

**Appendix A**  
**Groundwater Sampling Results**

**Petroleum Spill Sites**  
**Data Qualifiers and Table Notes:**

- \* The principal organic contaminant standard for groundwater of 5 µg/L applies to this substance.
  - ◆ A higher numerical value was found in the sample duplicate.
  - B The analyte was also detected in a blank.
  - F The analyte was detected above the MDL, but below the RL.
  - J The analyte was positively identified, the quantitation is an estimate.
  - M A matrix effect was present.
  - R The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.
  - U The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.
  - UJ The analyte was not detected above the RL, however the quantitation is an approximation.
-  Indicates exceedance of NYS Groundwater Standards.

Tank Farms 1 & 3  
Groundwater Sampling Results

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3-CE3														
		TF3CE313AA	TF3CE312BB	TF3CE313CA	TF3CE312DA	TF3CE312EA	TF3CE313FA	TF3CE313GB	TF3CE313HB	TF3CE312IB	TF3CE313JB	TF3CE313KB	TF3CE313LB	TF3CE313MA	TF3CE312NA	TF3CE313OA
Date of Collection	2/19/2002	6/19/2002	9/13/2002	12/12/2002	3/12/2003	6/20/2003	9/12/2003	12/12/2003	3/17/2004	6/17/2004	9/16/2004	1/3/2005	3/29/2005	3/28/2006	6/20/2006	
Sample Depth (ft)	13	12	13	12	12	13	13	13	12	13	13	13	13	12	13	
VOCs (ug/L)	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1-chlorohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1,1-trichloroethane	5	U	U	U	2.6	U	U	U	U	U	U	U	U	U	U	
1,1,1,2-tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1,2,2-tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dibromoethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,3-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,3-trichloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-dibromo-3-chloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,4-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2,4-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,3-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,3,5-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2-butanol	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2-hexanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2,2-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-methyl-2-pentanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
acetone	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
acrylonitrile	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
benzene	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
bromobenzene	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
bromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
bromochloromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
bromodichloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
bromofom	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
carbon disulfide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
carbon-tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloroethane	5	U	U	0.21 F	U	U	U	U	U	U	U	U	U	0.22 F	U	
chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloromethane	5	U	U	0.24 F	U	U	U	U	U	U	U	U	U	U	U	
cis-1,2-dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
cis-1,2-dichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
cis-1,2-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
dibromochloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
dichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
dibromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
ethylbenzene	5	0.21 F	U	0.37 F	U	U	U	U	U	0.28 F	U	0.22 F	U	U	U	
hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
isopropylbenzene	5	6.9	7.6	13	5.1 ♦	2.1	3.1	3.6	9.8	11	7.8	8.7	3.4	7.3	3.2	5.2
m,p-xylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
methyl cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
methyl iodide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
methyl ethyl ketone	5	U	U	U	U	1.6 UJ	U	U	U	U	U	U	U	U	U	
methyl tert butyl ether (MTBE)	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
methylene chloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
n-butylbenzene	5	1.1	1.1	U	U	U	U	U	U	2.7	0.85 F	8.6	0.37 F	1.4	0.46 F	1.1
n-propylbenzene	5	8.1	5.8	11	4.8 ♦	2	2.3	2.1	10	13	8.4	U	3.4	8.6	3.4	5.8
naphthalene	10	U	1.													

**Tank Farms 1 & 3**  
**Groundwater Sampling Results**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3-CE3									
		TF3CE313PA	TF3CE312RA	TF3CE312SA	TF3CE312TA						
Sample ID		9/26/2006	3/20/2007	3/20/2008	3/27/2009						
Date of Collection		13	12	12	12						
Sample Depth (ft)	( $\mu$ g/L)										
VOCs ( $\mu$ g/L)											
1-chlorohexane	--	U	U	U	U						
1,1-dichloroethane	5	U	0.18 F	U	U						
1,1-dichloropropene	5	U	U	U	U						
1,1,1-trichloroethane	5	U	U	U	U						
1,1,2-trichloroethylene	5	U	U	U	U						
1,1,1,2-tetrachloroethane	5	U	U	U	U						
1,1,2,2-tetrachloroethane	5	U	U	U	U						
1,2-dibromoethane	--	U	U	U	U						
1,2-dichlorobenzene	3	U	U	U	U						
1,2-dichloroethane	0.6	U	U	U	U						
1,2-dichloropropane	1	U	U	U	U						
1,2,3-trichlorobenzene	5	U	U	U	U						
1,2,3-trichloropropane	0.04	U	U	U	U						
1,2-dibromo-3-chloropropane	0.04	U	U	U	U						
1,2,4-trichlorobenzene	5	U	U	U	U						
1,2,4-trimethylbenzene	5	U	U	U	U						
1,3-dichlorobenzene	3	U	U	U	U						
1,3-dichloropropane	5	U	U	U	U						
1,3,5-trimethylbenzene	5	U	U	U	U						
1,4-dichlorobenzene	3	U	U	U	U						
2-butanone	--	U	U	U	U						
2-chlorotoluene	5	U	U	U	U						
2-hexanone	--	U	U	U	U						
2,2-dichloropropane	5	U	U	U	U						
4-chlorotoluene	5	U	U	U	U						
4-methyl-2-pentanone	--	U	U	U	U						
acetone	50	U	U	U	U						
acrylonitrile	--	U	U	U	U						
benzene	1	U	U	U	U						
bromobenzene	--	U	U	U	U						
bromomethane	5	U	U	U	U						
bromochloromethane	5	U	U	U	U						
bromodichloromethane	--	U	U	U	U						
bromofom	50	U	U	U	U						
carbon disulfide	--	U	U	U	U						
carbon-tetrachloride	5	U	U	U	U						
chlorobenzene	5	U	U	U	U						
chloroethane	5	U	U	U	U						
chloroform	7	U	U	U	U						
chloromethane	5	U	U	U	U						
cis-1,2-dichloroethane	5	U	U	U	U						
cis-1,2-dichloroethylene	5	U	0.11 F	U	U						
cis-1,2-dichloropropene	5	U	U	U	U						
cyclohexane	--	U	U	U	U						
dibromochloromethane	--	U	U	U	U						
dichlorofluoromethane	5	U	U	U	U						
dibromomethane	5	U	U	U	U						
ethylbenzene	5	U	U	U	U						
hexachlorobutadiene	0.5	U	U	U	U						
isopropylbenzene	5	6.4	3.67 J	3.74	1.52						
m,p-xylene	5	U	U	U	U						
methyl cyclohexane	--	U	U	U	U						
methyl iodide	--	U	U	U	U						
methyl ethyl ketone	5	U	U	U	U						
methyl tert butyl ether (MTBE)	5	U	U	U	U						
methylene chloride	5	U	0.37 F	U	U						
n-butylbenzene	5	1.31	0.45 F	1.17	0.370 F						
n-propylbenzene	5	6.68	3.16 J	5.38	1.90						
naphthalene	10	2.33	1.16	U	U						
o-xylene	5	U	U	U	U						
p-isopropyltoluene	5	U	U	U	U						
sec-butylbenzene	5	4.06	2.45 J	2.7	1.51						
t-butylbenzene	5	0.85	0.54 F	0.63 F	0.310 F						
styrene	50	U	U	U	U						
t-butylbenzene	5	U	U	U	U						
tetrachloroethene	5	U	U	U	U						
toluene	5	U	U	U	U						
trans-1,2-dichloroethene	5	U	U	U	U						
trans-1,3-dichloropropene	--	U	U	U	U						
trichloroethylene	5	1.13	U	1.15	0.800 F						
trichlorofluoromethane	5	U	U	U	U						
vinyl acetate	--	U	U	U	U						
vinyl chloride	2	U	U	U	U						
Total VOCs	--	22.76	12.09	9.39	5.62						
<b>Field Parameters</b>											
dissolved iron (mg/L)	--	3.6	2.4	2.5	1.4						
pH	--	7.29	7.59	6.84	6.87						
specific conductance ( $\mu$ S/cm)	--	78.7	74.6	78	804						
temperature (degrees C)	--	12.8	9.5	9.8	11.74						
dissolved oxygen (mg/L)	--	4.77	10.54	5.92	2.33						
oxidation reduction potential (mV)	--	-26	-69	-97	-80						

## Tank Farms 1 & 3 Groundwater Sampling Results

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup> (µg/L)	Groundwater Sampling Results													
		TF3MW-21													
Sample ID	TF3M2114AA	TF3M2114BB	TF3M2115CA	TF3M2113DA	TF3M2114EA	TF3M2114FA	TF3M2114GB	TF3M2114HB	TF3M2114IB	TF3M2114JB	TF3M2114KB	TF3M2114LB	TF3M2114MA	TF3M2114NA	TF3M2114OA
Date of Collection	2/27/2002	6/19/2002	9/13/2002	12/12/2002	3/12/2003	6/23/2003	9/11/2003	12/12/2003	3/18/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006
Sample Depth (ft)	14	14	15	13	14	14	14	14	14	14	14	14	14	14	14
VOCs (ug/L)															
1-chlorohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloroethane	5	0.33 F	0.25 F	U	0.23 F	0.24 F	U	U	U	U	U	U	U	U	U
1,1-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-trichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-trichloroethylene	5	U	U	U	2.6	U	U	U	U	U	U	U	U	U	U
1,1,1,2-tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromoethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichloropropene	0.04	U	1.1	U	U	0.16 UJ	U	U	U	U	U	U	U	U	U
1,2-dibromo-3-chloropropane	0.04	U	U	2.1 J ♦	U	0.25 UJ	U	U	U	U	U	U	U	U	U
1,2,4-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	3.3	2.4 ♦	11	0.41 F	2.2 J ♦	0.9 F	9.6	1.8	U	1.9 F	U	U	U	0.56 F
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-butanol	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-hexanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2,2-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-methyl-2-pentanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acetone	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acrylonitrile	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
benzene	1	0.75	0.55	0.56 ♦	U	0.15 UJ	U	U	U	U	U	U	U	U	U
bromobenzene	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromomethane	5	U	U	U	U	0.19 UJ	U	U	U	U	U	U	U	U	U
bromochloromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromodichloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromofom	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon disulfide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon-tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5	U	U	0.82 J ♦	0.55	0.16 UJ	0.44 F	U	U	U	U	U	U	U	1.3 J
chloroform	7	U	U	U	U	U	0.14 UJ	U	U	U	U	U	U	U	U
chloromethane	5	U	U	0.85 ♦	0.33 F	0.26 J ♦	0.28 F	U	U	U	U	U	U	U	1 J
cis-1,2-dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromochloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5	U	0.28 F	U	U	0.18 UJ	0.71 F	3.5	U	U	U	U	U	U	U
hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	1.4 F	U	U	U
isopropylbenzene	5	34	28	50	36	25 J ♦	32 J	71	63	23	30	41	29	24	48 ♦
m,p-xylene	5	4.4	4.5	8.2	1.2	1.9 J ♦	2.3 J	18	5.2	2 F	3.7 F	2.4 F	2.8 F	3.2 F	4.2
methyl cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl iodide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl ethyl ketone	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl ethyl tert-ethyl (MTBE)	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methylene chloride	5	U	U	U	U	U	U	U	U	2.6 F	U	U	U	U	U
n-butylbenzene	5	5.1	4.4	6.9 J ♦	4.3	0.22 UJ	U	8.1	U	3.8 F	3 F	2.5 F	1.8 F	2.2 F	2
n-propylbenzene	5	7.8	6.7	10	6.9	5.2 J ♦	5.2 J	12	11	4.2	6.7	8.8	6.7	5.4	8.4
naphthalene	10	U	U	1.6 J ♦	0.78 J	0.21 UJ	0.7 F	2.2	2	U	1.1 F	1.2 F	1.2 F	1.6 F	2
o-xylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5	8.9	7	10 ♦	4	4.4 J ♦	3.5 J	7.6	6.3	2.4 F	4.4 F	4.1 F	4 F	3.8 F	3.8 F
sec-butylbenzene	5	6.4	6.4	9.8	4.8	4.7 J ♦	U	7.2	6.4	2.9 F	5.4	5.3	3.8 F	3.3 F	4.6
t-butylbenzene	5	1.8	1.6	2.3	1.2	1.3 J ♦	1.2 J	2	U	U	0.69 F	1.5 F	U	U	1.4 J
styrene	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
tetrachloroethylene	5	U	U	U	U	0.18 UJ	U	U	U	U	U	U	U	U	U
toluene	5	0.31 F	U	0.48 F	U	0.16 UJ	U	U	U	U	U	2 F	U	U	U
trans-1,2-dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-dichloropropene	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trichloroethylene	5	U	U	U	U	0.17 UJ	U	U	U	U	U	U	U	U	U
trichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
vinyl acetate	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	74.39	65.08	108.11	60.7	40.5	42.03	143.8	95.7	40.9	58.29	68.8	49.3	43.5	74.76
<b>Field Parameters</b>															
dissolved iron (mg/L)	--	3.8	N/A	3.2	2	1.9	1.9	1.6	2.4	1.6	2.4	3.2	3.6	3.6	3.8
pH	--	7.26	8.19	6.92	7.09	9.95	7.36	7.43	8.99	7.41	6.92	6.98	6.73	7.83	7.58
specific conductance (µS/cm)	--	591	665	940	524	443	749	898	979	62	60	68	92.8	114	89.2
temperature (degrees C)	--	10.5	10.5	12.8	12.3	10.1	10.4	12.05	12.79	10.11	10.6	13.2</			

**Tank Farms 1 & 3**  
**Groundwater Sampling Results**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup> ( $\mu\text{g/L}$ )	TF3MW-21									
		TF3M2114PA	TF3M2114RA	TF3M2114RA	TF3M2114TA						
		9/26/2006	3/21/2007	3/21/2008	3/27/2009						
VOCs ( $\mu\text{g/L}$ )		14	14	14	14						
1-chlorohexane	--	U	U	U	U						
1,1-dichloroethane	5	U	U	U	U						
1,1-dichloropropene	5	U	U	U	U						
1,1,1-trichloroethane	5	U	U	U	U						
1,1,2-trichloroethylene	5	U	U	U	U						
1,1,1,2-tetrachloroethane	5	U	U	U	U						
1,1,2,2-tetrachloroethane	5	U	U	U	U						
1,2-dibromoethane	--	U	U	U	U						
1,2-dichlorobenzene	3	U	U	U	U						
1,2-dichloroethane	0.6	U	U	U	U						
1,2-dichloropropane	1	U	U	U	U						
1,2,3-trichlorobenzene	5	U	U	U	U						
1,2,3-trichloropropane	0.04	U	U	U	U						
1,2-dibromo-3-chloropropane	0.04	U	U	U	U						
1,2,4-trichlorobenzene	5	U	U	U	U						
1,2,4-trimethylbenzene	5	1.04 ♦	U	U	U						
1,3-dichlorobenzene	3	U	U	U	U						
1,3-dichloropropane	5	U	U	U	U						
1,3,5-trimethylbenzene	5	U	U	U	U						
1,4-dichlorobenzene	3	U	U	U	U						
2-butanone	--	U	U	U	U						
2-chlorotoluene	5	U	U	U	U						
2-hexanone	--	U	U	U	U						
2,2-dichloropropane	5	U	U	U	U						
4-chlorotoluene	5	U	U	U	U						
4-methyl-2-pentanone	--	U	U	U	U						
acetone	50	U	U	U	U						
acrylonitrile	--	U	U	U	U						
benzene	1	0.23	U	U	U						
bromobenzene	--	U	U	U	U						
bromomethane	5	U	U	U	U						
bromochloromethane	5	U	U	U	U						
bromodichloromethane	--	U	U	U	U						
bromofom	50	U	U	U	U						
carbon disulfide	--	U	U	U	U						
carbon-tetrachloride	5	U	U	U	U						
chlorobenzene	5	U	U	U	U						
chloroethane	5	U	U	U	U						
chloroform	7	U	U	U	U						
chloromethane	5	U	U	U	U	UQ					
cis-1,2-dichloroethane	5	U	U	U	U						
cis-1,2-dichloroethylene	5	U	U	U	U						
cis-1,2-dichloropropene	5	U	U	U	U						
cyclohexane	--	U	U	U	U						
dibromochloromethane	--	U	U	U	U						
dichlorofluoromethane	5	U	U	U	U						
dibromomethane	5	U	U	U	U						
ethylbenzene	5	U	U	U	U						
hexachlorobutadiene	0.5	U	U	U	U						
isopropylbenzene	5	64	24.9	13.2	23.1						
m,p-xylene	5	1.18	U	U	U						
methyl cyclohexane	--	U	U	U	U						
methyl iodide	--	U	U	U	U						
methyl ethyl ketone	5	U	U	U	U						
methyl tert butyl ether (MTBE)	5	U	U	U	U						
methylene chloride	5	U	0.5 F	U	U						
n-butylbenzene	5	3.2 ♦	0.96 F	U	0.710 F						
n-propylbenzene	5	10.8	4.18 F	2.52	3.14						
naphthalene	10	3.26 ♦	1.58 F	U	U						
o-xylene	5	U	U	U	U						
p-isopropyltoluene	5	4.1 ♦	1.1 F	1.04 F	0.600 F						
sec-butylbenzene	5	5.1	2.26 F	1.24	1.56						
t-butylbenzene	5	1.84 ♦	0.8 F	0.680 F	0.450 F						
styrene	50	U	U	U	U						
t-butylbenzene	5	U	U	U	U						
tetrachloroethylene	5	U	U	U	U						
toluene	5	0.24	U	U	U						
trans-1,2-dichloroethene	5	U	U	U	U						
trans-1,3-dichloropropene	--	U	U	U	U						
trichloroethylene	5	U	U	U	U						
trichlorofluoromethane	5	U	U	U	U						
vinyl acetate	--	U	U	U	U						
vinyl chloride	2	U	U	U	U						
Total VOCs	--	94.99	36.28	18.68	29.56						
Field Parameters											
dissolved iron (mg/L)	--	2.8	1.9	3.4	2.4						
pH	--	7.27	7.82	7.36	7.04						
specific conductance ( $\mu\text{S}/\text{cm}$ )	--	0.12	69.5	84.2	905						
temperature (degrees C)	--	14.1	10.6	10.83	12.73						
dissolved oxygen (mg/L)	--	3.34	1.45	0.53	3.37						
oxidation reduction potential (mV)	--	-116	-119	-124	-98						

## Tank Farms 1 & 3 Groundwater Sampling Results

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup> (µg/L)	TF3MW-116														
		TF3M11613AA	TF3M11613AA	TF3M11613BB	TF3M11614CA	TF3M11613DA	TF3M11613EA	TF3M11613FA	TF3M11614GB	TF3M11613HB	TF3M11613IB	TF3M11613JB	TF3M11613KB	TF3M11613LB	TF3M11613MA	TF3M11613NA
		12/13/2001	2/27/2002	6/18/2002	9/13/2002	12/19/2002	3/12/2003	6/23/2003	9/12/2003	12/12/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006
Sample ID		13	13	13	14	13	13	13	13	13	13	13	16	13	13	13
Sample Depth (ft)																
VOCs (ug/L)																
1-chlorohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-trichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-trichloroethylene	5	U	U	U	U	2.6	U	U	U	U	U	U	U	U	U	U
1,1,1,2-tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromoethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloropropane	1	U	0.82	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-dibromo-3-chloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	0.26 F	UM	U	U
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-butanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-hexanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2,2-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-methyl-2-pentanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acetone	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acrylonitrile	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
benzene	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromobenzene	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromochloromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromodichloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromofom	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon disulfide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon-tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	0.36 F	U
chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloroethylene	5	U	0.26 F	U	U	U	U	U	U	U	0.24 F	U	U	U	U	U
cis-1,2-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromochloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	0.24 F	U	0.21 F	U
hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5	15	7.9 ♦	12	6.3	14	4.9	9	2.8 ♦	5.8 ♦	9.4 ♦	14	22	18	9.4 M	9.9
m,p-xylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl iodide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl ethyl ketone	5	U	U	U	U	U	U	1.6 UJ	U	U	U	U	U	U	U	U
methyl ethyl tert ethyl (MTBE)	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methylene chloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5	3.8	3.6	4.4	7.8	3.8	U	3.1 J	2 ♦	1.5 ♦	1.8 ♦	1.5	3.6 M	3.8	3.3 J	4.2
n-propylbenzene	5	8.3	10 ♦	11	9.5	6.8	4.6	9.4	2.7 ♦	3.7 ♦	6 ♦	6.8	16	18	9.3 M	4.4
napthalene	10	U	U	U	U	U	U	U	U	U	U	U	U	U	0.21 F	U
o-xylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5	U	U	U	0.65	0.38 F	0.22 F	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5	10	8.1 ♦	7.3	10	4.1	7.9	3.1 ♦	3.5 ♦	4.9 ♦	6.5	13 M	14	8 M	8.7	
t-butylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
styrene	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5	2.1	1.5 ♦	2.2	2.1	2.1	1.2	1.7 J	0.86 ♦	1.2 ♦	1.8 ♦	1.9	2.8 M	2.3	1.8 J	1.6
tetrachloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
toluene	5	U	U	U	U	0.22 F	U	U	U	U	U	U	U	U	U	U
trans-1,2-dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-dichloropropene	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
vinyl acetate	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	39.2	32.18	36.9	36.57	37.08	15.02	31.1	11.46	15.94	23.9	31.2	57.6	56.31	32.37	33.2
<b>Field Parameters</b>																

**Tank Farms 1 & 3**  
**Groundwater Sampling Results**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-116					
		TF3M11614OA 6/20/2006	TF3M11614PA 9/26/2006	TF3M11613RA 3/20/2007	TF3M11613SA 3/21/2008	TF3M11613TA 3/27/2009	
Sample Depth (ft)	( $\mu$ g/L)	14	14	13	13	13	
VOCs (ug/L)							
1-chlorohexane	--	U	U	U	U	U	
1,1-dichloroethane	5	U	U	U	U	U	
1,1-dichloropropene	5	U	U	U	U	U	
1,1,1-trichloroethane	5	U	U	U	U	U	
1,1,2-trichloroethylene	5	U	U	U	U	U	
1,1,1,2-tetrachloroethane	5	U	U	U	U	U	
1,1,2,2-tetrachloroethane	5	U	U	U	U	U	
1,2-dibromoethane	--	U	U	U	U	U	
1,2-dichlorobenzene	3	U	U	U	U	U	
1,2-dichloroethane	0.6	U	U	U	U	U	
1,2-dichloropropane	1	U	U	U	U	U	
1,2,3-trichlorobenzene	5	U	U	U	U	U	
1,2,3-trichloropropane	0.04	U	U	U	U	U	
1,2-dibromo-3-chloropropane	0.04	U	U	U	U	U	
1,2,4-trichlorobenzene	5	U	U	U	U	U	
1,2,4-trimethylbenzene	5	U	U	U	U	U	
1,3-dichlorobenzene	3	U	U	U	U	U	
1,3-dichloropropane	5	U	U	U	U	U	
1,3,5-trimethylbenzene	5	U	U	U	U	U	
1,4-dichlorobenzene	3	U	U	U	U	U	
2-butanone	--	U	U	U	U	U	
2-chlorotoluene	5	U	U	U	U	U	
2-hexanone	--	U	U	U	U	U	
2,2-dichloropropane	5	U	U	U	U	U	
4-chlorotoluene	5	U	U	U	U	U	
4-methyl-2-pentanone	--	U	U	U	U	U	
acetone	50	U	U	U	U	U	
acrylonitrile	--	U	U	U	U	U	
benzene	1	U	U	U	U	U	
bromobenzene	--	U	U	U	U	U	
bromomethane	5	U	U	U	U	U	
bromochloromethane	5	U	U	U	U	U	
bromodichloromethane	--	U	U	U	U	U	
bromofom	50	U	U	U	U	U	
carbon disulfide	--	U	U	U	U	U	
carbon-tetrachloride	5	U	U	U	U	U	
chlorobenzene	5	U	U	U	U	U	
chloroethane	5	0.54 F	U	U	U	U	
chloroform	7	U	U	U	U	U	
chloromethane	5	U	U	U	U	U	
cis-1,2-dichloroethane	5	U	U	U	U	U	
cis-1,2-dichloroethylene	5	U	U	U	U	U	
cis-1,2-dichloropropene	5	U	U	U	U	U	
cyclohexane	--	U	U	U	U	U	
dibromochloromethane	--	U	U	U	U	U	
dichlorofluoromethane	5	U	U	U	U	U	
dibromomethane	5	U	U	U	U	U	
ethylbenzene	5	U	U	U	U	U	
hexachlorobutadiene	0.5	U	U	U	U	U	
isopropylbenzene	5	5.8	7.44	5.55 J	10.7	1.94	
m,p-xylene	5	U	U	U	U	U	
methyl cyclohexane	--	U	U	U	U	U	
methyl iodide	--	U	U	U	U	U	
methyl ethyl ketone	5	U	U	U	U	U	
methyl ethyl tyl ether (MTBE)	5	U	U	U	U	U	
methylene chloride	5	U	U	0.37 F	U	U	
n-butylbenzene	5	2	1.8	1.26 J	1.59	0.640 F	
n-propylbenzene	5	4.4	4.18	3.36 J	8.17	1.27	
naphthalene	10	U	U	0.7 F	U	U	
o-xylene	5	U	U	U	U	U	
p-isopropyltoluene	5	U	U	U	U	U	
sec-butylbenzene	5	4.5	4.03	4.44 J	7.79	2.75	
t-butylbenzene	5	U	U	U	U	U	
styrene	50	U	U	U	U	U	
t-butylbenzene	5	1.5	1.54	1.27	2.03	0.490 F	
tetrachloroethylene	5	U	U	U	U	U	
toluene	5	U	U	U	U	U	
trans-1,2-dichloroethene	5	U	U	U	U	U	
trans-1,3-dichloropropene	--	U	U	U	U	U	
trichloroethylene	5	U	U	U	U	U	
trichlorofluoromethane	5	U	U	U	U	U	
vinyl acetate	--	U	U	U	U	U	
vinyl chloride	2	U	U	U	U	U	
Total VOCs	--	18.79	18.99	16.95	30.28	7.09	
<b>Field Parameters</b>							
dissolved iron (mg/L)	--	4.5	3.2	4	2.6	1.8	
pH	--	7.02	7.3	47.57	7.27	6.87	
specific conductance ( $\mu$ S/cm)	--	0.169	140	88.3	94.9	1300	
temperature (degrees C)	--	11	14.1	10.2	10.18	12.23	
dissolved oxygen (mg/L)	--	6.82	0.7	0	9.73	2.33	
oxidation reduction potential (mV)	--	-92	-122	-109	-123	-97	

**Tank Farms 1 & 3**  
**Groundwater Sampling Results**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-123													
		TF3M12313AA	TF3M12313AA	TF3M12313BB	TF3M12313CA	TF3M12313DA	TF3M12313EA	TF3M12313FA	TF3M12313GB	TF3M12313HB	TF3M12313IB	TF3MW12313JB	TF3M12313KB	TF3M12313LB	TF3M12313MA
Date of Collection	12/13/2001	2/26/2002	6/19/2002	9/13/2002	12/12/2002	3/12/2003	6/23/2003	9/12/2003	12/12/2003	3/18/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006
Sample Depth (ft) (µg/L)	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
VOCs (µg/L)															
1-chlorohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-trichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-trichloroethylene	5	U	U	U	U	2.6	U	U	U	U	U	U	U	U	U
1,1,1,2-tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromoethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichlorobenzene	5	U	U	U	0.9 M	U	U	U	U	U	U	U	U	U	U
1,2,3-trichloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromo-3-chloropropane	0.04	5.6	U	1.4 ♦	U	5 UJ	0.5 UJ	U	U	U	U	U	U	U	U
1,2,4-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	350 ♦	88 ♦	46 ♦	78 M♦	28	31 ♦	60	72	37	54	45	66	28	19
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5	26 ♦	10	6.1 ♦	12	4	4.1	8.9	9.9	4.9	7.1	7	10	4.4	2.7 F
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-butanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-hexanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2,2-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-methyl-2-pentanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acetone	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acrylonitrile	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
benzene	1	0.38 F	0.32 F	U	U	0.25 F	U	U	U	U	U	U	U	U	U
bromobenzene	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromochloromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromodichloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromofom	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon disulfide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon-tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5	U	U	U	U	0.29 F	U	U	U	U	U	U	U	U	0.72 F
chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromochloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5	2.4	1.7	0.95 ♦	U	0.33 F	U	U	U	U	U	U	U	U	U
hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5	480 ♦	140 ♦	73 ♦	130 M♦	53	62 J♦	120	130	63	110	85	120	56	51
m,p-xylene	5	22 ♦	7	2.5 ♦	4.3	1.8	1.2	U	U	1.3 F	U	1.4 F	1.4 F	U	U
methyl cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl iodide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl ethyl ketone	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl ethyl utyl ether (MTBE)	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methylene chloride	5	U	U	U	U	U	U	U	6.5 B	U	3 B	U	U	U	U
n-butylbenzene	5	20 ♦	4.7	2.1 ♦	U	U	U	U	5.2	U	U	1.4 F	1.9 F	0.9 F	1.2 F
n-propylbenzene	5</														

**Tank Farms 1 & 3**  
**Groundwater Sampling Results**  
**TF3MW-123**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3M12314OA 6/20/2006	TF3M12314PA 9/26/2006	TF3M12313RA 3/21/2007	TF3M12313SA 3/20/2008	TF3M12313TA 3/27/2009						
Sample ID												
Date of Collection												
Sample Depth (ft) ( $\mu\text{g/L}$ )		14	14	13	13	13						
VOCs ( $\mu\text{g/L}$ )												
1-chlorohexane	--	U	U	U	U	U						
1,1-dichloroethene	5	U	U	U	U	U						
1,1-dichloropropene	5	U	U	U	U	U						
1,1,1-trichloroethane	5	U	U	U	U	U						
1,1,2-trichloroethylene	5	U	U	U	U	U						
1,1,1,2-tetrachloroethane	5	U	U	U	U	U						
1,1,2,2-tetrachloroethane	5	U	U	U	U	U						
1,2-dibromoethane	--	U	U	U	U	U						
1,2-dichlorobenzene	3	U	U	U	U	U						
1,2-dichloroethane	0.6	U	U	U	U	U						
1,2-dichloropropane	1	U	U	U	U	U						
1,2,3-trichlorobenzene	5	U	U	U	U	U						
1,2,3-trichloropropane	0.04	U	U	U	U	U						
1,2-dibromo-3-chloropropane	0.04	U	U	U	U	U						
1,2,4-trichlorobenzene	5	U	U	U	U	U						
1,2,4-trimethylbenzene	5	5.5♦	22.5	23.7	11.4	8.84						
1,3-dichlorobenzene	3	U	U	U	U	U						
1,3-dichloropropane	5	U	U	U	U	U						
1,3,5-trimethylbenzene	5	0.88 F	3.88	3.9	2.94	3.52						
1,4-dichlorobenzene	3	U	U	U	U	U						
2-butanone	--	U	U	U	U	U						
2-chlorotoluene	5	U	U	U	U	U						
2-hexanone	--	U	U	U	U	U						
2,2-dichloropropane	5	U	U	U	U	U						
4-chlorotoluene	5	U	U	U	U	U						
4-methyl-2-pentanone	--	U	U	U	U	U						
acetone	50	U	U	U	U	U						
acrylonitrile	--	U	U	U	U	U						
benzene	1	U	U	U	U	U						
bromobenzene	--	U	U	U	U	U						
bromomethane	5	U	U	U	U	U						
bromochloromethane	5	U	U	U	U	U						
bromodichloromethane	--	U	U	U	U	U						
bromofom	50	U	U	U	U	U						
carbon disulfide	--	U	U	U	U	U						
carbon-tetrachloride	5	U	U	U	U	U						
chlorobenzene	5	U	U	U	U	U						
chloroethane	5	0.69 F	U	U	U	U						
chloroform	7	U	U	U	U	U						
chloromethane	5	0.68 F	U	U	U	U						
cis-1,2-dichloroethane	5	U	U	U	U	U						
cis-1,2-dichloroethylene	5	U	U	U	U	U						
cis-1,2-dichloropropene	5	U	U	U	U	U						
cyclohexane	--	U	U	U	U	U						
dibromochloromethane	--	U	U	U	U	U						
dichlorofluoromethane	5	U	U	U	U	U						
dibromomethane	5	U	U	U	U	U						
ethylbenzene	5	U	0.17	0.26 F	U	U						
hexachlorobutadiene	0.5	U	U	U	U	U						
isopropylbenzene	5	41 J	67.9	70.3	63.9	46.6						
m,p-xylene	5	U	0.34	0.3 F	U	U						
methyl cyclohexane	--	U	U	U	U	U						
methyl iodide	--	U	U	U	U	U						
methyl ethyl ketone	5	U	U	U	U	U						
methyl ethyl ether (MTBE)	5	U	U	U	U	U						
methylene chloride	5	U	U	0.28 F	U	U						
n-butylbenzene	5	U	1.44	0.54 F	2.2	0.76 F						
n-propylbenzene	5	U	U	8	U	4.62						
naphthalene	10	U	U	0.96 F	U	U						
o-xylene	5	U	U	U	U	U						
p-isopropyltoluene	5	0.46 F	1.82	1.12 F	1.92 F	0.96 F						
sec-butylbenzene	5	0.79 F	1.52	1.4 F	1.84 F	1.24 F						
t-butylbenzene	5	U	U	U	U	U						
styrene	50	U	U	U	U	U						
t-butylbenzene	5	0.77 F	1.42	0.96 F	1 F	0.640 F						
tetrachloroethylene	5	U	U	U	U	U						
toluene	5	U	U	U	U	U						
trans-1,2-dichloroethene	5	U	U	U	U	U						
trans-1,3-dichloropropene	--	U	U	U	U	U						
trichloroethylene	5	U	U	U	U	U						
trichlorofluoromethane	5	U	U	U	U	U						
vinyl acetate	--	U	U	U	U	U						
vinyl chloride	2	U	U	U	U	U						
Total VOCs	--	54.19	107.03	111.72	92.42	67.18						
<b>Field Parameters</b>												
dissolved iron (mg/L)	--	3.6	3	N/S	3	1.2						
pH	--	7.26	7.33	7.65	6.92	6.91						
specific conductance ( $\mu\text{S}/\text{cm}$ )	--	74.3	81	56.1	0.12	1290						
temperature (degrees C)	--	11.5	14.4	9.3	9	10.84						
dissolved oxygen (mg/L)	--	6.08	3.09	3.22	8.77	2.46						
oxidation reduction potential (mV)	--	-99	-108	-89	-69	-39						

**Tank Farms 1 & 3**  
**Groundwater Sampling Results**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-127													
		TF3M12713AA	TF3M12713BB	TF3M12714CA	TF3M12712DA	TF3M12713EA	TF3M12713FA	TF3M12713GB	TF3M12713HB	TF3M12713IB	TF3M12713JB	TF3M12713KB	TF3M12713LB	TF3M12713MA	TF3M12713NA
Date of Collection	2/12/2002	6/19/2002	9/13/2002	12/20/2002	3/12/2003	6/20/2003	9/12/2003	12/12/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006
Sample Depth (ft) ( $\mu\text{g/L}$ )	13	13	14	12	13	13	13	13	13	13	13	13	13	13	13
VOCs ( $\mu\text{g/L}$ )															
1-chlorohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-trichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-trichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1,2-tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromoethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromo-3-chloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	180 ♦	16	190 ♦	14	15	5.6	56 J	56	21	72	43	70	6.2	28
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5	66 ♦	6.6	74 ♦	7.9	6.3	2.5	30	20	7.1	0.83 F	13	U	2.9	9.2
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-butanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-hexanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2,2-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-methyl-2-pentanone	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acetone	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acrylonitrile	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
benzene	1	2.6	0.94	5.7	1.3	0.54	2.2	5.2	2.1	2.9	4.2	3.3	2.2	0.97	1.7
bromobenzene	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromochloromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromodichloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
bromofom	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon disulfide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
carbon-tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5	U	U	0.44 F	U	U	U	U	U	U	U	U	U	U	U
chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloromethane	5	U	U	0.47 F	U	U	U	U	U	U	U	U	U	U	0.22 F
cis-1,2-dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromochloromethane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
dibromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5	81	15	120 B	20	35	12	41 J	47	25	50	26	30	5.2	16
hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5	37	5.9	67 ♦	8.7	7.6	3.1	24	18	8.6	18	10	10	3.6	6.5
m,p-xylene	5	45	7	49	7.7	20	4.6	45	40	18	41	24	25	2.7	8.3
methyl cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl iodide	--	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl ethyl ketone	5	U	U	U	U	U	1.6 UJ	U	U	U	U	U	U	U	U
methyl ethyl tert-ethyl ether (MTBE)	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methylene chloride	5	U	U	U	U	U	U	U	0.8 F	U	2.2	0.53 F	U	U	U
n															

