



PASCO COUNTY, FLORIDA

D.E.P.

JUL 22 1999

Southwest District Tampa

DADE CITY (727) 521-4274
LAND O' LAKES (727) 996-7341
NEW PORT RICHEY (727) 847-8145

UTILITIES SERVICES BRANCH
PUB. WKS./UTILITIES BLDG. S-213
7530 LITTLE ROAD
NEW PORT RICHEY, FL 34654

20 July 1999

Ms. Allison Amram
Environmental Specialist III
Waste Management Section
Florida Department of
Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

RE: West Pasco Class I Sanitary Landfill
Surface Water Monitoring

Dear Ms. Amram:

Enclosed please find the analytical results for the parameters listed in 62-701(8)(b) Florida Administrative Code, conducted on the surface water runoff at the West Pasco Class I Sanitary Landfill. The samples were collected after three different rain events: May 22, May 25, and June 10.

If you have any questions please feel free to contact me.

Sincerely,

Candia E. Mulhern
Laboratory Manager

Enc.

cc: Douglas S. Bramlett, Assistant County Administrator (Utilities Services)
Robert J. Sigmond, Utilities Fiscal Services/Special Projects Director



PASCO COUNTY, FLORIDA

D.E.P.

JUL 22 1999

Southwest District Tampa

ENVIRONMENTAL LABORATORY
8864 GOVERNMENT DRIVE
NEW PORT RICHEY, FL 34654
(727) 847-8902

DHRS # 44237, E44123
CompQAP # 870167G

REPORT OF ANALYSES

RESOURCE RECOVERY
14230 HAYS ROAD
SPRING HILL, FL 34610-
Attn: VINCENT MANNELLA

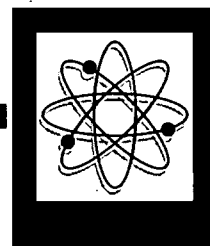
PROJECT NAME: LMF ASH CELL
DATE: 07/15/99

SAMPLE NUMBER- 79758 SAMPLE ID- LMF A-2 RAINWATER RUNOFF SAMPLE MATRIX- OT
DATE SAMPLED- 05/22/99 LOCATION- RAINWATER RUNOFF TIME SAMPLED- 0800
DATE RECEIVED- 05/22/99 SAMPLER- SCOTT BERGE RECEIVED BY- AS
TIME RECEIVED- 1220 DELIVERED BY- SCOTT BERGE TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS	DQ
TOT.ORGANIC CARBON	SM 5310			05/26/99	1300	IF	2.12	mg/L	
BIOCHEM.OXY.DEMAND	SM5210B			05/24/99	1200	TER	<1	mg/L	
CHEMICAL OXYGEN DEMAND	SM5220B			06/11/99	1500	TER	4.78	mg/L	
CHLOROPHYLL A	SM 10200H	06/04/99	TER	05/26/99	1000	JK	<0.1	mg/M3	
FECAL COLIFORM MF	SM9222D			05/22/99	1135	AS	<1	MF/100 ml	
TOTAL HARDNESS AS CaCO3	SM 2340 C			06/04/99	1100	TER	32.0	mg/L CaCO3	
AMMONIA NITROGEN	SM4500NH3H			06/02/99	1400	IF	0.12	mg/L	
NITRATE	SM4500NO3F			05/26/99		IF	<0.11	mg/L	
TOTAL NITROGEN	CALC.			06/15/99	1100	CEM	0.72	MG/L	
TOTAL PHOSPHOROUS	SM4500P B			06/10/99	1300	DN	0.05	mgP/L	
TOTAL DISS.SOLIDS	SM2540C			05/27/99	0800	JK	23	mg/L	
TOTAL SUSP. SOLIDS	SM2540D			05/24/99	1400	TER	1	mg/L	
COPPER, TOTAL	SM3113B	05/24/99	TER	06/07/99	1440	TER	<0.02	mg/L	
IRON, TOTAL	SM 3111B	05/24/99	TER	06/04/99	1020	TER	<0.02	mg/L	
MERCURY, TOTAL	SM3112B			06/15/99	1000	TER	<0.0002	mg/L	
ZINC, TOTAL	SM3111B	05/24/99	TER	06/09/99	0935	TER	<0.005	mg/L	

LABORATORY DIRECTOR



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : Res. Rec.
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

Date Sampled: May 22 1999 Date Received: May 25 1999 Lab Number : 13884

REPORT OF ANALYSIS

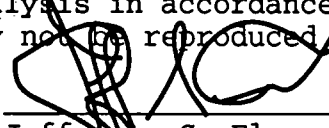
					13884
Parameter	Unit	Method	%ACC	%PRC	A2
Detection					
Limit					
Silver mg/L		.00005	96.5	.170	.00481
Arsenic mg/L		.00005	92.9	.950	.00072
Barium mg/L		.00040	99.3	1.29	.00487
Beryllium mg/L		.00010	119.	3.61	<.0001
Cadmium mg/L		.00005	93.6	.470	.00026
Cobalt mg/L		.00010	95.5	1.63	<.0001
Chromium mg/L		.00020	97.1	1.36	.00129
Copper mg/L		.00020	89.1	.470	0.0114
Nickel mg/L		.00020	93.2	1.19	.00059
Lead mg/L		.00010	99.9	1.54	.00231
Antimony mg/L		.00020	96.5	2.03	.00552
Selenium mg/L		.00030	91.6	.720	.00080
Thallium mg/L		.00010	100.	.440	<.0001
Vanadium mg/L		.00006	100.	1.76	.00158
Zinc mg/L		.00070	87.4	.450	0.0229
Dilution_Factor		-	-	-	1.00
Acetone ug/L		10.0	116.	15.0	<10.0
Acrylonitrile ug/L		1.00			<1.00
Benzene ug/L		0.500	95.6	1.89	<0.500
Bromobenzene ug/L		1.00	82.1	.770	<1.00
Bromochloromethane ug/L		1.00	94.8	4.74	<1.00
Bromodichloromethane ug/L		1.00	83.8	.630	<1.00
Bromoform ug/L		1.00	71.0	2.74	<1.00
Bromomethane ug/L		5.00	128.	.710	<5.00
n-butylbenzene ug/L		1.00	95.6	2.07	<1.00
sec-butylbenzene ug/L		1.00	88.6	1.20	<1.00

Data Release Authorization

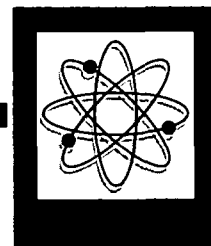
Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4

Methods of analysis in accordance with FCL QA and EPA approved methodology.

This Report may not be reproduced in part, results relate only to items tested.


Jefferson S. Flowers, Ph.d.
President/Technical Director

Serving Your Analytical and Environmental Needs Since 1957



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : Res. Rec.
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

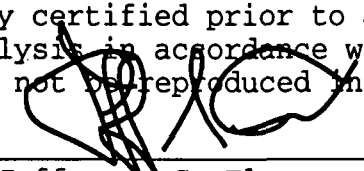
Date Sampled: May 22 1999 Date Received: May 25 1999 Lab. Number : 13884

REPORT OF ANALYSIS

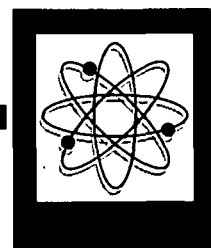
					13884
Parameter	Unit	Method	%ACC	%PRC	A2
Detection Limit					
tert-butylbenzene	ug/L	1.00	83.1	1.28	<1.00
Carbon disulfide	ug/L	5.00	119.	7.95	<5.00
Carbon tetrachloride	ug/L	1.00	85.3	.410	<1.00
Chlorobenzene	ug/L	0.500	94.9	.140	<0.500
Chloroethane	ug/L	1.00	94.6	5.08	<1.00
Chloroform	ug/L	1.00	106.	1.93	<1.00
Chloromethane	ug/L	5.00	97.2	4.77	<5.00
2-chlorotoluene	ug/L	0.500	84.3	.620	<0.500
4-chlorotoluene	ug/L	0.500	82.1	.080	<0.500
Dibromochloromethane	ug/L	1.00	86.5	.400	<1.00
1,2-dibromo-3-chloro	ug/L	1.00	99.6	5.01	<1.00
1,2-dibromoethane	ug/L	1.00	95.0	.180	<1.00
Dibromomethane	ug/L	1.00	95.9	1.07	<1.00
o-dichlorobenzene	ug/L	0.500	87.3	.480	<0.500
m-dichlorobenzene	ug/L	0.500	85.3	.160	<0.500
Para-dichlorobenzene	ug/L	0.500	84.3	2.10	<0.500
Dichlorodifluorometh	ug/L	2.00	111.	5.08	<2.00
t-1,4-dichloro-2-but	ug/L	10.0			<10.0
1,1-dichloroethane	ug/L	1.00			<1.00
1,2-dichloroethane	ug/L	1.00	85.1	.870	<1.00
1,1-dichloroethene	ug/L	1.00	103.	16.5	<1.00
cis-1,2-dichloroethe	ug/L	1.00	105.	.870	<1.00
t-1,2-dichloroethene	ug/L	2.00	100.	5.43	<2.00
1,2-dichloroethene	ug/L	1.00	103.	3.10	<1.00
1,2-dichloropropane	ug/L	1.00	89.7	1.38	<1.00
1,3-dichloropropane	ug/L	1.00	97.6	1.23	<1.00

Data Release Authorization

Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4.
Methods of analysis in accordance with FCL QA and EPA approved methodology.
This Report may not be reproduced in part, results relate only to items tested.


Jefferson S. Flowers, Ph.D.
President/Technical Director

Serving Your Analytical and Environmental Needs Since 1957



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : Res. Rec.
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

Date Sampled: May 22 1999 Date Received: May 25 1999 Lab Number : 13884

REPORT OF ANALYSIS

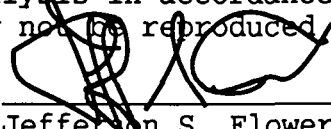
Parameter	Unit	Method	%ACC	%PRC	13884
					A2
					Detection Limit
2,2-dichloropropane	ug/L	3.00	81.7	.990	<3.00
1,1-dichloropropene	ug/L	0.500	85.9	1.07	<0.500
cis-1,3-dichloroprop	ug/L	1.00	82.5	1.03	<1.00
trans-1,3,-dichlorop	ug/L	1.00	83.1	3.10	<1.00
Ethylbenzene	ug/L	0.500	96.8	.400	<0.500
Hexachlorobutadiene	ug/L	1.00	92.9	.260	<1.00
2-Hexanone	ug/L	10.0	101.	.450	<10.0
Hexachloroethane	ug/L	1.00			<1.00
Isopropylbenzene	ug/L	1.00	81.2	.040	<1.00
4-isopropyltoluene	ug/L	1.00	87.5	.080	<1.00
Methylene chloride	ug/L	1.00	118.	11.3	<1.00
Methyl-tert-butyleth	ug/L	1.00	103.	4.10	<1.00
2-butanone	ug/L	10.0	120.	3.81	<10.0
Methyl iodide	ug/L	1.00	97.2	2.91	<1.00
4-methyl-2-pentanone	ug/L	10.0	103.	.030	<10.0
Naphthalene	ug/L	1.00	112.	5.27	<1.00
propylbenzene	ug/L	1.00	88.5	2.16	<1.00
Styrene	ug/L	1.00	80.2	.220	<1.00
1,1,1,2-tetrachloroe	ug/L	1.00	91.8	.190	<1.00
1,1,2,2-tetrachloroe	ug/L	1.00	72.5	4.34	<1.00
Tetrachloroethene	ug/L	1.00	108.	.160	<1.00
Toluene	ug/L	0.500	95.9	.290	<0.500
1,2,3-trichlorobenze	ug/L	1.00	107.	4.25	<1.00
1,2,4-trichlorobenze	ug/L	1.00	112.	4.40	<1.00
1,1,1-trichloroethan	ug/L	1.00			<1.00
1,1,2-trichloroethan	ug/L	1.00	97.3	1.02	<1.00

Data Release Authorization

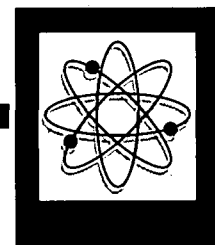
Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4.

Methods of analysis in accordance with FCL QA and EPA approved methodology.

This Report may not be reproduced in part, results relate only to items tested.


Jefferson S. Flowers, Ph.d.
President/Technical Director

Serving Your Analytical and Environmental Needs Since 1957



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : Res. Rec.
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

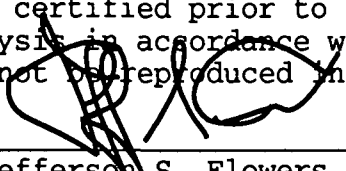
For: Appendix I

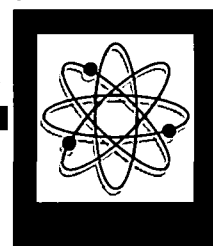
Date Sampled: May 22 1999 Date Received: May 25 1999 Lab Number : 13884
REPORT OF ANALYSIS

Parameter	Unit	Method	%ACC	%PRC	13884
					A2
		Detection			
		Limit			
Trichloroethene	ug/L	1.00	98.8	2.68	<1.00
Trichlorofluorometha	ug/L	2.00	128.	1.63	<2.00
1,2,3-trichloropropa	ug/L	1.00	71.2	.890	<1.00
1,2,4-trimethylbenze	ug/L	1.00	83.4	.550	<1.00
1,3,5-trimethylbenze	ug/L	1.00	83.7	.420	<1.00
Vinyl acetate	ug/L	1.00	90.7	.890	<1.00
Vinyl chloride	ug/L	0.500	102.	3.24	<0.500
Xylene	ug/L	0.500	96.0	.810	<0.500
Surrogate_Spike1	ug/L	1.00	85.3	.050	24.6
Surrogate_Spike2	ug/L	1.00	103.	.500	28.5
Surrogate_Spike3	ug/L	1.00	92.0	.200	22.0

Data Release Authorization

Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4
Methods of analysis in accordance with FCL QA and EPA approved methodology.
This Report may not be reproduced in part, results relate only to items tested.


Jefferson S. Flowers, Ph.d.
President/Technical Director



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : Res. Rec.
PO Number : 110456
FDHRS Number : 83139
FHRS ENVNumber : E83018
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

Date Sampled: May 22 1999 Date Received: May 25 1999 Lab Number : 13884

REPORT OF INFORMATION

Parameter	Unit	Limit	Expected Value	Range	Correlation
					13884
Silver	mg/L	5.72	0.262	.00481	
Arsenic	mg/L	18.2	0.486	.00072	
Barium	mg/L	171.	4.02	.00487	
Cadmium	mg/L	76.7	0.839	.00026	
Chromium	mg/L	359.	4.69	.00129	
Copper	mg/L	2810	47.8	0.0114	
Nickel	mg/L	57.5	1.13	.00059	
Lead	mg/L	5360	53.7	.00231	
Antimony	mg/L	5.69	0.270	.00552	
Selenium	mg/L	0.659	0.0226	.00080	
Vanadium	mg/L	94.9	8.53	.00158	
Zinc	mg/L	12000	131.	0.0229	
Surrogate_Spike1	ug/L	56.7	45.9	24.6	
Surrogate_Spike2	ug/L	-	-	28.5	
Surrogate_Spike3	ug/L	63.0	46.2	22.0	

The above information is intended to highlight exceptional data as compared to the upper control limits (Limit) established for each of the parameters. Range exceedances are flagged by integer values in the Range column. The Expected values are derived from historical data. Expected is computed as either the mean or computed directly from another parameter using linear regression. All known correlation rule exceedances are listed as enumerated rule numbers in the Correlation column. Correlation pair rules are defined on the last page.

3609	FLOWERS CHEMICAL LABORATORIES																
	ANALYTICAL RESULTS FORM											HRS Number 83139					
			A-2									QA		Section			
Parameter	Symbol	Unit	13884									Method	MDL	%RSD	%Rec	Analys	Date
Silver	*	mg/L	0.00481									EPA6020	0.00005	0.1795042	96.5375	LSM	05-27-99
Arsenic	*	mg/L	0.000722									EPA6020	0.00005	0.9541301	92.925	LSM	05-27-99
Barium	*	mg/L	0.00487									EPA6020	0.0004	1.2982235	99.3075	LSM	05-27-99
Beryllium	*	mg/L	<0.0001U									EPA6020	0.0001	3.6194509	119.75	LSM	05-27-99
Cadmium	*	mg/L	0.000263									EPA6020	0.00005	0.4732383	93.6315	LSM	05-27-99
Cobalt	*	mg/L	<0.0001U									EPA6020	0.0001	1.6366420	95.5	LSM	05-27-99
Chromium	*	mg/L	0.00129									EPA6020	0.0002	1.3684882	97.17	LSM	05-27-99
Copper	*	mg/L	0.0114									EPA6020	0.0002	0.4707211	89.1	LSM	05-27-99
Nickel	*	mg/L	0.000594									EPA6020	0.0002	1.1910575	93.2325	LSM	05-27-99
Lead	*	mg/L	0.00231									EPA6020	0.0001	1.5467391	99.9625	LSM	05-27-99
Antimony	*	mg/L	0.00552									EPA6020	0.0002	2.0343810	96.5175	LSM	05-27-99
Selenium	*	mg/L	0.000800									EPA6020	0.0003	0.7243839	91.64	LSM	05-27-99
Thallium	*	mg/L	<0.0001U									EPA6020	0.0001	0.4402764	100.25	LSM	05-27-99
Vanadium	*	mg/L	0.00158									EPA6020	0.00008	1.7699115	100.2875	LSM	05-27-99
Zinc	*	mg/L	0.0229									EPA6020	0.0007	0.4538234	87.45	LSM	05-27-99
Dilution Factor	*	#	1									EPA5030	1			CLS	06-02-99
Acetone	*	ug/L	<10U									EPA8260	10	15	116	CLS	06-02-99
Acrylonitrile	*	ug/L	<1U									EPA8260	1			CLS	06-02-99
Benzene	*	ug/L	<0.5U									EPA8260	0.5	1.89	95.6	CLS	06-02-99
Bromobenzene	*	ug/L	<1U									EPA8260	1	0.778	82.1	CLS	06-02-99
Bromochloromethane	*	ug/L	<1U									EPA8260	1	4.74	94.8	CLS	06-02-99
Bromodichloromethane	*	ug/L	<1U									EPA8260	1	0.633	83.8	CLS	06-02-99
Bromoform	*	ug/L	<1U									EPA8260	1	2.74	71	CLS	06-02-99
Bromomethane	*	ug/L	<5U									EPA8260	5	0.716	128	CLS	06-02-99
n-butylbenzene	*	ug/L	<1U									EPA8260	1	2.07	95.6	CLS	06-02-99
sec-butylbenzene	*	ug/L	<1U									EPA8260	1	1.2	88.6	CLS	06-02-99
tert-butylbenzene	*	ug/L	<1U									EPA8260	1	1.28	83.1	CLS	06-02-99
Carbon disulfide	*	ug/L	<5U									EPA8260	5	7.95	119	CLS	06-02-99
Carbon tetrachloride	*	ug/L	<1U									EPA8260	1	0.415	85.3	CLS	06-02-99
Chlorobenzene	*	ug/L	<0.5U									EPA8260	0.5	0.149	94.9	CLS	06-02-99
Chloroethane	*	ug/L	<1U									EPA8260	1	5.08	94.6	CLS	06-02-99
Chloroform	*	ug/L	<1U									EPA8260	1	1.93	106	CLS	06-02-99
Chloromethane	*	ug/L	<5U									EPA8260	5	4.77	97.2	CLS	06-02-99
2-chlorotoluene	*	ug/L	<0.5U									EPA8260	0.5	0.629	84.3	CLS	06-02-99
4-chlorotoluene	*	ug/L	<0.5U									EPA8260	0.5	0.0862	82.1	CLS	06-02-99
Dibromochloromethane	*	ug/L	<1U									EPA8260	1	0.409	86.5	CLS	06-02-99
1,2-dibromo-3-chloroprop	*	ug/L	<1U									EPA8260	1	5.01	99.6	CLS	06-02-99
1,2-dibromoethane	*	ug/L	<1U									EPA8260	1	0.186	95	CLS	06-02-99
Dibromomethane	*	ug/L	<1U									EPA8260	1	1.07	95.9	CLS	06-02-99
o-dichlorobenzene	*	ug/L	<0.5U									EPA8260	0.5	0.486	87.3	CLS	06-02-99
m-dichlorobenzene	*	ug/L	<0.5U									EPA8260	0.5	0.166	85.3	CLS	06-02-99
Para-dichlorobenzene	*	ug/L	<0.5U									EPA8260	0.5	2.1	84.3	CLS	06-02-99
Dichlorodifluoromethane	*	ug/L	<2U									EPA8260	2	5.08	111	CLS	06-02-99
t-1,4-dichloro-2-butene	*	ug/L	<10U									EPA8260	10			CLS	06-02-99
1,1-dichloroethane	*	ug/L	<1U									EPA8260	1			CLS	06-02-99
1,2-dichloroethane	*	ug/L	<1U									EPA8260	1	0.873	85.1	CLS	06-02-99
1,1-dichloroethene	*	ug/L	<1U									EPA8260	1	18.5	103	CLS	06-02-99
cis-1,2-dichloroethene	*	ug/L	<1U									EPA8260	1	0.876	105	CLS	06-02-99
t-1,2-dichloroethene	*	ug/L	<2U									EPA8260	2	5.43	100	CLS	06-02-99
1,2-dichloroethene	*	ug/L	<1U									EPA8260	1	3.1	103	CLS	06-02-99

1,2-dichloropropane	*	ug/L	<1U									EPA8260	1	1.38	89.7	CLS	06-02-99
1,3-dichloropropane	*	ug/L	<1U									EPA8260	1	1.23	87.6	CLS	06-02-99
2,2-dichloropropane	*	ug/L	<3U									EPA8260	3	0.995	81.7	CLS	06-02-99
1,1-dichloropropene	*	ug/L	<0.5U									EPA8260	0.5	1.07	85.9	CLS	06-02-99
cis-1,3-dichloropropene	*	ug/L	<1U									EPA8260	1	1.03	82.5	CLS	06-02-99
trans-1,3-dichloropropene	*	ug/L	<1U									EPA8260	1	3.1	83.1	CLS	06-02-99
Ethylbenzene	*	ug/L	<0.5U									EPA8260	0.5	0.402	96.8	CLS	06-02-99
Hexachlorobutadiene	*	ug/L	<1U									EPA8260	1	0.266	92.9	CLS	06-02-99
2-Hexanone	*	ug/L	<10U									EPA8260	10	0.455	101	CLS	06-02-99
Hexachloroethane	*	ug/L	<1U									EPA8260	1			CLS	06-02-99
Isopropylbenzene	*	ug/L	<1U									EPA8260	1	0.0436	81.2	CLS	06-02-99
4-Isopropyltoluene	*	ug/L	<1U									EPA8260	1	0.0809	87.5	CLS	06-02-99
Methylene chloride	*	ug/L	<1U									EPA8260	1	11.3	118	CLS	06-02-99
Methyl-tert-butylether	*	ug/L	<1U									EPA8260	1	4.1	103	CLS	06-02-99
2-butanone	*	ug/L	<10U									EPA8260	10	3.81	120	CLS	06-02-99
Methyl iodide	*	ug/L	<1U									EPA8260	1	2.91	97.2	CLS	06-02-99
4-methyl-2-pentanone	*	ug/L	<10U									EPA8260	10	0.0345	103	CLS	06-02-99
Naphthalene	*	ug/L	<1U									EPA8260	1	5.27	112	CLS	06-02-99
n-Propylbenzene	*	ug/L	<1U									EPA8260	1	2.16	88.5	CLS	06-02-99
Styrene	*	ug/L	<1U									EPA8260	1	0.22	80.2	CLS	06-02-99
1,1,1,2-tetrachloroethane	*	ug/L	<1U									EPA8260	1	0.183	81.8	CLS	06-02-99
1,1,2,2-tetrachloroethane	*	ug/L	<1U									EPA8260	1	4.34	72.5	CLS	06-02-99
Tetrachloroethene	*	ug/L	<1U									EPA8260	1	0.163	108	CLS	06-02-99
Toluene	*	ug/L	<0.5U									EPA8260	0.5	0.295	95.9	CLS	06-02-99
1,2,3-trichlorobenzene	*	ug/L	<1U									EPA8260	1	4.25	107	CLS	06-02-99
1,2,4-trichlorobenzene	*	ug/L	<1U									EPA8260	1	4.4	112	CLS	06-02-99
1,1,1-trichloroethane	*	ug/L	<1U									EPA8260	1			CLS	06-02-99
1,1,2-trichloroethane	*	ug/L	<1U									EPA8260	1	1.02	87.3	CLS	06-02-99
Trichloroethene	*	ug/L	<1U									EPA8260	1	2.68	98.8	CLS	06-02-99
Trichlorofluoromethane	*	ug/L	<2U									EPA8260	2	1.63	128	CLS	06-02-99
1,2,3-trichloropropane	*	ug/L	<1U									EPA8260	1	0.894	71.2	CLS	06-02-99
1,2,4-trimethylbenzene	*	ug/L	<1U									EPA8260	1	0.551	83.4	CLS	06-02-99
1,3,5-trimethylbenzene	*	ug/L	<1U									EPA8260	1	0.423	83.7	CLS	06-02-99
Vinyl acetate	*	ug/L	<1U									EPA8260	1	0.897	90.7	CLS	06-02-99
Vinyl chloride	*	ug/L	<0.5U									EPA8260	0.5	3.24	102	CLS	06-02-99
Xylene	*	ug/L	<0.5U									EPA8260	0.5	0.811	86	CLS	06-02-99
Surrogate Spike1	*	ug/L	24.62									EPA8260	1	0.0553	85.3	CLS	06-02-99
Surrogate Spike2	*	ug/L	28.54									EPA8260	1	0.504	103	CLS	06-02-99
Surrogate Spike3	*	ug/L	22.04									EPA8260	1	0.205	82	CLS	06-02-99
-	*	-										-	-				

Date Received: 05-25-99

Typed:

06-07-99

Sent:

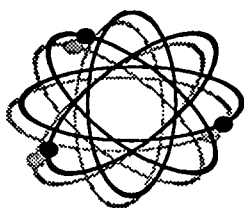
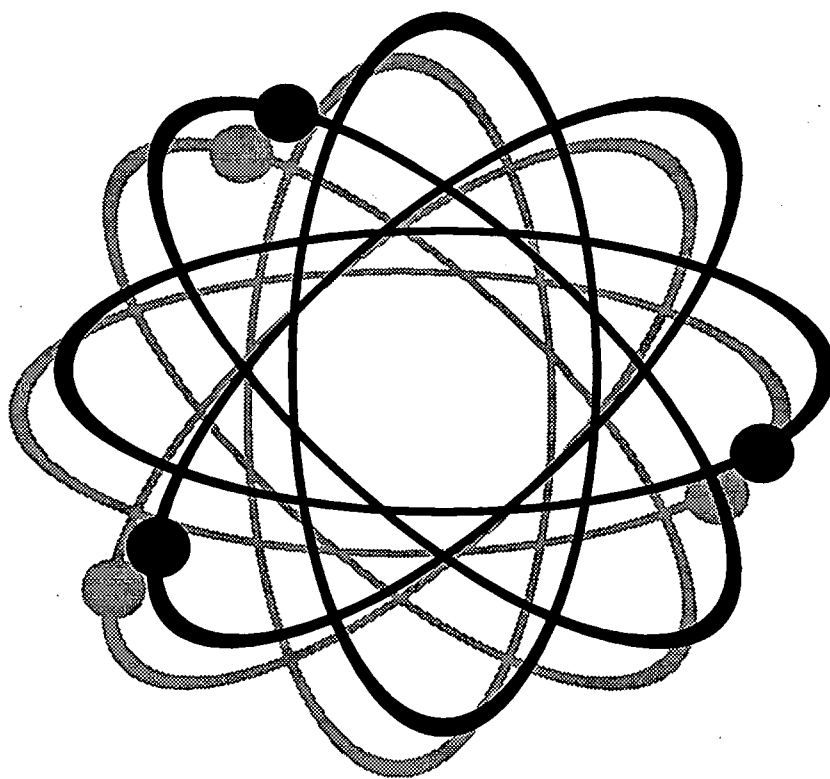
06-07-99

Project Number Res. Rec.
 PO Number 110456
 Date Sampled 1 05-22-99 *
 Date Analyzed 0
 Compacted 1
 Format NormRR
 Unit Cost Exted
 Appendix I 18500 1 *

Quality Assurance Report

Prepared for: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
Lab Numbers: 13884 - 13884

Report date: 7-Jun-99



**FLOWERS
CHEMICAL
LABORATORIES**



FLOWERS CHEMICAL LABORATORIES, INC.

