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HUNTERS POINT
SSIC NO. 5090.3

Tetra Tech EM Inc.

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April 4, 2003

Mr. G. Patrick Brooks, R.G.
Remedial Project Manager
Naval Facilities Engineering Command
Southwest Division
1230 Columbia Street, Suite 1100
San Diego, CA 92101

Subject: **User Data Package 3 – Results of the Post-Injection Round 1 Groundwater Sampling**
Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California
Contract Number N68711-00-D-0005, Delivery Order 0013

Dear Mr. Brooks:

Between January 7 and January 10, 2003, Tetra Tech EM Inc. (Tetra Tech) completed post-injection round 1 groundwater sampling for the Ferox^{sm} Injection Technology demonstration at Parcel C, Remedial Unit C4, of Hunters Point Shipyard. This work was conducted under the above-referenced delivery order from the U.S. Department of the Navy (Navy), Naval Facilities Engineering Command, Southwest Division, under the Indefinite Quantity Contract for Architectural-Engineering Services to Provide CERCLA/RCRA/UST Studies.

The technology demonstration project is being conducted in association with, and partially funded by, the Navy's Alternative Restoration Technology Team, Naval Facilities Engineering Service Center (NFESC). This user data package summarizes the results of field activities, which included groundwater sampling of 19 monitoring wells and measurement of groundwater levels in 23 monitoring wells.

Enclosure 1 of this letter report provides copies of the groundwater sampling forms, Enclosure 2 provides copies of the chain-of-custody forms for the samples, Enclosure 3 provides the groundwater level measurement forms, Enclosure 4 provides the analytical laboratory reports, and Enclosure 5 provides the data validation reports. Groundwater sampling, groundwater level measurement, laboratory analysis, and data validation are discussed below.

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GROUNDWATER SAMPLING

Tetra Tech collected groundwater samples from 19 monitoring wells between January 7 and January 10, 2003. Samples were collected from the following monitoring wells:

IR28MW211F	IR28MW275F	IR28MW311A	IR28MW341F	IR28MW342F
IR28MW351F	IR28MW355F	IR28MW356F	IR28MW357F	IR28MW358F
IR28MW359F	IR28MW360F	IR28MW361F	IR28MW362F (F2)	IR28MW932F
IR28MW933F5	IR28MW934F5	IR28IW938F	IR28IW939F	

Samples were sent to an off-site laboratory for a subset of the following analyses: volatile organic compounds (VOC), total iron, dissolved iron, dissolved arsenic, dissolved manganese, alkalinity, chloride, nitrate, ethane, ethene, and dissolved hydrogen. Table 1 at the end of this letter summarizes specific sampling requirements. In addition, groundwater was analyzed during purging for the following parameters: temperature, specific conductance, dissolved oxygen, pH, oxidation-reduction potential, and turbidity. Enclosures 1 and 2 present the groundwater sampling forms and chain-of-custody records.

GROUNDWATER LEVEL MEASUREMENT

Tetra Tech measured groundwater levels in 23 monitoring wells on January 7, 2003, prior to the commencement of groundwater sampling. Water level measurements were collected from the following wells:

IR28MW211F	IR28MW275F	IR28MW310F	IR28MW311A	IR28MW341F
IR28MW342F	IR28MW351F	IR28MW355F	IR28MW356F	IR28MW357F
IR28MW358F	IR28MW359F	IR28MW360F	IR28MW361F	IR28MW362F
IR28MW393F	IR28MW935F	IR28MW936F	IR28MW937F	IR28IW938F
IR28IW939F	IR28MW940F	IR28MW402F		

Enclosure 3 provides the groundwater level measurement forms.

LABORATORY ANALYSIS

Groundwater samples were sent for analysis to Columbia Analytical Services in Redding, California, a pre-qualified subcontractor laboratory. The laboratory was approved by NFESC and evaluated by Tetra Tech to ensure that it can meet the technical requirements of the laboratory scope of work and produce data of acceptable quality. Table 2 at the end of this letter summarizes the validated analytical results. Enclosure 4 provides the analytical laboratory reports for the post-injection round 1 sampling.

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DATA VALIDATION

Data generated during field and laboratory activities must be validated and verified to ensure that they are defensible and of acceptable quality. An independent third-party contractor validated laboratory data for metals and VOCs. Table 2 at the end of this letter summarizes the validated analytical results. Enclosure 5 provides the data validation reports for the post-injection round 1 sampling.

If you have any questions or comments about this user data package, please contact me at (215) 656-8720 or Doug Bielskis at (415) 222-8242.

Sincerely,

John McCall, P.E.
Project Manager

Enclosures:
1. Groundwater Sampling Forms
2. Chain-of-Custody Forms
3. Groundwater Level Measurement Forms
4. Analytical Laboratory Reports
5. Data Validation Reports

cc: Mr. Keith Forman, Southwest Division
Mr. Dave DeMars, Southwest Division
Ms. Diane Silva (Admin. Record), Southwest Division
Mr. Doug Bielskis, Tetra Tech EM Inc.
AECRU File

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TABLE 1: GROUNDWATER SAMPLING REQUIREMENTS

User Data Package 3, Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California

Monitoring Well	Volatile Organic Compounds	Total Iron	Dissolved Iron	Dissolved Arsenic	Dissolved Manganese	Nitrate	Chloride	Alkalinity	Ethane	Ethene	Dissolved Hydrogen
IR28MW211F	X	X	X	--	--	--	X	X	X	X	X
IR28MW275F	X	X	X	--	--	--	X	X	X	X	X
IR28MW311A	X	X	X	--	--	--	X	X	X	X	X
IR28MW341F	X	X	X	--	--	X	X	X	X	X	X
IR28MW342F	X	X	X	--	--	--	X	X	X	X	X
IR28MW351F	X	X	X	X	X	--	X	X	X	X	X
IR28MW355F	X	X	X	X	X	--	X	X	X	X	X
IR28MW356F	X	X	X	X	X	--	X	X	X	X	X
IR28MW357F	X	X	X	X	X	--	X	X	X	X	X
IR28MW358F	X	X	X	X	X	--	X	X	X	X	X
IR28MW359F	X	X	X	--	--	X	X	X	X	X	X
IR28MW360F	X	X	X	X	X	X	X	X	X	X	X
IR28MW361F	X	X	X	--	--	X	X	X	X	X	X
IR28MW362F (F2)	X	X	X	--	--	X	X	X	X	X	X
IR28MW932F	X	X	X	X	X	--	X	X	X	X	X
IR28MW933F5	X	X	X	--	--	X	X	X	X	X	X
IR28MW934F5	X	X	X	--	--	--	X	X	X	X	X
IR28IW938F	X	X	X	X	X	--	X	X	X	X	X
IR28IW939F	X	X	X	X	X	--	X	X	X	X	X
Total	**19**	**19**	**19**	**9**	**9**	**6**	**19**	**19**	**19**	**19**	**19**

Note:

-- Analyte was not sampled for at this location.

TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES

User Data Package 3, Parcel C Treatability Study Support

Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28IW938F	IR28IW939F	IR28MW211F	IR28MW275F	IR28MW311A	IR28MW341F
Sample Date	01/10/2003	01/09/2003	01/09/2003	01/08/2003	01/07/2003	01/09/2003
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Sample ID	0302H027	0302H021	0302H022	0302H014	0302H003	0302H023
VOLATILE ORGANIC COMPOUNDS (µg/L)						
1,1,1-TRICHLOROETHANE	< 1	< 1	< 4	< 1	< 1	< 1
1,1,2,2-TETRACHLOROETHANE	< 1	< 1	< 4	< 1	< 1	< 1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 1	< 1	< 4	< 1	* 2 *	< 1
1,1,2-TRICHLOROETHANE	* 1 *	* 6 *	* 8 *	< 1	< 1	* 2 *
1,1-DICHLOROETHANE	< 1	* 0.8 J *	< 4	< 1	< 1	< 1
1,1-DICHLOROETHENE	< 1	* 2 *	< 4	< 1	< 1	< 1
1,2,3-TRICHLOROBENZENE	< 1	< 1	< 4	< 1	< 1	< 1
1,2,4-TRICHLOROBENZENE	< 1	< 1	< 4	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPANE	< 5	< 5	< 20	< 5	< 5	< 5
1,2-DIBROMOETHANE	< 1	< 1	< 4	< 1	< 1	< 1
1,2-DICHLOROBENZENE	< 1	< 1	< 4	< 1	* 0.1 J *	< 1
1,2-DICHLOROETHANE	* 2 *	* 31 *	* 35 *	< 1	< 1	* 2 *
1,2-DICHLOROPROPANE	< 1	* 1 *	< 4	< 1	< 1	< 1
1,3-DICHLOROBENZENE	< 1	< 1	< 4	< 1	< 1	< 1
1,4-DICHLOROBENZENE	< 1	< 1	< 4	< 1	< 1	< 1
2-BUTANONE	< 5	< 5	< 20	< 5	< 5	< 5
2-HEXANONE	< 5	< 5	< 20	< 5	< 5	< 5
4-METHYL-2-PENTANONE	< 5	< 5	< 20	< 5	< 5	< 5
ACETONE	NA	< 5	NA	< 5	< 5	NA
BENZENE	< 1	* 1 *	< 4	< 1	< 1	< 1
BROMOCHLOROMETHANE	< 1	< 1	< 4	< 1	< 1	< 1
BROMODICHLOROMETHANE	< 1	< 1	< 4	< 1	< 1	< 1
BROMOFORM	< 1	< 1	< 4	< 1	< 1	< 1
BROMOMETHANE	< 1	< 1	< 4	< 1	< 1	< 1
CARBON DISULFIDE	< 1	< 1	< 4	< 1	< 1	< 1
CARBON TETRACHLORIDE	< 1	< 1	< 4	* 0.3 J *	< 1	< 1
CHLOROBENZENE	< 1	< 1	< 4	< 1	< 1	< 1
CHLOROETHANE	< 1	< 1	< 4	< 1	< 1	< 1
CHLOROFORM	< 1	* 57 *	< 4	< 2	< 1	* 3 *
CHLOROMETHANE	< 1	* 0.3 J *	< 4	< 1	< 1	< 1

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TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28IW938F	IR28IW939F	IR28MW211F	IR28MW275F	IR28MW311A	IR28MW341F
Sample Date	01/10/2003	01/09/2003	01/09/2003	01/08/2003	01/07/2003	01/09/2003
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Sample ID	0302H027	0302H021	0302H022	0302H014	0302H003	0302H023
VOLATILE ORGANIC COMPOUNDS (µg/L)						
CIS-1,2-DICHLOROETHENE	< 1	* 9 *	* 2 J *	* 5 *	* 3 *	* 0.4 J *
CIS-1,3-DICHLOROPROPENE	< 1	< 1	< 4	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	< 1	< 1	< 4	< 1	< 1	< 1
DICHLORODIFLUOROMETHANE	< 1	< 1	< 4	< 1	< 1	< 1
ETHYLBENZENE	< 1	< 1	< 4	< 1	< 1	< 1
ISOPROPYLBENZENE	< 1	< 1	< 4	< 1	< 1	< 1
METHYLENE CHLORIDE	< 3	* 25 *	< 13	< 2	< 2	< 6
STYRENE	< 1	< 1	< 4	< 1	< 1	< 1
TERT-BUTYL METHYL ETHER	< 1	< 1	< 4	< 1	< 1	< 1
TETRACHLOROETHENE	< 1	* 1 *	< 4	* 30 *	< 1	< 1
TOLUENE	< 1	< 1	< 4	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHENE	< 1	< 1	< 4	< 1	< 1	< 1
TRANS-1,3-DICHLOROPROPENE	< 1	< 1	< 4	< 1	< 1	< 1
TRICHLOROETHENE	* 13 *	* 460 *	* 420 *	* 68 *	* 5 *	* 100 *
TRICHLOROFLUOROMETHANE	< 1	< 1	< 4	< 1	* 5 *	< 1
VINYL CHLORIDE	< 1	* 0.7 J *	< 4	* 0.5 J *	< 1	< 1
XYLENE (TOTAL)	< 1	< 1	< 4	< 1	< 1	< 1
TOTAL METALS (µg/L)						
IRON	* 180,000 *	* 3,800 *	* 2,100 *	* 590 *	< 42	* 1,700 *
DISSOLVED METALS (µg/L)						
ARSENIC	< 1	< 1	NA	NA	NA	NA
IRON	< 34	* 110 *	* 27 J *	* 35 J *	* 14 J *	* 15 J *
MANGANESE	* 190 *	* 1,100 *	NA	NA	NA	NA
DISSOLVED GASES (µg/L)						
ETHANE	* 11 *	* 50 *	* 42 *	< 0.5	< 0.5	* 53 *
ETHENE	* 2 *	* 31 *	* 11 *	< 2	< 2	* 9 *
HYDROGEN IN WATER	< 5	< 17	< 17	< 17	< 17	< 17

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TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28IW938F	IR28IW939F	IR28MW211F	IR28MW275F	IR28MW311A	IR28MW341F
Sample Date	01/10/2003	01/09/2003	01/09/2003	01/08/2003	01/07/2003	01/09/2003
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Sample ID	0302H027	0302H021	0302H022	0302H014	0302H003	0302H023
ANIONS (µg/L)						
CHLORIDE	* 110,000 *	* 140,000 *	* 150,000 *	* 13,000 *	* 15,000,000 *	* 100,000 *
NITRATE AS NITROGEN	NA	NA	NA	NA	NA	< 15
ALKALINITY (µg/L)						
ALKALINITY, TOTAL (AS CACO3)	* 190,000 *	* 81,000 *	* 44,000 *	* 140,000 *	* 210,000 *	* 22,000 *

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TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support

Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28MW342F	IR28MW351F	IR28MW355F	IR28MW356F	IR28MW357F	IR28MW357F (DUP)
Sample Date	01/09/2003	01/07/2003	01/07/2003	01/07/2003	01/07/2003	01/07/2003
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Sample ID	0302H019	0302H002	0302H006	0302H007	0302H004	0302H005
VOLATILE ORGANIC COMPOUNDS (µg/L)						
1,1,1-TRICHLOROETHANE	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-TETRACHLOROETHANE	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 1	* 0.6 J *	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	* 1 *	* 0.2 J *	< 1	* 0.3 J *	< 1	< 1
1,1-DICHLOROETHANE	* 0.3 J *	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHENE	* 0.3 J *	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-TRICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPANE	< 5	< 5	< 5	< 5	< 5	< 5
1,2-DIBROMOETHANE	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	* 6 *	* 0.8 J *	< 1	* 0.3 J *	< 1	< 1
1,2-DICHLOROPROPANE	* 0.2 J *	* 0.2 J *	< 1	< 1	< 1	< 1
1,3-DICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
1,4-DICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	< 5	< 5	< 5	< 5	< 5	< 5
2-HEXANONE	< 5	< 5	< 5	< 5	< 5	< 5
4-METHYL-2-PENTANONE	< 5	< 5	< 5	< 5	< 5	< 5
ACETONE	< 5	< 5	< 5	< 5	< 5	< 5
BENZENE	< 1	< 1	< 1	< 1	< 1	< 1
BROMOCHLOROMETHANE	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	< 1	* 0.4 J *	< 1	< 1	< 1	< 1
CARBON DISULFIDE	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	< 1	* 1 *	< 1	* 11 J *	< 1	< 1
CHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	* 8 *	< 2	< 1	* 6 J *	* 3 *	* 3 *
CHLOROMETHANE	< 1	< 1	* 0.3 J *	* 0.3 J *	< 1	< 1

Notes to table on page 13

TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28MW342F	IR28MW351F	IR28MW355F	IR28MW356F	IR28MW357F	IR28MW357F (DUP)
Sample Date	01/09/2003	01/07/2003	01/07/2003	01/07/2003	01/07/2003	01/07/2003
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Sample ID	0302H019	0302H002	0302H006	0302H007	0302H004	0302H005
VOLATILE ORGANIC COMPOUNDS (µg/L)						
CIS-1,2-DICHLOROETHENE	* 1 *	* 4 *	< 1	* 13 J *	* 0.2 J *	* 0.2 J *
CIS-1,3-DICHLOROPROPENE	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	< 1	< 1	< 1	< 1	< 1	< 1
DICHLORODIFLUOROMETHANE	< 1	< 1	< 1	< 1	< 1	< 1
ETHYLBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
ISOPROPYLBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	< 8	< 2	< 2	< 2	< 2	< 2
STYRENE	< 1	< 1	< 1	< 1	< 1	< 1
TERT-BUTYL METHYL ETHER	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHENE	* 1 *	* 0.3 J *	< 1	< 1	< 1	< 1
TOLUENE	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHENE	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,3-DICHLOROPROPENE	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHENE	* 47 *	* 35 *	* 17 *	* 44 *	* 35 *	* 34 *
TRICHLOROFLUOROMETHANE	< 1	* 2 *	< 1	< 1	< 1	< 1
VINYL CHLORIDE	< 1	< 1	< 1	< 1	< 1	< 1
XYLENE (TOTAL)	< 1	< 1	< 1	< 1	< 1	< 1
TOTAL METALS (µg/L)						
IRON	* 400 *	* 6,000 *	* 49 J *	< 32	* 1,300 *	* 1,700 *
DISSOLVED METALS (µg/L)						
ARSENIC	NA	< 1	* 6 J *	* 1 J *	* 2 J *	* 2 J *
IRON	* 34 J *	* 100 *	* 11 J *	* 14 J *	< 9	< 9
MANGANESE	NA	* 250 *	* 2 J *	* 5 J *	* 110 *	* 120 *
DISSOLVED GASES (µg/L)						
ETHANE	* 55 *	< 0.5	< 0.5	< 0.5	* 0.4 J *	NA
ETHENE	* 10 *	< 2	< 2	< 2	< 2	NA
HYDROGEN IN WATER	< 17	< 17	< 17	< 17	< 17	NA

Notes to table on page 13

TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28MW342F	IR28MW351F	IR28MW355F	IR28MW356F	IR28MW357F	IR28MW357F (DUP)
Sample Date	01/09/2003	01/07/2003	01/07/2003	01/07/2003	01/07/2003	01/07/2003
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Sample ID	0302H019	0302H002	0302H006	0302H007	0302H004	0302H005
ANIONS (µg/L)						
CHLORIDE	* 86,000 *	* 2,500,000 *	* 73,000 *	* 180,000 *	* 72,000 *	NA
ALKALINITY (µg/L)						
ALKALINITY, TOTAL (AS CACO3)	* 53,000 *	* 100,000 *	* 140,000 *	* 160,000 *	* 120,000 *	NA

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TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support

Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28MW358F	IR28MW359F	IR28MW360F	IR28MW361F	IR28MW361F (DUP)	IR28MW362F
Sample Date	01/08/2003	01/08/2003	01/08/2003	01/08/2003	01/08/2003	01/10/2003
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Sample ID	0302H009	0302H012	0302H013	0302H010	0302H011	0302H026
VOLATILE ORGANIC COMPOUNDS (µg/L)						
1,1,1-TRICHLOROETHANE	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-TETRACHLOROETHANE	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	< 1	< 1	* 0.8 J *	* 0.2 J *	< 1	* 1 *
1,1-DICHLOROETHANE	< 1	< 1	* 0.2 J *	< 1	< 1	* 0.2 J *
1,1-DICHLOROETHENE	< 1	< 1	* 0.6 J *	< 1	< 1	< 1
1,2,3-TRICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-TRICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPANE	< 5	< 5	< 5	< 5	< 5	< 5
1,2-DIBROMOETHANE	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	< 1	< 1	* 3 *	* 0.2 J *	* 0.2 J *	* 23 *
1,2-DICHLOROPROPANE	< 1	< 1	* 0.2 J *	< 1	< 1	< 1
1,3-DICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
1,4-DICHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	< 5	< 5	< 5	< 5	< 5	< 5
2-HEXANONE	< 5	< 5	< 5	< 5	< 5	< 5
4-METHYL-2-PENTANONE	< 5	< 5	< 5	< 5	< 5	< 5
ACETONE	< 5	< 5	< 5	< 5	< 5	NA
BENZENE	< 1	< 1	* 0.3 J *	< 1	< 1	< 1
BROMOCHLOROMETHANE	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	< 1	* 0.5 J *	< 1	* 2 *	* 3 *	< 1
CARBON DISULFIDE	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	< 1	* 0.5 J *	* 4 *	* 5 *	* 6 *	< 1
CHLOROBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	< 1	* 3 *	* 44 J *	* 17 *	* 17 *	< 2
CHLOROMETHANE	* 0.3 J *	< 1	< 1	* 0.4 J *	* 0.5 J *	< 1

Notes to table on page 13

TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28MW358F	IR28MW359F	IR28MW360F	IR28MW361F	IR28MW361F (DUP)	IR28MW362F
Sample Date	01/08/2003	01/08/2003	01/08/2003	01/08/2003	01/08/2003	01/10/2003
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Sample ID	0302H009	0302H012	0302H013	0302H010	0302H011	0302H026
VOLATILE ORGANIC COMPOUNDS (µg/L)						
CIS-1,2-DICHLOROETHENE	< 1	* 0.2 J *	* 18 *	* 3 *	* 3 *	< 1
CIS-1,3-DICHLOROPROPENE	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	< 1	< 1	< 1	< 1	< 1	< 1
DICHLORODIFLUOROMETHANE	< 1	< 1	< 1	< 1	< 1	< 1
ETHYLBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
ISOPROPYLBENZENE	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	< 2	< 2	< 2	< 2	< 2	* 16 *
STYRENE	< 1	< 1	< 1	< 1	< 1	< 1
TERT-BUTYL METHYL ETHER	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHENE	< 1	* 0.4 J *	* 12 *	* 0.4 J *	* 0.5 J *	< 1
TOLUENE	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHENE	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,3-DICHLOROPROPENE	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHENE	* 4 *	* 55 *	* 690 *	* 130 *	* 130 *	* 11 *
TRICHLOROFLUOROMETHANE	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	< 1	< 1	* 0.8 J *	< 1	< 1	< 1
XYLENE (TOTAL)	< 1	< 1	< 1	< 1	< 1	< 1
TOTAL METALS (µg/L)						
IRON	* 570 *	* 270 *	* 720 *	* 19,000 *	* 21,000 *	< 190
DISSOLVED METALS (µg/L)						
ARSENIC	* 4 J *	NA	* 3 J *	NA	NA	NA
IRON	< 9	* 10 J *	< 9	* 9,200 *	* 13,000 *	< 71
MANGANESE	* 3 J *	NA	* 74 *	NA	NA	NA
DISSOLVED GASES (µg/L)						
ETHANE	< 0.5	< 0.5	* 4 *	* 2 *	NA	* 16 *
ETHENE	< 2	< 2	* 3 *	< 2	NA	* 3 *
HYDROGEN IN WATER	< 17	< 17	< 17	< 17	NA	* 42 *

Notes to table on page 13

TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28MW358F	IR28MW359F	IR28MW360F	IR28MW361F	IR28MW361F (DUP)	IR28MW362F
Sample Date	01/08/2003	01/08/2003	01/08/2003	01/08/2003	01/08/2003	01/10/2003
Matrix	WATER	WATER	WATER	WATER	WATER	WATER
Sample ID	0302H009	0302H012	0302H013	0302H010	0302H011	0302H026
ANIONS (µg/L)						
CHLORIDE	* 54,000 *	* 66,000 *	* 55,000 *	* 88,000 *	NA	* 120,000 *
NITRATE AS NITROGEN	NA	* 2,900 *	* 3,500 *	* 660 *	NA	* 80 *
ALKALINITY (µg/L)						
ALKALINITY, TOTAL (AS CACO3)	* 230,000 *	* 120,000 *	* 80,000 *	* 110,000 *	NA	* 14,000 *

Notes to table on page 13

TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support

Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28MW932F	IR28MW933F5	IR28MW934F5
Sample Date	01/09/2003	01/08/2003	01/08/2003
Matrix	WATER	WATER	WATER
Sample ID	0302H020	0302H016	0302H015
VOLATILE ORGANIC COMPOUNDS (µg/L)			
1,1,1-TRICHLOROETHANE	< 1	< 1	< 1
1,1,2,2-TETRACHLOROETHANE	< 1	< 1	< 1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	* 1 *	* 0.3 J *	* 2 *
1,1-DICHLOROETHANE	* 1 *	< 1	< 1
1,1-DICHLOROETHENE	* 0.6 J *	< 1	< 1
1,2,3-TRICHLOROBENZENE	< 1	< 1	< 1
1,2,4-TRICHLOROBENZENE	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPANE	< 5	< 5	< 5
1,2-DIBROMOETHANE	< 1	< 1	< 1
1,2-DICHLOROBENZENE	< 1	< 1	< 1
1,2-DICHLOROETHANE	* 41 *	* 0.2 J *	* 0.7 J *
1,2-DICHLOROPROPANE	* 0.3 J *	< 1	* 0.5 J *
1,3-DICHLOROBENZENE	< 1	< 1	< 1
1,4-DICHLOROBENZENE	< 1	< 1	< 1
2-BUTANONE	< 5	< 5	< 5
2-HEXANONE	< 5	< 5	< 5
4-METHYL-2-PENTANONE	< 5	< 5	< 5
ACETONE	< 5	< 5	< 5
BENZENE	< 1	< 1	< 1
BROMOCHLOROMETHANE	< 1	< 1	< 1
BROMODICHLOROMETHANE	< 1	< 1	< 1
BROMOFORM	< 1	< 1	< 1
BROMOMETHANE	< 1	< 1	< 1
CARBON DISULFIDE	< 1	< 1	< 1
CARBON TETRACHLORIDE	< 1	* 1 *	* 30 *
CHLOROBENZENE	< 1	< 1	< 1
CHLOROETHANE	< 1	< 1	< 1
CHLOROFORM	* 64 *	* 6 *	* 92 J *
CHLOROMETHANE	< 1	< 1	< 1

Notes to table on page 13

TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28MW932F	IR28MW933F5	IR28MW934F5
Sample Date	01/09/2003	01/08/2003	01/08/2003
Matrix	WATER	WATER	WATER
Sample ID	0302H020	0302H016	0302H015
VOLATILE ORGANIC COMPOUNDS (µg/L)			
CIS-1,2-DICHLOROETHENE	* 22 *	* 1 *	* 54 J *
CIS-1,3-DICHLOROPROPENE	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	< 1	< 1	< 1
DICHLORODIFLUOROMETHANE	< 1	< 1	< 1
ETHYLBENZENE	< 1	< 1	< 1
ISOPROPYLBENZENE	< 1	< 1	< 1
METHYLENE CHLORIDE	* 13 *	< 2	< 2
STYRENE	< 1	< 1	< 1
TERT-BUTYL METHYL ETHER	< 1	< 1	< 1
TETRACHLOROETHENE	* 2 *	< 1	* 0.3 J *
TOLUENE	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHENE	< 1	< 1	* 0.3 J *
TRANS-1,3-DICHLOROPROPENE	< 1	< 1	< 1
TRICHLOROETHENE	* 120 *	* 38 *	* 400 *
TRICHLOROFLUOROMETHANE	< 1	< 1	< 1
VINYL CHLORIDE	* 0.8 J *	< 1	< 1
XYLENE (TOTAL)	< 1	< 1	< 1
TOTAL METALS (µg/L)			
IRON	* 400 *	* 3,400 *	* 960 *
DISSOLVED METALS (µg/L)			
ARSENIC	< 3	NA	NA
IRON	* 91 J *	< 9	< 9
MANGANESE	* 1,200 *	NA	NA
DISSOLVED GASES (µg/L)			
ETHANE	* 33 *	* 2 *	< 0.5
ETHENE	* 31 *	< 2	< 2
HYDROGEN IN WATER	< 17	< 17	< 17

Notes to table on page 13

TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support

Hunters Point Shipyard, San Francisco, California

Sample Location ID	IR28MW932F	IR28MW933F5	IR28MW934F5
Sample Date	01/09/2003	01/08/2003	01/08/2003
Matrix	WATER	WATER	WATER
Sample ID	0302H020	0302H016	0302H015
ANIONS (µg/L)			
CHLORIDE	* 92,000 *	* 140,000 *	* 220,000 *
NITRATE AS NITROGEN	NA	* 810 *	NA
ALKALINITY (µg/L)			
ALKALINITY, TOTAL (AS CACO3)	* 96,000 *	* 55,000 *	* 100,000 *

Notes to table on page 13

TABLE 2: ANALYTICAL RESULTS FOR POST-INJECTION ROUND 1 GROUNDWATER SAMPLES (Continued)

User Data Package 3, Parcel C Treatability Study Support
Hunters Point Shipyard, San Francisco, California

Notes: < = Chemical was analyzed for and was not detected at the associated reporting limit
J = Estimated value
NA = Not analyzed

All detected concentrations are flanked by asterisks (*).