## **Tank Farms 1 & 3 Groundwater Sampling Results**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup> (µg/L)	TF3MW-127				
		TF3M12713PA 9/26/2006	TF3M12713PA 3/21/2007	TF3M12712SA 3/20/2008	TF3M12713TA 3/27/2009	
		13	13	12	13	
<b>VOCs (µg/L)</b>						
1-chlorohexane	--	U	U	U	U	
1,1-dichloroethene	5	U	U	U	U	
1,1-dichloropropene	5	U	U	U	U	
1,1,1-trichloroethane	5	U	U	U	U	
1,1,2-trichloroethylene	5	U	U	U	U	
1,1,1,2-tetrachloroethane	5	U	U	U	U	
1,1,2,2-tetrachloroethane	5	U	U	U	U	
1,2-dibromoethane	--	U	U	U	U	
1,2-dichlorobenzene	3	U	U	U	U	
1,2-dichloroethane	0.6	U	U	U	U	
1,2-dichloropropane	1	U	U	U	U	
1,2,3-trichlorobenzene	5	U	U	U	U	
1,2,3-trichloropropane	0.04	U	U	U	U	
1,2-dibromo-3-chloropropane	0.04	U	U	U	U	
1,2,4-trichlorobenzene	5	U	U	U	U	
1,2,4-trimethylbenzene	5	101	59.6	14.5	104 ♦	
1,3-dichlorobenzene	3	U	U	U	U	
1,3-dichloropropane	5	U	U	U	U	
1,3,5-trimethylbenzene	5	U	U	U	20.3	
1,4-dichlorobenzene	3	U	U	U	U	
2-butanone	--	U	U	U	U	
2-chlorotoluene	5	U	U	U	U	
2-hexanone	--	U	U	U	U	
2,2-dichloropropane	5	U	U	U	U	
4-chlorotoluene	5	U	U	U	U	
4-methyl-2-pentanone	--	U	U	U	U	
acetone	50	U	U	U	U	
acrylonitrile	--	U	U	U	U	
benzene	1	3.05	0.94 F	0.73	0.63	
bromobenzene	--	U	U	U	U	
bromomethane	5	U	U	U	U	
bromochloromethane	5	U	U	U	U	
bromodichloromethane	--	U	U	U	U	
bromofom	50	U	U	U	U	
carbon disulfide	--	U	U	U	U	
carbon-tetrachloride	5	U	U	U	U	
chlorobenzene	5	U	U	U	U	
chloroethane	5	U	U	U	U	
chloroform	7	U	U	U	U	
chlormethane	5	U	U	U	U	
cis-1,2-dichloroethane	5	U	U	U	U	
cis-1,2-dichloroethylene	5	U	U	U	U	
cis-1,2-dichloropropene	5	U	U	U	U	
cyclohexane	--	U	U	U	U	
dibromochloromethane	--	U	U	U	U	
dichlorofluoromethane	5	U	U	U	U	
dibromomethane	5	U	U	U	U	
ethylbenzene	5	47.8	23.2	15.6	92.2 ♦	
hexachlorobutadiene	0.5	U	U	U	U	
isopropylbenzene	5	25.5	U	3.79	27.2	
m,p-xylene	5	31.6	14.6	12.3	41	
methyl cyclohexane	--	U	U	U	U	
methyl iodide	--	U	U	U	U	
methyl ethyl ketone	5	U	U	U	U	
methyl ert utyl ether (MTBE)	5	U	U	U	U	
methylene chloride	5	U	0.44 F	U	U	
n-butylbenzene	5	1.56	0.74 F	U	1.31	
n-propylbenzene	5	27.5	15.3 J	3.39	26.9	
naphthalene	10	25.8	12.3	3.83	27	
o-xylene	5	U	U	U	U	
p-isopropyltoluene	5	3.9 ♦	1.08 F	0.4 F	1.78	
sec-butylbenzene	5	3.7 ♦	2.48 J	0.26 F	2.84	
t-butylbenzene	5	U	U	U	U	
styrene	50	U	U	U	U	
t-butylbenzene	5	U	0.32 F	U	U	
tetrachloroethylene	5	U	U	U	U	
toluene	5	U	U	U	U	
trans-1,2-dichloroethene	5	U	U	U	U	
trans-1,3-dichloropropene	--	U	U	U	U	
trichloroethylene	5	U	U	0.13 F	U	
trichlorofluoromethane	5	U	U	U	U	
vinyl acetate	--	U	U	U	U	
vinyl chloride	2	U	U	U	U	
Total VOCs	--	271.41	131	54.93	338.6	
<b>Field Parameters</b>						
dissolved iron (mg/L)	--	4.2	1.9	0	1.2	
pH	--	7.27	7.28	6.95	6.21	
specific conductance (µS/cm)	--	82	84.3	77	873	
temperature (degrees C)	--	13.5	8.9	8.41	10.88	
dissolved oxygen (mg/L)	--	5.12	2.75	3.12	3.5	
oxidation reduction potential (mV)	--	23	18	243	5	

## Tank Farms 1 & 3 Groundwater Sampling Results

**Tank Farms 1 & 3**  
**Groundwater Sampling Results**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-128					
		TF3M12814PA 9/26/2006	TF3M12813RA 3/21/2007	TF3M12813SA 3/21/2008	TF3M12813TA 3/27/2009		
Sample ID							
Date of Collection							
Sample Depth (ft)	( $\mu\text{g/L}$ )	14	13	13	13		
VOCs ( $\mu\text{g/L}$ )							
1-chlorohexane	--	U	U	U	U		
1,1-dichloroethene	5	U	U	U	U		
1,1-dichloropropene	5	U	U	U	U		
1,1,1-trichloroethane	5	U	U	U	U		
1,1,2-trichloroethylene	5	U	U	U	U		
1,1,1,2-tetrachloroethane	5	U	U	U	U		
1,1,2,2-tetrachloroethane	5	U	U	U	U		
1,2-dibromoethane	--	U	U	U	U		
1,2-dichlorobenzene	3	U	U	U	U		
1,2-dichloroethane	0.6	U	U	U	U		
1,2-dichloropropane	1	U	U	U	U		
1,2,3-trichlorobenzene	5	U	U	U	U		
1,2,3-trichloropropane	0.04	U	U	U	U		
1,2-dibromo-3-chloropropane	0.04	U	U	U	U		
1,2,4-trichlorobenzene	5	U	U	U	U		
1,2,4-trimethylbenzene	5	4.25	5.61	0.64 F	1.42		
1,3-dichlorobenzene	3	U	U	U	U		
1,3-dichloropropane	5	U	U	U	U		
1,3,5-trimethylbenzene	5	U	U	U	0.620 F		
1,4-dichlorobenzene	3	U	U	U	U		
2-butanone	--	U	U	U	U		
2-chlorotoluene	5	U	U	U	U		
2-hexanone	--	U	U	U	U		
2,2-dichloropropane	5	U	U	U	U		
4-chlorotoluene	5	U	U	U	U		
4-methyl-2-pentanone	--	U	U	U	U		
acetone	50	U	U	U	U		
acrylonitrile	--	U	U	U	U		
benzene	1	0.33	0.98	U	U		
bromobenzene	--	U	U	U	U		
bromomethane	5	U	U	U	U		
bromochloromethane	5	U	U	U	U		
bromodichloromethane	--	U	U	U	U		
bromoform	50	U	U	U	U		
carbon disulfide	--	U	U	U	U		
carbon-tetrachloride	5	U	U	U	U		
chlorobenzene	5	U	U	U	U		
chloroethane	5	U	U	U	U		
chloroform	7	U	U	U	U		
chloromethane	5	U	U	U	U		
cis-1,2-dichloroethane	5	U	U	U	U		
cis-1,2-dichloroethylene	5	U	U	U	U		
cis-1,2-dichloropropene	5	U	U	U	U		
cyclohexane	--	U	U	U	U		
dibromochloromethane	--	U	U	U	U		
dichlorofluoromethane	5	U	U	U	U		
dibromomethane	5	U	U	U	U		
ethylbenzene	5	6.5	14.9	0.63 F	0.900 F		
hexachlorobutadiene	0.5	U	U	U	U		
isopropylbenzene	5	2.05	9.07 J	0.39 F	0.720 F		
m,p-xylene	5	4.37	4.2	0.38 F	0.710 F		
methyl cyclohexane	--	U	U	U	U		
methyl iodide	--	U	U	U	U		
methyl ethyl ketone	5	U	U	U	U		
methyl tert butyl ether (MTBE)	5	U	U	U	U		
methylene chloride	5	U	0.45 F	U	U		
n-butylbenzene	5	U	1.59 J	U	U		
n-propylbenzene	5	2.49	13.2 J	0.26 F	0.700 F		
naphthalene	10	3.04	7.36	0.68 F	1.18		
o-xylene	5	U	U	U	U		
p-isopropyltoluene	5	0.86	1.67	U	U		
sec-butylbenzene	5	0.89	4.36 J	U	0.220 F		
t-butylbenzene	5	U	0.5 F	U	U		
styrene	50	U	U	U	U		
t-butylbenzene	5	U	U	U	U		
tetrachloroethylene	5	U	U	U	U		
toluene	5	U	U	U	U		
trans-1,2-dichloroethene	5	U	U	U	U		
trans-1,3-dichloropropene	--	U	U	U	U		
trichloroethylene	5	U	U	U	U		
trichlorofluoromethane	5	U	U	U	U		
vinyl acetate	--	U	U	U	U		
vinyl chloride	2	U	U	U	U		
Total VOCs	--	24.78	63.89	2.98	6.47		
<b>Field Parameters</b>							
dissolved iron (mg/L)	--	0	0.3	0	0		
pH	--	7.43	7.12	6.96	5.86		
specific conductance ( $\mu\text{S}/\text{cm}$ )	--	70	61.2	54.1	657		
temperature (degrees C)	--	13.5	8.8	8.24	11.66		
dissolved oxygen (mg/L)	--	5.11	4.22	9.84	6.65		
oxidation reduction potential (mV)	--	135	70	283	233		

**Tank Farms 1 & 3**  
**Groundwater Sampling Results**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-133												
		TF3M13316HB	TF3M13317IB	TF3M13316JB	TF3M13316KB	TF3M13316LB	TF3M13316MA	TF3M13316NA	TF3M13316OA	TF3M13316PA	TF3M13316RA	TF3M13316RA	TF3M13316TA	
Sample ID	11/25/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006	9/29/2006	3/21/2007	3/20/2008	3/27/2009		
Date of Collection	11/25/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006	9/29/2006	3/21/2007	3/20/2008	3/27/2009		
Sample Depth (ft)	17	16	16	16	16	16	16	16	16	16	16	16		
VOCs (µg/L)	--	U	U	U	U	U	U	U	U	U	U	U		
1-chlorohexane	--	U	U	U	U	U	U	U	U	U	U	U		
1,1-dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U		
1,1-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U		
1,1,1-trichloroethane	5	U	U	U	U	U	U	U	U	U	U	U		
1,1,2-trichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U		
1,1,1,2-tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U		
1,2-dibromoethane	--	U	U	U	U	U	U	U	U	U	U	U		
1,2-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U		
1,2-dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U		
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U		
1,2,3-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U		
1,2,3-trichloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U		
1,2-dibromo-3-chloropropane	0.04	U	U	U	U	U	U	U	U	U	U	U		
1,2,4-trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U		
1,2,4-trimethylbenzene	5	80	72	49	15	12	9.3	22	9.2 ♦	2.88	4.16	U	3.2	
1,3-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U		
1,3-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U		
1,3,5-trimethylbenzene	5	44	26	16	6.2	5.7	8.6	12	U	U	U	18.2 ♦	5.02	
1,4-dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U		
2-butanone	--	U	U	U	U	U	U	U	U	U	U	U		
2-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U		
2-hexanone	--	U	U	U	U	U	U	U	U	U	U	U		
2,2-dichloropropane	5	U	U	U	U	U	U	U	U	U	U	U		
4-chlorotoluene	5	U	U	U	U	U	U	U	U	U	U	U		
4-methyl-2-pentanone	--	U	U	U	U	U	U	U	U	U	U	U		
acetone	5	U	U	U	U	U	U	U	U	U	U	U		
acrylonitrile	--	U	U	U	U	U	U	U	U	U	U	U		
benzene	1	U	U	U	U	U	U	U	U	U	U	U		
bromobenzene	--	U	U	U	U	U	U	U	U	U	U	U		
bromomethane	5	U	U	U	U	U	U	U	U	U	U	U		
bromochloromethane	5	U	U	U	U	U	U	U	U	U	U	U		
bromodichloromethane	--	U	U	U	U	U	U	U	U	U	U	U		
bromofom	50	U	U	U	U	U	U	U	U	U	U	U		
carbon disulfide	--	U	U	U	U	U	U	U	U	U	U	U		
carbon-tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U		
chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U		
chloroethane	5	U	U	U	U	U	U	0.33 F	U	U	U	U		
chloroform	7	U	U	U	U	U	U	U	U	U	U	U		
chloromethane	5	U	U	U	U	U	U	U	U	U	U	U		
cis-1,2-dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U		
cis-1,2-dichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U		
cis-1,2-dichloropropene	5	U	U	U	U	U	U	U	U	U	U	U		
cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U		
dibromochloromethane	--	U	U	U	U	U	U	U	U	U	U	U		
dichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	U	U		
dibromomethane	5	U	U	U	U	U	U	U	U	U	U	U		
ethylbenzene	5	U	0.73 F	0.97 F	U	U	0.2 F	0.38 F	0.31 F ♦	0.16	0.25 F	0.28 F ♦	0.290 F	
hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U		
isopropylbenzene	5	13	20	14	5.3	4.3	6.8	8.5	11 ♦	5.16	6.75 J	9.75 ♦	9.06	
m,p-xylene	5	8.2	5	3.4 F	1.2 F	0.95 F	1 F	1.3	1.1 F ♦	0.49	0.6 F	0.7 F ♦	U	
methyl cyclohexane	--	U	U	U	U	U	U	U	U	U	U	U		
methyl iodide	--	U	U	U	U	U	U	U	U	U	U	U		
methyl ethyl ketone	5	U	U	U	U	U	U	U	U	U	U	U		
methyl tert butyl ether (MTBE)	5	U	U	U	U	U	U	U	U	U	U	U		
methylene chloride	5	U	U	U	U	U	U	U	U	U	0.29 F	U	U	
n-butylbenzene	5	5.1	3.1	1.8 F	0.77 F	0.68 F	1.4	0.83 F	2.2 ♦	1.19	0.83 F	1.02 ♦	2.01	
n-propylbenzene	5	16	20	14	6.6	5.4	7.6	8.7	13 ♦	6.59	7.61 J	10.4 ♦	13.7	
naphthalene	10	3.7	5.2	3	0.87 F	0.98 F	1.6	1.6	2.5 B ♦	2.09	2.1 J	1.69	1.46	
o-xylene	5	U	U	U	U	U	U	U	U	U	U	U		
p-isopropyltoluene	5	18	3.5	1.9 F	0.8 F	0.88 F	1.5	2.4	2.2 ♦	1.29	1.53	2.21 ♦	1.75	
sec-butylbenzene	5	11	12	8.4	4.									

**Appendix B**  
**Daily Chemical Quality Control Reports**

## Daily Chemical Quality Control Report

Project/Delivery Order Number: F41624-03-D-8601-0027

Date: 03/27/09

Project Name/Site Number: Griffiss Petroleum Spills Sites sampling (Site Tank Farms 1 and 3).

Weather conditions: Average temperature: 45    Average barometric reading: 30.0

Wind direction and speed: West-northwest 2.3 mph

Significant wind changes: None.

General description of tasks completed: Bailer sampling at Site Tank Farms 1 and 3 (TF3MW-21, -116, -123, -127, -128, -133, and TF3CE-3).

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Explain any departures from the SAP or deviations from approved procedures during the day's field activities: None.

---

Explain any technical problems encountered in the field or field equipment/field analytical instrument malfunction: None.

---

Corrective actions taken or instructions obtained from AFCEE personnel: No corrective actions necessary.

---

Sampling shipment completed:  Yes  No    LSL Courier.

DCQCR Prepared by: Niels van Hoesel, FOM

Date: 30 March 2009

CQCC Signature: Concordia R. van Hoesel Date: 3/31/09

### ATTACHMENTS:

Checklist	Daily Chemical Quality Control Report Attachments
✓	✓ Field sampling forms
✓	✓ Equipment Calibration Log
✓	✓ Copies of COCs
	✓ SDG Table (See accompanying COCs)
✓	✓ Daily Health and Safety Meeting Form

## WELL PURGING &amp; SAMPLING FORM

40-05-27

Project: ~~TF 1+3~~ Sampled by: JW / KM

Location and Site Code (SITEID): TF 1+3

Well No. (LOCID): TF3-CB3 Well Diameter (SDIAM): 4"

Date (LOGDATE): 3/27/09 Weather: cloudy / 45°

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

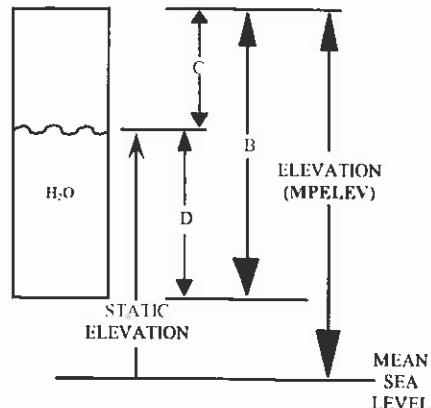
PURGING INFORMATION:

Measured Well Depth (B) (TOTDEPTH) 27.25 ft.

Measured Water Level Depth (C) (STATDEP) 12.31 ft.

Length of Static Water Column (D) =  $\frac{(B)}{(C)} - \frac{(C)}{(D)}$  = 14.94 ft.Casing Water Volume (E) =  $\frac{(A)}{(B)} \times \frac{(D)}{(C)}$  = 9.711 gal

Minimum Purge Volume = 29.1 gal (3 well volumes)



Purge Date and Method: 3/27/09 - Bailer

Physical Appearance/Comments: cloudy grey / Petro odor

FE 1.4mg/L

FIELD MEASUREMENTS:

Allowable Range: ± 0.1    ± 5%    ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1043	5	6.85	78.0	11.57	199.0	4.25	-46
1045	10	6.75	78.6	11.64	295.0	2.35	-63
1047	15	6.77	79.1	11.62	312.0	2.57	-69
1049	20	6.78	80.2	11.77	285.0	2.63	-75
1051	25	6.84	80.2	11.73	286.0	2.81	-78
1053	30	6.87	80.4	11.74	376.0	2.33	-80

Sample Time: 1056    Sample ID: TF3CE312TA

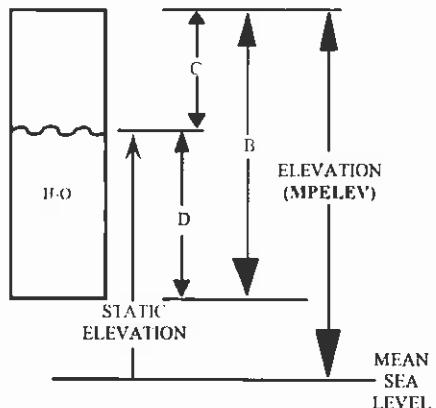
Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING &amp; SAMPLING FORM

Project: 40-05-27 Sampled by: KM/LW  
 Location and Site Code (SITEID): TF 1+3  
 Well No. (LOCID): TF3 Mw-21 Well Diameter (SDIAM): 4"  
 Date (LOGDATE): 3/27/09 Weather: Sun / 48°

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:Measured Well Depth (B) (TOTDEPTH) 26.04 ft.Measured Water Level Depth (C) (STATDEP) 13.71 ft.Length of Static Water Column (D) = (B) - (C) = 12.33 ft.Casing Water Volume (E) = (A) x (D) = 8.0145 galMinimum Purge Volume = 24.04 gal (3 well volumes)Purge Date and Method: 3/27/09 - BailexPhysical Appearance/Comments: cloudy / slight Petro odor  
FE 2.4 mg/L

## FIELD MEASUREMENTS:

Allowable Range: ± 0.1 ± 5% ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1146	4	7.03	0.108	12.61	117.0	3.74	-76
1148	8	6.98	0.106	12.53	130.0	3.38	-87
1150	12	6.98	94.3	12.63	103.0	2.87	-93
1152	16	6.99	92.3	12.67	118.0	2.05	-97
1154	20	7.02	90.7	12.70	129.0	2.22	-98
1156	24.04	7.04	90.5	12.73	117.0	3.37	-98

Sample Time: 1200 Sample ID: TF3M214TA

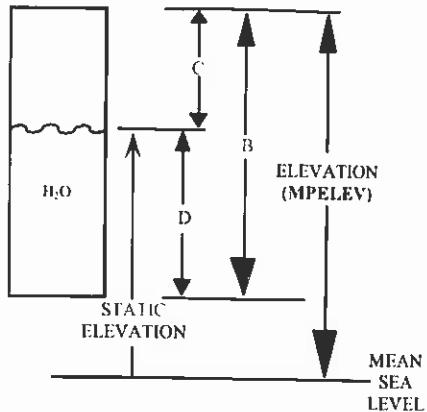
Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity,  $\text{Fe}^{2+}$ ,  $\text{CH}_4$ ,  $\text{H}_2\text{S}$ ) parameters should be sampled first.

# WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: JW/KM  
 Location and Site Code (SITEID): TF 1+3  
 Well No. (LOCID): TF3 mw-116 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 31/27/09 Weather: Sun / 45°

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:Measured Well Depth (B) (TOTDEPTH) 21.11 ft.Measured Water Level Depth (C) (STATDEP) 13.00 ft.Length of Static Water Column (D) = (B) - (C) = 8.11 ft.Casing Water Volume (E) = (A) x (D) = 1.2976 galMinimum Purge Volume = 3.9 gal (3 well volumes)Purge Date and Method: 3/27/09 - BailePhysical Appearance/Comments: Cloudy grey / no odor  
FE 1.8 mg/LFIELD MEASUREMENTS:Allowable Range: ± 0.1   ± 5%   ± 1°C

Time	Volume Removed (gal)	pH	EC ( $\mu\text{S}/\text{cm}$ )	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1222	0.75	6.91	0.134	12.59	186.0	3.61	-77
1223	1.50	6.88	0.133	12.43	175.0	3.34	-85
1224	2.25	6.89	0.129	12.33	162.0	2.71	-91
1225	3.00	6.85	0.132	12.28	168.0	2.52	-93
1226	3.75	6.89	0.130	12.24	164.0	3.04	-95
1227	4.50	6.87	0.130	12.23	167.0	2.33	-97

Sample Time: 1230 Sample ID: TF3M116137A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity,  $\text{Fe}^{2+}$ ,  $\text{CH}_4$ ,  $\text{H}_2\text{S}$ ) parameters should be sampled first.

## **WELL PURGING & SAMPLING FORM**

Project: 40-05-27 Sampled by: JW/KM

Location and Site Code (SITEID): TE 1+3

Well No. (LOCID): TP3 MW-123 Well Diameter (SDIAM): 2"

Date (LOGDATE): 3/27/09 Weather: Sun / 45°

**CASING VOLUME INFORMATION:**

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/l)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

#### PURGING INFORMATION:

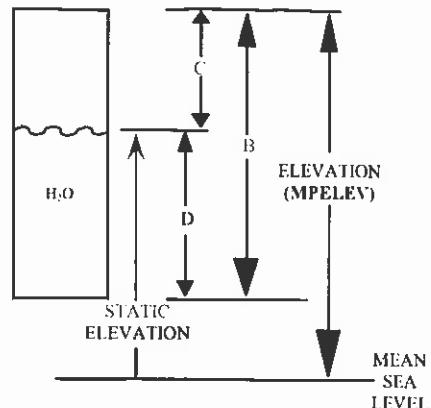
Measured Well Depth (B) (TOTDEPTH) 20.50 ft.

Measured Water Level Depth (C) (STATDEP) 13.06 ft.

$$\text{Length of Static Water Column (D)} = \frac{\text{(B)}}{\text{(C)}} - \frac{\text{(C)}}{\text{(D)}} = \frac{744}{\text{ft.}}$$

$$\text{Casing Water Volume (E)} = \frac{\text{(A)}}{\text{(D)}} \times \text{_____} = \underline{\underline{11904}} \text{ gal}$$

Minimum Purge Volume = 3.6 gal (3 well volumes)



Purge Date and Method: baiter - 3/27/09

Physical Appearance/Comments: silty orange / no odor

## FIELD MEASUREMENTS:

Allowable Range:       $\pm 0.1$        $\pm 5\%$        $\pm 1^\circ C$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1208	.75	7.18	93.25	11.21	347.0	6.33	6
1209	1.5	7.02	0.118	10.97	338.0	4.5	-4
1210	2.05	6.98	0.124	10.87	394.0	3.4	-14
1211	3.0	6.97	0.126	10.84	607.0	2.97	-26
1212	3.75	6.87	0.128	10.84	642.0	2.42	-34
1213	4.50	6.91	0.129	10.84	664.0	2.46	-39

Sample Time: 1215      Sample ID: TF3M12313TA/C

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity,  $\text{Fe}^{2+}$ ,  $\text{CH}_4$ ,  $\text{H}_2\text{S}$ ) parameters should be sampled first.

## **WELL PURGING & SAMPLING FORM**

Project: 40-05-27 Sampled by: SW/KM  
Location and Site Code (SITEID): TF 1+3  
Well No. (LOCID): TF3MW-127 Well Diameter (SDIAM): 2"  
Date (LOGDATE): 3127109 Weather: cloudy / 45°

**CASING VOLUME INFORMATION:**

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

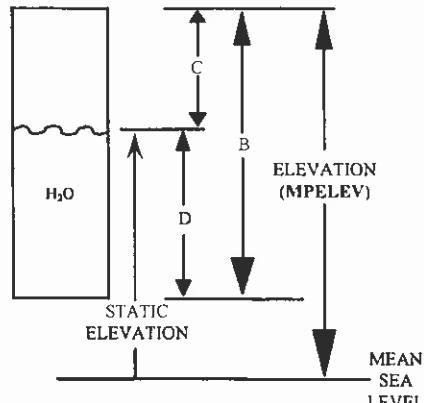
Measured Well Depth (B) (TOTDEPTH) 19.55 ft

Measured Water Level Depth (C) (STATDEP) 12.61 ft.

$$\text{Length of Static Water Column (D)} = \frac{\text{(B)}}{\text{(C)}} = \frac{6.94}{\text{(D)}} \text{ ft.}$$

$$\text{Casing Water Volume (E)} = \frac{\text{_____}}{(\text{A})} \times \frac{\text{_____}}{(\text{B})} = \underline{\underline{1.1104}} \text{ gal}$$

Minimum Purge Volume = 3.3 gal (3 well volumes)



Purge Date and Method: bailer / 3-27-09

Physical Appearance/Comments: clear / slight petro  
FE 1.2 mg/L

## FIELD MEASUREMENTS:

Allowable Range:  $\pm 0.1$     $\pm 5\%$     $\pm 1^{\circ}\text{C}$

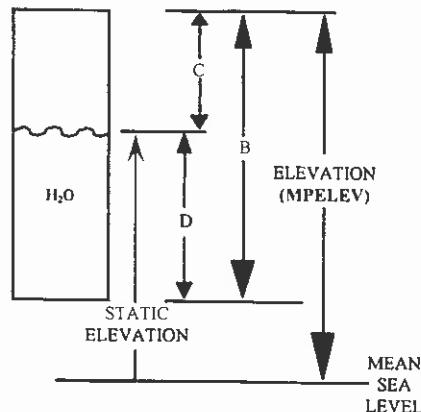
Sample Time: 1008      Sample ID: JF3M12713TA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity,  $\text{Fe}^{2+}$ ,  $\text{CH}_4$ ,  $\text{H}_2\text{S}$ ) parameters should be sampled first.

## WELL PURGING &amp; SAMPLING FORM

40-05-27Project: TF 1 and 3 Sampled by: SW/KMLocation and Site Code (SITEID): TF 1 and 3Well No. (LOCID): WL-TF3MW-128 Well Diameter (SDIAM): 2"Date (LOGDATE): 3/27/09 Weather: Partly cloudy / 45°CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:Measured Well Depth (B) (TOTDEPTH) 19.91 ft.Measured Water Level Depth (C) (STATDEP) 13.10 ft.Length of Static Water Column (D) =  $\frac{(B)}{(C)} - \frac{C}{(D)}$  = 6.81 ft.Casing Water Volume (E) =  $\frac{(A)}{(D)} \times (B) = \underline{h\ 0896}$  galMinimum Purge Volume = 3.3 gal (3 well volumes)Purge Date and Method: 3/27/09 - bailedPhysical Appearance/Comments: silty brown / no odor  
FE 0.0 mg/LFIELD MEASUREMENTS:Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$ 

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
0942	0.75	5.80	62.5	13.11	29.99	8.77	223
0943	1.5	5.78	63.0	12.37	541.0	8.06	227
0944	2.25	5.76	63.7	12.13	220.0	7.51	231
0945	3.0	5.78	65.3	11.88	172.0	7.12	232
0946	3.75	5.86	65.7	11.66	102.0	6.65	233

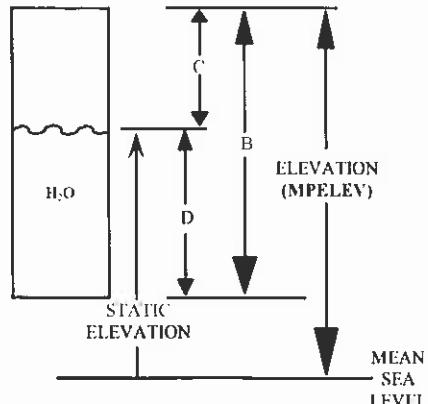
Sample Time: 0948 Sample ID: TF3M12813TA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity,  $\text{Fe}^{2+}$ ,  $\text{CH}_4$ ,  $\text{H}_2\text{S}$ ) parameters should be sampled first.

## WELL PURGING &amp; SAMPLING FORM

Project: VO-05-27 Sampled by: JW/KMLocation and Site Code (SITEID): TF 1+3Well No. (LOCID): TF3MW133 Well Diameter (SDIAM): 2"Date (LOGDATE): 3/27/09 Weather: cloudy / 45°CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:Measured Well Depth (B) (TOTDEPTH) 21.87 ft.Measured Water Level Depth (C) (STATDEP) 15.68 ft.Length of Static Water Column (D) = (B) - (C) = 6.19 ft.Casing Water Volume (E) = (A) x (D) = 0.0904 galMinimum Purge Volume = 2.97 gal (3 well volumes)Purge Date and Method: 3/27/09 - bailerPhysical Appearance/Comments: cloudy / no odor  
FE 0.0 mg/LFIELD MEASUREMENTS:Allowable Range: ± 0.1 ± 5% ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1018	.5	6.75	30.7	11.21	106.0	7.46	113
1019	1	6.65	33.2	11.19	80.5	7.31	119
1020	1.5	6.52	36.6	11.30	51.6	6.47	118
1021	2.0	6.48	41.1	11.40	55.7	6.36	110
1022	2.5	6.48	44.5	11.50	33.1	5.92	98
1023	3	6.48	48.6	11.53	23.1	6.34	84
1024	3.5	6.51	51.4	11.57	28.3	5.98	71
1025	4.0	6.53	55.0	11.60	19.8	4.28	50
1026	4.5	6.58	58.5	11.51	16.9	4.89	31
1027	6.0	6.55	62.4	11.64	20.1	4.36	25

Sample Time: 1030 Sample ID: TF3M13316TA 6 well volumes purged

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## Equipment Calibration Log

Instrument Name: Horn # 1

**Model Number:** \_\_\_\_\_

**AFCCEE**  
**CHAIN OF CUSTODY RECORD**

COC#: I\_ SDG#: 212 Cooler ID: A\_

Ship to: Pamela Titus Life Science Laboratories, Inc. 5000 Brittonfield Pkwy, Suite 200 East Syracuse, NY 13057 Tel: (315)437-0200		Project Name: Griffiss AFB TF 1 and 3 Sampling Sampler Name: Josh Wenzel <i>Niels van Hoesel Jr.</i> Carrier: LSL courier		Send Results to: Niels van Hoesel FPM Group 153 Brooks Road Rome, NY 13441 Phone: (315) 336-7721 Ext. 205	
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Field Sample ID	Location ID (LOCID)	Date 2009	Time	MATRIX	SMCODE	SACODE	SBD/SED	Preservative	Fill/Unfill	No. of Containers	VOC Note 1	SVOCs Note 2	1 L Amber	Total Alkalinity (zero headspace) Note 3	Nitrogen (Nitrate) Note 4	16 oz poly Note 5	Total Sulfide Note 5	16 oz Poly (ZnAC and NaOH)	Comments	Analyses Requested	
TF3CE312TA	MW-CE	3/27	1056	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
TF3M2114TA	TF3MW21	3/27	1200	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
TF3M11613TA	WL-TF3MW-116	3/27	1230	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
TF3M12313TA	WL-TF3MW-123	3/27	1215	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
TF3M12313TC	WL-TF3MW-123	3/27	1215	WG	B	0/0	FD	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
TF3M12713TA	WL-TF3MW-127	3/27	1008	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
TF3M12813TA	WL-TF3MW-128	3/27	0948	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
TF3M13316TA	WL-TF3MW-133	3/27	1030	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
032709TE	FIELDDQC	3/27	1400	WQ	B	0/0	EB	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
032709TF	FIELDDQC	3/27	1245	WQ	NA	0/0	AB	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	
032709TR	FIELDDQC	3/27	0900	WQ	NA	0/0	TB	HCl	Unf.	3	3	-	-	-	-	-	-	-	-	-	

Sample Condition Upon Receipt at Laboratory:

Special Instructions/Comments: Analyses to be conducted in compliance with AFCCEE QAPP 4.0

Note 1: VOCs: SW8260, AFCCEE QAPP 4.0 List.

Note 2: SVOCs: SW8270, AFCCEE QAPP 4.0 List.

Note 3: Total Alkalinity, 310.2.

Note 4: Nitrogen: 353.2, Nitrate: Automated.

Note 5: Total Sulfide: 376.2.