QA Conformance Summary

Client:	Pasco Co. Utilities Env. Lab
Project Number:	Res. Rec.
P.O. Number:	110456
Date Sampled:	22-May-99
Lab Numbers:	13884 - 13884

Sample Handling

Sample handling and holding time criteria were met for all samples.

Samples Collected by Submitter

Surrogate Compound Recoveries:

The recovery limits were met for all sample as shown in section 1. This represents complete success.

Accuracy / Precision:

The recovery limits were met for all compounds in the matrix spike as shown in section 2.

The recovery limits were met for all compounds in the matrix spike duplicate as shown in section 2.

The RSD was exceeded for 1 compound as shown in section 2. This represents a 98.8% success rate.

Method Blanks:

No target compounds were found in the method blank in excess of the method limit as shown in section 3.

QCCS Check Sample:

The control limits were exceeded for 1 compound as shown in section 4. This represents a 98.8% success rate.

Standards Traceability:

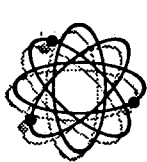
The t-test limits were exceeded for 6 calibration standards as shown in section 5.

This represents a 92.7% success rate.

The t-test limits were exceeded for 7 QCCS standards as shown in section 5. This represents a 91.5% success rate.

The t-test limits were exceeded for 7 matrix spike standards as shown in section 5.

This represents a 91.5% success rate.



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 1

Surrogate Compound Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

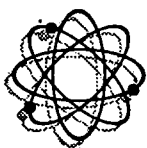
Surrogate_Spike1 for EPA8260

Surrogate Expected: 30

Unit of measure: ug/L

Acceptability Limits: 22.4 - 34.2

Laboratory Number	Site Description	Surrogate Recovered	Percent Recovered
13884	A-2	24.6	82.1



**FLOWERS CHEMICAL
LABORATORIES, INC.**

QA Section 1

Surrogate Compound Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

Surrogate_Spike2 for EPA8260

Surrogate Expected: 30

Unit of measure: ug/L

Acceptability Limits: 22.9 - 35.6

Laboratory Number	Site Description	Surrogate Recovered	Percent Recovered
13884	A-2	28.5	95.1



QA Section 1

Surrogate Compound Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

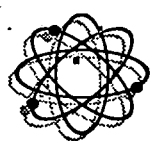
Surrogate_Spike3 for EPA8260

Surrogate Expected: 30

Unit of measure: ug/L

Acceptability Limits: 22 - 33.4

Laboratory Number	Site Description	Surrogate Recovered	Percent Recovered
13884	A-2	22.0	73.5



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 2

Matrix Spike Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

Analyte	Unit	Analysis Method	Date	Spike Added	Sample Conc.	MS Conc.	MS Rec.	MSD Conc.	MSD Rec.	Acceptable Limits	STD Rec.	Acceptable Limits
Silver	mg/L	EPA6020	05-27-99	0.222	0.005	0.219	96.5%	0.219	96.3%	0.136 - 0.301	0.000	0 - 0.049
Arsenic	mg/L	EPA6020	05-27-99	0.222	0.001	0.207	92.9%	0.205	91.9%	0.167 - 0.286	0.002	0 - 0.035
Barium	mg/L	EPA6020	05-27-99	0.222	0.005	0.226	99.3%	0.229	101%	0.168 - 0.287	0.002	0 - 0.036
Beryllium	mg/L	EPA6020	05-27-99	0.222	<0.0001	0.266	120%	0.277	125%	0.149 - 0.314	0.008	0 - 0.042
Cadmium	mg/L	EPA6020	05-27-99	0.222	0.000	0.208	93.6%	0.207	93.1%	0.154 - 0.288	0.001	0 - 0.033
Cobalt	mg/L	EPA6020	05-27-99	0.222	<0.0001	0.212	95.5%	0.208	93.8%	0.149 - 0.292	0.003	0 - 0.041
Chromium	mg/L	EPA6020	05-27-99	0.222	0.001	0.217	97.2%	0.214	95.7%	0.159 - 0.286	0.002	0 - 0.033
Copper	mg/L	EPA6020	05-27-99	0.222	0.011	0.209	89.1%	0.208	88.6%	0.149 - 0.303	0.001	0 - 0.045
Nickel	mg/L	EPA6020	05-27-99	0.222	0.001	0.208	93.2%	0.205	92.0%	0.145 - 0.291	0.002	0 - 0.042
Lead	mg/L	EPA6020	05-27-99	0.222	0.002	0.224	100%	0.221	98.2%	0.154 - 0.297	0.003	0 - 0.034
Antimony	mg/L	EPA6020	05-27-99	0.222	0.006	0.220	96.5%	0.215	94.3%	0.166 - 0.299	0.004	0 - 0.039
Selenium	mg/L	EPA6020	05-27-99	0.222	0.001	0.204	91.6%	0.203	90.9%	0.155 - 0.287	0.001	0 - 0.039
Thallium	mg/L	EPA6020	05-27-99	0.222	<0.0001	0.223	100%	0.224	101%	0.159 - 0.294	0.001	0 - 0.042
Vanadium	mg/L	EPA6020	05-27-99	0.222	0.002	0.224	100%	0.220	98.3%	0.160 - 0.305	0.003	0 - 0.046
Zinc	mg/L	EPA6020	05-27-99	0.222	0.023	0.217	87.5%	0.216	87.0%	0.138 - 0.329	0.001	0 - 0.050
Acetone	ug/L	EPA8260	06-02-99	200	<10	207	104%	257	129%	77.2 - 322	35.4	0 - 66.5
Benzene	ug/L	EPA8260	06-02-99	20	<0.5	19.4	97.0%	18.9	94.5%	12.4 - 26.1	0.354	0 - 3.97
Bromobenzene	ug/L	EPA8260	06-02-99	20	<1	16.3	81.5%	16.5	82.5%	15.2 - 23.6	0.141	0 - 2.46
Bromochloromethane	ug/L	EPA8260	06-02-99	20	<1	19.6	98.0%	18.3	91.5%	14.7 - 24.2	0.919	0 - 2.80
Bromodichloromethane	ug/L	EPA8260	06-02-99	20	<1	16.7	83.5%	16.8	84.0%	16.2 - 23.7	0.071	0 - 2.20
Bromoform	ug/L	EPA8260	06-02-99	20	<1	13.9	69.5%	14.5	72.5%	13.4 - 25.6	0.424	0 - 3.51
Bromomethane	ug/L	EPA8260	06-02-99	20	<5	25.8	129%	25.6	128%	13.9 - 25.9	0.141	0 - 4.38
n-butylbenzene	ug/L	EPA8260	06-02-99	20	<1	19.4	97.0%	18.8	94.0%	14.1 - 23.6	0.424	0 - 2.67
sec-butylbenzene	ug/L	EPA8260	06-02-99	20	<1	17.9	89.5%	17.6	88.0%	15.2 - 23.4	0.212	0 - 2.50
tert-butylbenzene	ug/L	EPA8260	06-02-99	20	<1	16.8	84.0%	16.5	82.5%	15.2 - 23.8	0.212	0 - 2.46
Carbon disulfide	ug/L	EPA8260	06-02-99	20	<5	22.4	112%	25.1	126%	8.88 - 30.8	1.91	0 - 6.68
Carbon tetrachloride	ug/L	EPA8260	06-02-99	20	<1	17.1	85.5%	17.0	85.0%	12.0 - 27.8	0.071	0 - 4.37
Chlorobenzene	ug/L	EPA8260	06-02-99	20	<0.5	19.0	95.0%	19.0	95.0%	16.3 - 23.4	0.000	0 - 2.02
Chloroethane	ug/L	EPA8260	06-02-99	20	<1	18.2	91.0%	19.6	98.0%	12.4 - 26.3	0.990	0 - 5.30
Chloroform	ug/L	EPA8260	06-02-99	20	<1	21.5	108%	20.9	105%	14.5 - 25.9	0.424	0 - 3.40
Chloromethane	ug/L	EPA8260	06-02-99	20	<5	18.8	94.0%	20.1	101%	11.0 - 25.8	0.919	0 - 4.44
2-chlorotoluene	ug/L	EPA8260	06-02-99	20	<0.5	16.8	84.0%	16.9	84.5%	14.9 - 24.0	0.071	0 - 2.52
4-chlorotoluene	ug/L	EPA8260	06-02-99	20	<0.5	16.4	82.0%	16.4	82.0%	15.0 - 23.4	0.000	0 - 2.19
Dibromochloromethane	ug/L	EPA8260	06-02-99	20	<1	17.4	87.0%	17.3	86.5%	15.1 - 24.5	0.071	0 - 2.62
1,2-dibromo-3-chloropropane	ug/L	EPA8260	06-02-99	20	<1	19.2	96.0%	20.6	103%	12.0 - 26.5	0.990	0 - 4.41

QA Section 2

Matrix Spike Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

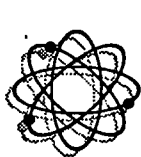
Analyte	Unit	Analysis Method	Date	Spike Added	Sample Conc.	MS Conc.	MS Rec.	MSD Conc.	MSD Rec.	Acceptable Limits	STD Rec.	Acceptable Limits
1,2-dibromoethane	ug/L	EPA8260	06-02-99	20	<1	19.0	95.0%	19.0	95.0%	15.5 - 24.2	0.000	0 - 3.23
Dibromomethane	ug/L	EPA8260	06-02-99	20	<1	19.0	95.0%	19.3	96.5%	16.1 - 23.9	0.212	0 - 2.32
o-dichlorobenzene	ug/L	EPA8260	06-02-99	20	<0.5	17.5	87.5%	17.4	87.0%	14.5 - 24.4	0.071	0 - 2.72
m-dichlorobenzene	ug/L	EPA8260	06-02-99	20	<0.5	17.1	85.5%	17.0	85.0%	14.7 - 24.0	0.071	0 - 2.65
Para-dichlorobenzene	ug/L	EPA8260	06-02-99	20	<0.5	17.1	85.5%	16.6	83.0%	14.5 - 24.0	0.354	0 - 2.72
Dichlorodifluoromethane	ug/L	EPA8260	06-02-99	20	<2	22.9	115%	21.3	107%	8.88 - 26.0	1.13	0 - 4.92
1,2-dichloroethane	ug/L	EPA8260	06-02-99	20	<1	16.9	84.5%	17.1	85.5%	14.3 - 25.3	0.141	0 - 3.47
1,1-dichloroethene	ug/L	EPA8260	06-02-99	20	<1	23.0	115%	18.2	91.0%	13.4 - 25.0	3.39	0 - 3.39
cis-1,2-dichloroethene	ug/L	EPA8260	06-02-99	20	<1	20.9	105%	21.1	106%	14.6 - 24.5	0.141	0 - 2.80
t-1,2-dichloroethene	ug/L	EPA8260	06-02-99	20	<2	19.3	96.5%	20.8	104%	12.9 - 25.8	1.06	0 - 3.53
1,2-dichloroethene	ug/L	EPA8260	06-02-99	40	<1	40.1	100%	41.9	105%	27.8 - 50.4	1.27	0 - 6.04
1,2-dichloropropane	ug/L	EPA8260	06-02-99	20	<1	18.1	90.5%	17.8	89.0%	15.2 - 24.6	0.212	0 - 2.35
1,3-dichloropropane	ug/L	EPA8260	06-02-99	20	<1	19.3	96.5%	19.7	98.5%	15.6 - 24.4	0.283	0 - 2.62
2,2-dichloropropane	ug/L	EPA8260	06-02-99	20	<3	16.2	81.0%	16.5	82.5%	5.64 - 25.7	0.212	0 - 6.57
1,1-dichloropropene	ug/L	EPA8260	06-02-99	20	<0.5	17.0	85.0%	17.3	86.5%	13.9 - 23.9	0.212	0 - 2.79
cis-1,3-dichloropropene	ug/L	EPA8260	06-02-99	20	<1	16.6	83.0%	16.4	82.0%	15.0 - 23.8	0.141	0 - 2.56
trans-1,3-dichloropropene	ug/L	EPA8260	06-02-99	20	<1	16.3	81.5%	17.0	85.0%	13.9 - 25.0	0.495	0 - 3.27
Ethylbenzene	ug/L	EPA8260	06-02-99	20	<0.5	19.4	97.0%	19.3	96.5%	14.6 - 24.3	0.071	0 - 2.64
Hexachlorobutadiene	ug/L	EPA8260	06-02-99	20	<1	18.5	92.5%	18.6	93.0%	15.0 - 23.7	0.071	0 - 2.85
2-Hexanone	ug/L	EPA8260	06-02-99	20	<10	20.2	101%	20.3	102%	10.7 - 28.4	0.071	0 - 3.91
Isopropylbenzene	ug/L	EPA8260	06-02-99	20	<1	16.2	81.0%	16.2	81.0%	13.5 - 24.6	0.000	0 - 3.16
4-isopropyltoluene	ug/L	EPA8260	06-02-99	20	<1	17.5	87.5%	17.5	87.5%	15.5 - 22.9	0.000	0 - 2.30
Methylene chloride	ug/L	EPA8260	06-02-99	20	<1	21.7	109%	25.4	127%	13.2 - 27.2	2.62	0 - 4.29
Methyl-tert-butylether	ug/L	EPA8260	06-02-99	20	<1	19.9	99.5%	21.1	106%	8.80 - 27.6	0.849	0 - 4.38
2-butanone	ug/L	EPA8260	06-02-99	20	<10	23.3	117%	24.6	123%	8.34 - 31.0	0.919	0 - 7.00
Methyl iodide	ug/L	EPA8260	06-02-99	20	<1	19.0	95.0%	19.8	99.0%	10.5 - 32.3	0.566	0 - 5.18
4-methyl-2-pentanone	ug/L	EPA8260	06-02-99	20	<10	20.5	103%	20.5	103%	7.54 - 27.9	0.000	0 - 4.37
Naphthalene	ug/L	EPA8260	06-02-99	20	<1	21.6	108%	23.3	117%	12.5 - 26.7	1.20	0 - 4.45
Propylbenzene	ug/L	EPA8260	06-02-99	20	<1	18.0	90.0%	17.4	87.0%	14.9 - 23.5	0.424	0 - 2.48
Styrene	ug/L	EPA8260	06-02-99	20	<1	16.0	80.0%	16.1	80.5%	15.2 - 26.4	0.071	0 - 2.50
1,1,1,2-tetrachloroethane	ug/L	EPA8260	06-02-99	20	<1	18.3	91.5%	18.4	92.0%	15.7 - 24.0	0.071	0 - 2.62
1,1,2,2-tetrachloroethane	ug/L	EPA8260	06-02-99	20	<1	15.0	75.0%	14.1	70.5%	11.9 - 25.8	0.636	0 - 4.20
Tetrachloroethene	ug/L	EPA8260	06-02-99	40	<1	43.3	108%	43.2	108%	22.4 - 55.5	0.071	0 - 10.2
Toluene	ug/L	EPA8260	06-02-99	20	<0.5	19.1	95.5%	19.2	96.0%	13.8 - 25.0	0.071	0 - 3.07
1,2,3-trichlorobenzene	ug/L	EPA8260	06-02-99	20	<1	20.8	104%	22.1	111%	13.4 - 25.7	0.919	0 - 3.88

QA Section 2

Matrix Spike Recovery

Client: Pasco Co. Utilities Env. Lab
 Project Number: Res. Rec.
 P.O. Number: 110456
 Date Sampled: 22-May-99
 Lab Numbers: 13884 - 13884

Analyte	Unit	Analysis Method	Date	Spike Added	Sample Conc.	MS Conc.	MS Rec.	MSD Conc.	MSD Rec.	Acceptable Limits	STD Rec.	Acceptable Limits
1,2,4-trichlorobenzene	ug/L	EPA8260	06-02-99	20	<1	21.7	109%	23.1	116%	13.5 - 25.0	0.990	0 - 3.58
1,1,2-trichloroethane	ug/L	EPA8260	06-02-99	20	<1	19.3	96.5%	19.6	98.0%	15.7 - 24.3	0.212	0 - 2.50
Trichloroethene	ug/L	EPA8260	06-02-99	20	<1	19.4	97.0%	20.1	101%	13.2 - 28.0	0.495	0 - 3.72
Trichlorofluoromethane	ug/L	EPA8260	06-02-99	20	<2	25.4	127%	26.0	130%	7.62 - 28.5	0.424	0 - 5.04
1,2,3-trichloropropane	ug/L	EPA8260	06-02-99	20	<1	14.1	70.5%	14.3	71.5%	12.5 - 27.2	0.141	0 - 3.96
1,2,4-trimethylbenzene	ug/L	EPA8260	06-02-99	20	<1	16.8	84.0%	16.6	83.0%	14.3 - 24.3	0.141	0 - 3.04
1,3,5-trimethylbenzene	ug/L	EPA8260	06-02-99	20	<1	16.8	84.0%	16.7	83.5%	15.1 - 23.5	0.071	0 - 2.62
Vinyl acetate	ug/L	EPA8260	06-02-99	20	<1	18.3	91.5%	18.0	90.0%	7.12 - 30.6	0.212	0 - 7.76
Vinyl chloride	ug/L	EPA8260	06-02-99	20	<0.5	19.9	99.5%	20.8	104%	11.8 - 27.4	0.636	0 - 5.38
Xylene	ug/L	EPA8260	06-02-99	60	<0.5	57.9	96.5%	57.2	95.3%	43.5 - 73.6	0.495	0 - 7.52



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 3

Method Blank Report

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

Analyte	Unit	Method	Date	Concentration
Silver	mg/L	EPA6020	05-27-99	<0.00005
Arsenic	mg/L	EPA6020	05-27-99	<0.00005
Barium	mg/L	EPA6020	05-27-99	<0.0004
Beryllium	mg/L	EPA6020	05-27-99	<0.0001
Cadmium	mg/L	EPA6020	05-27-99	<0.00005
Cobalt	mg/L	EPA6020	05-27-99	<0.0001
Chromium	mg/L	EPA6020	05-27-99	<0.0002
Copper	mg/L	EPA6020	05-27-99	<0.0002
Nickel	mg/L	EPA6020	05-27-99	<0.0002
Lead	mg/L	EPA6020	05-27-99	<0.0001
Antimony	mg/L	EPA6020	05-27-99	<0.0002
Selenium	mg/L	EPA6020	05-27-99	<0.0003
Thallium	mg/L	EPA6020	05-27-99	<0.0001
Vanadium	mg/L	EPA6020	05-27-99	<0.00006
Zinc	mg/L	EPA6020	05-27-99	<0.0007
Acetone	ug/L	EPA8260	06-02-99	<10
Acrylonitrile	ug/L	EPA8260	06-02-99	<1
Benzene	ug/L	EPA8260	06-02-99	<0.5
Bromobenzene	ug/L	EPA8260	06-02-99	<1
Bromochloromethane	ug/L	EPA8260	06-02-99	<1
Bromodichloromethane	ug/L	EPA8260	06-02-99	<1
Bromoform	ug/L	EPA8260	06-02-99	<1
Bromomethane	ug/L	EPA8260	06-02-99	<5
n-butylbenzene	ug/L	EPA8260	06-02-99	<1
sec-butylbenzene	ug/L	EPA8260	06-02-99	<1
tert-butylbenzene	ug/L	EPA8260	06-02-99	<1
Carbon disulfide	ug/L	EPA8260	06-02-99	<5
Carbon tetrachloride	ug/L	EPA8260	06-02-99	<1
Chlorobenzene	ug/L	EPA8260	06-02-99	<0.5



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 3

Method Blank Report

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

Analyte	Unit	Method	Date	Concentration
Chloroethane	ug/L	EPA8260	06-02-99	<1
Chloroform	ug/L	EPA8260	06-02-99	<1
Chloromethane	ug/L	EPA8260	06-02-99	<5
2-chlorotoluene	ug/L	EPA8260	06-02-99	<0.5
4-chlorotoluene	ug/L	EPA8260	06-02-99	<0.5
Dibromochloromethane	ug/L	EPA8260	06-02-99	<1
1,2-dibromo-3-chloropropane	ug/L	EPA8260	06-02-99	<1
1,2-dibromoethane	ug/L	EPA8260	06-02-99	<1
Dibromomethane	ug/L	EPA8260	06-02-99	<1
o-dichlorobenzene	ug/L	EPA8260	06-02-99	<0.5
m-dichlorobenzene	ug/L	EPA8260	06-02-99	<0.5
Para-dichlorobenzene	ug/L	EPA8260	06-02-99	<0.5
Dichlorodifluoromethane	ug/L	EPA8260	06-02-99	<2
t-1,4-dichloro-2-butene	ug/L	EPA8260	06-02-99	<10
1,1-dichloroethane	ug/L	EPA8260	06-02-99	<1
1,2-dichloroethane	ug/L	EPA8260	06-02-99	<1
1,1-dichloroethene	ug/L	EPA8260	06-02-99	<1
cis-1,2-dichloroethene	ug/L	EPA8260	06-02-99	<1
t-1,2-dichloroethene	ug/L	EPA8260	06-02-99	<2
1,2-dichloroethene	ug/L	EPA8260	06-02-99	<1
1,2-dichloropropane	ug/L	EPA8260	06-02-99	<1
1,3-dichloropropane	ug/L	EPA8260	06-02-99	<1
2,2-dichloropropane	ug/L	EPA8260	06-02-99	<3
1,1-dichloropropene	ug/L	EPA8260	06-02-99	<0.5
cis-1,3-dichloropropene	ug/L	EPA8260	06-02-99	<1
trans-1,3,-dichloropropene	ug/L	EPA8260	06-02-99	<1
Ethylbenzene	ug/L	EPA8260	06-02-99	<0.5
Hexachlorobutadiene	ug/L	EPA8260	06-02-99	<1
2-Hexanone	ug/L	EPA8260	06-02-99	<10