ENCLOSURE 1
GROUNDWATER SAMPLING FORMS

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 1 of 1

Well No.: 1R28MW211F

Personnel: H Cheng

Day: Thursday

Date: 1/9/03

Casing Volume = N/A Gallons

Initial depth to water: 6.75 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 87.6 ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1.14	Ø	127	6.75	15.78	Ø.626	2.Ø6	8.48	-485.5	31.4	Ø
1620	1	16Ø	6.76	16.16	Ø.624	Ø.72	8.5Ø	-513.Ø	27.7	Ø
1626	2	16Ø	6.76	16.29	Ø.624	Ø.49	8.51	-536.2	26.5	Ø
1631	3	16Ø	6.77	16.32	Ø.622	Ø.27	8.51	-547.8	25.7	Ø
1636	4	175	6.78	16.39	Ø.621	Ø.21	8.52	-55Ø.6	26.Ø	Ø
1642	5	16Ø	6.79	16.37	Ø.619	Ø.21	8.51	-551.8	24.1	Ø
1648	6	16Ø	6.8Ø	16.34	Ø.617	Ø.2Ø	8.51	-554.1	24.Ø	Ø
1654	7	16Ø	6.8Ø	16.39	Ø.613	Ø.19	8.51	-554.5	23.2	Ø
1700	8	16Ø	6.8Ø	16.44	Ø.611	Ø.15	8.51	-562.1	21.9	Ø
1705	9	16Ø	6.8Ø	16.48	Ø.61Ø	Ø.12	8.52	-559.7	22.Ø	Ø
1711	10	16Ø	6.8Ø	16.48	Ø.61Ø	Ø.13	8.52	-555.7	21.4	Ø

After sampling and, if accessible, depth to bottom: 15.86 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	Ø2JØ179 A1	Filter Apparatus	Ø.45 µm	N/A
Water Level Meter	Heron H.O.L	Ø1-1ØØ9	Other Turbidimeter	DRT-15CE	319
Pump	Geopump I	91Ø	Other		
PID	Thermo 580B	5848-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern — Off-Site Lab		Fate and Transport Data — Off-Site Lab	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: Ø3Ø2HØ22 Sample Date/Time: 1/9/03 1715

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 10' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: IR28MW275F

Sheet 1 of 1

Personnel: H. Cheng

Day: WEDNESDAY

Date: 1/8/03

Casing Volume = N/A Gallons

Initial depth to water: 6.00 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 14.2 ppm Background: 0 ppm

Groundwater Parameters

	Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
MODIFIED MICRO PURGE →	1224	0	120	6.00	15.14	0.378	6.82	7.15	189.9	57.7	0
	1229	0.5	120	6.81	15.00	0.375	4.86	7.03	205.4	6.74	0
	1241	6.0	600	8.70	15.44	0.333	5.12	7.02	213.6	3.32	0
	1246	7	150	8.80	15.47	0.350	4.04	7.00	227.3	2.08	0
	1252	8	150	8.81	15.48	0.364	3.69	6.98	193.0	4.84	0
	1300	9	120	8.86	15.48	0.366	3.64	6.97	237.3	8.44	0
	1308	10	120	8.80	15.48	0.365	3.58	6.96	234.0	9.95	0
	1315	11	120	8.79	15.56	0.365	3.51	6.96	242.1	7.33	0

After sampling and, if accessible, depth to bottom: 11.88 ft. below TOC Purged Dry? No

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI-556	02J0179 A1	Filter Apparatus	0.45 µm	N/A
Water Level Meter	Heron	01-1009	Other Turbidimeter	DRT-15CE	310
Pump	Geopump 1	910	Other		
PID	Thermo 580B	5806-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab	Fate and Transport Data	Off-Site Lab
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 030214014

Sample Date/Time: 1/8/03 1320

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 9' bgs

Method of Extraction:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1R28MW311A

Sheet 1 of 1

Personnel: D. CHENG

Day: TUESDAY

Date: 1/7/03

Casing Volume = N/A Gallons

Initial depth to water: 4.57 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1448	0	—	4.71	17.62	39.33	0.56	6.76	153.0	2.67	0
1452	1	185	4.71	17.66	39.46	0.25	6.82	99.5	0.93	0
1456	2	240	4.71	17.76	39.38	0.16	6.82	82.9	1.13	0
1459	3	300	4.71	17.81	39.29	0.46	6.82	74.5	1.03	0
1501	4	343	4.71	17.85	39.22	0.10	6.82	71.3	1.34	0
1504	5	343	4.71	17.86	39.15	0.06	6.82	68.9	2.52	0
1507	6	343	4.71	17.82	39.06	0.03	6.83	65.8	1.41	0
1509	7	343	4.71	17.87	38.97	0.07	6.83	63.3	1.21	0
1511	8	343	4.71	17.85	38.94	0.07	6.83	61.3	1.07	0

After sampling and, if accessible, depth to bottom: 19.63 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI-556	01F0880AC	Filter Apparatus	0.45 µm	N/A
Water Level Meter	HOIL/SMOIL	01-1002	Other Turbidimeter	DRT-15CE	310
Pump	Geopump1	719	Other		
PID	Thermo	5285-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab	Fate and Transport Data	Off-Site Lab
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 0302H003 Sample Date/Time: 1/7/03 1515

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 16' bgs.

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 1 of 1

Well No.: 1R28MW341F

Personnel: D. CHENG

Day: THURSDAY

Date: 1/9/03

Casing Volume = N/A Gallons

Initial depth to water: 6.82 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0 ppm Background: 0 ppm

Modified micropurge at 300 ml/min

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1619	0	—	6.99	15.20	0.410	0.55	8.17	-312.2	241	0
1628	1	114	7.30	16.04	0.404	0.20	8.14	-315.6	174	0
1645	7	141	7.98	17.15	0.408	0.03	7.97	-327.9	46.8	0
1650	8	200	7.62	17.04	0.411	0.04	7.92	-331.2	34.0	0
1656	9	240	7.56	17.02	0.416	0.07	7.89	-334.1	20.7	0
1659	10	240	7.68	17.06	0.416	0.04	7.91	-356.4	17.1	0
1703	11	240	7.70	17.05	0.416	0.05	7.91	-357.8	14.2	0
1707	12	240	7.68	17.05	0.416	0.08	7.90	-342.3	11.2	0
1710	13	240	7.70	17.07	0.416	0.09	7.89	-343.3	9.9	0
1714	14	240	7.66	17.08	0.416	0.07	7.88	-342.2	9.2	0
1718	15	240	7.58	17.05	0.417	0.06	7.87	-351.1	8.1	0

After sampling and, if accessible, depth to bottom: 16.75 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	01F0880 AC	Filter Apparatus	0.45 µm	N/A
Water Level Meter	Heron H01L	01-1002	Other Turbidimeter	DRT-15CE	310
Pump	Geopump 1	719	Other		
PID	OVM 580B	580B-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X
		NITRATE	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 0302H023

Sample Date/Time: 1/9/03 1735

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 14' bgs.

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 1 of 2

Well No.: IRZ8MW342F

Personnel: D. CHENG

Day: THURSDAY

Date: 1/9/03

Casing Volume = N/A Gallons

Initial depth to water: 6.48 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
0937	0	-	6.63	15.61	0.480	0.57	7.34	-195.4	85.1	0
0941	1	240	6.65	16.04	0.458	0.19	7.67	-192.9	79.4	0
0945	2	240	6.67	16.18	0.449	0.15	7.81	-228.7	63.5	0
0948	3	300	6.68	16.31	0.444	0.06	7.96	-282.0	45.9	0
0952	4	300	6.68	16.34	0.443	0.03	8.02	-288.2	32.5	0
0954	5	360	6.69	16.37	0.445	0.03	8.08	-273.0	24.5	0
0957	6	300	6.69	16.42	0.447	0.03	8.10	-309.0	21.5	0
0959	7	343	6.69	16.42	0.451	0.02	8.12	-305.7	18.6	0
1002	8	343	6.70	16.44	0.456	0.02	8.13	-307.0	16.0	0
1005	9	343	6.70	16.43	0.457	0.02	8.14	-307.6	14.4	0
1007	10	343	6.70	16.43	0.458	0.01	8.15	-317.1	14.7	0

After sampling and, if accessible, depth to bottom: 14.80 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	01F0880 AC	Filter Apparatus	0.45 µm	N/A
Water Level Meter	Heron H01L	01-10002	Other Turbidimeter	DRT-15CE	310
Pump	Geopump 1	719	Other		
PID	Thermo 580B	580B-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab	Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Fe (Total)	X	Chloride	X	Fe^{2+} (mg/L)	N/A	N/A
Fe (Dis.)	X	Alkalinity	X	Mn^{2+} (mg/L)		
As (Dis.)		Ethane	X	Filter where turbidity > 50 NTU		
Mn (Dis.)		Ethene	X	Downhole Dissolved Oxygen		
VOCs	X	Hydrogen	X	Top (mg/L)		
				Middle (mg/L)	N/A	
				Bottom (mg/L)		

Sample Number: 0302H019

Sample Date/Time: 1/9/03 1030

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 10' bgs.

Method of Extraction:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 2 of 2

Well No.: IR28MW342F

Day: THURSDAY

Date: 1/9/03

Personnel: D. CHENG

Initial depth to water: 6.48 ft. below top of casing

Casing Volume = N/A Gallons

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: Ø ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1Ø1Ø	11	343	6.72	16.45	Ø.46Ø	Ø.Ø2	8.16	-321.1	13.4	Ø
1Ø12	12	343	6.72	16.45	Ø.461	Ø.Ø2	8.16	-311.7	11.7	Ø
1Ø14	13	343	6.72	16.47	Ø.462	Ø.Ø5	8.16	-328.3	11.1	Ø
1Ø17	14	343	6.72	16.48	Ø.463	Ø.Ø3	8.17	-329.8	1Ø.5	Ø
1Ø2Ø	15	343	6.72	16.45	Ø.463	Ø.Ø2	8.18	-329.1	9.6	Ø
1Ø23	16	343	6.72	16.4Ø	Ø.465	Ø.Ø2	8.19	-327.7	8.6	Ø
1Ø25	17	343	6.72	16.42	Ø.466	Ø.Ø4	8.18	-323.9	7.7	Ø

After sampling and, if accessible, depth to bottom: 14.8Ø ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter			Filter Apparatus		
Water Level Meter			Other		
Pump			Other		
PID			Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab	Fate and Transport Data	Off-Site Lab
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)		
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	
Bottom (mg/L)	

Sample Date/Time:

Sample Number:

QA/QC Sample(s)? ☐ ~~None~~ ☐ Field Dup ☐ MS/MSD

Dup. Sample Time Dup. Sample Number

Comments:

Method of Extraction:
☐ Submersible Pump
☐ Peristaltic Pump
☐ Disposable Bailer

Method of Sampling:
☐ Submersible Pump
☐ Peristaltic Pump
☐ Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1R28MW351F

Sheet 1 of 2

Personnel: H. CHENG, D. CHENG

Day: TUESDAY

Date: 1/7/03

Casing Volume = N/A Gallons

Initial depth to water: 6.71 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 1.3 ppm Background: Φ ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1026	Φ	–	6.71	15.27	2.893	3.76	8.07	-70.2	9.62	Φ
1028	1	300	6.95	16.56	6.730	2.53	7.45	-45.5	124.5	Φ
1030	2	300	6.91	16.99	7.589	1.89	7.21	-26.1	97.9	Φ
1032	3	240	6.90	17.00	7.592	1.47	7.18	-18.8	65.3	Φ
1035	4	300	6.91	17.05	7.362	1.12	7.19	-24.1	49.0	Φ
1037	5	300	6.92	17.10	7.059	0.83	7.21	-36.7	40.3	Φ
1040	6	300	6.93	17.15	6.760	0.64	7.22	-40.3	29.5	Φ
1042	7	300	6.93	17.20	6.671	0.54	7.23	-38.6	20.9	Φ
1044	8	300	6.93	17.22	6.630	0.47	7.23	-33.3	15.1	Φ
1046	9	300	6.93	17.25	6.671	0.40	7.22	-26.1	11.3	Φ
1049	10	300	6.94	17.26	6.728	0.35	7.21	-18.2	8.7	Φ

After sampling and, if accessible, depth to bottom: 61.80 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	02J0179 AI	Filter Apparatus	0.45 μm	N/A
Water Level Meter	HERON H.01L	01-1009	Other ~~TURBIDIMETER~~	DRT-15CE	319
Pump	FULTZ	FULTZ-01	Other		
PID	OVM 580B	580B-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	N/A
Bottom (mg/L)	

Sample Number: 03021002

Sample Date/Time: 1/7/03 1100

QA/QC Sample(s)? ☐ None ☐ Field Dup ☒ MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 55' bgs

Method of Extraction:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

Method of Sampling:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 2 of 2

Well No.: 1R28MW351F

Personnel: H. CHENG, D. CHENG

Day: TUESDAY

Date: 1/7/03

Casing Volume = N/A Gallons

Initial depth to water: 6.71 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 1.3 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1051	11	300	6.94	17.28	6.793	0.32	7.20	-14.1	6.8	0
1053	12	300	6.94	17.30	6.832	0.25	7.20	-5.1	5.4	0
1056	13	300	6.94	17.28	6.860	0.27	7.19	-1.7	5.1	0
1058	14	300	6.94	17.26	6.883	0.26	7.18	0.4	5.5	0

After sampling and, if accessible, depth to bottom: 61.80 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter			Filter Apparatus		
Water Level Meter	SEE		~~Other~~	FIRST	SHEET
Pump			Other		
PID			Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab	Fate and Transport Data	Off-Site Lab
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	N/A
Bottom (mg/L)	

Sample Number: 0302H002

Sample Date/Time: 1/7/03 1100

QA/QC Sample(s)? ☐ None ☐ Field Dup ☒ MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 55' bgs

Method of Extraction:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

Method of Sampling:
- ☒ Submersible Pump
- ☐ Peristaltic Pump
- ☐ Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: ~~IR28MW355F~~ IR28MW355F

Sheet 1 of 1

Personnel: D. Cheng

Day: TUESDAY

Date: 1/7/03

Casing Volume = N/A Gallons

Initial depth to water: 6.74 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1612	0	—	6.81	16.69	1.136	4.65	8.00	46.2	2.31	0
1620	1	120	7.23	16.67	0.833	4.30	7.76	45.7	1.15	0
1635	7	120	8.83	16.82	0.656	4.46	7.68	42.9	3.40	0
1641	8	109	8.88	16.68	0.655	3.56	7.64	42.2	1.81	0
1649	9	109	8.93	16.69	0.654	3.66	7.62	47.6	2.06	0
1657	10	109	8.98	16.69	0.655	3.56	7.60	45.5	1.60	0

modified micropurge at 300 ml/min

After sampling and, if accessible, depth to bottom: 20.43 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	01F0880AC	Filter Apparatus	0.45 µm	N/A
Water Level Meter	HOIL/SM0HL	01-1002	Other Turbidimeter	DRT-15CE	310
Pump	Geopump 1	719	Other		
PID	Thermo SPM	75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data: Off-Site Lab	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 0302H006 Sample Date/Time: 1/7/03 1700

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 18' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: ~~1R28MW355F~~ 1R28MW356F (HC)

Sheet 1 of 1

Personnel: H. Cheng

Day: TUESDAY

Date: 1/7/03

Casing Volume = N/A Gallons

Initial depth to water: 6.71 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 4.3 ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1615	Ø	15Ø	6.71	16.93	Ø.959	6.27	7.31	177.7	Ø.59	Ø
1622	1	12Ø	7.16	16.92	Ø.979	6.18	7.26	182.7	Ø.39	Ø
1638	8	6ØØ	9.1Ø	17.Ø1	Ø.958	6.3Ø	7.27	176.5	1.51	Ø
1644	9	2ØØ	9.Ø5	16.99	Ø.957	6.17	7.27	178.5	1.17	Ø
1650	1Ø	2ØØ	9.Ø9	16.99	Ø.96Ø	6.13	7.26	179.3	Ø.75	Ø
1656	11	185	9.1Ø	16.98	Ø.96Ø	6.2Ø	7.25	182.2	Ø.45	Ø

MODIFIED MICROPURGE →

After sampling and, if accessible, depth to bottom: 2Ø.4Ø ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	Ø2JØ179 A1	Filter Apparatus	Ø.45 μm	N/A
Water Level Meter	HERON H-Ø1L	(HC) 645-Ø1-18Ø9	Other TURBIDIMETER	DRT-15CE	319
Pump	GEOPUMP 1	91Ø	Other		
PID	THERMO 580B	580B-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: Ø3Ø24Ø07

Sample Date/Time: 1/7/Ø3 1715

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 15' bgs

Method of Extraction:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 1 of 1

Well No.: IR28MW357F

Personnel: H. CHENG

Day: TUESDAY

Date: 1/7/03

Casing Volume = N/A Gallons

Initial depth to water: 6.26 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 4.5 ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1442	Ø	12Ø	6.41	16.63	Ø.537	5.94	7.60	149.9	8.56	Ø
145Ø	1	12Ø	6.64	16.69	Ø.515	3.33	7.36	167.3	8.5Ø	Ø
1453	1.5	12Ø	6.72	16.69	Ø.514	3.Ø8	7.33	168.3	8.22	Ø
15Ø4	8.Ø	6ØØ	7.85	16.88	Ø.518	2.31	7.28	163.8	7.96	Ø
15Ø9	11.Ø	12Ø	8.1Ø	16.91	Ø.521	2.Ø9	7.27	161.5	8.21	Ø
1515	12	16Ø	7.94	16.86	Ø.521	1.89	7.26	163.2	8.65	Ø
1518	13	25Ø	7.95	16.85	Ø.522	1.79	7.26	163.7	8.89	Ø
1522	14	25Ø	7.96	16.82	Ø.523	1.77	7.25	164.1	9.76	Ø

MODIFIED MICROPURGE →

After sampling and, if accessible, depth to bottom: 2Ø.38 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	ØZJØ179 A1	Filter Apparatus	Ø.45 µm	N/A
Water Level Meter	HERON H.OIL	(MW) 645 Ø1-1889	Other TURBIDIMETER	DRT-15CE	319
Pump	GEOPUMP 1	91Ø	Other		
PID	THERMO 580B	580B-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data: Off-Site Lab		Field Test Kit Analyses	Unfiltered	Filtered
Fe (Total)	X	Chloride	X	Fe^{2+} (mg/L)	N/A	N/A
Fe (Dis.)	X	Alkalinity	X	Mn^{2+} (mg/L)		
As (Dis.)	X	Ethane	X	Filter where turbidity > 50 NTU.		
Mn (Dis.)	X	Ethene	X	Downhole Dissolved Oxygen		
VOCs	X	Hydrogen	X	Top (mg/L)	N/A	
				Middle (mg/L)		
				Bottom (mg/L)		

Sample Number: Ø3Ø2HØØ4 Sample Date/Time: 1/7/03 153Ø

QA/QC Sample(s)? ☐ None ☒ Field Dup ☐ MS/MSD

Dup. Sample Time 154Ø Dup. Sample Number Ø3Ø2HØØ5

Comments: Pump intake at 15 bgs

Method of Extraction:
- ☐ Submersible Pump
- ☒ Peristaltic Pump
- ☐ Disposable Bailer

Method of Sampling:
- ☐ Submersible Pump
- ☒ Peristaltic Pump
- ☐ Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: IR28MW358F

Sheet 1 of 1

Personnel: H. CHENG, D. CHENG

Day: TUESDAY

Date: 1/7/03

Casing Volume = N/A Gallons

Initial depth to water: 6.36 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: Ø ppm Background: Ø ppm

Groundwater Parameters

	Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
	Ø858	Ø	~~60~~ 150	7.23	15.93	Ø.84Ø	7.Ø6	7.57	177.3	2.49	Ø
	Ø9Ø3	2	6Ø	7.43	16.7Ø	Ø.841	6.Ø1	7.59	147.2	2.35	Ø
	Ø91Ø	3	6Ø	7.58	16.30	Ø.843	4.32	7.59	139.6	2.29	Ø
Modified micropurging at 3L/min	Ø913	10	16Ø	1Ø.11	16.82	Ø.846	3.69	7.58	117.1	3.74	Ø
	Ø92Ø	11	~~24Ø~~ 150	1Ø.29	16.23	Ø.847	3.21	7.58	128.2	3.81	Ø
	Ø926	12	8Ø	1Ø.46	16.25	Ø.846	2.85	7.57	124.7	3.87	Ø
	MODIFIED MICROPURGE FAILED → ATTEMPT TO PURGE DRY										
	~~Ø94Ø~~	62	PURGED DRY								
1/8/Ø3	~~1Ø44~~ Ø949	63	133	11.98	14.93	Ø.71Ø	2.58	7.22	21Ø.4	7.91	Ø

After sampling and, if accessible, depth to bottom: 2Ø.38 ft. below TOC Purged Dry? Y

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	Ø2JØ179 AI	Filter Apparatus	Ø.45µm	N/A
Water Level Meter	HERON H.MIL	Ø1-1ØØ9	Other TURBIDIMETER	DRT-15CE	319
Pump	FULTZ	FULTZ.Ø1	Other PUMP	GRUNDFOS	719
PID	58Ø B	58ØB-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	~~N/A~~	~~N/A~~
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen
Top (mg/L)
Middle (mg/L) N/A
Bottom (mg/L)

Sample Number: Ø3Ø2HØØ9 Sample Date/Time: 1/8/Ø3 1ØØØ

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 15' bgs

Method of Extraction:
[X] Submersible Pump
[ ] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1R28MW359F

Personnel: D. CHENG

Day: WEDNESDAY

Date: 1/8/03

Sheet 1 of 1

Casing Volume = N/A Gallons

Initial depth to water: 6.19 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1047	0	—	~~7.31~~ 6.31	15.18	0.560	2.31	7.23	116.4	5.03	0
1054	1	120	6.75	15.58	0.558	1.73	7.10	125.7	4.02	0
1103	7	109	8.10	16.61	0.557	1.88	7.01	74.3	3.38	0
1113	8	133	8.09	16.17	0.557	1.39	6.99	65.7	3.20	0
1119	9	133	8.13	16.17	0.557	1.51	6.98	49.7	3.03	0
1125	10	133	8.19	16.16	0.557	1.56	6.98	49.9	2.84	0
1133	11	133	8.22	16.17	0.557	1.57	6.98	48.7	2.96	0

modified micropurge @ 240 mL/min

After sampling and, if accessible, depth to bottom: 20.40 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	01F0880 AC	Filter Apparatus	0.45 µm	N/A
Water Level Meter	Heron H01L	01-10002	Other Turbidimeter	DRT-15CE	319
Pump	Geopump 1	719	Other		
PID	580B	580B-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X
		NITRATE	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 0302H012 Sample Date/Time: 1/8/03 1140

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 15' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1R28MW36ØF

Sheet 1 of 1

Personnel: D. CHENG

Day: WEDNESDAY

Date: 1/8/Ø3

Casing Volume = N/A Gallons

Initial depth to water: 6.2Ø ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: Ø ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1218	Ø	—	6.33	15.62	Ø.537	2.22	7.22	1Ø7.6	6.69	Ø
1224	1	141	6.34	15.84	Ø.538	Ø.89	7.17	7Ø.Ø	6.4Ø	Ø
123Ø	2	16Ø	6.35	16.ØØ	Ø.537	Ø.66	7.14	52.8	6.23	Ø
1234	3	2ØØ	6.38	16.Ø8	Ø.537	Ø.67	7.13	41.2	6.2Ø	Ø
1238	4	185	6.37	16.12	Ø.537	Ø.65	7.11	33.4	5.96	Ø
1243	5	218	6.39	16.13	Ø.537	Ø.59	7.1Ø	27.4	5.53	Ø
1247	6	24Ø	6.39	16.17	Ø.537	Ø.55	7.Ø9	24.6	5.23	Ø
1252	7	24Ø	6.4Ø	16.2Ø	Ø.537	Ø.54	7.Ø9	5.8	5.19	Ø
1254	8	24Ø	6.4Ø	16.2Ø	Ø.537	Ø.46	7.Ø8	1Ø.8	5.Ø1	Ø
1258	9	24Ø	6.4Ø	16.21	Ø.536	Ø.44	7.Ø8	12.3	5.Ø1	Ø

After sampling and, if accessible, depth to bottom: 2Ø.22 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	Ø1FØ88Ø AC	Filter Apparatus	Ø.45 µm	N/A
Water Level Meter	Heron H-Ø1L	Ø1-1ØØ2	Other Turbidimeter	DRT-15CE	319
Pump	Geopump1	719	Other		
PID	58ØB	58ØB-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data: Off-Site Lab	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X
		NITRATE	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU

Downhole Dissolved Oxygen

Top (mg/L)	
Middle (mg/L)	N/A
Bottom (mg/L)	

Sample Number: Ø3Ø2H-Ø13 Sample Date/Time: 1/8/Ø3 1345

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 15' bgs.

Method of Extraction:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1R28MW361F

Sheet 1 of 2

Personnel: H. CHANG

Day: WEDNESDAY

Date: 1/8/03

Casing Volume = N/A Gallons

Initial depth to water: 6.49 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 13.5 ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
Ø949	Ø	12Ø	6.49	15.22	Ø.729	5.65	7.56	2Ø8.Ø	18.3	Ø
Ø958	1	12Ø	6.88	15.68	Ø.67Ø	1.32	7.58	2Ø1.7	16.9	Ø
1ØØ1	1.5	12Ø	6.94	15.77	Ø.667	Ø.99	7.58	198.1	15.76	Ø
1ØØ8	5	6ØØ	7.67	16.68	Ø.664	Ø.38	7.58	-217.2	18.21	Ø
1Ø15	9	6ØØ	8.17	16.68	Ø.671	Ø.32	7.57	-295.Ø	42.5	Ø
1Ø19	12	2ØØ	8.38	16.67	Ø.675	Ø.29	7.57	-454.3	69.6	Ø
1Ø25	13	2ØØ	8.22	16.41	Ø.674	Ø.34	7.57	-371.6	1Ø6.5	Ø
1Ø3Ø	14	2ØØ	8.26	16.4Ø	Ø.678	Ø.35	7.56	-393.8	133.9	Ø
1Ø35	15	2ØØ	8.32	16.43	Ø.682	Ø.33	7.56	-334.4	176.4	Ø
1Ø4Ø	16	185	8.36	16.36	Ø.684	Ø.33	7.55	-379.8	21Ø	Ø
1Ø46	17	16Ø	8.37	16.27	Ø.687	Ø.4Ø	7.55	-381.9	23Ø	Ø

MODIFIED MICROPURGE →

After sampling and, if accessible, depth to bottom: 2Ø.39 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	Ø23Ø179 A1	Filter Apparatus	Ø.45μm	N/A
Water Level Meter	HERON	Ø1-1Ø69	Other TURBIDIMETER	DRT-15CE	31Ø
Pump	GEOPUMP 1	91Ø	Other		
PID	THERMO 580B	75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X
		NITRATE	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: Ø3Ø2HØ1Ø

Sample Date/Time: 1/8/03 11ØØ

QA/QC Sample(s)? [ ] None [X] Field Dup [ ] MS/MSD

Dup. Sample Time 1115 Dup. Sample Number Ø3Ø2HØ11

Comments: Pump intake at 15' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 2 of 2

Well No.: 1R28MW361F

Personnel: H. CHENG

Day: WEDNESDAY

Date: 1/8/03

Casing Volume = N/A Gallons

Initial depth to water: 6.49 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 13.5 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1051	18	160	8.40	16.25	0.689	0.44	7.54	-378.3	214	0

After sampling and, if accessible, depth to bottom: 20.39 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	02J849 A1	Filter Apparatus	0.45 µm	N/A
Water Level Meter	HELON	01-1009	Other TURBIDIMETER	DRT-15CE	310
Pump	GEOPUMP 1	910	Other		
PID	THERMO 580B	75824-654	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab	Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Fe (Total)	X	Chloride	X	Fe^{2+} (mg/L)	N/A	N/A
Fe (Dis.)	X	Alkalinity	X	Mn^{2+} (mg/L)		
As (Dis.)		Ethane	X	Filter where turbidity > 50 NTU		
Mn (Dis.)		Ethene	X	**Downhole Dissolved Oxygen**		
VOCs	X	Hydrogen	X	Top (mg/L)	N/A	
		NITRATE	X	Middle (mg/L)		
				Bottom (mg/L)		

Sample Number: 030240 10 Sample Date/Time: 1/8/03 1100

QA/QC Sample(s)? [ ] None [X] Field Dup [ ] MS/MSD

Dup. Sample Time 1115 Dup. Sample Number 030240 11

Comments: Pump intake at 15' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: IR28MW362F

Sheet 1 of 1

Personnel: H. Cheng

Day: Friday

Date: 1/10/03

Casing Volume = N/A Gallons

Initial depth to water: 6.77 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 14.2 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
0937	0	175	6.77	14.86	0.510	5.44	7.84	-443.8	17.05	0
0945	1	150	6.79	15.66	0.463	2.13	7.94	-495.5	4.93	0
0951	2	150	6.80	15.87	0.454	0.74	8.09	-540.1	2.97	0
0958	3	150	6.77	15.90	0.452	0.53	8.14	-546.8	1.92	0
1004	4	150	6.79	16.06	0.450	0.44	8.17	-494.3	1.77	0
1011	5	150	6.81	16.09	0.450	0.23	8.17	-487.6	1.30	0
1020	6	150	6.80	15.88	0.449	0.24	8.25	-539.4	1.34	0
1027	7	150	6.80	15.99	0.451	0.18	8.25	-545.3	1.30	0
1035	8	150	6.82	16.05	0.454	0.15	8.24	-553.0	1.57	0
1043	9	150	6.82	15.99	0.457	0.14	8.26	-561.3	1.28	0
1050	10	150	6.81	16.00	0.466	0.17	8.24	-555.2	1.35	0

After sampling and, if accessible, depth to bottom: 16.96 ft. below TOC

Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	02J0179 A1	Filter Apparatus	0.45 μm	N/A
Water Level Meter	Heron H.01	01-1002	Other Turbidimeter	ART-15CE	310
Pump	Geopump 1	719	Other		
PID	Thermo 580B	580B-75824-654	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X
		Nitrate	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 03024026

Sample Date/Time: 1/10/03 1100

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 15' bgs

Method of Extraction:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

932

Well No.: IR28MW358F

Sheet 1 of 1

Personnel: H Cheng

Day: Thursday

Date: 1/9/03

Casing Volume = N/A Gallons

Initial depth to water: 6.88 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
0936	1	150	6.88	15.61	0.549	1.86	8.14	-221.6	9.23	0
0942	2	120	6.91	15.88	0.528	0.79	8.38	-272.6	5.09	0
0948	3	120	6.90	15.96	0.522	0.67	8.43	-449.7	3.83	0
0956	4	150	6.92	15.15	0.512	0.35	8.40	-451.6	2.80	0
1003	5	120	6.93	16.08	0.508	0.28	8.38	-398.0	3.66	0
1010	6	120	6.93	16.03	0.504	0.20	8.31	-408.6	2.57	0
1017	7	120	6.94	16.05	0.501	0.17	8.27	-409.6	1.80	0
1025	8	120	6.97	16.07	0.501	0.16	8.25	-431.1	1.87	0
1032	9	120	6.97	16.11	0.501	0.14	8.25	-434.2	1.78	0
1039	10	120	6.97	16.19	0.504	0.13	8.23	-428.0	1.66	0

After sampling and, if accessible, depth to bottom: 30.54 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	02J0179 A1	Filter Apparatus	0.45 mm	N/A
Water Level Meter	Heron H.O.L	01-1009	Other Turbidimeter	DRT-15CE	319
Pump	Geopump 1	910	Other		
PID	Thermo 580B	75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern	Off-Site Lab	Fate and Transport Data	Off-Site Lab	Field Test Kit Analyses	Unfiltered	Filtered
Fe (Total)	X	Chloride	X	Fe^{2+} (mg/L)	N/A	N/A
Fe (Dis.)	X	Alkalinity	X	Mn^{2+} (mg/L)		
As (Dis.)	X	Ethane	X	Filter where turbidity > 50 NTU.		
Mn (Dis.)	X	Ethene	X	Downhole Dissolved Oxygen		
VOCs	X	Hydrogen	X	Top (mg/L)		
				Middle (mg/L)	N/A	
				Bottom (mg/L)		

Sample Number: 03G2H020 Sample Date/Time: 1/9/03 1045

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake set at 28.5' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1R28MW933F5

Sheet 1 of 2

Personnel: H. Cheng

Day: WEDNESDAY

Date: 1/8/03

Casing Volume = N/A Gallons

Initial depth to water: — ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1534	0	120	—	16.75	0.715	2.14	7.44	-377.2	430	0
1541	1	150	—	16.80	0.769	0.58	7.15	-322.1	310	0
1558	2	150	—	17.06	0.726	0.39	7.12	-323.4	385	0
1604	3	150	—	17.01	0.709	0.24	7.10	-354.8	397	0
1610	4	150	—	17.04	0.693	0.20	7.08	-351.2	421	0
1616	5	150	—	17.08	0.674	0.18	7.05	-358.3	332	0
1622	6	150	—	17.03	0.665	0.17	7.04	-352.4	222	0
1627	7	150	—	17.12	0.655	0.18	7.02	-392.0	153.2	0
1633	8	150	—	17.10	0.645	0.17	7.03	-367.0	87.2	0
1640	9	150	—	17.09	0.635	0.15	7.02	-364.7	44.9	0
1647	10	150	—	17.05	0.632	0.15	7.01	-344.3	26.8	0

modified purge rate →

After sampling and, if accessible, depth to bottom: — ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	02J0179 A1	Filter Apparatus	0.45 μm	N/A
Water Level Meter	HERON	01-1009	Other Turbidimeter	DRT-15CE	310
Pump	Geopump 1	910	Other		
PID	Thermo 580B	580B-75824 684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X
		NITRATE	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 03020016

Sample Date/Time: 1/8/03 1710

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Well chamber is too narrow to measure water level. Pump intake at ~29.5' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1P28MW933F5

Sheet 2 of 2

Personnel: H. Cheng

Day: Wednesday

Date: 1/8/03

Casing Volume = N/A Gallons

Initial depth to water: N/A ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 0.0 ppm Background: 0.0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1654	11	150	—	17.13	0.625	0.14	7.01	-322.4	18.5	0
1700	12	150	—	17.12	0.622	0.15	7.01	-316.3	~~20.~~ 19.1 (R)	0
1707	13	150	—	17.12	0.619	0.13	7.01	-318.1	20.1	0

After sampling and, if accessible, depth to bottom: ____ ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter			Filter Apparatus		
Water Level Meter			Other		
Pump			Other		
PID			Other		

SEE FIRST PAGE

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X
		Nitrate	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 0302H016

Sample Date/Time: 1/8/03 1710

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time ____ Dup. Sample Number ____

Comments: Well chamber is too narrow to measure water level.
Pump intake at ~29.5' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 1 of 2

Well No.: 1R28MW934F5

Personnel: D. CHENG

Day: WEDNESDAY

Date: 1/8/03

Casing Volume = N/A Gallons

Initial depth to water: N/A ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: Ø ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1536	Ø	–	N/A	16.36	Ø.856	1.26	7.12	-1Ø5.6	878	Ø
1545	1	16Ø		16.45	Ø.945	Ø.12	6.97	-63.Ø	632	Ø
1552	2	16Ø		16.49	Ø.957	Ø.11	6.91	-4Ø.9	234	Ø
1557	3	16Ø		16.59	Ø.958	Ø.13	6.89	-31.9	236	Ø
16Ø3	4	16Ø		16.61	Ø.961	Ø.15	6.85	-28.8	128	Ø
161Ø	5	16Ø		16.63	Ø.965	Ø.16	6.83	-22.Ø	64.1	Ø
1616	6	16Ø		16.63	Ø.967	Ø.15	6.81	-16.8	47.2	Ø
1623	7	16Ø		16.63	Ø.971	Ø.15	6.79	-12.9	28.Ø	Ø
1629	8	16Ø		16.61	Ø.974	Ø.16	6.76	-8.7	16.4	Ø
1635	9	16Ø		16.7Ø	Ø.98Ø	Ø.18	6.74	-8.5	27.7	Ø
164Ø	1Ø	16Ø		16.76	Ø.984	Ø.18	673	-6.6	3Ø.Ø	Ø

After sampling and, if accessible, depth to bottom: 29.7 ft. below TOC Purged Dry?