Cooler Temperature:

#1 Released by: (Sig)	Date:	#2 Released by: (Sig)	Date: 3/17/09	#3 Released by: (Sig)	Date: 3/30/09
Company Name:	Time:	Company Name: FPM Group Ltd	Time: 3:05 pm	Company Name:	Time: 1505
#1 Received by: (Sig) Niels van Hoesel	Date: 3/16/09	#2 Received by: (Sig)	Date:	#3 Received by: (Sig)	Date:
Company Name: FPM Group Ltd	Time: 1000	Company Name:	Time:	Company Name:	Time:

SMCODE

B = Bailler  
 G = Grab (only for EB).  
 NA = Not Applicable (only for AB/TB)  
 PP = Peristaltic Pump  
 BP = Bladder Pump  
 SP = Submersible Pump  
 SS = Split Spoon

MATRIX

WG = Ground water  
 WQ = Water Quality Control Matrix  
 SO = Soil

SACODE

N = Normal Sample  
 AB = Ambient Blank  
 TB = Trip Blank  
 EB = Equipment Blank  
 FD = Field Duplicate  
 MS = Matrix Spike  
 SD = Matrix Spike Duplicate

## Daily Health and Safety Meeting Form

Date: 3/27/09 Time: 8:45

Location: FPM office (garage)

Weather Conditions: 40° S Sunny

Meeting Type: Daily Health and Safety

Personnel Present:

John Mensel Catrina Mattice

Visitors Present: —

Visitor Training: —

PPE Required: Modified D

Possible risks, injuries, concerns:

slip trip fall, security @ Rome labs

Anticipated Releases to Environment (if so, describe and detail response action/control measures implemented):

None

Property Damage:

—

Description (include sequence of events describing step by step how incident happened):

—

Analysis for, and Implementation of Corrective/Preventative Procedure to Prevent Future Occurrences (to be formulated by SSHO + FOM, approved by PM, and SSHO implemented):

—

Report made by (Name): Hil, van Mensel

SSHP Organization Title: Site Safety and Health Officer

**Appendix C**  
**Validated Lab Data**

**FPM-GROUP**  
**Data Verification and Usability Report**  
**GRIFFISS AIR FORCE BASE**  
**Site Griffiss AFB TANK FARM 1/3**  
**Water Sampling**  
**Contract No. F41624-03-D-8601**

**FPM Project No. 40-05-27**

**LSL Job # 0903182**

Laboratory: Life Sciences Laboratories, Inc.  
Sample Matrix: Water  
Number of Samples: 11  
Analytical Protocol: AFCEE QAPP, Version 4.0, with AFCEE-approved lab variances  
Data Reviewer: Connie van Hoesel  
Sample Date: March 27, 2009

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**LIST OF DATA VERIFICATION SAMPLES**

This verification report pertains to the following environmental samples and corresponding QC samples:

Sample ID	Date	QC Samples	Date
TF3CE312TA	3/27/09	032709TE, 032709TF, 032709TR	3/27/09
TF3M11613TA	3/27/09		
TF3M12713TA	3/27/09		
TF3M12813TA	3/27/09		
TF3M13316TA	3/27/09		
TF3M2114TA	3/27/09		
TF3M12313TA	3/27/09	TF3M12313TC	3/27/09

Notes:

Refer to attached chain-of-custody for detailed sampling information and sample specific analyses requested.

TA – Primary environmental samples

TC – Field duplicate sample

TE – Equipment blank

TF – Ambient blank

TR – Trip blank

## **DELIVERABLES**

The data deliverable report was per requirements of the AFCEE QAPP 4.0 and approved variances. The report consisted of the following major sections: lab attachment letter, case narrative, chain-of-custody, lab qualifier definitions, analytical results (sheet 2) based on analytical batch, calibration summaries, method blank summaries, laboratory control sample summaries, matrix spike/matrix spike duplicate summaries, holding time forms, performance checks, surrogate and internal standard recoveries, as applicable.

## **ANALYTICAL METHODS**

The analytical test methods and QA/QC requirements used for the soil sample analysis was per methods as specified in the AFCEE Quality Assurance Project Plan, Version 4.0 and AFCEE approved laboratory variances. The analytical methods employed included SW-846: Volatile Organic Compounds (VOCs) by Method SW8260.

## **VERIFICATION GUIDANCE**

The analytical work was performed by Life Sciences Laboratories, Inc. in accordance with the Air Force Center for Environmental Excellence (AFCEE), Quality Assurance Project Plan (QAPP), Version 4.0, with AFCEE-approved laboratory variances. The data was verified according to the protocols and QC requirements of the respective analytical methods and of the QAPP Version 4.0. For data usability purposes all values were further evaluated, including positive and non-detect results that were qualified “Q” according to the QAPP. The data usability analysis was based on the reviewer’s professional judgment and on an assessment of how this data would fare with respect to the U.S. Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) National Functional Guidelines for Organic (and Inorganic) Data Review (February 1994), and the AFCEE QAPP, Version 4.0.

## **QA/QC CRITERIA**

The following QA/QC criteria were reviewed, as applicable and available:

- Method detection limits and reporting limits (MDL, RL)
- Holding times, sample preservation and storage
- MS tune performance
- Initial and Continuing calibration summaries
- Second source calibration verification summary
- Method blanks
- Ambient, equipment, and trip blanks (as applicable)
- Field duplicate results
- Surrogate spike recoveries
- Internal standard areas counts and retention times

- Laboratory control samples (LCS)
- Results reported between MDL and RL (F-flag)
- Sample storage and preservation
- Data system printouts
- Qualitative and quantitative compound identification
- Chain-of-custody (COC)
- Case narrative and deliverables compliance

The items listed above were in compliance with AFCEE QAPP and USEPA criteria and protocols with exceptions discussed in the text below. The data have been verified according to the procedures outlined above and qualified accordingly.

***GENERAL NOTES:***

**MISSING SAMPLES**

None. All samples documented on the chain of custody were received by the laboratory.

**BLANKS**

Whenever blanks, including method, ambient, equipment, and trip, contained low levels of contaminants (between MDL and RL), the laboratory and/or data verifier qualified the subject results with an “F” flag. Since no qualification of associated field samples are required for blanks less than half the RL, no further action was taken in such instances.

## VOLATILE ORGANIC COMPOUNDS (VOCs)

- According to the case narrative, the following samples were analyzed at a dilution of 1:2: TF3M12313TA, and TF3M12313TC. The dilution results only are reported and are used in data verification as representing original results.
- According to the case narrative, sample TF3M12713TA required dilution after original results for the following analytes were above the calibration curve: 1,2,4-trimethylbenzene and ethylbenzene. Use diluted sample results for these compounds only. Original sample results are modified accordingly.
- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The AFCEE QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above the reporting limits (RLs) and the relative percent differences (RPDs) between the duplicate sample results exceed AFCEE QAPP's RPD control limits. If these conditions are met for any analytes in the field duplicate samples, per the AFCEE QAPP, the specific analytes in all samples collected on the same sampling date are to be qualified as estimated ("J") for positive results and rejected ("R") for nondetects. Using professional judgment, it is deemed inappropriate to consider any set of field duplicate samples to be truly representative of a site or sampling event. Therefore, if qualification of data is needed, then only the parent-duplicate sample set will be qualified as estimated ("J") for positive results and rejected ("R") for non-detects, and no action will be taken for this criterion in all the other samples collected on the same sampling date.

The following table summarizes QC exceedances of the relative percent differences (RPD's) of field duplicate samples TF3M12313TA and TF3M12313TC.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result ( $\mu\text{g/L}$ )	Field Dup Result ( $\mu\text{g/L}$ )	MDL ( $\mu\text{g/L}$ ) Normal, Dup	RPD	Flag Applied	Rationale
TF3M12313TA	TF3M12313TC	1,2,4-Trimethylbenzene	8.84	8.00	0.200	10.0	None	RPD < 20%
TF3M12313TA	TF3M12313TC	1,3,5-Trimethylbenzene	3.52	1.38 F	0.200	--	None	RPD < 20%
TF3M12313TA	TF3M12313TC	Isopropylbenzene	46.6	40.8	0.200	13.3	None	RPD < 20%
TF3M12313TA	TF3M12313TC	n-Propylbenzene	4.62	4.08	0.200	12.4	None	RPD < 20%

- Corrective Action:** No corrective action was necessary, since the RPD's between all detected results (i.e., when both the normal result and the field duplicate sample were above the reporting limit), were less than AFCEE's 20% limit.
- Laboratory control samples (LCS) are samples spiked with all analytes of interest at known concentrations. The following table summarizes QC exceedances of the LCS analysis. The LCS ID, percent recovery, and QC limits are listed.

LCS Job Number Spike Analytes	LCS %Rec	QC Limits (%)	Flag Applied	Rationale
<i>LSL Job # 0903182: LCS/LCSD-16897</i>				
LCS: Acetone	137	40-135	None	%Rec > upper control limit, all associated results non-detect

The LCS analyses are used to assess the overall laboratory performance pertaining to the analytical method. The QAPP includes method-specific QC acceptance criteria for the percent recovery of the spike compounds. The LCS results are used to evaluate each AFCEE analytical batch and to determine if the method is within control limits. When an LCS analyte is outside the acceptance limit, the laboratory shall perform corrective action. If the corrective action is ineffective in resolving the exceedance, then that analyte's results in all the associated samples are qualified. According to the QAPP, when the percent recovery (%Rec) is greater than the upper control limit, positive results are considered estimated (flagged "J"); and when the %Rec is less than the lower control limit, positive values are estimated (flagged "J") and non-detects are rejected (flagged "R"). Note that the QAPP also allows for up to three marginal exceedances of LCS control limits for an LCS with 64 analytes.

**Corrective Action:** In accordance with the case narrative, no corrective action was required for the compounds listed in the above table when the %Rec was above the upper control limit and all associated sample results were non-detect. Note also that this compound is not a project-specific analyte of concern for the site.

- According to the case narrative, in the following continuing calibration verification (CCV), analytes exhibited the following exceedances:

Type of Calibration Exceedance Affected Analytes	%D/ %RSD	AFCEE QC Limit	Flag Applied	Rationale
CCV-16915				
Chloromethane	-28.9	±20	UJ	Per AFCEE-approved variance, all results less than RL

**Corrective Action:** When the %D was less than the lower control limit, "UJ" flags were deemed appropriate since all associated results were non-detect, and the results are considered usable, albeit estimated. Note that this compound is not a project-specific analyte of concern for the site.

## **DATA USABILITY RESULTS**

### **VOCs**

Based on the evaluation of all information in the analytical data groups, the results of the samples for VOCs are highly usable with the data qualifiers as noted. Using the verification approach as presented above, the results for all above samples are 100% usable.

## **AFCEE SUMMARY**

All data in Job # 0903182 are valid and usable with qualifications as noted in the data review.

Signed: Concordia van Hoosier Date: 4/23/09

### **ATTACHMENTS**

- Chain-of-Custody
- Laboratory's Case Narrative
- Definition of AFCEE Data Qualifiers
- Definition of USEPA Data Qualifiers
- Qualified final data verification results on annotated Lab Sheet 2s

**AFCEE  
ORGANIC ANALYSES DATA PACKAGE**

Analytical Method: SW8260B

AAB #: R16915

Lab Name: Life Science Laboratories, Inc.

Contract Number:

Base/Command:

Prime Contractor: FPM Group

Field Sample ID	Lab Sample ID
TF3M2114TA	0903182-002A
TF3M12713TA DL	0903182-006ADL

**Comments:**

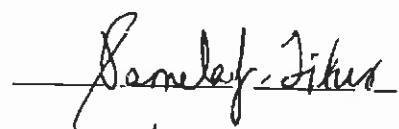
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I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the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

Signature:



Name: Pamela J. Titus

Date:

4/16/09

Title: Project Manager

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

#### **Preparatory Method:**

AAB #: R16897

**Lab Name:** Life Science Laboratories, Inc.

## Contents

Field Sample ID: TE3GE312TA

Last Sample ID: 8888123-881A

% Solids: 0

Initial Setup 11

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Concentration Units ( $\mu\text{g/L}$  or  $\text{mg/Kg}$  dry weight):  $\mu\text{g/L}$

**Data Analyzed.**

Analyte	MEP	RI	Retention Time	Conc.	Comments
(m+p)-Xylene	0.200	2.00	0.200	1	U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1	U
1,1,1-Trichloroethane	0.100	1.00	0.100	1	U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1	U
1,1,2-Trichloroethane	0.160	1.00	0.160	1	U
1,1-Dichloroethane	0.100	1.00	0.100	1	U
1,1-Dichloroethene	0.160	1.00	0.160	1	U
1,1-Dichloropropene	0.100	1.00	0.100	1	U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1	U
1,2,3-Trichloropropane	0.330	2.00	0.330	1	U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1	U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.160	1.00	0.160	1	U
1,2-Dichlorobenzene	0.100	1.00	0.100	1	U
1,2-Dichloroethane	0.160	0.500	0.160	1	U
1,2-Dichloropropane	0.160	1.00	0.160	1	U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1	U
1,3-Dichlorobenzene	0.100	1.00	0.100	1	U
1,3-Dichloropropane	0.100	0.500	0.100	1	U
1,4-Dichlorobenzene	0.160	0.500	0.160	1	U
1-Chlorohexane	0.160	1.00	0.160	1	U
2,2-Dichloropropane	0.330	1.00	0.330	1	U
2-Butanone	1.00	10.0	1.00	1	U
2-Chlorotoluene	0.100	1.00	0.100	1	U
4-Chlorotoluene	0.100	1.00	0.100	1	U
4-Methyl-2-pentanone	1.00	10.0	1.00	1	U
Acetone	1.00	10.0	1.00	1	U
Benzene	0.100	0.500	0.100	1	U
Bromobenzene	0.100	1.00	0.100	1	U
Bromochloromethane	0.100	1.00	0.100	1	U
Bromodichloromethane	0.100	0.500	0.100	1	U

**Comments:**

CWT  
4/13/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: TF3CE312TA

Lab Sample ID: 0903182-001A

Matrix: Groundwater

% Solids: 0

Initial Calibration ID: 1447

File ID: M6065.D

Date Received: 30-Mar-09

Data Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RI	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	1.52	1		
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.370	1		F
n-Propylbenzene	0.100	1.00	1.90	1		
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	1.51	1		U
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.310	1		F
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.800	1		F
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

CW  
4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3CE312TA</u>	Lab Sample ID: <u>0903182-001A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6065.D</u>
Date Received: <u>30-Mar-09</u>	Data Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RE	Concentration	Dilution	Confrm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	117	72 - 119	
4-Bromofluorobenzene	106	76 - 119	
Toluene-d8	99	81 - 120	

Normal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1763176	874552 - 3498208	
Chlorobenzene-d5	1974726	1033520 - 4134082	-
Fluorobenzene	3368932	1977723 - 7910892	

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4/23/09

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B

**Preparatory Method:**

**AAB #:** R16915

**Lab Name:** Life Science Laboratories, Inc.

**Contract #:**

**Field Sample ID:** TF3M2114TA

**Lab Sample ID:** 0903182-002A

**Matrix:** Groundwater

**% Solids:** 0

**Initial Calibration ID:** 1447

**File ID:** M6102.D

**Data Received:** 30-Mar-09

**Date Extracted:**

**Date Analyzed:** 08-Apr-09

**Concentration Units (ug/L or mg/Kg dry weight):** ug/L

**Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropene	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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Cut  
4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16915

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: TF3M2114TA

Lab Sample ID: 0903182-002A

Matrix: Groundwater

% Solids: 0

Initial Calibration ID: 1447

File ID: M6102.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 08-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualify
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		UQ
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	23.1	1		
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.710	1		F
n-Propylbenzene	0.100	1.00	3.14	1		
Naphthalene	0.100	1.00	0.100	1		
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.600	1		F
sec-Butylbenzene	0.160	1.00	1.56	1		
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.450	1		F
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #: <u>R16915</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:	
Field Sample ID: <u>TF3M2114TA</u>	Lab Sample ID: <u>0903182-002A</u>	Matrix: <u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID: <u>M6102.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed: <u>08-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size: <u>25 mL</u>

Analysis	MDL	RF	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	104	72 - 119	
4-Bromofluorobenzene	108	76 - 119	
Toluene-d8	107	81 - 120	

Internal Std	Area Count	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1758025	874552 - 3498208	
Chlorobenzene-d5	2130223	1033520 - 4134082	
Fluorobenzene	4401303	1977723 - 7910892	

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4/23/09

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M11613TA</u>	Lab Sample ID: <u>0903182-003A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6067.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	R <sub>L</sub>	Concentration	Dilution Factor	Comments	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16897</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>IF3M11613TA</u>	Lab Sample ID:	<u>0903182-003A</u>	Matrix:	<u>Groundwater</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6067.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Chemical Name	MDL	PPM	Sample Concentration	Calibration	Sample Volume	Comments
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	1.94	1		
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.640	1		F
n-Propylbenzene	0.100	1.00	1.27	1		
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	2.75	1		
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.490	1		F
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B

**Preparatory Method:**

**AAB #:** R16897

**Lab Name:** Life Science Laboratories, Inc.

**Contract #:**

**Field Sample ID:** TF3M11613TA

**Lab Sample ID:** 0903182-003A

**Matrix:** Groundwater

**% Solids:** 0

**Initial Calibration ID:** 1447

**File ID:** M6067.D

**Date Received:** 30-Mar-09

**Date Extracted:**

**Date Analyzed:** 06-Apr-09

**Concentration Units (ug/L or mg/Kg dry weight):** ug/L

**Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	112	72 - 119	
4-Bromofluorobenzene	103	76 - 119	
Toluene-d8	101	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1885608	874552 - 3498208	
Chlorobenzene-d5	1955609	1033520 - 4134082	
Fluorobenzene	3265412	1977723 - 7910892	

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**Comments:**

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 2**  
**RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: TF3M12313TA

Lab Sample ID: 0903182-004A

Matrix: Groundwater

% Solids: 0

Initial Calibration ID: 1447

File ID: M6068.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Calibration	Comments	Recalculated
(m+p)-Xylene	0.400	4.00	0.400	2			U
1,1,1,2-Tetrachloroethane	0.320	1.00	0.320	2			U
1,1,1-Trichloroethane	0.200	2.00	0.200	2			U
1,1,2,2-Tetrachloroethane	0.200	1.00	0.200	2			U
1,1,2-Trichloroethane	0.320	2.00	0.320	2			U
1,1-Dichloroethane	0.200	2.00	0.200	2			U
1,1-Dichloroethylene	0.320	2.00	0.320	2			U
1,1-Dichloropropene	0.200	2.00	0.200	2			U
1,2,3-Trichlorobenzene	0.200	2.00	0.200	2			U
1,2,3-Trichloropropane	0.660	4.00	0.660	2			U
1,2,4-Trichlorobenzene	0.200	2.00	0.200	2			U
1,2,4-Trimethylbenzene	0.200	2.00	8.84	2			
1,2-Dibromo-3-chloropropane	2.00	10.0	2.00	2			U
1,2-Dibromoethane	0.320	2.00	0.320	2			U
1,2-Dichlorobenzene	0.200	2.00	0.200	2			U
1,2-Dichloroethane	0.320	1.00	0.320	2			U
1,2-Dichloropropane	0.320	2.00	0.320	2			U
1,3,5-Trimethylbenzene	0.200	2.00	3.52	2			
1,3-Dichlorobenzene	0.200	2.00	0.200	2			U
1,3-Dichloropropane	0.200	1.00	0.200	2			U
1,4-Dichlorobenzene	0.320	1.00	0.320	2			U
1-Chlorohexane	0.320	2.00	0.320	2			U
2,2-Dichloropropane	0.660	2.00	0.660	2			U
2-Butanone	2.00	20.0	2.00	2			U
2-Chlorotoluene	0.200	2.00	0.200	2			U
4-Chlorotoluene	0.200	2.00	0.200	2			U
4-Methyl-2-pentanone	2.00	20.0	2.00	2			U
Acetone	2.00	20.0	2.00	2			U
Benzene	0.200	1.00	0.200	2			U
Bromobenzene	0.200	2.00	0.200	2			U
Bromochloromethane	0.200	2.00	0.200	2			U
Bromodichloromethane	0.200	1.00	0.200	2			U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16897</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>TF3M12313TA</u>	Lab Sample ID:	<u>0903182-004A</u>	Matrix:	<u>Groundwater</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6068.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Analyte	MDL	RI	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.660	2.00	0.660	2		U
Bromomethane	0.660	6.00	0.660	2		U
Carbon tetrachloride	0.200	2.00	0.200	2		U
Chlorobenzene	0.200	1.00	0.200	2		U
Chloroethane	0.660	2.00	0.660	2		U
Chloroform	0.200	1.00	0.200	2		U
Chloromethane	0.660	2.00	0.660	2		U
cis-1,2-Dichloroethene	0.200	2.00	0.200	2		U
cis-1,3-Dichloropropene	0.320	1.00	0.320	2		U
Dibromochloromethane	0.200	1.00	0.200	2		U
Dibromomethane	0.320	2.00	0.320	2		U
Dichlorodifluoromethane	0.200	2.00	0.200	2		U
Ethylbenzene	0.200	2.00	0.200	2		U
Hexachlorobutadiene	0.200	2.00	0.200	2		U
Isopropylbenzene	0.200	2.00	46.6	2		U
Methyl tert-butyl ether	0.320	10.0	0.320	2		U
Methylene chloride	0.320	2.00	0.320	2		U
n-Butylbenzene	0.200	2.00	0.760	2		F
n-Propylbenzene	0.200	2.00	4.62	2		U
Naphthalene	0.200	2.00	0.200	2		U
o-Xylene	0.200	2.00	0.200	2		U
p-Isopropyltoluene	0.320	2.00	0.960	2		F
sec-Butylbenzene	0.320	2.00	1.24	2		F
Styrene	0.200	2.00	0.200	2		U
tert-Butylbenzene	0.200	2.00	0.640	2		F
Tetrachloroethene	0.200	2.00	0.200	2		U
Toluene	0.200	2.00	0.200	2		U
trans-1,2-Dichloroethene	0.200	2.00	0.200	2		U
trans-1,3-Dichloropropene	0.320	2.00	0.320	2		U
Trichloroethene	0.200	2.00	0.200	2		U
Trichlorofluoromethane	0.200	2.00	0.200	2		U
Vinyl chloride	0.660	2.00	0.660	2		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M12313TA</u>	Lab Sample ID: <u>0903182-004A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6068.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Surrogate	MPR	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.600	4.00	0.600	2		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	114	72 - 119	
4-Bromofluorobenzene	100	76 - 119	
Toluene-d8	97	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1907338	874552 - 3498208	
Chlorobenzene-d5	2020279	1033520 - 4134082	
Fluorobenzene	3287653	1977723 - 7910892	

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**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M12313TC</u>	Lab Sample ID: <u>0903182-005A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6069.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RE	Concentration	Calibration	Comments	Qual.
(m+p)-Xylene	0.400	4.00	0.400	2		U
1,1,1,2-Tetrachloroethane	0.320	1.00	0.320	2		U
1,1,1-Trichloroethane	0.200	2.00	0.200	2		U
1,1,2,2-Tetrachloroethane	0.200	1.00	0.200	2		U
1,1,2-Trichloroethane	0.320	2.00	0.320	2		U
1,1-Dichloroethane	0.200	2.00	0.200	2		U
1,1-Dichloroethene	0.320	2.00	0.320	2		U
1,1-Dichloropropene	0.200	2.00	0.200	2		U
1,2,3-Trichlorobenzene	0.200	2.00	0.200	2		U
1,2,3-Trichloropropane	0.660	4.00	0.660	2		U
1,2,4-Trichlorobenzene	0.200	2.00	0.200	2		U
1,2,4-Trimethylbenzene	0.200	2.00	8.00	2		
1,2-Dibromo-3-chloropropane	2.00	10.0	2.00	2		U
1,2-Dibromoethane	0.320	2.00	0.320	2		U
1,2-Dichlorobenzene	0.200	2.00	0.200	2		U
1,2-Dichloroethane	0.320	1.00	0.320	2		U
1,2-Dichloropropene	0.320	2.00	0.320	2		U
1,3,5-Trimethylbenzene	0.200	2.00	1.38	2		F
1,3-Dichlorobenzene	0.200	2.00	0.200	2		U
1,3-Dichloropropane	0.200	1.00	0.200	2		U
1,4-Dichlorobenzene	0.320	1.00	0.320	2		U
1-Chlorohexane	0.320	2.00	0.320	2		U
2,2-Dichloropropane	0.660	2.00	0.660	2		U
2-Butanone	2.00	20.0	2.00	2		U
2-Chlorotoluene	0.200	2.00	0.200	2		U
4-Chlorotoluene	0.200	2.00	0.200	2		U
4-Methyl-2-pentanone	2.00	20.0	2.00	2		U
Acetone	2.00	20.0	2.00	2		U
Benzene	0.200	1.00	0.200	2		U
Bromobenzene	0.200	2.00	0.200	2		U
Bromochloromethane	0.200	2.00	0.200	2		U
Bromodichloromethane	0.200	1.00	0.200	2		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: TF3M12313TC

Lab Sample ID: 0903162-005A

Matrix: Groundwater

% Solids: 0

Initial Calibration ID: 1447

File ID: M6069.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	PPM	R	Concentration	Dilution	Comments	Unit
Bromoform	0.660	2.00	0.660	2		U
Bromomethane	0.660	6.00	0.660	2		U
Carbon tetrachloride	0.200	2.00	0.200	2		U
Chlorobenzene	0.200	1.00	0.200	2		U
Chloroethane	0.660	2.00	0.660	2		U
Chloroform	0.200	1.00	0.200	2		U
Chloromethane	0.660	2.00	0.660	2		U
cis-1,2-Dichloroethene	0.200	2.00	0.200	2		U
cis-1,3-Dichloropropene	0.320	1.00	0.320	2		U
Dibromochloromethane	0.200	1.00	0.200	2		U
Dibromomethane	0.320	2.00	0.320	2		U
Dichlorodifluoromethane	0.200	2.00	0.200	2		U
Ethylbenzene	0.200	2.00	0.200	2		U
Hexachlorobutadiene	0.200	2.00	0.200	2		U
Isopropylbenzene	0.200	2.00	40.8	2		
Methyl tert-butyl ether	0.320	10.0	0.320	2		U
Methylene chloride	0.320	2.00	0.320	2		U
n-Butylbenzene	0.200	2.00	0.740	2		F
n-Propylbenzene	0.200	2.00	4.08	2		
Naphthalene	0.200	2.00	0.200	2		U
o-Xylene	0.200	2.00	0.200	2		U
p-Isopropyltoluene	0.320	2.00	0.880	2		F
sec-Butylbenzene	0.320	2.00	1.02	2		F
Styrene	0.200	2.00	0.200	2		U
tert-Butylbenzene	0.200	2.00	0.540	2		F
Tetrachloroethene	0.200	2.00	0.200	2		U
Toluene	0.200	2.00	0.200	2		U
trans-1,2-Dichloroethane	0.200	2.00	0.200	2		U
trans-1,3-Dichloropropene	0.320	2.00	0.320	2		U
Trichloroethene	0.200	2.00	0.200	2		U
Trichlorofluoromethane	0.200	2.00	0.200	2		U
Vinyl chloride	0.660	2.00	0.660	2		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #: <u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:	
Field Sample ID: <u>TF3M12313TC</u>	Lab Sample ID: <u>0903182-005A</u>	Matrix: <u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID: <u>M6069.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed: <u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size: <u>25 mL</u>

Analysis	MDL	RI	Concentration	Dilution	Comments	Qualifier
Xylenes (total)	0.600	4.00	0.600	2		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	115	72 - 119	
4-Bromofluorobenzene	101	76 - 119	
Toluene-d8	88	81 - 120	

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Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1921029	874552 - 3498208	
Chlorobenzene-d5	2270318	1033520 - 4134082	
Fluorobenzene	3299142	1977723 - 7910892	

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: TF3M12713TA

Lab Sample ID: 0903182-006A

Matrix: Groundwater

% Solids: 0

Initial Calibration ID: 1447

File ID: M6070.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RI	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	41.0	1		
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		
1,1,1-Trichloroethane	0.100	1.00	0.100	1		
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		
1,1,2-Trichloroethane	0.160	1.00	0.160	1		
1,1-Dichloroethane	0.100	1.00	0.100	1		
1,1-Dichloroethene	0.160	1.00	0.160	1		
1,1-Dichloropropene	0.100	1.00	0.100	1		
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		
1,2,3-Trichloropropane	0.330	2.00	0.330	1		
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		
1,2,4-Trimethylbenzene	0.100	1.00	3874.104	F 5		
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		
1,2-Dibromoethane	0.160	1.00	0.160	1		
1,2-Dichlorobenzene	0.100	1.00	0.100	1		
1,2-Dichloroethane	0.160	0.500	0.160	1		
1,2-Dichloropropane	0.160	1.00	0.160	1		
1,3,5-Trimethylbenzene	0.100	1.00	20.3	1		
1,3-Dichlorobenzene	0.100	1.00	0.100	1		
1,3-Dichloropropane	0.100	0.500	0.100	1		
1,4-Dichlorobenzene	0.160	0.500	0.160	1		
1-Chlorohexans	0.160	1.00	0.160	1		
2,2-Dichloropropane	0.330	1.00	0.330	1		
2-Butanone	1.00	10.0	1.00	1		
2-Chlorotoluene	0.100	1.00	0.100	1		
4-Chlorotoluene	0.100	1.00	0.100	1		
4-Methyl-2-pentanone	1.00	10.0	1.00	1		
Acetone	1.00	10.0	1.00	1		
Benzene	0.100	0.500	0.630	1		
Bromobenzene	0.100	1.00	0.100	1		
Bromochloromethane	0.100	1.00	0.100	1		
Bromodichloromethane	0.100	0.500	0.100	1		

Comments:

\*Result transferred from dilution sample TF3M12713TA(1:5)

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B

**Preparatory Method:**

**AAB #:** R16897

**Lab Name:** Life Science Laboratories, Inc.

**Contract #:**

**Field Sample ID:** TF3M12713TA

**Lab Sample ID:** 0903182-006A

**Matrix:** Groundwater

**% Solids:** 0

**Initial Calibration ID:** 1447

**File ID:** M6070.D

**Date Received:** 30-Mar-09

**Date Extracted:**

**Date Analyzed:** 06-Apr-09

**Concentration Units (ug/L or mg/Kg dry weight):** ug/L

**Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	842.92	2	± 5	+
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	27.2	1		
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	1.31	1		
n-Propylbenzene	0.100	1.00	26.9	1		
Naphthalene	0.100	1.00	27.0	1		
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	1.78	1		
sec-Butylbenzene	0.160	1.00	2.84	1		
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

**Comments:**

\*Result transferred from dilution sample TF3M12713TA DL (1:5)

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16697</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>JF3M12713TA</u>	Lab Sample ID: <u>0903182-006A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6070.D</u>
Data Received: <u>30-Mar-09</u>	Data Extracted:	Data Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Comments	Qualifier
Xylenes (total)	0.300	2.00	41.0	1		

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	115	72 - 119	
4-Bromofluorobenzene	97	76 - 119	
Toluene-d8	97	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	2073607	874552 - 3498208	
Chlorobenzene-d5	2124423	1033520 - 4134082	
Fluorobenzene	3459945	1977723 - 7910892	

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**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16915

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: TF3M12713TA DL

Lab Sample ID: 0903182-006ADL

Matrix: Groundwater

% Solids: 0

Initial Calibration ID: 1447

File ID: M6103.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 08-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	IDF	RL	Concentration	Dilution	Comments	Calibration
(m+p)-Xylene	1.00	10.0	39.8	5		
1,1,1,2-Tetrachloroethane	0.800	2.50	0.800	5		U
1,1,1-Trichloroethane	0.500	5.00	0.500	5		U
1,1,2,2-Tetrachloroethane	0.500	2.50	0.500	5		U
1,1,2-Trichloroethane	0.800	5.00	0.800	5		U
1,1-Dichloroethane	0.500	5.00	0.500	5		U
1,1-Dichloroethene	0.800	5.00	0.800	5		U
1,1-Dichloropropene	0.500	5.00	0.500	5		U
1,2,3-Trichlorobenzene	0.500	5.00	0.500	5		U
1,2,3-Trichloropropane	1.65	10.0	1.65	5		U
1,2,4-Trichlorobenzene	0.500	5.00	0.500	5		U
1,2,4-Trimethylbenzene	0.500	5.00	104	5		
1,2-Dibromo-3-chloropropane	5.00	25.0	5.00	5		U
1,2-Dibromoethane	0.800	5.00	0.800	5		U
1,2-Dichlorobenzene	0.500	5.00	0.500	5		U
1,2-Dichloroethane	0.800	2.50	0.800	5		U
1,2-Dichloropropane	0.800	5.00	0.800	5		U
1,3,5-Trimethylbenzene	0.500	5.00	20.6	5		
1,3-Dichlorobenzene	0.500	5.00	0.500	5		U
1,3-Dichloropropane	0.500	2.50	0.500	5		U
1,4-Dichlorobenzene	0.800	2.50	0.800	5		U
1-Chlorohexane	0.800	5.00	0.800	5		U
2,2-Dichloropropane	1.65	5.00	1.65	5		U
2-Butanone	5.00	50.0	5.00	5		U
2-Chlorotoluene	0.500	5.00	0.500	5		U
4-Chlorotoluene	0.500	5.00	0.500	5		U
4-Methyl-2-pentanone	5.00	50.0	5.00	5		U
Acetone	5.00	50.0	5.00	5		U
Benzene	0.500	2.50	0.500	5		U
Bromobenzene	0.500	5.00	0.500	5		U
Bromochloromethane	0.500	5.00	0.500	5		U
Bromodichloromethane	0.500	2.50	0.500	5		U

Comments:

\* result transferred to original sample TF3M12713TA (1:1)

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #: <u>R16915</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:	
Field Sample ID: <u>TF3M12713TA DL</u>	Lab Sample ID: <u>0903182-006ADL</u>	Matrix: <u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID: <u>M6103.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed: <u>08-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size: <u>25 mL</u>

Analyte	MDL	PRE	Concentration	Dilution	Comments	Qual.
Bromoform	1.65	5.00	1.65	5		U
Bromomethane	1.65	15.0	1.65	5		U
Carbon tetrachloride	0.500	5.00	0.500	5		U
Chlorobenzene	0.500	2.50	0.500	5		U
Chloroethane	1.65	5.00	1.65	5		U
Chloroform	0.500	2.50	0.500	5		U
Chloromethane	1.65	5.00	1.65	5		UQ
cis-1,2-Dichloroethene	0.500	5.00	0.500	5		U
cis-1,3-Dichloropropene	0.800	2.50	0.800	5		U
Dibromochloromethane	0.500	2.50	0.500	5		U
Dibromomethane	0.800	5.00	0.800	5		U
Dichlorodifluoromethane	0.500	5.00	0.500	5		U
Ethylbenzene	0.500	5.00	92.2	5		
Hexachlorobutadiene	0.500	5.00	0.500	5		U
Isopropylbenzene	0.500	5.00	31.6	5		
Methyl tert-butyl ether	0.800	25.0	0.800	5		U
Methylene chloride	0.800	5.00	0.800	5		U
n-Butylbenzene	0.500	5.00	1.05	5		F
n-Propylbenzene	0.500	5.00	28.0	5		
Naphthalene	0.500	5.00	33.1	5		
o-Xylene	0.500	5.00	0.500	5		U
p-Isopropyltoluene	0.800	5.00	1.60	5		
sec-Butylbenzene	0.800	5.00	2.95	5		F
Styrene	0.500	5.00	0.500	5		U
tert-Butylbenzene	0.500	5.00	0.500	5		U
Tetrachloroethene	0.500	5.00	0.500	5		U
Toluene	0.500	5.00	0.500	5		U
trans-1,2-Dichloroethene	0.500	5.00	0.500	5		U
trans-1,3-Dichloropropene	0.800	5.00	0.800	5		U
Trichloroethene	0.500	5.00	0.500	5		U
Trichlorofluoromethane	0.500	5.00	0.500	5		U
Vinyl chloride	1.65	5.00	1.65	5		U

Comments: \* Resent transferred to original sample TF3M12713TA (1:1)

cont  
4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B      Preparatory Method:       AAB #: R16915  
 Lab Name: Life Science Laboratories, Inc.      Contract #:   
 Field Sample ID: TF3M12713TA DL      Lab Sample ID: 0903182-006ADL      Matrix: Groundwater  
 % Solids: 0      Initial Calibration ID: 1447      File ID: M6103.D  
 Date Received: 30-Mar-09      Date Extracted:       Date Analyzed: 08-Apr-09  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 25 mL

Analyte	MDL	RI	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	1.50	10.0	39.8	5		

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	111	72 - 119	
4-Bromofluorobenzene	103	76 - 119	
Toluene-d8	106	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1776148	874552 - 3498208	
Chlorobenzene-d5	2219454	1033520 - 4134082	
Fluorobenzene	4593959	1977723 - 7910892	

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4/23/09

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 2**  
**RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: TF3M12813TA

Lab Sample ID: 0903182-007A

Matrix: Groundwater

% Solids: 0

Initial Calibration ID: 1447

File ID: M6071.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Sample Size	Comments
(m+p)-Xylene	0.200	2.00	0.710	1		F
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	1.42	1		
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.620	1		F
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromoform	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: TF3M12813TA

Lab Sample ID: 0903182-007A

Matrix: Groundwater

% Solids: 0

Initial Calibration ID: 1447

File ID: M6071.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Comments	Speciation
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.900	1		F
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	0.720	1		F
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1		U
n-Propylbenzene	0.100	1.00	0.700	1		U
Naphthalene	0.100	1.00	1.18	1		F
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.220	1		F
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #: <u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:	
Field Sample ID: <u>TF3M12013TA</u>	Lab Sample ID: <u>0903182-007A</u>	Matrix: <u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID: <u>M6071.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed: <u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size: <u>25 mL</u>

	Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)		0.300	2.00	0.710	1		F

	Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4		113	72 - 119	
4-Bromofluorobenzene		104	76 - 119	
Toluene-d8		95	81 - 120	

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	Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4		1831605	874552 - 3498208	
Chlorobenzene-d5		2186358	1033520 - 4134082	
Fluorobenzene		3548807	1977723 - 7910892	

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M13316TA</u>	Lab Sample ID: <u>0903182-008A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6072.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Chemical Name	MDL	RL	Concentration	Dilution	Confirm	Notes
(m+p)-Xylene	0.200	2.00	0.330	1		F
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	3.20	1		
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	5.02	1		
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromoform	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	0.500	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>JF3M13316TA</u>	Lab Sample ID: <u>0903182-008A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6072.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	URL	Concentration	Dilution	Confirm	Sample	Positive
Bromoform	0.330	1.00	0.330	1			U
Bromomethane	0.330	3.00	0.330	1			U
Carbon tetrachloride	0.100	1.00	0.100	1			U
Chlorobenzene	0.100	0.500	0.100	1			U
Chloroethane	0.330	1.00	0.330	1			U
Chloroform	0.100	0.500	0.100	1			U
Chloromethane	0.330	1.00	0.330	1			U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1			U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1			U
Dibromochloromethane	0.100	0.500	0.100	1			U
Dibromomethane	0.160	1.00	0.160	1			U
Dichlorodifluoromethane	0.100	1.00	0.100	1			U
Ethylbenzene	0.100	1.00	0.290	1			F
Hexachlorobutadiene	0.100	1.00	0.100	1			U
Isopropylbenzene	0.100	1.00	9.06	1			
Methyl tert-butyl ether	0.160	5.00	0.160	1			U
Methylene chloride	0.160	1.00	0.160	1			U
n-Butylbenzene	0.100	1.00	2.01	1			
n-Propylbenzene	0.100	1.00	13.7	1			
Naphthalene	0.100	1.00	1.46	1			
o-Xylene	0.100	1.00	0.100	1			U
p-Isopropyltoluene	0.160	1.00	1.75	1			
sec-Butylbenzene	0.160	1.00	6.73	1			
Styrene	0.100	1.00	0.100	1			U
tert-Butylbenzene	0.100	1.00	1.01	1			
Tetrachloroethene	0.100	1.00	0.100	1			U
Toluene	0.100	1.00	0.100	1			U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1			U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1			U
Trichloroethene	0.100	1.00	0.100	1			U
Trichlorofluoromethane	0.100	1.00	0.100	1			U
Vinyl chloride	0.330	1.00	0.330	1			U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B      Preparatory Method:       AAB #: R16897  
 Lab Name: Life Science Laboratories, Inc.      Contract #:   
 Field Sample ID: TF3M13316TA      Lab Sample ID: 0903182-008A      Matrix: Groundwater  
 % Solids: 0      Initial Calibration ID: 1447      File ID: M6072.D  
 Date Received: 30-Mar-09      Date Extracted:       Date Analyzed: 06-Apr-09  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 25 mL

Analyte	MDL	RI	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.330	1		F

Calibration Standard	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	119	72 - 119	
4-Bromofluorobenzene	106	76 - 119	
Toluene-d8	98	81 - 120	

Internal Std	Area Count	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1934159	874552 - 3498208	
Chlorobenzene-d5	2058937	1033520 - 4134082	
Fluorobenzene	3346570	1977723 - 7910892	

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Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: 032709TE

Lab Sample ID: 0903182-009A

Matrix: Water Q

% Solids: 0

Initial Calibration ID: 1447

File ID: M6063.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Comments	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorofluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: 032709TE

Lab Sample ID: 0903182-009A

Matrix: Water Q

% Solids: 0

Initial Calibration ID: 1447

File ID: M6063.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RI	Concentration	Dilution	Comments	Review
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	0.100	1		U
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1		U
n-Propylbenzene	0.100	1.00	0.100	1		U
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.160	1		U
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

CM  
4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #: <u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:	
Field Sample ID: <u>032709TE</u>	Lab Sample ID: <u>0903182-009A</u>	Matrix: <u>Water Q</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID: <u>M6063.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed: <u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size: <u>25 mL</u>

Sample	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Lmts	Qualifier
1,2-Dichloroethane-d4	117	72 - 119	
4-Bromofluorobenzene	103	76 - 119	
Toluene-d8	99	81 - 120	

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4/23/09

Internal Std	Area Counts	Area Count Lmts	Qualifier
1,4-Dichlorobenzene-d4	1656408	874552 - 3498208	
Chlorobenzene-d5	2004356	1033520 - 4134082	
Fluorobenzene	3556266	1977723 - 7910892	

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: 032709TF

Lab Sample ID: 0903182-010A

Matrix: Water Q

% Solids: 0

Initial Calibration ID: 1447

File ID: M6064.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Condition	Caliber
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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\_\_\_\_\_  
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4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #: <u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:	
Field Sample ID: <u>032709TF</u>	Lab Sample ID: <u>0903182-010A</u>	Matrix: <u>Water Q</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID: <u>M6054.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed: <u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size: <u>25 ml.</u>

Analyte	MDL	RI <sub>r</sub>	Concentration	Dilution	Comments	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	0.100	1		U
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1		U
n-Propylbenzene	0.100	1.00	0.100	1		U
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.160	1		U
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>032709TF</u>	Lab Sample ID: <u>0903182-010A</u>	Matrix:	<u>Water Q</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6064.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>µg/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Lims	Qualifier
1,2-Dichloroethane-d4	117	72 - 119	
4-Bromofluorobenzene	105	76 - 119	
Toluene-d8	99	81 - 120	

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Internal Std	Area Counts	Area Count Lims	Qualifier
1,4-Dichlorobenzene-d4	1620248	874552 - 3498208	
Chlorobenzene-d5	1969784	1033520 - 4134082	
Fluorobenzene	3508833	1977723 - 7910892	

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: 032709TR

Lab Sample ID: 0903182-011A

Matrix: Water Q

% Solids: 0

Initial Calibration ID: 1447

File ID: M6062.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropene	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

cut  
4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: 032709TR

Lab Sample ID: 0903182-011A

Matrix: Water Q

% Solids: 0

Initial Calibration ID: 1447

File ID: M6062.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 06-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualify
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	0.100	1		U
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1		U
n-Propylbenzene	0.100	1.00	0.100	1		U
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.160	1		U
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

cut  
4/23/09

**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #: <u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:	
Field Sample ID: <u>032709TR</u>	Lab Sample ID: <u>0903182-011A</u>	Matrix: <u>Water Q</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID: <u>M6062.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed: <u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size: <u>25 mL</u>

Analyte	MDL	RI	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	114	72 - 119	
4-Bromofluorobenzene	103	76 - 119	
Toluene-d8	101	81 - 120	

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Internal Std	Area Counts	Area Count Units	Qualifier
1,4-Dichlorobenzene-d4	1664781	874552 - 3498208	
Chlorobenzene-d5	1984868	1033520 - 4134082	
Fluorobenzene	3628954	1977723 - 7910892	

Comments:

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## **Quality Control Results**

**GRIFFISS ENVIRONMENTAL SAMPLES - PETROLEUM SITES**  
**CHEMICAL DATA QUALITY CONTROL SUMMARY MEMORANDUM: RESULTS FOR ORGANICS**

Laboratory: LSL, Inc. FPM Contract#: 40-05-27 Method: 8260  
 Job Number: 0904014 LSL Project: Building 15 Reviewer: Connie van Hoesel  
 Sample Date: 4/1/09 Review Date: 5/1/09

<b>Review Questions</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Compounds/Samples Affected and/or Comments</b>	<b>Flag</b>
1a. Were sample preservation requirements met?	X				
1b. Were sample storage requirements met?	X				
2. Were QAPP-specified RLs achieved?	X			As per approved variance.	None
3. Were measurement results for all QAPP-specified target analytes reported?	X				
4. Were all results reported between the MDL and the RL flagged F?	X				
5a. Were surrogate spikes added to every sample, control, standard, and method blank?	X				
5b. Was the %R for each surrogate spike within QAPP specifications?	X	X			
6. If dilutions were performed, which results should be reported?	X			Sample B15M1216VA was analyzed at a dilution of 1:10. The dilution results only are reported and used in the data verification.	
7. Were target analytes in the field blank analyses (trip, field or equipment) reported below half the RL?	X				
8a. Was a method blank analyzed with each batch?	X				
8b. Were target analytes in the method blank reported below half the RL?	X				
9a. Were the mass spectral ion intensities using BFB	X				

Signed: Connie van Hoesel

Dated: 4/23/09

## **Appendix D**

### **Raw Lab Data**

# **Life Science Laboratories, Inc.**

**5000 Brittonfield Parkway, Suite 200  
East Syracuse, NY 13057                           (315) 437-0200**

Friday, April 17, 2009

Niels van Hoesel  
FPM Group  
153 Brooks Road  
Rome, NY 13441

TEL:

Project: GRIFFISS AFB - TF 1 AND 3

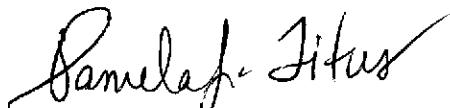
RE: Analytical Results

Order No.: 0903182

Dear Niels van Hoesel:

Life Science Laboratories, Inc. received 11 sample(s) on 3/30/2009 for the analyses presented in the following report. Sample results relate only to the samples as received by the laboratory.

Very truly yours,  
Life Science Laboratories, Inc.



Pamela J. Titus  
Project Manager

# **Laboratory Report**

## **Project Management Case Narrative**

### **INTRODUCTION/ANALYTICAL RESULTS**

This report summarizes the laboratory results for samples from FPM, for the Griffiss AFB-TF 1 and 3 – Rome, NY project.

### **CONDITION UPON RECEIPT/CHAIN OF CUSTODY**

The cooler(s) were received intact. When the cooler(s) were received by the laboratory, the sample custodian(s) opened and inspected the shipment(s) for damage and custody inconsistencies. Chains of custody documenting receipt are presented in the chain of custody section. Each sample was assigned a unique laboratory number and a custody file created. The samples were placed in a secured walk-in cooler and signed in and out by the chemists performing the tests. The sign out record, or lab chronicle, is presented in the chain of custody section.

There were no discrepancies noted upon receipt. The temperature of the well iced cooler was 3.4°C.

### **METHODOLOGY**

The following methods were used to perform the analyses:

PARAMETER	METHOD	REFERENCE
Volatile Organics	SW8260B	1
1) <u>Test Methods for Evaluating Solid Wastes, SW-846 Third Edition, Final Update III, December 1996</u> (including the QC requirements specified in AFCEE 4.0 + variances).		

### **QUALITY CONTROL**

QA/QC results are summarized in the Laboratory Report.

### **RAW DATA**

The raw data is not requested for this report. Life Science Laboratories, Inc. will keep the raw data on file.

## GC/MS Volatile Organics Case Narrative

Client: FPM  
Project/Order: Griffiss AFB – TF 1 and 3  
Work Order #: 0903182  
Methodology: 8260B

Analyzed/Reviewed by (Initials/Date): HS 4/15/09

Supervisor/Reviewed by (Initials/Date): MWP for MV 4/6/09

QA/QC Review (Initials/Date): MM for LK 4/16/09

File Name: G:\Narratives\MSVoa\0903182msvnar.doc

### **GC/MS Volatile Organics**

The GC/MS Volatile instruments are equipped with a Restek Rtx-VMS, 60 m x 0.25 mm ID capillary column (MS01), Restek Rtx-502.2, 105 m x 0.53 mm ID capillary column (MS02), Restek Rtx-502.2, 60 m x 0.25 mm ID capillary column (MS03) and Restek Rtx-VMS, 60 m x 0.25mm ID capillary column (MS04), and a Vocabr 3000 adsorbent trap.

### **Holding Times and Sample Preservation**

All samples were prepared and analyzed within the method and/or QAPP specified holding time requirements. Samples had a pH of < 2.

### **Laboratory Control Sample**

The following compound(s) did not meet laboratory control sample recovery criteria:

LCS No.	Compound	Corrective Action
LCS-16897	Acetone	1

- 1 The recovery exceeded the upper control limit and was not detected above the PQL/RL in the associated samples. This excursion is allowed by a project variance to the QAPP. No corrective action was taken.

### **Surrogate Standards**

All surrogate standard recoveries met method and/or project specific QC criteria.

### **Internal Standards**

All internal standard areas met method and/or project specific QC criteria.

### **Calibrations**

The following continuing calibration compound(s) exceeded method percent drift and/or RRF criteria:

Calibration ID	Instrument	Compound	%D	RRF	Corrective Action
CCV-16915	MS 2	Chloromethane	-28.9		1

- 1 The recovery exceeded the lower control limit and was not detected above the PQL/RL in the associated samples. The client determined the analyte was not a compound of concern and allowed the excursion. No corrective action was taken.

## **GC/MS Volatile Organics Case Narrative - Page 2**

Client:	FPM
Project/Order:	Griffiss AFB – TF 1 and 3
Work Order #:	0903182
Methodology:	8260B

### **Preparation Blanks**

All preparation blanks met method and/or project specific QC criteria.

**Life Science Laboratories, Inc.****Date: 16-Apr-09**

**CLIENT:** FPM Group  
**Project:** Griffiss AFB - TF 1 and 3  
**Lab Order:** 0903182

**Work Order Sample Summary**

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Tag Number</b>	<b>Collection Date</b>	<b>Date Received</b>
0903182-001A	TF3CE312TA	MW-CE	3/27/2009	3/30/2009
0903182-002A	TF3M2114TA	TF3MW21	3/27/2009	3/30/2009
0903182-003A	TF3M11613TA	WL-TF3MW-116	3/27/2009	3/30/2009
0903182-004A	TF3M12313TA	WL-TF3MW-123	3/27/2009	3/30/2009
0903182-005A	TF3M12313TC	WL-TF3MW-123	3/27/2009	3/30/2009
0903182-006A	TF3M12713TA	WL-TF3MW-127	3/27/2009	3/30/2009
0903182-007A	TF3M12813TA	WL-TF3MW-128	3/27/2009	3/30/2009
0903182-008A	TF3M13316TA	WL-TF3MW-133	3/27/2009	3/30/2009
0903182-009A	032709TE	FIELDQC	3/27/2009	3/30/2009
0903182-010A	032709TF	FIELDQC	3/27/2009	3/30/2009
0903182-011A	032709TR	FIELDQC	3/27/2009	3/30/2009

**Life Science Laboratories, Inc.**

16-Apr-09

**Lab Order:** 0903182  
**Client:** FPM Group  
**Project:** Griffiss AFB - TF 1 and 3

**DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0903182-001A	TF3CE312TA	3/27/2009 10:56:00 AM	Groundwater	Volatile Organic Compounds by GC/MS			4/6/2009
0903182-002A	TF3M2114TA	3/27/2009 12:00:00 PM		Volatile Organic Compounds by GC/MS			4/8/2009
0903182-003A	TF3M11613TA	3/27/2009 12:30:00 PM		Volatile Organic Compounds by GC/MS			4/6/2009
0903182-004A	TF3M12313TA	3/27/2009 12:15:00 PM		Volatile Organic Compounds by GC/MS			4/6/2009
0903182-005A	TF3M12313TC			Volatile Organic Compounds by GC/MS			4/6/2009
0903182-006A	TF3M12713TA	3/27/2009 10:08:00 AM		Volatile Organic Compounds by GC/MS			4/6/2009
				Volatile Organic Compounds by GC/MS			4/8/2009
0903182-007A	TF3M12813TA	3/27/2009 9:48:00 AM		Volatile Organic Compounds by GC/MS			4/6/2009
0903182-008A	TF3M13316TA	3/27/2009 10:30:00 AM		Volatile Organic Compounds by GC/MS			4/6/2009
0903182-009A	032709TE	3/27/2009 2:00:00 PM	Water Q	Volatile Organic Compounds by GC/MS			4/6/2009
0903182-010A	032709TF	3/27/2009 12:45:00 PM		Volatile Organic Compounds by GC/MS			4/6/2009
0903182-011A	032709TR	3/27/2009 9:00:00 AM		Volatile Organic Compounds by GC/MS			4/6/2009

## **Chain of Custody**

**AFCEE  
CHAIN OF CUSTODY RECORD**

COC#: 1 SDG#: 212 Cooler ID: A

Ship to: Pamela Titus Life Science Laboratories, Inc. 5000 Brittonfield Pkwy, Suite 200 East Syracuse, NY 13057 Tel: (315)437-0200 Carrier: LSL courier:		Project Name: Griffiss AFB TF 1 and 3 Sampling Sampler Name: Josh Wenzel <i>Niels van Hoesel for</i> Sampler Signature: <i>JW</i>		Send Results to: Niels van Hoesel FPM Group 153 Brooks Road Rome, NY 13441 Phone: (315) 336-7721 Ext. 205	
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Field Sample ID	Location ID (LOCID)	Date 2009	Time	MATRIX	SACODE	SBD/SED	SMCODE	No. of Contaminers	VOC note 1	SVOCs note 2	1 L amber	Total Alkalinity note 3 (zero headspace)	Nitrogen (Nitrate) note 4 16 oz poly	Total Sulfide Note 5 16 oz poly (ZnAC and NaOH)	Comments	Analyses Requested			
																Preservative	Filter/Unfilter.	40 mL vials (HCl)	SVOCs note 2
TF3CE312TA	MW-CE	3/27	1056	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
TF3M2114TA	TF3MW21	3/27	1200	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
TF3M11613TA	WL-TF3MW-116	3/27	1230	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
TF3M12313TA	WL-TF3MW-123	3/27	1215	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
TF3M12313TC	WL-TF3MW-123	3/27	1215	WG	B	0/0	FD	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
TF3M12713TA	WL-TF3MW-127	3/27	1008	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
TF3M12813TA	WL-TF3MW-128	3/27	0948	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
TF3M13316TA	WL-TF3MW-133	3/27	1030	WG	B	0/0	N	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
032709TE	FIELDQC	3/27	1400	WQ	B	0/0	EB	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
032709TF	FIELDQC	3/27	1245	WQ	NA	0/0	AB	HCl	Unf.	3	3	-	-	-	-	-	-	-	-
032709TR	FIELDQC	3/27	0900	WQ	NA	0/0	TB	HCl	Unf.	3	3	-	-	-	-	-	-	-	-

Sample Condition Upon Receipt at Laboratory: <i>Good</i>	Cooler Temperature: <i>3.4 °C</i>
Special Instructions/Comments: Analyses to be conducted in compliance with AFCEE QAPP 4.0	
Note 1: VOCs: SW8260, AFCEE QAPP 4.0 List.	
Note 2: SVOCs: SW8270, AFCEE QAPP 4.0 List.	
Note 3: Total Alkalinity, 310.2.	
Note 4: Nitrogen: 353.2, Nitrate: Automated.	
Note 5: Total Sulfide: 376.2.	

#1 Released by: (Sig)	Date:	#2 Released by: (Sig)	Date: 3/16/09	#3 Released by: (Sig)	Date: 3/30/09
Company Name:	Time:	Company Name: FPM Group Ltd	Time: 3:05 pm	Company Name: CSM	Time: 1:50 pm
#1 Received by: (Sig) Niels van Hoesel	Date: 3/16/09	#3 Received by: (Sig)	Date 3/20/09	#3 Received by: (Sig)	Date 3/30/09
Company Name: FPM Group Ltd	Time: 1000	Company Name: CSM	Time: 1:00	Company Name: CSM	Time: 1:00

#### MATRIX

WG = Ground water  
 WQ = Water Quality Control Matrix  
 SO = Soil

#### SMC CODE

B = Bailer  
 G = Grab (only for EB).  
 NA = Not Applicable (only for AB/TB)  
 PP = Peristaltic Pump  
 BP = Bladder Pump  
 SP = Submersible Pump  
 SS = Split Spoon

#### SACODE

N = Normal Sample  
 AB = Ambient Blank  
 TB = Trip Blank  
 EB = Equipment Blank  
 FD = Field Duplicate  
 MS = Matrix Spike  
 SD = Matrix Spike Duplicate

**Life Science Laboratories, Inc.****Sample Receipt Checklist**

Client Name: FPM

Date and Time Received:

3/30/2009 4:10:00 PM

Work Order Number: 0903182

Received by: ads

Checklist completed by:

Initials

3/30/09  
Date

Reviewed by:

Initials

3/31/09  
DateDelivery Method: Courier

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Comments:

Corrective Action:

## **Analytical Results**

**AFCEE  
ORGANIC ANALYSES DATA PACKAGE**

**Analytical Method:** SW8260B

**AAB #:**

R16897

**Lab Name:** Life Science Laboratories, Inc.

**Contract Number:**

**Base/Command:**

**Prime Contractor:** FPM Group

Field Sample ID	Lab Sample ID
TF3CE312TA	0903182-001A
TF3M11613TA	0903182-003A
TF3M12313TA	0903182-004A
TF3M12313TC	0903182-005A
TF3M12713TA	0903182-006A
TF3M12813TA	0903182-007A
TF3M13316TA	0903182-008A
032709TE	0903182-009A
032709TF	0903182-010A
032709TR	0903182-011A

**Comments:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

Signature:

Pamela J. Titus

Name: Pamela J. Titus

Date:

4/16/09

Title: Project Manager

**AFCEE  
ORGANIC ANALYSES DATA PACKAGE**

Analytical Method: SW8260B      AAB #: R16915

Lab Name: Life Science Laboratories, Inc.      Contract Number:

Base/Command:      Prime Contractor: FPM Group

Field Sample ID	Lab Sample ID
TF3M2114TA	0903182-002A
TF3M12713TA DL	0903182-006ADL

**Comments:**

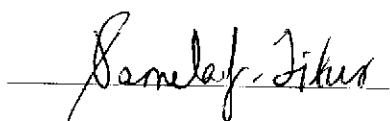
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I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the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

Signature:



Name: Pamela J. Titus

Date:

4/16/09

Title: Project Manager

**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 2**  
**RESULTS**

**Analytical Method:** SW8260B      **Preparatory Method:** \_\_\_\_\_      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Field Sample ID:** TF3CE312TA      **Lab Sample ID:** 0903182-001A      **Matrix:** Groundwater  
**% Solids:** 0      **Initial Calibration ID:** 1447      **File ID:** M6065.D  
**Date Received:** 30-Mar-09      **Date Extracted:** \_\_\_\_\_      **Date Analyzed:** 06-Apr-09  
**Concentration Units (ug/L or mg/Kg dry weight):** ug/L      **Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B      **Preparatory Method:** \_\_\_\_\_      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Field Sample ID:** TF3CE312TA      **Lab Sample ID:** 0903182-001A      **Matrix:** Groundwater  
**% Solids:** 0      **Initial Calibration ID:** 1447      **File ID:** M6065.D  
**Date Received:** 30-Mar-09      **Date Extracted:** \_\_\_\_\_      **Date Analyzed:** 06-Apr-09  
**Concentration Units (ug/L or mg/Kg dry weight):** ug/L      **Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.100	1.00	0.100	1		U
Dibromochloromethane	0.160	0.500	0.160	1		U
Dibromomethane	0.100	0.500	0.100	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	1.52	1		
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.370	1		F
n-Propylbenzene	0.100	1.00	1.90	1		
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	1.51	1		
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.310	1		F
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.800	1		F
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B      **Preparatory Method:** \_\_\_\_\_      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Field Sample ID:** TF3CE312TA      **Lab Sample ID:** 0903182-001A      **Matrix:** Groundwater  
**% Solids:** 0      **Initial Calibration ID:** 1447      **File ID:** M6065.D  
**Date Received:** 30-Mar-09      **Date Extracted:** \_\_\_\_\_      **Date Analyzed:** 06-Apr-09  
**Concentration Units (ug/L or mg/Kg dry weight):** ug/L      **Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	117	72 - 119	
4-Bromofluorobenzene	106	76 - 119	
Toluene-d8	99	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1763176	874552 - 3498208	
Chlorobenzene-d5	1974726	1033520 - 4134082	
Fluorobenzene	3368932	1977723 - 7910892	

**Comments:**

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 2**  
**RESULTS**

Analytical Method: SW8260B

Preparatory Method:

AAB #: R16915

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID: TF3M2114TA

Lab Sample ID: 0903182-002A

Matrix: Groundwater

% Solids: 0

Initial Calibration ID: 1447

File ID: M6102.D

Date Received: 30-Mar-09

Date Extracted:

Date Analyzed: 08-Apr-09

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16915</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M2114TA</u>	Lab Sample ID: <u>0903182-002A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6102.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>08-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		UQ
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	23.1	1		
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.710	1		F
n-Propylbenzene	0.100	1.00	3.14	1		
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.600	1		F
sec-Butylbenzene	0.160	1.00	1.56	1		
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.450	1		F
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16915</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M2114TA</u>	Lab Sample ID: <u>0903182-002A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6102.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>08-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	104	72 - 119	
4-Bromofluorobenzene	108	76 - 119	
Toluene-d8	107	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1758025	874552 - 3498208	
Chlorobenzene-d5	2130223	1033520 - 4134082	
Fluorobenzene	4401303	1977723 - 7910892	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M11613TA</u>	Lab Sample ID: <u>0903182-003A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6067.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M11613TA</u>	Lab Sample ID: <u>0903182-003A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6067.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	1.94	1		
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.640	1		F
n-Propylbenzene	0.100	1.00	1.27	1		
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	2.75	1		
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.490	1		F
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: SW8260B      Preparatory Method:       AAB #: R16897  
 Lab Name: Life Science Laboratories, Inc.      Contract #:   
 Field Sample ID: TF3M11613TA      Lab Sample ID: 0903182-003A      Matrix: Groundwater  
 % Solids: 0      Initial Calibration ID: 1447      File ID: M6067.D  
 Date Received: 30-Mar-09      Date Extracted:       Date Analyzed: 06-Apr-09  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	112	72 - 119	
4-Bromofluorobenzene	103	76 - 119	
Toluene-d8	101	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1885608	874552 - 3498208	
Chlorobenzene-d5	1955609	1033520 - 4134082	
Fluorobenzene	3265412	1977723 - 7910892	

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16897</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>TF3M12313TA</u>	Lab Sample ID:	<u>0903182-004A</u>	Matrix:	<u>Groundwater</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6068.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.400	4.00	0.400	2		U
1,1,1,2-Tetrachloroethane	0.320	1.00	0.320	2		U
1,1,1-Trichloroethane	0.200	2.00	0.200	2		U
1,1,2,2-Tetrachloroethane	0.200	1.00	0.200	2		U
1,1,2-Trichloroethane	0.320	2.00	0.320	2		U
1,1-Dichloroethane	0.200	2.00	0.200	2		U
1,1-Dichloroethene	0.320	2.00	0.320	2		U
1,1-Dichloropropene	0.200	2.00	0.200	2		U
1,2,3-Trichlorobenzene	0.200	2.00	0.200	2		U
1,2,3-Trichloropropane	0.660	4.00	0.660	2		U
1,2,4-Trichlorobenzene	0.200	2.00	0.200	2		U
1,2,4-Trimethylbenzene	0.200	2.00	8.84	2		
1,2-Dibromo-3-chloropropane	2.00	10.0	2.00	2		U
1,2-Dibromoethane	0.320	2.00	0.320	2		U
1,2-Dichlorobenzene	0.200	2.00	0.200	2		U
1,2-Dichloroethane	0.320	1.00	0.320	2		U
1,2-Dichloropropane	0.320	2.00	0.320	2		U
1,3,5-Trimethylbenzene	0.200	2.00	3.52	2		
1,3-Dichlorobenzene	0.200	2.00	0.200	2		U
1,3-Dichloropropane	0.200	1.00	0.200	2		U
1,4-Dichlorobenzene	0.320	1.00	0.320	2		U
1-Chlorohexane	0.320	2.00	0.320	2		U
2,2-Dichloropropane	0.660	2.00	0.660	2		U
2-Butanone	2.00	20.0	2.00	2		U
2-Chlorotoluene	0.200	2.00	0.200	2		U
4-Chlorotoluene	0.200	2.00	0.200	2		U
4-Methyl-2-pentanone	2.00	20.0	2.00	2		U
Acetone	2.00	20.0	2.00	2		U
Benzene	0.200	1.00	0.200	2		U
Bromobenzene	0.200	2.00	0.200	2		U
Bromochloromethane	0.200	2.00	0.200	2		U
Bromodichloromethane	0.200	1.00	0.200	2		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16897</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>TF3M12313TA</u>	Lab Sample ID:	<u>0903182-004A</u>	Matrix:	<u>Groundwater</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6068.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.660	2.00	0.660	2		U
Bromomethane	0.660	6.00	0.660	2		U
Carbon tetrachloride	0.200	2.00	0.200	2		U
Chlorobenzene	0.200	1.00	0.200	2		U
Chloroethane	0.660	2.00	0.660	2		U
Chloroform	0.200	1.00	0.200	2		U
Chloromethane	0.660	2.00	0.660	2		U
cis-1,2-Dichloroethene	0.200	2.00	0.200	2		U
cis-1,3-Dichloropropene	0.320	1.00	0.320	2		U
Dibromochloromethane	0.200	1.00	0.200	2		U
Dibromomethane	0.320	2.00	0.320	2		U
Dichlorodifluoromethane	0.200	2.00	0.200	2		U
Ethylbenzene	0.200	2.00	0.200	2		U
Hexachlorobutadiene	0.200	2.00	0.200	2		U
Isopropylbenzene	0.200	2.00	46.6	2		U
Methyl tert-butyl ether	0.320	10.0	0.320	2		U
Methylene chloride	0.320	2.00	0.320	2		U
n-Butylbenzene	0.200	2.00	0.760	2		F
n-Propylbenzene	0.200	2.00	4.62	2		
Naphthalene	0.200	2.00	0.200	2		U
o-Xylene	0.200	2.00	0.200	2		U
p-Isopropyltoluene	0.320	2.00	0.200	2		U
sec-Butylbenzene	0.320	2.00	0.960	2		F
Styrene	0.200	2.00	1.24	2		F
tert-Butylbenzene	0.200	2.00	0.200	2		U
Tetrachloroethene	0.200	2.00	0.640	2		F
Toluene	0.200	2.00	0.200	2		U
trans-1,2-Dichloroethene	0.200	2.00	0.200	2		U
trans-1,3-Dichloropropene	0.320	2.00	0.320	2		U
Trichloroethene	0.200	2.00	0.200	2		U
Trichlorofluoromethane	0.200	2.00	0.200	2		U
Vinyl chloride	0.660	2.00	0.660	2		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B      **Preparatory Method:** \_\_\_\_\_      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Field Sample ID:** TF3M12313TA      **Lab Sample ID:** 0903182-004A      **Matrix:** Groundwater  
**% Solids:** 0      **Initial Calibration ID:** 1447      **File ID:** M6068.D  
**Date Received:** 30-Mar-09      **Date Extracted:** \_\_\_\_\_      **Date Analyzed:** 06-Apr-09  
**Concentration Units (ug/L or mg/Kg dry weight):** ug/L      **Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.600	4.00	0.600	2		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	114	72 - 119	
4-Bromofluorobenzene	100	76 - 119	
Toluene-d8	97	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1907338	874552 - 3498208	
Chlorobenzene-d5	2020279	1033520 - 4134082	
Fluorobenzene	3287653	1977723 - 7910892	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B

**Preparatory Method:**

**AAB #:** R16897

**Lab Name:** Life Science Laboratories, Inc.

**Contract #:**

**Field Sample ID:** TF3M12313TC

**Lab Sample ID:** 0903182-005A

**Matrix:** Groundwater

**% Solids:** 0

**Initial Calibration ID:** 1447

**File ID:** M6069.D

**Date Received:** 30-Mar-09

**Date Extracted:**

**Date Analyzed:** 06-Apr-09

**Concentration Units (ug/L or mg/Kg dry weight):** ug/L

**Sample Size:** 25 mL

<b>Analyte</b>	<b>MDL</b>	<b>RL</b>	<b>Concentration</b>	<b>Dilution</b>	<b>Confirm</b>	<b>Qualifier</b>
(m+p)-Xylene	0.400	4.00	0.400	2		U
1,1,1,2-Tetrachloroethane	0.320	1.00	0.320	2		U
1,1,1-Trichloroethane	0.200	2.00	0.200	2		U
1,1,2,2-Tetrachloroethane	0.200	1.00	0.200	2		U
1,1,2-Trichloroethane	0.320	2.00	0.320	2		U
1,1-Dichloroethane	0.200	2.00	0.200	2		U
1,1-Dichloroethene	0.320	2.00	0.320	2		U
1,1-Dichloropropene	0.200	2.00	0.200	2		U
1,2,3-Trichlorobenzene	0.200	2.00	0.200	2		U
1,2,3-Trichloropropane	0.660	4.00	0.660	2		U
1,2,4-Trichlorobenzene	0.200	2.00	0.200	2		U
1,2,4-Trimethylbenzene	0.200	2.00	8.00	2		
1,2-Dibromo-3-chloropropane	2.00	10.0	2.00	2		U
1,2-Dibromoethane	0.320	2.00	0.320	2		U
1,2-Dichlorobenzene	0.200	2.00	0.200	2		U
1,2-Dichloroethane	0.320	1.00	0.320	2		U
1,2-Dichloropropane	0.320	2.00	0.320	2		U
1,3,5-Trimethylbenzene	0.200	2.00	1.38	2		F
1,3-Dichlorobenzene	0.200	2.00	0.200	2		U
1,3-Dichloropropane	0.200	1.00	0.200	2		U
1,4-Dichlorobenzene	0.320	1.00	0.320	2		U
1-Chlorohexane	0.320	2.00	0.320	2		U
2,2-Dichloropropane	0.660	2.00	0.660	2		U
2-Butanone	2.00	20.0	2.00	2		U
2-Chlorotoluene	0.200	2.00	0.200	2		U
4-Chlorotoluene	0.200	2.00	0.200	2		U
4-Methyl-2-pentanone	2.00	20.0	2.00	2		U
Acetone	2.00	20.0	2.00	2		U
Benzene	0.200	1.00	0.200	2		U
Bromobenzene	0.200	2.00	0.200	2		U
Bromochloromethane	0.200	2.00	0.200	2		U
Bromodichloromethane	0.200	1.00	0.200	2		U