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 3

Method Blank Report

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

Analyte	Unit	Method	Date	Concentration
Hexachloroethane	ug/L	EPA8260	06-02-99	<1
Isopropylbenzene	ug/L	EPA8260	06-02-99	<1
4-isopropyltoluene	ug/L	EPA8260	06-02-99	<1
Methylene chloride	ug/L	EPA8260	06-02-99	<1
Methyl-tert-butylether	ug/L	EPA8260	06-02-99	<1
2-butanone	ug/L	EPA8260	06-02-99	<10
Methyl iodide	ug/L	EPA8260	06-02-99	<1
4-methyl-2-pentanone	ug/L	EPA8260	06-02-99	<10
Naphthalene	ug/L	EPA8260	06-02-99	<1
Propylbenzene	ug/L	EPA8260	06-02-99	<1
Styrene	ug/L	EPA8260	06-02-99	<1
1,1,1,2-tetrachloroethane	ug/L	EPA8260	06-02-99	<1
1,1,2,2-tetrachloroethane	ug/L	EPA8260	06-02-99	<1
Tetrachloroethene	ug/L	EPA8260	06-02-99	<1
Toluene	ug/L	EPA8260	06-02-99	<0.5
1,2,3-trichlorobenzene	ug/L	EPA8260	06-02-99	<1
1,2,4-trichlorobenzene	ug/L	EPA8260	06-02-99	<1
1,1,1-trichloroethane	ug/L	EPA8260	06-02-99	<1
1,1,2-trichloroethane	ug/L	EPA8260	06-02-99	<1
Trichloroethene	ug/L	EPA8260	06-02-99	<1
Trichlorofluoromethane	ug/L	EPA8260	06-02-99	<2
1,2,3-trichloropropane	ug/L	EPA8260	06-02-99	<1
1,2,4-trimethylbenzene	ug/L	EPA8260	06-02-99	<1
1,3,5-trimethylbenzene	ug/L	EPA8260	06-02-99	<1
Vinyl acetate	ug/L	EPA8260	06-02-99	<1
Vinyl chloride	ug/L	EPA8260	06-02-99	<0.5
Xylene	ug/L	EPA8260	06-02-99	<0.5



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 4

QCCS Sample Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

Analyte	Unit	Method	Date	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
Silver	mg/L	EPA6020	05-27-99	0.100	0.100	99.6%	0.081 - 0.120
Arsenic	mg/L	EPA6020	05-27-99	0.100	0.094	94.3%	0.086 - 0.114
Barium	mg/L	EPA6020	05-27-99	0.100	0.101	101%	0.086 - 0.115
Beryllium	mg/L	EPA6020	05-27-99	0.100	0.104	104%	0.066 - 0.132
Cadmium	mg/L	EPA6020	05-27-99	0.100	0.098	97.6%	0.087 - 0.113
Cobalt	mg/L	EPA6020	05-27-99	0.100	0.095	95.1%	0.087 - 0.116
Chromium	mg/L	EPA6020	05-27-99	0.100	0.099	98.6%	0.084 - 0.115
Copper	mg/L	EPA6020	05-27-99	0.100	0.095	95.1%	0.081 - 0.118
Nickel	mg/L	EPA6020	05-27-99	0.100	0.094	93.8%	0.082 - 0.115
Lead	mg/L	EPA6020	05-27-99	0.100	0.100	99.8%	0.085 - 0.118
Antimony	mg/L	EPA6020	05-27-99	0.100	0.095	95.1%	0.086 - 0.111
Selenium	mg/L	EPA6020	05-27-99	0.100	0.099	99.1%	0.084 - 0.116
Thallium	mg/L	EPA6020	05-27-99	0.100	0.100	100%	0.085 - 0.119
Vanadium	mg/L	EPA6020	05-27-99	0.100	0.100	99.9%	0.085 - 0.116
Zinc	mg/L	EPA6020	05-27-99	0.100	0.093	92.9%	0.080 - 0.118
Acetone	ug/L	EPA8260	06-02-99	100	125	125%	39.2 - 163
Benzene	ug/L	EPA8260	06-02-99	10.0	10.1	101%	6.77 - 13.1
Bromobenzene	ug/L	EPA8260	06-02-99	10.0	8.29	82.9%	7.50 - 12.1
Bromochloromethane	ug/L	EPA8260	06-02-99	10.0	9.39	93.9%	7.68 - 11.7
Bromodichloromethane	ug/L	EPA8260	06-02-99	10.0	8.50	85.0%	8.28 - 11.6
Bromoform	ug/L	EPA8260	06-02-99	10.0	7.00	70.0%	6.68 - 12.7
Bromomethane	ug/L	EPA8260	06-02-99	10.0	14.2	142%	5.99 - 14.2
n-butylbenzene	ug/L	EPA8260	06-02-99	10.0	9.84	98.4%	7.10 - 11.9
sec-butylbenzene	ug/L	EPA8260	06-02-99	10.0	9.36	93.6%	7.44 - 12.2
tert-butylbenzene	ug/L	EPA8260	06-02-99	10.0	8.83	88.3%	6.96 - 13.0
Carbon disulfide	ug/L	EPA8260	06-02-99	10.0	13.5	135%	5.04 - 16.0
Carbon tetrachloride	ug/L	EPA8260	06-02-99	10.0	8.41	84.1%	6.48 - 13.3
Chlorobenzene	ug/L	EPA8260	06-02-99	10.0	9.40	94.0%	8.58 - 11.6
Chloroethane	ug/L	EPA8260	06-02-99	10.0	10.6	106%	5.43 - 14.3
Chloroform	ug/L	EPA8260	06-02-99	10.0	12.1	121%	7.48 - 13.1
Chloromethane	ug/L	EPA8260	06-02-99	10.0	12.2	122%	3.89 - 14.0
2-chlorotoluene	ug/L	EPA8260	06-02-99	10.0	8.89	88.9%	7.02 - 12.6
4-chlorotoluene	ug/L	EPA8260	06-02-99	10.0	8.49	84.9%	7.17 - 12.3
Dibromochloromethane	ug/L	EPA8260	06-02-99	10.0	8.19	81.9%	7.94 - 11.6
1,2-dibromo-3-chloropropane	ug/L	EPA8260	06-02-99	10.0	9.98	99.8%	5.93 - 12.5



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 4

QCCS Sample Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

Analyte	Unit	Method	Date	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
1,2-dibromoethane	ug/L	EPA8260	06-02-99	10.0	8.94	89.4%	8.22 - 11.4
Dibromomethane	ug/L	EPA8260	06-02-99	10.0	9.48	94.8%	8.34 - 11.9
o-dichlorobenzene	ug/L	EPA8260	06-02-99	10.0	8.79	87.9%	7.85 - 12.1
m-dichlorobenzene	ug/L	EPA8260	06-02-99	10.0	8.73	87.3%	8.00 - 11.9
Para-dichlorobenzene	ug/L	EPA8260	06-02-99	10.0	8.76	87.6%	7.85 - 12.1
Dichlorodifluoromethane	ug/L	EPA8260	06-02-99	10.0	12.7	127%	4.28 - 13.5
1,1-dichloroethane	ug/L	EPA8260	06-02-99	10.0	12.0	120%	7.14 - 13.1
1,2-dichloroethane	ug/L	EPA8260	06-02-99	10.0	8.54	85.4%	7.74 - 12.5
1,1-dichloroethene	ug/L	EPA8260	06-02-99	10.0	10.3	103%	6.39 - 12.9
cis-1,2-dichloroethene	ug/L	EPA8260	06-02-99	10.0	11.2	112%	7.82 - 11.9
t-1,2-dichloroethene	ug/L	EPA8260	06-02-99	10.0	11.5	115%	6.61 - 12.9
1,2-dichloroethene	ug/L	EPA8260	06-02-99	20.0	22.7	114%	14.3 - 25.3
1,2-dichloropropane	ug/L	EPA8260	06-02-99	10.0	8.73	87.3%	7.58 - 12.2
1,3-dichloropropane	ug/L	EPA8260	06-02-99	10.0	9.50	95.0%	8.37 - 11.5
2,2-dichloropropane	ug/L	EPA8260	06-02-99	10.0	8.50	85.0%	2.84 - 13.3
1,1-dichloropropene	ug/L	EPA8260	06-02-99	10.0	8.99	89.9%	7.32 - 11.7
cis-1,3-dichloropropene	ug/L	EPA8260	06-02-99	10.0	8.03	80.3%	7.20 - 11.8
trans-1,3-dichloropropene	ug/L	EPA8260	06-02-99	10.0	7.39	73.9%	7.05 - 12.1
Ethylbenzene	ug/L	EPA8260	06-02-99	10.0	9.79	97.9%	7.50 - 12.5
Hexachlorobutadiene	ug/L	EPA8260	06-02-99	10.0	9.94	99.4%	7.27 - 12.5
2-Hexanone	ug/L	EPA8260	06-02-99	10.0	9.05	90.5%	6.01 - 13.7
Isopropylbenzene	ug/L	EPA8260	06-02-99	10.0	8.61	86.1%	6.72 - 13.7
4-isopropyltoluene	ug/L	EPA8260	06-02-99	10.0	9.22	92.2%	7.62 - 11.9
Methylene chloride	ug/L	EPA8260	06-02-99	10.0	14.0	140%	6.48 - 13.9
Methyl-tert-butylether	ug/L	EPA8260	06-02-99	10.0	11.7	117%	4.62 - 14.6
2-butanone	ug/L	EPA8260	06-02-99	10.0	11.7	117%	4.35 - 16.1
Methyl iodide	ug/L	EPA8260	06-02-99	10.0	10.3	103%	5.94 - 16.3
4-methyl-2-pentanone	ug/L	EPA8260	06-02-99	10.0	10.3	103%	4.31 - 13.1
Naphthalene	ug/L	EPA8260	06-02-99	10.0	10.9	109%	3.68 - 14.7
Propylbenzene	ug/L	EPA8260	06-02-99	10.0	9.48	94.8%	7.15 - 12.3
Styrene	ug/L	EPA8260	06-02-99	10.0	7.97	79.7%	7.85 - 12.9
1,1,1,2-tetrachloroethane	ug/L	EPA8260	06-02-99	10.0	8.91	89.1%	7.87 - 11.8
1,1,2,2-tetrachloroethane	ug/L	EPA8260	06-02-99	10.0	7.77	77.7%	6.18 - 12.8
Tetrachloroethene	ug/L	EPA8260	06-02-99	20.0	22.1	111%	11.3 - 27.9
Toluene	ug/L	EPA8260	06-02-99	10.0	10.0	100%	7.15 - 13.0



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 4

QCCS Sample Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res. Rec.
P.O. Number: 110456
Date Sampled: 22-May-99
Lab Numbers: 13884 - 13884

Analyte	Unit	Method	Date	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
1,2,3-trichlorobenzene	ug/L	EPA8260	06-02-99	10.0	10.4	104%	5.48 - 13.3
1,2,4-trichlorobenzene	ug/L	EPA8260	06-02-99	10.0	10.9	109%	5.56 - 12.7
1,1,1-trichloroethane	ug/L	EPA8260	06-02-99	10.0	8.75	87.5%	7.70 - 12.3
1,1,2-trichloroethane	ug/L	EPA8260	06-02-99	10.0	9.64	96.4%	8.49 - 11.4
Trichloroethene	ug/L	EPA8260	06-02-99	10.0	9.92	99.2%	6.39 - 14.6
Trichlorofluoromethane	ug/L	EPA8260	06-02-99	10.0	14.2	142%	1.52 - 15.6
1,2,3-trichloropropane	ug/L	EPA8260	06-02-99	10.0	7.22	72.2%	6.52 - 13.5
1,2,4-trimethylbenzene	ug/L	EPA8260	06-02-99	10.0	8.87	88.7%	7.53 - 12.2
1,3,5-trimethylbenzene	ug/L	EPA8260	06-02-99	10.0	8.81	88.1%	7.31 - 12.3
Vinyl acetate	ug/L	EPA8260	06-02-99	10.0	9.01	90.1%	2.86 - 16.6
Vinyl chloride	ug/L	EPA8260	06-02-99	10.0	10.4	104%	5.43 - 13.9
Xylene	ug/L	EPA8260	06-02-99	30.0	29.0	96.7%	21.7 - 38.3



PASCO COUNTY, FLORIDA

D.E.P.

JUL 22 1999

Southwest District Tampa

ENVIRONMENTAL LABORATORY
8864 GOVERNMENT DRIVE
NEW PORT RICHEY, FL 34654
(727) 847-8902

DHRS # 44237, E44123
CompQAP # 870167G

REPORT OF ANALYSES

RESOURCE RECOVERY
14230 HAYS ROAD
SPRING HILL, FL 34610-
Attn: VINCENT MANNELLA

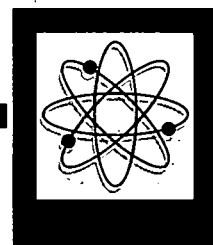
PROJECT NAME: LMF ASH CELL
DATE: 07/15/99

SAMPLE NUMBER- 79790 SAMPLE ID- LMF ASH CELL RAINWATER RUNOFF SAMPLE MATRIX- OT
DATE SAMPLED- 05/25/99 LOCATION- RAINWATER RUNOFF TIME SAMPLED- 0700
DATE RECEIVED- 05/25/99 SAMPLER- RAY BOERSTLER RECEIVED BY- MAS
TIME RECEIVED- 0825 DELIVERED BY- RAY BOERSTLER TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS	DQ
TOT.ORGANIC CARBON	SM 5310			05/26/99	1300	IF	5.69	mg/L	
BIOCHEM.OXY.DEMAND	SM5210B			05/26/99	1500	TER	2	mg/L	
CHEMICAL OXYGEN DEMAND	SM5220B			06/11/99	1500	TER	14.3	mg/L	
CHLOROPHYLL A	SM 10200H	06/04/99	TER	05/26/99	1000	JK	0.26	mg/M3	
FECAL COLIFORM MF	SM9222D			05/25/99	1110	AS	<1	MF/100 ml	
TOTAL HARDNESS AS CaCO3	SM 2340 C			06/04/99	1100	TER	40.0	mg/L CaCO3	
AMMONIA NITROGEN	SM4500NH3H			06/02/99	1400	IF	0.08	mg/L	
NITRATE	SM4500NO3F			05/26/99		IF	<0.11	mg/L	
TOTAL NITROGEN	CALC.			06/15/99	1100	CEM	0.46	MG/L	
TOTAL PHOSPHOROUS	SM4500P B			06/10/99	1300	DN	0.07	mgP/L	
TOTAL DISS.SOLIDS	SM2540C			05/27/99	0800	JK	50	mg/L	
TOTAL SUSP. SOLIDS	SM2540D			05/25/99	1420	TER	3	mg/L	
COPPER, TOTAL	SM3113B	05/28/99	TER	06/07/99	1440	TER	0.02	mg/L	
IRON, TOTAL	SM3113B	05/28/99	TER	06/04/99	1020	TER	0.03	mg/L	
MERCURY, TOTAL	SM3112B			06/15/99	1000	TER	0.0005	mg/L	
ZINC, TOTAL	SM3111B	05/28/99	TER	06/09/99	0935	TER	0.028	mg/L	

LABORATORY DIRECTOR



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : N/A *Resource Rec*
PO Number : 110456 *Rain Run OFF*
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

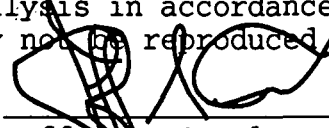
Date Sampled: May 25 1999 Date Received: May 26 1999 Lab Number : 13922

REPORT OF ANALYSIS

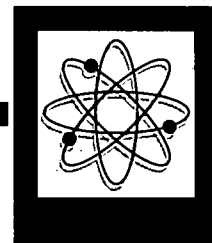
Parameter	Unit	Method	%ACC	%PRC	13922 RRAC
		Detection Limit			
Silver	mg/L	.00005	97.5	3.55	<5e-05
Arsenic	mg/L	.00005	92.2	3.15	.00102
Barium	mg/L	.00040	98.0	3.02	.00538
Beryllium	mg/L	.00010	100.	4.93	<.0001
Cadmium	mg/L	.00005	92.6	3.15	.00019
Cobalt	mg/L	.00010	96.0	4.24	<.0001
Chromium	mg/L	.00020	100.	5.22	.00038
Copper	mg/L	.00020	89.3	4.44	0.0171
Nickel	mg/L	.00020	93.6	4.84	.00021
Lead	mg/L	.00010	94.2	3.30	.00270
Antimony	mg/L	.00020	97.6	2.22	.00633
Selenium	mg/L	.00030	94.3	3.80	.00139
Thallium	mg/L	.00010	97.0	4.44	<.0001
Vanadium	mg/L	.00006	97.3	5.20	.00367
Zinc	mg/L	.00070	71.8	4.80	0.0504
Dilution_Factor		-	-	-	1.00
Acetone	ug/L	10.0	116.	15.0	<10.0
Acrylonitrile	ug/L	1.00			<1.00
Benzene	ug/L	0.500	95.6	1.89	<0.500
Bromobenzene	ug/L	1.00	82.1	.770	<1.00
Bromochloromethane	ug/L	1.00	94.8	4.74	<1.00
Bromodichloromethane	ug/L	1.00	83.8	.630	<1.00
Bromoform	ug/L	1.00	71.0	2.74	<1.00
Bromomethane	ug/L	5.00	128.	.710	<5.00
n-butylbenzene	ug/L	1.00	95.6	2.07	<1.00
sec-butylbenzene	ug/L	1.00	88.6	1.20	<1.00

Data Release Authorization

Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4
Methods of analysis in accordance with FCL QA and EPA approved methodology.
This Report may not be reproduced in part, results relate only to items tested.


Jefferson S. Flowers, Ph.d.
President/Technical Director

Serving Your Analytical and Environmental Needs Since 1957



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : N/A
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

Date Sampled: May 25 1999 Date Received: May 26 1999 Lab Number : 13922

REPORT OF ANALYSIS

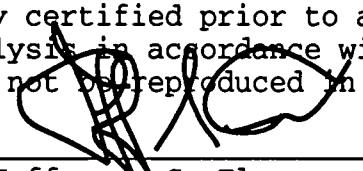
Parameter	Unit	Method	%ACC	%PRC	13922 RRAC
	Detection				
	Limit				
tert-butylbenzene	ug/L	1.00	83.1	1.28	<1.00
Carbon disulfide	ug/L	5.00	119.	7.95	<5.00
Carbon tetrachloride	ug/L	1.00	85.3	.410	<1.00
Chlorobenzene	ug/L	0.500	94.9	.140	<0.500
Chloroethane	ug/L	1.00	94.6	5.08	<1.00
Chloroform	ug/L	1.00	106.	1.93	<1.00
Chloromethane	ug/L	5.00	97.2	4.77	<5.00
2-chlorotoluene	ug/L	0.500	84.3	.620	<0.500
4-chlorotoluene	ug/L	0.500	82.1	.080	<0.500
Dibromochloromethane	ug/L	1.00	86.5	.400	<1.00
1,2-dibromo-3-chloro	ug/L	1.00	99.6	5.01	<1.00
1,2-dibromoethane	ug/L	1.00	95.0	.180	<1.00
Dibromomethane	ug/L	1.00	95.9	1.07	<1.00
o-dichlorobenzene	ug/L	0.500	87.3	.480	<0.500
m-dichlorobenzene	ug/L	0.500	85.3	.160	<0.500
Para-dichlorobenzene	ug/L	0.500	84.3	2.10	<0.500
Dichlorodifluorometh	ug/L	2.00	111.	5.08	<2.00
t-1,4-dichloro-2-but	ug/L	10.0			<10.0
1,1-dichloroethane	ug/L	1.00			<1.00
1,2-dichloroethane	ug/L	1.00	85.1	.870	<1.00
1,1-dichloroethene	ug/L	1.00	103.	16.5	<1.00
cis-1,2-dichloroethe	ug/L	1.00	105.	.870	<1.00
t-1,2-dichloroethene	ug/L	2.00	100.	5.43	<2.00
1,2-dichloroethene	ug/L	1.00	103.	3.10	<1.00
1,2-dichloropropane	ug/L	1.00	89.7	1.38	<1.00
1,3-dichloropropane	ug/L	1.00	97.6	1.23	<1.00

Data Release Authorization

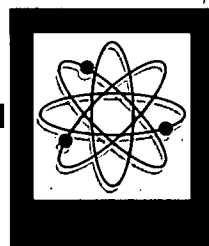
Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4

Methods of analysis in accordance with FCL QA and EPA approved methodology.

This Report may not be reproduced in part, results relate only to items tested.


Jefferson S. Flowers, Ph.d.
President/Technical Director

Serving Your Analytical and Environmental Needs Since 1957



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : N/A
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

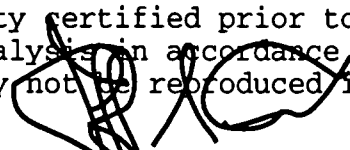
Date Sampled: May 25 1999 Date Received: May 26 1999 Lab Number : 13922

REPORT OF ANALYSIS

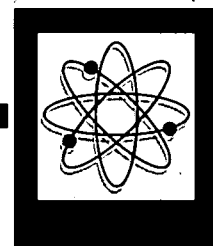
Parameter	Unit	Method	%ACC	%PRC	13922
					RRAC
		Detection			
		Limit			
2,2-dichloropropane	ug/L	3.00	81.7	.990	<3.00
1,1-dichloropropene	ug/L	0.500	85.9	1.07	<0.500
cis-1,3-dichloroprop	ug/L	1.00	82.5	1.03	<1.00
trans-1,3,-dichlorop	ug/L	1.00	83.1	3.10	<1.00
Ethylbenzene	ug/L	0.500	96.8	.400	<0.500
Hexachlorobutadiene	ug/L	1.00	92.9	.260	<1.00
2-Hexanone	ug/L	10.0	101.	.450	<10.0
Hexachloroethane	ug/L	1.00			<1.00
Isopropylbenzene	ug/L	1.00	81.2	.040	<1.00
4-isopropyltoluene	ug/L	1.00	87.5	.080	<1.00
Methylene chloride	ug/L	1.00	118.	11.3	16.8
Methyl-tert-butyleth	ug/L	1.00	103.	4.10	<1.00
2-butanone	ug/L	10.0	120.	3.81	<10.0
Methyl iodide	ug/L	1.00	97.2	2.91	<1.00
4-methyl-2-pentanone	ug/L	10.0	103.	.030	<10.0
Naphthalene	ug/L	1.00	112.	5.27	<1.00
propylbenzene	ug/L	1.00	88.5	2.16	<1.00
Styrene	ug/L	1.00	80.2	.220	<1.00
1,1,1,2-tetrachloroe	ug/L	1.00	91.8	.190	<1.00
1,1,2,2-tetrachloroe	ug/L	1.00	72.5	4.34	<1.00
Tetrachloroethene	ug/L	1.00	108.	.160	<1.00
Toluene	ug/L	0.500	95.9	.290	<0.500
1,2,3-trichlorobenze	ug/L	1.00	107.	4.25	<1.00
1,2,4-trichlorobenze	ug/L	1.00	112.	4.40	<1.00
1,1,1-trichloroethan	ug/L	1.00			<1.00
1,1,2-trichloroethan	ug/L	1.00	97.3	1.02	<1.00

Data Release Authorization

Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4
Methods of analysis in accordance with FCL QA and EPA approved methodology.
This Report may not be reproduced in part, results relate only to items tested.


Jefferson S. Flowers, Ph.d.
President/Technical Director

Serving Your Analytical and Environmental Needs Since 1957



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : N/A
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

Date Sampled: May 25 1999 Date Received: May 26 1999 Lab Number : 13922

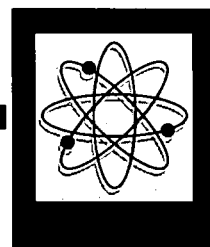
REPORT OF ANALYSIS

Parameter	Unit	Method	%ACC	%PRC	13922
					RRAC
		Detection			
		Limit			
Trichloroethene	ug/L	1.00	98.8	2.68	<1.00
Trichlorofluorometha	ug/L	2.00	128.	1.63	<2.00
1,2,3-trichloropropa	ug/L	1.00	71.2	.890	<1.00
1,2,4-trimethylbenze	ug/L	1.00	83.4	.550	<1.00
1,3,5-trimethylbenze	ug/L	1.00	83.7	.420	<1.00
Vinyl acetate	ug/L	1.00	90.7	.890	<1.00
Vinyl chloride	ug/L	0.500	102.	3.24	<0.500
Xylene	ug/L	0.500	96.0	.810	<0.500
Surrogate_Spike1	ug/L	1.00	85.3	.050	24.0
Surrogate_Spike2	ug/L	1.00	103.	.500	28.5
Surrogate_Spike3	ug/L	1.00	92.0	.200	22.6

Data Release Authorization

Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4
Methods of analysis in accordance with FCL QA and EPA approved methodology.
This Report may not be reproduced in part, results relate only to items tested.


