APPENDIX E

ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION (CD ONLY)

This page intentionally left blank.

TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 10817

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: OPH	PURCHASE ORDER NO.: 20848 - Task #38
PROJECT LOCATION: Morro Bay	PROJECT NO.: 1990.0790
SAMPLER NAME: Bryce Bouldin	AIRBILL NUMBER: 849749139450
PROJECT CONTACT: Lynn Jefferson	PROJECT CONTACT PHONE NUMBER: 949/749-7500

ANALYSES REQUIRED

LABORATORY NAME: CMX

LABORATORY ID (FOR LABORATORY): 05H093

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	EPA 8260B	EPA 6010B (Cd only)	EPA 300.0 (NO3+NO2)	EPA 350.1 (NH3)	Grain size / carbonate	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
079-017	8/8/05	1130	3	X		W	10 day	X						Trip Blank			TB
079-004	8/8/05	1345	6	X		W	10 day	X	X	X	X	X		MCH-4LA			Reg
079-003	8/8/05	1950	6	X		W	10 day	X	X	X	X	X		MCH-3UA			Reg
079-002	8/8/05	1940	6		X	W	10 day	X	X	X	X	X		MCH-2LA			Reg
079-001	8/8/05	1435	6	X		W	10 day	X	X	X	X	X		MCH-1UA			Reg
079-008	8/9/05	0750	6	X		W	10 day	X	X	X	X	X		MCH-8LA			Reg
079-007	8/9/05	0850	18	X		W	10 day	X	X	X	X	X	Run MS/MSD	MCH-7UA			Reg
079-005	8/9/05	0935	6	X		W	10 day	X	X	X	X	X		MCH-5UA			Reg
079-012	8/9/05	1110	6	X		W	10 day	X	X	X	X	X		MCH-6LA			Reg
079-013	8/9/05	1340	6	X		W	10 day	X	X	X	X	X		MCH-1UA			Reg

RELINQUISHED BY (Signature)	DATE 8/10/05	RECEIVED BY (Signature) FedEx	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY FTEC	TIME 1400	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	COMPOSITE DESCRIPTION
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	**SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)**
COMPANY	TIME	COMPANY	TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:
OPHA
~~8/05~~
8/10/05

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

~~1990~~ 0018250

TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 10810

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: OPHA GW Sampling	PURCHASE ORDER NO.: 20848 Task "38
PROJECT LOCATION: Moffett F.A.	PROJECT NO.: 1990.0790
SAMPLER NAME: Bryce Bartelmy	AIRBILL NUMBER: 849749139450
PROJECT CONTACT: Lynn Jefferson	PROJECT CONTACT PHONE NUMBER: 949/756-7500

ANALYSES REQUIRED

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 05H093

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	EPA 8260B	EPA 6010B (Cd)	EPA 300.0 (NO3)	EPA 300.0/30.1	Anions (Cl, SO4)	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
079-010	8/9/05	1420	6	X		W	10 day	X	X	X	X	X		MCH-9UA			Reg
079-011	8/9/05	1430	6		X	W	10 day	X	X	X	X	X		MCH-9UA			FD
079-006	8/9/05	1515	6	X		W	10 day	X	X	X	X	X		MCH-6LA			Reg
079-009	8/9/05	1520	6		X	W	10 day	X	X	X	X	X		MCH-6LA			FD
079-014	8/9/05	1620	6	X		W	10 day	X	X	X	X	X		W89-6			Reg
079-015	8/9/05	1715	6	X		W	10 day	X	X	X	X	X		W89-7			Reg
079-016	8/10/05	0736	6	X		W	10 day	X	X	X	X	X		8781			Reg

RELINQUISHED BY (Signature)	DATE: 8/10/05	RECEIVED BY (Signature)	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY: Tt	TIME: 1400	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	COMPOSITE DESCRIPTION
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	**SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)**
COMPANY	TIME	COMPANY	TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:
OPHA
8/05
K1/05

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

0018250

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 08-31-2005
EMAX Batch No.: 05H093

Attn: Lynn Jefferson

Tetra Tech EC, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, OPHA GW, CTO 79

Enclosed is the Laboratory report for samples received on 08/11/05.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
079-010	H093-01	08/09/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				ALKALINITY BICARBONATE
				ALKALINITY CARBONATE
				NITRATE/NITRITE-N
				ORTHOPHOSPHATE-P
				CA MG K NA
079-011	H093-02	08/09/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				ALKALINITY BICARBONATE
				ALKALINITY CARBONATE
				NITRATE/NITRITE-N
				ORTHOPHOSPHATE-P
				CA MG K NA
079-006	H093-03	08/09/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC

Sample ID	Control #	Col Date	Matrix	Analysis
079-009	H093-04	08/09/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC
079-014	H093-05	08/09/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC
079-015	H093-06	08/09/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC
079-016	H093-07	08/10/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC
079-017	H093-08	08/08/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS
079-004	H093-09	08/08/05	WATER	VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC

Sample ID	Control #	Col Date	Matrix	Analysis
079-003	H093-10	08/08/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC
079-002	H093-11	08/08/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC
079-001	H093-12	08/08/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC
079-008	H093-13	08/09/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC
079-007	H093-14	08/09/05	WATER	ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC ALKALINITY BICARBONATE

Sample ID	Control #	Col Date	Matrix	Analysis
079-005	H093-15	08/09/05	WATER	ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC ALKALINITY BICARBONATE
079-012	H093-16	08/09/05	WATER	ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC ALKALINITY BICARBONATE
079-013	H093-17	08/09/05	WATER	ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC ALKALINITY BICARBONATE
079-007MS	H093-14M	08/09/05	WATER	ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS CHLORIDE BY IC SULFATE BY IC NITRATE/NITRITE-N
079-007MSD	H093-14S	08/09/05	WATER	ORTHOPHOSPHATE-P CA MG K NA VOLATILE ORGANICS BY GC/MS
079-007DUP	H093-14D	08/09/05	WATER	CA MG K NA CHLORIDE BY IC SULFATE BY IC ALKALINITY BICARBONATE ALKALINITY CARBONATE NITRATE/NITRITE-N ORTHOPHOSPHATE-P

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

CASE NARRATIVE

EMAX LABORATORIES, INC.

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05H093

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Seventeen (17) water samples were received on 08/11/05 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at half of the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit except:

Sample	Surrogate	%Rec.	QC Limit
H093-11T	4-BFB	126	75-125%
H093-13R	1,2-DCA-d4	73	75-125%
H093-16R	Toluene-d8	127	75-125%
H093-16R	4-BFB	126	75-125%

5. **Lab Control Sample/Lab Control Sample Duplicate**

   Recoveries were within QC limit.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample H093-14 was spiked. Most of the recoveries were out of QC limit due to matrix interference.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met with the aforementioned exception.

   TCE in H093-01 to -06, -16 and -17 were manually reintegrated to correct for improper integration. Chromatograms of before and after manual integration for H093-02 and 04 (requested for level 4) were submitted for review.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/17/05 20:19
Sample ID: 079-010	Date Analyzed: 08/17/05 20:19
Lab Samp ID: H093-01	Dilution Factor: 1
Lab File ID: RHD535	Matrix : WATER
Ext Btch ID: VO94H48	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.77J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.28J	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	41	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.4J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	180E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	87	75-125
4-BROMOFLUOROBENZENE	113	75-125
TOLUENE-D8	117	75-125

2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05H093
Sample ID: 079-010DL
Lab Samp ID: H093-01T
Lab File ID: RHD703
Ext Btch ID: VO94H64
Calib. Ref.: RGD109

Date Collected: 08/09/05
Date Received: 08/11/05
Date Extracted: 08/22/05 13:18
Date Analyzed: 08/22/05 13:18
Dilution Factor: 50
Matrix : WATER
% Moisture : NA
Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	250	10
1,1,2,2-TETRACHLOROETHANE	ND	50	10
1,1,2-TRICHLOROETHANE	ND	250	10
1,1-DICHLOROETHANE	ND	250	10
1,1-DICHLOROETHENE	ND	250	10
1,2-DICHLOROETHANE	ND	25	10
1,2-DICHLOROPROPANE	ND	250	10
2-BUTANONE	ND	2500	250
2-HEXANONE	ND	2500	250
4-METHYL-2-PENTANONE	ND	2500	250
ACETONE	ND	2500	250
BENZENE	ND	25	10
BROMODICHLOROMETHANE	ND	250	10
BROMOFORM	ND	250	15
BROMOMETHANE	ND	250	10
CARBON TETRACHLORIDE	ND	25	10
CHLOROBENZENE	ND	250	10
CHLOROETHANE	ND	250	10
CHLOROFORM	ND	250	10
CHLOROMETHANE	ND	250	10
CIS-1,2-DICHLOROETHENE	40J	250	10
CIS-1,3-DICHLOROPROPENE	ND	25	10
DIBROMOCHLOROMETHANE	ND	250	10
ETHYLBENZENE	ND	25	10
XYLENES	ND	75	35
MTBE	ND	50	10
METHYLENE CHLORIDE	ND	250	25
STYRENE	ND	250	10
TETRACHLOROETHENE	ND	250	10
TOLUENE	ND	25	10
TRANS-1,2-DICHLOROETHENE	ND	250	10
TRANS-1,3-DICHLOROPROPENE	ND	25	10
TRICHLOROETHENE	470	250	10
VINYL CHLORIDE	ND	25	10
VINYL ACETATE	ND	2500	25

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	75-125
4-BROMOFLUOROBENZENE	117	75-125
TOLUENE-D8	120	75-125

2005

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/17/05 20:59
Sample ID: 079-011	Date Analyzed: 08/17/05 20:59
Lab Samp ID: H093-02	Dilution Factor: 1
Lab File ID: RHD536	Matrix : WATER
Ext Btch ID: VO94H48	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.8J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.28J	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	42	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.5J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	190E	5	.2
VINYL CHLORIDE	.3J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	85	75-125
4-BROMOFLUOROBENZENE	112	75-125
TOLUENE-D8	120	75-125

2006

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 13:58
Sample ID: 079-011DL	Date Analyzed: 08/22/05 13:58
Lab Samp ID: H093-02T	Dilution Factor: 50
Lab File ID: RHD704	Matrix : WATER
Ext Btch ID: V094H64	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	250	10
1,1,2,2-TETRACHLOROETHANE	ND	50	10
1,1,2-TRICHLOROETHANE	ND	250	10
1,1-DICHLOROETHANE	ND	250	10
1,1-DICHLOROETHENE	ND	250	10
1,2-DICHLOROETHANE	ND	25	10
1,2-DICHLOROPROPANE	ND	250	10
2-BUTANONE	ND	2500	250
2-HEXANONE	ND	2500	250
4-METHYL-2-PENTANONE	ND	2500	250
ACETONE	ND	2500	250
BENZENE	ND	25	10
BROMODICHLOROMETHANE	ND	250	10
BROMOFORM	ND	250	15
BROMOMETHANE	ND	250	10
CARBON TETRACHLORIDE	ND	25	10
CHLOROBENZENE	ND	250	10
CHLOROETHANE	ND	250	10
CHLOROFORM	ND	250	10
CHLOROMETHANE	ND	250	10
CIS-1,2-DICHLOROETHENE	43J	250	10
CIS-1,3-DICHLOROPROPENE	ND	25	10
DIBROMOCHLOROMETHANE	ND	250	10
ETHYLBENZENE	ND	25	10
XYLENES	ND	75	35
MTBE	ND	50	10
METHYLENE CHLORIDE	ND	250	25
STYRENE	ND	250	10
TETRACHLOROETHENE	ND	250	10
TOLUENE	ND	25	10
TRANS-1,2-DICHLOROETHENE	ND	250	10
TRANS-1,3-DICHLOROPROPENE	ND	25	10
TRICHLOROETHENE	510	250	10
VINYL CHLORIDE	ND	25	10
VINYL ACETATE	ND	2500	25

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	79	75-125
4-BROMOFLUOROBENZENE	120	75-125
TOLUENE-D8	121	75-125

2014

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/17/05 21:39
Sample ID: 079-006	Date Analyzed: 08/17/05 21:39
Lab Samp ID: H093-03	Dilution Factor: 1
Lab File ID: RHD537	Matrix : WATER
Ext Btch ID: V094H48	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.52J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.46J	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	16	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	1.3J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	290E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	87	75-125
4-BROMOFLUOROBENZENE	109	75-125
TOLUENE-D8	117	75-125

2018

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 14:39
Sample ID: 079-0060L	Date Analyzed: 08/22/05 14:39
Lab Samp ID: H093-03T	Dilution Factor: 100
Lab File ID: RHD705	Matrix : WATER
Ext Btch ID: VO94H64	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	500	20
1,1,2,2-TETRACHLOROETHANE	ND	100	20
1,1,2-TRICHLOROETHANE	ND	500	20
1,1-DICHLOROETHANE	ND	500	20
1,1-DICHLOROETHENE	ND	500	20
1,2-DICHLOROETHANE	ND	50	20
1,2-DICHLOROPROPANE	ND	500	20
2-BUTANONE	ND	5000	500
2-HEXANONE	ND	5000	500
4-METHYL-2-PENTANONE	ND	5000	500
ACETONE	ND	5000	500
BENZENE	ND	50	20
BROMODICHLOROMETHANE	ND	500	20
BROMOFORM	ND	500	30
BROMOMETHANE	ND	500	20
CARBON TETRACHLORIDE	ND	50	20
CHLOROBENZENE	ND	500	20
CHLOROETHANE	ND	500	20
CHLOROFORM	ND	500	20
CHLOROMETHANE	ND	500	20
CIS-1,2-DICHLOROETHENE	ND	500	20
CIS-1,3-DICHLOROPROPENE	ND	50	20
DIBROMOCHLOROMETHANE	ND	500	20
ETHYLBENZENE	ND	50	20
XYLENES	ND	150	70
MTBE	ND	100	20
METHYLENE CHLORIDE	ND	500	50
STYRENE	ND	500	20
TETRACHLOROETHENE	ND	500	20
TOLUENE	ND	50	20
TRANS-1,2-DICHLOROETHENE	ND	500	20
TRANS-1,3-DICHLOROPROPENE	ND	50	20
TRICHLOROETHENE	720	500	20
VINYL CHLORIDE	ND	50	20
VINYL ACETATE	ND	5000	50

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	82	75-125
4-BROMOFLUOROBENZENE	120	75-125
TOLUENE-D8	121	75-125

2019

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/17/05 22:19
Sample ID: 079-009	Date Analyzed: 08/17/05 22:19
Lab Samp ID: H093-04	Dilution Factor: 1
Lab File ID: RHD538	Matrix : WATER
Ext Btch ID: V094H48	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.52J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.37J	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	16	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	1.2J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	220E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	86	75-125
4-BROMOFLUOROBENZENE	111	75-125
TOLUENE-D8	119	75-125

2020

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 15:19
Sample ID: 079-009DL	Date Analyzed: 08/22/05 15:19
Lab Samp ID: H093-04T	Dilution Factor: 100
Lab File ID: RHD706	Matrix : WATER
Ext Btch ID: V094H64	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	500	20
1,1,2,2-TETRACHLOROETHANE	ND	100	20
1,1,2-TRICHLOROETHANE	ND	500	20
1,1-DICHLOROETHANE	ND	500	20
1,1-DICHLOROETHENE	ND	500	20
1,2-DICHLOROETHANE	ND	50	20
1,2-DICHLOROPROPANE	ND	500	20
2-BUTANONE	ND	5000	500
2-HEXANONE	ND	5000	500
4-METHYL-2-PENTANONE	ND	5000	500
ACETONE	ND	5000	500
BENZENE	ND	50	20
BROMODICHLOROMETHANE	ND	500	20
BROMOFORM	ND	500	30
BROMOMETHANE	ND	500	20
CARBON TETRACHLORIDE	ND	50	20
CHLOROBENZENE	ND	500	20
CHLOROETHANE	ND	500	20
CHLOROFORM	ND	500	20
CHLOROMETHANE	ND	500	20
CIS-1,2-DICHLOROETHENE	ND	500	20
CIS-1,3-DICHLOROPROPENE	ND	50	20
DIBROMOCHLOROMETHANE	ND	500	20
ETHYLBENZENE	ND	50	20
XYLENES	ND	150	70
MTBE	ND	100	20
METHYLENE CHLORIDE	ND	500	50
STYRENE	ND	500	20
TETRACHLOROETHENE	ND	500	20
TOLUENE	ND	50	20
TRANS-1,2-DICHLOROETHENE	ND	500	20
TRANS-1,3-DICHLOROPROPENE	ND	50	20
TRICHLOROETHENE	820	500	20
VINYL CHLORIDE	ND	50	20
VINYL ACETATE	ND	5000	50

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	75-125
4-BROMOFLUOROBENZENE	120	75-125
TOLUENE-D8	122	75-125

2028

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/17/05 22:59
Sample ID: 079-014	Date Analyzed: 08/17/05 22:59
Lab Samp ID: H093-05	Dilution Factor: 1
Lab File ID: RHD539	Matrix : WATER
Ext Btch ID: V094H48	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.5J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	6.4J	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	180E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	5.3	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	7.6	5	.2
VINYL CHLORIDE	100E	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	85	75-125
4-BROMOFLUOROBENZENE	110	75-125
TOLUENE-D8	119	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/21/05 21:20
Sample ID: 079-014DL	Date Analyzed: 08/21/05 21:20
Lab Samp ID: H093-05T	Dilution Factor: 25
Lab File ID: RHD679	Matrix : WATER
Ext Btch ID: V094H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	330	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	5.4J	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	ND	120	5
VINYL CHLORIDE	110	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	82	75-125
4-BROMOFLUOROBENZENE	120	75-125
TOLUENE-D8	123	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/21/05 20:40
Sample ID: 079-015	Date Analyzed: 08/21/05 20:40
Lab Samp ID: H093-06R	Dilution Factor: 1
Lab File ID: RHD678	Matrix : WATER
Ext Btch ID: VO94H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	79	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	121	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/10/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05N093	Date Extracted: 08/22/05 02:01
Sample ID: 079-016	Date Analyzed: 08/22/05 02:01
Lab Samp ID: N093-07R	Dilution Factor: 1
Lab File ID: RHD686	Matrix : WATER
Ext Btch ID: V094H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	.28J	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.26J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	1.1J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	87E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	80	75-125
4-BROMOFLUOROBENZENE	123	75-125
TOLUENE-D8	123	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/10/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/21/05 22:01
Sample ID: 079-016DL	Date Analyzed: 08/21/05 22:01
Lab Samp ID: H093-07T	Dilution Factor: 10
Lab File ID: RHD680	Matrix : WATER
Ext Btch ID: V094H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	2.9J	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	84	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	75-125
4-BROMOFLUOROBENZENE	122	75-125
TOLUENE-D8	124	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/21/05 19:20
Sample ID: 079-017	Date Analyzed: 08/21/05 19:20
Lab Samp ID: H093-08R	Dilution Factor: 1
Lab File ID: RHD676	Matrix : WATER
Ext Btch ID: V094H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	.22J	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	82	75-125
4-BROMOFLUOROBENZENE	120	75-125
TOLUENE-D8	121	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/18/05 09:38
Sample ID: 079-004	Date Analyzed: 08/18/05 09:38
Lab Samp ID: H093-09	Dilution Factor: 1
Lab File ID: RHD555	Matrix : WATER
Ext Btch ID: VO94H50	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.5J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	41	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.6J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	160E	5	.2
VINYL CHLORIDE	.37J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	86	75-125
4-BROMOFLUOROBENZENE	114	75-125
TOLUENE-D8	118	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/21/05 22:41
Sample ID: 079-004DL	Date Analyzed: 08/21/05 22:41
Lab Samp ID: H093-09T	Dilution Factor: 25
Lab File ID: RH0681	Matrix : WATER
Ext Btch ID: V094H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	44J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	520	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	82	75-125
4-BROMOFLUOROBENZENE	124	75-125
TOLUENE-D8	124	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/18/05 10:18
Sample ID: 079-003	Date Analyzed: 08/18/05 10:18
Lab Samp ID: H093-10	Dilution Factor: 1
Lab File ID: RHD556	Matrix : WATER
Ext Btch ID: VO94H50	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.3J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	97E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	.44J	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.8J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	140E	5	.2
VINYL CHLORIDE	.6	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	85	75-125
4-BROMOFLUOROBENZENE	111	75-125
TOLUENE-D8	120	75-125

2040

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05H093
Sample ID: 079-003DL
Lab Samp ID: H093-10T
Lab File ID: RHD682
Ext Btch ID: V094H62
Calib. Ref.: RGD109

Date Collected: 08/08/05
Date Received: 08/11/05
Date Extracted: 08/21/05 23:21
Date Analyzed: 08/21/05 23:21
Dilution Factor: 25
Matrix : WATER
% Moisture : NA
Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	100J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	150	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	75-125
4-BROMOFLUOROBENZENE	122	75-125
TOLUENE-D8	122	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/18/05 10:59
Sample ID: 079-002	Date Analyzed: 08/18/05 10:59
Lab Samp ID: H093-11	Dilution Factor: 1
Lab File ID: RHD557	Matrix : WATER
Ext Btch ID: V094H50	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	3.1J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	110E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	25	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	320E	5	.2
VINYL CHLORIDE	2.4	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	75-125
4-BROMOFLUOROBENZENE	112	75-125
TOLUENE-D8	119	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 00:01
Sample ID: 079-002DL	Date Analyzed: 08/22/05 00:01
Lab Samp ID: H093-11T	Dilution Factor: 25
Lab File ID: RHD683	Matrix : WATER
Ext Btch ID: VO94H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	370	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	27J	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	360	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	83	75-125
4-BROMOFLUOROBENZENE	126*	75-125
TOLUENE-D8	124	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/18/05 11:39
Sample ID: 079-001	Date Analyzed: 08/18/05 11:39
Lab Samp ID: H093-12	Dilution Factor: 1
Lab File ID: RHD558	Matrix : WATER
Ext Btch ID: V094H50	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	1.2J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	140E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	8.9	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	200E	5	.2
VINYL CHLORIDE	1.7	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	85	75-125
4-BROMOFLUOROBENZENE	113	75-125
TOLUENE-D8	119	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 00:41
Sample ID: 079-001DL	Date Analyzed: 08/22/05 00:41
Lab Samp ID: H093-12T	Dilution Factor: 25
Lab File ID: RHD684	Matrix : WATER
Ext Btch ID: V094H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	140	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	8.7J	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	210	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	75-125
4-BROMOFLUOROBENZENE	125	75-125
TOLUENE-D8	125	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/21/05 20:00
Sample ID: 079-008	Date Analyzed: 08/21/05 20:00
Lab Samp ID: H093-13R	Dilution Factor: 1
Lab File ID: RHD677	Matrix : WATER
Ext Btch ID: V094H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	3J	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	73*	75-125
4-BROMOFLUOROBENZENE	123	75-125
TOLUENE-D8	124	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/18/05 07:37
Sample ID: 079-007	Date Analyzed: 08/18/05 07:37
Lab Samp ID: H093-14	Dilution Factor: 1
Lab File ID: RHD552	Matrix : WATER
Ext Btch ID: VO94H50	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.66J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	100E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	4.5J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	240E	5	.2
VINYL CHLORIDE	.5J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	86	75-125
4-BROMOFLUOROBENZENE	111	75-125
TOLUENE-D8	118	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 01:21
Sample ID: 079-007DL	Date Analyzed: 08/22/05 01:21
Lab Samp ID: H093-14T	Dilution Factor: 25
Lab File ID: RHD685	Matrix : WATER
Ext Btch ID: V094H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	120J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	5.2J	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	280	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	82	75-125
4-BROMOFLUOROBENZENE	120	75-125
TOLUENE-D8	120	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/18/05 12:59
Sample ID: 079-005	Date Analyzed: 08/18/05 12:59
Lab Samp ID: H093-15	Dilution Factor: 1
Lab File ID: RHD560	Matrix : WATER
Ext Btch ID: V094H50	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	1.9J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	.23J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	37	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	86	75-125
4-BROMOFLUOROBENZENE	112	75-125
TOLUENE-D8	120	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 02:40
Sample ID: 079-012	Date Analyzed: 08/22/05 02:40
Lab Samp ID: H093-16R	Dilution Factor: 1
Lab File ID: RHD687	Matrix : WATER
Ext Btch ID: VO94H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.45J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.33J	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	14	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.2J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	190E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	76	75-125
4-BROMOFLUOROBENZENE	126*	75-125
TOLUENE-D8	127*	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 11:17
Sample ID: 079-012DL	Date Analyzed: 08/22/05 11:17
Lab Samp ID: H093-16T	Dilution Factor: 50
Lab File ID: RHD700	Matrix : WATER
Ext Btch ID: VO94H64	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	250	10
1,1,2,2-TETRACHLOROETHANE	ND	50	10
1,1,2-TRICHLOROETHANE	ND	250	10
1,1-DICHLOROETHANE	ND	250	10
1,1-DICHLOROETHENE	ND	250	10
1,2-DICHLOROETHANE	ND	25	10
1,2-DICHLOROPROPANE	ND	250	10
2-BUTANONE	ND	2500	250
2-HEXANONE	ND	2500	250
4-METHYL-2-PENTANONE	ND	2500	250
ACETONE	ND	2500	250
BENZENE	ND	25	10
BROMODICHLOROMETHANE	ND	250	10
BROMOFORM	ND	250	15
BROMOMETHANE	ND	250	10
CARBON TETRACHLORIDE	ND	25	10
CHLOROBENZENE	ND	250	10
CHLOROETHANE	ND	250	10
CHLOROFORM	ND	250	10
CHLOROMETHANE	ND	250	10
CIS-1,2-DICHLOROETHENE	18J	250	10
CIS-1,3-DICHLOROPROPENE	ND	25	10
DIBROMOCHLOROMETHANE	ND	250	10
ETHYLBENZENE	ND	25	10
XYLENES	ND	75	35
MTBE	ND	50	10
METHYLENE CHLORIDE	ND	250	25
STYRENE	ND	250	10
TETRACHLOROETHENE	ND	250	10
TOLUENE	ND	25	10
TRANS-1,2-DICHLOROETHENE	ND	250	10
TRANS-1,3-DICHLOROPROPENE	ND	25	10
TRICHLOROETHENE	1200	250	10
VINYL CHLORIDE	ND	25	10
VINYL ACETATE	ND	2500	25