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M12313TC</u>	Lab Sample ID: <u>0903182-005A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6069.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.660	2.00	0.660	2		U
Bromomethane	0.660	6.00	0.660	2		U
Carbon tetrachloride	0.200	2.00	0.200	2		U
Chlorobenzene	0.200	1.00	0.200	2		U
Chloroethane	0.660	2.00	0.660	2		U
Chloroform	0.200	1.00	0.200	2		U
Chloromethane	0.660	2.00	0.660	2		U
cis-1,2-Dichloroethene	0.200	2.00	0.200	2		U
cis-1,3-Dichloropropene	0.320	1.00	0.320	2		U
Dibromochloromethane	0.200	1.00	0.200	2		U
Dibromomethane	0.320	2.00	0.320	2		U
Dichlorodifluoromethane	0.200	2.00	0.200	2		U
Ethylbenzene	0.200	2.00	0.200	2		U
Hexachlorobutadiene	0.200	2.00	0.200	2		U
Isopropylbenzene	0.200	2.00	40.8	2		
Methyl tert-butyl ether	0.320	10.0	0.320	2		U
Methylene chloride	0.320	2.00	0.320	2		U
n-Butylbenzene	0.200	2.00	0.740	2		F
n-Propylbenzene	0.200	2.00	4.08	2		
Naphthalene	0.200	2.00	0.200	2		U
o-Xylene	0.200	2.00	0.200	2		U
p-Isopropyltoluene	0.320	2.00	0.880	2		F
sec-Butylbenzene	0.320	2.00	1.02	2		F
Styrene	0.200	2.00	0.200	2		U
tert-Butylbenzene	0.200	2.00	0.540	2		F
Tetrachloroethene	0.200	2.00	0.200	2		U
Toluene	0.200	2.00	0.200	2		U
trans-1,2-Dichloroethene	0.200	2.00	0.200	2		U
trans-1,3-Dichloropropene	0.320	2.00	0.320	2		U
Trichloroethene	0.200	2.00	0.200	2		U
Trichlorofluoromethane	0.200	2.00	0.200	2		U
Vinyl chloride	0.660	2.00	0.660	2		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M12313TC</u>	Lab Sample ID: <u>0903182-005A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6069.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.600	4.00	0.600	2		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	115	72 - 119	
4-Bromofluorobenzene	101	76 - 119	
Toluene-d8	88	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1921029	874552 - 3498208	
Chlorobenzene-d5	2270318	1033520 - 4134082	
Fluorobenzene	3299142	1977723 - 7910892	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M12713TA</u>	Lab Sample ID: <u>0903182-006A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6070.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	41.0	1		
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		<u>U</u>
1,1,1-Trichloroethane	0.100	1.00	0.100	1		<u>U</u>
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		<u>U</u>
1,1,2-Trichloroethane	0.160	1.00	0.160	1		<u>U</u>
1,1-Dichloroethane	0.100	1.00	0.100	1		<u>U</u>
1,1-Dichloroethene	0.160	1.00	0.160	1		<u>U</u>
1,1-Dichloropropene	0.100	1.00	0.100	1		<u>U</u>
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		<u>U</u>
1,2,3-Trichloropropane	0.330	2.00	0.330	1		<u>U</u>
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		<u>U</u>
1,2,4-Trimethylbenzene	0.100	1.00	86.4	1		<u>J</u>
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		<u>U</u>
1,2-Dibromoethane	0.160	1.00	0.160	1		<u>U</u>
1,2-Dichlorobenzene	0.100	1.00	0.100	1		<u>U</u>
1,2-Dichloroethane	0.160	0.500	0.160	1		<u>U</u>
1,2-Dichloropropane	0.160	1.00	0.160	1		<u>U</u>
1,3,5-Trimethylbenzene	0.100	1.00	20.3	1		
1,3-Dichlorobenzene	0.100	1.00	0.100	1		<u>U</u>
1,3-Dichloropropane	0.100	0.500	0.100	1		<u>U</u>
1,4-Dichlorobenzene	0.160	0.500	0.160	1		<u>U</u>
1-Chlorohexane	0.160	1.00	0.160	1		<u>U</u>
2,2-Dichloropropane	0.330	1.00	0.330	1		<u>U</u>
2-Butanone	1.00	10.0	1.00	1		<u>U</u>
2-Chlorotoluene	0.100	1.00	0.100	1		<u>U</u>
4-Chlorotoluene	0.100	1.00	0.100	1		<u>U</u>
4-Methyl-2-pentanone	1.00	10.0	1.00	1		<u>U</u>
Acetone	1.00	10.0	1.00	1		<u>U</u>
Benzene	0.100	0.500	0.630	1		<u>U</u>
Bromobenzene	0.100	1.00	0.100	1		<u>U</u>
Bromochloromethane	0.100	1.00	0.100	1		<u>U</u>
Bromodichloromethane	0.100	0.500	0.100	1		<u>U</u>

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B      **Preparatory Method:** \_\_\_\_\_      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Field Sample ID:** TF3M12713TA      **Lab Sample ID:** 0903182-006A      **Matrix:** Groundwater  
**% Solids:** 0      **Initial Calibration ID:** 1447      **File ID:** M6070.D  
**Date Received:** 30-Mar-09      **Date Extracted:** \_\_\_\_\_      **Date Analyzed:** 06-Apr-09  
**Concentration Units (ug/L or mg/Kg dry weight):** ug/L      **Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	84.2	1		J
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	27.2	1		
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	1.31	1		
n-Propylbenzene	0.100	1.00	26.9	1		
Naphthalene	0.100	1.00	27.0	1		
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	1.78	1		
sec-Butylbenzene	0.160	1.00	2.84	1		
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16897</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>TF3M12713TA</u>	Lab Sample ID:	<u>0903182-006A</u>	Matrix:	<u>Groundwater</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6070.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	41.0	1		

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	115	72 - 119	
4-Bromofluorobenzene	97	76 - 119	
Toluene-d8	97	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	2073607	874552 - 3498208	
Chlorobenzene-d5	2124423	1033520 - 4134082	
Fluorobenzene	3459945	1977723 - 7910892	

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16915</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>TF3M12713TA DL</u>	Lab Sample ID:	<u>0903182-006ADL</u>	Matrix:	<u>Groundwater</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6103.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>08-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	1.00	10.0	39.8	5		
1,1,1,2-Tetrachloroethane	0.800	2.50	0.800	5		<u>U</u>
1,1,1-Trichloroethane	0.500	5.00	0.500	5		<u>U</u>
1,1,2,2-Tetrachloroethane	0.500	2.50	0.500	5		<u>U</u>
1,1,2-Trichloroethane	0.800	5.00	0.800	5		<u>U</u>
1,1-Dichloroethane	0.500	5.00	0.500	5		<u>U</u>
1,1-Dichloroethene	0.800	5.00	0.800	5		<u>U</u>
1,1-Dichloropropene	0.500	5.00	0.500	5		<u>U</u>
1,2,3-Trichlorobenzene	0.500	5.00	0.500	5		<u>U</u>
1,2,3-Trichloropropane	1.65	10.0	1.65	5		<u>U</u>
1,2,4-Trichlorobenzene	0.500	5.00	0.500	5		<u>U</u>
1,2,4-Trimethylbenzene	0.500	5.00	104	5		
1,2-Dibromo-3-chloropropane	5.00	25.0	5.00	5		<u>U</u>
1,2-Dibromoethane	0.800	5.00	0.800	5		<u>U</u>
1,2-Dichlorobenzene	0.500	5.00	0.500	5		<u>U</u>
1,2-Dichloroethane	0.800	2.50	0.800	5		<u>U</u>
1,2-Dichloropropane	0.800	5.00	0.800	5		<u>U</u>
1,3,5-Trimethylbenzene	0.500	5.00	20.6	5		
1,3-Dichlorobenzene	0.500	5.00	0.500	5		<u>U</u>
1,3-Dichloropropane	0.500	2.50	0.500	5		<u>U</u>
1,4-Dichlorobenzene	0.800	2.50	0.800	5		<u>U</u>
1-Chlorohexane	0.800	5.00	0.800	5		<u>U</u>
2,2-Dichloropropane	1.65	5.00	1.65	5		<u>U</u>
2-Butanone	5.00	50.0	5.00	5		<u>U</u>
2-Chlorotoluene	0.500	5.00	0.500	5		<u>U</u>
4-Chlorotoluene	0.500	5.00	0.500	5		<u>U</u>
4-Methyl-2-pentanone	5.00	50.0	5.00	5		<u>U</u>
Acetone	5.00	50.0	5.00	5		<u>U</u>
Benzene	0.500	2.50	0.500	5		<u>U</u>
Bromobenzene	0.500	5.00	0.500	5		<u>U</u>
Bromochloromethane	0.500	5.00	0.500	5		<u>U</u>
Bromodichloromethane	0.500	2.50	0.500	5		<u>U</u>

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16915</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M12713TA DL</u>	Lab Sample ID: <u>0903182-006ADL</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6103.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>08-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	1.65	5.00	1.65	5		U
Bromomethane	1.65	15.0	1.65	5		U
Carbon tetrachloride	0.500	5.00	0.500	5		U
Chlorobenzene	0.500	2.50	0.500	5		U
Chloroethane	1.65	5.00	1.65	5		U
Chloroform	0.500	2.50	0.500	5		U
Chloromethane	1.65	5.00	1.65	5		UQ
cis-1,2-Dichloroethene	0.500	5.00	0.500	5		U
cis-1,3-Dichloropropene	0.800	2.50	0.800	5		U
Dibromochloromethane	0.500	2.50	0.500	5		U
Dibromomethane	0.800	5.00	0.800	5		U
Dichlorodifluoromethane	0.500	5.00	0.500	5		U
Ethylbenzene	0.500	5.00	92.2	5		
Hexachlorobutadiene	0.500	5.00	0.500	5		U
Isopropylbenzene	0.500	5.00	31.6	5		
Methyl tert-butyl ether	0.800	25.0	0.800	5		U
Methylene chloride	0.800	5.00	0.800	5		U
n-Butylbenzene	0.500	5.00	1.05	5		F
n-Propylbenzene	0.500	5.00	28.0	5		
Naphthalene	0.500	5.00	33.1	5		
o-Xylene	0.500	5.00	0.500	5		U
p-Isopropyltoluene	0.800	5.00	1.60	5		F
sec-Butylbenzene	0.800	5.00	2.95	5		F
Styrene	0.500	5.00	0.500	5		U
tert-Butylbenzene	0.500	5.00	0.500	5		U
Tetrachloroethene	0.500	5.00	0.500	5		U
Toluene	0.500	5.00	0.500	5		U
trans-1,2-Dichloroethene	0.500	5.00	0.500	5		U
trans-1,3-Dichloropropene	0.800	5.00	0.800	5		U
Trichloroethene	0.500	5.00	0.500	5		U
Trichlorofluoromethane	0.500	5.00	0.500	5		U
Vinyl chloride	1.65	5.00	1.65	5		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16915</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M12713TA DL</u>	Lab Sample ID: <u>0903182-006ADL</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6103.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>08-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	1.50	10.0	39.8	5		

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	111	72 - 119	
4-Bromofluorobenzene	103	76 - 119	
Toluene-d8	106	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1776148	874552 - 3498208	
Chlorobenzene-d5	2219454	1033520 - 4134082	
Fluorobenzene	4593969	1977723 - 7910892	

**Comments:**

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 2**  
**RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16897</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>TF3M12813TA</u>	Lab Sample ID:	<u>0903182-007A</u>	Matrix:	<u>Groundwater</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6071.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.710	1		F
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	1.42	1		
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.620	1		F
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>TF3M12813TA</u>	Lab Sample ID: <u>0903182-007A</u>	Matrix:	<u>Groundwater</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6071.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.900	1		F
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	0.720	1		F
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1		U
n-Propylbenzene	0.100	1.00	0.700	1		F
Naphthalene	0.100	1.00	1.18	1		
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.220	1		F
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B      **Preparatory Method:** \_\_\_\_\_      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Field Sample ID:** TF3M12813TA      **Lab Sample ID:** 0903182-007A      **Matrix:** Groundwater  
**% Solids:** 0      **Initial Calibration ID:** 1447      **File ID:** M6071.D  
**Date Received:** 30-Mar-09      **Date Extracted:** \_\_\_\_\_      **Date Analyzed:** 06-Apr-09  
**Concentration Units (ug/L or mg/Kg dry weight):** ug/L      **Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.710	1		F

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	113	72 - 119	
4-Bromofluorobenzene	104	76 - 119	
Toluene-d8	95	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1831605	874552 - 3498208	
Chlorobenzene-d5	2186358	1033520 - 4134082	
Fluorobenzene	3548807	1977723 - 7910892	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B      **Preparatory Method:** \_\_\_\_\_      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Field Sample ID:** TF3M13316TA      **Lab Sample ID:** 0903182-008A      **Matrix:** Groundwater  
**% Solids:** 0      **Initial Calibration ID:** 1447      **File ID:** M6072.D  
**Date Received:** 30-Mar-09      **Date Extracted:** \_\_\_\_\_      **Date Analyzed:** 06-Apr-09  
**Concentration Units (ug/L or mg/Kg dry weight):** ug/L      **Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.330	1		F
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	3.20	1		
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	5.02	1		
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16897</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>TF3M13316TA</u>	Lab Sample ID:	<u>0903182-008A</u>	Matrix:	<u>Groundwater</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6072.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.290	1		F
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	9.06	1		
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	2.01	1		
n-Propylbenzene	0.100	1.00	13.7	1		
Naphthalene	0.100	1.00	1.46	1		
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	1.75	1		
sec-Butylbenzene	0.160	1.00	6.73	1		
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	1.01	1		
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B      **Preparatory Method:** \_\_\_\_\_      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Field Sample ID:** TF3M13316TA      **Lab Sample ID:** 0903182-008A      **Matrix:** Groundwater  
**% Solids:** 0      **Initial Calibration ID:** 1447      **File ID:** M6072.D  
**Date Received:** 30-Mar-09      **Date Extracted:** \_\_\_\_\_      **Date Analyzed:** 06-Apr-09  
**Concentration Units (ug/L or mg/Kg dry weight):** ug/L      **Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.330	1		F

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	119	72 - 119	
4-Bromofluorobenzene	106	76 - 119	
Toluene-d8	98	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1934159	874552 - 3498208	
Chlorobenzene-d5	2058937	1033520 - 4134082	
Fluorobenzene	3346570	1977723 - 7910892	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>032709TE</u>	Lab Sample ID: <u>0903182-009A</u>	Matrix:	<u>Water Q</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6063.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 2**  
**RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16897</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>032709TE</u>	Lab Sample ID:	<u>0903182-009A</u>	Matrix:	<u>Water Q</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6063.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	0.100	1		U
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1		U
n-Propylbenzene	0.100	1.00	0.100	1		U
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.160	1		U
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>032709TE</u>	Lab Sample ID: <u>0903182-009A</u>	Matrix:	<u>Water Q</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6063.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>	Sample Size: <u>25 mL</u>		

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	117	72 - 119	
4-Bromofluorobenzene	103	76 - 119	
Toluene-d8	99	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1656408	874552 - 3498208	
Chlorobenzene-d5	2004356	1033520 - 4134082	
Fluorobenzene	3556266	1977723 - 7910892	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>032709TF</u>	Lab Sample ID: <u>0903182-010A</u>	Matrix:	<u>Water Q</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6064.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

<b>Analytical Method:</b> <u>SW8260B</u>	<b>Preparatory Method:</b>	<b>AAB #:</b>	<u>R16897</u>
<b>Lab Name:</b> <u>Life Science Laboratories, Inc.</u>	<b>Contract #:</b>		
<b>Field Sample ID:</b> <u>032709TF</u>	<b>Lab Sample ID:</b> <u>0903182-010A</u>	<b>Matrix:</b>	<u>Water Q</u>
<b>% Solids:</b> <u>0</u>	<b>Initial Calibration ID:</b> <u>1447</u>	<b>File ID:</b>	<u>M6064.D</u>
<b>Date Received:</b> <u>30-Mar-09</u>	<b>Date Extracted:</b>	<b>Date Analyzed:</b>	<u>06-Apr-09</u>
<b>Concentration Units (ug/L or mg/Kg dry weight):</b> <u>ug/L</u>		<b>Sample Size:</b>	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	0.100	1		U
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1		U
n-Propylbenzene	0.100	1.00	0.100	1		U
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.160	1		U
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

**Analytical Method:** SW8260B      **Preparatory Method:** \_\_\_\_\_      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Field Sample ID:** 032709TF      **Lab Sample ID:** 0903182-010A      **Matrix:** Water Q  
**% Solids:** 0      **Initial Calibration ID:** 1447      **File ID:** M6064.D  
**Date Received:** 30-Mar-09      **Date Extracted:** \_\_\_\_\_      **Date Analyzed:** 06-Apr-09  
**Concentration Units (ug/L or mg/Kg dry weight):** ug/L      **Sample Size:** 25 mL

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control limits	Qualifier
1,2-Dichloroethane-d4	117	72 - 119	
4-Bromofluorobenzene	105	76 - 119	
Toluene-d8	99	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1620248	874552 - 3498208	
Chlorobenzene-d5	1969784	1033520 - 4134082	
Fluorobenzene	3508833	1977723 - 7910892	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>032709TR</u>	Lab Sample ID: <u>0903182-011A</u>	Matrix:	<u>Water Q</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6062.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
(m+p)-Xylene	0.200	2.00	0.200	1		U
1,1,1,2-Tetrachloroethane	0.160	0.500	0.160	1		U
1,1,1-Trichloroethane	0.100	1.00	0.100	1		U
1,1,2,2-Tetrachloroethane	0.100	0.500	0.100	1		U
1,1,2-Trichloroethane	0.160	1.00	0.160	1		U
1,1-Dichloroethane	0.100	1.00	0.100	1		U
1,1-Dichloroethene	0.160	1.00	0.160	1		U
1,1-Dichloropropene	0.100	1.00	0.100	1		U
1,2,3-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,3-Trichloropropane	0.330	2.00	0.330	1		U
1,2,4-Trichlorobenzene	0.100	1.00	0.100	1		U
1,2,4-Trimethylbenzene	0.100	1.00	0.100	1		U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1		U
1,2-Dibromoethane	0.160	1.00	0.160	1		U
1,2-Dichlorobenzene	0.100	1.00	0.100	1		U
1,2-Dichloroethane	0.160	0.500	0.160	1		U
1,2-Dichloropropane	0.160	1.00	0.160	1		U
1,3,5-Trimethylbenzene	0.100	1.00	0.100	1		U
1,3-Dichlorobenzene	0.100	1.00	0.100	1		U
1,3-Dichloropropane	0.100	0.500	0.100	1		U
1,4-Dichlorobenzene	0.160	0.500	0.160	1		U
1-Chlorohexane	0.160	1.00	0.160	1		U
2,2-Dichloropropane	0.330	1.00	0.330	1		U
2-Butanone	1.00	10.0	1.00	1		U
2-Chlorotoluene	0.100	1.00	0.100	1		U
4-Chlorotoluene	0.100	1.00	0.100	1		U
4-Methyl-2-pentanone	1.00	10.0	1.00	1		U
Acetone	1.00	10.0	1.00	1		U
Benzene	0.100	0.500	0.100	1		U
Bromobenzene	0.100	1.00	0.100	1		U
Bromochloromethane	0.100	1.00	0.100	1		U
Bromodichloromethane	0.100	0.500	0.100	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method: <u>SW8260B</u>	Preparatory Method:	AAB #:	<u>R16897</u>
Lab Name: <u>Life Science Laboratories, Inc.</u>	Contract #:		
Field Sample ID: <u>032709TR</u>	Lab Sample ID: <u>0903182-011A</u>	Matrix:	<u>Water Q</u>
% Solids: <u>0</u>	Initial Calibration ID: <u>1447</u>	File ID:	<u>M6062.D</u>
Date Received: <u>30-Mar-09</u>	Date Extracted:	Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight): <u>ug/L</u>		Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bromoform	0.330	1.00	0.330	1		U
Bromomethane	0.330	3.00	0.330	1		U
Carbon tetrachloride	0.100	1.00	0.100	1		U
Chlorobenzene	0.100	0.500	0.100	1		U
Chloroethane	0.330	1.00	0.330	1		U
Chloroform	0.100	0.500	0.100	1		U
Chloromethane	0.330	1.00	0.330	1		U
cis-1,2-Dichloroethene	0.100	1.00	0.100	1		U
cis-1,3-Dichloropropene	0.160	0.500	0.160	1		U
Dibromochloromethane	0.100	0.500	0.100	1		U
Dibromomethane	0.160	1.00	0.160	1		U
Dichlorodifluoromethane	0.100	1.00	0.100	1		U
Ethylbenzene	0.100	1.00	0.100	1		U
Hexachlorobutadiene	0.100	1.00	0.100	1		U
Isopropylbenzene	0.100	1.00	0.100	1		U
Methyl tert-butyl ether	0.160	5.00	0.160	1		U
Methylene chloride	0.160	1.00	0.160	1		U
n-Butylbenzene	0.100	1.00	0.100	1		U
n-Propylbenzene	0.100	1.00	0.100	1		U
Naphthalene	0.100	1.00	0.100	1		U
o-Xylene	0.100	1.00	0.100	1		U
p-Isopropyltoluene	0.160	1.00	0.160	1		U
sec-Butylbenzene	0.160	1.00	0.160	1		U
Styrene	0.100	1.00	0.100	1		U
tert-Butylbenzene	0.100	1.00	0.100	1		U
Tetrachloroethene	0.100	1.00	0.100	1		U
Toluene	0.100	1.00	0.100	1		U
trans-1,2-Dichloroethene	0.100	1.00	0.100	1		U
trans-1,3-Dichloropropene	0.160	1.00	0.160	1		U
Trichloroethene	0.100	1.00	0.100	1		U
Trichlorofluoromethane	0.100	1.00	0.100	1		U
Vinyl chloride	0.330	1.00	0.330	1		U

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS**

Analytical Method:	<u>SW8260B</u>	Preparatory Method:		AAB #:	<u>R16897</u>
Lab Name:	<u>Life Science Laboratories, Inc.</u>	Contract #:			
Field Sample ID:	<u>032709TR</u>	Lab Sample ID:	<u>0903182-011A</u>	Matrix:	<u>Water Q</u>
% Solids:	<u>0</u>	Initial Calibration ID:	<u>1447</u>	File ID:	<u>M6062.D</u>
Date Received:	<u>30-Mar-09</u>	Date Extracted:		Date Analyzed:	<u>06-Apr-09</u>
Concentration Units (ug/L or mg/Kg dry weight):	<u>ug/L</u>			Sample Size:	<u>25 mL</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Xylenes (total)	0.300	2.00	0.300	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	114	72 - 119	
4-Bromofluorobenzene	103	76 - 119	
Toluene-d8	101	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1664781	874552 - 3498208	
Chlorobenzene-d5	1984868	1033520 - 4134082	
Fluorobenzene	3628954	1977723 - 7910892	

Comments:

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## **Quality Control Results**

**AFCEE  
ORGANIC ANALYSES DATA SHEET 3  
INITIAL MULTIPONT CALIBRATION**

<b>Analytical Method:</b>	<u>8260B</u>	<b>AAB #:</b>	
<b>Lab Name:</b>	<u>Life Science Laboratories, Inc.</u>	<b>Contract #:</b>	
<b>Instrument ID:</b>	<u>MS02_12</u>	<b>Date of Initial Calibration:</b>	<u>04-DEC-08</u>
<b>Initial Calibration ID:</b>	<u>1447</u>	<b>Concentration Units (ug/L or mg/kg):</b>	<u>ug/L</u>

**SEE ATTACHED**

**Comments:**

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## Response Factor Report #2MS12

ICAL #1447

Method : C:\HPCHEM\1\METHODS\MD04VOCW.M (RTE Integrator)  
 Title : VOC's w/Restek RTX-502.2, 0.53mm x 105m, 3.0 df  
 Last Update : Tue Dec 09 12:58:45 2008  
 Response via : Initial Calibration

## Calibration Files

0.5	=M5684.D	1.0	=M5685.D	2.0	=M5686.D
10	=M5689.D	20	=M5688.D	30	=M5690.D

	Compound	0.5	1.0	2.0	10	20	30	Avg	%RSD
1) I	Fluorobenzene			-----ISTD-----					
2)	Dichlorodifluoromethane	0.614	0.632	0.647	0.834	0.827	0.821	0.740	13.91
3) P	Chloromethane	0.405	0.385	0.335	0.311	0.323	0.317	0.339	11.94
4) CP	Vinyl chloride	0.158	0.195	0.217	0.262	0.249	0.252	0.226	16.79
5)	Bromomethane		0.197	0.235	0.265	0.248	0.281	0.256	15.36
6)	Chloroethane		0.100	0.140	0.165	0.159	0.146	0.144	16.41
7)	Trichlorofluoromethane	0.706	0.709	0.723	0.820	0.803	0.790	0.763	6.35
8)	Acrolein	0.014	0.015	0.014	0.017	0.017	0.016	0.015#	7.86
9)	1,1,2-Trichloro-1,2	0.785	0.767	0.764	0.840	0.786	0.757	0.779	3.85
10)	Acetone		0.032	0.027	0.029	0.028	0.028	0.029#	6.88
11) CPM	1,1-Dichloroethene	0.276	0.278	0.277	0.312	0.305	0.301	0.294	5.39
12)	Methyl acetate		0.110	0.105	0.108	0.108	0.110	0.109	2.19
13)	Methyl iodide	0.146	0.195	0.197	0.347	0.403	0.455	0.319	43.68
14)	Methylene chloride	0.389	0.404	0.338	0.356	0.343	0.343	0.357	7.86
15)	Acrylonitrile	0.025	0.029	0.030	0.034	0.034	0.035	0.031#	11.56
16)	Carbon disulfide	0.693	0.677	0.646	0.835	0.798	0.793	0.742	9.58
17)	Methyl tert-Butyl ether	0.480	0.490	0.451	0.531	0.521	0.518	0.498	5.59
18)	trans-1,2-Dichloroethane	0.348	0.345	0.345	0.384	0.374	0.368	0.363	4.55
19)	Vinyl acetate		0.277	0.273	0.284	0.377	0.336	0.370	0.329
20) P	1,1-Dichloroethane	0.584	0.587	0.607	0.651	0.662	0.656	0.630	5.68
21)	2-Butanone			0.041	0.051	0.054	0.055	0.052	13.27
22)	2,2-Dichloropropane	0.456	0.455	0.457	0.530	0.507	0.508	0.491	6.97
23)	cis-1,2-Dichloroethane	0.320	0.350	0.371	0.400	0.390	0.388	0.373	7.74
24) CP	Chloroform		0.788	0.773	0.785	0.824	0.823	0.809	0.803
25)	Bromochloromethane	0.232	0.224	0.234	0.262	0.258	0.253	0.246	6.19
26)	1,1,1-Trichloroethane	0.560	0.611	0.619	0.690	0.696	0.684	0.651	8.37
27)	Cyclohexane		0.353	0.355	0.374	0.398	0.387	0.381	0.374
28)	1,1-Dichloropropene	0.421	0.457	0.457	0.508	0.500	0.492	0.476	6.68
29) S	1,2-Dichloroethane	0.282	0.311	0.304	0.309	0.306	0.297	0.301	3.25
30)	Carbon tetrachloride	0.552	0.577	0.611	0.702	0.700	0.700	0.651	10.54
31)	1,2-Dichloroethane	0.304	0.342	0.336	0.365	0.366	0.360	0.349	6.61
32) M	Benzene		0.801	0.827	0.826	0.869	0.881	0.870	0.849
33) M	Trichloroethene	0.412	0.452	0.433	0.486	0.492	0.474	0.460	6.37
34)	Methylcyclohexane	0.322	0.325	0.340	0.377	0.363	0.366	0.351	6.21
35) CP	1,2-Dichloropropane	0.299	0.314	0.338	0.345	0.349	0.346	0.334	5.83
36)	Bromodichloromethane	0.730	0.752	0.787	0.928	0.939	0.936	0.858	11.24
37)	Dibromomethane		0.367	0.401	0.380	0.424	0.417	0.411	0.401
38)	2-Chloroethylvinyl				0.003	0.005	0.008	0.007#	48.63
39)	4-Methyl-2-pentanone		0.031	0.038	0.053	0.056	0.060	0.050#	24.72
40)	cis-1,3-Dichloropropane	0.380	0.391	0.404	0.528	0.537	0.548	0.478	17.10
41) CPM	Toluene		0.460	0.488	0.505	0.565	0.557	0.552	0.527
42)	trans-1,3-Dichloropropene	0.195	0.252	0.279	0.374	0.394	0.406	0.331	26.56
43)	2-Hexanone			0.051	0.063	0.095	0.101	0.105	0.087
									27.33

OK (W) 1-7-09

(#) = Out of Range   ### Number of calibration levels exceeded format   ###  
 MD04VOCW.M           Tue Dec 09 13:13:48 2008

1-9-08 Page 1

## Response Factor Report #2MS12

Method : C:\HPCHEM\1\METHODS\MD04VOCW.M (RTE Integrator)  
 Title : VOC's w/Restek RTX-502.2, 0.53mm x 105m, 3.0 df  
 Last Update : Tue Dec 09 14:00:22 2008  
 Response via : Initial Calibration

## Calibration Files

0.5	=M5684.D	1.0	=M5685.D	2.0	=M5686.D
10	=M5689.D	20	=M5688.D	30	=M5690.D

	Compound	0.5	1.0	2.0	10	20	30	Avg	%RSD
44)	1,1,2-Trichloroethane	0.215	0.234	0.242	0.272	0.271	0.266	0.253	8.85
45) I	Chlorobenzene-d5			-----ISTD-----					
46) S	Toluene-d8	1.575	1.555	1.549	1.647	1.597	1.691	1.610	3.41
47)	1,3-Dichloropropane	0.736	0.757	0.765	0.860	0.842	0.901	0.822	8.38
48)	Tetrachloroethene	1.133	1.121	1.184	1.179	1.123	1.193	1.156	2.64
49)	Dibromochloromethane	1.050	1.155	1.253	1.525	1.531	1.653	1.402	17.56
50)	1,2-Dibromoethane	0.794	0.857	0.867	0.990	0.991	1.065	0.946	11.29
51)	1-Chlorohexane	0.535	0.602	0.621	0.694	0.671	0.725	0.654	10.88
52) PM	Chlorobenzene	1.496	1.453	1.438	1.452	1.361	1.439	1.431	3.26
53)	1,1,1,2-Tetrachloro	0.780	0.822	0.855	0.909	0.880	0.935	0.872	6.48
54) CP	Ethylbenzene	1.910	1.921	1.907	1.916	1.790	1.805	1.856	3.99
55)	(m+p)-Xylene	0.684	0.712	0.728	0.747	0.714	0.767	0.730	3.99
56)	o-Xylene	0.626	0.697	0.709	0.766	0.756	0.818	0.739	9.02
57)	Styrene	0.812	0.927	1.006	1.167	1.159	1.257	1.080	15.55
58) P	Bromoform	0.474	0.578	0.655	0.955	0.974	1.086	0.829	30.63
59) I	1,4-Dichlorobenzene-d			-----ISTD-----					
60)	Isopropylbenzene	2.240	2.188	2.247	2.404	2.183	2.293	2.263	3.33
61) P	1,1,2,2-Tetrachloro	0.982	1.006	1.000	1.088	0.957	1.019	1.010	4.02
62) S	Bromofluorobenzene	1.743	1.624	1.615	1.594	1.431	1.499	1.567	6.95
63)	1,2,3-Trichloroprop	0.563	0.672	0.652	0.605	0.600	0.698	0.631	7.36
64)	trans-1,4-Dichloro-			0.031	0.056	0.058	0.072	0.058	30.24
65)	n-Propylbenzene	2.480	2.549	2.636	2.918	2.663	2.796	2.690	5.69
66)	Bromobenzene	1.024	1.067	1.077	1.086	0.971	1.042	1.046	3.75
67)	1,3,5-Trimethylbenz	1.811	1.887	1.854	1.929	1.730	1.862	1.846	3.39
68)	2-Chlorotoluene	2.206	2.073	2.055	2.231	1.984	1.943	2.075	5.17
69)	4-Chlorotoluene	2.254	2.424	2.297	2.233	1.992	2.177	2.200	6.88
70)	tert-Butylbenzene	1.954	1.911	1.990	2.063	1.851	1.977	1.961	3.39
71)	1,2,4-Trimethylbenz	1.580	1.656	1.638	1.807	1.660	1.764	1.695	4.84
72)	sec-Butylbenzene	2.313	2.364	2.402	2.633	2.686	2.576	2.506	5.76
73)	p-Isopropyltoluene	1.617	1.694	1.762	2.026	2.116	2.054	1.903	10.74
74)	1,3-Dichlorobenzene	1.504	1.541	1.518	1.672	1.658	1.630	1.595	4.47
75)	1,4-Dichlorobenzene	1.510	1.500	1.463	1.517	1.528	1.511	1.507	1.42
76)	n-Butylbenzene	1.414	1.343	1.351	1.639	1.655	1.722	1.547	11.01
77)	1,2-Dichlorobenzene	1.438	1.423	1.407	1.574	1.539	1.523	1.490	4.43
78)	1,2-Dibromo-3-chlor	0.133	0.132	0.182	0.187	0.196	0.173		18.76
79)	1,2,4-Trichlorobenz	1.236	1.116	1.097	1.179	1.040	1.102	1.130	5.59
80)	Hexachlorobutadiene	0.838	0.866	0.806	0.893	0.771	0.814	0.829	4.89
81)	Naphthalene	1.015	0.995	0.919	0.957	0.896	0.897	0.943	5.03
82)	1,2,3-Trichlorobenz	0.894	0.855	0.843	0.881	0.768	0.844	0.849	4.79

## Response Factor Report #2MS12

Method : C:\HPCHEM\1\METHODS\MD04VOCW.M (RTE Integrator)  
 Title : VOC's w/Restek RTX-502.2, 0.53mm x 105m, 3.0 df  
 Last Update : Tue Dec 09 13:56:58 2008  
 Response via : Initial Calibration

## Calibration Files

40	=M5691.D	=	=
	=	=	=

	Compound	40	Avg	%RSD
1)	I Fluorobenzene	-----ISTD-----		
2)	Dichlorodifluoromet	0.804		
3)	P Chloromethane	0.296		
4)	CP Vinyl chloride	0.248		
5)	Bromomethane	0.311		
6)	Chloroethane	0.158		
7)	Trichlorofluorometh	0.790		
8)	Acrolein	0.016		
9)	1,1,2-Trichloro-1,2	0.751		
10)	Acetone	0.028		
11)	CPM 1,1-Dichloroethene	0.306		
12)	Methyl acetate	0.112		
13)	Methyl iodide	0.493		
14)	Methylene chloride	0.329		
15)	Acrylonitrile	0.033		
16)	Carbon disulfide	0.750		
17)	Methyl tert-Butyl e	0.500		
18)	trans-1,2-Dichloroe	0.376		
19)	Vinyl acetate	0.385		
20)	P 1,1-Dichloroethane	0.663		
21)	2-Butanone	0.059		
22)	2,2-Dichloropropane	0.527		
23)	cis-1,2-Dichloroeth	0.392		
24)	CP Chloroform	0.818		
25)	Bromochloromethane	0.258		
26)	1,1,1-Trichloroetha	0.700		
27)	Cyclohexane	0.373		
28)	1,1-Dichloropropene	0.498		
29)	S 1,2-Dichloroethane-	0.299		
30)	Carbon tetrachlorid	0.714		
31)	1,2-Dichloroethane	0.366		
32)	M Benzene	0.873		
33)	M Trichloroethene	0.472		
34)	Methylcyclohexane	0.365		
35)	CP 1,2-Dichloropropane	0.345		
36)	Bromodichloromethan	0.933		
37)	Dibromomethane	0.407		
38)	2-Chloroethylvinyl	0.010		
39)	4-Methyl-2-pentanon	0.061		
40)	cis-1,3-Dichloropro	0.559		
41)	CPM Toluene	0.561		
42)	trans-1,3-Dichlorop	0.418		
3)	2-Hexanone	0.108		

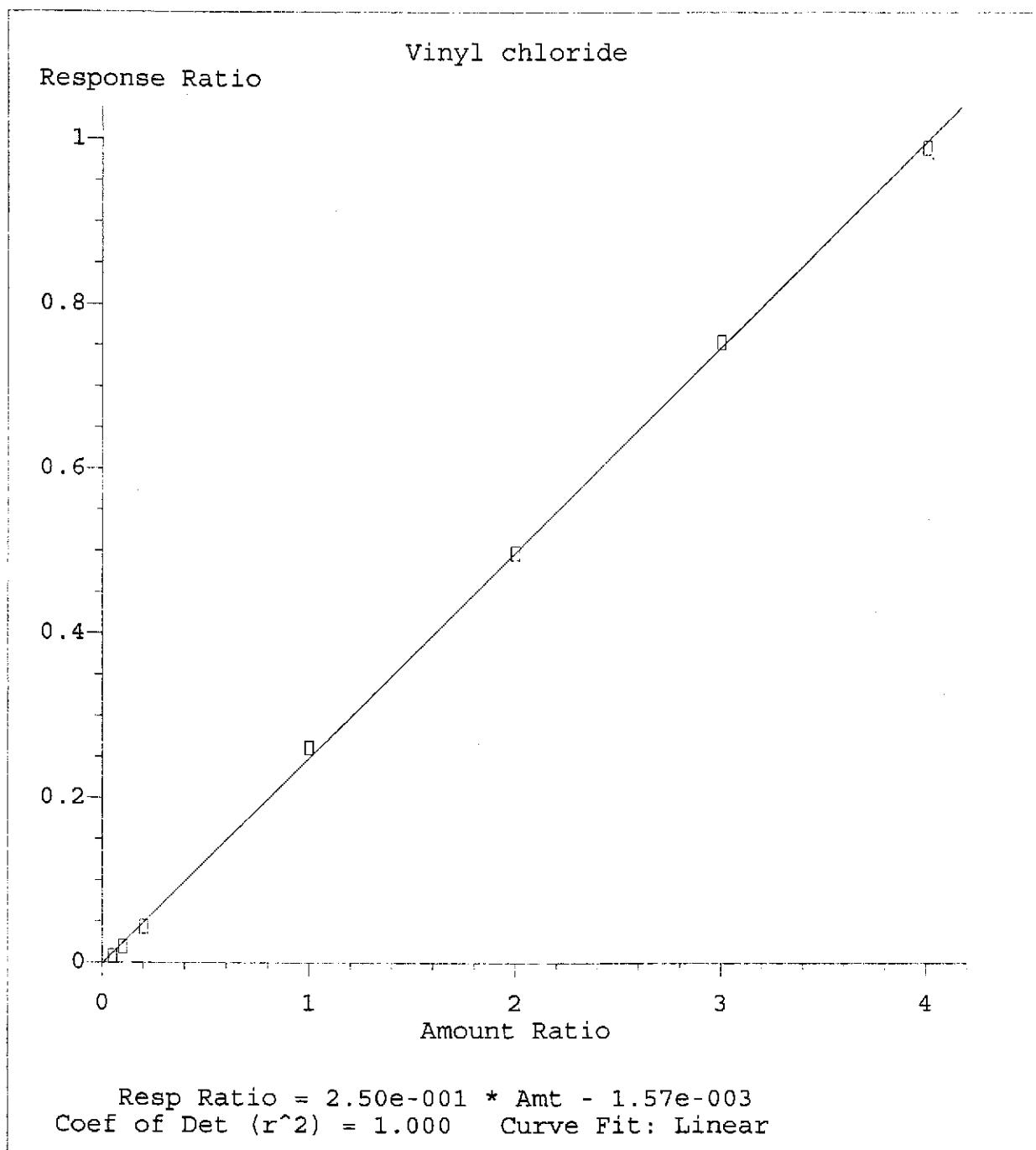
## Response Factor Report #2MS12

Method : C:\HPCHEM\1\METHODS\MD04VOCW.M (RTE Integrator)  
 Title : VOC's w/Restek RTX-502.2, 0.53mm x 105m, 3.0 df  
 Last Update : Tue Dec 09 13:56:58 2008  
 Response via : Initial Calibration