Jefferson A. Flowers, Ph.d.
President/Technical Director



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun 7 1999
Project Number : N/A
PO Number : 110456
FDHRS Number : 83139
FHRS ENVNumber : E83018
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

Date Sampled: May 25 1999 Date Received: May 26 1999 Lab Number : 13922

REPORT OF INFORMATION

Parameter	Unit	Limit	Expected Value	Range	Correlation
				13922	
Arsenic	mg/L	18.2	0.486	.00102	
Barium	mg/L	171.	4.02	.00538	
Cadmium	mg/L	76.7	0.839	.00019	
Chromium	mg/L	359.	4.69	.00038	
Copper	mg/L	2810	47.8	0.0171	
Nickel	mg/L	57.5	1.13	.00021	
Lead	mg/L	5360	53.7	.00270	
Antimony	mg/L	5.69	0.270	.00633	
Selenium	mg/L	0.659	0.0226	.00139	
Vanadium	mg/L	94.9	8.53	.00367	
Zinc	mg/L	12000	131.	0.0504	
Methylene chloride	ug/L	15400	246.	16.8	
Surrogate_Spike1	ug/L	56.7	45.9	24.0	
Surrogate_Spike2	ug/L	-	-	28.5	
Surrogate_Spike3	ug/L	63.0	46.2	22.6	

The above information is intended to highlight exceptional data as compared to the upper control limits (Limit) established for each of the parameters. Range exceedances are flagged by integer values in the Range column. The Expected values are derived from historical data. Expected is computed as either the mean or computed directly from another parameter using linear regression. All known correlation rule exceedances are listed as enumerated rule numbers in the Correlation column. Correlation pair rules are defined on the last page.

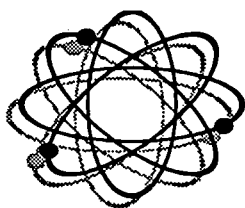
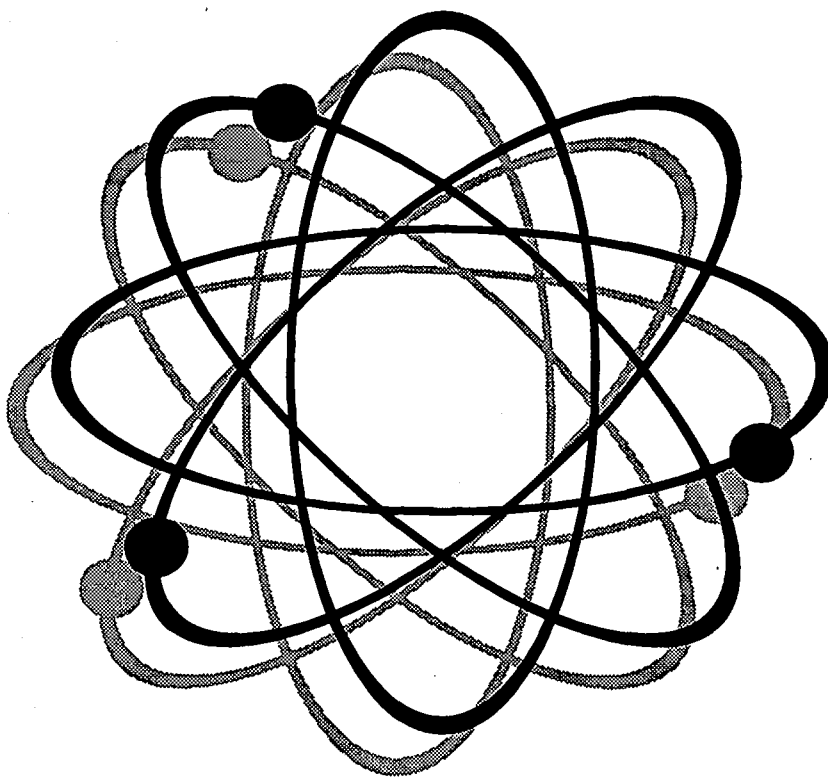
3609	FLOWERS CHEMICAL LABORATORIES																
	ANALYTICAL RESULTS FORM										HRS Number 83139						
			RRAC									QA		Section			
Parameter	Symbol	Unit	13922									Method	MDL	%RSD	%Rec	Analys	Date
Silver	*	mg/L	<0.00005U									EPA6020	0.00005	3.5576110	97.5	LSM	05-27-99
Arsenic	*	mg/L	0.00102									EPA6020	0.00005	3.1562207	92.2925	LSM	05-27-99
Barium	*	mg/L	0.00538									EPA6020	0.0004	3.0291883	98.08	LSM	05-27-99
Beryllium	*	mg/L	<0.0001U									EPA6020	0.0001	4.9342987	100.25	LSM	05-27-99
Cadmium	*	mg/L	0.000193									EPA6020	0.00005	3.1562207	92.66325	LSM	05-27-99
Cobalt	*	mg/L	<0.0001U									EPA6020	0.0001	4.2477876	96	LSM	05-27-99
Chromium	*	mg/L	0.000376									EPA6020	0.0002	5.2256693	100.08075	LSM	05-27-99
Copper	*	mg/L	0.0171									EPA6020	0.0002	4.4423142	89.3	LSM	05-27-99
Nickel	*	mg/L	0.000214									EPA6020	0.0002	4.8490726	93.65375	LSM	05-27-99
Lead	*	mg/L	0.00270									EPA6020	0.0001	3.3038348	94.285	LSM	05-27-99
Antimony	*	mg/L	0.00633									EPA6020	0.0002	2.2291076	97.65	LSM	05-27-99
Selenium	*	mg/L	0.00139									EPA6020	0.0003	3.8062612	94.375	LSM	05-27-99
Thallium	*	mg/L	<0.0001U									EPA6020	0.0001	4.4423142	97	LSM	05-27-99
Vanadium	*	mg/L	0.00367									EPA6020	0.00006	5.2056220	97.35	LSM	05-27-99
Zinc	*	mg/L	0.0504									EPA6020	0.0007	4.8095421	71.8	LSM	05-27-99
Dilution Factor	*	#	1									EPA5030	1			CLS	06-02-99
Acetone	*	ug/L	<10U									EPA8260	10	15	116	CLS	06-02-99
Acrylonitrile	*	ug/L	<1U									EPA8260	1			CLS	06-02-99
Benzene	*	ug/L	<0.5U									EPA8260	0.5	1.89	95.6	CLS	06-02-99
Bromobenzene	*	ug/L	<1U									EPA8260	1	0.776	82.1	CLS	06-02-99
Bromochloromethane	*	ug/L	<1U									EPA8260	1	4.74	94.8	CLS	06-02-99
Bromodichloromethane	*	ug/L	<1U									EPA8260	1	0.633	83.8	CLS	06-02-99
Bromoform	*	ug/L	<1U									EPA8260	1	2.74	71	CLS	06-02-99
Bromomethane	*	ug/L	<5U									EPA8260	5	0.716	128	CLS	06-02-99
n-butylbenzene	*	ug/L	<1U									EPA8260	1	2.07	95.6	CLS	06-02-99
sec-butylbenzene	*	ug/L	<1U									EPA8260	1	1.2	88.6	CLS	06-02-99
tert-butylbenzene	*	ug/L	<1U									EPA8260	1	1.28	83.1	CLS	06-02-99
Carbon disulfide	*	ug/L	<5U									EPA8260	5	7.95	119	CLS	06-02-99
Carbon tetrachloride	*	ug/L	<1U									EPA8260	1	0.415	85.3	CLS	06-02-99
Chlorobenzene	*	ug/L	<0.5U									EPA8260	0.5	0.149	94.9	CLS	06-02-99
Chloroethane	*	ug/L	<1U									EPA8260	1	5.08	94.6	CLS	06-02-99
Chloroform	*	ug/L	<1U									EPA8260	1	1.93	106	CLS	06-02-99
Chloromethane	*	ug/L	<5U									EPA8260	5	4.77	97.2	CLS	06-02-99
2-chlorotoluene	*	ug/L	<0.5U									EPA8260	0.5	0.629	84.3	CLS	06-02-99
4-chlorotoluene	*	ug/L	<0.5U									EPA8260	0.5	0.0862	82.1	CLS	06-02-99
Dibromochloromethane	*	ug/L	<1U									EPA8260	1	0.409	86.5	CLS	06-02-99
1,2-dibromo-3-chloroprop	*	ug/L	<1U									EPA8260	1	5.01	99.6	CLS	06-02-99
1,2-dibromoethane	*	ug/L	<1U									EPA8260	1	0.186	95	CLS	06-02-99
Dibromomethane	*	ug/L	<1U									EPA8260	1	1.07	95.9	CLS	06-02-99
o-dichlorobenzene	*	ug/L	<0.5U									EPA8260	0.5	0.486	87.3	CLS	06-02-99
m-dichlorobenzene	*	ug/L	<0.5U									EPA8260	0.5	0.166	85.3	CLS	06-02-99
Para-dichlorobenzene	*	ug/L	<0.5U									EPA8260	0.5	2.1	84.3	CLS	06-02-99
Dichlorodifluoromethane	*	ug/L	<2U									EPA8260	2	5.08	111	CLS	06-02-99
t-1,4-dichloro-2-butene	*	ug/L	<10U									EPA8260	10			CLS	06-02-99
1,1-dichloroethane	*	ug/L	<1U									EPA8260	1			CLS	06-02-99
1,2-dichloroethane	*	ug/L	<1U									EPA8260	1	0.873	85.1	CLS	06-02-99
1,1-dichloroethene	*	ug/L	<1U									EPA8260	1	16.5	103	CLS	06-02-99
cis-1,2-dichloroethene	*	ug/L	<1U									EPA8260	1	0.876	105	CLS	06-02-99
t-1,2-dichloroethene	*	ug/L	<2U									EPA8260	2	5.43	100	CLS	06-02-99
1,2-dichloroethene	*	ug/L	<1U									EPA8260	1	3.1	103	CLS	06-02-99

1,2-dichloropropane	*	ug/L	<1U									EPA8260	1	1.38	89.7	CLS	06-02-99
1,3-dichloropropane	*	ug/L	<1U									EPA8260	1	1.23	97.6	CLS	06-02-99
2,2-dichloropropane	*	ug/L	<3U									EPA8260	3	0.995	81.7	CLS	06-02-99
1,1-dichloropropene	*	ug/L	<0.5U									EPA8260	0.5	1.07	85.9	CLS	06-02-99
cis-1,3-dichloropropene	*	ug/L	<1U									EPA8260	1	1.03	82.5	CLS	06-02-99
trans-1,3-dichloropropene	*	ug/L	<1U									EPA8260	1	3.1	83.1	CLS	06-02-99
Ethylbenzene	*	ug/L	<0.5U									EPA8260	0.5	0.402	96.8	CLS	06-02-99
Hexachlorobutadiene	*	ug/L	<1U									EPA8260	1	0.266	92.9	CLS	06-02-99
2-Hexanone	*	ug/L	<10U									EPA8260	10	0.455	101	CLS	06-02-99
Hexachloroethane	*	ug/L	<1U									EPA8260	1			CLS	06-02-99
Isopropylbenzene	*	ug/L	<1U									EPA8260	1	0.0436	81.2	CLS	06-02-99
4-Isopropyltoluene	*	ug/L	<1U									EPA8260	1	0.0809	87.5	CLS	06-02-99
Methylene chloride	*	ug/L	16.79									EPA8260	1	11.3	118	CLS	06-02-99
Methyl-tert-butylether	*	ug/L	<1U									EPA8260	1	4.1	103	CLS	06-02-99
2-butanone	*	ug/L	<10U									EPA8260	10	3.81	120	CLS	06-02-99
Methyl iodide	*	ug/L	<1U									EPA8260	1	2.91	87.2	CLS	06-02-99
4-methyl-2-pentanone	*	ug/L	<10U									EPA8260	10	0.0345	103	CLS	06-02-99
Naphthalene	*	ug/L	<1U									EPA8260	1	5.27	112	CLS	06-02-99
Propylbenzene	*	ug/L	<1U									EPA8260	1	2.16	88.5	CLS	06-02-99
Styrene	*	ug/L	<1U									EPA8260	1	0.22	80.2	CLS	06-02-99
1,1,1,2-tetrachloroethane	*	ug/L	<1U									EPA8260	1	0.183	91.8	CLS	06-02-99
1,1,2,2-tetrachloroethane	*	ug/L	<1U									EPA8260	1	4.34	72.5	CLS	06-02-99
Tetrachloroethene	*	ug/L	<1U									EPA8260	1	0.163	108	CLS	06-02-99
Toluene	*	ug/L	<0.5U									EPA8260	0.5	0.295	95.9	CLS	06-02-99
1,2,3-trichlorobenzene	*	ug/L	<1U									EPA8260	1	4.25	107	CLS	06-02-99
1,2,4-trichlorobenzene	*	ug/L	<1U									EPA8260	1	4.4	112	CLS	06-02-99
1,1,1-trichloroethane	*	ug/L	<1U									EPA8260	1			CLS	06-02-99
1,1,2-trichloroethane	*	ug/L	<1U									EPA8260	1	1.02	87.3	CLS	06-02-99
Trichloroethene	*	ug/L	<1U									EPA8260	1	2.68	88.8	CLS	06-02-99
Trichlorofluoromethane	*	ug/L	<2U									EPA8260	2	1.63	128	CLS	06-02-99
1,2,3-trichloropropane	*	ug/L	<1U									EPA8260	1	0.894	71.2	CLS	06-02-99
1,2,4-trimethylbenzene	*	ug/L	<1U									EPA8260	1	0.551	83.4	CLS	06-02-99
1,3,5-trimethylbenzene	*	ug/L	<1U									EPA8260	1	0.423	83.7	CLS	06-02-99
Vinyl acetate	*	ug/L	<1U									EPA8260	1	0.897	90.7	CLS	06-02-99
Vinyl chloride	*	ug/L	<0.5U									EPA8260	0.5	3.24	102	CLS	06-02-99
Xylene	*	ug/L	<0.5U									EPA8260	0.5	0.811	96	CLS	06-02-99
Surrogate Spike1	*	ug/L	24.01									EPA8260	1	0.0553	85.3	CLS	06-02-99
Surrogate Spike2	*	ug/L	28.52									EPA8260	1	0.504	103	CLS	06-02-99
Surrogate Spike3	*	ug/L	22.65									EPA8260	1	0.205	92	CLS	06-02-99
-	*	-										-	-				
Date Received: 05-26-99 Typed: 06-07-99 Sent: 06-07-99																	
Project Number	N/A																
PO Number	110456																
Date Sampled	1 05-25-99 *																
Date Analyzed	0																
Compacted	1																
Format	NormRR																
Unit Cost	Exted																
Appendix I	18500 1 *																

Quality Assurance Report

Prepared for: Pasco Co. Utilities Env. Lab
Project Number: N/A
Lab Numbers: 13922 - 13922

Report date: 7-Jun-99



**FLOWERS
CHEMICAL
LABORATORIES**



FLOWERS CHEMICAL LABORATORIES, INC.

QA Conformance Summary

Client:	Pasco Co. Utilities Env. Lab
Project Number:	N/A
P.O. Number:	110456
Date Sampled:	25-May-99
Lab Numbers:	13922 - 13922

Sample Handling

Sample handling and holding time criteria were met for all samples.

Samples Collected by Submitter

Surrogate Compound Recoveries:

The recovery limits were met for all sample as shown in section 1. This represents complete success.

Accuracy / Precision:

The recovery limits were met for all compounds in the matrix spike as shown in section 2.

The recovery limits were met for all compounds in the matrix spike duplicate as shown in section 2.

The RSD was exceeded for 1 compound as shown in section 2. This represents a 98.8% success rate.

Method Blanks:

No target compounds were found in the method blank in excess of the method limit as shown in section 3.

QCCS Check Sample:

The control limits were exceeded for 1 compound as shown in section 4. This represents a 98.8% success rate.

Standards Traceability:

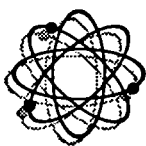
The t-test limits were exceeded for 6 calibration standards as shown in section 5.

This represents a 92.7% success rate.

The t-test limits were exceeded for 7 QCCS standards as shown in section 5. This represents a 91.5% success rate.

The t-test limits were exceeded for 7 matrix spike standards as shown in section 5.

This represents a 91.5% success rate.



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 1

Surrogate Compound Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

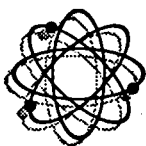
Surrogate_Spike1 for EPA8260

Surrogate Expected: 30

Unit of measure: ug/L

Acceptability Limits: 22.4 - 34.2

Laboratory Number	Site Description	Surrogate Recovered	Percent Recovered
13922	RRAC	24.0	80.0



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 1

Surrogate Compound Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Surrogate_Spike2 for EPA8260

Surrogate Expected: 30

Unit of measure: ug/L

Acceptability Limits: 22.9 - 35.6

Laboratory Number	Site Description	Surrogate Recovered	Percent Recovered
13922	RRAC	28.5	95.1



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 2

Matrix Spike Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Analyte	Unit	Analysis Method	Date	Spike Added	Sample Conc.	MS Conc.	MS Rec.	MSD Conc.	MSD Rec.	Acceptable Limits	STD Rec.	Acceptable Limits
1,2-dibromoethane	ug/L	EPA8260	06-02-99	20	<1	19.0	95.0%	19.0	95.0%	15.5 - 24.2	0.000	0 - 3.23
Dibromomethane	ug/L	EPA8260	06-02-99	20	<1	19.0	95.0%	19.3	96.5%	16.1 - 23.9	0.212	0 - 2.32
o-dichlorobenzene	ug/L	EPA8260	06-02-99	20	<0.5	17.5	87.5%	17.4	87.0%	14.5 - 24.4	0.071	0 - 2.72
m-dichlorobenzene	ug/L	EPA8260	06-02-99	20	<0.5	17.1	85.5%	17.0	85.0%	14.7 - 24.0	0.071	0 - 2.65
Para-dichlorobenzene	ug/L	EPA8260	06-02-99	20	<0.5	17.1	85.5%	16.6	83.0%	14.5 - 24.0	0.354	0 - 2.72
Dichlorodifluoromethane	ug/L	EPA8260	06-02-99	20	<2	22.9	115%	21.3	107%	8.88 - 26.0	1.13	0 - 4.92
1,2-dichloroethane	ug/L	EPA8260	06-02-99	20	<1	16.9	84.5%	17.1	85.5%	14.3 - 25.3	0.141	0 - 3.47
1,1-dichloroethene	ug/L	EPA8260	06-02-99	20	<1	23.0	115%	18.2	91.0%	13.4 - 25.0	3.39	0 - 3.39
cis-1,2-dichloroethene	ug/L	EPA8260	06-02-99	20	<1	20.9	105%	21.1	106%	14.6 - 24.5	0.141	0 - 2.80
t-1,2-dichloroethene	ug/L	EPA8260	06-02-99	20	<2	19.3	96.5%	20.8	104%	12.9 - 25.8	1.06	0 - 3.53
1,2-dichloroethene	ug/L	EPA8260	06-02-99	40	<1	40.1	100%	41.9	105%	27.8 - 50.4	1.27	0 - 6.04
1,2-dichloropropane	ug/L	EPA8260	06-02-99	20	<1	18.1	90.5%	17.8	89.0%	15.2 - 24.6	0.212	0 - 2.35
1,3-dichloropropane	ug/L	EPA8260	06-02-99	20	<1	19.3	96.5%	19.7	98.5%	15.6 - 24.4	0.283	0 - 2.62
2,2-dichloropropane	ug/L	EPA8260	06-02-99	20	<3	16.2	81.0%	16.5	82.5%	5.64 - 25.7	0.212	0 - 6.57
1,1-dichloropropene	ug/L	EPA8260	06-02-99	20	<0.5	17.0	85.0%	17.3	86.5%	13.9 - 23.9	0.212	0 - 2.79
cis-1,3-dichloropropene	ug/L	EPA8260	06-02-99	20	<1	16.6	83.0%	16.4	82.0%	15.0 - 23.8	0.141	0 - 2.56
trans-1,3,-dichloropropene	ug/L	EPA8260	06-02-99	20	<1	16.3	81.5%	17.0	85.0%	13.9 - 25.0	0.495	0 - 3.27
Ethylbenzene	ug/L	EPA8260	06-02-99	20	<0.5	19.4	97.0%	19.3	96.5%	14.6 - 24.3	0.071	0 - 2.64
Hexachlorobutadiene	ug/L	EPA8260	06-02-99	20	<1	18.5	92.5%	18.6	93.0%	15.0 - 23.7	0.071	0 - 2.85
2-Hexanone	ug/L	EPA8260	06-02-99	20	<10	20.2	101%	20.3	102%	10.7 - 28.4	0.071	0 - 3.91
Isopropylbenzene	ug/L	EPA8260	06-02-99	20	<1	16.2	81.0%	16.2	81.0%	13.5 - 24.6	0.000	0 - 3.16
4-isopropyltoluene	ug/L	EPA8260	06-02-99	20	<1	17.5	87.5%	17.5	87.5%	15.5 - 22.9	0.000	0 - 2.30
Methylene chloride	ug/L	EPA8260	06-02-99	20	<1	21.7	109%	25.4	127%	13.2 - 27.2	2.62	0 - 4.29
Methyl-tert-butylether	ug/L	EPA8260	06-02-99	20	<1	19.9	99.5%	21.1	106%	8.80 - 27.6	0.849	0 - 4.38
2-butanone	ug/L	EPA8260	06-02-99	20	<10	23.3	117%	24.6	123%	8.34 - 31.0	0.919	0 - 7.00
Methyl iodide	ug/L	EPA8260	06-02-99	20	<1	19.0	95.0%	19.8	99.0%	10.5 - 32.3	0.566	0 - 5.18
4-methyl-2-pentanone	ug/L	EPA8260	06-02-99	20	<10	20.5	103%	20.5	103%	7.54 - 27.9	0.000	0 - 4.37
Naphthalene	ug/L	EPA8260	06-02-99	20	<1	21.6	108%	23.3	117%	12.5 - 26.7	1.20	0 - 4.45
Propylbenzene	ug/L	EPA8260	06-02-99	20	<1	18.0	90.0%	17.4	87.0%	14.9 - 23.5	0.424	0 - 2.48
Styrene	ug/L	EPA8260	06-02-99	20	<1	16.0	80.0%	16.1	80.5%	15.2 - 26.4	0.071	0 - 2.50
1,1,1,2-tetrachloroethane	ug/L	EPA8260	06-02-99	20	<1	18.3	91.5%	18.4	92.0%	15.7 - 24.0	0.071	0 - 2.62
1,1,2,2-tetrachloroethane	ug/L	EPA8260	06-02-99	20	<1	15.0	75.0%	14.1	70.5%	11.9 - 25.8	0.636	0 - 4.20
Tetrachloroethene	ug/L	EPA8260	06-02-99	40	<1	43.3	108%	43.2	108%	22.4 - 55.5	0.071	0 - 10.2
Toluene	ug/L	EPA8260	06-02-99	20	<0.5	19.1	95.5%	19.2	96.0%	13.8 - 25.0	0.071	0 - 3.07
1,2,3-trichlorobenzene	ug/L	EPA8260	06-02-99	20	<1	20.8	104%	22.1	111%	13.4 - 25.7	0.919	0 - 3.88



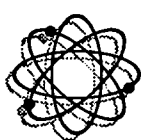
FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 2

Matrix Spike Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Analyte	Unit	Analysis Method	Date	Spike Added	Sample Conc.	MS Conc.	MS Rec.	MSD Conc.	MSD Rec.	Acceptable Limits	STD Rec.	Acceptable Limits
1,2,4-trichlorobenzene	ug/L	EPA8260	06-02-99	20	<1	21.7	109%	23.1	116%	13.5 - 25.0	0.990	0 - 3.58
1,1,2-trichloroethane	ug/L	EPA8260	06-02-99	20	<1	19.3	96.5%	19.6	98.0%	15.7 - 24.3	0.212	0 - 2.50
Trichloroethene	ug/L	EPA8260	06-02-99	20	<1	19.4	97.0%	20.1	101%	13.2 - 28.0	0.495	0 - 3.72
Trichlorofluoromethane	ug/L	EPA8260	06-02-99	20	<2	25.4	127%	26.0	130%	7.62 - 28.5	0.424	0 - 5.04
1,2,3-trichloropropane	ug/L	EPA8260	06-02-99	20	<1	14.1	70.5%	14.3	71.5%	12.5 - 27.2	0.141	0 - 3.96
1,2,4-trimethylbenzene	ug/L	EPA8260	06-02-99	20	<1	16.8	84.0%	16.6	83.0%	14.3 - 24.3	0.141	0 - 3.04
1,3,5-trimethylbenzene	ug/L	EPA8260	06-02-99	20	<1	16.8	84.0%	16.7	83.5%	15.1 - 23.5	0.071	0 - 2.62
Vinyl acetate	ug/L	EPA8260	06-02-99	20	<1	18.3	91.5%	18.0	90.0%	7.12 - 30.6	0.212	0 - 7.76
Vinyl chloride	ug/L	EPA8260	06-02-99	20	<0.5	19.9	99.5%	20.8	104%	11.8 - 27.4	0.636	0 - 5.38
Xylene	ug/L	EPA8260	06-02-99	60	<0.5	57.9	96.5%	57.2	95.3%	43.5 - 73.6	0.495	0 - 7.52