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	80	75-125
4-BROMOFLUOROBENZENE	121	75-125
TOLUENE-D8	121	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 03:20
Sample ID: 079-013	Date Analyzed: 08/22/05 03:20
Lab Samp ID: H093-17R	Dilution Factor: 1
Lab File ID: RHD688	Matrix : WATER
Ext Btch ID: VO94H62	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.56J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	86E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	3.1J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	200E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	83	75-125
4-BROMOFLUOROBENZENE	121	75-125
TOLUENE-D8	121	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
Batch No. : 05H093	Date Extracted: 08/22/05 11:58
Sample ID: 079-013DL	Date Analyzed: 08/22/05 11:58
Lab Samp ID: H093-17T	Dilution Factor: 25
Lab File ID: RHD701	Matrix : WATER
Ext Btch ID: VO94H64	% Moisture : NA
Calib. Ref.: RGD109	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	77J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	310	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	81	75-125
4-BROMOFLUOROBENZENE	121	75-125
TOLUENE-D8	122	75-125

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05H093

METHOD 3010A/6010B
METALS BY ICP

Sixteen (16) water samples were received on 08/11/05 for Metals analysis by Method 3010A/6010B in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blanks were free of contamination at half of the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Serial Dilution / Post-Analytical Spike**

   Sample H093-14 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. **Matrix Spike/Matrix Spike Duplicate**

   Sample H093-14 was spiked. All recoveries were within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-010	Date Analyzed: 08/19/05 23:12
Lab Samp ID: H093-01	Dilution Factor: 1
Lab File ID: I07H049013	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H049008	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	112	2	.1
Magnesium	42.9	1	.1
Potassium	4.04J	9	1
Sodium	49	5	.25

7003

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-011	Date Analyzed: 08/19/05 23:15
Lab Samp ID: H093-02	Dilution Factor: 1
Lab File ID: I07H049014	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H049008	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	116	2	.1
Magnesium	44.8	1	.1
Potassium	3.35J	9	1
Sodium	50.2	5	.25

7004

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-006	Date Analyzed: 08/19/05 23:19
Lab Samp ID: H093-03	Dilution Factor: 1
Lab File ID: I07H049015	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H049008	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	119	2	.1
Magnesium	39.6	1	.1
Potassium	5.74J	9	1
Sodium	44.4	5	.25

7005

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-009	Date Analyzed: 08/19/05 23:23
Lab Samp ID: H093-04	Dilution Factor: 1
Lab File ID: I07H049016	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H049008	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	120	2	.1
Magnesium	40.4	1	.1
Potassium	3.96J	9	1
Sodium	44.4	5	.25

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-014	Date Analyzed: 08/19/05 23:27
Lab Samp ID: H093-05	Dilution Factor: 1
Lab File ID: I07H049017	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H049008	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	123	2	.1
Magnesium	50.8	1	.1
Potassium	3.33J	9	1
Sodium	35.3	5	.25

7084

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-015	Date Analyzed: 08/19/05 23:31
Lab Samp ID: H093-06	Dilution Factor: 1
Lab File ID: I07H049018	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H049008	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	223	2	.1
Magnesium	91.6	1	.1
Potassium	3.84J	9	1
Sodium	38.3	5	.25

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/10/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-016	Date Analyzed: 08/19/05 23:35
Lab Samp ID: H093-07	Dilution Factor: 1
Lab File ID: I07H049019	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H049008	Instrument ID : EMAXI107

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	144	2	.1
Magnesium	45	1	.1
Potassium	3.66J	9	1
Sodium	32.3	5	.25

7009

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-004	Date Analyzed: 08/23/05 12:35
Lab Samp ID: H093-09	Dilution Factor: 1
Lab File ID: I07H054010	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H054008	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	146	2	.1
Magnesium	56.9	1	.1
Potassium	1.7J	9	1
Sodium	39.5	5	.25

7010

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-003	Date Analyzed: 08/23/05 12:39
Lab Samp ID: H093-10	Dilution Factor: 1
Lab File ID: I07H054011	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H054008	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	163	2	.1
Magnesium	61.3	1	.1
Potassium	2.34J	9	1
Sodium	42.5	5	.25

7011

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client	: TETRA TECH EC, INC.	Date Collected:	08/08/05
Project	: MFA, OPNA GW, CTO 79	Date Received:	08/11/05
SDG NO.	: 05H093	Date Extracted:	08/16/05 09:30
Sample ID:	079-002	Date Analyzed:	08/23/05 12:43
Lab Samp ID:	H093-11	Dilution Factor:	1
Lab File ID:	I07H054012	Matrix :	WATER
Ext Btch ID:	IPH037W	% Moisture :	NA
Calib. Ref.:	I07H054008	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	166	2	.1
Magnesium	65.5	1	.1
Potassium	1.54J	9	1
Sodium	43.5	5	.25

7012

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client	: TETRA TECH EC, INC.	Date Collected:	08/08/05
Project	: MFA, OPHA GW, CTO 79	Date Received:	08/11/05
SDG NO.	: 05H093	Date Extracted:	08/16/05 09:30
Sample ID:	079-001	Date Analyzed:	08/23/05 12:47
Lab Samp ID:	H093-12	Dilution Factor:	1
Lab File ID:	I07H054013	Matrix :	WATER
Ext Btch ID:	IPH037W	% Moisture :	NA
Calib. Ref.:	I07H054008	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	160	2	.1
Magnesium	61.5	1	.1
Potassium	1.92J	9	1
Sodium	44.9	5	.25

7013

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client	: TETRA TECH EC, INC.	Date Collected:	08/09/05
Project	: MFA, OPHA GW, CTO 79	Date Received:	08/11/05
SDG NO.	: 05H093	Date Extracted:	08/16/05 09:30
Sample ID:	079-008	Date Analyzed:	08/23/05 12:51
Lab Samp ID:	H093-13	Dilution Factor:	1
Lab File ID:	I07H054014	Matrix :	WATER
Ext Btch ID:	IPH037W	% Moisture :	NA
Calib. Ref.:	I07H054008	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	130	2	.1
Magnesium	41.5	1	.1
Potassium	1.41J	9	1
Sodium	35.3	5	.25

7014

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-007	Date Analyzed: 08/23/05 12:55
Lab Samp ID: H093-14	Dilution Factor: 1
Lab File ID: I07H054015	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H054008	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	169	2	.1
Magnesium	62	1	.1
Potassium	1.07J	9	1
Sodium	43.7	5	.25

7015

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-005	Date Analyzed: 08/23/05 13:27
Lab Samp ID: H093-15	Dilution Factor: 1
Lab File ID: I07H054022	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H054020	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	188	2	.1
Magnesium	70.5	1	.1
Potassium	2.49J	9	1
Sodium	44.2	5	.25

7016

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client	: TETRA TECH EC, INC.	Date Collected:	08/09/05
Project	: MFA, OPHA GW, CTO 79	Date Received:	08/11/05
SDG NO.	: 05H093	Date Extracted:	08/16/05 09:30
Sample ID:	079-012	Date Analyzed:	08/23/05 13:31
Lab Samp ID:	H093-16	Dilution Factor:	1
Lab File ID:	I07H054023	Matrix :	WATER
Ext Btch ID:	IPH037W	% Moisture :	NA
Calib. Ref.:	I07H054020	Instrument ID :	EMAXI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	128	2	.1
Magnesium	45.6	1	.1
Potassium	2.56J	9	1
Sodium	34.7	5	.25

7017

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 08/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 08/11/05
SDG NO. : 05H093	Date Extracted: 08/16/05 09:30
Sample ID: 079-013	Date Analyzed: 08/23/05 13:35
Lab Samp ID: H093-17	Dilution Factor: 1
Lab File ID: I07H054024	Matrix : WATER
Ext Btch ID: IPH037W	% Moisture : NA
Calib. Ref.: I07H054020	Instrument ID : EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	162	2	.1
Magnesium	57.6	1	.1
Potassium	1.31J	9	1
Sodium	36.5	5	.25

7018

METHOD 3010A/6010B
METALS BY ICP

EMAX LABORATORIES, INC.

Client	: TETRA TECH EC, INC.	Date Collected:	NA
Project	: MFA, OPHA GW, CTO 79	Date Received:	08/16/05
SDG NO.	: 05H093	Date Extracted:	08/16/05 09:30
Sample ID:	MBLK1W	Date Analyzed:	08/19/05 22:58
Lab Samp ID:	IPH037WB	Dilution Factor:	1
Lab File ID:	I07H049010	Matrix :	WATER
Ext Btch ID:	IPH037W	% Moisture :	NA
Calib. Ref.:	I07H049008	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	ND	2	.1
Magnesium	ND	1	.1
Potassium	1.39J	9	1
Sodium	ND	5	.25

7019

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05H093

METHOD 310.1
ALKALINITY

Sixteen (16) water samples were received on 08/11/05 for Bicarbonate, Carbonate and Total Alkalinity analysis by Method 310.1 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Duplicate**

   Sample H093-14 was analyzed for duplicate. %RPDs were within QC limit.

5. **Matrix Spike**

   Sample H093-14 was spiked. %Recoveries were within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 310.1
BICARBONATE ALKALINITY AS CACO3

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05H093

Matrix : WATER
Instrument ID : I53

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALH008WB	ND	1	NA	5	1	08/15/0515:00	NA	ALH008W-01	NA	ALH008W	NA	NA
LCS1W	ALH008WL	47.1	1	NA	5	1	08/15/0515:05	NA	ALH008W-02	NA	ALH008W	NA	NA
LCD1W	ALH008WC	47.1	1	NA	5	1	08/15/0515:10	NA	ALH008W-03	NA	ALH008W	NA	NA
079-010	H093-01	296	1	NA	5	1	08/15/0515:15	NA	ALH008W-04	NA	ALH008W	08/09/05	08/11/05
079-011	H093-02	296	1	NA	5	1	08/15/0515:20	NA	ALH008W-05	NA	ALH008W	08/09/05	08/11/05
079-006	H093-03	296	1	NA	5	1	08/15/0515:25	NA	ALH008W-06	NA	ALH008W	08/09/05	08/11/05
079-009	H093-04	296	1	NA	5	1	08/15/0515:30	NA	ALH008W-07	NA	ALH008W	08/09/05	08/11/05
079-014	H093-05	335	1	NA	5	1	08/15/0515:35	NA	ALH008W-08	NA	ALH008W	08/09/05	08/11/05
079-015	H093-06R	680	1	NA	5	1	08/15/0515:45	NA	ALH008W-10	NA	ALH008W	08/09/05	08/11/05
079-016	H093-07	283	1	NA	5	1	08/15/0515:50	NA	ALH008W-11	NA	ALH008W	08/10/05	08/11/05
079-004	H093-09	348	1	NA	5	1	08/15/0515:55	NA	ALH008W-12	NA	ALH008W	08/08/05	08/11/05
079-003	H093-10	374	1	NA	5	1	08/15/0516:00	NA	ALH008W-13	NA	ALH008W	08/08/05	08/11/05
079-002	H093-11	392	1	NA	5	1	08/15/0516:05	NA	ALH008W-14	NA	ALH008W	08/08/05	08/11/05
079-001	H093-12	432	1	NA	5	1	08/15/0516:10	NA	ALH008W-15	NA	ALH008W	08/08/05	08/11/05
079-008	H093-13	269	1	NA	5	1	08/15/0516:15	NA	ALH008W-16	NA	ALH008W	08/09/05	08/11/05
079-007	H093-14	432	1	NA	5	1	08/15/0516:20	NA	ALH008W-17	NA	ALH008W	08/09/05	08/11/05
079-007DUP	H093-14D	429	1	NA	5	1	08/15/0516:25	NA	ALH008W-18	NA	ALH008W	08/09/05	08/11/05
079-007MS	H093-14M	485	1	NA	5	1	08/15/0516:30	NA	ALH008W-19	NA	ALH008W	08/09/05	08/11/05
079-005	H093-15	395	1	NA	5	1	08/15/0516:35	NA	ALH008W-20	NA	ALH008W	08/09/05	08/11/05
079-012	H093-16	290	1	NA	5	1	08/15/0516:40	NA	ALH008W-21	NA	ALH008W	08/09/05	08/11/05
079-013	H093-17	377	1	NA	5	1	08/15/0516:45	NA	ALH008W-22	NA	ALH008W	08/09/05	08/11/05

2008

EMAX LABORATORIES, INC.

METHOD 310.1
CARBONATE ALKALINITY AS CACO3

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05H093

Matrix : WATER
Instrument ID : I53

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALH008WB	ND	1	NA	5	1	08/15/0515:00	NA	ALH008W-01	NA	ALH008W	NA	NA
079-010	H093-01	ND	1	NA	5	1	08/15/0515:15	NA	ALH008W-04	NA	ALH008W	08/09/05	08/11/05
079-011	H093-02	ND	1	NA	5	1	08/15/0515:20	NA	ALH008W-05	NA	ALH008W	08/09/05	08/11/05
079-006	H093-03	ND	1	NA	5	1	08/15/0515:25	NA	ALH008W-06	NA	ALH008W	08/09/05	08/11/05
079-009	H093-04	ND	1	NA	5	1	08/15/0515:30	NA	ALH008W-07	NA	ALH008W	08/09/05	08/11/05
079-014	H093-05	ND	1	NA	5	1	08/15/0515:35	NA	ALH008W-08	NA	ALH008W	08/09/05	08/11/05
079-015	H093-06R	ND	1	NA	5	1	08/15/0515:45	NA	ALH008W-10	NA	ALH008W	08/09/05	08/11/05
079-016	H093-07	ND	1	NA	5	1	08/15/0515:50	NA	ALH008W-11	NA	ALH008W	08/10/05	08/11/05
079-004	H093-09	ND	1	NA	5	1	08/15/0515:55	NA	ALH008W-12	NA	ALH008W	08/08/05	08/11/05
079-003	H093-10	ND	1	NA	5	1	08/15/0516:00	NA	ALH008W-13	NA	ALH008W	08/08/05	08/11/05
079-002	H093-11	ND	1	NA	5	1	08/15/0516:05	NA	ALH008W-14	NA	ALH008W	08/08/05	08/11/05
079-001	H093-12	ND	1	NA	5	1	08/15/0516:10	NA	ALH008W-15	NA	ALH008W	08/08/05	08/11/05
079-008	H093-13	ND	1	NA	5	1	08/15/0516:15	NA	ALH008W-16	NA	ALH008W	08/09/05	08/11/05
079-007	H093-14	ND	1	NA	5	1	08/15/0516:20	NA	ALH008W-17	NA	ALH008W	08/09/05	08/11/05
079-007DUP	H093-14D	ND	1	NA	5	1	08/15/0516:25	NA	ALH008W-18	NA	ALH008W	08/09/05	08/11/05
079-005	H093-15	ND	1	NA	5	1	08/15/0516:35	NA	ALH008W-20	NA	ALH008W	08/09/05	08/11/05
079-012	H093-16	ND	1	NA	5	1	08/15/0516:40	NA	ALH008W-21	NA	ALH008W	08/09/05	08/11/05
079-013	H093-17	ND	1	NA	5	1	08/15/0516:45	NA	ALH008W-22	NA	ALH008W	08/09/05	08/11/05

8008

METHOD 310.1
TOTAL ALKALINITY AS CACO3

Client : TETRA TECH EC, INC.
Project : MFA, OPNA GW, CTO 79
Batch No. : 05H093

Matrix : WATER
Instrument ID : 153

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALH008WB	ND	1	NA	5	1	08/15/0515:00	NA	ALH008W-01	NA	ALH008W	NA	NA
LCS1W	ALH008WL	47.1	1	NA	5	1	08/15/0515:05	NA	ALH008W-02	NA	ALH008W	NA	NA
LCD1W	ALH008WC	47.1	1	NA	5	1	08/15/0515:10	NA	ALH008W-03	NA	ALH008W	NA	NA
079-010	H093-01	296	1	NA	5	1	08/15/0515:15	NA	ALH008W-04	NA	ALH008W	08/09/05	08/11/05
079-011	H093-02	296	1	NA	5	1	08/15/0515:20	NA	ALH008W-05	NA	ALH008W	08/09/05	08/11/05
079-006	H093-03	296	1	NA	5	1	08/15/0515:25	NA	ALH008W-06	NA	ALH008W	08/09/05	08/11/05
079-009	H093-04	296	1	NA	5	1	08/15/0515:30	NA	ALH008W-07	NA	ALH008W	08/09/05	08/11/05
079-014	H093-05	335	1	NA	5	1	08/15/0515:35	NA	ALH008W-08	NA	ALH008W	08/09/05	08/11/05
079-015	H093-06R	680	1	NA	5	1	08/15/0515:45	NA	ALH008W-10	NA	ALH008W	08/09/05	08/11/05
079-016	H093-07	283	1	NA	5	1	08/15/0515:50	NA	ALH008W-11	NA	ALH008W	08/10/05	08/11/05
079-004	H093-09	348	1	NA	5	1	08/15/0515:55	NA	ALH008W-12	NA	ALH008W	08/08/05	08/11/05
079-003	H093-10	374	1	NA	5	1	08/15/0516:00	NA	ALH008W-13	NA	ALH008W	08/08/05	08/11/05
079-002	H093-11	392	1	NA	5	1	08/15/0516:05	NA	ALH008W-14	NA	ALH008W	08/08/05	08/11/05
079-001	H093-12	432	1	NA	5	1	08/15/0516:10	NA	ALH008W-15	NA	ALH008W	08/08/05	08/11/05
079-008	H093-13	269	1	NA	5	1	08/15/0516:15	NA	ALH008W-16	NA	ALH008W	08/09/05	08/11/05
079-007	H093-14	432	1	NA	5	1	08/15/0516:20	NA	ALH008W-17	NA	ALH008W	08/09/05	08/11/05
079-007DUP	H093-14D	429	1	NA	5	1	08/15/0516:25	NA	ALH008W-18	NA	ALH008W	08/09/05	08/11/05
079-007MS	H093-14M	485	1	NA	5	1	08/15/0516:30	NA	ALH008W-19	NA	ALH008W	08/09/05	08/11/05
079-005	H093-15	395	1	NA	5	1	08/15/0516:35	NA	ALH008W-20	NA	ALH008W	08/09/05	08/11/05
079-012	H093-16	290	1	NA	5	1	08/15/0516:40	NA	ALH008W-21	NA	ALH008W	08/09/05	08/11/05
079-013	H093-17	377	1	NA	5	1	08/15/0516:45	NA	ALH008W-22	NA	ALH008W	08/09/05	08/11/05

8008

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05H093

METHOD 300.0
ANIONS

Sixteen (16) water samples were received on 08/11/05 for Chloride and Sulfate analyses by method 300.0 in accordance with "Method for Determination of Inorganic Anions by Ion Chromatography", EPA 600/84-017.

1. **Holding Time**

   Analyses met holding time criteria.

2. **Method Blank**

   Method blanks were free of contamination at half of the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limits.

4. **Duplicate**

   Sample H093-14 was analyzed for duplicate. %RPDs were within QC limit.

5. **Matrix Spike**

   Sample H093-14 was spiked. Recoveries were within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 300.0
CHLORIDE

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05H093

Matrix : WATER
Instrument ID : 100

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICH018WB	ND	1	NA	1	.1	08/12/0515:03	NA	AH12-03	AH12-01	ICH018W	NA	NA
LCS1W	ICH018WL	4.81	1	NA	1	.1	08/12/0515:17	NA	AH12-04	AH12-01	ICH018W	NA	NA
LCD1W	ICH018WC	4.78	1	NA	1	.1	08/12/0515:32	NA	AH12-05	AH12-01	ICH018W	NA	NA
079-010	H093-01	35.1	20	NA	20	2	08/12/0516:00	NA	AH12-07	AH12-01	ICH018W	08/09/05	08/11/05
079-016	H093-07	37.5	20	NA	20	2	08/12/0518:27	NA	AH12-17	AH12-13	ICH018W	08/10/05	08/11/05
079-004	H093-09	36.6	20	NA	20	2	08/12/0518:41	NA	AH12-18	AH12-13	ICH018W	08/08/05	08/11/05
079-003	H093-10	33.4	20	NA	20	2	08/12/0519:02	NA	AH12-19	AH12-13	ICH018W	08/08/05	08/11/05
079-002	H093-11	34.3	20	NA	20	2	08/12/0519:16	NA	AH12-20	AH12-13	ICH018W	08/08/05	08/11/05
079-001	H093-12	33.5	20	NA	20	2	08/12/0519:30	NA	AH12-21	AH12-13	ICH018W	08/08/05	08/11/05
079-008	H093-13	31.5	20	NA	20	2	08/12/0519:44	NA	AH12-22	AH12-13	ICH018W	08/09/05	08/11/05
079-007	H093-14	32.1	20	NA	20	2	08/12/0519:58	NA	AH12-23	AH12-13	ICH018W	08/09/05	08/11/05
079-007DUP	H093-14D	32.1	20	NA	20	2	08/12/0520:12	NA	AH12-24	AH12-13	ICH018W	08/09/05	08/11/05
079-007MS	H093-14M	124	20	NA	20	2	08/12/0520:54	NA	AH12-27	AH12-25	ICH018W	08/09/05	08/11/05
079-005	H093-15	38.2	25	NA	25	2.5	08/12/0521:09	NA	AH12-28	AH12-25	ICH018W	08/09/05	08/11/05
079-012	H093-16	37.5	20	NA	20	2	08/12/0521:23	NA	AH12-29	AH12-25	ICH018W	08/09/05	08/11/05
079-013	H093-17	31.8	20	NA	20	2	08/12/0521:37	NA	AH12-30	AH12-25	ICH018W	08/09/05	08/11/05
079-011	H093-02	34.9	20	NA	20	2	08/12/0521:51	NA	AH12-31	AH12-25	ICH018W	08/09/05	08/11/05
MBLK2W	ICH019WB	ND	1	NA	1	.1	08/12/0522:05	NA	AH12-32	AH12-25	ICH019W	NA	NA
LCS2W	ICH019WL	4.72	1	NA	1	.1	08/12/0522:19	NA	AH12-33	AH12-25	ICH019W	NA	NA
LCD2W	ICH019WC	4.73	1	NA	1	.1	08/12/0522:33	NA	AH12-34	AH12-25	ICH019W	NA	NA
079-006	H093-03	39.3	20	NA	20	2	08/12/0522:47	NA	AH12-35	AH12-25	ICH019W	08/09/05	08/11/05
079-009	H093-04	36.8	20	NA	20	2	08/12/0523:01	NA	AH12-36	AH12-25	ICH019W	08/09/05	08/11/05
079-014	H093-05	31.8	20	NA	20	2	08/12/0523:43	NA	AH12-39	AH12-37	ICH019W	08/09/05	08/11/05
079-015	H093-06	28.6	20	NA	20	2	08/12/0523:57	NA	AH12-40	AH12-37	ICH019W	08/09/05	08/11/05

EMAX

80115

METHOD 300.0
SULFATE

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : D5H093

Matrix : WATER
Instrument ID : 100

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICH018WB	ND	1	NA	.5	.25	08/12/0515:03	NA	AH12-03	AH12-01	ICH018W	NA	NA
LCS1W	ICH018WL	4.7	1	NA	.5	.25	08/12/0515:17	NA	AH12-04	AH12-01	ICH018W	NA	NA
LCD1W	ICH018WC	4.7	1	NA	.5	.25	08/12/0515:32	NA	AH12-05	AH12-01	ICH018W	NA	NA
079-010	H093-01	154	20	NA	10	5	08/12/0516:00	NA	AH12-07	AH12-01	ICH018W	08/09/05	08/11/05
079-016	H093-07	202	20	NA	10	5	08/12/0518:27	NA	AH12-17	AH12-13	ICH018W	08/10/05	08/11/05
079-004	H093-09	204	20	NA	10	5	08/12/0518:41	NA	AH12-18	AH12-13	ICH018W	08/08/05	08/11/05
079-003	H093-10	236	20	NA	10	5	08/12/0519:02	NA	AH12-19	AH12-13	ICH018W	08/08/05	08/11/05
079-002	H093-11	235	20	NA	10	5	08/12/0519:16	NA	AH12-20	AH12-13	ICH018W	08/08/05	08/11/05
079-001	H093-12	195	20	NA	10	5	08/12/0519:30	NA	AH12-21	AH12-13	ICH018W	08/08/05	08/11/05
079-008	H093-13	183	20	NA	10	5	08/12/0519:44	NA	AH12-22	AH12-13	ICH018W	08/09/05	08/11/05
079-007	H093-14	193	20	NA	10	5	08/12/0519:58	NA	AH12-23	AH12-13	ICH018W	08/09/05	08/11/05
079-007DUP	H093-14D	193	20	NA	10	5	08/12/0520:12	NA	AH12-24	AH12-13	ICH018W	08/09/05	08/11/05
079-007MS	H093-14M	291	20	NA	10	5	08/12/0520:54	NA	AH12-27	AH12-25	ICH018W	08/09/05	08/11/05
079-005	H093-15	273	25	NA	12.5	6.25	08/12/0521:09	NA	AH12-28	AH12-25	ICH018W	08/09/05	08/11/05
079-012	H093-16	161	20	NA	10	5	08/12/0521:23	NA	AH12-29	AH12-25	ICH018W	08/09/05	08/11/05
079-013	H093-17	214	20	NA	10	5	08/12/0521:37	NA	AH12-30	AH12-25	ICH018W	08/09/05	08/11/05
079-011	H093-02	154	20	NA	10	5	08/12/0521:51	NA	AH12-31	AH12-25	ICH018W	08/09/05	08/11/05
MBLK2W	ICH019WB	ND	1	NA	.5	.25	08/12/0522:05	NA	AH12-32	AH12-25	ICH019W	NA	NA
LCS2W	ICH019WL	4.5	1	NA	.5	.25	08/12/0522:19	NA	AH12-33	AH12-25	ICH019W	NA	NA
LCD2W	ICH019WC	4.63	1	NA	.5	.25	08/12/0522:33	NA	AH12-34	AH12-25	ICH019W	NA	NA
079-006	H093-03	139	20	NA	10	5	08/12/0522:47	NA	AH12-35	AH12-25	ICH019W	08/09/05	08/11/05
079-009	H093-04	138	20	NA	10	5	08/12/0523:01	NA	AH12-36	AH12-25	ICH019W	08/09/05	08/11/05
079-014	H093-05	139	20	NA	10	5	08/12/0523:43	NA	AH12-39	AH12-37	ICH019W	08/09/05	08/11/05
079-015	H093-06	182	20	NA	10	5	08/12/0523:57	NA	AH12-40	AH12-37	ICH019W	08/09/05	08/11/05

8016

EMAX LABORATORIES, INC.