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	Ø1FØ88Ø AC	Filter Apparatus	Ø.45 µm	N/A
Water Level Meter	Heron HØ1C	Ø1-1ØØ2	Other Turbidimeter	DRT-15CE	319
Pump	Geopump 1	719	Other		
PID	58ØB	58ØB-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)		Ethane	X
Mn (Dis.)		Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: Ø3Ø2HØ15 Sample Date/Time: 1/8/Ø3 165Ø

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Well chamber too narrow - cannot measure water level. Pump intake at ~29.5' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Baller

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 2 of 2

Well No.: 1R28MW934F5

Personnel: D. LHENG

Day: WEDNESDAY

Date: 1/8/03

Casing Volume = N/A Gallons

Initial depth to water: N/A ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: Ø ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1645	11	160	N/A	16.75	0.990	0.20	6.72	-2.0	28.8	Ø

After sampling and, if accessible, depth to bottom: ft. below TOC Purged Dry?

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter			Filter Apparatus		
Water Level Meter			Other		
Pump			Other		
PID			Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern		Fate and Transport Data			
Off-Site Lab		*Off-Site Lab*		*Field Test Kit Analyses*	Unfiltered / Filtered
Fe (Total)		Chloride		Fe^{2+} (mg/L)	
Fe (Dis.)		Alkalinity		Mn^{2+} (mg/L)	
As (Dis.)		Ethane		Filter where turbidity > 50 NTU.	
Mn (Dis.)		Ethene		*Downhole Dissolved Oxygen*	
VOCs		Hydrogen		Top (mg/L)	
				Middle (mg/L)	
				Bottom (mg/L)	

GEN

Sample Number: Sample Date/Time:

QA/QC Sample(s)? None Field Dup MS/MSD

Dup. Sample Time Dup. Sample Number

Comments:

Method of Extraction:
- Submersible Pump
- Peristaltic Pump
- Disposable Bailer

Method of Sampling:
- Submersible Pump
- Peristaltic Pump
- Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1R281W938F

Sheet 1 of 2

Personnel: D. Cheng

Day: Friday

Date: 1/10/03

Casing Volume = N/A Gallons

Initial depth to water: 6.83 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 18.5 ppm Background: 0 ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
0931	0	–	6.95	16.21	1.124	0.55	8.51	-641.2	731	0
0937	1	133	6.99	16.32	0.731	0.21	8.40	-582.0	654	0
0945	2	133	7.02	16.39	0.556	0.09	8.34	-631.1	697	0
0952	3	133	7.02	16.38	0.550	0.03	8.33	-667.7	581	0
0957	4	133	7.05	16.40	0.548	0.01	8.32	-616.1	623	0
1005	5	133	7.05	16.41	0.547	0.02	8.32	-614.2	607	0
1012	6	133	7.06	16.35	0.547	0.01	8.32	-611.5	574	0
1020	7	133	7.06	16.46	0.547	0.01	8.34	-595.8	598	0
1026	8	133	7.08	16.46	0.546	0.03	8.35	-537.4	624	0
1033	9	133	7.09	16.44	0.546	0.01	8.38	-637.3	396	0
1041	10	133	7.09	16.44	0.545	0.01	8.40	-603.2	498	0

After sampling and, if accessible, depth to bottom: 16.02 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	01F0880AC	Filter Apparatus	0.45µm	N/A
Water Level Meter	Heron H.01	01-1002	Other Turbidimeter	DRT-15CE	310
Pump	Grundfos	910	Other		
PID	Thermo 580B	580B-75824-684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data: Off-Site Lab	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 03021027

Sample Date/Time: 1/10/03 1150

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 13' bgs

Method of Extraction:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1R281W938F

Sheet 2 of 2

Personnel: D. Cheng

Day: Friday

Date: 1/10/03

Casing Volume = N/A Gallons

Initial depth to water: 6.83 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)]

Organic Vapor Concentrations
Top of Casing: 18.5 ppm Background: Φ ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1049	11	133	7.10	16.59	0.546	0.00	8.38	-666.3	108	0
1054	12	133	7.11	16.58	0.545	0.01	8.37	-667.7	184	0
1100	13	133	7.12	16.59	0.545	0.00	8.37	-669.2	213	0
1108	14	133	7.13	16.60	0.544	0.01	8.36	-662.9	274	0
1113	15	133	7.12	16.54	0.544	0.01	8.36	-661.8	307	0
1121	16	133	7.12	16.48	0.543	0.02	8.36	-657.5	509	0
1134	17	133	7.09	16.16	0.543	0.01	8.36	-581.2	579	0
1139	18	133	7.11	16.50	0.543	0.03	8.38	-573.4	612	0
1144	19	133	7.13	16.65	0.542	0.01	8.38	-578.1	608	0

After sampling and, if accessible, depth to bottom: 16.02 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	SEE	PAGE	Filter Apparatus		
Water Level Meter			Other 1		
Pump			Other		
PID			Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: 03024027

Sample Date/Time: 1/10/03 1150

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 13' bgs

Method of Extraction:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: 1R281W939F

Sheet 1 of 3

Personnel: H. Cheng / D. Cheng

Day: Thursday

Date: 1/9/03

Casing Volume = N/A Gallons

Initial depth to water: 6.85 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)] (6")

Organic Vapor Concentrations
Top of Casing: 142 ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1159	Ø	15Ø	6.86	15.48	Ø.645	1.83	8.18	-479.1	16.25	Ø
12Ø6	1	15Ø	6.86	15.91	Ø.648	Ø.43	8.16	-413.7	11.57	Ø
1212	2	16Ø	6.87	16.Ø1	Ø.647	Ø.28	8.16	-391.5	1Ø.28	Ø
1218	3	16Ø	6.87	16.13	Ø.648	Ø.45	8.17	-542.4	1Ø.14	Ø
1224	4	16Ø	6.87	16.18	Ø.648	Ø.24	8.17	-497.7	1Ø.36	Ø
1230	5	2ØØ	6.88	16.24	Ø.648	Ø.48	8.17	-537.6	9.81	Ø
1235	6	2ØØ	6.88	16.28	Ø.648	Ø.17	8.17	-566.4	9.88	Ø
1243	7	2ØØ	6.88	16.14	Ø.648	Ø.25	8.17	-526.4	9.11	Ø
1249	8	2ØØ	6.89	16.21	Ø.647	Ø.22	8.16	-537.2	9.12	Ø
1256	9	2ØØ	6.9Ø	16.3Ø	Ø.647	Ø.19	8.17	-573.1	9.ØØ	Ø
13Ø5	1Ø	2ØØ	6.91	16.36	Ø.647	Ø.12	8.17	-58Ø.2	8.75	Ø

After sampling and, if accessible, depth to bottom: 20.39 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter	YSI 556	Ø2JØ177 A1	Filter Apparatus	Ø.45 µm	N/A
Water Level Meter	Heron H-Øll	Ø1-1ØØ9	Other Turbidimeter	DRT-15CE	319
Pump	Grundfos	91Ø	Other		
PID	Thermo 580B	75824 ~~758~~ 684	Other		

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data (Off-Site Lab)	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: Ø3Ø2HØ21

Sample Date/Time: 1/9/Ø3 144Ø

QA/QC Sample(s)? ☐ None ☐ Field Dup ☐ MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 15' bgs

Method of Extraction:
- ☐ Submersible Pump
- ☒ Peristaltic Pump
- ☐ Disposable Bailer

Method of Sampling:
- ☐ Submersible Pump
- ☒ Peristaltic Pump
- ☐ Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Sheet 2 of 3

Well No.: ~~IRZRMW939F~~ IRZRIW939F

Personnel: H. Cheng / D. Cheng

Day: Thursday

Date: 1/9/03

Casing Volume = N/A Gallons

Initial depth to water: 6.85 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)] (6")

Organic Vapor Concentrations
Top of Casing: 142 ppm Background: Ø ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1309	11	200	6.91	16.35	0.646	0.11	8.17	-586.4	33.0	0
1314	12	200	6.91	16.37	0.645	0.11	8.17	-419.3	33.1	0
1319	13	200	6.91	16.38	0.645	0.14	8.17	-457.0	32.9	0
1324	14	200	6.91	16.40	0.645	0.13	8.17	-514.4	32.1	0
1329	15	200	6.92	16.40	0.645	0.08	8.17	-531.7	31.3	0
1334	16	200	6.92	16.39	0.645	0.09	8.17	-541.6	30.7	0
1339	17	200	6.92	16.42	0.645	0.10	8.17	-444.7	31.1	0
1344	18	200	6.92	16.36	0.645	0.08	8.17	-549.9	29.3	0
1348	19	200	6.92	16.37	0.645	0.09	8.17	-491.1	29.4	0
1353	20	200	6.92	16.40	0.645	0.08	8.16	-446.9	29.5	0
1359	21	200	6.92	16.36	0.645	0.07	8.17	-419.4	27.9	0

After sampling and, if accessible, depth to bottom: 20.39 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter			Filter Apparatus		
Water Level Meter			Other		
Pump			Other		
PID			Other		

SEE PAGE ONE

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data: Off-Site Lab		Field Test Kit Analyses	Unfiltered	Filtered
Fe (Total)	X	Chloride	X	Fe^{2+} (mg/L)	N/A	N/A
Fe (Dis.)	X	Alkalinity	X	Mn^{2+} (mg/L)		
As (Dis.)	X	Ethane	X	Filter where turbidity > 50 NTU.		
Mn (Dis.)	X	Ethene	X	Downhole Dissolved Oxygen		
VOCs	X	Hydrogen	X	Top (mg/L)	NA	
				Middle (mg/L)		
				Bottom (mg/L)		

Sample Number: Ø3Ø2MØ21 Sample Date/Time: 1/9/03 1440

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 15' bgs

Method of Extraction:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Method of Sampling:
[ ] Submersible Pump
[X] Peristaltic Pump
[ ] Disposable Bailer

Revised 10/31/02

TETRA TECH INC.
MONITORING WELL SAMPLING SHEET

Well No.: ~~TR28W939F~~ HC (TR28W939F)

Sheet 3 of 3

Personnel: H. Cheng / D. Cheng

Day: Thursday

Date: 1/9/03

Casing Volume = N/A Gallons

Initial depth to water: 6.85 ft. below top of casing

[casing volume = water column height (ft) x 0.03 gal/ft (0.75-inch well) or 0.163 gal/ft (2-inch well) or 0.652 gal/ft (4-inch well)] (6")

Organic Vapor Concentrations
Top of Casing: 142 ppm Background: Φ ppm

Groundwater Parameters

Time	Cumulative Volume Purged (L)	Discharge Rate (mL/min)	Depth to water (ft. below TOC)	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	PID/OVM (ppm)
1405 ~~1342~~	22	200	6.92	16.31	0.645	0.08	8.17	-553.0 ~~-425.5~~	29.1	0
1409	23	200	6.92	16.34	0.646	0.08	8.17	-478.7	27.6	0
1414	24	200	6.92	16.38	0.645	0.08	8.17	-582.9	28.1	0
1418	25	200	6.92	16.42	0.644	0.07	8.17	-392.1	28.9	0

After sampling and, if accessible, depth to bottom: 20.39 ft. below TOC Purged Dry? NO

Field Measurement Equipment Used

Equipment	Model	Serial Number	Equipment	Model	Serial Number
Water Quality Meter			Filter Apparatus		
Water Level Meter			Other		
Pump			Other		
PID			Other		

SEE FIRST PAGE

Groundwater Samples Collected (check all that apply)

Analytes of Concern (Off-Site Lab)		Fate and Transport Data: Off-Site Lab	
Fe (Total)	X	Chloride	X
Fe (Dis.)	X	Alkalinity	X
As (Dis.)	X	Ethane	X
Mn (Dis.)	X	Ethene	X
VOCs	X	Hydrogen	X

Field Test Kit Analyses

	Unfiltered	Filtered
Fe^{2+} (mg/L)	N/A	N/A
Mn^{2+} (mg/L)		

Filter where turbidity > 50 NTU.

Downhole Dissolved Oxygen

Top (mg/L)	N/A
Middle (mg/L)	
Bottom (mg/L)	

Sample Number: Φ3Φ2HΦ21

Sample Date/Time: 1/9/03 ~~1640~~ 1440

QA/QC Sample(s)? [X] None [ ] Field Dup [ ] MS/MSD

Dup. Sample Time _____ Dup. Sample Number _____

Comments: Pump intake at 15' bgs

Method of Extraction:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Method of Sampling:
- [ ] Submersible Pump
- [X] Peristaltic Pump
- [ ] Disposable Bailer

Revised 10/31/02

ENCLOSURE 2
CHAIN-OF-CUSTODY FORMS

Tetra Tech EM Inc.
San Francisco Office

135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record No. 4377

4377

Lab PO#:	Ø22277
Lab:	columbia
Project name:	Fenix Lyon Tech. Park
TtEMI technical contact:	Dr. Kutzal
Field samplers:	Hwakung Cheng
Project (CTO) number:	G9Ø16Ø13Ø3Ø5Ø2Ø7Ø9
TtEMI project manager:	John McCall
Field samplers' signatures:	

Preservative Added: HCl; HNO3; HNO3; HCl; HNO3

Sample ID	Sample Location (Pt. ID)	Date	Time	Matrix	MS / MSD	40 ml VOA	1 liter Amber	500 ml Poly	Sleeve	Glass Jar	250 ml Poly	VOA	SVOA	Pest/PCBs	Metals	TPH Purgeables	TPH Extractables	Total Fe	Diss. Fe/As/Mn	Chloride/Alkalinity	Ethane/Ethene	Diss. Hydrogen	Diss. Fe	Nitrate
Ø3Ø2HØØ1	Trip blank	1/7/Ø3	Ø9ØØ	WATER		2						X												
Ø3Ø2HØØ2	1R28MW351F		114Ø		X	1Ø		4		2		X						X	X	X	X	X		
Ø3Ø2HØØ3	1R28MW311A		1515			5		2		1		X						X	-	X	X	X	X	
Ø3Ø2HØØ4	1R28MW357F		153Ø			5		2		1		X						X	X	X	X	X		
Ø3Ø2HØØ5	1R28MW357F duplicate		154Ø			3		2				X						X	X					
Ø3Ø2HØØ6	1R28MW~~356F~~ 355F		17ØØ			5		2		1		X						X	X	X	X	X		
Ø3Ø2HØØ7	1R28MW~~355F~~ 356F		1715			5		2		1		X						X	X	X	X	X		
Ø3Ø2HØØ8	Equipment Rinsate		173Ø			3		2				X						X	X					
Ø3Ø2HØØ9	1R28MW358F	1/8/Ø3	1ØØØ			5		2		1		X						X	X	X	X	X		
Ø3Ø2HØ1Ø	1R28MW361F		11ØØ			5		2		1		X						X	-	X	X	X	X	
Ø3Ø2HØ11	1R28MW361F duplicate		1115			3		2				X						X	X					
Ø3Ø2HØ12	1R28MW359F		114Ø			5		2		1		X						X	-	X	X	X	X	

	Name (print)	Company Name	Date	Time
Relinquished by:	Hwakung Cheng	TtEMI	1/8/Ø3	9ØØ
Received by: Fed Ex				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Sample Ø3Ø2HØØ2 – MS/MSD for VOCs, chloride, and metals only
Dissolved metals are field filtered

Fed Ex #: 8368 9469 4671

WHITE-Laboratory Copy YELLOW-Sample Tracker PINK-File Copy

Tetra Tech EM Inc.
San Francisco Office
135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record No. 4378

4378

Lab PO#:	Ø22277
Lab:	Columbia
Project name:	Fenix Injection Tech. Dem.
TtEMI technical contact:	Deb Kutcal
Field samplers:	Hwakung Cheng
Project (CTO) number:	6ØØ16Ø13Ø3Ø5Ø2Ø7Ø9
TtEMI project manager:	John McCall
Field samplers' signatures:	

Preservative Added: HCl; HNO3; HNO3; HCl; HNO3

Sample ID	Sample Location (Pt. ID)	Date	Time	Matrix	MS / MSD	40 ml VOA	1 liter Amber	500 ml Poly	Sleeve	Glass Jar	250 mL Bottle		VOA	SVOA	Pest/PCBs	Metals	TPH Purgeables	TPH Extractables	Total Fe	Diss. Fe/As/Mn	Chloride/Alkalinity	Ethane/Ethene	Diss. Hydrogen	Nitrate	Diss. Fe			
Ø3Ø2HØ13	IR28MW34ØF	1/8/03	13Ø5	WATER		5	–	2	—		1	—	X	—	—	—	—	—	X	X	X	X	X	X	—	—	—	—
Ø3Ø2HØ14	IR28MW275F	↓	132Ø	↓		5	–	2	—		1	—	X	—	—	—	—	—	X	~~X~~	X	X	X	–	X	—	—	—
Ø3Ø2HØ15	IR28MW934F5		165Ø			5	–	2	—		1	—	X	—	—	—	—	—	X	—	X	X	X	–	X	—	—	—
Ø3Ø2HØ16	IR28MW933F5		171Ø			5	–	2	—		1	—	X	—	—	—	—	—	X	–	X	X	X	X	X	—	—	—
Ø3Ø2HØ17	Equipment Rinsate		18ØØ			3	–	2	—		—	—	X	—	—	—	—	—	X	X	—	—	—	—	—	—	—	—

IR

	Name (print)	Company Name	Date	Time
Relinquished by:	Hwakung Cheng	~~[illegible]~~ TtEMI	1/8/03	~~Ø7ØØ~~ 19ØØ
Received by: Fed Ex				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Sample Ø3Ø2HØ14 – Do not analyze for Diss. As/Mn
Dissolved metals are field filtered

Fed Ex #: 8368 9469 4671

WHITE-Laboratory Copy YELLOW-Sample Tracker PINK-File Copy

Tetra Tech EM Inc.
San Francisco Office
135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record No. 4379

4379

Lab PO#:	Ø22277
Lab:	Columbia
Project name:	Franx Injection Tech Dem.
TtEMI technical contact:	Dave Kassal
Field samplers:	Hwakong Cheng
Project (CTO) number:	99W6Ø13Ø3Ø5Ø2Ø7Ø9
TtEMI project manager:	John McCall
Field samplers' signatures:	Hwa Cheng

Preservative Added: HCl; H2O2; HNO3; H2SO4; —; HCl; —; —

Sample ID	Sample Location (Pt. ID)	Date	Time	Matrix	MS / MSD	40 ml VOA	1 liter Amber	500 ml Poly	Sleeve	Glass Jar	250 ml Poly	VOA	SVOA	Pest/PCBs	Metals	TPH Purgeables	TPH Extractables	Total Fe	Dis. Fe/As/Mn	Dis. Fe	Chloride/Alkalinity	Ethane/Ethene	Dis. Hydrogen	Nitrate
Ø3Ø2HØ18	Trip blank	1/9/03	ØØØØ	WATER		2						X												
Ø3Ø2HØ19	IR28MW342F		1Ø3Ø			5	-	2		1		X						X	-	X	X	X	X	
Ø3Ø2HØ2Ø	IR28MW432F		1Ø45			5	-	2		1		X						X	X	-	X	X	X	
Ø3Ø2HØ21	IR28IW939F		114Ø			5	-	2		1		X						X	X	-	X	X	X	
Ø3Ø2HØ22	IR28MW211F		1715			5	-	2		1		X						X	-	X	X	X	X	
Ø3Ø2HØ23	IR28MW341F		1735			5	-	2		1		X						X	-	X	X	X	X	X
Ø3Ø2HØ24	Equipment Rinsate		1745			3	-	2				X						X	X					

	Name (print)	Company Name	Date	Time
Relinquished by: Hwa Cheng	Hwakong Cheng	TtEMI	1/9/03	~~ØØ36~~ 1939
Received by: Fed Ex				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:
Dissolved metals are field filtered.

Fed Ex #: 8368 9469 4682

WHITE-Laboratory Copy YELLOW-Sample Tracker PINK-File Copy

Tetra Tech EM Inc.
San Francisco Office
135 Main St. Suite 1800
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

Chain of Custody Record No. [redacted]

4380

Lab PO#: Ø22277

Lab: Columbia

Project name: Fonix Injection Tech. Dem.

TtEMI technical contact: Dave Kutsal

Field samplers: Hwakung Chang

Project (CTO) number: GFØ16013Ø305Ø2Ø7Ø7

TtEMI project manager: John McCall

Field samplers' signatures:

Sample ID	Sample Location (Pt. ID)	Date	Time	Matrix	MS / MSD	40 ml VOA	1 liter Amber	500 ml Poly	Sleeve	Glass Jar	250 mL Poly	VOA	SVOA	Pest/PCBs	Metals	TPH Purgeables	TPH Extractables	Total Fe	Diss. Fe	Diss Fe / As / Mn	Chloride / Alkalinity	Ketone / Ether	Diss. Hydrocarbon	NH3 ATC
Ø392HØ25	Trip blank	1/1Ø/Ø3	ØØØØ	WATER		2						X												
Ø3Ø2HØ26	1R28MW362F	↓	11ØØ	↓		5		2			1	X						X	X		X	X	X	X
Ø3Ø2HØ27	1R28MW938F	↓	115Ø	↓		5		2			1	X						X			X	X	X	X
Ø3Ø2HØ28	Equipment Rinsate	↓	12ØØ	↓		3		2				X						X			X			

Preservative Added: HCl; HNO3; HNO3; HNO3; HCl

	Name (print)	Company Name	Date	Time
Relinquished by:	Hwakung Chang	TtEMI	1/1Ø/Ø3	146Ø
Received by: Fed Ex				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

Turnaround time/remarks:

Diss. metals are field filtered

Fed Ex #:

WHITE-Laboratory Copy YELLOW-Sample Tracker PINK-File Copy

ENCLOSURE 3
GROUNDWATER LEVEL MEASUREMENT FORMS

TETRA TECH EM INC.
GROUNDWATER LEVEL MEASUREMENTS LOG

Type of organic vapor meter used (circle): (PID) FID

Well Identification Number	Organic Vapor Information: PID/FID Reading (ppm)	Organic Vapor Information: Date	Water Level Information: Well previously equilibrated? (Yes/No)	Water Level Information: If not previously equilibrated, pressure detected when cap removed? (NA/Yes/No)	Depth to Groundwater Information: Time	Depth to Groundwater Information: Date	Depth to Groundwater Information: Depth to Groundwater[1] from Pump Platform or Riser, if present (feet)	Depth to Groundwater Information: Thickness of Pump Platform or Riser, if present (feet)	Depth to Groundwater Information: Depth to Groundwater[1] from Top of PVC Casing (feet)	Depth to Well Bottom from Top of PVC Casing[2] (feet)	Comments
1R28MW939F	142	1/6/03	Yes	NA	0941	1/6/03	NA	NA	6.73	20.39	Soft bottom
1R28MW362F	14.2	↓	↓	↓	0947	↓	↓	↓	6.68	16.89	Soft bottom
1R28MW241F	87.6	↓	↓	↓	0950	↓	↓	↓	6.52	15.86	Long tone at 15.86 Soft bottom
1R28MW351F	1.3	↓	↓	↓	0954	↓	↓	↓	6.67	61.8	Soft bottom
1R28MW936F	64	↓	↓	↓	0959	↓	↓	↓	6.82	20.19	Soft bottom
1R28MW938F	18.5	↓	↓	↓	1002	↓	↓	↓	6.83	16.02	Soft bottom
1R28MW357F	4.5	↓	↓	↓	1024	↓	↓	↓	6.26	20.38	
1R28MW358F	2.6	↓	↓	↓	1026	↓	↓	↓	6.25	20.38	
1R28MW359F	3.3	↓	↓	↓	1029	↓	↓	↓	6.19	20.4	
1R28MW935F	2.1	↓	↓	↓	1031	↓	↓	↓	6.72	19.59	Soft bottom

Notes: 1 Where bladder pump sampling platform or riser is present, depth to water must be corrected to depth from top of PVC casing.
2 Note if access to well bottom is limited by presence of dedicated bladder pump.

Field Staff: H. Cheng, D. Cheng

Field Staff Signature: H. Cheng

Page No.: 1 of 3

Date: 1/6/03

TETRA TECH EM INC.
GROUNDWATER LEVEL MEASUREMENTS LOG

Type of organic vapor meter used (circle): (PID) FID

Well Identification Number	Organic Vapor Information: PID/FID Reading (ppm)	Organic Vapor Information: Date	Water Level Information: Well previously equilibrated? (Yes/No)	Water Level Information: If not previously equilibrated, pressure detected when cap removed? (NA/Yes/No)	Depth to Groundwater Information: Time	Depth to Groundwater Information: Date	Depth to Groundwater Information: Depth to Groundwater[1] from Pump Platform or Riser, if present (feet)	Depth to Groundwater Information: Thickness of Pump Platform or Riser, if present (feet)	Depth to Groundwater Information: Depth to Groundwater[1] from Top of PVC Casing (feet)	Depth to Well Bottom from Top of PVC Casing[2] (feet)	Comments
1R28MW361F	13.5	1/6/03	Yes	NA	1034	1/6/03	NA	NA	6.42	20.39	
1R28MW937F	14.8	↓	↓	↓	1034	↓	↓	↓	6.59	20.16	
1R28MW341F	77	↓	↓	↓	1036	↓	↓	↓	6.82	16.75	Soft bottom
1R28IW940F	9.8	↓	↓	↓	1044	↓	↓	↓	6.64	20.49	
1R28MW342F	13.3	↓	↓	↓	1047	↓	↓	↓	6.48	14.80	Soft bottom
1R28MW360F	39.7	↓	↓	↓	1049	↓	↓	↓	6.20	20.22	
(DUP) 1R28MW355F ~~1R28MW356F~~	2.2	↓	↓	↓	1051	↓	↓	↓	6.74	20.43	
(DUP) 1R28MW356F ~~1R28MW355F~~	4.3	↓	↓	↓	1053	↓	↓	↓	6.69	20.40	
1R28MW275F	14.2	↓	↓	↓	1056	↓	↓	↓	5.96	11.88	
1R28MW318F	38	↓	↓	↓	1058	↓	↓	↓	5.05	35.50	

Notes: 1 Where bladder pump sampling platform or riser is present, depth to water must be corrected to depth from top of PVC casing.
2 Note if access to well bottom is limited by presence of dedicated bladder pump.