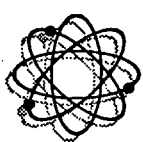
FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 3

Method Blank Report

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Analyte	Unit	Method	Date	Concentration
Silver	mg/L	EPA6020	05-27-99	<0.00005
Arsenic	mg/L	EPA6020	05-27-99	<0.00005
Barium	mg/L	EPA6020	05-27-99	<0.0004
Beryllium	mg/L	EPA6020	05-27-99	<0.0001
Cadmium	mg/L	EPA6020	05-27-99	<0.00005
Cobalt	mg/L	EPA6020	05-27-99	<0.0001
Chromium	mg/L	EPA6020	05-27-99	<0.0002
Copper	mg/L	EPA6020	05-27-99	<0.0002
Nickel	mg/L	EPA6020	05-27-99	<0.0002
Lead	mg/L	EPA6020	05-27-99	<0.0001
Antimony	mg/L	EPA6020	05-27-99	<0.0002
Selenium	mg/L	EPA6020	05-27-99	<0.0003
Thallium	mg/L	EPA6020	05-27-99	<0.0001
Vanadium	mg/L	EPA6020	05-27-99	<0.00006
Zinc	mg/L	EPA6020	05-27-99	<0.0007
Acetone	ug/L	EPA8260	06-02-99	<10
Acrylonitrile	ug/L	EPA8260	06-02-99	<1
Benzene	ug/L	EPA8260	06-02-99	<0.5
Bromobenzene	ug/L	EPA8260	06-02-99	<1
Bromochloromethane	ug/L	EPA8260	06-02-99	<1
Bromodichloromethane	ug/L	EPA8260	06-02-99	<1
Bromoform	ug/L	EPA8260	06-02-99	<1
Bromomethane	ug/L	EPA8260	06-02-99	<5
n-butylbenzene	ug/L	EPA8260	06-02-99	<1
sec-butylbenzene	ug/L	EPA8260	06-02-99	<1
tert-butylbenzene	ug/L	EPA8260	06-02-99	<1
Carbon disulfide	ug/L	EPA8260	06-02-99	<5
Carbon tetrachloride	ug/L	EPA8260	06-02-99	<1
Chlorobenzene	ug/L	EPA8260	06-02-99	<0.5



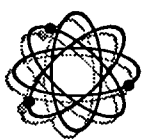
FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 3

Method Blank Report

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Analyte	Unit	Method	Date	Concentration
Chloroethane	ug/L	EPA8260	06-02-99	<1
Chloroform	ug/L	EPA8260	06-02-99	<1
Chloromethane	ug/L	EPA8260	06-02-99	<5
2-chlorotoluene	ug/L	EPA8260	06-02-99	<0.5
4-chlorotoluene	ug/L	EPA8260	06-02-99	<0.5
Dibromochloromethane	ug/L	EPA8260	06-02-99	<1
1,2-dibromo-3-chloropropane	ug/L	EPA8260	06-02-99	<1
1,2-dibromoethane	ug/L	EPA8260	06-02-99	<1
Dibromomethane	ug/L	EPA8260	06-02-99	<1
o-dichlorobenzene	ug/L	EPA8260	06-02-99	<0.5
m-dichlorobenzene	ug/L	EPA8260	06-02-99	<0.5
Para-dichlorobenzene	ug/L	EPA8260	06-02-99	<0.5
Dichlorodifluoromethane	ug/L	EPA8260	06-02-99	<2
t-1,4-dichloro-2-butene	ug/L	EPA8260	06-02-99	<10
1,1-dichloroethane	ug/L	EPA8260	06-02-99	<1
1,2-dichloroethane	ug/L	EPA8260	06-02-99	<1
1,1-dichloroethene	ug/L	EPA8260	06-02-99	<1
cis-1,2-dichloroethene	ug/L	EPA8260	06-02-99	<1
t-1,2-dichloroethene	ug/L	EPA8260	06-02-99	<2
1,2-dichloroethene	ug/L	EPA8260	06-02-99	<1
1,2-dichloropropane	ug/L	EPA8260	06-02-99	<1
1,3-dichloropropane	ug/L	EPA8260	06-02-99	<1
2,2-dichloropropane	ug/L	EPA8260	06-02-99	<3
1,1-dichloropropene	ug/L	EPA8260	06-02-99	<0.5
cis-1,3-dichloropropene	ug/L	EPA8260	06-02-99	<1
trans-1,3,-dichloropropene	ug/L	EPA8260	06-02-99	<1
Ethylbenzene	ug/L	EPA8260	06-02-99	<0.5
Hexachlorobutadiene	ug/L	EPA8260	06-02-99	<1
2-Hexanone	ug/L	EPA8260	06-02-99	<10



QA Section 3

Method Blank Report

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Analyte	Unit	Method	Date	Concentration
Hexachloroethane	ug/L	EPA8260	06-02-99	<1
Isopropylbenzene	ug/L	EPA8260	06-02-99	<1
4-isopropyltoluene	ug/L	EPA8260	06-02-99	<1
Methylene chloride	ug/L	EPA8260	06-02-99	<1
Methyl-tert-butylether	ug/L	EPA8260	06-02-99	<1
2-butanone	ug/L	EPA8260	06-02-99	<10
Methyl_iodide	ug/L	EPA8260	06-02-99	<1
4-methyl-2-pentanone	ug/L	EPA8260	06-02-99	<10
Naphthalene	ug/L	EPA8260	06-02-99	<1
Propylbenzene	ug/L	EPA8260	06-02-99	<1
Styrene	ug/L	EPA8260	06-02-99	<1
1,1,1,2-tetrachloroethane	ug/L	EPA8260	06-02-99	<1
1,1,2,2-tetrachloroethane	ug/L	EPA8260	06-02-99	<1
Tetrachloroethene	ug/L	EPA8260	06-02-99	<1
Toluene	ug/L	EPA8260	06-02-99	<0.5
1,2,3-trichlorobenzene	ug/L	EPA8260	06-02-99	<1
1,2,4-trichlorobenzene	ug/L	EPA8260	06-02-99	<1
1,1,1-trichloroethane	ug/L	EPA8260	06-02-99	<1
1,1,2-trichloroethane	ug/L	EPA8260	06-02-99	<1
Trichloroethene	ug/L	EPA8260	06-02-99	<1
Trichlorofluoromethane	ug/L	EPA8260	06-02-99	<2
1,2,3-trichloropropane	ug/L	EPA8260	06-02-99	<1
1,2,4-trimethylbenzene	ug/L	EPA8260	06-02-99	<1
1,3,5-trimethylbenzene	ug/L	EPA8260	06-02-99	<1
Vinyl acetate	ug/L	EPA8260	06-02-99	<1
Vinyl chloride	ug/L	EPA8260	06-02-99	<0.5
Xylene	ug/L	EPA8260	06-02-99	<0.5



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 4

QCCS Sample Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Analyte	Unit	Method	Date	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
Silver	mg/L	EPA6020	05-27-99	0.100	0.105	105%	0.081 - 0.120
Arsenic	mg/L	EPA6020	05-27-99	0.100	0.095	95.0%	0.086 - 0.114
Barium	mg/L	EPA6020	05-27-99	0.100	0.102	102%	0.086 - 0.115
Beryllium	mg/L	EPA6020	05-27-99	0.100	0.098	97.9%	0.066 - 0.132
Cadmium	mg/L	EPA6020	05-27-99	0.100	0.097	97.0%	0.087 - 0.113
Cobalt	mg/L	EPA6020	05-27-99	0.100	0.098	97.6%	0.087 - 0.116
Chromium	mg/L	EPA6020	05-27-99	0.100	0.101	101%	0.084 - 0.115
Copper	mg/L	EPA6020	05-27-99	0.100	0.109	109%	0.081 - 0.118
Nickel	mg/L	EPA6020	05-27-99	0.100	0.097	97.0%	0.082 - 0.115
Lead	mg/L	EPA6020	05-27-99	0.100	0.095	94.5%	0.085 - 0.118
Antimony	mg/L	EPA6020	05-27-99	0.100	0.098	98.0%	0.086 - 0.111
Selenium	mg/L	EPA6020	05-27-99	0.100	0.101	101%	0.084 - 0.116
Thallium	mg/L	EPA6020	05-27-99	0.100	0.095	94.7%	0.085 - 0.119
Vanadium	mg/L	EPA6020	05-27-99	0.100	0.102	102%	0.085 - 0.116
Zinc	mg/L	EPA6020	05-27-99	0.100	0.098	98.4%	0.080 - 0.118
Acetone	ug/L	EPA8260	06-02-99	100	125	125%	39.2 - 163
Benzene	ug/L	EPA8260	06-02-99	10.0	10.1	101%	6.77 - 13.1
Bromobenzene	ug/L	EPA8260	06-02-99	10.0	8.29	82.9%	7.50 - 12.1
Bromochloromethane	ug/L	EPA8260	06-02-99	10.0	9.39	93.9%	7.68 - 11.7
Bromodichloromethane	ug/L	EPA8260	06-02-99	10.0	8.50	85.0%	8.28 - 11.6
Bromoform	ug/L	EPA8260	06-02-99	10.0	7.00	70.0%	6.68 - 12.7
Bromomethane	ug/L	EPA8260	06-02-99	10.0	14.2	142%	5.99 - 14.2
n-butylbenzene	ug/L	EPA8260	06-02-99	10.0	9.84	98.4%	7.10 - 11.9
sec-butylbenzene	ug/L	EPA8260	06-02-99	10.0	9.36	93.6%	7.44 - 12.2
tert-butylbenzene	ug/L	EPA8260	06-02-99	10.0	8.83	88.3%	6.96 - 13.0
Carbon disulfide	ug/L	EPA8260	06-02-99	10.0	13.5	135%	5.04 - 16.0
Carbon tetrachloride	ug/L	EPA8260	06-02-99	10.0	8.41	84.1%	6.48 - 13.3
Chlorobenzene	ug/L	EPA8260	06-02-99	10.0	9.40	94.0%	8.58 - 11.6
Chloroethane	ug/L	EPA8260	06-02-99	10.0	10.6	106%	5.43 - 14.3
Chloroform	ug/L	EPA8260	06-02-99	10.0	12.1	121%	7.48 - 13.1
Chloromethane	ug/L	EPA8260	06-02-99	10.0	12.2	122%	3.89 - 14.0
2-chlorotoluene	ug/L	EPA8260	06-02-99	10.0	8.89	88.9%	7.02 - 12.6
4-chlorotoluene	ug/L	EPA8260	06-02-99	10.0	8.49	84.9%	7.17 - 12.3
Dibromochloromethane	ug/L	EPA8260	06-02-99	10.0	8.19	81.9%	7.94 - 11.6
1,2-dibromo-3-chloropropane	ug/L	EPA8260	06-02-99	10.0	9.98	99.8%	5.93 - 12.5



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 4

QCCS Sample Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Analyte	Unit	Method	Date	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
1,2-dibromoethane	ug/L	EPA8260	06-02-99	10.0	8.94	89.4%	8.22 - 11.4
Dibromomethane	ug/L	EPA8260	06-02-99	10.0	9.48	94.8%	8.34 - 11.9
o-dichlorobenzene	ug/L	EPA8260	06-02-99	10.0	8.79	87.9%	7.85 - 12.1
m-dichlorobenzene	ug/L	EPA8260	06-02-99	10.0	8.73	87.3%	8.00 - 11.9
Para-dichlorobenzene	ug/L	EPA8260	06-02-99	10.0	8.76	87.6%	7.85 - 12.1
Dichlorodifluoromethane	ug/L	EPA8260	06-02-99	10.0	12.7	127%	4.28 - 13.5
1,1-dichloroethane	ug/L	EPA8260	06-02-99	10.0	12.0	120%	7.14 - 13.1
1,2-dichloroethane	ug/L	EPA8260	06-02-99	10.0	8.54	85.4%	7.74 - 12.5
1,1-dichloroethene	ug/L	EPA8260	06-02-99	10.0	10.3	103%	6.39 - 12.9
cis-1,2-dichloroethene	ug/L	EPA8260	06-02-99	10.0	11.2	112%	7.82 - 11.9
t-1,2-dichloroethene	ug/L	EPA8260	06-02-99	10.0	11.5	115%	6.61 - 12.9
1,2-dichloroethene	ug/L	EPA8260	06-02-99	20.0	22.7	114%	14.3 - 25.3
1,2-dichloropropane	ug/L	EPA8260	06-02-99	10.0	8.73	87.3%	7.58 - 12.2
1,3-dichloropropane	ug/L	EPA8260	06-02-99	10.0	9.50	95.0%	8.37 - 11.5
2,2-dichloropropane	ug/L	EPA8260	06-02-99	10.0	8.50	85.0%	2.84 - 13.3
1,1-dichloropropene	ug/L	EPA8260	06-02-99	10.0	8.99	89.9%	7.32 - 11.7
cis-1,3-dichloropropene	ug/L	EPA8260	06-02-99	10.0	8.03	80.3%	7.20 - 11.8
trans-1,3-dichloropropene	ug/L	EPA8260	06-02-99	10.0	7.39	73.9%	7.05 - 12.1
Ethylbenzene	ug/L	EPA8260	06-02-99	10.0	9.79	97.9%	7.50 - 12.5
Hexachlorobutadiene	ug/L	EPA8260	06-02-99	10.0	9.94	99.4%	7.27 - 12.5
2-Hexanone	ug/L	EPA8260	06-02-99	10.0	9.05	90.5%	6.01 - 13.7
Isopropylbenzene	ug/L	EPA8260	06-02-99	10.0	8.61	86.1%	6.72 - 13.7
4-isopropyltoluene	ug/L	EPA8260	06-02-99	10.0	9.22	92.2%	7.62 - 11.9
Methylene chloride	ug/L	EPA8260	06-02-99	10.0	14.0	140%	6.48 - 13.9
Methyl-tert-butylether	ug/L	EPA8260	06-02-99	10.0	11.7	117%	4.62 - 14.6
2-butanone	ug/L	EPA8260	06-02-99	10.0	11.7	117%	4.35 - 16.1
Methyl iodide	ug/L	EPA8260	06-02-99	10.0	10.3	103%	5.94 - 16.3
4-methyl-2-pentanone	ug/L	EPA8260	06-02-99	10.0	10.3	103%	4.31 - 13.1
Naphthalene	ug/L	EPA8260	06-02-99	10.0	10.9	109%	3.68 - 14.7
Propylbenzene	ug/L	EPA8260	06-02-99	10.0	9.48	94.8%	7.15 - 12.3
Styrene	ug/L	EPA8260	06-02-99	10.0	7.97	79.7%	7.85 - 12.9
1,1,1,2-tetrachloroethane	ug/L	EPA8260	06-02-99	10.0	8.91	89.1%	7.87 - 11.8
1,1,2,2-tetrachloroethane	ug/L	EPA8260	06-02-99	10.0	7.77	77.7%	6.18 - 12.8
Tetrachloroethene	ug/L	EPA8260	06-02-99	20.0	22.1	111%	11.3 - 27.9
Toluene	ug/L	EPA8260	06-02-99	10.0	10.0	100%	7.15 - 13.0



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 4

QCCS Sample Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Analyte	Unit	Method	Date	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
1,2,3-trichlorobenzene	ug/L	EPA8260	06-02-99	10.0	10.4	104%	5.48 - 13.3
1,2,4-trichlorobenzene	ug/L	EPA8260	06-02-99	10.0	10.9	109%	5.56 - 12.7
1,1,1-trichloroethane	ug/L	EPA8260	06-02-99	10.0	8.75	87.5%	7.70 - 12.3
1,1,2-trichloroethane	ug/L	EPA8260	06-02-99	10.0	9.64	96.4%	8.49 - 11.4
Trichloroethene	ug/L	EPA8260	06-02-99	10.0	9.92	99.2%	6.39 - 14.6
Trichlorofluoromethane	ug/L	EPA8260	06-02-99	10.0	14.2	142%	1.52 - 15.6
1,2,3-trichloropropane	ug/L	EPA8260	06-02-99	10.0	7.22	72.2%	6.52 - 13.5
1,2,4-trimethylbenzene	ug/L	EPA8260	06-02-99	10.0	8.87	88.7%	7.53 - 12.2
1,3,5-trimethylbenzene	ug/L	EPA8260	06-02-99	10.0	8.81	88.1%	7.31 - 12.3
Vinyl acetate	ug/L	EPA8260	06-02-99	10.0	9.01	90.1%	2.86 - 16.6
Vinyl chloride	ug/L	EPA8260	06-02-99	10.0	10.4	104%	5.43 - 13.9
Xylene	ug/L	EPA8260	06-02-99	30.0	29.0	96.7%	21.7 - 38.3



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Silver	Fisher	14-140AS	827	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99	2.66	±2.00	0.935	0.078	1.14	0.358
Matrix Spike	EMS	A7125004	727	EVB	01-06-98	12-12-99	922	EVB	08-25-98	08-25-99	1.90	>1.69	0.935	0.078	1.08	0.090
Arsenic	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99	4.77	>1.67	0.973	0.063	1.03	0.050
QCCS	OCD Analysts	9AFS30Z2192	909	LMS	04-19-99	12-31-99	1195	LMS	04-19-99	12-31-99						
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	08-25-98	08-25-99						
Barium	Fisher	14-137AS	827	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	EMS	A7125004	727	EVB	01-06-98	12-12-99	922	EVB	01-06-98	07-06-99						
Beryllium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LMS	04-19-99	12-31-99	1195	LMS	04-19-99	12-31-99						
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	01-06-98	07-06-99						
Cadmium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	01-06-98	07-06-99	3.22	±2.00	0.710	0.078	0.976	0.011
Cobalt	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99	8.01	>1.69	1.01	0.039	0.962	0.029
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	08-25-98	08-25-99						
Chromium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	01-06-98	07-06-99						
Copper	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	01-06-98	07-06-99						
Nickel	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	08-25-98	08-25-99						
Lead	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	01-06-98	07-06-99						
Antimony	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS																



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	08-25-98	08-25-99						
Selenium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	QCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	08-25-98	08-25-99						
Thallium																
QCCS	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	08-31-99						
Matrix Spike																
Vanadium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99			1.01	0.149	0.995	0.020
QCCS																
Matrix Spike	EMS	A7125083	728	EVB	01-06-98	12-12-99	922	EVB	08-25-98	08-25-99						
Zinc																
QCCS	QCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike																
Acetone																
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.28	±1.97	0.978	0.089	1.21	0.369
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.28	±1.97	0.978	0.089	1.21	0.369
Benzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	6.13	>1.68	0.976	0.052	1.02	0.039
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	6.13	>1.68	0.976	0.052	1.02	0.039
Bromobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	6.65	>1.68	1.02	0.049	1.07	0.024
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	6.65	>1.68	1.02	0.049	1.07	0.024
Bromochloromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.05	0.103	1.03	0.005
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.05	0.103	1.03	0.005
Bromodichloromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.947	0.054	0.981	0.005
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.947	0.054	0.981	0.005
Bromoform	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.70	>1.76	1.02	0.061	1.07	0.043
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.70	>1.76	1.02	0.061	1.07	0.043
Bromomethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.974	0.035	1.17	0.045



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Received	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.974	0.035	1.17	0.045
n-butylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.53	>1.68	1.03	0.054	1.02	0.024
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.53	>1.68	1.03	0.054	1.02	0.024
sec-butylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99			0.994	0.047	1.00	
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99			0.994	0.047	1.00	
tert-butylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	3.47	>1.68	1.04	0.054	1.15	0.065
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	3.47	>1.68	1.04	0.054	1.15	0.065
Carbon disulfide	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	6.88	>1.68	1.00	0.056	1.02	0.031
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	6.88	>1.68	1.00	0.056	1.02	0.031
Carbon tetrachloride	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.57	>1.76	0.995	0.074	1.03	0.026
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.57	>1.76	0.995	0.074	1.03	0.026
Chlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.44	>1.75	1.00	0.052	1.01	0.027
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.44	>1.75	1.00	0.052	1.01	0.027
Chloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.76	>1.76	0.993	0.074	1.01	0.053
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.76	>1.76	0.993	0.074	1.01	0.053
Chloroform	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.79	>1.76	0.966	0.053	1.03	0.036
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.79	>1.76	0.966	0.053	1.03	0.036
Chloromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.23	>1.68	0.954	0.079	0.944	0.034
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.23	>1.68	0.954	0.079	0.944	0.034
2-chlorotoluene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.056	1.07	0.003
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.056	1.07	0.003
4-chlorotoluene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.92	>1.68	1.01	0.054	1.01	0.033



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.92	>1.68	1.01	0.054	1.01	0.033
Dibromochloromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.11	>1.76	0.973	0.063	1.01	0.029
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.11	>1.76	0.973	0.063	1.01	0.029
1,2-dibromo-3-chloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.989	0.103	0.975	0.025
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.989	0.103	0.975	0.025
1,2-dibromoethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.77	>1.69	1.03	0.062	0.964	0.036
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.77	>1.69	1.03	0.062	0.964	0.036
Dibromomethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	2.66	>1.69	1.07	0.118	1.02	0.020
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	2.66	>1.69	1.07	0.118	1.02	0.020
o-dichlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.33	>1.75	1.03	0.068	1.07	0.059
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.33	>1.75	1.03	0.068	1.07	0.059
m-dichlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.00	0.059	1.09	0.047
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.00	0.059	1.09	0.047
Para-dichlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS																
Matrix Spike																
Dichlorodifluoromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.20	>1.68	1.01	0.082	1.01	0.039
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.20	>1.68	1.01	0.082	1.01	0.039
1,1-dichloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	1.85	>1.65	0.954	0.086	1.10	0.109
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.00	>1.65	0.954	0.086	1.04	0.029
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.00	>1.65	0.954	0.086	1.04	0.029
1,2-dichloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.18	>1.65	0.978	0.083	0.986	0.023
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.18	>1.65	0.978	0.083	0.986	0.023
1,1-dichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	1.77	>1.65	0.942	0.093	1.08	0.062
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.942	0.093	0.993	0.020



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.942	0.093	0.993	0.020
cis-1,2-dichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	10.8	>1.69	1.01	0.028	1.02	0.069
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	10.8	>1.69	1.01	0.028	1.02	0.069
t-1,2-dichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
1,2-dichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	1.88	>1.68	1.05	0.210	1.03	0.053
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	1.88	>1.68	1.05	0.210	1.03	0.053
1,2-dichloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.096	1.00	0.011
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.096	1.00	0.011
1,3-dichloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.40	>1.69	0.996	0.097	1.00	0.013
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.40	>1.69	0.996	0.097	1.00	0.013
2,2-dichloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	5.47	±2.01	1.04	0.168	0.752	0.174
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	-1.02	±2.02	1.04	0.168	0.964	0.085
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	-1.02	±2.02	1.04	0.168	0.964	0.085
1,1-dichloropropene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	8.47	>1.69	1.02	0.043	0.989	0.031
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	8.47	>1.69	1.02	0.043	0.989	0.031
cis-1,3-dichloropropene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.42	>1.77	0.977	0.063	1.02	0.029
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.42	>1.77	0.977	0.063	1.02	0.029
trans-1,3,-dichloropropene	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
Ethylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	7.35	>1.68	0.975	0.047	1.01	0.028
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	7.35	>1.68	0.975	0.047	1.01	0.028
Hexachlorobutadiene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	8.93	±2.03	0.736	0.125	1.04	0.045
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	10.8	±1.98	0.736	0.125	1.01	0.105



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Received	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Control Mean	Control Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	10.8	±1.98	0.736	0.125	1.01	0.105
2-Hexanone	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.27	>1.68	1.03	0.095	1.03	0.087
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.27	>1.68	1.03	0.095	1.03	0.087
Isopropylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	6.64	>1.68	1.02	0.045	1.08	0.031
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	6.64	>1.68	1.02	0.045	1.08	0.031
4-isopropyltoluene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.01	0.040	1.01	0.003
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.01	0.040	1.01	0.003
Methylene chloride	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	5.36	±2.06	1.00	0.061	1.18	0.094
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	1.97	>1.77	1.00	0.061	1.13	0.056
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	1.97	>1.77	1.00	0.061	1.13	0.056
Methyl-tert-butylether	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.74	>1.71	0.951	0.066	0.999	0.044
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.74	>1.71	0.951	0.066	0.999	0.044
2-butanone	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.19	±1.99	1.01	0.167	1.15	0.230
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.19	±1.99	1.01	0.167	1.15	0.230
Methyl iodide	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99	5.87	±2.00	1.00	0.051	1.17	0.157
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.46	>1.68	1.00	0.051	1.09	0.051
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.46	>1.68	1.00	0.051	1.09	0.051
4-methyl-2-pentanone	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.975	0.066	0.889	0.008
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.975	0.066	0.889	0.008
Naphthalene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
Propylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	5.70	>1.69	1.03	0.054	1.09	0.032
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	5.70	>1.69	1.03	0.054	1.09	0.032
Styrene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99			0.982	0.026	1.14	0.030