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05H093

METHOD 353.3
NITRATE/NITRITE-N

Sixteen (16) water samples were received on 08/11/05 for Nitrate/Nitrite-N analysis by Method 353.3 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample**

   Lab control result was within QC limit.

4. **Duplicate**

   Sample H093-14 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample H093-14 was spiked. %Recovery was within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

   All results were reported as Nitrogen concentration.

METHOD 353.3
NITRATE/NITRITE-N

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05H093

Matrix : WATER
Instrument ID : I70

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	NAH008WB	ND	1	NA	.1	.02	08/25/0518:54	NA	NAH008W-10	NAH008W-07	NAH008W	NA	NA
LCS1W	NAH008WL	.495	1	NA	.1	.02	08/25/0518:55	NA	NAH008W-11	NAH008W-07	NAH008W	NA	NA
079-010	H093-01	ND	1	NA	.1	.02	08/25/0518:56	NA	NAH008W-12	NAH008W-07	NAH008W	08/09/05	08/11/05
079-011	H093-02	ND	1	NA	.1	.02	08/25/0518:57	NA	NAH008W-13	NAH008W-07	NAH008W	08/09/05	08/11/05
079-006	H093-03	.166	1	NA	.1	.02	08/25/0518:58	NA	NAH008W-14	NAH008W-07	NAH008W	08/09/05	08/11/05
079-009	H093-04	.205	1	NA	.1	.02	08/25/0518:59	NA	NAH008W-15	NAH008W-07	NAH008W	08/09/05	08/11/05
079-014	H093-05	ND	1	NA	.1	.02	08/25/0519:00	NA	NAH008W-16	NAH008W-07	NAH008W	08/09/05	08/11/05
079-015	H093-06	ND	1	NA	.1	.02	08/25/0519:01	NA	NAH008W-17	NAH008W-07	NAH008W	08/09/05	08/11/05
079-016	H093-07R	1.85	5	NA	.5	.1	08/25/0519:05	NA	NAH008W-21	NAH008W-19	NAH008W	08/10/05	08/11/05
079-004	H093-09	.148	1	NA	.1	.02	08/25/0519:06	NA	NAH008W-22	NAH008W-19	NAH008W	08/08/05	08/11/05
079-003	H093-10	.671	1	NA	.1	.02	08/25/0519:07	NA	NAH008W-23	NAH008W-19	NAH008W	08/08/05	08/11/05
079-002	H093-11	.111	1	NA	.1	.02	08/25/0519:08	NA	NAH008W-24	NAH008W-19	NAH008W	08/08/05	08/11/05
079-001	H093-12R	1.08	2	NA	.2	.04	08/25/0519:10	NA	NAH008W-26	NAH008W-19	NAH008W	08/08/05	08/11/05
079-008	H093-13	ND	1	NA	.1	.02	08/25/0519:11	NA	NAH008W-27	NAH008W-19	NAH008W	08/09/05	08/11/05
079-007	H093-14R	1.08	2	NA	.2	.04	08/25/0519:13	NA	NAH008W-29	NAH008W-19	NAH008W	08/09/05	08/11/05
079-007DUP	H093-14D	1.08	2	NA	.2	.04	08/25/0519:14	NA	NAH008W-30	NAH008W-19	NAH008W	08/09/05	08/11/05
079-007MS	H093-14M	2.05	2	NA	.2	.04	08/25/0519:17	NA	NAH008W-33	NAH008W-31	NAH008W	08/09/05	08/11/05
079-005	H093-15	.181	1	NA	.1	.02	08/25/0519:18	NA	NAH008W-34	NAH008W-31	NAH008W	08/09/05	08/11/05
079-012	H093-16R	1.15	2	NA	.2	.04	08/25/0519:20	NA	NAH008W-36	NAH008W-31	NAH008W	08/09/05	08/11/05
079-013	H093-17	ND	1	NA	.1	.02	08/25/0519:21	NA	NAH008W-37	NAH008W-31	NAH008W	08/09/05	08/11/05

8070

EMAX LABORATORIES, INC.

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05H093

METHOD 365.2
TOTAL PHOSPHORUS

Sixteen (16) water samples were received on 08/11/05 for Total Phosphorus analysis by Method 365.2 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Duplicate**

   Sample H093-14 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample H093-14 was spiked. %Recovery was within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

   All results were reported as Phosphorus concentration.

8077

METHOD 365.2
TOTAL PHOSPHORUS

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05H093

Matrix : WATER
Instrument ID : I70

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	POH013WB	ND	1	NA	.5	.02	08/25/0516:09	NA	POH013W-10	POH013W-08	POH013W	NA	NA
LCS1W	POH013WL	.516	1	NA	.5	.02	08/25/0516:10	NA	POH013W-11	POH013W-08	POH013W	NA	NA
LCD1W	POH013WC	.523	1	NA	.5	.02	08/25/0516:11	NA	POH013W-12	POH013W-08	POH013W	NA	NA
079-010	H093-01	ND	1	NA	.5	.02	08/25/0516:12	NA	POH013W-13	POH013W-08	POH013W	08/09/05	08/11/05
079-011	H093-02	ND	1	NA	.5	.02	08/25/0516:13	NA	POH013W-14	POH013W-08	POH013W	08/09/05	08/11/05
079-006	H093-03	ND	1	NA	.5	.02	08/25/0516:14	NA	POH013W-15	POH013W-08	POH013W	08/09/05	08/11/05
079-009	H093-04	ND	1	NA	.5	.02	08/25/0516:15	NA	POH013W-16	POH013W-08	POH013W	08/09/05	08/11/05
079-014	H093-05	ND	1	NA	.5	.02	08/25/0516:16	NA	POH013W-17	POH013W-08	POH013W	08/09/05	08/11/05
079-015	H093-06	ND	1	NA	.5	.02	08/25/0516:17	NA	POH013W-18	POH013W-08	POH013W	08/09/05	08/11/05
079-016	H093-07	ND	1	NA	.5	.02	08/25/0516:18	NA	POH013W-19	POH013W-08	POH013W	08/10/05	08/11/05
079-004	H093-09	ND	1	NA	.5	.02	08/25/0516:21	NA	POH013W-22	POH013W-20	POH013W	08/08/05	08/11/05
079-003	H093-10	ND	1	NA	.5	.02	08/25/0516:22	NA	POH013W-23	POH013W-20	POH013W	08/08/05	08/11/05
079-002	H093-11	ND	1	NA	.5	.02	08/25/0516:23	NA	POH013W-24	POH013W-20	POH013W	08/08/05	08/11/05
079-001	H093-12	ND	1	NA	.5	.02	08/25/0516:24	NA	POH013W-25	POH013W-20	POH013W	08/08/05	08/11/05
079-008	H093-13	ND	1	NA	.5	.02	08/25/0516:25	NA	POH013W-26	POH013W-20	POH013W	08/09/05	08/11/05
079-007	H093-14	ND	1	NA	.5	.02	08/25/0516:26	NA	POH013W-27	POH013W-20	POH013W	08/09/05	08/11/05
079-007DUP	H093-14D	ND	1	NA	.5	.02	08/25/0516:27	NA	POH013W-28	POH013W-20	POH013W	08/09/05	08/11/05
079-007MS	H093-14M	.528	1	NA	.5	.02	08/25/0516:28	NA	POH013W-29	POH013W-20	POH013W	08/09/05	08/11/05
079-005	H093-15	ND	1	NA	.5	.02	08/25/0516:29	NA	POH013W-30	POH013W-20	POH013W	08/09/05	08/11/05
079-012	H093-16	ND	1	NA	.5	.02	08/25/0516:30	NA	POH013W-31	POH013W-20	POH013W	08/09/05	08/11/05
079-013	H093-17	ND	1	NA	.5	.02	08/25/0516:33	NA	POH013W-34	POH013W-32	POH013W	08/09/05	08/11/05

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Airfield, OPHA GW, CTO 79

Collection Date: August 8 through August 10, 2005

LDC Report Date: September 8, 2005

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05G093

Sample Identification

079-010	079-001
079-010DL	079-001DL
079-011**	079-008
079-011DL**	079-007
079-006	079-007DL
079-006DL	079-005
079-009**	079-012
079-009DL**	079-012DL
079-014	079-013
079-014DL	079-013DL
079-015	079-007MS
079-016	079-007MSD
079-016DL	
079-017	
079-004	
079-004DL	
079-003	
079-003DL	
079-002**	
079-002DL**	

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 32 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
7/29/05	2-Butanone	0.048 (≥0.05)	All samples in SDG 056093	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
8/17/05	Carbon tetrachloride Bromoform Methyl-tert-butyl ether	26.3 33.4 26.6	079-010 079-011** 079-006 079-009** 079-014 MBLK1W	J (all detects) UJ (all non-detects)	A
8/18/05	Bromomethane Carbon tetrachloride Bromoform Methyl-tert-butyl ether	31.4 30.8 26.3 29.0	079-004 079-003 079-002** 079-001 079-007 079-005 079-007MS 079-007MSD MBLK2W	J (all detects) UJ (all non-detects)	A
8/21/05	Vinyl acetate Bromoform	29.8 28.2	079-014DL 079-015 079-016 079-016DL 079-017 079-004DL 079-003DL 079-002DL** 079-001DL 079-008 079-007DL 079-012 079-013 MBLK3W	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
8/22/05	Carbon tetrachloride trans-1,3-Dichloropropene Dibromochloromethane Bromoform Methyl-tert-butyl ether	27.0 29.8 27.6 31.6 34.3	079-010DL 079-011DL** 079-006DL 079-009DL** 079-012DL 079-013DL MBLK4W	J (all detects) UJ (all non-detects)	A

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
7/29/05	Vinyl acetate	71.2	All samples in SDG 05G093	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
8/2/05	Vinyl acetate	25.2	All samples in SDG 05G093	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
8/17/05	2-Butanone	0.041 (≥0.05)	079-010 079-011** 079-006 079-009** 079-014 MBLK1W	J (all detects) UJ (all non-detects)	A
8/18/05	2-Butanone	0.046 (≥0.05)	079-004 079-003 079-002** 079-001 079-007 079-005 079-007MS 079-007MSD MBLK2W	J (all detects) UJ (all non-detects)	A
8/22/05	2-Butanone	0.048 (≥0.05)	079-010DL 079-011DL** 079-006DL 079-009DL** 079-012DL 079-013DL MBLK4W	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
MBLK1W	8/17/05	Methylene chloride	0.65 ug/L	079-010 079-011** 079-006 079-009** 079-014

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
079-008	1,2-Dichloroethane-d4	73 (75-125)	All TCL compounds	J (all detects) UJ (all non-detects)	A
079-012	Bromofluorobenzene Toluene-d8	126 (75-125) 127 (75-125)	All TCL compounds	J (all detects)	A
079-002DL**	Bromofluorobenzene	126 (75-125)	All TCL compounds	J (all detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
079-007MS/MSD (079-007)	Toluene 1,1-Dichloroethene Benzene Chlorobenzene	144 (75-125) 135 (75-125) 131 (75-125) 127 (75-125)	129 (75-125) - - -	- - - -	J (all detects) J (all detects) J (all detects) J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
079-010 079-011** 079-006 079-009** 079-016 079-004 079-012	Trichloroethene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
079-003 079-002** 079-001 079-007 079-013	Trichloroethene cis-1,2-Dichloroethene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A
079-014	cis-1,2-Dichloroethene Vinyl chloride	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 079-010 and 079-011**, samples 079-010DL and 079-011DL**, samples 079-006 and 079-009**, and samples 079-006DL and 079-009DL** were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	079-010	079-011**	
1,1-Dichloroethene	0.77	0.8	4
Chloroform	0.28	0.28	0
cis-1,2-Dichloroethene	41	42	2
trans-1,2-Dichloroethene	2.4	2.5	4
Trichloroethene	180	190	5
Vinyl chloride	0.5U	0.2	Not calculable

Compound	Concentration (ug/L)		RPD
	079-010DL	079-011DL**	
cis-1,2-Dichloroethene	40	43	7
Trichloroethene	470	510	8

Compound	Concentration (ug/L)		RPD
	079-006	079-009**	
1,1-Dichloroethene	0.52	0.52	0
Chloroform	0.46	0.37	22
cis-1,2-Dichloroethene	16	16	0
trans-1,2-Dichloroethene	1.3	1.2	8
Trichloroethene	290	220	27

Compound	Concentration (ug/L)		RPD
	079-006DL	079-009DL**	
Trichloroethene	720	820	13

XVII. Field Blanks

Sample 079-017 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Compound	Concentration (ug/L)
079-017	Toluene	0.22

Moffett Airfield, OPHA GW, CTO 79
Volatiles - Data Qualification Summary - SDG 05G093

SDG	Sample	Compound	Flag	A or P	Reason
05G093	079-010 079-010DL 079-011** 079-011DL** 079-006 079-006DL 079-009** 079-009DL** 079-014 079-014DL 079-015 079-016 079-016DL 079-017 079-004 079-004DL 079-003 079-003DL 079-002** 079-002DL** 079-001 079-001DL 079-008 079-007 079-007DL 079-005 079-012 079-012DL 079-013 079-013DL	2-Butanone	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
05G093	079-010 079-011** 079-006 079-009** 079-014	Carbon tetrachloride Bromoform Methyl-tert-butyl ether	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
05G093	079-004 079-003 079-002** 079-001 079-007 079-005	Bromomethane Carbon tetrachloride Bromoform Methyl-tert-butyl ether	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

SDG	Sample	Compound	Flag	A or P	Reason
05G093	079-014DL 079-015 079-016 079-016DL 079-017 079-004DL 079-003DL 079-002DL** 079-001DL 079-008 079-007DL 079-012 079-013	Vinyl acetate Bromoform	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
05G093	079-010DL 079-011DL** 079-006DL 079-009DL** 079-012DL 079-013DL	Carbon tetrachloride trans-1,3-Dichloropropene Dibromochloromethane Bromoform Methyl-tert-butyl ether	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
05G093	079-010 079-010DL 079-011** 079-011DL** 079-006 079-006DL 079-009** 079-009DL** 079-014 079-014DL 079-015 079-016 079-016DL 079-017 079-004 079-004DL 079-003 079-003DL 079-002** 079-002DL** 079-001 079-001DL 079-008 079-007 079-007DL 079-005 079-012 079-012DL 079-013 079-013DL	Vinyl acetate	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D)

SDG	Sample	Compound	Flag	A or P	Reason
05G093	079-010 079-011** 079-006 079-009** 079-014 079-004 079-003 079-002** 079-001 079-007 079-005 079-010DL 079-011DL** 079-006DL 079-009DL** 079-012DL 079-013DL	2-Butanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
05G093	079-008	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate recovery (%R)
05G093	079-012 079-002DL**	All TCL compounds	J (all detects)	A	Surrogate recovery (%R)
05G093	079-007	Toluene 1,1-Dichloroethene Benzene Chlorobenzene	J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicates (%R)
05G093	079-010 079-011** 079-006 079-009** 079-016 079-004 079-012	Trichloroethene	J (all detects)	A	Compound quantitation and CRQLs
05G093	079-003 079-002** 079-001 079-007 079-013	Trichloroethene cis-1,2-Dichloroethene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
05G093	079-014	cis-1,2-Dichloroethene Vinyl chloride	J (all detects) J (all detects)	A	Compound quantitation and CRQLs

Moffett Airfield, OPHA GW, CTO 79
Volatiles - Laboratory Blank Data Qualification Summary - SDG 05G093

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: August 8 through August 9, 2005

LDC Report Date: September 14, 2005

Matrix: Water

Parameters: Metals

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05H093

Sample Identification

079-010
079-011**
079-006
079-009**
079-014
079-015
079-016
079-004
079-003
079-002**
079-001
079-008
079-007
079-005
079-012
079-013
079-007MS
079-007MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 18 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Metals. The metals analyzed were Calcium, Magnesium, Potassium, and Sodium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Potassium	1.39 mg/L	All samples in SDG 05H093
ICB/CCB	Potassium Sodium	1875 ug/L 509 ug/L	079-010 079-011** 079-006 079-009** 079-014 079-015 079-016

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
079-010	Potassium	4.04 mg/L	4.04U mg/L
079-011**	Potassium	3.35 mg/L	3.35U mg/L

Sample	Analyte	Reported Concentration	Modified Final Concentration
079-006	Potassium	5.74 mg/L	5.74U mg/L
079-009**	Potassium	3.96 mg/L	3.96U mg/L
079-014	Potassium	3.33 mg/L	3.33U mg/L
079-015	Potassium	3.84 mg/L	3.84U mg/L
079-016	Potassium	3.66 mg/L	3.66U mg/L
079-004	Potassium	1.7 mg/L	1.7U mg/L
079-003	Potassium	2.34 mg/L	2.34U mg/L
079-002**	Potassium	1.54 mg/L	1.54U mg/L
079-001	Potassium	1.92 mg/L	1.92U mg/L
079-008	Potassium	1.41 mg/L	1.41U mg/L
079-007	Potassium	1.07 mg/L	1.07U mg/L
079-005	Potassium	2.49 mg/L	2.49U mg/L
079-012	Potassium	2.56 mg/L	2.56U mg/L
079-013	Potassium	1.31 mg/L	1.31U mg/L

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VI. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

All sample result verifications were acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIII. Field Duplicates

Samples 079-010 and 079-011** and samples 079-006 and 079-009** were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/L)		RPD
	079-010	079-011**	
Calcium	112	116	4
Magnesium	42.9	44.8	4

Compound	Concentration (mg/L)		RPD
	079-010	079-011**	
Potassium	4.04	3.35	19
Sodium	49	50.2	2

Compound	Concentration (mg/L)		RPD
	079-006	079-009**	
Calcium	119	120	1
Magnesium	39.6	40.4	2
Potassium	5.74	3.96	37
Sodium	44.4	44.4	0

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, OPHA GW, CTO 79
Metals - Data Qualification Summary - SDG 05H093

No Sample Data Qualified in this SDG

Moffett Air Field, OPHA GW, CTO 79
Metals - Laboratory Blank Data Qualification Summary - SDG 05H093

SDG	Sample	Analyte	Modified Final Concentration	A or P
05H093	079-010	Potassium	4.04U mg/L	A
05H093	079-011**	Potassium	3.35U mg/L	A
05H093	079-006	Potassium	5.74U mg/L	A
05H093	079-009**	Potassium	3.96U mg/L	A
05H093	079-014	Potassium	3.33U mg/L	A
05H093	079-015	Potassium	3.84U mg/L	A
05H093	079-016	Potassium	3.66U mg/L	A
05H093	079-004	Potassium	1.7U mg/L	A
05H093	079-003	Potassium	2.34U mg/L	A
05H093	079-002**	Potassium	1.54U mg/L	A
05H093	079-001	Potassium	1.92U mg/L	A
05H093	079-008	Potassium	1.41U mg/L	A
05H093	079-007	Potassium	1.07U mg/L	A
05H093	079-005	Potassium	2.49U mg/L	A
05H093	079-012	Potassium	2.56U mg/L	A
05H093	079-013	Potassium	1.31U mg/L	A

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: August 8 through August 10, 2005

LDC Report Date: September 14, 2005

Matrix: Water

Parameters: Wet Chemistry

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05H093

Sample Identification

079-010
079-011**
079-006
079-009**
079-014
079-015
079-016
079-004
079-003
079-002**
079-001
079-008
079-007
079-005
079-012
079-013
079-007MS
079-007DUP

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 18 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 300.0 for Chloride and Sulfate, EPA Method 310.1 for Alkalinity, EPA Method 353.3 for Nitrate/Nitrite as Nitrogen, and EPA Method 365.2 for Total Phosphorus.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Sample Result Verification

All sample result verification met validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

Samples 079-010 and 079-011** and samples 079-006 and 079-009** were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L		RPD
	079-010	079-011**	
Alkalinity	296	296	0
Chloride	35.1	34.9	1
Sulfate	154	154	0

Analyte	Concentration (mg/L)		RPD
	079-006	079-009**	
Alkalinity	296	296	0
Chloride	39.3	36.8	7
Sulfate	139	138	1
Nitrate/Nitrite as N	0.166	0.205	21

X. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, OPHA GW, CTO 79
Wet Chemistry - Data Qualification Summary - SDG 05H093

No Sample Data Qualified in this SDG

Moffett Air Field, OPHA GW, CTO 79
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG 05H093

No Sample Data Qualified in this SDG

TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 10227

CHAIN-OF-CUSTODY RECORD

PROJECT NAME	PURCHASE ORDER NO.
Orion [illegible]	20948 T [illegible] 33
PROJECT LOCATION	PROJECT NO.
Naval Training	1990.079D
SAMPLER NAME	AIRBILL NUMBER
Lynn Jefferson	851803127367
PROJECT CONTACT	PROJECT CONTACT PHONE NUMBER
Lynn Jefferson	949-756-7557

ANALYSES REQUIRED

LABORATORY NAME: GMAX

LABORATORY ID (FOR LABORATORY): 05L078

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	EPA 8260B (VOCs)	EPA 8260B (Carbons)	EPA 8270C (PAHs by GC/MS)	EPA 8270C (PAHs by GC/MS)	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
079-033	12/9/05	1300	3	X		W	10 day	X	X	X	X		Trip Blank	-	-	TB
079-031	12/9/05	1355	6	X		W	10 day	X	X	X	X		MCH-4LA	-	-	EB
079-020	12/8/05	0820	6	X				X	X	X	X		MCH-3UA	-	-	EB
079-022		0825	6		X			X	X	X	X		MCH-3LA	-	-	FD
079-018		0915	6	X				X	X	X	X		MCH-1UA	-	-	EB
079-019		0955	6	X				X	X	X	X		MCH-2LA	-	-	EB
079-026		1110	3 X 6R	X				X	X	X	X	MS/MSD	MCH-8LA	-	-	EB
079-025		1200	6	X				X	X	X	X		MCH-7UA	-	-	EB
079-023		1330	6		X			X	X	X	X		MCH-5UA	-	-	EB
079-029	↓	1500	3 X 5	X		↓	↓	X	X	X	X		MCH-6LA	-	-	EB

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
[signature]	12/12/05	[signature]
COMPANY TREC	TIME 1700	COMPANY FedEx
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
COMPANY	TIME	COMPANY

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:
OPHA
Rel 2005

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

ND19291 - IN

TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 10215

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Orion Park Housing	PURCHASE ORDER NO.: 20848 - TA LSK
PROJECT LOCATION: Moffett Airfield	PROJECT NO.: 1190.720
SAMPLER NAME: Lynn Wilson	AIRBILL NUMBER: 851803127367
PROJECT CONTACT: Lynn Wilson	PROJECT CONTACT PHONE NUMBER: 949-752-7558

ANALYSES REQUIRED

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 05L078

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	EPA 8260B (VOCs)	EPA 8260B (Oxygenates)	EPA 8260B (Naphthalene)	EPA 8260B (1,2-DCA, EDB)	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
079-028	12/8/05	1540	5	X		W	10 day	X	X	X	X		IMCH-10LA	-	-	FD
079-029	12/8/05	1630	6	X		W	10 day	X	X	X	X		IMCH-11UA	-	-	MS/MSD

12/12/05

RELINQUISHED BY (Signature)	DATE: 12/8/05	RECEIVED BY (Signature)	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY: TtEC	TIME: 1700	COMPANY: FedEx	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	COMPOSITE DESCRIPTION
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
COMPANY	TIME	COMPANY	TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

M19201_01

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 12-30-2005
EMAX Batch No.: 05L078

Attn: Lynn Jefferson

Tetra Tech EC, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, OPHA GW, CTO 79

Enclosed is the Laboratory report for samples received on 12/09/05.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
079-033	L078-01	12/07/05	WATER	VOLATILE ORGANICS BY GC/MS
079-021	L078-02	12/07/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-020	L078-03	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-022	L078-04	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY

Sample ID	Control #	Col Date	Matrix	Analysis
079-018	L078-05	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-019	L078-06	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-026	L078-07	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-025	L078-08	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-023	L078-09	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-024	L078-10	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-028	L078-11	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA

EMAX LABORATORIES, INC. 1835 W. 205th Street, Torrance, CA 90501 Tel: (310) 618-8889 Fax: (310) 618-0818

Sample ID	Control #	Col Date	Matrix	Analysis
				ALKALINITY
079-029	L078-12	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-026MS	L078-07M	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
079-026MSD	L078-07S	12/08/05	WATER	VOLATILE ORGANICS BY GC/MS
				CA MG K NA
079-026DUP	L078-07D	12/08/05	WATER	CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				ALKALINITY

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

EMAX LABORATORIES, INC. 1835 W. 205th Street, Torrance, CA 90501 Tel: (310) 618-8889 Fax: (310) 618-0818

EMAX LABORATORIES, INC.