Field Staff: H. Cheng, D. Cheng

Field Staff Signature: [signature]

Page No.: 2 of 3

Date: 1/6/03

TETRA TECH EM INC.
GROUNDWATER LEVEL MEASUREMENTS LOG

Type of organic vapor meter used (circle): PID FID

Well Identification Number	Organic Vapor Information		Water Level Information							Depth to Well Bottom from Top of PVC Casing[2] (feet)	Comments
					Depth to Groundwater Information						
	PID/FID Reading (ppm)	Date	Well previously equilibrated? (Yes/No)	If not previously equilibrated, **pressure detected** when cap removed? (NA/Yes/No)	Time	Date	Depth to Groundwater[1] from Pump Platform or Riser, if present (feet)	Thickness of Pump Platform or Riser, if present (feet)	Depth to Groundwater[1] from Top of PVC Casing (feet)		
1R28MW311A	0	1/6/03	Yes	NA	1101	1/6/03	NA	NA	4.57	19.63	
1R28MW353F	0	↓	↓	↓	1103	↓	↓	↓	4.90	58.90	
1R28MW4026	4.2	↓	↓	↓	1105	↓	↓	↓	4.97	42.38	

Notes: 1 Where bladder pump sampling platform or riser is present, depth to water must be corrected to depth from top of PVC casing.
2 Note if access to well bottom is limited by presence of dedicated bladder pump.

Field Staff: H. Cheng, D. Cheng

Field Staff Signature: [illegible]

Page No.: 3 of 3

Date: 1/6/03

ENCLOSURE 4
ANALYTICAL LABORATORY REPORTS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H001

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317001

Matrix: WATER Level: LOW Lab File ID: C030086

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	1.0	J
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	0.20	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	1.0	U
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	0.20	J
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	U
79-01-6	Trichloroethene	0.18	1.0	1.0	U
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	1.0	U
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H001

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317001

Matrix: WATER Level: LOW Lab File ID: C030086

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.090	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H002

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317002

Lab File ID: C030111

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND (Units: UG/L)	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	0.40	J
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	2.0	
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	0.60	J
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	1.0	J
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	0.40	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	4.0	
78-93-3	2-Butanone	0.57	5.0	1.0	J
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	2.0	
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	0.80	J
79-01-6	Trichloroethene	0.18	1.0	30	
78-87-5	1,2-Dichloropropane	0.13	1.0	0.20	J
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	0.40	J
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	0.20	J
127-18-4	Tetrachloroethene	0.16	1.0	0.30	J
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H002

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317002

Matrix: WATER Level: LOW Lab File ID: C030111

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.080	J
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.20	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H002DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317002DL

Lab File ID: C030098

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 2.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.36	2.0	2.0	U
74-87-3	Chloromethane	0.46	2.0	2.0	U
75-01-4	Vinyl chloride	0.40	2.0	2.0	U
74-83-9	Bromomethane	0.56	2.0	2.0	U
75-00-3	Chloroethane	0.44	2.0	2.0	U
75-69-4	Trichlorofluoromethane	0.40	2.0	2.0	D
76-13-1	1,1,2-Trichlorotrifluoroetha	0.38	2.0	1.0	DJ
75-35-4	1,1-Dichloroethene	0.44	2.0	2.0	U
67-64-1	Acetone	1.9	10	10	U
75-15-0	Carbon disulfide	0.40	2.0	2.0	U
75-09-2	Methylene chloride	0.26	4.0	0.40	DJ
156-60-5	trans-1,2-Dichloroethene	0.44	2.0	2.0	U
1634-04-4	Methyl tert-butylether	0.30	2.0	2.0	U
75-34-3	1,1-Dichloroethane	0.30	2.0	2.0	U
156-59-2	cis-1,2-Dichloroethene	0.32	2.0	5.0	D
78-93-3	2-Butanone	1.1	10	10	U
74-97-5	Bromochloromethane	0.36	2.0	2.0	U
67-66-3	Chloroform	0.20	2.0	3.0	D
71-55-6	1,1,1-Trichloroethane	0.36	2.0	2.0	U
56-23-5	Carbon tetrachloride	0.42	2.0	1.0	DJ
71-43-2	Benzene	0.28	2.0	2.0	U
107-06-2	1,2-Dichloroethane	0.32	2.0	0.90	DJ
79-01-6	Trichloroethene	0.36	2.0	35	D
78-87-5	1,2-Dichloropropane	0.26	2.0	2.0	U
75-27-4	Bromodichloromethane	0.32	2.0	2.0	U
10061-01-5	cis-1,3-Dichloropropene	0.22	2.0	2.0	U
108-10-1	4-Methyl-2-pentanone	1.0	10	10	U
108-88-3	Toluene	0.32	2.0	0.40	DJ
10061-02-6	trans-1,3-Dichloropropene	0.24	2.0	2.0	U
79-00-5	1,1,2-Trichloroethane	0.28	2.0	2.0	U
127-18-4	Tetrachloroethene	0.32	2.0	0.40	DJ
591-78-6	2-Hexanone	1.0	10	10	U
124-48-1	Dibromochloromethane	0.30	2.0	2.0	U
106-93-4	1,2-Dibromoethane	0.24	2.0	2.0	U
108-90-7	Chlorobenzene	0.38	2.0	2.0	U
100-41-4	Ethylbenzene	0.26	2.0	2.0	U
1330-20-7	Xylene (total)	0.78	2.0	2.0	U
100-42-5	Styrene	0.18	2.0	2.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H002DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317002DL

Lab File ID: C030098

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 2.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.28	2.0	2.0	U
98-82-8	Isopropylbenzene	0.20	2.0	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.18	2.0	2.0	U
541-73-1	1,3-Dichlorobenzene	0.32	2.0	2.0	U
95-50-1	1,2-Dichlorobenzene	0.18	2.0	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.2	10	10	U
120-82-1	1,2,4-Trichlorobenzene	0.20	2.0	2.0	U
87-61-6	1,2,3-Trichlorobenzene	0.12	2.0	0.20	DJ
106-46-7	1,4-Dichlorobenzene	0.14	2.0	2.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H003

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317003

Lab File ID: C030088

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane		0.18	1.0	1.0	U
74-87-3	Chloromethane		0.23	1.0	1.0	U
75-01-4	Vinyl chloride		0.20	1.0	1.0	U
74-83-9	Bromomethane		0.28	1.0	1.0	U
75-00-3	Chloroethane		0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane		0.20	1.0	5.0	
76-13-1	1,1,2-Trichlorotrifluoroetha		0.19	1.0	2.0	
75-35-4	1,1-Dichloroethene		0.22	1.0	1.0	U
67-64-1	Acetone		0.94	5.0	5.0	U
75-15-0	Carbon disulfide		0.20	1.0	1.0	U
75-09-2	Methylene chloride		0.13	2.0	0.20	J
156-60-5	trans-1,2-Dichloroethene		0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether		0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane		0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene		0.16	1.0	3.0	
78-93-3	2-Butanone		0.57	5.0	5.0	U
74-97-5	Bromochloromethane		0.18	1.0	1.0	U
67-66-3	Chloroform		0.10	1.0	0.20	J
71-55-6	1,1,1-Trichloroethane		0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride		0.21	1.0	1.0	U
71-43-2	Benzene		0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane		0.16	1.0	1.0	U
79-01-6	Trichloroethene		0.18	1.0	5.0	
78-87-5	1,2-Dichloropropane		0.13	1.0	1.0	U
75-27-4	Bromodichloromethane		0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene		0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone		0.53	5.0	5.0	U
108-88-3	Toluene		0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene		0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane		0.14	1.0	1.0	U
127-18-4	Tetrachloroethene		0.16	1.0	1.0	U
591-78-6	2-Hexanone		0.50	5.0	5.0	U
124-48-1	Dibromochloromethane		0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane		0.12	1.0	1.0	U
108-90-7	Chlorobenzene		0.19	1.0	1.0	U
100-41-4	Ethylbenzene		0.13	1.0	1.0	U
1330-20-7	Xylene (total)		0.39	1.0	1.0	U
100-42-5	Styrene		0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H003

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317003

Matrix: WATER Level: LOW Lab File ID: C030088

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	0.10	J
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H004

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317004

Matrix: WATER Level: LOW Lab File ID: C030089

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	0.40	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	0.20	J
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	3.0	
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	U
79-01-6	Trichloroethene	0.18	1.0	45	E
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	1.0	U
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H004

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317004

Lab File ID: C030089

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H004DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317004DL

Lab File ID: C030099

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 2.0

Units: UG/L

CAS NO.	COMPOUND	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.36	2.0	2.0	U
74-87-3	Chloromethane	0.46	2.0	2.0	U
75-01-4	Vinyl chloride	0.40	2.0	2.0	U
74-83-9	Bromomethane	0.56	2.0	2.0	U
75-00-3	Chloroethane	0.44	2.0	2.0	U
75-69-4	Trichlorofluoromethane	0.40	2.0	2.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.38	2.0	2.0	U
75-35-4	1,1-Dichloroethene	0.44	2.0	10	U
67-64-1	Acetone	1.9	10	2.0	U
75-15-0	Carbon disulfide	0.40	2.0	0.60	DJ
75-09-2	Methylene chloride	0.26	4.0	2.0	U
156-60-5	trans-1,2-Dichloroethene	0.44	2.0	2.0	U
1634-04-4	Methyl tert-butylether	0.30	2.0	2.0	U
75-34-3	1,1-Dichloroethane	0.30	2.0	2.0	U
156-59-2	cis-1,2-Dichloroethene	0.32	2.0	10	U
78-93-3	2-Butanone	1.1	10	2.0	U
74-97-5	Bromochloromethane	0.36	2.0	2.0	D
67-66-3	Chloroform	0.20	2.0	2.0	U
71-55-6	1,1,1-Trichloroethane	0.36	2.0	2.0	U
56-23-5	Carbon tetrachloride	0.42	2.0	2.0	U
71-43-2	Benzene	0.28	2.0	2.0	U
107-06-2	1,2-Dichloroethane	0.32	2.0	35	D
79-01-6	Trichloroethene	0.36	2.0	2.0	U
78-87-5	1,2-Dichloropropane	0.26	2.0	2.0	U
75-27-4	Bromodichloromethane	0.32	2.0	2.0	U
10061-01-5	cis-1,3-Dichloropropene	0.22	2.0	10	U
108-10-1	4-Methyl-2-pentanone	1.0	10	2.0	U
108-88-3	Toluene	0.32	2.0	2.0	U
10061-02-6	trans-1,3-Dichloropropene	0.24	2.0	2.0	U
79-00-5	1,1,2-Trichloroethane	0.28	2.0	2.0	U
127-18-4	Tetrachloroethene	0.32	2.0	10	U
591-78-6	2-Hexanone	1.0	10	2.0	U
124-48-1	Dibromochloromethane	0.30	2.0	2.0	U
106-93-4	1,2-Dibromoethane	0.24	2.0	2.0	U
108-90-7	Chlorobenzene	0.38	2.0	2.0	U
100-41-4	Ethylbenzene	0.26	2.0	2.0	U
1330-20-7	Xylene (total)	0.78	2.0	2.0	U
100-42-5	Styrene	0.18	2.0	2.0	U

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H004DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317004DL

Lab File ID: C030099

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 2.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.28	2.0	2.0	U
98-82-8	Isopropylbenzene	0.20	2.0	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.18	2.0	2.0	U
541-73-1	1,3-Dichlorobenzene	0.32	2.0	2.0	U
95-50-1	1,2-Dichlorobenzene	0.18	2.0	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.2	10	10	U
120-82-1	1,2,4-Trichlorobenzene	0.20	2.0	2.0	U
87-61-6	1,2,3-Trichlorobenzene	0.12	2.0	0.20	DJ
106-46-7	1,4-Dichlorobenzene	0.14	2.0	0.20	DJ

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H005

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317005

Matrix: WATER Level: LOW Lab File ID: C030090

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	0.40	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	0.20	J
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	3.0	
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	U
79-01-6	Trichloroethene	0.18	1.0	42	E
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	1.0	U
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H005

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317005

Matrix: WATER Level: LOW Lab File ID: C030090

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H005DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317005DL

Lab File ID: C030113

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 2.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.36	2.0	2.0	U
74-87-3	Chloromethane	0.46	2.0	2.0	U
75-01-4	Vinyl chloride	0.40	2.0	2.0	U
74-83-9	Bromomethane	0.56	2.0	2.0	U
75-00-3	Chloroethane	0.44	2.0	2.0	U
75-69-4	Trichlorofluoromethane	0.40	2.0	2.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.38	2.0	2.0	U
75-35-4	1,1-Dichloroethene	0.44	2.0	2.0	U
67-64-1	Acetone	1.9	10	3.0	DJ
75-15-0	Carbon disulfide	0.40	2.0	2.0	U
75-09-2	Methylene chloride	0.26	4.0	0.60	DJ
156-60-5	trans-1,2-Dichloroethene	0.44	2.0	2.0	U
1634-04-4	Methyl tert-butylether	0.30	2.0	2.0	U
75-34-3	1,1-Dichloroethane	0.30	2.0	2.0	U
156-59-2	cis-1,2-Dichloroethene	0.32	2.0	2.0	U
78-93-3	2-Butanone	1.1	10	10	U
74-97-5	Bromochloromethane	0.36	2.0	2.0	U
67-66-3	Chloroform	0.20	2.0	2.0	D
71-55-6	1,1,1-Trichloroethane	0.36	2.0	2.0	U
56-23-5	Carbon tetrachloride	0.42	2.0	2.0	U
71-43-2	Benzene	0.28	2.0	2.0	U
107-06-2	1,2-Dichloroethane	0.32	2.0	2.0	U
79-01-6	Trichloroethene	0.36	2.0	34	D
78-87-5	1,2-Dichloropropane	0.26	2.0	2.0	U
75-27-4	Bromodichloromethane	0.32	2.0	2.0	U
10061-01-5	cis-1,3-Dichloropropene	0.22	2.0	2.0	U
108-10-1	4-Methyl-2-pentanone	1.0	10	10	U
108-88-3	Toluene	0.32	2.0	2.0	U
10061-02-6	trans-1,3-Dichloropropene	0.24	2.0	2.0	U
79-00-5	1,1,2-Trichloroethane	0.28	2.0	2.0	U
127-18-4	Tetrachloroethene	0.32	2.0	2.0	U
591-78-6	2-Hexanone	1.0	10	10	U
124-48-1	Dibromochloromethane	0.30	2.0	2.0	U
106-93-4	1,2-Dibromoethane	0.24	2.0	2.0	U
108-90-7	Chlorobenzene	0.38	2.0	2.0	U
100-41-4	Ethylbenzene	0.26	2.0	2.0	U
1330-20-7	Xylene (total)	0.78	2.0	2.0	U
100-42-5	Styrene	0.18	2.0	2.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H005DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317005DL

Lab File ID: C030113

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 2.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.28	2.0	2.0	U
98-82-8	Isopropylbenzene	0.20	2.0	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.18	2.0	2.0	U
541-73-1	1,3-Dichlorobenzene	0.32	2.0	2.0	U
106-46-7	1,4-Dichlorobenzene	0.14	2.0	0.20	DJ
95-50-1	1,2-Dichlorobenzene	0.18	2.0	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.2	10	10	U
120-82-1	1,2,4-Trichlorobenzene	0.20	2.0	2.0	U
87-61-6	1,2,3-Trichlorobenzene	0.12	2.0	0.20	DJ

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H006

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317006

Lab File ID: C030091

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	0.30	J
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	2.0	U
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	1.0	U
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	1.0	
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	U
79-01-6	Trichloroethene	0.18	1.0	17	
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	1.0	U
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H006

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317006

Lab File ID: C030091

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H007

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317007

Lab File ID: C030092

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND	Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane		0.18	1.0	1.0	U
74-87-3	Chloromethane		0.23	1.0	0.30	J
75-01-4	Vinyl chloride		0.20	1.0	1.0	U
74-83-9	Bromomethane		0.28	1.0	1.0	U
75-00-3	Chloroethane		0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane		0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha		0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene		0.22	1.0	1.0	U
67-64-1	Acetone		0.94	5.0	5.0	U
75-15-0	Carbon disulfide		0.20	1.0	1.0	U
75-09-2	Methylene chloride		0.13	2.0	0.30	J
156-60-5	trans-1,2-Dichloroethene		0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether		0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane		0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene		0.16	1.0	13	
78-93-3	2-Butanone		0.57	5.0	5.0	U
74-97-5	Bromochloromethane		0.18	1.0	1.0	U
67-66-3	Chloroform		0.10	1.0	6.0	
71-55-6	1,1,1-Trichloroethane		0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride		0.21	1.0	11	
71-43-2	Benzene		0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane		0.16	1.0	0.30	J
79-01-6	Trichloroethene		0.18	1.0	69	E
78-87-5	1,2-Dichloropropane		0.13	1.0	1.0	U
75-27-4	Bromodichloromethane		0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene		0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone		0.53	5.0	5.0	U
108-88-3	Toluene		0.16	1.0	0.20	J
10061-02-6	trans-1,3-Dichloropropene		0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane		0.14	1.0	0.30	J
127-18-4	Tetrachloroethene		0.16	1.0	1.0	U
591-78-6	2-Hexanone		0.50	5.0	5.0	U
124-48-1	Dibromochloromethane		0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane		0.12	1.0	1.0	U
108-90-7	Chlorobenzene		0.19	1.0	1.0	U
100-41-4	Ethylbenzene		0.13	1.0	1.0	U
1330-20-7	Xylene (total)		0.39	1.0	1.0	U
100-42-5	Styrene		0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H007

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317007

Lab File ID: C030092

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.20	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H007DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317007DL

Matrix: WATER Level: LOW Lab File ID: C030114

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 4.0

CAS NO.	COMPOUND	Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane		0.72	4.0	4.0	U
74-87-3	Chloromethane		0.92	4.0	4.0	U
75-01-4	Vinyl chloride		0.80	4.0	4.0	U
74-83-9	Bromomethane		1.1	4.0	4.0	U
75-00-3	Chloroethane		0.88	4.0	4.0	U
75-69-4	Trichlorofluoromethane		0.80	4.0	4.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha		0.76	4.0	4.0	U
75-35-4	1,1-Dichloroethene		0.88	4.0	4.0	U
67-64-1	Acetone		3.8	20	8.0	DJ
75-15-0	Carbon disulfide		0.80	4.0	4.0	U
75-09-2	Methylene chloride		0.52	8.0	0.70	DJ
156-60-5	trans-1,2-Dichloroethene		0.88	4.0	4.0	U
1634-04-4	Methyl tert-butylether		0.60	4.0	4.0	U
75-34-3	1,1-Dichloroethane		0.60	4.0	4.0	U
156-59-2	cis-1,2-Dichloroethene		0.64	4.0	9.0	D
78-93-3	2-Butanone		2.3	20	20	U
74-97-5	Bromochloromethane		0.72	4.0	4.0	U
67-66-3	Chloroform		0.40	4.0	5.0	D
71-55-6	1,1,1-Trichloroethane		0.72	4.0	4.0	U
56-23-5	Carbon tetrachloride		0.84	4.0	7.0	D
71-43-2	Benzene		0.56	4.0	4.0	U
107-06-2	1,2-Dichloroethane		0.64	4.0	4.0	U
79-01-6	Trichloroethene		0.72	4.0	44	D
78-87-5	1,2-Dichloropropane		0.52	4.0	4.0	U
75-27-4	Bromodichloromethane		0.64	4.0	4.0	U
10061-01-5	cis-1,3-Dichloropropene		0.44	4.0	4.0	U
108-10-1	4-Methyl-2-pentanone		2.1	20	20	U
108-88-3	Toluene		0.64	4.0	4.0	U
10061-02-6	trans-1,3-Dichloropropene		0.48	4.0	4.0	U
79-00-5	1,1,2-Trichloroethane		0.56	4.0	4.0	U
127-18-4	Tetrachloroethene		0.64	4.0	4.0	U
591-78-6	2-Hexanone		2.0	20	20	U
124-48-1	Dibromochloromethane		0.60	4.0	4.0	U
106-93-4	1,2-Dibromoethane		0.48	4.0	4.0	U
108-90-7	Chlorobenzene		0.76	4.0	4.0	U
100-41-4	Ethylbenzene		0.52	4.0	4.0	U
1330-20-7	Xylene (total)		1.6	4.0	4.0	U
100-42-5	Styrene		0.36	4.0	4.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H007DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317007DL

Lab File ID: C030114

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 4.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.56	4.0	4.0	U
98-82-8	Isopropylbenzene	0.40	4.0	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.36	4.0	4.0	U
541-73-1	1,3-Dichlorobenzene	0.64	4.0	4.0	U
106-46-7	1,4-Dichlorobenzene	0.28	4.0	0.40	DJ
95-50-1	1,2-Dichlorobenzene	0.36	4.0	4.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.4	20	20	U
120-82-1	1,2,4-Trichlorobenzene	0.40	4.0	4.0	U
87-61-6	1,2,3-Trichlorobenzene	0.24	4.0	0.50	DJ

FORM I VOA

SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H008

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317008

Lab File ID: C030093

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND (Units: UG/L)	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	4.0	J
67-64-1	Acetone	0.94	5.0	1.0	U
75-15-0	Carbon disulfide	0.20	1.0	0.20	J
75-09-2	Methylene chloride	0.13	2.0	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	1.0	U
78-93-3	2-Butanone	0.57	5.0	1.0	J
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	0.20	J
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	U
79-01-6	Trichloroethene	0.18	1.0	1.0	U
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	0.20	J
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	0.80	J
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	1.0	U
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H008

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317008

Lab File ID: C030093

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

Units: UG/L

CAS NO.	COMPOUND	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.60	J

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H009

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317009

Lab File ID: C030094

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND (Units: UG/L)	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	0.30	J
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	J
67-64-1	Acetone	0.94	5.0	1.0	U
75-15-0	Carbon disulfide	0.20	1.0	0.20	J
75-09-2	Methylene chloride	0.13	2.0	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	1.0	U
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	0.50	J
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	U
79-01-6	Trichloroethene	0.18	1.0	4.0	
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	1.0	U
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H009

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317009

Lab File ID: C030094

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H010

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317010

Lab File ID: C030095

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	0.40	J
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	2.0	
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	0.40	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	3.0	
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	17	
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	5.0	
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	0.20	J
79-01-6	Trichloroethene	0.18	1.0	200	E
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	0.20	J
127-18-4	Tetrachloroethene	0.16	1.0	0.40	J
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H010

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317010

Lab File ID: C030095

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H010DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317010DL

Lab File ID: C030115

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 10.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	1.8	10	10	U
74-87-3	Chloromethane	2.3	10	10	U
75-01-4	Vinyl chloride	2.0	10	10	U
74-83-9	Bromomethane	2.8	10	10	U
75-00-3	Chloroethane	2.2	10	10	U
75-69-4	Trichlorofluoromethane	2.0	10	10	U
76-13-1	1,1,2-Trichlorotrifluoroetha	1.9	10	10	U
75-35-4	1,1-Dichloroethene	2.2	10	10	U
67-64-1	Acetone	9.4	50	21	DJ
75-15-0	Carbon disulfide	2.0	10	10	U
75-09-2	Methylene chloride	1.3	20	20	U
156-60-5	trans-1,2-Dichloroethene	2.2	10	10	U
1634-04-4	Methyl tert-butylether	1.5	10	10	U
75-34-3	1,1-Dichloroethane	1.5	10	10	U
156-59-2	cis-1,2-Dichloroethene	1.6	10	2.0	DJ
78-93-3	2-Butanone	5.7	50	50	U
74-97-5	Bromochloromethane	1.8	10	10	U
67-66-3	Chloroform	1.0	10	15	D
71-55-6	1,1,1-Trichloroethane	1.8	10	10	U
56-23-5	Carbon tetrachloride	2.1	10	4.0	DJ
71-43-2	Benzene	1.4	10	10	U
107-06-2	1,2-Dichloroethane	1.6	10	10	U
79-01-6	Trichloroethene	1.8	10	130	D
78-87-5	1,2-Dichloropropane	1.3	10	10	U
75-27-4	Bromodichloromethane	1.6	10	10	U
10061-01-5	cis-1,3-Dichloropropene	1.1	10	10	U
108-10-1	4-Methyl-2-pentanone	5.3	50	50	U
108-88-3	Toluene	1.6	10	10	U
10061-02-6	trans-1,3-Dichloropropene	1.2	10	10	U
79-00-5	1,1,2-Trichloroethane	1.4	10	10	U
127-18-4	Tetrachloroethene	1.6	10	10	U
591-78-6	2-Hexanone	5.0	50	50	U
124-48-1	Dibromochloromethane	1.5	10	10	U
106-93-4	1,2-Dibromoethane	1.2	10	10	U
108-90-7	Chlorobenzene	1.9	10	10	U
100-41-4	Ethylbenzene	1.3	10	10	U
1330-20-7	Xylene (total)	3.9	10	10	U
100-42-5	Styrene	0.90	10	10	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H010DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317010DL

Lab File ID: C030115

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 10.0

CAS NO.	COMPOUND (Units: UG/L)	MDL	RL	RESULT	Q
75-25-2	Bromoform	1.4	10	10	U
98-82-8	Isopropylbenzene	1.0	10	10	U
79-34-5	1,1,2,2-Tetrachloroethane	0.90	10	10	U
541-73-1	1,3-Dichlorobenzene	1.6	10	10	U
106-46-7	1,4-Dichlorobenzene	0.70	10	10	U
95-50-1	1,2-Dichlorobenzene	0.90	10	10	U
96-12-8	1,2-Dibromo-3-chloropropane	5.9	50	50	U
120-82-1	1,2,4-Trichlorobenzene	1.0	10	10	U
87-61-6	1,2,3-Trichlorobenzene	0.60	10	1.0	DJ

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H011

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317011

Lab File ID: C030096

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND (Units: UG/L)	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	0.50	J
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	3.0	
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	0.40	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	3.0	
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	17	
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	6.0	
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	0.20	J
79-01-6	Trichloroethene	0.18	1.0	210	E
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	0.50	J
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H011

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317011

Lab File ID: C030096

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND (Units: UG/L)	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H011DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317011DL

Lab File ID: C030116

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 10.0

CAS NO.	COMPOUND	Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane		1.8	10	10	U
74-87-3	Chloromethane		2.3	10	10	U
75-01-4	Vinyl chloride		2.0	10	10	U
74-83-9	Bromomethane		2.8	10	10	U
75-00-3	Chloroethane		2.2	10	10	U
75-69-4	Trichlorofluoromethane		2.0	10	10	U
76-13-1	1,1,2-Trichlorotrifluoroetha		1.9	10	10	U
75-35-4	1,1-Dichloroethene		2.2	10	10	U
67-64-1	Acetone		9.4	50	23	DJ
75-15-0	Carbon disulfide		2.0	10	10	U
75-09-2	Methylene chloride		1.3	20	2.0	DJ
156-60-5	trans-1,2-Dichloroethene		2.2	10	10	U
1634-04-4	Methyl tert-butylether		1.5	10	10	U
75-34-3	1,1-Dichloroethane		1.5	10	10	U
156-59-2	cis-1,2-Dichloroethene		1.6	10	2.0	DJ
78-93-3	2-Butanone		5.7	50	50	U
74-97-5	Bromochloromethane		1.8	10	10	U
67-66-3	Chloroform		1.0	10	15	D
71-55-6	1,1,1-Trichloroethane		1.8	10	10	U
56-23-5	Carbon tetrachloride		2.1	10	4.0	DJ
71-43-2	Benzene		1.4	10	10	U
107-06-2	1,2-Dichloroethane		1.6	10	10	U
79-01-6	Trichloroethene		1.8	10	130	D
78-87-5	1,2-Dichloropropane		1.3	10	10	U
75-27-4	Bromodichloromethane		1.6	10	10	U
10061-01-5	cis-1,3-Dichloropropene		1.1	10	10	U
108-10-1	4-Methyl-2-pentanone		5.3	50	50	U
108-88-3	Toluene		1.6	10	10	U
10061-02-6	trans-1,3-Dichloropropene		1.2	10	10	U
79-00-5	1,1,2-Trichloroethane		1.4	10	10	U
127-18-4	Tetrachloroethene		1.6	10	10	U
591-78-6	2-Hexanone		5.0	50	50	U
124-48-1	Dibromochloromethane		1.5	10	10	U
106-93-4	1,2-Dibromoethane		1.2	10	10	U
108-90-7	Chlorobenzene		1.9	10	10	U
100-41-4	Ethylbenzene		1.3	10	10	U
1330-20-7	Xylene (total)		3.9	10	10	U
100-42-5	Styrene		0.90	10	10	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H011DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317011DL

Lab File ID: C030116

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 10.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	1.4	10	10	U
98-82-8	Isopropylbenzene	1.0	10	10	U
79-34-5	1,1,2,2-Tetrachloroethane	0.90	10	10	U
541-73-1	1,3-Dichlorobenzene	1.6	10	10	U
106-46-7	1,4-Dichlorobenzene	0.70	10	0.80	DJ
95-50-1	1,2-Dichlorobenzene	0.90	10	10	U
96-12-8	1,2-Dibromo-3-chloropropane	5.9	50	50	U
120-82-1	1,2,4-Trichlorobenzene	1.0	10	10	U
87-61-6	1,2,3-Trichlorobenzene	0.60	10	1.0	DJ

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H012

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317012

Lab File ID: C030097

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND (Units: UG/L)	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	0.50	J
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	2.0	U
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	0.20	J
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	3.0	
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	0.50	J
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	U
79-01-6	Trichloroethene	0.18	1.0	70	E
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	0.40	J
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H012

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317012

Lab File ID: C030097

Date Received: 01/09/03

Date Analyzed: 01/15/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.090	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H012DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317012DL