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99			0.982	0.026	1.14	0.030
1,1,1,2-tetrachloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	5.28	>1.76	0.962	0.049	1.02	0.036
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.65	±1.99	1.02	0.054	1.00	0.006
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.65	±1.99	1.02	0.054	1.00	0.006
1,1,2,2-tetrachloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	2.93	>1.68	0.996	0.110	1.05	0.031
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	2.93	>1.68	0.996	0.110	1.05	0.031
Tetrachloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	2.73	±2.07	0.949	0.045	1.10	0.175
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.10	>1.76	0.949	0.045	0.986	0.104
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.10	>1.76	0.949	0.045	0.986	0.104
Toluene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.71	>1.68	0.986	0.067	1.01	0.032
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.71	>1.68	0.986	0.067	1.01	0.032
1,2,3-trichlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	12.2	±2.01	1.02	0.064	0.723	0.107
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.83	±1.99	1.02	0.064	0.847	0.125
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.83	±1.99	1.02	0.064	0.847	0.125
1,2,4-trichlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.06	>1.70	0.748	0.113	0.784	0.057
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.06	>1.70	0.748	0.113	0.784	0.057
1,1,1-trichloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.92	>1.65	0.979	0.079	1.01	0.037
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.92	>1.65	0.979	0.079	1.01	0.037
1,1,2-trichloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.992	0.418	0.975	0.009
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.992	0.418	0.975	0.009
Trichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.63	±1.98	0.974	0.056	1.14	0.153
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.63	±1.98	0.974	0.056	1.14	0.153
Trichlorofluoromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
1,2,3-trichloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.24	1.43	1.09	0.010



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: N/A
P.O. Number: 110456
Date Sampled: 25-May-99
Lab Numbers: 13922 - 13922

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
Standard							Lot									
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.24	1.43	1.09	0.010
1,2,4-trimethylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.01	0.025	1.05	0.002
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.01	0.025	1.05	0.002
1,3,5-trimethylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.030	1.06	
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.030	1.06	
Vinyl acetate	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Vinyl chloride	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
M&P-Xylene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
EPA6020 Blank	Flowers Chemical Laboratories	Valid	34	JSF	01-01-95	12-31-99	14	JSF	01-01-95	01-01-97						
EPA8260 Blank	Flowers Chemical Laboratories	Valid	34	JSF	01-01-95	12-31-99	14	JSF	01-01-95	01-01-97						
Surrogate Spike1	EMS	095-017	289	FG	10-05-95	12-30-99	268	FG	10-05-95	10-05-96			1.01	0.083		
Surrogate Spike2	EMS	095-017	289	FG	10-05-95	12-30-99	268	FG	10-05-95	10-05-96			1.00	0.034		
Surrogate Spike3	EMS	095-017	289	FG	10-05-95	12-30-99	268	FG	10-05-95	10-05-96			0.989	0.043		



PASCO COUNTY, FLORIDA

ENVIRONMENTAL LABORATORY
8864 GOVERNMENT DRIVE
NEW PORT RICHEY, FL 34654
(727) 847-8902

DHRS # 44237, E44123
CompQAP # 870167G

REPORT OF ANALYSES

RESOURCE RECOVERY
14230 HAYS ROAD
SPRING HILL, FL 34610-
Attn: VINCENT MANNELLA

PROJECT NAME: RES REC ASHCELL
DATE: 07/15/99

SAMPLE NUMBER- 80377 SAMPLE ID- LMF ASH CELL RAINWATER RUNOFF SAMPLE MATRIX- OT
DATE SAMPLED- 06/10/99 LOCATION- RAINWATER RUNOFF TIME SAMPLED- 0810
DATE RECEIVED- 06/10/99 SAMPLER- RAYMOND BOERSTLER RECEIVED BY- MAS
TIME RECEIVED- 0945 DELIVERED BY- R BOERSTLER TYPE SAMPLE- Grab

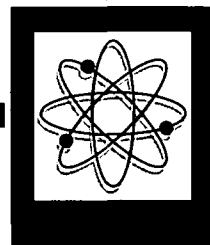
Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS	DQ
TOT.ORGANIC CARBON	SM 5310			06/24/99	1230	IF	2.75	mg/L	
BIOCHEM.OXY.DEMAND	SM5210B			06/11/99	1630	DN	1	mg/L	
CHEMICAL OXYGEN DEMAND	SM5220B			06/11/99	1500	TER	12.8	mg/L	
CHLOROPHYLL A	SM 10200H	06/14/99	TER	06/15/99	1000	JKH	<0.10	mg/M3	
FECAL COLIFORM MF	SM9222D			06/10/99	1050	AS	<1	MF/100 ml	
TOTAL HARDNESS AS CaCO3	SM 2340 C			06/21/99	1600	TER	11.6	mg/L CaCO3	
AMMONIA NITROGEN	SM4500NH3H			06/18/99	1530	IF	0.16	mg/L	
NITRATE	SM4500NO3F			06/16/99	1600	IF	<0.11	mg/L	
TOTAL NITROGEN	CALC.			07/15/99	1100	CEM	0.46	MG/L	
TOTAL PHOSPHOROUS	SM4500P B			06/10/99	1300	DN	0.05	mgP/L	
TOTAL DISS.SOLIDS	SM2540C			06/15/99	0930	JKH	38	mg/L	
TOTAL SUSP. SOLIDS	SM2540D			06/10/99	1600	DN	4	mg/L	
COPPER, TOTAL	SM3113B	06/14/99	TER	06/21/99	1005	TER	<0.02	mg/L	
IRON, TOTAL	SM 3111B	06/14/99	TER	06/21/99	0950	TER	0.05	mg/L	
MERCURY, TOTAL	SM3112B			06/15/99	1000	TER	0.0003	mg/L	
ZINC, TOTAL	SM3111B	06/14/99	TER	06/21/99	1015	TER	0.08	mg/L	

LABORATORY DIRECTOR

FLOWERS

**CHEMICAL
LABORATORIES**
INCORPORATED



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun17 1999
Project Number : Res Rec LMF
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

Date Sampled: Jun10 1999 Date Received: Jun11 1999 Lab Number : 7722

REPORT OF ANALYSIS

Parameter	Unit	Method	%ACC	%PRC	7722 EFF
		Detection			
		Limit			
Silver	mg/L	.00005	103.	2.74	<5e-05
Arsenic	mg/L	.00005	103.	4.81	.00104
Barium	mg/L	.00040	105.	1.44	.00451
Beryllium	mg/L	.00010	115.	3.01	<.0001
Cadmium	mg/L	.00005	99.0	2.02	.00046
Cobalt	mg/L	.00010	103.	.840	.00019
Chromium	mg/L	.00020	106.	1.87	.00131
Copper	mg/L	.00020	102.	2.02	0.0162
Nickel	mg/L	.00020	103.	2.33	<.0002
Lead	mg/L	.00010	101.	4.58	.00401
Antimony	mg/L	.00020	103.	1.43	.00661
Selenium	mg/L	.00030	99.0	2.49	<.0003
Thallium	mg/L	.00010	103.	4.39	<.0001
Vanadium	mg/L	.00006	107.	1.02	.00236
Zinc	mg/L	.00070	104.	8.10	0.0525
Dilution Factor		-	-	-	1.00
Acetone	ug/L	10.0	79.5	9.22	<10.0
Acrylonitrile	ug/L	1.00			<1.00
Benzene	ug/L	0.500	92.3	2.26	<0.500
Bromobenzene	ug/L	1.00	82.2	5.25	<1.00
Bromochloromethane	ug/L	1.00	94.6	4.04	<1.00
Bromodichloromethane	ug/L	1.00	86.2	4.18	<1.00
Bromoform	ug/L	1.00	72.0	5.70	<1.00
Bromomethane	ug/L	5.00	102.	9.88	<5.00
n-butylbenzene	ug/L	1.00	94.0	5.45	<1.00
sec-butylbenzene	ug/L	1.00	88.1	5.54	<1.00

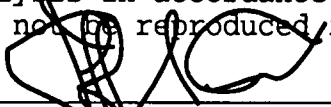
D.E.P.

JUL 22 1999

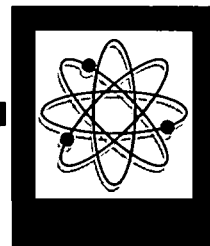
Southwest District Tampa

Data Release Authorization

Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec.4
Methods of analysis in accordance with FCL QA and EPA approved methodology.
This Report may not be reproduced in part, results relate only to items tested.


Jefferson S. Flowers, Ph.d.
President/Technical Director

Serving Your Analytical and Environmental Needs Since 1957



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun17 1999
Project Number : Res Rec LMF
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

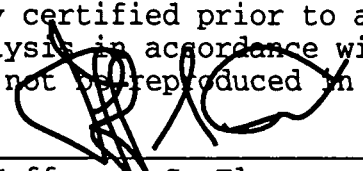
Date Sampled: Jun10 1999 Date Received: Jun11 1999 Lab Number : 7722

REPORT OF ANALYSIS

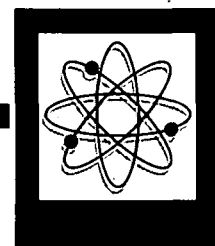
Parameter	Unit	Method	%ACC	%PRC	7722 EFF
		Detection Limit			
tert-butylbenzene	ug/L	1.00	94.6	4.49	<1.00
Carbon disulfide	ug/L	5.00	76.2	9.70	<5.00
Carbon tetrachloride	ug/L	1.00	99.0	1.86	<1.00
Chlorobenzene	ug/L	0.500	93.7	4.49	<0.500
Chloroethane	ug/L	1.00	76.0	3.68	<1.00
Chloroform	ug/L	1.00	98.2	4.75	<1.00
Chloromethane	ug/L	5.00	79.1	3.35	<5.00
2-chlorotoluene	ug/L	0.500	86.3	4.83	<0.500
4-chlorotoluene	ug/L	0.500	83.5	5.76	<0.500
Dibromochloromethane	ug/L	1.00	90.9	5.52	<1.00
1,2-dibromo-3-chloro	ug/L	1.00	98.8	3.83	<1.00
1,2-dibromoethane	ug/L	1.00	95.2	5.16	<1.00
Dibromomethane	ug/L	1.00	97.0	4.67	<1.00
o-dichlorobenzene	ug/L	0.500	88.3	5.61	<0.500
m-dichlorobenzene	ug/L	0.500	86.4	4.75	<0.500
Para-dichlorobenzene	ug/L	0.500	87.5	5.46	<0.500
Dichlorodifluorometh	ug/L	2.00	82.1	5.00	<2.00
t-1,4-dichloro-2-but	ug/L	10.0			<10.0
1,1-dichloroethane	ug/L	1.00	68.6	15.4	<1.00
1,2-dichloroethane	ug/L	1.00	94.2	3.64	<1.00
1,1-dichloroethene	ug/L	1.00	74.7	6.54	<1.00
cis-1,2-dichloroethe	ug/L	1.00	77.8	8.36	<1.00
t-1,2-dichloroethene	ug/L	2.00	67.2	10.7	<2.00
1,2-dichloroethene	ug/L	1.00	72.5	9.46	<1.00
1,2-dichloropropane	ug/L	1.00	91.1	4.77	<1.00
1,3-dichloropropane	ug/L	1.00	94.8	4.44	<1.00

Data Release Authorization

Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4
Methods of analysis in accordance with FCL QA and EPA approved methodology
This Report may not be reproduced in part, results relate only to items tested.


Jefferson S. Flowers, Ph.D.
President/Technical Director

Serving Your Analytical and Environmental Needs Since 1957



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun17 1999
Project Number : Res Rec LMF
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

Date Sampled: Jun10 1999 Date Received: Jun11 1999 Lab Number : 7722

REPORT OF ANALYSIS

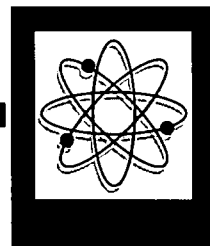
Parameter	Unit	Method	%ACC	%PRC	7722 EFF
		Detection Limit			
2,2-dichloropropane	ug/L	3.00	82.6	11.5	<3.00
1,1-dichloropropene	ug/L	0.500	96.5	3.41	<0.500
cis-1,3-dichloroprop	ug/L	1.00	92.9	4.30	<1.00
trans-1,3,-dichlorop	ug/L	1.00	91.8	5.47	<1.00
Ethylbenzene	ug/L	0.500	98.8	4.15	<0.500
Hexachlorobutadiene	ug/L	1.00	105.	4.27	<1.00
2-Hexanone	ug/L	10.0	85.6	4.34	<10.0
Hexachloroethane	ug/L	1.00			<1.00
Isopropylbenzene	ug/L	1.00	83.9	4.47	<1.00
4-isopropyltoluene	ug/L	1.00	88.5	5.60	<1.00
Methylene chloride	ug/L	1.00	81.8	5.27	<1.00
Methyl-tert-butyleth	ug/L	1.00			<1.00
2-butanone	ug/L	10.0	72.5	11.2	<10.0
Methyl iodide	ug/L	1.00	74.6	8.10	<1.00
4-methyl-2-pentanone	ug/L	10.0			<10.0
Naphthalene	ug/L	1.00	121.	2.04	<1.00
propylbenzene	ug/L	1.00	86.6	5.23	<1.00
Styrene	ug/L	1.00	78.9	4.93	<1.00
1,1,1,2-tetrachloroe	ug/L	1.00	94.8	5.03	<1.00
1,1,2,2-tetrachloroe	ug/L	1.00	82.0	6.17	<1.00
Tetrachloroethene	ug/L	1.00	75.2	5.19	<1.00
Toluene	ug/L	0.500	95.0	3.83	<0.500
1,2,3-trichlorobenze	ug/L	1.00	132.	1.93	<1.00
1,2,4-trichlorobenze	ug/L	1.00	125.	7.04	<1.00
1,1,1-trichloroethan	ug/L	1.00	97.6	3.22	<1.00
1,1,2-trichloroethan	ug/L	1.00	94.3	5.47	<1.00

Data Release Authorization

Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec. 4
Methods of analysis in accordance with FCL QA and EPA approved methodology.
This Report may not be reproduced in part, results relate only to items tested.

Jefferson S. Flowers, Ph.d.
President/Technical Director

Serving Your Analytical and Environmental Needs Since 1957



Received From:
Pasco Co. Utilities Env. Lab
8864 Government Dr.
New Port Richey, FL 34654

Date Reported : Jun17 1999
Project Number : Res Rec LMF
PO Number : 110456
FDHRSW Number : 83139
NYSDOH Number : 11595
FDER COMQAPNum : 86-0008G
LDHH Number : 94-23
NCDEHNR Number : 296
SCDHEC Number : 96019

For: Appendix I

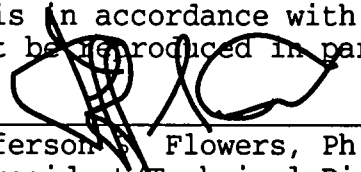
Date Sampled: Jun10 1999 Date Received: Jun11 1999 Lab Number : 7722

REPORT OF ANALYSIS

Parameter	Unit	Method	%ACC	%PRC	7722 EFF
	Detection				
	Limit				
Trichloroethene	ug/L	1.00	109.	5.94	<1.00
Trichlorofluorometha	ug/L	2.00	104.	5.39	<2.00
1,2,3-trichloropropa	ug/L	1.00	73.2	5.90	<1.00
1,2,4-trimethylbenze	ug/L	1.00	85.5	5.30	<1.00
1,3,5-trimethylbenze	ug/L	1.00	85.8	5.27	<1.00
Vinyl acetate	ug/L	1.00	80.9	.870	<1.00
Vinyl chloride	ug/L	0.500	78.0	4.08	<0.500
Xylene	ug/L	0.500	95.9	4.21	<0.500
Surrogate_Spike1	ug/L	1.00	90.8	1.74	26.7
Surrogate_Spike2	ug/L	1.00	98.9	1.17	27.7
Surrogate_Spike3	ug/L	1.00	96.6	.290	23.8

Data Release Authorization

Sample integrity certified prior to analysis. Deficiencies are in QA Report Sec.4
Methods of analysis in accordance with FCL QA and EPA approved methodology.
This Report may not be reproduced in part, results relate only to items tested.


Jefferson Flowers, Ph.d.
President/Technical Director

3609				FLOWERS CHEMICAL LABORATORIES											
				ANALYTICAL RESULTS FORM						HRS Number 83139					
Parameter	Symbol	Unit	eff							QA		Section		Analys	Date
			7722							Method	MDL	%RSD	%Rec		
Silver	*	mg/L	<0.00005U							EPA6020	0.00005	2.7489664	103	LSM	06-16-99
Arsenic	*	mg/L	0.00104							EPA6020	0.00005	4.8190658	103.2825	LSM	06-16-99
Barium	*	mg/L	0.00451							EPA6020	0.0004	1.4456686	105.97	LSM	06-16-99
Beryllium	*	mg/L	<0.0001U							EPA6020	0.0001	3.0190388	115.25	LSM	06-16-99
Cadmium	*	mg/L	0.000460							EPA6020	0.00005	2.0291978	89.043	LSM	06-16-99
Cobalt	*	mg/L	0.000193							EPA6020	0.0001	0.8468476	103.913	LSM	06-16-99
Chromium	*	mg/L	0.00131							EPA6020	0.0002	1.8762312	106.6625	LSM	06-16-99
Copper	*	mg/L	0.0162							EPA6020	0.0002	2.0297150	102.95	LSM	06-16-99
Nickel	*	mg/L	<0.0002U							EPA6020	0.0002	2.3316199	103	LSM	06-16-99
Lead	*	mg/L	0.00401							EPA6020	0.0001	4.5809474	101.6975	LSM	06-16-99
Antimony	*	mg/L	0.00661							EPA6020	0.0002	1.4389524	103.775	LSM	06-16-99
Selenium	*	mg/L	<0.0003U							EPA6020	0.0003	2.4928331	99	LSM	06-16-99
Thallium	*	mg/L	<0.0001U							EPA6020	0.0001	4.3985966	103	LSM	06-16-99
Vanadium	*	mg/L	0.00236							EPA6020	0.00006	1.0254411	107.44	LSM	06-16-99
Zinc	*	mg/L	0.0525							EPA6020	0.0007	8.1023415	104.875	LSM	06-16-99
Dilution Factor	*	#	1							EPA5030	1			CLS	06-15-99
Acetone	*	ug/L	<10U							EPA8260	10	9.22	79.5	CLS	06-15-99
Acrylonitrile	*	ug/L	<1U							EPA8260	1			CLS	06-15-99
Benzene	*	ug/L	<0.5U							EPA8260	0.5	2.26	92.3	CLS	06-15-99
Bromobenzene	*	ug/L	<1U							EPA8260	1	5.25	82.2	CLS	06-15-99
Bromochloromethane	*	ug/L	<1U							EPA8260	1	4.04	84.6	CLS	06-15-99
Bromodichloromethane	*	ug/L	<1U							EPA8260	1	4.18	86.2	CLS	06-15-99
Bromofom	*	ug/L	<1U							EPA8260	1	5.7	72	CLS	06-15-99
Bromomethane	*	ug/L	<5U							EPA8260	5	9.88	102	CLS	06-15-99
n-butylbenzene	*	ug/L	<1U							EPA8260	1	5.45	94	CLS	06-15-99
sec-butylbenzene	*	ug/L	<1U							EPA8260	1	5.54	88.1	CLS	06-15-99
tert-butylbenzene	*	ug/L	<1U							EPA8260	1	4.49	94.6	CLS	06-15-99
Carbon disulfide	*	ug/L	<5U							EPA8260	5	9.7	76.2	CLS	06-15-99
Carbon tetrachloride	*	ug/L	<1U							EPA8260	1	1.86	99	CLS	06-15-99
Chlorobenzene	*	ug/L	<0.5U							EPA8260	0.5	4.49	93.7	CLS	06-15-99
Chloroethane	*	ug/L	<1U							EPA8260	1	3.68	76	CLS	06-15-99
Chlorofom	*	ug/L	<1U							EPA8260	1	4.75	98.2	CLS	06-15-99
Chloromethane	*	ug/L	<5U							EPA8260	5	3.35	79.1	CLS	06-15-99
2-chlorotoluene	*	ug/L	<0.5U							EPA8260	0.5	4.83	86.3	CLS	06-15-99
4-chlorotoluene	*	ug/L	<0.5U							EPA8260	0.5	5.76	83.5	CLS	06-15-99
Dibromochloromethane	*	ug/L	<1U							EPA8260	1	5.52	90.9	CLS	06-15-99
1,2-dibromo-3-chloroprop.	*	ug/L	<1U							EPA8260	1	3.83	98.8	CLS	06-15-99
1,2-dibromoethane	*	ug/L	<1U							EPA8260	1	5.16	95.2	CLS	06-15-99
Dibromomethane	*	ug/L	<1U							EPA8260	1	4.67	97	CLS	06-15-99
o-dichlorobenzene	*	ug/L	<0.5U							EPA8260	0.5	5.61	88.3	CLS	06-15-99
m-dichlorobenzene	*	ug/L	<0.5U							EPA8260	0.5	4.75	86.4	CLS	06-15-99
Para-dichlorobenzene	*	ug/L	<0.5U							EPA8260	0.5	5.46	87.5	CLS	06-15-99
Dichlorodifluoromethane	*	ug/L	<2U							EPA8260	2	5	82.1	CLS	06-15-99
t-1,4-dichloro-2-butene	*	ug/L	<10U							EPA8260	10			CLS	06-15-99
1,1-dichloroethane	*	ug/L	<1U							EPA8260	1	15.4	68.6	CLS	06-15-99
1,2-dichloroethane	*	ug/L	<1U							EPA8260	1	3.64	94.2	CLS	06-15-99
1,1-dichloroethene	*	ug/L	<1U							EPA8260	1	6.54	74.7	CLS	06-15-99
cis-1,2-dichloroethene	*	ug/L	<1U							EPA8260	1	8.36	77.8	CLS	06-15-99
t-1,2-dichloroethene	*	ug/L	<2U							EPA8260	2	10.7	67.2	CLS	06-15-99
1,2-dichloroethene	*	ug/L	<1U							EPA8260	1	9.46	72.5	CLS	06-15-99

1,2-dichloropropane	*	ug/L	<1U									EPA8260	1	4.77	91.1	CLS	06-15-99
1,3-dichloropropane	*	ug/L	<1U									EPA8260	1	4.44	94.8	CLS	06-15-99
2,2-dichloropropane	*	ug/L	<3U									EPA8260	3	11.5	82.6	CLS	06-15-99
1,1-dichloropropene	*	ug/L	<0.5U									EPA8260	0.5	3.41	96.5	CLS	06-15-99
cis-1,3-dichloropropene	*	ug/L	<1U									EPA8260	1	4.3	92.9	CLS	06-15-99
trans-1,3-dichloropropene	*	ug/L	<1U									EPA8260	1	5.47	91.8	CLS	06-15-99
Ethylbenzene	*	ug/L	<0.5U									EPA8260	0.5	4.15	98.8	CLS	06-15-99
Hexachlorobutadiene	*	ug/L	<1U									EPA8260	1	4.27	105	CLS	06-15-99
2-Hexanone	*	ug/L	<10U									EPA8260	10	4.34	85.6	CLS	06-15-99
Hexachloroethane	*	ug/L	<1U									EPA8260	1			CLS	06-15-99
Isopropylbenzene	*	ug/L	<1U									EPA8260	1	4.47	83.9	CLS	06-15-99
4-Isopropyltoluene	*	ug/L	<1U									EPA8260	1	5.6	88.5	CLS	06-15-99
Methylene chloride	*	ug/L	<1U									EPA8260	1	5.27	81.8	CLS	06-15-99
Methyl-tert-butylether	*	ug/L	<1U									EPA8260	1			CLS	06-15-99
2-butanone	*	ug/L	<10U									EPA8260	10	11.2	72.5	CLS	06-15-99
Methyl iodide	*	ug/L	<1U									EPA8260	1	8.1	74.6	CLS	06-15-99
4-methyl-2-pentanone	*	ug/L	<10U									EPA8260	10			CLS	06-15-99
Naphthalene	*	ug/L	<1U									EPA8260	1	2.04	121	CLS	06-15-99
Propylbenzene	*	ug/L	<1U									EPA8260	1	5.23	86.6	CLS	06-15-99
Styrene	*	ug/L	<1U									EPA8260	1	4.93	78.9	CLS	06-15-99
1,1,1,2-tetrachloroethane	*	ug/L	<1U									EPA8260	1	5.03	94.8	CLS	06-15-99
1,1,2,2-tetrachloroethane	*	ug/L	<1U									EPA8260	1	6.17	82	CLS	06-15-99
Tetrachloroethene	*	ug/L	<1U									EPA8260	1	5.19	75.2	CLS	06-15-99
Toluene	*	ug/L	<0.5U									EPA8260	0.5	3.83	95	CLS	06-15-99
1,2,3-trichlorobenzene	*	ug/L	<1U									EPA8260	1	1.93	132	CLS	06-15-99
1,2,4-trichlorobenzene	*	ug/L	<1U									EPA8260	1	7.04	125	CLS	06-15-99
1,1,1-trichloroethane	*	ug/L	<1U									EPA8260	1	3.22	97.6	CLS	06-15-99
1,1,2-trichloroethane	*	ug/L	<1U									EPA8260	1	5.47	94.3	CLS	06-15-99
Trichloroethene	*	ug/L	<1U									EPA8260	1	5.94	109	CLS	06-15-99
Trichlorofluoromethane	*	ug/L	<2U									EPA8260	2	5.39	104	CLS	06-15-99
1,2,3-trichloropropane	*	ug/L	<1U									EPA8260	1	5.9	73.2	CLS	06-15-99
1,2,4-trimethylbenzene	*	ug/L	<1U									EPA8260	1	5.3	85.5	CLS	06-15-99
1,3,5-trimethylbenzene	*	ug/L	<1U									EPA8260	1	5.27	85.8	CLS	06-15-99
Vinyl acetate	*	ug/L	<1U									EPA8260	1	0.875	80.9	CLS	06-15-99
Vinyl chloride	*	ug/L	<0.5U									EPA8260	0.5	4.08	78	CLS	06-15-99
Xylene	*	ug/L	<0.5U									EPA8260	0.5	4.21	95.9	CLS	06-15-99
Surrogate Spike1	*	ug/L	26.7									EPA8260	1	1.74	90.8	CLS	06-15-99
Surrogate Spike2	*	ug/L	27.7									EPA8260	1	1.17	98.9	CLS	06-15-99
Surrogate Spike3	*	ug/L	23.78									EPA8260	1	0.293	96.6	CLS	06-15-99
-	*	-										-	-				