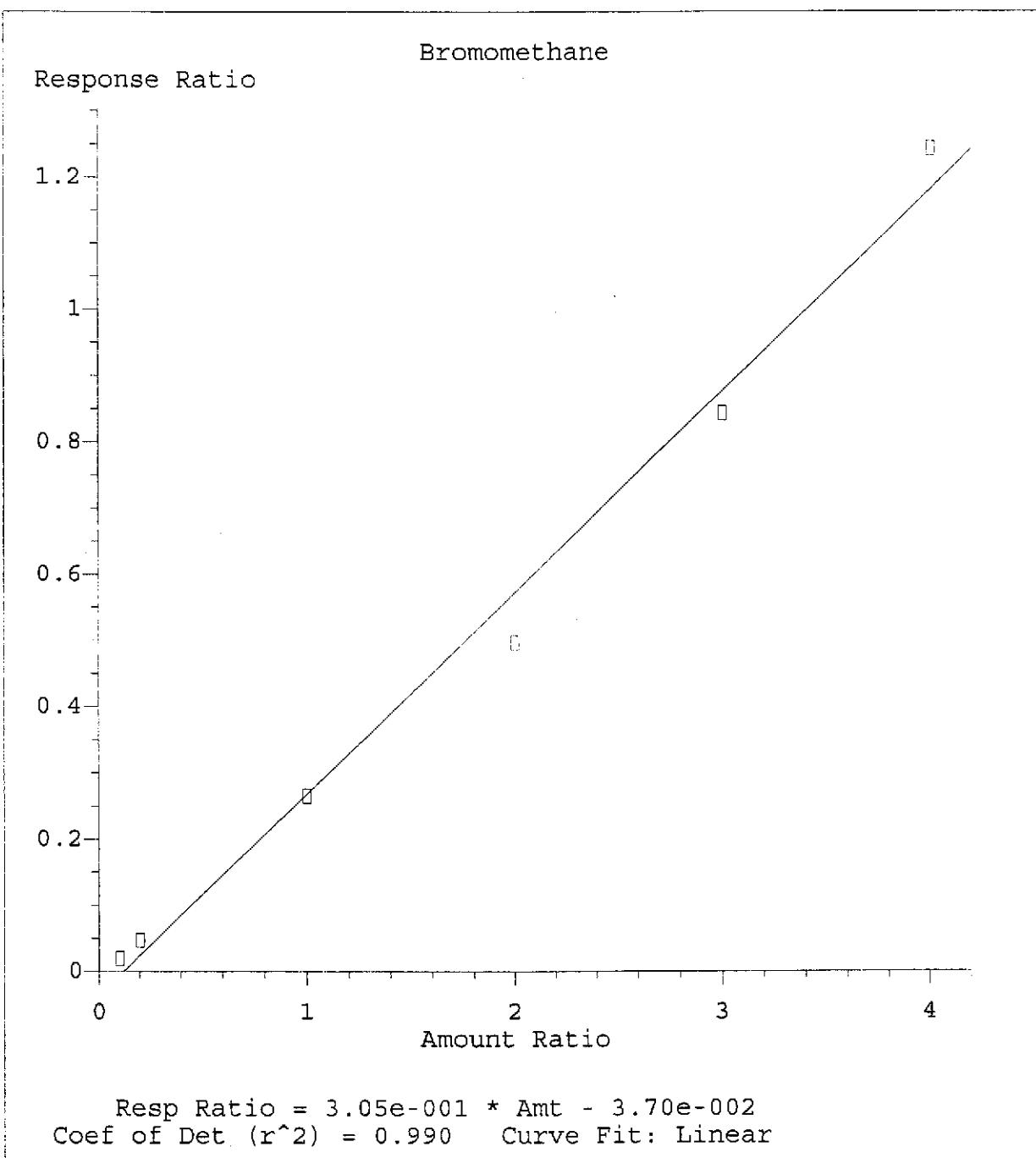
## Calibration Files

40	=M5691.D	=	=
	=	=	=

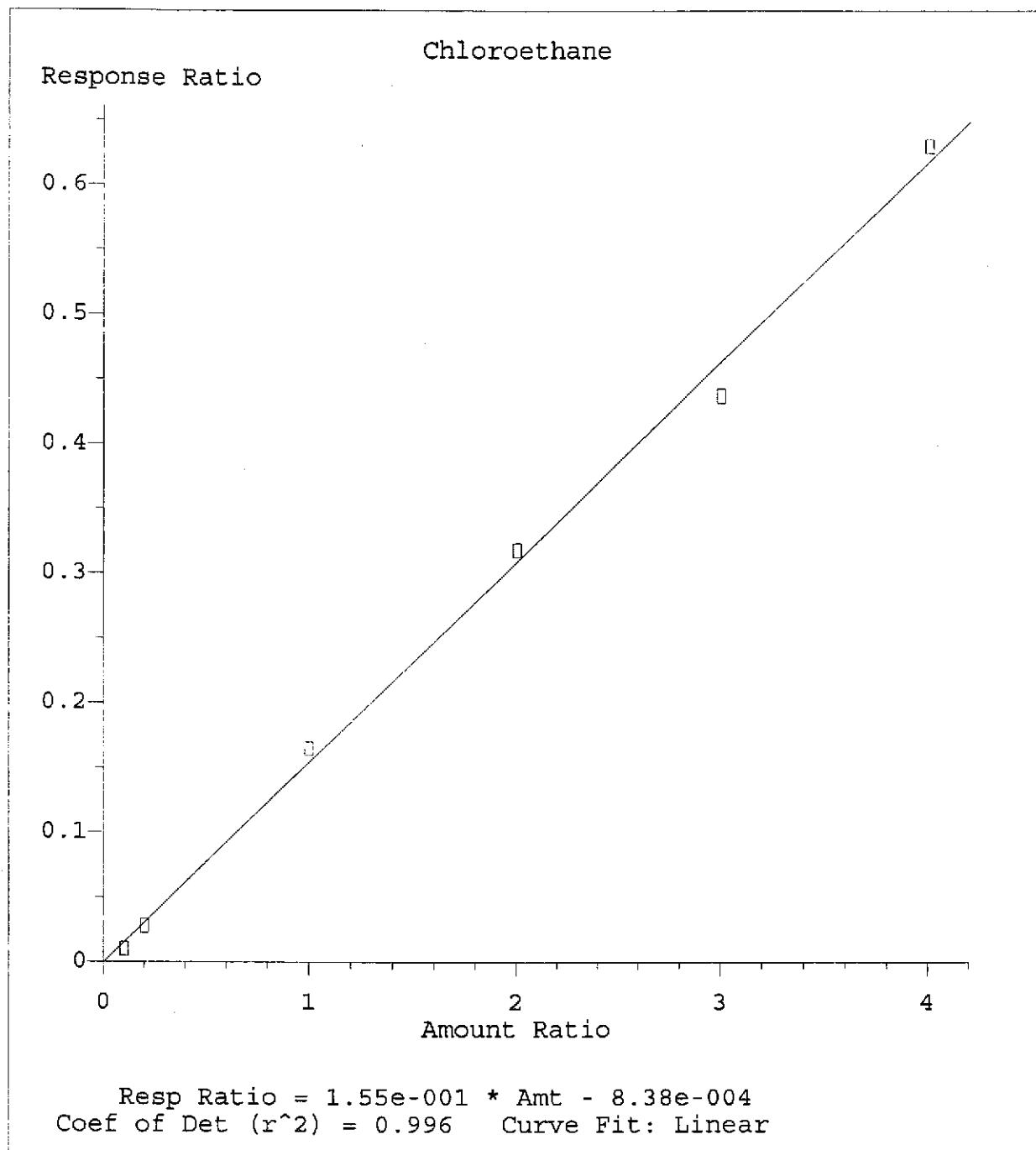
	Compound	40	Avg	%RSD
44)	1,1,2-Trichloroetha	0.268		
45) I	Chlorobenzene-d5	-----ISTD-----		
46) S	Toluene-d8	1.654		
47)	1,3-Dichloropropane	0.897		
48)	Tetrachloroethene	1.162		
49)	Dibromochloromethan	1.650		
50)	1,2-Dibromoethane	1.061		
51)	1-Chlorohexane	0.728		
52) PM	Chlorobenzene	1.377		
53)	1,1,1,2-Tetrachloro	0.921		
54) CP	Ethylbenzene	1.744		
55)	(m+p)-Xylene	0.757		
56)	o-Xylene	0.802		
57)	Styrene	1.234		
58) P	Bromoform	1.083		
59) I	1,4-Dichlorobenzene-d	-----ISTD-----		
0)	Isopropylbenzene	2.287		
61) P	1,1,2,2-Tetrachloro	1.021		
62) S	Bromofluorobenzene	1.465		
63)	1,2,3-Trichloroprop	0.624		
64)	trans-1,4-Dichloro-	0.075		
65)	n-Propylbenzene	2.785		
66)	Bromobenzene	1.053		
67)	1,3,5-Trimethylbenz	1.846		
68)	2-Chlorotoluene	2.034		
69)	4-Chlorotoluene	2.027		
70)	tert-Butylbenzene	1.981		
71)	1,2,4-Trimethylbenz	1.756		
72)	sec-Butylbenzene	2.565		
73)	p-Isopropyltoluene	2.050		
74)	1,3-Dichlorobenzene	1.644		
75)	1,4-Dichlorobenzene	1.520		
76)	n-Butylbenzene	1.708		
77)	1,2-Dichlorobenzene	1.527		
78)	1,2-Dibromo-3-chlor	0.206		
79)	1,2,4-Trichlorobenz	1.141		
80)	Hexachlorobutadiene	0.812		
81)	Naphthalene	0.921		
82)	1,2,3-Trichlorobenz	0.862		



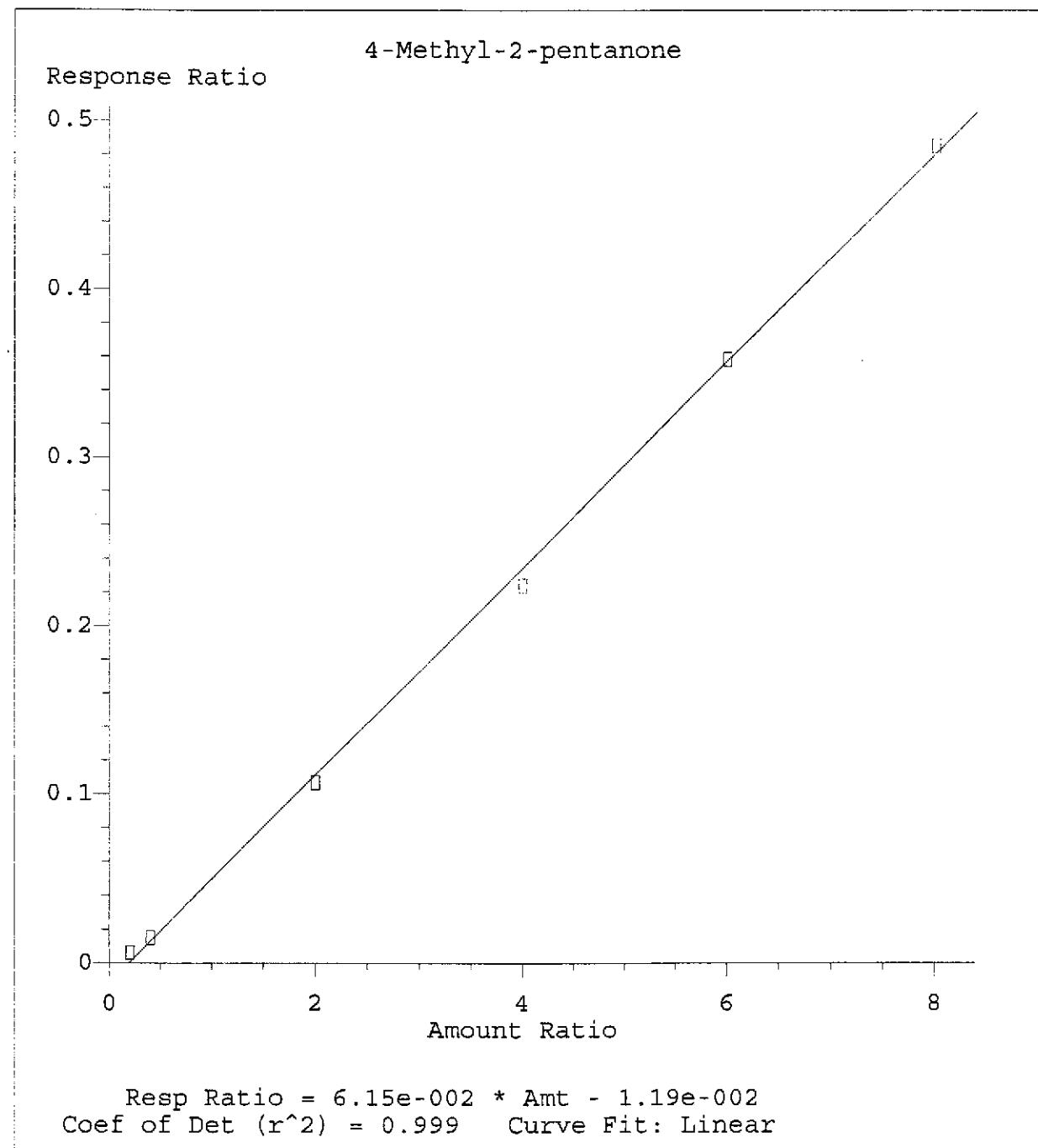
Method Name: C:\HPCHEM\1\METHODS\MD04VOCW.M  
Calibration Table Last Updated: Tue Dec 09 13:19:27 2008



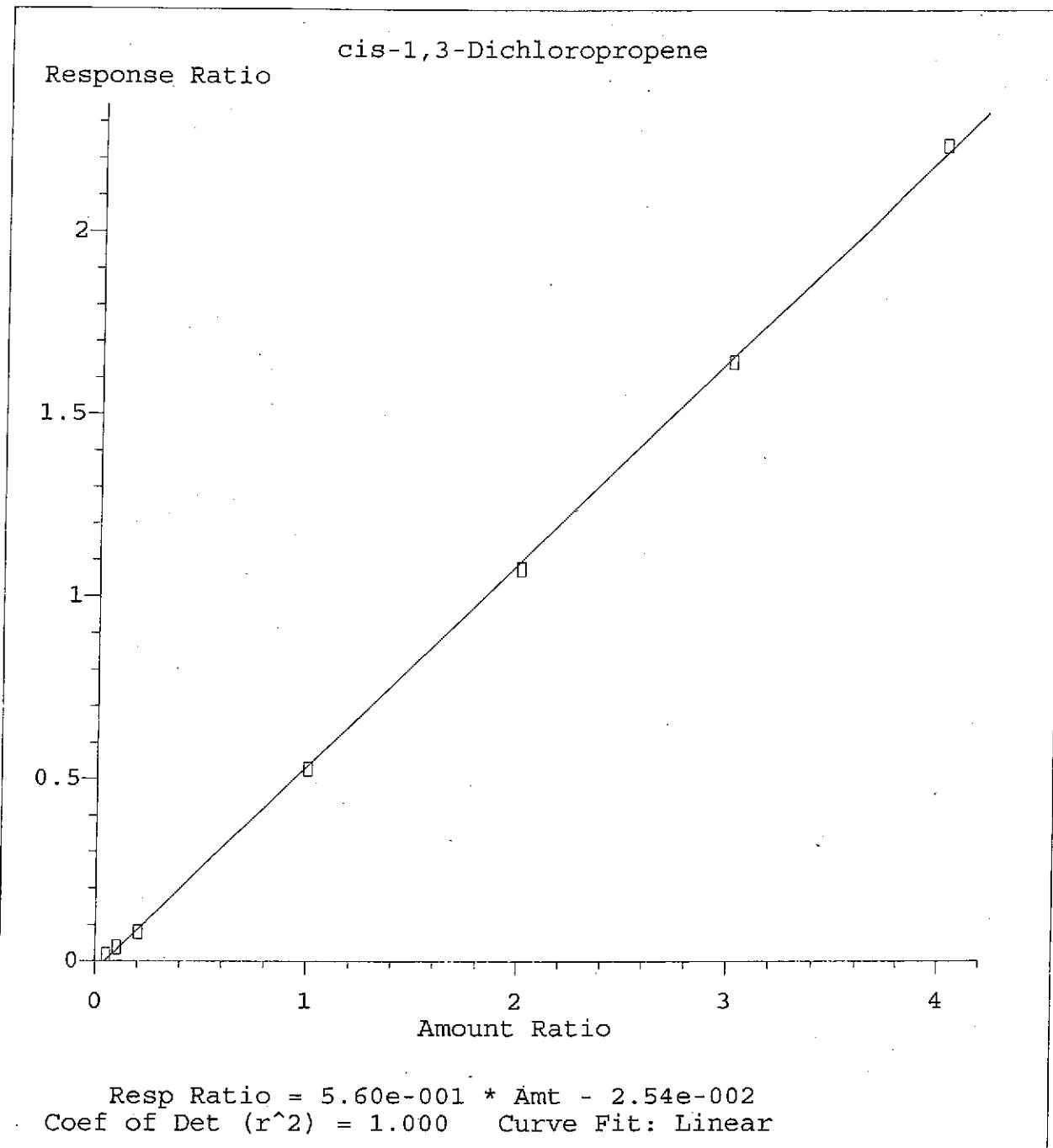
Method Name: C:\HPCHEM\1\METHODS\MD04VOCW.M  
Calibration Table Last Updated: Tue Dec 09 13:20:36 2008



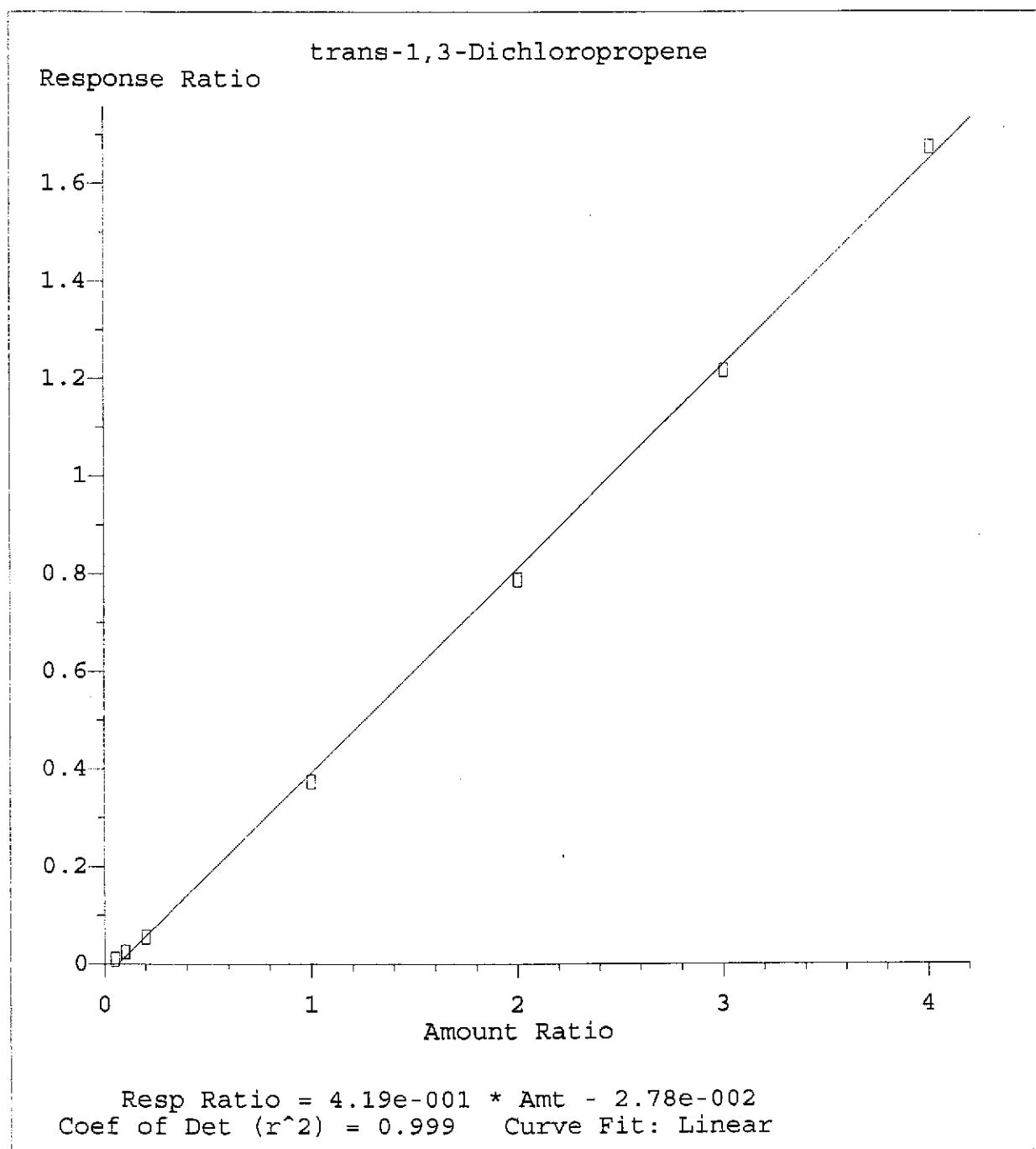
Method Name: C:\HPCHEM\1\METHODS\MD04VOCW.M  
Calibration Table Last Updated: Tue Dec 09 13:20:47 2008



Method Name: C:\HPCHEM\1\METHODS\MD04VOCW.M  
Calibration Table Last Updated: Tue Dec 09 13:21:59 2008



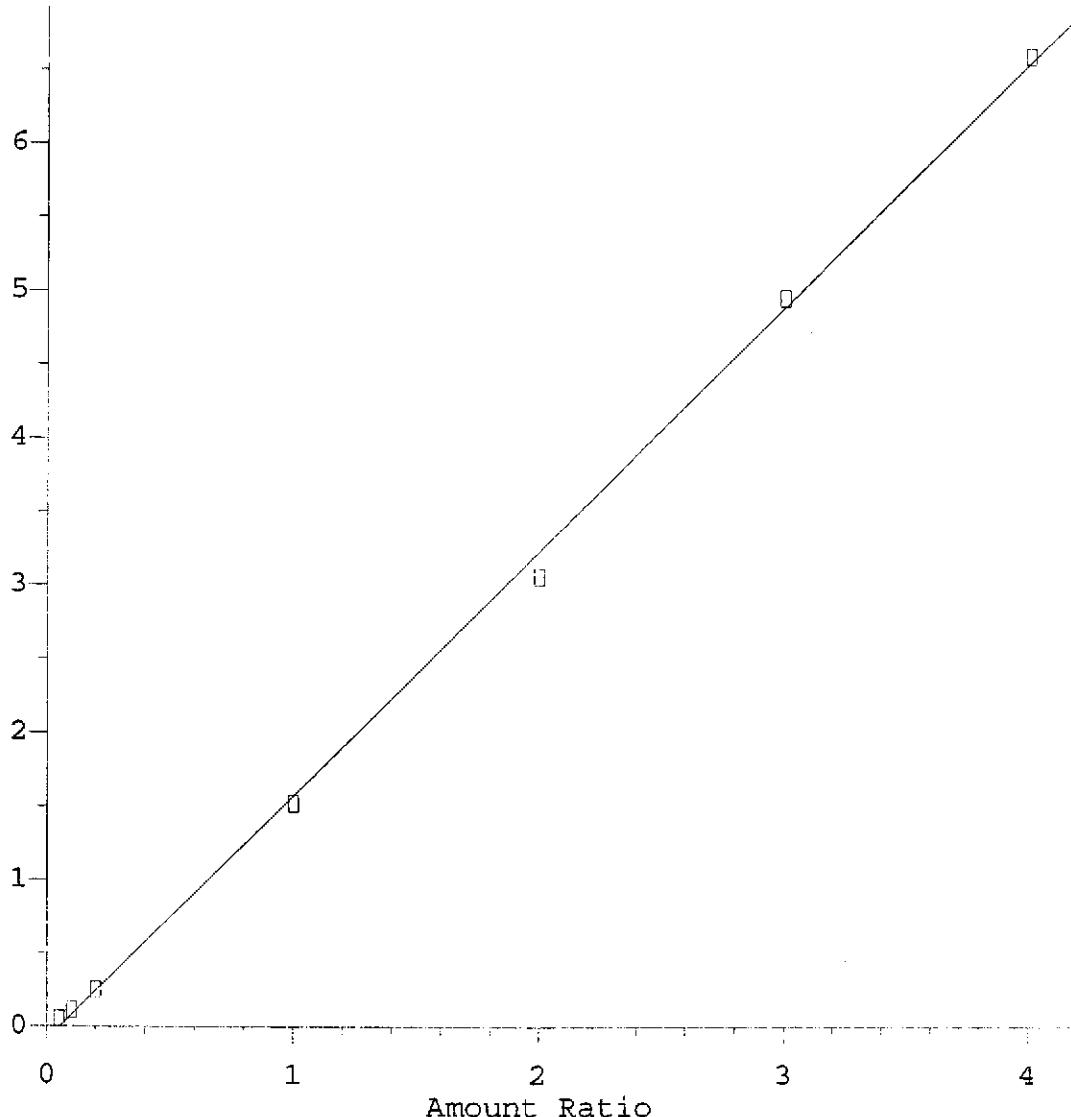
Method Name: C:\HPCHEM\1\METHODS\MD04VOCW.M  
Calibration Table Last Updated: Wed Apr 15 12:35:47 2009



Method Name: C:\HPCHEM\1\METHODS\MD04VOCW.M  
Calibration Table Last Updated: Tue Dec 09 13:24:32 2008

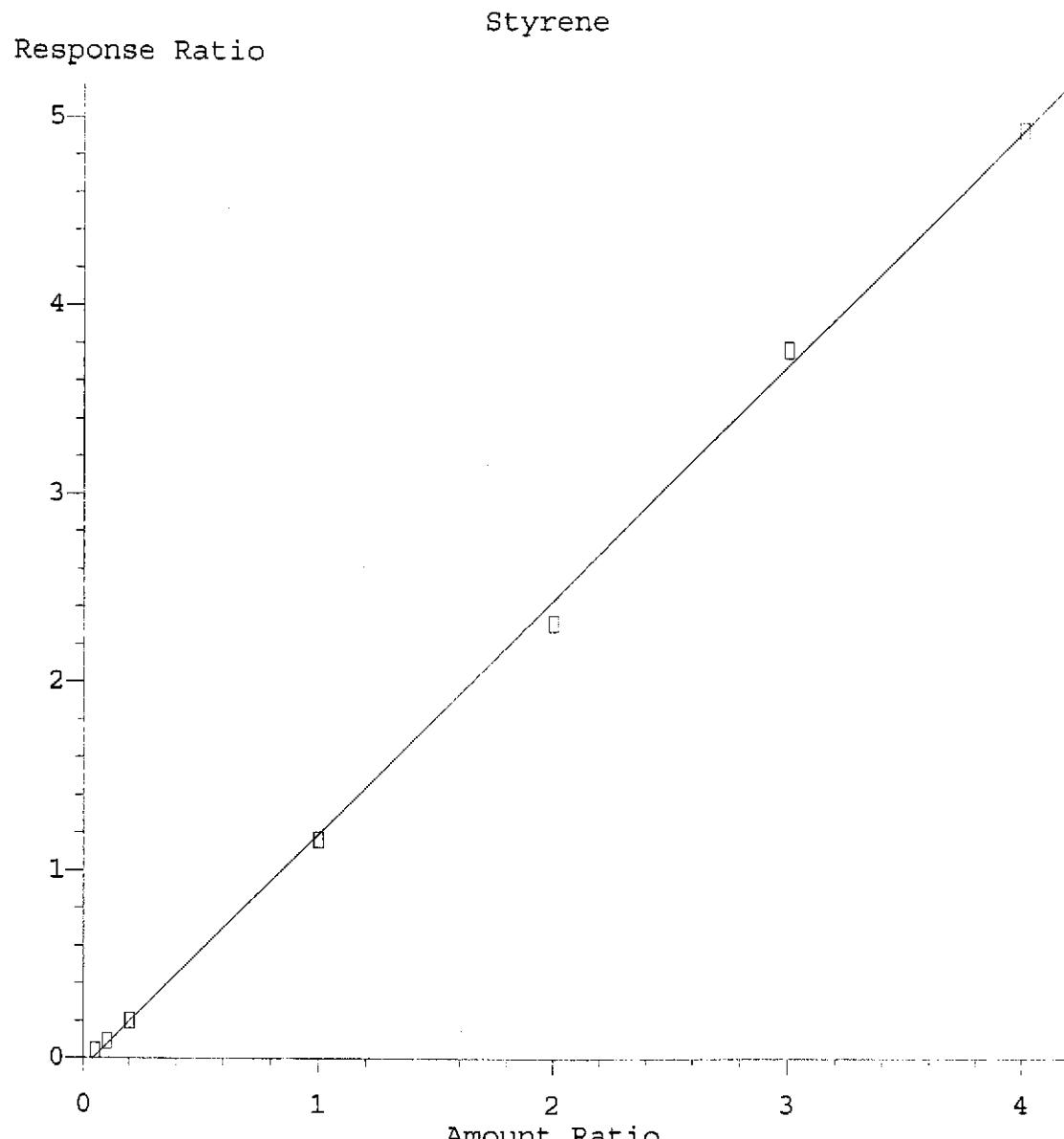
Response Ratio

Dibromochloromethane

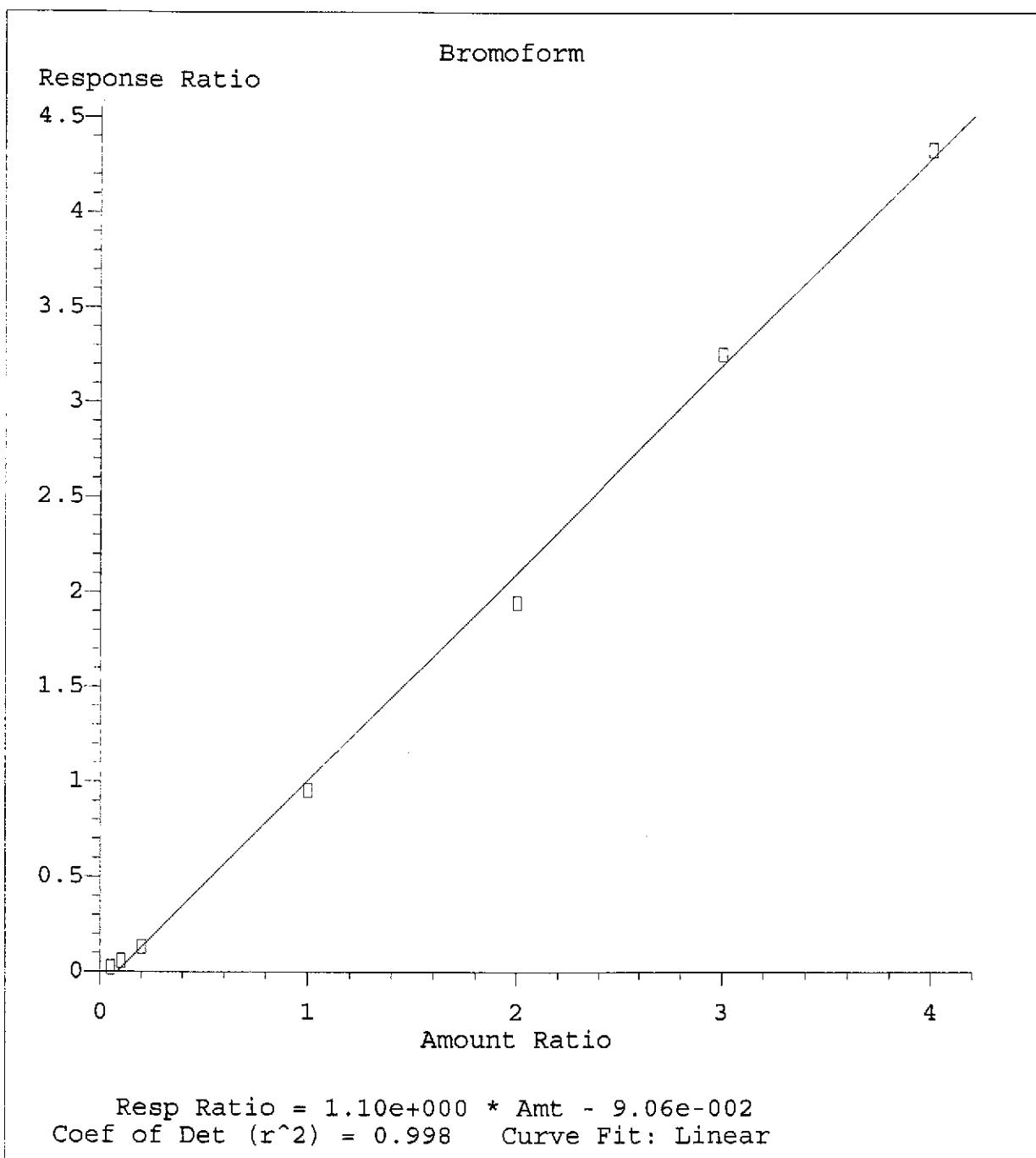


Resp Ratio = 1.66e+000 \* Amt - 8.95e-002  
Coef of Det ( $r^2$ ) = 0.999 Curve Fit: Linear

Method Name: C:\HPCHEM\1\METHODS\MD04VOCW.M  
Calibration Table Last Updated: Tue Dec 09 13:24:55 2008



Method Name: C:\HPCHEM\1\METHODS\MD04VOCW.M  
Calibration Table Last Updated: Tue Dec 09 13:25:23 2008



Method Name: C:\HPCHEM\1\METHODS\MD04VOCW.M  
Calibration Table Last Updated: Tue Dec 09 13:25:41 2008

**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 4**  
**SECOND SOURCE CALIBRATION VERIFICATION**

**Analytical Method:** SW8260B      **AAB #:** R15743  
**Lab Name:** Life Science Laboratories, In      **Contract Number:** \_\_\_\_\_  
**Instrument ID:** MS02\_12      **Initial Calibration ID:** 1447  
**Second Source ID:** 2SRC-15743      **Concentration Units (mg/L or mg/kg):** ug/L