Lab File ID: C030117

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 4.0

CAS NO.	COMPOUND	Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane		0.72	4.0	4.0	U
74-87-3	Chloromethane		0.92	4.0	4.0	U
75-01-4	Vinyl chloride		0.80	4.0	4.0	U
74-83-9	Bromomethane		1.1	4.0	4.0	U
75-00-3	Chloroethane		0.88	4.0	4.0	U
75-69-4	Trichlorofluoromethane		0.80	4.0	4.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha		0.76	4.0	4.0	U
75-35-4	1,1-Dichloroethene		0.88	4.0	4.0	U
67-64-1	Acetone		3.8	20	8.0	DJ
75-15-0	Carbon disulfide		0.80	4.0	4.0	U
75-09-2	Methylene chloride		0.52	8.0	8.0	U
156-60-5	trans-1,2-Dichloroethene		0.88	4.0	4.0	U
1634-04-4	Methyl tert-butylether		0.60	4.0	4.0	U
75-34-3	1,1-Dichloroethane		0.60	4.0	4.0	U
156-59-2	cis-1,2-Dichloroethene		0.64	4.0	4.0	U
78-93-3	2-Butanone		2.3	20	20	U
74-97-5	Bromochloromethane		0.72	4.0	4.0	U
67-66-3	Chloroform		0.40	4.0	3.0	DJ
71-55-6	1,1,1-Trichloroethane		0.72	4.0	4.0	U
56-23-5	Carbon tetrachloride		0.84	4.0	4.0	U
71-43-2	Benzene		0.56	4.0	4.0	U
107-06-2	1,2-Dichloroethane		0.64	4.0	4.0	U
79-01-6	Trichloroethene		0.72	4.0	55	D
78-87-5	1,2-Dichloropropane		0.52	4.0	4.0	U
75-27-4	Bromodichloromethane		0.64	4.0	4.0	U
10061-01-5	cis-1,3-Dichloropropene		0.44	4.0	4.0	U
108-10-1	4-Methyl-2-pentanone		2.1	20	20	U
108-88-3	Toluene		0.64	4.0	4.0	U
10061-02-6	trans-1,3-Dichloropropene		0.48	4.0	4.0	U
79-00-5	1,1,2-Trichloroethane		0.56	4.0	4.0	U
127-18-4	Tetrachloroethene		0.64	4.0	4.0	U
591-78-6	2-Hexanone		2.0	20	20	U
124-48-1	Dibromochloromethane		0.60	4.0	4.0	U
106-93-4	1,2-Dibromoethane		0.48	4.0	4.0	U
108-90-7	Chlorobenzene		0.76	4.0	4.0	U
100-41-4	Ethylbenzene		0.52	4.0	4.0	U
1330-20-7	Xylene (total)		1.6	4.0	4.0	U
100-42-5	Styrene		0.36	4.0	4.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H012DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317012DL

Lab File ID: C030117

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 4.0

CAS NO.	COMPOUND (Units: UG/L)	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.56	4.0	4.0	U
98-82-8	Isopropylbenzene	0.40	4.0	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.36	4.0	4.0	U
541-73-1	1,3-Dichlorobenzene	0.64	4.0	4.0	U
106-46-7	1,4-Dichlorobenzene	0.28	4.0	0.30	DJ
95-50-1	1,2-Dichlorobenzene	0.36	4.0	4.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.4	20	20	U
120-82-1	1,2,4-Trichlorobenzene	0.40	4.0	0.50	DJ
87-61-6	1,2,3-Trichlorobenzene	0.24	4.0	0.50	DJ

FORM I VOA

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H013

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317013

Lab File ID: C030118

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	0.80	J
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	0.60	J
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	2.0	U
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	0.20	J
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	18	
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	44	E
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	4.0	
71-43-2	Benzene	0.14	1.0	0.30	J
107-06-2	1,2-Dichloroethane	0.16	1.0	3.0	
79-01-6	Trichloroethene	0.18	1.0	600	E
78-87-5	1,2-Dichloropropane	0.13	1.0	0.20	J
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	0.20	J
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	0.80	J
127-18-4	Tetrachloroethene	0.16	1.0	12	
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H013

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317013

Lab File ID: C030118

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H013DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9317013DL

Lab File ID: C030123

Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 25.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	4.5	25	25	U
74-87-3	Chloromethane	5.8	25	25	U
75-01-4	Vinyl chloride	5.0	25	25	U
74-83-9	Bromomethane	7.0	25	25	U
75-00-3	Chloroethane	5.5	25	25	U
75-69-4	Trichlorofluoromethane	5.0	25	25	U
76-13-1	1,1,2-Trichlorotrifluoroetha	4.7	25	25	U
75-35-4	1,1-Dichloroethene	5.5	25	25	U
67-64-1	Acetone	24	120	73	DJ
75-15-0	Carbon disulfide	5.0	25	25	U
75-09-2	Methylene chloride	3.2	50	50	U
156-60-5	trans-1,2-Dichloroethene	5.5	25	25	U
1634-04-4	Methyl tert-butylether	3.8	25	25	U
75-34-3	1,1-Dichloroethane	3.8	25	25	U
156-59-2	cis-1,2-Dichloroethene	4.0	25	15	DJ
78-93-3	2-Butanone	14	120	120	U
74-97-5	Bromochloromethane	4.5	25	25	U
67-66-3	Chloroform	2.5	25	40	D
71-55-6	1,1,1-Trichloroethane	4.5	25	25	U
56-23-5	Carbon tetrachloride	5.2	25	25	U
71-43-2	Benzene	3.5	25	25	U
107-06-2	1,2-Dichloroethane	4.0	25	25	U
79-01-6	Trichloroethene	4.5	25	690	D
78-87-5	1,2-Dichloropropane	3.2	25	25	U
75-27-4	Bromodichloromethane	4.0	25	25	U
10061-01-5	cis-1,3-Dichloropropene	2.8	25	25	U
108-10-1	4-Methyl-2-pentanone	13	120	120	U
108-88-3	Toluene	4.0	25	25	U
10061-02-6	trans-1,3-Dichloropropene	3.0	25	25	U
79-00-5	1,1,2-Trichloroethane	3.5	25	25	U
127-18-4	Tetrachloroethene	4.0	25	11	DJ
591-78-6	2-Hexanone	12	120	120	U
124-48-1	Dibromochloromethane	3.8	25	25	U
106-93-4	1,2-Dibromoethane	3.0	25	25	U
108-90-7	Chlorobenzene	4.7	25	25	U
100-41-4	Ethylbenzene	3.2	25	25	U
1330-20-7	Xylene (total)	9.7	25	25	U
100-42-5	Styrene	2.2	25	25	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H013DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317013DL

Matrix: WATER Level: LOW Lab File ID: C030123

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 25.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	3.5	25	25	U
98-82-8	Isopropylbenzene	2.5	25	25	U
79-34-5	1,1,2,2-Tetrachloroethane	2.2	25	25	U
541-73-1	1,3-Dichlorobenzene	4.0	25	25	U
106-46-7	1,4-Dichlorobenzene	1.8	25	2.0	DJ
95-50-1	1,2-Dichlorobenzene	2.2	25	25	U
96-12-8	1,2-Dibromo-3-chloropropane	15	120	120	U
120-82-1	1,2,4-Trichlorobenzene	2.5	25	3.0	DJ
87-61-6	1,2,3-Trichlorobenzene	1.5	25	4.0	DJ

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H014

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317014

Matrix: WATER Level: LOW Lab File ID: C030119

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	0.50	J
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	0.20	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	5.0	
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	2.0	
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	0.30	J
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	U
79-01-6	Trichloroethene	0.18	1.0	86	E
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	0.20	J
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	30	
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H014

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317014

Matrix: WATER Level: LOW Lab File ID: C030119

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H014DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317014DL

Matrix: WATER Level: LOW Lab File ID: C030124

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 5.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.90	5.0	5.0	U
74-87-3	Chloromethane	1.2	5.0	5.0	U
75-01-4	Vinyl chloride	1.0	5.0	5.0	U
74-83-9	Bromomethane	1.4	5.0	5.0	U
75-00-3	Chloroethane	1.1	5.0	5.0	U
75-69-4	Trichlorofluoromethane	1.0	5.0	5.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.95	5.0	5.0	U
75-35-4	1,1-Dichloroethene	1.1	5.0	5.0	U
67-64-1	Acetone	4.7	25	14	DJ
75-15-0	Carbon disulfide	1.0	5.0	5.0	U
75-09-2	Methylene chloride	0.65	10	0.80	DJ
156-60-5	trans-1,2-Dichloroethene	1.1	5.0	5.0	U
1634-04-4	Methyl tert-butylether	0.75	5.0	5.0	U
75-34-3	1,1-Dichloroethane	0.75	5.0	5.0	U
156-59-2	cis-1,2-Dichloroethene	0.80	5.0	4.0	DJ
78-93-3	2-Butanone	2.8	25	25	U
74-97-5	Bromochloromethane	0.90	5.0	5.0	U
67-66-3	Chloroform	0.50	5.0	2.0	DJ
71-55-6	1,1,1-Trichloroethane	0.90	5.0	5.0	U
56-23-5	Carbon tetrachloride	1.0	5.0	5.0	U
71-43-2	Benzene	0.70	5.0	5.0	U
107-06-2	1,2-Dichloroethane	0.80	5.0	5.0	U
79-01-6	Trichloroethene	0.90	5.0	68	D
78-87-5	1,2-Dichloropropane	0.65	5.0	5.0	U
75-27-4	Bromodichloromethane	0.80	5.0	5.0	U
10061-01-5	cis-1,3-Dichloropropene	0.55	5.0	5.0	U
108-10-1	4-Methyl-2-pentanone	2.6	25	25	U
108-88-3	Toluene	0.80	5.0	5.0	U
10061-02-6	trans-1,3-Dichloropropene	0.60	5.0	5.0	U
79-00-5	1,1,2-Trichloroethane	0.70	5.0	5.0	U
127-18-4	Tetrachloroethene	0.80	5.0	26	D
591-78-6	2-Hexanone	2.5	25	25	U
124-48-1	Dibromochloromethane	0.75	5.0	5.0	U
106-93-4	1,2-Dibromoethane	0.60	5.0	5.0	U
108-90-7	Chlorobenzene	0.95	5.0	5.0	U
100-41-4	Ethylbenzene	0.65	5.0	5.0	U
1330-20-7	Xylene (total)	1.9	5.0	5.0	U
100-42-5	Styrene	0.45	5.0	5.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H014DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317014DL

Matrix: WATER Level: LOW Lab File ID: C030124

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 5.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.70	5.0	5.0	U
98-82-8	Isopropylbenzene	0.50	5.0	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.45	5.0	5.0	U
541-73-1	1,3-Dichlorobenzene	0.80	5.0	5.0	U
106-46-7	1,4-Dichlorobenzene	0.35	5.0	0.50	DJ
95-50-1	1,2-Dichlorobenzene	0.45	5.0	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.9	25	25	U
120-82-1	1,2,4-Trichlorobenzene	0.50	5.0	0.60	DJ
87-61-6	1,2,3-Trichlorobenzene	0.30	5.0	0.70	DJ

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H015

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317015

Matrix: WATER Level: LOW Lab File ID: C030120

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	0.30	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	0.30	J
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	54	E
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	92	E
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	30	
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	0.70	J
79-01-6	Trichloroethene	0.18	1.0	490	E
78-87-5	1,2-Dichloropropane	0.13	1.0	0.50	J
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	2.0	
127-18-4	Tetrachloroethene	0.16	1.0	0.30	J
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H015

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317015

Matrix: WATER Level: LOW Lab File ID: C030120

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H015DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317015DL

Matrix: WATER Level: LOW Lab File ID: C030125

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 20.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	3.6	20	20	U
74-87-3	Chloromethane	4.6	20	20	U
75-01-4	Vinyl chloride	4.0	20	20	U
74-83-9	Bromomethane	5.6	20	20	U
75-00-3	Chloroethane	4.4	20	20	U
75-69-4	Trichlorofluoromethane	4.0	20	20	U
76-13-1	1,1,2-Trichlorotrifluoroetha	3.8	20	20	U
75-35-4	1,1-Dichloroethene	4.4	20	20	U
67-64-1	Acetone	19	100	51	DJ
75-15-0	Carbon disulfide	4.0	20	20	U
75-09-2	Methylene chloride	2.6	40	40	U
156-60-5	trans-1,2-Dichloroethene	4.4	20	20	U
1634-04-4	Methyl tert-butylether	3.0	20	20	U
75-34-3	1,1-Dichloroethane	3.0	20	20	U
156-59-2	cis-1,2-Dichloroethene	3.2	20	42	D
78-93-3	2-Butanone	11	100	100	U
74-97-5	Bromochloromethane	3.6	20	20	U
67-66-3	Chloroform	2.0	20	78	D
71-55-6	1,1,1-Trichloroethane	3.6	20	20	U
56-23-5	Carbon tetrachloride	4.2	20	21	D
71-43-2	Benzene	2.8	20	20	U
107-06-2	1,2-Dichloroethane	3.2	20	20	U
79-01-6	Trichloroethene	3.6	20	400	D
78-87-5	1,2-Dichloropropane	2.6	20	20	U
75-27-4	Bromodichloromethane	3.2	20	20	U
10061-01-5	cis-1,3-Dichloropropene	2.2	20	20	U
108-10-1	4-Methyl-2-pentanone	10	100	100	U
108-88-3	Toluene	3.2	20	20	U
10061-02-6	trans-1,3-Dichloropropene	2.4	20	20	U
79-00-5	1,1,2-Trichloroethane	2.8	20	20	U
127-18-4	Tetrachloroethene	3.2	20	20	U
591-78-6	2-Hexanone	10	100	100	U
124-48-1	Dibromochloromethane	3.0	20	20	U
106-93-4	1,2-Dibromoethane	2.4	20	20	U
108-90-7	Chlorobenzene	3.8	20	20	U
100-41-4	Ethylbenzene	2.6	20	20	U
1330-20-7	Xylene (total)	7.8	20	20	U
100-42-5	Styrene	1.8	20	20	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H015DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317015DL

Matrix: WATER Level: LOW Lab File ID: C030125

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 20.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	2.8	20	20	U
98-82-8	Isopropylbenzene	2.0	20	20	U
79-34-5	1,1,2,2-Tetrachloroethane	1.8	20	20	U
541-73-1	1,3-Dichlorobenzene	3.2	20	20	U
106-46-7	1,4-Dichlorobenzene	1.4	20	2.0	DJ
95-50-1	1,2-Dichlorobenzene	1.8	20	2.0	DJ
96-12-8	1,2-Dibromo-3-chloropropane	12	100	100	U
120-82-1	1,2,4-Trichlorobenzene	2.0	20	20	U
87-61-6	1,2,3-Trichlorobenzene	1.2	20	3.0	DJ

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H016

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317016

Matrix: WATER Level: LOW Lab File ID: C030121

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	5.0	U
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	1.0	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	1.0	
78-93-3	2-Butanone	0.57	5.0	5.0	U
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	6.0	
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	0.20	J
79-01-6	Trichloroethene	0.18	1.0	38	
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	0.30	J
127-18-4	Tetrachloroethene	0.16	1.0	1.0	U
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H016

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317016

Matrix: WATER Level: LOW Lab File ID: C030121

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.10	J
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H017

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317017

Matrix: WATER Level: LOW Lab File ID: C030122

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.18	1.0	1.0	U
74-87-3	Chloromethane	0.23	1.0	1.0	U
75-01-4	Vinyl chloride	0.20	1.0	1.0	U
74-83-9	Bromomethane	0.28	1.0	1.0	U
75-00-3	Chloroethane	0.22	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.20	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.19	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.22	1.0	1.0	U
67-64-1	Acetone	0.94	5.0	4.0	J
75-15-0	Carbon disulfide	0.20	1.0	1.0	U
75-09-2	Methylene chloride	0.13	2.0	0.30	J
156-60-5	trans-1,2-Dichloroethene	0.22	1.0	1.0	U
1634-04-4	Methyl tert-butylether	0.15	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.15	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	1.0	1.0	U
78-93-3	2-Butanone	0.57	5.0	1.0	J
74-97-5	Bromochloromethane	0.18	1.0	1.0	U
67-66-3	Chloroform	0.10	1.0	0.40	J
71-55-6	1,1,1-Trichloroethane	0.18	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.14	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.16	1.0	1.0	U
79-01-6	Trichloroethene	0.18	1.0	1.0	U
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.16	1.0	0.20	J
10061-01-5	cis-1,3-Dichloropropene	0.11	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.53	5.0	5.0	U
108-88-3	Toluene	0.16	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.14	1.0	1.0	U
127-18-4	Tetrachloroethene	0.16	1.0	1.0	U
591-78-6	2-Hexanone	0.50	5.0	5.0	U
124-48-1	Dibromochloromethane	0.15	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.12	1.0	1.0	U
108-90-7	Chlorobenzene	0.19	1.0	1.0	U
100-41-4	Ethylbenzene	0.13	1.0	1.0	U
1330-20-7	Xylene (total)	0.39	1.0	1.0	U
100-42-5	Styrene	0.090	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H017

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9317 SDG No.: D9317 Lab Sample ID: D9317017

Matrix: WATER Level: LOW Lab File ID: C030122

Sample Volume: 10.0 ML Date Received: 01/09/03

Date Analyzed: 01/16/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-25-2	Bromoform	0.14	1.0	1.0	U
98-82-8	Isopropylbenzene	0.10	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.090	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.16	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.070	1.0	0.080	J
95-50-1	1,2-Dichlorobenzene	0.090	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.59	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.10	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.060	1.0	0.10	J

FORM I VOA SW846

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H002

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317002

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.0	U		P
7439-89-6	Iron	102			P
7439-96-5	Manganese	253			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H002T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317018

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	5980			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H003

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317003

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	13.5	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H003T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317019

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	42.1	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H004

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317004

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.4	B		P
7439-89-6	Iron	9.0	U		P
7439-96-5	Manganese	113			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H004T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317020

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	1320			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H005

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317005

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	2.2	B		P
7439-89-6	Iron	9.0	U		P
7439-96-5	Manganese	121			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H005T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317021

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	1740			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H006

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317006

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.8	B		P
7439-89-6	Iron	10.5	B		P
7439-96-5	Manganese	1.9	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
0302H006T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317022

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	49.4	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H007

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317007

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.2	B		P
7439-89-6	Iron	14.4	B		P
7439-96-5	Manganese	5.3	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H007T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317023

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	32.3	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H008

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317008

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.0	U		P
7439-89-6	Iron	9.0	U		P
7439-96-5	Manganese	0.30	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H008T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317024

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	9.2	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H009

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317009

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.4	B		P
7439-89-6	Iron	9.0	U		P
7439-96-5	Manganese	2.5	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

03O2H009T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317025

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	567			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H010

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317010

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	9210			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H010T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317026

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	19400			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H011

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317011

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	13100			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H011T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317027

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	20900			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H012

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317012

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	10.0	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H012T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317028

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	271			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H013

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317013

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	3.0	B		P
7439-89-6	Iron	9.0	U		P
7439-96-5	Manganese	74.0			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H013T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317029

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	721			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H014

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317014

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	34.7	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H014T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317030

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	588			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H015

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317015

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	9.0	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H015T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317031

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	957			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H016

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317016

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	9.0	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H016T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317032

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	3400			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H017

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317017

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.0	U		P
7439-89-6	Iron	9.0	U		P
7439-96-5	Manganese	0.30	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H017T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9317

Matrix (soil/water): WATER Lab Sample ID: D9317033

Level (low/med): LOW Date Received: 01/09/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	9.0	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Report of Analytical Results

Client Sample ID: 0302H002
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/07/03 11:00 (Tue)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317002

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	100	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	2490	mg/L	200	01/10/03 13:24	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H003
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/07/03 15:15 (Tue)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317003

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	214	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	15100	mg/L	1000	01/10/03 14:16	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H004
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/07/03 15:30 (Tue)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317004

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	116	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	71.5	mg/L	10	01/09/03 21:50	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H006
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/07/03 17:00 (Tue)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317006

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	140	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	72.8	mg/L	10	01/09/03 23:00	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H007
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/07/03 17:15 (Tue)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317007

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	158	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	180	mg/L	10	01/09/03 23:18	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H009
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/08/03 10:00 (Wed)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317009

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	226	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	54.4	mg/L	10	01/10/03 03:24	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H010
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/08/03 11:00 (Wed)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317010

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	107	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	88.3	mg/L	10	01/10/03 03:41	EPA300.0
NUTRIENTS					
Nitrate as N	0.66	mg/L	0.10	01/09/03 16:17	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H012
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/08/03 11:40 (Wed)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317012

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	116	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	66.4	mg/L	10	01/10/03 03:59	EPA300.0
NUTRIENTS					
Nitrate as N	2.94	mg/L	0.10	01/09/03 16:34	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H013
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/08/03 13:05 (Wed)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317013

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	80	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	55.2	mg/L	10	01/10/03 04:16	EPA300.0
NUTRIENTS					
Nitrate as N	3.50	mg/L	0.10	01/09/03 16:52	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H014
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/08/03 13:20 (Wed)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317014

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	140	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	13.0	mg/L	1.0	01/10/03 14:34	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H015
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/08/03 16:50 (Wed)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317015

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	104	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	217	mg/L	20	01/10/03 14:52	EPA300.0

(19484)

Report of Analytical Results

Client Sample ID: 0302H016
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/08/03 17:10 (Wed)
Date Received: 01/09/03 10:10 (Thu)

Reference No: D9317
Lab Sample ID: D9317016

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	55	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	137	mg/L	10	01/10/03 05:09	EPA300.0
NUTRIENTS					
Nitrate as N	0.81	mg/L	0.10	01/09/03 17:09	EPA300.0

(19484)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054

Hydrogen

Test Code: RSK 175
Instrument ID: HP5890A/TCD #8
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date(s) Collected: 1/7 - 1/8/03
Date Received: 1/10/03
Date(s) Analyzed: 1/20/03
Volume(s) Analyzed: 0.10 ml

Client Sample ID	CAS Sample ID	D.F.	Hydrogen µg/L Result	MRL	MDL	Data Qualifier
0302H002	P2300054-001	1.00	ND	17.0	5.00	
0302H003	P2300054-002	1.00	ND	17.0	5.00	
0302H004	P2300054-003	1.00	ND	17.0	5.00	
0302H006	P2300054-004	1.00	ND	17.0	5.00	
0302H007	P2300054-005	1.00	ND	17.0	5.00	
0302H009	P2300054-006	1.00	ND	17.0	5.00	
0302H010	P2300054-007	1.00	ND	17.0	5.00	
0302H012	P2300054-008	1.00	ND	17.0	5.00	
0302H013	P2300054-009	1.00	ND	17.0	5.00	
0302H014	P2300054-010	1.00	ND	17.0	5.00	
0302H015	P2300054-011	1.00	ND	17.0	5.00	
0302H016	P2300054-012	1.00	ND	17.0	5.00	
Method Control Sample	P030120-MB	1.00	ND	17.0	5.00	

The Method Control Sample is laboratory water carried through the entire analytical process.
ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H002**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-001

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/7/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml(s)

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	ND	0.50	0.30	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Sample

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H003**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-002

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/7/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	ND	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Sample (2)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H004**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-003

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/7/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	**0.41**	0.50	0.30	J

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The analyte was positively identified below the laboratory method reporting limit;
the associated numerical value is considered estimated.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Sample (3)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H006**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-004

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/7/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	ND	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Sample (4)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H007**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-005

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/7/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	ND	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Sample (5)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H009**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-006

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/8/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	ND	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Sample (6)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H010**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-007

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/8/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	1.7	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Sample (7)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H012**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-008

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/8/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	ND	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG-TO1- Sample (8)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H013**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-009

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/8/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	3.2	1.5	0.40	
74-84-0	Ethane	3.9	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RLs Date: 1/21/03

00054SVG.TO1- Sample (9)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H013**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-009DUP

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/8/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	3.3	1.5	0.40	
74-84-0	Ethane	4.0	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Dup (9)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H014**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-010

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/8/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	ND	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Sample (10)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H015**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-011

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/8/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	ND	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H016**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300054
CAS Sample ID: P2300054-012

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/8/03
Date Received: 1/10/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	ND	1.5	0.40	
74-84-0	Ethane	1.5	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/21/03

00054SVG.TO1- Sample (12)

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H018

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327001

Matrix: WATER Level: LOW Lab File ID: R030222

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.26	1.0	1.0	U
74-87-3	Chloromethane	0.20	1.0	1.0	U
75-01-4	Vinyl chloride	0.26	1.0	1.0	U
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.28	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.29	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.29	1.0	1.0	U
67-64-1	Acetone	0.62	5.0	5.0	U
75-15-0	Carbon disulfide	0.25	1.0	1.0	U
75-09-2	Methylene chloride	0.15	2.0	0.20	J
1634-04-4	Methyl tert-butylether	0.22	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.12	1.0	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.28	1.0	1.0	U
78-93-3	2-Butanone	0.71	5.0	5.0	U
74-97-5	Bromochloromethane	0.15	1.0	1.0	U
67-66-3	Chloroform	0.11	1.0	0.20	J
156-59-2	cis-1,2-Dichloroethene	0.23	1.0	1.0	U
71-55-6	1,1,1-Trichloroethane	0.22	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.13	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.24	1.0	1.0	U
79-01-6	Trichloroethene	0.24	1.0	1.0	U
78-87-5	1,2-Dichloropropane	0.12	1.0	1.0	U
75-27-4	Bromodichloromethane	0.11	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.21	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.47	5.0	5.0	U
108-88-3	Toluene	0.23	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.20	1.0	1.0	U
127-18-4	Tetrachloroethene	0.26	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.28	1.0	1.0	U
591-78-6	2-Hexanone	0.33	5.0	5.0	U
124-48-1	Dibromochloromethane	0.11	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.19	1.0	1.0	U
108-90-7	Chlorobenzene	0.11	1.0	1.0	U
100-41-4	Ethylbenzene	0.21	1.0	1.0	U
1330-20-7	Xylene (total)	0.64	1.0	1.0	U
100-42-5	Styrene	0.11	1.0	1.0	U
75-25-2	Bromoform	0.19	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H018

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327001

Matrix: WATER Level: LOW Lab File ID: R030222

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.24	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.10	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.26	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.10	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.68	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.090	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.14	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.27	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H019

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327002

Matrix: WATER Level: LOW Lab File ID: R030226

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.26	1.0	1.0	U
74-87-3	Chloromethane	0.20	1.0	1.0	U
75-01-4	Vinyl chloride	0.26	1.0	1.0	U
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.28	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.29	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.29	1.0	0.30	J
67-64-1	Acetone	0.62	5.0	5.0	U
75-15-0	Carbon disulfide	0.25	1.0	1.0	U
75-09-2	Methylene chloride	0.15	2.0	8.0	
1634-04-4	Methyl tert-butylether	0.22	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.12	1.0	0.30	J
156-60-5	trans-1,2-Dichloroethene	0.28	1.0	1.0	U
78-93-3	2-Butanone	0.71	5.0	5.0	U
74-97-5	Bromochloromethane	0.15	1.0	1.0	U
67-66-3	Chloroform	0.11	1.0	8.0	
156-59-2	cis-1,2-Dichloroethene	0.23	1.0	1.0	
71-55-6	1,1,1-Trichloroethane	0.22	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.13	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.24	1.0	6.0	
79-01-6	Trichloroethene	0.24	1.0	56	E
78-87-5	1,2-Dichloropropane	0.12	1.0	0.20	J
75-27-4	Bromodichloromethane	0.11	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.21	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.47	5.0	5.0	U
108-88-3	Toluene	0.23	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.20	1.0	1.0	U
127-18-4	Tetrachloroethene	0.26	1.0	1.0	
79-00-5	1,1,2-Trichloroethane	0.28	1.0	1.0	
591-78-6	2-Hexanone	0.33	5.0	0.40	J
124-48-1	Dibromochloromethane	0.11	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.19	1.0	1.0	U
108-90-7	Chlorobenzene	0.11	1.0	1.0	U
100-41-4	Ethylbenzene	0.21	1.0	1.0	U
1330-20-7	Xylene (total)	0.64	1.0	1.0	U
100-42-5	Styrene	0.11	1.0	1.0	U
75-25-2	Bromoform	0.19	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H019

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327002

Matrix: WATER Level: LOW Lab File ID: R030226

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.24	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.10	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.26	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.10	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.68	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.090	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.14	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.27	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H019DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9327002DL

Lab File ID: R030227

Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 2.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.52	2.0	2.0	U
74-87-3	Chloromethane	0.40	2.0	2.0	U
75-01-4	Vinyl chloride	0.52	2.0	2.0	U
74-83-9	Bromomethane	0.64	2.0	2.0	U
75-00-3	Chloroethane	0.56	2.0	2.0	U
75-69-4	Trichlorofluoromethane	0.58	2.0	2.0	U
75-35-4	1,1-Dichloroethene	0.58	2.0	2.0	U
67-64-1	Acetone	1.2	10	10	U
75-15-0	Carbon disulfide	0.50	2.0	2.0	U
75-09-2	Methylene chloride	0.30	4.0	8.0	D
1634-04-4	Methyl tert-butylether	0.44	2.0	2.0	U
75-34-3	1,1-Dichloroethane	0.24	2.0	2.0	U
156-60-5	trans-1,2-Dichloroethene	0.56	2.0	2.0	U
78-93-3	2-Butanone	1.4	10	10	U
74-97-5	Bromochloromethane	0.30	2.0	2.0	U
67-66-3	Chloroform	0.22	2.0	6.0	D
156-59-2	cis-1,2-Dichloroethene	0.46	2.0	1.0	DJ
71-55-6	1,1,1-Trichloroethane	0.44	2.0	2.0	U
56-23-5	Carbon tetrachloride	0.42	2.0	2.0	U
71-43-2	Benzene	0.26	2.0	2.0	U
107-06-2	1,2-Dichloroethane	0.48	2.0	6.0	D
79-01-6	Trichloroethene	0.48	2.0	47	D
78-87-5	1,2-Dichloropropane	0.24	2.0	2.0	U
75-27-4	Bromodichloromethane	0.22	2.0	2.0	U
10061-01-5	cis-1,3-Dichloropropene	0.42	2.0	2.0	U
108-10-1	4-Methyl-2-pentanone	0.94	10	10	U
108-88-3	Toluene	0.46	2.0	2.0	U
10061-02-6	trans-1,3-Dichloropropene	0.40	2.0	2.0	U
127-18-4	Tetrachloroethene	0.52	2.0	0.80	DJ
79-00-5	1,1,2-Trichloroethane	0.56	2.0	1.0	DJ
591-78-6	2-Hexanone	0.66	10	10	U
124-48-1	Dibromochloromethane	0.22	2.0	2.0	U
106-93-4	1,2-Dibromoethane	0.38	2.0	2.0	U
108-90-7	Chlorobenzene	0.22	2.0	2.0	U
100-41-4	Ethylbenzene	0.42	2.0	2.0	U
1330-20-7	Xylene (total)	1.3	2.0	2.0	U
100-42-5	Styrene	0.22	2.0	2.0	U
75-25-2	Bromoform	0.38	2.0	2.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H019DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327002DL