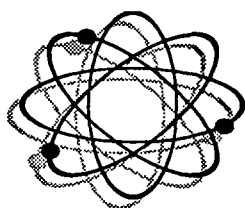
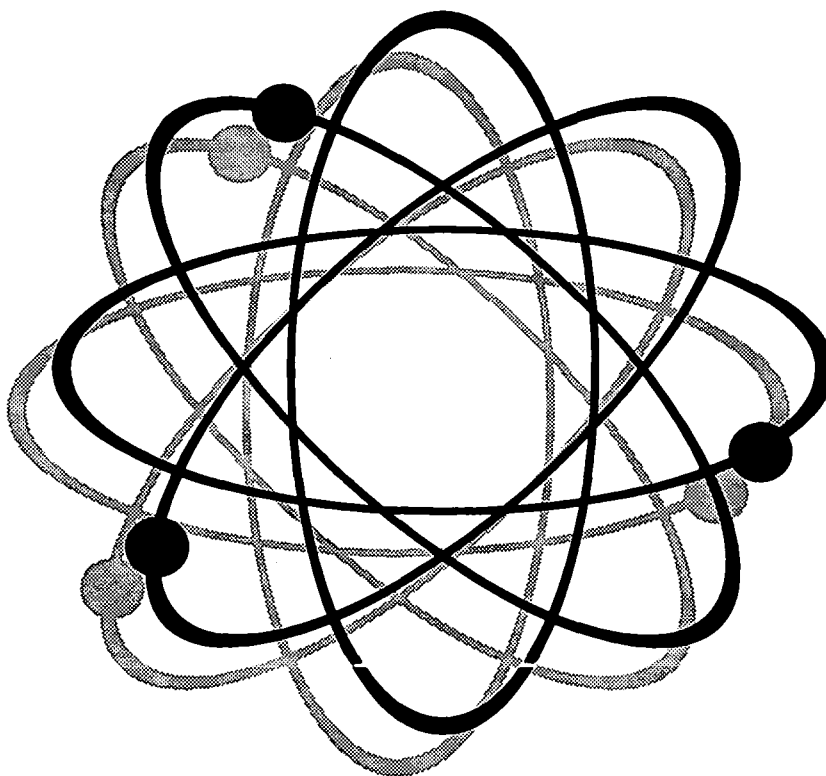
Date Received: 06-11-99 Typed: 06-17-99 Sent: 06-17-99

Project Number Res Rec LMF
PO Number 110456
Date Sampled 1 06-10-99 *
Date Analyzed 0
Compacted 1
Format NormRR
Unit Cost Exted
Appendix I 18500 1 *

Quality Assurance Report

Prepared for: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
Lab Numbers: 7722 - 7722

Report date: 17-Jun-99



**FLOWERS
CHEMICAL
LABORATORIES**

**QA
Conformance
Summary**

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Sample Handling

Sample handling and holding time criteria were met for all samples.

Samples Collected by Submitter

Surrogate Compound Recoveries:

The recovery limits were met for all sample as shown in section 1. This represents complete success.

Accuracy / Precision:

The recovery limits were exceeded for 2 compounds in the matrix spike as shown in section 2. This represents a 97.6% success rate.

The recovery limits were exceeded for 4 compounds in the matrix spike duplicate as shown in section 2. This represents a 95.1% success rate.

The RSD was exceeded for 1 compound as shown in section 2. This represents a 98.8% success rate.

Method Blanks:

No target compounds were found in the method blank in excess of the method limit as shown in section 3.

QCCS Check Sample:

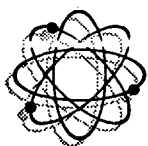
The control limits were exceeded for 2 compounds as shown in section 4. This represents a 97.6% success rate.

Standards Traceability:

The t-test limits were exceeded for 6 calibration standards as shown in section 5. This represents a 92.6% success rate.

The t-test limits were exceeded for 6 QCCS standards as shown in section 5. This represents a 92.6% success rate.

The t-test limits were exceeded for 8 matrix spike standards as shown in section 5. This represents a 90.1% success rate.



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 1

Surrogate Compound Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

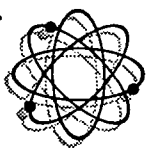
Surrogate_Spike1 for EPA8260

Surrogate Expected: 30

Unit of measure: ug/L

Acceptability Limits: 22.1 - 34.5

Laboratory Number	Site Description	Surrogate Recovered	Percent Recovered
7722	eff	26.7	89.0



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 1

Surrogate Compound Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

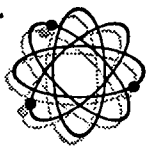
Surrogate_Spike2 for EPA8260

Surrogate Expected: 30

Unit of measure: ug/L

Acceptability Limits: 22.9 - 35.6

Laboratory Number	Site Description	Surrogate Recovered	Percent Recovered
7722	eff	27.7	92.3



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 1

Surrogate Compound Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Surrogate_Spike3 for EPA8260

Surrogate Expected: 30

Unit of measure: ug/L

Acceptability Limits: 21.5 - 33.7

Laboratory Number	Site Description	Surrogate Recovered	Percent Recovered
7722	eff	23.8	79.3



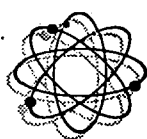
FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 2

Matrix Spike Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Analyte	Unit	Analysis Method	Date	Spike Added	Sample Conc.	MS Conc.	MS Rec.	MSD Conc.	MSD Rec.	Acceptable Limits	STD Rec.	Acceptable Limits
Silver	mg/L	EPA6020	06-16-99	0.222	0.0000	0.229	103%	0.236	106%	0.133 - 0.295	0.005	0 - 0.049
Arsenic	mg/L	EPA6020	06-16-99	0.222	0.001	0.231	103%	0.218	97.8%	0.168 - 0.285	0.009	0 - 0.035
Barium	mg/L	EPA6020	06-16-99	0.222	0.005	0.240	106%	0.236	104%	0.169 - 0.286	0.003	0 - 0.036
Beryllium	mg/L	EPA6020	06-16-99	0.222	<0.0001	0.256	115%	0.265	119%	0.148 - 0.316	0.006	0 - 0.043
Cadmium	mg/L	EPA6020	06-16-99	0.222	0.000	0.221	99.0%	0.216	96.8%	0.154 - 0.288	0.004	0 - 0.033
Cobalt	mg/L	EPA6020	06-16-99	0.222	0.000	0.231	104%	0.233	105%	0.150 - 0.290	0.002	0 - 0.041
Chromium	mg/L	EPA6020	06-16-99	0.222	0.001	0.238	107%	0.233	104%	0.160 - 0.284	0.004	0 - 0.032
Copper	mg/L	EPA6020	06-16-99	0.222	0.016	0.245	103%	0.239	100%	0.153 - 0.308	0.004	0 - 0.043
Nickel	mg/L	EPA6020	06-16-99	0.222	<0.0002	0.229	103%	0.235	106%	0.145 - 0.289	0.004	0 - 0.041
Lead	mg/L	EPA6020	06-16-99	0.222	0.004	0.230	102%	0.242	107%	0.157 - 0.299	0.009	0 - 0.034
Antimony	mg/L	EPA6020	06-16-99	0.222	0.007	0.237	104%	0.241	106%	0.167 - 0.301	0.003	0 - 0.039
Selenium	mg/L	EPA6020	06-16-99	0.222	<0.0003	0.220	99.0%	0.214	96.3%	0.157 - 0.284	0.004	0 - 0.037
Thallium	mg/L	EPA6020	06-16-99	0.222	<0.0001	0.229	103%	0.241	108%	0.160 - 0.293	0.008	0 - 0.041
Vanadium	mg/L	EPA6020	06-16-99	0.222	0.002	0.241	107%	0.238	106%	0.161 - 0.305	0.002	0 - 0.046
Zinc	mg/L	EPA6020	06-16-99	0.222	0.053	0.286	105%	0.261	93.6%	0.154 - 0.368	0.018	0 - 0.050
Acetone	ug/L	EPA8260	06-15-99	200	<10	169	84.5%	149	74.5%	78.2 - 322	14.1	0 - 66.3
Benzene	ug/L	EPA8260	06-15-99	20	<0.5	18.8	94.0%	18.2	91.0%	12.5 - 25.9	0.424	0 - 3.92
Bromobenzene	ug/L	EPA8260	06-15-99	20	<1	17.1	85.5%	15.8	79.0%	15.2 - 23.6	0.919	0 - 2.47
Bromochloromethane	ug/L	EPA8260	06-15-99	20	<1	19.5	97.5%	18.4	92.0%	14.7 - 24.2	0.778	0 - 2.84
Bromodichloromethane	ug/L	EPA8260	06-15-99	20	<1	17.8	89.0%	16.7	83.5%	16.2 - 23.7	0.778	0 - 2.20
Bromoform	ug/L	EPA8260	06-15-99	20	<1	15.0	75.0%	13.8	69.0%	13.7 - 25.4	0.849	0 - 3.38
Bromomethane	ug/L	EPA8260	06-15-99	20	<5	21.9	110%	19.0	95.0%	13.9 - 25.9	2.05	0 - 4.38
n-butylbenzene	ug/L	EPA8260	06-15-99	20	<1	19.5	97.5%	18.1	90.5%	14.1 - 23.6	0.990	0 - 2.66
sec-butylbenzene	ug/L	EPA8260	06-15-99	20	<1	18.3	91.5%	16.9	84.5%	15.2 - 23.4	0.990	0 - 2.50
tert-butylbenzene	ug/L	EPA8260	06-15-99	20	<1	19.5	97.5%	18.3	91.5%	15.2 - 23.8	0.849	0 - 2.46
Carbon disulfide	ug/L	EPA8260	06-15-99	20	<5	16.3	81.5%	14.2	71.0%	8.92 - 30.9	1.48	0 - 6.20
Carbon tetrachloride	ug/L	EPA8260	06-15-99	20	<1	20.1	101%	19.5	97.5%	12.0 - 27.9	0.424	0 - 4.37
Chlorobenzene	ug/L	EPA8260	06-15-99	20	<0.5	19.3	96.5%	18.2	91.0%	16.6 - 23.2	0.778	0 - 1.99
Chloroethane	ug/L	EPA8260	06-15-99	20	<1	15.6	78.0%	14.8	74.0%	12.4 - 26.3	0.566	0 - 5.23
Chloroform	ug/L	EPA8260	06-15-99	20	<1	20.3	102%	19.0	95.0%	14.1 - 25.9	0.919	0 - 3.58
Chloromethane	ug/L	EPA8260	06-15-99	20	<5	16.2	81.0%	15.4	77.0%	11.0 - 25.8	0.566	0 - 4.24
2-chlorotoluene	ug/L	EPA8260	06-15-99	20	<0.5	17.9	89.5%	16.7	83.5%	14.9 - 24.0	0.849	0 - 2.53
4-chlorotoluene	ug/L	EPA8260	06-15-99	20	<0.5	17.4	87.0%	16.0	80.0%	15.0 - 23.4	0.990	0 - 2.19
Dibromochloromethane	ug/L	EPA8260	06-15-99	20	<1	18.9	94.5%	17.5	87.5%	15.2 - 24.5	0.990	0 - 2.60
1,2-dibromo-3-chloropropane	ug/L	EPA8260	06-15-99	20	<1	20.3	102%	19.2	96.0%	11.9 - 26.5	0.778	0 - 4.45



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 2

Matrix Spike Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

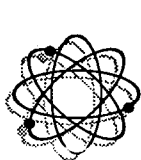
Analyte	Unit	Analysis Method	Date	Spike Added	Sample Conc.	MS Conc.	MS Rec.	MSD Conc.	MSD Rec.	Acceptable Limits	STD Rec.	Acceptable Limits
1,2-dibromoethane	ug/L	EPA8260	06-15-99	20	<1	19.7	98.5%	18.4	92.0%	15.5 - 24.3	0.919	0 - 3.09
Dibromomethane	ug/L	EPA8260	06-15-99	20	<1	20.0	100%	18.8	94.0%	16.1 - 23.9	0.849	0 - 2.33
o-dichlorobenzene	ug/L	EPA8260	06-15-99	20	<0.5	18.4	92.0%	17.0	85.0%	14.5 - 24.4	0.990	0 - 2.72
m-dichlorobenzene	ug/L	EPA8260	06-15-99	20	<0.5	17.9	89.5%	16.7	83.5%	14.7 - 24.0	0.849	0 - 2.65
Para-dichlorobenzene	ug/L	EPA8260	06-15-99	20	<0.5	18.2	91.0%	16.8	84.0%	14.5 - 24.0	0.990	0 - 2.72
Dichlorodifluoromethane	ug/L	EPA8260	06-15-99	20	<2	17.0	85.0%	15.8	79.0%	8.82 - 26.1	0.849	0 - 4.77
1,1-dichloroethane	ug/L	EPA8260	06-15-99	20	<1	15.2	76.0%	12.2	61.0%	13.9 - 26.1	2.12	0 - 3.36
1,2-dichloroethane	ug/L	EPA8260	06-15-99	20	<1	19.3	96.5%	18.4	92.0%	14.1 - 25.4	0.636	0 - 3.47
1,1-dichloroethene	ug/L	EPA8260	06-15-99	20	<1	15.6	78.0%	14.2	71.0%	13.4 - 25.1	0.990	0 - 3.40
cis-1,2-dichloroethene	ug/L	EPA8260	06-15-99	20	<1	16.5	82.5%	14.6	73.0%	14.6 - 24.6	1.34	0 - 2.83
t-1,2-dichloroethene	ug/L	EPA8260	06-15-99	20	<2	14.5	72.5%	12.4	62.0%	12.8 - 25.9	1.48	0 - 3.54
1,2-dichloroethene	ug/L	EPA8260	06-15-99	40	<1	30.9	77.3%	27.1	67.8%	27.8 - 50.4	2.69	0 - 6.10
1,2-dichloropropane	ug/L	EPA8260	06-15-99	20	<1	18.8	94.0%	17.6	88.0%	15.1 - 24.6	0.849	0 - 2.35
1,3-dichloropropane	ug/L	EPA8260	06-15-99	20	<1	19.6	98.0%	18.4	92.0%	15.6 - 24.4	0.849	0 - 2.57
2,2-dichloropropane	ug/L	EPA8260	06-15-99	20	<3	17.9	89.5%	15.2	76.0%	5.66 - 25.7	1.91	0 - 6.52
1,1-dichloropropene	ug/L	EPA8260	06-15-99	20	<0.5	19.8	99.0%	18.8	94.0%	13.9 - 23.9	0.707	0 - 2.79
cis-1,3-dichloropropene	ug/L	EPA8260	06-15-99	20	<1	19.1	95.5%	18.0	90.0%	15.1 - 23.8	0.778	0 - 2.55
trans-1,3-dichloropropene	ug/L	EPA8260	06-15-99	20	<1	19.1	95.5%	17.6	88.0%	13.9 - 25.0	1.06	0 - 3.28
Ethylbenzene	ug/L	EPA8260	06-15-99	20	<0.5	20.3	102%	19.2	96.0%	14.6 - 24.3	0.778	0 - 2.64
Hexachlorobutadiene	ug/L	EPA8260	06-15-99	20	<1	21.7	109%	20.4	102%	15.0 - 23.7	0.919	0 - 2.85
2-Hexanone	ug/L	EPA8260	06-15-99	20	<10	17.6	88.0%	16.6	83.0%	10.8 - 28.3	0.707	0 - 3.98
Isopropylbenzene	ug/L	EPA8260	06-15-99	20	<1	17.3	86.5%	16.3	81.5%	13.5 - 24.5	0.707	0 - 3.17
4-isopropyltoluene	ug/L	EPA8260	06-15-99	20	<1	18.4	92.0%	17.0	85.0%	15.5 - 22.9	0.990	0 - 2.30
Methylene chloride	ug/L	EPA8260	06-15-99	20	<1	17.0	85.0%	15.8	79.0%	13.1 - 27.3	0.849	0 - 4.42
Methyl-tert-butylether	ug/L	EPA8260	06-15-99	20	1.98	14.8	64.1%	12.3	51.6%	9.63 - 30.5	1.77	0 - 4.82
2-butanone	ug/L	EPA8260	06-15-99	20	<10	15.7	78.5%	13.4	67.0%	8.32 - 31.1	1.63	0 - 6.90
Methyl iodide	ug/L	EPA8260	06-15-99	20	<1	15.8	79.0%	14.1	70.5%	10.5 - 32.3	1.20	0 - 5.17
4-methyl-2-pentanone	ug/L	EPA8260	06-15-99	20	<10	22.3	112%	12.6	63.0%	7.56 - 28.0	6.86	0 - 4.35
Naphthalene	ug/L	EPA8260	06-15-99	20	<1	24.6	123%	23.9	120%	12.5 - 26.7	0.495	0 - 4.47
Propylbenzene	ug/L	EPA8260	06-15-99	20	<1	18.0	90.0%	16.7	83.5%	14.9 - 23.6	0.919	0 - 2.49
Styrene	ug/L	EPA8260	06-15-99	20	<1	16.3	81.5%	15.2	76.0%	15.2 - 26.4	0.778	0 - 2.52
1,1,1,2-tetrachloroethane	ug/L	EPA8260	06-15-99	20	<1	19.6	98.0%	18.3	91.5%	15.7 - 24.0	0.919	0 - 2.62
1,1,2,2-tetrachloroethane	ug/L	EPA8260	06-15-99	20	<1	17.1	85.5%	15.7	78.5%	11.9 - 25.8	0.990	0 - 4.17
Tetrachloroethene	ug/L	EPA8260	06-15-99	40	<1	31.2	78.0%	29.0	72.5%	22.4 - 55.6	1.56	0 - 10.2
Toluene	ug/L	EPA8260	06-15-99	20	<0.5	19.5	97.5%	18.5	92.5%	13.8 - 25.0	0.707	0 - 3.07

QA Section 2

Matrix Spike Recovery

Client: Pasco Co. Utilities Env. Lab
 Project Number: Res Rec LMF
 P.O. Number: 110456
 Date Sampled: 10-Jun-99
 Lab Numbers: 7722 - 7722

Analyte	Unit	Analysis Method	Date	Spike Added	Sample Conc.	MS Conc.	MS Rec.	MSD Conc.	MSD Rec.	Acceptable Limits	STD Rec.	Acceptable Limits
1,2,3-trichlorobenzene	ug/L	EPA8260	06-15-99	20	<1	26.8	134%	26.1	131%	13.3 - 25.8	0.495	0 - 3.88
1,2,4-trichlorobenzene	ug/L	EPA8260	06-15-99	20	<1	26.1	131%	23.7	119%	13.5 - 25.0	1.70	0 - 3.58
1,1,1-trichloroethane	ug/L	EPA8260	06-15-99	20	<1	20.0	100%	19.1	95.5%	13.8 - 25.7	0.636	0 - 3.09
1,1,2-trichloroethane	ug/L	EPA8260	06-15-99	20	<1	19.6	98.0%	18.1	90.5%	15.7 - 24.3	1.06	0 - 2.51
Trichloroethene	ug/L	EPA8260	06-15-99	20	<1	22.7	114%	20.9	105%	13.1 - 28.1	1.27	0 - 3.71
Trichlorofluoromethane	ug/L	EPA8260	06-15-99	20	<2	21.5	108%	19.9	99.5%	7.62 - 28.5	1.13	0 - 5.00
1,2,3-trichloropropane	ug/L	EPA8260	06-15-99	20	<1	15.2	76.0%	14.0	70.0%	12.5 - 27.2	0.849	0 - 3.96
1,2,4-trimethylbenzene	ug/L	EPA8260	06-15-99	20	<1	17.7	88.5%	16.5	82.5%	14.3 - 24.3	0.849	0 - 3.05
1,3,5-trimethylbenzene	ug/L	EPA8260	06-15-99	20	<1	17.8	89.0%	16.5	82.5%	15.1 - 23.5	0.919	0 - 2.62
Vinyl acetate	ug/L	EPA8260	06-15-99	20	<1	16.1	80.5%	16.3	81.5%	7.18 - 30.6	0.141	0 - 7.76
Vinyl chloride	ug/L	EPA8260	06-15-99	20	<0.5	16.0	80.0%	15.1	75.5%	11.8 - 27.4	0.636	0 - 5.39
Xylene	ug/L	EPA8260	06-15-99	60	<0.5	59.2	98.7%	55.8	93.0%	43.6 - 73.6	2.40	0 - 7.54

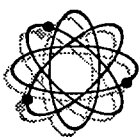


QA Section 3

Method Blank Report

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Analyte	Unit	Method	Date	Concentration
Silver	mg/L	EPA6020	06-16-99	<0.00005
Arsenic	mg/L	EPA6020	06-16-99	<0.00005
Barium	mg/L	EPA6020	06-16-99	<0.0004
Beryllium	mg/L	EPA6020	06-16-99	<0.0001
Cadmium	mg/L	EPA6020	06-16-99	<0.00005
Cobalt	mg/L	EPA6020	06-16-99	<0.0001
Chromium	mg/L	EPA6020	06-16-99	<0.0002
Copper	mg/L	EPA6020	06-16-99	<0.0002
Nickel	mg/L	EPA6020	06-16-99	<0.0002
Lead	mg/L	EPA6020	06-16-99	<0.0001
Antimony	mg/L	EPA6020	06-16-99	<0.0002
Selenium	mg/L	EPA6020	06-16-99	<0.0003
Thallium	mg/L	EPA6020	06-16-99	<0.0001
Vanadium	mg/L	EPA6020	06-16-99	<0.00006
Zinc	mg/L	EPA6020	06-16-99	<0.0007
Acetone	ug/L	EPA8260	06-15-99	<10
Acrylonitrile	ug/L	EPA8260	06-15-99	<1
Benzene	ug/L	EPA8260	06-15-99	<0.5
Bromobenzene	ug/L	EPA8260	06-15-99	<1
Bromochloromethane	ug/L	EPA8260	06-15-99	<1
Bromodichloromethane	ug/L	EPA8260	06-15-99	<1
Bromoform	ug/L	EPA8260	06-15-99	<1
Bromomethane	ug/L	EPA8260	06-15-99	<5
n-butylbenzene	ug/L	EPA8260	06-15-99	<1
sec-butylbenzene	ug/L	EPA8260	06-15-99	<1
tert-butylbenzene	ug/L	EPA8260	06-15-99	<1
Carbon disulfide	ug/L	EPA8260	06-15-99	<5
Carbon tetrachloride	ug/L	EPA8260	06-15-99	<1
Chlorobenzene	ug/L	EPA8260	06-15-99	<0.5