Analyte	Expected	Found	%D	Q
(m+p)-Xylene	20	20.3	1.7	
1,1,1,2-Tetrachloroethane	10	10.5	4.9	
1,1,1-Trichloroethane	10	10.4	4.3	
1,1,2,2-Tetrachloroethane	10	10.3	3.3	
1,1,2-Trichloroethane	10	11	10.1	
1,1-Dichloroethane	10	10.1	1.0	
1,1-Dichloroethene	10	10.3	3.0	
1,1-Dichloropropene	10	10.6	5.8	
1,2,3-Trichlorobenzene	10	10.2	2.1	
1,2,3-Trichloropropane	10	10.6	5.6	
1,2,4-Trichlorobenzene	10	9.54	-4.6	
1,2,4-Trimethylbenzene	10	10.6	6.3	
1,2-Dibromo-3-chloropropane	10	9.53	-4.7	
1,2-Dibromoethane	10	10.6	5.5	
1,2-Dichlorobenzene	10	10.5	4.7	
1,2-Dichloroethane	10	10.4	4.5	
1,2-Dichloropropane	10	10.6	6.3	
1,3,5-Trimethylbenzene	10	10.3	3.3	
1,3-Dichlorobenzene	10	10.4	4.1	
1,3-Dichloropropane	10	10.5	5.0	
1,4-Dichlorobenzene	10	10.1	0.6	
1-Chlorohexane	10	10.9	9.4	
2,2-Dichloropropane	10	9.82	-1.8	
2-Butanone	20	22.9	14.6	
2-Chlorotoluene	10	10.7	7.1	
4-Chlorotoluene	10	9.91	-0.9	
4-Methyl-2-pentanone	20	19.7	-1.6	
Acetone	20	23.9	19.4	
Benzene	10	10.4	3.5	
Bromobenzene	10	10.2	2.5	
Bromochloromethane	10	10.8	7.5	
Bromodichloromethane	10	11	9.7	
Bromoform	10	9.52	-4.8	
Bromomethane	10	11	10.4	
Carbon tetrachloride	10	10.7	7.3	

**Comments:**

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 4**  
**SECOND SOURCE CALIBRATION VERIFICATION**

Analytical Method: SW8260B AAB #: R15743  
 Lab Name: Life Science Laboratories, In Contract Number:  
 Instrument ID: MS02\_12 Initial Calibration ID: 1447  
 Second Source ID: 2SRC-15743 Concentration Units (mg/L or mg/kg): µg/L

Analyte	Expected	Found	%D	Q
Chlorobenzene	10	10.1	0.7	
Chloroethane	10	11.1	10.8	
Chloroform	10	10.3	2.7	
Chloromethane	10	9.8	-2.0	
cis-1,2-Dichloroethene	10	10.5	5.1	
cis-1,3-Dichloropropene	10	11	9.9	
Dibromochloromethane	10	9.91	-0.9	
Dibromomethane	10	10.7	7.1	
Dichlorodifluoromethane	10	12	20.2	
Ethylbenzene	10	9.98	-0.2	
Hexachlorobutadiene	10	9.98	-0.2	
Isopropylbenzene	10	10.4	3.7	
Methyl tert-butyl ether	10	10.6	6.5	
Methylene chloride	10	9.51	-4.9	
n-Butylbenzene	10	9.95	-0.5	
n-Propylbenzene	10	10.6	6.4	
Naphthalene	10	10.1	0.6	
o-Xylene	10	10.5	5.3	
p-Isopropyltoluene	10	10.6	6.3	
sec-Butylbenzene	10	10.4	3.5	
Styrene	10	9.83	-1.7	
tert-Butylbenzene	10	10.3	3.0	
Tetrachloroethene	10	10.2	2.1	
Toluene	10	10.6	5.8	
trans-1,2-Dichloroethene	10	10.3	3.4	
trans-1,3-Dichloropropene	10	9.75	-2.5	
Trichloroethene	10	10.8	7.5	
Trichlorofluoromethane	10	11.4	13.9	
Vinyl chloride	10	10.6	6.4	
Xylenes (total)	30	30.9	2.9	

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 5A  
CALIBRATION VERIFICATION - GC/MS ANALYSIS**

**Analytical Method:** SW8260B      **AAB #:** MS02\_12\_090406

**Lab Name:** Life Science Laboratories, In      **Contract Number:**

**Instrument ID:** MS02\_12      **Initial Calibration ID:** 1447

**ICV ID:** CCV #1 ID: CCV-16897      **CCV #2 ID:**

<b>Analyte</b>	<b>ICV</b>		<b>CCV #1</b>		<b>CCV #2</b>		<b>Q</b>
	<b>RF</b>	<b>%D</b>	<b>RF</b>	<b>%D</b>	<b>RF</b>	<b>%D</b>	
1,1,2,2-Tetrachloroethane *			1.194	18.2			
1,1-Dichloroethane *			0.62	-1.6			
Bromoform *			0.934	-6.4			
Chlorobenzene *			1.413	-1.3			
Chloromethane *			0.28	-17.4			
1,1-Dichloroethene #					-2.7		
1,2-Dichloropropane #					1.8		
Chloroform #					0.6		
Ethylbenzene #					-0.8		
Toluene #					1.9		
Vinyl chloride #					3.2		
(m+p)-Xylene					-1.2		
1,1,1,2-Tetrachloroethane					2.3		
1,1,1-Trichloroethane					1.4		
1,1,2-Trichloroethane					6.7		
1,1-Dichloropropene					-2.7		
1,2,3-Trichlorobenzene					5.2		
1,2,3-Trichloropropane					14.4		
1,2,4-Trichlorobenzene					-2.2		
1,2,4-Trimethylbenzene					4.1		
1,2-Dibromo-3-chloropropane					1.4		
1,2-Dibromoethane					-1.0		
1,2-Dichlorobenzene					3.8		
1,2-Dichloroethane					3.7		
1,2-Dichloroethane-d4					2.3		
1,3,5-Trimethylbenzene					2.1		
1,3-Dichlorobenzene					1.8		
1,3-Dichloropropane					3.6		
1,4-Dichlorobenzene					-2.9		
1-Chlorohexane					0		
2,2-Dichloropropane					-0.2		
2-Butanone					3.8		
2-Chlorotoluene					14.7		

\* SPCCs # CCCS

**Comments:**

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 5A**  
**CALIBRATION VERIFICATION - GC/MS ANALYSIS**

Analytical Method: SW8260B      AAB #: MS02\_12\_090406

Lab Name: Life Science Laboratories, In      Contract Number:

Instrument ID: MS02\_12      Initial Calibration ID: 1447

ICV ID: CCV #1 ID: CCV-16897      CCV #2 ID:

Analyte	ICV RF	%D	CCV #1 RF	%D	CCV #2 RF	%D	Q
4-Bromofluorobenzene				0.2			
4-Chlorotoluene				-10.5			
4-Methyl-2-pentanone				-8.0			
Acetone				13.8			
Benzene				-2.4			
Bromobenzene				6.1			
Bromochloromethane				-2.0			
Bromodichloromethane				3.5			
Bromomethane				-8.9			
Carbon tetrachloride				-0.9			
Chloroethane				5.5			
cis-1,2-Dichloroethene				0			
cis-1,3-Dichloropropene				-3.6			
Dibromochloromethane				-5.2			
Dibromomethane				-4.7			
Dichlorodifluoromethane				0.4			
Hexachlorobutadiene				4.7			
Isopropylbenzene				8.0			
Methyl tert-butyl ether				-1.6			
Methylene chloride				-3.1			
n-Butylbenzene				-3.9			
n-Propylbenzene				7.7			
Naphthalene				2.0			
o-Xylene				2.4			
p-Isopropyltoluene				0			
sec-Butylbenzene				1.4			
Styrene				-7.0			
tert-Butylbenzene				2.4			
Tetrachloroethene				0.5			
Toluene-d8				-1.2			
trans-1,2-Dichloroethene				-10.5			
trans-1,3-Dichloropropene				-14.8			
Trichloroethene				-2.4			

\* SPCCs # CCCS

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 5A  
CALIBRATION VERIFICATION - GC/MS ANALYSIS**

Analytical Method: SW8260B AAB #: MS02\_12\_090406  
Lab Name: Life Science Laboratories, In Contract Number:  
Instrument ID: MS02\_12 Initial Calibration ID: 1447  
ICV ID: CCV #1 ID: CCV-16897 CCV #2 ID:

Analyte	ICV		CCV #1		CCV #2		Q
	RF	%D	RF	%D	RF	%D	
Trichlorofluoromethane				13.1			
Xylenes (total)				0			

\* SPCCs # CCCS

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 5A  
CALIBRATION VERIFICATION - GC/MS ANALYSIS**

**Analytical Method:** SW8260B      **AAB #:** MS02\_12\_090408  
**Lab Name:** Life Science Laboratories, In      **Contract Number:** \_\_\_\_\_  
**Instrument ID:** MS02\_12      **Initial Calibration ID:** 1447  
**ICV ID:**      **CCV #1 ID:** CCV-16915      **CCV #2 ID:** \_\_\_\_\_

<b>Analyte</b>	<b>ICV</b>		<b>CCV #1</b>		<b>CCV #2</b>		<b>Q</b>
	<b>RF</b>	<b>%D</b>	<b>RF</b>	<b>%D</b>	<b>RF</b>	<b>%D</b>	
1,1,2,2-Tetrachloroethane *			1.197	18.5			
1,1-Dichloroethane *			0.659	4.6			
Bromoform *			0.925	-7.3			
Chlorobenzene *			1.439	0.6			
Chloromethane *			0.241	-28.9			*
1,1-Dichloroethene #				-1.7			
1,2-Dichloropropane #				1.8			
Chloroform #				-0.1			
Ethylbenzene #				0.7			
Toluene #				2.7			
Vinyl chloride #				-6.2			
(m+p)-Xylene				-1.8			
1,1,1,2-Tetrachloroethane				3.4			
1,1,1-Trichloroethane				1.2			
1,1,2-Trichloroethane				8.3			
1,1-Dichloropropene				-3.6			
1,2,3-Trichlorobenzene				3.4			
1,2,3-Trichloropropane				7.0			
1,2,4-Trichlorobenzene				-4.0			
1,2,4-Trimethylbenzene				2.7			
1,2-Dibromo-3-chloropropane				-1.4			
1,2-Dibromoethane				-2.2			
1,2-Dichlorobenzene				2.8			
1,2-Dichloroethane				0.9			
1,2-Dichloroethane-d4				2.7			
1,3,5-Trimethylbenzene				2.4			
1,3-Dichlorobenzene				6.3			
1,3-Dichloropropane				1.1			
1,4-Dichlorobenzene				-4.8			
1-Chlorohexane				-2.3			
2,2-Dichloropropane				-2.0			
2-Butanone				7.7			
2-Chlorotoluene				-1.8			

\* SPCCs # CCCS

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 5A  
CALIBRATION VERIFICATION - GC/MS ANALYSIS**

**Analytical Method:** SW8260B      **AAB #:** MS02\_12\_090408  
**Lab Name:** Life Science Laboratories, In      **Contract Number:** \_\_\_\_\_  
**Instrument ID:** MS02\_12      **Initial Calibration ID:** 1447  
**ICV ID:** CCV #1 ID: CCV-16915      **CCV #2 ID:** \_\_\_\_\_

Analyte	ICV		CCV #1		CCV #2		Q
	RF	%D	RF	%D	RF	%D	
4-Bromofluorobenzene				0.1			
4-Chlorotoluene				4.1			
4-Methyl-2-pentanone				-4.2			
Acetone				13.8			
Benzene				-0.4			
Bromobenzene				7.3			
Bromochloromethane				0.8			
Bromodichloromethane				3.1			
Bromomethane				-2.7			
Carbon tetrachloride				-0.9			
Chloroethane				9.8			
cis-1,2-Dichloroethene				1.3			
cis-1,3-Dichloropropene				-3.1			
Dibromochloromethane				-5.2			
Dibromomethane				-2.0			
Dichlorodifluoromethane				-2.4			
Hexachlorobutadiene				1.9			
Isopropylbenzene				9.4			
Methyl tert-butyl ether				-4.4			
Methylene chloride				-1.7			
n-Butylbenzene				-9.2			
n-Propylbenzene				6.9			
Naphthalene				-0.4			
o-Xylene				1.6			
p-Isopropyltoluene				-1.4			
sec-Butylbenzene				-3.2			
Styrene				-8.6			
tert-Butylbenzene				2.5			
Tetrachloroethene				-0.3			
Toluene-d8				-0.2			
trans-1,2-Dichloroethene				-6.6			
trans-1,3-Dichloropropene				-15.9			
Trichloroethene				-1.5			

\* SPCCs # CCCS

**Comments:**

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AFCEE  
ORGANIC ANALYSES DATA SHEET 5A  
CALIBRATION VERIFICATION - GC/MS ANALYSIS

Analytical Method: SW8260B AAB #: MS02\_12\_090408

Lab Name: Life Science Laboratories, Inc. Contract Number:

Instrument ID: MS02\_12 Initial Calibration ID: 1447

ICV ID: CCV #1 ID: CCV-16915 CCV #2 ID:

Analyte	ICV		CCV #1		CCV #2		Q
	RF	%D	RF	%D	RF	%D	
Trichlorofluoromethane				8.0			
Xylenes (total)				-0.6			

\* SPCCs # CCCS

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 7**  
**BLANKS**

**Analytical Method:** SW8260B      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract Number:** \_\_\_\_\_  
**Units:** µg/L      **Method Blank ID:** MB-16897  
**Initial Calibration ID:** 1447      **File ID:** M6061.D

Analyte	Method Blank	RL	Q
(m+p)-Xylene	0.200	2.00	U
1,1,1,2-Tetrachloroethane	0.160	0.500	U
1,1,1-Trichloroethane	0.100	1.00	U
1,1,2,2-Tetrachloroethane	0.100	0.500	U
1,1,2-Trichloroethane	0.160	1.00	U
1,1-Dichloroethane	0.100	1.00	U
1,1-Dichloroethene	0.160	1.00	U
1,1-Dichloropropene	0.100	1.00	U
1,2,3-Trichlorobenzene	0.100	1.00	U
1,2,3-Trichloropropane	0.330	2.00	U
1,2,4-Trichlorobenzene	0.100	1.00	U
1,2,4-Trimethylbenzene	0.100	1.00	U
1,2-Dibromo-3-chloropropane	1.00	5.00	U
1,2-Dibromoethane	0.160	1.00	U
1,2-Dichlorobenzene	0.100	1.00	U
1,2-Dichloroethane	0.160	0.500	U
1,2-Dichloropropane	0.160	1.00	U
1,3,5-Trimethylbenzene	0.100	1.00	U
1,3-Dichlorobenzene	0.100	1.00	U
1,3-Dichloropropene	0.100	0.500	U
1,4-Dichlorobenzene	0.160	0.500	U
1-Chlorohexane	0.160	1.00	U
2,2-Dichloropropane	0.330	1.00	U
2-Butanone	1.00	10.0	U
2-Chlorotoluene	0.100	1.00	U
4-Chlorotoluene	0.100	1.00	U
4-Methyl-2-pentanone	1.00	10.0	U
Acetone	1.00	10.0	U
Benzene	0.100	0.500	U
Bromobenzene	0.100	1.00	U
Bromochloromethane	0.100	1.00	U
Bromodichloromethane	0.100	0.500	U
Bromoform	0.330	1.00	U
Bromomethane	0.330	3.00	U
Carbon tetrachloride	0.100	1.00	U

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 7  
BLANKS**

**Analytical Method:** SW8260B      **AAB #:** R16897  
**Lab Name:** Life Science Laboratories, Inc.      **Contract Number:** \_\_\_\_\_  
**Units:** µg/L      **Method Blank ID:** MB-16897  
**Initial Calibration ID:** 1447      **File ID:** M6061.D

Analyte	Method Blank	RL	Q
Chlorobenzene	0.100	0.500	U
Chloroethane	0.330	1.00	U
Chloroform	0.100	0.500	U
Chloromethane	0.330	1.00	U
cis-1,2-Dichloroethene	0.100	1.00	U
cis-1,3-Dichloropropene	0.160	0.500	U
Dibromochloromethane	0.100	0.500	U
Dibromomethane	0.160	1.00	U
Dichlorodifluoromethane	0.100	1.00	U
Ethylbenzene	0.100	1.00	U
Hexachlorobutadiene	0.100	1.00	U
Isopropylbenzene	0.100	1.00	U
Methyl tert-butyl ether	0.160	5.00	U
Methylene chloride	0.160	1.00	U
n-Butylbenzene	0.100	1.00	U
n-Propylbenzene	0.100	1.00	U
Naphthalene	0.100	1.00	U
o-Xylene	0.100	1.00	U
p-Isopropyltoluene	0.160	1.00	U
sec-Butylbenzene	0.160	1.00	U
Styrene	0.100	1.00	U
tert-Butylbenzene	0.100	1.00	U
Tetrachloroethene	0.100	1.00	U
Toluene	0.100	1.00	U
trans-1,2-Dichloroethene	0.100	1.00	U
trans-1,3-Dichloropropene	0.160	1.00	U
Trichloroethene	0.100	1.00	U
Trichlorofluoromethane	0.100	1.00	U
Vinyl chloride	0.330	1.00	U
Xylenes (total)	0.300	2.00	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	115	72 - 119	
4-Bromofluorobenzene	101	76 - 119	
Toluene-d8	98	81 - 120	

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 7  
BLANKS**

Analytical Method: SW8260B      AAB #: R16897  
Lab Name: Life Science Laboratories, Inc.      Contract Number:  
Units: ug/L      Method Blank ID: MB-16897  
Initial Calibration ID: 1447      File ID: M6061.D

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1753772	874552 - 3498208	
Chlorobenzene-d5	2043825	1033520 - 4134082	
Fluorobenzene	3608883	1977723 - 7910892	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 7  
BLANKS**

**Analytical Method:** SW8260B      **AAB #:** R16915  
**Lab Name:** Life Science Laboratories, Inc.      **Contract Number:** \_\_\_\_\_  
**Units:** ug/L      **Method Blank ID:** MB-16915  
**Initial Calibration ID:** 1447      **File ID:** M6101.D

Analyte	Method Blank	RL	Q
(m+p)-Xylene	0.200	2.00	U
1,1,1,2-Tetrachloroethane	0.160	0.500	U
1,1,1-Trichloroethane	0.100	1.00	U
1,1,2,2-Tetrachloroethane	0.100	0.500	U
1,1,2-Trichloroethane	0.160	1.00	U
1,1-Dichloroethane	0.100	1.00	U
1,1-Dichloroethene	0.160	1.00	U
1,1-Dichloropropene	0.100	1.00	U
1,2,3-Trichlorobenzene	0.100	1.00	U
1,2,3-Trichloropropane	0.330	2.00	U
1,2,4-Trichlorobenzene	0.100	1.00	U
1,2,4-Trimethylbenzene	0.100	1.00	U
1,2-Dibromo-3-chloropropane	1.00	5.00	U
1,2-Dibromoethane	0.160	1.00	U
1,2-Dichlorobenzene	0.100	1.00	U
1,2-Dichloroethane	0.160	0.500	U
1,2-Dichloropropane	0.160	1.00	U
1,3,5-Trimethylbenzene	0.100	1.00	U
1,3-Dichlorobenzene	0.100	1.00	U
1,3-Dichloropropane	0.100	0.500	U
1,4-Dichlorobenzene	0.160	0.500	U
1-Chlorohexane	0.160	1.00	U
2,2-Dichloropropane	0.330	1.00	U
2-Butanone	1.00	10.0	U
2-Chlorotoluene	0.100	1.00	U
4-Chlorotoluene	0.100	1.00	U
4-Methyl-2-pentanone	1.00	10.0	U
Acetone	1.00	10.0	U
Benzene	0.100	0.500	U
Bromobenzene	0.100	1.00	U
Bromochloromethane	0.100	1.00	U
Bromodichloromethane	0.100	0.500	U
Bromoform	0.330	1.00	U
Bromomethane	0.330	3.00	U
Carbon tetrachloride	0.100	1.00	U

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 7  
BLANKS**

**Analytical Method:** SW8260B      **AAB #:** R16915  
**Lab Name:** Life Science Laboratories, Inc.      **Contract Number:** \_\_\_\_\_  
**Units:** µg/L      **Method Blank ID:** MB-16915  
**Initial Calibration ID:** 1447      **File ID:** M6101.D

Analyte	Method Blank	RL	Q
Chlorobenzene	0.100	0.500	U
Chloroethane	0.330	1.00	U
Chloroform	0.100	0.500	U
Chloromethane	0.330	1.00	U
cis-1,2-Dichloroethene	0.100	1.00	U
cis-1,3-Dichloropropene	0.160	0.500	U
Dibromochloromethane	0.100	0.500	U
Dibromomethane	0.160	1.00	U
Dichlorodifluoromethane	0.100	1.00	U
Ethylbenzene	0.100	1.00	U
Hexachlorobutadiene	0.100	1.00	U
Isopropylbenzene	0.100	1.00	U
Methyl tert-butyl ether	0.160	5.00	U
Methylene chloride	0.160	1.00	U
n-Butylbenzene	0.100	1.00	U
n-Propylbenzene	0.100	1.00	U
Naphthalene	0.100	1.00	U
o-Xylene	0.100	1.00	U
p-Isopropyltoluene	0.160	1.00	U
sec-Butylbenzene	0.160	1.00	U
Styrene	0.100	1.00	U
tert-Butylbenzene	0.100	1.00	U
Tetrachloroethene	0.100	1.00	U
Toluene	0.100	1.00	U
trans-1,2-Dichloroethene	0.100	1.00	U
trans-1,3-Dichloropropene	0.160	1.00	U
Trichloroethene	0.100	1.00	U
Trichlorofluoromethane	0.100	1.00	U
Vinyl chloride	0.330	1.00	U
Xylenes (total)	0.300	2.00	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	109	72 - 119	
4-Bromofluorobenzene	106	76 - 119	
Toluene-d8	110	81 - 120	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 7  
BLANKS**

Analytical Method: SW8260B      AAB #: R16915  
Lab Name: Life Science Laboratories, Inc.      Contract Number:  
Units: µg/L      Method Blank ID: MB-16915  
Initial Calibration ID: 1447      File ID: M6101.D

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1607902	874552 - 3498208	
Chlorobenzene-d5	2135054	1033520 - 4134082	
Fluorobenzene	4686706	1977723 - 7910892	

**Comments:**

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 8**  
**LABORATORY CONTROL SAMPLE**

Analytical Method: SW8260B

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #: \_\_\_\_\_

LCS ID: LCS-16897

Initial Calibration ID: 1447

Concentration Units (mg/L or mg/kg): µg/L

File ID: M6058.D

Analyte	Expected	Found	%R	Control Limits	Q
(m+p)-Xylene	20	21.3	106	76 - 128	
1,1,1,2-Tetrachloroethane	10	11.0	110	81 - 129	
1,1,1-Trichloroethane	10	11.0	110	67 - 132	
1,1,2,2-Tetrachloroethane	10	11.8	118	63 - 128	
1,1,2-Trichloroethane	10	11.6	116	75 - 125	
1,1-Dichloroethane	10	11.0	110	69 - 133	
1,1-Dichloroethene	10	10.7	107	68 - 130	
1,1-Dichloropropene	10	10.4	104	73 - 132	
1,2,3-Trichlorobenzene	10	11.5	115	67 - 137	
1,2,3-Trichloropropane	10	10.9	109	73 - 124	
1,2,4-Trichlorobenzene	10	9.86	99	66 - 134	
1,2,4-Trimethylbenzene	10	10.5	105	74 - 132	
1,2-Dibromo-3-chloropropane	10	10.4	104	50 - 132	
1,2-Dibromoethane	10	10.5	105	80 - 121	
1,2-Dichlorobenzene	10	10.8	108	71 - 122	
1,2-Dichloroethane	10	11.1	111	69 - 132	
1,2-Dichloropropane	10	11.0	110	75 - 125	
1,3,5-Trimethylbenzene	10	10.3	103	74 - 131	
1,3-Dichlorobenzene	10	11.2	112	75 - 124	
1,3-Dichloropropane	10	11.4	114	73 - 126	
1,4-Dichlorobenzene	10	10.6	106	74 - 123	
1-Chlorohexane	10	11.7	117	70 - 125	
2,2-Dichloropropane	10	10.9	109	69 - 137	
2-Butanone	20	24.2	121	49 - 136	
2-Chlorotoluene	10	10.5	105	73 - 126	
4-Chlorotoluene	10	10.8	108	74 - 128	
4-Methyl-2-pentanone	20	20.4	102	58 - 134	
Acetone	20	27.3	137	40 - 135	*
Benzene	10	11.1	111	81 - 122	
Bromobenzene	10	11.3	113	76 - 124	
Bromochloromethane	10	11.2	112	65 - 129	
Bromodichloromethane	10	11.8	118	76 - 121	
Bromoform	10	10.3	103	69 - 128	
Bromomethane	10	10.0	100	30 - 141	
Carbon tetrachloride	10	10.6	106	66 - 138	
Chlorobenzene	10	10.9	109	81 - 122	
Chloroethane	10	10.5	105	58 - 133	
Chloroform	10	11.2	112	69 - 128	
Chloromethane	10	7.83	78	56 - 131	
cis-1,2-Dichloroethene	10	10.9	109	72 - 126	
cis-1,3-Dichloropropene	10	10.9	109	69 - 131	
Dibromochloromethane	10	9.01	90	66 - 133	

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 8**  
**LABORATORY CONTROL SAMPLE**

Analytical Method: SW8260B

AAB #:

R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

LCS ID: LCS-16897

Initial Calibration ID: 1447

Concentration Units (mg/L or mg/kg): µg/L

File ID: M6058.D

Analyte	Expected	Found	%R	Control Limits	Q
Dibromomethane	10	10.5	105	76 - 125	
Dichlorodifluoromethane	10	9.99	100	30 - 153	
Ethylbenzene	10	10.6	106	73 - 127	
Hexachlorobutadiene	10	10.7	107	67 - 131	
Isopropylbenzene	10	11.1	111	75 - 127	
Methyl tert-butyl ether	10	11.1	111	65 - 123	
Methylene chloride	10	10.8	108	63 - 137	
n-Butylbenzene	10	9.32	93	69 - 137	
n-Propylbenzene	10	11.0	110	72 - 129	
Naphthalene	10	11.0	110	54 - 138	
o-Xylene	10	10.7	107	80 - 121	
p-Isopropyltoluene	10	10.3	103	73 - 130	
sec-Butylbenzene	10	10.4	104	72 - 127	
Styrene	10	10.9	109	65 - 134	
tert-Butylbenzene	10	10.2	102	70 - 129	
Tetrachloroethene	10	11.0	110	66 - 128	
Toluene	10	11.0	110	77 - 122	
trans-1,2-Dichloroethene	10	10.4	104	63 - 137	
trans-1,3-Dichloropropene	10	9.44	94	59 - 135	
Trichloroethene	10	10.7	107	70 - 127	
Trichlorofluoromethane	10	11.0	110	57 - 129	
Vinyl chloride	10	10.1	101	50 - 134	
Xylenes (total)	30	32.0	107	80 - 121	

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	108	72 - 119	
4-Bromofluorobenzene	97	76 - 119	
Toluene-d8	103	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1296228	874552 - 3498208	
Chlorobenzene-d5	1512751	1033520 - 4134082	
Fluorobenzene	2966857	1977723 - 7910892	

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 8**  
**LABORATORY CONTROL SAMPLE**

Analytical Method: SW8260B

AAB #: R16915

Lab Name: Life Science Laboratories, Inc.

Contract #: \_\_\_\_\_

LCS ID: LCS-16915

Initial Calibration ID: 1447

Concentration Units (mg/L or mg/kg): µg/L

File ID: M6098.D

Analyte	Expected	Found	%R	Control Limits	Q
(m+p)-Xylene	20	20.1	101	76 - 128	
1,1,1,2-Tetrachloroethane	10	10.9	109	81 - 129	
1,1,1-Trichloroethane	10	10.7	107	67 - 132	
1,1,2,2-Tetrachloroethane	10	12.6	126	63 - 128	
1,1,2-Trichloroethane	10	11.6	116	75 - 125	
1,1-Dichloroethane	10	11.2	112	69 - 133	
1,1-Dichloroethene	10	10.4	104	68 - 130	
1,1-Dichloropropene	10	10.4	104	73 - 132	
1,2,3-Trichlorobenzene	10	11.8	118	67 - 137	
1,2,3-Trichloropropane	10	9.10	91	73 - 124	
1,2,4-Trichlorobenzene	10	10.4	104	66 - 134	
1,2,4-Trimethylbenzene	10	10.5	105	74 - 132	
1,2-Dibromo-3-chloropropane	10	10.4	104	50 - 132	
1,2-Dibromoethane	10	10.2	102	80 - 121	
1,2-Dichlorobenzene	10	10.8	108	71 - 122	
1,2-Dichloroethane	10	11.0	110	69 - 132	
1,2-Dichloropropane	10	11.4	114	75 - 125	
1,3,5-Trimethylbenzene	10	10.4	104	74 - 131	
1,3-Dichlorobenzene	10	10.7	107	75 - 124	
1,3-Dichloropropane	10	10.9	109	73 - 126	
1,4-Dichlorobenzene	10	10.6	106	74 - 123	
1-Chlorohexane	10	11.2	112	70 - 125	
2,2-Dichloropropane	10	10.9	109	69 - 137	
2-Butanone	20	23.4	117	49 - 136	
2-Chlorotoluene	10	10.6	106	73 - 126	
4-Chlorotoluene	10	10.8	108	74 - 128	
4-Methyl-2-pentanone	20	20.7	103	58 - 134	
Acetone	20	26.4	132	40 - 135	
Benzene	10	11.0	110	81 - 122	
Bromobenzene	10	11.8	118	76 - 124	
Bromochloromethane	10	11.1	111	65 - 129	
Bromodichloromethane	10	11.8	118	76 - 121	
Bromoform	10	10.1	101	69 - 128	
Bromomethane	10	10.1	101	30 - 141	
Carbon tetrachloride	10	10.6	106	66 - 138	
Chlorobenzene	10	10.4	104	81 - 122	
Chloroethane	10	11.4	114	58 - 133	
Chloroform	10	11.2	112	69 - 128	
Chloromethane	10	7.66	77	56 - 131	
cis-1,2-Dichloroethene	10	10.7	107	72 - 126	
cis-1,3-Dichloropropene	10	10.7	107	69 - 131	
Dibromochloromethane	10	9.04	90	66 - 133	

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 8**  
**LABORATORY CONTROL SAMPLE**

Analytical Method: SW8260B

AAB #: R16915

Lab Name: Life Science Laboratories, Inc.

Contract #: \_\_\_\_\_

LCS ID: LCS-16915

Initial Calibration ID: 1447

Concentration Units (mg/L or mg/kg): µg/L

File ID: M6098.D

Analyte	Expected	Found	%R	Control Limits	Q
Dibromomethane	10	10.2	102	76 - 125	
Dichlorodifluoromethane	10	9.70	97	30 - 153	
Ethylbenzene	10	10.2	103	73 - 127	
Hexachlorobutadiene	10	10.7	107	67 - 131	
Isopropylbenzene	10	11.5	115	75 - 127	
Methyl tert-butyl ether	10	11.0	110	65 - 123	
Methylene chloride	10	10.7	107	63 - 137	
n-Butylbenzene	10	9.56	96	69 - 137	
n-Propylbenzene	10	10.9	109	72 - 129	
Naphthalene	10	11.5	115	54 - 138	
o-Xylene	10	10.7	107	80 - 121	
p-Isopropyltoluene	10	10.4	104	73 - 130	
sec-Butylbenzene	10	10.2	102	72 - 127	
Styrene	10	10.5	105	65 - 134	
tert-Butylbenzene	10	10.5	105	70 - 129	
Tetrachloroethene	10	10.7	107	66 - 128	
Toluene	10	10.8	108	77 - 122	
trans-1,2-Dichloroethene	10	9.96	100	63 - 137	
trans-1,3-Dichloropropene	10	9.27	93	59 - 135	
Trichloroethene	10	10.4	104	70 - 127	
Trichlorofluoromethane	10	11.3	113	57 - 129	
Vinyl chloride	10	9.65	97	50 - 134	
Xylenes (total)	30	30.8	103	80 - 121	

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	106	72 - 119	
4-Bromofluorobenzene	105	76 - 119	
Toluene-d8	99	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1423353	874552 - 3498208	
Chlorobenzene-d5	1715350	1033520 - 4134082	
Fluorobenzene	3266662	1977723 - 7910892	

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 8**  
**LABORATORY CONTROL SAMPLE**

Analytical Method: SW8260B

AAB #: R16897

Lab Name: Life Science Laboratories, Inc.

Contract #:

LCS ID: LCSD-16897

Initial Calibration ID: 1447

Concentration Units (mg/L or mg/kg): µg/L

File ID: M6059.D

Analyte	Expected	Found	%R	Control Limits	Q
(m+p)-Xylene	20	20.6	103	76 - 128	
1,1,1,2-Tetrachloroethane	10	10.9	109	81 - 129	
1,1,1-Trichloroethane	10	10.8	108	67 - 132	
1,1,2,2-Tetrachloroethane	10	11.6	116	63 - 128	
1,1,2-Trichloroethane	10	11.7	117	75 - 125	
1,1-Dichloroethane	10	11.1	111	69 - 133	
1,1-Dichloroethene	10	10.3	103	68 - 130	
1,1-Dichloropropene	10	10.4	104	73 - 132	
1,2,3-Trichlorobenzene	10	11.4	114	67 - 137	
1,2,3-Trichloropropane	10	8.81	88	73 - 124	
1,2,4-Trichlorobenzene	10	10.1	101	66 - 134	
1,2,4-Trimethylbenzene	10	10.6	106	74 - 132	
1,2-Dibromo-3-chloropropane	10	10.4	104	50 - 132	
1,2-Dibromoethane	10	10.4	104	80 - 121	
1,2-Dichlorobenzene	10	10.8	108	71 - 122	
1,2-Dichloroethane	10	11.1	111	69 - 132	
1,2-Dichloropropane	10	11.5	115	75 - 125	
1,3,5-Trimethylbenzene	10	10.6	106	74 - 131	
1,3-Dichlorobenzene	10	11.4	114	75 - 124	
1,3-Dichloropropane	10	11.2	112	73 - 126	
1,4-Dichlorobenzene	10	10.5	105	74 - 123	
1-Chlorohexane	10	11.2	112	70 - 125	
2,2-Dichloropropane	10	10.7	107	69 - 137	
2-Butanone	20	23.8	119	49 - 136	
2-Chlorotoluene	10	10.8	108	73 - 126	
4-Chlorotoluene	10	10.9	109	74 - 128	
4-Methyl-2-pentanone	20	19.9	99	58 - 134	
Acetone	20	26.8	134	40 - 135	
Benzene	10	11.2	112	81 - 122	
Bromobenzene	10	11.5	115	76 - 124	
Bromochloromethane	10	11.3	113	65 - 129	
Bromodichloromethane	10	11.7	117	76 - 121	
Bromoform	10	10.0	101	69 - 128	
Bromomethane	10	10.4	104	30 - 141	
Carbon tetrachloride	10	10.6	106	66 - 138	
Chlorobenzene	10	10.9	109	81 - 122	
Chloroethane	10	11.2	112	58 - 133	
Chloroform	10	11.2	112	69 - 128	
Chloromethane	10	7.63	76	56 - 131	
cis-1,2-Dichloroethene	10	10.9	109	72 - 126	
cis-1,3-Dichloropropene	10	10.6	106	69 - 131	
Dibromochloromethane	10	8.96	90	66 - 133	

Comments:

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 8  
LABORATORY CONTROL SAMPLE**

**Analytical Method:** SW8260B

**AAB #:** R16897

**Lab Name:** Life Science Laboratories, Inc.

**Contract #:**

**LCS ID:** LCSD-16897

**Initial Calibration ID:** 1447

**Concentration Units (mg/L or mg/kg):** µg/L

**File ID:** M6059.D

Analyte	Expected	Found	%R	Control Limits	Q
Dibromomethane	10	10.3	103	76 - 125	
Dichlorodifluoromethane	10	9.57	96	30 - 153	
Ethylbenzene	10	10.3	103	73 - 127	
Hexachlorobutadiene	10	10.7	107	67 - 131	
Isopropylbenzene	10	11.3	113	75 - 127	
Methyl tert-butyl ether	10	11.1	111	65 - 123	
Methylene chloride	10	10.3	103	63 - 137	
n-Butylbenzene	10	9.65	97	69 - 137	
n-Propylbenzene	10	11.3	113	72 - 129	
Naphthalene	10	11.2	112	54 - 138	
o-Xylene	10	11.0	110	80 - 121	
p-Isopropyltoluene	10	10.4	104	73 - 130	
sec-Butylbenzene	10	10.4	104	72 - 127	
Styrene	10	11.1	111	65 - 134	
tert-Butylbenzene	10	10.4	104	70 - 129	
Tetrachloroethene	10	10.7	107	66 - 128	
Toluene	10	10.9	109	77 - 122	
trans-1,2-Dichloroethene	10	10.4	104	63 - 137	
trans-1,3-Dichloropropene	10	9.27	93	59 - 135	
Trichloroethene	10	10.6	106	70 - 127	
Trichlorofluoromethane	10	11.0	110	57 - 129	
Vinyl chloride	10	9.39	94	50 - 134	
Xylenes (total)	30	31.6	105	80 - 121	

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	107	72 - 119	
4-Bromofluorobenzene	100	76 - 119	
Toluene-d8	101	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1338650	874552 - 3498208	
Chlorobenzene-d5	1589237	1033520 - 4134082	
Fluorobenzene	3076168	1977723 - 7910892	

**Comments:**

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 8**  
**LABORATORY CONTROL SAMPLE**

Analytical Method: SW8260B

AAB #:

R16915

Lab Name:

Life Science Laboratories, Inc.