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05L078

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Twelve (12) water samples were received on 12/09/05 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at half of the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   Recoveries were within QC limit.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample L078-07 was spiked. All recoveries were within QC limit.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

   TCE in L078-02, -06, -11, -12 and cis-1,2-DCE in L078-06 were manually reintegrated to correct for improper integration. Chromatograms of before and after manual integration were kept on file for review.

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/07/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/14/05 16:23
Sample ID: 079-033	Date Analyzed: 12/14/05 16:23
Lab Samp ID: L078-01	Dilution Factor: 1
Lab File ID: RLC403	Matrix : WATER
Ext Btch ID: V067L34	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	97	75-125
4-BROMOFLUOROBENZENE	116	75-125
TOLUENE-D8	107	75-125

2004

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/07/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 04:52
Sample ID: 079-021	Date Analyzed: 12/15/05 04:52
Lab Samp ID: L078-02	Dilution Factor: 1
Lab File ID: RLC424	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.46J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	48	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.6J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	140E	5	.2
VINYL CHLORIDE	.4J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	75-125
4-BROMOFLUOROBENZENE	116	75-125
TOLUENE-D8	108	75-125

2005

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/07/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/16/05 10:22
Sample ID: 079-021DL	Date Analyzed: 12/16/05 10:22
Lab Samp ID: L078-02T	Dilution Factor: 25
Lab File ID: RLC475	Matrix : WATER
Ext Btch ID: V067L39	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	54J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	480	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	75-125
4-BROMOFLUOROBENZENE	108	75-125
TOLUENE-D8	104	75-125

2006

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPNA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 05:28
Sample ID: 079-020	Date Analyzed: 12/15/05 05:28
Lab Samp ID: L078-03	Dilution Factor: 1
Lab File ID: RLC425	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.4J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	180E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	.55J	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	5	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	220E	5	.2
VINYL CHLORIDE	.56	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	75-125
4-BROMOFLUOROBENZENE	118	75-125
TOLUENE-D8	107	75-125

2007

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPNA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/16/05 10:57
Sample ID: 079-020DL	Date Analyzed: 12/16/05 10:57
Lab Samp ID: L078-03Y	Dilution Factor: 10
Lab File ID: RLC476	Matrix : WATER
Ext Btch ID: V067L39	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	200	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	4.9J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	200	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	75-125
4-BROMOFLUOROBENZENE	107	75-125
TOLUENE-D8	107	75-125

2008

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 06:03
Sample ID: 079-022	Date Analyzed: 12/15/05 06:03
Lab Samp ID: L078-04	Dilution Factor: 1
Lab File ID: RLC426	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.37J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	180E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	.56J	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	5J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	230E	5	.2
VINYL CHLORIDE	.54	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	75-125
4-BROMOFLUOROBENZENE	115	75-125
TOLUENE-D8	108	75-125

2009

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/16/05 11:30
Sample ID: 079-022DL	Date Analyzed: 12/16/05 11:30
Lab Samp ID: L078-04I	Dilution Factor: 10
Lab File ID: RLC477	Matrix : WATER
Ext Btch ID: V067L39	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	200	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	5J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	210	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	75-125
4-BROMOFLUOROBENZENE	111	75-125
TOLUENE-D8	108	75-125

2015

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 06:38
Sample ID: 079-018	Date Analyzed: 12/15/05 06:38
Lab Samp ID: L078-05	Dilution Factor: 1
Lab File ID: RLC427	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	1.1J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	140E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	9.4	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	210E	5	.2
VINYL CHLORIDE	2.4	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	75-125
4-BROMOFLUOROBENZENE	115	75-125
TOLUENE-D8	108	75-125

2020

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/16/05 12:04
Sample ID: 079-018DL	Date Analyzed: 12/16/05 12:04
Lab Samp ID: L078-05T	Dilution Factor: 10
Lab File ID: RLC478	Matrix : WATER
Ext Btch ID: V067L39	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	150	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	9.6J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	190	50	2
VINYL CHLORIDE	2.6J	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	75-125
4-BROMOFLUOROBENZENE	108	75-125
TOLUENE-D8	105	75-125

2021

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 07:14
Sample ID: 079-019	Date Analyzed: 12/15/05 07:14
Lab Samp ID: L078-06	Dilution Factor: 1
Lab File ID: RLC428	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	2.7J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	76E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	25	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	110E	5	.2
VINYL CHLORIDE	3.8	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	75-125
4-BROMOFLUOROBENZENE	114	75-125
TOLUENE-D8	105	75-125

2022

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/16/05 12:40
Sample ID: 079-019DL	Date Analyzed: 12/16/05 12:40
Lab Samp ID: L078-06T	Dilution Factor: 25
Lab File ID: RLC479	Matrix : WATER
Ext Stch ID: V067L39	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	490	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	27J	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	330	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	75-125
4-BROMOFLUOROBENZENE	107	75-125
TOLUENE-D8	106	75-125

2023

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 04:16
Sample ID: 079-026	Date Analyzed: 12/15/05 04:16
Lab Samp ID: L078-07	Dilution Factor: 1
Lab File ID: RLC423	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	75-125
4-BROMOFLUOROBENZENE	115	75-125
TOLUENE-D8	108	75-125

2024

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 07:50
Sample ID: 079-025	Date Analyzed: 12/15/05 07:50
Lab Samp ID: L078-08	Dilution Factor: 1
Lab File ID: RLC429	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.63J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	130E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	5J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	270E	5	.2
VINYL CHLORIDE	.65	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	75-125
4-BROMOFLUOROBENZENE	114	75-125
TOLUENE-D8	107	75-125

2025

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/16/05 13:14
Sample ID: 079-025DL	Date Analyzed: 12/16/05 13:14
Lab Samp ID: L078-08Y	Dilution Factor: 10
Lab File ID: RLC480	Matrix : WATER
Ext Btch ID: V067L39	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	140	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	4.8J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	250	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	75-125
4-BROMOFLUOROBENZENE	110	75-125
TOLUENE-D8	105	75-125

2026

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 08:25
Sample ID: 079-023	Date Analyzed: 12/15/05 08:25
Lab Samp ID: L078-09	Dilution Factor: 1
Lab File ID: RLC430	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	2.2J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	.2J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	36	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	75-125
4-BROMOFLUOROBENZENE	116	75-125
TOLUENE-D8	107	75-125

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 09:00
Sample ID: 079-024	Date Analyzed: 12/15/05 09:00
Lab Samp ID: L078-10	Dilution Factor: 1
Lab File ID: RLC431	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.31J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	.23J	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	12	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	.9J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	220E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	75-125
4-BROMOFLUOROBENZENE	117	75-125
TOLUENE-D8	105	75-125

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 11:17
Sample ID: 079-024DL	Date Analyzed: 12/15/05 11:17
Lab Samp ID: L078-10T	Dilution Factor: 50
Lab File ID: RLC435	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKCS45	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	250	10
1,1,2,2-TETRACHLOROETHANE	ND	50	10
1,1,2-TRICHLOROETHANE	ND	250	10
1,1-DICHLOROETHANE	ND	250	10
1,1-DICHLOROETHENE	ND	250	10
1,2-DICHLOROETHANE	ND	25	10
1,2-DICHLOROPROPANE	ND	250	10
2-BUTANONE	ND	2500	250
2-HEXANONE	ND	2500	250
4-METHYL-2-PENTANONE	ND	2500	250
ACETONE	ND	2500	250
BENZENE	ND	25	10
BROMODICHLOROMETHANE	ND	250	10
BROMOFORM	ND	250	15
BROMOMETHANE	ND	250	10
CARBON TETRACHLORIDE	ND	25	10
CHLOROBENZENE	ND	250	10
CHLOROETHANE	ND	250	10
CHLOROFORM	ND	250	10
CHLOROMETHANE	ND	250	10
CIS-1,2-DICHLOROETHENE	13J	250	10
CIS-1,3-DICHLOROPROPENE	ND	25	10
DIBROMOCHLOROMETHANE	ND	250	10
ETHYLBENZENE	ND	25	10
XYLENES	ND	75	35
MTBE	ND	50	10
METHYLENE CHLORIDE	ND	250	25
STYRENE	ND	250	10
TETRACHLOROETHENE	ND	250	10
TOLUENE	ND	25	10
TRANS-1,2-DICHLOROETHENE	ND	250	10
TRANS-1,3-DICHLOROPROPENE	ND	25	10
TRICHLOROETHENE	750	250	10
VINYL CHLORIDE	ND	25	10
VINYL ACETATE	ND	2500	25

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	75-125
4-BROMOFLUOROBENZENE	114	75-125
TOLUENE-D8	106	75-125

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 09:34
Sample ID: 079-028	Date Analyzed: 12/15/05 09:34
Lab Samp ID: L078-11	Dilution Factor: 1
Lab File ID: RLC432	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.34J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	19	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.2J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	63E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	109	75-125

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 10:43
Sample ID: 079-028DL	Date Analyzed: 12/15/05 10:43
Lab Samp ID: L078-11T	Dilution Factor: 100
Lab File ID: RLC434	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	500	20
1,1,2,2-TETRACHLOROETHANE	ND	100	20
1,1,2-TRICHLOROETHANE	ND	500	20
1,1-DICHLOROETHANE	ND	500	20
1,1-DICHLOROETHENE	ND	500	20
1,2-DICHLOROETHANE	ND	50	20
1,2-DICHLOROPROPANE	ND	500	20
2-BUTANONE	ND	5000	500
2-HEXANONE	ND	5000	500
4-METHYL-2-PENTANONE	ND	5000	500
ACETONE	ND	5000	500
BENZENE	ND	50	20
BROMODICHLOROMETHANE	ND	500	20
BROMOFORM	ND	500	30
BROMOMETHANE	ND	500	20
CARBON TETRACHLORIDE	ND	50	20
CHLOROBENZENE	ND	500	20
CHLOROETHANE	ND	500	20
CHLOROFORM	ND	500	20
CHLOROMETHANE	ND	500	20
CIS-1,2-DICHLOROETHENE	21J	500	20
CIS-1,3-DICHLOROPROPENE	ND	50	20
DIBROMOCHLOROMETHANE	ND	500	20
ETHYLBENZENE	ND	50	20
XYLENES	ND	150	70
MTBE	ND	100	20
METHYLENE CHLORIDE	ND	500	50
STYRENE	ND	500	20
TETRACHLOROETHENE	ND	500	20
TOLUENE	ND	50	20
TRANS-1,2-DICHLOROETHENE	ND	500	20
TRANS-1,3-DICHLOROPROPENE	ND	50	20
TRICHLOROETHENE	1100	500	20
VINYL CHLORIDE	ND	50	20
VINYL ACETATE	ND	5000	50

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	98	75-125
4-BROMOFLUOROBENZENE	112	75-125
TOLUENE-D8	103	75-125

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/15/05 10:08
Sample ID: 079-029	Date Analyzed: 12/15/05 10:08
Lab Samp ID: L078-12	Dilution Factor: 1
Lab File ID: RLC433	Matrix : WATER
Ext Btch ID: V067L36	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.52J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	120E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	3.4J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	95E	5	.2
VINYL CHLORIDE	.39J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	75-125
4-BROMOFLUOROBENZENE	118	75-125
TOLUENE-D8	108	75-125

EMAX LABORATORIES, INC.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
Batch No. : 05L078	Date Extracted: 12/16/05 13:48
Sample ID: 079-029DL	Date Analyzed: 12/16/05 13:48
Lab Samp ID: L078-12T	Dilution Factor: 25
Lab File ID: RLC481	Matrix : WATER
Ext Btch ID: V067L39	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	130	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	380	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	75-125
4-BROMOFLUOROBENZENE	103	75-125
TOLUENE-D8	105	75-125

EMAX LABORATORIES, INC.

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05L078

METHOD 3010A/6010B
METALS BY ICP

Eleven (11) water samples were received on 12/09/05 for Metals analysis by Method 3010A/6010B in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at half of the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Serial Dilution / Post-Analytical Spike**

   Sample L078-02 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. **Matrix Spike/Matrix Spike Duplicate**

   Sample L078-07 was spiked. All recoveries were within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 3010A/60108
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/07/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO. : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-021	Date Analyzed: 12/23/05 16:24
Lab Samp ID: L078-02	Dilution Factor: 1
Lab File ID: I73L030015	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030009	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	143	2	.1
Magnesium	55.1	1	.1
Potassium	1.32J	9	1
Sodium	37.4	5	.25

7003

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO. : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-020	Date Analyzed: 12/23/05 16:37
Lab Samp ID: L078-03	Dilution Factor: 1
Lab File ID: I73L030017	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030009	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	140	2	.1
Magnesium	54.6	1	.1
Potassium	1.27J	9	1
Sodium	41.1	5	.25

7004

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO. : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-022	Date Analyzed: 12/23/05 16:43
Lab Samp ID: L078-04	Dilution Factor: 1
Lab File ID: I73L030018	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030009	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	140	2	.1
Magnesium	54.6	1	.1
Potassium	1.27J	9	1
Sodium	41.4	5	.25

7005

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO. : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-018	Date Analyzed: 12/23/05 16:49
Lab Samp ID: L078-05	Dilution Factor: 1
Lab File ID: I73L030019	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030009	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	145	2	.1
Magnesium	56.2	1	.1
Potassium	1.35J	9	1
Sodium	44	5	.25

7006

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MPA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO. : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-019	Date Analyzed: 12/23/05 16:55
Lab Samp ID: L078-06	Dilution Factor: 1
Lab File ID: I73L030020	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030009	Instrument ID : EMAXI173

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	156	2	.1
Magnesium	62.3	1	.1
Potassium	1.26J	9	1
Sodium	42.4	5	.25

7007

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO. : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-026	Date Analyzed: 12/23/05 17:14
Lab Samp ID: L078-07	Dilution Factor: 1
Lab File ID: I73L030023	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030021	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	123	2	.1
Magnesium	39.2	1	.1
Potassium	1.2J	9	1
Sodium	34.7	5	.25

7008

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO. : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-025	Date Analyzed: 12/23/05 17:32
Lab Samp ID: L078-08	Dilution Factor: 1
Lab File ID: I73L030026	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030021	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	161	2	.1
Magnesium	60.3	1	.1
Potassium	1.63J	9	1
Sodium	43.2	5	.25

7009

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO. : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-023	Date Analyzed: 12/23/05 17:38
Lab Samp ID: L078-09	Dilution Factor: 1
Lab File ID: I73L030027	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030021	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	165	2	.1
Magnesium	62	1	.1
Potassium	1.84J	9	1
Sodium	41.3	5	.25

7010

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO.: 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-024	Date Analyzed: 12/23/05 17:45
Lab Samp ID: L078-10	Dilution Factor: 1
Lab File ID: I73L030028	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030021	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	115	2	.1
Magnesium	38.4	1	.1
Potassium	2.2J	9	1
Sodium	36.8	5	.25

7011

METHOD 3010A/6010B
METALS BY ICP

Client	: TETRA TECH EC, INC.	Date Collected:	12/08/05
Project	: MFA, OPHA GW, CTO 79	Date Received:	12/09/05
SDG NO.	: 05L078	Date Extracted:	12/13/05 09:45
Sample ID:	079-028	Date Analyzed:	12/23/05 17:51
Lab Samp ID:	L078-11	Dilution Factor:	1
Lab File ID:	I73L030029	Matrix :	WATER
Ext Btch ID:	IPL029W	% Moisture :	NA
Calib. Ref.:	I73L030021	Instrument ID :	EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	122	2	.1
Magnesium	43.5	1	.1
Potassium	1.44J	9	1
Sodium	32.4	5	.25

7012

METHOD 3010A/60108
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/08/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/09/05
SDG NO: : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: 079-029	Date Analyzed: 12/23/05 17:57
Lab Samp ID: L078-12	Dilution Factor: 1
Lab File ID: I73L030030	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030021	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	155	2	.1
Magnesium	57.4	1	.1
Potassium	1.21J	9	1
Sodium	38.3	5	.25

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: NA
Project : MFA, OPHA GW, CTO 79	Date Received: 12/13/05
SDG NO. : 05L078	Date Extracted: 12/13/05 09:45
Sample ID: MBLK1W	Date Analyzed: 12/23/05 16:00
Lab Samp ID: IPL029W8	Dilution Factor: 1
Lab File ID: I73L030011	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030009	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	ND	2	.1
Magnesium	ND	1	.1
Potassium	ND	9	1
Sodium	ND	5	.25

7014

EMAX LABORATORIES, INC.

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05L078

METHOD 300.0
ANIONS

Eleven (11) water samples were received on 12/09/05 for Chloride and Sulfate analyses by method 300.0 in accordance with "Method for Determination of Inorganic Anions by Ion Chromatography", EPA 600/84-017.

1. **Holding Time**

   Analyses met holding time criteria.

2. **Method Blank**

   Method blanks were free of contamination at half of the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limits.

4. **Duplicate**

   Sample L078-07 was analyzed for duplicate. %RPDs were within QC limit.

5. **Matrix Spike**

   Sample L078-07 was spiked. Recoveries were within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 300.0
CHLORIDE

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05L078

Matrix : WATER
Instrument ID : 100

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICL018WB	ND	1	NA	1	.1	12/12/0522:01	NA	AL12-32	AL12-25	ICL018W	NA	NA
LCS1W	ICL018WL	4.69	1	NA	1	.1	12/12/0522:21	NA	AL12-33	AL12-25	ICL018W	NA	NA
LCD1W	ICL018WC	4.77	1	NA	1	.1	12/12/0522:41	NA	AL12-34	AL12-25	ICL018W	NA	NA
079-021	L078-02	33.1	20	NA	20	2	12/13/0504:42	NA	AL12-52	AL12-49	ICL018W	12/07/05	12/09/05
079-020	L078-03	31.6	20	NA	20	2	12/13/0505:02	NA	AL12-53	AL12-49	ICL018W	12/08/05	12/09/05
079-022	L078-04	33.1	20	NA	20	2	12/13/0505:22	NA	AL12-54	AL12-49	ICL018W	12/08/05	12/09/05
079-018	L078-05	32.9	20	NA	20	2	12/13/0505:42	NA	AL12-55	AL12-49	ICL018W	12/08/05	12/09/05
079-019	L078-06	34.8	20	NA	20	2	12/13/0506:02	NA	AL12-56	AL12-49	ICL018W	12/08/05	12/09/05
079-025	L078-08	32.2	20	NA	20	2	12/13/0506:42	NA	AL12-58	AL12-49	ICL018W	12/08/05	12/09/05
079-023	L078-09	35.9	20	NA	20	2	12/13/0507:02	NA	AL12-59	AL12-49	ICL018W	12/08/05	12/09/05
079-024	L078-10	32.8	20	NA	20	2	12/13/0507:22	NA	AL12-60	AL12-49	ICL018W	12/08/05	12/09/05
MBLK2W	ICL019WB	ND	1	NA	1	.1	12/13/0508:23	NA	AL12-63	AL12-61	ICL019W	NA	NA
LCS2W	ICL019WL	4.74	1	NA	1	.1	12/13/0508:43	NA	AL12-64	AL12-61	ICL019W	NA	NA
LCD2W	ICL019WC	4.67	1	NA	1	.1	12/13/0509:03	NA	AL12-65	AL12-61	ICL019W	NA	NA
079-028	L078-11	30.8	20	NA	20	2	12/13/0509:23	NA	AL12-66	AL12-61	ICL019W	12/08/05	12/09/05
079-029	L078-12	31.5	20	NA	20	2	12/13/0509:43	NA	AL12-67	AL12-61	ICL019W	12/08/05	12/09/05
MBLK3W	ICL038WB	ND	1	NA	1	.1	12/28/0516:46	NA	AL28-03	AL28-01	ICL038W	NA	NA
LCS3W	ICL038WL	4.97	1	NA	1	.1	12/28/0517:06	NA	AL28-04	AL28-01	ICL038W	NA	NA
LCD3W	ICL038WC	4.94	1	NA	1	.1	12/28/0517:26	NA	AL28-05	AL28-01	ICL038W	NA	NA
079-026	L078-07	32.1	20	NA	20	2	12/28/0517:46	NA	AL28-06	AL28-01	ICL038W	12/08/05	12/09/05
079-026DUP	L078-07D	32.2	20	NA	20	2	12/28/0518:06	NA	AL28-07	AL28-01	ICL038W	12/08/05	12/09/05
079-026MS	L078-07M	136	20	NA	20	2	12/28/0518:26	NA	AL28-08	AL28-01	ICL038W	12/08/05	12/09/05

8003

METHOD 300.0
SULFATE

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05L078

Matrix : WATER
Instrument ID : 100

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICL018WB	ND	1	NA	.5	.25	12/12/0522:01	NA	AL12-32	AL12-25	ICL018W	NA	NA
LCS1W	ICL018WL	4.53	1	NA	.5	.25	12/12/0522:21	NA	AL12-33	AL12-25	ICL018W	NA	NA
LCD1W	ICL018WC	4.52	1	NA	.5	.25	12/12/0522:41	NA	AL12-34	AL12-25	ICL018W	NA	NA
079-021	L078-02	205	20	NA	10	5	12/13/0504:42	NA	AL12-52	AL12-49	ICL018W	12/07/05	12/09/05
079-020	L078-03	186	20	NA	10	5	12/13/0505:02	NA	AL12-53	AL12-49	ICL018W	12/08/05	12/09/05
079-022	L078-04	195	20	NA	10	5	12/13/0505:22	NA	AL12-54	AL12-49	ICL018W	12/08/05	12/09/05
079-018	L078-05	185	20	NA	10	5	12/13/0505:42	NA	AL12-55	AL12-49	ICL018W	12/08/05	12/09/05
079-019	L078-06	236	20	NA	10	5	12/13/0506:02	NA	AL12-56	AL12-49	ICL018W	12/08/05	12/09/05
079-025	L078-08	204	20	NA	10	5	12/13/0506:42	NA	AL12-58	AL12-49	ICL018W	12/08/05	12/09/05
079-023	L078-09	258	20	NA	10	5	12/13/0507:02	NA	AL12-59	AL12-49	ICL018W	12/08/05	12/09/05
079-024	L078-10	139	20	NA	10	5	12/13/0507:22	NA	AL12-60	AL12-49	ICL018W	12/08/05	12/09/05
MBLK2W	ICL019WB	ND	1	NA	.5	.25	12/13/0508:23	NA	AL12-63	AL12-61	ICL019W	NA	NA
LCS2W	ICL019WL	4.57	1	NA	.5	.25	12/13/0508:43	NA	AL12-64	AL12-61	ICL019W	NA	NA
LCD2W	ICL019WC	4.67	1	NA	.5	.25	12/13/0509:03	NA	AL12-65	AL12-61	ICL019W	NA	NA
079-028	L078-11	164	20	NA	10	5	12/13/0509:23	NA	AL12-66	AL12-61	ICL019W	12/08/05	12/09/05
079-029	L078-12	224	20	NA	10	5	12/13/0509:43	NA	AL12-67	AL12-61	ICL019W	12/08/05	12/09/05
MBLK3W	ICL038WB	ND	1	NA	.5	.25	12/28/0516:46	NA	AL28-03	AL28-01	ICL038W	NA	NA
LCS3W	ICL038WL	5.07	1	NA	.5	.25	12/28/0517:06	NA	AL28-04	AL28-01	ICL038W	NA	NA
LCD3W	ICL038WC	4.95	1	NA	.5	.25	12/28/0517:26	NA	AL28-05	AL28-01	ICL038W	NA	NA
079-026	L078-07	201	20	NA	10	5	12/28/0517:46	NA	AL28-06	AL28-01	ICL038W	12/08/05	12/09/05
079-026DUP	L078-07D	203	20	NA	10	5	12/28/0518:06	NA	AL28-07	AL28-01	ICL038W	12/08/05	12/09/05
079-026MS	L078-07M	307	20	NA	10	5	12/28/0518:26	NA	AL28-08	AL28-01	ICL038W	12/08/05	12/09/05

4008

EMAX LABORATORIES, INC.

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05L078

METHOD 310.1
TOTAL ALKALINITY AS CACO3

Eleven (11) water samples were received on 12/09/05 for Total Alkalinity analysis by Method 310.1 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Duplicate**

   Sample L078-07 was analyzed for duplicate. %RPD was within QC limit.

5. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 310.1
BICARBONATE ALKALINITY AS CACO3

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05L078

Matrix : WATER
Instrument ID : 153

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALL010WB	ND	1	NA	5	1	12/13/0515:30	NA	ALL010W-01	NA	ALL010W	NA	NA
LCS1W	ALL010WL	54.3	1	NA	5	1	12/13/0515:35	NA	ALL010W-02	NA	ALL010W	NA	NA
LCD1W	ALL010WC	57.0	1	NA	5	1	12/13/0515:40	NA	ALL010W-03	NA	ALL010W	NA	NA
079-021	L078-02	361	1	NA	5	1	12/13/0516:05	NA	ALL010W-08	NA	ALL010W	12/07/05	12/09/05
079-020	L078-03	407	1	NA	5	1	12/13/0516:10	NA	ALL010W-09	NA	ALL010W	12/08/05	12/09/05
079-022	L078-04	404	1	NA	5	1	12/13/0516:15	NA	ALL010W-10	NA	ALL010W	12/08/05	12/09/05
079-018	L078-05	461	1	NA	5	1	12/13/0516:20	NA	ALL010W-11	NA	ALL010W	12/08/05	12/09/05
079-019	L078-06	442	1	NA	5	1	12/13/0516:25	NA	ALL010W-12	NA	ALL010W	12/08/05	12/09/05
079-026	L078-07	285	1	NA	5	1	12/13/0516:30	NA	ALL010W-13	NA	ALL010W	12/08/05	12/09/05
079-026DUP	L078-07D	288	1	NA	5	1	12/13/0516:35	NA	ALL010W-14	NA	ALL010W	12/08/05	12/09/05
079-025	L078-08	461	1	NA	5	1	12/13/0516:40	NA	ALL010W-15	NA	ALL010W	12/08/05	12/09/05
079-023	L078-09	412	1	NA	5	1	12/13/0516:45	NA	ALL010W-16	NA	ALL010W	12/08/05	12/09/05
079-024	L078-10	315	1	NA	5	1	12/13/0516:50	NA	ALL010W-17	NA	ALL010W	12/08/05	12/09/05
079-028	L078-11	315	1	NA	5	1	12/13/0516:55	NA	ALL010W-18	NA	ALL010W	12/08/05	12/09/05
079-029	L078-12	399	1	NA	5	1	12/13/0517:00	NA	ALL010W-19	NA	ALL010W	12/08/05	12/09/05

8070

EMAX LABORATORIES, INC.