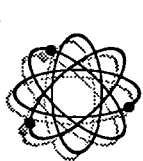


QA Section 3

Method Blank Report

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Analyte	Unit	Method	Date	Concentration
Chloroethane	ug/L	EPA8260	06-15-99	<1
Chloroform	ug/L	EPA8260	06-15-99	<1
Chloromethane	ug/L	EPA8260	06-15-99	<5
2-chlorotoluene	ug/L	EPA8260	06-15-99	<0.5
4-chlorotoluene	ug/L	EPA8260	06-15-99	<0.5
Dibromochloromethane	ug/L	EPA8260	06-15-99	<1
1,2-dibromo-3-chloropropane	ug/L	EPA8260	06-15-99	<1
1,2-dibromoethane	ug/L	EPA8260	06-15-99	<1
Dibromomethane	ug/L	EPA8260	06-15-99	<1
o-dichlorobenzene	ug/L	EPA8260	06-15-99	<0.5
m-dichlorobenzene	ug/L	EPA8260	06-15-99	<0.5
Para-dichlorobenzene	ug/L	EPA8260	06-15-99	<0.5
Dichlorodifluoromethane	ug/L	EPA8260	06-15-99	<2
t-1,4-dichloro-2-butene	ug/L	EPA8260	06-15-99	<10
1,1-dichloroethane	ug/L	EPA8260	06-15-99	<1
1,2-dichloroethane	ug/L	EPA8260	06-15-99	<1
1,1-dichloroethene	ug/L	EPA8260	06-15-99	<1
cis-1,2-dichloroethene	ug/L	EPA8260	06-15-99	<1
t-1,2-dichloroethene	ug/L	EPA8260	06-15-99	<2
1,2-dichloroethene	ug/L	EPA8260	06-15-99	<1
1,2-dichloropropane	ug/L	EPA8260	06-15-99	<1
1,3-dichloropropane	ug/L	EPA8260	06-15-99	<1
2,2-dichloropropane	ug/L	EPA8260	06-15-99	<3
1,1-dichloropropene	ug/L	EPA8260	06-15-99	<0.5
cis-1,3-dichloropropene	ug/L	EPA8260	06-15-99	<1
trans-1,3,-dichloropropene	ug/L	EPA8260	06-15-99	<1
Ethylbenzene	ug/L	EPA8260	06-15-99	<0.5
Hexachlorobutadiene	ug/L	EPA8260	06-15-99	<1
2-Hexanone	ug/L	EPA8260	06-15-99	<10

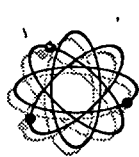


QA Section 3

Method Blank Report

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Analyte	Unit	Method	Date	Concentration
Hexachloroethane	ug/L	EPA8260	06-15-99	<1
Isopropylbenzene	ug/L	EPA8260	06-15-99	<1
4-isopropyltoluene	ug/L	EPA8260	06-15-99	<1
Methylene chloride	ug/L	EPA8260	06-15-99	<1
Methyl-tert-butylether	ug/L	EPA8260	06-15-99	<1
2-butanone	ug/L	EPA8260	06-15-99	<10
Methyl iodide	ug/L	EPA8260	06-15-99	<1
4-methyl-2-pentanone	ug/L	EPA8260	06-15-99	<10
Naphthalene	ug/L	EPA8260	06-15-99	<1
Propylbenzene	ug/L	EPA8260	06-15-99	<1
Styrene	ug/L	EPA8260	06-15-99	<1
1,1,1,2-tetrachloroethane	ug/L	EPA8260	06-15-99	<1
1,1,2,2-tetrachloroethane	ug/L	EPA8260	06-15-99	<1
Tetrachloroethene	ug/L	EPA8260	06-15-99	<1
Toluene	ug/L	EPA8260	06-15-99	<0.5
1,2,3-trichlorobenzene	ug/L	EPA8260	06-15-99	<1
1,2,4-trichlorobenzene	ug/L	EPA8260	06-15-99	<1
1,1,1-trichloroethane	ug/L	EPA8260	06-15-99	<1
1,1,2-trichloroethane	ug/L	EPA8260	06-15-99	<1
Trichloroethene	ug/L	EPA8260	06-15-99	<1
Trichlorofluoromethane	ug/L	EPA8260	06-15-99	<2
1,2,3-trichloropropane	ug/L	EPA8260	06-15-99	<1
1,2,4-trimethylbenzene	ug/L	EPA8260	06-15-99	<1
1,3,5-trimethylbenzene	ug/L	EPA8260	06-15-99	<1
Vinyl acetate	ug/L	EPA8260	06-15-99	<1
Vinyl chloride	ug/L	EPA8260	06-15-99	<0.5
Xylene	ug/L	EPA8260	06-15-99	<0.5



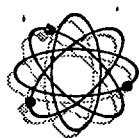
FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 4

QCCS Sample Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Analyte	Unit	Method	Date	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
Silver	mg/L	EPA6020	06-16-99	0.100	0.107	107%	0.081 - 0.120
Arsenic	mg/L	EPA6020	06-16-99	0.100	0.106	106%	0.086 - 0.114
Barium	mg/L	EPA6020	06-16-99	0.100	0.107	107%	0.086 - 0.115
Beryllium	mg/L	EPA6020	06-16-99	0.100	0.114	114%	0.067 - 0.131
Cadmium	mg/L	EPA6020	06-16-99	0.100	0.104	104%	0.088 - 0.113
Cobalt	mg/L	EPA6020	06-16-99	0.100	0.104	104%	0.086 - 0.116
Chromium	mg/L	EPA6020	06-16-99	0.100	0.106	106%	0.084 - 0.115
Copper	mg/L	EPA6020	06-16-99	0.100	0.104	104%	0.081 - 0.118
Nickel	mg/L	EPA6020	06-16-99	0.100	0.107	107%	0.082 - 0.115
Lead	mg/L	EPA6020	06-16-99	0.100	0.108	108%	0.085 - 0.119
Antimony	mg/L	EPA6020	06-16-99	0.100	0.105	105%	0.086 - 0.111
Selenium	mg/L	EPA6020	06-16-99	0.100	0.104	104%	0.084 - 0.116
Thallium	mg/L	EPA6020	06-16-99	0.100	0.108	108%	0.084 - 0.119
Vanadium	mg/L	EPA6020	06-16-99	0.100	0.106	106%	0.085 - 0.116
Zinc	mg/L	EPA6020	06-16-99	0.100	0.102	102%	0.080 - 0.118
Acetone	ug/L	EPA8260	06-15-99	100	79.6	79.6%	38.9 - 163
Benzene	ug/L	EPA8260	06-15-99	10.0	10.2	102%	6.77 - 13.1
Bromobenzene	ug/L	EPA8260	06-15-99	10.0	9.46	94.6%	7.51 - 12.1
Bromochloromethane	ug/L	EPA8260	06-15-99	10.0	10.2	102%	7.67 - 11.7
Bromodichloromethane	ug/L	EPA8260	06-15-99	10.0	9.29	92.9%	8.28 - 11.6
Bromoform	ug/L	EPA8260	06-15-99	10.0	7.73	77.3%	6.68 - 12.7
Bromomethane	ug/L	EPA8260	06-15-99	10.0	11.2	112%	5.99 - 14.2
n-butylbenzene	ug/L	EPA8260	06-15-99	10.0	11.2	112%	7.10 - 11.9
sec-butylbenzene	ug/L	EPA8260	06-15-99	10.0	10.4	104%	7.45 - 12.2
tert-butylbenzene	ug/L	EPA8260	06-15-99	10.0	11.0	110%	6.93 - 13.0
Carbon disulfide	ug/L	EPA8260	06-15-99	10.0	8.46	84.6%	5.01 - 16.0
Carbon tetrachloride	ug/L	EPA8260	06-15-99	10.0	9.92	99.2%	6.48 - 13.3
Chlorobenzene	ug/L	EPA8260	06-15-99	10.0	10.4	104%	8.58 - 11.6
Chloroethane	ug/L	EPA8260	06-15-99	10.0	8.46	84.6%	5.41 - 14.4
Chloroform	ug/L	EPA8260	06-15-99	10.0	12.1	121%	7.48 - 13.1
Chloromethane	ug/L	EPA8260	06-15-99	10.0	8.97	89.7%	3.89 - 14.0
2-chlorotoluene	ug/L	EPA8260	06-15-99	10.0	10.6	106%	7.02 - 12.6
4-chlorotoluene	ug/L	EPA8260	06-15-99	10.0	9.50	95.0%	7.18 - 12.4
Dibromochloromethane	ug/L	EPA8260	06-15-99	10.0	9.46	94.6%	7.94 - 11.6
1,2-dibromo-3-chloropropane	ug/L	EPA8260	06-15-99	10.0	10.5	105%	5.94 - 12.5



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 4

QCCS Sample Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Analyte	Unit	Method	Date	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
1,2-dibromoethane	ug/L	EPA8260	06-15-99	10.0	9.64	96.4%	8.21 - 11.4
Dibromomethane	ug/L	EPA8260	06-15-99	10.0	10.2	102%	8.34 - 11.9
o-dichlorobenzene	ug/L	EPA8260	06-15-99	10.0	10.2	102%	7.84 - 12.1
m-dichlorobenzene	ug/L	EPA8260	06-15-99	10.0	9.96	99.6%	7.99 - 11.9
Para-dichlorobenzene	ug/L	EPA8260	06-15-99	10.0	9.74	97.4%	7.85 - 12.1
Dichlorodifluoromethane	ug/L	EPA8260	06-15-99	10.0	8.81	88.1%	4.28 - 13.5
1,1-dichloroethane	ug/L	EPA8260	06-15-99	10.0	7.70	77.0%	7.16 - 13.0
1,2-dichloroethane	ug/L	EPA8260	06-15-99	10.0	9.79	97.9%	7.76 - 12.4
1,1-dichloroethene	ug/L	EPA8260	06-15-99	10.0	8.34	83.4%	6.37 - 12.9
cis-1,2-dichloroethene	ug/L	EPA8260	06-15-99	10.0	8.60	86.0%	7.82 - 11.9
trans-1,2-dichloroethene	ug/L	EPA8260	06-15-99	10.0	7.45	74.5%	6.61 - 12.9
1,2-dichloroethene	ug/L	EPA8260	06-15-99	20.0	16.1	80.5%	14.3 - 25.3
1,2-dichloropropane	ug/L	EPA8260	06-15-99	10.0	9.74	97.4%	7.59 - 12.2
1,3-dichloropropane	ug/L	EPA8260	06-15-99	10.0	10.4	104%	8.38 - 11.5
2,2-dichloropropane	ug/L	EPA8260	06-15-99	10.0	9.30	93.0%	2.84 - 13.3
1,1-dichloropropene	ug/L	EPA8260	06-15-99	10.0	10.1	101%	7.32 - 11.7
cis-1,3-dichloropropene	ug/L	EPA8260	06-15-99	10.0	9.69	96.9%	7.20 - 11.8
trans-1,3-dichloropropene	ug/L	EPA8260	06-15-99	10.0	9.03	90.3%	7.05 - 12.1
Ethylbenzene	ug/L	EPA8260	06-15-99	10.0	10.8	108%	7.49 - 12.5
Hexachlorobutadiene	ug/L	EPA8260	06-15-99	10.0	12.4	124%	7.25 - 12.5
2-Hexanone	ug/L	EPA8260	06-15-99	10.0	8.74	87.4%	6.01 - 13.7
Isopropylbenzene	ug/L	EPA8260	06-15-99	10.0	9.94	99.4%	6.75 - 13.7
4-isopropyltoluene	ug/L	EPA8260	06-15-99	10.0	10.3	103%	7.62 - 11.9
Methylene chloride	ug/L	EPA8260	06-15-99	10.0	10.4	104%	6.48 - 13.9
Methyl-tert-butylether	ug/L	EPA8260	06-15-99	10.0	7.38	73.8%	4.57 - 14.7
2-butanone	ug/L	EPA8260	06-15-99	10.0	7.72	77.2%	4.35 - 16.1
Methyl iodide	ug/L	EPA8260	06-15-99	10.0	8.55	85.5%	5.97 - 16.2
4-methyl-2-pentanone	ug/L	EPA8260	06-15-99	10.0	6.72	67.2%	4.31 - 13.1
Naphthalene	ug/L	EPA8260	06-15-99	10.0	13.3	133%	3.67 - 14.7
Propylbenzene	ug/L	EPA8260	06-15-99	10.0	10.3	103%	7.15 - 12.3
Styrene	ug/L	EPA8260	06-15-99	10.0	8.33	83.3%	7.82 - 13.0
1,1,1,2-tetrachloroethane	ug/L	EPA8260	06-15-99	10.0	10.0	100%	7.86 - 11.8
1,1,2,2-tetrachloroethane	ug/L	EPA8260	06-15-99	10.0	9.42	94.2%	6.18 - 12.8
Tetrachloroethene	ug/L	EPA8260	06-15-99	20.0	16.8	84.0%	11.3 - 27.9
Toluene	ug/L	EPA8260	06-15-99	10.0	10.6	106%	7.10 - 13.1



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 4

QCCS Sample Recovery

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Analyte	Unit	Method	Date	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
1,2,3-trichlorobenzene	ug/L	EPA8260	06-15-99	10.0	15.1	151%	5.43 - 13.4
1,2,4-trichlorobenzene	ug/L	EPA8260	06-15-99	10.0	13.9	139%	5.56 - 12.7
1,1,1-trichloroethane	ug/L	EPA8260	06-15-99	10.0	10.4	104%	7.70 - 12.3
1,1,2-trichloroethane	ug/L	EPA8260	06-15-99	10.0	10.2	102%	8.46 - 11.5
Trichloroethene	ug/L	EPA8260	06-15-99	10.0	12.4	124%	6.36 - 14.6
Trichlorofluoromethane	ug/L	EPA8260	06-15-99	10.0	11.5	115%	1.52 - 15.6
1,2,3-trichloropropane	ug/L	EPA8260	06-15-99	10.0	8.66	86.6%	6.52 - 13.5
1,2,4-trimethylbenzene	ug/L	EPA8260	06-15-99	10.0	10.1	101%	7.53 - 12.2
1,3,5-trimethylbenzene	ug/L	EPA8260	06-15-99	10.0	10.0	100%	7.31 - 12.3
Vinyl acetate	ug/L	EPA8260	06-15-99	10.0	7.68	76.8%	2.88 - 16.6
Vinyl chloride	ug/L	EPA8260	06-15-99	10.0	8.59	85.9%	5.39 - 14.0
Xylene	ug/L	EPA8260	06-15-99	30.0	31.6	105%	21.7 - 38.3



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Silver	Fisher	14-140AS	827	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99	2.66	±2.00	0.935	0.078	1.14	0.358
Matrix Spike	Fisher	14-140AS	827	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99						
Arsenic	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99	4.77	>1.67	0.973	0.063	1.03	0.050
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99	4.18	±1.98	0.978	0.089	1.21	0.375
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99	4.77	>1.67	0.973	0.063	1.03	0.050
Barium	Fisher	14-137AS	827	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	827	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
Beryllium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LMS	04-19-99	12-31-99	1195	LMS	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
Cadmium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
Cobalt	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99	8.01	>1.69	1.01	0.039	0.962	0.029
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
Chromium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
Copper	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
Nickel	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99						
Lead	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	OCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
Antimony	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS																



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
Selenium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
QCCS	Fisher	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-05-98	11-05-99						
Thallium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	08-31-99						
QCCS	QCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	08-31-99						
Vanadium	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99			1.01	0.149	0.995	0.020
QCCS	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99			1.01	0.149	0.995	0.020
Matrix Spike	Fisher	14-137AS	826	EVB	11-03-98	08-31-99	994	EVB	11-03-98	05-03-99			1.01	0.149	0.995	0.020
Zinc	QCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
QCCS	QCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Matrix Spike	QCD Analysts	9AFS30Z2192	909	LSM	04-19-99	12-31-99	1195	LSM	04-19-99	12-31-99						
Acetone	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.28	±1.97	0.978	0.089	1.21	0.369
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.28	±1.97	0.978	0.089	1.21	0.369
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.28	±1.97	0.978	0.089	1.21	0.369
Benzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	6.13	>1.68	0.976	0.052	1.02	0.039
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	6.13	>1.68	0.976	0.052	1.02	0.039
Bromobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	6.65	>1.68	1.02	0.049	1.07	0.024
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	6.65	>1.68	1.02	0.049	1.07	0.024
Bromochloromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.05	0.103	1.03	0.005
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.05	0.103	1.03	0.005
Bromodichloromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.947	0.054	0.981	0.005
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.947	0.054	0.981	0.005
Bromoform	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.70	>1.76	1.02	0.061	1.07	0.043
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.70	>1.76	1.02	0.061	1.07	0.043
Bromomethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.974	0.035	1.17	0.045



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.974	0.035	1.17	0.045
n-butylbenzene	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.53	>1.68	1.03	0.054	1.02	0.024
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.53	>1.68	1.03	0.054	1.02	0.024
sec-butylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99			0.994	0.047	1.00	
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99			0.994	0.047	1.00	
tert-butylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	3.47	>1.68	1.04	0.054	1.15	0.065
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	3.47	>1.68	1.04	0.054	1.15	0.065
Carbon disulfide	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	6.88	>1.68	1.00	0.056	1.02	0.031
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	6.88	>1.68	1.00	0.056	1.02	0.031
Carbon tetrachloride	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.57	>1.76	0.995	0.074	1.03	0.026
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.57	>1.76	0.995	0.074	1.03	0.026
Chlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.44	>1.75	1.00	0.052	1.01	0.027
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.44	>1.75	1.00	0.052	1.01	0.027
Chloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.76	>1.76	0.993	0.074	1.01	0.053
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.76	>1.76	0.993	0.074	1.01	0.053
Chloroform	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.79	>1.76	0.966	0.053	1.03	0.036
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.79	>1.76	0.966	0.053	1.03	0.036
Chloromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.23	>1.68	0.954	0.079	0.944	0.034
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.23	>1.68	0.954	0.079	0.944	0.034
2-chlorotoluene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.056	1.07	0.003
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.056	1.07	0.003
4-chlorotoluene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.92	>1.68	1.01	0.054	1.01	0.033



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.92	>1.68	1.01	0.054	1.01	0.033
Dibromochloromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.11	>1.76	0.973	0.063	1.01	0.029
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.11	>1.76	0.973	0.063	1.01	0.029
1,2-dibromo-3-chloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.989	0.103	0.975	0.025
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.989	0.103	0.975	0.025
1,2-dibromoethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.77	>1.69	1.03	0.062	0.964	0.036
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.77	>1.69	1.03	0.062	0.964	0.036
Dibromomethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.07	0.118	1.02	0.003
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.07	0.118	1.02	0.003
o-dichlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.33	>1.75	1.03	0.068	1.07	0.059
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.33	>1.75	1.03	0.068	1.07	0.059
m-dichlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.00	0.059	1.09	0.047
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.00	0.059	1.09	0.047
Dichlorodifluoromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.20	>1.68	1.01	0.082	1.01	0.039
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.20	>1.68	1.01	0.082	1.01	0.039
1,1-dichloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	1.85	>1.65	0.954	0.086	1.10	0.109
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.00	>1.65	0.954	0.086	1.04	0.029
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.00	>1.65	0.954	0.086	1.04	0.029
1,2-dichloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.18	>1.65	0.978	0.083	0.986	0.023
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.18	>1.65	0.978	0.083	0.986	0.023
1,1-dichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	1.77	>1.65	0.942	0.093	1.08	0.062
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.942	0.093	0.993	0.020
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.942	0.093	0.993	0.020
cis-1,2-dichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	10.8	>1.69	1.01	0.028	1.02	0.069



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	10.8	>1.69	1.01	0.028	1.02	0.069
t-1,2-dichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
1,2-dichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	1.88	>1.68	1.05	0.210	1.03	0.053
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	1.88	>1.68	1.05	0.210	1.03	0.053
1,2-dichloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.096	1.00	0.011
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.096	1.00	0.011
1,3-dichloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.40	>1.69	0.996	0.097	1.00	0.013
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.40	>1.69	0.996	0.097	1.00	0.013
2,2-dichloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	5.47	±2.01	1.04	0.168	0.752	0.174
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	-1.02	±2.02	1.04	0.168	0.964	0.085
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	-1.02	±2.02	1.04	0.168	0.964	0.085
1,1-dichloropropene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	8.47	>1.69	1.02	0.043	0.989	0.031
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	8.47	>1.69	1.02	0.043	0.989	0.031
cis-1,3-dichloropropene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.42	>1.77	0.977	0.063	1.02	0.029
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.42	>1.77	0.977	0.063	1.02	0.029
trans-1,3-dichloropropene	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
Ethylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	7.35	>1.68	0.975	0.047	1.01	0.028
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	7.35	>1.68	0.975	0.047	1.01	0.028
Hexachlorobutadiene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	8.93	±2.03	0.736	0.125	1.04	0.045
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	10.8	±1.98	0.736	0.125	1.01	0.105
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	10.8	±1.98	0.736	0.125	1.01	0.105
2-Hexanone	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.27	>1.68	1.03	0.095	1.03	0.087



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.27	>1.68	1.03	0.095	1.03	0.087
Isopropylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	6.64	>1.68	1.02	0.045	1.08	0.031
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	6.64	>1.68	1.02	0.045	1.08	0.031
4-isopropyltoluene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.01	0.040	1.01	0.003
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.01	0.040	1.01	0.003
Methylene chloride	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	5.36	±2.06	1.00	0.061	1.18	0.094
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	1.97	>1.77	1.00	0.061	1.13	0.056
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	1.97	>1.77	1.00	0.061	1.13	0.056
Methyl-tert-butylether	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.74	>1.71	0.951	0.066	0.999	0.044
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.74	>1.71	0.951	0.066	0.999	0.044
2-butanone	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.19	±1.99	1.01	0.167	1.15	0.230
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.19	±1.99	1.01	0.167	1.15	0.230
Methyl iodide	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99	5.87	±2.00	1.00	0.051	1.17	0.157
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.46	>1.68	1.00	0.051	1.09	0.051
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.46	>1.68	1.00	0.051	1.09	0.051
4-methyl-2-pentanone	EMS	A8060237	766	CLS	07-01-98	10-22-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.975	0.066	0.889	0.008
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.975	0.066	0.889	0.008
Naphthalene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99						
Propylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	5.70	>1.69	1.03	0.054	1.09	0.032
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99	5.70	>1.69	1.03	0.054	1.09	0.032
Styrene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99			0.982	0.026	1.14	0.030
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	01-30-99	895	CLS	07-13-98	07-13-99			0.982	0.026	1.14	0.030
1,1,1,2-tetrachloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	5.28	>1.76	0.962	0.049	1.02	0.036
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	7.65	±1.99	1.02	0.054	1.00	0.006



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	-7.65	±1.99	1.02	0.054	1.00	0.006
1,1,2,2-tetrachloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	2.93	>1.68	0.996	0.110	1.05	0.031
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	2.93	>1.68	0.996	0.110	1.05	0.031
Tetrachloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	2.73	±2.07	0.949	0.045	1.10	0.175
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.10	>1.76	0.949	0.045	0.986	0.104
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.10	>1.76	0.949	0.045	0.986	0.104
Toluene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.71	>1.68	0.986	0.067	1.01	0.032
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	5.71	>1.68	0.986	0.067	1.01	0.032
1,2,3-trichlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99	-12.2	±2.01	1.02	0.064	0.723	0.107
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	-7.83	±1.99	1.02	0.064	0.847	0.125
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	-7.83	±1.99	1.02	0.064	0.847	0.125
1,2,4-trichlorobenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.06	>1.70	0.748	0.113	0.784	0.057
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.06	>1.70	0.748	0.113	0.784	0.057
1,1,1-trichloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.92	>1.65	0.979	0.079	1.01	0.037
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	4.92	>1.65	0.979	0.079	1.01	0.037
1,1,2-trichloroethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.992	0.418	0.975	0.009
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			0.992	0.418	0.975	0.009
Trichloroethene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.63	±1.98	0.974	0.056	1.14	0.153
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99	3.63	±1.98	0.974	0.056	1.14	0.153
Trichlorofluoromethane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
1,2,3-trichloropropane	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.24	1.43	1.03	0.010
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.24	1.43	1.03	0.010
1,2,4-trimethylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.01	0.025	1.05	0.002



FLOWERS CHEMICAL LABORATORIES, INC.

QA Section 5

Standards Traceability

Client: Pasco Co. Utilities Env. Lab
Project Number: Res Rec LMF
P.O. Number: 110456
Date Sampled: 10-Jun-99
Lab Numbers: 7722 - 7722

Compound Name	Manufacturer Name	Manufacturer Lot #	Rec Lot #	Rec By	Date Recieved	Valid Until	Prep Lot #	Prep By	Date Prepared	Valid Until	t-test	t-test range	Contro Mean	Contro Std	Lot Mean	Lot Std
			Standard				Lot									
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.01	0.025	1.05	0.002
1,3,5-trimethylbenzene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.030	1.06	
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99			1.02	0.030	1.06	
Vinyl acetate	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	M-0600	769	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Vinyl chloride	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	M-0195	768	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
M&P-Xylene	Ultra	L-0405	765	CLS	07-01-98	04-30-99	894	CLS	07-13-98	07-13-99						
QCCS	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
Matrix Spike	Ultra	L-0029	767	CLS	07-01-98	12-30-99	895	CLS	07-13-98	07-13-99						
EPA6020 Blank	Flowers Chemical Laboratorie	Valid	34	JSF	01-01-95	12-31-99	14	JSF	01-01-95	01-01-97						
EPA8260 Blank	Flowers Chemical Laboratorie	Valid	34	JSF	01-01-95	12-31-99	14	JSF	01-01-95	01-01-97						
Surrogate Spike1	EMS	095-017	289	FG	10-05-95	12-30-99	268	FG	10-05-95	10-05-96			1.01	0.083		
Surrogate Spike2	EMS	095-017	289	FG	10-05-95	12-30-99	268	FG	10-05-95	10-05-96			1.00	0.034		
Surrogate Spike3	EMS	095-017	289	FG	10-05-95	12-30-99	268	FG	10-05-95	10-05-96			0.989	0.043		