Matrix: WATER Level: LOW Lab File ID: R030227

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 2.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.48	2.0	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	2.0	2.0	U
541-73-1	1,3-Dichlorobenzene	0.52	2.0	2.0	U
106-46-7	1,4-Dichlorobenzene	0.20	2.0	2.0	U
95-50-1	1,2-Dichlorobenzene	0.20	2.0	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.4	10	10	U
120-82-1	1,2,4-Trichlorobenzene	0.18	2.0	2.0	U
87-61-6	1,2,3-Trichlorobenzene	0.28	2.0	2.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.54	2.0	2.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H020

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327003

Matrix: WATER Level: LOW Lab File ID: R030228

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.26	1.0	1.0	U
74-87-3	Chloromethane	0.20	1.0	1.0	U
75-01-4	Vinyl chloride	0.26	1.0	0.80	J
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.28	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.29	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.29	1.0	0.60	J
67-64-1	Acetone	0.62	5.0	5.0	U
75-15-0	Carbon disulfide	0.25	1.0	1.0	U
75-09-2	Methylene chloride	0.15	2.0	13	
1634-04-4	Methyl tert-butylether	0.22	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.12	1.0	1.0	
156-60-5	trans-1,2-Dichloroethene	0.28	1.0	1.0	U
78-93-3	2-Butanone	0.71	5.0	5.0	U
74-97-5	Bromochloromethane	0.15	1.0	1.0	U
67-66-3	Chloroform	0.11	1.0	70	E
156-59-2	cis-1,2-Dichloroethene	0.23	1.0	22	
71-55-6	1,1,1-Trichloroethane	0.22	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.13	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.24	1.0	43	E
79-01-6	Trichloroethene	0.24	1.0	150	E
78-87-5	1,2-Dichloropropane	0.12	1.0	0.30	J
75-27-4	Bromodichloromethane	0.11	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.21	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.47	5.0	5.0	U
108-88-3	Toluene	0.23	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.20	1.0	1.0	U
127-18-4	Tetrachloroethene	0.26	1.0	2.0	
79-00-5	1,1,2-Trichloroethane	0.28	1.0	1.0	
591-78-6	2-Hexanone	0.33	5.0	5.0	U
124-48-1	Dibromochloromethane	0.11	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.19	1.0	1.0	U
108-90-7	Chlorobenzene	0.11	1.0	1.0	U
100-41-4	Ethylbenzene	0.21	1.0	1.0	U
1330-20-7	Xylene (total)	0.64	1.0	1.0	U
100-42-5	Styrene	0.11	1.0	1.0	U
75-25-2	Bromoform	0.19	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H020

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327003

Matrix: WATER Level: LOW Lab File ID: R030228

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.24	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.10	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.26	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.10	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.68	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.090	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.14	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.27	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H020DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327003DL

Matrix: WATER Level: LOW Lab File ID: R030229

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 5.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	1.3	5.0	5.0	U
74-87-3	Chloromethane	1.0	5.0	5.0	U
75-01-4	Vinyl chloride	1.3	5.0	5.0	U
74-83-9	Bromomethane	1.6	5.0	5.0	U
75-00-3	Chloroethane	1.4	5.0	5.0	U
75-69-4	Trichlorofluoromethane	1.4	5.0	5.0	U
75-35-4	1,1-Dichloroethene	1.4	5.0	5.0	U
67-64-1	Acetone	3.1	25	25	U
75-15-0	Carbon disulfide	1.2	5.0	5.0	U
75-09-2	Methylene chloride	0.75	10	13	D
1634-04-4	Methyl tert-butylether	1.1	5.0	5.0	U
75-34-3	1,1-Dichloroethane	0.60	5.0	1.0	DJ
156-60-5	trans-1,2-Dichloroethene	1.4	5.0	5.0	U
78-93-3	2-Butanone	3.5	25	25	U
74-97-5	Bromochloromethane	0.75	5.0	5.0	U
67-66-3	Chloroform	0.55	5.0	64	D
156-59-2	cis-1,2-Dichloroethene	1.2	5.0	20	D
71-55-6	1,1,1-Trichloroethane	1.1	5.0	5.0	U
56-23-5	Carbon tetrachloride	1.0	5.0	5.0	U
71-43-2	Benzene	0.65	5.0	5.0	U
107-06-2	1,2-Dichloroethane	1.2	5.0	41	D
79-01-6	Trichloroethene	1.2	5.0	120	D
78-87-5	1,2-Dichloropropane	0.60	5.0	5.0	U
75-27-4	Bromodichloromethane	0.55	5.0	5.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	5.0	5.0	U
108-10-1	4-Methyl-2-pentanone	2.4	25	25	U
108-88-3	Toluene	1.2	5.0	5.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	5.0	5.0	U
127-18-4	Tetrachloroethene	1.3	5.0	5.0	U
79-00-5	1,1,2-Trichloroethane	1.4	5.0	5.0	U
591-78-6	2-Hexanone	1.6	25	25	U
124-48-1	Dibromochloromethane	0.55	5.0	5.0	U
106-93-4	1,2-Dibromoethane	0.95	5.0	5.0	U
108-90-7	Chlorobenzene	0.55	5.0	5.0	U
100-41-4	Ethylbenzene	1.0	5.0	5.0	U
1330-20-7	Xylene (total)	3.2	5.0	5.0	U
100-42-5	Styrene	0.55	5.0	5.0	U
75-25-2	Bromoform	0.95	5.0	5.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H020DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327003DL

Matrix: WATER Level: LOW Lab File ID: R030229

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 5.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	1.2	5.0	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	5.0	5.0	U
541-73-1	1,3-Dichlorobenzene	1.3	5.0	5.0	U
106-46-7	1,4-Dichlorobenzene	0.50	5.0	5.0	U
95-50-1	1,2-Dichlorobenzene	0.50	5.0	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	3.4	25	25	U
120-82-1	1,2,4-Trichlorobenzene	0.45	5.0	5.0	U
87-61-6	1,2,3-Trichlorobenzene	0.70	5.0	5.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	1.4	5.0	5.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H021

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327004

Matrix: WATER Level: LOW Lab File ID: R030230

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.26	1.0	1.0	U
74-87-3	Chloromethane	0.20	1.0	0.30	J
75-01-4	Vinyl chloride	0.26	1.0	0.70	J
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.28	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.29	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.29	1.0	2.0	
67-64-1	Acetone	0.62	5.0	5.0	U
75-15-0	Carbon disulfide	0.25	1.0	1.0	U
75-09-2	Methylene chloride	0.15	2.0	25	
1634-04-4	Methyl tert-butylether	0.22	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.12	1.0	0.80	J
156-60-5	trans-1,2-Dichloroethene	0.28	1.0	1.0	U
78-93-3	2-Butanone	0.71	5.0	5.0	U
74-97-5	Bromochloromethane	0.15	1.0	1.0	U
67-66-3	Chloroform	0.11	1.0	53	E
156-59-2	cis-1,2-Dichloroethene	0.23	1.0	9.0	
71-55-6	1,1,1-Trichloroethane	0.22	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.13	1.0	1.0	
107-06-2	1,2-Dichloroethane	0.24	1.0	31	
79-01-6	Trichloroethene	0.24	1.0	430	E
78-87-5	1,2-Dichloropropane	0.12	1.0	1.0	
75-27-4	Bromodichloromethane	0.11	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.21	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.47	5.0	5.0	U
108-88-3	Toluene	0.23	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.20	1.0	1.0	U
127-18-4	Tetrachloroethene	0.26	1.0	1.0	
79-00-5	1,1,2-Trichloroethane	0.28	1.0	6.0	
591-78-6	2-Hexanone	0.33	5.0	5.0	U
124-48-1	Dibromochloromethane	0.11	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.19	1.0	1.0	U
108-90-7	Chlorobenzene	0.11	1.0	1.0	U
100-41-4	Ethylbenzene	0.21	1.0	1.0	U
1330-20-7	Xylene (total)	0.64	1.0	1.0	U
100-42-5	Styrene	0.11	1.0	1.0	U
75-25-2	Bromoform	0.19	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H021

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327004

Matrix: WATER Level: LOW Lab File ID: R030230

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.24	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.10	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.26	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.10	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.68	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.090	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.14	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.27	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H021DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327004DL

Matrix: WATER Level: LOW Lab File ID: J030290

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 20.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	4.0	20	20	U
74-87-3	Chloromethane	8.0	20	20	U
75-01-4	Vinyl chloride	4.8	20	20	U
74-83-9	Bromomethane	6.4	20	20	U
75-00-3	Chloroethane	7.4	20	20	U
75-69-4	Trichlorofluoromethane	7.2	20	20	U
75-35-4	1,1-Dichloroethene	7.2	20	20	U
67-64-1	Acetone	9.2	100	100	U
75-15-0	Carbon disulfide	5.2	20	20	U
75-09-2	Methylene chloride	3.0	40	27	DJ
1634-04-4	Methyl tert-butylether	6.6	20	20	U
75-34-3	1,1-Dichloroethane	1.4	20	20	U
156-60-5	trans-1,2-Dichloroethene	4.2	20	20	U
78-93-3	2-Butanone	24	100	100	U
74-97-5	Bromochloromethane	2.8	20	20	U
67-66-3	Chloroform	1.8	20	57	D
156-59-2	cis-1,2-Dichloroethene	4.4	20	7.0	DJ
71-55-6	1,1,1-Trichloroethane	4.2	20	20	U
56-23-5	Carbon tetrachloride	4.8	20	20	U
71-43-2	Benzene	2.4	20	20	U
107-06-2	1,2-Dichloroethane	5.0	20	28	D
79-01-6	Trichloroethene	8.6	20	460	D
78-87-5	1,2-Dichloropropane	2.6	20	20	U
75-27-4	Bromodichloromethane	4.8	20	20	U
10061-01-5	cis-1,3-Dichloropropene	2.6	20	20	U
108-10-1	4-Methyl-2-pentanone	15	100	100	U
108-88-3	Toluene	5.0	20	20	U
10061-02-6	trans-1,3-Dichloropropene	6.0	20	20	U
127-18-4	Tetrachloroethene	5.0	20	20	U
79-00-5	1,1,2-Trichloroethane	8.0	20	20	U
591-78-6	2-Hexanone	19	100	100	U
124-48-1	Dibromochloromethane	1.6	20	20	U
106-93-4	1,2-Dibromoethane	5.6	20	20	U
108-90-7	Chlorobenzene	1.4	20	20	U
100-41-4	Ethylbenzene	5.4	20	20	U
1330-20-7	Xylene (total)	8.8	20	20	U
100-42-5	Styrene	1.2	20	20	U
75-25-2	Bromoform	8.0	20	20	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H021DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327004DL

Matrix: WATER Level: LOW Lab File ID: J030290

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 20.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	3.6	20	20	U
79-34-5	1,1,2,2-Tetrachloroethane	2.2	20	20	U
541-73-1	1,3-Dichlorobenzene	1.6	20	20	U
106-46-7	1,4-Dichlorobenzene	2.0	20	20	U
95-50-1	1,2-Dichlorobenzene	1.0	20	20	U
96-12-8	1,2-Dibromo-3-chloropropane	15	100	100	U
120-82-1	1,2,4-Trichlorobenzene	2.2	20	20	U
87-61-6	1,2,3-Trichlorobenzene	1.8	20	20	U
76-13-1	1,1,2-Trichlorotrifluoroetha	9.6	20	20	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H021DL2

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327004DL2

Matrix: WATER Level: LOW Lab File ID: R030259

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 2.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.52	2.0	2.0	U
74-87-3	Chloromethane	0.40	2.0	2.0	U
75-01-4	Vinyl chloride	0.52	2.0	2.0	U
74-83-9	Bromomethane	0.64	2.0	2.0	U
75-00-3	Chloroethane	0.56	2.0	2.0	U
75-69-4	Trichlorofluoromethane	0.58	2.0	2.0	U
75-35-4	1,1-Dichloroethene	0.58	2.0	2.0	D
67-64-1	Acetone	1.2	10	10	U
75-15-0	Carbon disulfide	0.50	2.0	2.0	U
75-09-2	Methylene chloride	0.30	4.0	25	D
1634-04-4	Methyl tert-butylether	0.44	2.0	2.0	U
75-34-3	1,1-Dichloroethane	0.24	2.0	0.80	DJ
156-60-5	trans-1,2-Dichloroethene	0.56	2.0	2.0	U
78-93-3	2-Butanone	1.4	10	4.0	DJ
74-97-5	Bromochloromethane	0.30	2.0	2.0	U
67-66-3	Chloroform	0.22	2.0	53	D
156-59-2	cis-1,2-Dichloroethene	0.46	2.0	9.0	D
71-55-6	1,1,1-Trichloroethane	0.44	2.0	2.0	U
56-23-5	Carbon tetrachloride	0.42	2.0	2.0	U
71-43-2	Benzene	0.26	2.0	0.90	DJ
107-06-2	1,2-Dichloroethane	0.48	2.0	31	D
79-01-6	Trichloroethene	0.48	2.0	440	DE
78-87-5	1,2-Dichloropropane	0.24	2.0	1.0	DJ
75-27-4	Bromodichloromethane	0.22	2.0	2.0	U
10061-01-5	cis-1,3-Dichloropropene	0.42	2.0	2.0	U
108-10-1	4-Methyl-2-pentanone	0.94	10	10	U
108-88-3	Toluene	0.46	2.0	2.0	U
10061-02-6	trans-1,3-Dichloropropene	0.40	2.0	2.0	U
127-18-4	Tetrachloroethene	0.52	2.0	1.0	DJ
79-00-5	1,1,2-Trichloroethane	0.56	2.0	6.0	D
591-78-6	2-Hexanone	0.66	10	3.0	DJ
124-48-1	Dibromochloromethane	0.22	2.0	2.0	U
106-93-4	1,2-Dibromoethane	0.38	2.0	2.0	U
108-90-7	Chlorobenzene	0.22	2.0	2.0	U
100-41-4	Ethylbenzene	0.42	2.0	2.0	U
1330-20-7	Xylene (total)	1.3	2.0	2.0	U
100-42-5	Styrene	0.22	2.0	2.0	U
75-25-2	Bromoform	0.38	2.0	2.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H021DL2

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327004DL2

Matrix: WATER Level: LOW Lab File ID: R030259

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 2.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.48	2.0	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	2.0	2.0	U
541-73-1	1,3-Dichlorobenzene	0.52	2.0	2.0	U
106-46-7	1,4-Dichlorobenzene	0.20	2.0	2.0	U
95-50-1	1,2-Dichlorobenzene	0.20	2.0	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.4	10	10	U
120-82-1	1,2,4-Trichlorobenzene	0.18	2.0	2.0	U
87-61-6	1,2,3-Trichlorobenzene	0.28	2.0	2.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.54	2.0	2.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H022

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327005

Matrix: WATER Level: LOW Lab File ID: J030291

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 4.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.80	4.0	4.0	U
74-87-3	Chloromethane	1.6	4.0	4.0	U
75-01-4	Vinyl chloride	0.96	4.0	4.0	U
74-83-9	Bromomethane	1.3	4.0	4.0	U
75-00-3	Chloroethane	1.5	4.0	4.0	U
75-69-4	Trichlorofluoromethane	1.4	4.0	4.0	U
75-35-4	1,1-Dichloroethene	1.4	4.0	4.0	U
67-64-1	Acetone	1.8	20	20	U
75-15-0	Carbon disulfide	1.0	4.0	4.0	U
75-09-2	Methylene chloride	0.60	8.0	13	
1634-04-4	Methyl tert-butylether	1.3	4.0	4.0	U
75-34-3	1,1-Dichloroethane	0.28	4.0	4.0	U
156-60-5	trans-1,2-Dichloroethene	0.84	4.0	4.0	U
78-93-3	2-Butanone	4.9	20	20	U
74-97-5	Bromochloromethane	0.56	4.0	4.0	U
67-66-3	Chloroform	0.36	4.0	4.0	
156-59-2	cis-1,2-Dichloroethene	0.88	4.0	2.0	J
71-55-6	1,1,1-Trichloroethane	0.84	4.0	4.0	U
56-23-5	Carbon tetrachloride	0.96	4.0	4.0	U
71-43-2	Benzene	0.48	4.0	4.0	U
107-06-2	1,2-Dichloroethane	1.0	4.0	35	
79-01-6	Trichloroethene	1.7	4.0	360	E
78-87-5	1,2-Dichloropropane	0.52	4.0	4.0	U
75-27-4	Bromodichloromethane	0.96	4.0	4.0	U
10061-01-5	cis-1,3-Dichloropropene	0.52	4.0	4.0	U
108-10-1	4-Methyl-2-pentanone	3.0	20	20	U
108-88-3	Toluene	1.0	4.0	4.0	U
10061-02-6	trans-1,3-Dichloropropene	1.2	4.0	4.0	U
127-18-4	Tetrachloroethene	1.0	4.0	4.0	U
79-00-5	1,1,2-Trichloroethane	1.6	4.0	8.0	
591-78-6	2-Hexanone	3.8	20	20	U
124-48-1	Dibromochloromethane	0.32	4.0	4.0	U
106-93-4	1,2-Dibromoethane	1.1	4.0	4.0	U
108-90-7	Chlorobenzene	0.28	4.0	4.0	U
100-41-4	Ethylbenzene	1.1	4.0	4.0	U
1330-20-7	Xylene (total)	1.8	4.0	4.0	U
100-42-5	Styrene	0.24	4.0	4.0	U
75-25-2	Bromoform	1.6	4.0	4.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H022

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327005

Matrix: WATER Level: LOW Lab File ID: J030291

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 4.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.72	4.0	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.44	4.0	4.0	U
541-73-1	1,3-Dichlorobenzene	0.32	4.0	4.0	U
106-46-7	1,4-Dichlorobenzene	0.40	4.0	4.0	U
95-50-1	1,2-Dichlorobenzene	0.20	4.0	4.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.9	20	20	U
120-82-1	1,2,4-Trichlorobenzene	0.44	4.0	4.0	U
87-61-6	1,2,3-Trichlorobenzene	0.36	4.0	4.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	1.9	4.0	4.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H022DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327005DL

Matrix: WATER Level: LOW Lab File ID: R030256

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 40.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	10	40	40	U
74-87-3	Chloromethane	8.0	40	40	U
75-01-4	Vinyl chloride	10	40	40	U
74-83-9	Bromomethane	13	40	40	U
75-00-3	Chloroethane	11	40	40	U
75-69-4	Trichlorofluoromethane	12	40	40	U
75-35-4	1,1-Dichloroethene	12	40	40	U
67-64-1	Acetone	25	200	200	U
75-15-0	Carbon disulfide	10	40	40	U
75-09-2	Methylene chloride	6.0	80	27	DJ
1634-04-4	Methyl tert-butylether	8.8	40	40	U
75-34-3	1,1-Dichloroethane	4.8	40	40	U
156-60-5	trans-1,2-Dichloroethene	11	40	40	U
78-93-3	2-Butanone	28	200	200	U
74-97-5	Bromochloromethane	6.0	40	40	U
67-66-3	Chloroform	4.4	40	20	DJ
156-59-2	cis-1,2-Dichloroethene	9.2	40	40	U
71-55-6	1,1,1-Trichloroethane	8.8	40	40	U
56-23-5	Carbon tetrachloride	8.4	40	40	U
71-43-2	Benzene	5.2	40	40	U
107-06-2	1,2-Dichloroethane	9.6	40	38	DJ
79-01-6	Trichloroethene	9.6	40	420	D
78-87-5	1,2-Dichloropropane	4.8	40	40	U
75-27-4	Bromodichloromethane	4.4	40	40	U
10061-01-5	cis-1,3-Dichloropropene	8.4	40	40	U
108-10-1	4-Methyl-2-pentanone	19	200	200	U
108-88-3	Toluene	9.2	40	40	U
10061-02-6	trans-1,3-Dichloropropene	8.0	40	40	U
127-18-4	Tetrachloroethene	10	40	40	U
79-00-5	1,1,2-Trichloroethane	11	40	40	U
591-78-6	2-Hexanone	13	200	200	U
124-48-1	Dibromochloromethane	4.4	40	40	U
106-93-4	1,2-Dibromoethane	7.6	40	40	U
108-90-7	Chlorobenzene	4.4	40	40	U
100-41-4	Ethylbenzene	8.4	40	40	U
1330-20-7	Xylene (total)	26	40	40	U
100-42-5	Styrene	4.4	40	40	U
75-25-2	Bromoform	7.6	40	40	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H022DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327005DL

Matrix: WATER Level: LOW Lab File ID: R030256

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 40.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	9.6	40	40	U
79-34-5	1,1,2,2-Tetrachloroethane	4.0	40	40	U
541-73-1	1,3-Dichlorobenzene	10	40	40	U
106-46-7	1,4-Dichlorobenzene	4.0	40	40	U
95-50-1	1,2-Dichlorobenzene	4.0	40	40	U
96-12-8	1,2-Dibromo-3-chloropropane	27	200	200	U
120-82-1	1,2,4-Trichlorobenzene	3.6	40	40	U
87-61-6	1,2,3-Trichlorobenzene	5.6	40	40	U
76-13-1	1,1,2-Trichlorotrifluoroetha	11	40	40	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H023

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327006

Matrix: WATER Level: LOW Lab File ID: J030292

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.20	1.0	1.0	U
74-87-3	Chloromethane	0.40	1.0	1.0	U
75-01-4	Vinyl chloride	0.24	1.0	1.0	U
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.37	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.36	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.36	1.0	1.0	U
67-64-1	Acetone	0.46	5.0	5.0	U
75-15-0	Carbon disulfide	0.26	1.0	1.0	U
75-09-2	Methylene chloride	0.15	2.0	6.0	
1634-04-4	Methyl tert-butylether	0.33	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.070	1.0	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.21	1.0	1.0	U
78-93-3	2-Butanone	1.2	5.0	5.0	U
74-97-5	Bromochloromethane	0.14	1.0	1.0	U
67-66-3	Chloroform	0.090	1.0	3.0	B
156-59-2	cis-1,2-Dichloroethene	0.22	1.0	0.40	J
71-55-6	1,1,1-Trichloroethane	0.21	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.24	1.0	1.0	U
71-43-2	Benzene	0.12	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.25	1.0	2.0	
79-01-6	Trichloroethene	0.43	1.0	110	E
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.24	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.74	5.0	5.0	U
108-88-3	Toluene	0.25	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.30	1.0	1.0	U
127-18-4	Tetrachloroethene	0.25	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.40	1.0	2.0	
591-78-6	2-Hexanone	0.95	5.0	5.0	U
124-48-1	Dibromochloromethane	0.080	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.28	1.0	1.0	U
108-90-7	Chlorobenzene	0.070	1.0	1.0	U
100-41-4	Ethylbenzene	0.27	1.0	1.0	U
1330-20-7	Xylene (total)	0.44	1.0	1.0	U
100-42-5	Styrene	0.060	1.0	1.0	U
75-25-2	Bromoform	0.40	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H023

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327006

Matrix: WATER Level: LOW Lab File ID: J030292

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.18	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.11	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.080	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.050	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.73	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.11	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.090	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.48	1.0	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H023DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9327006DL

Lab File ID: J030293

Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 5.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	1.0	5.0	5.0	U
74-87-3	Chloromethane	2.0	5.0	5.0	U
75-01-4	Vinyl chloride	1.2	5.0	5.0	U
74-83-9	Bromomethane	1.6	5.0	5.0	U
75-00-3	Chloroethane	1.8	5.0	5.0	U
75-69-4	Trichlorofluoromethane	1.8	5.0	5.0	U
75-35-4	1,1-Dichloroethene	1.8	5.0	5.0	U
67-64-1	Acetone	2.3	25	25	U
75-15-0	Carbon disulfide	1.3	5.0	5.0	U
75-09-2	Methylene chloride	0.75	10	6.0	DJ
1634-04-4	Methyl tert-butylether	1.6	5.0	5.0	U
75-34-3	1,1-Dichloroethane	0.35	5.0	5.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	5.0	5.0	U
78-93-3	2-Butanone	6.1	25	25	U
74-97-5	Bromochloromethane	0.70	5.0	5.0	U
67-66-3	Chloroform	0.45	5.0	4.0	DJ
156-59-2	cis-1,2-Dichloroethene	1.1	5.0	5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	5.0	5.0	U
56-23-5	Carbon tetrachloride	1.2	5.0	5.0	U
71-43-2	Benzene	0.60	5.0	5.0	U
107-06-2	1,2-Dichloroethane	1.2	5.0	5.0	U
79-01-6	Trichloroethene	2.2	5.0	100	D
78-87-5	1,2-Dichloropropane	0.65	5.0	5.0	U
75-27-4	Bromodichloromethane	1.2	5.0	5.0	U
10061-01-5	cis-1,3-Dichloropropene	0.65	5.0	5.0	U
108-10-1	4-Methyl-2-pentanone	3.7	25	25	U
108-88-3	Toluene	1.2	5.0	5.0	U
10061-02-6	trans-1,3-Dichloropropene	1.5	5.0	5.0	U
127-18-4	Tetrachloroethene	1.2	5.0	5.0	U
79-00-5	1,1,2-Trichloroethane	2.0	5.0	5.0	U
591-78-6	2-Hexanone	4.7	25	25	U
124-48-1	Dibromochloromethane	0.40	5.0	5.0	U
106-93-4	1,2-Dibromoethane	1.4	5.0	5.0	U
108-90-7	Chlorobenzene	0.35	5.0	5.0	U
100-41-4	Ethylbenzene	1.4	5.0	5.0	U
1330-20-7	Xylene (total)	2.2	5.0	5.0	U
100-42-5	Styrene	0.30	5.0	5.0	U
75-25-2	Bromoform	2.0	5.0	5.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H023DL

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327006DL

Matrix: WATER Level: LOW Lab File ID: J030293

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/23/03

Dilution Factor: 5.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.90	5.0	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.55	5.0	5.0	U
541-73-1	1,3-Dichlorobenzene	0.40	5.0	5.0	U
106-46-7	1,4-Dichlorobenzene	0.50	5.0	5.0	U
95-50-1	1,2-Dichlorobenzene	0.25	5.0	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	3.6	25	25	U
120-82-1	1,2,4-Trichlorobenzene	0.55	5.0	5.0	U
87-61-6	1,2,3-Trichlorobenzene	0.45	5.0	5.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	2.4	5.0	5.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H024

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327007

Matrix: WATER Level: LOW Lab File ID: R030223

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.26	1.0	1.0	U
74-87-3	Chloromethane	0.20	1.0	1.0	U
75-01-4	Vinyl chloride	0.26	1.0	1.0	U
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.28	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.29	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.29	1.0	1.0	U
67-64-1	Acetone	0.62	5.0	3.0	J
75-15-0	Carbon disulfide	0.25	1.0	1.0	U
75-09-2	Methylene chloride	0.15	2.0	0.40	J
1634-04-4	Methyl tert-butylether	0.22	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.12	1.0	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.28	1.0	1.0	U
78-93-3	2-Butanone	0.71	5.0	3.0	J
74-97-5	Bromochloromethane	0.15	1.0	1.0	U
67-66-3	Chloroform	0.11	1.0	0.20	J
156-59-2	cis-1,2-Dichloroethene	0.23	1.0	1.0	U
71-55-6	1,1,1-Trichloroethane	0.22	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.21	1.0	1.0	U
71-43-2	Benzene	0.13	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.24	1.0	1.0	U
79-01-6	Trichloroethene	0.24	1.0	1.0	U
78-87-5	1,2-Dichloropropane	0.12	1.0	1.0	U
75-27-4	Bromodichloromethane	0.11	1.0	0.20	J
10061-01-5	cis-1,3-Dichloropropene	0.21	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.47	5.0	5.0	U
108-88-3	Toluene	0.23	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.20	1.0	1.0	U
127-18-4	Tetrachloroethene	0.26	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.28	1.0	1.0	U
591-78-6	2-Hexanone	0.33	5.0	1.0	J
124-48-1	Dibromochloromethane	0.11	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.19	1.0	1.0	U
108-90-7	Chlorobenzene	0.11	1.0	1.0	U
100-41-4	Ethylbenzene	0.21	1.0	1.0	U
1330-20-7	Xylene (total)	0.64	1.0	1.0	U
100-42-5	Styrene	0.11	1.0	1.0	U
75-25-2	Bromoform	0.19	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H024

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9327 SDG No.: D9327 Lab Sample ID: D9327007

Matrix: WATER Level: LOW Lab File ID: R030223

Sample Volume: 10.0 ML Date Received: 01/10/03

Date Analyzed: 01/22/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.24	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.10	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.26	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	0.40	J
95-50-1	1,2-Dichlorobenzene	0.10	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.68	5.0	3.0	J
120-82-1	1,2,4-Trichlorobenzene	0.090	1.0	0.20	J
87-61-6	1,2,3-Trichlorobenzene	0.14	1.0	0.60	J
76-13-1	1,1,2-Trichlorotrifluoroetha	0.27	1.0	1.0	U

FORM I VOA SW846

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H019

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327002

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	33.9	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H019T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327008

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	398			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H020

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327003

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	3.2	B		P
7439-89-6	Iron	91.4	B		P
7439-96-5	Manganese	1160			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H020T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327009

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	396			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H021

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327004

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.1	B		P
7439-89-6	Iron	105			P
7439-96-5	Manganese	1070			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H021T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327010

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	3770			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H022

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327005

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	27.3	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
0302H022T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327011

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	2140			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H023

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327006

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	15.4	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H023T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327012

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	1680			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H024

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327007

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.0	U		P
7439-89-6	Iron	9.0	U		P
7439-96-5	Manganese	0.30	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H024T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9327

Matrix (soil/water): WATER Lab Sample ID: D9327013

Level (low/med): LOW Date Received: 1/10/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	9.0	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Report of Analytical Results

Client Sample ID: 0302H019
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/09/03 10:30 (Thu)
Date Received: 01/10/03 10:10 (Fri)

Reference No: D9327
Lab Sample ID: D9327002

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	53	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	86.3	mg/L	10	01/10/03 16:54	EPA300.0

(19480)

Report of Analytical Results

Client Sample ID: 0302H020
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/09/03 10:45 (Thu)
Date Received: 01/10/03 10:10 (Fri)

Reference No: D9327
Lab Sample ID: D9327003

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	96	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	91.5	mg/L	10	01/10/03 17:12	EPA300.0

(19480)

Report of Analytical Results

Client Sample ID: 0302H021
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/09/03 14:40 (Thu)
Date Received: 01/10/03 10:10 (Fri)

Reference No: D9327
Lab Sample ID: D9327004

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	81	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	135	mg/L	10	01/10/03 17:29	EPA300.0

(19480)

Report of Analytical Results

Client Sample ID: 0302H022
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/09/03 17:15 (Thu)
Date Received: 01/10/03 10:10 (Fri)

