but less than mass 443	8.2
442	Greater than 40.0% of mass 198	84.8
443	17.0 - 23.0% of mass 442	15.7(18.6)2

MCC 3/27/91

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD80	SSTD80	S030705	03/07/91	1524
02	SSTD50	SSTD50	S030706	03/07/91	1601
03	SSTD120	SSTD120	S030707	03/07/91	1651
04	SSTD160	SSTD160	S030708	03/07/91	1734
05	SSTD20	SSTD20	S030710	03/07/91	1809
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5B

SEMIVOLATILE ORGANICS GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

[redacted] No.: STANDARD CHLORINE

Lab File ID: S030801 DFTPP Injection Date: 03/08/91

Instrument ID: 5100SP DFTPP Injection Time: 1034

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	35.3
70	Less than 2.0% of mass 69	0.6(1.7)1
127	40.0 - 60.0% of mass 198	42.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	17.4
365	Greater than 1.00% of mass 198	1.41
441	Present, but less than mass 443	4.7
442	Greater than 40.0% of mass 198	49.5
443	17.0 - 23.0% of mass 442	9.6(19.4)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	SSTD50	S030803	03/08/91	1223
02	SBLKLE0134-MB1	91LE0134-MB1	S030806	03/08/91	1432
03	SBLKLE0133-MB1	91LE0133-MB1	S030807	03/08/91	1513
04	SBLKLE0134-MB1 BS	91LE0134-MB1S	S030813	03/08/91	1901
05	SBLKLE0134-MB1 BSD	91LE0134-MB1T	S030814	03/08/91	2008
06	SB-35-5-1	9102L442-007	S030815	03/08/91	2045
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SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: S030819 DFTPP Injection Date: 03/09/91

Instrument ID: 5100SP DFTPP Injection Time: 0014

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	32.6
68	Less than 2.0% of mass 69	0.6(1.2)1
69	Mass 69 relative abundance	46.9
70	Less than 2.0% of mass 69	0.0(0.0)1
127	40.0 - 60.0% of mass 198	48.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	18.0
365	Greater than 1.00% of mass 198	1.67
441	Present, but less than mass 443	5.6
442	Greater than 40.0% of mass 198	61.1
443	17.0 - 23.0% of mass 442	11.7(19.2)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	SSTD50	S030820	03/09/91	0028
02	SB-15A-2-1	9102L442-006	S030829	03/09/91	0655
03	SB-1A-3-1	9102L442-003	S030830	03/09/91	0734
04	SB-1A-3-2	9102L442-004	S030831	03/09/91	0813
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5B

SEMIVOLATILE ORGANICS GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Client No.: STANDARD CHLORINE

Lab File ID: S031101 DFTPP Injection Date: 03/11/91

Instrument ID: 5100SP DFTPP Injection Time: 0914

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	34.8
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	48.3
70	Less than 2.0% of mass 69	0.0(0.0)1
127	40.0 - 60.0% of mass 198	50.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	17.2
365	Greater than 1.00% of mass 198	1.44
441	Present, but less than mass 443	5.7
442	Greater than 40.0% of mass 198	60.1
443	17.0 - 23.0% of mass 442	11.6(19.3)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	SSTD50	S031102	03/11/91	0946
02	SB-20-3-3	9102L442-002	S031107	03/11/91	1340
03	SB-1A-3-1DL	9102L442-003	S031114	03/11/91	1841
04	SB-15A-2-1DL	9102L442-006	S031116	03/11/91	1959
05	SB-1A-3-2DL	9102L442-004	S031117	03/11/91	2037
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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE

Lab File ID: S051001 DFTPP Injection Date: 05/10/91

Instrument ID: 5100SP DFTPP Injection Time: 0825

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.7
68	Less than 2.0% of mass 69	0.6(1.5)1
69	Mass 69 relative abundance	37.6
70	Less than 2.0% of mass 69	0.4(0.94)1
127	40.0 - 60.0% of mass 198	44.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	20.4
365	Greater than 1.00% of mass 198	2.21
441	Present, but less than mass 443	8.2
442	Greater than 40.0% of mass 198	63.0
443	17.0 - 23.0% of mass 442	11.8(18.8)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	SSTD50	S051004	05/10/91	1026
02	SB-35-5-1RE	9102L442-007	S051005	05/10/91	1113
03	SB-35-5-1MS	9102L442-007S	S051006	05/10/91	1155
04	SB-35-5-1MSD	9102L442-007T	S051007	05/10/91	1313
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SEMIVOLATILE ORGANICS INTITIAL CALIBRATION DATA