Contract #:

LCS ID:

LCSD-16915

Initial Calibration ID: 1447

Concentration Units (mg/L or mg/kg): µg/L

File ID: M6099.D

Analyte	Expected	Found	%R	Control Limits	Q
(m+p)-Xylene	20	20.4	102	76 - 128	
1,1,1,2-Tetrachloroethane	10	10.9	109	81 - 129	
1,1,1-Trichloroethane	10	11.0	110	67 - 132	
1,1,2,2-Tetrachloroethane	10	11.9	119	63 - 128	
1,1,2-Trichloroethane	10	11.8	118	75 - 125	
1,1-Dichloroethane	10	11.0	110	69 - 133	
1,1-Dichloroethene	10	10.6	106	68 - 130	
1,1-Dichloropropene	10	10.4	104	73 - 132	
1,2,3-Trichlorobenzene	10	11.9	119	67 - 137	
1,2,3-Trichloropropane	10	9.37	94	73 - 124	
1,2,4-Trichlorobenzene	10	10.3	103	66 - 134	
1,2,4-Trimethylbenzene	10	10.6	106	74 - 132	
1,2-Dibromo-3-chloropropane	10	10.2	102	50 - 132	
1,2-Dibromoethane	10	10.5	105	80 - 121	
1,2-Dichlorobenzene	10	10.8	108	71 - 122	
1,2-Dichloroethane	10	11.1	111	69 - 132	
1,2-Dichloropropane	10	11.4	114	75 - 125	
1,3,5-Trimethylbenzene	10	10.4	104	74 - 131	
1,3-Dichlorobenzene	10	11.0	110	75 - 124	
1,3-Dichloropropane	10	11.1	111	73 - 126	
1,4-Dichlorobenzene	10	10.6	106	74 - 123	
1-Chlorohexane	10	11.4	114	70 - 125	
2,2-Dichloropropane	10	10.9	109	69 - 137	
2-Butanone	20	23.1	115	49 - 136	
2-Chlorotoluene	10	9.47	95	73 - 126	
4-Chlorotoluene	10	11.8	118	74 - 128	
4-Methyl-2-pentanone	20	20.0	100	58 - 134	
Acetone	20	25.5	127	40 - 135	
Benzene	10	11.1	111	81 - 122	
Bromobenzene	10	11.7	117	76 - 124	
Bromochloromethane	10	11.3	113	65 - 129	
Bromodichloromethane	10	11.8	118	76 - 121	
Bromoform	10	10.4	104	69 - 128	
Bromomethane	10	10.3	103	30 - 141	
Carbon tetrachloride	10	10.7	107	66 - 138	
Chlorobenzene	10	10.8	108	81 - 122	
Chloroethane	10	10.6	106	58 - 133	
Chloroform	10	11.2	112	69 - 128	
Chloromethane	10	7.27	73	56 - 131	
cis-1,2-Dichloroethene	10	10.9	109	72 - 126	
cis-1,3-Dichloropropene	10	10.8	108	69 - 131	
Dibromochloromethane	10	9.06	91	66 - 133	

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 8**  
**LABORATORY CONTROL SAMPLE**

Analytical Method: SW8260B      AAB #: R16915

Lab Name: Life Science Laboratories, Inc.      Contract #:

LCS ID: LCSD-16915      Initial Calibration ID: 1447

Concentration Units (mg/L or mg/kg): µg/L      File ID: M6099.D

Analyte	Expected	Found	%R	Control Limits	Q
Dibromomethane	10	10.5	105	76 - 125	
Dichlorodifluoromethane	10	9.12	91	30 - 153	
Ethylbenzene	10	10.5	105	73 - 127	
Hexachlorobutadiene	10	11.0	110	67 - 131	
Isopropylbenzene	10	11.2	112	75 - 127	
Methyl tert-butyl ether	10	11.1	111	65 - 123	
Methylene chloride	10	11.2	112	63 - 137	
n-Butylbenzene	10	9.49	95	69 - 137	
n-Propylbenzene	10	11.2	112	72 - 129	
Naphthalene	10	11.5	115	54 - 138	
o-Xylene	10	10.8	108	80 - 121	
p-Isopropyltoluene	10	10.5	105	73 - 130	
sec-Butylbenzene	10	10.4	104	72 - 127	
Styrene	10	10.8	108	65 - 134	
tert-Butylbenzene	10	10.6	106	70 - 129	
Tetrachloroethene	10	10.9	109	66 - 128	
Toluene	10	10.9	109	77 - 122	
trans-1,2-Dichloroethene	10	10.6	106	63 - 137	
trans-1,3-Dichloropropene	10	9.36	94	59 - 135	
Trichloroethene	10	10.7	107	70 - 127	
Trichlorofluoromethane	10	10.6	106	57 - 129	
Vinyl chloride	10	9.22	92	50 - 134	
Xylenes (total)	30	31.2	104	80 - 121	

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	101	72 - 119	
4-Bromofluorobenzene	98	76 - 119	
Toluene-d8	100	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	1459078	874552 - 3498208	
Chlorobenzene-d5	1734302	1033520 - 4134082	
Fluorobenzene	3322116	1977723 - 7910892	

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 9**  
**MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY**

Analytical Method: SW8260B AAB #: R16897

Lab Name: Life Science Laboratories, Inc. Contract #:

Concentration Units (mg/L or mg/kg): µg/L % Solids: 0

Parent Field Sample ID: LCSD-16897 MS ID: LCS-16897 MSD ID: LCSD-16897

Calibration ID: 1447

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicate Spiked Sample Result	%R	%RPD	Control Limits %R	Control Limits %RPD	Q
(m+p)-Xylene		20.0	21.3	106	20.6	103	3	76 - 128	20	
1,1,1,2-Tetrachloroethane		10.0	11.0	110	10.9	109	1	81 - 129	20	
1,1,1-Trichloroethane		10.0	11.0	110	10.8	108	2	67 - 132	20	
1,1,2,2-Tetrachloroethane		10.0	11.8	118	11.6	116	1	63 - 128	20	
1,1,2-Trichloroethane		10.0	11.6	116	11.7	117	1	75 - 125	20	
1,1-Dichloroethane		10.0	11.0	110	11.1	111	1	69 - 133	20	
1,1-Dichloroethene		10.0	10.7	107	10.3	103	4	68 - 130	20	
1,1-Dichloropropene		10.0	10.4	104	10.4	104	0	73 - 132	20	
1,2,3-Trichlorobenzene		10.0	11.5	115	11.4	114	1	67 - 137	20	
1,2,3-Trichloropropane		10.0	10.9	109	8.81	88	21	73 - 124	20	*
1,2,4-Trichlorobenzene		10.0	9.86	99	10.1	101	2	66 - 134	20	
1,2,4-Trimethylbenzene		10.0	10.5	105	10.6	106	1	74 - 132	20	
1,2-Dibromo-3-chloropropane		10.0	10.4	104	10.4	104	0	50 - 132	20	
1,2-Dibromoethane		10.0	10.5	105	10.4	104	0	80 - 121	20	
1,2-Dichlorobenzene		10.0	10.8	108	10.8	108	0	71 - 122	20	
1,2-Dichloroethane		10.0	11.1	111	11.1	111	0	69 - 132	20	
1,2-Dichloropropane		10.0	11.0	110	11.5	115	5	75 - 125	20	
1,3,5-Trimethylbenzene		10.0	10.3	103	10.6	106	3	74 - 131	20	
1,3-Dichlorobenzene		10.0	11.2	112	11.4	114	1	75 - 124	20	
1,3-Dichloropropane		10.0	11.4	114	11.2	112	1	73 - 126	20	
1,4-Dichlorobenzene		10.0	10.6	106	10.5	105	0	74 - 123	20	
1-Chlorohexane		10.0	11.7	117	11.2	112	4	70 - 125	20	
2,2-Dichloropropane		10.0	10.9	109	10.7	107	2	69 - 137	20	
2-Butanone		20.0	24.2	121	23.8	119	1	49 - 136	20	
2-Chlorotoluene		10.0	10.5	105	10.8	108	3	73 - 126	20	
4-Chlorotoluene		10.0	10.8	108	10.9	109	1	74 - 128	20	
4-Methyl-2-pentanone		20.0	20.4	102	19.9	99	3	58 - 134	20	
Acetone		20.0	27.3	137	26.8	134	2	40 - 135	20	*
Benzene		10.0	11.1	111	11.2	112	1	81 - 122	20	
Bromobenzene		10.0	11.3	113	11.5	115	2	76 - 124	20	
Bromochloromethane		10.0	11.2	112	11.3	113	1	65 - 129	20	
Bromodichloromethane		10.0	11.8	118	11.7	117	1	76 - 121	20	
Bromoform		10.0	10.3	103	10.0	101	3	69 - 128	20	

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 9**  
**MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY**

Analytical Method: SW8260B AAB #: R16897

Lab Name: Life Science Laboratories, Inc. Contract #:

Concentration Units (mg/L or mg/kg): µg/L % Solids: 0

Parent Field Sample ID: LCSD-16897 MS ID: LCS-16897 MSD ID: LCSD-16897

Calibration ID: 1447

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicate Spiked Sample Result	%R	%RPD	Control Limits %R	Control Limits %RPD	Q
Bromomethane		10.0	10.0	100	10.4	104	4	30 - 141	20	
Carbon tetrachloride		10.0	10.6	106	10.6	106	0	66 - 138	20	
Chlorobenzene		10.0	10.9	109	10.9	109	0	81 - 122	20	
Chloroethane		10.0	10.5	105	11.2	112	7	58 - 133	20	
Chloroform		10.0	11.2	112	11.2	112	0	69 - 128	20	
Chloromethane		10.0	7.83	78	7.63	76	3	56 - 131	20	
cis-1,2-Dichloroethene		10.0	10.9	109	10.9	109	0	72 - 126	20	
cis-1,3-Dichloropropene		10.0	10.9	109	10.6	106	3	69 - 131	20	
Dibromochloromethane		10.0	9.01	90	8.96	90	1	66 - 133	20	
Dibromomethane		10.0	10.5	105	10.3	103	2	76 - 125	20	
Dichlorodifluoromethane		10.0	9.99	100	9.57	96	4	30 - 153	20	
Ethylbenzene		10.0	10.6	106	10.3	103	2	73 - 127	20	
Hexachlorobutadiene		10.0	10.7	107	10.7	107	0	67 - 131	20	
Isopropylbenzene		10.0	11.1	111	11.3	113	2	75 - 127	20	
Methyl tert-butyl ether		10.0	11.1	111	11.1	111	1	65 - 123	20	
Methylene chloride		10.0	10.8	108	10.3	103	4	63 - 137	20	
n-Butylbenzene		10.0	9.32	93	9.65	97	3	69 - 137	20	
n-Propylbenzene		10.0	11.0	110	11.3	113	3	72 - 129	20	
Naphthalene		10.0	11.0	110	11.2	112	2	54 - 138	20	
o-Xylene		10.0	10.7	107	11.0	110	2	80 - 121	20	
p-Isopropyltoluene		10.0	10.3	103	10.4	104	0	73 - 130	20	
sec-Butylbenzene		10.0	10.4	104	10.4	104	1	72 - 127	20	
Styrene		10.0	10.9	109	11.1	111	2	65 - 134	20	
tert-Butylbenzene		10.0	10.2	102	10.4	104	2	70 - 129	20	
Tetrachloroethene		10.0	11.0	110	10.7	107	2	66 - 128	20	
Toluene		10.0	11.0	110	10.9	109	1	77 - 122	20	
trans-1,2-Dichloroethene		10.0	10.4	104	10.4	104	0	63 - 137	20	
trans-1,3-Dichloropropene		10.0	9.44	94	9.27	93	2	59 - 135	20	
Trichloroethene		10.0	10.7	107	10.6	106	1	70 - 127	20	
Trichlorofluoromethane		10.0	11.0	110	11.0	110	0	57 - 129	20	
Vinyl chloride		10.0	10.1	101	9.39	94	7	50 - 134	20	
Xylenes (total)		30.0	32.0	107	31.6	105	1	80 - 121	20	

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 9**  
**MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY**

Analytical Method: SW8260B      AAB #: R16915

Lab Name: Life Science Laboratories, Inc.      Contract #:

Concentration Units (mg/L or mg/kg): µg/L      % Solids: 0

Parent Field Sample ID: LCSD-16915      MS ID: LCS-16915      MSD ID: LCSD-16915

Calibration ID: 1447

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicate Spiked Sample Result	%R	%RPD	Control Limits %R	Control Limits %RPD	Q
(m+p)-Xylene		20.0	20.1	101	20.4	102		1	76 - 128	20
1,1,1,2-Tetrachloroethane		10.0	10.9	109	10.9	109		0	81 - 129	20
1,1,1-Trichloroethane		10.0	10.7	107	11.0	110		3	67 - 132	20
1,1,2,2-Tetrachloroethane		10.0	12.6	126	11.9	119		6	63 - 128	20
1,1,2-Trichloroethane		10.0	11.6	116	11.8	118		1	75 - 125	20
1,1-Dichloroethane		10.0	11.2	112	11.0	110		2	69 - 133	20
1,1-Dichloroethene		10.0	10.4	104	10.6	106		2	68 - 130	20
1,1-Dichloropropene		10.0	10.4	104	10.4	104		0	73 - 132	20
1,2,3-Trichlorobenzene		10.0	11.8	118	11.9	119		1	67 - 137	20
1,2,3-Trichloropropane		10.0	9.10	91	9.37	94		3	73 - 124	20
1,2,4-Trichlorobenzene		10.0	10.4	104	10.3	103		1	66 - 134	20
1,2,4-Trimethylbenzene		10.0	10.5	105	10.6	106		0	74 - 132	20
1,2-Dibromo-3-chloropropane		10.0	10.4	104	10.2	102		2	50 - 132	20
1,2-Dibromoethane		10.0	10.2	102	10.5	105		3	80 - 121	20
1,2-Dichlorobenzene		10.0	10.8	108	10.8	108		0	71 - 122	20
1,2-Dichloroethane		10.0	11.0	110	11.1	111		1	69 - 132	20
1,2-Dichloropropane		10.0	11.4	114	11.4	114		1	75 - 125	20
1,3,5-Trimethylbenzene		10.0	10.4	104	10.4	104		0	74 - 131	20
1,3-Dichlorobenzene		10.0	10.7	107	11.0	110		2	75 - 124	20
1,3-Dichloropropane		10.0	10.9	109	11.1	111		2	73 - 126	20
1,4-Dichlorobenzene		10.0	10.6	106	10.6	106		0	74 - 123	20
1-Chlorohexane		10.0	11.2	112	11.4	114		1	70 - 125	20
2,2-Dichloropropane		10.0	10.9	109	10.9	109		1	69 - 137	20
2-Butanone		20.0	23.4	117	23.1	115		1	49 - 136	20
2-Chlorotoluene		10.0	10.6	106	9.47	95		12	73 - 126	20
4-Chlorotoluene		10.0	10.8	108	11.8	118		9	74 - 128	20
4-Methyl-2-pentanone		20.0	20.7	103	20.0	100		4	58 - 134	20
Acetone		20.0	26.4	132	25.5	127		3	40 - 135	20
Benzene		10.0	11.0	110	11.1	111		1	81 - 122	20
Bromobenzene		10.0	11.8	118	11.7	117		1	76 - 124	20
Bromochloromethane		10.0	11.1	111	11.3	113		2	65 - 129	20
Bromodichloromethane		10.0	11.8	118	11.8	118		1	76 - 121	20
Bromoform		10.0	10.1	101	10.4	104		3	69 - 128	20

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 9**  
**MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY**

**Analytical Method:** SW8260B      **AAB #:** R16915

**Lab Name:** Life Science Laboratories, Inc.      **Contract #:**

**Concentration Units (mg/L or mg/kg):** µg/L      **% Solids:** 0

**Parent Field Sample ID:** LCSD-16915      **MS ID:** LCS-16915      **MSD ID:** LCSD-16915

**Calibration ID:** 1447

<b>Analyte</b>	<b>Parent Sample Result</b>	<b>Spike Added</b>	<b>Spiked Sample Result</b>	<b>%R</b>	<b>Duplicate Spiked Sample Result</b>	<b>%R</b>	<b>%RPD</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Q</b>
Bromomethane		10.0	10.1	101	10.3	103	2	30 - 141	20	
Carbon tetrachloride		10.0	10.6	106	10.7	107	0	66 - 138	20	
Chlorobenzene		10.0	10.4	104	10.8	108	3	81 - 122	20	
Chloroethane		10.0	11.4	114	10.6	106	7	58 - 133	20	
Chloroform		10.0	11.2	112	11.2	112	1	69 - 128	20	
Chloromethane		10.0	7.66	77	7.27	73	5	56 - 131	20	
cis-1,2-Dichloroethene		10.0	10.7	107	10.9	109	2	72 - 126	20	
cis-1,3-Dichloropropene		10.0	10.7	107	10.8	108	1	69 - 131	20	
Dibromochloromethane		10.0	9.04	90	9.06	91	0	66 - 133	20	
Dibromomethane		10.0	10.2	102	10.5	105	3	76 - 125	20	
Dichlorodifluoromethane		10.0	9.70	97	9.12	91	6	30 - 153	20	
Ethylbenzene		10.0	10.2	103	10.5	105	3	73 - 127	20	
Hexachlorobutadiene		10.0	10.7	107	11.0	110	3	67 - 131	20	
Isopropylbenzene		10.0	11.5	115	11.2	112	2	75 - 127	20	
Methyl tert-butyl ether		10.0	11.0	110	11.1	111	1	65 - 123	20	
Methylene chloride		10.0	10.7	107	11.2	112	5	63 - 137	20	
n-Butylbenzene		10.0	9.56	96	9.49	95	1	69 - 137	20	
n-Propylbenzene		10.0	10.9	109	11.2	112	3	72 - 129	20	
Naphthalene		10.0	11.5	115	11.5	115	0	54 - 138	20	
o-Xylene		10.0	10.7	107	10.8	108	1	80 - 121	20	
p-Isopropyltoluene		10.0	10.4	104	10.5	105	1	73 - 130	20	
sec-Butylbenzene		10.0	10.2	102	10.4	104	2	72 - 127	20	
Styrene		10.0	10.5	105	10.8	108	3	65 - 134	20	
tert-Butylbenzene		10.0	10.5	105	10.6	106	1	70 - 129	20	
Tetrachloroethene		10.0	10.7	107	10.9	109	2	66 - 128	20	
Toluene		10.0	10.8	108	10.9	109	1	77 - 122	20	
trans-1,2-Dichloroethene		10.0	9.96	100	10.6	106	6	63 - 137	20	
trans-1,3-Dichloropropene		10.0	9.27	93	9.36	94	1	59 - 135	20	
Trichloroethene		10.0	10.4	104	10.7	107	3	70 - 127	20	
Trichlorofluoromethane		10.0	11.3	113	10.6	106	7	57 - 129	20	
Vinyl chloride		10.0	9.65	97	9.22	92	5	50 - 134	20	
Xylenes (total)		30.0	30.8	103	31.2	104	1	80 - 121	20	

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 10  
HOLDING TIMES**

**Analytical Method:** SW8260B

**AAB #:** R16897

**Lab Name:** Life Science Laboratories, Inc.

**Contract #:**

Field Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Max. Holding Time E	Time Held Ext.	Date Analyzed	Max. Holding Time A	Time Held Anal.	Q
TF3CE312TA	0903182-001A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.3	
TF3M11613TA	0903182-003A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.3	
TF3M12313TA	0903182-004A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.3	
TF3M12313TC	0903182-005A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.3	
TF3M12713TA	0903182-006A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.3	
TF3M12813TA	0903182-007A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.4	
TF3M13316TA	0903182-008A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.5	
032709TE	0903182-009A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.1	
032709TF	0903182-010A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.2	
032709TR	0903182-011A	27-Mar-09	30-Mar-09	06-Apr-09			06-Apr-09	14	10.3	

**Comments:**

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 10**  
**HOLDING TIMES**

Analytical Method: SW8260B

AAB #: R16915

Lab Name: Life Science Laboratories, Inc.

Contract #:

Field Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Max. Holding Time E	Time Held Ext.	Date Analyzed	Max. Holding Time A	Time Held Anal.	Q
TF3M2114TA	0903182-002A	27-Mar-09	30-Mar-09	08-Apr-09			08-Apr-09	14	12	
TF3M12713TA DL	0903182-006ADL	27-Mar-09	30-Mar-09	08-Apr-09			08-Apr-09	14	12.1	

Comments:

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**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 11**  
**INSTRUMENT ANALYSIS SEQUENCE LOG**

**Analytical Method:** SW8260B

**AAB#:**

**Lab Name:** Life Science Laboratories, Inc.

**Contract #:**

**Instrument ID #:** MS02\_12

**Calibration ID:** 1447

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Lab Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
TB120408A2	TB120408A2	04-Dec-08	9:30	04-Dec-08	10:22
ICAL 0.5 ppb	ICAL 0.5 ppb	04-Dec-08	10:22	04-Dec-08	11:03
ICAL 1.0 ppb	ICAL 1.0 ppb	04-Dec-08	11:03	04-Dec-08	11:44
ICAL 2.0 ppb	ICAL 2.0 ppb	04-Dec-08	11:44	04-Dec-08	13:07
ICAL 20 ppb	ICAL 20 ppb	04-Dec-08	13:07	04-Dec-08	13:57
ICAL 10 ppb	ICAL 10 ppb	04-Dec-08	13:57	04-Dec-08	14:38
ICAL 30 ppb	ICAL 30 ppb	04-Dec-08	14:38	04-Dec-08	15:19
ICAL 40 ppb	ICAL 40 ppb	04-Dec-08	15:19	04-Dec-08	16:42
2SRC-15743	2SRC-15743	04-Dec-08	16:42	04-Dec-08	16:42
CCV-16897	CCV-16897	06-Apr-09	11:48	06-Apr-09	12:36
TB040609A2	TB040609A2	06-Apr-09	11:48	06-Apr-09	12:36
LCS-16897	LCS-16897	06-Apr-09	12:36	06-Apr-09	13:17
LCSD-16897	LCSD-16897	06-Apr-09	13:17	06-Apr-09	14:39
MB-16897	MB-16897	06-Apr-09	14:39	06-Apr-09	15:21
032709TR	0903182-011A	06-Apr-09	15:21	06-Apr-09	16:02
032709TE	0903182-009A	06-Apr-09	16:02	06-Apr-09	16:43
032709TF	0903182-010A	06-Apr-09	16:43	06-Apr-09	17:24
TF3CE312TA	0903182-001A	06-Apr-09	17:24	06-Apr-09	18:46
TF3M11613TA	0903182-003A	06-Apr-09	18:46	06-Apr-09	19:27
TF3M12313TA	0903182-004A	06-Apr-09	19:27	06-Apr-09	20:08
TF3M12313TC	0903182-005A	06-Apr-09	20:08	06-Apr-09	20:49
TF3M12713TA	0903182-006A	06-Apr-09	20:49	06-Apr-09	21:31
TF3M12813TA	0903182-007A	06-Apr-09	21:31	06-Apr-09	22:12
TF3M13316TA	0903182-008A	06-Apr-09	22:12	06-Apr-09	22:12
TB040809A2	TB040809A2	08-Apr-09	7:10	08-Apr-09	8:03
CCV-16915	CCV-16915	08-Apr-09	8:03	08-Apr-09	8:44
LCS-16915	LCS-16915	08-Apr-09	8:44	08-Apr-09	9:28
LCSD-16915	LCSD-16915	08-Apr-09	9:28	08-Apr-09	10:50
MB-16915	MB-16915	08-Apr-09	10:50	08-Apr-09	11:31
TF3M2114TA	0903182-002A	08-Apr-09	11:31	08-Apr-09	12:12
TF3M12713TA DL	0903182-006ADL	08-Apr-09	12:12	08-Apr-09	12:12

**Comments:**

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**AFCEE  
ORGANIC ANALYSES DATA SHEET 12  
INSTRUMENT PERFORMANCE CHECK  
(BFB or DFTPP)**

**Analytical Method:** SW8260B      **AAB #:** MS02\_12\_081204A  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Instrument ID:** MS02\_12      **Injection Date/Time:** 12/4/2008 9:30:00 AM  
**Initial Calibration ID:** 1447      **File ID:** C:\HPCHEM\1\DATA\M5683.D  
**Compound:** SW8260B      **Sample ID:** TB120408A2

Mass	Ion Abundance Criteria	% Relative Abundance	Q
50	15 - 40% of m/z 95	20.2	
75	30 - 60% of m/z 95	50.1	
95	Base peak, 100% relative abundance	100	
96	5 - 9% of m/z 95	6.6	
173	Less than 2% of m/z 174	0	
174	Greater than 50% of m/z 95	69.4	
175	5 - 9% of m/z 174	7.2	
176	Greater than 95% but less than 101% of m/z 174	99.9	
177	5 - 9% of m/z 176	6.1	

**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 12**  
**INSTRUMENT PERFORMANCE CHECK**  
**(BFB or DFTPP)**

**Analytical Method:** SW8260B      **AAB #:** MS02\_12\_090406A  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Instrument ID:** MS02\_12      **Injection Date/Time:** 4/6/2009 11:48:00 AM  
**Initial Calibration ID:** 1447      **File ID:** C:\HPCHEM\1\DATA\M6057.D  
**Compound:** SW8260B      **Sample ID:** TB040609A2

Mass	Ion Abundance Criteria	% Relative Abundance	Q
50	15 - 40% of m/z 95	22.0	
75	30 - 60% of m/z 95	56.5	
95	Base peak, 100% relative abundance	100	
96	5 - 9% of m/z 95	7.4	
173	Less than 2% of m/z 174	0.6	
174	Greater than 50% of m/z 95	70.3	
175	5 - 9% of m/z 174	7.1	
176	Greater than 95% but less than 101% of m/z 174	98.6	
177	5 - 9% of m/z 176	6.1	

**AFCEE**  
**ORGANIC ANALYSES DATA SHEET 12**  
**INSTRUMENT PERFORMANCE CHECK**  
**(BFB or DFTPP)**

**Analytical Method:** SW8260B      **AAB #:** MS02\_12\_090408A  
**Lab Name:** Life Science Laboratories, Inc.      **Contract #:** \_\_\_\_\_  
**Instrument ID:** MS02\_12      **Injection Date/Time:** 4/8/2009 7:10:00 AM  
**Initial Calibration ID:** 1447      **File ID:** C:\HPCHEM1\DATA\W6096.D  
**Compound:** SW8260B      **Sample ID:** TB040809A2

<b>Mass</b>	<b>Ion Abundance Criteria</b>	<b>% Relative Abundance</b>	<b>Q</b>
50	15 - 40% of m/z 95	20.0	
75	30 - 60% of m/z 95	52.2	
95	Base peak, 100% relative abundance	100	
96	5 - 9% of m/z 95	6.0	
173	Less than 2% of m/z 174	0.2	
174	Greater than 50% of m/z 95	76.5	
175	5 - 9% of m/z 174	6.9	
176	Greater than 95% but less than 101% of m/z 174	100.1	
177	5 - 9% of m/z 176	6.0	

**Appendix E**  
**Temporary Biosparging Log Table and Field Forms**

Date	Well	Depth to H2O(ft)	Total Depth(ft)	PSI	Sparge Depth(ft)
5/20/2008	AP2MW-14	10.75	25.64	6.5	24.64
5/21/2008	AP2MW-14	11.6	25.64	6.5	24.64
5/23/2008	TF3MW-127	13.15	19.91	3	18.91
6/19/2008	AP2MW-14	13.5	25.4	6.5	24.4
6/23/2008	AP2MW-B1NE2	22.05	28.57	3.5	25.57
6/24/2008	TF3MW-127	13.46	19.63	2.65	18.63
6/25/2008	TF3MW-127	13.46	19.63	2.65	18.63
7/2/2008	AP2MW-LD1W	12.94	23.06	4.5	22
7/7/2008	HE8MW-3	15.95	27.26	5	26.2
7/8/2008	AP2MW-14	14.11	25.63	6	24.63
7/9/2008	7001VMW-1	14.54	42.25	12.5	37
7/18/2008	7001MW-2	14.97	24.99	4.5	23.99
7/21/2008	TF3MW-127	14.08	19.85	3.3	18.85
7/22/2008	AP2MW-B1NE2	23.7	28.65	3.2	27.65
7/23/2008	HE8MW-3	16.1	26.91	5.2	25.5
7/24/2008	AP2MW-14	14.7	25.43	6.5	24.4
7/25/2008	7001VMW-1	14.65	42.32	12.2	39
7/29/2008	TF3MW-123	13.8	20.7	3.5	19.5
8/4/2008	HE8MW-3	16.27	26.98	5.2	26
8/5/2008	AP2MW-14	11.5	25.5	6.5	24.5
8/6/2008	7001VMW-1	16.02	42.2	12.5	38
8/7/2008	TF3MW-127	13.45	19.89	3.3	18.5
8/12/2008	AP2MW-B1NE2	22.88	28.6	3.2	27.6
8/18/2008	HE8MW-3	16.33	28.4	5.2	27.4
8/19/2008	AP2MW-14	15.88	25.44	6.5	24.44
8/20/2008	AP2MW-LD1W	13.76	22.88	4.4	21.88
8/21/2008	TF3MW-127	13.38	19.6	3.3	18.6
8/25/2008	7001VMW-1	15.65	42.3	12.2	39
9/2/2008	TF3MW-127	13.52	19.45	3.3	18.45
9/5/2008	HE8MW-3	16.41	26.2	5.21	25.2
10/2/2008	TF3MW-127	13.59	19.9	3.5	16
10/3/2008	TF3MW-123	13.77	20.8	3.55	18
10/6/2008	HE8MW-3	16.58	26.33	6.5	23
10/7/2008	AP2MW-14	15.82	25.55	6.5	24.5
10/8/2008	AP2MW-LD1SW	15.39	23.06	4.4	22.06
10/9/2008	7001VMW-1	15.38	42.25	12.2	40.25
10/10/2008	7001MW-2	15.78	24.9	4.6	23.9
10/16/2008	7001VMW-1	15.65	42.25	12.2	41.25
10/17/2008	7001MW-2	15.81	24.9	4.6	23.9
10/20/2008	TF3MW-127	15.18	19.86	3.3	18.86
10/21/2008	TF3MW-123	15.84	25.55	6.5	24.55
10/22/2008	TF3MW-127	13.51	20.8	3.55	19.8
10/23/2008	HE8MW-3	17.82	28.4	5.21	27
10/24/2008	7001VMW-1	15.69	42.25	12.2	41.25
10/27/2008	7001MW-2	15.82	24.9	4.6	23.9
10/28/2008	TF3MW-127	12.88	19.86	3.3	18.86
10/29/2008	AP2MW-B1NE2	23.91	28.71	3.2	27.71
10/31/2008	AP2MW-14	16.9	25.55	6.5	24



## Temporary Biosparging

WELL: TF3 MW - 127

Date:	<u>5-23</u> -08
-------	-----------------

Depth to Water (ft):	<u>13.15</u>	Pressure (psi):	<u>3</u>
Total Depth (ft):	<u>19.91</u>	Sparge Depth (ft):	<u>18.91</u>

### Comments

Start - 10:10

Shutdown - 1645

## Temporary Biosparging

WELL: TF3NW-127

Date:	6-24-08
-------	---------

6-25-08

Depth to Water (ft):	13.46	Pressure (psi):	2.65
Total Depth (ft):	19.65 (6.17)	Sparge Depth (ft):	18.63

### Comments

10:00 → 1740 (6-24-08)

1000 → 1700 (6-25-08)

## Temporary Biosparging

WELL: *TF3MW-127*

Date:	<i>7-21-08</i>
-------	----------------

Depth to Water (ft):	<i>14.08</i>	Pressure (psi):	<i>3.3</i>
Total Depth (ft):	<i>19.85</i>	Sparge Depth (ft):	<i>18.85</i>

### Comments

*0925 - Start.  
1600 - Shut down*

## Temporary Biosparging

WELL: *TF3MW-123*

Date:	<i>7-29-08</i>
-------	----------------

Depth to Water (ft):	<i>13.80</i>	Pressure (psi):	<i>3.5</i>
Total Depth (ft):	<i>20.70</i>	Sparge Depth (ft):	<i>19.5</i>

### Comments

*Start -0915*

*Shut down - 1630*

## Temporary Biosparging

WELL: TF3 MW-127

Date:	8/21/08
-------	---------

Depth to Water (ft):	13.38	Pressure (psi):	3.3
Total Depth (ft):	19.60	Sparge Depth (ft):	18.6

### Comments

Start - 1015

Shutdown - 1630

## Temporary Biosparging

WELL: TF3 MW-127

Date:	9-2-08
-------	--------

Depth to Water (ft):	13.52	Pressure (psi):	3.3
Total Depth (ft):	19.45	Sparge Depth (ft):	18.45

### Comments

Start time - 0940  
End time - 1630

## Temporary Biosparging

WELL: TF3 MW-127

Date:	10-02-08
-------	----------

Depth to Water (ft):	13.59	Pressure (psi):	3.5 psi
Total Depth (ft):	19.90	Sparge Depth (ft):	16'

Comments	Setup on TF3 MW-127 - OK 0900 - 1600 - operation period
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## Temporary Biosparging

WELL: TF3MUS-12S

Date:	10/31/08
-------	----------

Depth to Water (ft):	13.77	Pressure (psi):	3.55
Total Depth (ft):	20.8	Sparge Depth (ft):	18.0

### Comments

0830 -  
0900 - 1600

## Temporary Biosparging

WELL: TF3 MW-123

Date:	10/22/08
-------	----------

Depth to Water (ft):	13.51	Pressure (psi):	3.55
Total Depth (ft):	20.8	Sparge Depth (ft):	19.8

Comments

Start - 0930 End 1645

## Temporary Biosparging

WELL: TF3 MW - 127

Date:	11/12/08
-------	----------

Depth to Water (ft):	13.02	Pressure (psi):	3.3
Total Depth (ft):	19.86	Sparge Depth (ft):	18.86

Comments Start - 1030 End - 1630

-Fixed cable for Generator.

## Temporary Biosparging

WELL: TF3 MW-127

Date:

11/24/08

Depth to Water (ft):	13.12	Pressure (psi):	3.3
Total Depth (ft):	19.86	Sparge Depth (ft):	18.86

Comments

Start - 0930 End - 1630

## Temporary Biosparging

**WELL:** TF3 MW-127

<b>Date:</b>	<u>5/6/09</u>
--------------	---------------

Depth to Water (ft):	<u>12.81</u>	Pressure (psi):	<u>3</u>
Total Depth (ft):	<u>19.65</u>	Sparge Depth (ft):	<u>18.65</u>

<b>Comments</b>
<p><del>19.65 12.81 6.81</del></p> <p>Start - 10:00 AM STOP 16:30 PM</p> <p>3.16</p>

## Temporary Biosparging

WELL: TF3 MW 127

Date:	6.9.09
-------	--------

Depth to Water (ft):	N/A	Pressure (psi):	5.00
Total Depth (ft):	19.61	Sparge Depth (ft):	18.61
Start Time:	10:30		
Shut Down Time:	4:30		

Comments