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05L078

METHOD 353.3
NITRATE/NITRITE-N

Eleven (11) water samples were received on 12/09/05 for Nitrate/Nitrite-N analysis by Method 353.3 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Duplicate**

   Sample L078-07 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample L078-07 was spiked. %Recovery was within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

   Nitrate/Nitrite-N results were reported as Nitrogen concentration.

METHOD 353.3
NITRATE/NITRITE-N

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05L078

Matrix : WATER
Instrument ID : 170

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	NAL004WB	ND	1	NA	.1	.02	12/29/0514:09	NA	NAL004W-10	NAL004W-07	NAL004W	NA	NA
LCS1W	NAL004WL	.497	1	NA	.1	.02	12/29/0514:10	NA	NAL004W-11	NAL004W-07	NAL004W	NA	NA
LCD1W	NAL004WC	.493	1	NA	.1	.02	12/29/0514:11	NA	NAL004W-12	NAL004W-07	NAL004W	NA	NA
079-021	L078-02	.366	1	NA	.1	.02	12/29/0514:12	NA	NAL004W-13	NAL004W-07	NAL004W	12/07/05	12/09/05
079-020	L078-03	.153	1	NA	.1	.02	12/29/0514:13	NA	NAL004W-14	NAL004W-07	NAL004W	12/08/05	12/09/05
079-022	L078-04R	1.03	2	NA	.2	.04	12/29/0514:15	NA	NAL004W-16	NAL004W-07	NAL004W	12/08/05	12/09/05
079-018	L078-05	.995	1	NA	.1	.02	12/29/0514:16	NA	NAL004W-17	NAL004W-07	NAL004W	12/08/05	12/09/05
079-019	L078-06	.197	1	NA	.1	.02	12/29/0514:17	NA	NAL004W-18	NAL004W-07	NAL004W	12/08/05	12/09/05
079-026	L078-07	ND	1	NA	.1	.02	12/29/0514:20	NA	NAL004W-21	NAL004W-19	NAL004W	12/08/05	12/09/05
079-026DUP	L078-07D	ND	1	NA	.1	.02	12/29/0514:21	NA	NAL004W-22	NAL004W-19	NAL004W	12/08/05	12/09/05
079-026MS	L078-07M	.484	1	NA	.1	.02	12/29/0514:22	NA	NAL004W-23	NAL004W-19	NAL004W	12/08/05	12/09/05
079-025	L078-08	.901	1	NA	.1	.02	12/29/0514:23	NA	NAL004W-24	NAL004W-19	NAL004W	12/08/05	12/09/05
079-023	L078-09	.334	1	NA	.1	.02	12/29/0514:24	NA	NAL004W-25	NAL004W-19	NAL004W	12/08/05	12/09/05
079-024	L078-10	.357	1	NA	.1	.02	12/29/0514:25	NA	NAL004W-26	NAL004W-19	NAL004W	12/08/05	12/09/05
079-028	L078-11R	1.19	2	NA	.2	.04	12/29/0514:27	NA	NAL004W-28	NAL004W-19	NAL004W	12/08/05	12/09/05
079-029	L078-12	.214	1	NA	.1	.02	12/29/0514:28	NA	NAL004W-29	NAL004W-19	NAL004W	12/08/05	12/09/05

0808

EMAX LABORATORIES, INC.

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: December 7 through December 8, 2005

LDC Report Date: January 12, 2006

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05L078

Sample Identification

079-033	079-024DL
079-021	079-028DL
079-020	079-029DL
079-022**	
079-018	
079-019	
079-026	
079-025	
079-023**	
079-024	
079-028	
079-029	
079-026MS	
079-026MSD	
079-021DL	
079-020DL	
079-022DL**	
079-018DL	
079-019DL	
079-025DL	

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 23 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
11/20/05	Acetone	0.030 (≥0.05)	All samples in SDG 05L078	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
12/16/05	Chloroform	21.5	079-021DL 079-020DL 079-022DL** 079-018DL 079-019DL 079-025DL 079-024DL 079-028DL 079-029DL MBLK3W	None	P

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
12/14/05	Chloromethane Bromomethane	25.4 25.8	079-033 MBLK1W	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
12/14/05	Acetone	0.031 (≥0.05)	079-033 MBLK1W	J (all detects) UJ (all non-detects)	A
12/15/05	Acetone	0.029 (≥0.05)	079-021 079-020 079-022** 079-018 079-019 079-026 079-025 079-023** 079-024 079-028 079-029 079-026MS 079-026MSD MBLK2W	J (all detects) UJ (all non-detects)	A

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
12/16/05	Acetone	0.036 (≥0.05)	079-021DL 079-020DL 079-022DL** 079-018DL 079-019DL 079-025DL 079-024DL 079-028DL 079-029DL MBLK3W	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
079-021 079-024 079-028	Trichloroethene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
079-020 079-022** 079-018 079-019 079-025 079-029	cis-1,2-Dichloroethene Trichloroethene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 079-020 and 079-022** and samples 079-020DL and 079-022DL** were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	079-020	079-022**	
1,1-Dichloroethene	0.4	0.37	8
cis-1,2-Dichloroethene	180	180	0

Compound	Concentration (ug/L)		RPD
	079-020	079-022**	
Tetrachloroethene	0.55	0.56	2
trans-1,2-Dichloroethene	5	5	0
Trichloroethene	220	230	4
Vinyl chloride	0.56	0.54	4

Compound	Concentration (ug/L)		RPD
	079-020DL	079-022DL**	
cis-1,2-Dichloroethene	200	200	0
trans-1,2-Dichloroethene	4.9	5	2
Trichloroethene	200	210	5

XVII. Field Blanks

Sample 079-033 was identified as a trip blank. No volatile contaminants were found in this blank.

Moffett Air Field, OPHA GW, CTO 79
Volatiles - Data Qualification Summary - SDG 05L078

SDG	Sample	Compound	Flag	A or P	Reason
05L078	079-033 079-021 079-020 079-022** 079-018 079-019 079-026 079-025 079-023** 079-024 079-028 079-029 079-021DL 079-020DL 079-022DL** 079-018DL 079-019DL 079-025DL 079-024DL 079-028DL 079-029DL	Acetone	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
05L078	079-021DL 079-020DL 079-022DL** 079-018DL 079-019DL 079-025DL 079-024DL 079-028DL 079-029DL	Chloroform	None	P	Continuing calibration (%D)
05L078	079-033	Chloromethane Bromomethane	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

SDG	Sample	Compound	Flag	A or P	Reason
05L078	079-033 079-021 079-020 079-022** 079-018 079-019 079-026 079-025 079-023** 079-024 079-028 079-029 079-021DL 079-020DL 079-022DL** 079-018DL 079-019DL 079-025DL 079-024DL 079-028DL 079-029DL	Acetone	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
05L078	079-021 079-024 079-028	Trichloroethene	J (all detects)	A	Compound quantitation and CRQLs
05L078	079-020 079-022** 079-018 079-019 079-025 079-029	cis-1,2-Dichloroethene Trichloroethene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs

Moffett Air Field, OPHA GW, CTO 79
Volatiles - Laboratory Blank Data Qualification Summary - SDG 05L078

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: December 7 through December 8, 2005

LDC Report Date: January 12, 2006

Matrix: Water

Parameters: Metals

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05L078

Sample Identification

079-021
079-020
079-022**
079-018
079-019
079-026
079-025
079-023**
079-024
079-028
079-029
079-026MS
079-026MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 13 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Metals. The metals analyzed were Calcium, Magnesium, Potassium, and Sodium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Calcium Magnesium	127 ug/L 123 ug/L	All samples in SDG 05L078

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VI. Duplicate Sample Analysis

Duplicate sample analyses were reviewed for each matrix as applicable.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
079-021L	Sodium	11 (≤10)	All samples in SDG 05L078	J (all detects)	A

XI. Sample Result Verification

All sample result verifications were acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIII. Field Duplicates

Samples 079-020 and 079-022** were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/L)		RPD
	079-020	079-022**	
Calcium	140	140	0
Magnesium	54.6	54.6	0

Compound	Concentration (mg/L)		RPD
	079-020	079-022**	
Potassium	1.27	1.27	0
Sodium	41.1	41.4	1

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, OPHA GW, CTO 79
Metals - Data Qualification Summary - SDG 05L078

SDG	Sample	Analyte	Flag	A or P	Reason
05L078	079-021 079-020 079-022** 079-018 079-019 079-026 079-025 079-023** 079-024 079-028 079-029	Sodium	J (all detects)	A	ICP serial dilution (%D)

Moffett Air Field, OPHA GW, CTO 79
Metals - Laboratory Blank Data Qualification Summary - SDG 05L078

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: December 7 through December 8, 2005

LDC Report Date: January 12, 2006

Matrix: Water

Parameters: Wet Chemistry

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05L078

Sample Identification

079-021
079-020
079-022**
079-018
079-019
079-026
079-025
079-023**
079-024
079-028
079-029
079-026MS
079-026DUP

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 13 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 300.0 for Chloride and Sulfate, EPA Method 310.1 for Alkalinity, and EPA Method 353.3 for Nitrate/Nitrite as Nitrogen.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Sample Result Verification

All sample result verifications were acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

Samples 079-020 and 079-022** were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L		RPD
	079-020	079-022**	
Chloride	31.6	33.1	5
Sulfate	186	195	5
Total alkalinity	407	404	1
Nitrate/Nitrite as N	0.153	1.03	148

X. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, OPHA GW, CTO 79
Wet Chemistry - Data Qualification Summary - SDG 05L078

No Sample Data Qualified in this SDG

Moffett Air Field, OPHA GW, CTO 79
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG 05L078

No Sample Data Qualified in this SDG

TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 13846

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: OPHA	PURCHASE ORDER NO.: 320848 Task 38
PROJECT LOCATION: Moffett Airfield	PROJECT NO.: 1990.099D
SAMPLER NAME: Lynn Jellison	AIRBILL NUMBER: 851803127389
PROJECT CONTACT: Lynn Jellison	PROJECT CONTACT PHONE NUMBER: (949-756-7558)

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 05L088

Project Information Section Do not submit to Laboratory

ANALYSES REQUIRED

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	EPA 8260B (VOCs)	EPA 8260B (carbon)	EPA 8260B (oxygenates)	EPA 8260B (TPH/BTEX)	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
099-034	12/9/05	0900	3	X		W	10d	X					TRIP Blank	-	-	TB
099-027	12/9/05	0810	6	X		W	10d	X	X	X	X		MCH-94A	-	-	FD
099-032	12/9/05	0925	6		X	W	10d	X	X	X	X		87B1	-	-	FD
099-031	12/9/05	1040	6	X		W	10d	X	X	X	X		W89-7	-	-	FD
099-030	12/9/05	1153	5	X		W	10d	X	X	X	X		W89-6	-	-	FD
	12/9/05															
10																
	1															

RELINQUISHED BY (Signature)	DATE 12/9/05	RECEIVED BY (Signature)	
COMPANY REC	TIME 1500	COMPANY FedEx	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:
OPHA
R2/2005

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

0019392-01

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 01-03-2006
EMAX Batch No.: 05L088

Attn: Lynn Jefferson

Tetra Tech EC, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, OPHA GW, CTO 79

Enclosed is the Laboratory report for samples received on 12/10/05.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
079-034	L088-01	12/09/05	WATER	VOLATILE ORGANICS BY GC/MS
079-027	L088-02	12/09/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-032	L088-03	12/09/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY
079-031	L088-04	12/09/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY

Sample ID	Control #	Col Date	Matrix	Analysis
079-030	L088-05	12/09/05	WATER	VOLATILE ORGANICS BY GC/MS
				CHLORIDE BY IC
				SULFATE BY IC
				NITRATE/NITRITE-N
				CA MG K NA
				ALKALINITY

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

EMAX LABORATORIES, INC. 1835 W. 205th Street, Torrance, CA 90501 Tel: (310) 618-8889 Fax: (310) 618-0818

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05L088

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Five (5) water samples were received on 12/10/05 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   Recoveries were within QC limit.

6. **Matrix Spike/Matrix Spike Duplicate**

   No MS/MSD sample was designated in this SDG.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

   TCE in L088-02 was manually reintegrated to correct for improper integration. Chromatograms of before and after manual integrations were kept on file for review.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
Batch No. : 05L088	Date Extracted: 12/14/05 05:55
Sample ID: 079-034	Date Analyzed: 12/14/05 05:55
Lab Samp ID: L088-01	Dilution Factor: 1
Lab File ID: RLC385	Matrix : WATER
Ext Btch ID: V067L33	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	98	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	109	75-125

2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
Batch No. : 05L088	Date Extracted: 12/14/05 06:31
Sample ID: 079-027	Date Analyzed: 12/14/05 06:31
Lab Samp ID: L088-02	Dilution Factor: 1
Lab File ID: RLC386	Matrix : WATER
Ext Btch ID: V067L33	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.7J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	47	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.5J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	160E	5	.2
VINYL CHLORIDE	.36J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	98	75-125
4-BROMOFLUOROBENZENE	118	75-125
TOLUENE-D8	107	75-125

2005

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
Batch No. : 05L088	Date Extracted: 12/14/05 14:37
Sample ID: 079-027DL	Date Analyzed: 12/14/05 14:37
Lab Samp ID: L088-02T	Dilution Factor: 25
Lab File ID: RLC400	Matrix : WATER
Ext Btch ID: V067L34	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	51J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	610	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	75-125
4-BROMOFLUOROBENZENE	116	75-125
TOLUENE-D8	108	75-125

2006

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
Batch No. : 05L088	Date Extracted: 12/14/05 07:06
Sample ID: 079-032	Date Analyzed: 12/14/05 07:06
Lab Samp ID: L088-03	Dilution Factor: 1
Lab File ID: RLC387	Matrix : WATER
Ext Btch ID: V067L33	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	.23J	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.22J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	1.2J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	90E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	75-125
4-BROMOFLUOROBENZENE	117	75-125
TOLUENE-D8	108	75-125

2007

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
Batch No. : 05L088	Date Extracted: 12/14/05 15:13
Sample ID: 079-032DL	Date Analyzed: 12/14/05 15:13
Lab Samp ID: L088-03T	Dilution Factor: 5
Lab File ID: RLC401	Matrix : WATER
Ext Btch ID: VO67L34	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	25	1
1,1,2,2-TETRACHLOROETHANE	ND	5	1
1,1,2-TRICHLOROETHANE	ND	25	1
1,1-DICHLOROETHANE	ND	25	1
1,1-DICHLOROETHENE	ND	25	1
1,2-DICHLOROETHANE	ND	2.5	1
1,2-DICHLOROPROPANE	ND	25	1
2-BUTANONE	ND	250	25
2-HEXANONE	ND	250	25
4-METHYL-2-PENTANONE	ND	250	25
ACETONE	ND	250	25
BENZENE	ND	2.5	1
BROMODICHLOROMETHANE	ND	25	1
BROMOFORM	ND	25	1.5
BROMOMETHANE	ND	25	1
CARBON TETRACHLORIDE	ND	2.5	1
CHLOROBENZENE	ND	25	1
CHLOROETHANE	ND	25	1
CHLOROFORM	ND	25	1
CHLOROMETHANE	ND	25	1
CIS-1,2-DICHLOROETHENE	1.2J	25	1
CIS-1,3-DICHLOROPROPENE	ND	2.5	1
DIBROMOCHLOROMETHANE	ND	25	1
ETHYLBENZENE	ND	2.5	1
XYLENES	ND	7.5	3.5
MTBE	ND	5	1
METHYLENE CHLORIDE	ND	25	2.5
STYRENE	ND	25	1
TETRACHLOROETHENE	ND	25	1
TOLUENE	ND	2.5	1
TRANS-1,2-DICHLOROETHENE	ND	25	1
TRANS-1,3-DICHLOROPROPENE	ND	2.5	1
TRICHLOROETHENE	86	25	1
VINYL CHLORIDE	ND	2.5	1
VINYL ACETATE	ND	250	2.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	75-125
4-BROMOFLUOROBENZENE	114	75-125
TOLUENE-D8	107	75-125

2013

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
Batch No. : 05L088	Date Extracted: 12/14/05 10:00
Sample ID: 079-031	Date Analyzed: 12/14/05 10:00
Lab Samp ID: L088-04	Dilution Factor: 1
Lab File ID: RLC392	Matrix : WATER
Ext Btch ID: VO67L33	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	97	75-125
4-BROMOFLUOROBENZENE	115	75-125
TOLUENE-D8	106	75-125

2017

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
Batch No. : 05L088	Date Extracted: 12/14/05 10:34
Sample ID: 079-030	Date Analyzed: 12/14/05 10:34
Lab Samp ID: L088-05	Dilution Factor: 1
Lab File ID: RLC393	Matrix : WATER
Ext Btch ID: V067L33	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	74E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	3.3J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	270E	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	75-125
4-BROMOFLUOROBENZENE	113	75-125
TOLUENE-D8	105	75-125

2018

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
Batch No. : 05L088	Date Extracted: 12/14/05 15:49
Sample ID: 079-030DL	Date Analyzed: 12/14/05 15:49
Lab Samp ID: L088-05T	Dilution Factor: 25
Lab File ID: RLC402	Matrix : WATER
Ext Btch ID: V067L34	% Moisture : NA
Calib. Ref.: RKC545	Instrument ID : T-067

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	90J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	ND	120	5
VINYL CHLORIDE	330	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	75-125
4-BROMOFLUOROBENZENE	114	75-125
TOLUENE-D8	107	75-125

2019

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05L088

METHOD 3010A/6010B
METALS BY ICP

Four (4) water samples were received on 12/10/05 for Metals analysis by Method 3010A/6010B in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at half of the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Serial Dilution / Post-Analytical Spike**

   Sample L088-02 was analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. **Matrix Spike/Matrix Spike Duplicate**

   No MS/MSD sample was designated in this SDG.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
SDG NO. : 05L088	Date Extracted: 12/13/05 09:45
Sample ID: 079-027	Date Analyzed: 12/23/05 18:03
Lab Samp ID: L088-02	Dilution Factor: 1
Lab File ID: I73L030031	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030021	Instrument ID : EMAXI173

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	117	2	.1
Magnesium	43.3	1	.1
Potassium	1.47J	9	1
Sodium	35.5	5	.25

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: 12/09/05
Project : MFA, OPHA GW, CTO 79	Date Received: 12/10/05
SDG NO. : 05L088	Date Extracted: 12/13/05 09:45
Sample ID: 079-032	Date Analyzed: 12/23/05 18:09
Lab Samp ID: L088-03	Dilution Factor: 1
Lab File ID: I73L030032	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030021	Instrument ID : EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	136	2	.1
Magnesium	44.4	1	.1
Potassium	1.32J	9	1
Sodium	34.3	5	.25

7004

METHOD 3010A/6010B
METALS BY ICP

Client	: TETRA TECH EC, INC.	Date Collected:	12/09/05
Project	: MFA, OPHA GW, CTO 79	Date Received:	12/10/05
SDG NO.	: 05L088	Date Extracted:	12/13/05 09:45
Sample ID	: 079-031	Date Analyzed:	12/23/05 18:28
Lab Samp ID	: L088-04	Dilution Factor:	1
Lab File ID	: I73L030035	Matrix :	WATER
Ext Btch ID	: IPL029W	% Moisture :	NA
Calib. Ref.	: I73L030033	Instrument ID :	EMAXTI73

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	176	2	.1
Magnesium	75.1	1	.1
Potassium	1.93J	9	1
Sodium	38.6	5	.25

METHOD 3010A/6010B
METALS BY ICP

Client	: TETRA TECH EC, INC.	Date Collected:	12/09/05
Project	: MFA, OPHA GW, CTO 79	Date Received:	12/10/05
SDG NO.	: 05L088	Date Extracted:	12/13/05 09:45
Sample ID:	079-030	Date Analyzed:	12/23/05 18:34
Lab Samp ID:	L088-05	Dilution Factor:	1
Lab File ID:	I73L030036	Matrix :	WATER
Ext Btch ID:	IPL029W	% Moisture :	NA
Calib. Ref.:	I73L030033	Instrument ID :	EMAXT173

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	75	2	.1
Magnesium	60.1	1	.1
Potassium	1.75J	9	1
Sodium	40	5	.25

METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH EC, INC.	Date Collected: NA
Project : MFA, OPHA GW, CTO 79	Date Received: 12/13/05
SDG NO. : 05L088	Date Extracted: 12/13/05 09:45
Sample ID: MBLK1W	Date Analyzed: 12/23/05 16:00
Lab Samp ID: IPL029WB	Dilution Factor: 1
Lab File ID: I73L030011	Matrix : WATER
Ext Btch ID: IPL029W	% Moisture : NA
Calib. Ref.: I73L030009	Instrument ID : EMAXT173

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Calcium	ND	2	.1
Magnesium	ND	1	.1
Potassium	ND	9	1
Sodium	ND	5	.25

7007

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05L088

METHOD 300.0
ANIONS

Four (4) water samples were received on 12/10/05 for Chloride and Sulfate analyses by method 300.0 in accordance with "Method for Determination of Inorganic Anions by Ion Chromatography", EPA 600/84-017.

1. **Holding Time**

   Analyses met holding time criteria.

2. **Method Blank**

   Method blanks were free of contamination at half of the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limits.

4. **Duplicate**

   Duplicate sample was not designated in this SDG.

5. **Matrix Spike**

   MS sample was not designated in this SDG.

6. **Sample Analysis**

   Samples wereanalyzed according to the prescribed QC procedures. All criteria were met.

METHOD 300.0
CHLORIDE

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05L088

Matrix : WATER
Instrument ID : 100

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICL020WB	ND	1	NA	1	.1	12/13/0517:34	NA	AL13-03	AL13-01	ICL020W	NA	NA
LCS1W	ICL020WL	4.68	1	NA	1	.1	12/13/0517:54	NA	AL13-04	AL13-01	ICL020W	NA	NA
LCD1W	ICL020WC	4.67	1	NA	1	.1	12/13/0518:14	NA	AL13-05	AL13-01	ICL020W	NA	NA
079-030	L088-05	29.2	20	NA	20	2	12/13/0520:15	NA	AL13-11	AL13-01	ICL020W	12/09/05	12/10/05
MBLK2W	ICL024WB	ND	1	NA	1	.1	12/15/0520:33	NA	AL15-34	AL15-25	ICL024W	NA	NA
LCS2W	ICL024WL	4.83	1	NA	1	.1	12/15/0520:53	NA	AL15-35	AL15-25	ICL024W	NA	NA
LCD2W	ICL024WC	4.83	1	NA	1	.1	12/15/0521:13	NA	AL15-36	AL15-25	ICL024W	NA	NA
079-027	L088-02	29.8	20	NA	20	2	12/16/0506:15	NA	AL15-63	AL15-61	ICL024W	12/09/05	12/10/05
079-032	L088-03	36.7	20	NA	20	2	12/16/0506:35	NA	AL15-64	AL15-61	ICL024W	12/09/05	12/10/05
079-031	L088-04	37.2	20	NA	20	2	12/16/0506:55	NA	AL15-65	AL15-61	ICL024W	12/09/05	12/10/05

2008

METHOD 300.0
SULFATE

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05L088

Matrix : WATER
Instrument ID : 100

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICL020WB	ND	1	NA	.5	.25	12/13/0517:34	NA	AL13-03	AL13-01	ICL020W	NA	NA
LCS1W	ICL020WL	4.68	1	NA	.5	.25	12/13/0517:54	NA	AL13-04	AL13-01	ICL020W	NA	NA
LCD1W	ICL020WC	4.79	1	NA	.5	.25	12/13/0518:14	NA	AL13-05	AL13-01	ICL020W	NA	NA
079-030	L088-05	113	20	NA	10	5	12/13/0520:15	NA	AL13-11	AL13-01	ICL020W	12/09/05	12/10/05
MBLK2W	ICL024WB	ND	1	NA	.5	.25	12/15/0520:33	NA	AL15-34	AL15-25	ICL024W	NA	NA
LCS2W	ICL024WL	5.02	1	NA	.5	.25	12/15/0520:53	NA	AL15-35	AL15-25	ICL024W	NA	NA
LCD2W	ICL024WC	4.7	1	NA	.5	.25	12/15/0521:13	NA	AL15-36	AL15-25	ICL024W	NA	NA
079-027	L088-02	158	20	NA	10	5	12/16/0506:15	NA	AL15-63	AL15-61	ICL024W	12/09/05	12/10/05
079-032	L088-03	213	20	NA	10	5	12/16/0506:35	NA	AL15-64	AL15-61	ICL024W	12/09/05	12/10/05
079-031	L088-04	283	20	NA	10	5	12/16/0506:55	NA	AL15-65	AL15-61	ICL024W	12/09/05	12/10/05

8005

EMAX LABORATORIES, INC.

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 05L088

METHOD 310.1
ALKALINITY AS CACO3

Four (4) water samples were received on 12/10/05 for Bicarbonate, Carbonate and Total Alkalinity as CACO3 analyses by Method 310.1 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Duplicate**

   Duplicate sample was not designated in this SDG.

5. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

METHOD 310.1
BICARBONATE ALKALINITY AS CACO3

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05L088

Matrix : WATER
Instrument ID : 153

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALL010W8	ND	1	NA	5	1	12/13/0515:30	NA	ALL010W-01	NA	ALL010W	NA	NA
LCS1W	ALL010WL	54.3	1	NA	5	1	12/13/0515:35	NA	ALL010W-02	NA	ALL010W	NA	NA
LCD1W	ALL010WC	57.0	1	NA	5	1	12/13/0515:40	NA	ALL010W-03	NA	ALL010W	NA	NA
079-027	L088-02	318	1	NA	5	1	12/13/0517:05	NA	ALL010W-20	NA	ALL010W	12/09/05	12/10/05
079-032	L088-03	312	1	NA	5	1	12/13/0517:10	NA	ALL010W-21	NA	ALL010W	12/09/05	12/10/05
079-031	L088-04	472	1	NA	5	1	12/13/0517:15	NA	ALL010W-22	NA	ALL010W	12/09/05	12/10/05
079-030	L088-05	337	1	NA	5	1	12/13/0517:20	NA	ALL010W-23	NA	ALL010W	12/09/05	12/10/05

8058

METHOD 310.1
CARBONATE ALKALINITY AS CACO3

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05L088

Matrix : WATER
Instrument ID : I53

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLKTW	ALL010WB	ND	1	NA	5	1	12/13/0515:30	NA	ALL010W-01	NA	ALL010W	NA	NA
079-027	L088-02	ND	1	NA	5	1	12/13/0517:05	NA	ALL010W-20	NA	ALL010W	12/09/05	12/10/05
079-032	L088-03	ND	1	NA	5	1	12/13/0517:10	NA	ALL010W-21	NA	ALL010W	12/09/05	12/10/05
079-031	L088-04	ND	1	NA	5	1	12/13/0517:15	NA	ALL010W-22	NA	ALL010W	12/09/05	12/10/05
079-030	L088-05	ND	1	NA	5	1	12/13/0517:20	NA	ALL010W-23	NA	ALL010W	12/09/05	12/10/05

0908

METHOD 310.1
TOTAL ALKALINITY AS CACO3

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : 05L088

Matrix : WATER
Instrument ID : I53

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ALL010WB	ND	1	NA	5	1	12/13/0515:30	NA	ALL010W-01	NA	ALL010W	NA	NA
LCS1W	ALL010WL	54.3	1	NA	5	1	12/13/0515:35	NA	ALL010W-02	NA	ALL010W	NA	NA
LCD1W	ALL010WC	57.0	1	NA	5	1	12/13/0515:40	NA	ALL010W-03	NA	ALL010W	NA	NA
079-027	L088-02	318	1	NA	5	1	12/13/0517:05	NA	ALL010W-20	NA	ALL010W	12/09/05	12/10/05
079-032	L088-03	312	1	NA	5	1	12/13/0517:10	NA	ALL010W-21	NA	ALL010W	12/09/05	12/10/05
079-031	L088-04	472	1	NA	5	1	12/13/0517:15	NA	ALL010W-22	NA	ALL010W	12/09/05	12/10/05
079-030	L088-05	337	1	NA	5	1	12/13/0517:20	NA	ALL010W-23	NA	ALL010W	12/09/05	12/10/05

8061

EMAX LABORATORIES, INC.

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA. OPHA GW, CTO 79

SDG: 05L088

METHOD 353.3
NITRATE/NITRITE-N

Four (4) water samples were received on 12/10/05 for Nitrate/Nitrite-N analysis by Method 353.3 in accordance with "Method for Chemical Analysis of Water and Wastewater", EPA 600/4-79-020 (1983).

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Duplicate**

   No duplicate sample was designated in this SDG.

5. **Matrix Spike**

   No MS sample was designated in this SDG.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

   All results were reported as Nitrogen concentration.

METHOD 353.3
NITRATE/NITRITE-N

Client : TETRA TECH EC, INC.
Project : MFA, OPHA GW, CTO 79
Batch No. : OSL088

Matrix : WATER
Instrument ID : I70

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	NAL004WB	ND	1	NA	.1	.02	12/29/0514:09	NA	NAL004W-10	NAL004W-07	NAL004W	NA	NA
LCS1W	NAL004WL	.497	1	NA	.1	.02	12/29/0514:10	NA	NAL004W-11	NAL004W-07	NAL004W	NA	NA
LCD1W	NAL004WC	.493	1	NA	.1	.02	12/29/0514:11	NA	NAL004W-12	NAL004W-07	NAL004W	NA	NA
079-027	L088-02	ND	1	NA	.1	.02	12/29/0514:29	NA	NAL004W-30	NAL004W-19	NAL004W	12/09/05	12/10/05
079-032	L088-03R	1.76	4	NA	.4	.08	12/29/0514:33	NA	NAL004W-34	NAL004W-31	NAL004W	12/09/05	12/10/05
079-031	L088-04	ND	1	NA	.1	.02	12/29/0514:34	NA	NAL004W-35	NAL004W-31	NAL004W	12/09/05	12/10/05
079-030	L088-05	ND	1	NA	.1	.02	12/29/0514:35	NA	NAL004W-36	NAL004W-31	NAL004W	12/09/05	12/10/05

8065

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: December 9, 2005

LDC Report Date: January 12, 2006

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05L088

Sample Identification

079-034
079-027
079-032**
079-031
079-030
079-027DL
079-032DL**
079-030DL

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
11/20/05	Acetone	0.030 (≥0.05)	All samples in SDG 05L088	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
12/14/05 (RLC396)	Chloromethane	25.4	079-027DL 079-032DL**	J (all detects) UJ (all non-detects)	A
	Bromomethane	25.8	079-030DL MBLK2W	J (all detects) UJ (all non-detects)	

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
12/14/05 (RLC376)	Acetone	0.030 (≥0.05)	079-034 079-027 079-032** 079-031 079-030 MBLK1W	J (all detects) UJ (all non-detects)	A
12/14/05 (RLC396)	Acetone	0.031 (≥0.05)	079-027DL 079-032DL** 079-030DL MBLK2W	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
079-027 079-032**	Trichloroethene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
079-030	cis-1,2-Dichloroethene Vinyl chloride	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Sample 079-034 was identified as a trip blank. No volatile contaminants were found in this blank.

Moffett Air Field, OPHA GW, CTO 79
Volatiles - Data Qualification Summary - SDG 05L088

SDG	Sample	Compound	Flag	A or P	Reason
05L088	079-034 079-027 079-032** 079-031 079-030 079-027DL 079-032DL** 079-030DL	Acetone	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
05L088	079-027DL 079-032DL** 079-030DL	Chloromethane Bromomethane	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
05L088	079-034 079-027 079-032** 079-031 079-030 079-027DL 079-032DL** 079-030DL	Acetone	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
05L088	079-027 079-032**	Trichloroethene	J (all detects)	A	Compound quantitation and CRQLs
05L088	079-030	cis-1,2-Dichloroethene Vinyl chloride	J (all detects) J (all detects)	A	Compound quantitation and CRQLs

Moffett Air Field, OPHA GW, CTO 79
Volatiles - Laboratory Blank Data Qualification Summary - SDG 05L088

No Sample Data Qualified in this SDG

LDC Report# 14498B4

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: December 9, 2005

LDC Report Date: January 12, 2006

Matrix: Water

Parameters: Metals

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05L088

Sample Identification

079-027
079-032**
079-031
079-030

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Metals. The metals analyzed were Calcium, Magnesium, Potassium, and Sodium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Calcium Magnesium	127 ug/L 123 ug/L	All samples in SDG 05L088

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VI. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
079-021L	Sodium	11 (≤10)	All samples in SDG 05L088	J (all detects)	A

XI. Sample Result Verification

All sample result verifications were acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, OPHA GW, CTO 79
Metals - Data Qualification Summary - SDG 05L088

SDG	Sample	Analyte	Flag	A or P	Reason
05L088	079-027 079-032** 079-031 079-030	Sodium	J (all detects)	A	ICP serial dilution (%D)

Moffett Air Field, OPHA GW, CTO 79
Metals - Laboratory Blank Data Qualification Summary - SDG 05L088

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: December 9, 2005

LDC Report Date: January 12, 2006

Matrix: Water

Parameters: Wet Chemistry

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 05L088

Sample Identification

079-027
079-032**
079-031
079-030

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 300.0 for Chloride and Sulfate, EPA Method 310.1 for Alkalinity, and EPA Method 353.3 for Nitrate/Nitrite as Nitrogen.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

V. Duplicates

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Sample Result Verification

All sample result verifications were acceptable for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

Moffett Air Field, OPHA GW, CTO 79
Wet Chemistry - Data Qualification Summary - SDG 05L088

No Sample Data Qualified in this SDG

Moffett Air Field, OPHA GW, CTO 79
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG 05L088

No Sample Data Qualified in this SDG

TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 10849

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Crow Park N.A. - RS/LCS	PURCHASE ORDER NO.: 26945 - Task #38
PROJECT LOCATION: MRA	PROJECT NO.: 1990.270D
SAMPLER NAME: D. Hunter	AIRBILL NUMBER: 4555 3123 8071
PROJECT CONTACT: Lynn Jefferson	PROJECT CONTACT PHONE NUMBER: 619/758-4338

ANALYSES REQUIRED

LABORATORY NAME: CMAX

LABORATORY ID (FOR LABORATORY): 06C209

Project Information Section Do not submit to Laboratory

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	COMMENTS	LOCATION	DEPTH START	DEPTH END	QC
079-052	3-21-06	1135	3	X		W	10 day		Trip Blank			TB
079-038	3-21-06	1055	3	X		W	10 day		MCH-3LA			Reg
079-039	3-21-06	1145	3	X		W	10 day		MCH-4LA			Reg
079-040	3-21-06	1150	3		X	W	10 day		MCH-4LA			FD
079-036	3-21-06	1405	3	X		W	10 day		MCH-1LA			Reg
079-037	3-21-06	1435	3	X		W	10 day		MCH-2LA			Reg
079-042	3-21-06	1520	3	X		W	10 day		MCH-6LA			Reg
079-043	3-22-06	0820	3	X		W	10 day		MCH-7LA			Reg
079-044	3-22-06	0850	9	X		W	10 day	RUN MS/MSD	MCH-8LA			Reg
079-041	3-22-06	0945	3	X		W	10 day		MCH-5LA			Reg

RELINQUISHED BY (Signature)	DATE 3-22-06	RECEIVED BY (Signature) FEDX	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY TT	TIME 1401	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	COMPOSITE DESCRIPTION
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	**SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)**
COMPANY	TIME	COMPANY	TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT: OPHA - R3/06

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

00199042-01

TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 10850

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Otay Park M.A. - R3/04	PURCHASE ORDER NO: 20345 In-K 58
PROJECT LOCATION: MRP	PROJECT NO: [illegible] 079.07D
SAMPLER NAME: D. Harris	AIRBILL NUMBER: 8455 9123 8071
PROJECT CONTACT: Lynn Jefferson	PROJECT CONTACT PHONE NUMBER: 949-756 [illegible]

ANALYSES REQUIRED

LABORATORY NAME: LMAX

LABORATORY ID (FOR LABORATORY): 06C209

COMMENTS

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT
079-046	3-22-06	1030	3	X		W	14d
079-047	3-22-06	1130	3	X		W	14d
079-045	3-22-06	1212	3	X		W	14d
079-049	3-22-06	1340	3	X		W	14d
079-050	3-22-06	1455	3	X		W	14d
079-051	3-22-06	1500	3		X	W	14d
079-048	3-22-06	1540	3	X		W	14d

Project Information Section Do not submit to Laboratory

LOCATION	DEPTH START	DEPTH END	QC
MCH-10LA			Reg
MCH-11UA			Reg
MCH-9UA			Reg
W89-7			Reg
8781			Reg
8781			FD
W89-6			Reg

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

SAMPLING COMMENT:
OPHA R3/04

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax:(310) 618-0818

Date: 04-04-2006
EMAX Batch No.: 06C209

Attn: Lynn Jefferson

Tetra Tech EC, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, OPHA GW, CTO 79

Enclosed is the Laboratory report for samples received on 03/23/06.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
079-052	C209-01	03/21/06	WATER	VOLATILE ORGANICS BY GC/MS
079-038	C209-02	03/21/06	WATER	VOLATILE ORGANICS BY GC/MS
079-039	C209-03	03/21/06	WATER	VOLATILE ORGANICS BY GC/MS
079-040	C209-04	03/21/06	WATER	VOLATILE ORGANICS BY GC/MS
079-036	C209-05	03/21/06	WATER	VOLATILE ORGANICS BY GC/MS
079-037	C209-06	03/21/06	WATER	VOLATILE ORGANICS BY GC/MS
079-042	C209-07	03/21/06	WATER	VOLATILE ORGANICS BY GC/MS
079-043	C209-08	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-044	C209-09	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-041	C209-10	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-046	C209-11	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-047	C209-12	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-045	C209-13	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-049	C209-14	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-050	C209-15	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-051	C209-16	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-048	C209-17	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-044MS	C209-09M	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS
079-044MSD	C209-09S	03/22/06	WATER	VOLATILE ORGANICS BY GC/MS

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

LABORATORY REPORT FOR

TETRA TECH EC, INC.

MFA, OPHA GW, CTO 79

METHOD SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

SDG#: 06C209

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 06C209

METHOD SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Seventeen (17) water samples were received on 03/23/06 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at half of the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   Recoveries were within QC limit.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample C209-09 was spiked. All recoveries were within QC limits.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/25/06 01:40
Sample ID: 079-052	Date Analyzed: 03/25/06 01:40
Lab Samp ID: C209-01	Dilution Factor: 1
Lab File ID: RCV541	Matrix : WATER
Ext Btch ID: V001C40	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	111	75-125
4-BROMOFLUOROBENZENE	110	75-125
TOLUENE-D8	112	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/25/06 02:18
Sample ID: 079-038	Date Analyzed: 03/25/06 02:18
Lab Samp ID: C209-02	Dilution Factor: 1
Lab File ID: RCV542	Matrix : WATER
Ext Btch ID: V001C40	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.25J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	110E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	.43J	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	4.5J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	140E	5	.2
VINYL CHLORIDE	.22J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	117	75-125
4-BROMOFLUOROBENZENE	106	75-125
TOLUENE-D8	105	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/27/06 20:37
Sample ID: 079-038DL	Date Analyzed: 03/27/06 20:37
Lab Samp ID: C209-02T	Dilution Factor: 10
Lab File ID: RCV568	Matrix : WATER
Ext Btch ID: V001C41	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	130	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	4.1J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	160	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	118	75-125
4-BROMOFLUOROBENZENE	104	75-125
TOLUENE-D8	103	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/25/06 02:55
Sample ID: 079-039	Date Analyzed: 03/25/06 02:55
Lab Samp ID: C209-03	Dilution Factor: 1
Lab File ID: RCV543	Matrix : WATER
Ext Btch ID: V001C40	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.35J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	43	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.2J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	280E	5	.2
VINYL CHLORIDE	.26J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	114	75-125
4-BROMOFLUOROBENZENE	107	75-125
TOLUENE-D8	107	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/27/06 19:59
Sample ID: 079-039DL	Date Analyzed: 03/27/06 19:59
Lab Samp ID: C209-03T	Dilution Factor: 10
Lab File ID: RCV567	Matrix : WATER
Ext Btch ID: V001C41	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	43J	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	320	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	75-125
4-BROMOFLUOROBENZENE	93	75-125
TOLUENE-D8	95	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/25/06 03:33
Sample ID: 079-040	Date Analyzed: 03/25/06 03:33
Lab Samp ID: C209-04	Dilution Factor: 1
Lab File ID: RCV544	Matrix : WATER
Ext Btch ID: V001C40	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.37J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	43	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.3J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	280E	5	.2
VINYL CHLORIDE	.3J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	117	75-125
4-BROMOFLUOROBENZENE	108	75-125
TOLUENE-D8	106	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/25/06 04:10
Sample ID: 079-036	Date Analyzed: 03/25/06 04:10
Lab Samp ID: C209-05	Dilution Factor: 1
Lab File ID: RCV545	Matrix : WATER
Ext Btch ID: V001C40	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.75J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	130E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	7.5	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	120E	5	.2
VINYL CHLORIDE	1.1	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	117	75-125
4-BROMOFLUOROBENZENE	107	75-125
TOLUENE-D8	108	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/27/06 18:43
Sample ID: 079-036DL	Date Analyzed: 03/27/06 18:43
Lab Samp ID: C209-05T	Dilution Factor: 10
Lab File ID: RCV565	Matrix : WATER
Ext Btch ID: V001C41	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	140	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	6.5J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	120	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	114	75-125
4-BROMOFLUOROBENZENE	100	75-125
TOLUENE-D8	102	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/25/06 04:48
Sample ID: 079-037	Date Analyzed: 03/25/06 04:48
Lab Samp ID: C209-06	Dilution Factor: 1
Lab File ID: RCV546	Matrix : WATER
Ext Btch ID: V001C40	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	2.3J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	260E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	22	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	200E	5	.2
VINYL CHLORIDE	2.9	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	115	75-125
4-BROMOFLUOROBENZENE	106	75-125
TOLUENE-D8	107	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/27/06 17:21
Sample ID: 079-037DL	Date Analyzed: 03/27/06 17:21
Lab Samp ID: C209-06I	Dilution Factor: 25
Lab File ID: RCV563	Matrix : WATER
Ext Btch ID: V001C41	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	380	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	20J	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	220	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	112	75-125
4-BROMOFLUOROBENZENE	97	75-125
TOLUENE-D8	96	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/25/06 05:26
Sample ID: 079-042	Date Analyzed: 03/25/06 05:26
Lab Samp ID: C209-07	Dilution Factor: 1
Lab File ID: RCV547	Matrix : WATER
Ext Btch ID: V001C40	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.36J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	15	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	.88J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	310E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	117	75-125
4-BROMOFLUOROBENZENE	108	75-125
TOLUENE-D8	107	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/21/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/27/06 16:42
Sample ID: 079-042DL	Date Analyzed: 03/27/06 16:42
Lab Samp ID: C209-07T	Dilution Factor: 25
Lab File ID: RCV562	Matrix : WATER
Ext Btch ID: V001C41	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	9.8J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	390	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	114	75-125
4-BROMOFLUOROBENZENE	100	75-125
TOLUENE-D8	101	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/25/06 06:03
Sample ID: 079-043	Date Analyzed: 03/25/06 06:03
Lab Samp ID: C209-08	Dilution Factor: 1
Lab File ID: RCV548	Matrix : WATER
Ext Btch ID: V001C40	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.45J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	.29J	5	.2
CIS-1,2-DICHLOROETHENE	96E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	4.1J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	160E	5	.2
VINYL CHLORIDE	.39J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	116	75-125
4-BROMOFLUOROBENZENE	108	75-125
TOLUENE-D8	106	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/27/06 17:59
Sample ID: 079-043DL	Date Analyzed: 03/27/06 17:59
Lab Samp ID: C209-08T	Dilution Factor: 10
Lab File ID: RCV564	Matrix : WATER
Ext Btch ID: V001C41	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	100	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	3.3J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	160	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	116	75-125
4-BROMOFLUOROBENZENE	96	75-125
TOLUENE-D8	97	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/27/06 16:04
Sample ID: 079-044	Date Analyzed: 03/27/06 16:04
Lab Samp ID: C209-09R	Dilution Factor: 1
Lab File ID: RCV561	Matrix : WATER
Ext Btch ID: VO01C41	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	.37J	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	75-125
4-BROMOFLUOROBENZENE	94	75-125
TOLUENE-D8	96	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/28/06 22:02
Sample ID: 079-041	Date Analyzed: 03/28/06 22:02
Lab Samp ID: C209-10R	Dilution Factor: 1
Lab File ID: RCV603	Matrix : WATER
Ext Btch ID: V001C44	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	3.8J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	.39J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	50	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	75-125
4-BROMOFLUOROBENZENE	97	75-125
TOLUENE-D8	97	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/28/06 22:40
Sample ID: 079-046	Date Analyzed: 03/28/06 22:40
Lab Samp ID: C209-11R	Dilution Factor: 1
Lab File ID: RCV604	Matrix : WATER
Ext Btch ID: VO01C44	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	.2J	5	.2
CIS-1,2-DICHLOROETHENE	1.8J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	63E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	75-125
4-BROMOFLUOROBENZENE	92	75-125
TOLUENE-D8	94	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/29/06 08:09
Sample ID: 079-046DL	Date Analyzed: 03/29/06 08:09
Lab Samp ID: C209-11T	Dilution Factor: 5
Lab File ID: RCV619	Matrix : WATER
Ext Btch ID: V001C46	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	25	1
1,1,2,2-TETRACHLOROETHANE	ND	5	1
1,1,2-TRICHLOROETHANE	ND	25	1
1,1-DICHLOROETHANE	ND	25	1
1,1-DICHLOROETHENE	ND	25	1
1,2-DICHLOROETHANE	ND	2.5	1
1,2-DICHLOROPROPANE	ND	25	1
2-BUTANONE	ND	250	25
2-HEXANONE	ND	250	25
4-METHYL-2-PENTANONE	ND	250	25
ACETONE	ND	250	25
BENZENE	ND	2.5	1
BROMODICHLOROMETHANE	ND	25	1
BROMOFORM	ND	25	1.5
BROMOMETHANE	ND	25	1
CARBON TETRACHLORIDE	ND	2.5	1
CHLOROBENZENE	ND	25	1
CHLOROETHANE	ND	25	1
CHLOROFORM	ND	25	1
CHLOROMETHANE	ND	25	1
CIS-1,2-DICHLOROETHENE	2J	25	1
CIS-1,3-DICHLOROPROPENE	ND	2.5	1
DIBROMOCHLOROMETHANE	ND	25	1
ETHYLBENZENE	ND	2.5	1
XYLENES	ND	7.5	3.5
MTBE	ND	5	1
METHYLENE CHLORIDE	ND	25	2.5
STYRENE	ND	25	1
TETRACHLOROETHENE	ND	25	1
TOLUENE	ND	2.5	1
TRANS-1,2-DICHLOROETHENE	ND	25	1
TRANS-1,3-DICHLOROPROPENE	ND	2.5	1
TRICHLOROETHENE	71	25	1
VINYL CHLORIDE	ND	2.5	1
VINYL ACETATE	ND	250	2.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	75-125
4-BROMOFLUOROBENZENE	94	75-125
TOLUENE-D8	96	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/28/06 23:18
Sample ID: 079-047	Date Analyzed: 03/28/06 23:18
Lab Samp ID: C209-12R	Dilution Factor: 1
Lab File ID: RCV605	Matrix : WATER
Ext Btch ID: V001C44	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : Y-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.32J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	81E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	3.1J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	180E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	75-125
4-BROMOFLUOROBENZENE	97	75-125
TOLUENE-D8	95	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/29/06 07:31
Sample ID: 079-047DL	Date Analyzed: 03/29/06 07:31
Lab Samp ID: C209-12T	Dilution Factor: 10
Lab File ID: RCV618	Matrix : WATER
Ext Btch ID: V001C46	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	96	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	2.5J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	210	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	115	75-125
4-BROMOFLUOROBENZENE	96	75-125
TOLUENE-D8	94	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/28/06 23:56
Sample ID: 079-045	Date Analyzed: 03/28/06 23:56
Lab Samp ID: C209-13R	Dilution Factor: 1
Lab File ID: RCV606	Matrix : WATER
Ext Btch ID: V001C44	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.43J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	39	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.2J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	260E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	75-125
4-BROMOFLUOROBENZENE	90	75-125
TOLUENE-D8	90	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/29/06 06:53
Sample ID: 079-045DL	Date Analyzed: 03/29/06 06:53
Lab Samp ID: C209-13T	Dilution Factor: 25
Lab File ID: RCV617	Matrix : WATER
Ext Btch ID: V001C46	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	43J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	380	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	109	75-125
4-BROMOFLUOROBENZENE	95	75-125
TOLUENE-D8	97	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/28/06 21:24
Sample ID: 079-049	Date Analyzed: 03/28/06 21:24
Lab Samp ID: C209-14R	Dilution Factor: 1
Lab File ID: RCV602	Matrix : WATER
Ext Btch ID: V001C44	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	75-125
4-BROMOFLUOROBENZENE	97	75-125
TOLUENE-D8	100	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/28/06 18:52
Sample ID: 079-050	Date Analyzed: 03/28/06 18:52
Lab Samp ID: C209-15	Dilution Factor: 1
Lab File ID: RCV598	Matrix : WATER
Ext Btch ID: V001C44	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	.89J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	51E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	75-125
4-BROMOFLUOROBENZENE	97	75-125
TOLUENE-D8	98	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/29/06 10:53
Sample ID: 079-050DL	Date Analyzed: 03/29/06 10:53
Lab Samp ID: C209-15T	Dilution Factor: 5
Lab File ID: RCV623	Matrix : WATER
Ext Btch ID: V001C46	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLORDETHANE	ND	25	1
1,1,2,2-TETRACHLOROETHANE	ND	5	1
1,1,2-TRICHLOROETHANE	ND	25	1
1,1-DICHLOROETHANE	ND	25	1
1,1-DICHLOROETHENE	ND	25	1
1,2-DICHLOROETHANE	ND	2.5	1
1,2-DICHLOROPROPANE	ND	25	1
2-BUTANONE	ND	250	25
2-HEXANONE	ND	250	25
4-METHYL-2-PENTANONE	ND	250	25
ACETONE	ND	250	25
BENZENE	ND	2.5	1
BROMODICHLOROMETHANE	ND	25	1
BROMOFORM	ND	25	1.5
BROMOMETHANE	ND	25	1
CARBON TETRACHLORIDE	ND	2.5	1
CHLOROBENZENE	ND	25	1
CHLOROETHANE	ND	25	1
CHLOROFORM	ND	25	1
CHLOROMETHANE	ND	25	1
CIS-1,2-DICHLOROETHENE	ND	25	1
CIS-1,3-DICHLOROPROPENE	ND	2.5	1
DIBROMOCHLOROMETHANE	ND	25	1
ETHYLBENZENE	ND	2.5	1
XYLENES	ND	7.5	3.5
MTBE	ND	5	1
METHYLENE CHLORIDE	ND	25	2.5
STYRENE	ND	25	1
TETRACHLOROETHENE	ND	25	1
TOLUENE	ND	2.5	1
TRANS-1,2-DICHLOROETHENE	ND	25	1
TRANS-1,3-DICHLOROPROPENE	ND	2.5	1
TRICHLOROETHENE	57	25	1
VINYL CHLORIDE	ND	2.5	1
VINYL ACETATE	ND	250	2.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	75-125
4-BROMOFLUOROBENZENE	100	75-125
TOLUENE-D8	101	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/28/06 19:30
Sample ID: 079-051	Date Analyzed: 03/28/06 19:30
Lab Samp ID: C209-16	Dilution Factor: 1
Lab File ID: RCV599	Matrix : WATER
Ext Btch ID: V001C44	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	.84J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	49	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	75-125
4-BROMOFLUOROBENZENE	93	75-125
TOLUENE-D8	94	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/28/06 20:08
Sample ID: 079-048	Date Analyzed: 03/28/06 20:08
Lab Samp ID: C209-17	Dilution Factor: 1
Lab File ID: RCV600	Matrix : WATER
Ext Btch ID: VO01C44	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.24J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	190E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	3.7J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	.72J	5	.2
VINYL CHLORIDE	51E	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	110	75-125
4-BROMOFLUOROBENZENE	97	75-125
TOLUENE-D8	98	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 03/22/06
Project : MFA, OPHA GW, CTO 79	Date Received: 03/23/06
Batch No. : 06C209	Date Extracted: 03/29/06 09:29
Sample ID: 079-048DL	Date Analyzed: 03/29/06 09:29
Lab Samp ID: C209-17T	Dilution Factor: 10
Lab File ID: RCV621	Matrix : WATER
Ext Btch ID: V001C46	% Moisture : NA
Calib. Ref.: RCV007	Instrument ID : T-001