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: 5100SP Calibration Date(s): 03/07/91 03/07/91

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = S030710 RRF50 = S030706
RRF80 = S030705 RRF120= S030707 RRF160= S030708

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
1,3-Dichlorobenzene	1.321	1.351	1.325	1.335	1.236	1.314	3.4
1,4-Dichlorobenzene *	1.475	1.503	1.520	1.418	1.294	1.442	6.3*
1,2-Dichlorobenzene	1.280	1.333	1.332	1.300	1.198	1.289	4.3
Nitrobenzene	0.309	0.322	0.312	0.323	0.319	0.317	2.0
1,2,4-Trichlorobenzene	0.286	0.284	0.277	0.276	0.262	0.277	3.4
Hexachlorobenzene	0.272	0.268	0.265	0.250	0.227	0.256	7.2
1,2,3-Trichlorobenzene	0.329	0.326	0.316	0.303	0.274	0.310	7.2
1,3,5-Trichlorobenzene	0.336	0.341	0.345	0.335	0.308	0.333	4.4
1,2,4,5-Tetrachlorobenzene	0.817	0.803	0.774	0.724	0.635	0.751	9.8
1,2,3,4-Tetrachlorobenzene	0.611	0.609	0.589	0.551	0.485	0.569	9.3
Pentachlorobenzene	0.183	0.204	0.208	0.201	0.197	0.199	4.8
1-Chloro-3-nitrobenzene	0.119	0.153	0.158	0.162	0.159	0.150	11.8
Nitrobenzene-d5	0.358	0.370	0.364	0.367	0.359	0.364	1.4
2-Fluorobiphenyl	1.217	1.194	1.166	1.053	0.967	1.119	9.5
p-Terphenyl-d14	1.099	0.967	0.998	0.901	0.801	0.953	11.7
Phenol-d5	1.161	1.329	1.322	1.336	1.352	1.300	6.0
2-Fluorophenol	1.200	1.324	1.333	1.303	1.315	1.295	4.2
2,4,6-Tribromophenol	0.062	0.084	0.094	0.097	0.110	0.089	20.0

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: 5100SP Calibration Date: 03/08/91 Time: 1223

Lab File ID: S030803 Init. Calib. Date(s): 03/07/91 03/07/91

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
1,3-Dichlorobenzene		1.314	1.324	-0.8	
1,4-Dichlorobenzene	*	1.442	1.462	-1.4	*
1,2-Dichlorobenzene		1.289	1.316	-2.1	
Nitrobenzene		0.317	0.307	3.2	
1,2,4-Trichlorobenzene		0.277	0.293	-5.8	
Hexachlorobenzene		0.256	0.268	-4.7	
1,2,3-Trichlorobenzene		0.310	0.333	-7.4	
1,3,5-Trichlorobenzene		0.333	0.350	-5.1	
1,2,4,5-Tetrachlorobenzene		0.751	0.798	-6.3	
1,2,3,4-Tetrachlorobenzene		0.569	0.605	-6.3	
Pentachlorobenzene		0.199	0.205	-3.0	
1-Chloro-3-nitrobenzene		0.150	0.160	-6.7	
Nitrobenzene-d5		0.364	0.345	5.2	
2-Fluorobiphenyl		1.119	1.188	-6.2	
p-Terphenyl-d14		0.953	1.003	-5.2	
Phenol-d5		1.300	1.168	10.2	
2-Fluorophenol		1.295	1.161	10.3	
2,4,6-Tribromophenol		0.089	0.085	4.5	

MC 3/27/91

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: 5100SP Calibration Date: 03/09/91 Time: 0028

Lab File ID: S030820 Init. Calib. Date(s): 03/07/91 03/07/91

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
1,3-Dichlorobenzene		1.314	1.191	9.4	
1,4-Dichlorobenzene	*	1.442	1.503	-4.2	*
1,2-Dichlorobenzene		1.289	1.267	1.7	
Nitrobenzene		0.317	0.303	4.4	
1,2,4-Trichlorobenzene		0.277	0.271	2.2	
Hexachlorobenzene		0.256	0.282	-10.2	
1,2,3-Trichlorobenzene		0.310	0.319	-2.9	
1,3,5-Trichlorobenzene		0.333	0.324	2.7	
1,2,4,5-Tetrachlorobenzene		0.751	0.754	-0.4	
1,2,3,4-Tetrachlorobenzene		0.569	0.575	-1.1	
Pentachlorobenzene		0.199	0.190	4.5	
1-Chloro-3-nitrobenzene		0.150	0.135	10.0	
Nitrobenzene-d5		0.364	0.373	-2.5	
2-Fluorobiphenyl		1.119	1.161	-3.8	
p-Terphenyl-d14		0.953	1.131	-18.7	
Phenol-d5		1.300	1.244	4.3	
2-Fluorophenol		1.295	1.273	1.7	
2,4,6-Tribromophenol		0.089	0.061	31.5	