Reference No: 09327
Lab Sample ID: 09327005

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	44	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	150	mg/L	10	01/10/03 17:47	EPA300.0

(19480)

Report of Analytical Results

Client Sample ID: 0302H023
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/09/03 17:35 (Thu)
Date Received: 01/10/03 10:10 (Fri)

Reference No: D9327
Lab Sample ID: D9327006

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	22	mg/L	10	01/11/03 13:00	EPA310.1
ANIONS					
Chloride	102	mg/L	10	01/10/03 18:05	EPA300.0
NUTRIENTS					
Nitrate as N	0.02 U	mg/L	0.10	01/10/03 15:09	EPA300.0

(19480)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300064

Hydrogen

Test Code: RSK 175
Instrument ID: HP5890A/TCD #8
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date(s) Collected: 1/9/03
Date Received: 1/14/03
Date(s) Analyzed: 1/20/03
Volume(s) Analyzed: 0.10 ml

Client Sample ID	CAS Sample ID	D.F.	Hydrogen µg/L Result	MRL	MDL	Data Qualifier
0302H019	P2300064-001	1.00	ND	17.0	5.00	
0302H020	P2300064-002	1.00	ND	17.0	5.00	
0302H021	P2300064-003	1.00	ND	17.0	5.00	
0302H022	P2300064-004	1.00	ND	17.0	5.00	
0302H023	P2300064-005	1.00	ND	17.0	5.00	
Method Control Sample	P030120-MB	1.00	ND	17.0	5.00	

The Method Control Sample is laboratory water carried through the entire analytical process.
ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/22/03

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H019**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300064
CAS Sample ID: P2300064-001

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/9/03
Date Received: 1/14/03
Date Analyzed: 1/17/03
Volume(s) Analyzed: 0.10 ml(s)

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	**9.5**	1.5	0.40	
74-84-0	Ethane	**55**	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/22/03

00064SVG.RD1- Sample

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H019**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300064
CAS Sample ID: P2300064-001DUP

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/9/03
Date Received: 1/14/03
Date Analyzed: 1/17/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	**9.6**	1.5	0.40	
74-84-0	Ethane	**56**	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/22/03

00064SVG.RD1- Dup

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H020**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300064
CAS Sample ID: P2300064-002

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/9/03
Date Received: 1/14/03
Date Analyzed: 1/17/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	31	1.5	0.40	
74-84-0	Ethane	33	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/22/03

00064SVG.RD1- Sample (2)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H021**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300064
CAS Sample ID: P2300064-003

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/9/03
Date Received: 1/14/03
Date Analyzed: 1/17/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	**31**	1.5	0.40	
74-84-0	Ethane	**50**	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/22/03

00064SVG.RD1- Sample (3)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H022**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300064
CAS Sample ID: P2300064-004

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/9/03
Date Received: 1/14/03
Date Analyzed: 1/17/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	11	1.5	0.40	
74-84-0	Ethane	42	0.50	0.30	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/22/03

00064SVG.RD1- Sample (4)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H023**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300064
CAS Sample ID: P2300064-005

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/9/03
Date Received: 1/14/03
Date Analyzed: 1/17/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	8.7	1.5	0.40	
74-84-0	Ethane	53	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1/22/03

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H025

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9333 SDG No.: D9333 Lab Sample ID: D9333001

Matrix: WATER Level: LOW Lab File ID: J030281

Sample Volume: 10.0 ML Date Received: 01/13/03

Date Analyzed: 01/23/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.20	1.0	1.0	U
74-87-3	Chloromethane	0.40	1.0	1.0	U
75-01-4	Vinyl chloride	0.24	1.0	1.0	U
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.37	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.36	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.36	1.0	1.0	U
67-64-1	Acetone	0.46	5.0	5.0	U
75-15-0	Carbon disulfide	0.26	1.0	0.60	J
75-09-2	Methylene chloride	0.15	2.0	2.0	U
1634-04-4	Methyl tert-butylether	0.33	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.070	1.0	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.21	1.0	1.0	U
78-93-3	2-Butanone	1.2	5.0	5.0	U
74-97-5	Bromochloromethane	0.14	1.0	1.0	U
67-66-3	Chloroform	0.090	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.22	1.0	1.0	U
71-55-6	1,1,1-Trichloroethane	0.21	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.24	1.0	1.0	U
71-43-2	Benzene	0.12	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.25	1.0	1.0	U
79-01-6	Trichloroethene	0.43	1.0	1.0	U
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.24	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.74	5.0	5.0	U
108-88-3	Toluene	0.25	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.30	1.0	1.0	U
127-18-4	Tetrachloroethene	0.25	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.40	1.0	1.0	U
591-78-6	2-Hexanone	0.95	5.0	5.0	U
124-48-1	Dibromochloromethane	0.080	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.28	1.0	1.0	U
108-90-7	Chlorobenzene	0.070	1.0	1.0	U
100-41-4	Ethylbenzene	0.27	1.0	1.0	U
1330-20-7	Xylene (total)	0.44	1.0	1.0	U
100-42-5	Styrene	0.060	1.0	1.0	U
75-25-2	Bromoform	0.40	1.0	1.0	U

FORM I VOA SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H025

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9333 SDG No.: D9333

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9333001

Lab File ID: J030281

Date Received: 01/13/03

Date Analyzed: 01/23/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.18	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.11	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.080	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.050	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.73	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.11	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.090	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.48	1.0	1.0	U

FORM I VOA

SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H026

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Lab Sample ID: D9333002

Case No.: D9333 SDG No.: D9333

Lab File ID: J030282

Matrix: WATER Level: LOW

Date Received: 01/13/03

Sample Volume: 10.0 ML

Date Analyzed: 01/23/03

Dilution Factor: 1.0

Units: UG/L

CAS NO.	COMPOUND	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.20	1.0	1.0	U
74-87-3	Chloromethane	0.40	1.0	1.0	U
75-01-4	Vinyl chloride	0.24	1.0	1.0	U
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.37	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.36	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.36	1.0	1.0	U
67-64-1	Acetone	0.46	5.0	5.0	U
75-15-0	Carbon disulfide	0.26	1.0	1.0	U
75-09-2	Methylene chloride	0.15	2.0	16	
1634-04-4	Methyl tert-butylether	0.33	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.070	1.0	0.20	J
156-60-5	trans-1,2-Dichloroethene	0.21	1.0	1.0	U
78-93-3	2-Butanone	1.2	5.0	5.0	U
74-97-5	Bromochloromethane	0.14	1.0	1.0	U
67-66-3	Chloroform	0.090	1.0	2.0	B
156-59-2	cis-1,2-Dichloroethene	0.22	1.0	1.0	U
71-55-6	1,1,1-Trichloroethane	0.21	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.24	1.0	1.0	U
71-43-2	Benzene	0.12	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.25	1.0	23	
79-01-6	Trichloroethene	0.43	1.0	11	
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.24	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.74	5.0	5.0	U
108-88-3	Toluene	0.25	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.30	1.0	1.0	U
127-18-4	Tetrachloroethene	0.25	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.40	1.0	5.0	U
591-78-6	2-Hexanone	0.95	5.0	1.0	U
124-48-1	Dibromochloromethane	0.080	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.28	1.0	1.0	U
108-90-7	Chlorobenzene	0.070	1.0	1.0	U
100-41-4	Ethylbenzene	0.27	1.0	1.0	U
1330-20-7	Xylene (total)	0.44	1.0	1.0	U
100-42-5	Styrene	0.060	1.0	1.0	U
75-25-2	Bromoform	0.40	1.0	1.0	U

SW846

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H026

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9333 SDG No.: D9333

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9333002

Lab File ID: J030282

Date Received: 01/13/03

Date Analyzed: 01/23/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.18	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.11	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.080	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.050	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.73	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.11	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.090	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.48	1.0	1.0	U

SW846

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H027

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9333 SDG No.: D9333

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9333003

Lab File ID: J030283

Date Received: 01/13/03

Date Analyzed: 01/23/03

Dilution Factor: 1.0

CAS NO.	COMPOUND Units: UG/L	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.20	1.0	1.0	U
74-87-3	Chloromethane	0.40	1.0	1.0	U
75-01-4	Vinyl chloride	0.24	1.0	1.0	U
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.37	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.36	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.36	1.0	1.0	U
67-64-1	Acetone	0.46	5.0	5.0	U
75-15-0	Carbon disulfide	0.26	1.0	1.0	U
75-09-2	Methylene chloride	0.15	2.0	3.0	
1634-04-4	Methyl tert-butylether	0.33	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.070	1.0	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.21	1.0	1.0	U
78-93-3	2-Butanone	1.2	5.0	5.0	U
74-97-5	Bromochloromethane	0.14	1.0	1.0	U
67-66-3	Chloroform	0.090	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.22	1.0	1.0	U
71-55-6	1,1,1-Trichloroethane	0.21	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.24	1.0	1.0	U
71-43-2	Benzene	0.12	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.25	1.0	2.0	
79-01-6	Trichloroethene	0.43	1.0	13	
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.24	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0	1.0	U
108-10-1	4-Methyl-2-pentanone	0.74	5.0	5.0	U
108-88-3	Toluene	0.25	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.30	1.0	1.0	U
127-18-4	Tetrachloroethene	0.25	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.40	1.0	1.0	
591-78-6	2-Hexanone	0.95	5.0	5.0	U
124-48-1	Dibromochloromethane	0.080	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.28	1.0	1.0	U
108-90-7	Chlorobenzene	0.070	1.0	1.0	U
100-41-4	Ethylbenzene	0.27	1.0	1.0	U
1330-20-7	Xylene (total)	0.44	1.0	1.0	U
100-42-5	Styrene	0.060	1.0	1.0	U
75-25-2	Bromoform	0.40	1.0	1.0	U

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FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT ID.

0302H027

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9333 SDG No.: D9333

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9333003

Lab File ID: J030283

Date Received: 01/13/03

Date Analyzed: 01/23/03

Dilution Factor: 1.0

Units: UG/L

CAS NO.	COMPOUND	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.18	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.11	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.080	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.050	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.73	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.11	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.090	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.48	1.0	1.0	U

SW846

CLIENT ID.

0302H028

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Lab Sample ID: D9333004

Case No.: D9333 SDG No.: D9333

Lab File ID: J030284

Matrix: WATER Level: LOW

Date Received: 01/13/03

Sample Volume: 10.0 ML

Date Analyzed: 01/23/03

Dilution Factor: 1.0

Units: UG/L

CAS NO.	COMPOUND	MDL	RL	RESULT	Q
75-71-8	Dichlorodifluoromethane	0.20	1.0	1.0	U
74-87-3	Chloromethane	0.40	1.0	1.0	U
75-01-4	Vinyl chloride	0.24	1.0	1.0	U
74-83-9	Bromomethane	0.32	1.0	1.0	U
75-00-3	Chloroethane	0.37	1.0	1.0	U
75-69-4	Trichlorofluoromethane	0.36	1.0	1.0	U
75-35-4	1,1-Dichloroethene	0.36	1.0	2.0	J
67-64-1	Acetone	0.46	5.0	1.0	U
75-15-0	Carbon disulfide	0.26	1.0	0.20	J
75-09-2	Methylene chloride	0.15	2.0	1.0	U
1634-04-4	Methyl tert-butylether	0.33	1.0	1.0	U
75-34-3	1,1-Dichloroethane	0.070	1.0	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.21	1.0	5.0	U
78-93-3	2-Butanone	1.2	5.0	1.0	U
74-97-5	Bromochloromethane	0.14	1.0	0.30	J
67-66-3	Chloroform	0.090	1.0	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.22	1.0	1.0	U
71-55-6	1,1,1-Trichloroethane	0.21	1.0	1.0	U
56-23-5	Carbon tetrachloride	0.24	1.0	1.0	U
71-43-2	Benzene	0.12	1.0	1.0	U
107-06-2	1,2-Dichloroethane	0.25	1.0	1.0	U
79-01-6	Trichloroethene	0.43	1.0	1.0	U
78-87-5	1,2-Dichloropropane	0.13	1.0	1.0	U
75-27-4	Bromodichloromethane	0.24	1.0	1.0	U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0	5.0	U
108-10-1	4-Methyl-2-pentanone	0.74	5.0	2.0	
108-88-3	Toluene	0.25	1.0	1.0	U
10061-02-6	trans-1,3-Dichloropropene	0.30	1.0	1.0	U
127-18-4	Tetrachloroethene	0.25	1.0	1.0	U
79-00-5	1,1,2-Trichloroethane	0.40	1.0	5.0	U
591-78-6	2-Hexanone	0.95	5.0	1.0	U
124-48-1	Dibromochloromethane	0.080	1.0	1.0	U
106-93-4	1,2-Dibromoethane	0.28	1.0	1.0	U
108-90-7	Chlorobenzene	0.070	1.0	1.0	U
100-41-4	Ethylbenzene	0.27	1.0	1.0	U
1330-20-7	Xylene (total)	0.44	1.0	1.0	U
100-42-5	Styrene	0.060	1.0	1.0	U
75-25-2	Bromoform	0.40	1.0		

SW846

CLIENT ID.

0302H028

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: COLUMBIA ANALYTICAL SERVICES - REDDING

Case No.: D9333 SDG No.: D9333

Matrix: WATER Level: LOW

Sample Volume: 10.0 ML

Lab Sample ID: D9333004

Lab File ID: J030284

Date Received: 01/13/03

Date Analyzed: 01/23/03

Dilution Factor: 1.0

CAS NO.	COMPOUND (Units: UG/L)	MDL	RL	RESULT	Q
98-82-8	Isopropylbenzene	0.18	1.0	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.11	1.0	1.0	U
541-73-1	1,3-Dichlorobenzene	0.080	1.0	1.0	U
106-46-7	1,4-Dichlorobenzene	0.10	1.0	1.0	U
95-50-1	1,2-Dichlorobenzene	0.050	1.0	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	0.73	5.0	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.11	1.0	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.090	1.0	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroetha	0.48	1.0	1.0	U

SW846

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H026

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9333

Matrix (soil/water): WATER Lab Sample ID: D9333002

Level (low/med): LOW Date Received: 01/13/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	71.2	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H026T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9333

Matrix (soil/water): WATER Lab Sample ID: D9333005

Level (low/med): LOW Date Received: 01/13/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	193			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H027

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9333

Matrix (soil/water): WATER Lab Sample ID: D9333003

Level (low/med): LOW Date Received: 01/13/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.0	U		P
7439-89-6	Iron	34.3	B		P
7439-96-5	Manganese	188			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H027T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9333

Matrix (soil/water): WATER Lab Sample ID: D9333006

Level (low/med): LOW Date Received: 01/13/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	179000			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Form I - IN

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H028

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9333

Matrix (soil/water): WATER Lab Sample ID: D9333004

Level (low/med): LOW Date Received: 01/13/03

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.0	U		P
7439-89-6	Iron	38.3	B		P
7439-96-5	Manganese	0.30	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Columbia Analytical Services, Inc.

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

0302H028T

Contract: TTEMI/HUNTER'S PT

Lab Code: RDD Case No.: SAS No.: SDG NO.: D9333

Matrix (soil/water): WATER Lab Sample ID: D9333007

Level (low/med): LOW Date Received: 01/13/03

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	51.0	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Report of Analytical Results

Client Sample ID: 0302H026
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/10/03 11:00 (Fri)
Date Received: 01/13/03 10:00 (Mon)

Reference No: D9333
Lab Sample ID: D9333002

CATEGORY NAME / Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL					
Alkalinity as CaCO3	14	mg/L	10	01/15/03 15:45	EPA310.1
ANIONS					
Chloride	119	mg/L	20	01/13/03 16:51	EPA300.0
NUTRIENTS					
Nitrate as N	0.08 B	mg/L	0.10	01/13/03 15:40	EPA300.0

(19476)

Report of Analytical Results

Client Sample ID: 0302H027
Sample Description: None
Sample Matrix: Water
Site: N/A

Date Collected: 01/10/03 11:50 (Fri)
Date Received: 01/13/03 10:00 (Mon)

Reference No: D9333
Lab Sample ID: D9333003

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date/Time of Analysis	Analytical Method(s)
GENERAL Alkalinity as CaCO3	192	mg/L	10	01/15/03 15:45	EPA310.1
ANIONS Chloride	111	mg/L	10	01/13/03 17:44	EPA300.0

(19476)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300063

Hydrogen

Test Code: RSK 175
Instrument ID: HP5890A/TCD #8
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date(s) Collected: 1/10/03
Date Received: 1/14/03
Date(s) Analyzed: 1/20/03
Volume(s) Analyzed: 0.10 ml

Client Sample ID	CAS Sample ID	D.F.	Hydrogen µg/L Result	MRL	MDL	Data Qualifier
0302H026	P2300063-001	1.00	41.9	17.0	5.00	
0302H026	P2300063-001DUP	1.00	37.5	17.0	5.00	
0302H027	P2300063-002	1.00	ND	17.0	5.00	
Method Control Sample	P030120-MB	1.00	ND	17.0	5.00	

The Method Control Sample is laboratory water carried through the entire analytical process.
ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KMR Date: 01/24/03

00063SVG.RD2 - Sample

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Tetra Tech**
Client Sample ID: **0302H026**
Client Project ID: **Hunter's Point**

CAS Project ID: P2300063
CAS Sample ID: P2300063-001

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/10/03
Date Received: 1/14/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml(s)

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	3.1	1.5	0.40	
74-84-0	Ethane	16	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KMR Date: 01/21/03

00063SVG.RDt - Sample

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: Tetra Tech
Client Sample ID: 0302H027
Client Project ID: Hunter's Point

CAS Project ID: P2300063
CAS Sample ID: P2300063-002

Test Code: RSK 175
Instrument ID: HP5890A/FID #10
Analyst: Regan Lau
Sampling Media: Liquid
Test Notes:

Date Collected: 1/10/03
Date Received: 1/14/03
Date Analyzed: 1/15/03
Volume(s) Analyzed: 0.10 ml

D.F. = 1.00

CAS #	Compound	Result µg/L	MRL µg/L	Detection Limit µg/L	Data Qualifier
74-85-1	Ethene	1.6	1.5	0.40	
74-84-0	Ethane	11	0.50	0.30	

ND = Compound was analyzed for, but not detected above the **laboratory detection limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KMR Date: 01/24/03

00063SVG RD1 - Sample (2)

ENCLOSURE 5
DATA VALIDATION REPORTS

Tetra Tech EM Inc.
DATA VALIDATION REPORT

Site:	Hunters Point Shipyard
Project Name:	DO-013
Laboratory:	Columbia Analytical Services - Redding
Data Reviewer:	Sandra Obleas, The DV Group
Review Date:	February 24, 2003

Sample Delivery Group (SDG) No.: D9317

Sample Nos.:		
	0302H001	0302H010
	0302H002	0302H011
	0302H003	0302H012
	0302H004 *	0302H013
	0302H005	0302H014
	0302H006	0302H015*
	0302H007	0302H016
	0302H008	0302H017
	0302H009 *	

* Full Validation Sample

Matrix: Water

Collection Date(s): January 7 and 8, 2003

The data were qualified according to the U.S. Environmental Protection Agency (EPA) documents "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (October 1999), "USEPA Contract Laboratory National Functional Guidelines for Low Concentration Organic Data" (EPA 2001), and "USEPA Contract Laboratory Program National Functional Guidelines For Inorganic Data Review" (February 1994). In addition, the TtEMI documents "Data Validation Guidelines for CLP Organic Analyses," "Data Validation Guidelines for CLP Inorganic Analyses," "Data Validation Guidelines for Non-CLP Organic Analyses," "Data Validation Guidelines for Non-CLP Inorganic and Physical Analyses" (August 2001), and the document entitled "TtEMI Comprehensive Long-term Environmental Action Navy II Analytical Services Statement of Work" (May 2000) were used along with other specified criteria in EPA methods. Data validation requirements are presented below.

I certify that all data validation criteria outlined in the above referenced documents were assessed, and any qualifications made to the data were in accordance with those documents.

_____
Certified by

DATA VALIDATION REQUIREMENTS

Full validation includes all parameters listed below. An asterisk (*) indicates cursory validation parameters.

CLP Organic Parameters

*	Holding times
	GC/MS instrument performance check
*	Initial and continuing calibrations
*	Blanks
*	Surrogate recovery
*	Matrix spike/matrix spike duplicate
*	Laboratory control sample or blank spike
*	Field duplicates
*	Internal standard performance
	Target compound identification
	Tentatively identified compounds
	Compound quantitation
	Reported detection limits
	System performance
*	Overall assessment of data for the SDG

CLP Inorganic Parameters

*	Holding times
*	Initial and continuing calibrations
*	Blanks
*	Matrix spike
*	Laboratory control sample or blank spike
*	Field duplicates
*	Matrix duplicates
	ICP interference check sample
	GFAA quality control
*	ICP serial dilution
	Sample result verification
	Analyte quantitation
	Reported detection limits
*	Overall assessment of data for the SDG

Non-CLP Organic and Inorganic Parameters

*	Method compliance
*	Holding times
*	Initial and continuing calibrations
*	Blanks
*	Matrix spike/matrix spike duplicate
*	Laboratory control sample or blank spike
*	Field duplicates
*	Matrix duplicates
*	Surrogate recovery
	Analyte quantitation
	Reported detection limits
*	Overall assessment of data for the SDG

DATA VALIDATION QUALIFIERS AND CODES

Data Validation Qualifiers

UJ Estimated nondetected result

J Estimated detected result

R Rejected result

NJ Tentatively Identified Compound (TIC)

Data Validation Qualifier Codes

U1, U2, U4	Laboratory method blank, Field blank, Common blank contamination
J1, UJ1, R3	Noncompliance with instrument performance criteria
J2, UJ2	Duplicate precision exceedance
J3, UJ3, R2	Surrogate, Matrix spike, Laboratory control sample (LCS) exceedance
J4, UJ4	Serial Dilution
J5, UJ5, R1	Holding time exceedance
J7, UJ7, R7	Calibration exceedance
J8	Compound above calibration range
J9, UJ9	ICP Interference check sample; Compound identification
J0, UJ0, R0	Internal standard exceedance
J	Quantification below reporting limit

TABLE 1
CURSORY DATA VALIDATION SUMMARY

Analysis	Holding Times	Surrogates	MS/MSD	Matrix Duplicates	LCS	Blanks	Calibrations	Internal Standards	Field Duplicates	Other
VOA 8260	√	pg. 6	pg. 6	N/A	√	pg. 6, 7	pg. 8	√	pg. 9	pg. 8, 9
Metals	√	N/A	√	√	√	pg. 11	√	N/A	pg. 11	pg. 11

Notes:
√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.
N/A indicates the parameter is not applicable to an analysis.
If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.
The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers are described in the text.

TABLE 2
FULL DATA VALIDATION SUMMARY
Samples 0302H004, 0302H009, 0302H015

Analysis	GC/MS Tuning	Target Compound List Identification	Compound or Analyte Quantification	Reported Detection Limits	Tentatively Identified Compounds	System Performance	Interference Check Sample	Graphite Furnace Quality Control
VOA 8260	√	√	√	√	N/A	√	N/A	N/A
Metals	N/A	N/A	√	√	N/A	√	√	N/A

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.
N/A indicates the parameter is not applicable to an analysis.
If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.
The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

DATA ASSESSMENT

VOLATILES (8260) ANALYSIS

I. Surrogate Recovery

A. Due to surrogate recovery problems, the following detected results are qualified as estimated (J3).

- Volatiles for sample 0302H007.

The surrogates outside of QC limits are listed below.

Sample ID	Surrogate	%R	QC Limits
0302H007	Dibromofloromethane	122	76-114%
	Toluene-d8	114	88-110%
	4-Bromofluorobenzene	118	86-115%

High percent recoveries indicate that detected results may be biased high.

II. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

A. Due to accuracy problems in the MS/MSD analysis, the following detected results are qualified as estimated (J3).

- 1,1-Dichlorethene and Trichloroethene in matrix sample 0302H002.

The recoveries outside the QC limits are listed below.

Sample ID	Compound	MS%R, MSD%R / RPD	QC Limits
0302H002	1,1-Dichlorethene	150*, 170* / 13	70-130 / 30
	Trichloroethene	170*, 180* / 6	70-130 / 30

This outlier affected only the spiked sample. Spike recoveries above the QC limit indicate that detects may be biased high.

III. Blank Contamination

A. Due to common laboratory contamination, the following results are considered nondetected (U4).

- Methylene chloride in samples 0302H001, 0302H002, 0302H003, 0302H004, 0302H005, 0302H007, 0302H008, 0302H009, 0302H010, 0302H011, 0302H014, 0302H015, 0302H016, 0302H017, 0302H002DL, 0302H004DL, 0302H005DL, 0302H007DL, 0302H011DL, and 0302H014DL.
- Acetone in samples 0302H001, 0302H002, 0302H008, 0302H009, 0302H017, 0302H005DL, 0302H007DL, 0302H010DL, 0302H011DL, 0302H012DL, 0302H013DL, 0302H014DL, and 0302H015DL.

Methylene chloride and Acetone are considered common laboratory contaminants when found at levels less than 5x the CRQL in environmental samples and not found in the associated blanks.

B. Due to method blank contamination, the following results are considered nondetected (U1).

- Chloroform in samples 0302H001, 0302H003, 0302H006, 0302H008, 0302H009, 0302H017, 0302H004DL, 0302H005DL, 0302H012DL, and 0302H014DL.
- 1,2,3-Trichlorobenzene in samples 0302H001, 0302H002, 0302H003, 0302H004, 0302H005, 0302H006, 0302H007, 0302H008, 0302H009, 0302H010, 0302H011, 0302H012, 0302H013, 0302H014, 0302H015, 0302H016, 0302H017, 0302H002DL, 0302H004DL, 0302H005DL, 0302H007DL, 0302H010DL, 0302H011DL, 0302H012DL, 0302H013DL, 0302H014DL, and 0302H015DL.

The following compounds were detected in the associated method blanks at the concentrations noted below.

Compound	Blank ID	Concentration, µg/L
Chloroform	Method blank 1/15/03	0.2
1,2,3-Trichlorobenzene	Method blank 1/16/03	0.2

Detected results less than 5x the blank contamination were qualified.

C. Due to field, trip, and equipment rinsate blank contamination, the following results are considered nondetected (U2).

- 1,4-Dichlorobenzene in samples 0302H002, 0302H003, 0302H004, 0302H005, 0302H006, 0302H007, 0302H009, 0302H010, 0302H011, 0302H012, 0302H013, 0302H014, 0302H015, 0302H016, 0302H004DL, 0302H005DL, 0302H007DL, 0302H011DL, 0302H012DL, 0302H013DL, 0302H014DL, and 0302H015DL.
- 2-Butanone in sample 0302H002.
- Toluene in samples 0302H002, 0302H007, 0302H013, 0302H014, and 0302H002DL.
- Chloroform in samples 0302H002, 0302H014, 0302H002DL, 0302H007DL, 0302H010DL, 0302H011DL, 0302H012DL, and 0302H013DL.

The following compounds were detected in the associated field, trip, and equipment rinsate blanks at the concentrations noted below.

Compound	Blank ID	Concentration, µg/L	
1,4-Dichlorobenzene	0302H008	0.6	
2-Butanone	Equipment rinsate	1.0	
Toluene			0.8
Chloroform	0302H017 Equipment rinsate	0.4	

Detected results less than 5x the maximum blank contamination were qualified.

IV. Calibrations

A. Due to continuing calibration problems, the following detected and nondetected results are qualified as estimated (J7 / UJ7).

- Bromomethane and 1,1,2,2-Tetrachloroethane in samples 0302H002, 0302H013, 0302H014, 0302H015, 0302H016, 0302H017, 0302H005DL, 0302H007DL, 0302H010DL, 0302H011DL, 0302H012DL, 0302H013DL, 0302H014DL, and 0302H015DL.

The following continuing calibrations had percent differences (%D) of >25%.

Calibration Date	Compound	%D
1/16/03 1021	Bromomethane	52.9
	1,1,2,2-Tetrachloroethane	48.8

V. Other Qualifications

A. The following results are qualified as estimated (J).

- 1,1,2-Dichloroethane, 1,1,2-Trichlorotrifluoroethane, 1,2-Dichloroethane, 1,2-Dichloropropane, and Tetrachloroethene detected results were reported below the contract required report limit (RL) for sample 0302H002.
- 1,1,2-Trichlorotrifluoroethane, 1,2-Dichloroethane, Carbon tetrachloride and Tetrachloroethene detected results were reported below the contract required report limit (RL) for sample 0302H002DL.
- 1,2-Dichlorobenzene detected result was reported below the contract required report limit (RL) for sample 0302H003.
- cis-1,2-Dichloroethene detected result was reported below the contract required report limit (RL) for sample 0302H004.
- cis-1,2-Dichloroethene detected result was reported below the contract required report limit (RL) for sample 0302H005.
- Chloromethane detected result was reported below the contract required report limit (RL) for sample 0302H006.
- 1,4-Dichlorobenzene, 2-Butanone, Bromodichloromethane and Toluene detected result was reported below the contract required report limit (RL) for sample 0302H008.
- Chloromethane detected result was reported below the contract required report limit (RL) for sample 0302H009.
- 1,1,2-Trichloroethane, 1,2-Dichloroethane, Chloromethane, and Tetrachloroethene detected results were reported below the contract required report limit (RL) for sample 0302H010.
- Carbon tetrachloride and cis-1,2-Dichloroethene detected results were reported below the contract required report limit (RL) for sample 0302H010DL.
- 1,2-Dichloroethane, Chloromethane, and Tetrachloroethene detected results were reported below the contract required report limit (RL) for sample 0302H011.
- Carbon tetrachloride and cis-1,2-Dichloroethene detected results were reported below the contract required report limit (RL) for sample 0302H011DL.
- Bromomethane, Carbon tetrachloride, and cis-1,2-Dichloroethene detected results were reported below the contract required report limit (RL) for sample 0302H012.
- 1,2,4-Trichlorobenzene detected result was reported below the contract required report limit (RL) for sample 0302H012DL.

- 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichloropropane, Benzene, and Vinyl chloride detected results were reported below the contract required report limit (RL) for sample 0302H013.
- 1,2,4-Trichlorobenzene, cis-1,2-Dichloroethene and Tetrachloroethene detected result were reported below the contract required report limit (RL) for sample 0302H013DL.
- Carbon tetrachloride and Vinyl chloride detected results were reported below the contract required report limit (RL) for sample 0302H014.
- 1,2,4-Trichlorobenzene and cis-1,2-Dichloroethene detected result were reported below the contract required report limit (RL) for sample 0302H014DL.
- 1,2-Dichloroethane, 1,2-Dichloropropane, Tetrachloroethene, and trans-1,2-Dichloroethene detected results were reported below the contract required report limit (RL) for sample 0302H015.
- 1,2,4-Trichlorobenzene detected result was reported below the contract required report limit (RL) for sample 0302H015DL.
- 1,1,2-Trichloroethane and 1,2-Dichloroethane detected results were reported below the contract required report limit (RL) for sample 0302H016.
- 1,4-Dichlorobenzene, 2-Butanone, and Bromodichloromethane detected result was reported below the contract required report limit (RL) for sample 0302H017.

Detected results reported below the RL are considered to be qualitatively acceptable, but quantitatively unreliable due to the uncertainty in analytical precision near the limit of detection.

B. The following result was qualified as estimated (J8) due to exceed calibration range.

- Trichloroethene for samples 0302H004, 0302H005, 0302H007, 0302H010, 0302H011, 0302H012, 0302H013, 0302H014, and 0302H015.
- cis-1,2-Dichloroethene for sample 0302H015.
- Chloroform for samples 0302H013 and 0302H015.

VI. Field Duplicate

A. The following RPDs were obtained for the field duplicate samples: 0302H010 / 0302H011:

- 200% for 1,1,2-Trichloroethane; 40% for Bromomethane.

For water samples, the field RPD guideline is $\pm$ 25%. The data are not qualified on the basis of field duplicate results.

Full Validation Criteria for Samples 0302H004, 0302H009, 0302H015

VII. GC/MS Tuning

A. The ion abundance criteria were met for the bromofluorobenzene (BFB) GC/MS performance check. The samples were analyzed within 12 hours of the associated performance check.

VIII. Target Compound List (TCL) Identification

A. The relative retention times, mass spectra, and peak identifications of the samples were evaluated. Target compound identification was considered to be correct.

IX. Compound Quantitation and Reported Detection Limits

A. Sample results were recalculated with the proper dilution factors, weights, volumes, and percent moisture used to calculate the sample results. The samples were correctly quantitated. The reported detection limits were consistent with the contract required report limits and reflect any dilutions, weights, volumes, and percent moisture.

X. Tentatively Identified Compounds (TICs)

A. TICs not performed.

XI. System Performance

A. The samples were evaluated for reconstructed ion chromatogram (RIC) baseline shifts, extraneous peaks, loss of resolution, and peak tailing. No system degradation was noted.

CLP METALS ANALYSIS

I. Blank Contamination

A. Due to equipment rinsate contamination, the following results are considered nondetected (U2).

- Total Iron for samples 0302H003 and 0302H007.

The following analytes were detected in the associated field, trip, and equipment rinsate blanks at the concentrations noted below.

Analyte	Blank ID	Concentration, µg/L
Total Iron	0302H008 Equipment rinsate	9.2

Detected results less than 5x the maximum blank contamination were qualified

II. Other Qualifications

A. The following results are qualified as estimated (J).

- Dissolved Arsenic detected result was reported above the IDL but below the CRDL for samples 0302H004, 0302H005, 0302H006, 0302H007, 0302H009, and 0302H013.
- Dissolved Iron detected result was reported above the IDL but below the CRDL for samples 0302H003, 0302H006, 0302H007, 0302H012, and 0302H014.
- Dissolved Manganese detected result was reported above the IDL but below the CRDL for samples 0302H006, 0302H007 and 0302H009.
- Total Iron detected result was reported above the IDL but below the CRDL for samples 0302H006 and 0302H008.

Results above the IDL but below the CRDL are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

III. Field Duplicate

A. The following RPDs were obtained for the field duplicate samples:

- 0302H004 / 0302H005: 27% for Total Iron.
- 0302H010 / 0302H011: 35% for Dissolved Iron.

For water samples, the field RPD guideline is $\pm$ 25%. The data are not qualified on the basis of field duplicate results.

Full Validation Criteria for Samples 0302H004, 0302H009, 0302H015

IV. Analyte Quantitation and Reported Detection Limits

A. Sample results were recalculated, with the proper dilution factors, weights, volumes, and percent moisture used to calculate the sample results. The samples were found to be correctly quantitated. The reported detection limits were consistent with the contract required report limits and reflect any dilutions, weights, volumes, and percent moisture.

V. Graphite Furnace Atomic Absorption (GFAA) Analysis

A. GFAA was not performed.

VI. ICP Interference Check Sample

A. ICSAB percent recoveries were acceptable and spectral interference was not found.

OVERALL ASSESSMENT OF DATA

I. Method Compliance and Additional Comments

A. All analyses were conducted within all specifications of the requested methods.

II. Usability

A. Due to high surrogate recoveries in the Volatile analyses, eleven target analytes were qualified as estimated for one sample. Due to common laboratory contamination in the Volatile analyses, the following were considered nondetected: Methylene chloride for twenty samples; and Acetone for thirteen samples. Due to method blank contamination, the following were considered nondetected: Chloroform for ten samples; 1,2,3-Trichlorobenzene for twenty-seven. Due to equipment rinsate contamination, the following were considered nondetected: 1,4-Dichlorobenzne for twenty-two samples; 2-Butanone for one sample; Toluene for five samples; and Chloroform for eight samples. Bromomethane and 1,1,2,2-Tetrachloroethane were qualified as estimated for fourteen samples. Due to uncertainty in the analytical precision near the limit of detection, the following were qualified as estimated: 1,1-Dichloroethane for one sample; 1,1,2-Trichlorotrifluoroethane for two samples; 1,2-Dichloroethane for five samples; 1,2-Dichloropropane for three samples; Tetrachloroethene for six samples; Carbon tetrachloride for five samples; 1,2-Dichlorobenzene for one sample; cis-1,2-Dichloroethene for seven samples; Chloromethane for four samples; 1,4-Dichlorobenzene for two samples; 2-Butanone for two samples; Bromodichloromethane for two samples; Toluene for one sample; 1,1,2-Trichloroethane for three samples; Bromomethane for one sample; 1,2,4-Trichlorobenzene for four samples; 1,1-Dichloroethane for one sample; 1,1-Dichloroethene for one sample; Benzene for one sample; Vinyl chloride for two samples; and trans-1,2-Dichloroethene for one sample. The following exceeded the calibration range: Trichloroethene for nine samples; cis-1,2-Dichloroethene for one sample; and Chloroform for two samples.

B. Volatile sample 0302H002 was reanalyzed at a dilution. The diluted sample results should be used as the final validated results.

C. Volatile samples 0302H004, 0302H005, 0302H007, 0302H010, 0302H011, 0302H012, 0302H013, 0302H014, and 0302H015 were reanalyzed at a dilution due to results exceeding the calibration range. The diluted results should be used as the final validated results as follows: Trichloroethene for samples 0302H004DL, 0302H005DL, 0302H007DL, 0302H010DL, 0302H011DL, 0302H012DL, 0302H013DL, 0302H014DL, 0302H015DL; cis-1,2-Dichloroethene for sample 0302H015DL; Chloroform for samples 0302H013DL, 0302H015DL.

D. Due to equipment rinsate blank contamination in the Metals analyses, the following were considered nondetected: Total Iron for two samples. Due to uncertainty in the analytical precision near the limit of detection, the following were qualified as estimated: Dissolved Arsenic for six samples; Dissolved Iron for five samples; Dissolved Manganese for three samples; Total Iron for two samples.

E. The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be rejected (R) are unusable for all purposes. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the cursory and full data validation all other results are considered valid and usable for all purposes. In general, the absence of rejected data and the small number of qualifiers added to the data indicate high usability.

Tetra Tech EM Inc.
DATA VALIDATION REPORT

Site:	Hunters Point Shipyard
Project Name:	DO-013
Laboratory:	Columbia Analytical Services - Redding
Data Reviewer:	Sandra Obleas, The DV Group
Review Date:	February 24, 2003

Sample Delivery Group (SDG) No.: D9327

Sample Nos.:	0302H018	0302H022
	0302H019	0302H023
	0302H020	0302H024
	0302H021 *	

* Full Validation Sample

Matrix: Water

Collection Date(s): January 9, 2003

The data were qualified according to the U.S. Environmental Protection Agency (EPA) documents "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (October 1999), "USEPA Contract Laboratory National Functional Guidelines for Low Concentration Organic Data" (EPA 2001), and "USEPA Contract Laboratory Program National Functional Guidelines For Inorganic Data Review" (February 1994). In addition, the TtEMI documents "Data Validation Guidelines for CLP Organic Analyses," "Data Validation Guidelines for CLP Inorganic Analyses," "Data Validation Guidelines for Non-CLP Organic Analyses," "Data Validation Guidelines for Non-CLP Inorganic and Physical Analyses" (August 2001), and the document entitled "TtEMI Comprehensive Long-term Environmental Action Navy II Analytical Services Statement of Work" (May 2000) were used along with other specified criteria in EPA methods. Data validation requirements are presented below.

I certify that all data validation criteria outlined in the above referenced documents were assessed, and any qualifications made to the data were in accordance with those documents.

_____
Certified by

DATA VALIDATION REQUIREMENTS

Full validation includes all parameters listed below. An asterisk (*) indicates cursory validation parameters.

CLP Organic Parameters

*	Holding times
	GC/MS instrument performance check
*	Initial and continuing calibrations
*	Blanks
*	Surrogate recovery
*	Matrix spike/matrix spike duplicate
*	Laboratory control sample or blank spike
*	Field duplicates
*	Internal standard performance
	Target compound identification
	Tentatively identified compounds
	Compound quantitation
	Reported detection limits
	System performance
*	Overall assessment of data for the SDG

CLP Inorganic Parameters

*	Holding times
*	Initial and continuing calibrations
*	Blanks
*	Matrix spike
*	Laboratory control sample or blank spike
*	Field duplicates
*	Matrix duplicates
	ICP interference check sample
	GFAA quality control
*	ICP serial dilution
	Sample result verification
	Analyte quantitation
	Reported detection limits
*	Overall assessment of data for the SDG

Non-CLP Organic and Inorganic Parameters

*	Method compliance
*	Holding times
*	Initial and continuing calibrations
*	Blanks
*	Matrix spike/matrix spike duplicate
*	Laboratory control sample or blank spike
*	Field duplicates
*	Matrix duplicates
*	Surrogate recovery
	Analyte quantitation
	Reported detection limits
*	Overall assessment of data for the SDG

DATA VALIDATION QUALIFIERS AND CODES

Data Validation Qualifiers

UJ Estimated nondetected result

J Estimated detected result

R Rejected result

NJ Tentatively Identified Compound (TIC)

Data Validation Qualifier Codes

U1, U2, U4	Laboratory method blank, Field blank, Common blank contamination
J1, UJ1, R3	Noncompliance with instrument performance criteria
J2, UJ2	Duplicate precision exceedance
J3, UJ3, R2	Surrogate, Matrix spike, Laboratory control sample (LCS) exceedance
J4, UJ4	Serial Dilution
J5, UJ5, R1	Holding time exceedance
J7, UJ7, R7	Calibration exceedance
J8	Compound above calibration range
J9, UJ9	ICP Interference check sample; Compound identification
J0, UJ0, R0	Internal standard exceedance
J	Quantification below reporting limit

TABLE 1
CURSORY DATA VALIDATION SUMMARY

Analysis	Holding Times	Surrogates	MS/MSD	Matrix Duplicates	LCS	Blanks	Calibrations	Internal Standards	Field Duplicates	Other
VOA 8260	√	√	N/A	N/A	√	pg. 6	pg. 7	√	N/A	pg. 7, 8
Metals	√	N/A	N/A	N/A	√	pg. 9	√	N/A	N/A	pg. 9

Notes:
√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.
N/A indicates the parameter is not applicable to an analysis.
If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.
The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers are described in the text.

TABLE 2
FULL DATA VALIDATION SUMMARY
Sample 0302H021

Analysis	GC/MS Tuning	Target Compound List Identification	Compound or Analyte Quantification	Reported Detection Limits	Tentatively Identified Compounds	System Performance	Interference Check Sample	Graphite Furnace Quality Control
VOA 8260	√	√	√	√	N/A	√	N/A	N/A
Metals	N/A	N/A	√	√	N/A	√	√	N/A

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.
N/A indicates the parameter is not applicable to an analysis.
If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.
The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

DATA ASSESSMENT

VOLATILES (8260) ANALYSIS

I. Blank Contamination

A. Due to common laboratory contamination, the following results are considered nondetected (U4).

- Methylene chloride in samples 0302H018, 0302H019, 0302H022, 0302H023, 0302H024, 0302H019DL, 0302H020DL, 0302H021DL1, 0302H022DL, and 0302H023DL.
- Acetone in sample 0302H024.

Methylene chloride and Acetone are considered common laboratory contaminants when found at levels less than 5x the CRQL in environmental samples and not found in the associated blanks.

B. Due to method blank contamination, the following results are considered nondetected (U1).

- Chloroform in samples 0302H018, 0302H022, 0302H024, 0302H022DL, and 0302H023DL.

The following compounds were detected in the associated method blanks at the concentrations noted below.

Compound	Blank ID	Concentration, µg/L
Chloroform	Method blank 1/23/03	0.4

Detected results less than 5x the blank contamination were qualified.

C. Due to field, trip, and equipment rinsate blank contamination, the following results are considered nondetected (U2).

- 2-Hexanone in samples 0302H019 and 0302H021DL2.
- 2-Butanone in sample 0302H021DL2.

The following compounds were detected in the associated field, trip, and equipment rinsate blanks at the concentrations noted below.

Compound	Blank ID	Concentration, µg/L
2-Hexanone	0302H024	1.0
2-Butanone	Equipment rinsate	3.0

Detected results less than 5x the maximum blank contamination were qualified.

II. Calibrations

A. Due to severe calibration problems, the following nondetected results are rejected (R7).

- Acetone in samples 0302H021DL1, 0302H022, 0302H023, and 0302H023DL

The following relative response factor (RRF) did not meet the QC limit of >0.05.

Calibration Date	Compound	RRF
1/23/03 Init. Cal.	Acetone	0.039

B. Due to continuing calibration problems, the following nondetected results are qualified as estimated (UJ7).

- Bromoform in samples 0302H021DL2 and 0302H022DL.

The following continuing calibrations had percent differences (%D) of >25%.

Calibration Date	Compound	%D
1/23/03 1514	Bromoform	-29.5

III. Other Qualifications

A. The following results are qualified as estimated (J).

- 1,1-Dichloroethane, 1,1-Dichloroethene, and 1,2-Dichloropropane detected results were reported below the contract required report limit (RL) for sample 0302H019.
- 1,1,2-Trichloroethane, cis-1,2-Dichloroethene, and Tetrachloroethene detected results were reported below the contract required report limit (RL) for sample 0302H019DL.
- 1,1-Dichloroethene, 1,2-Dichloropropane, and Vinyl chloride detected results were reported below the contract required report limit (RL) for sample 0302H020.
- 1,1-Dichloroethane detected result was reported below the contract required report limit (RL) for sample 0302H020DL.
- 1,1-Dichloroethane, Chloromethane, and Vinyl chloride detected results were reported below the contract required report limit (RL) for sample 0302H021.
- cis-1,2-Dichloroethene detected result was reported below the contract required report limit (RL) for sample 0302H021DL1.
- 1,1-Dichloroethane, 1,2-Dichloropropane, Benzene, and Tetrachloroethene detected result was reported below the contract required report limit (RL) for sample 0302H021DL2.
- cis-1,2-Dichloroethene detected result was reported below the contract required report limit (RL) for sample 0302H022.
- 1,2-Dichloroethane detected result was reported below the contract required report limit (RL) for sample 0302H022DL.
- cis-1,2-Dichloroethene detected result was reported below the contract required report limit (RL) for sample 0302H023.
- 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-chloropropane, 1,4-Dichlorobenzene, 2-Butanone, 2-Hexanone, and Bromodichloromethane detected result was reported below the contract required report limit (RL) for sample 0302H024.

Detected results reported below the RL are considered to be qualitatively acceptable, but quantitatively unreliable due to the uncertainty in analytical precision near the limit of detection.

B. The following result was qualified as estimated (J8) due to exceed calibration range.

- Trichloroethene for samples 0302H019, 0302H020, 0302H021, 0302H021DL2, 0302H022, and 0302H023.
- 1,2-Dichloroethane for sample 0302H020.
- Chloroform for samples 0302H020 and 0302H021.

Full Validation Criteria for Sample 0302H021

IV. GC/MS Tuning

A. The ion abundance criteria were met for the bromofluorobenzene (BFB) GC/MS performance check. The samples were analyzed within 12 hours of the associated performance check.

V. Target Compound List (TCL) Identification

A. The relative retention times, mass spectra, and peak identifications of the samples were evaluated. Target compound identification was considered to be correct.

VI. Compound Quantitation and Reported Detection Limits

A. Sample results were recalculated with the proper dilution factors, weights, volumes, and percent moisture used to calculate the sample results. The samples were correctly quantitated. The reported detection limits were consistent with the contract required report limits and reflect any dilutions, weights, volumes, and percent moisture.

VII. Tentatively Identified Compounds (TICs)

A. TICs not performed.

VIII. System Performance

A. The samples were evaluated for reconstructed ion chromatogram (RIC) baseline shifts, extraneous peaks, loss of resolution, and peak tailing. No system degradation was noted.

CLP METALS ANALYSIS

I. Blank Contamination

A. Due to calibration and method blank contamination, the following results are considered nondetected (U1).

- Dissolved Arsenic for samples 0302H020 and 0302H021.

The following metals were detected in the associated calibration and method blanks at the concentrations noted below.

Analyte	Blank ID	Concentration, ug/L
Dissolved Arsenic	CCB6	1.2

Detected results less than 5x the maximum blank contamination were qualified.

II. Other Qualifications

A. The following results are qualified as estimated (J).

- Dissolved Iron detected result was reported above the IDL but below the CRDL for sample 0302H019, 0302H020, 0302H022, and 0302H023.

Results above the IDL but below the CRDL are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

Full Validation Criteria for Sample 0302H021

III. Analyte Quantitation and Reported Detection Limits

A. Sample results were recalculated, with the proper dilution factors, weights, volumes, and percent moisture used to calculate the sample results. The samples were found to be correctly quantitated. The reported detection limits were consistent with the contract required report limits and reflect any dilutions, weights, volumes, and percent moisture.

IV. Graphite Furnace Atomic Absorption (GFAA) Analysis

A. GFAA was not performed.

V. ICP Interference Check Sample

A. ICSAB percent recoveries were acceptable and spectral interference was not found.

OVERALL ASSESSMENT OF DATA

I. Method Compliance and Additional Comments

A. All analyses were conducted within all specifications of the requested methods.

II. Usability

A. Due to severe calibration problems in the Volatiles analysis, the following were rejected: Acetone for four samples. RRFs were less than 0.05.

B. Due to common laboratory contamination in the Volatile analyses, the following were considered nondetected: Methylene chloride for ten samples; and Acetone for one sample. Due to method blank contamination, Chloroform was considered nondetected for five samples. Due to equipment rinsate contamination, the following were considered nondetected: 2-Hexanone two samples and 2-Butanone for one sample. Bromoform was qualified as estimate for two samples. Due to uncertainty in the analytical precision near the limit of detection, the following were qualified as estimated: 1,1-Dichloroethane for four samples; 1,1-Dichloroethene for two samples; 1,2-Dichloropropane for three samples; 1,1,2-Trichloroethane for one sample; cis-1,2-Dichloroethene for four samples; Tetrachloroethene for two samples; Vinyl chloride for two samples; Chloromethane for one sample; Benzene for one sample; 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-chloropropane, 1,4-Dichlorobenzene, 2-Butanone, 2-Hexanone, and Bromodichloromethane for one sample. The following exceeded the calibration range: Trichloroethene for six samples; 1,2-Dichloroethane for one sample; Chloroform for two samples.

C. Volatile samples 0302H019, 0302H020, 0302H021, 0302H021DL, 0302H022, and 0302H023 were reanalyzed at a dilution due to results exceeding the calibration range. The diluted results should be used as the final validated results.

D. Trichloroethene exceeded the calibration range for Volatile sample 0302H021DL2. The diluted result for sample 0302H021DL1 should be used as the final validated results.

E. Due to calibration blank contamination in the Metals analyses, the following were considered nondetected: Dissolved Arsenic for two samples. Due to uncertainty in the analytical precision near the limit of detection, the following were qualified as estimated: Dissolved Iron for four samples.

F. The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be rejected (R) are unusable for all purposes. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the cursory and full data validation all other results are considered valid and usable for all purposes. In general, the few data points of rejected data and the small number of qualifiers added to the data indicate high usability.

Tetra Tech EM Inc.
DATA VALIDATION REPORT

Site:	Hunters Point Shipyard
Project Name:	DO-013
Laboratory:	Columbia Analytical Services - Redding
Data Reviewer:	Sandra Obleas, The DV Group
Review Date:	February 24, 2003

Sample Delivery Group (SDG) No.: D9333

Sample Nos.: 0302H026
0302H027 *
0302H028

* Full Validation Sample

Matrix: Water

Collection Date(s): January 10, 2003

The data were qualified according to the U.S. Environmental Protection Agency (EPA) documents "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (October 1999), "USEPA Contract Laboratory National Functional Guidelines for Low Concentration Organic Data" (EPA 2001), and "USEPA Contract Laboratory Program National Functional Guidelines For Inorganic Data Review" (February 1994). In addition, the TtEMI documents "Data Validation Guidelines for CLP Organic Analyses," "Data Validation Guidelines for CLP Inorganic Analyses," "Data Validation Guidelines for Non-CLP Organic Analyses," "Data Validation Guidelines for Non-CLP Inorganic and Physical Analyses" (August 2001), and the document entitled "TtEMI Comprehensive Long-term Environmental Action Navy II Analytical Services Statement of Work" (May 2000) were used along with other specified criteria in EPA methods. Data validation requirements are presented below.

I certify that all data validation criteria outlined in the above referenced documents were assessed, and any qualifications made to the data were in accordance with those documents.

_____
Certified by

DATA VALIDATION REQUIREMENTS

Full validation includes all parameters listed below. An asterisk (*) indicates cursory validation parameters.

CLP Organic Parameters

*	Holding times
	GC/MS instrument performance check
*	Initial and continuing calibrations
*	Blanks
*	Surrogate recovery
*	Matrix spike/matrix spike duplicate
*	Laboratory control sample or blank spike
*	Field duplicates
*	Internal standard performance
	Target compound identification
	Tentatively identified compounds
	Compound quantitation
	Reported detection limits
	System performance
*	Overall assessment of data for the SDG

CLP Inorganic Parameters

*	Holding times
*	Initial and continuing calibrations
*	Blanks
*	Matrix spike
*	Laboratory control sample or blank spike
*	Field duplicates
*	Matrix duplicates
	ICP interference check sample
	GFAA quality control
*	ICP serial dilution
	Sample result verification
	Analyte quantitation
	Reported detection limits
*	Overall assessment of data for the SDG

Non-CLP Organic and Inorganic Parameters

*	Method compliance
*	Holding times
*	Initial and continuing calibrations
*	Blanks
*	Matrix spike/matrix spike duplicate
*	Laboratory control sample or blank spike
*	Field duplicates
*	Matrix duplicates
*	Surrogate recovery
	Analyte quantitation
	Reported detection limits
*	Overall assessment of data for the SDG

DATA VALIDATION QUALIFIERS AND CODES

Data Validation Qualifiers

UJ	Estimated nondetected result
J	Estimated detected result
R	Rejected result
NJ	Tentatively Identified Compound (TIC)

Data Validation Qualifier Codes

U1, U2, U4	Laboratory method blank, Field blank, Common blank contamination
J1, UJ1, R3	Noncompliance with instrument performance criteria
J2, UJ2	Duplicate precision exceedance
J3, UJ3, R2	Surrogate, Matrix spike, Laboratory control sample (LCS) exceedance
J4, UJ4	Serial Dilution
J5, UJ5, R1	Holding time exceedance
J7, UJ7, R7	Calibration exceedance
J8	Compound above calibration range
J9, UJ9	ICP Interference check sample; Compound identification
J0, UJ0, R0	Internal standard exceedance
J	Quantification below reporting limit

TABLE 1
CURSORY DATA VALIDATION SUMMARY

Analysis	Holding Times	Surrogates	MS/MSD	Matrix Duplicates	LCS	Blanks	Calibrations	Internal Standards	Field Duplicates	Other
VOA 8260	√	√	N/A	N/A	√	pg. 6	pg. 6	√	N/A	pg. 6
Metals	√	N/A	N/A	N/A	√	pg. 8	√	N/A	N/A	pg. 8

Notes:
√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.
N/A indicates the parameter is not applicable to an analysis.
If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.
The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers are described in the text.

TABLE 2
FULL DATA VALIDATION SUMMARY
Sample 0302H027

Analysis	GC/MS Tuning	Target Compound List Identification	Compound or Analyte Quantification	Reported Detection Limits	Tentatively Identified Compounds	System Performance	Interference Check Sample	Graphite Furnace Quality Control
VOA 8260	√	√	√	√	N/A	√	N/A	N/A
Metals	N/A	N/A	√	√	N/A	√	√	N/A

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.
N/A indicates the parameter is not applicable to an analysis.
If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.
The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers found are described below.

DATA ASSESSMENT

VOLATILES (8260) ANALYSIS

I. Blank Contamination

A. Due to common laboratory contamination, the following results are considered nondetected (U4).

- Methylene chloride in samples 0302H027 and 0302H028.
- Acetone in sample 0302H028.

Methylene chloride and Acetone are considered common laboratory contaminants when found at levels less than 5x the CRQL in environmental samples and not found in the associated blanks.

B. Due to method blank contamination, the following results are considered nondetected (U1).

- Chloroform in samples 0302H026 and 0302H028.

The following compounds were detected in the associated method blanks at the concentrations noted below.

Compound	Blank ID	Concentration, µg/L
Chloroform	Method blank 1/23/03	0.4

Detected results less than 5x the blank contamination were qualified.

II. Calibrations

A. Due to severe calibration problems, the following detected results are estimated (J7) and the nondetected results are rejected (R7).

- Acetone in all samples.

The following relative response factor (RRF) did not meet the QC limit of >0.05.

Calibration Date	Compound	RRF
1/23/03 Init. Cal.	Acetone	0.039

III. Other Qualifications

A. The following results are qualified as estimated (J).

- Carbon disulfide detected result was reported below the contract required report limit (RL) for sample 0302H025.
- 1,1-Dichloroethane detected result was reported below the contract required report limit (RL) for sample 0302H026.

Detected results reported below the RL are considered to be qualitatively acceptable, but quantitatively unreliable due to the uncertainty in analytical precision near the limit of detection.

Full Validation Criteria for Sample 0302H027

IV. GC/MS Tuning

A. The ion abundance criteria were met for the bromofluorobenzene (BFB) GC/MS performance check. The samples were analyzed within 12 hours of the associated performance check.

V. Target Compound List (TCL) Identification

A. The relative retention times, mass spectra, and peak identifications of the samples were evaluated. Target compound identification was considered to be correct.

VI. Compound Quantitation and Reported Detection Limits

A. Sample results were recalculated with the proper dilution factors, weights, volumes, and percent moisture used to calculate the sample results. The samples were correctly quantitated. The reported detection limits were consistent with the contract required report limits and reflect any dilutions, weights, volumes, and percent moisture.

VII. Tentatively Identified Compounds (TICs)

A. TICs not performed.

VIII. System Performance

A. The samples were evaluated for reconstructed ion chromatogram (RIC) baseline shifts, extraneous peaks, loss of resolution, and peak tailing. No system degradation was noted.

CLP METALS ANALYSIS

I. Blank Contamination

A. Due to equipment rinsate contamination, the following results are considered nondetected (U2).

- Dissolved Iron for samples 0302H026 and 0302H027.
- Total Iron for sample 0302H026.

The following analytes were detected in the associated field, trip, and equipment rinsate blanks at the concentrations noted below.

Analyte	Blank ID	Concentration, µg/L
Dissolved Iron	0302H028	38.3
Total Iron	Equipment rinsate	51.0

Detected results less than 5x the maximum blank contamination were qualified

II. Other Qualifications

A. The following results are qualified as estimated (J).

- Dissolved Iron detected result was reported above the IDL but below the CRDL for sample 0302H028.
- Total Iron detected result was reported above the IDL but below the CRDL for sample 0302H028.

Results above the IDL but below the CRDL are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

Full Validation Criteria for Sample 0302H027

III. Analyte Quantitation and Reported Detection Limits

A. Sample results were recalculated, with the proper dilution factors, weights, volumes, and percent moisture used to calculate the sample results. The samples were found to be correctly quantitated. The reported detection limits were consistent with the contract required report limits and reflect any dilutions, weights, volumes, and percent moisture.

IV. Graphite Furnace Atomic Absorption (GFAA) Analysis

A. GFAA was not performed.

V. ICP Interference Check Sample

A. ICSAB percent recoveries were acceptable and spectral interference was not found.

OVERALL ASSESSMENT OF DATA

I. Method Compliance and Additional Comments

A. All analyses were conducted within all specifications of the requested methods.

II. Usability

A. Due to severe calibration problems in the Volatiles analysis, the following were rejected: Acetone for three samples and qualified as estimated for one sample. RRFs were less than 0.05.

B. Due to common laboratory contamination in the Volatile analyses, the following were considered nondetected: Methylene chloride for two samples; and Acetone for one sample. Due to method blank contamination, Chloroform was considered nondetected for two samples. Due to uncertainty in the analytical precision near the limit of detection, the following were qualified as estimated: Carbon disulfide for one sample; 1,1-Dichloroethane for one sample.

C. Due to equipment rinsate contamination in the Metals analyses, the following were considered nondetected: Dissolved Iron for two samples and Total Iron for one sample. Due to uncertainty in the analytical precision near the limit of detection, the following were qualified as estimated: Dissolved Iron for one sample; and Total Iron for one sample.

D. The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be rejected (R) are unusable for all purposes. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the cursory and full data validation all other results are considered valid and usable for all purposes. In general, the few data points of rejected data and the small number of qualifiers added to the data indicate high usability.

TETRA TECH EM INC.

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1230 Columbia Street, Suite 1100
San Diego, CA 92101-8517

DATE: 4/7/03
DO: 013
LOCATION:
Hunters Point Shipyard, San Francisco
California

FROM:

Michael Wanta, Contract Manager

DOCUMENT TITLE AND DATE:

User Data Package 3 – Results of the Post-Injection Round 1 Groundwater Sampling, Parcel C Treatability Study Support, April 4, 2003

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