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	260	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	3.3J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	50	2
VINYL CHLORIDE	57	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	115	75-125
4-BROMOFLUOROBENZENE	102	75-125
TOLUENE-D8	103	75-125

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: March 21 through March 22, 2006

LDC Report Date: April 21, 2006

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 06C209

Sample Identification

079-052	079-036DL
079-038	079-037DL
079-039	079-042DL
079-040**	079-043DL
079-036	079-046DL
079-037	079-047DL
079-042	079-045DL
079-043	079-050DL
079-044	079-048DL
079-041	079-044MS
079-046	079-044MSD
079-047	
079-045	
079-049	
079-050	
079-051**	
079-048	
079-038DL	
079-039DL	
079-040DL**	

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 31 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
3/2/06	2-Butanone	0.049 (≥0.05)	All samples in SDG 06C209	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/27/06	Vinyl acetate	34	079-044 079-038DL 079-039DL 079-040DL** 079-036DL 079-037DL 079-042DL 079-043DL MBLK2W	J (all detects) UJ (all non-detects)	A

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
3/28/06	2-Butanone	0.044 (≥0.05)	079-041 079-046 079-047 079-045 079-049 079-050 079-051** 079-048 MBLK3W	J (all detects) UJ (all non-detects)	A
3/29/06	2-Butanone	0.047 (≥0.05)	079-046DL 079-047DL 079-045DL 079-050DL 079-048DL MBLK4W	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
079-038 079-036 079-037 079-043 079-047	cis-1,2-Dichloroethene Trichloroethene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A
079-039 079-040** 079-042 079-046 079-045 079-050	Trichloroethene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
079-048	cis-1,2-Dichloroethene Vinyl chloride	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 079-039 and 079-040**, samples 079-050 and 079-051**, samples 079-039DL and 079-040DL**, and samples 079-051** and 079-050DL were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	079-039	079-040**	
1,1-Dichloroethene	0.35	0.37	6
cis-1,2-Dichloroethene	43	43	0
trans-1,2-Dichloroethene	2.2	2.3	4
Trichloroethene	280	280	0
Vinyl chloride	0.26	0.3	14

Compound	Concentration (ug/L)		RPD
	079-039DL	079-040DL**	
cis-1,2-Dichloroethene	43	45	5
Trichloroethene	320	330	3
trans-1,2-Dichloroethene	50U	2.2	Not calculable

Compound	Concentration (ug/L)		RPD
	079-050	079-051**	
cis-1,2-Dichloroethene	0.89	0.84	6
Trichloroethene	51	49	4

Compound	Concentration (ug/L)		RPD
	079-051**	079-050DL	
Trichloroethene	49	57	15

XVII. Field Blanks

Sample 079-052 was identified as a trip blank. No volatile contaminants were found in this blank.

Moffett Air Field, OPHA GW, CTO 79
Volatiles - Data Qualification Summary - SDG 06C209

SDG	Sample	Compound	Flag	A or P	Reason
06C209	079-052 079-038 079-039 079-040** 079-036 079-037 079-042 079-043 079-044 079-041 079-046 079-047 079-045 079-049 079-050 079-051** 079-048 079-038DL 079-039DL 079-040DL** 079-036DL 079-037DL 079-042DL 079-043DL 079-046DL 079-047DL 079-045DL 079-050DL 079-048DL	2-Butanone	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
06C209	079-044 079-038DL 079-039DL 079-040DL** 079-036DL 079-037DL 079-042DL 079-043DL	Vinyl acetate	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
06C209	079-041 079-046 079-047 079-045 079-049 079-050 079-051** 079-048 079-046DL 079-047DL 079-045DL 079-050DL 079-048DL	2-Butanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)

SDG	Sample	Compound	Flag	A or P	Reason
06C209	079-038 079-036 079-037 079-043 079-047	cis-1,2-Dichloroethene Trichloroethene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
06C209	079-039 079-040** 079-042 079-046 079-045 079-050	Trichloroethene	J (all detects)	A	Compound quantitation and CRQLs
06C209	079-048	cis-1,2-Dichloroethene Vinyl chloride	J (all detects) J (all detects)	A	Compound quantitation and CRQLs

Moffett Air Field, OPHA GW, CTO 79
Volatiles - Laboratory Blank Data Qualification Summary - SDG 06C209

No Sample Data Qualified in this SDG

LDC #: 14855A1
SDG #: 06C209
Laboratory: EMAX Laboratories, Inc.

VALIDATION COMPLETENESS WORKSHEET
Level III/IV

Date: 4/19/06
Page: 1 of 1
Reviewer: MR
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/21-22/06
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	% RSD, r²
IV.	Continuing calibration	SW	ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	Not reviewed for Level III validation.
XII.	Compound quantitation/CRQLs	SW	Not reviewed for Level III validation.
XIII.	Tentatively identified compounds (TICs)	N	Not reviewed for Level III validation.
XIV.	System performance	A	Not reviewed for Level III validation.
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D_1 = 3, 4 D_2 = 15, 16 D_3 = 19, 20
XVII.	Field blanks	ND	TB = 1 D_4 = 16, 08

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV validation

Water

1 1	079-052	11 3	079-046	21 2	079-036DL	31 1	079-044MSD
2 1	079-038	12 3	079-047	22 2	079-037DL	32 1	MBLK1W
3 1	079-039 D_1	13 3	079-045	23 2	079-042DL	33 2	MBLK2W
4 1	079-040** D_1	14 3	079-049	24 2	079-043DL	34 3	MBLK3W
5 1	079-036	15 3	079-050 D_2	25 4	079-046DL	35 4	MBLK4W
6 1	079-037	16 3	079-051** D_2, D_4	26 4	079-047DL	36	
7 1	079-042	17 3	079-048	27 4	079-045DL	37	
8 1	079-043	18 2	079-038DL	28 4	079-050DL D_4	38	
9 2	079-044	19 2	079-039DL D_3	29 4	079-048DL	39	
10 3	079-041	20 2	079-040DL** D_3	30 1	079-044MS	40	

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS CHECKLIST

Page: 1 of 7
Reviewer: MC
2nd Reviewer: [illegible]

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 0.05?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS CHECKLIST

Reviewer: JR
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: R

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
[✓ Y] N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
[✓ Y] N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?________
[✓ Y] N N/A Did the initial calibration meet the acceptance criteria?
Y [✓ N] N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/02/06	ICAL	M		0.049	All + Blks	J/UJ/A

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: JVC
2nd Reviewer: R

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
(Y) N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <25.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	3/27/06	RCV 555	HH	34		9, 18-24, MBLK 2W	J/UJ/A
	3/28/06	RCV 592	M		0.644	10-17, MBLK 3W	J/UJ/A
	3/29/06	RCV 611	M		0.647	25-29, MBLK 4W	J/UJ/A

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and CRQLs

Reviewer: NK
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?

Y N N/A Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		2, 5, 6, 8, 12	QQQ, S > calib range		J dets / A
		3, 4, 7, 11, 13, 15	S		
		17	QQQ, C		

Comments: See sample calculation verification worksheet for recalculations

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: JR
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/L)		RPD
	3	4	
H	0.35	0.37	6
QQQ	43	43	0
PPP	2.2	2.3	4
S	280	280	0
%C	0.26	0.3	14

Compound	Concentration (ug/L)		RPD
	19	20	
QQQ	43	45	5
S	320	330	3
PPP	60 U	2.2	NC

Compound	Concentration (ug/L)		RPD
	15	16	
QQQ	0.89	0.84	6
S	51	49	4

Compound	Concentration (ug/L)		RPD
	16	28	
S	49	57	15

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 2
Reviewer: JTG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/07/06	Methylene chloride (1st internal standard)		See	CV calculation			
			Trichlorethene (2nd internal standard)	0.420	0.420	0.423	0.423	2.48	2.46
			Toluene (3rd internal standard)	0.667	0.667	0.678	0.678	4.36	4.35
2			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						
3			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						
4			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 14855A1
SDG# 06C209

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: NG
2nd Reviewer: R

METHOD: GC EPA SW 846 Method 8260B

Parameter: Methylene Chloride

Date	Column	Compound	X Conc. Ratio	Y Area Ratio		RF
03/02/2006	RTX 502.2	Methylene Chloride	0.050	0.03839		0.768
	T001		0.100	0.06239		0.624
			0.200	0.10658		0.533
			0.500	0.23394		0.468
			1.000	0.43022		0.430
			2.000	0.79375		0.397
			3.000	1.15402		0.385
			4.000	1.52918		0.382
			5.000	1.92664		0.385
						0.486

Regression Output:		Reported	
Constant	3.3E-002	k=	2.37E-002
Std Err of Y Est	0.01296		
R Squared	0.99970	r2 =	0.99950
No. of Observations	9.00000		
Degrees of Freedom	7.00000		
X Coefficient(s)	3.770E-001	m =	3.8247E-001
Std Err of Coef.	0.002476		

Response ratio = m * Amount + k

LDC #: 14855 A1
SDG #: OGC 209

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JB
2nd Reviewer: SR

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_is)/(A_is)(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	KCV595	3/24/06	Methylene chloride (1st internal standard)	10	12.433	12.432	24	24
			Trichloroethene (2nd internal standard)	0.423	0.375	0.375	11	11
			Toluene (3rd internal standard)	0.678	0.680	0.680	0	0
2	KCV595	3/27/06	Methylene chloride (1st internal standard)	10	10.862	10.861	9	9
			Trichloroethene (2nd internal standard)	0.423	0.367	0.367	13	13
			Toluene (3rd internal standard)	0.678	0.676	0.676	0	0
3	KCV592	3/28/06	Methylene chloride (1st internal standard)	10	10.476	10.475	5	5
			Trichloroethene (2nd internal standard)	0.423	0.353	0.353	17	17
			Toluene (3rd internal standard)	0.678	0.593	0.593	13	13
4			Methylene chloride (1st internal standard)					
			Trichloroethene (2nd internal standard)					
			Toluene (3rd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JR
2nd reviewer: 4

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 4

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	10	10.65	106	106	0
Bromofluorobenzene		10.81	108	108	
1,2-Dichloroethane-d4		11.66	117	117	
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: 9R
2nd Reviewer: 2

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = | MSC - MSDC | * 2/(MSC + MSDC)

MSC = Matrix spike percent recovery; MSDC = Matrix spike duplicate percent recovery

MS/MSD sample: 20/21

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration ( )		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	10	10	0	8.11	7.93	81	81	79	79	2	2
Trichloroethene			0.367	8.47	8.56	85	85	86	86	1	1
Benzene			0	8.87	9.20	89	89	92	92	4	4
Toluene				9.62	9.76	96	96	98	98	1	1
Chlorobenzene				8.99	9.24	90	90	92	92	3	3

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: MC
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA

Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS = Laboractry control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS ID: RCV 537/8 LCSD

Compound	Spike Added ( )		Spiked Sample Concentration ( )		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	10	10	7.99	8.41	80	80	84	84	5	5
Trichloroethene			8.18	8.63	82	82	86	86	5	5
Benzene			8.79	9.24	88	88	92	92	5	5
Toluene			9.41	9.6	94	94	96	96	2	2
Chlorobenzene			8.84	9	88	88	90	90	2	2

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 14855A1
SDG #: 06C209

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JR
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. 4 . 999 :

Conc. = $\frac{(5925590)(10)(\quad)(\quad)}{(2443303)(0.503)(\quad)(\quad)}$

= 43.33

≈ 43 ug/L

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 20519

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: OPHA	PURCHASE ORDER NO: 20898 T38
PROJECT LOCATION: McCLELLAN FIELD	PROJECT NO: 1990.079D
SAMPLER NAME: BRYCE BARTHMA	AIRBILL NUMBER: 8555 3123 5022
PROJECT CONTACT: LYNN JEFFERSON	PROJECT CONTACT PHONE NUMBER: 949-756-7558

ANALYSES REQUIRED: SVOA 8260B

LABORATORY NAME: EMAX

LABORATORY ID (FOR LABORATORY): 06F188

COMMENTS

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT
79-010	6-13-06	0730	3	X		W	10 DAY
079-055	6-13-06	1105	3		X	W	10 day
079-056	6-13-06	1125	3	X		W	10 day
079-060	6-13-06	1300	3	X		W	10 day
079-003	6-13-06	1355	3	X		W	10 day
079-001	6-13-06	1405	3	X		W	10 day
071-002	6-13-06	1410	3		X	W	10 day
079-059	6-13-06	1515		X		W	10 day
079-001	6-13-06	1515	3	X		W	10 day
079-066	6-13-06	1545	3		X	W	10 day

RELINQUISHED BY (Signature)	DATE 6-14-06	RECEIVED BY (Signature)	
COMPANY TTA	TIME 1400	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	
COMPANY	TIME	COMPANY	

LABORATORY INSTRUCTIONS/COMMENTS

COMPOSITE DESCRIPTION

SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN
COOLER SEAL: ☐ INTACT ☐ BROKEN

Project Information Section Do not submit to Laboratory

LOCATION	DEPTH START	DEPTH END	QC
TRIP Blank	/	/	TB
MCH-1UA	-	-	Reg
MCH-2LA	-	-	Reg
MCH-6LA	-	-	Reg
MCH-8LA	-	-	Reg
MCH-7UA	-	-	Reg
MCH-7UA	-	-	FD
MCH-5UA	-	-	Reg
MCH-9UA	-	-	Reg
MCH-11UA	-	-	Reg

SAMPLING COMMENT:

OPHA - Round 4
2006

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

TETRA TECH
1230 Columbia Street, Suite 500
San Diego, CA 92101 (619) 234-8696

NUMBER 20520

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: OPHA	PURCHASE ORDER NO: 20544 T53
PROJECT LOCATION: Moffett Field	PROJECT NO: 1990.0790
SAMPLER NAME: Bryce Barlow	AIRBILL NUMBER: 8555 8123 8222
PROJECT CONTACT: Lynn Jeffries	PROJECT CONTACT PHONE NUMBER: 949-756-7775

SAMPLE ID	DATE COLLECTED	TIME COLLECTED	NO. OF CONTAINER	LEVEL 3	LEVEL 4	TYPE	TAT	ANALYSES REQUIRED: Do Check Mark Only
~~MW-1~~ 079-065	6-13-06	1610	3	X		W	15 day	X
079-067	6-13-06	1705	3	X		W	15 day	X
079-057	6-14-06	0745	3	X		W	15 day	X
079-058	6-14-06	0820	3	X		W	15 day	X
079-069	6-14-06	0920	3	X		W	15 day	X
079-068	6-14-06	1210	9	X		S	15 day	X

LABORATORY NAME: CWM-1

LABORATORY ID (FOR LABORATORY): 06F188

COMMENTS: Run MS/MSD

Project Information Section Do not submit to Laboratory

LOCATION	DEPTH START	DEPTH END	QC
MCH-10LA	–	–	Reg
W89-6	–	–	Reg
MCH-3LA	–	–	Reg
MCH-4LA	–	–	Reg
87B1	–	–	Reg
W89-7	–	–	Reg

SAMPLING COMMENT: OPHA R4/06

RELINQUISHED BY (Signature)	DATE 6-14-06	RECEIVED BY (Signature)	LABORATORY INSTRUCTIONS/COMMENTS
COMPANY Ftcl	TIME 1400	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	COMPOSITE DESCRIPTION
COMPANY	TIME	COMPANY	
RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	SAMPLE CONDITION UPON RECEIPT (FOR LABORATORY)
COMPANY	TIME	COMPANY	TEMPERATURE: _____ SAMPLE CONDITION: ☐ INTACT ☐ BROKEN COOLER SEAL: ☐ INTACT ☐ BROKEN

White - Laboratory; Pink - Laboratory; Canary - Project File; Manila - Data Management

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax:(310) 618-0818

Date: 06-29-2006
EMAX Batch No.: 06F188

Attn: Lynn Jefferson

Tetra Tech EC, Inc.
1940 E Deere Ave, Suite 200
Santa Ana CA 92705

Subject: Laboratory Report
Project: MFA, OPHA GW, CTO 79

Enclosed is the Laboratory report for samples received on 06/15/06.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
079-070	F188-01	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-055	F188-02	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-056	F188-03	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-060	F188-04	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-063	F188-05	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-061	F188-06	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-062	F188-07	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-059	F188-08	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-064	F188-09	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-066	F188-10	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-065	F188-11	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-067	F188-12	06/13/06	WATER	VOLATILE ORGANICS BY GC/MS
079-057	F188-13	06/14/06	WATER	VOLATILE ORGANICS BY GC/MS
079-058	F188-14	06/14/06	WATER	VOLATILE ORGANICS BY GC/MS
079-069	F188-15	06/14/06	WATER	VOLATILE ORGANICS BY GC/MS
079-068	F188-16	06/14/06	WATER	VOLATILE ORGANICS BY GC/MS
079-068MS	F188-16M	06/14/06	WATER	VOLATILE ORGANICS BY GC/MS
079-068MSD	F188-16S	06/14/06	WATER	VOLATILE ORGANICS BY GC/MS

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

EMAX LABORATORIES, INC.

LABORATORY REPORT FOR

TETRA TECH EC, INC.

MFA, OPHA GW, CTO 79

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

SDG#: 06F188

CASE NARRATIVE

CLIENT: TETRA TECH EC, INC.

PROJECT: MFA, OPHA GW, CTO 79

SDG: 06F188

METHOD 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Sixteen (16) water samples were received on 06/15/06 for Volatile Organic analysis by Method 5030B/8260B in accordance with USEPA SW846, 3rd ed.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   Recoveries were within QC limit.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample F188-16 was spiked. All recoveries were within QC limit.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 01:09
Sample ID: 079-070	Date Analyzed: 06/18/06 01:09
Lab Samp ID: F188-01	Dilution Factor: 1
Lab File ID: RFD217	Matrix : WATER
Ext Btch ID: VO94F18	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	75-125
4-BROMOFLUOROBENZENE	116	75-125
TOLUENE-D8	113	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 04:25
Sample ID: 079-055	Date Analyzed: 06/18/06 04:25
Lab Samp ID: F188-02	Dilution Factor: 1
Lab File ID: RFD222	Matrix : WATER
Ext Btch ID: VO94F18	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	1.1J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	160E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	7.6	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	150E	5	.2
VINYL CHLORIDE	1.2	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	111	75-125
4-BROMOFLUOROBENZENE	121	75-125
TOLUENE-D8	115	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/19/06 23:05
Sample ID: 079-055DL	Date Analyzed: 06/19/06 23:05
Lab Samp ID: F188-02T	Dilution Factor: 25
Lab File ID: RFD265	Matrix : WATER
Ext Btch ID: V094F22	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	170	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	7.2J	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	160	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	75-125
4-BROMOFLUOROBENZENE	117	75-125
TOLUENE-D8	114	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 05:04
Sample ID: 079-056	Date Analyzed: 06/18/06 05:04
Lab Samp ID: F188-03	Dilution Factor: 1
Lab File ID: RFD223	Matrix : WATER
Ext Btch ID: VO94F18	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	2.2J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	160E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	17	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	190E	5	.2
VINYL CHLORIDE	1.3	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	109	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	114	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/19/06 23:45
Sample ID: 079-056DL	Date Analyzed: 06/19/06 23:45
Lab Samp ID: F188-03T	Dilution Factor: 25
Lab File ID: RFD266	Matrix : WATER
Ext Btch ID: V094F22	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	320	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	18J	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	230	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	75-125
4-BROMOFLUOROBENZENE	113	75-125
TOLUENE-D8	113	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 14:15
Sample ID: 079-060	Date Analyzed: 06/20/06 14:15
Lab Samp ID: F188-04R	Dilution Factor: 1
Lab File ID: RFD288	Matrix : WATER
Ext Btch ID: V094F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.33J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	11	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	.78J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	280E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	75-125
4-BROMOFLUOROBENZENE	121	75-125
TOLUENE-D8	117	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 13:37
Sample ID: 079-060DL	Date Analyzed: 06/20/06 13:37
Lab Samp ID: F188-04T	Dilution Factor: 100
Lab File ID: RFD287	Matrix : WATER
Ext Btch ID: V094F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	500	20
1,1,2,2-TETRACHLOROETHANE	ND	100	20
1,1,2-TRICHLOROETHANE	ND	500	20
1,1-DICHLOROETHANE	ND	500	20
1,1-DICHLOROETHENE	ND	500	20
1,2-DICHLOROETHANE	ND	50	20
1,2-DICHLOROPROPANE	ND	500	20
2-BUTANONE	ND	5000	500
2-HEXANONE	ND	5000	500
4-METHYL-2-PENTANONE	ND	5000	500
ACETONE	ND	5000	500
BENZENE	ND	50	20
BROMODICHLOROMETHANE	ND	500	20
BROMOFORM	ND	500	30
BROMOMETHANE	ND	500	20
CARBON TETRACHLORIDE	ND	50	20
CHLOROBENZENE	ND	500	20
CHLOROETHANE	ND	500	20
CHLOROFORM	ND	500	20
CHLOROMETHANE	ND	500	20
CIS-1,2-DICHLOROETHENE	ND	500	20
CIS-1,3-DICHLOROPROPENE	ND	50	20
DIBROMOCHLOROMETHANE	ND	500	20
ETHYLBENZENE	ND	50	20
XYLENES	ND	150	70
MTBE	ND	100	20
METHYLENE CHLORIDE	ND	500	50
STYRENE	ND	500	20
TETRACHLOROETHENE	ND	500	20
TOLUENE	ND	50	20
TRANS-1,2-DICHLOROETHENE	ND	500	20
TRANS-1,3-DICHLOROPROPENE	ND	50	20
TRICHLOROETHENE	590	500	20
VINYL CHLORIDE	ND	50	20
VINYL ACETATE	ND	5000	50

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	75-125
4-BROMOFLUOROBENZENE	121	75-125
TOLUENE-D8	117	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CYO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 22:10
Sample ID: 079-063	Date Analyzed: 06/20/06 22:10
Lab Samp ID: F188-05R	Dilution Factor: 1
Lab File ID: RFD300	Matrix : WATER
Ext Btch ID: V094F26	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	.28J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	116	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 07:02
Sample ID: 079-061	Date Analyzed: 06/18/06 07:02
Lab Samp ID: F188-06	Dilution Factor: 1
Lab File ID: RF0226	Matrix : WATER
Ext Btch ID: V094F18	% Moisture : NA
Calib. Ref.: RF0135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.57J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	93E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	4.1J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	190E	5	.2
VINYL CHLORIDE	.42J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	75-125
4-BROMOFLUOROBENZENE	118	75-125
TOLUENE-D8	115	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 00:23
Sample ID: 079-061DL	Date Analyzed: 06/20/06 00:23
Lab Samp ID: F188-06T	Dilution Factor: 25
Lab File ID: RFD267	Matrix : WATER
Ext Btch ID: V094F22	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	98J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	210	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	75-125
4-BROMOFLUOROBENZENE	114	75-125
TOLUENE-D8	114	75-125