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: 5100SP Calibration Date: 03/11/91 Time: 0946

Lab File ID: S031102 Init. Calib. Date(s): 03/07/91 03/07/91

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
1,3-Dichlorobenzene		1.314	1.379	-4.9	
1,4-Dichlorobenzene	*	1.442	1.455	-0.9	*
1,2-Dichlorobenzene		1.289	1.292	-0.2	
Nitrobenzene		0.317	0.292	7.9	
1,2,4-Trichlorobenzene		0.277	0.285	-2.9	
Hexachlorobenzene		0.256	0.310	-21.1	
1,2,3-Trichlorobenzene		0.310	0.337	-8.7	
1,3,5-Trichlorobenzene		0.333	0.344	-3.3	
1,2,4,5-Tetrachlorobenzene		0.751	0.752	-0.1	
1,2,3,4-Tetrachlorobenzene		0.569	0.590	-3.7	
Pentachlorobenzene		0.199	0.197	1.0	
1-Chloro-3-nitrobenzene		0.150	0.138	8.0	
Nitrobenzene-d5		0.364	0.334	8.2	
2-Fluorobiphenyl		1.119	1.106	1.2	
p-Terphenyl-d14		0.953	1.446	-51.7	
Phenol-d5		1.300	1.047	19.5	
2-Fluorophenol		1.295	1.125	13.1	
2,4,6-Tribromophenol		0.089	0.063	29.2	

mcc 3/27/91

FORM VII SV-1 5/88 Rev.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Instrument ID: 5100SP Calibration Date: 05/10/91 Time: 1026

Lab File ID: S051004 Init. Calib. Date(s): 03/07/91 03/07/91

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
1,3-Dichlorobenzene		1.314	1.211	7.8	
1,4-Dichlorobenzene	*	1.442	1.563	-8.4	*
1,2-Dichlorobenzene		1.289	1.262	2.1	
Nitrobenzene		0.317	0.291	8.2	
1,2,4-Trichlorobenzene		0.277	0.352	-27.1	
Hexachlorobenzene		0.256	0.353	-37.9	
1,2,3-Trichlorobenzene		0.310	0.411	-32.6	
1,3,5-Trichlorobenzene		0.333	0.466	-39.9	
1,2,4,5-Tetrachlorobenzene		0.751	0.822	-9.5	
1,2,3,4-Tetrachlorobenzene		0.569	0.692	-21.6	
Pentachlorobenzene		0.199	0.264	-32.7	
1-Chloro-3-nitrobenzene		0.150	0.185	-23.3	
Nitrobenzene-d5		0.364	0.339	6.9	
2-Fluorobiphenyl		1.119	1.120	-0.1	
p-Terphenyl-d14		0.953	1.007	-5.7	
Phenol-d5		1.300	1.079	17.0	
2-Fluorophenol		1.295	1.042	19.5	
2,4,6-Tribromophenol		0.089	0.194	-118.	

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): S030803 Date Analyzed: 03/08/91

Instrument ID: 5100SP Time Analyzed: 1223

	IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
12 HOUR STD	34374	6.62	115442	9.48	59152	13.85
UPPER LIMIT	68748	7.12	230884	9.98	118304	14.35
LOWER LIMIT	17187	6.12	57721	8.98	29576	13.35
CLIENT SAMPLE NO.						
01 SB-35-5-1	30430	6.63	73204	9.48	51872	13.83
02 SBLKLE0134-MB1	31556	6.62	88176	9.50	51039	13.85
03 SBLKLE0134-MB1 BS	38173	6.62	117897	9.50	66242	13.85
04 SBLKLE0134-MB1 BSD	24752	6.62	82369	9.48	49638	13.83
05 SBLKLE0133-MB1	30312	6.62	85816	9.50	49638	13.85

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = 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: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): S030803 Date Analyzed: 03/08/91

Instrument ID: 5100SP Time Analyzed: 1223

	IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
12 HOUR STD	73515	17.58	50982	22.52		
UPPER LIMIT	147030	18.08	101964	23.02		
LOWER LIMIT	36758	17.08	25491	22.02		
CLIENT SAMPLE NO.						
01 SB-35-5-1	49795	17.57	37130	22.52		
02 SBLKLE0134-MB1	63218	17.58	39540	22.52		
03 SBLKLE0134-MB1 BS	81539	17.58	48558	22.52		
04 SBLKLE0134-MB1 BSD	66424	17.57	43052	22.52		
05 SBLKLE0133-MB1	64402	17.58	40566	22.50		

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = 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

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): S030820 Date Analyzed: 03/09/91

Instrument ID: 5100SP Time Analyzed: 0028

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	22720	6.62	77506	9.48	40282	13.85
	UPPER LIMIT	45440	7.12	155012	9.98	80564	14.35
	LOWER LIMIT	11360	6.12	38753	8.98	20141	13.35
	CLIENT SAMPLE NO.						
01	SB-1A-3-1	48941*	6.58	170132*	9.47	89670*	13.83
02	SB-1A-3-2	48603*	6.60	179721*	9.48	92401*	13.85
03	SB-15A-2-1	52321*	6.60	161385*	9.48	87816*	13.85

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = 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

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): S030820 Date Analyzed: 03/09/91

Instrument ID: 5100SP Time Analyzed: 0028

	IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
12 HOUR STD	44905	17.58	28359	22.55		
UPPER LIMIT	89810	18.08	56718	23.05		
LOWER LIMIT	22453	17.08	14180	22.05		
CLIENT SAMPLE NO.						
01 SB-1A-3-1	103496*	17.57	48239	22.52		
02 SB-1A-3-2	105490*	17.58	45382	22.57		
03 SB-15A-2-1	108032*	17.58	52809	22.52		

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = 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

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): S031102 Date Analyzed: 03/11/91

Instrument ID: 5100SP Time Analyzed: 0946

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	49311	6.63	165092	9.48	88112	13.85
	UPPER LIMIT	98622	7.13	330184	9.98	176224	14.35
	LOWER LIMIT	24656	6.13	82546	8.98	44056	13.35
	CLIENT SAMPLE NO.						
01	SB-20-3-3	73687	6.62	220012	9.48	131292	13.85
02	SB-1A-3-1DL	34812	6.58	103202	9.50	54855	13.87
03	SB-1A-3-2DL	49878	6.62	142849	9.48	81529	13.85
04	SB-15A-2-1DL	33030	6.60	80754*	9.48	49311	13.83

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = 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

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): S031102 Date Analyzed: 03/11/91

Instrument ID: 5100SP Time Analyzed: 0946

	IS4(PHN) AREA	#	RT	IS5(CRY) AREA	#	RT	IS6(PRY) AREA	#	RT
12 HOUR STD	94497		17.58	41709		22.53			
UPPER LIMIT	188994		18.08	83418		23.03			
LOWER LIMIT	47249		17.08	20855		22.03			
CLIENT SAMPLE NO.									
01 SB-20-3-3	147189		17.58	73527		22.52			
02 SB-1A-3-1DL	54666		17.62	25146		22.58			
03 SB-1A-3-2DL	74115		17.60	39258		22.57			
04 SB-15A-2-1DL	45904	*	17.62	19287	*	22.57			

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = 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

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): S051004 Date Analyzed: 05/10/91

Instrument ID: 5100SP Time Analyzed: 1026

	IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
12 HOUR STD	17337	6.45	57113	9.35	34915	13.75
UPPER LIMIT	34674	6.95	114226	9.85	69830	14.25
LOWER LIMIT	8669	5.95	28557	8.85	17458	13.25
CLIENT SAMPLE NO.						
01 SB-35-5-1RE	31795	6.52	95003	9.38	56471	13.77
02 SB-35-5-1MS	25225	6.48	72259	9.37	40345	13.77
03 SB-35-5-1MSD	39411*	6.52	114681*	9.38	66066	13.77

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = 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

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Roy F. Weston, Inc. Contract: 2267-09-02-0000

Case No.: STANDARD CHLORINE RFW Lot: 9102L442

Lab File ID (Standard): S051004 Date Analyzed: 05/10/91

Instrument ID: 5100SP Time Analyzed: 1026

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	50199	17.50	43206	22.73		
	UPPER LIMIT	100398	18.00	86412	23.23		
	LOWER LIMIT	25100	17.00	21603	22.23		
	CLIENT SAMPLE NO.						
01	SB-35-5-1RE	81692	17.52	67699	22.62		
02	SB-35-5-1MS	57104	17.52	45198	22.62		
03	SB-35-5-1MSD	91839	17.52	94168*	22.48		

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = 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