2022

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 07:40
Sample ID: 079-062	Date Analyzed: 06/18/06 07:40
Lab Samp ID: F188-07	Dilution Factor: 1
Lab File ID: RFD227	Matrix : WATER
Ext Btch ID: V094F18	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.57J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	95E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	4.1J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	200E	5	.2
VINYL CHLORIDE	.43J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	75-125
4-BROMOFLUOROBENZENE	118	75-125
TOLUENE-D8	115	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 14:51
Sample ID: 079-059	Date Analyzed: 06/18/06 14:51
Lab Samp ID: F188-08	Dilution Factor: 1
Lab File ID: RFD238	Matrix : WATER
Ext Btch ID: V094F20	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	2.9J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	.36J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	50	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	115	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 15:30
Sample ID: 079-064	Date Analyzed: 06/18/06 15:30
Lab Samp ID: F188-09	Dilution Factor: 1
Lab File ID: RFD239	Matrix : WATER
Ext Btch ID: V094F20	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.63J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	39	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.3J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	330E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	75-125
4-BROMOFLUOROBENZENE	120	75-125
TOLUENE-D8	114	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 08:53
Sample ID: 079-064DL	Date Analyzed: 06/20/06 08:53
Lab Samp ID: F188-09T	Dilution Factor: 100
Lab File ID: RFD280	Matrix : WATER
Ext Btch ID: V094F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	500	20
1,1,2,2-TETRACHLOROETHANE	ND	100	20
1,1,2-TRICHLOROETHANE	ND	500	20
1,1-DICHLOROETHANE	ND	500	20
1,1-DICHLOROETHENE	ND	500	20
1,2-DICHLOROETHANE	ND	50	20
1,2-DICHLOROPROPANE	ND	500	20
2-BUTANONE	ND	5000	500
2-HEXANONE	ND	5000	500
4-METHYL-2-PENTANONE	ND	5000	500
ACETONE	ND	5000	500
BENZENE	ND	50	20
BROMODICHLOROMETHANE	ND	500	20
BROMOFORM	ND	500	30
BROMOMETHANE	ND	500	20
CARBON TETRACHLORIDE	ND	50	20
CHLOROBENZENE	ND	500	20
CHLOROETHANE	ND	500	20
CHLOROFORM	ND	500	20
CHLOROMETHANE	ND	500	20
CIS-1,2-DICHLOROETHENE	39J	500	20
CIS-1,3-DICHLOROPROPENE	ND	50	20
DIBROMOCHLOROMETHANE	ND	500	20
ETHYLBENZENE	ND	50	20
XYLENES	ND	150	70
MTBE	ND	100	20
METHYLENE CHLORIDE	ND	500	50
STYRENE	ND	500	20
TETRACHLOROETHENE	ND	500	20
TOLUENE	ND	50	20
TRANS-1,2-DICHLOROETHENE	ND	500	20
TRANS-1,3-DICHLOROPROPENE	ND	50	20
TRICHLOROETHENE	450J	500	20
VINYL CHLORIDE	ND	50	20
VINYL ACETATE	ND	5000	50

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	75-125
4-BROMOFLUOROBENZENE	118	75-125
TOLUENE-D8	115	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 16:09
Sample ID: 079-066	Date Analyzed: 06/18/06 16:09
Lab Samp ID: F188-10	Dilution Factor: 1
Lab File ID: RFD240	Matrix : WATER
Ext Btch ID: V094F20	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.51J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	89E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.9J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	250E	5	.2
VINYL CHLORIDE	.28J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	105	75-125
4-BROMOFLUOROBENZENE	121	75-125
TOLUENE-D8	116	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 09:32
Sample ID: 079-066DL	Date Analyzed: 06/20/06 09:32
Lab Samp ID: F188-10T	Dilution Factor: 25
Lab File ID: RFD281	Matrix : WATER
Ext Btch ID: VO94F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	90J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	270	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	116	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 16:48
Sample ID: 079-065	Date Analyzed: 06/18/06 16:48
Lab Samp ID: F188-11	Dilution Factor: 1
Lab File ID: RFD241	Matrix : WATER
Ext Btch ID: V094F20	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.35J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	16	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	1.9J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	190E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	109	75-125
4-BROMOFLUOROBENZENE	116	75-125
TOLUENE-D8	112	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 10:10
Sample ID: 079-065DL	Date Analyzed: 06/20/06 10:10
Lab Samp ID: F188-11T	Dilution Factor: 25
Lab File ID: RFD282	Matrix : WATER
Ext Btch ID: V094F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	14J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	870	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	75-125
4-BROMOFLUOROBENZENE	117	75-125
TOLUENE-D8	115	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 15:32
Sample ID: 079-067	Date Analyzed: 06/20/06 15:32
Lab Samp ID: F188-12R	Dilution Factor: 1
Lab File ID: RFD290	Matrix : WATER
Ext Btch ID: V094F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	110E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	3.1J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	95E	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	75-125
4-BROMOFLUOROBENZENE	112	75-125
TOLUENE-D8	115	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/13/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 10:48
Sample ID: 079-067DL	Date Analyzed: 06/20/06 10:48
Lab Samp ID: F188-12T	Dilution Factor: 10
Lab File ID: RFD283	Matrix : WATER
Ext Btch ID: V094F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	130	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	3.4J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	50	2
VINYL CHLORIDE	110	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	117	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH EC, INC.	Date Collected: 06/14/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 18:06
Sample ID: 079-057	Date Analyzed: 06/18/06 18:06
Lab Samp ID: F188-13	Dilution Factor: 1
Lab File ID: RFD243	Matrix : WATER
Ext Btch ID: VO94F20	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.27J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	110E	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	.32J	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.9J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	110E	5	.2
VINYL CHLORIDE	.74	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	75-125
4-BROMOFLUOROBENZENE	118	75-125
TOLUENE-D8	115	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 06/14/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 11:27
Sample ID: 079-057DL	Date Analyzed: 06/20/06 11:27
Lab Samp ID: F188-13T	Dilution Factor: 10
Lab File ID: RFD284	Matrix : WATER
Ext Btch ID: V094F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	50	2
1,1,2,2-TETRACHLOROETHANE	ND	10	2
1,1,2-TRICHLOROETHANE	ND	50	2
1,1-DICHLOROETHANE	ND	50	2
1,1-DICHLOROETHENE	ND	50	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	50	2
2-BUTANONE	ND	500	50
2-HEXANONE	ND	500	50
4-METHYL-2-PENTANONE	ND	500	50
ACETONE	ND	500	50
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	50	2
BROMOFORM	ND	50	3
BROMOMETHANE	ND	50	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	50	2
CHLOROETHANE	ND	50	2
CHLOROFORM	ND	50	2
CHLOROMETHANE	ND	50	2
CIS-1,2-DICHLOROETHENE	110	50	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	50	2
ETHYLBENZENE	ND	5	2
XYLENES	ND	15	7
MTBE	ND	10	2
METHYLENE CHLORIDE	ND	50	5
STYRENE	ND	50	2
TETRACHLOROETHENE	ND	50	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	2.6J	50	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	110	50	2
VINYL CHLORIDE	ND	5	2
VINYL ACETATE	ND	500	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	75-125
4-BROMOFLUOROBENZENE	120	75-125
TOLUENE-D8	116	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 06/14/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 18:45
Sample ID: 079-058	Date Analyzed: 06/18/06 18:45
Lab Samp ID: F188-14	Dilution Factor: 1
Lab File ID: RFD244	Matrix : WATER
Ext Btch ID: V094F20	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.46J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	40	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	2.3J	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	310E	5	.2
VINYL CHLORIDE	.3J	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	75-125
4-BROMOFLUOROBENZENE	118	75-125
TOLUENE-D8	114	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 06/14/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 12:06
Sample ID: 079-058DL	Date Analyzed: 06/20/06 12:06
Lab Samp ID: F188-14T	Dilution Factor: 25
Lab File ID: RFD285	Matrix : WATER
Ext Btch ID: VO94F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	120	5
1,1,2,2-TETRACHLOROETHANE	ND	25	5
1,1,2-TRICHLOROETHANE	ND	120	5
1,1-DICHLOROETHANE	ND	120	5
1,1-DICHLOROETHENE	ND	120	5
1,2-DICHLOROETHANE	ND	12	5
1,2-DICHLOROPROPANE	ND	120	5
2-BUTANONE	ND	1200	120
2-HEXANONE	ND	1200	120
4-METHYL-2-PENTANONE	ND	1200	120
ACETONE	ND	1200	120
BENZENE	ND	12	5
BROMODICHLOROMETHANE	ND	120	5
BROMOFORM	ND	120	7.5
BROMOMETHANE	ND	120	5
CARBON TETRACHLORIDE	ND	12	5
CHLOROBENZENE	ND	120	5
CHLOROETHANE	ND	120	5
CHLOROFORM	ND	120	5
CHLOROMETHANE	ND	120	5
CIS-1,2-DICHLOROETHENE	42J	120	5
CIS-1,3-DICHLOROPROPENE	ND	12	5
DIBROMOCHLOROMETHANE	ND	120	5
ETHYLBENZENE	ND	12	5
XYLENES	ND	37	18
MTBE	ND	25	5
METHYLENE CHLORIDE	ND	120	12
STYRENE	ND	120	5
TETRACHLOROETHENE	ND	120	5
TOLUENE	ND	12	5
TRANS-1,2-DICHLOROETHENE	ND	120	5
TRANS-1,3-DICHLOROPROPENE	ND	12	5
TRICHLOROETHENE	400	120	5
VINYL CHLORIDE	ND	12	5
VINYL ACETATE	ND	1200	12

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	115	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 06/14/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/21/06 00:46
Sample ID: 079-069	Date Analyzed: 06/21/06 00:46
Lab Samp ID: F188-15R	Dilution Factor: 1
Lab File ID: RFD304	Matrix : WATER
Ext Btch ID: V094F26	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	.21J	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	.2J	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	.94J	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	67E	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	75-125
4-BROMOFLUOROBENZENE	119	75-125
TOLUENE-D8	118	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 06/14/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/20/06 12:58
Sample ID: 079-069DL	Date Analyzed: 06/20/06 12:58
Lab Samp ID: F188-15T	Dilution Factor: 5
Lab File ID: RFD286	Matrix : WATER
Ext Btch ID: V094F24	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	25	1
1,1,2,2-TETRACHLOROETHANE	ND	5	1
1,1,2-TRICHLOROETHANE	ND	25	1
1,1-DICHLOROETHANE	ND	25	1
1,1-DICHLOROETHENE	ND	25	1
1,2-DICHLOROETHANE	ND	2.5	1
1,2-DICHLOROPROPANE	ND	25	1
2-BUTANONE	ND	250	25
2-HEXANONE	ND	250	25
4-METHYL-2-PENTANONE	ND	250	25
ACETONE	ND	250	25
BENZENE	ND	2.5	1
BROMODICHLOROMETHANE	ND	25	1
BROMOFORM	ND	25	1.5
BROMOMETHANE	ND	25	1
CARBON TETRACHLORIDE	ND	2.5	1
CHLOROBENZENE	ND	25	1
CHLOROETHANE	ND	25	1
CHLOROFORM	ND	25	1
CHLOROMETHANE	ND	25	1
CIS-1,2-DICHLOROETHENE	1J	25	1
CIS-1,3-DICHLOROPROPENE	ND	2.5	1
DIBROMOCHLOROMETHANE	ND	25	1
ETHYLBENZENE	ND	2.5	1
XYLENES	ND	7.5	3.5
MTBE	ND	5	1
METHYLENE CHLORIDE	ND	25	2.5
STYRENE	ND	25	1
TETRACHLOROETHENE	ND	25	1
TOLUENE	ND	2.5	1
TRANS-1,2-DICHLOROETHENE	ND	25	1
TRANS-1,3-DICHLOROPROPENE	ND	2.5	1
TRICHLOROETHENE	69	25	1
VINYL CHLORIDE	ND	2.5	1
VINYL ACETATE	ND	250	2.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	97	75-125
4-BROMOFLUOROBENZENE	115	75-125
TOLUENE-D8	116	75-125

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

EMAX LABORATORIES, INC.

Client : TETRA TECH EC, INC.	Date Collected: 06/14/06
Project : MFA, OPHA GW, CTO 79	Date Received: 06/15/06
Batch No. : 06F188	Date Extracted: 06/18/06 01:48
Sample ID: 079-068	Date Analyzed: 06/18/06 01:48
Lab Samp ID: F188-16	Dilution Factor: 1
Lab File ID: RFD218	Matrix : WATER
Ext Btch ID: V094F18	% Moisture : NA
Calib. Ref.: RFD135	Instrument ID : T-094

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	.2
1,1,2,2-TETRACHLOROETHANE	ND	1	.2
1,1,2-TRICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHANE	ND	5	.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	.5	.2
1,2-DICHLOROPROPANE	ND	5	.2
2-BUTANONE	ND	50	5
2-HEXANONE	ND	50	5
4-METHYL-2-PENTANONE	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	.5	.2
BROMODICHLOROMETHANE	ND	5	.2
BROMOFORM	ND	5	.3
BROMOMETHANE	ND	5	.2
CARBON TETRACHLORIDE	ND	.5	.2
CHLOROBENZENE	ND	5	.2
CHLOROETHANE	ND	5	.2
CHLOROFORM	ND	5	.2
CHLOROMETHANE	ND	5	.2
CIS-1,2-DICHLOROETHENE	ND	5	.2
CIS-1,3-DICHLOROPROPENE	ND	.5	.2
DIBROMOCHLOROMETHANE	ND	5	.2
ETHYLBENZENE	ND	.5	.2
XYLENES	ND	1.5	.7
MTBE	ND	1	.2
METHYLENE CHLORIDE	ND	5	.5
STYRENE	ND	5	.2
TETRACHLOROETHENE	ND	5	.2
TOLUENE	ND	.5	.2
TRANS-1,2-DICHLOROETHENE	ND	5	.2
TRANS-1,3-DICHLOROPROPENE	ND	.5	.2
TRICHLOROETHENE	ND	5	.2
VINYL CHLORIDE	ND	.5	.2
VINYL ACETATE	ND	50	.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	111	75-125
4-BROMOFLUOROBENZENE	117	75-125
TOLUENE-D8	115	75-125

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Moffett Air Field, OPHA GW, CTO 79

Collection Date: June 13 through June 14, 2006

LDC Report Date: July 31, 2006

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III & IV

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 06F188

Sample Identification

079-070
079-055**
079-055DL**
079-056
079-056DL
079-060
079-060DL
079-063
079-061
079-061DL
079-062**
079-062DL**
079-059
079-064
079-064DL
079-066**
079-066DL**
079-065
079-065DL
079-067
079-067DL
079-057
079-057DL
079-058
079-058DL
079-069
079-069DL
079-068
079-068MS
079-068MSD

**Indicates sample underwent EPA Level IV review

Introduction

This data review covers 30 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a EPA Level IV review. A EPA Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
6/15/06	2-Butanone	0.049 (≥0.05)	All samples in SDG 06F188	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/17/06	Bromomethane	38.3	079-070 079-055** 079-056 079-061 079-062** 079-068 079-068MS 079-068MSD MBLK1W	J (all detects) UJ (all non-detects)	A
6/18/06	Bromomethane	28.7	079-059 079-064 079-066** 079-065 079-057 079-058 MBLK2W	J (all detects) UJ (all non-detects)	A
6/20/06 (RFD274)	Vinyl acetate	48.8	079-060 079-060DL 079-064DL 079-066DL** 079-065DL 079-067 079-067DL 079-057DL 079-058DL 079-069DL MBLK4W	J (all detects) UJ (all non-detects)	A
6/20/06 (RFD294)	Bromomethane	32.4	079-063 079-069 MBLKW5	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
6/18/06	2-Butanone	0.047 (≥0.05)	079-059 079-064 079-066** 079-065 079-057 079-058 MBLK2W	J (all detects) UJ (all non-detects)	A
6/19/06	2-Butanone	0.048 (≥0.05)	079-055DL** 079-056DL 079-061DL 079-062DL** MBLK3W	J (all detects) UJ (all non-detects)	A
6/20/06 (RFD274)	2-Butanone	0.047 (≥0.05)	079-060 079-060DL 079-064DL 079-066DL** 079-065DL 079-067 079-067DL 079-057DL 079-058DL 079-069DL MBLK4W	J (all detects) UJ (all non-detects)	A
6/20/06 (RFD294)	2-Butanone	0.044 (≥0.05)	079-063 079-069 MBLKW5	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
079-055** 079-056 079-061 079-062** 079-066** 079-057	cis-1,2-Dichloroethene Trichloroethene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A
079-060 079-064 079-065 079-058 079-069	Trichloroethene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
079-067	cis-1,2-Dichloroethene Vinyl chloride	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not evaluated for the samples reviewed by Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which a EPA Level IV review was performed. Raw data were not evaluated for the samples reviewed by Level III criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 079-061 and 079-062** and samples 079-061DL and 079-062DL** were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	079-061	079-062**	
1,1-Dichloroethene	0.57	0.57	0
cis-1,2-Dichloroethene	93	95	2
trans-1,2-Dichloroethene	4.1	4.1	0
Trichloroethene	190	200	5
Vinyl Chloride	0.42	0.43	2

Compound	Concentration (ug/L)		RPD
	079-061DL	079-062DL**	
cis-1,2-Dichloroethene	98	94	4
Trichloroethene	210	220	5

XVII. Field Blanks

Sample 079-052 was identified as a trip blank. No volatile contaminants were found in this blank.

Moffett Air Field, OPHA GW, CTO 79
Volatiles - Data Qualification Summary - SDG 06F188

SDG	Sample	Compound	Flag	A or P	Reason
06F188	079-070 079-055** 079-055DL** 079-056 079-056DL 079-060 079-060DL 079-063 079-061 079-061DL 079-062** 079-062DL** 079-059 079-064 079-064DL 079-066** 079-066DL** 079-065 079-065DL 079-067 079-067DL 079-057 079-057DL 079-058 079-058DL 079-069 079-069DL 079-068	2-Butanone	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
06F188	079-070 079-055** 079-056 079-061 079-062** 079-068 079-059 079-064 079-066** 079-065 079-057 079-058 079-063 079-069	Bromomethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
06F188	079-060 079-060DL 079-064DL 079-066DL** 079-065DL 079-067 079-067DL 079-057DL 079-058DL 079-069DL	Vinyl acetate	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

SDG	Sample	Compound	Flag	A or P	Reason
06F188	079-059 079-064 079-066** 079-065 079-057 079-058 079-055DL** 079-056DL 079-061DL 079-062DL** 079-060 079-060DL 079-064DL 079-066DL** 079-065DL 079-067 079-067DL 079-057DL 079-058DL 079-069DL 079-063 079-069	2-Butanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
06F188	079-055** 079-056 079-061 079-062** 079-066** 079-057	cis-1,2-Dichloroethene Trichloroethene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
06F188	079-060 079-064 079-065 079-058 079-069	Trichloroethene	J (all detects)	A	Compound quantitation and CRQLs
06F188	079-067	cis-1,2-Dichloroethene Vinyl chloride	J (all detects) J (all detects)	A	Compound quantitation and CRQLs

Moffett Air Field, OPHA GW, CTO 79
Volatiles - Laboratory Blank Data Qualification Summary - SDG 06F188

No Sample Data Qualified in this SDG

LDC #: 15295A1
SDG #: 06F188
Laboratory: EMAX Laboratories, Inc.

VALIDATION COMPLETENESS WORKSHEET
Level III/IV

Date: 7/29/06
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/13 – 6/14/06
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	% RSD, r^2 ≥ 0.990
IV.	Continuing calibration	SW	ICV ± 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	Not reviewed for Level III validation.
XII.	Compound quantitation/CRQLs	~~A~~ SW	Not reviewed for Level III validation.
XIII.	Tentitatively identified compounds (TICs)	N	Not reviewed for Level III validation. not reported
XIV.	System performance	A	Not reviewed for Level III validation.
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 9 + 11 10 + 12
XVII.	Field blanks	ND	TB = 1

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV validation

1 1	079-070 TB	11 1	079-062** D	21 4	079-067DL	31 1	MBLK1W
2 1	079-055**	12 3	079-062DL**	22 2	079-057	32 2	MBLK2W
3 3	079-055DL**	13 2	079-059	23 4	079-057DL	33 3	MBLK3W
4 1	079-056	14 2	079-064	24 2	079-058	34 4	MBLK4W
5 3	079-056DL	15 4	079-064DL	25 4	079-058DL	35 5	MBLK5W
6 4	079-060	16 2	079-066**	26 5	079-069	36	
7 4	079-060DL	17 4	079-066DL**	27 4	079-069DL	37	
8 5	079-063	18 2	079-065	28 1	079-068	38	
9 1	079-061 D	19 4	079-065DL	29 1	079-068MS	39	
10 3	079-061DL	20 4	079-067	30 1	079-068MSD	40	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethene	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. 1,2-Dichlorotetrafluoroethane
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl chloride**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Methyl ethyl ketone	FFF. 1,3-Dichlorobenzene	XXX. Di-isopropyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropene	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropene	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1-Dichloroethene**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethene	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC.1-Chlorohexane
J. 1,2-Dichloroethene, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromoethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethene	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethene	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropene	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 15295A1
SDG #: 06F188

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.		✓		
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 15295A1
SDG #: 06F18X

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: B
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓		✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 15295A1
SDG #: 06F188

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
[✓ Y] N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
[✓ Y] N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?__________
[✓ Y] N N/A Did the initial calibration meet the acceptance criteria?
Y [✓ N] N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	6/15/06	ICAL - T094	M		0.049	All + Blk	J/UJ/A

LDC #: 15295A1
SDG #: 06F198

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <25.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	6/17/06	RFD212	B	38.3		MBLKIW, 1, 2, 4	J/UJ/A
						9, 11, 28–30	
	6/18/06	RFD233	B	28.7		MBLK2W, 13, 14	J/UJ/A
			M		0.047	16, 18, 22, 24	
	6/19/06	RFD253	M		0.048	MBLK3W, 3, 5,	J/UJ/A
						10, 12	
	6/20/06	RFD274	HH	48.8		MBLK4W, 6, 7,	J/UJ/A
			M		0.047	15, 17, 19–21,	
						23, 25, 27	
	6/20/06	RFD294	B	32.4		MBLKWC, 8, 26	J/UJ/A
			M		0.044	↓	

LDC #: 15295A1
SDG #: 06F188

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and CRQLs

Page: 1 of 1
Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?

Y N N/A Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Date	~~Sample ID~~ compound	Finding	Associated Samples	Qualifications
		QQQ, S	exceeded cal range	2, 4, 9, 11	J/A det
				~~16, 20~~ 16, 22	
		S	↓	6, 14, 18,	↓
				24, 26	
		QQQ, C		20	↓

Comments: See sample calculation verification worksheet for recalculations

LDC#: 15295A1
SDG#: 06F188

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ug/L)		RPD	
	9	11		
1,1-Dichloroethene	0.57	0.57	0	
cis-1,2-Dichloroethene	93	95	2	
trans-1,2-Dichloroethene	4.1	4.1	0	
Trichloroethene	190	200	5	
Vinyl Chloride	0.42	0.43	2	

Compound	Concentration (ug/L)		RPD	
	10	12		
cis-1,2-Dichloroethene	98	94	4	
Trichloroethene	210	220	5	

V:\FIELD DUPLICATES\11025_PAHs\15295a1.wpd

LDC #: 15295A1
SDG #: 06F188

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_is)/(A_is)(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	V094F15	6/15/06	Methylene chloride (1st internal standard)	0.350	0.350	0.372	0.372	10.87	10.87
			Trichlorethene (2nd internal standard)	0.438	0.438	0.424	0.424	5.71	5.71
			~~Toluene~~ Bromoform (3rd internal standard)	0.559	0.559	0.517	0.517	7.31	7.31
2			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						
3			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						
4			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 15295A1
SDG #: 06F188

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: E
2nd Reviewer: Q

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	RFD212	6/17/06	Methylene chloride (1st internal standard)	0.372	0.364	0.364	2.2	2.2
			Trichlorethene (2nd internal standard)	0.424	0.425	0.425	0.2	0.2
			~~Toluene~~ Bromoform (3rd internal standard)	0.517	0.513	0.513	0.8	0.8
2	RFD253	6/19/06	Methylene chloride (1st internal standard)		0.343	0.343	7.8	7.8
			Trichlorethene (2nd internal standard)		0.403	0.403	5.0	5.0
			~~Toluene~~ Bromoform (3rd internal standard)		0.554	0.554	7.2	7.2
3	RFD274	6/20/06	Methylene chloride (1st internal standard)		0.342	0.342	8.1	8.1
			Trichlorethene (2nd internal standard)		0.415	0.415	2.1	2.1
			~~Toluene~~ Bromoform (3rd internal standard)		0.529	0.529	2.3	2.3
4			Methylene chloride (1st internal standard)					
			Trichlorethene (2nd internal standard)					
			Toluene (3rd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 15295A1
SDG #: 06F188

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	10	11.52	115	115	0
Bromofluorobenzene	↓	12.14	121	121	↓
1,2-Dichloroethane-d4		11.08	111	111	
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 15295A1
SDG #: 06F188

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: B
2nd Reviewer: R

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = | MSC - MSDC | * 2/(MSC + MSDC)

MSC = Matrix spike percent recovery; MSDC = Matrix spike duplicate percent recovery

MS/MSD sample: 29 & 30

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration ( )		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	10	10	ND	10.2	10.2	102	102	102	102	1	1
Trichloroethene				9.81	9.79	98	98	98	98	0	0
Benzene				9.88	9.94	99	99	99	99	1	1
Toluene				10.2	10.2	102	102	102	102	0	0
Chlorobenzene				10.4	10.5	104	104	105	105	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LCS #: 13241371

SDG #: 06F188

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: B

2nd Reviewer: R

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA

Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS = Laboraotry control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCSD-1

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	10	10	9.51	9.73	95	95	9.73	9.73	2	2
Trichloroethene			9.63	10.1	96	96	101	101	5	5
Benzene			9.51	10	95	95	100	100	5	5
Toluene			9.76	10.2	98	98	102	102	4	4
Chlorobenzene			10.1	10.4	101	101	104	104	3	3

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 15295A1
SDG #: 06F188

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 6f 7
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #3 . cis-1,2-DCE

Conc. = $\frac{(811088)(10)(25)}{(2334724)(0.508)(\quad)(\quad)}$

=

170 ug/L

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification