APPENDIX H

Outdoor Air Background Evaluation

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TECHNICAL MEMORANDUM

Date:	April 4, 2008
To:	Craig Rankine, Ecology
From:	Rick Wadsworth, P.E.
Subject:	Outdoor Air Data and Wind Direction Information
cc:	Patty Boyden, Port of Vancouver Lisa Pearson, Ecology Rod Schmall, Ecology Barbara Trejo, Department of Health Richard Roché, Parametrix
Project Number:	275-1940-006 (0107/4979)
Project Name:	SMC/Cadet RI/FS – Comprehensive Air Monitoring Plan

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This technical memorandum has been prepared for the Washington State Department of Ecology (Ecology) to present historical outdoor air data and wind direction information for the SMC/Cadet site located in Vancouver, Washington. It is our understanding that the outdoor air data and wind direction information can used to select an appropriate data set for the calculation of background concentrations in the project area. However, based on comments received from Ecology and the Washington Department of Health (DOH) on the January 2007 Draft Comprehensive Vapor Intrusion Evaluation and Indoor Air Monitoring Plan (CAMP), it was indicated that Ecology will provide the statistical method to be used in the background calculation. In order to facilitate this process, Parametrix is submitting the following information:

Table 1:	Outdoor Air Sample Results – 2002 through 2008
Table 2:	Selected Outdoor Air Sample Results and Primary Wind Direction
Table 3:	Proposed Outdoor Air Data Set for Background Calculation
Figure 1:	Outdoor Air Sample Locations
Attachment A:	Wind Direction Rose Plots for Outdoor Air Sample Dates

The primary focus of this evaluation is to select outdoor air samples which are not impacted by the presence of the shallow trichloroethylene (TCE) plume. There is potential that volatilization of TCE (and other constituents) from groundwater into the atmosphere may be occurring and therefore influencing the outdoor air sample results. Table 1 includes all outdoor air data collected to date in the project area, which have been collected since approximately 2002. However, it should be noted that most of the samples collected prior to 2007 were collected within the North Fruit Valley Neighborhood (NFVN) within the known area of the TCE plume. In early 2007, outdoor air samples were primarily focused on those areas located outside of the shallow TCE plume. All sample locations were approved by Ecology and DOH.

Figure 1 shows the location of all outdoor air samples collected from 2002 through 2008. In addition, the approximate extent of the combined TCE plume in the shallow aquifer is shown. For the purposes of this screening process, the TCE plume shown is from groundwater data collected in September 2007. Although the groundwater concentrations within the plume have dropped significantly in recent years, the aerial extent of the plume (i.e. area bounded by 5 micrograms per liter) has not changed dramatically. Therefore, the September 2007 TCE plume appears to be representative of the aerial extent and can be used for the selection of an appropriate outdoor air data set.

As shown in the figure, outdoor air locations CM-MW-09-OA, FRAM-OA, 3301-FR-OA, 1616-31-OA, and CM-MW-21-OA are located outside of the known TCE plume. Outdoor air sample locations SGS-OA and GMW-OA are also located outside of the shallow TCE plume. However, the data from these locations are not recommended to be used due to the SGS-OA sample location near the ST Services TCE/PCE plume and GMW-OA located near the air stripper at Great Western Malting.

The shaded portions of Table 1 indicate the outdoor air data which is recommended to be removed from the background calculation data set. These were not deemed appropriate based on the following reasons:

- Sample location within the shallow TCE plume area
- Elevated detection limit not consistent with remaining data set
- Quality assurance/quality control evaluation rejected the data
- Sample location near areas of potential impact (i.e. GWM air stripping towers, ST Services)

Based on these criteria, Table 2 includes all outdoor air data not removed as part of the first screening process. Wind direction information was then used to further screen the outdoor air data. The wind direction information was obtained from the Pearson Field weather station, which is located to the southeast of the project area. Rose plots were developed for each day of outdoor air sample collection and are included in Attachment A. As shown in the rose plots, wind direction and speed can be highly variable. However, a number of sampling events appear to have occurred in relatively consistent wind direction conditions. Note that Table 2 includes a column for the primary wind direction obtained from the rose plots, but that this information is only a summary and the rose plots should be reviewed to fully understand the variables of wind direction and speed. The location of the outdoor air sample was evaluated against the wind direction and the location of the TCE plume. The shaded data in Table 2 indicates that the wind direction is such that the outdoor air data could potentially have been impacted by the shallow TCE plume.

Table 3 includes the proposed data set for background calculations. Based on the evaluation process, approximately 21 outdoor air samples are representative of background conditions with no significant influence from the TCE plume. It is expected that Ecology will provide the Port of Vancouver with the statistical method to be used on an approved data set.

TABLE 1: OUTDOOR AIR SAMPLING RESULTS - 2002 through 2008

North Fruit Valley Neighborhood

Sample ID (####-XX-OA-ZZ)	Compound	1,1,1-TCA		1,1-DCA		1,1-DCE		1,2-DCA		Chloroethane		cis-1,2-DCE		PCE		trans-1,2-DCE		TCE		Vinyl Chloride	
	Sample Date	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv
1616-31-OA-24	07/21/04	0.13 N	0.024 N	0.13 U	0.032 U	0.065 U	0.016 U	0.074 N	0.018 N	0.08 J	0.03 J	0.029 N	0.0073 N	0.9	0.13	0.65 U	0.16 U	0.13	0.024	0.042 U	0.016 U
1616-31-OA-24	01/06/05	0.11	0.02	0.036 U	0.0089 U	0.0063 J	0.0016 J	0.037	0.0091	0.019 J	0.0072 J	0.036 U	0.0091 U	0.18	0.027	0.0055 J	0.0014 J	0.11	0.02	0.036 U	0.014 U
1616-31-OA-24	02/25/05	0.11	0.02	0.036 U	0.0089 U	0.0093	0.0023	0.034	0.0084	0.022	0.0083	0.036 U	0.0091 U	0.34	0.05	0.0069	0.0017	0.099	0.018	0.036 U	0.014 U
1616-31-OA-24	06/15/05	0.097	0.018	0.039 U	0.0096 U	0.0068	0.0017	0.029	0.0072	0.026	0.0099	0.039 U	0.0098 U	0.041	0.006	0.039 U	0.0098 U	0.0096	0.0018	0.039 U	0.015 U
1616-31-OA-24	08/31/05	0.093	0.017	0.034 U	0.0084 U	0.0096 J	0.0024 J	0.02 J	0.0049 J	0.019 UJ	0.0072 UJ	0.034 U	0.0086 U	0.038	0.0056	0.034 U	0.0086 U	0.0061 J	0.0011 J	0.034 U	0.013 U
1616-31-OA	09/13/07	0.056	0.01	0.034 U	0.0083 U	0.034 U	0.0085 U	0.034 U	0.0083 U	0.034 U	0.013 U	0.034 U	0.0085 U	0.1	0.015	0.034 U	0.0085 U	0.034 U	0.0063 U	0.034 U	0.013 U
1616-31-OA	09/15/07	0.062	0.011	0.038 U	0.0094 U	0.038 U	0.0096 U	0.04	0.0098	0.038 U	0.014 U	0.038 U	0.0096 U	0.077	0.011	0.038 U	0.0096 U	0.038 U	0.0071 U	0.038 U	0.015 U
1616-31-OA	09/20/07	0.069	0.013	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.17	0.025	0.037 U	0.0093 U	0.063	0.012	0.037 U	0.014 U
1616-31-OA	09/30/07	0.062	0.011	0.036 U	0.0089 U	0.036 U	0.0091 U	0.036 U	0.0089 U	0.036 U	0.014 U	0.036 U	0.0091 U	0.057	0.0084	0.036 U	0.0091 U	0.036 U	0.0067 U	0.036 U	0.014 U
1616-31-OA	12/18/07	0.064	0.012	0.044 U	0.011 U	0.044 U	0.011 U	0.052	0.013	0.044 U	0.017 U	0.044 U	0.011 U	0.3	0.044	0.044 U	0.011 U	0.044 U	0.0081 U	0.044 U	0.017 U
1616-31-OA	12/19/07	0.077	0.014	0.036 U	0.0088 U	0.036 U	0.009 U	0.038	0.0094	0.036 U	0.014 U	0.036 U	0.009 U	0.072	0.011	0.036 U	0.009 U	0.036 U	0.0067 U	0.036 U	0.014 U
1616-31-OA	12/21/07	0.071	0.013	0.039 U	0.0097 U	0.039 U	0.0099 U	0.04	0.0099	0.039 U	0.015 U	0.039 U	0.0099 U	0.4	0.059	0.039 U	0.0099 U	0.099	0.018	0.039 U	0.015 U
2105-28-OA-24	09/16/03	0.23	0.042	0.037 U	0.0091 U	0.037 U	0.0093 U	0.027	0.0067	0.022	0.0083	0.037 U	0.0093 U	0.39	0.058	0.037 U	0.0093 U	0.62	0.12	0.037 U	0.014 U
2105-28-OA-24	10/02/03	0.31	0.057	0.0084	0.0021	0.017	0.0043	0.022	0.0054	0.025	0.0095	0.01	0.0025	0.57	0.084	0.031 U	0.0078 U	0.81	0.15	0.031 U	0.012 U
2105-28-OA-24	01/30/04	0.13	0.024	0.021	0.0052	0.0061	0.0015	0.032	0.0079	0.077	0.029	0.036 U	0.0091 U	0.062	0.0091	0.036 U	0.0091 U	0.1	0.019	0.036 U	0.014 U
2105-28-OA-24	01/06/05	0.11	0.02	0.032 U	0.0079 U	0.0063 J	0.0016 J	0.036	0.0089	0.017 J	0.0064 J	0.032 U	0.0081 U	0.25	0.037	0.004 J	0.001 J	0.51	0.095	0.0042 J	0.0016 J
2105-28-OA-24	02/25/05	0.11	0.02	0.037 U	0.0091 U	0.014	0.0035	0.034	0.0084	0.035	0.013	0.0093	0.0023	0.3	0.044	0.0053	0.0013	0.2	0.037	0.037 U	0.014 U
2105-28-OA-24	06/15/05	0.1	0.018	0.04 U	0.0099 U	0.0066	0.0017	0.029	0.0072	0.028	0.011	0.04 U	0.01 U	0.089	0.013	0.04 U	0.01 U	0.0071	0.0013	0.04 U	0.016 U
2105-28-OA-24	08/31/05	0.099	0.018	0.041 U	0.01 U	0.0089 J	0.0022 J	0.025 J	0.0062 J	0.018 UJ	0.0068 UJ	0.041 U	0.01 U	0.036 J	0.0053 J	0.041 U	0.01 U	0.0096 J	0.0018 J	0.041 U	0.016 U
2105-28-OA-GB	10/02/03	0.2	0.037	0.0026	0.00064	0.012	0.003	0.02	0.0049	0.013	0.0049	0.0042	0.0011	0.3	0.044	0.031 U	0.0078 U	0.37	0.069	0.031 U	0.012 U
2110-28-OA-GB	11/15/04	1.2 U	0.22 U	1.2 U	0.3 U	1.2 U	0.3 U	1.2 U	0.3 U	1.2 U	0.45 U	1.2 U	0.3 U	1.2 U	0.18 U	1.2 U	0.3 U	1.2 U	0.22 U	1.2 U	0.47 U
2113-28-OA	02/07/07	0.091 R	0.017 R	1.5 R	0.38 R	1.5 R	0.38 R	1.5 R	0.38 R	1.5 R	0.58 R	1.5 R	0.38 R	0.15 R	0.022 R	1.5 R	0.38 R	1.5 R	0.28 R	1.5 R	0.59 R
2206-28-OA-24	09/08/02	0.14	0.026	1.5 U	0.37 U	0.075 U	0.019 U	0.019	0.0047	0.077 U	0.029 U	1.5 U	0.38 U	0.13	0.019	1.5 U	0.38 U	0.14	0.026	0.3 U	0.12 U
2206-28-OA-24	05/07/04	0.18	0.033	0.13 U	0.032 U	0.062 U	0.016 U	0.064 N	0.016 N	0.15	0.057	0.12 U	0.03 U	0.12	0.018	0.62 U	0.16 U	0.066 U	0.012 U	0.04 U	0.016 U
2500-FO-OA-24	08/31/05	0.095	0.017	0.032 U	0.0079 U	0.008 J	0.002 J	0.02 J	0.0049 J	0.013 UJ	0.0049 UJ	0.032 U	0.0081 U	0.023 J	0.0034 J	0.032 U	0.0081 U	0.0057 J	0.0011 J	0.032 U	0.013 U
2500-FO-OA-24 (Dup)	08/31/05	0.093	0.017	0.041 U	0.01 U	0.012 J	0.003 J	0.02 J	0.0049 J	0.032 J	0.012 J	0.041 U	0.01 U	0.025 J	0.0037 J	0.041 U	0.01 U	0.0057 J	0.0011 J	0.0056 J	0.0022 J
2805-UN-OA-24	09/08/02	0.14	0.026	1.4 U	0.35 U	0.068 U	0.017 U	0.022	0.0054	0.18	0.068	1.4 U	0.35 U	0.093	0.014	1.4 U	0.35 U	0.065	0.012	0.27 U	0.11 U
2805-UN-OA-24	10/02/03	0.4	0.073	0.0065	0.0016	0.029	0.0073	0.025	0.0062	0.086	0.033	0.018	0.0045	0.66	0.097	0.039 U	0.0098 U	1.7	0.32	0.039 U	0.015 U
2805-UN-OA-24	01/30/04	0.13	0.024	0.036 U	0.0089 U	0.0091	0.0023	0.032	0.0079	0.029	0.011	0.036 U	0.0091 U	0.061	0.009	0.036 U	0.0091 U	0.29	0.054	0.036 U	0.014 U
2805-UN-OA-24	05/08/04	0.17 R	0.031 R	0.11 R	0.027 R	0.055 R	0.014 R	0.1 R	0.025 R	0.18 R	0.068 R	0.11 R	0.028 R	0.15 R	0.022 R	0.55 R	0.14 R	0.12 R	0.022 R	0.035 R	0.014 R
2809-UN-OA-24	09/08/02	0.14	0.026	1.5 U	0.37 U	0.073 U	0.018 U	0.021	0.0052	0.15	0.057	1.5 U	0.38 U	0.087	0.013	1.5 U	0.38 U	0.068	0.013	0.29 U	0.11 U
2914-UN-OA-24	01/30/04	0.13	0.024	0.021	0.0052	0.0069	0.0017	0.033	0.0081	0.04	0.015	0.037 U	0.0093 U	0.066	0.0097	0.037 U	0.0093 U	0.14	0.026	0.037 U	0.014 U
2914-UN-OA-24	07/21/04	0.13	0.024	0.13 U	0.032 U	0.062 U	0.016 U	0.041 N	0.01 N	0.026 NJ	0.0099 NJ	0.12 U	0.03 U	0.48	0.071	0.62 U	0.16 U	0.038 U	0.0071 U	0.04 U	0.016 U
2914-UN-OA-24	01/06/05	0.11 J	0.02 J	0.049 UJ	0.012 UJ	0.0055 J	0.0014 J	0.035 J	0.0086 J	0.014 J	0.0053 J	0.049 UJ	0.012 UJ	0.16 J	0.024 J	0.049 UJ	0.012 UJ	0.18 J	0.033 J	0.049 UJ	0.019 UJ
2914-UN-OA-24 (Dup)	01/06/05	0.11 J	0.02 J	0.042 UJ	0.01 UJ	0.042 UJ	0.011 UJ	0.034 J	0.0084 J	0.047 J	0.018 J	0.042 UJ	0.011 UJ	0.17 J	0.025 J	0.005 J	0.0013 J	0.18 J	0.033 J	0.0059 J	0.0023 J
2914-UN-OA-24	02/25/05	0.11	0.02	0.037 U	0.0091 U	0.01	0.0025	0.035	0.0086	0.013 U	0.0049 U	0.0073	0.0018	0.32	0.047	0.0051	0.0013	0.17	0.032	0.037 U	0.014 U
2914-UN-OA-24	06/15/05	0.1	0.018	0.038 U	0.0094 U	0.0069	0.0017	0.029	0.0072	0.019 U	0.0072 U	0.038 U	0.0096 U	0.29	0.043	0.038 U	0.0096 U	0.0049	0.00091	0.038 U	0.015 U
2914-UN-OA-24	08/31/05	0.1 J	0.018 J	0.043 U	0.011 U	0.015 J	0.0038 J	0.026 J	0.0064 J	0.017 UJ	0.0064 UJ	0.043 U	0.011 U	0.042 J	0.0062 J	0.043 U	0.011 U	0.014	0.0026	0.043 U	0.017 U
31-ONST-OA-GB	10/02/03	0.16	0.029	0.031 U	0.0077 U	0.0081	0.002	0.021	0.0052	0.077	0.029	0.031 U	0.0078 U	0.28	0.041	0.031 U	0.0078 U	0.015	0.0028	0.031 U	0.012 U
3301-FR-OA-24	01/25/02	0.56	0.1			0.063 U	0.016 U					0.005	0.0013	0.11	0.016			0.11	0.02	0.011	0.0043
CM-AS-OUTDOOR	12/10/00	3.5 U	0.64 U	2.6 U	0.64 U	2.5 U	0.63 U	2.6 U	0.64 U	1.7 U	0.64 U	2.5 U	0.63 U	4.3 U	0.63 U	10 U	2.5 U	3.4 U	0.63 U	1.6 U	0.63 U
CM-MW-09s-OA	09/08/02	0.14	0.026	1.5 U	0.37 U	0.076 U	0.019 U	0.018	0.0044	0.068 U	0.026 U	1.5 U	0.38 U	0.073	0.011	1.5 U	0.38 U	0.078	0.015	0.3 U	0.12 U
CM-MW-09s-OA	10/02/03	0.15	0.027	0.0036	0.00088	0.04 U	0.01 U	0.024	0.0059	0.021	0.008	0.04 U	0.01 U	0.12	0.018	0.04 U	0.01 U	0.085	0.016	0.04 U	0.016 U
CM-MW-09s-OA	01/30/04	0.13	0.024	0.14	0.035	0.0065	0.0016	0.034	0.0084	0.034 U	0.013 U	0.046 U	0.012 U	0.062	0.0091	0.046 U	0.012 U	0.033 U	0.0061 U	0.046 U	0.018 U
CM-MW-09s-OA	07/21/04	0.12 J	0.022 J	0.13 U	0.032 U	0.066 U	0.017 U	0.1 N	0.025 N	0.044 J	0.017 J	0.13 U	0.033 U	0.03 N	0.0044 N	0.66 U	0.17 U	0.027 U	0.005 U	0.043 U	0.017 U
CM-MW-09s-OA	01/06/05	0.11	0.02	0.033 U	0.0081 U	0.0039 J	0.00098 J	0.037	0.0091	0.013 J	0.0049 J	0.033 U	0.0083 U	0.19	0.028	0.033 U	0.0083 U	0.19	0.035	0.033 U	0.013 U
CM-MW-09s-OA	02/25/05	0.11	0.02	0.039 U	0.0096 U	0.01	0.0025	0.049	0.012	0.25	0.095	0.039 U	0.0098 U	0.32	0.047	0.039 U	0.0098 U	0.22	0.041	0.039 U	0.015 U
CM-MW-09s-OA	06/15/05	0.11	0.02	0.038 U	0.0094 U	0.0066	0.0017	0.036	0.0089	0.036	0.014	0.038 U	0.0096 U	0.059	0.0087	0.038 U	0.0096 U	0.0094	0.0017	0.038 U	0.015 U
CM-MW-09s-OA	02/16/07	0.051	0.0094	0.032 U	0.008 U	0.032 U	0.0081 U	0.043	0.011	0.067	0.026	0.032 U	0.0081 U	0.11	0.017	0.032 U	0.0081 U	0.032 U	0.006 U	0.032 U	0.013 U
CM-MW-09s-OA	05/31/07	0.051 UJ	0.0094 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.019 UJ	0.051 UJ	0.013 UJ	0.094 J	0.014 J	0.051 UJ	0.013 UJ	0.21 J	0.04 J	0.051 UJ	0.02 UJ
CM-MW-09s-OA	09/13/07	0.055	0.01	0.04 U	0.0099 U	0.04 U	0.01 U	0.04 U	0.0099 U	0.04 U	0.015 U	0.04 U	0.01 U	0.089	0.013	0.04 U	0.01 U	0.04 U	0.0075 U	0.04 U	0.016 U
CM-MW-09s-OA	09/15/07	0.057	0.011	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.068	0.01	0.037 U	0.0093 U	0.037 U	0.0069 U	0.037 U	0.014 U
CM-MW-09s-OA	09/20/07	0.061	0.011	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.088	0.013	0.037 U	0.0093 U	0.037 U	0.0068 U	0.037 U	0.014 U

Sample ID (####-XX-OA-ZZ)	Compound	1,1,1-TCA		1,1-DCA		1,1-DCE		1,2-DCA		Chloroethane		cis-1,2-DCE		PCE		trans-1,2-DCE		TCE		Vinyl Chloride	
	Sample Date	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv
CM-MW-09s-OA	09/30/07	0.06 J	0.011 J	0.047 UJ	0.012 UJ	0.047 UJ	0.012 UJ	0.047 UJ	0.012 UJ	0.047 UJ	0.018 UJ	0.047 UJ	0.012 UJ	0.099 J	0.015 J	0.047 UJ	0.012 UJ	0.047 UJ	0.0087 UJ	0.047 UJ	0.018 UJ
CM-MW-09s-OA (Dup)	09/30/07	0.061	0.011	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.092	0.014	0.037 U	0.0093 U	0.037 U	0.0068 U	0.037 U	0.014 U
CM-MW-09s-OA	12/07/07	0.055	0.01	0.038 U	0.0095 U	0.038 U	0.0097 U	0.038 U	0.0095 U	0.038 U	0.015 U	0.038 U	0.0097 U	0.082	0.012	0.038 U	0.0097 U	0.038 U	0.0071 U	0.038 U	0.015 U
CM-MW-09s-OA	12/18/07	0.063	0.012	0.037 U	0.0091 U	0.037 U	0.0093 U	0.04	0.01	0.037 U	0.014 U	0.037 U	0.0093 U	0.065	0.0096	0.037 U	0.0093 U	0.037 U	0.0068 U	0.037 U	0.014 U
CM-MW-09s-OA	12/19/07	0.061	0.011	0.036 U	0.0088 U	0.036 U	0.009 U	0.039	0.0096	0.036 U	0.014 U	0.036 U	0.009 U	0.058	0.0085	0.036 U	0.009 U	0.036 U	0.0067 U	0.036 U	0.014 U
CM-MW-09s-OA	12/21/07	0.067	0.012	0.036 U	0.0088 U	0.036 U	0.009 U	0.04	0.0098	0.036 U	0.013 U	0.036 U	0.009 U	0.16	0.024	0.036 U	0.009 U	0.069	0.013	0.036 U	0.014 U
CM-MW-09s-OA	01/04/08	0.06	0.011	0.04 U	0.0098 U	0.04 U	0.01 U	0.04	0.01	0.04 U	0.015 U	0.04 U	0.01 U	0.094	0.014	0.04 U	0.01 U	0.04 U	0.0074 U	0.04 U	0.016 U
CM-MW-21i-OA	02/16/07	0.053	0.0096	0.036 U	0.0089 U	0.036 U	0.0091 U	0.046	0.011	0.036 U	0.014 U	0.036 U	0.0091 U	0.12	0.018	0.036 U	0.0091 U	0.057	0.011	0.036 U	0.014 U
CM-MW-21i-OA	05/31/07	0.037 U	0.0068 U	0.037 U	0.0091 U	0.037 U	0.0093 U	0.046	0.011	0.037 U	0.014 U	0.037 U	0.0093 U	0.066	0.0097	0.037 U	0.0093 U	0.037 U	0.0069 U	0.037 U	0.014 U
FRAM-OA	02/16/07	0.05	0.0091	0.032 U	0.008 U	0.032 U	0.0081 U	0.043	0.011	0.032 U	0.012 U	0.032 U	0.0081 U	0.088	0.013	0.032 U	0.0081 U	0.032 U	0.006 U	0.032 U	0.013 U
FRAM-OA	05/31/07	0.036	0.0065	0.031 U	0.0076 U	0.031 U	0.0078 U	0.047	0.012	0.031 U	0.012 U	0.031 U	0.0078 U	0.11	0.016	0.031 U	0.0078 U	0.031 U	0.0057 U	0.031 U	0.012 U
FRAM-OA	09/13/07	0.05	0.0092	0.035 U	0.0086 U	0.035 U	0.0088 U	0.047	0.012	0.035 U	0.013 U	0.035 U	0.0088 U	0.077	0.011	0.035 U	0.0088 U	0.056	0.01	0.035 U	0.014 U
FRAM-OA	09/15/07	0.077	0.014	0.038 U	0.0093 U	0.038 U	0.0095 U	0.043	0.011	0.038 U	0.014 U	0.038 U	0.0095 U	0.11	0.017	0.038 U	0.0095 U	0.075	0.014	0.038 U	0.015 U
FRAM-OA	09/20/07	0.059 J	0.011 J	0.03 UJ	0.0073 UJ	0.03 UJ	0.0074 UJ	0.03 UJ	0.0073 UJ	0.03 UJ	0.011 UJ	0.03 UJ	0.0074 UJ	0.056 J	0.0082 J	0.03 UJ	0.0074 UJ	0.03 UJ	0.0055 UJ	0.03 UJ	0.012 UJ
FRAM-OA	09/30/07	0.06	0.011	0.041 U	0.01 U	0.041 U	0.01 U	0.041 U	0.01 U	0.041 U	0.015 U	0.041 U	0.01 U	0.064	0.0095	0.041 U	0.01 U	0.041 U	0.0076 U	0.041 U	0.016 U
FRAM-OA	12/18/07	0.064	0.012	0.033 U	0.0082 U	0.033 U	0.0083 U	0.04	0.01	0.033 U	0.013 U	0.033 U	0.0083 U	0.098	0.014	0.033 U	0.0083 U	0.033 U	0.0061 U	0.033 U	0.013 U
FRAM-OA	12/19/07	0.063	0.012	0.036 U	0.0089 U	0.036 U	0.0091 U	0.039	0.0097	0.036 U	0.014 U	0.036 U	0.0091 U	0.059	0.0087	0.036 U	0.0091 U	0.036 U	0.0067 U	0.036 U	0.014 U
FRAM-OA	12/21/07	0.069	0.013	0.037 U	0.0092 U	0.037 U	0.0094 U	0.042	0.01	0.037 U	0.014 U	0.037 U	0.0094 U	0.17	0.025	0.037 U	0.0094 U	0.061	0.011	0.037 U	0.015 U
RGRW-03-OA	02/16/07	0.053	0.0097	0.037 U	0.009 U	0.037 U	0.0092 U	0.045	0.011	0.037 U	0.014 U	0.037 U	0.0092 U	0.098	0.014	0.037 U	0.0092 U	0.037 U	0.0068 U	0.037 U	0.014 U
RGRW-03-OA (Dup)	02/16/07	0.053 J	0.0097 J	0.051 UJ	0.013 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.013 UJ	0.069 J	0.026 J	0.051 UJ	0.013 UJ	0.1 J	0.015 J	0.051 UJ	0.013 UJ	0.051 UJ	0.0095 UJ	0.051 UJ	0.02 UJ
RGRW-03-OA	05/31/07	0.045 UJ	0.0083 UJ	0.045 UJ	0.011 UJ	0.045 UJ	0.011 UJ	0.049 J	0.012 J	0.045 UJ	0.017 UJ	0.045 UJ	0.011 UJ	0.07 J	0.01 J	0.045 UJ	0.011 UJ	0.045 UJ	0.0084 UJ	0.045 UJ	0.018 UJ
RGRW-03-OA	09/13/07	0.055	0.01	0.034 U	0.0083 U	0.034 U	0.0085 U	0.034 U	0.0083 U	0.072	0.027	0.034 U	0.0085 U	0.087	0.013	0.034 U	0.0085 U	0.034 U	0.0062 U	0.034 U	0.013 U
RGRW-03-OA (Dup)	09/13/07	0.055	0.01	0.035 U	0.0085 U	0.035 U	0.0087 U	5.9	1.5	0.07	0.026	0.035 U	0.0087 U	1.6	0.24	0.035 U	0.0087 U	2.1	0.4	0.035 U	0.014 U
RGRW-03-OA	09/15/07	0.058	0.011	0.04 U	0.0098 U	0.04 U	0.01 U	0.13	0.032	0.04 U	0.015 U	0.04 U	0.01 U	0.34	0.05	0.04 U	0.01 U	0.04 U	0.0074 U	0.04 U	0.015 U
RGRW-03-OA	09/20/07	0.064 J	0.012 J	0.053 UJ	0.013 UJ	0.053 UJ	0.013 UJ	0.053 UJ	0.013 UJ	0.053 UJ	0.02 UJ	0.053 UJ	0.013 UJ	0.19 J	0.028 J	0.053 UJ	0.013 UJ	0.053 UJ	0.0098 UJ	0.053 UJ	0.021 UJ
RGRW-03-OA	09/30/07	0.061	0.011	0.04 U	0.0099 U	0.04 U	0.01 U	0.04 U	0.0099 U	0.04 U	0.015 U	0.04 U	0.01 U	0.076	0.011	0.04 U	0.01 U	0.04 U	0.0074 U	0.04 U	0.016 U
RGRW-03-OA	12/07/07	0.057	0.01	0.038 U	0.0095 U	0.038 U	0.0097 U	0.038 U	0.0095 U	0.038 U	0.015 U	0.038 U	0.0097 U	0.12	0.018	0.038 U	0.0097 U	0.038 U	0.0071 U	0.038 U	0.015 U
RGRW-03-OA	12/18/07	0.065	0.012	0.034 U	0.0084 U	0.034 U	0.0086 U	0.04	0.0099	0.034 U	0.013 U	0.034 U	0.0086 U	0.076	0.011	0.034 U	0.0086 U	0.034 U	0.0063 U	0.034 U	0.013 U
RGRW-03-OA	12/19/07	0.064	0.012	0.036 U	0.0088 U	0.036 U	0.009 U	0.038	0.0094	0.036 U	0.013 U	0.036 U	0.009 U	0.058	0.0086	0.036 U	0.009 U	0.043	0.0081	0.036 U	0.014 U
RGRW-03-OA	12/21/07	0.072	0.013	0.038 U	0.0095 U	0.038 U	0.0097 U	0.045	0.011	0.038 U	0.015 U	0.038 U	0.0097 U	0.18	0.026	0.038 U	0.0097 U	0.075	0.014	0.038 U	0.015 U
RGRW-03-OA	01/04/08	0.064	0.012	0.037 U	0.009 U	0.037 U	0.0092 U	0.043	0.011	0.037 U	0.014 U	0.037 U	0.0092 U	0.092	0.014	0.037 U	0.0092 U	0.037 U	0.0068 U	0.037 U	0.014 U

South Fruit Valley Neighborhood

Sample ID (####-XX-OA) or (ZZZ-OA)	Compound	1,1,1-TCA		1,1-DCA		1,1-DCE		1,2-DCA		Chloroethane		cis-1,2-DCE		PCE		trans-1,2-DCE		TCE		Vinyl Chloride	
	Sample Date	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv	μg/m^3	ppbv
2201-SI-OA	09/06/06	0.041 U	0.0076 U	0.041 U	0.01 U	0.041 U	0.01 U	0.041 U	0.01 U	0.041 U	0.016 U	0.041 U	0.01 U	0.041 U	0.0061 U	0.041 U	0.01 U	0.34	0.064	0.041 U	0.016 U
2201-SI-OA	02/16/07	0.053	0.0097	0.087	0.021	0.043 U	0.011 U	0.044	0.011	0.043 U	0.016 U	0.043 U	0.011 U	0.1	0.015	0.043 U	0.011 U	0.043 U	0.0081 U	0.043 U	0.017 U
2201-SI-OA	05/31/07	0.037 U	0.0067 U	0.037 U	0.009 U	0.037 U	0.0092 U	0.038	0.0094	0.037 U	0.014 U	0.037 U	0.0092 U	0.099	0.015	0.037 U	0.0092 U	0.037 U	0.0068 U	0.037 U	0.014 U
2201-SI-OA	09/13/07	0.054 J	0.0098 J	0.054 UJ	0.013 UJ	0.054 UJ	0.013 UJ	0.065 J	0.016 J	0.054 UJ	0.02 UJ	0.054 UJ	0.013 UJ	0.13 J	0.019 J	0.054 UJ	0.013 UJ	0.054 UJ	0.01 UJ	0.054 UJ	0.021 UJ
2201-SI-OA	09/15/07	0.058	0.011	0.037 U	0.0092 U	0.037 U	0.0094 U	0.066	0.016	0.037 U	0.014 U	0.037 U	0.0094 U	0.12	0.018	0.037 U	0.0094 U	0.037 U	0.0069 U	0.037 U	0.015 U
2201-SI-OA	09/20/07	0.059	0.011	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.1	0.015	0.037 U	0.0093 U	0.038	0.0071	0.037 U	0.014 U
2201-SI-OA	09/30/07	0.061	0.011	0.04 U	0.0098 U	0.04 U	0.01 U	0.04 U	0.0098 U	0.04 U	0.015 U	0.04 U	0.01 U	0.073	0.011	0.04 U	0.01 U	0.04 U	0.0074 U	0.04 U	0.015 U
2201-SI-OA	12/18/07	0.065	0.012	0.037 U	0.0091 U	0.037 U	0.0093 U	0.041	0.01	0.037 U	0.014 U	0.037 U	0.0093 U	0.084	0.012	0.037 U	0.0093 U	0.037 U	0.0069 U	0.037 U	0.014 U
2201-SI-OA	12/19/07	0.11	0.021	0.04 U	0.0099 U	0.04 U	0.01 U	0.04 U	0.0099 U	0.04 U	0.015 U	0.04 U	0.01 U	0.079	0.012	0.04 U	0.01 U	0.04 U	0.0074 U	0.04 U	0.016 U
2201-SI-OA	12/21/07	0.068 J	0.013 J	0.03 UJ	0.0075 UJ	0.03 UJ	0.0076 UJ	0.041 J	0.01 J	0.03 UJ	0.011 UJ	0.03 UJ	0.0076 UJ	0.17 J	0.025 J	0.03 UJ	0.0076 UJ	0.073 J	0.014 J	0.03 UJ	0.012 UJ
2201-SI-OA (Dup)	12/21/07	0.066 J	0.012 J	0.045 UJ	0.011 UJ	0.045 UJ	0.011 UJ	0.045 UJ	0.011 UJ	0.045 UJ	0.017 UJ	0.045 UJ	0.011 UJ	0.17 J	0.026 J	0.045 UJ	0.011 UJ	0.066 J	0.012 J	0.045 UJ	0.017 UJ
GWM-OA	08/31/05	0.093	0.017	0.031 U	0.0077 U	0.031 U	0.0079 U	0.031 U	0.0077 U	0.031 U	0.012 U	0.031 U	0.0079 U	0.032	0.0047	0.031 U	0.0079 U	0.036	0.0067	0.031 U	0.012 U
GWM-OA	11/09/05	0.12	0.022	0.035 U	0.0087 U	0.035 U	0.0089 U	0.041	0.01	0.035 U	0.013 U	0.035 U	0.0089 U	0.39	0.058	0.035 U	0.0089 U	0.16	0.029	0.035 U	0.014 U
GWM-OA	03/23/06	0.12	0.022	0.036 U	0.0088 U	0.036 U	0.009 U	0.051	0.013	0.036 U	0.013 U	0.036 U	0.009 U	0.22	0.033	0.036 U	0.009 U	0.13	0.024	0.036 U	0.014 U
GWM-OA	06/07/06	0.093	0.017	0.038 U	0.0095 U	0.038 U	0.0097 U	0.038 U	0.0095 U	0.038 U	0.015 U	0.073	0.018	0.052	0.0076	0.038 U	0.0097 U	0.056	0.01	0.038 U	0.015 U
GWM-OA	09/08/06	0.038	0.0069	0.034 U	0.0084 U	0.034 U	0.0086 U	0.034 U	0.0084 U	0.11	0.04	0.034 U	0.0086 U	0.15	0.022	0.034 U	0.0086 U	0.034 U	0.0063 U	0.034 U	0.013 U
GWM-OA	02/16/07	0.051	0.0094	0.04 U	0.0099 U	0.041	0.01	0.052	0.013	0.04 U	0.015 U	0.04 U	0.01 U	0.15	0.023	0.04 U	0.01 U	0.044	0.0082	0.04 U	0.016 U
GWM-OA	05/31/07	0.04	0.0073	0.037 U	0.0092 U	0.037 U	0.0094 U	0.041	0.01	0.05	0.019	0.037 U	0.0094 U	0.085	0.013	0.037 U	0.0094 U	0.12	0.022	0.037 U	0.015 U
MKA-OA	08/31/05	0.21	0.038	0.083 U	0.02 U	0.083 U	0.021 U	0.083 U	0.02 U	0.083 U	0.031 U	0.083 U	0.021 U	0.083 U	0.012 U	0.083 U	0.021 U	1.6	0.29	0.083 U	0.032 U
MKA-OA	11/09/05	0.14 J	0.026 J	0.032 UJ	0.0078 UJ	0.038 J	0.0096 J	0.044 J	0.011 J	0.032 UJ	0.012 UJ	0.032 UJ	0.008 UJ	0.38 J	0.056 J	0.032 UJ	0.008 UJ	0.2 J	0.038 J	0.032 UJ	0.012 UJ

Sample ID (####-XX-OA-ZZ)	Compound	1,1,1-TCA		1,1-DCA		1,1-DCE		1,2-DCA		Chloroethane		cis-1,2-DCE		PCE		trans-1,2-DCE		TCE		Vinyl Chloride	
	Sample Date	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv
MKA-OA	03/23/06	0.12	0.021	0.037 U	0.009 U	0.037 U	0.0092 U	0.05	0.012	0.037 U	0.014 U	0.037 U	0.0092 U	0.19	0.029	0.037 U	0.0092 U	0.37	0.069	0.037 U	0.014 U
MKA-OA	06/07/06	0.093	0.017	0.039 U	0.0096 U	0.039 U	0.0098 U	0.039 U	0.0096 U	0.041	0.015	0.039 U	0.0098 U	0.06	0.0088	0.039 U	0.0098 U	0.49	0.09	0.039 U	0.015 U
MKA-OA	09/09/06	0.039 U	0.0072 U	0.039 U	0.0097 U	0.039 U	0.0099 U	0.039 U	0.0097 U	0.039 U	0.015 U	0.039 U	0.0099 U	0.039 U	0.0058 U	0.039 U	0.0099 U	0.37	0.069	0.039 U	0.015 U
MKA-OA	02/16/07	0.052	0.0095	0.034 U	0.0083 U	0.034 U	0.0085 U	0.044	0.011	0.034 U	0.013 U	0.034 U	0.0085 U	0.18	0.027	0.034 U	0.0085 U	0.036	0.0068	0.034 U	0.013 U
MKA-OA	05/31/07	0.042 U	0.0077 U	0.042 U	0.01 U	0.042 U	0.011 U	0.042 U	0.01 U	0.042 U	0.016 U	0.042 U	0.011 U	0.051	0.0076	0.042 U	0.011 U	0.042 U	0.0078 U	0.042 U	0.016 U
MKA-OA (Dup)	05/31/07	0.037 U	0.0067 U	0.037 U	0.0091 U	0.037 U	0.0093 U	0.059	0.015	0.037 U	0.014 U	0.037 U	0.0093 U	0.049	0.0072	0.037 U	0.0093 U	0.037 U	0.0068 U	0.037 U	0.014 U
SGS-OA	08/31/05	0.091	0.017	0.037 U	0.009 U	0.037 U	0.0092 U	0.037 U	0.009 U	0.037 U	0.014 U	0.037 U	0.0092 U	0.037 U	0.0054 U	0.037 U	0.0092 U	0.037 U	0.0068 U	0.037 U	0.014 U
SGS-OA	11/09/05	0.13	0.023	0.039 U	0.0096 U	0.039 U	0.0098 U	0.039 U	0.0096 U	0.039 U	0.015 U	0.039 U	0.0098 U	0.33	0.048	0.039 U	0.0098 U	0.34	0.064	0.039 U	0.015 U
SGS-OA	03/23/06	0.12	0.022	0.042 U	0.01 U	0.042 U	0.011 U	0.048	0.012	0.042 U	0.016 U	0.042 U	0.011 U	0.16	0.024	0.042 U	0.011 U	0.15	0.029	0.042 U	0.016 U
SGS-OA	06/07/06	0.092	0.017	0.033 U	0.008 U	0.033 U	0.0082 U	0.035	0.0086	0.033 U	0.012 U	0.033 U	0.0082 U	0.042	0.0062	0.033 U	0.0082 U	0.033 U	0.0061 U	0.033 U	0.013 U
SGS-OA	09/08/06	0.039 U	0.0071 U	0.039 U	0.0095 U	0.039 U	0.0097 U	0.039 U	0.0095 U	0.039 U	0.015 U	0.039 U	0.0097 U	0.039 U	0.0057 U	0.039 U	0.0097 U	0.18	0.033	0.039 U	0.015 U
SGS-OA	02/16/07	0.051	0.0094	0.038 U	0.0095 U	0.038 U	0.0097 U	0.044	0.011	0.038 U	0.015 U	0.038 U	0.0097 U	0.097	0.014	0.038 U	0.0097 U	0.038 U	0.0071 U	0.038 U	0.015 U
SGS-OA	05/31/07	0.04 U	0.0072 U	0.04 U	0.0098 U	0.04 U	0.01 U	0.04 U	0.0098 U	0.04 U	0.015 U	0.04 U	0.01 U	0.059	0.0087	0.04 U	0.01 U	0.04 U	0.0074 U	0.04 U	0.015 U
SMC-OA	08/31/05	0.042	0.0076	0.038 U	0.0094 U	0.038 U	0.0096 U	0.038 U	0.0094 U	0.038 U	0.014 U	0.038 U	0.0096 U	0.038 U	0.0056 U	0.038 U	0.0096 U	0.038 U	0.0071 U	0.038 U	0.015 U
SMC-OA	11/09/05	0.12	0.022	0.039 U	0.0097 U	0.039 U	0.0099 U	0.039 U	0.0097 U	0.039 U	0.015 U	0.039 U	0.0099 U	2.4	0.36	0.039 U	0.0099 U	0.23	0.043	0.039 U	0.015 U
SMC-OA	03/23/06	0.12	0.022	0.031 U	0.0077 U	0.031 U	0.0079 U	0.051	0.013	0.031 U	0.012 U	0.031 U	0.0079 U	0.21	0.032	0.031 U	0.0079 U	0.32	0.06	0.031 U	0.012 U
SMC-OA	06/07/06	0.091	0.017	0.037 U	0.009 U	0.037 U	0.0092 U	0.037 U	0.009 U	0.037 U	0.014 U	0.037 U	0.0092 U	0.047	0.0069	0.037 U	0.0092 U	0.05	0.0092	0.037 U	0.014 U
SMC-OA	09/08/06	0.039 U	0.0072 U	0.039 U	0.0096 U	0.039 U	0.0098 U	0.039 U	0.0096 U	0.039 U	0.015 U	0.039 U	0.0098 U	0.043	0.0064	0.039 U	0.0098 U	0.21	0.04	0.039 U	0.015 U
SMC-OA	02/17/07	0.17	0.031	0.23	0.058	0.088	0.022	0.062	0.015	0.033 U	0.013 U	0.25	0.063	0.58	0.085	0.033 U	0.0083 U	0.5	0.094	0.033 U	0.013 U
SMC-OA	05/31/07	0.04	0.0073	0.037 U	0.0091 U	0.037 U	0.0093 U	0.071	0.017	0.037 U	0.014 U	0.037 U	0.0093 U	0.08	0.012	0.037 U	0.0093 U	0.12	0.023	0.037 U	0.014 U

NOTES:

Sample IDs

OA = Outdoor Air

ZZ = Sample Location or Type (24 = 24 Hour Sample, GB = Grab Sample)

Other Outdoor Air Sample IDs: 31-ONST = W 31st St on street, CM-AS = Cadet Manufaturing Air Sparging system, CM-MW = Cadet Manufaturing Monitoring Well, Fram = La Frambois Rd on street, RGRW = Recirculating Groundwater Remediation Well

Units

µg/m^3 = micrograms per cubic meter

ppbv = parts per billion volume (compound concentrations converted from µg/m^3 to ppbv using ideal gas constant at 25ºC and compound molecular weight)

Miscellaneous

(Dup) = Field Duplicate

Data Qualifiers

U = Not detected at or above the method reporting limit.

UJ = Not detected at or above the method reporting limit. However, the method reporting limit value is uncertain.

J = The analyte was positively identified but the associated value is approximate.

N = Indicates an analyte has been tentatively identified but not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Compounds

1,1,1-TCA = 1,1,1-Trichloroethane
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,2-DCA = 1,2-Dichloroethane
cis-1,2-DCE = cis-1,2-Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene

Sample location is within shallow TCE/PCE plume
Sample was a grab sample; not consistent with other data collection methods
Sample had high detection limit
QA/QC indicated rejected data
Sample location near discharge of air stripping tower at Great Western Malting
Sample location is near ST Services shallow plume

TABLE 2: SELECTED OUTDOOR AIR SAMPLE RESULTS AND PRIMARY WIND DIRECTION

Sample ID (####-XX-OA-ZZ)	Compound	1,1,1-TCA		1,1-DCA		1,1-DCE		1,2-DCA		Chloroethane		cis-1,2-DCE		PCE		trans-1,2-DCE		TCE		Vinyl Chloride		Wind Direction Pearson Field Data
	Sample Date	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	
1616-31-OA-24	07/21/04			0.13 U	0.032 U	0.065 U	0.016 U			0.08 J	0.03 J			0.9	0.13	0.65 U	0.16 U	0.13	0.024	0.042 U	0.016 U	Northwest
1616-31-OA-24	01/06/05	0.11	0.02	0.036 U	0.0089 U	0.0063 J	0.0016 J	0.037	0.0091	0.019 J	0.0072 J	0.036 U	0.0091 U	0.18	0.027	0.0055 J	0.0014 J	0.11	0.02	0.036 U	0.014 U	Southeast
1616-31-OA-24	02/25/05	0.11	0.02	0.036 U	0.0089 U	0.0093	0.0023	0.034	0.0084	0.022	0.0083	0.036 U	0.0091 U	0.34	0.05	0.0069	0.0017	0.099	0.018	0.036 U	0.014 U	Southwest/Southeast
1616-31-OA-24	06/15/05	0.097	0.018	0.039 U	0.0096 U	0.0068	0.0017	0.029	0.0072	0.026	0.0099	0.039 U	0.0098 U	0.041	0.006	0.039 U	0.0098 U	0.0096	0.0018	0.039 U	0.015 U	Northwest
1616-31-OA-24	08/31/05	0.093	0.017	0.034 U	0.0084 U	0.0096 J	0.0024 J	0.02 J	0.0049 J	0.019 UJ	0.0072 UJ	0.034 U	0.0086 U	0.038	0.0056	0.034 U	0.0086 U	0.0061 J	0.0011 J	0.034 U	0.013 U	Northwest
1616-31-OA	09/13/07	0.056	0.01	0.034 U	0.0083 U	0.034 U	0.0085 U	0.034 U	0.0083 U	0.034 U	0.013 U	0.034 U	0.0085 U	0.1	0.015	0.034 U	0.0085 U	0.034 U	0.0063 U	0.034 U	0.013 U	Northwest/Southeast
1616-31-OA	09/15/07	0.062	0.011	0.038 U	0.0094 U	0.038 U	0.0096 U	0.04	0.0098	0.038 U	0.014 U	0.038 U	0.0096 U	0.077	0.011	0.038 U	0.0096 U	0.038 U	0.0071 U	0.038 U	0.015 U	Northwest
1616-31-OA	09/20/07	0.069	0.013	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.17	0.025	0.037 U	0.0093 U	0.063	0.012	0.037 U	0.014 U	Northwest
1616-31-OA	09/30/07	0.062	0.011	0.036 U	0.0089 U	0.036 U	0.0091 U	0.036 U	0.0089 U	0.036 U	0.014 U	0.036 U	0.0091 U	0.057	0.0084	0.036 U	0.0091 U	0.036 U	0.0067 U	0.036 U	0.014 U	Southeast
1616-31-OA	12/18/07	0.064	0.012	0.044 U	0.011 U	0.044 U	0.011 U	0.052	0.013	0.044 U	0.017 U	0.044 U	0.011 U	0.3	0.044	0.044 U	0.011 U	0.044 U	0.0081 U	0.044 U	0.017 U	Southeast
1616-31-OA	12/19/07	0.077	0.014	0.036 U	0.0088 U	0.036 U	0.009 U	0.038	0.0094	0.036 U	0.014 U	0.036 U	0.009 U	0.072	0.011	0.036 U	0.009 U	0.036 U	0.0067 U	0.036 U	0.014 U	Southeast
1616-31-OA	12/21/07	0.071	0.013	0.039 U	0.0097 U	0.039 U	0.0099 U	0.04	0.0099	0.039 U	0.015 U	0.039 U	0.0099 U	0.4	0.059	0.039 U	0.0099 U	0.099	0.018	0.039 U	0.015 U	West/East
3301-FR-OA-24	01/25/02	0.56	0.1			0.063 U	0.016 U					0.005	0.0013	0.11	0.016			0.11	0.02	0.011	0.0043	South
CM-MW-09s-OA	09/08/02	0.14	0.026	1.5 U	0.37 U	0.076 U	0.019 U	0.018	0.0044	0.068 U	0.026 U	1.5 U	0.38 U	0.073	0.011	1.5 U	0.38 U	0.078	0.015	0.3 U	0.12 U	North-Northwest
CM-MW-09s-OA	10/02/03	0.15	0.027	0.0036	0.00088	0.04 U	0.01 U	0.024	0.0059	0.021	0.008	0.04 U	0.01 U	0.12	0.018	0.04 U	0.01 U	0.085	0.016	0.04 U	0.016 U	Northwest
CM-MW-09s-OA	01/30/04	0.13	0.024	0.14	0.035	0.0065	0.0016	0.034	0.0084	0.034 U	0.013 U	0.046 U	0.012 U	0.062	0.0091	0.046 U	0.012 U	0.033 U	0.0061 U	0.046 U	0.018 U	Southwest
CM-MW-09s-OA	07/21/04	0.12 J	0.022 J	0.13 U	0.032 U	0.066 U	0.017 U			0.044 J	0.017 J	0.13 U	0.033 U			0.66 U	0.17 U	0.027 U	0.005 U	0.043 U	0.017 U	Northwest
CM-MW-09s-OA	01/06/05	0.11	0.02	0.033 U	0.0081 U	0.0039 J	0.00098 J	0.037	0.0091	0.013 J	0.0049 J	0.033 U	0.0083 U	0.19	0.028	0.033 U	0.0083 U	0.19	0.035	0.033 U	0.013 U	Southeast
CM-MW-09s-OA	02/25/05	0.11	0.02	0.039 U	0.0096 U	0.01	0.0025	0.049	0.012	0.25	0.095	0.039 U	0.0098 U	0.32	0.047	0.039 U	0.0098 U	0.22	0.041	0.039 U	0.015 U	Southeast/Southwest
CM-MW-09s-OA	06/15/05	0.11	0.02	0.038 U	0.0094 U	0.0066	0.0017	0.036	0.0089	0.036	0.014	0.038 U	0.0096 U	0.059	0.0087	0.038 U	0.0096 U	0.0094	0.0017	0.038 U	0.015 U	Northwest
CM-MW-09s-OA	02/16/07	0.051	0.0094	0.032 U	0.008 U	0.032 U	0.0081 U	0.043	0.011	0.067	0.026	0.032 U	0.0081 U	0.11	0.017	0.032 U	0.0081 U	0.032 U	0.006 U	0.032 U	0.013 U	Southwest/Southeast
CM-MW-09s-OA	05/31/07	0.051 UJ	0.0094 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.019 UJ	0.051 UJ	0.013 UJ	0.094 J	0.014 J	0.051 UJ	0.013 UJ	0.21 J	0.04 J	0.051 UJ	0.02 UJ	Northwest
CM-MW-09s-OA	09/13/07	0.055	0.01	0.04 U	0.0099 U	0.04 U	0.01 U	0.04 U	0.0099 U	0.04 U	0.015 U	0.04 U	0.01 U	0.089	0.013	0.04 U	0.01 U	0.04 U	0.0075 U	0.04 U	0.016 U	Northwest/Southeast
CM-MW-09s-OA	09/15/07	0.057	0.011	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.068	0.01	0.037 U	0.0093 U	0.037 U	0.0069 U	0.037 U	0.014 U	Northwest
CM-MW-09s-OA	09/20/07	0.061	0.011	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.088	0.013	0.037 U	0.0093 U	0.037 U	0.0068 U	0.037 U	0.014 U	Northwest
CM-MW-09s-OA	09/30/07	0.06 J	0.011 J	0.047 UJ	0.012 UJ	0.047 UJ	0.012 UJ	0.047 UJ	0.012 UJ	0.047 UJ	0.018 UJ	0.047 UJ	0.012 UJ	0.099 J	0.015 J	0.047 UJ	0.012 UJ	0.047 UJ	0.0087 UJ	0.047 UJ	0.018 UJ	Southeast
CM-MW-09s-OA (Dup)	09/30/07	0.061	0.011	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.092	0.014	0.037 U	0.0093 U	0.037 U	0.0068 U	0.037 U	0.014 U	Southeast
CM-MW-09s-OA	12/07/07	0.055	0.01	0.038 U	0.0095 U	0.038 U	0.0097 U	0.038 U	0.0095 U	0.038 U	0.015 U	0.038 U	0.0097 U	0.082	0.012	0.038 U	0.0097 U	0.038 U	0.0071 U	0.038 U	0.015 U	Northwest
CM-MW-09s-OA	12/18/07	0.063	0.012	0.037 U	0.0091 U	0.037 U	0.0093 U	0.04	0.01	0.037 U	0.014 U	0.037 U	0.0093 U	0.065	0.0096	0.037 U	0.0093 U	0.037 U	0.0068 U	0.037 U	0.014 U	Southeast
CM-MW-09s-OA	12/19/07	0.061	0.011	0.036 U	0.0088 U	0.036 U	0.009 U	0.039	0.0096	0.036 U	0.014 U	0.036 U	0.009 U	0.058	0.0085	0.036 U	0.009 U	0.036 U	0.0067 U	0.036 U	0.014 U	Southeast
CM-MW-09s-OA	12/21/07	0.067	0.012	0.036 U	0.0088 U	0.036 U	0.009 U	0.04	0.0098	0.036 U	0.013 U	0.036 U	0.009 U	0.16	0.024	0.036 U	0.009 U	0.069	0.013	0.036 U	0.014 U	West/East
CM-MW-09s-OA	01/04/08	0.06	0.011	0.04 U	0.0098 U	0.04 U	0.01 U	0.04	0.01	0.04 U	0.015 U	0.04 U	0.01 U	0.094	0.014	0.04 U	0.01 U	0.04 U	0.0074 U	0.04 U	0.016 U	Southeast
CM-MW-21i-OA	02/16/07	0.053	0.0096	0.036 U	0.0089 U	0.036 U	0.0091 U	0.046	0.011	0.036 U	0.014 U	0.036 U	0.0091 U	0.12	0.018	0.036 U	0.0091 U	0.057	0.011	0.036 U	0.014 U	Southeast/Southwest
CM-MW-21i-OA	05/31/07	0.037 U	0.0068 U	0.037 U	0.0091 U	0.037 U	0.0093 U	0.046	0.011	0.037 U	0.014 U	0.037 U	0.0093 U	0.066	0.0097	0.037 U	0.0093 U	0.037 U	0.0069 U	0.037 U	0.014 U	Northwest
FRAM-OA	02/16/07	0.05	0.0091	0.032 U	0.008 U	0.032 U	0.0081 U	0.043	0.011	0.032 U	0.012 U	0.032 U	0.0081 U	0.088	0.013	0.032 U	0.0081 U	0.032 U	0.006 U	0.032 U	0.013 U	Southwest/Southeast
FRAM-OA	05/31/07	0.036	0.0065	0.031 U	0.0076 U	0.031 U	0.0078 U	0.047	0.012	0.031 U	0.012 U	0.031 U	0.0078 U	0.11	0.016	0.031 U	0.0078 U	0.031 U	0.0057 U	0.031 U	0.012 U	Northwest
FRAM-OA	09/13/07	0.05	0.0092	0.035 U	0.0086 U	0.035 U	0.0088 U	0.047	0.012	0.035 U	0.013 U	0.035 U	0.0088 U	0.077	0.011	0.035 U	0.0088 U	0.056	0.01	0.035 U	0.014 U	Northwest/Southeast
FRAM-OA	09/15/07	0.077	0.014	0.038 U	0.0093 U	0.038 U	0.0095 U	0.043	0.011	0.038 U	0.014 U	0.038 U	0.0095 U	0.11	0.017	0.038 U	0.0095 U	0.075	0.014	0.038 U	0.015 U	Northwest
FRAM-OA	09/20/07	0.059 J	0.011 J	0.03 UJ	0.0073 UJ	0.03 UJ	0.0074 UJ	0.03 UJ	0.0073 UJ	0.03 UJ	0.011 UJ	0.03 UJ	0.0074 UJ	0.056 J	0.0082 J	0.03 UJ	0.0074 UJ	0.03 UJ	0.0055 UJ	0.03 UJ	0.012 UJ	Northwest
FRAM-OA	09/30/07	0.06	0.011	0.041 U	0.01 U	0.041 U	0.01 U	0.041 U	0.01 U	0.041 U	0.015 U	0.041 U	0.01 U	0.064	0.0095	0.041 U	0.01 U	0.041 U	0.0076 U	0.041 U	0.016 U	Southeast
FRAM-OA	12/18/07	0.064	0.012	0.033 U	0.0082 U	0.033 U	0.0083 U	0.04	0.01	0.033 U	0.013 U	0.033 U	0.0083 U	0.098	0.014	0.033 U	0.0083 U	0.033 U	0.0061 U	0.033 U	0.013 U	Southeast
FRAM-OA	12/19/07	0.063	0.012	0.036 U	0.0089 U	0.036 U	0.0091 U	0.039	0.0097	0.036 U	0.014 U	0.036 U	0.0091 U	0.059	0.0087	0.036 U	0.0091 U	0.036 U	0.0067 U	0.036 U	0.014 U	Southeast
FRAM-OA	12/21/07	0.069	0.013	0.037 U	0.0092 U	0.037 U	0.0094 U	0.042	0.01	0.037 U	0.014 U	0.037 U	0.0094 U	0.17	0.025	0.037 U	0.0094 U	0.061	0.011	0.037 U	0.015 U	West/East

Potentially rejected due to primary wind direction

Sample ID (####-XX-OA-ZZ)	Compound	1,1,1-TCA		1,1-DCA		1,1-DCE		1,2-DCA		Chloroethane		cis-1,2-DCE		PCE		trans-1,2-DCE		TCE		Vinyl Chloride		Wind Direction
	Sample Date	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	Pearson Field Data

NOTES:

Sample IDs

OA = Outdoor Air

ZZ = Sample Location or Type (24 = 24 Hour Sample, GB = Grab Sample)

Other Outdoor Air Sample IDs: 31-ONST = W 31st St on street, CM-AS = Cadet Manufaturing Air Sparging system, CM-MW = Cadet Manufaturing Monitoring Well, Fram = La Frambois Rd on street, RGRW = Recirculating Groundwater Remediation Well

Units

µg/m^3 = micrograms per cubic meter

ppbv = parts per billion volume (compound concentrations converted from µg/m^3 to ppbv using ideal gas constant at 25ºC and compound molecular weight)

Miscellaneous

(Dup) = Field Duplicate

Data Qualifiers

U = Not detected at or above the method reporting limit.

UJ = Not detected at or above the method reporting limit. However, the method reporting limit value is uncertain.

J = The analyte was positively identified but the associated value is approximate.

N = Indicates an analyte has been tentatively identified but not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Compounds

1,1,1-TCA = 1,1,1-Trichloroethane
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,2-DCA = 1,2-Dichloroethane
cis-1,2-DCE = cis-1,2-Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene

TABLE 3: PROPOSED OUTDOOR AIR DATA SET TO BE USED FOR BACKGROUND CALCULATION

Sample ID (####-XX-OA-ZZ)	Compound	1,1,1-TCA		1,1-DCA		1,1-DCE		1,2-DCA		Chloroethane		cis-1,2-DCE		PCE		trans-1,2-DCE		TCE		Vinyl Chloride		Wind Direction
	Sample Date	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	µg/m^3	ppbv	Pearson Field Data
1616-31-OA-24	07/21/04			0.13 U	0.032 U	0.065 U	0.016 U			0.08 J	0.03 J			0.9	0.13	0.65 U	0.16 U	0.13	0.024	0.042 U	0.016 U	Northwest
1616-31-OA-24	01/06/05	0.11	0.02	0.036 U	0.0089 U	0.0063 J	0.0016 J	0.037	0.0091	0.019 J	0.0072 J	0.036 U	0.0091 U	0.18	0.027	0.0055 J	0.0014 J	0.11	0.02	0.036 U	0.014 U	Southeast
1616-31-OA-24	06/15/05	0.097	0.018	0.039 U	0.0096 U	0.0068	0.0017	0.029	0.0072	0.026	0.0099	0.039 U	0.0098 U	0.041	0.006	0.039 U	0.0098 U	0.0096	0.0018	0.039 U	0.015 U	Northwest
1616-31-OA-24	08/31/05	0.093	0.017	0.034 U	0.0084 U	0.0096 J	0.0024 J	0.02 J	0.0049 J	0.019 UJ	0.0072 UJ	0.034 U	0.0086 U	0.038	0.0056	0.034 U	0.0086 U	0.0061 J	0.0011 J	0.034 U	0.013 U	Northwest
1616-31-OA	09/15/07	0.062	0.011	0.038 U	0.0094 U	0.038 U	0.0096 U	0.04	0.0098	0.038 U	0.014 U	0.038 U	0.0096 U	0.077	0.011	0.038 U	0.0096 U	0.038 U	0.0071 U	0.038 U	0.015 U	Northwest
1616-31-OA	09/20/07	0.069	0.013	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.17	0.025	0.037 U	0.0093 U	0.063	0.012	0.037 U	0.014 U	Northwest
CM-MW-09s-OA	09/08/02	0.14	0.026	1.5 U	0.37 U	0.076 U	0.019 U	0.018	0.0044	0.068 U	0.026 U	1.5 U	0.38 U	0.073	0.011	1.5 U	0.38 U	0.078	0.015	0.3 U	0.12 U	North-Northwest
CM-MW-09s-OA	10/02/03	0.15	0.027	0.0036	0.00088	0.04 U	0.01 U	0.024	0.0059	0.021	0.008	0.04 U	0.01 U	0.12	0.018	0.04 U	0.01 U	0.085	0.016	0.04 U	0.016 U	Northwest
CM-MW-09s-OA	01/30/04	0.13	0.024	0.14	0.035	0.0065	0.0016	0.034	0.0084	0.034 U	0.013 U	0.046 U	0.012 U	0.062	0.0091	0.046 U	0.012 U	0.033 U	0.0061 U	0.046 U	0.018 U	Southwest
CM-MW-09s-OA	07/21/04	0.12 J	0.022 J	0.13 U	0.032 U	0.066 U	0.017 U	0.1 N	0.025 N	0.044 J	0.017 J	0.13 U	0.033 U			0.66 U	0.17 U	0.027 U	0.005 U	0.043 U	0.017 U	Northwest
CM-MW-09s-OA	06/15/05	0.11	0.02	0.038 U	0.0094 U	0.0066	0.0017	0.036	0.0089	0.036	0.014	0.038 U	0.0096 U	0.059	0.0087	0.038 U	0.0096 U	0.0094	0.0017	0.038 U	0.015 U	Northwest
CM-MW-09s-OA	05/31/07	0.051 UJ	0.0094 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.013 UJ	0.051 UJ	0.019 UJ	0.051 UJ	0.013 UJ	0.094 J	0.014 J	0.051 UJ	0.013 UJ	0.21 J	0.04 J	0.051 UJ	0.02 UJ	Northwest
CM-MW-09s-OA	09/13/07	0.055	0.01	0.04 U	0.0099 U	0.04 U	0.01 U	0.04 U	0.0099 U	0.04 U	0.015 U	0.04 U	0.01 U	0.089	0.013	0.04 U	0.01 U	0.04 U	0.0075 U	0.04 U	0.016 U	Northwest/Southeast
CM-MW-09s-OA	09/15/07	0.057	0.011	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.068	0.01	0.037 U	0.0093 U	0.037 U	0.0069 U	0.037 U	0.014 U	Northwest
CM-MW-09s-OA	09/20/07	0.061	0.011	0.037 U	0.0091 U	0.037 U	0.0093 U	0.037 U	0.0091 U	0.037 U	0.014 U	0.037 U	0.0093 U	0.088	0.013	0.037 U	0.0093 U	0.037 U	0.0068 U	0.037 U	0.014 U	Northwest
CM-MW-09s-OA	12/07/07	0.055	0.01	0.038 U	0.0095 U	0.038 U	0.0097 U	0.038 U	0.0095 U	0.038 U	0.015 U	0.038 U	0.0097 U	0.082	0.012	0.038 U	0.0097 U	0.038 U	0.0071 U	0.038 U	0.015 U	Northwest
CM-MW-21i-OA	05/31/07	0.037 U	0.0068 U	0.037 U	0.0091 U	0.037 U	0.0093 U	0.046	0.011	0.037 U	0.014 U	0.037 U	0.0093 U	0.066	0.0097	0.037 U	0.0093 U	0.037 U	0.0069 U	0.037 U	0.014 U	Northwest
FRAM-OA	05/31/07	0.036	0.0065	0.031 U	0.0076 U	0.031 U	0.0078 U	0.047	0.012	0.031 U	0.012 U	0.031 U	0.0078 U	0.11	0.016	0.031 U	0.0078 U	0.031 U	0.0057 U	0.031 U	0.012 U	Northwest
FRAM-OA	09/15/07	0.077	0.014	0.038 U	0.0093 U	0.038 U	0.0095 U	0.043	0.011	0.038 U	0.014 U	0.038 U	0.0095 U	0.11	0.017	0.038 U	0.0095 U	0.075	0.014	0.038 U	0.015 U	Northwest
FRAM-OA	09/20/07	0.059 J	0.011 J	0.03 UJ	0.0073 UJ	0.03 UJ	0.0074 UJ	0.03 UJ	0.0073 UJ	0.03 UJ	0.011 UJ	0.03 UJ	0.0074 UJ	0.056 J	0.0082 J	0.03 UJ	0.0074 UJ	0.03 UJ	0.0055 UJ	0.03 UJ	0.012 UJ	Northwest
FRAM-OA	12/21/07	0.069	0.013	0.037 U	0.0092 U	0.037 U	0.0094 U	0.042	0.01	0.037 U	0.014 U	0.037 U	0.0094 U	0.17	0.025	0.037 U	0.0094 U	0.061	0.011	0.037 U	0.015 U	West/East

NOTES:

Sample IDs

OA = Outdoor Air

ZZ = Sample Location or Type (24 = 24 Hour Sample, GB = Grab Sample)

Other Outdoor Air Sample IDs: 31-ONST = W 31st St on street, CM-AS = Cadet Manufaturing Air Sparging system, CM-MW = Cadet Manufaturing Monitoring Well, Fram = La Frambois Rd on street, RGRW = Recirculating Groundwater Remediation Well

Units

µg/m^3 = micrograms per cubic meter

ppbv = parts per billion volume (compound concentrations converted from µg/m^3 to ppbv using ideal gas constant at 25ºC and compound molecular weight)

Miscellaneous

(Dup) = Field Duplicate

Data Qualifiers

U = Not detected at or above the method reporting limit.

UJ = Not detected at or above the method reporting limit. However, the method reporting limit value is uncertain.

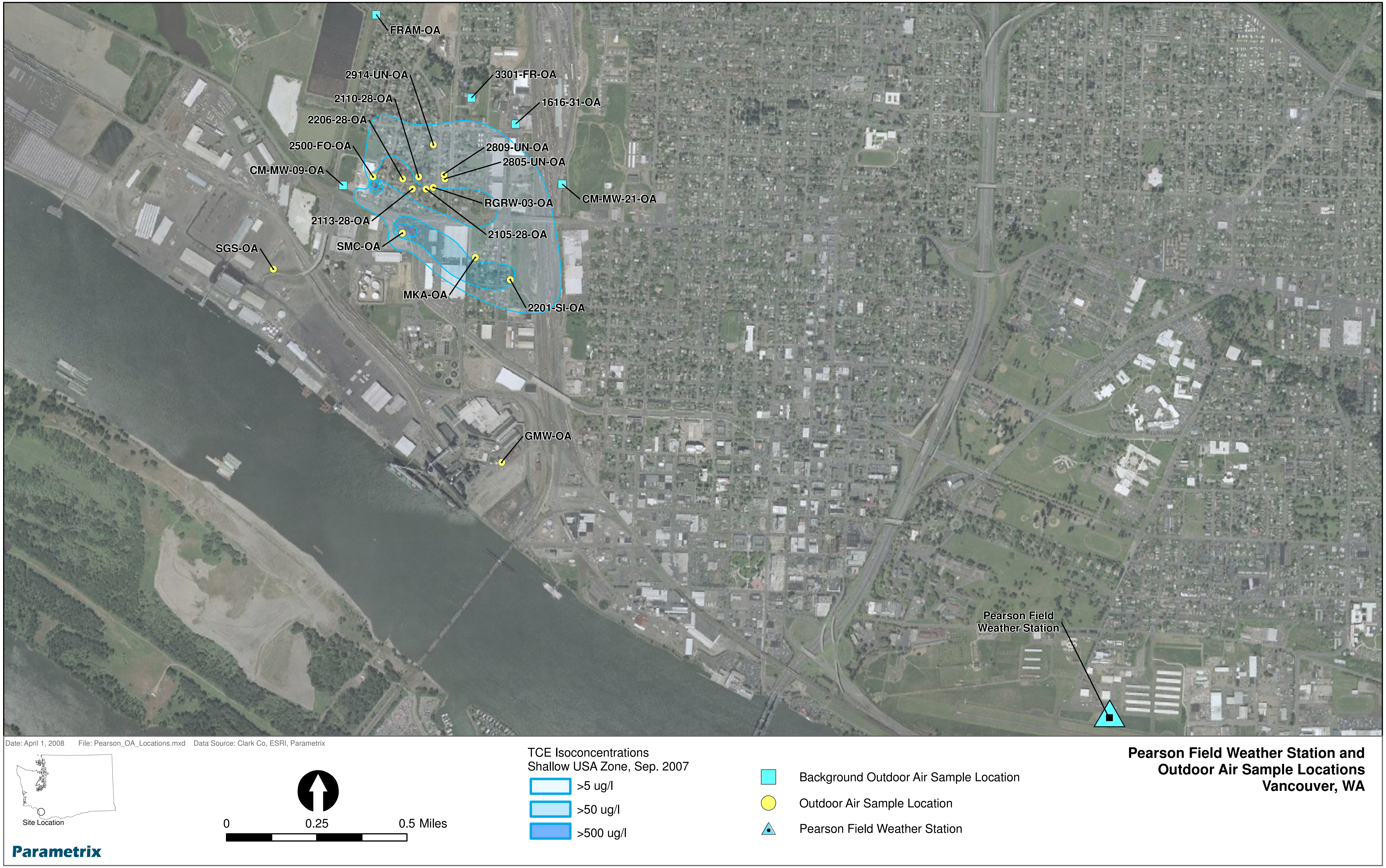
J = The analyte was positively identified but the associated value is approximate.

N = Indicates an analyte has been tentatively identified but not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Compounds

1,1,1-TCA = 1,1,1-Trichloroethane	cis-1,2-DCE = cis-1,2-Dichloroethene
1,1-DCA = 1,1-Dichloroethane	PCE = Tetrachloroethene
1,1-DCE = 1,1-Dichloroethene	TCE = Trichloroethene
1,2-DCA = 1,2-Dichloroethane	trans-1,2-DCE = trans-1,2-Dichloroethene



Date: April 1, 2008 File: Pearson_OA_Locations.mxd Data Source: Clark Co, ESRI, Parametrix

Parametrix

Pearson Field Weather Station and Outdoor Air Sample Locations Vancouver, WA

ATTACHMENT A

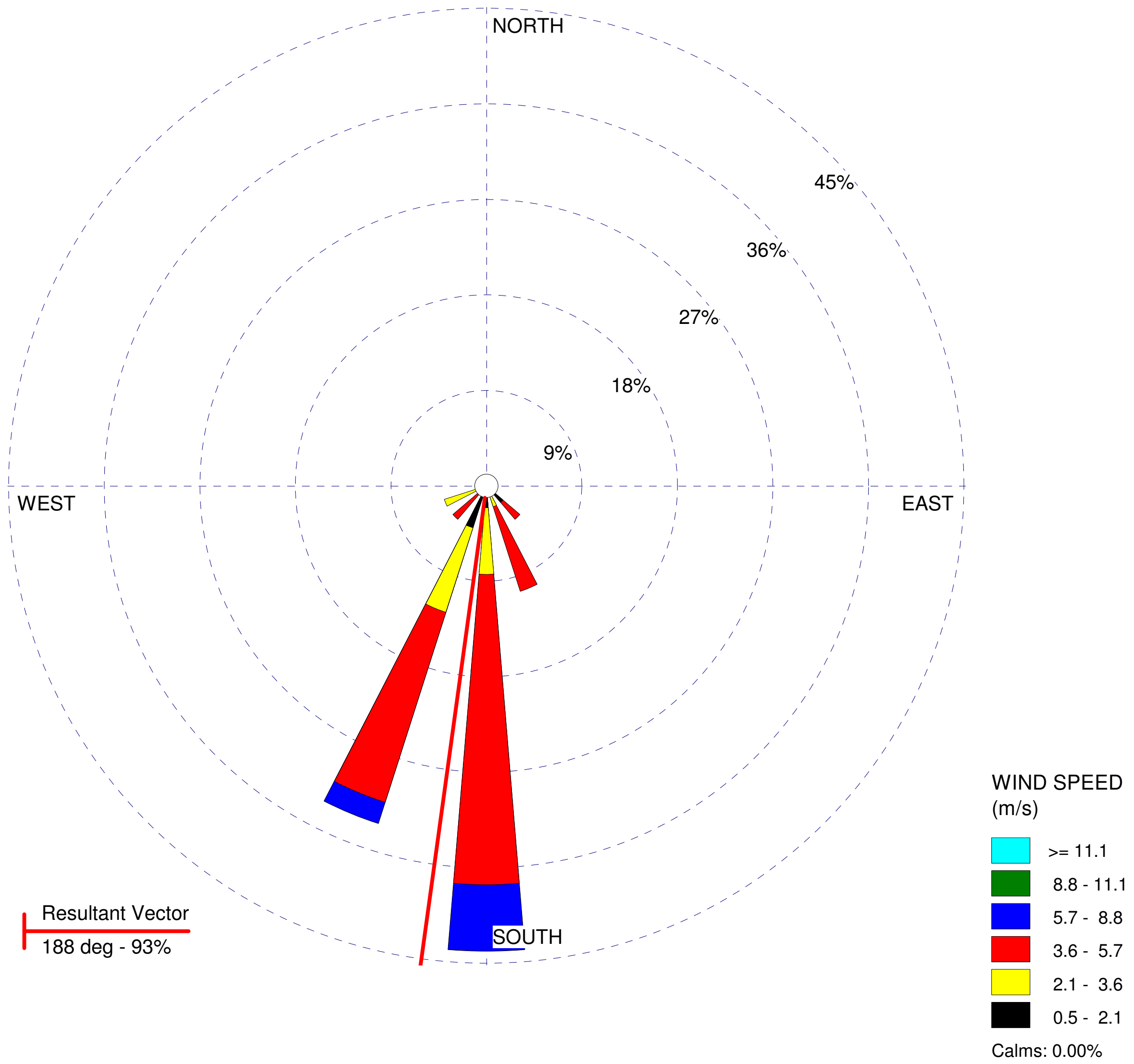
Wind Direction Rose Plots for Outdoor Air Sample Dates

WIND ROSE PLOT:

Wind Direction for Samples Collected on 1/25/2002

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
3301-FR-OA-24

DATA PERIOD:

2002
Jan 24 - Jan 25
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

188º

Parametrix

CALM WINDS:

0.00%

TOTAL COUNT:

48 hrs.

AVG. WIND SPEED:

3.94 m/s

PROJECT NO.:

275-1940-006

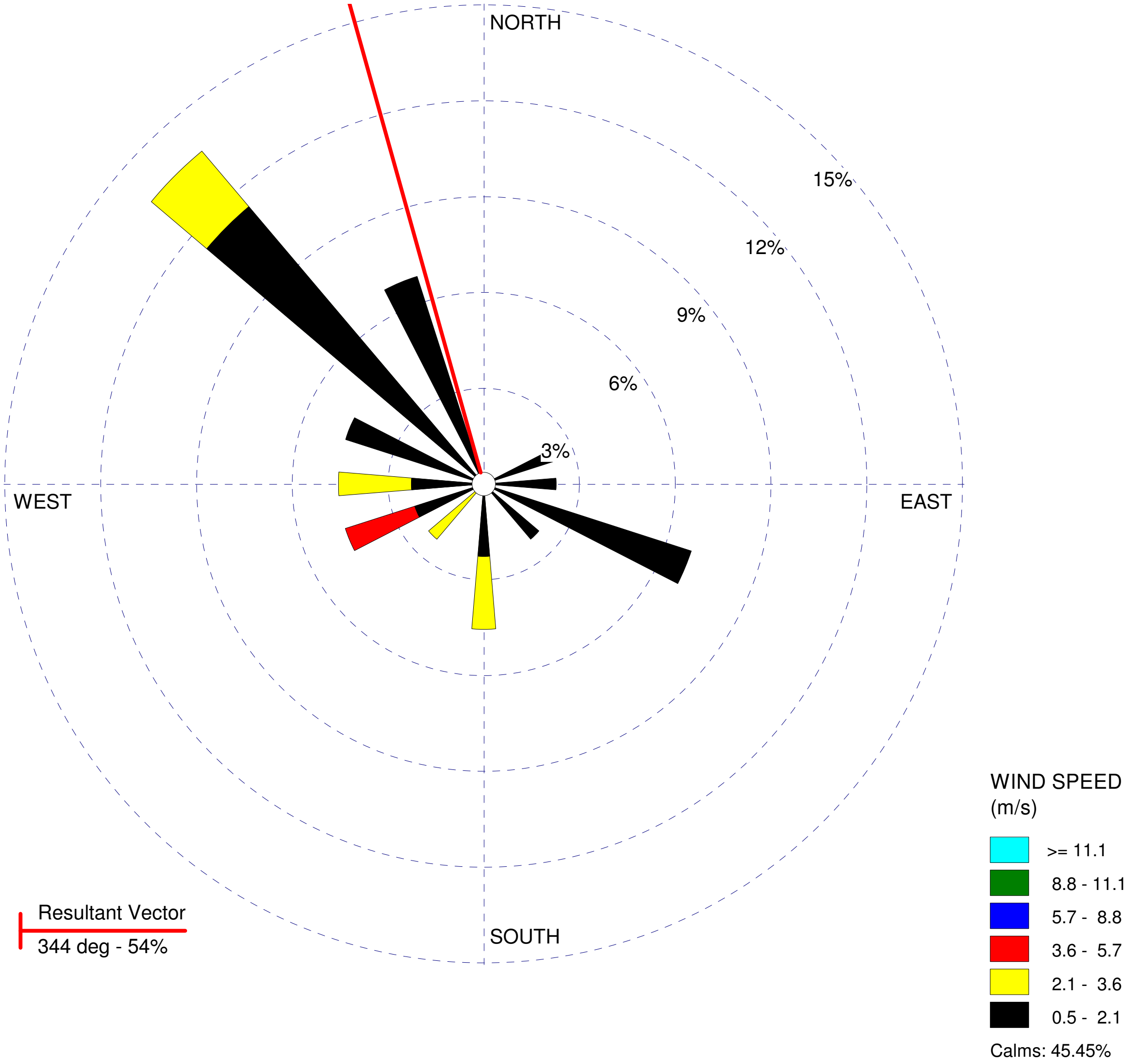
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 9/08/2002

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
CM-MW-09s-OA

DATA PERIOD:

2002
Sep 7 - Sep 8
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

334º

CALM WINDS:

45.45%

TOTAL COUNT:

44 hrs.

Parametrix

AVG. WIND SPEED:

1.09 m/s

PROJECT NO.:

275-1940-006

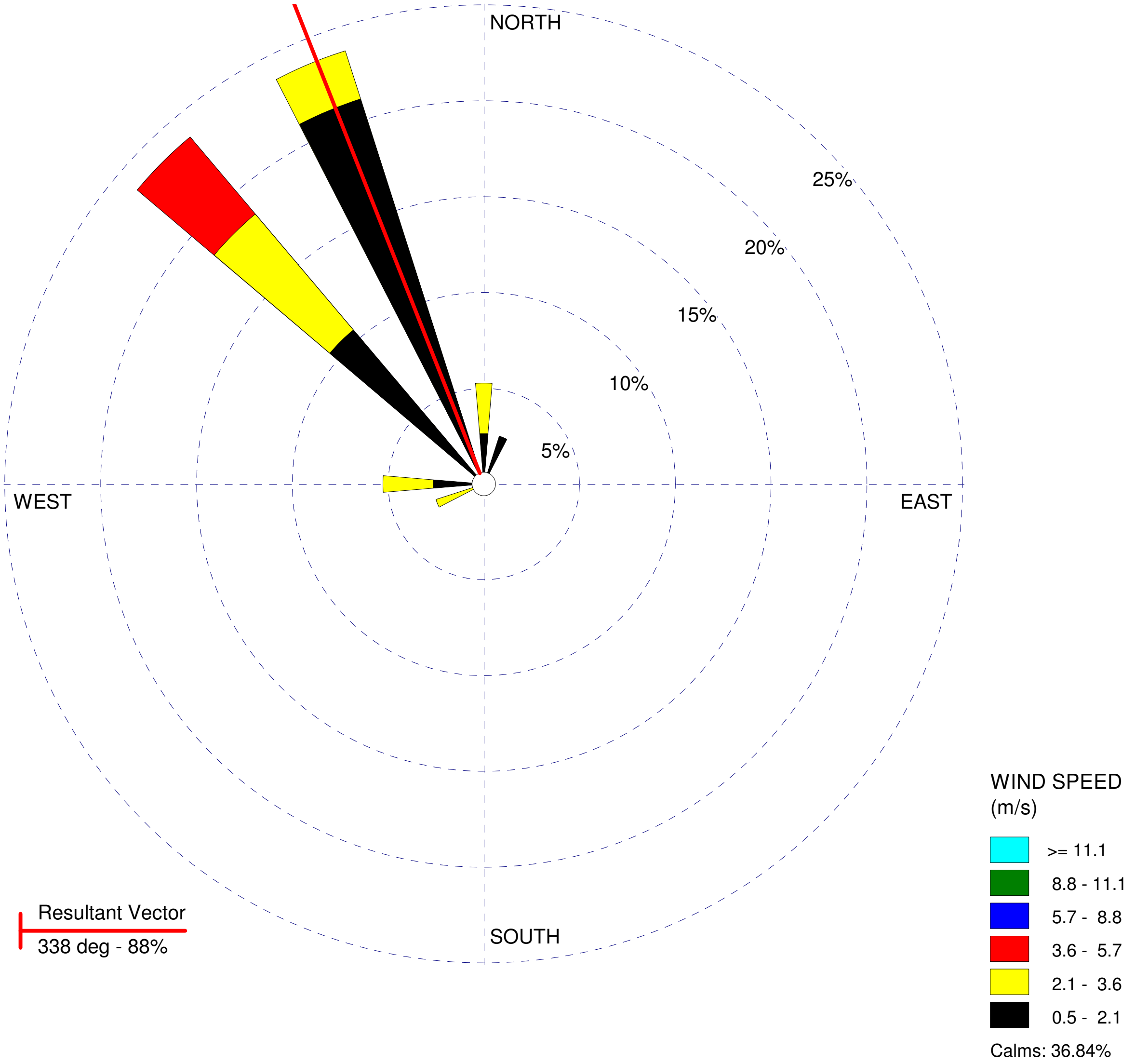
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 10/02/2003

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
CM-MW-09s-OA

DATA PERIOD:

2003
Oct 2 - Oct 3
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

338º

Parametrix

CALM WINDS:

36.84%

TOTAL COUNT:

38 hrs.

AVG. WIND SPEED:

1.45 m/s

PROJECT NO.:

275-1940-006

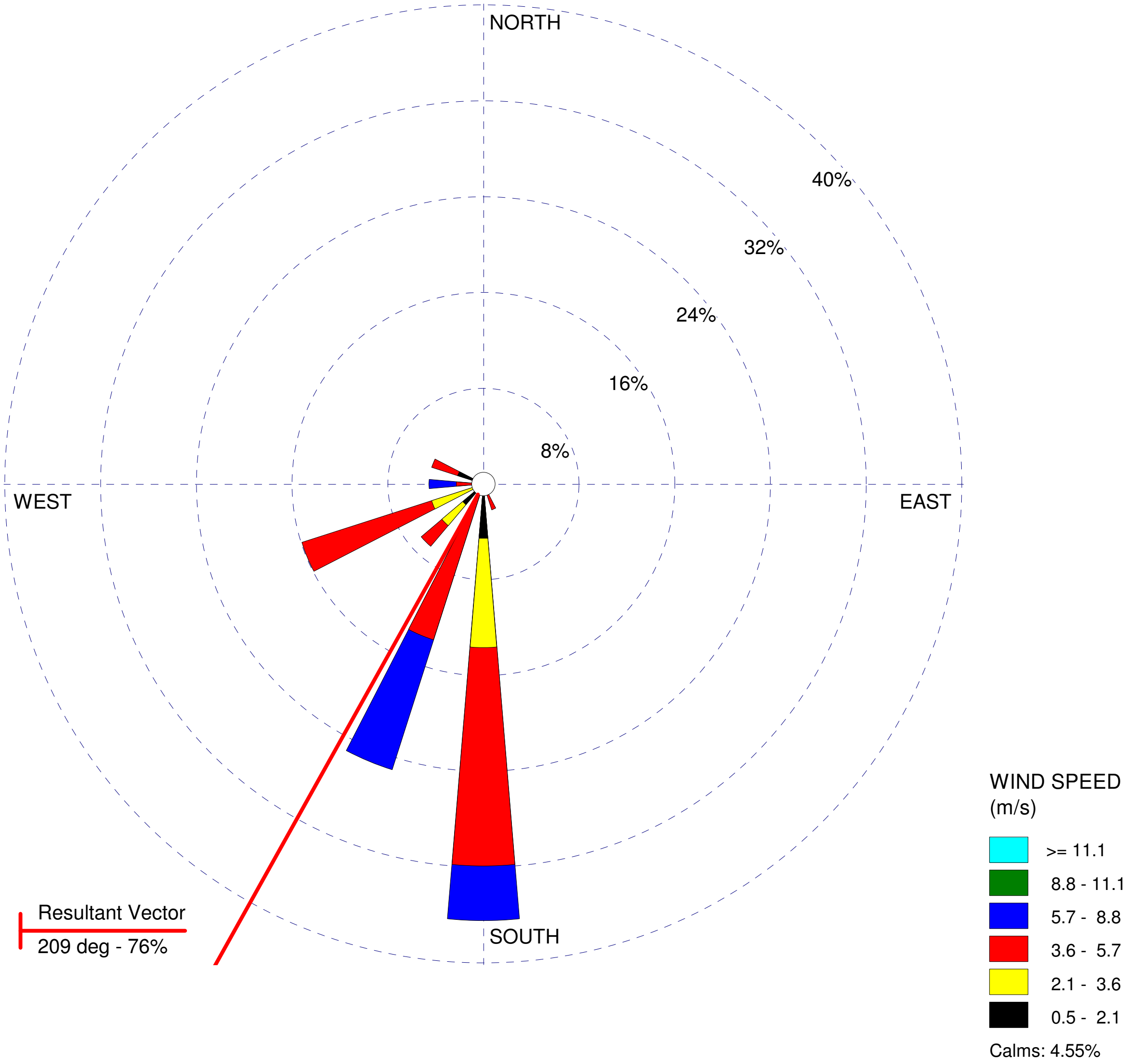
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 1/30/2004

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
CM-MW-09s-OA

DATA PERIOD:

2004
Jan 29 - Jan 30
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

209º

CALM WINDS:

4.55%

TOTAL COUNT:

44 hrs.

Parametrix

AVG. WIND SPEED:

4.00 m/s

PROJECT NO.:

275-1940-006

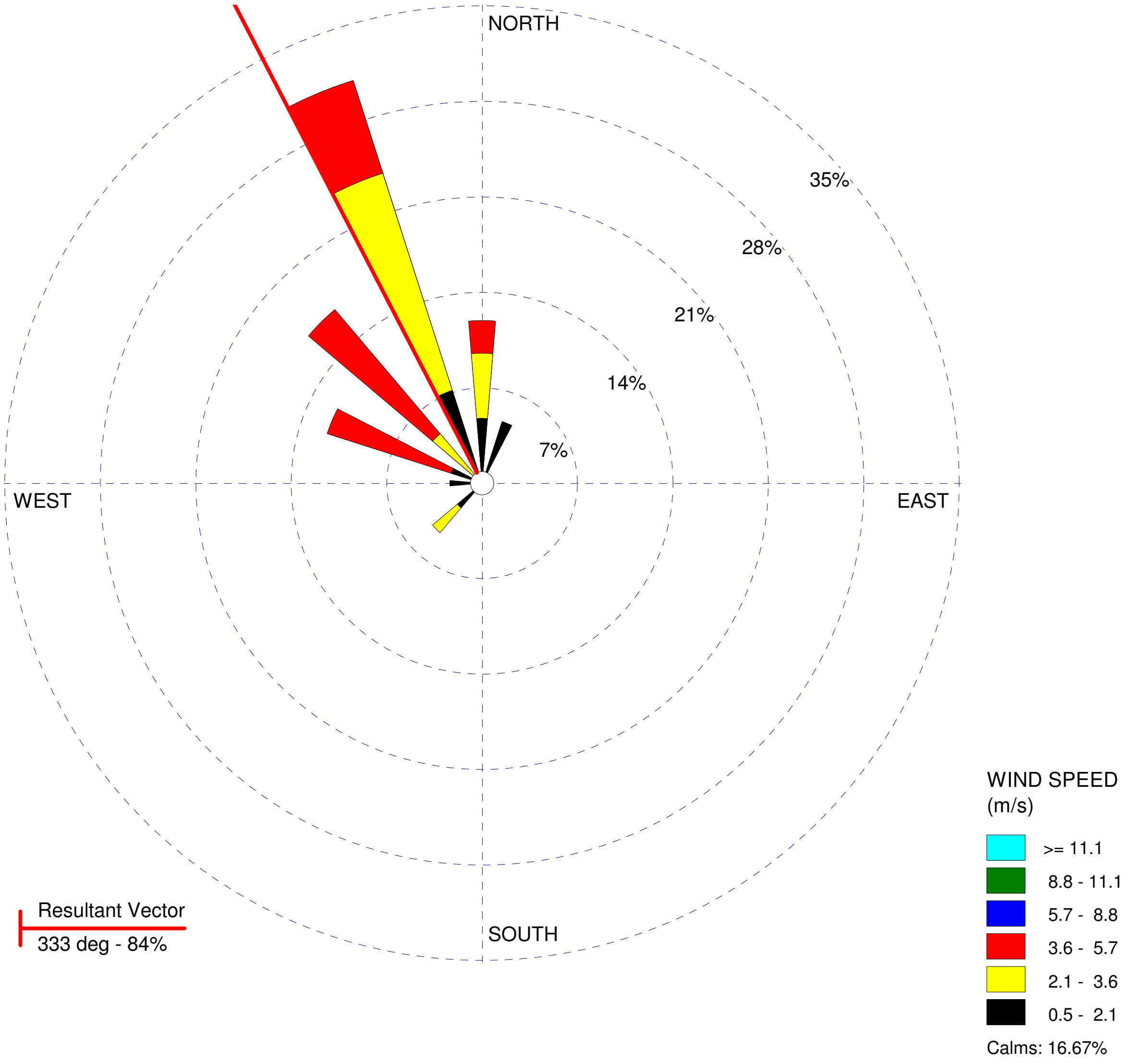
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 7/21/2004

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA

DATA PERIOD:

2004
Jul 20 - Jul 21
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

333º

CALM WINDS:

16.67%

TOTAL COUNT:

42 hrs.

Parametrix

AVG. WIND SPEED:

2.52 m/s

PROJECT NO.:

275-1940-006

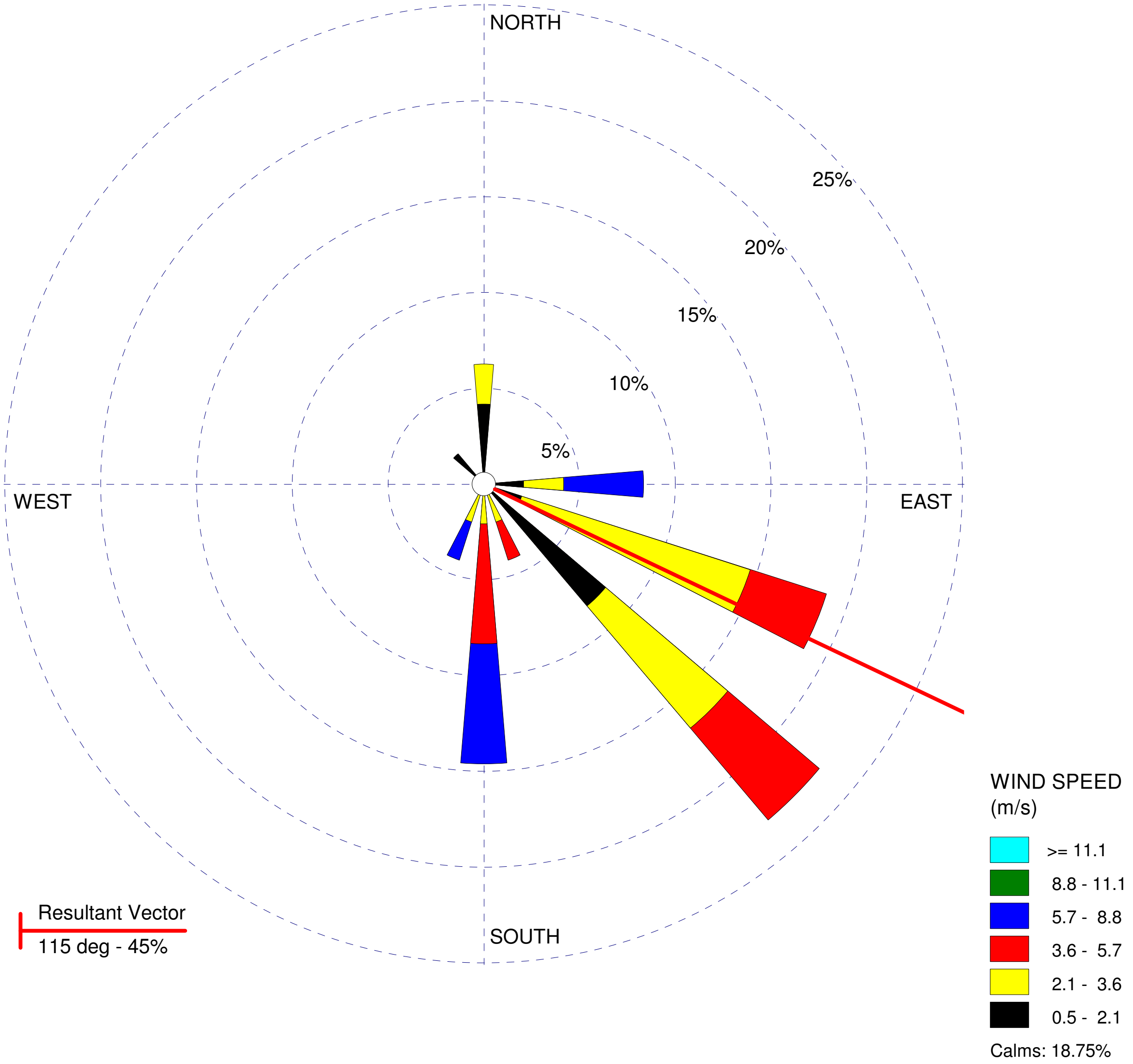
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 1/06/2005

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA

DATA PERIOD:

2005
Jan 5 - Jan 6
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

115º

CALM WINDS:

18.75%

TOTAL COUNT:

48 hrs.

Parametrix

AVG. WIND SPEED:

2.69 m/s

PROJECT NO.:

275-1940-006

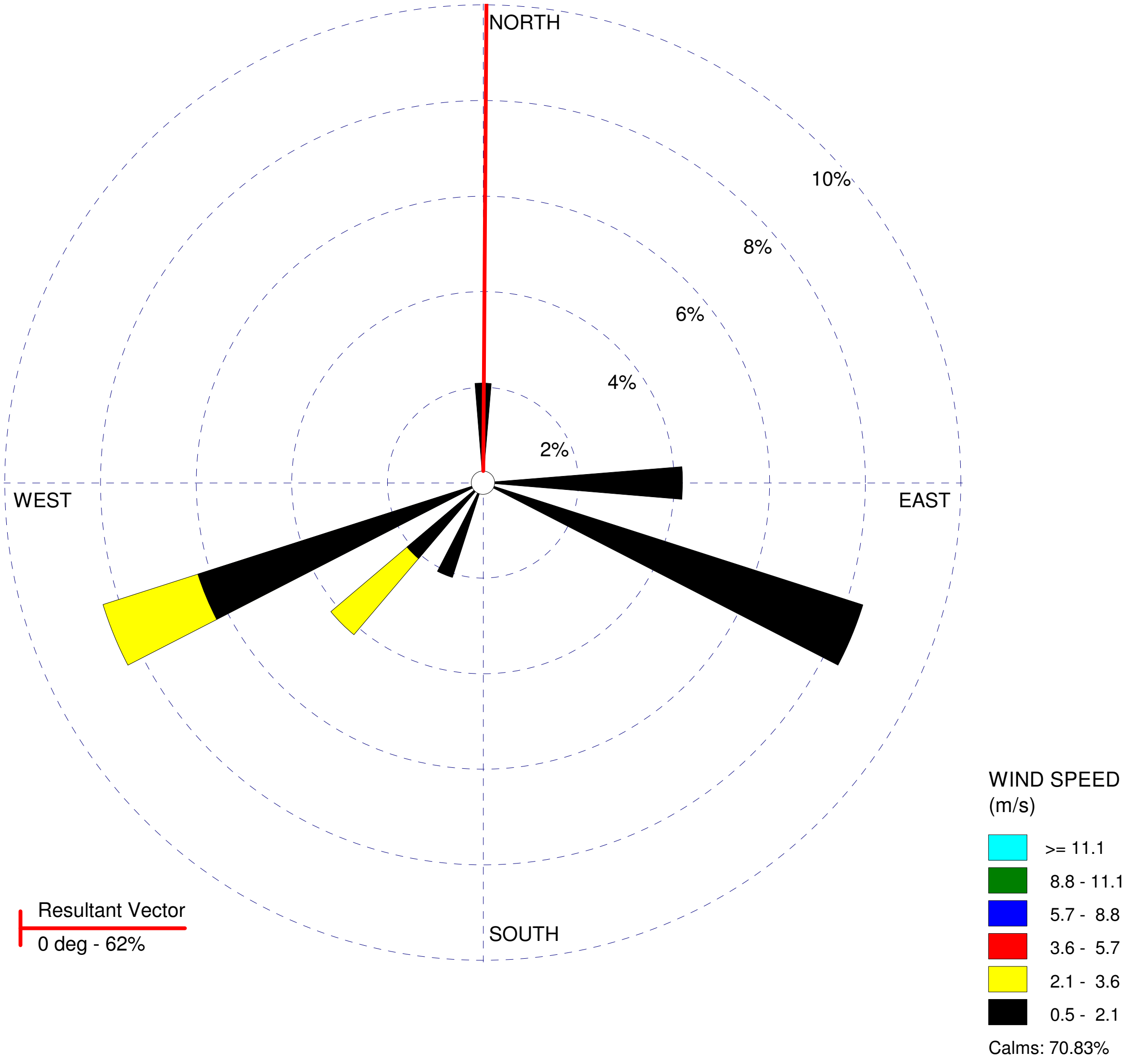
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 2/25/2005

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA

DATA PERIOD:

2005
Feb 24 - Feb 25
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

0º

CALM WINDS:

70.83%

TOTAL COUNT:

48 hrs.

Parametrix

AVG. WIND SPEED:

0.52 m/s

PROJECT NO.:

275-1940-006

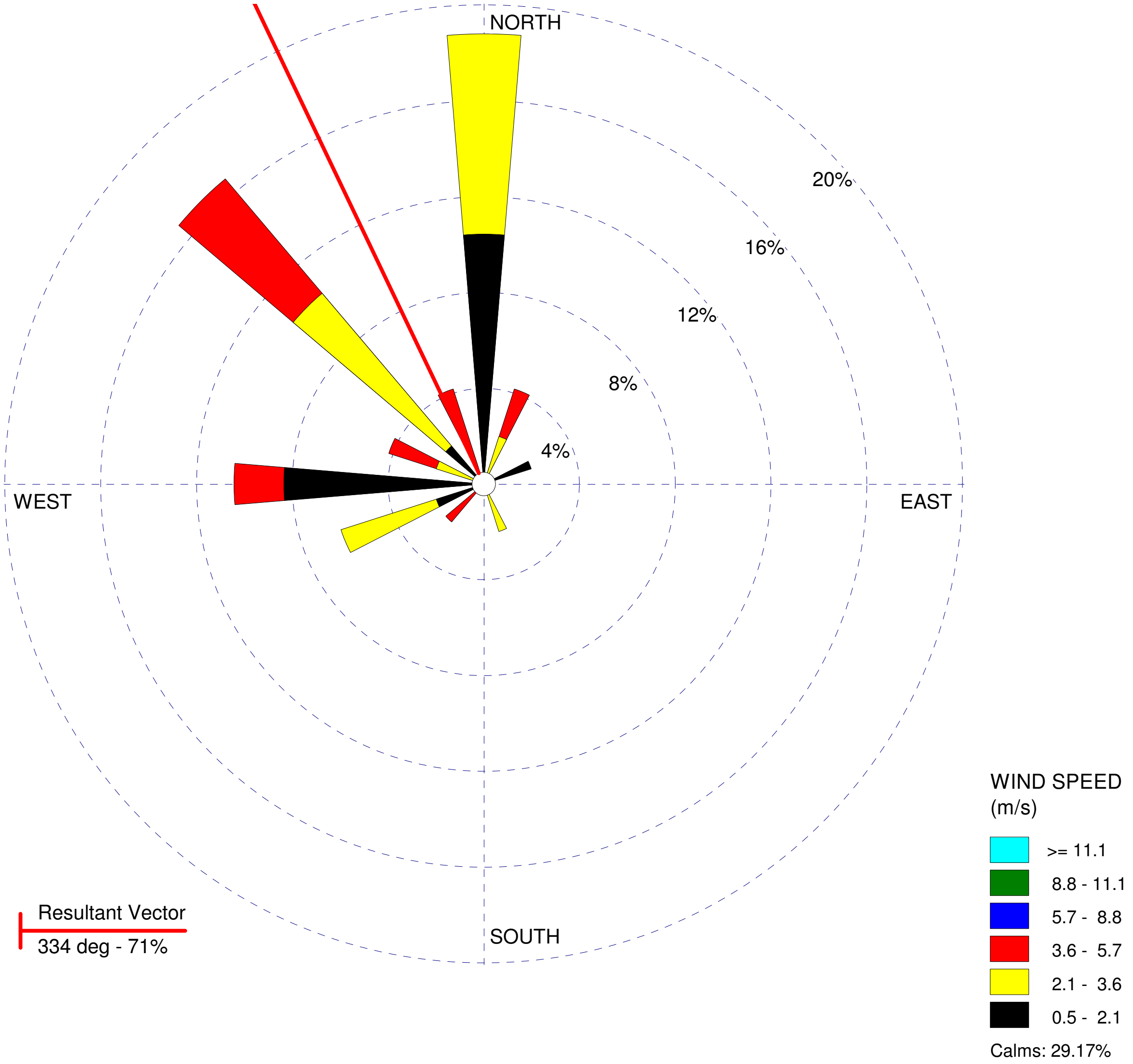
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 6/15/2005

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA

DATA PERIOD:

2005
Jun 14 - Jun 15
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

334º

CALM WINDS:

29.17%

TOTAL COUNT:

48 hrs.

Parametrix

AVG. WIND SPEED:

1.92 m/s

PROJECT NO.:

275-1940-006

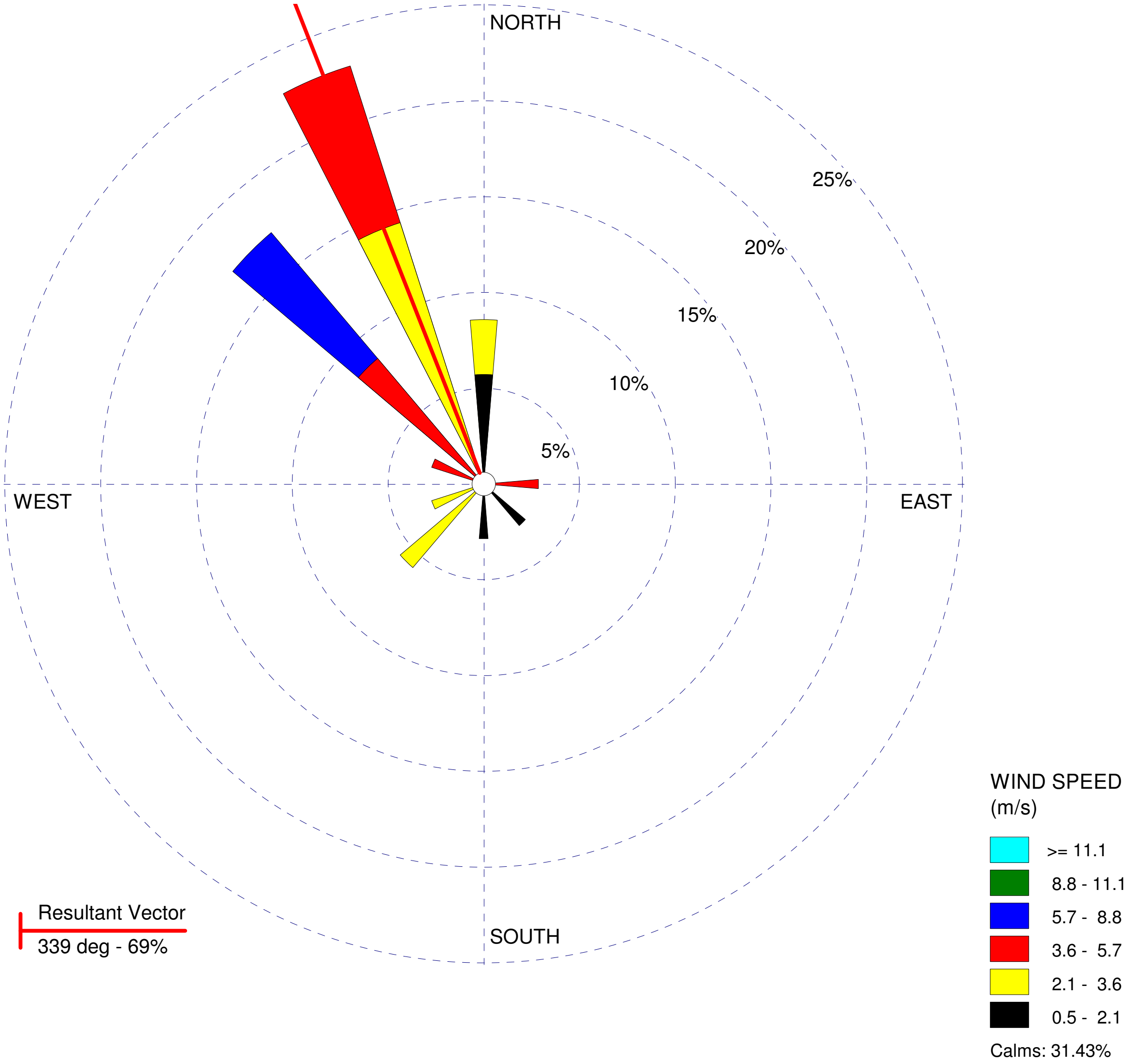
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 8/31/2005

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA

DATA PERIOD:

2005
Aug 30 - Aug 31
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

339º

CALM WINDS:

31.43%

TOTAL COUNT:

35 hrs.

Parametrix

AVG. WIND SPEED:

2.49 m/s

PROJECT NO.:

275-1940-006

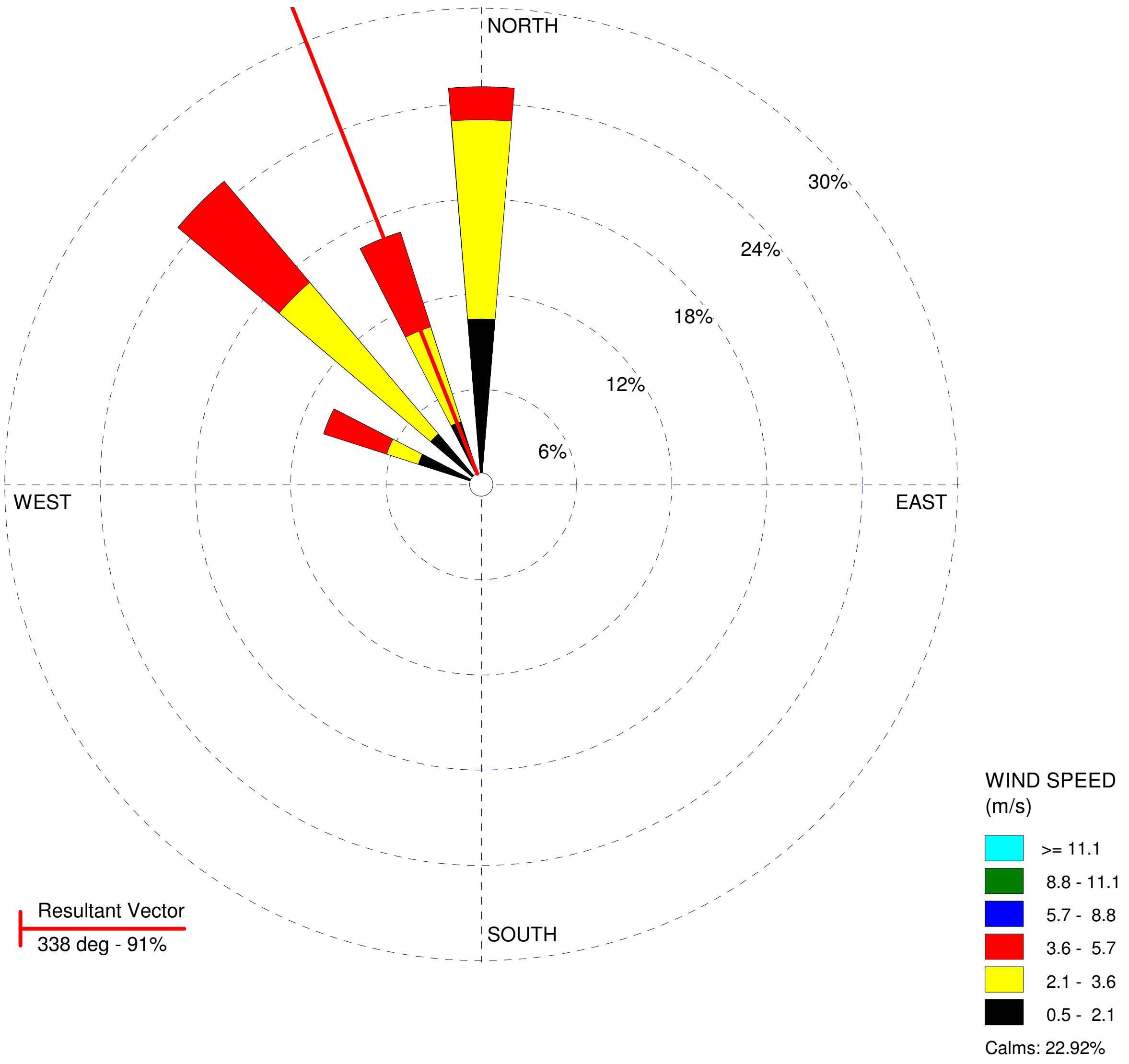
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 9/06/2006

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
2201-SI-OA

DATA PERIOD:

2006
Sep 5 - Sep 6
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

338º

CALM WINDS:

22.92%

TOTAL COUNT:

48 hrs.

Parametrix

AVG. WIND SPEED:

2.19 m/s

PROJECT NO.:

275-1940-006

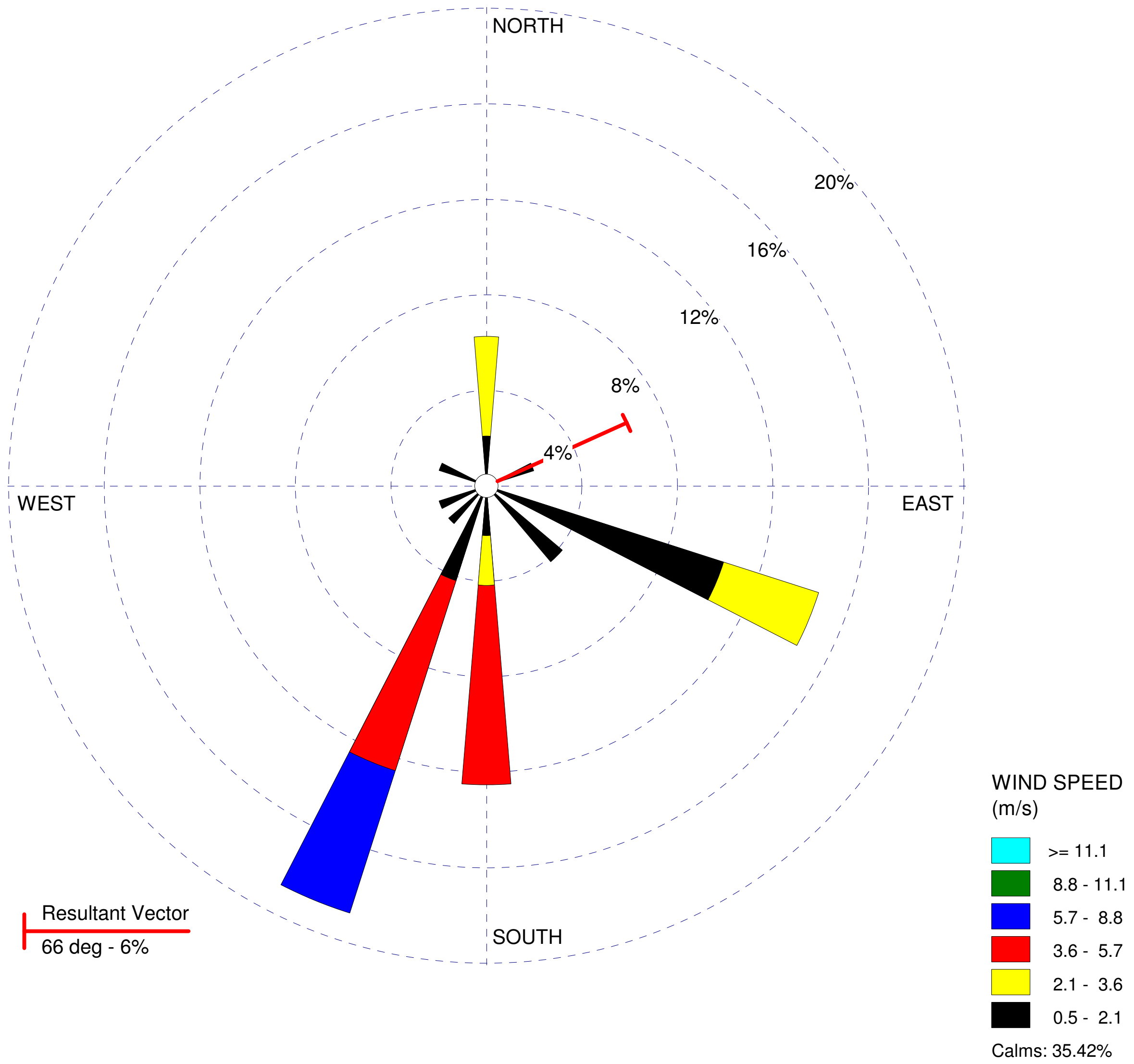
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 2/16/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
2201-SI-OA
CM-MW-21i-OA
CM-MW-09s-OA
FRAM-OA

DATA PERIOD:

2007
Feb 15 - Feb 16
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

66º

Parametrix

CALM WINDS:

35.42%

TOTAL COUNT:

48 hrs.

AVG. WIND SPEED:

1.85 m/s

PROJECT NO.:

275-1940-006

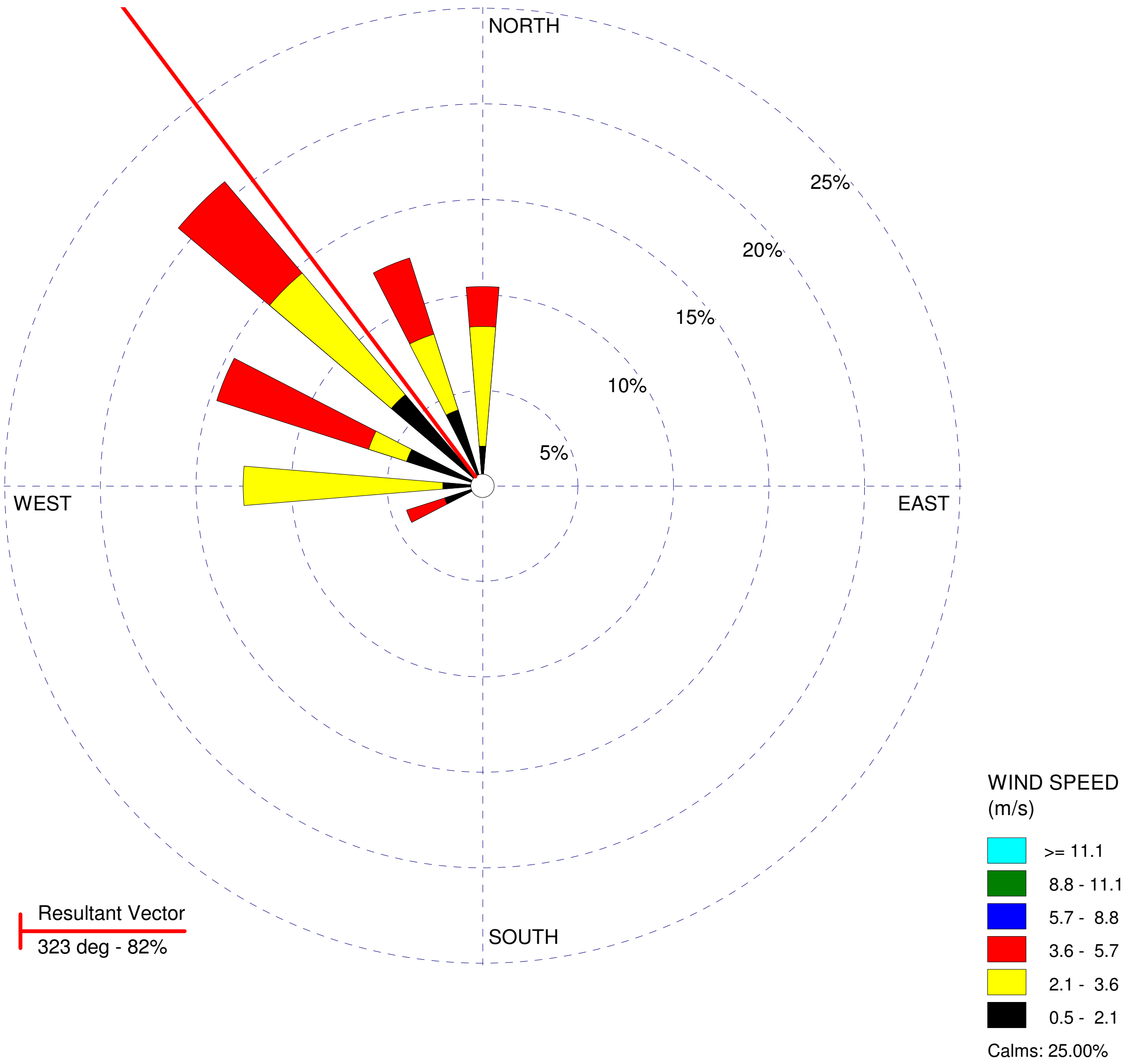
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 5/31/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
2201-SI-OA
CM-MW-21i-OA
CM-MW-09s-OA
FRAM-OA

DATA PERIOD:

2007
May 30 - May 31
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

323º

CALM WINDS:

25.00%

TOTAL COUNT:

48 hrs.

AVG. WIND SPEED:

2.17 m/s

Parametrix

PROJECT NO.:

275-1940-006

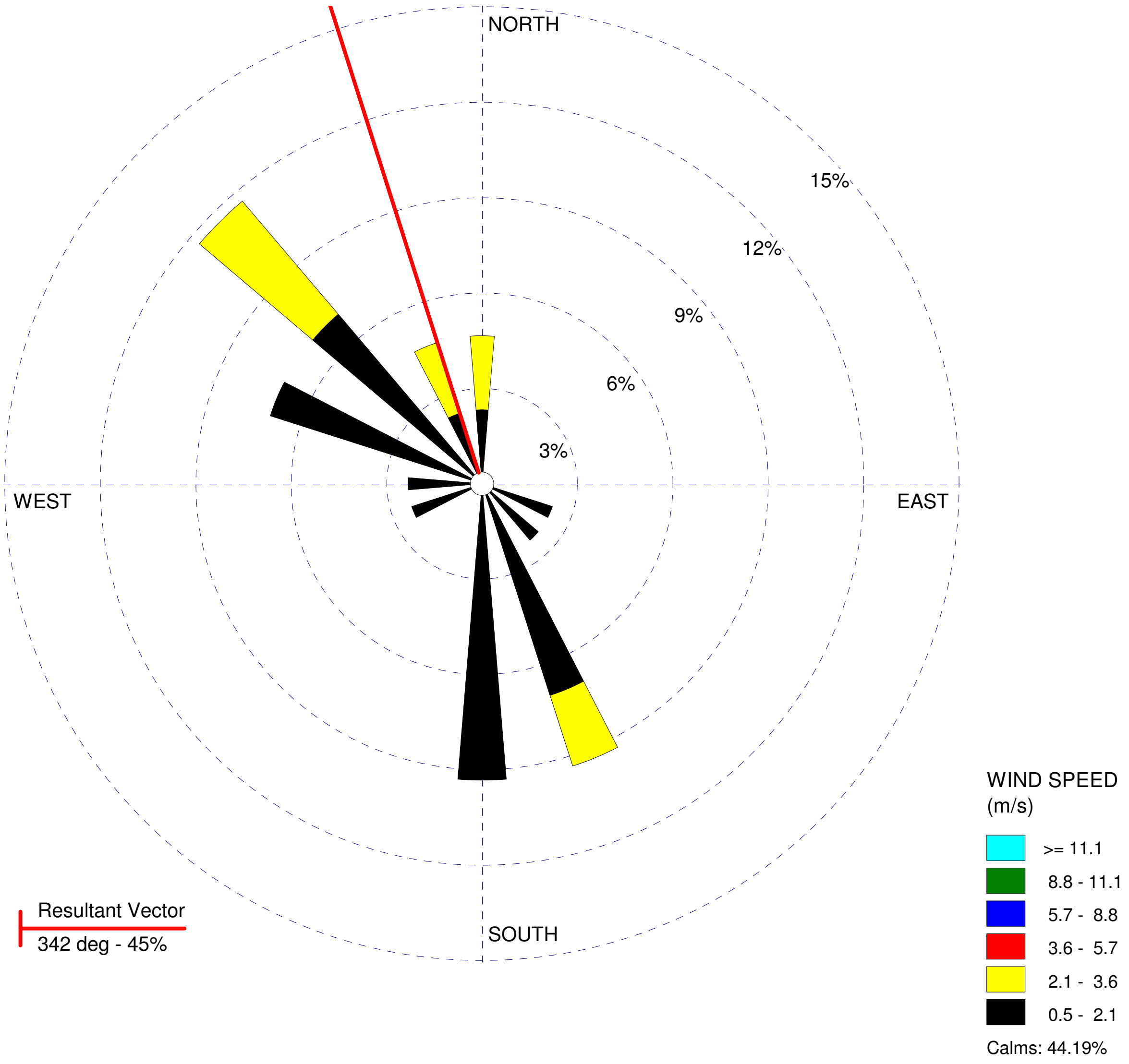
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 9/13/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA
FRAM-OA

DATA PERIOD:

2007
Sep 12 - Sep 13
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

342º

CALM WINDS:

44.19%

TOTAL COUNT:

43 hrs.

Parametrix

AVG. WIND SPEED:

0.93 m/s

PROJECT NO.:

275-1940-006

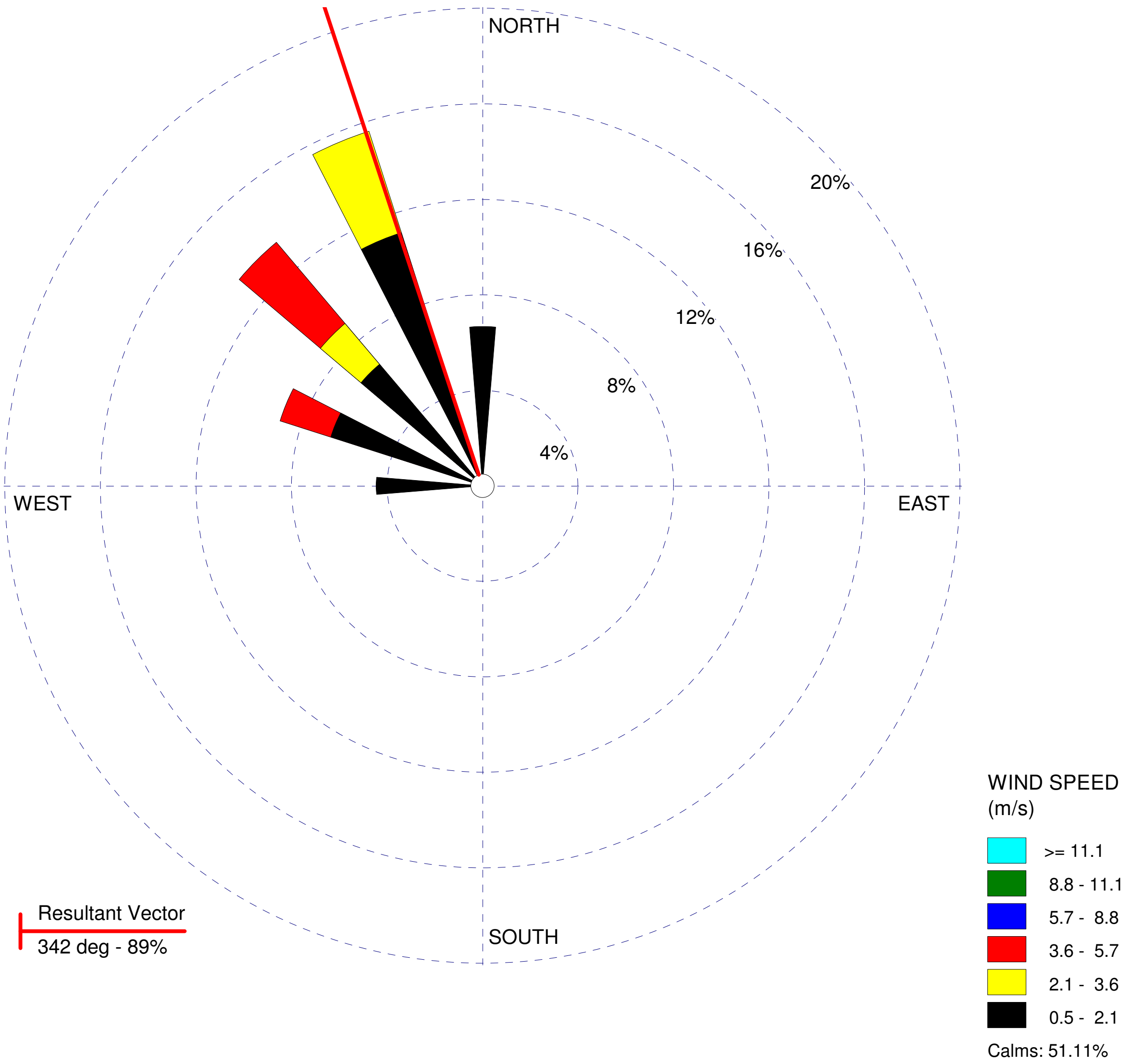
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 9/15/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA
FRAM-OA

DATA PERIOD:

2007
Sep 14 - Sep 15
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

342º

CALM WINDS:

51.11%

TOTAL COUNT:

45 hrs.

Parametrix

AVG. WIND SPEED:

0.96 m/s

PROJECT NO.:

275-1940-006

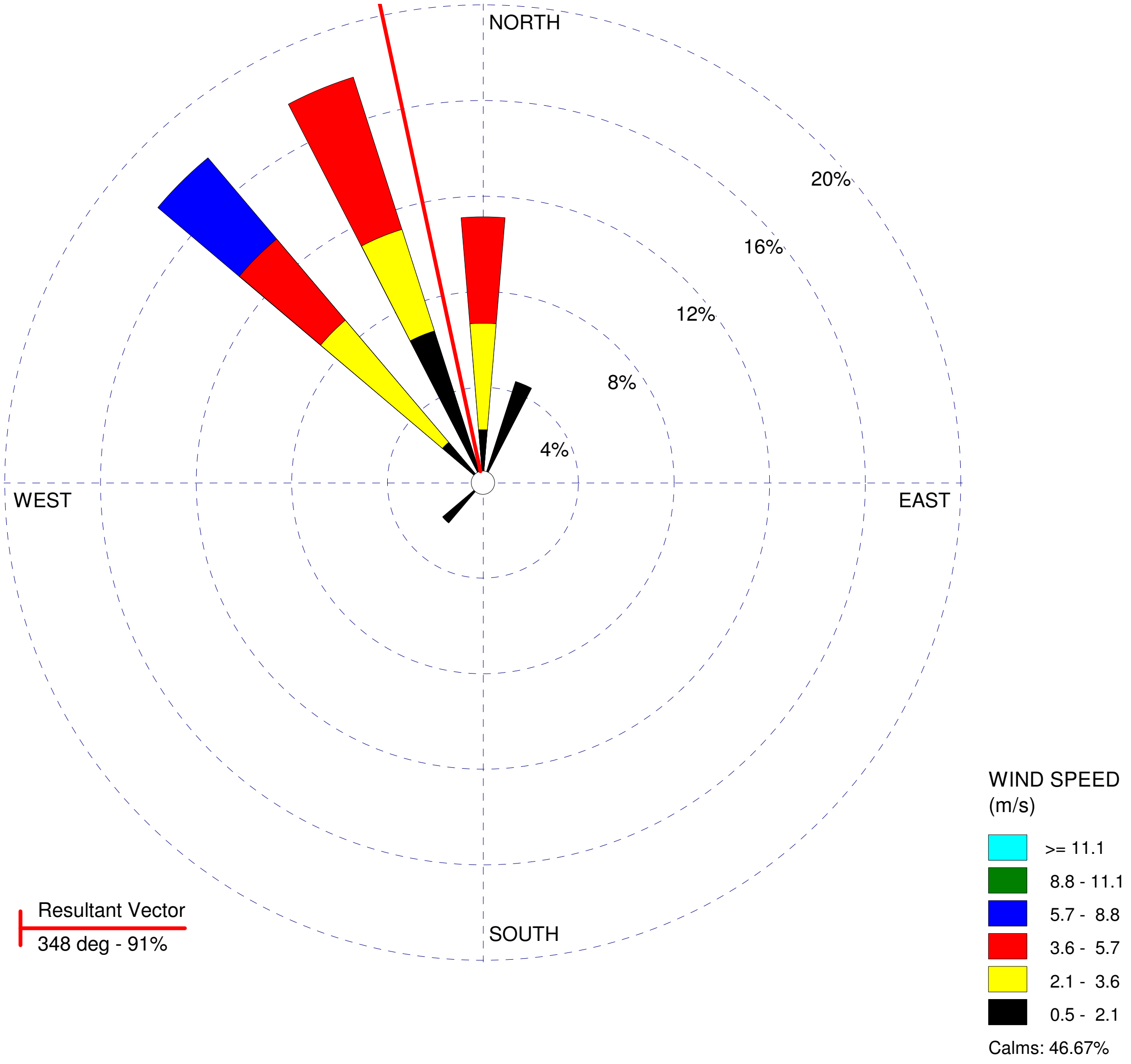
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 9/20/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA
FRAM-OA

DATA PERIOD:

2007
Sep 19 - Sep 20
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

348º

CALM WINDS:

46.67%

TOTAL COUNT:

45 hrs.

Parametrix

AVG. WIND SPEED:

1.62 m/s

PROJECT NO.:

275-1940-006

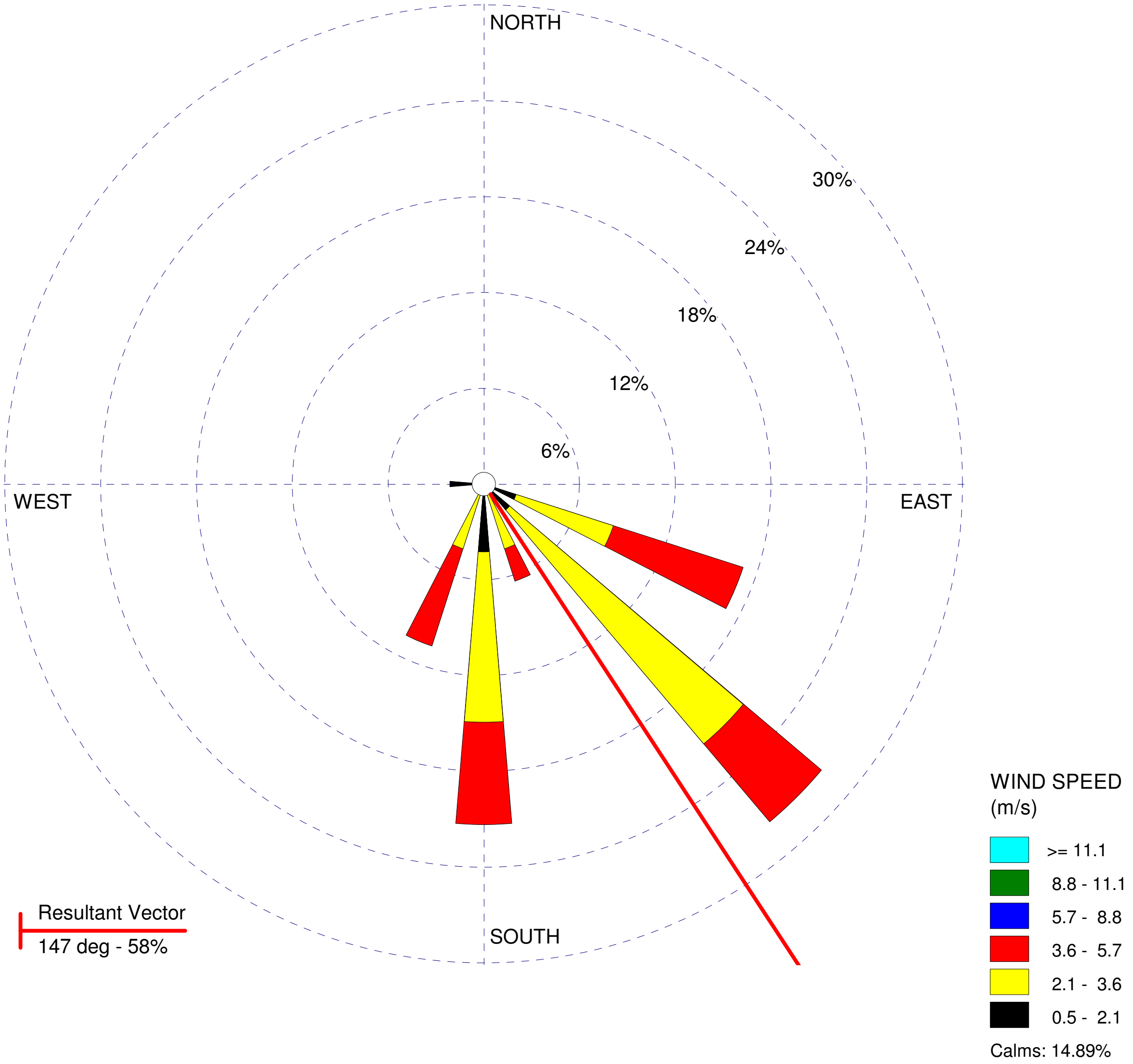
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 9/30/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA
FRAM-OA

DATA PERIOD:

2007
Sep 29 - Sep 30
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

147º

CALM WINDS:

14.89%

TOTAL COUNT:

47 hrs.

Parametrix

AVG. WIND SPEED:

2.72 m/s

PROJECT NO.:

275-1940-006

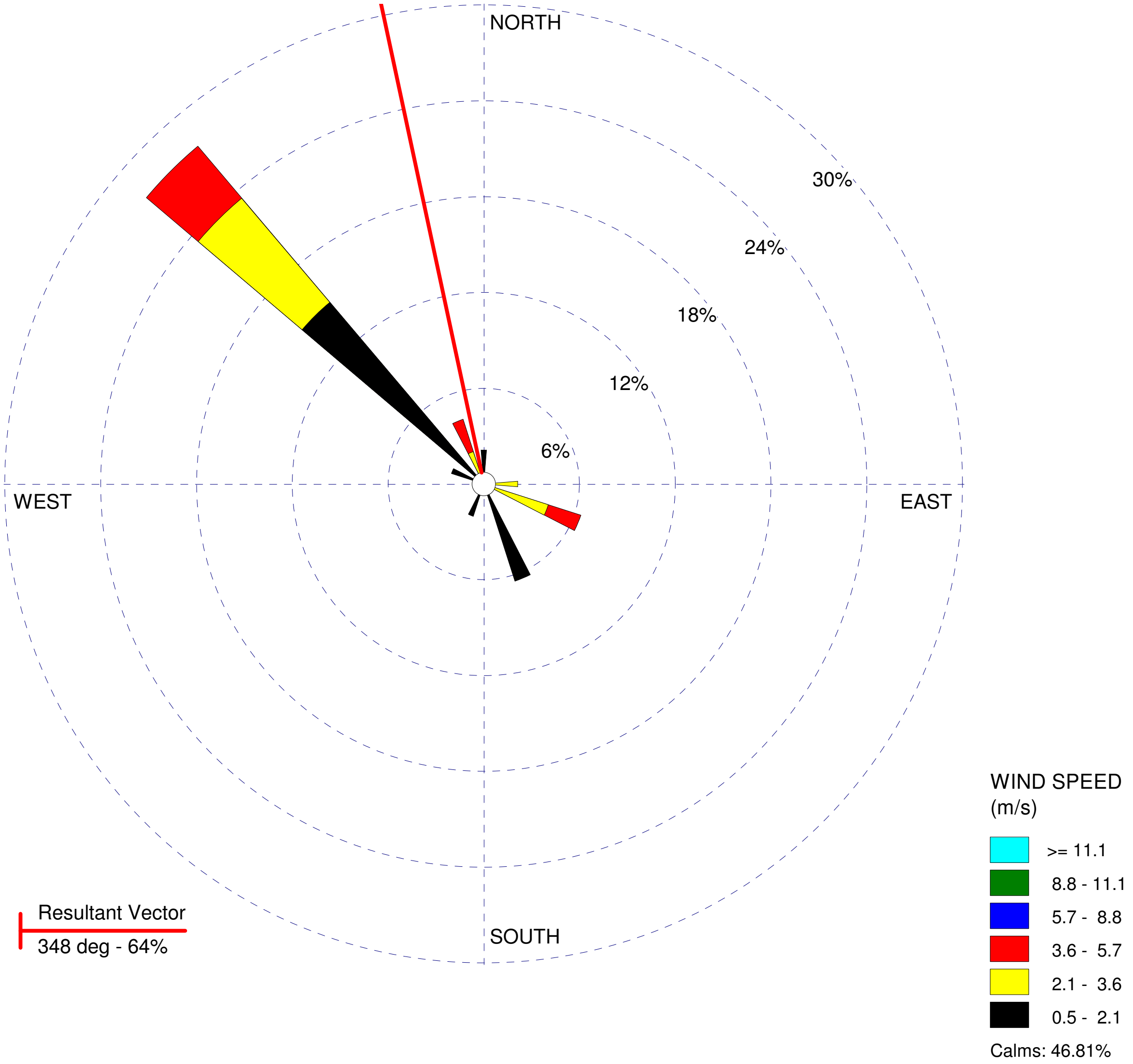
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 12/07/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
CM-MW-09s-OA

DATA PERIOD:

2007
Dec 6 - Dec 7
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

348º

CALM WINDS:

46.81%

TOTAL COUNT:

47 hrs.

Parametrix

AVG. WIND SPEED:

1.21 m/s

PROJECT NO.:

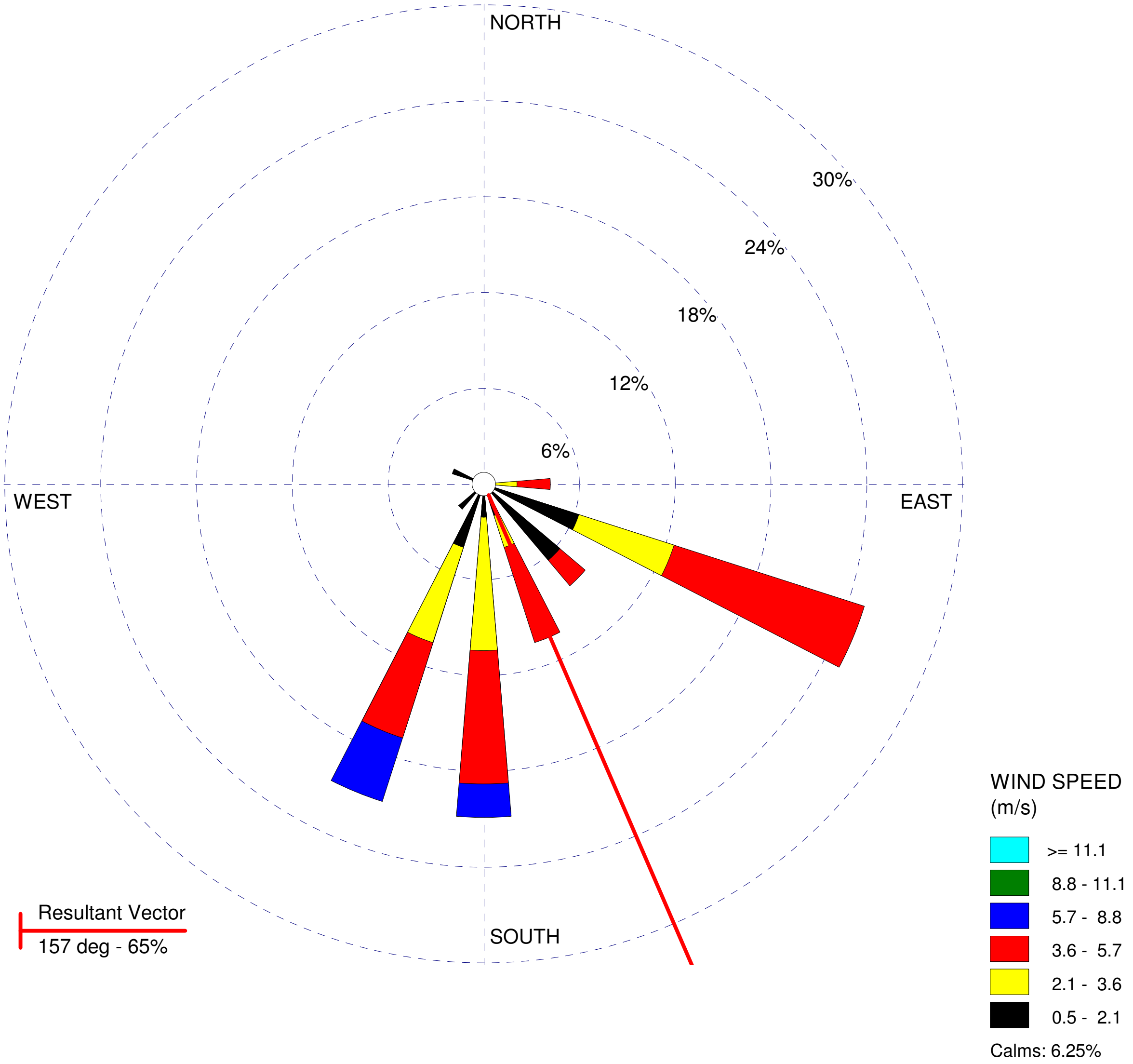
275-1940-006

WIND ROSE PLOT:

Wind Direction for Samples Collected on 12/18/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA
FRAM-OA

DATA PERIOD:

2007
Dec 17 - Dec 18
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

157º

CALM WINDS:

6.25%

TOTAL COUNT:

48 hrs.

Parametrix

AVG. WIND SPEED:

3.17 m/s

PROJECT NO.:

275-1940-006

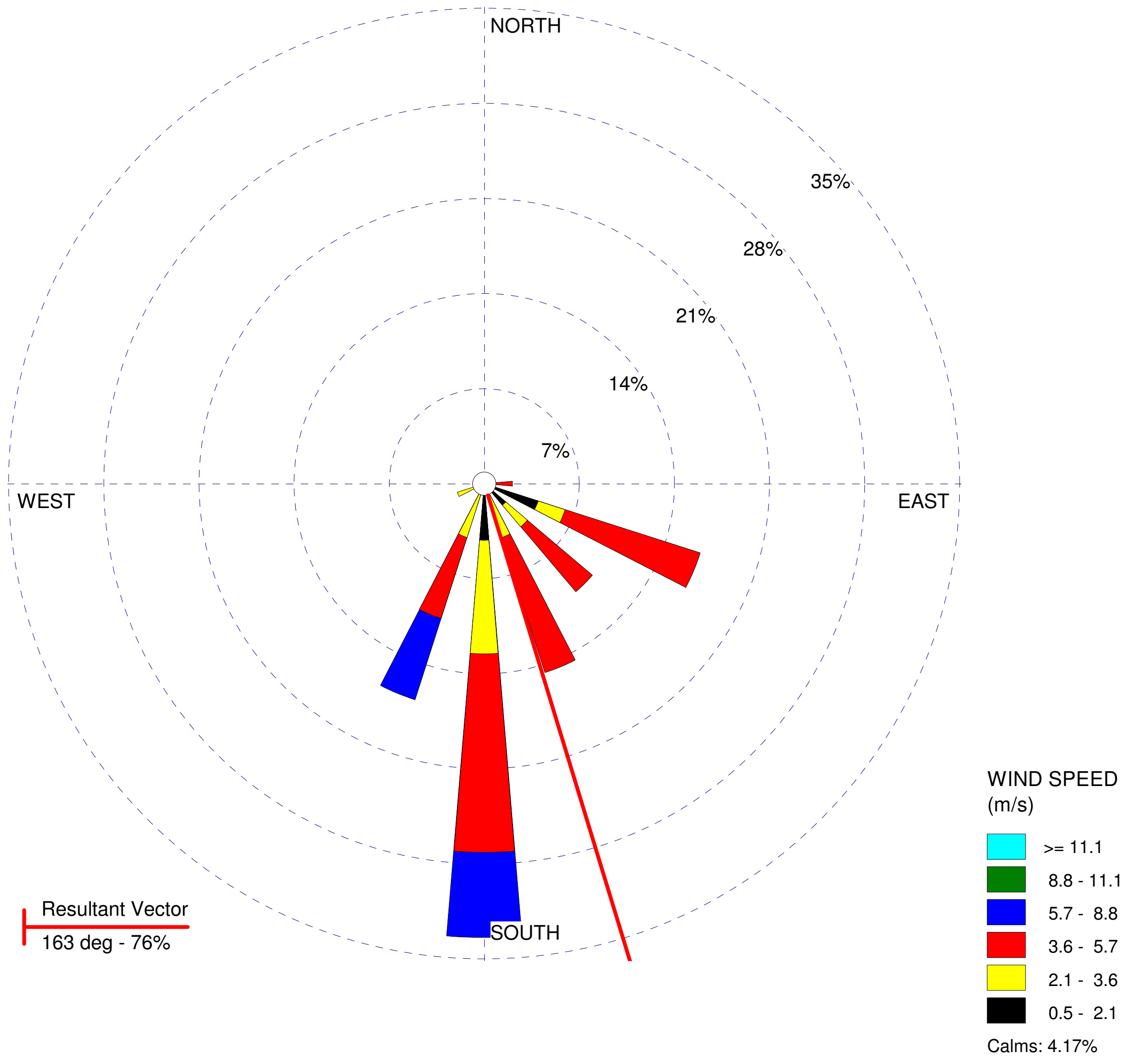
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 12/19/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA
FRAM-OA

DATA PERIOD:

2007
Dec 18 - Dec 19
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

163º

CALM WINDS:

4.17%

TOTAL COUNT:

48 hrs.

Parametrix

AVG. WIND SPEED:

3.81 m/s

PROJECT NO.:

275-1940-006

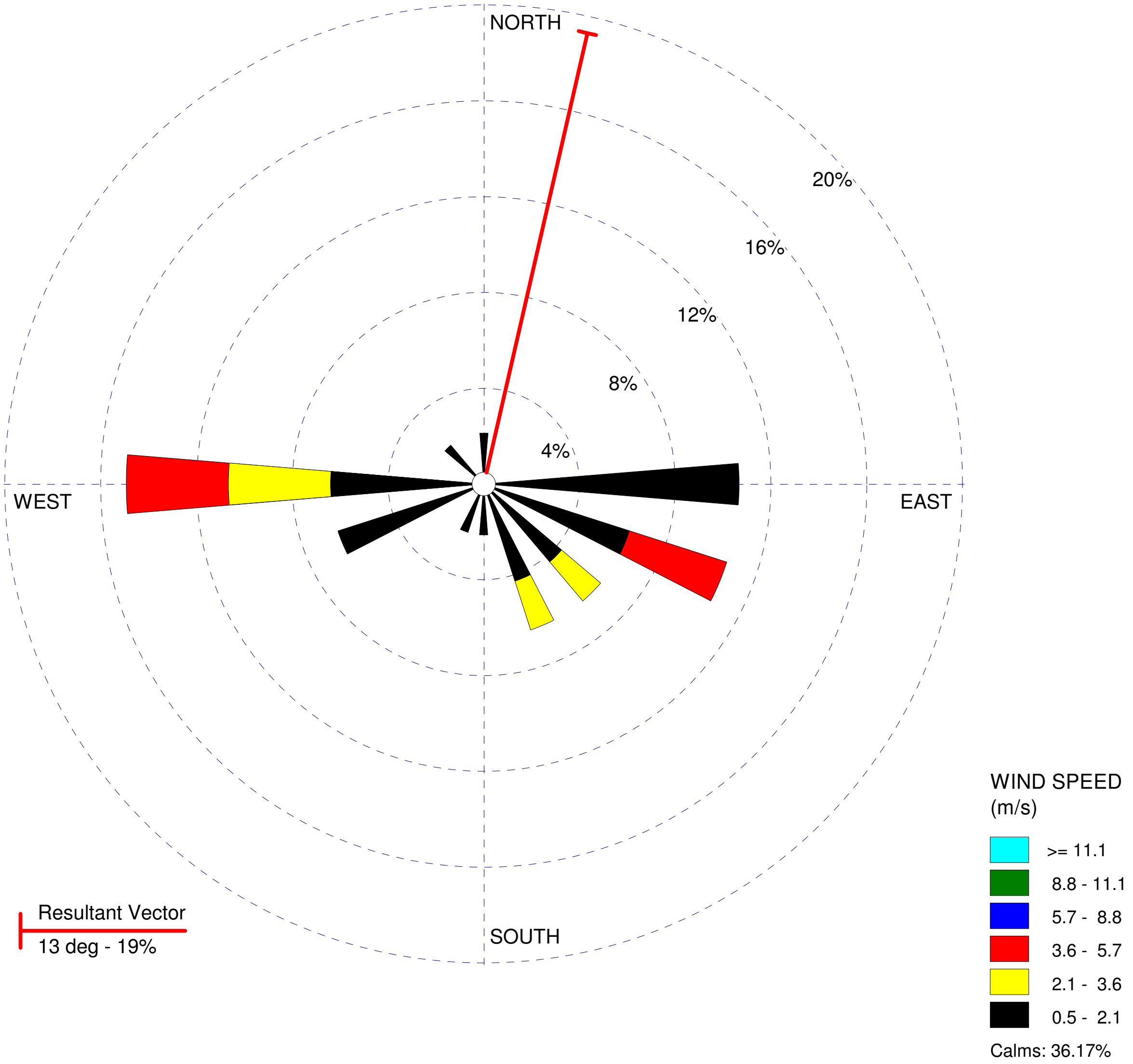
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 12/21/2007

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
1616-31-OA
CM-MW-09s-OA
FRAM-OA

DATA PERIOD:

2007
Dec 20 - Dec 21
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

13º

CALM WINDS:

36.17%

TOTAL COUNT:

47 hrs.

Parametrix

AVG. WIND SPEED:

1.30 m/s

PROJECT NO.:

275-1940-006

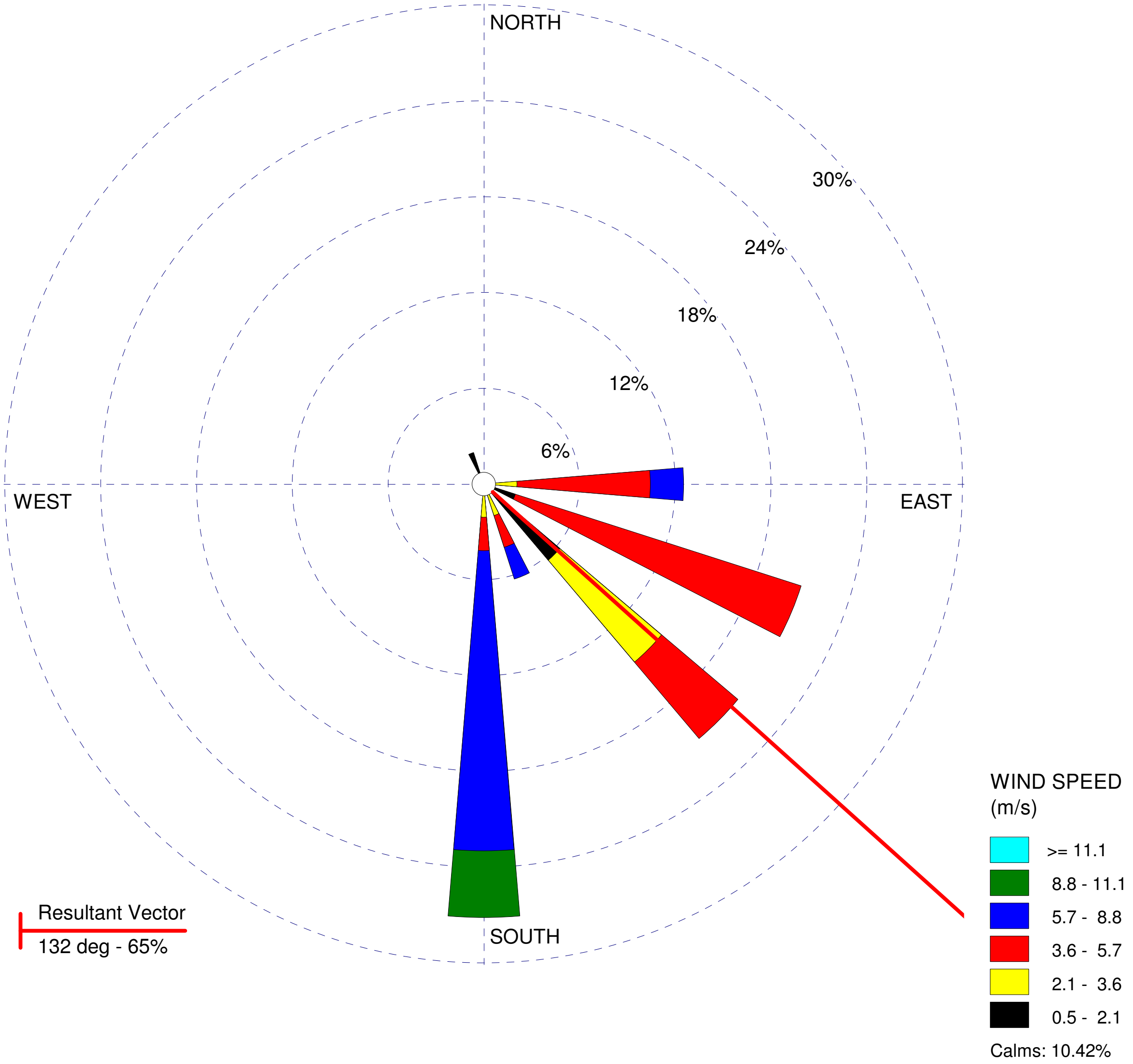
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Direction for Samples Collected on 1/04/2008

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Samples:
CM-MW-09s-OA

DATA PERIOD:

2008
Jan 3 - Jan 4
00:00 - 23:00

DATA SOURCE:

Pearson Airfield Vancouver

MEAN WIND DIRECTION:

132º

CALM WINDS:

10.42%

TOTAL COUNT:

48 hrs.

Parametrix

AVG. WIND SPEED:

4.25 m/s

PROJECT NO.:

275-1940-006

WRPLOT View - Lakes Environmental Software

APPENDIX I

Aquifer Pump Test Results and Supporting Information

APPENDIX D: AQUIFER PUMPING TEST

SUMMARY

This Groundwater Pumping Test Report describes the fieldwork performed for the Cadet Manufacturing Company (Cadet) pumping test and the data reduction and evaluation process. Step-drawdown and constant-rate aquifer pumping tests were performed at the Cadet facility (2500 W. Fourth Plain Boulevard, Vancouver, Washington [the Site]) between March 20 and March 23, 2002. One recovery well and six new monitoring wells were installed at the Site between February 22 and March 4, 2002. The objective of the Cadet groundwater pumping tests was to provide additional information for the conceptual hydrogeologic model and for the numerical groundwater flow and constituent transport model being completed for the Cadet site.

Groundwater drawdown observed in response to pumping was used to evaluate hydrogeologic characteristics. Hydraulic conductivity and storativity were estimated by the curve-matching pumping test analysis program, AQTESOLV®. The hydraulic conductivity and storativity values from the 2002 pumping test are summarized in Table D-2. The hydraulic conductivity values from the pumping tests conducted in 2002 range from approximately 0.05 to 5.03 cm/sec (140 to 14,260 fpd). The pumping test results do not suggest substantial differences from previously determined hydraulic conductivity values with depth or investigative zones.

Purge water and decontamination water generated during each groundwater pumping test was contained in a series of industrial tanks provided by Rain-for-Rent. Prior to discharge to the sanitary sewer, the water was sampled and tested per the City of Vancouver's requirements. Approximately 223,000 gallons of purge and decontamination water were generated and discharged into the sanitary sewer from the aquifer tests.

1.0 INTRODUCTION

In accordance with Agreed Order (00 TCP VA-847), AMEC Earth & Environmental, Inc. (AMEC) conducted an aquifer pumping test at the Cadet Manufacturing Company (Cadet) facility on March 22, 2002. The Cadet facility is located at 2500 W. Fourth Plain Boulevard, Vancouver, Washington (the Site). The pumping test was performed as described in the original Work Plan for Pumping Test dated January 2, 2002, the Pumping Test Work Plan Response to Second Set of Ecology Comments dated February 28, 2002, and the Pumping Test Work Plan Response to Ecology Comments and Deviations dated February 25, 2002. This report describes the fieldwork performed for the Cadet pumping test, the data reduction and evaluation process, and a discussion on how the data will be used for fate and transport modeling and design of remedial technologies at the Cadet facility.

1.1 Scope and Objectives

The objective of the Cadet groundwater pumping test was to provide additional information which would be used in the groundwater fate and transport model, and the future selection and design of remedial activities at the Site. The tasks performed to attain the additional information included a step-drawdown groundwater pumping test and a constant-rate groundwater pumping test. The step-drawdown pumping test was performed to evaluate the appropriate pumping rate for the constant-rate groundwater pumping test. The constant-rate groundwater pumping test was conducted to estimate the site-specific hydraulic conductivity and storativity of the Unconsolidated Sedimentary Aquifer (USA) observed at the Cadet site.

Fate and transport modeling using data collected from aquifer testing will be useful in evaluating the migration of halogenated volatile organic compounds (HVOCs) in the area. Specifically, the pumping test would establish aquifer characteristics such as vertical and horizontal hydraulic conductivity, storativity, response of the aquifer to stresses such as pumping, and the radius of influence of a pumping well (production well, recovery well or recirculating well) at a known flow rate.

The scope of work performed in preparation and execution of the pumping test activities included installing a pumping well and a network of monitoring wells, installing down-well pressure transducers and dataloggers to record groundwater level responses to pumping, monitoring peripheral wells for changes in contaminant concentrations, sampling extracted groundwater for the presence of HVOCs, and discharging the extracted groundwater to the City of Vancouver sanitary sewer.

1.2 Historic Aquifer Tests

Slug testing was conducted on August 8, 2000 and May 30, 2001 to estimate hydraulic properties of the USA at the Site and in the Fruit Valley Neighborhood. Slug testing was selected because it does not alter groundwater flow directions, and impacted water is not generated.

Changes in groundwater elevation observed during the slug tests were used to estimate hydraulic conductivity of the intermediate and deep zones of the USA. Based on the results of slug testing, average hydraulic conductivity for the intermediate zone of the USA is 140 fpd (4.8×10^{-2} cm/sec), and the average hydraulic conductivity of the deep zone of the USA is 170 fpd (6.2×10^{-2} cm/sec). These values are within the published ranges of values for the USA (McFarland and Morgan, 1996).

2.0 WELL INSTALLATION

2.1 Pumping Well Installation

The groundwater extraction well RW-1 was installed on March 4, 2002. A 10.25-inch outer diameter hollow stem auger was used to install 6-inch inner diameter threaded PVC well casing with pre-packed PVC well screens. The recovery well was completed at 65 feet below ground surface (bgs). Two 10-foot sections of 0.050-inch slotted well screen pre-packed with 6-9 silica sand were installed from 40 to 60 feet bgs. Eight bags of 6-9 silica sand were added from 35 to 65 feet bgs as a supplemental filter pack. Forty-two bags of bentonite chips were placed from 3 to 35 feet bgs to establish a proper borehole seal. Five feet of 6-inch inner diameter PVC well casing were placed from 60 to 65 feet bgs to create a sediment sump. The end of the PVC well casing was capped with a threaded stainless steel flat-bottomed well cap. The boring and construction log for the groundwater extraction well RW-1 is included in Attachment D-1.

The well screen slot size, mesh size of the pre-pack filter, and mesh size of the supplemental filter pack were selected based on the physical sieve analysis of soil samples collected from a test boring prior to well installation. Results of the sieve analysis are included in Attachment D-2. Two soil samples were collected from 40 to 46.5 feet bgs and from 50 to 60 feet bgs and tested by AMEC. The test results were used to determine the appropriate slot sizes and filter pack mesh sizes used in the well construction. Attempts made to collect soil samples using a Shelby tube with a pitcher sampler were unsuccessful in recovering deeper sediments from the USA because the deeper soils were predominately coarse grained sands with some gravel.

2.2 Monitoring Well Installation

Six monitoring wells (MW-11 through MW-16) were installed at the Site in the area immediately surrounding the groundwater pumping well between February 22 and March 1, 2002. Each well was constructed with 2-inch inner diameter PVC well casing and 5 feet of 0.010-inch slotted PVC pre-packed well screen. Well screen pre-packs and supplemental filter packs consisted of 10-20 silica sand. A proper borehole seal in each monitoring well was established with either bentonite chips or a combination of bentonite chips and grout. The approximate locations of the recovery well and monitoring well network are depicted on Figure D-1. Well boring and construction logs are included in Attachment D-1. Well construction details are summarized in Table D-1.

2.3 Well Development

The recovery well was developed within 24 hours of installation. Well development was conducted over two one-hour intervals with respective discharge rates of 100 and 200 gpm. Suspended solids in the extracted water diminished within five minutes of development.

3.0 GROUNDWATER PUMPING TESTS

Groundwater pumping tests are performed to estimate hydraulic parameters (i.e., hydraulic conductivity and storativity) of groundwater-bearing formations in the subsurface. Aquifer tests can provide knowledge of aquifers to make more reliable predictions of aquifer response to changes in pressure heads due to groundwater pumping. Step-drawdown and constant-rate pumping tests are two types of aquifer tests typically used to gather aquifer data used in estimating aquifer properties.

3.1 Step-Drawdown Pumping Tests

Step-drawdown testing provides a means for understanding the performance of wells in relation to the subsurface groundwater-bearing formations. Step-drawdown tests are usually performed by pumping a single well at successively higher discharge rates while recording the drawdown response in the well. Drawdown observed in the pumping well is composed of two parts: 1) drawdown due to laminar flow, referred to as formation loss, and 2) drawdown resulting from the turbulent flow in the immediate vicinity of the well, referred to as well loss. In laminar flow conditions, the change in drawdown is linearly proportional to the change in the discharge rate. Under turbulent flow conditions, drawdown increases substantially for small increases in the discharge rate. The laminar and turbulent components of well losses can be estimated to help select optimum discharge rates for constant-rate aquifer pumping tests.

For the aquifer characterization efforts at Cadet, a step-drawdown test was performed to estimate the optimum discharge rate for the planned constant-rate aquifer pumping test. The feasible range of pumping rates used for the step-drawdown test was estimated using theoretical drawdown calculations for an unconfined aquifer. The results of the step-drawdown test were then used to estimate the optimal pumping rate for the constant-rate pumping test. The optimum discharge rate results in the largest achievable drawdown without dewatering the pumping well. Maximizing the magnitude of observed drawdown in the pumping well will maximize the aquifer stress experienced by the observation wells, thereby making interpretation of the data more reliable.

3.2 Constant-Rate Pumping Tests

Constant-rate pumping tests are commonly used for estimating values of hydraulic properties of aquifers and are frequently performed in areas where additional observation wells are available. The constant-rate pumping test includes extracting groundwater at a specific and steady discharge rate from a well, or set of wells, while water level responses to groundwater extraction from the pumping well are recorded in the pumping well and surrounding observation wells. Water level recovery rates, or residual drawdown, are also monitored and recorded after the pumping phase is complete for each aquifer pumping test. Residual drawdown measurements are often more reliable than drawdown data because the aquifer recovery occurs at a constant rate and is not influenced by well efficiency. Steady pumping can be difficult to achieve in many field conditions.

The constant-rate pumping test discharge rate was determined from the step-drawdown tests described in Section 3.1. The pumping rate was manually controlled with a ball valve. The pumping rate was periodically checked and monitored with an instantaneous and totalizing flow meter attached to the discharge line throughout the pumping test.

4.0 CADET GROUNDWATER PUMPING TEST

Step-drawdown and constant-rate aquifer pumping tests were performed at groundwater extraction well RW-1 between March 20 and March 23, 2002. RW-1 is located on Cadet property, in the parking lot just west of the manufacturing facility (Figure D-1).

As described in the Pumping Test Work Plan, the monitoring well network selected to monitor the response of groundwater levels (drawdown) to pumping consisted of twelve monitoring wells: MW-1i, MW-1s, MW-2s, MW-9s, MW-11 through MW-16, DPW-3, and DPW-11. Figure D-1 shows the locations of the recovery well and the monitoring wells used during the Cadet pumping tests.

The influence of tidal changes on groundwater elevations was monitored before and during the pumping test with a transducer placed in monitoring well MW-2s. These groundwater level data were used to remove the effect of tidal fluctuations observed in the drawdown data collected during the pumping test.

During the step-drawdown and constant-rate pumping tests, groundwater was extracted from the formation using a pump capable of pumping at a rate of 200 gpm. Groundwater was prevented from flowing back down the pumping well when pumping was terminated by a check valve installed on the effluent line pumping. The discharge rate was controlled manually with a valve and flow totalizer, which also indicated instantaneous flow rates at a precision of 20 gpm. The extracted water was discharged directly into three 21,000-gallon tanks provided by Rain-for-Rent. Water levels were monitored manually with an electronic water level indicator in the pumping wells and observation wells. Water levels in select wells were also measured using down-well pressure transducers equipped with automated dataloggers.

4.1 Groundwater Testing and Discharge

In accordance with the Pumping Test Work Plan Response to Second Set of Ecology Comments dated February 28, 2002, monitoring wells DPW-3 and DPW-11 were sampled every four hours during the pumping test to evaluate potential changes in groundwater HVOC levels. Samples were tested by AMEC on site by U.S. EPA Method 8535 with the ENVIROL system. Field laboratory results provided no evidence of HVOC migration during the pumping test.

Groundwater discharged into the 21,000-gallon tanks was sampled by AMEC and tested by U.S. EPA Test Method 8260 prior to discharge to the sanitary sewer system. This was required in the Special Wastewater Discharge Application (SWDA) by the City of Vancouver. The SWDA permitted Cadet to discharge groundwater directly to the sanitary sewer located west of Cadet under a special wastewater discharge permit. Discharge was authorized as long as permit parameters (including a maximum trichloroethylene level of 0.71 ppm and a maximum discharge rate of 200 gpm) were not exceeded. The Special Wastewater Discharge Authorization permit is included in Attachment D-3.

4.2 Step-Drawdown Pumping Test

A step-drawdown test was conducted at RW-1 on March 20, 2002. The step-drawdown test had a single step of 50 gpm, with pumping rates at 100 and 150 gpm. Each stage of the test operated for approximately 30 minutes, with an overall step-drawdown duration of 62 minutes. Groundwater levels in RW-1 were measured manually with an electronic water level indicator while groundwater levels in MW-11 through MW-16 were measured with pressure transducers equipped with dataloggers. The water level measurement frequency was every minute for the first ten minutes and every 5 minutes thereafter for each stage. The discharge rate was increased at the start of the second step without turning the pump off to maintain influenced water levels.

4.2.1 Results

The groundwater level in RW-1 dropped approximately 2.62 feet below static water level immediately after the pump was turned on. Depth-to-water measurements indicate that the groundwater level rebounded slightly and equilibrated at approximately 2.4 feet below static water levels. After the pumping rate was increased to 150 gpm, the groundwater level decreased immediately to approximately 2.65 feet below static water levels. Water levels equilibrated at approximately 2.66 feet below static water levels during the remainder of the step-drawdown test duration.

The step-drawdown pumping test results were used to evaluate the optimum discharge rate for the constant-rate pumping test. Water level measurements collected during the step-drawdown tests were manually graphed on semilog paper by plotting drawdown over time. A pumping rate of 150 gpm was selected for the constant-rate pumping test at RW-1 based on the results of the step-drawdown test. The step-drawdown tests indicated that the maximum pumping rate would be bounded by on-site storage capacities and the limitation set on the discharge rate to the sanitary sewer. The field data sheets are included in Attachment D-4.

4.2.2 Deviations

During the recovery well development, 20 gpm steps were determined to be inadequate in consideration of the aquifer productivity. The step-drawdown test was therefore conducted at discharge rates of 100 and 150 gpm.

4.3 Constant-Rate Pumping Test

The constant-rate pumping test at RW-1 was started on March 22, 2002 at 14:23 with a discharge rate of approximately 150 gpm. The test was terminated on March 23, 2002 approximately 24 hours after pumping started. The recovery test was initiated immediately after the pump shut down. The recovery test lasted for only 20 minutes because groundwater levels recovered almost immediately after the pump was shut down. Changes in water levels were continuously measured in the pumping well anc monitoring wells MW-11 through MW-16 by pressure transducers equipped with automated dataloggers. Manual depth-to-water measurements were made approximately every hour at RW-1 and MW-13.

Groundwater levels in RW-1 decreased and equilibrated at approximately 0.60 feet within one minute after starting the pumping test. The maximum drawdown observed in RW-1 before groundwater equilibrated was 1.02 feet. Maximum drawdown in the observation wells ranged from 0.016 feet (MW-11) to 0.10 feet (MW-15). No measurable drawdown was observed in wells MW-12 and MW-16. The most distal observation well, MW-14, had a maximum measured drawdown of 0.05 feet. The field data sheets are included in Attachment D-4.

Although groundwater drawdown equilibrated quickly after starting the pumping test, the pumping test was conducted for approximately 24 hours to identify potential recharge or no-flow boundaries. Although tidal changes did not influence the early-time data, when coupled with the low pumping rate, which was limited by the discharge permit, late-time data were affected more by tidal changes than by pumping. Thus, post-test analysis only focused on early-time data of the groundwater drawdown measurements collected during the aquifer tests.

4.3.1 Data Analysis Methodology

The pumping test data analysis considered only the drawdown measurements recorded at RW-1, MW-11, and MW-13 through MW-15 during the first minute of pumping. These data were corrected for tidal effects prior to analysis. A pressure transducer placed in well MW-2s (located approximately 340 feet north of RW-1) during the aquifer tests recorded groundwater levels that were not affected by pumping from RW-1. There was no to little tidal change observed in MW-2s during the first minute of pumping at RW-1. When the tidal change was removed from the observed drawdown measurements, the corrected drawdown did not significantly differ from observed drawdown because tidal changes over one minute are negligible. The ~~corrected~~ drawdown measurements for each well were then used to estimate hydrogeologic characteristics of the water-bearing zone in the area of the aquifer tests.

Corrected drawdown measurements were analyzed using the curve-matching pumping test analysis program AQTESOLV®. AQTESOLV® uses analytical solution methods to estimate hydraulic conductivity and storativity characteristics of the water-bearing formations in the areas where the aquifer tests took place. The analysis methods used include the Theis (Theis, 1935), Cooper-Jacob Straight Line Method (Cooper and Jacob, 1946) with corrected drawdown, and Neuman (Neuman, 1974) approximation solutions. These solution methods are applicable for unconfined aquifers and can be implemented with partially penetrating well corrections.

The aquifer recovery data were also analyzed to provide an independent check of the hydraulic conductivity and storativity approximations from the pumping tests. When pumping is stopped, well and aquifer water levels rise toward their pre-pumping levels. The rate of recovery provides a means for calculating the coefficients transmissivity and storage. Calculated recovery and residual drawdown data (Driscoll, 1986) were evaluated with AQTESOLV® and the Cooper-Jacob Straight Line (1954) method.

All of the solution methods for approximating hydraulic conductivity and storativity are based upon assumptions and conditions including: 1) the aquifer is unconfined; 2) the aquifer has an apparent infinite areal extent; 3) the aquifer is homogenous and of constant thickness over the area influenced by the aquifer test; 4) the water table prior to pumping is horizontal over the area influenced by the aquifer test; and 5) the discharge rate is constant.

The radius of influence of a well can be determined from a distance-drawdown semilog plot. The radius of influence is the radial distance from the center of a well bore to the point where there is no drawdown.

4.3.2 Results

The estimated hydraulic conductivity and storativity results from the pumping test data are presented in Table D-2. The hydraulic conductivity values estimated using each method are within one order of magnitude for all the wells with the exception of the pumping well. Without the pumping well estimates, the hydraulic conductivity ranged from 0.27 to 5.03 cm/sec (761 to 14,260 fpd); the average hydraulic conductivity was 2.55 cm/sec (7,230 fpd). The pumping well hydraulic conductivity estimates ranged from 0.05 to 0.53 cm/sec (140 to 1,502 fpd). In general, the Neuman method yielded the lowest hydraulic conductivity estimates of the three solution methods. The AQTESOLV® results are included in Attachment D-5.

The magnitudes of the storativity values estimated from the pumping tests results ranged significantly for each well. Estimated storativity values ranged from 6.5 × 10 to 5.4 × 10^1, whereas storativity values for sand and gravel unconfined aquifers typically range from 1.0 × 10^{-1} to 3.0 × 10^{-1} (Driscoll, 1986). Among the factors that may have affected estimates of storativity is the short time duration of pumping test data used in the analysis (approximately one minute), and the small drawdowns observed in the observation wells as a result of the low pumping rate.

Analysis of groundwater recovery rates was limited to recovery data collected from wells MW-13 and MW-14. These were the only sets of groundwater recovery data used to estimate hydraulic conductivity and storativity values because the time-drawdown recovery data collected from the other monitoring wells were inadequate for analysis. The results from MW-13 and MW-14 using the Theis and Cooper-Jacob solution methods are summarized also in Table D-2. As seen in Table D-2, the hydraulic conductivity estimates determined from the aquifer recovery data are lower than the values calculated from the pumping test data with the exception of the Neuman solutions. Storativity values determined from the aquifer recovery data are more consistent than the pumping test values and better reflect unconfined aquifer storativity values published in literature.

Figure D-2 shows drawdown observed in the wells after one minute of pumping at RW-1. After one minute of pumping at RW-1, the apparent pumping-induced radius of influence was approximately 10 feet. The magnitude of the radius of influence is dependent on the pumping rate at the extraction well and the permeability of the aquifer sediments. At RW-1, the pumping test was performed at a pumping rate that did not significantly stress the highly permeable USA aquifer.

Correct.

4.3.3 Deviations

No deviations from the pumping test work plans were noted.

5.0 SUMMARY

Following is a summary of the contents of the report:

- Aquifer testing was completed between March 20 and March 23, 2002 and involved step-drawdown and constant-rate pumping tests at pumping well RW-1.
- One new pumping well (RW-1) and six new monitoring wells (MW-11 through MW-16) were installed to measure drawdown during the pumping tests.
- Hydraulic conductivity and storativity were estimated by the curve-matching pumping test analysis program, AQTESOLV®. Groundwater hydraulic properties determined from aquifer stress testing conducted to date at the Site are summarized in Table D-2. The hydraulic conductivity values from the pumping tests conducted in 2002 range from approximately 0.05 to 5.03 cm/sec (140 to 14,260 fpd). The pumping test results do not suggest substantial differences from previously determined hydraulic conductivity values with depth or investigative zones.
- Purge water and decontamination water generated during each groundwater pumping test was contained in a series of industrial tanks provided by Rain-for-Rent. Prior to discharge to the sanitary sewer, the water was sampled and tested per the City of Vancouver's requirements. Approximately 223,000 gallons of purge and decontamination water were generated and discharged into the sanitary sewer from the aquifer tests.

ATTACHMENTS:

Table D-1	Monitoring Well Construction Details
Table D-2	Estimated Hydraulic Conductivity and Storativity Values From RW-1 Groundwater Pumping Test and Recovery Test
Figure D-1	Pumping Well and Monitoring Well Locations for Cadet Pumping Tests
Figure D-2	Drawdown Observed after One Minute of Pumping at Well RW-1
Attachment D-1	Well Installation Boring and Construction Logs
Attachment D-2	Recovery Well Soil Sieve Analysis Results
Attachment D-3	City of Vancouver Special Wastewater Discharge Authorization Permit and Laboratory Reports
Attachment D-4	Field Data, Step-Drawdown Aquifer Test Field Sheets, and Constant-Rate Aquifer Test Field Sheets
Attachment D-5	AQTESOLV® Solutions

REFERENCES:

Cooper, H.H. and C.E. Jacob, 1946. A generalized graphical method for evaluating formation constants and summarizing well field history, Am. Geophys. Union Trans., vol. 27, pp. 526-534.

Driscoll, F.G. 1986. Groundwater and Wells, Second Edition. Johnson Screens, St. Paul, Minnesota 55112.

McFarland, W.D., and D.S. Morgan, 1996. Description of the Ground-Water Flow System in the Portland Basin, Oregon and Washington. United States Geological Survey Water-Supply Paper 2470-A, 1996.

Neuman, S.P., 1974. Effect of partial penetration on flow in unconfined aquifers considering delayed gravity response, Water Resources Research, vol. 10, no. 2, pp. 303-312.

Theis, C.V., 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage, Am. Geophys. Union Trans., vol. 16, pp. 519-524.

Table D-1
Monitoring Well Construction Details

Monitoring Well ID	Completed Depth (ft bgs)	Bentonite Interval (ft bgs)	Grout Seal Interval (ft bgs)	Filter Pack Interval (ft bgs)	Screen Interval (ft bgs)
MW-11	29.4	1–21	NA	21–29.4	23.5–28.5
MW-12	29.5	1–22	NA	22–29.5	24–29
MW-13	55	1–26	26–45	45–55	48.5–53.5
MW-14	54.5	1–21	21–44.5	44.5–54.5	49–54
MW-15	55	1–32	32–46	46–55	49.5–54.5
MW-16	30	0.5–20	NA	20–30	23–28

Table D-2

Estimated Hydraulic Conductivity and Storativity Values from RW-1 Groundwater Pumping Test and Recovery Test

Well Name	Distance from the Pumping Well (feet)	Screened Interval (feet bgs)	Aquifer Thickness (b) (feet)	Solution Method	Hydraulic Conductivity (K) (ft/day)	Hydraulic Conductivity (K) (cm/sec)	Storativity (S) (unitless)
RW-1	0	40 to 60	200	Theis	629	0.22	9.5E-11
RW-1	0	40 to 60	200	Cooper-Jacob	1,502	0.53	1.3E-30
RW-1	0	40 to 60	200	Neuman	140	0.05	5.4E+01
MW-15	10	54 to 49	200	Theis	14,260	5.03	1.7E-30
MW-15	10	54 to 49	200	Cooper-Jacob	761	0.27	9.3E-02
MW-15	10	54 to 49	200	Neuman	4,475	1.58	7.0E-02
MW-14	14	54.5 to 49.5	200	Theis	9,340	3.30	1.1E-15
MW-14	14	54.5 to 49.5	200	Cooper-Jacob	11,115	3.92	1.9E-18
MW-14	14	54.5 to 49.5	200	Neuman	3,124	1.10	9.7E-02
MW-13	5	53.5 to 48.5	200	Theis	8,450	2.98	1.1E-24
MW-13	5	53.5 to 48.5	200	Cooper-Jacob	11,820	4.17	6.5E-35
MW-13	5	53.5 to 48.5	200	Neuman	1,717	0.61	5.3E-01
Recovery Analysis							
MW-14	14	54.5 to 49.5	200	Theis[1]	265	0.09	2.0E-02
MW-14	14	54.5 to 49.5	200	Cooper-Jacob[1]	562	0.20	1.0E-02
MW-13	5	53.5 to 48.5	200	Theis[1]	109	0.04	8.4E-02
MW-13	5	53.5 to 48.5	200	Cooper-Jacob[1]	219	0.08	5.9E-02

Notes:

Pumping well is RW-1.

The aquifer is assumed to be unconfined.

[1] Recovery analysis.

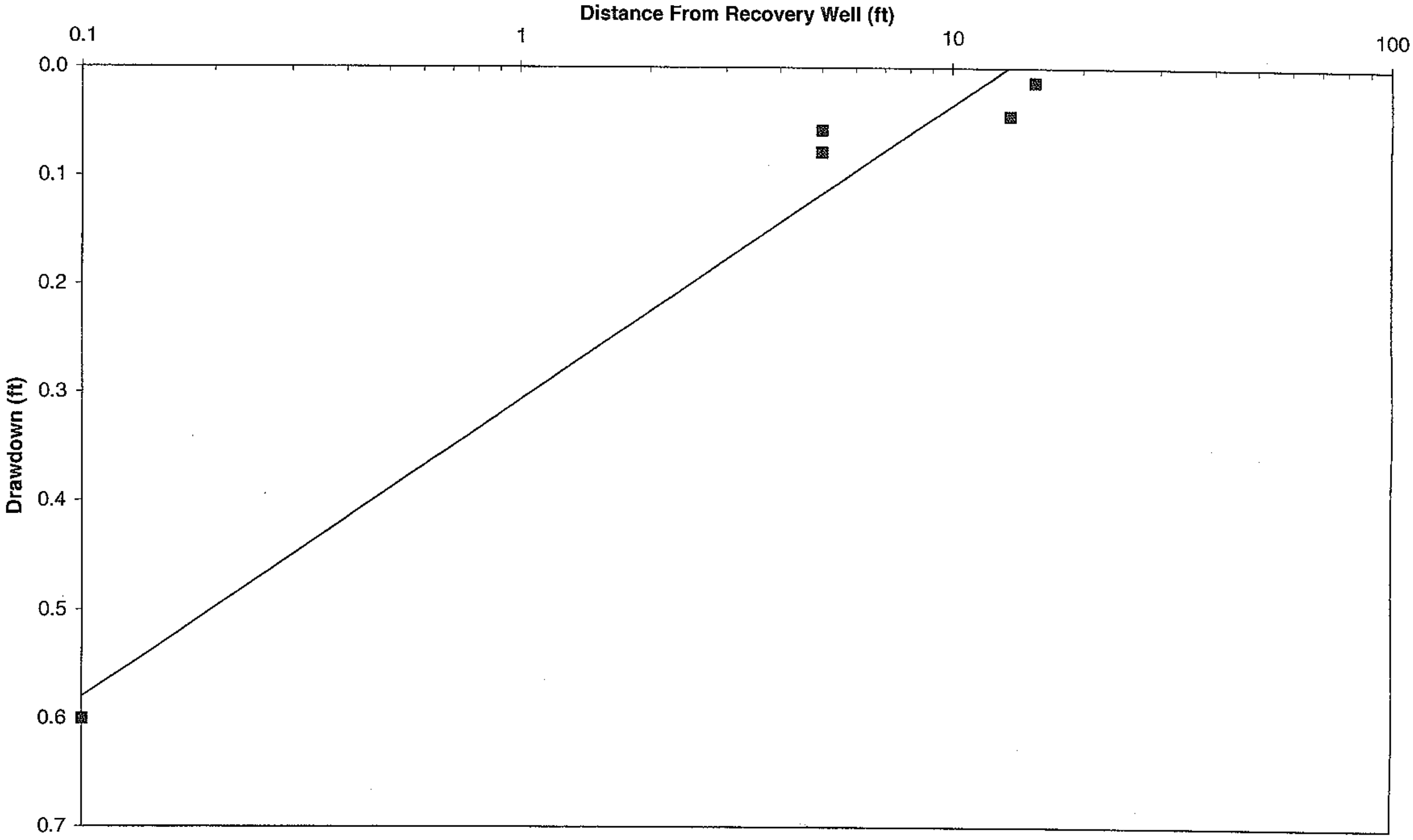


FIGURE D-2

amec

7376 SW Durham Road
Portland, Oregon USA 97224

Job: 2-61M-10135-R
Design:
Drawn:
Date: 12/14/02

CADET MANUFACTURING CO.
2500 W FOURTH PLAIN BLVD.
VANCOUVER, WASHINGTON

DRAWDOWN OBSERVED AFTER ONE MINUTE OF PUMPING AT WELL RW-1

K:\10135\Reports\RI\App D Aq Pump\PumpTestRpt--tbl-fig.xls

ATTACHMENT D-1

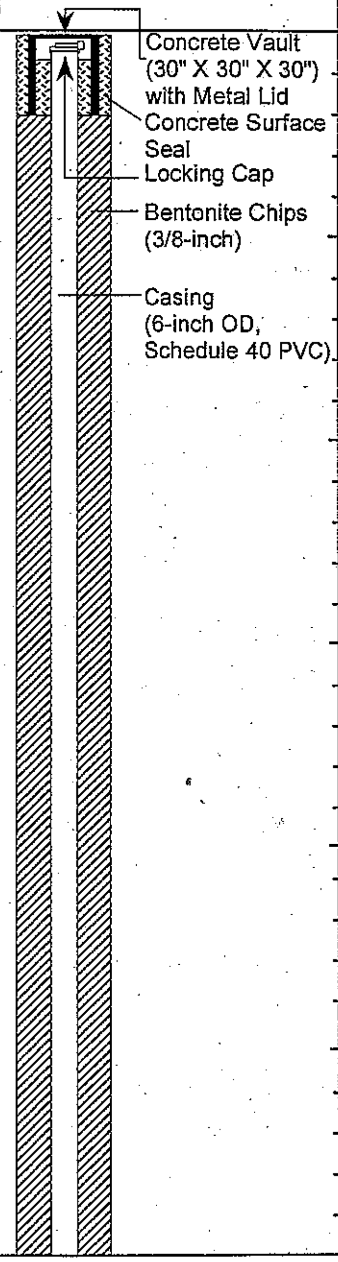
Well Installation Boring and Construction Logs

PROJECT: Cadet Manufacturing **START CARD/TAG NO.:** R047984/AGT641 **BORING No.:** RW-1 **PAGE 1 OF 3**

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 3/4/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 10.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water
0	GRAVEL, (FILL).					
5	SILT, (SM), medium stiff, moist to damp, brown, micaceous, very fine-grained sand.		▨	7	0.0	
10	SILT, (SM), medium stiff, moist to damp, brown, micaceous, very fine-grained sand with 4.0-inch lens of SAND, loose, damp, brown, micaceous silt at 10.5 feet. Drilling denser at 13.5 feet.		▨	6	0.0	
15	SAND, (SM), medium dense, moist, brown, some silt.		▨	19	0.0	
20	GUS sampler used to collect Shelby tube sample. Lots of back pressure on sample. Piece of fabric pulled from bottom end of tube before tube was removed from sampler. Approximately 1.0 foot recovered. Sample possibly disturbed due to fabric on wall of sampler tube. GUS sampler used to collect samples at 22.0-24.0 feet and 25.0-27.0 feet.		▨ NR			
25	Similar amounts of back pressure.					
	SAND, (SW), medium dense, moist, dark brown, few small gravel. Larger GRAVEL at 26.5 feet during drilling. Sandy at 28.0 feet and GRAVEL at 29.0 feet.					
30						

AS-BUILT DESIGN



ANALYSES

LEGEND

- ▨ 2.0-inch OD / 3.0-inch OD split-spoon sample with % recovered
- ▨ 3.0-inch OD undisturbed sample with % recovered
- NR No sample recovery

PROJECT NUMBER: 1-61M-10135-C T2

Cadet Manufacturing
Vancouver, Washington

AMEC EARTH & ENVIRONMENTAL, INC.
7376 SW Durham Road
Portland, Oregon 97224
Phone (503) 639-3400 FAX (503) 620-7892

\10135\RW1.DRW

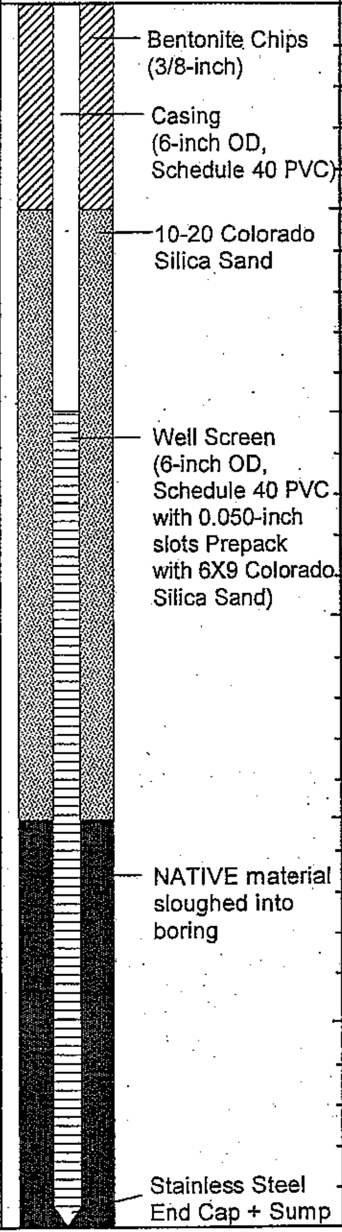
Drilling Started: 2/22/02 **Drilling Completed:** 3/4/02 **Logged By:** B. Lary/SWBK

PROJECT: Cadet Manufacturing START CARD/TAG NO.: R047984/AGT641 BORING No.: RW-1 PAGE 2 OF 3

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 3/4/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 10.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings	Ground Water	ANALYSES
30	SAND, (SW), very dense, moist, dark brown, some fine-grained sand, silt, and gravel. Medium gravel in end of shoe.			50+	(ppm) 0.0		
35	SAND, (SW), very dense, wet, dark brown, coarse- to very coarse-grained, some gravel.			50+	0.0		
	Switched to 3.0-inch diameter spoon at 40.0 feet. Continuous sieve sample collected.						
40	SAND, (SW), very dense, wet, dark brown to black, very coarse-grained, small subangular gravel.			50+			
	Changed to SAND (driller observation) at 43.0 feet. Probably heaving SANDS.						
45	SAND, (SW), dense, wet, dark brown to black, coarse-grained, small to medium subangular gravel (some pieces > 1.5-inch diameter).			35			
	Heaving SANDS above sample.						
50	SAND, (SW), dense, wet, dark brown to black, coarse-grained, small subangular gravel.			32			
55	SAND, (SW), very dense, wet, dark brown to black, coarse-grained, small to medium subangular gravel (some pieces > 1.5-inch diameter).			50+			
60							

AS-BUILT DESIGN



LEGEND

- ▨ 2.0-inch OD / 3.0-inch OD split-spoon sample with % recovered
- ▨ 3.0-inch OD undisturbed sample with % recovered
- NR No sample recovery

PROJECT NUMBER: 1-61M-10135-C T2

Cadet Manufacturing
Vancouver, Washington

AMEC EARTH & ENVIRONMENTAL, INC.
7376 SW Durham Road
Portland, Oregon 97224
Phone (503) 639-3400 FAX (503) 620-7892

\10135\RW1PG2.DRW

Drilling Started: 2/22/02 Drilling Completed: 3/4/02 Logged By: B. Lary/SWBK

PROJECT: Cadet Manufacturing **START CARD/TAG NO.:** R047984/AGT641 **BORING No.:** RW-1 **PAGE 3 OF 3**

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 3/4/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 10.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water	AS-BUILT DESIGN	ANALYSES
60	SAND, (SW), very dense, wet, dark brown to black, coarse-grained, small to medium subangular gravel (some pieces > 1.5-inch diameter).		▨	50+			▓ NATIVE material sloughed into boring	
65	Total depth = 65.0 feet.							
70								
75								
80								
85								
90								

LEGEND

▨ 2.0-inch OD / 3.0-inch OD split-spoon sample with % recovered
▯ 3.0-inch OD undisturbed sample with % recovered
NR No sample recovery

PROJECT NUMBER: 1-61M-10135-C T2

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Portland, Oregon 97224
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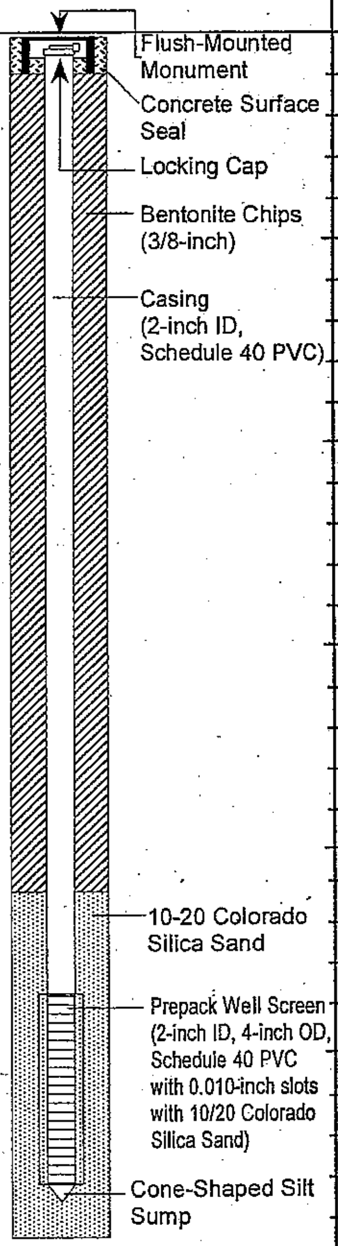
\10135\RW1PG3.DRW

Drilling Started: 2/22/02 **Drilling Completed:** 3/4/02 **Logged By:** B. Lary/SWBK

PROJECT: Cadet Manufacturing   START CARD/TAG NO.: 047984/AGT695   BORING No.: MW-11   PAGE 1 OF 1

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 2/28/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water	AS-BUILT DESIGN	ANALYSES
0	(No samples. Logging by drilling character and cuttings only.)							
5								
10	SILT to SANDY SILT, soft, damp, medium brown, mottled, very fine-grained, some clay.							
	Drilling easily and consistent.					▽ SW		
15								
20								
	Color grades to medium gray.							
25								
	GRAVELLY SANDS. Harder drilling.							
	Very hard drilling last foot.							
30	Total depth = 30.0 feet.							



LEGEND

▽ SW Static groundwater level on 2/28/02

PROJECT NUMBER: 1-61M-10135-C T2

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\10135\MW11.DRW

Drilling Started: 2/28/02   Drilling Completed: 2/28/02   Logged By: C. Bartlett

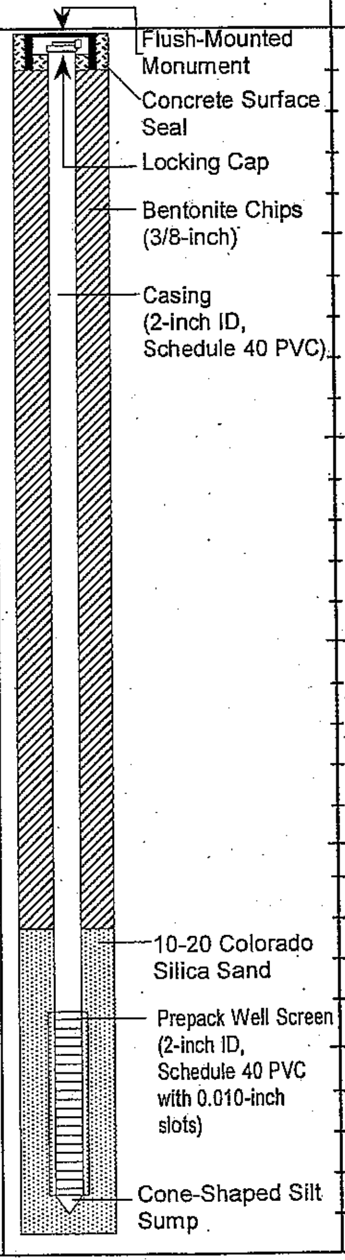
PROJECT: Cadet Manufacturing START CARD/TAG NO.: 047984/AGT698 BORING No.: MW-12 PAGE 1 OF 1

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 2/28/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water
0	(No samples. Logging by drilling character and cuttings only.)					
5	Relatively easy drilling to 10.0 feet.					
10	SILT to SANDY SILT, damp, medium brown, very fine-grained, some clay.					
						▽ SW
15						
20	SILT to CLAYEY SILT, damp, medium brown, mottled, very fine-grained, some sand.					
	Relatively easy drilling.					
25						
	Hard drilling - GRAVEL. No cuttings.					
30	Total depth = 30.0 feet.					

AS-BUILT DESIGN

ANALYSES



LEGEND

▽ SW Static groundwater level on 2/28/02

PROJECT NUMBER: 1-61M-10135-C T2

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Vancouver, Washington

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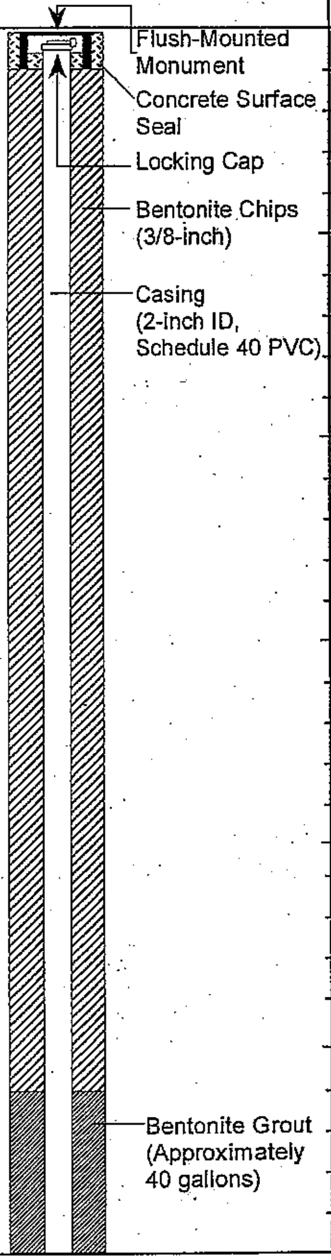
\10135\MW12.DRW

Drilling Started: 2/28/02 Drilling Completed: 2/28/02 Logged By: C. Bartlett

PROJECT: Cadet Manufacturing   **START CARD/TAG NO.:** 047984/AGT694   **BORING No.:** MW-13   **PAGE 1 OF 2**

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 2/28/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water	AS-BUILT DESIGN	ANALYSES
0	(No samples. Logging by drilling character and cuttings only.)							
	Easy, smooth drilling.							
5	CLAYEY SILT, soft, damp, medium brown, mottled.							
10								
15	SILT to SANDY SILT, damp, medium brown to medium to dark gray-brown, mottled in upper section, some clay.					▽ SW		
	SILT to SANDY SILT, with trace clay.							
	Slightly harder drilling at 19.0-20.0 feet.							
20								
25								
	Very slow, hard drilling.							
	SAND to GRAVELLY SAND.							
30								



PROJECT NUMBER: 1-61M-10135-C T2

LEGEND

▽ SW Static groundwater level on 2/28/02

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\10135\MW13.DRW

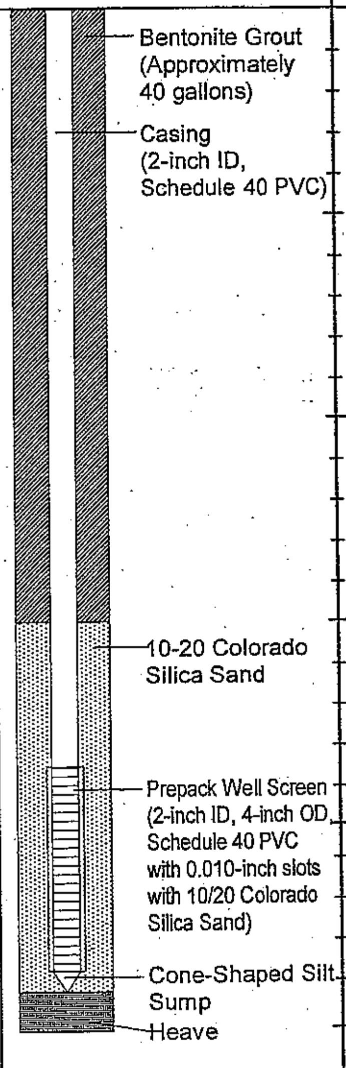
Drilling Started: 2/28/02   **Drilling Completed:** 2/28/02   **Logged By:** C. Bartlett

PROJECT: Cadet Manufacturing   START CARD/TAG NO.: 047984/AGT694   BORING No.: MW-13   PAGE 2 OF 2

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 2/28/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water
30						
	Very slow, hard drilling.					
35						
	SANDY SILT, very fine- to fine-grained sand, some silt.					
40						
	Hard drilling.					
45	Hard, slow drilling. Few cuttings returned.					
	Very hard and slow drilling. GRAVEL.					
	Very hard drilling at 47.0-50.0 feet. GRAVEL.					
50						
55	Total depth = 55.0 feet.					
60						

AS-BUILT DESIGN



ANALYSES

LEGEND

SW Static groundwater level on 2/28/02

PROJECT NUMBER: 1-61M-10135-C T2

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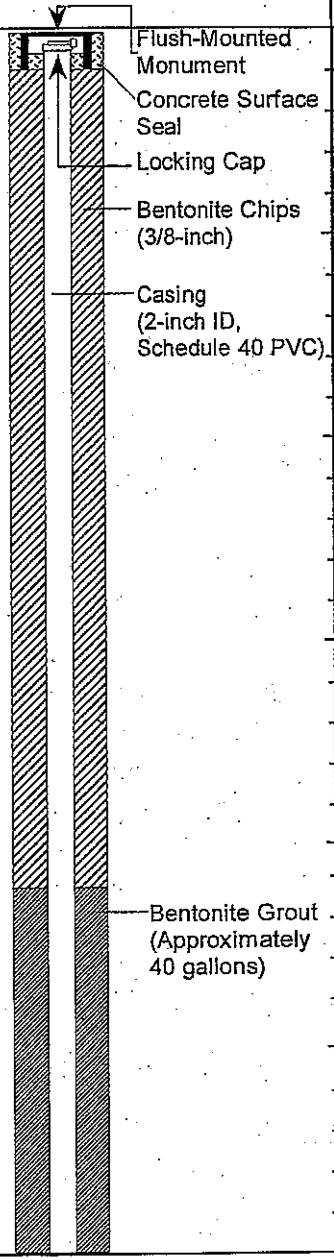
\10135\MW13PG2.DRW

Drilling Started: 2/28/02   Drilling Completed: 2/28/02   Logged By: C. Bartlett

PROJECT: Cadet Manufacturing **START CARD/TAG NO.:** 047984/AGT696 **BORING No.:** MW-14 **PAGE 1 OF 2**

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 2/28/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water	AS-BUILT DESIGN	ANALYSES
0	(No samples. Logging by drilling character and cuttings only.) SILT to CLAYEY SILT, soft, damp, light to medium brown, mottled, some very fine-grained sand.							
5	Drilling easily and smoothly.							
10	SILT to SANDY SILT, very fine-grained, some clay.							
15						SW		
20	SANDY SILT, soft, trace clay.							
25	Hard drilling. GRAVELLY SAND.							
30								



LEGEND

SW Static groundwater level on 2/28/02

PROJECT NUMBER: 1-61M-10135-C T2

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\10135\MW14.DRW

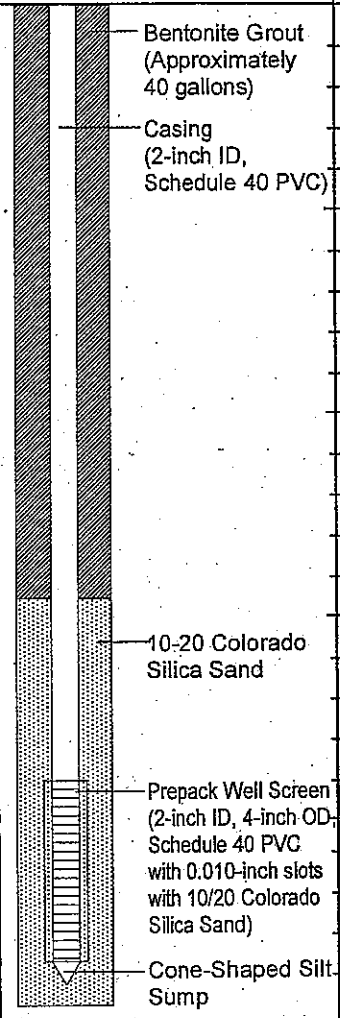
Drilling Started: 2/28/02 **Drilling Completed:** 2/28/02 **Logged By:** C. Bartlett

PROJECT: Cadet Manufacturing **START CARD/TAG NO.:** 047984/AGT696 **BORING No.:** MW-14 **PAGE 2 OF 2**

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 2/28/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water
30	GRAVELLY SAND. Very slow drilling.					
35						
40	Very slow drilling. Relatively few cuttings returned.					
45	SILT to SANDY SILT, very fine- to fine-grained sand. Very slow, hard drilling.					
50						
55	Total depth = 55.0 feet.					
60						

AS-BUILT DESIGN



ANALYSES

LEGEND

SW Static groundwater level on 2/28/02

PROJECT NUMBER: 1-61M-10135-C T2

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\10135\MW14PG2.DRW

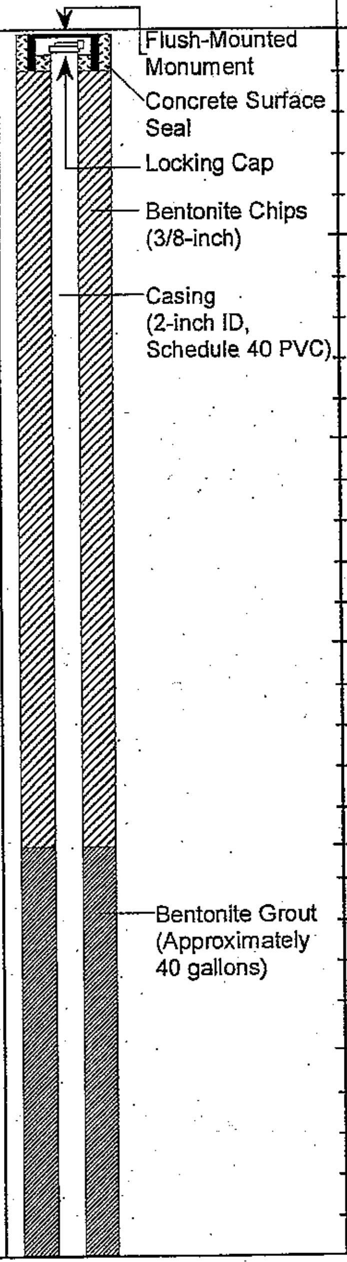
Drilling Started: 2/28/02 **Drilling Completed:** 2/28/02 **Logged By:** C. Bartlett

PROJECT: Cadet Manufacturing START CARD/TAG NO.: 047984/AGT693 BORING No.: MW-15 PAGE 1 OF 2

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 2/27/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water
0	GRAVEL.					
5			NR	6		
10	SILT to SANDY SILT (ML), medium stiff, damp, light to medium brown, mottled, trace clay, organic material at top.		▨	12	1.1	
						SW
15	SANDY SILT to SILTY SAND (SP), stiff/ medium dense, damp, medium brown, slightly mottled, very fine- to fine-grained, homogeneous.		▨	14	1.8	
20	SAND to SILTY SAND (SP), medium dense, wet, medium brown-gray, slightly mottled, very fine- to medium-grained, homogeneous, with occasional small pods of silt.		▨	19	1.7	
25	SAND (SP), dense, wet, dark brown-gray (basalt and some quartz), fine- to very coarse-grained, trace fine gravel, silt, homogeneous.		▨	40	2.3	
30						

AS-BUILT DESIGN



ANALYSES

LEGEND

▨ 2.0-inch OD / 3.0-inch OD split-spoon sample with % recovered

NR No sample recovery

SW Static groundwater level on 2/27/02

PROJECT NUMBER: 1-61M-10135-C T2

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\10135\MW15.DRW

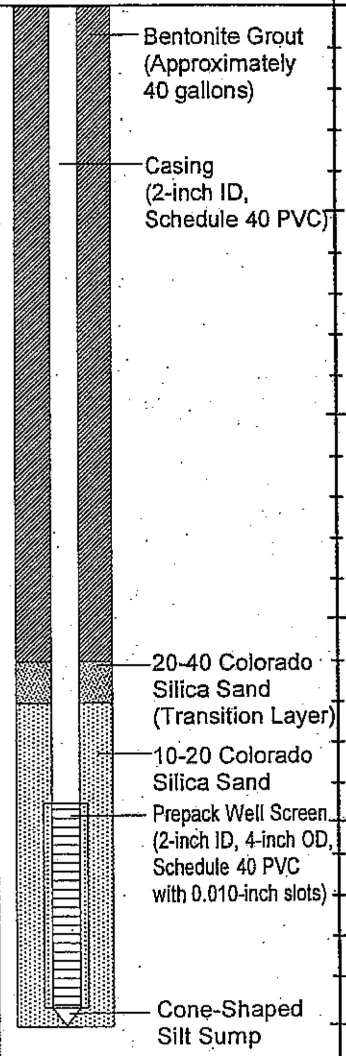
Drilling Started: 2/27/02 Drilling Completed: 2/27/02 Logged By: C. Bartlett

PROJECT: Cadet Manufacturing START CARD/TAG NO.: 047984/AGT693 BORING No.: MW-15 PAGE 2 OF 2

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 2/27/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water	ANALYSES
30	SAND (SP), medium dense, wet, dark gray-brown (basalt), quartz, fine- to very coarse-grained, 10% fine gravel, trace silt.		▨	30	4.5		
35	Grades to very coarse-grained, 20-30% fine to coarse gravel, round to subrounded.		▨	50+	3.5		
40	SAND (SP), medium dense, wet, dark gray (basalt), quartz, round to subrounded, fine- to very coarse-grained, approximately 10% fine gravel, trace silt, homogeneous. Heaving sand conditions encountered.		▨	21	3.0		
45	SAND (SP) to GRAVELLY SAND (GP), round to subrounded, medium- to very coarse-grained, 30-40% fine to coarse gravel (mostly fine), basalt, some quartz, trace silt.		▨	50+	2.3		
50	Heaving sand conditions encountered. SAND (SP) to GRAVELLY SAND (GP), very dense, wet, dark gray, round to subrounded, basalt, some quartz, trace silt.		▨	50+	1.8		
55	Total depth = 56.5 feet.		▨	50+	2.3		
60							

AS-BUILT DESIGN



LEGEND

▨ 2.0-inch OD / 3.0-inch OD split-spoon sample with % recovered

NR No sample recovery

SW Static groundwater level on 2/27/02

PROJECT NUMBER: 1-61M-10135-C T2

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\10135\MW15PG2.DRW

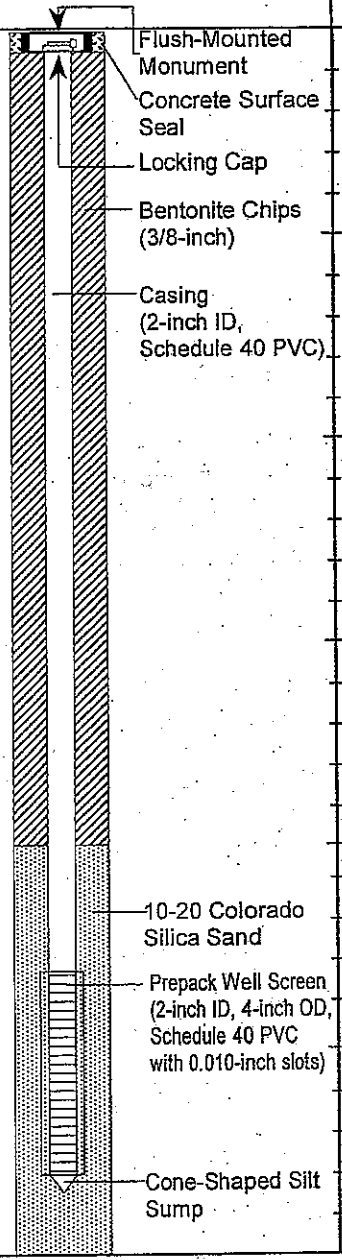
Drilling Started: 2/27/02 Drilling Completed: 2/27/02 Logged By: C. Bartlett

PROJECT: Cadet Manufacturing START CARD/TAG NO.: 047984/AGT697 BORING No.: MW-16 PAGE 1 OF 2

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 3/1/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water	ANALYSES
0	GRAVEL.						
5	SILT, stiff, dry to damp, medium brown, mottled, trace organics, trace clay.		▨	11	2.2		
10	SAND, round to subrounded, very coarse- to coarse-grained, basalt (1.0-inch lens at top).		▨	13	1.0		
	SANDY SILT to SILT, stiff, damp, medium brown, slightly mottled, very fine- to fine-grained, thin zones of clayey silt, trace clay.					▼ SW	
15	SILTY SAND, medium dense, wet, dark gray-brown, well-sorted, very fine- to fine-grained, some silt, trace mica.		▨	16	1.0		
20	SAND, medium dense, wet, dark gray to black (basalt and quartz), round to subrounded, fine- to coarse-grained, interbedded with silty sand, trace gravel.		▨	19			
25	SAND, dense, wet, dark gray to black, round to subrounded, well-sorted, fine- to medium-grained, basalt, some quartz, trace silt, homogeneous.		▨	35	1.5		
	Grades to approximately 15% coarse- to very coarse-grained SAND.						
30							

AS-BUILT DESIGN



LEGEND

▨ 2.0-inch OD / 3.0-inch OD split-spoon sample with % recovered

▼ SW Static groundwater level on 3/1/02

PROJECT NUMBER: 1-61M-10135-C T2

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\10135\MW16.DRW

Drilling Started: 3/1/02 Drilling Completed: 3/1/02 Logged By: C. Bartlett

PROJECT: Cadet Manufacturing **START CARD/TAG NO.:** 047984/AGT697 **BORING No.:** MW-16 **PAGE 2 OF 2**

Elevation Reference:
Relative Ground Surface Elevation:
Well Completed: 3/1/02
Relative Casing Elevation:
Boring Method: Hollow Stem Auger
Borehole Diameter: 6.0"

Depth (feet)	SOIL DESCRIPTION	Sample Number	Sample Type	Blow Counts	Volatile Readings (ppm)	Ground Water	AS-BUILT DESIGN	ANALYSES
30	Total depth = 30.0 feet.		▨	15/50 for 6"				
35								
40								
45								
50								
55								
60								

LEGEND

▨ 2.0-inch OD / 3.0-inch OD split-spoon sample with % recovered

▽ SW Static groundwater level on 3/1/02

PROJECT NUMBER: 1-61M-10135-C T2

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\10135\MW16PG2.DRW

Drilling Started: 3/1/02 **Drilling Completed:** 3/1/02 **Logged By:** C. Bartlett

ATTACHMENT D-2

Recovery Well Soil Sieve Analysis Results

Fax

Date: Monday, February 25, 2002

To: Scott Bourcy
AMEC
Phone: 503-639-3400
Fax: 503-620-7892

From: Oglebay Norton Industrial Sands
Andre Fiedler
Phone: 719-390-7969
Fax: 719-390-5517

Pages: 2

Per our conversation, attached is my design review. The 2 dashed lines are developed based on the 4x and 6x multipliers of your D50 value. I have plotted Colorado Silica Sand^{TM} 6x9. Note that it does fall within the design range for the lower half of the graph (finer fraction). For 10% passing, you could use a screen up to about 0.080-inch slot.
These are merely my recommendations. We assume no liability for the use of this information.
Thank you.

amec

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Portland, Oregon
USA 97223-5025
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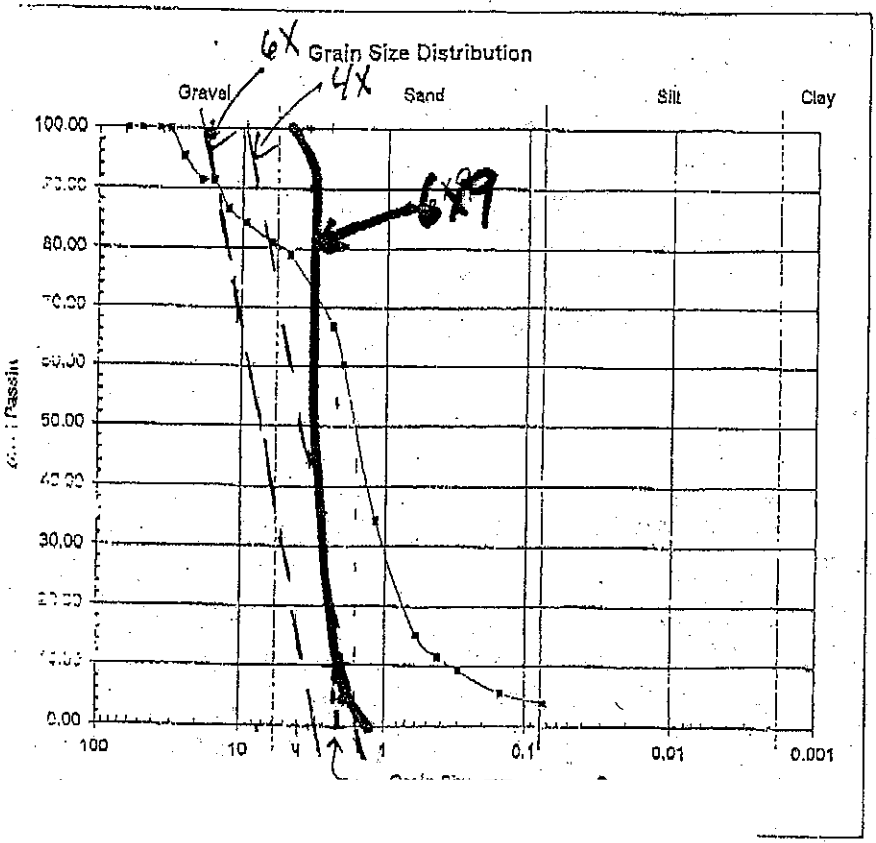
Fax (503) 620-7892

SIZE ANALYSIS: ASTM D 421 and ASTM D 422

Name	CADET			Date	2/23/02
Number	1-61m-10135-C/T2			Tested By	CMC
Boring/Source	RW-1	Depth (ft)	50-60'	Lab #	5432B
Material Description	Gravelly SAND				



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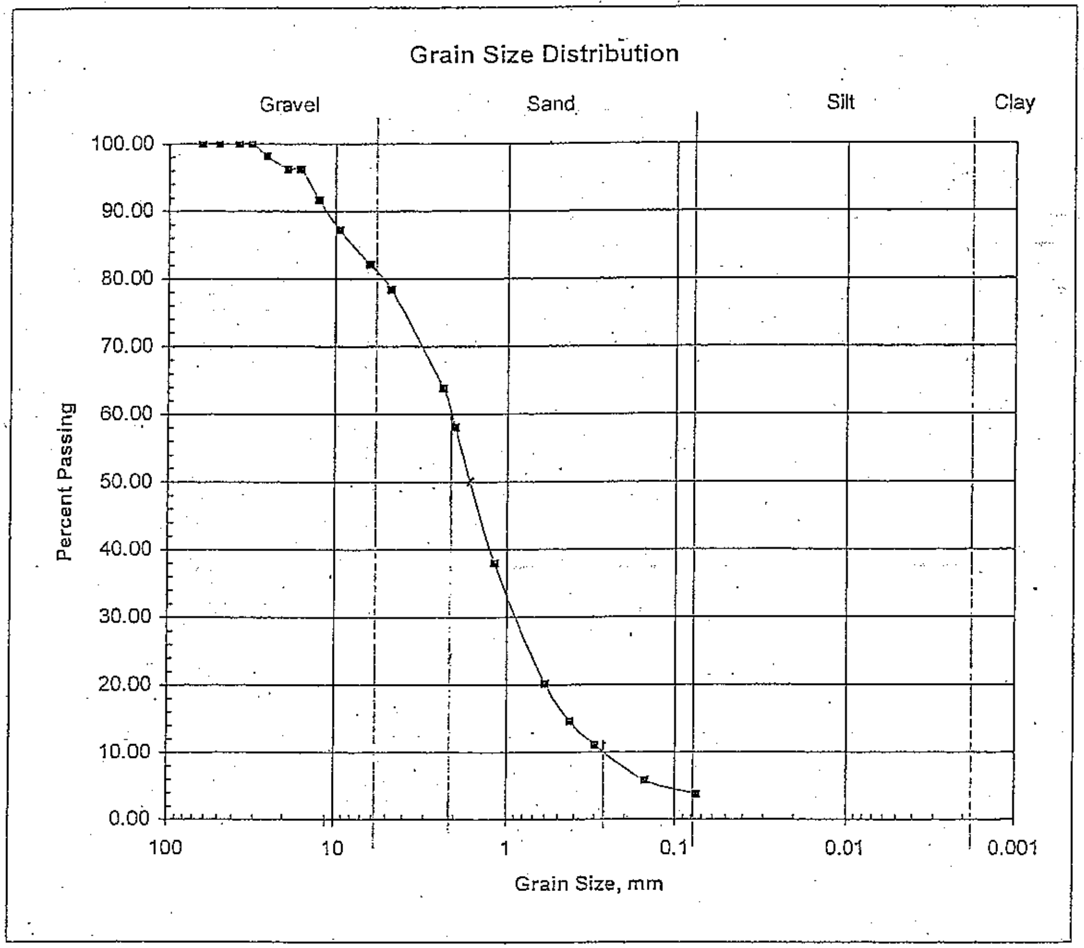
GRAIN SIZE ANALYSIS: ASTM D 421 and ASTM D 422

Project Name	CADET			Date	2/23/02
Project Number	1-61m-10135-C/T2			Tested By	CMC
Boring/Source	RW-1	Depth (ft)	40-46.5'	Lab #	5432A
Material Description	Gravelly SAND				



Version 8/1/98

Lab5432.Sieve

Sieve #200 Wash	
(A) Dry Weight Before Wash (gm)	3601.6
(B) Dry Weight After Wash (gm)	3485.2
(C) Percent Passing #200 [(A-B)/A*100]	3.2

Coarse Sieves		(D) Individual			Assumed
Number	Grain Size	Weight Retained	(E) % Retained	(F) % Passing	Distribution
	(mm)	(gm)	[D/A*100]	[E-F]	
2 1/2"	63		0.00	100.00	100.0
2"	50		0.00	100.00	100.0
1 1/2"	37.5	0	0.00	100.00	100.0
1 1/4"	31.5		0.00	100.00	99.1
1"	25.4	67.2	1.87	98.13	98.1
3/4"	19	69.6	1.93	96.20	96.2
5/8"	15.9	0	0.00	96.20	94.0
1/2"	12.5	161.5	4.48	91.72	91.7
3/8"	9.5	161.8	4.49	87.23	87.2
1/4"	6.3	184.7	5.13	82.10	82.1
4	4.75	133.7	3.71	78.38	78.4

(G) Split Material Dry Weight Total (gm)	
Dry Material Weight After #200 Wash (gm)	

Fine Sieves		(H) Individual			Cumulative	Assumed
Number	Grain Size	Weight Retained	(I) % Retained	(J) % Passing	% Passing	Distribution
	(mm)	(gm)	[H/G]	[I-J]	[J*E]	
8	2.36	524.8	14.6	63.8	63.8	63.8
10	2	206.4	5.7	58.1	58.1	58.1
16	1.18	723.7	20.1	38.0	38.0	38.0
30	0.6	642.7	17.8	20.1	20.1	20.1
40	0.425	200.5	5.6	14.6	14.6	14.6
50	0.3	126.7	3.5	11.1	11.1	11.1
100	0.15	188.6	5.2	5.8	5.8	5.8
200	0.075	74.2	2.1	3.8	3.8	3.8
Pan		19.5	0.5	3.2	3.2	3.2

	Sand Line	Silt Line	Clay Line
0	4.75	0.075	0.002
100	4.75	0.075	0.002

Remarks: ______________________________

Reviewed By: ______________________

amec

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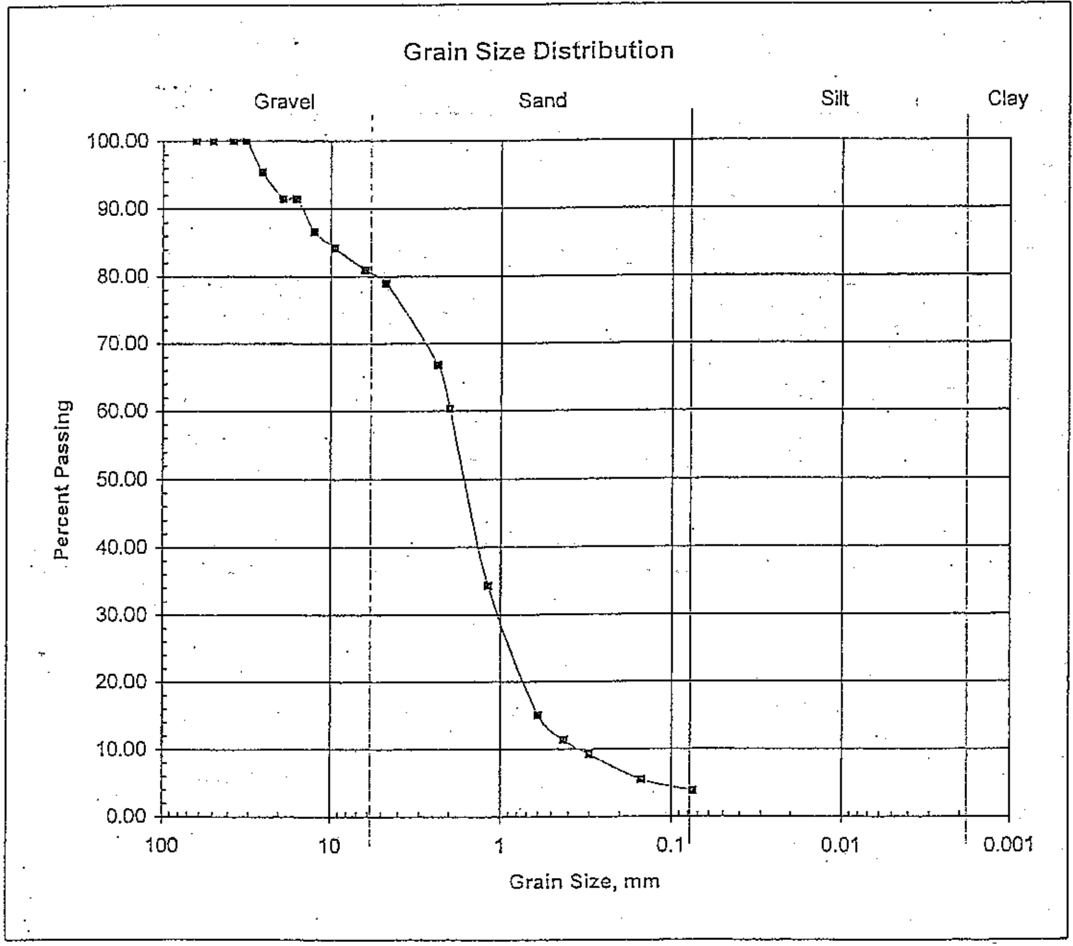
Fax (503) 620-7892

GRAIN SIZE ANALYSIS: ASTM D 421 and ASTM D 422

Project Name	CADET			Date	2/23/02
Project Number	1-61m-10135-C/T2			Tested By	CMC
Boring/Source	RW-1	Depth (ft)	50-60'	Lab #	5432B
Material Description	Gravelly SAND				



Sieve #200 Wash	
(A) Dry Weight Before Wash (gm)	6516.3
(B) Dry Weight After Wash (gm)	6304
(C) Percent Passing #200 [(A-B)/A*100]	3.3

Coarse Sieves		(D) Individual			Assumed
Number	Grain Size	Weight Retained	(E) % Retained	(F) % Passing	Distribution
	(mm)	(gm)	[D/A*100]	[E-F]	
2 1/2"	63		0.00	100.00	100.0
2"	50		0.00	100.00	100.0
1 1/2"	37.5	0	0.00	100.00	100.0
1 1/4"	31.5	0	0.00	100.00	97.7
1"	25.4	298.2	4.58	95.42	95.4
3/4"	19	257.5	3.95	91.47	91.5
5/8"	15.9	0	0.00	91.47	89.0
1/2"	12.5	318.9	4.89	86.58	86.6
3/8"	9.5	154.9	2.38	84.20	84.2
1/4"	6.3	212.2	3.26	80.94	80.9
4	4.75	129.7	1.99	78.95	79.0

(F) Split Material Dry Weight Total (gm)	
Dry Material Weight After #200 Wash (gm)	

Fine Sieves		(H) Individual			Cumulative	Assumed
Number	Grain Size	Weight Retained	(I) % Retained	(J) % Passing	% Passing	Distribution
	(mm)	(gm)	[H/G]	[I-J]	[J*E]	
8	2.36	791	12.1	66.8	66.8	66.8
10	2	421	6.5	60.4	60.4	60.4
16	1.18	1699	26.1	34.3	34.3	34.3
30	0.6	1254.2	19.2	15.0	15.0	15.0
40	0.425	241.1	3.7	11.3	11.3	11.3
50	0.3	137.7	2.1	9.2	9.2	9.2
100	0.15	243.5	3.7	5.5	5.5	5.5
200	0.075	108.2	1.7	3.8	3.8	3.8
Pan		27.9	0.4	3.4	3.4	3.4

	Sand Line	Silt Line	Clay Line
0	4.75	0.075	0.002
100	4.75	0.075	0.002

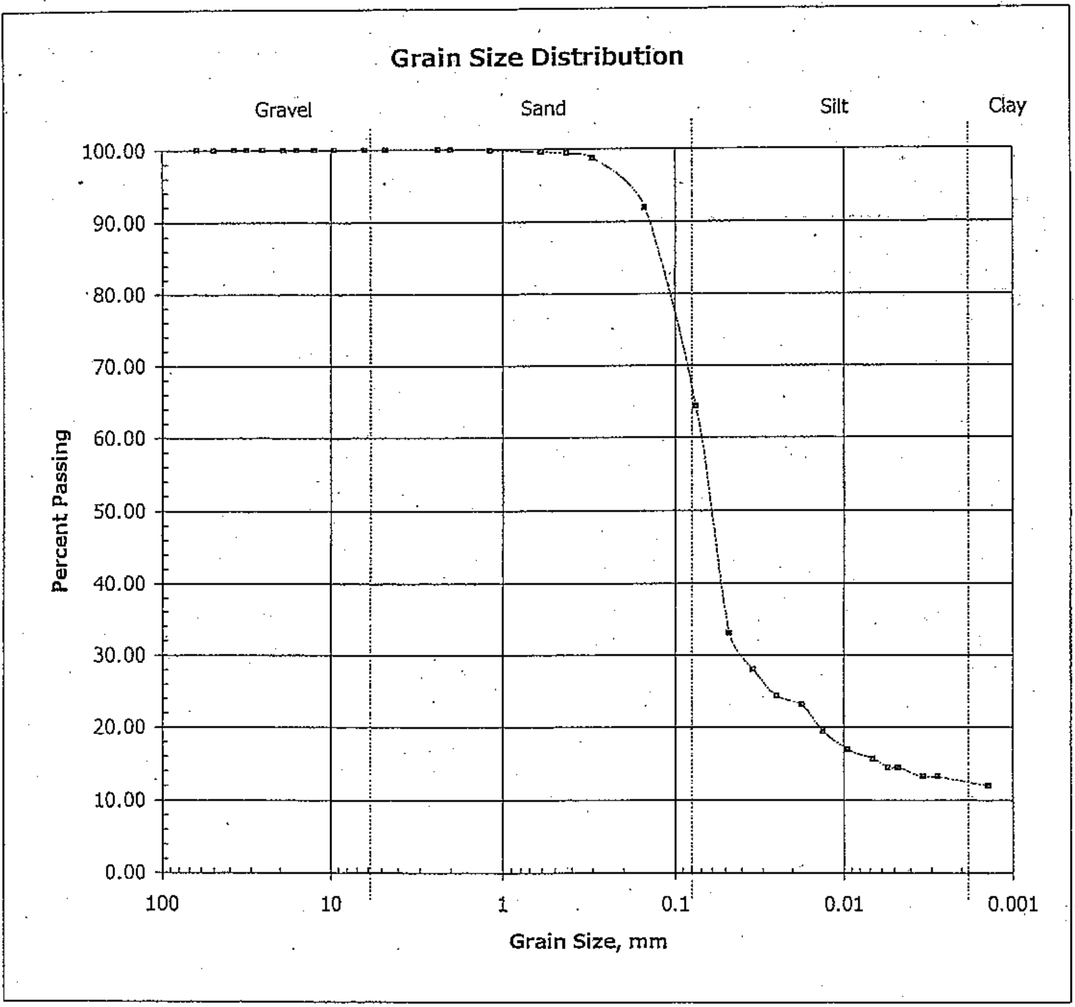
Remarks:

Reviewed By:

AMEC Earth &
Environmental, Inc.
7376 SW Durham Road
Portland, Oregon
USA 97224
Tel (503) 639-3400
Fax (503) 620-7892

GRAIN SIZE ANALYSIS: ASTM D 421 and ASTM D 422

Project Name	CADET			Date	3/20/02
Project Number	1-61M-10135-C/T2			Tested By	K. M.
Boring/Source	MW4 & MW 15	Depth (ft)	5-15	Lab #	**5440**
Material Description	Brown silt				



Sieve #200 Wash	
(A) Dry Weight Before Wash (gm)	51.9
(B) Dry Weight After Wash (gm)	19.48
(C) Percent Passing #200 [(A-B)/A*100]	62.5

Coarse Sieves		(D) Individual			Assumed
Number	Grain Size	Weight Retained	(E) % Retained	(F) % Passing	Distribution
	(mm)	(gm)	[D/A*100]	[E-F]	
2 1/2"	63		0.00	100.00	100.0
2"	50		0.00	100.00	100.0
1 1/2"	37.5		0.00	100.00	100.0
1 1/4"	31.5		0.00	100.00	100.0
1"	25.4	0	0.00	100.00	100.0
3/4"	19	0	0.00	100.00	100.0
5/8"	15.9	0	0.00	100.00	100.0
1/2"	12.5	0	0.00	100.00	100.0
3/8"	9.5	0	0.00	100.00	100.0
1/4"	6.3	0	0.00	100.00	100.0
4	4.75	0	0.00	100.00	100.0

(F) Split Material Dry Weight Total (gm)	
Dry Material Weight After #200 Wash (gm)	

Fine Sieves		(H) Individual			Cumulative	Assumed
Number	Grain Size	Weight Retained	(I) % Retained	(J) % Passing	% Passing	Distribution
	(mm)	(gm)	[H/G]	[I-J]	[J*E]	
8	2.36	0	0.0	100.0	100.0	100.0
10	2	0	0.0	100.0	100.0	99.9
16	1.18	0.08	0.2	99.8	99.8	99.8
30	0.6	0.13	0.3	99.6	99.6	99.6
40	0.425	0.11	0.2	99.4	99.4	99.4
50	0.3	0.35	0.7	98.7	98.7	98.7
100	0.15	3.59	6.9	91.8	91.8	91.8
200	0.075	14.28	27.5	64.3	64.3	64.3
Pan		1.09	2.1	62.2	62.2	62.2

	Sand Line	Silt Line	Clay Line
0	4.75	0.075	0.002
100	4.75	0.075	0.002

Remarks:

Reviewed By:

Hydrometer Analysis

Zero Correction	0	Dispersing Agent	NaPO3
Specific Gravity, Gs	2.67	a = [(1.65Gs)/(2.65(Gs-1))	0.995481
% Passing #200 Sieve (Sv200)	64.3	Start Time	
Tested Mass of Soil, Ms (gm)	51.9	Meniscus Correction (CorrM)	1

Elapsed Time (min)	Temp. (Celsius)	Actual Reading Ra	Corr. Reading Rc	% Finer (F%) [Rc*a/Ms]	Meniscus Corr. R	L	K	Particle Diameter (mm)	Adjusted % Finer [Sv10*F%]
1	19	27	26.7	51.2125928	28	11.7	0.0138	0.047	32.91815
2	19	23	22.7	43.5402943	24	12.4	0.0138	0.034	27.98659
4	19	20	19.7	37.7860704	21	12.9	0.0138	0.025	24.28792
8	19	19	18.7	35.8679957	20	13	0.0138	0.018	23.05504
15	19	16	15.7	30.1137718	17	13.5	0.0138	0.013	19.35637
30	19	14	13.7	26.2776225	15	13.8	0.0138	0.009	16.89059
60	19	13	12.7	24.3595479	14	14	0.0138	0.007	15.6577
90	19	12	11.7	22.4414733	13	14.2	0.0138	0.005	14.42481
120	19	12	11.7	22.4414733	13	14.2	0.0138	0.005	14.42481
240	19	11	10.7	20.5233986	12	14.3	0.0138	0.003	13.19192
360	19	11	10.7	20.5233986	12	14.3	0.0138	0.003	13.19192
1440	19	10	9.7	18.605324	11	14.5	0.0138	0.001	11.95903

ATTACHMENT D-3

City of Vancouver Special Wastewater Discharge Authorization Permit
and Analytical Reports

P.O. Box 1995
Vancouver, WA 98668-1995

City of
VANCOUVER
WASHINGTON

www.ci.vancouver.wa.us

FAX TRANSMITTAL

		Date:	03/19/2002
To: Jeff Medken		**Fax:**	1-503-620-7892
Company: AMEC		**Phone:**	1-503-639-3400
From: Kevin Smithline City of Vancouver		**Phone:** **Fax:**	360-696-8008 360-696-8460
Re: Special Wastewater Discharge Authorization		**Pages:**	2
CC: Dotti Ramey City of Vancouver			

___ **Urgent** X **For Review** ___ **Please Comment** ___ **Please Reply**

Comments:
Here is the Special Wastewater Discharge Authorization. Please note the discharge limitations. The City will review analytical data as described in the application package prior to any discharge to sanitary sewer for the first two events. The City will be contacted ASAP with sample results when available for the third discharge event. Also, this approval is granted with reference to the Special Wastewater Discharge Application signed and dated February 26, 2002 and in conformance with any other data submitted to the City.
Please remember the traffic devices for the discharge piping.
Thanks.

Special Wastewater Discharge Authorization

City of Vancouver
Wastewater Engineering-
Industrial Pretreatment
P.O. Box 1995
Vancouver, WA 98668
Office: (360) 696-8008
Fax: (360) 696-8460

City of
VANCOUVER
WASHINGTON

Special Discharge Authorization #	2002.01
Wastewater Generator:	Cadet Manufacturing
Agent / Contact:	AMEC – Sean Gormley
Contact Mailing Address:	7376 SW Durham Rd, Portland, OR 97224
Contact Telephone No.	503-639-3400

The above Generator, or their Designated Agent, is authorized to discharge a certified non-hazardous "special wastewater" to the City of Vancouver's sanitary sewer system in compliance with the Pretreatment Program (Vancouver Municipal Code Chapter 14.10), any applicable provisions of Federal or State Regulations, and conditions contained in this **Discharge Authorization.**
The details of the authorized discharge are provided below.

Authorized Discharge Time:	March 20, 2002 through March 28, 2002
Volume to be Discharged (units):	20,000 GPD, 27,000 GPD, and 288,000 GPD (3 discharge events) **Max Allowable = 335,000 gallons over 9-day period**
Process Generating Wastewater:	Well Development, Drawdown Test, and Pump Test
Designated Discharge Location:	MH #1014 (Westside Interceptor) near lagoon fence
Discharge Limitations:	**TTO ≤ 1.8 ppm, TCE ≤ 0.71 ppm, and Discharge Rate ≤ 200 GPM**
City contact for Discharge: (call 24 hours prior to discharge):	Kevin Smithline or Dotti Ramey 360-696-8008
Discharge Fees:	$50 Administrative Fee *plus* $0.34 per 100 gal. Sewer Fee

The Generator (or Agent) is required to provide the City with a record of total discharge volume and date(s) of discharge within 15 days after discharge. Information must be mailed or faxed to the attention of the Industrial Pretreatment Coordinator at the address shown above.

This **Discharge Authorization** is granted with reference to the Special Wastewater Discharge Application signed and dated *February 26, 2002* and in conformance with any other data submitted to the City. The City reserves the right to rescind this Authorization at any time, for any reason.

*This **Discharge Authorization** must accompany wastewater transporter or be on site during the discharge activities.*

Dotti Ramey

Dotti Ramey, P.E.
Industrial Pretreatment Coordinator

I:\PRETREATMENT\Special WW\SDA 3-6-02.doc

Special Wastewater Discharge Application

City of Vancouver
Wastewater Management -
Industrial Pretreatment
P.O. Box 1995
Vancouver, WA 98668
Office: 360-696-8008
Fax: 360- 696-8460

City of
VANCOUVER
WASHINGTON

Representative Sample & Testing Certification

INSTRUCTIONS: To determine the acceptability of the wastewater described in the Special Wastewater Discharge Application, please complete Sections A-D as applicable. Analytical data is typically required prior to discharge of a wastewater to the sewer system. Contact the City of Vancouver's Industrial Pretreatment group (696-8008) to confirm the scope of testing. This form is used to certify that the analytical data presented is derived from the testing of a representative sample. A representative sample is obtained using any appropriate method specified in state or federal regulations. A representative sample reflects the physical characteristics and chemical components in the same proportion as found in the wastewater to be discharged.

SECTION A: Sampling Method - Indicate the method used

☑ I have obtained and analyzed a representative sample of the wastewater described in the Special Wastewater Discharge Application according to methods prescribed in 40 CFR Part 136.

○ I have obtained and analyzed a representative sample of the wastewater described in the Special Wastewater Discharge Application according to a method *equivalent to* 40 CFR Part 136. Comment:

SECTION B: Sampling Location - Provide description of how and where sample was obtained.

This sample was retrieved from a direct-push investigation, at a depth of approximately 24 feet bgs. This sample location is approximately 50' south of the pump test area.

SECTION C: Representative Sample Certification

Generator's Name, Company and/or Facility: Cadet Manufacturing

Date Sample Collected: 3/22/01
Sampler's Name (print): Jeff Menken
Sampler's Signature: Jeff Menk
Samplers Title: Geology staff
Sampler's Employer: AMEC Earth and Environmental
Date Sample Analyzed: 3/23/01
Company Performing Chemical Analysis: North Creek Analytical, Inc.

SECTION D: Representative Data Certification

I certify that the analytical data presented was derived from a representative sample taken in accordance with the methods listed in Part A of this form.

John L Kuyk
Authorized Representative's Signature

John L. Kuiper
Printed Name

Sr. Associate
Title

2/26/02
Date

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 0-61M-10135-C Project Manager: Barb Lary	**Reported:** 03/20/02 16:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
031902-TANK	P2C0549-01	Water	03/19/02 15:15	03/19/02 16:30

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 0-61M-10135-C
Project Manager: Barb Lary

Reported:
03/20/02 16:29

Selected Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
031902-TANK (P2C0549-01) Water					Sampled: 03/19/02	Received: 03/19/02			
Bromobenzene	ND	0.500	ug/l	1	EPA 8260B	03/20/02	03/20/02	2030624	
Bromodichloromethane	ND	0.500	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.500	"	"	"	"	"	"	
Chlorobenzene	ND	0.500	"	"	"	"	"	"	
Chloroethane	ND	0.500	"	"	"	"	"	"	
Chloroform	**15.4**	0.500	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.500	"	"	"	"	"	"	
Dibromomethane	ND	0.500	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.500	"	"	"	"	"	"	
cis-1,2-Dichloroethene	**3.34**	0.500	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.500	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
Tetrachloroethene	**4.20**	0.500	"	"	"	"	"	"	
1,1,1-Trichloroethane	**0.500**	0.500	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.500	"	"	"	"	"	"	
Trichloroethene	**5.58**	0.500	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.500	"	"	"	"	"	"	
Vinyl chloride	ND	0.500	"	"	"	"	"	"	
Surr: 4-BFB	*102 %*	*84-118*							
Surr: 1,2-DCA-d4	*99.5 %*	*79-123*							
Surr: Dibromofluoromethane	*93.0 %*	*81-121*							
Surr: Toluene-d8	*94.5 %*	*87-111*							

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 0-61M-10135-C Project Manager: Barb Lary	**Reported:** 03/20/02 16:29

Selected Volatile Organic Compounds per EPA Method 8260B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2030624 - EPA 5030B										
Blank (2030624-BLK1)				Prepared & Analyzed: 03/20/02						
Bromobenzene	ND	0.500	ug/l							
Bromodichloromethane	ND	0.500	"							
Bromoform	ND	1.00	"							
Bromomethane	ND	5.00	"							
Carbon tetrachloride	ND	0.500	"							
Chlorobenzene	ND	0.500	"							
Chloroethane	ND	0.500	"							
Chloroform	ND	0.500	"							
Chloromethane	ND	5.00	"							
Dibromochloromethane	ND	1.00	"							
1,2-Dibromoethane	ND	0.500	"							
Dibromomethane	ND	0.500	"							
1,2-Dichlorobenzene	ND	0.500	"							
1,3-Dichlorobenzene	ND	0.500	"							
1,4-Dichlorobenzene	ND	0.500	"							
Dichlorodifluoromethane	ND	5.00	"							
1,1-Dichloroethane	ND	0.500	"							
1,2-Dichloroethane	ND	0.500	"							
1,1-Dichloroethene	ND	0.500	"							
cis-1,2-Dichloroethene	ND	0.500	"							
trans-1,2-Dichloroethene	ND	0.500	"							
1,2-Dichloropropane	ND	0.500	"							
cis-1,3-Dichloropropene	ND	0.500	"							
trans-1,3-Dichloropropene	ND	0.500	"							
Methylene chloride	ND	5.00	"							
1,1,1,2-Tetrachloroethane	ND	0.500	"							
1,1,2,2-Tetrachloroethane	ND	0.500	"							
Tetrachloroethene	ND	0.500	"							
1,1,1-Trichloroethane	ND	0.500	"							
1,1,2-Trichloroethane	ND	0.500	"							
Trichloroethene	ND	0.500	"							
Trichlorofluoromethane	ND	0.500	"							
1,2,3-Trichloropropane	ND	0.500	"							
Vinyl chloride	ND	0.500	"							
Surr: 4-BFB	*20.2*		*"*	*20.0*		*101*	*84-118*			

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 0-61M-10135-C
Project Manager: Barb Lary

Reported:
03/20/02 16:29

Selected Volatile Organic Compounds per EPA Method 8260B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2030624 - EPA 5030B										
Blank (2030624-BLK1)				Prepared & Analyzed: 03/20/02						
Surr: 1,2-DCA-d4	*20.4*		*ug/l*	*20.0*		*102*	*79-123*			
Surr: Dibromofluoromethane	*19.1*		*"*	*20.0*		*95.5*	*81-121*			
Surr: Toluene-d8	*19.1*		*"*	*20.0*		*95.5*	*87-111*			
LCS (2030624-BS1)				Prepared & Analyzed: 03/20/02						
Chlorobenzene	19.6	0.500	ug/l	20.0		98.0	80-125			
1,1-Dichloroethene	20.8	0.500	"	20.0		104	70-135			
Trichloroethene	20.7	0.500	"	20.0		104	70-130			
Surr: 4-BFB	*21.8*		*"*	*20.0*		*109*	*84-118*			
Surr: 1,2-DCA-d4	*19.4*		*"*	*20.0*		*97.0*	*79-123*			
Surr: Dibromofluoromethane	*18.9*		*"*	*20.0*		*94.5*	*81-121*			
Surr: Toluene-d8	*19.8*		*"*	*20.0*		*99.0*	*87-111*			
Matrix Spike (2030624-MS1)	**Source: P2C0549-01**			Prepared & Analyzed: 03/20/02						
Chlorobenzene	19.6	0.500	ug/l	20.0	ND	98.0	80-125			
1,1-Dichloroethene	21.8	0.500	"	20.0	ND	109	70-135			
Trichloroethene	26.2	0.500	"	20.0	5.58	103	70-130			
Surr: 4-BFB	*21.6*		*"*	*20.0*		*108*	*84-118*			
Surr: 1,2-DCA-d4	*20.1*		*"*	*20.0*		*100*	*79-123*			
Surr: Dibromofluoromethane	*19.3*		*"*	*20.0*		*96.5*	*81-121*			
Surr: Toluene-d8	*20.2*		*"*	*20.0*		*101*	*87-111*			
Matrix Spike Dup (2030624-MSD1)	**Source: P2C0549-01**			Prepared & Analyzed: 03/20/02						
Chlorobenzene	20.8	0.500	ug/l	20.0	ND	104	80-125	5.94	25	
1,1-Dichloroethene	23.1	0.500	"	20.0	ND	116	70-135	5.79	25	
Trichloroethene	27.1	0.500	"	20.0	5.58	108	70-130	3.38	25	
Surr: 4-BFB	*21.7*		*"*	*20.0*		*108*	*84-118*			
Surr: 1,2-DCA-d4	*19.5*		*"*	*20.0*		*97.5*	*79-123*			
Surr: Dibromofluoromethane	*19.4*		*"*	*20.0*		*97.0*	*81-121*			
Surr: Toluene-d8	*20.0*		*"*	*20.0*		*100*	*87-111*			

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 0-61M-10135-C Project Manager: Barb Lary	Reported: 03/20/02 16:29

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

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North Creek Analytical, Inc.
Environmental Laboratory Network
www.ncalabs.com

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: P2C0549

CLIENT: AMEC
REPORT TO: BARB LARY
ADDRESS:
PHONE: 503-639-3400 FAX 503-639-3400
PROJECT NAME: CADET
PROJECT NUMBER: 1-61M-10135-C
SAMPLED BY: BARB LARY

INVOICE TO:

P.O. NUMBER:

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyses
10 7 5 4 3 2 1 [✓ <1]
STD.

Petroleum Hydrocarbon Analyses
5 4 3 2 1 <1
STD.

OTHER Please Specify RUSH

*Turnaround Requests less than standard may incur Rush Charges.

		REQUESTED ANALYSES																
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	HVOCs by 8260													MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1. 031902-TANK	3/19/02 1515	X													W	3		
2.																		
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		
11.																		
12.																		
13.																		
14.																		
15.																		

RELINQUISHED BY: Barb Lary
PRINT NAME: BARB LARY FIRM: AMEC DATE: 3/19/02 TIME: 1630

RECEIVED BY: Amy
PRINT NAME: Amy Burns FIRM: NCA DATE: 3/19/02 TIME: 16:30

RELINQUISHED BY:
PRINT NAME: FIRM: DATE: TIME:

RECEIVED BY:
PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS: PLEASE FAX OR LEAVE VOICE MAIL W/ RESULTS !!

TEMP: 2.3

PAGE 1 OF 1

COC REV 3/99

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 1-61M-10135-C task 2
Project Manager: James Feild

Reported:
03/21/02 16:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Steptest-H2O-032002	P2C0587-01	Water	03/20/02 14:00	03/20/02 15:40

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 1-61M-10135-C task 2
Project Manager: James Feild

Reported:
03/21/02 16:59

Selected Volatile Organic Compounds per EPA Method 8260B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Steptest-H2O-032002 (P2C0587-01) Water					Sampled: 03/20/02		Received: 03/20/02		
Bromobenzene	ND	0.500	ug/l	1	EPA 8260B	03/21/02	03/21/02	2030678	
Bromodichloromethane	ND	0.500	"	"	"	"	"	"	
Bromoform	ND	1.00	"	"	"	"	"	"	
Bromomethane	ND	5.00	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.500	"	"	"	"	"	"	
Chlorobenzene	ND	0.500	"	"	"	"	"	"	
Chloroethane	ND	0.500	"	"	"	"	"	"	
Chloroform	**15.9**	0.500	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.500	"	"	"	"	"	"	
Dibromomethane	ND	0.500	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.500	"	"	"	"	"	"	
cis-1,2-Dichloroethene	**3.56**	0.500	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.500	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.500	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
Tetrachloroethene	**4.35**	0.500	"	"	"	"	"	"	
1,1,1-Trichloroethane	**0.500**	0.500	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.500	"	"	"	"	"	"	
Trichloroethene	**5.75**	0.500	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.500	"	"	"	"	"	"	
Vinyl chloride	ND	0.500	"	"	"	"	"	"	
Surr: 4-BFB	*100 %*	*84-118*							
Surr: 1,2-DCA-d4	*98.0 %*	*79-123*							
Surr: Dibromofluoromethane	*93.5 %*	*81-121*							
Surr: Toluene-d8	*95.0 %*	*87-111*							

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 1-61M-10135-C task 2
Project Manager: James Feild

Reported:
03/21/02 16:59

Selected Volatile Organic Compounds per EPA Method 8260B - Quality Control

North Creek Analytical - Portland

Batch 2030678 - EPA 5030B

Blank (2030678-BLK1) Prepared & Analyzed: 03/21/02

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Bromobenzene	ND	0.500	ug/l							
Bromodichloromethane	ND	0.500	"							
Bromoform	ND	1.00	"							
Bromomethane	ND	5.00	"							
Carbon tetrachloride	ND	0.500	"							
Chlorobenzene	ND	0.500	"							
Chloroethane	ND	0.500	"							
Chloroform	ND	0.500	"							
Chloromethane	ND	5.00	"							
Dibromochloromethane	ND	1.00	"							
1,2-Dibromoethane	ND	0.500	"							
Dibromomethane	ND	0.500	"							
1,2-Dichlorobenzene	ND	0.500	"							
1,3-Dichlorobenzene	ND	0.500	"							
1,4-Dichlorobenzene	ND	0.500	"							
Dichlorodifluoromethane	ND	5.00	"							
1,1-Dichloroethane	ND	0.500	"							
1,2-Dichloroethane	ND	0.500	"							
1,1-Dichloroethene	ND	0.500	"							
cis-1,2-Dichloroethene	ND	0.500	"							
trans-1,2-Dichloroethene	ND	0.500	"							
1,2-Dichloropropane	ND	0.500	"							
cis-1,3-Dichloropropene	ND	0.500	"							
trans-1,3-Dichloropropene	ND	0.500	"							
Methylene chloride	ND	5.00	"							
1,1,1,2-Tetrachloroethane	ND	0.500	"							
1,1,2,2-Tetrachloroethane	ND	0.500	"							
Tetrachloroethene	ND	0.500	"							
1,1,1-Trichloroethane	ND	0.500	"							
1,1,2-Trichloroethane	ND	0.500	"							
Trichloroethene	ND	0.500	"							
Trichlorofluoromethane	ND	0.500	"							
1,2,3-Trichloropropane	ND	0.500	"							
Vinyl chloride	ND	0.500	"							
Surr: 4-BFB	*20.2*		"	*20.0*		*101*	*84-118*			

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 1-61M-10135-C task 2 Project Manager: James Feild	**Reported:** 03/21/02 16:59

Selected Volatile Organic Compounds per EPA Method 8260B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2030678 - EPA 5030B										
Blank (2030678-BLK1)				Prepared & Analyzed: 03/21/02						
Surr: 1,2-DCA-d4	*21.2*		*ug/l*	*20.0*		*106*	*79-123*			
Surr: Dibromofluoromethane	*19.5*		*"*	*20.0*		*97.5*	*81-121*			
Surr: Toluene-d8	*19.5*		*"*	*20.0*		*97.5*	*87-111*			
LCS (2030678-BS1)				Prepared & Analyzed: 03/21/02						
Chlorobenzene	20.7	0.500	ug/l	20.0		104	80-125			
1,1-Dichloroethene	21.7	0.500	"	20.0		108	70-135			
Trichloroethene	21.4	0.500	"	20.0		107	70-130			
Surr: 4-BFB	*21.4*		*"*	*20.0*		*107*	*84-118*			
Surr: 1,2-DCA-d4	*19.7*		*"*	*20.0*		*98.5*	*79-123*			
Surr: Dibromofluoromethane	*19.0*		*"*	*20.0*		*95.0*	*81-121*			
Surr: Toluene-d8	*19.8*		*"*	*20.0*		*99.0*	*87-111*			
Matrix Spike (2030678-MS1)	**Source: P2C0587-01**			Prepared & Analyzed: 03/21/02						
Chlorobenzene	20.5	0.500	ug/l	20.0	ND	102	80-125			
1,1-Dichloroethene	22.1	0.500	"	20.0	ND	110	70-135			
Trichloroethene	26.6	0.500	"	20.0	5.75	104	70-130			
Surr: 4-BFB	*21.9*		*"*	*20.0*		*110*	*84-118*			
Surr: 1,2-DCA-d4	*20.2*		*"*	*20.0*		*101*	*79-123*			
Surr: Dibromofluoromethane	*19.0*		*"*	*20.0*		*95.0*	*81-121*			
Surr: Toluene-d8	*20.1*		*"*	*20.0*		*100*	*87-111*			
Matrix Spike Dup (2030678-MSD1)	**Source: P2C0587-01**			Prepared & Analyzed: 03/21/02						
Chlorobenzene	21.2	0.500	ug/l	20.0	ND	106	80-125	3.36	25	
1,1-Dichloroethene	22.9	0.500	"	20.0	ND	114	70-135	3.56	25	
Trichloroethene	26.7	0.500	"	20.0	5.75	105	70-130	0.375	25	
Surr: 4-BFB	*21.6*		*"*	*20.0*		*108*	*84-118*			
Surr: 1,2-DCA-d4	*19.5*		*"*	*20.0*		*97.5*	*79-123*			
Surr: Dibromofluoromethane	*18.8*		*"*	*20.0*		*94.0*	*81-121*			
Surr: Toluene-d8	*19.8*		*"*	*20.0*		*99.0*	*87-111*			

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 1-61M-10135-C task 2 Project Manager: James Feild	**Reported:** 03/21/02 16:59

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

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North Creek Analytical, Inc.
Environmental Laboratory Network
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East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: P2C0587

CLIENT: AMEC
REPORT TO: Jim Fields
ADDRESS: 7376 SW Durham Rd.
Portland, OR 97224
PHONE: 503-639-3400 FAX: 503-620-7892
PROJECT NAME: Cadet
PROJECT NUMBER:
SAMPLED BY: Joe Rock

INVOICE TO:

P.O. NUMBER:

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyses
☐ 10 ☐ 7 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1
STD.

Petroleum Hydrocarbon Analyses
☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1
STD.

[✓ OTHER] Please Specify 1 day rush

*Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	REQUESTED ANALYSES: 8260													MATRIX (W, S, O)	# OF CONT.	COMMENTS	WO ID
1. Steptest H2O-032002	3-20-02 14:00	X																
2.																		
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		
11.																		
12.																		
13.																		
14.																		
15.																		

RELINQUISHED BY:
PRINT NAME: Joe Rock FIRM: AMEC DATE: 3-20-02 TIME: 1540
RECEIVED BY:
PRINT NAME: Kim Davis FIRM: NCA DATE: 3/20/02 TIME: 1540

RELINQUISHED BY:
PRINT NAME: FIRM: DATE: TIME:
RECEIVED BY:
PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS: cc: client

TEMP: 4.2

PAGE 1 OF 1

COC REV 3/99

amec

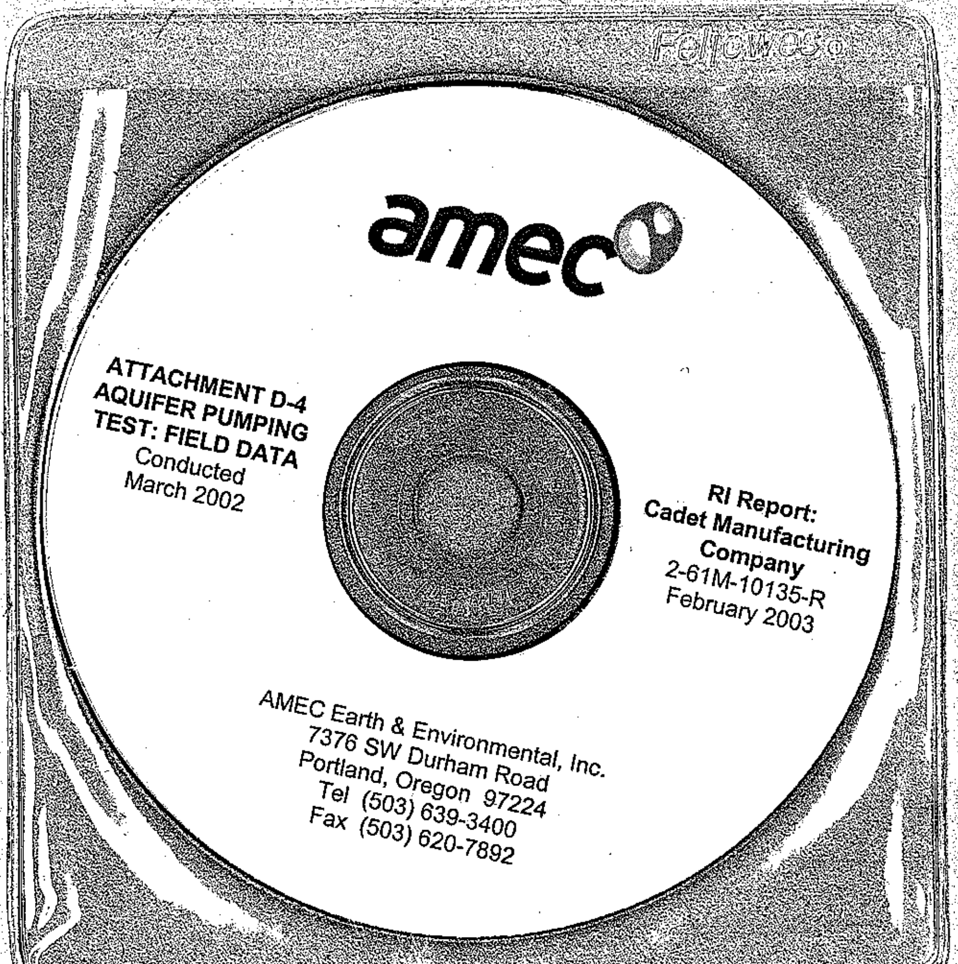
ATTACHMENT D-4
AQUIFER PUMPING
TEST: FIELD DATA
Conducted
March 2002

RI Report:
Cadet Manufacturing
Company
2-61M-10135-R
February 2003

AMEC Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Tel (503) 639-3400
Fax (503) 620-7892

ATTACHMENT D-4

Field Data (provided on CD),
Step-Drawdown Aquifer Test Field Sheets, and
Constant-Rate Aquifer Test Field Sheets



amec

ATTACHMENT D-4
AQUIFER PUMPING
TEST: FIELD DATA
Conducted
March 2002

RI Report:
Cadet Manufacturing
Company
2-61M-10135-R
February 2003

AMEC Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Tel (503) 639-3400
Fax (503) 620-7892

Step Drawdown Aquifer Test Field Sheets

amec

AMEC Earth & Environmental, Inc.
7477 SW Tech Center Drive
Portland, Oregon 97223

Aquifer Pumping Test Data Field Form

Client & Job Number Cadet - 1-61M-10135-C T2
Well ID RW-1
Pumping Well ☑ Observation Well ☐
Page 1 of

Well Information:
CASING DIAMETER: 6" SCREEN DIAMETER: 6" SCREEN LENGTH: 20'
WELL DEPTH: SCREENED INTERVAL FROM: TO:

PUMP ON DATE 3/19/02 TIME
PUMP OFF DATE 3/19/02 TIME
DURATION OF TEST

HOW WL'S MEASURED ducers + manual
DISTANCE FROM PUMPING WELL 0
MEASURING POINT TOC-standpipe
ELEVATION MEASURING POINT NA
top of standpipe ⇐ (PSI)

PUMP INFO
HOW Q MEASURED Flow meter-sensor
DEPTH TO PUMP INTAKE
TYPE OF TEST Step-test
PREVIOUS PUMPING development ~24 hrs ago

TIME t = AT t' = 0
Static Water Level = ~~0.00~~ 14.68

RECORDED BY	Date	Clock	Pumping Elapsed Time	Recovery Elapsed Time	Reading	Correction or Conversion	Water Level (Elev.)	Drawdown / Water Level Change (s or s')	Discharge Data Reading	Cum Q	Rate (GPM) (LPS)	COMMENTS
sawbk	3/19/02								12		GPM	
	3/19/02	13:22:50	:30		17.3				120			
		13:23:50	1:00						100			
			1:30						100			
		13:24:50	2		17.08				100			
			2:30						100			
		13:25:50	3						100			
			3:30		17.08				100			
		13:26:50	4:00		17.07				100			
			4:30		17.07				100			
		13:27:50	5		17.08				100			
		13:28:50	6		17.08				100			
		13:29:50	7		17.08				100			
		13:30:50	8		17.08				100			
		13:31:50	9		17.08				100			
		13:32:50	10		17.08				100			
		13:37:50	15		17.08				100-			
		13:42:50	20		17.09				100-			
		13:47:50	25		17.09				100-			
		13:52:50	30		17.09				100-			
		~~[illegible]~~	~~30:30~~	3:					10 —			
		13:54:5[illegible]	~~31~~	31:	17.29				150			*increased to
		13:55:20	~~31:30~~	32:30	17.33				150-			150 gpm
		13:55:50	~~32~~	33:00	17.32				150-			
		13:56:20	~~32:30~~	33:30	17.32							

RECORDED BY	Date	Clock	Pumping Elapsed Time	Recovery Elapsed Time	Reading	Correction or Conversion	Water Level (Elev.)	Drawdown / Water Level Change (s or s')	Reading	Cum Q	Rate (GPM) (LPS)	COMMENTS
		13:56:50	34		17.32							
		13:57:30	35:00		17.33							
		13:58:20	35:30		17.33							
		13:58:50	36:00		17.33							
		13:59:30	36:30		17.33							
		13:59:50	37		17.33							
	14:00:50	~~13:50~~	38		17.33				150±			
	14:01	~~15:50~~	39		17.33				150			
	14:02	~~16:50~~	40		17.33							
		14:03	41		17.33							
		14:04	42		17.33				150±			
		14:09	47		17.34				150±			
		14:14	52		17.34				150			
		14:19	57		17.34				150			
		14:24	62		17.34				150			
		~~14:29~~	~~67~~									
		14:24	:48 —	PUMP	OFF							
				heard	water moving	down	pipe.					

Constant-Rate Aquifer Test Field Sheets

amec

AMEC Earth & Environmental, Inc.
7477 SW Tech Center Drive
Portland, Oregon 97223

Aquifer Pumping Test Data Field Form

Client & Job Number 1-61M-10135-C-T2
Well ID RW-1
Pumping Well ☒ Observation Well ☐
Page 1 of 3

Well Information:
CASING DIAMETER: 6"
WELL DEPTH: 65 feet
SCREEN DIAMETER: 6"
SCREEN LENGTH: 20 ft
SCREENED INTERVAL FROM: 40 TO: 60

PUMP ON DATE 3/22/02 TIME 14:23:00
PUMP OFF DATE 3/23/02 TIME 14:23:00
DURATION OF TEST 24 hour pumping

HOW WL'S MEASURED
DISTANCE FROM PUMPING WELL 0 ft
MEASURING POINT
ELEVATION MEASURING POINT

PUMP INFO
HOW Q MEASURED
DEPTH TO PUMP INTAKE
TYPE OF TEST
PREVIOUS PUMPING

TIME t =		AT t' = 0			Static Water Level = 1598.00				Discharge Data			
RECORDED BY	Date	Clock 14:23:00	Pumping Elapsed Time	Recovery Elapsed Time	Reading	Correction or Conversion	Water Level (Elev.)	Drawdown / Water Level Change (s or s')	Reading	Cum Q	Rate (GPM) (LPS)	COMMENTS
SNBK	3/22/02	14:23	~~:30~~ 0	16.40	16.41				-		GPM	
		14:23:30	0:30	16.41	16.40							
		14:24:00	1:00	16.41	16.40							
		14:24:30	1:30		16.40							
		14:25	2:00		16.40				160			
		14:25:30	2:30		16.43							
		14:26	3:00		16.43							
		14:26:30	3:30		16.43							
		14:27	4:00		16.43							
		14:27:30	4:30		16.43							
		14:28	5:00		16.43							
		14:29	6		16.43							
		14:30	7		16.43							
		14:31	8		16.43							
		14:32	9		16.43							
		14:33	10		16.43							
		14:38	15		16.44							
		14:43	20		16.44							
		14:48	25		16.45							
		14:53	30		16.45							
		15:03 ~~14:58~~	40		16.455							
		15:13	50		16.48							
		15:23	60		16.49							
		15:43	1:20:00		16.51							
JWM		16:03	1:40:00		16.52				150			

K:\10000\10700\10703\Task 32\pumping test field form-template.xls.xls field sheet

1/17/02
Sheet 1 of 10

KW-1
15.56

RECORDED BY	Date	Clock	Pumping Elapsed Time	Recovery Elapsed Time	Reading	Correction or Conversion	Water Level (Elev.)	Drawdown / Water Level Change (s or s')	Reading	Cum Q	Rate (GPM) (LPS)	COMMENTS
JWM		16:23	2:00:00		16:55							
		17:23	3:00:00		16.61							
		18:23	4:00:00		16.67							
		19:23	5:00:00		16.74							
		20:23	6:00:00		16.78							
SWBK		21:23	7:00:00		16.82							
		22:23	8:00:00		16.84							
		23:23	9:00:00		16.80							
	3/23/02	00:23	10:00:00		16.76							
		01:23	11:00:00		16.73							
		02:23	12:00:00		16.73							
		03:23	13:00:00		16.74							
		04:23	14:00:00		16.78							
		05:23	15:00:00		16.81							
		06:23	16:00:00		16.85							
		07:23	17:00:00		16.86							
LLJ		08:23	18:00:00		16.86				150			
		09:23	19:00:00		16.81				150			
		10:23	20:00:00		16.69				150			
		11:23	21:00:00		16.59				150			
		12:23	22:00:00		16.54				150			
		13:23	23:00:00		16.53				150			
		14:23	24:00:00		16.55				150			
		14:24		:30	16.14				100 [illegible]			
				1:00	16.14				0			
				1:30	16.14							
				2:00	16.14							
				2:30	16.14							
				3:00	16.14							
				3:30	16.14							
				4:00	16.14							
				4:30	16.14							
				5:00	16.14							
		14:30		6:00	16.14							
		14:31		7:00	16.14							
		14:32		8:00	16.14							
		14:33		9:00	16.14							

RW-1

RECORDED BY	Date	Clock	Pumping Elapsed Time	Recovery Elapsed Time	Reading	Correction or Conversion	Water Level (Elev.)	Drawdown / Water Level Change (s or s')	Reading	Cum Q	Rate (GPM) (LPS)	COMMENTS
LLJ	3/23/02	14:34		10	16.14				0			
		14:39		15	16.14							
		14:44		20	16.15							
		14:49		25	16.15							
		14:54		30	16.16							
		—		~~35~~								
		15:04		40	16.16							
		15:14		50								
		15:24		60								

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15.23

amec

Aquifer Pumping Test Data Field Form

AMEC Earth & Environmental, Inc.
7477 SW Tech Center Drive
Portland, Oregon 97223

Client & Job Number 1-61M-10135-II T2
Well ID MW-13
Pumping Well ☐ Observation Well ☒
Page 1 of 3

Well Information:
CASING DIAMETER: 2"
SCREEN DIAMETER: 2"
SCREEN LENGTH: 5 ft
WELL DEPTH: 55 feet
SCREENED INTERVAL FROM: 50 TO: 55

PUMP ON DATE 3/22/02 TIME 14:23:00
PUMP OFF DATE 3/23/02 TIME 14:24:00
DURATION OF TEST 24 hours pumping

HOW WL'S MEASURED
DISTANCE FROM PUMPING WELL ~~8~~5 ft
MEASURING POINT
ELEVATION MEASURING POINT about 1ft above PVC casing

PUMP INFO
HOW Q MEASURED
DEPTH TO PUMP INTAKE
TYPE OF TEST
PREVIOUS PUMPING

TIME t = AT t' = 0
Static Water Level = 15.23 ft

RECORDED BY	Date	Clock 14:23:00	Pumping Elapsed Time 0:00	Recovery Elapsed Time	Reading DTW 15.23	Correction or Conversion	Water Level (Elev.)	Drawdown / Water Level Change (s or s')	Discharge Data Reading gage gpm	Cum Q	Rate (GPM) (LPS)	COMMENTS
HJ	3/22/02	14:23:30	0:30	-	15.31							
		14:24:00	01:00		15.31							
		14:24:30	1:30		15.32							
		14:25:00	2:00		15.32				160			
		14:25:30	2:30		15.32				155			
		14:26:00	3:00		15.32				160			
		14:26:30	3:30		15.32				~~155~~			
		14:27:00	4:00		15.32				155			
		14:27:30	4:30		15.33							
		14:28:00	5:00		15.33				155			
			~~5:30~~		~~15~~							
		14:29:00	6:00		15.33				155			
			~~6:30~~									
		14:30	7:00		15.31							
			~~7:30~~									
		14:31	8:00		15.32				155			
		14:32	9:00		15.32				155			
		14:33	10:00		15.32				155			
		14:38	15:00		15.34				155			
		14:43	20:00		15.34				155			
		14:48	25:00		15.35				155			
		14:53	30:00		15.35				150-~~05~~			
		15:03	40:00		15.36				155			
		15:13	50:00		15.38				155			
		15:23	60:00		15.38				150			

K:\10000\10700\10703\Task 32\pumping test field form-template.xls.xls field sheet

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Sheet 1 of 10

MW-13 [illegible]

RECORDED BY	Date	Clock	Pumping Elapsed Time	Recovery Elapsed Time	Reading	Correction or Conversion	Water Level (Elev.)	Drawdown / Water Level Change (s or s')	Reading	Cum Q	Rate (GPM) (LPS)	COMMENTS
JWM		15:43	1:20:00		15.40							
		16:03	1:40:00		15.42					150		
		16:23	2:00:00		15.45					150		
		17:23	3:00:00		15.52					150		
		18:23	4:00:00		15.59							
		19:23	5:00:00		15.64					150		
		20:23	6:00:00		15.70							
		21:23	7:00:00		15.73					150		
SWBK		22:23	8:00:00		15.75					150		
		23:23	9:00:00		15.70					150		
	3/23/02	00:23	10:00:00		15.66					150		
		01:23	11:00:00		15.65					150		
		02:23	12:00:00		15.63					150		
		03:23	13:00:00		15.65					150		
		04:23	14:00:00		15.68					150		
		05:23	15:00:00		15.71					150		
		06:23	16:00:00		15.73					150		
		07:23	17:00:00		15.76					150		
LLJ		08:23	18:00:00		15.79					150		
YKF		09:23	19:00:00		15.71					150		
		10:23	20:00:00		15.60					150		
		11:23	21:00:00		15.50					150		
		12:23	22:00:00		15.46					150		
		13:23	23:00:00		15.43					150		
		14:23	24:00:00		15.45					150		
		14:24:30		:30	15.37					[illegible]		
		14:25:00		1:00	15.37							
		14:25:30		1:30	15.37							
		14:26:00		2:00	15.37							
		14:26:30		2:30	15.37							
		14:27:00		3:00	15.37							
		14:27:30		3:30	15.37							
		14:28:00		4:00	15.37							
		14:28:30		4:30	15.37							
		14:29		5:00	15.37							
		14:30		6:00	15.37							
		14:31		7:00	15.37							

MW-13

RECORDED BY	Date	Clock	Pumping Elapsed Time	Recovery Elapsed Time	Reading	Correction or Conversion	Water Level (Elev.)	Drawdown / Water Level Change (s or s')	Reading	Cum Q	Rate (GPM) (LPS)	COMMENTS
LLJ/KF	3/27/02	14:32		8:00	15.37				0			
		14:33		9:00	15.37							
		14:34		10:00	15.37							
		14:39		15:00	15.38							
		14:44		20:00	15.38							
		14:49		25:00	15.38							
		14:54		30:00	15.38							
		15:04		40:00	15.38							
		15:14		50								
		15:24		60								

K:\10000\10700\10703\Task 32\pumping test field form-template.xls.xls field sheet

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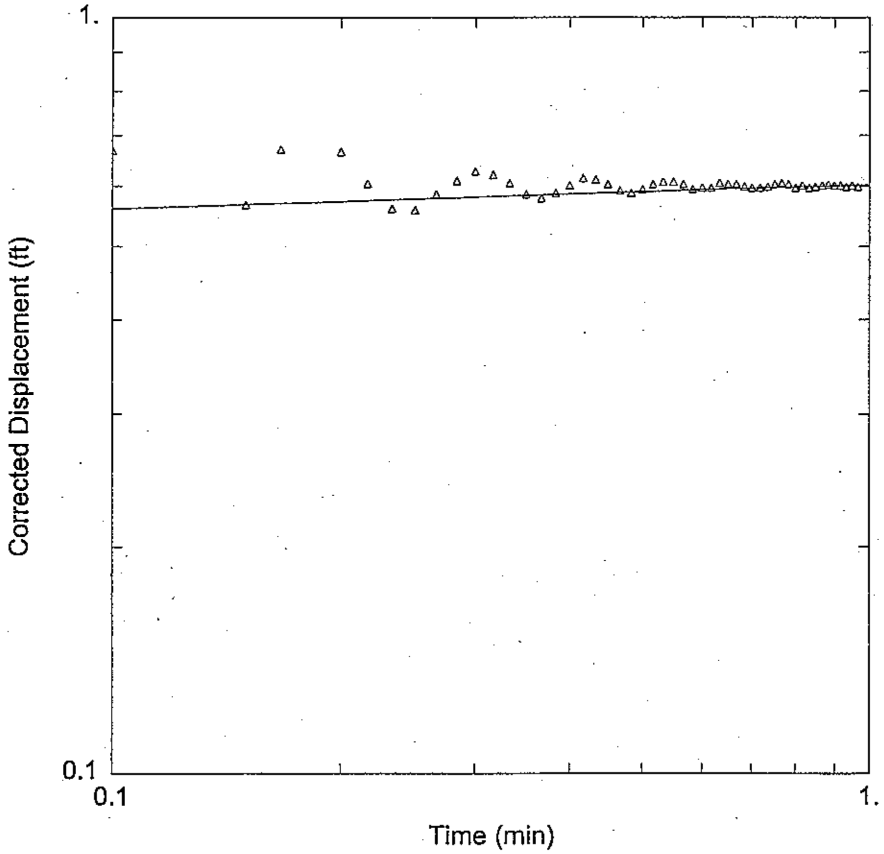
ATTACHMENT D-5

AQTESOLV® Solutions



2002 PUMPING TEST

Data Set: H:\CADET\RW1_T.AQT
Date: 11/18/02 Time: 17:00:20

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

too high

AQUIFER DATA

Saturated Thickness: 200. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
△ RW-1ow	0	0.1

SOLUTION

Data Set: H:\CADET\RW1_T.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 17:00:25

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: RW-1ow

X Location: 0. ft
Y Location: 0.1 ft

No. of observations: 57

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0333	0.4582	0.35	0.5863	0.6667	0.6042
0.05	0.7951	0.3667	0.5795	0.6833	0.5997

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0667	1.022	0.3833	0.5885	0.7	0.5975
0.0833	0.9232	0.4	0.602	0.7167	0.5975
0.1	0.6694	0.4167	0.6155	0.7333	0.5997
0.1167	0.4852	0.4333	0.6132	0.75	0.6042
0.1333	0.4695	0.45	0.6042	0.7667	0.6065
0.15	0.5683	0.4667	0.593	0.7833	0.6042
0.1667	0.6716	0.4833	0.5885	0.8	0.5975
0.1833	0.7031	0.5	0.5952	0.8167	0.602
0.2	0.6671	0.5167	0.6042	0.8333	0.5975
0.2167	0.6065	0.5333	0.6087	0.85	0.5997
0.2333	0.5615	0.55	0.6087	0.8667	0.602
0.25	0.5593	0.5667	0.6042	0.8833	0.6042
0.2667	0.5863	0.5833	0.5952	0.9	0.602
0.2833	0.611	0.6	0.5975	0.9167	0.602
0.3	0.6289	0.6167	0.5975	0.9333	0.5997
0.3167	0.6222	0.6333	0.6065	0.95	0.602
0.3333	0.6065	0.65	0.6042	0.9667	0.5997

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	1.257E+05	ft^2/day
S	9.512E-11	

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
T	1.257E+05	1.33E+05	ft^2/day
S	9.512E-11	6.785E-10	

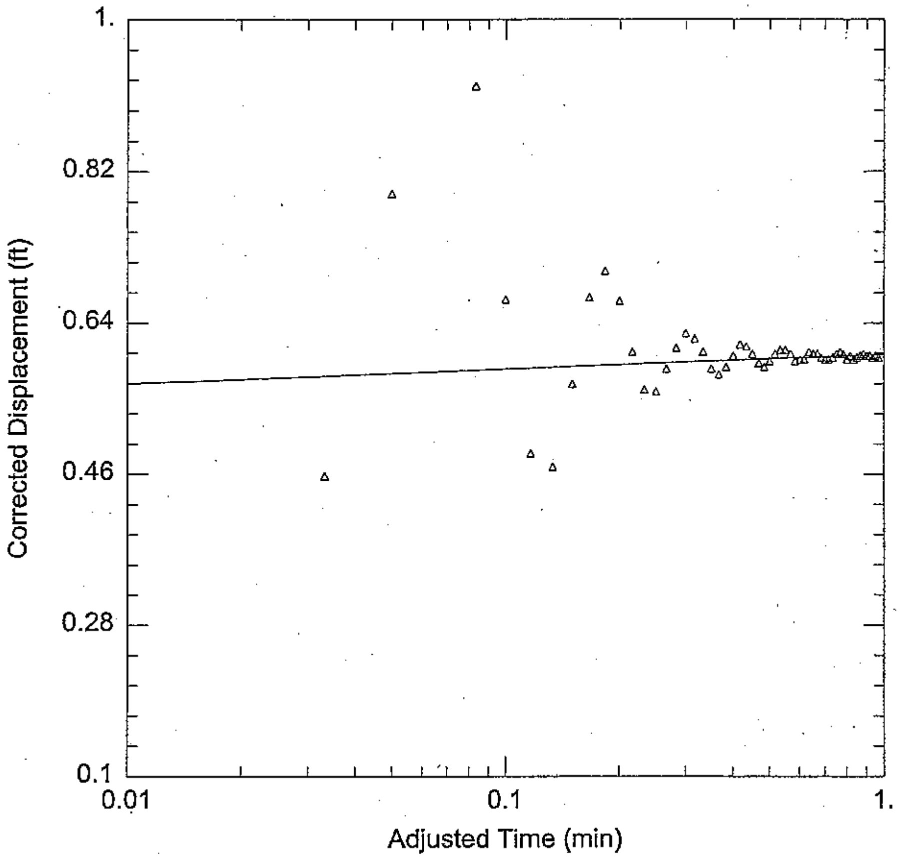
Parameter Correlations

	T	S
T	1.00	-0.05
S	-0.05	0.00

Residual Statistics

for weighted residuals

```
Sum of Squares ... 0.6132 ft2
Variance.......... 0.01115 ft2
Std. Deviation...... 0.1056 ft
Mean ............. 0.0542 ft
No. of Residuals ... 57.
No. of Estimates ... 2
```



2002 PUMPING TEST

Data Set: H:\CADET\RW1_CJ.AQT
Date: 11/18/02 Time: 16:59:54

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
▵ RW-1ow	0	0.1

SOLUTION

Data Set: H:\CADET\RW1_CJ.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:59:59

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: RW-1ow

X Location: 0. ft
Y Location: 0.1 ft

No. of observations: 57

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0333	0.4582	0.35	0.5863	0.6667	0.6042
0.05	0.7951	0.3667	0.5795	0.6833	0.5997

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0667	1.022	0.3833	0.5885	0.7	0.5975
0.0833	0.9232	0.4	0.602	0.7167	0.5975
0.1	0.6694	0.4167	0.6155	0.7333	0.5997
0.1167	0.4852	0.4333	0.6132	0.75	0.6042
0.1333	0.4695	0.45	0.6042	0.7667	0.6065
0.15	0.5683	0.4667	0.593	0.7833	0.6042
0.1667	0.6716	0.4833	0.5885	0.8	0.5975
0.1833	0.7031	0.5	0.5952	0.8167	0.602
0.2	0.6671	0.5167	0.6042	0.8333	0.5975
0.2167	0.6065	0.5333	0.6087	0.85	0.5997
0.2333	0.5615	0.55	0.6087	0.8667	0.602
0.25	0.5593	0.5667	0.6042	0.8833	0.6042
0.2667	0.5863	0.5833	0.5952	0.9	0.602
0.2833	0.611	0.6	0.5975	0.9167	0.602
0.3	0.6289	0.6167	0.5975	0.9333	0.5997
0.3167	0.6222	0.6333	0.6065	0.95	0.602
0.3333	0.6065	0.65	0.6042	0.9667	0.5997

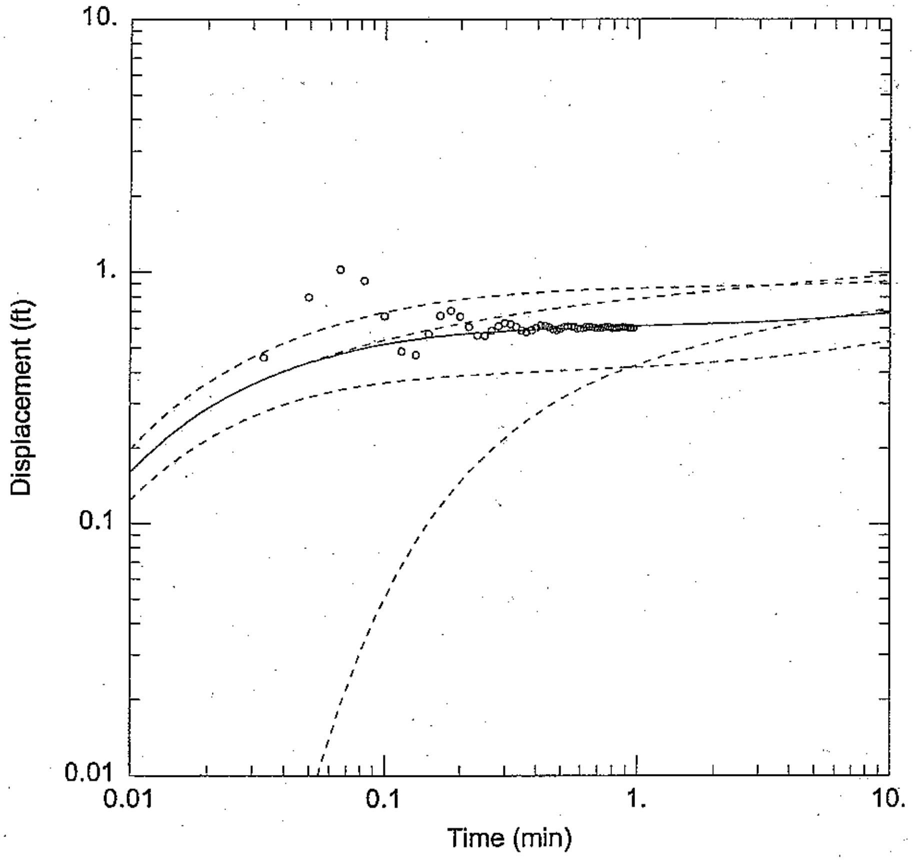
SOLUTION

Aquifer Model: Unconfined
Solution Method: Cooper-Jacob

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	3.034E+05	ft^2/day
S	1.338E-30	



2002 PUMPING TEST

Data Set: H:\CADET\RW1_N.AQT
Date: 11/18/02 Time: 17:00:07

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
○ RW-1ow	0	0.1

SOLUTION

Data Set: H:\CADET\RW1_N.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 17:00:12

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: RW-1ow

X Location: 0. ft
Y Location: 0.1 ft

No. of observations: 57

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0333	0.4582	0.35	0.5863	0.6667	0.6042
0.05	0.7951	0.3667	0.5795	0.6833	0.5997

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0667	1.022	0.3833	0.5885	0.7	0.5975
0.0833	0.9232	0.4	0.602	0.7167	0.5975
0.1	0.6694	0.4167	0.6155	0.7333	0.5997
0.1167	0.4852	0.4333	0.6132	0.75	0.6042
0.1333	0.4695	0.45	0.6042	0.7667	0.6065
0.15	0.5683	0.4667	0.593	0.7833	0.6042
0.1667	0.6716	0.4833	0.5885	0.8	0.5975
0.1833	0.7031	0.5	0.5952	0.8167	0.602
0.2	0.6671	0.5167	0.6042	0.8333	0.5975
0.2167	0.6065	0.5333	0.6087	0.85	0.5997
0.2333	0.5615	0.55	0.6087	0.8667	0.602
0.25	0.5593	0.5667	0.6042	0.8833	0.6042
0.2667	0.5863	0.5833	0.5952	0.9	0.602
0.2833	0.611	0.6	0.5975	0.9167	0.602
0.3	0.6289	0.6167	0.5975	0.9333	0.5997
0.3167	0.6222	0.6333	0.6065	0.95	0.602
0.3333	0.6065	0.65	0.6042	0.9667	0.5997

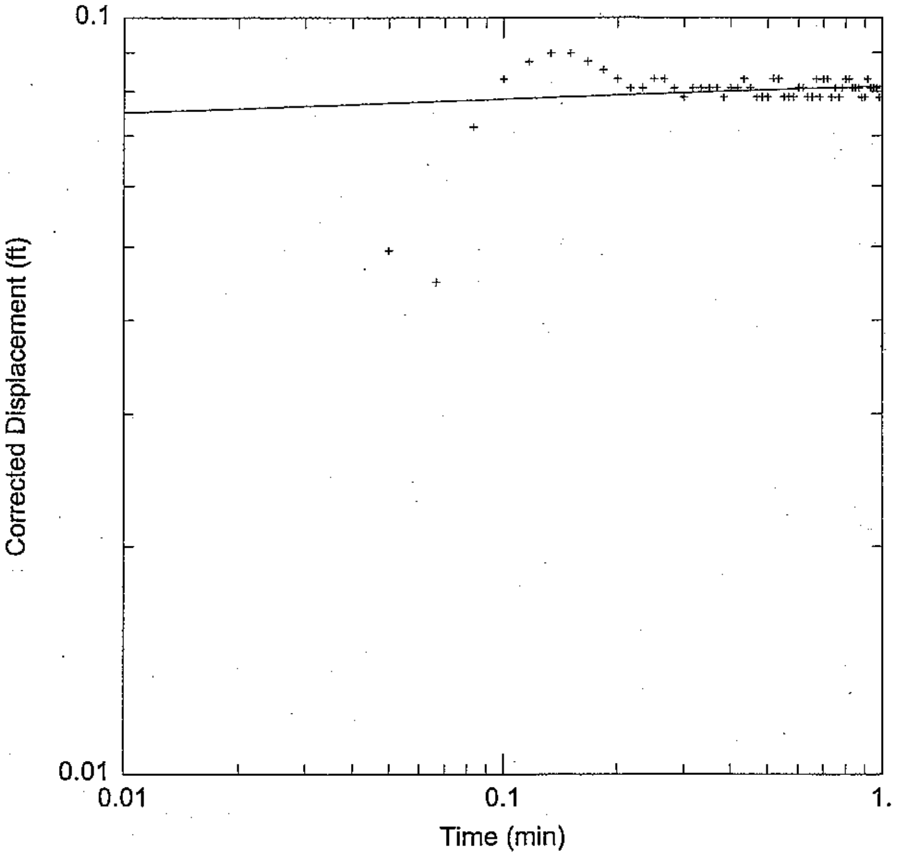
SOLUTION

Aquifer Model: Unconfined
Solution Method: Neuman

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	2.8E+04	ft^2/day
S	54.3	
Sy	1171.1	
ß	0.01	



2002 PUMPING TEST

Data Set: H:\CADET\MW13_T.AQT
Date: 11/18/02 Time: 16:57:23

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
+ MW-13	-4.5	-2.5

SOLUTION

Data Set: H:\CADET\MW13_T.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:57:30

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-13

X Location: -4.5 ft
Y Location: -2.5 ft

No. of observations: 57

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.05	0.04942	0.3666	0.08086	0.6833	0.07862
0.0666	0.04492	0.3833	0.07862	0.7	0.08311

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0833	0.07188	0.4	0.08086	0.7166	0.08311
0.1	0.08311	0.4166	0.08086	0.7333	0.07862
0.1166	0.0876	0.4333	0.08311	0.75	0.08086
0.1333	0.08985	0.45	0.08086	0.7666	0.07862
0.15	0.08985	0.4666	0.07862	0.7833	0.08086
0.1666	0.0876	0.4833	0.07862	0.8	0.08311
0.1833	0.08535	0.5	0.07862	0.8166	0.08311
0.2	0.08311	0.5166	0.08311	0.8333	0.08086
0.2166	0.08086	0.5333	0.08311	0.85	0.08086
0.2333	0.08086	0.55	0.07862	0.8666	0.08086
0.25	0.08311	0.5666	0.07862	0.8833	0.07862
0.2666	0.08311	0.5833	0.07862	0.9	0.07862
0.2833	0.08086	0.6	0.08086	0.9166	0.08311
0.3	0.07862	0.6166	0.08086	0.9333	0.08086
0.3166	0.08086	0.6333	0.07862	0.95	0.08086
0.3333	0.08086	0.65	0.07862	0.9666	0.08086
0.35	0.08086	0.6666	0.08311	0.9833	0.07862

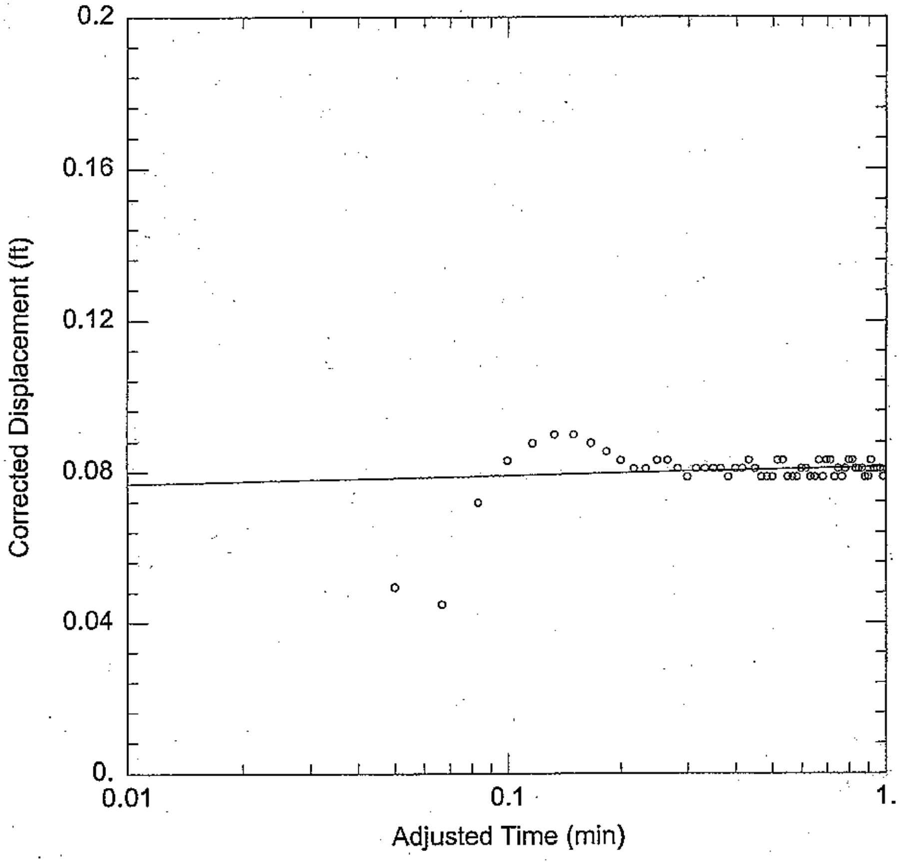
SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	1.69E+06	ft^2/day
S	1.116E-24	



2002 PUMPING TEST

Data Set: H:\CADET\MW13_CJ.AQT
Date: 11/18/02 Time: 16:56:35

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
○ MW-13	-4.5	-2.5

SOLUTION

Data Set: H:\CADET\MW13_CJ.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:56:23

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-13

X Location: -4.5 ft
Y Location: -2.5 ft

No. of observations: 57

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.05	0.04942	0.3666	0.08086	0.6833	0.07862
0.0666	0.04492	0.3833	0.07862	0.7	0.08311

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0833	0.07188	0.4	0.08086	0.7166	0.08311
0.1	0.08311	0.4166	0.08086	0.7333	0.07862
0.1166	0.0876	0.4333	0.08311	0.75	0.08086
0.1333	0.08985	0.45	0.08086	0.7666	0.07862
0.15	0.08985	0.4666	0.07862	0.7833	0.08086
0.1666	0.0876	0.4833	0.07862	0.8	0.08311
0.1833	0.08535	0.5	0.07862	0.8166	0.08311
0.2	0.08311	0.5166	0.08311	0.8333	0.08086
0.2166	0.08086	0.5333	0.08311	0.85	0.08086
0.2333	0.08086	0.55	0.07862	0.8666	0.08086
0.25	0.08311	0.5666	0.07862	0.8833	0.07862
0.2666	0.08311	0.5833	0.07862	0.9	0.07862
0.2833	0.08086	0.6	0.08086	0.9166	0.08311
0.3	0.07862	0.6166	0.08086	0.9333	0.08086
0.3166	0.08086	0.6333	0.07862	0.95	0.08086
0.3333	0.08086	0.65	0.07862	0.9666	0.08086
0.35	0.08086	0.6666	0.08311	0.9833	0.07862

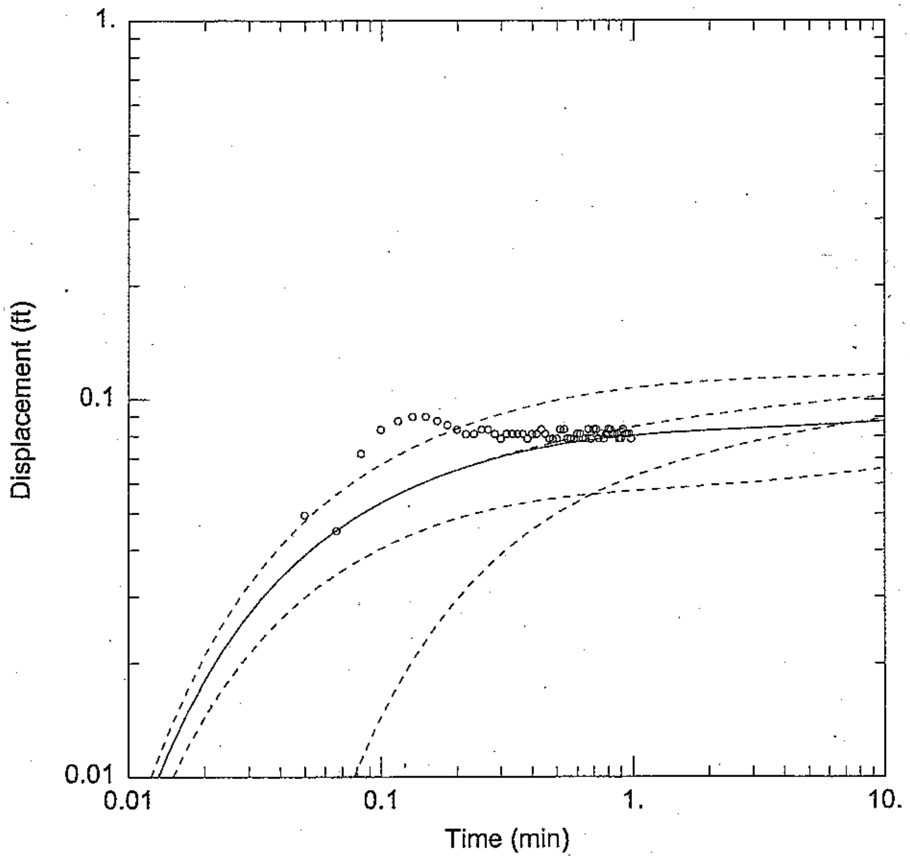
SOLUTION

Aquifer Model: Unconfined
Solution Method: Cooper-Jacob

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	2.364E+06	ft^2/day
S	6.457E-35	



2002 PUMPING TEST

Data Set: H:\CADET\MW13_N.AQT
Date: 11/18/02 Time: 16:57:00

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
○ MW-13	-4.5	-2.5

SOLUTION

Data Set: H:\CADET\MW13_N.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:57:14

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-13

X Location: -4.5 ft
Y Location: -2.5 ft

No. of observations: 57

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.05	0.04942	0.3666	0.08086	0.6833	0.07862
0.0666	0.04492	0.3833	0.07862	0.7	0.08311

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0833	0.07188	0.4	0.08086	0.7166	0.08311
0.1	0.08311	0.4166	0.08086	0.7333	0.07862
0.1166	0.0876	0.4333	0.08311	0.75	0.08086
0.1333	0.08985	0.45	0.08086	0.7666	0.07862
0.15	0.08985	0.4666	0.07862	0.7833	0.08086
0.1666	0.0876	0.4833	0.07862	0.8	0.08311
0.1833	0.08535	0.5	0.07862	0.8166	0.08311
0.2	0.08311	0.5166	0.08311	0.8333	0.08086
0.2166	0.08086	0.5333	0.08311	0.85	0.08086
0.2333	0.08086	0.55	0.07862	0.8666	0.08086
0.25	0.08311	0.5666	0.07862	0.8833	0.07862
0.2666	0.08311	0.5833	0.07862	0.9	0.07862
0.2833	0.08086	0.6	0.08086	0.9166	0.08311
0.3	0.07862	0.6166	0.08086	0.9333	0.08086
0.3166	0.08086	0.6333	0.07862	0.95	0.08086
0.3333	0.08086	0.65	0.07862	0.9666	0.08086
0.35	0.08086	0.6666	0.08311	0.9833	0.07862

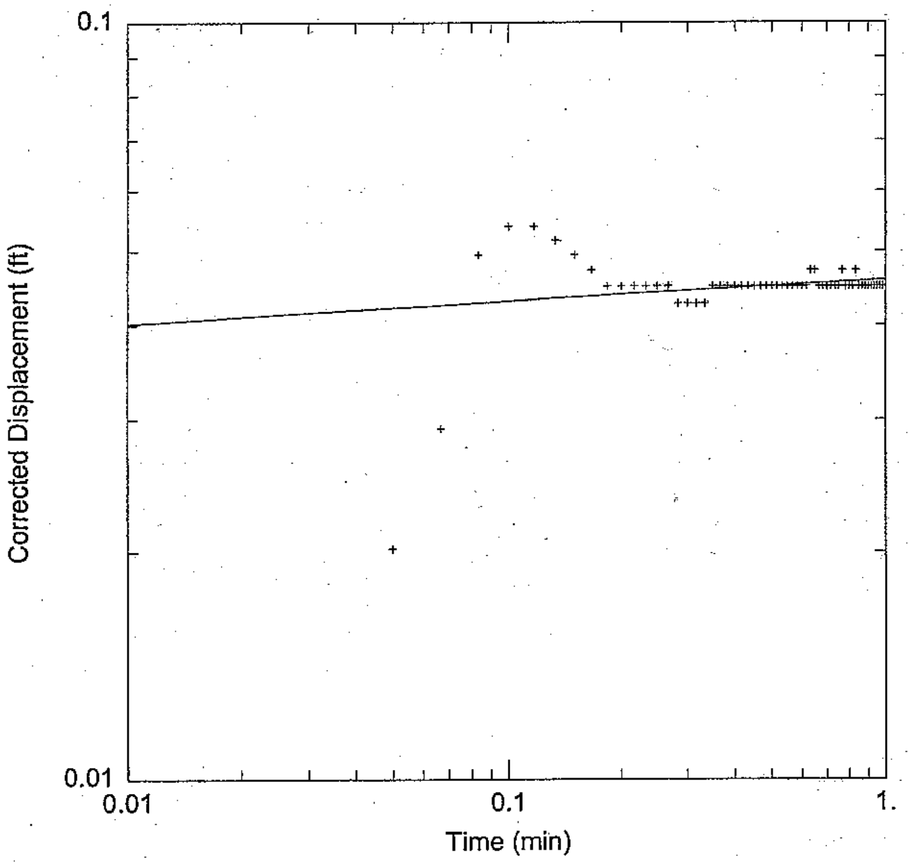
SOLUTION

Aquifer Model: Unconfined
Solution Method: Neuman

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	3.434E+05	ft^2/day
S	0.5312	
Sy	3.164	
ß	0.004	



2002 PUMPING TEST

Data Set: H:\CADET\MW14_T.AQT
Date: 11/18/02
Time: 16:58:23

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
+ MW-14	0	13.6

SOLUTION

Data Set: H:\CADET\MW14_T.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:58:30

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-14

X Location: 0. ft
Y Location: 13.6 ft

No. of observations: 58

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.05	0.02022	0.3834	0.04492	0.7167	0.04492
0.0667	0.0292	0.4	0.04492	0.7334	0.04492

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0834	0.04942	0.4167	0.04492	0.75	0.04492
0.1	0.05391	0.4334	0.04492	0.7667	0.04717
0.1167	0.05391	0.45	0.04492	0.7834	0.04492
0.1334	0.05166	0.4667	0.04492	0.8	0.04492
0.15	0.04942	0.4834	0.04492	0.8167	0.04492
0.1667	0.04717	0.5	0.04492	0.8334	0.04717
0.1834	0.04492	0.5167	0.04492	0.85	0.04492
0.2	0.04492	0.5334	0.04492	0.8667	0.04492
0.2167	0.04492	0.55	0.04492	0.8834	0.04492
0.2334	0.04492	0.5667	0.04492	0.9	0.04492
0.25	0.04492	0.5834	0.04492	0.9167	0.04492
0.2667	0.04492	0.6	0.04492	0.9334	0.04492
0.2834	0.04268	0.6167	0.04492	0.95	0.04492
0.3	0.04268	0.6334	0.04717	0.9667	0.04492
0.3167	0.04268	0.65	0.04717	0.9834	0.04492
0.3334	0.04268	0.6667	0.04492	1.	0.04492
0.35	0.04492	0.6834	0.04492		
0.3667	0.04492	0.7	0.04492		

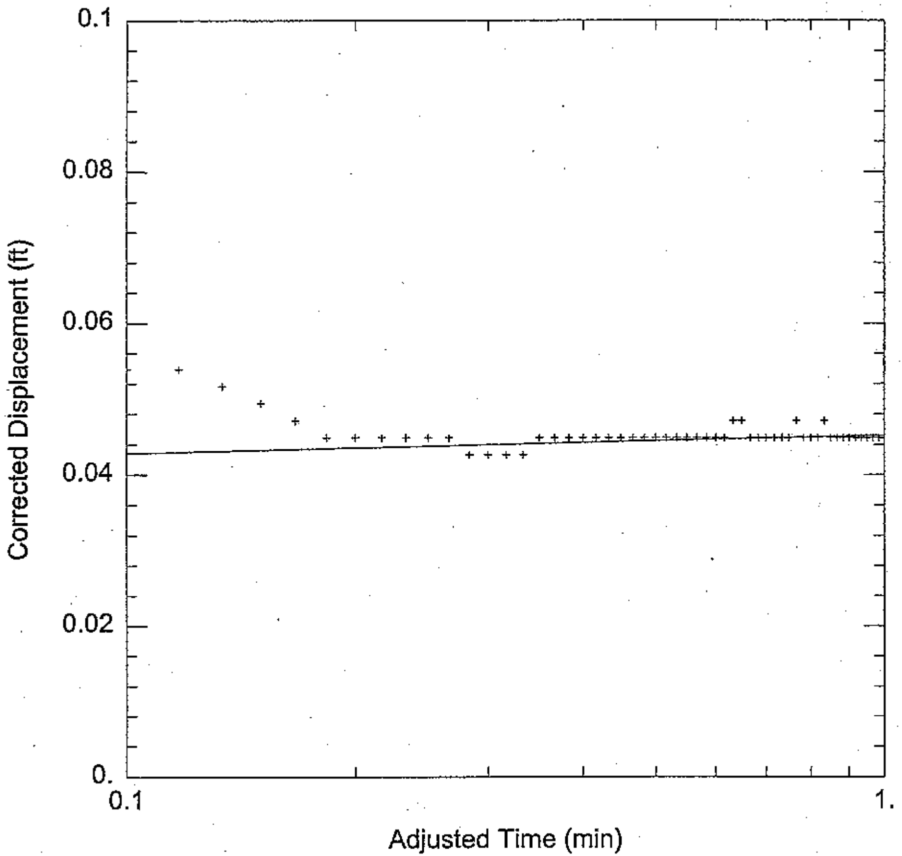
SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	1.868E+06	ft^2/day
S	1.062E-15	



2002 PUMPING TEST

Data Set: H:\CADET\MW14_CJ.AQT
Date: 11/18/02 Time: 16:57:47

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
+ MW-14	0	13.6

SOLUTION

Data Set: H:\CADET\MW14_CJ.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:57:55

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-14

X Location: 0. ft
Y Location: 13.6 ft

No. of observations: 58

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.05	0.02022	0.3834	0.04492	0.7167	0.04492
0.0667	0.0292	0.4	0.04492	0.7334	0.04492

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0834	0.04942	0.4167	0.04492	0.75	0.04492
0.1	0.05391	0.4334	0.04492	0.7667	0.04717
0.1167	0.05391	0.45	0.04492	0.7834	0.04492
0.1334	0.05166	0.4667	0.04492	0.8	0.04492
0.15	0.04942	0.4834	0.04492	0.8167	0.04492
0.1667	0.04717	0.5	0.04492	0.8334	0.04717
0.1834	0.04492	0.5167	0.04492	0.85	0.04492
0.2	0.04492	0.5334	0.04492	0.8667	0.04492
0.2167	0.04492	0.55	0.04492	0.8834	0.04492
0.2334	0.04492	0.5667	0.04492	0.9	0.04492
0.25	0.04492	0.5834	0.04492	0.9167	0.04492
0.2667	0.04492	0.6	0.04492	0.9334	0.04492
0.2834	0.04268	0.6167	0.04492	0.95	0.04492
0.3	0.04268	0.6334	0.04717	0.9667	0.04492
0.3167	0.04268	0.65	0.04717	0.9834	0.04492
0.3334	0.04268	0.6667	0.04492	1.	0.04492
0.35	0.04492	0.6834	0.04492		
0.3667	0.04492	0.7	0.04492		

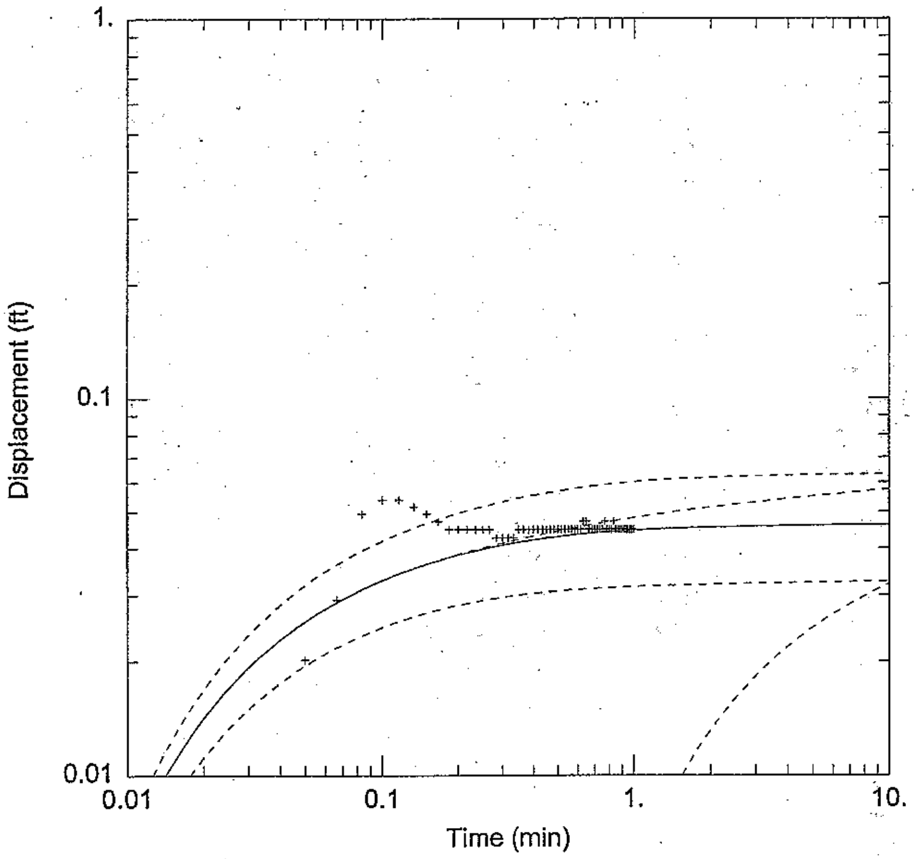
SOLUTION

Aquifer Model: Unconfined
Solution Method: Cooper-Jacob

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	2.223E+06	ft^2/day
S	1.893E-18	



2002 PUMPING TEST

Data Set: H:\CADET\MW14_N.AQT
Date: 11/18/02 Time: 16:58:04

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
+ MW-14	0	13.6

SOLUTION

Data Set: H:\CADET\MW14_N.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:58:10

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-14

X Location: 0. ft
Y Location: 13.6 ft

No. of observations: 58

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.05	0.02022	0.3834	0.04492	0.7167	0.04492
0.0667	0.0292	0.4	0.04492	0.7334	0.04492

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0834	0.04942	0.4167	0.04492	0.75	0.04492
0.1	0.05391	0.4334	0.04492	0.7667	0.04717
0.1167	0.05391	0.45	0.04492	0.7834	0.04492
0.1334	0.05166	0.4667	0.04492	0.8	0.04492
0.15	0.04942	0.4834	0.04492	0.8167	0.04492
0.1667	0.04717	0.5	0.04492	0.8334	0.04717
0.1834	0.04492	0.5167	0.04492	0.85	0.04492
0.2	0.04492	0.5334	0.04492	0.8667	0.04492
0.2167	0.04492	0.55	0.04492	0.8834	0.04492
0.2334	0.04492	0.5667	0.04492	0.9	0.04492
0.25	0.04492	0.5834	0.04492	0.9167	0.04492
0.2667	0.04492	0.6	0.04492	0.9334	0.04492
0.2834	0.04268	0.6167	0.04492	0.95	0.04492
0.3	0.04268	0.6334	0.04717	0.9667	0.04492
0.3167	0.04268	0.65	0.04717	0.9834	0.04492
0.3334	0.04268	0.6667	0.04492	1.	0.04492
0.35	0.04492	0.6834	0.04492		
0.3667	0.04492	0.7	0.04492		

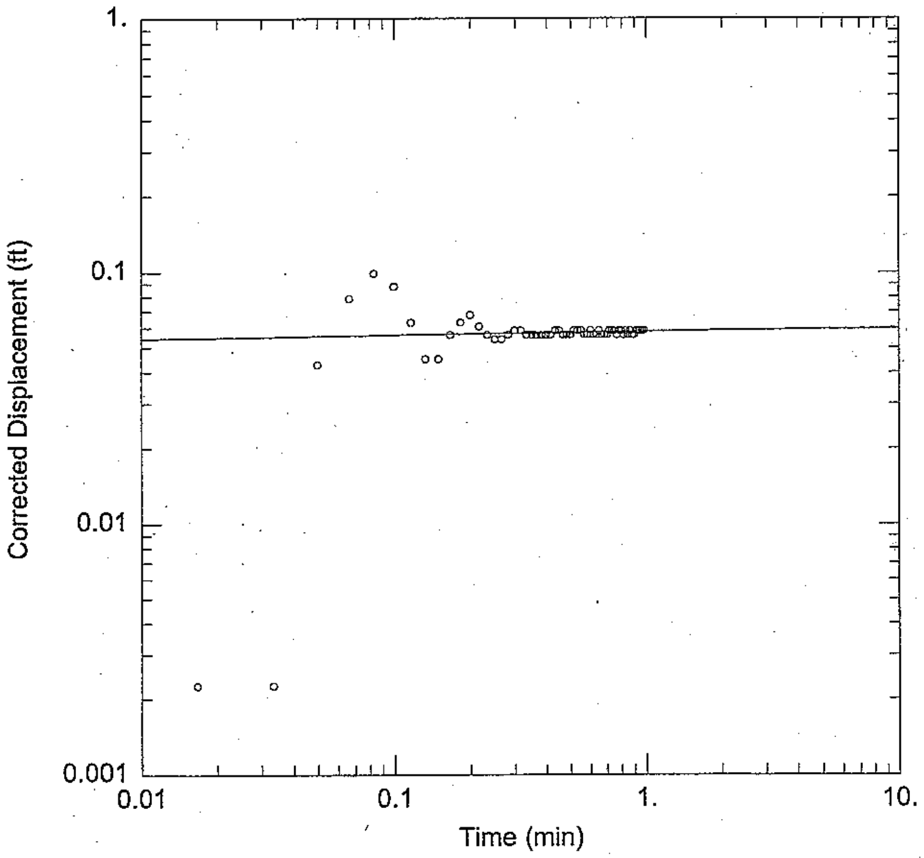
SOLUTION

Aquifer Model: Unconfined
Solution Method: Neuman

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	6.247E+05	ft^2/day
S	0.09669	
Sy	10.51	
ß	0.004	



2002 PUMPING TEST

Data Set: H:\CADET\MW15_T.AQT
Date: 11/18/02 Time: 16:59:24

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
○ MW-15	-11	-6

SOLUTION

Data Set: H:\CADET\MW15_T.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:59:29

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-15

X Location: -11. ft
Y Location: -6. ft

No. of observations: 59

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0167	0.002246	0.35	0.05615	0.6833	0.05615
0.0333	0.002246	0.3667	0.05615	0.7	0.05615

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.05	0.04268	0.3833	0.05615	0.7167	0.0584
0.0667	0.07862	0.4	0.05615	0.7333	0.0584
0.0833	0.09883	0.4167	0.05615	0.75	0.0584
0.1	0.0876	0.4333	0.0584	0.7667	0.05615
0.1167	0.06289	0.45	0.0584	0.7833	0.0584
0.1333	0.04492	0.4667	0.05615	0.8	0.0584
0.15	0.04492	0.4833	0.05615	0.8167	0.05615
0.1667	0.05615	0.5	0.05615	0.8333	0.0584
0.1833	0.06289	0.5167	0.0584	0.85	0.05615
0.2	0.06739	0.5333	0.0584	0.8667	0.0584
0.2167	0.06065	0.55	0.0584	0.8833	0.05615
0.2333	0.05615	0.5667	0.05615	0.9	0.05615
0.25	0.05391	0.5833	0.05615	0.9167	0.0584
0.2667	0.05391	0.6	0.0584	0.9333	0.0584
0.2833	0.05615	0.6167	0.05615	0.95	0.0584
0.3	0.0584	0.6333	0.05615	0.9667	0.0584
0.3167	0.0584	0.65	0.0584	0.9833	0.0584
0.3333	0.05615	0.6667	0.05615		

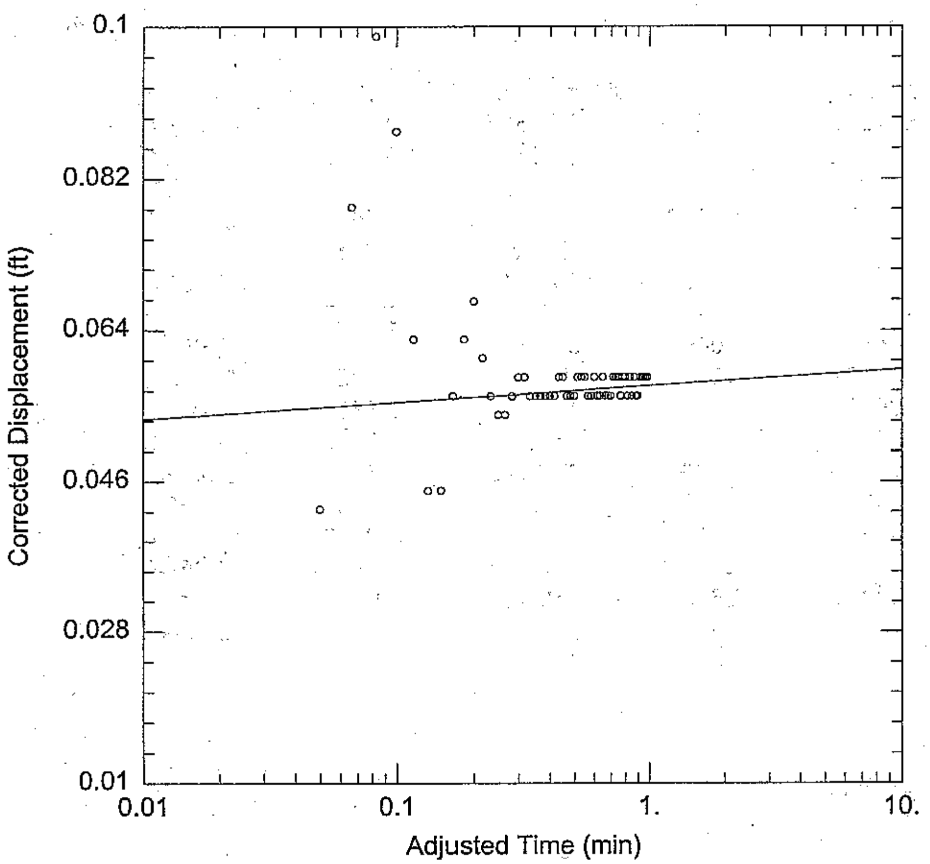
SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	2.852E+06	ft^2/day
S	1.735E-30	



2002 PUMPING TEST

Data Set: H:\CADET\MW15_CJ.AQT
Date: 11/18/02 Time: 16:58:47

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
○ MW-15	-11	-6

SOLUTION

Data Set: H:\CADET\MW15_CJ.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:58:52

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-15

X Location: -11. ft
Y Location: -6. ft

No. of observations: 59

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0167	0.002246	0.35	0.05615	0.6833	0.05615
0.0333	0.002246	0.3667	0.05615	0.7	0.05615

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.05	0.04268	0.3833	0.05615	0.7167	0.0584
0.0667	0.07862	0.4	0.05615	0.7333	0.0584
0.0833	0.09883	0.4167	0.05615	0.75	0.0584
0.1	0.0876	0.4333	0.0584	0.7667	0.05615
0.1167	0.06289	0.45	0.0584	0.7833	0.0584
0.1333	0.04492	0.4667	0.05615	0.8	0.0584
0.15	0.04492	0.4833	0.05615	0.8167	0.05615
0.1667	0.05615	0.5	0.05615	0.8333	0.0584
0.1833	0.06289	0.5167	0.0584	0.85	0.05615
0.2	0.06739	0.5333	0.0584	0.8667	0.0584
0.2167	0.06065	0.55	0.0584	0.8833	0.05615
0.2333	0.05615	0.5667	0.05615	0.9	0.05615
0.25	0.05391	0.5833	0.05615	0.9167	0.0584
0.2667	0.05391	0.6	0.0584	0.9333	0.0584
0.2833	0.05615	0.6167	0.05615	0.95	0.0584
0.3	0.0584	0.6333	0.05615	0.9667	0.0584
0.3167	0.0584	0.65	0.0584	0.9833	0.0584
0.3333	0.05615	0.6667	0.05615		

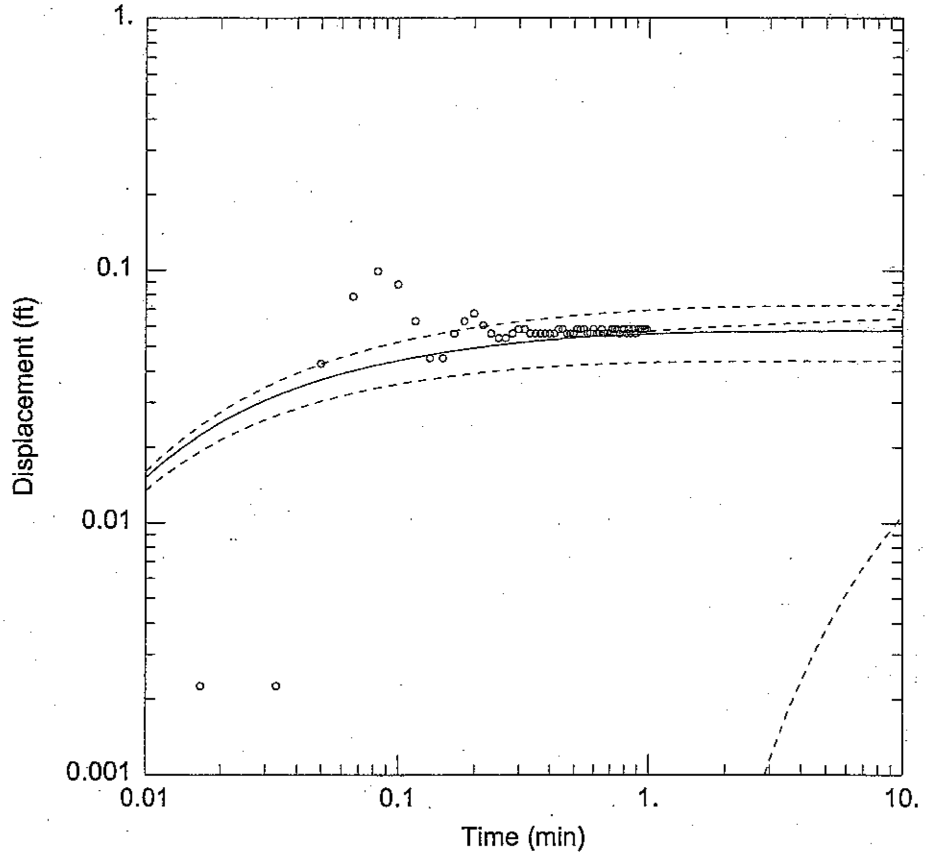
SOLUTION

Aquifer Model: Unconfined
Solution Method: Cooper-Jacob

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	2.68E+06	ft^2/day
S	2.36E-28	



2002 PUMPING TEST

Data Set: H:\CADET\MW15_N.AQT
Date: 11/18/02 Time: 16:59:05

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Test Location: Vancouver, WA
Test Well: RW-1
Test Date: 3-22-2002

AQUIFER DATA

Saturated Thickness: 200. ft

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
RW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
○ MW-15	-11	-6

SOLUTION

Data Set: H:\CADET\MW15_N.AQT
Title: 2002 Pumping Test
Date: 11/18/02
Time: 16:59:15

PROJECT INFORMATION

Company: AMEC E&E
Client: Cadet Manufacturing
Project: 2-61M-10135
Location: Vancouver, WA
Test Date: 3-22-2002
Test Well: RW-1

AQUIFER DATA

Saturated Thickness: 200. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: RW-1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data

Time (min)	Rate (gal/min)
0.	150.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-15

X Location: -11. ft
Y Location: -6. ft

No. of observations: 59

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0167	0.002246	0.35	0.05615	0.6833	0.05615
0.0333	0.002246	0.3667	0.05615	0.7	0.05615

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.05	0.04268	0.3833	0.05615	0.7167	0.0584
0.0667	0.07862	0.4	0.05615	0.7333	0.0584
0.0833	0.09883	0.4167	0.05615	0.75	0.0584
0.1	0.0876	0.4333	0.0584	0.7667	0.05615
0.1167	0.06289	0.45	0.0584	0.7833	0.0584
0.1333	0.04492	0.4667	0.05615	0.8	0.0584
0.15	0.04492	0.4833	0.05615	0.8167	0.05615
0.1667	0.05615	0.5	0.05615	0.8333	0.0584
0.1833	0.06289	0.5167	0.0584	0.85	0.05615
0.2	0.06739	0.5333	0.0584	0.8667	0.0584
0.2167	0.06065	0.55	0.0584	0.8833	0.05615
0.2333	0.05615	0.5667	0.05615	0.9	0.05615
0.25	0.05391	0.5833	0.05615	0.9167	0.0584
0.2667	0.05391	0.6	0.0584	0.9333	0.0584
0.2833	0.05615	0.6167	0.05615	0.95	0.0584
0.3	0.0584	0.6333	0.05615	0.9667	0.0584
0.3167	0.0584	0.65	0.0584	0.9833	0.0584
0.3333	0.05615	0.6667	0.05615		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Neuman

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	8.95E+05	ft^2/day
S	0.07009	
Sy	98.29	
ß	0.001	

APPENDIX J

Groundwater Tracer Test and Supporting Information

4.6 Aquifer Testing

Slug tests and tracer tests have been conducted at the Site and in the Project Area in an attempt to develop a better understanding of hydrogeologic parameters affecting the local groundwater system. Aquifer testing results are presented in the following sections.

4.6.1 Slug Tests

Slug testing was conducted on August 8, 2000 and May 30, 2001 to estimate hydraulic properties of the USA at the Site and in the FVN. Slug testing was selected because it does not alter groundwater flow directions, and impacted water is not generated.

Changes in groundwater elevation observed during the slug tests were used to estimate hydraulic conductivity of the intermediate and deep zones of the USA. Based on the results of slug testing, average hydraulic conductivity for the intermediate zone of the USA is 140 ft/day (4.8×10^{-2} cm/sec), and the average hydraulic conductivity of the deep zone of the USA is 170 ft/day (6.2×10^{-2} cm/sec). These values are within the published ranges of values for the USA (McFarland and Morgan, 1996).

4.6.2 Tracer Studies

4.6.2.1 August 2000 Tracer Test

A conservative tracer (lithium bromide in solution) was used to estimate groundwater flow direction and velocity at the Site. Concentrated lithium bromide solution (54 wt. %, Cat. No. 41, 151-5, Aldrich Chemical Co., Milwaukee, Wisconsin) was diluted to 2,000 mg/L in deionized water. Two liters of the dilute solution were added at each of four boring locations (BIP-1, BIP-2, BIP-3, and BIP-4) on August 18, 2000 at approximately 22 to 26 feet bgs, for a total of eight liters. The tracer solution was added to the subsurface using a direct-push rod, which was attached to a 4-foot groundwater-sampling screen. Approximately two liters of clean water were added through the rod at each boring location to force the tracer solution into the formation. The borings were abandoned using bentonite chips after the tracer application was completed.

Within the monitoring network for the HRC® pilot study (AMEC 2000) and at monitoring wells MW-1s and MW-3s, local groundwater was monitored approximately every 3 to 5 days during the first 3 weeks after tracer application. Groundwater was purged from the DPW monitoring wells and the groundwater specific conductance was measured as an indicator for the potential presence of lithium bromide. Specific conductance values are expected to increase in the presence of lithium bromide.

After the first 3 weeks of the tracer test, groundwater levels were measured in monitoring wells DPW-1 through DPW-10, MW-1s, and MW-3s approximately every two to three weeks, in an attempt to understand the flow direction of shallow groundwater immediately east of the building. Based on previous groundwater elevation maps, groundwater appeared to flow to the northeast in the shallow zone of the USA near the building.

Groundwater samples were collected for bromide testing at an analytical laboratory on approximately a weekly basis for the month following the tracer injection. Bromide was detected in a groundwater sample from monitoring well DPW-6 on September 14, 2000 at a concentration of 0.2 mg/L (the bromide detection limit). Bromide concentrations were consistently below detection limits for the other samples that were analyzed; therefore, no interpretation of the study was made. It is possible that the original concentration of bromide was diluted by dispersion and advective processes within the monitoring area, thereby resulting in bromide concentrations below detection limits. Alternatively, a preferential transport pathway may have allowed bromide to move out of the monitoring area without encountering pilot test area monitoring points.

4.6.2.2 October 2001 Tracer Test

A second tracer test was conducted in October 2001 in an attempt to improve the current understanding of shallow groundwater flow direction and velocity at the Site. The tracer test was designed to estimate aquifer parameters such as hydraulic conductivity and dispersion. Fluorescein analysis was preformed by AMEC's Portland, Oregon office, and bromide analysis was performed (on selected samples) by North Creek Analytical Laboratory (NCA) of Portland, Oregon. The October sampling was conducted near the end of a "drought" year for the Portland/Vancouver area.

Preparation and Tracer Injection

Approximately 1 week prior to tracer injection, background samples were collected from the tracer test monitoring wells. All background samples were analyzed for fluorescein, and selected background samples were also analyzed for bromide. Background samples analyzed for bromide were those from monitoring wells with tracer test samples that were also analyzed for bromide (see Analytical Methods, below). Water level measurements were collected from the tracer test monitoring wells prior to tracer injection.

The injection of the fluorescein and potassium bromide tracer took place on October 15, 2001. Tygon tubing (3/8-inch) was used to inject the tracer directly into DPW-11. Approximately 14 gallons of tracer solution, comprised of 3 pounds of fluorescein and 500 grams of potassium bromide, was injected at approximately 2 gallons per minute (gpm). The influent tracer solution was sampled prior to injection to determine the bromide and fluorescein concentrations injected. The tracer injection took approximately 6 ¾ minutes. The first tracer sample was retrieved from DPW-11 approximately 45 minutes after tracer injection.

Sampling and Monitoring

The tracer injection well, DPW-11, and fourteen monitoring wells (DPW-1 through DPW-15, excluding DPW-11) surrounding the tracer injection location were sampled and monitored during the tracer test. These wells will be referred to as the tracer test monitoring wells.

Samples were collected without purging the monitoring wells in order to prevent disturbing the natural groundwater gradient. Samples were retrieved from the middle of the screened interval at each monitoring well using peristaltic pumps at low flow rates. Two automated ISCO samplers also were used to continuously collect samples from DPW-3 and DPW-7 overnight and through the duration of the tracer test. The ISCO samplers were programmed to automatically collect samples every hour. The sampler automatically rinsed the suction line three times in between each sample collection to eliminate cross-contamination.

The fluorescein dye and potassium bromide tracer was monitored until October 22, 2001. Tracer was detected at three sampling locations during the tracer test: DPW-3, DPW-7, and DPW-6.

Analytical Methods

Samples collected during the tracer test from the direct-push monitoring wells were analyzed for fluorescein concentrations at AMEC (Portland, OR). Selected samples from DPW-3, DPW-7, and DPW-11 also were analyzed for bromide concentrations at NCA (Portland, OR). The fluorescein and bromide analytical results were used to determine the apparent groundwater flow direction and groundwater flow velocity. The fluorescein and bromide concentrations of the tracer test samples are shown in Tables 4.6-1 and 4.6-2 along with the date and time of collection.

Results and Discussion

Breakthrough of the fluorescein tracer was observed at elevated concentrations in two monitoring locations during the tracer test: DPW-3 and DPW-7. Fluorescein also was observed in relatively small concentrations in groundwater samples collected from DPW-6. Fluorescein was observed at very low concentrations in samples from the remainder of the monitoring locations (DPW-1, DPW-2, DPW-4, DPW-5, DPW-8, DPW-9, DPW-10, DPW-12, DPW-13, DPW-14, DPW-15, MW-5s, and MW-5i). Select groundwater samples from DPW-3, DPW-7, and DPW-11 were analyzed for bromide concentrations to compare results for both tracers used in the tracer test.

Fluorescein was detected at a concentration of 9,075 ppm in a groundwater sample collected from DPW-11 immediately after injection. Fluorescein tracer was first detected in DPW-3 approximately 7.5 hours after the tracer solution was injected into DPW-11. The fluorescein peak concentration at DPW-3 (approximately 13 ppm) was observed in the groundwater sample collected approximately 10.5 hours after tracer injection. Fluorescein tracer was first detected in DPW-7 approximately 9.5 hours after injection. The fluorescein peak concentration at DPW-7 (approximately 7 ppm) was observed approximately 12.5 hours after injection. The fluorescein peak concentration at DPW-6 (approximately 0.4 ppm) was observed in a groundwater sample collected approximately 46 hours after injection.

Multiple fluorescein concentration peaks were observed in the groundwater samples from DPW-3 and DPW-7 over the duration of the tracer test. The multiple fluorescein concentration peaks were most likely due to the effects of Columbia River tidal fluctuations on groundwater elevations near the Cadet facility. Recurrent increases in groundwater elevations most likely dissolved residual tracer solution in the injection well, thus causing subsequent slugs to pass through the system. For the purposes of discussing the results of the tracer test, groundwater samples representative of the first observed tracer peaks in DPW-3 and DPW-7 were selected for further analysis along with groundwater samples taken from DPW-11 over the duration of the tracer test.

The direction of groundwater flow in the vicinity the test area appeared to be easterly on the day of the tracer test (October 15, 2001). The direction of groundwater flow was inferred from the observation that fluorescein tracer was detected in monitoring wells DPW-3 and DPW-7 (Figure 2.2-4). Very low concentrations of fluorescein tracer in the other direct-push monitoring wells near DPW-3 and DPW-7 indicate that groundwater flow may potentially be dominated by advection and longitudinal dispersion (Istok, 1989).

The fluorescein and bromide breakthrough curves for DPW-3 and DPW-7 and dilution curve for DPW-11 were analyzed quantitatively to estimate the groundwater flow velocity. The DPW-11 dilution curves were analyzed with an analytical borehole dilution method. The method used to analyze the DPW-3 and DPW-7 breakthrough curves was an analytical instantaneous slug injection model that was used also to estimate aquifer parameters. The slug injection model assumes an isotropic, homogeneous aquifer with steady state groundwater flow. The instantaneous slug injection method, based on an analytical advective/dispersive transport solution for a slug injection into a uniform one-dimensional flow field, is described as:

$$C(x,t) = \frac{C_0 A}{4\pi t (D_L D_T)^{1/2}} \exp\left[-\frac{(x - v_x t)^2}{4 D_L t} - \frac{y^2}{4 D_T t} \right]$$

where:

C = the tracer concentration,

x = horizontal distance downgradient from the injection well to the monitoring wells,

y = horizontal distance perpendicular to direction of groundwater flow from the injection well to the monitoring wells

t = time since tracer injection,

C_0 = initial concentration of tracer in injected solution,

A = cross-sectional area of injection well

v_x = the average groundwater velocity in the x-direction (longitudinal direction of groundwater flow),

D_L = the longitudinal dispersivity, and

D_T = the transverse dispersivity.

The groundwater flow velocity and aquifer properties in the vicinity of the tracer test area were estimated by fitting the model to the observed fluorescein and bromide breakthrough curves for DPW-3 and DPW-7. The parameters estimated by the fitting process were C_0, v_x, and D_L. The initial concentrations of fluorescein and bromide in the tracer solution prior to injection were 9,075 ppm and 6,110 ppm, respectively. However, the initial concentrations in the tracer solution prior to injection are not equal to the actual concentration immediately outside of the injection well because of tracer dilution in the well and in the sand pack around the well. Therefore, C_0 for fluorescein and bromide was used as a fitting parameter. It should be noted that, ideally, C_0 would be the same for all breakthrough curves. The fits of the model to the observed fluorescein and bromide breakthrough curves of DPW-3 and DPW-7 are shown on Figures 4.6-1 and 4.6-2, and the parameter values from the models are given in Table 4.6-3.

The estimated C_0 values for the fluorescein and bromide breakthrough curves of DPW-3 and DPW-7 are within two orders of magnitude. The differences may be attributable to heterogeneous conditions between the injection well and the monitoring locations, DPW-3 and DPW-7, as well as non-uniform mixing in and around the injection well borehole.

The estimated longitudinal dispersivities also are closely matched for the model fits to the breakthrough curves. The values are all within one order of magnitude and the differences also may be attributable to the effects mentioned previously for the estimated C_0 values.

The greatest difference among fit parameters is observed in the range of estimated groundwater flow velocities. Groundwater velocities calculated using fluorescein and bromide results from DPW-3 were 28.9 ft/day and 28.3 ft/day, respectively, and the groundwater velocities calculated from DPW-7 were 43.9 ft/day (fluorescein) and 26.1 ft/day (bromide). The difference between the two fluorescein velocities does not correlate with the difference observed in the two velocities estimated from the bromide results. The groundwater flow velocities estimated using the model are generally equivalent to velocities estimated by dividing the radial distance to each well by the time at which the tracer peak arrival occurred in each well. The bromide tracer groundwater velocities are fairly consistent from DPW-3 and DPW-7 breakthrough curves. The discrepancy noted in the fluorescein results possibly may be attributed to preferential flow paths, a hydraulic gradient increase due to tidal changes, or localized lithology changes (that result in increased conductivity, or decreased porosity).

The method used to estimate the groundwater flow velocity near DPW-11 was based on a borehole dilution model. The borehole dilution test yields an estimate of the horizontal average linear groundwater velocity in the aquifer near the injection well screen. Application of the borehole dilution method is best suited for steady-state lateral and horizontal flow regimes. Typically, tracer solution is instantaneously injected into a discrete section of the well screen at an initial concentration C_0. The methodology further asserts that complete mixing occurs in the well screen section without affecting flow conditions in the formation. The tracer concentration in groundwater in the injection well casing is then monitored over time. The observed tracer dilution curve is then modeled as a completely mixed flow reactor, where the groundwater flow velocity is described as:

$$\bar{v}^{*} = -\frac{W}{A \cdot t} \ln\left(\frac{C}{C_0}\right)$$

where:

$\bar{v}^{*}$ = the average velocity across the center of the well bore,

W = the volume of the well casing used in the dilution test,

A = the vertical cross-sectional area through the center of the well casing,

t = the time since tracer injection,

C = the tracer concentration, and

C_0 = the initial tracer concentration.

The horizontal average groundwater flow velocity in the formation near the well casing and sand pack was estimated from $\bar{v}^*$ as:

$$\bar{v} = \frac{\bar{v}^*}{n\bar{\alpha}}$$

where:

$\bar{v}$ = the horizontal average groundwater flow velocity,

n = the aquifer porosity, and

$\bar{\alpha}$ = an adjustment factor.

The horizontal average groundwater flow velocity, $\bar{v}$, was estimated by fitting the borehole dilution model to the observed fluorescein and bromide tracer concentrations in DPW-11 over time. The average groundwater velocity across the center of the well casing, $\bar{v}^*$, was used as the fitting parameter. The observed breakthrough curves and model fits are shown on Figure 4.6-3 and the parameter values are given in Table 4.6-4. The value of $\bar{\alpha}$ generally varies between 0.5 and 4, depending on the geometry of the well screen, and the thickness and hydraulic conductivity of the sand pack around the well casing. The resulting estimated horizontal average groundwater velocity in the aquifer formation ranges from 4.7 to 0.6 ft/day (fluorescein) and 7.6 to 1.0 ft/day (bromide).

The tracer test results may have been affected when the tracer solute was injected into DPW-11. The groundwater velocity may have been artificially increased due to a temporary increase in hydraulic head. However, this seems unlikely because of the aquifer formation's large hydraulic conductivity documented in other areas of the POV. Fluorescein tracer also may have precipitated out of solution after the tracer was injected into DPW-11, affecting the initial concentration used in the analytical solution.

Conclusions

As indicated by the monitoring wells that had positive detections of fluorescein tracer (DPW-3 and DPW-7), groundwater flow at the Site appeared to be in an easterly direction at the time of the tracer test. Groundwater velocities were calculated to range from 26.1 to 43.9 ft/day using an analytical instantaneous slug injection method, and from 0.6 to 7.6 ft/day using a borehole dilution method. Longitudinal dispersivity was estimated to range from 0.13 to 0.33 feet. The groundwater velocities estimated from DPW-3 and DPW-11 bromide samples are generally equal to the groundwater velocities estimated using fluorescein for both wells. The flow velocity calculated from the DPW-7 bromide sample results is consistent with that velocity calculated from the DPW-3 bromide sample results. The DPW-7 bromide-estimated velocity is nearly 50% less than DPW-7 fluorescein-estimated velocity. Based on data collected from other investigations, the velocity calculated from the borehole dilution model appears to be most representative of the regional Site conditions. However, as other hydrogeological data are collected, this conclusion will be re-evaluated.

4.7 Identification of Non-Cadet Sources

A regional survey of properties near the Cadet Site was performed to evaluate potential uses of HVOCs and potential sources of HVOCs to regional groundwater. Several properties currently undergoing investigation and/or groundwater remediation activities for VOCs include the GATX/ST Services facility, located south-southwest of the Cadet Site along the Columbia River. ASI and the former Swan facility were previously discussed in Section 2.2.2. However, large areas have been identified in the vicinity as having incomplete data sets or monitoring well networks, sporadic VOC analytical results, or no groundwater data at all.

VOCs have been consistently detected at the Great Western Malting Company (GWMC) facility (Dames and Moore, 1993), located adjacent to the Columbia River, approximately 1 mile southeast of the Cadet Site (Figure 2.2-1). The GWMC facility has undergone some subsurface investigation work. VOCs have been detected in monitoring wells located on-site and north of the GWMC facility, and in soil gas samples collected from the site. A shallow Geoprobe® investigation conducted at the facility in June 2000 indicated that VOCs were not detected or were present at low levels in groundwater. This investigation did not extend to depths at which monitoring wells with detected VOCs are screened (Parametrix, Inc., 2001b).

The 2001 Roosevelt property is located approximately 0.8 miles southeast of the Cadet Site, and is in an area with relatively little groundwater analytical data. The 2001 Roosevelt Property/Vancouver Drum Site property was identified as a location where chlorinated solvents had been used in past operations (EPA, 1991a). VOCs have been detected in on-site soils and soil gas (Ecology 1994), but a groundwater investigation has yet to be conducted. VOCs have been detected in groundwater samples from monitoring wells south and north of the 2001 Roosevelt property.

4.8 Summary of Remedial Feasibility Testing to Date

Feasibility tests are conducted to assure that specific technologies are suitable for remediation and to collect information necessary to design a suitable or technically feasible remediation system. AMEC already has evaluated four remedial options,

Table 4.6-1
October 2001 Fluorescein Tracer Test Results

Sample ID	Compound	Date	Time	Concentration	Units	MRL
DPW-01	Fluorescein	10-Oct-01	14:05	0.133	µg/L	0.005
	Fluorescein	15-Oct-01	11:03	0.15	µg/L	0.005
	Fluorescein	15-Oct-01	13:17	0.441	µg/L	0.005
	Fluorescein	15-Oct-01	14:20	0.315	µg/L	0.005
	Fluorescein	15-Oct-01	15:18	0.363	µg/L	0.005
	Fluorescein	15-Oct-01	16:35	0.479	µg/L	0.005
	Fluorescein	16-Oct-01	9:07	0.172	µg/L	0.005
	Fluorescein	16-Oct-01	10:49	0.19	µg/L	0.005
	Fluorescein	16-Oct-01	13:22	0.171	µg/L	0.005
	Fluorescein	16-Oct-01	15:24	0.17	µg/L	0.005
	Fluorescein	17-Oct-01	8:31	0.143	µg/L	0.005
	Fluorescein	17-Oct-01	15:42	0.143	µg/L	0.005
DPW-02	Fluorescein	10-Oct-01	15:00	0.112	µg/L	0.005
	Fluorescein	15-Oct-01	10:46	0.113	µg/L	0.005
	Fluorescein	15-Oct-01	11:33	0.146	µg/L	0.005
	Fluorescein	15-Oct-01	13:04	0.2	µg/L	0.005
	Fluorescein	15-Oct-01	14:11	0.385	µg/L	0.005
	Fluorescein	15-Oct-01	15:08	1.42	µg/L	0.005
	Fluorescein	15-Oct-01	16:09	0.451	µg/L	0.005
	Fluorescein	15-Oct-01	17:15	0.289	µg/L	0.005
	Fluorescein	16-Oct-01	8:40	0.409	µg/L	0.005
	Fluorescein	16-Oct-01	10:30	0.356	µg/L	0.005
	Fluorescein	16-Oct-01	13:08	0.2	µg/L	0.005
	Fluorescein	16-Oct-01	15:07	0.247	µg/L	0.005
	Fluorescein	17-Oct-01	8:20	1.29	µg/L	0.005
	Fluorescein	17-Oct-01	15:08	0.497	µg/L	0.005
DPW-03	Fluorescein	10-Oct-01	15:10	0.115	µg/L	0.005
	Fluorescein	15-Oct-01	10:36	0.119	µg/L	0.005
	Fluorescein	15-Oct-01	11:30	0.157	µg/L	0.005
	Fluorescein	15-Oct-01	13:00	0.174	µg/L	0.005
	Fluorescein	15-Oct-01	14:00	0.214	µg/L	0.005
	Fluorescein	15-Oct-01	15:02	0.257	µg/L	0.005
	Fluorescein	15-Oct-01	16:00	0.251	µg/L	0.005
	Fluorescein	15-Oct-01	17:00	942.5	µg/L	0.005
	Fluorescein	15-Oct-01	18:00	5300	µg/L	0.005
	Fluorescein	15-Oct-01	19:00	11150	µg/L	0.005
	Fluorescein	15-Oct-01	20:00	12950	µg/L	0.005
	Fluorescein	15-Oct-01	21:00	12250	µg/L	0.005
	Fluorescein	15-Oct-01	22:00	7350	µg/L	0.005
	Fluorescein	15-Oct-01	23:00	6100	µg/L	0.005
	Fluorescein	16-Oct-01	0:00	4420	µg/L	0.005
	Fluorescein	16-Oct-01	1:00	2980	µg/L	0.005
	Fluorescein	16-Oct-01	2:00	2060	µg/L	0.005
	Fluorescein	16-Oct-01	3:00	2200	µg/L	0.005
	Fluorescein	16-Oct-01	4:00	4120	µg/L	0.005
	Fluorescein	16-Oct-01	5:00	4540	µg/L	0.005
	Fluorescein	16-Oct-01	6:00	8100	µg/L	0.005
	Fluorescein	16-Oct-01	7:00	7300	µg/L	0.005

Table 4.6-1
October 2001 Fluorescein Tracer Test Results

Sample ID	Compound	Date	Time	Concentration	Units	MRL
DPW-03	Fluorescein	16-Oct-01	8:00	6550	µg/L	0.005
	Fluorescein	16-Oct-01	10:12	5040	µg/L	0.005
	Fluorescein	16-Oct-01	12:40	2860	µg/L	0.005
	Fluorescein	16-Oct-01	14:40	2840	µg/L	0.005
	Fluorescein	16-Oct-01	16:40	2560	µg/L	0.005
	Fluorescein	16-Oct-01	18:40	5650	µg/L	0.005
	Fluorescein	16-Oct-01	20:40	4505	µg/L	0.005
	Fluorescein	16-Oct-01	22:40	4160	µg/L	0.005
	Fluorescein	17-Oct-01	0:40	3090	µg/L	0.005
	Fluorescein	17-Oct-01	2:40	2210	µg/L	0.005
	Fluorescein	17-Oct-01	4:40	2100	µg/L	0.005
	Fluorescein	17-Oct-01	6:40	3380	µg/L	0.005
	Fluorescein	17-Oct-01	16:00	1720	µg/L	0.005
	Fluorescein	17-Oct-01	19:00	2680	µg/L	0.005
	Fluorescein	17-Oct-01	22:00	3220	µg/L	0.005
	Fluorescein	18-Oct-01	1:00	3340	µg/L	0.005
	Fluorescein	18-Oct-01	4:00	2540	µg/L	0.005
	Fluorescein	18-Oct-01	7:00	2400	µg/L	0.005
	Fluorescein	18-Oct-01	10:00	2530	µg/L	0.005
	Fluorescein	18-Oct-01	13:00	2120	µg/L	0.005
	Fluorescein	18-Oct-01	16:00	1470	µg/L	0.005
	Fluorescein	18-Oct-01	19:00	2570	µg/L	0.005
	Fluorescein	18-Oct-01	22:00	2490	µg/L	0.005
	Fluorescein	19-Oct-01	1:00	2420	µg/L	0.005
	Fluorescein	19-Oct-01	4:00	1690	µg/L	0.005
	Fluorescein	19-Oct-01	7:00	1660	µg/L	0.005
	Fluorescein	19-Oct-01	10:00	2790	µg/L	0.005
	Fluorescein	19-Oct-01	13:00	2340	µg/L	0.005
	Fluorescein	19-Oct-01	16:00	1570	µg/L	0.005
	Fluorescein	19-Oct-01	19:00	3870	µg/L	0.005
	Fluorescein	19-Oct-01	22:00	3460	µg/L	0.005
	Fluorescein	20-Oct-01	1:00	3350	µg/L	0.005
	Fluorescein	20-Oct-01	4:00	1860	µg/L	0.005
	Fluorescein	20-Oct-01	7:00	1620	µg/L	0.005
	Fluorescein	20-Oct-01	10:00	3980	µg/L	0.005
	Fluorescein	20-Oct-01	13:00	2630	µg/L	0.005
	Fluorescein	20-Oct-01	16:00	1350	µg/L	0.005
	Fluorescein	20-Oct-01	19:00	2700	µg/L	0.005
	Fluorescein	20-Oct-01	22:00	4960	µg/L	0.005
	Fluorescein	21-Oct-01	1:00	3640	µg/L	0.005
	Fluorescein	21-Oct-01	4:00	2450	µg/L	0.005
	Fluorescein	21-Oct-01	7:00	1580	µg/L	0.005
	Fluorescein	21-Oct-01	10:00	3200	µg/L	0.005
	Fluorescein	21-Oct-01	13:00	4020	µg/L	0.005
	Fluorescein	21-Oct-01	16:00	1820	µg/L	0.005
	Fluorescein	21-Oct-01	19:00	1680	µg/L	0.005
	Fluorescein	21-Oct-01	22:00	4980	µg/L	0.005
	Fluorescein	22-Oct-01	1:00	4240	µg/L	0.005

Table 4.6-1
October 2001 Fluorescein Tracer Test Results

Sample ID	Compound	Date	Time	Concentration	Units	MRL
DPW-03	Fluorescein	22-Oct-01	4:00	2960	µg/L	0.005
	Fluorescein	22-Oct-01	7:00	1750	µg/L	0.005
	Fluorescein	22-Oct-01	10:00	1860	µg/L	0.005
	Fluorescein	22-Oct-01	13:00	5150	µg/L	0.005
	Fluorescein	22-Oct-01	16:00	2350	µg/L	0.005
	Fluorescein	22-Oct-01	19:00	2240	µg/L	0.005
	Fluorescein	22-Oct-01	22:00	4940	µg/L	0.005
	Fluorescein	23-Oct-01	1:00	4600	µg/L	0.005
	Fluorescein	23-Oct-01	4:00	3850	µg/L	0.005
	Fluorescein	23-Oct-01	7:00	2410	µg/L	0.005
DPW-04	Fluorescein	10-Oct-01	14:45	0.122	µg/L	0.005
	Fluorescein	15-Oct-01	10:38	0.13	µg/L	0.005
	Fluorescein	15-Oct-01	11:31	0.154	µg/L	0.005
	Fluorescein	15-Oct-01	13:01	0.145	µg/L	0.005
	Fluorescein	15-Oct-01	14:07	0.469	µg/L	0.005
	Fluorescein	15-Oct-01	15:03	0.74	µg/L	0.005
	Fluorescein	15-Oct-01	16:04	0.502	µg/L	0.005
	Fluorescein	15-Oct-01	17:16	0.242	µg/L	0.005
	Fluorescein	16-Oct-01	8:50	1.39	µg/L	0.005
	Fluorescein	16-Oct-01	10:19	1.22	µg/L	0.005
	Fluorescein	16-Oct-01	13:03	1.09	µg/L	0.005
	Fluorescein	16-Oct-01	15:02	0.741	µg/L	0.005
	Fluorescein	17-Oct-01	8:29	6.26	µg/L	0.005
	Fluorescein	17-Oct-01	15:14	2.19	µg/L	0.005
DPW-05	Fluorescein	10-Oct-01	14:33	0.11	µg/L	0.005
	Fluorescein	15-Oct-01	10:41	0.121	µg/L	0.005
	Fluorescein	15-Oct-01	11:36	0.122	µg/L	0.005
	Fluorescein	15-Oct-01	13:05	0.132	µg/L	0.005
	Fluorescein	15-Oct-01	14:12	0.146	µg/L	0.005
	Fluorescein	15-Oct-01	15:09	0.184	µg/L	0.005
	Fluorescein	15-Oct-01	16:18	0.141	µg/L	0.005
	Fluorescein	15-Oct-01	17:21	0.138	µg/L	0.005
	Fluorescein	16-Oct-01	8:58	0.136	µg/L	0.005
	Fluorescein	16-Oct-01	10:25	0.136	µg/L	0.005
	Fluorescein	16-Oct-01	13:09	0.128	µg/L	0.005
	Fluorescein	16-Oct-01	15:08	0.15	µg/L	0.005
	Fluorescein	17-Oct-01	8:35	0.126	µg/L	0.005
	Fluorescein	17-Oct-01	15:20	0.133	µg/L	0.005
DPW-06	Fluorescein	10-Oct-01	15:25	0.166	µg/L	0.005
	Fluorescein	15-Oct-01	15:29	0.271	µg/L	0.005
	Fluorescein	15-Oct-01	17:25	0.247	µg/L	0.005
	Fluorescein	16-Oct-01	9:22	15.8	µg/L	0.005
	Fluorescein	16-Oct-01	10:56	6.52	µg/L	0.005
	Fluorescein	16-Oct-01	13:32	4.01	µg/L	0.005
	Fluorescein	16-Oct-01	15:28	5.26	µg/L	0.005
	Fluorescein	17-Oct-01	8:58	355	µg/L	0.005
	Fluorescein	17-Oct-01	10:00	214.5	µg/L	0.005
	Fluorescein	17-Oct-01	11:00	143.75	µg/L	0.005

Table 4.6-1
October 2001 Fluorescein Tracer Test Results

Sample ID	Compound	Date	Time	Concentration	Units	MRL
DPW-06	Fluorescein	17-Oct-01	12:00	105.5	µg/L	0.005
	Fluorescein	17-Oct-01	13:08	77.5	µg/L	0.005
	Fluorescein	17-Oct-01	14:00	60.2	µg/L	0.005
	Fluorescein	17-Oct-01	15:00	55.9	µg/L	0.005
	Fluorescein	18-Oct-01	11:30	680	µg/L	0.005
	Fluorescein	19-Oct-01	11:30	397.5	µg/L	0.005
DPW-07	Fluorescein	10-Oct-01	14:47	0.114	µg/L	0.005
	Fluorescein	15-Oct-01	15:33	7.64	µg/L	0.005
	Fluorescein	15-Oct-01	17:05	2.96	µg/L	0.005
	Fluorescein	15-Oct-01	18:05	6.04	µg/L	0.005
	Fluorescein	15-Oct-01	19:05	208.5	µg/L	0.005
	Fluorescein	15-Oct-01	20:05	996	µg/L	0.005
	Fluorescein	15-Oct-01	21:05	1490	µg/L	0.005
	Fluorescein	15-Oct-01	22:05	1920	µg/L	0.005
	Fluorescein	15-Oct-01	23:05	1800	µg/L	0.005
	Fluorescein	16-Oct-01	0:05	1510	µg/L	0.005
	Fluorescein	16-Oct-01	1:05	1120	µg/L	0.005
	Fluorescein	16-Oct-01	2:05	1030	µg/L	0.005
	Fluorescein	16-Oct-01	3:05	1035	µg/L	0.005
	Fluorescein	16-Oct-01	4:05	1115	µg/L	0.005
	Fluorescein	16-Oct-01	5:05	2360	µg/L	0.005
	Fluorescein	16-Oct-01	6:05	5180	µg/L	0.005
	Fluorescein	16-Oct-01	7:05	7100	µg/L	0.005
	Fluorescein	16-Oct-01	8:05	6050	µg/L	0.005
	Fluorescein	16-Oct-01	10:13	3740	µg/L	0.005
	Fluorescein	16-Oct-01	12:25	5120	µg/L	0.005
	Fluorescein	16-Oct-01	14:25	1392	µg/L	0.005
	Fluorescein	16-Oct-01	16:25	2090	µg/L	0.005
	Fluorescein	16-Oct-01	18:25	6000	µg/L	0.005
	Fluorescein	16-Oct-01	19:25	5950	µg/L	0.005
	Fluorescein	16-Oct-01	20:25	7600	µg/L	0.005
	Fluorescein	16-Oct-01	21:25	5850	µg/L	0.005
	Fluorescein	16-Oct-01	22:25	4680	µg/L	0.005
	Fluorescein	17-Oct-01	0:25	2960	µg/L	0.005
	Fluorescein	17-Oct-01	2:25	2580	µg/L	0.005
	Fluorescein	17-Oct-01	4:25	2920	µg/L	0.005
	Fluorescein	17-Oct-01	6:25	5440	µg/L	0.005
	Fluorescein	17-Oct-01	8:25	6000	µg/L	0.005
	Fluorescein	17-Oct-01	9:25	5450	µg/L	0.005
	Fluorescein	17-Oct-01	10:25	5750	µg/L	0.005
	Fluorescein	17-Oct-01	13:00	4820	µg/L	0.005
	Fluorescein	17-Oct-01	16:01	2980	µg/L	0.005
	Fluorescein	17-Oct-01	19:01	8160	µg/L	0.005
	Fluorescein	17-Oct-01	22:01	7150	µg/L	0.005
	Fluorescein	18-Oct-01	1:01	6380	µg/L	0.005
	Fluorescein	18-Oct-01	4:01	4200	µg/L	0.005
	Fluorescein	18-Oct-01	7:01	4305	µg/L	0.005
	Fluorescein	18-Oct-01	10:01	5800	µg/L	0.005

Table 4.6-1
October 2001 Fluorescein Tracer Test Results

Sample ID	Compound	Date	Time	Concentration	Units	MRL
DPW-07	Fluorescein	18-Oct-01	13:01	4940	µg/L	0.005
	Fluorescein	18-Oct-01	16:01	2850	µg/L	0.005
	Fluorescein	18-Oct-01	19:01	6460	µg/L	0.005
	Fluorescein	18-Oct-01	22:01	7400	µg/L	0.005
	Fluorescein	19-Oct-01	1:01	4600	µg/L	0.005
	Fluorescein	19-Oct-01	4:01	4710	µg/L	0.005
	Fluorescein	19-Oct-01	7:01	3560	µg/L	0.005
	Fluorescein	19-Oct-01	10:01	5800	µg/L	0.005
	Fluorescein	19-Oct-01	16:01	4470	µg/L	0.005
	Fluorescein	19-Oct-01	19:01	3330	µg/L	0.005
	Fluorescein	19-Oct-01	22:01	3935	µg/L	0.005
	Fluorescein	20-Oct-01	1:01	6000	µg/L	0.005
	Fluorescein	20-Oct-01	4:01	6000	µg/L	0.005
	Fluorescein	20-Oct-01	7:01	3920	µg/L	0.005
	Fluorescein	20-Oct-01	10:01	2840	µg/L	0.005
	Fluorescein	20-Oct-01	13:01	5200	µg/L	0.005
	Fluorescein	20-Oct-01	16:01	3700	µg/L	0.005
	Fluorescein	20-Oct-01	19:01	2100	µg/L	0.005
	Fluorescein	20-Oct-01	22:01	4620	µg/L	0.005
	Fluorescein	21-Oct-01	1:01	7720	µg/L	0.005
	Fluorescein	21-Oct-01	4:01	6040	µg/L	0.005
	Fluorescein	21-Oct-01	7:01	3380	µg/L	0.005
	Fluorescein	21-Oct-01	10:01	2040	µg/L	0.005
	Fluorescein	21-Oct-01	13:01	3900	µg/L	0.005
	Fluorescein	21-Oct-01	16:01	4380	µg/L	0.005
	Fluorescein	21-Oct-01	19:01	2320	µg/L	0.005
	Fluorescein	21-Oct-01	22:01	1966	µg/L	0.005
	Fluorescein	22-Oct-01	1:01	6240	µg/L	0.005
	Fluorescein	22-Oct-01	4:01	5880	µg/L	0.005
	Fluorescein	22-Oct-01	7:01	3240	µg/L	0.005
	Fluorescein	22-Oct-01	10:01	2020	µg/L	0.005
	Fluorescein	22-Oct-01	13:01	1932	µg/L	0.005
	Fluorescein	22-Oct-01	16:01	3760	µg/L	0.005
	Fluorescein	22-Oct-01	19:01	3880	µg/L	0.005
	Fluorescein	22-Oct-01	22:01	2020	µg/L	0.005
	Fluorescein	23-Oct-01	1:01	6160	µg/L	0.005
	Fluorescein	23-Oct-01	4:01	7940	µg/L	0.005
	Fluorescein	23-Oct-01	7:01	4800	µg/L	0.005
DPW-08	Fluorescein	10-Oct-01	15:22	0.113	µg/L	0.005
	Fluorescein	15-Oct-01	15:44	0.14	µg/L	0.005
	Fluorescein	15-Oct-01	17:29	0.195	µg/L	0.005
	Fluorescein	16-Oct-01	9:24	0.366	µg/L	0.005
	Fluorescein	16-Oct-01	11:05	0.284	µg/L	0.005
	Fluorescein	16-Oct-01	13:41	0.181	µg/L	0.005
	Fluorescein	16-Oct-01	15:34	0.307	µg/L	0.005
	Fluorescein	17-Oct-01	8:52	0.207	µg/L	0.005
	Fluorescein	17-Oct-01	15:56	0.162	µg/L	0.005

Table 4.6-1
October 2001 Fluorescein Tracer Test Results

Sample ID	Compound	Date	Time	Concentration	Units	MRL
DPW-09	Fluorescein	10-Oct-01	15:07	0.118	µg/L	0.005
	Fluorescein	16-Oct-01	9:04	0.185	µg/L	0.005
	Fluorescein	16-Oct-01	10:38	0.25	µg/L	0.005
	Fluorescein	16-Oct-01	13:14	0.131	µg/L	0.005
	Fluorescein	16-Oct-01	15:11	0.155	µg/L	0.005
	Fluorescein	17-Oct-01	8:40	0.128	µg/L	0.005
	Fluorescein	17-Oct-01	15:28	0.123	µg/L	0.005
DPW-10	Fluorescein	10-Oct-01	14:10	0.12	µg/L	0.005
	Fluorescein	15-Oct-01	17:36	0.169	µg/L	0.005
	Fluorescein	16-Oct-01	9:16	0.216	µg/L	0.005
	Fluorescein	16-Oct-01	10:58	0.173	µg/L	0.005
	Fluorescein	16-Oct-01	13:35	0.169	µg/L	0.005
	Fluorescein	16-Oct-01	15:29	0.175	µg/L	0.005
	Fluorescein	17-Oct-01	8:45	0.131	µg/L	0.005
	Fluorescein	17-Oct-01	15:59	0.134	µg/L	0.005
DPW-11	Fluorescein	10-Oct-01	14:20	0.121	µg/L	0.005
	Fluorescein	15-Oct-01	10:40	9075000	µg/L	0.005
	Fluorescein	15-Oct-01	11:32	3875000	µg/L	0.005
	Fluorescein	15-Oct-01	13:02	2050000	µg/L	0.005
	Fluorescein	15-Oct-01	14:03	1500000	µg/L	0.005
	Fluorescein	15-Oct-01	15:04	1155000	µg/L	0.005
	Fluorescein	15-Oct-01	16:10	784000	µg/L	0.005
	Fluorescein	15-Oct-01	17:01	736000	µg/L	0.005
	Fluorescein	16-Oct-01	8:41	242000	µg/L	0.005
	Fluorescein	16-Oct-01	10:18	272000	µg/L	0.005
	Fluorescein	16-Oct-01	11:58	349000	µg/L	0.005
	Fluorescein	16-Oct-01	13:00	303000	µg/L	0.005
	Fluorescein	16-Oct-01	14:00	302000	µg/L	0.005
	Fluorescein	16-Oct-01	15:00	241000	µg/L	0.005
	Fluorescein	16-Oct-01	16:00	231000	µg/L	0.005
	Fluorescein	16-Oct-01	17:00	207000	µg/L	0.005
	Fluorescein	17-Oct-01	9:00	104000	µg/L	0.005
	Fluorescein	17-Oct-01	13:01	210000	µg/L	0.005
	Fluorescein	17-Oct-01	16:02	222000	µg/L	0.005
	Fluorescein	18-Oct-01	11:15	41350	µg/L	0.005
	Fluorescein	19-Oct-01	11:15	42000	µg/L	0.005
	Fluorescein	22-Oct-01	15:00	57000	µg/L	0.005
DPW-12	Fluorescein	10-Oct-01	13:26	0.126	µg/L	0.005
	Fluorescein	15-Oct-01	11:12	0.131	µg/L	0.005
	Fluorescein	15-Oct-01	13:11	0.122	µg/L	0.005
	Fluorescein	15-Oct-01	14:21	0.161	µg/L	0.005
	Fluorescein	15-Oct-01	15:13	0.191	µg/L	0.005
	Fluorescein	15-Oct-01	16:28	0.147	µg/L	0.005
	Fluorescein	16-Oct-01	9:09	0.137	µg/L	0.005
	Fluorescein	16-Oct-01	10:45	0.375	µg/L	0.005
	Fluorescein	16-Oct-01	13:20	0.166	µg/L	0.005
	Fluorescein	16-Oct-01	15:15	0.19	µg/L	0.005
	Fluorescein	17-Oct-01	8:44	0.136	µg/L	0.005
	Fluorescein	17-Oct-01	15:40	0.15	µg/L	0.005

Table 4.6-1
October 2001 Fluorescein Tracer Test Results

Sample ID	Compound	Date	Time	Concentration	Units	MRL
DPW-13	Fluorescein	10-Oct-01	13:45	0.126	µg/L	0.005
	Fluorescein	15-Oct-01	11:04	0.16	µg/L	0.005
	Fluorescein	15-Oct-01	13:08	6.15	µg/L	0.005
	Fluorescein	15-Oct-01	14:24	8.56	µg/L	0.005
	Fluorescein	15-Oct-01	15:19	10.6	µg/L	0.005
	Fluorescein	15-Oct-01	16:32	21.3	µg/L	0.005
	Fluorescein	16-Oct-01	9:13	3.92	µg/L	0.005
	Fluorescein	16-Oct-01	10:50	3.34	µg/L	0.005
	Fluorescein	16-Oct-01	13:24	2.39	µg/L	0.005
	Fluorescein	16-Oct-01	13:25	2.23	µg/L	0.005
	Fluorescein	16-Oct-01	15:18	2.33	µg/L	0.005
	Fluorescein	17-Oct-01	8:48	1.3	µg/L	0.005
	Fluorescein	17-Oct-01	15:46	1.13	µg/L	0.005
	Fluorescein	18-Oct-01	11:00	0.649	µg/L	0.005
	Fluorescein	19-Oct-01	11:00	0.743	µg/L	0.005
DPW-14	Fluorescein	10-Oct-01	13:20	0.168	µg/L	0.005
	Fluorescein	15-Oct-01	13:12	0.368	µg/L	0.005
	Fluorescein	15-Oct-01	14:15	0.39	µg/L	0.005
	Fluorescein	15-Oct-01	15:15	0.275	µg/L	0.005
	Fluorescein	15-Oct-01	16:42	0.184	µg/L	0.005
	Fluorescein	16-Oct-01	8:57	0.153	µg/L	0.005
	Fluorescein	16-Oct-01	10:43	0.191	µg/L	0.005
	Fluorescein	16-Oct-01	13:30	0.169	µg/L	0.005
	Fluorescein	16-Oct-01	15:20	0.194	µg/L	0.005
	Fluorescein	17-Oct-01	8:38	0.189	µg/L	0.005
	Fluorescein	17-Oct-01	15:52	0.203	µg/L	0.005
DPW-15	Fluorescein	10-Oct-01	13:50	0.121	µg/L	0.005
	Fluorescein	15-Oct-01	14:25	1.34	µg/L	0.005
	Fluorescein	15-Oct-01	15:11	0.335	µg/L	0.005
	Fluorescein	15-Oct-01	16:19	0.182	µg/L	0.005
	Fluorescein	15-Oct-01	17:17	0.364	µg/L	0.005
	Fluorescein	16-Oct-01	8:45	0.284	µg/L	0.005
	Fluorescein	16-Oct-01	10:39	0.478	µg/L	0.005
	Fluorescein	16-Oct-01	13:15	0.375	µg/L	0.005
	Fluorescein	16-Oct-01	15:12	1.02	µg/L	0.005
	Fluorescein	17-Oct-01	8:26	0.265	µg/L	0.005
	Fluorescein	17-Oct-01	15:41	0.252	µg/L	0.005
MW-05i	Fluorescein	16-Oct-01	16:30	0.167	µg/L	0.005
MW-05s	Fluorescein	16-Oct-01	16:41	0.261	µg/L	0.005

Notes:
MRL = method reporting limit
µg/L = micrograms per liter (ppb)
< = not detected at or above the given MRL

Table 4.6-2
October 2001 Bromide Tracer Test Results

Sample ID	Compound	Date	Time	Concentration	Units	MRL
DPW-03	Bromide	10-Oct-01	15:10	<0.500	mg/l	0.500
	Bromide	15-Oct-01	15:02	<0.500	mg/l	0.500
	Bromide	15-Oct-01	16:04	<0.500	mg/l	0.500
	Bromide	15-Oct-01	17:00	<0.500	mg/l	0.500
	Bromide	15-Oct-01	18:00	1.2	mg/l	0.500
	Bromide	15-Oct-01	19:00	2.29	mg/l	0.500
	Bromide	15-Oct-01	20:00	2.6	mg/l	0.500
	Bromide	15-Oct-01	21:00	2.71	mg/l	0.500
	Bromide	15-Oct-01	22:00	1.48	mg/l	0.500
	Bromide	15-Oct-01	23:00	1.08	mg/l	0.500
	Bromide	16-Oct-01	00:00	0.773	mg/l	0.500
	Bromide	16-Oct-01	01:00	0.666	mg/l	0.500
	Bromide	16-Oct-01	02:00	<0.500	mg/l	0.500
	Bromide	16-Oct-01	03:00	<0.500	mg/l	0.500
	Bromide	16-Oct-01	04:00	0.726	mg/l	0.500
	Bromide	16-Oct-01	05:00	0.867	mg/l	0.500
	Bromide	16-Oct-01	06:00	1.1	mg/l	0.500
	Bromide	16-Oct-01	07:00	1.51	mg/l	0.500
	Bromide	16-Oct-01	08:00	1.23	mg/l	0.500
	Bromide	16-Oct-01	10:12	0.892	mg/l	0.500
	Bromide	16-Oct-01	12:40	0.609	mg/l	0.500
	Bromide	16-Oct-01	13:40	<0.500	mg/l	0.500
	Bromide	16-Oct-01	14:40	<0.500	mg/l	0.500
	Bromide	16-Oct-01	15:40	0.53	mg/l	0.500
	Bromide	16-Oct-01	16:40	<0.500	mg/l	0.500
DPW-07	Bromide	10-Oct-01	14:47	<0.500	mg/l	0.500
	Bromide	15-Oct-01	18:05	<0.500	mg/l	0.500
	Bromide	15-Oct-01	19:05	<0.500	mg/l	0.500
	Bromide	15-Oct-01	20:05	<0.500	mg/l	0.500
	Bromide	15-Oct-01	21:05	<0.500	mg/l	0.500
	Bromide	15-Oct-01	22:05	<0.500	mg/l	0.500
	Bromide	16-Oct-01	00:05	<0.500	mg/l	0.500
	Bromide	16-Oct-01	03:05	<0.500	mg/l	0.500
	Bromide	16-Oct-01	04:05	<0.500	mg/l	0.500
	Bromide	16-Oct-01	05:05	<0.500	mg/l	0.500
	Bromide	16-Oct-01	06:05	0.942	mg/l	0.500
	Bromide	16-Oct-01	07:05	1.35	mg/l	0.500
	Bromide	16-Oct-01	10:13	0.857	mg/l	0.500
	Bromide	16-Oct-01	14:25	<0.500	mg/l	0.500

Table 4.6-2
October 2001 Bromide Tracer Test Results

Sample ID	Compound	Date	Time	Concentration	Units	MRL
DPW-11	Bromide	10-Oct-01	14:20	<0.500	mg/l	0.500
	Bromide	15-Oct-01	10:40	2540	mg/l	50.0
	Bromide	15-Oct-01	11:30	1510	mg/l	50.0
	Bromide	15-Oct-01	13:00	478	mg/l	50.0
	Bromide	15-Oct-01	14:03	361	mg/l	50.0
	Bromide	15-Oct-01	15:03	203	mg/l	50.0
	Bromide	15-Oct-01	17:00	167	mg/l	50.0
	Bromide	16-Oct-01	08:40	32.9	mg/l	5.00
	Bromide	16-Oct-01	17:00	25.3	mg/l	5.00
	Bromide	17-Oct-01	09:00	12.4	mg/l	5.00
	Bromide	18-Oct-01	11:15	4.74	mg/l	0.500
	Bromide	19-Oct-01	11:15	4.36	mg/l	0.500
	Bromide	22-Oct-01	15:00	16.1	mg/l	0.500

Notes:

MRL = method reporting limit
mg/L = milligrams per liter (ppb)
< = not detected at or above the given MRL

Table 4.6-3
Parameter Values Calculated for the One-Dimensional Slug Input Model

Monitoring Location	Tracer	Initial Concentration[1] C_0 (ppb)	Groundwater Velocity[1] v (ft/d)	Longitudinal Dispersivity[1] D_L (ft)
DPW-3	fluorescein	1.60E+5	28.9	0.20
	bromide	4.00E+4	28.3	0.26
DPW-7	fluorescein	6.00E+4	43.9	0.33
	bromide	2.75E+4	26.1	0.13

[1] Analytical one-dimensional instantaneous slug solution input fitting parameter

Table 4.6-4
Parameter Values Calculated for the Borehole Dilution Model

Monitoring Location	Tracer	Observed Initial Concentration[1] C_0 (ppb)	Borehole Velocity[2] $\bar{v}^*$ (ft/d)	Groundwater Velocity (ft/d) with Geometry Factor[3]		Effective Porosity[4] n
				(0.5)	(4.0)	
DPW-11	fluorescein	9.08E+6	0.71	4.7	0.6	0.30
	bromide	6.11E+6	1.13	7.6	1.0	0.30

Notes:

[1] Value from groundwater sample collected from DPW-11

[2] Borehole dilution method fitting parameter (Groundwater, Freeze and Cherry, 1979)

[3] Borehole dilution method fitting parameter (Groundwater, Freeze and Cherry, 1979)

[4] Literature value from Groundwater and Wells, F.G. Driscoll, 1986.

ppb = parts per billion
ft/d = feet per day
ft = feet

Figure 4.6-1

Observed Fluorescein and Bromide Concentrations in DPW-3 Compared to Analytical Solutions for 1-D, Instantaneous Slug Injection

Fluorescein Fit Parameters: v=28.9 ft/d, C_o=160 ppm, α_L=0.20 ft

Bromide Fit Parameters: v=28.3 ft/d, C_o=40 ppm, α_L=0.26 ft

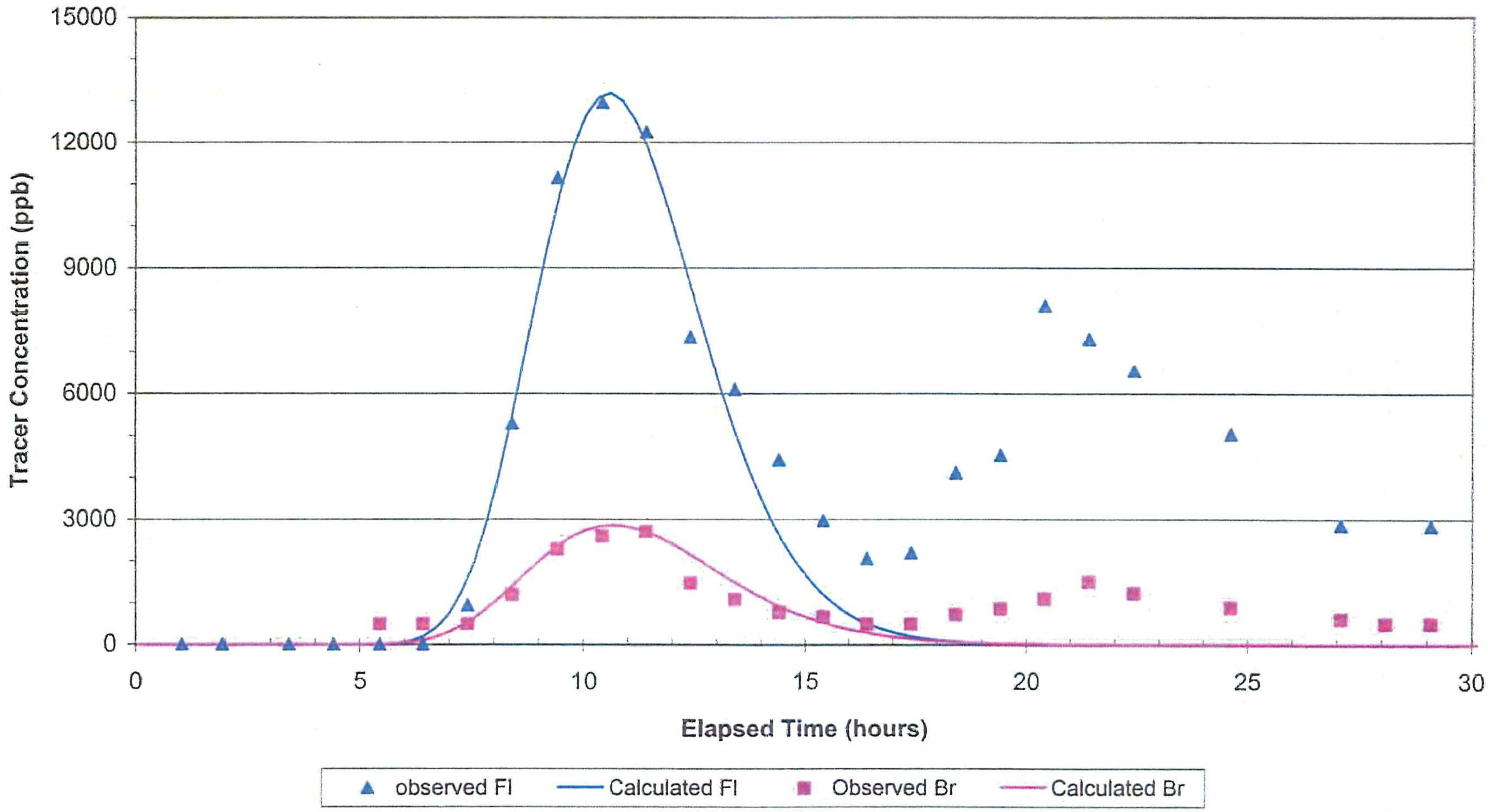


Figure 4.6-2

Observed Fluorescein and Bromide Concentrations in DPW-7 Compared to Analytical Solutions for 1-D, Instantaneous Slug Injection

Fluorescein Fit Parameters: v=43.9 ft/d, C_o=60 ppm, α_L=0.33 ft

Bromide Fit Parameters: v=26.1 ft/d, C_o=27.5 ppm, α_L=0.13 ft

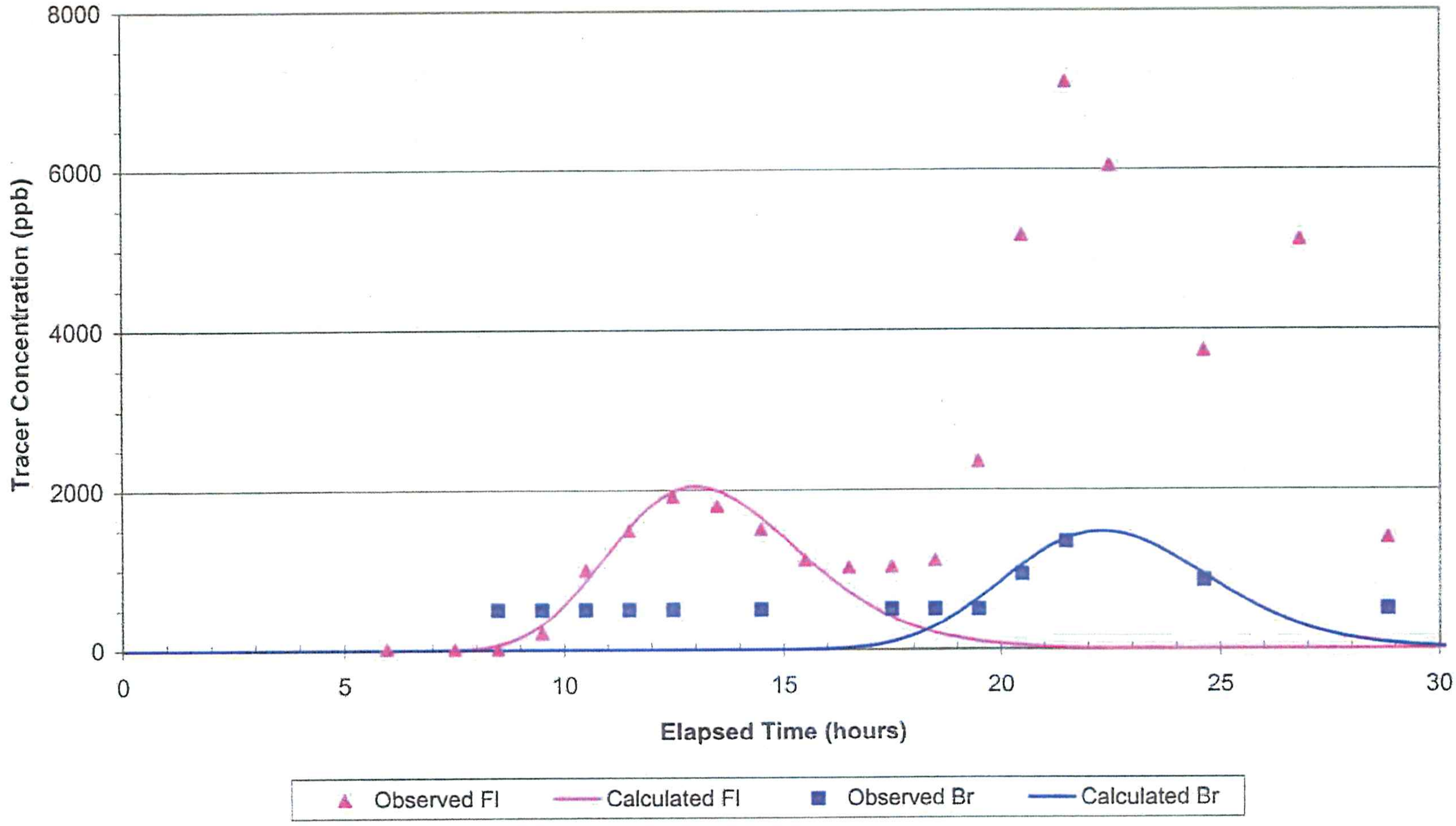
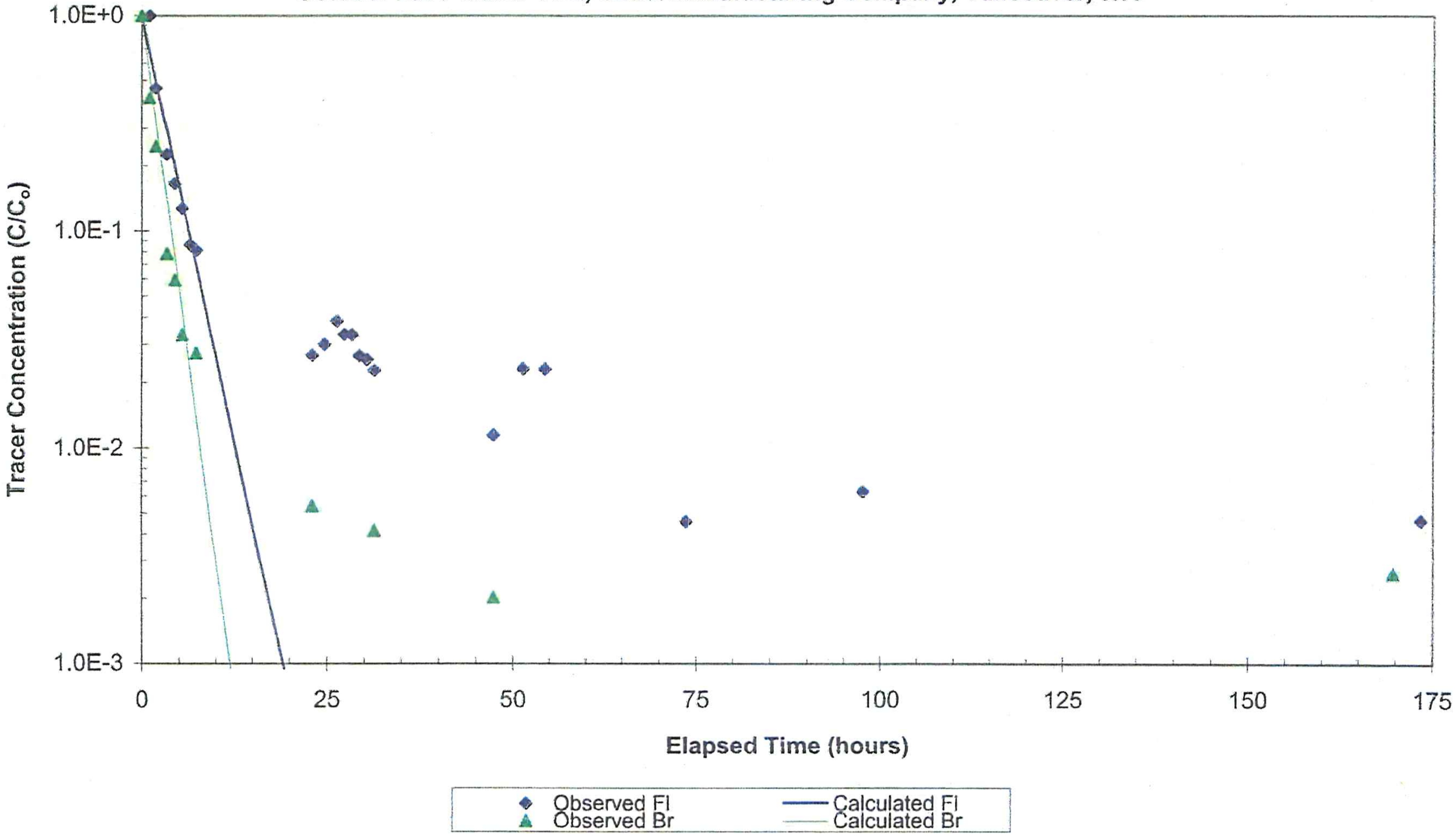


Figure 4.6-3
Fluorescein and Bromide Concentrations in DPW-11 Compared to Completely Mixed Flow Reactor Analytical Solutions

October 2001 Tracer Test, Cadet Manufacturing Company, Vancouver, WA



Cadet Manufacturing Company, Vancouver, Washington
Remedial Investigation Work Plan
K:\10135\WorkPlans\RI\RIWP-figures.xls

AMEC 1-61M-10135-9 (T2)
3/7/02
Sheet 1 of 1

APPENDIX E: TRACER TEST

In order to determine the direction and potential velocity of groundwater flow under differing seasonal conditions, AMEC conducted a series of tracer studies at the Site. The tracer testing was conducted in the east parking lot in an area of elevated HVOCs. Testing was done on three occasions: August 2000, October 2001, and April 2002. The August 2000 and October 2001 are discussed previously in the RIWP, and the April 2002 tracer test is described herein.

A prior tracer test conducted during October 2001 on the east side of the Cadet facility coincided with a period of seasonally low groundwater levels and record low precipitation. Therefore, additional tracer testing was conducted on April 26, 2002, under seasonally high groundwater levels, to determine whether groundwater flow velocities and groundwater flow directions change seasonally or are relatively constant. The testing occurred in the same area of the DPW monitoring wells as the prior test. The DPW monitoring well network is shown on Figure 3-1 of this RI Report.

Before the bromide tracer was injected, background samples were collected from monitoring wells DPW-2, DPW-3, DPW-4, DPW-11, and DPW-13 on April 4, 2002. The samples were submitted to North Creek Analytical, Inc. (NCA, Beaverton, OR) under chain-of-custody for bromide analysis. Bromide was not detected above the method reporting limit (0.5 ppm) in any of the groundwater samples analyzed. Laboratory reports are included in Attachment E-1.

Approximately 25 liters of a solution with approximately 35,000 ppm potassium bromide (KBr) were injected into DPW-11 on April 26, 2002 just before 11:00 AM. The duration of injection of the conservative tracer in DPW-11 was approximately 4 minutes. Groundwater samples were collected from wells DPW-2, DPW-3, DPW-4, DPW-7, DPW-11, and DPW-13 by fully automated ISCO samplers programmed to collect samples every hour. (DPW-4 was sampled only for the first 5 hours.) Samples were collected from the wells until April 27 at 10:20 AM. A final round of samples was collected from all DPW wells on May 2, 2002 for bromide analysis. Sample collection procedures were performed as described in the "additional tracer testing work plan" letter addressed to Ecology on April 19, 2002.

Samples were submitted to NCA under chain-of-custody for bromide analysis using EPA Method 300. Sample results were reported above the method reporting limit of 0.5 ppm. Laboratory reports are included in Attachment E-1. Analytical results indicated that bromide tracer was not observed in the monitoring well samples with the exception of the injection well (DPW-11) and one detection in DPW-2 approximately 6 hours after the initial bromide tracer injection. Bromide concentrations in DPW-11 decreased by two orders of magnitude to approximately 300 ppm about 3 hours after tracer injection.

The direction of groundwater flow on April 25, 2002 cannot be inferred with confidence from the tracer test results because there was only one instance of tracer detection in a well other than the injection well. This well, DPW-2, was located southeast of the injection well DPW-11 and had a bromide detection of 0.773 ppm. For comparison, concentrations of bromide in the injection well ranged from 14.0 to 2,650 ppm. However, the most probable direction that groundwater was likely flowing was southerly based on the single detection of bromide in well DPW-2 approximately 6 hours after the initial tracer injection. The results of this tracer test and the previous tracer test in October 2001 suggest that groundwater flow may fluctuate seasonally, since during the October 2001 tracer test, field observations of tracer concentrations in the monitoring wells clearly indicated that groundwater was flowing in an easterly direction. Also, where samples collected from the monitoring wells located east of DPW-11 showed no detections of bromide during the April 2002 tracer test, high concentrations of bromide remained in these wells for three days following the October 2001 injections.

ATTACHMENTS:

Attachment E-1 Analytical Laboratory Reports

ATTACHMENT E-1

Analytical Laboratory Reports

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135 E T1
Project Manager: James Feild

Reported:
04/10/02 10:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DPW-2/GW	P2D0145-01	Water	04/04/02 14:25	04/04/02 17:00
DPW-3/GW	P2D0145-02	Water	04/04/02 14:50	04/04/02 17:00
DPW-4/GW	P2D0145-03	Water	04/04/02 15:10	04/04/02 17:00
DPW-11/GW	P2D0145-04	Water	04/04/02 15:30	04/04/02 17:00
DPW-13/GW	P2D0145-05	Water	04/04/02 16:00	04/04/02 17:00

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135 E T1
Project Manager: James Feild

Reported:
04/10/02 10:56

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-2/GW (P2D0145-01) Water					Sampled: 04/04/02	Received: 04/04/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/05/02	04/05/02	2040195	
DPW-3/GW (P2D0145-02) Water					Sampled: 04/04/02	Received: 04/04/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/05/02	04/05/02	2040195	
DPW-4/GW (P2D0145-03) Water					Sampled: 04/04/02	Received: 04/04/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/05/02	04/05/02	2040195	
DPW-11/GW (P2D0145-04) Water					Sampled: 04/04/02	Received: 04/04/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/05/02	04/05/02	2040195	
DPW-13/GW (P2D0145-05) Water					Sampled: 04/04/02	Received: 04/04/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/05/02	04/05/02	2040195	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135 E T1
Project Manager: James Feild

Reported:
04/10/02 10:56

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040195 - Wet Chem										
Blank (2040195-BLK1)				Prepared & Analyzed: 04/05/02						
Bromide	ND	0.500	mg/l							
LCS (2040195-BS1)				Prepared & Analyzed: 04/05/02						
Bromide	20.1	0.500	mg/l	20.0		100	85-115			
Duplicate (2040195-DUP1)		**Source: P2D0139-02**		Prepared & Analyzed: 04/05/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2040195-MS1)		**Source: P2D0139-02**		Prepared & Analyzed: 04/05/02						
Bromide	4.50	0.556	mg/l	4.41	ND	102	75-125			
Matrix Spike Dup (2040195-MSD1)		**Source: P2D0139-02**		Prepared & Analyzed: 04/05/02						
Bromide	4.46	0.556	mg/l	4.41	ND	101	75-125	0.893	40	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135 E T1 Project Manager: James Feild	**Reported:** 04/10/02 10:56

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

nca™
North Creek Analytical, Inc.
Environmental Laboratory Network
www.ncalabs.com

11720 North Creek Pkwy N. Suite 400, Bothell, WA 98011-8244 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: P2D0145

CLIENT: AMEC
REPORT TO: James Feild - AMEC
ADDRESS:
PHONE: (503) 639-3400 FAX:
PROJECT NAME: Cadet
PROJECT NUMBER: 1-61m-10135 ETI
SAMPLED BY: JWM

INVOICE TO: James Feild
AMEC
7376 SW Durham Rd.
Portland, OR

P.O. NUMBER: 1-61m-10135 ETI

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyses: 10 7 5 4 [✓ 3] 2 1 <1
STD.

Petroleum Hydrocarbon Analyses: 5 4 3 2 1 <1
STD.

OTHER ~~Please Specify~~

*Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	REQUESTED ANALYSES: Bromide													MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1. DPW-2/GW	4/4/02 14:25	✓													W	1		
2. DPW-3/GW	14:50	✓														1		
3. DPW-4/GW	15:10	✓														1		
4. DPW-11/GW	15:30	✓														1		
5. DPW-13/GW	16:00	✓														1		
6.																		
7.																		
8.																		
9.																		
10.																		
11.																		
12.																		
13.																		
14.																		
15.																		

RELINQUISHED BY: Jeff Menkers
PRINT NAME: Jeff Menke FIRM: AMEC DATE: 4/4/02 TIME: 17:00

RECEIVED BY:
PRINT NAME: Sarah Pasrage FIRM: NCA DATE: 4-4-02 TIME: 1700

RELINQUISHED BY:
PRINT NAME: FIRM: DATE: TIME:

RECEIVED BY:
PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS: ac client
TEMP: 11.3
PAGE OF

COC REV 3/99

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Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DPW-11-1	P2D0834-01	Water	04/26/02 11:20	04/29/02 11:15
DPW-11-2	P2D0834-02	Water	04/26/02 12:20	04/29/02 11:15
DPW-11-3	P2D0834-03	Water	04/26/02 13:20	04/29/02 11:15
DPW-11-4	P2D0834-04	Water	04/26/02 14:20	04/29/02 11:15
DPW-11-5	P2D0834-05	Water	04/26/02 15:20	04/29/02 11:15
DPW-11-6	P2D0834-06	Water	04/26/02 16:20	04/29/02 11:15
DPW-11-7	P2D0834-07	Water	04/26/02 17:20	04/29/02 11:15
DPW-11-8	P2D0834-08	Water	04/26/02 18:20	04/29/02 11:15
DPW-11-9	P2D0834-09	Water	04/26/02 19:20	04/29/02 11:15
DPW-11-10	P2D0834-10	Water	04/26/02 20:20	04/29/02 11:15
DPW-11-11	P2D0834-11	Water	04/26/02 21:20	04/29/02 11:15
DPW-11-12	P2D0834-12	Water	04/26/02 22:20	04/29/02 11:15
DPW-11-13	P2D0834-13	Water	04/26/02 23:20	04/29/02 11:15
DPW-11-14	P2D0834-14	Water	04/27/02 00:20	04/29/02 11:15
DPW-11-15	P2D0834-15	Water	04/27/02 01:20	04/29/02 11:15
DPW-11-16	P2D0834-16	Water	04/27/02 02:20	04/29/02 11:15
DPW-11-17	P2D0834-17	Water	04/27/02 03:20	04/29/02 11:15
DPW-11-18	P2D0834-18	Water	04/27/02 04:20	04/29/02 11:15
DPW-11-19	P2D0834-19	Water	04/27/02 05:20	04/29/02 11:15
DPW-11-20	P2D0834-20	Water	04/27/02 06:20	04/29/02 11:15
DPW-11-21	P2D0834-21	Water	04/27/02 07:20	04/29/02 11:15
DPW-11-22	P2D0834-22	Water	04/27/02 08:20	04/29/02 11:15
DPW-11-23	P2D0834-23	Water	04/27/02 09:20	04/29/02 11:15
DPW-11-24	P2D0834-24	Water	04/27/02 10:20	04/29/02 11:15

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:50

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-11-1 (P2D0834-01) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**2650**	50.0	mg/l	100	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-11-2 (P2D0834-02) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**615**	50.0	mg/l	100	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-11-3 (P2D0834-03) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**309**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	
DPW-11-4 (P2D0834-04) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**199**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	
DPW-11-5 (P2D0834-05) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**136**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	
DPW-11-6 (P2D0834-06) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**102**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	
DPW-11-7 (P2D0834-07) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**79.3**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	
DPW-11-8 (P2D0834-08) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**98.8**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	
DPW-11-9 (P2D0834-09) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**64.3**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:50

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-11-10 (P2D0834-10) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**52.6**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	
DPW-11-11 (P2D0834-11) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**46.6**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	
DPW-11-12 (P2D0834-12) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**48.1**	5.00	mg/l	10	EPA 300.0	05/03/02	05/04/02	2050133	
DPW-11-13 (P2D0834-13) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**40.3**	5.00	mg/l	10	EPA 300.0	05/03/02	05/05/02	2050133	
DPW-11-14 (P2D0834-14) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	**34.6**	5.00	mg/l	10	EPA 300.0	05/03/02	05/05/02	2050133	
DPW-11-15 (P2D0834-15) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	**30.2**	0.500	mg/l	1	EPA 300.0	05/03/02	05/05/02	2050133	
DPW-11-16 (P2D0834-16) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	**24.3**	0.500	mg/l	1	EPA 300.0	05/03/02	05/05/02	2050133	
DPW-11-17 (P2D0834-17) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	**20.8**	0.500	mg/l	1	EPA 300.0	05/03/02	05/05/02	2050133	
DPW-11-18 (P2D0834-18) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	**19.1**	0.500	mg/l	1	EPA 300.0	05/03/02	05/05/02	2050133	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:50

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-11-19 (P2D0834-19) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	16.3	0.500	mg/l	1	EPA 300.0	05/03/02	05/05/02	2050133	
DPW-11-20 (P2D0834-20) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	16.7	0.500	mg/l	1	EPA 300.0	05/03/02	05/05/02	2050133	
DPW-11-21 (P2D0834-21) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	17.0	0.500	mg/l	1	EPA 300.0	05/03/02	05/05/02	2050133	
DPW-11-22 (P2D0834-22) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	15.9	0.500	mg/l	1	EPA 300.0	05/03/02	05/05/02	2050133	
DPW-11-23 (P2D0834-23) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	15.0	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-11-24 (P2D0834-24) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	14.0	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:50

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2050088 - Wet Chem										
Blank (2050088-BLK1)				Prepared & Analyzed: 05/02/02						
Bromide	ND	0.500	mg/l							
LCS (2050088-BS1)				Prepared & Analyzed: 05/02/02						
Bromide	19.4	0.500	mg/l	20.0		97.0	85-115			
Duplicate (2050088-DUP1)	**Source: P2D0833-07**			Prepared & Analyzed: 05/02/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2050088-MS1)	**Source: P2D0833-07**			Prepared & Analyzed: 05/02/02						
Bromide	4.29	0.556	mg/l	4.41	ND	97.3	75-125			
Matrix Spike Dup (2050088-MSD1)	**Source: P2D0833-07**			Prepared & Analyzed: 05/02/02						
Bromide	4.35	0.556	mg/l	4.41	ND	98.6	75-125	1.39	40	
Batch 2050133 - Wet Chem										
Blank (2050133-BLK1)				Prepared: 05/03/02 Analyzed: 05/04/02						
Bromide	ND	0.500	mg/l							
LCS (2050133-BS1)				Prepared: 05/03/02 Analyzed: 05/04/02						
Bromide	19.4	0.500	mg/l	20.0		97.0	85-115			
Duplicate (2050133-DUP1)	**Source: P2D0834-03**			Prepared: 05/03/02 Analyzed: 05/04/02						
Bromide	309	5.00	mg/l		309			0.00	20	
Matrix Spike (2050133-MS1)	**Source: P2D0834-03**			Prepared: 05/03/02 Analyzed: 05/04/02						
Bromide	360	5.56	mg/l	44.1	309	116	75-125			

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2050133 - Wet Chem										
Matrix Spike Dup (2050133-MSD1)	**Source: P2D0834-03**			Prepared: 05/03/02 Analyzed: 05/04/02						
Bromide	360	5.56	mg/l	44.1	309	116	75-125	0.00	40	
Batch 2050199 - Wet Chem										
Blank (2050199-BLK1)				Prepared & Analyzed: 05/06/02						
Bromide	ND	0.500	mg/l							
LCS (2050199-BS1)				Prepared & Analyzed: 05/06/02						
Bromide	19.9	0.500	mg/l	20.0		99.5	85-115			
Duplicate (2050199-DUP1)	**Source: P2D0835-01**			Prepared & Analyzed: 05/06/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2050199-MS1)	**Source: P2D0835-01**			Prepared & Analyzed: 05/06/02						
Bromide	4.46	0.556	mg/l	4.41	ND	101	75-125			
Matrix Spike Dup (2050199-MSD1)	**Source: P2D0835-01**			Prepared & Analyzed: 05/06/02						
Bromide	4.45	0.556	mg/l	4.41	ND	101	75-125	0.224	40	

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-LT2 Project Manager: James Feild	**Reported:** 05/10/02 16:50

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

P2D0834 1150

CHAIN OF CUSTODY

PROJECT: Cadet
PROJECT No.: 2-61M-10135-L
REPORT TO: JAMES FEILD
PHONE No.: See above
PROJECT MANAGER: JOHN KUIPER
PHONE No.: "
SAMPLER'S NAME (please print): SONIA KOHEI
PHONE No.: "
SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	TZ 0.8
1. DPW-11-1	4/26/02	1120	WATER	ICE	1	500ml	
2. DPW-11-2		1220					
3. DPW-11-3		1320					
4. DPW-11-4		1420					
5. DPW-11-5		1520					
6. DPW-11-6		1620					
7. DPW-11-7		1720					
8. DPW-11-8		1820					
9. DPW-11-9		1920					
10. DPW-11-10	↓	2020	↓	↓	↓	↓	↓

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. SNOBC/AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Olston	4/29/02	11:15
3.			3.		

PAGE 1 OF 3
COOLER 5 OF 6

2.6°C

AMEC Earth & Environmental, Inc. (2/02)

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

P2D0834 1151

CHAIN OF CUSTODY

PROJECT: Cadet
PROJECT No.: 2-61M-103-5-LT2
REPORT TO: James Feild
PHONE No.: 503-639-3400
PROJECT MANAGER: John Kuiper
PHONE No.:
SAMPLER'S NAME (please print): Sonia Kohrs
PHONE No.:
SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-11-11	4/26/02	2120	WATER	ICE	1	500ml	
2. DPW-11-12		2220					
3. DPW-11-13		2320					
4. DPW-11-14	4/27/02	0020					
5. DPW-11-15		0120					
6. DPW-11-16		0220					
7. DPW-11-17		0320					
8. DPW-11-18		0420					
9. DPW-11-19		0520					
10. DPW-11-20		0620					

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. [illegible]/AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.					

PAGE 2 OF 3
COOLER 5 of 6

2.6°C

AMEC Earth & Environmental, Inc. (2/02)

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

P2D0834 1153

CHAIN OF CUSTODY

PROJECT Cadet

PROJECT No. 2-61M-10135-LT2

REPORT TO: JAMES FEILD

PHONE No. 503-639-3400

PROJECT MANAGER JOHN KUIPER

PHONE No. ↓

SAMPLER'S NAME (please print) SONIA KOHRS

PHONE No. ↓

SAMPLER'S SIGNATURE For AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-11-21	4/27/02	0720	WATER	ICE	1	500 ml	↓
2. DPW-11-22	↓	0820	↓	↓	↓	↓	↓
3. DPW-11-23	↓	0920	↓	↓	↓	↓	↓
4. DPW-11-24	↓	1020	↓	↓	↓	↓	↓
5.							
6.							
7.							
8.							
9.							
10.							

SAMPLE RECEIPT	LABORATORY	TURNAROUND TIME	QC Reporting Requirements	COMMENTS / INSTRUCTIONS
TOTAL # CONTAINERS	SHIPPING I.D. / AIRBILL #	☐ 8 HOUR ☐ 24 HOUR		
CONDITION OF CONTAINERS	CARRIER	☐ 1 WEEK ☐ 2 WEEK (standard)		
CONDITION OF SEALS	DOT DESTINATION	☐ OTHER ____		

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. /AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

PAGE 3 OF 3
COOLER 5 OF 6

2.6°C

AMEC Earth & Environmental, Inc. (2/02)

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DPW-2-1	P2D0835-01	Water	04/26/02 11:20	04/29/02 11:15
DPW-2-2	P2D0835-02	Water	04/26/02 12:20	04/29/02 11:15
DPW-2-3	P2D0835-03	Water	04/26/02 13:20	04/29/02 11:15
DPW-2-4	P2D0835-04	Water	04/26/02 14:20	04/29/02 11:15
DPW-2-5	P2D0835-05	Water	04/26/02 15:20	04/29/02 11:15
DPW-2-6	P2D0835-06	Water	04/26/02 16:20	04/29/02 11:15
DPW-2-7	P2D0835-07	Water	04/26/02 17:20	04/29/02 11:15
DPW-2-8	P2D0835-08	Water	04/26/02 18:20	04/29/02 11:15
DPW-2-9	P2D0835-09	Water	04/26/02 19:20	04/29/02 11:15
DPW-2-10	P2D0835-10	Water	04/26/02 20:20	04/29/02 11:15
DPW-2-11	P2D0835-11	Water	04/26/02 21:20	04/29/02 11:15
DPW-2-12	P2D0835-12	Water	04/26/02 22:20	04/29/02 11:15
DPW-2-13	P2D0835-13	Water	04/26/02 23:20	04/29/02 11:15
DPW-2-14	P2D0835-14	Water	04/27/02 00:20	04/29/02 11:15
DPW-2-15	P2D0835-15	Water	04/27/02 01:20	04/29/02 11:15
DPW-2-16	P2D0835-16	Water	04/27/02 02:20	04/29/02 11:15
DPW-2-17	P2D0835-17	Water	04/27/02 03:20	04/29/02 11:15
DPW-2-18	P2D0835-18	Water	04/27/02 04:20	04/29/02 11:15
DPW-2-19	P2D0835-19	Water	04/27/02 05:20	04/29/02 11:15
DPW-2-20	P2D0835-20	Water	04/27/02 06:20	04/29/02 11:15
DPW-2-21	P2D0835-21	Water	04/27/02 07:20	04/29/02 11:15
DPW-2-22	P2D0835-22	Water	04/27/02 08:20	04/29/02 11:15
DPW-2-23	P2D0835-23	Water	04/27/02 09:20	04/29/02 11:15
DPW-2-24	P2D0835-24	Water	04/27/02 10:20	04/29/02 11:15

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:52

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-2-1 (P2D0835-01) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-2-2 (P2D0835-02) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-2-3 (P2D0835-03) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-2-4 (P2D0835-04) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-2-5 (P2D0835-05) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-2-6 (P2D0835-06) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-2-7 (P2D0835-07) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**0.773**	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-2-8 (P2D0835-08) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-2-9 (P2D0835-09) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:52

Anions per EPA Method 300.0

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-2-10 (P2D0835-10) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/06/02	2050199	
DPW-2-11 (P2D0835-11) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/07/02	2050199	
DPW-2-12 (P2D0835-12) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/07/02	2050199	
DPW-2-13 (P2D0835-13) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/07/02	2050199	
DPW-2-14 (P2D0835-14) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/07/02	2050199	
DPW-2-15 (P2D0835-15) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/07/02	2050199	
DPW-2-16 (P2D0835-16) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/07/02	2050199	
DPW-2-17 (P2D0835-17) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/07/02	2050199	
DPW-2-18 (P2D0835-18) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/06/02	05/07/02	2050199	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:52

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-2-19 (P2D0835-19) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	
DPW-2-20 (P2D0835-20) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	
DPW-2-21 (P2D0835-21) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	
DPW-2-22 (P2D0835-22) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	
DPW-2-23 (P2D0835-23) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	
DPW-2-24 (P2D0835-24) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-LT2 Project Manager: James Feild	**Reported:** 05/10/02 16:52

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2050199 - Wet Chem										
Blank (2050199-BLK1)				Prepared & Analyzed: 05/06/02						
Bromide	ND	0.500	mg/l							
LCS (2050199-BS1)				Prepared & Analyzed: 05/06/02						
Bromide	19.9	0.500	mg/l	20.0		99.5	85-115			
Duplicate (2050199-DUP1)	**Source: P2D0835-01**			Prepared & Analyzed: 05/06/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2050199-MS1)	**Source: P2D0835-01**			Prepared & Analyzed: 05/06/02						
Bromide	4.46	0.556	mg/l	4.41	ND	101	75-125			
Matrix Spike Dup (2050199-MSD1)	**Source: P2D0835-01**			Prepared & Analyzed: 05/06/02						
Bromide	4.45	0.556	mg/l	4.41	ND	101	75-125	0.224	40	
Batch 2050338 - Wet Chem										
Blank (2050338-BLK1)				Prepared: 05/08/02 Analyzed: 05/09/02						
Bromide	ND	0.500	mg/l							
LCS (2050338-BS1)				Prepared: 05/08/02 Analyzed: 05/09/02						
Bromide	19.5	0.500	mg/l	20.0		97.5	85-115			
Duplicate (2050338-DUP1)	**Source: P2D0835-19**			Prepared: 05/08/02 Analyzed: 05/09/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2050338-MS1)	**Source: P2D0835-19**			Prepared: 05/08/02 Analyzed: 05/09/02						
Bromide	4.72	0.556	mg/l	4.41	ND	107	75-125			

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:52

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Batch 2050338 - Wet Chem

Matrix Spike Dup (2050338-MSD1) **Source: P2D0835-19** Prepared: 05/08/02 Analyzed: 05/09/02

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Bromide	4.71	0.556	mg/l	4.41	ND	107	75-125	0.212	40	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-LT2 Project Manager: James Feild	Reported: 05/10/02 16:52

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

P2D0835
1152

CHAIN OF CUSTODY

PROJECT: CADET
PROJECT No.: 2-6AM-10135-LT2
REPORT TO: JAMES FEILD
PHONE No.: 503-639-3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.: ↓
SAMPLER'S NAME (please print): SONIA KOHRS
PHONE No.: ↓
SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-2-1	4/26/02	1120	WATER	ICE	1	500ml	
2. DPW-2-2		1220					
3. DPW-2-3		1320					
4. DPW-2-4		1420					
5. DPW-2-5		1520					
6. DPW-2-6		1620					
7. DPW-2-7		1720					
8. DPW-2-8		1820					
9. DPW-2-9		1920					
10. DPW-2-10	↓	2020	↓	↓	↓	↓	↓

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. SUBC / AMEC	4/29/02	9:15	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.					

PAGE 1 OF 3
COOLER 1 OF 6

AMEC Earth & Environmental, Inc. (2/02)

4.7°C

P2D0835

1039

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

CHAIN OF CUSTODY

PROJECT: CADET
PROJECT No.: 2-61M-10135-L.T2
REPORT TO: JAMES FEILD
PHONE No.: 503-639-3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.: ↓
SAMPLER'S NAME (please print): SONIA KOHRS
PHONE No.:
SAMPLER'S SIGNATURE: Small Bleh. For AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-2-11	4/26/02	2120	WATER	ICE	1	500 ml	
2. DPW-2-12		2220					
3. DPW-2-13	↓	2320					
4. DPW-2-14	4/27/02	0020					
5. DPW-2-15		0120					
6. DPW-2-16		0220					
7. DPW-2-17		0320					
8. DPW-2-18		0420					
9. DPW-2-19		0520					
10. DPW-2-20	↓	0620	↓	↓	↓	↓	↓

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. S. Kohrs / AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

PAGE 2 OF 3
COOLER 1 OF 6

4.7°C

AMEC Earth & Environmental, Inc. (2/02)

P2D0835

1163

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

CHAIN OF CUSTODY

PROJECT: CDOT
PROJECT No.: 2-61M-10135-LT2
REPORT TO: JAMES FEILD
PHONE No.: 503-639-3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.: ↓
SAMPLER'S NAME (please print): SONIA KONES
PHONE No.: ↓
SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0																	
1. DPW-2-21	4/27/02	0720	WATER	ICE	1	800ml	↓																	
2. DPW-2-22		0820	↓	↓	↓	↓	↓																	
3. DPW-2-23	↓	0920	↓	↓	↓	↓	↓																	
4. DPW-2-24	↓	1020	↓	↓	↓	↓	↓																	
5.																								
6.																								
7.																								
8.																								
9.																								
10.																								

SAMPLE RECEIPT	LABORATORY	TURNAROUND TIME	QC Reporting Requirements	COMMENTS / INSTRUCTIONS
TOTAL # CONTAINERS	SHIPPING I.D. / AIRBILL #	☐ 8 HOUR ☐ 24 HOUR		
CONDITION OF CONTAINERS	CARRIER	☐ 1 WEEK ☐ 2 WEEK (standard)		
CONDITION OF SEALS	DOT DESTINATION	☐ OTHER ____		

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. /AMEC	4/29/02	915	1.	4/29/02	915
2.			2.	4/29/02	11:15
3.			3.		

PAGE 3 OF 3
COOLER 1 OF 6

4.7°C

AMEC Earth & Environmental, Inc. (2/02)

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:24

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DPW-3-1	P2D0825-01	Water	04/26/02 11:20	04/29/02 11:15
DPW-3-2	P2D0825-02	Water	04/26/02 12:20	04/29/02 11:15
DPW-3-3	P2D0825-03	Water	04/26/02 13:20	04/29/02 11:15
DPW-3-4	P2D0825-04	Water	04/26/02 14:20	04/29/02 11:15
DPW-3-5	P2D0825-05	Water	04/26/02 15:20	04/29/02 11:15
DPW-3-6	P2D0825-06	Water	04/26/02 16:20	04/29/02 11:15
DPW-3-7	P2D0825-07	Water	04/26/02 17:20	04/29/02 11:15
DPW-3-8	P2D0825-08	Water	04/26/02 18:20	04/29/02 11:15
DPW-3-9	P2D0825-09	Water	04/26/02 19:20	04/29/02 11:15
DPW-3-10	P2D0825-10	Water	04/26/02 20:20	04/29/02 11:15
DPW-3-11	P2D0825-11	Water	04/26/02 21:20	04/29/02 11:15
DPW-3-12	P2D0825-12	Water	04/26/02 22:20	04/29/02 11:15
DPW-3-13	P2D0825-13	Water	04/26/02 23:20	04/29/02 11:15
DPW-3-14	P2D0825-14	Water	04/27/02 00:20	04/29/02 11:15
DPW-3-15	P2D0825-15	Water	04/27/02 01:20	04/29/02 11:15
DPW-3-16	P2D0825-16	Water	04/27/02 02:20	04/29/02 11:15
DPW-3-17	P2D0825-17	Water	04/27/02 03:20	04/29/02 11:15
DPW-3-18	P2D0825-18	Water	04/27/02 04:20	04/29/02 11:15
DPW-3-19	P2D0825-19	Water	04/27/02 05:20	04/29/02 11:15
DPW-3-20	P2D0825-20	Water	04/27/02 06:20	04/29/02 11:15
DPW-3-21	P2D0825-21	Water	04/27/02 07:20	04/29/02 11:15
DPW-3-22	P2D0825-22	Water	04/27/02 08:20	04/29/02 11:15
DPW-3-23	P2D0825-23	Water	04/27/02 09:20	04/29/02 11:15
DPW-3-24	P2D0825-24	Water	04/27/02 10:20	04/29/02 11:15
DPW-11-Tracer	P2D0825-25	Water	04/26/02 11:00	04/29/02 11:15

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:24

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-3-1 (P2D0825-01) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-3-2 (P2D0825-02) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-3-3 (P2D0825-03) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/29/02	2040962	
DPW-3-4 (P2D0825-04) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-3-5 (P2D0825-05) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-3-6 (P2D0825-06) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/29/02	2040962	
DPW-3-7 (P2D0825-07) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-3-8 (P2D0825-08) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-3-9 (P2D0825-09) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/29/02	2040962	

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:24

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-3-10 (P2D0825-10) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-11 (P2D0825-11) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-12 (P2D0825-12) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-3-13 (P2D0825-13) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-14 (P2D0825-14) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-15 (P2D0825-15) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-3-16 (P2D0825-16) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-17 (P2D0825-17) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-18 (P2D0825-18) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:24

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-3-19 (P2D0825-19) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-20 (P2D0825-20) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-21 (P2D0825-21) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-3-22 (P2D0825-22) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-23 (P2D0825-23) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-3-24 (P2D0825-24) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/29/02	04/30/02	2040962	
DPW-11-Tracer (P2D0825-25) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	**35000**	5000	mg/l	10000	EPA 300.0	04/29/02	04/30/02	2040962	

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:24

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040962 - Wet Chem										
Blank (2040962-BLK1)				Prepared & Analyzed: 04/29/02						
Bromide	ND	0.500	mg/l							
LCS (2040962-BS1)				Prepared & Analyzed: 04/29/02						
Bromide	19.8	0.500	mg/l	20.0		99.0	85-115			
Duplicate (2040962-DUP1)	**Source: P2D0718-03**			Prepared & Analyzed: 04/29/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2040962-MS1)	**Source: P2D0718-03**			Prepared & Analyzed: 04/29/02						
Bromide	4.41	0.556	mg/l	4.41	ND	100	75-125			
Matrix Spike Dup (2040962-MSD1)	**Source: P2D0718-03**			Prepared & Analyzed: 04/29/02						
Bromide	4.41	0.556	mg/l	4.41	ND	100	75-125	0.00	40	
Batch 2041012 - Wet Chem										
Blank (2041012-BLK1)				Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	ND	0.500	mg/l							
LCS (2041012-BS1)				Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	19.7	0.500	mg/l	20.0		98.5	85-115			
Duplicate (2041012-DUP1)	**Source: P2D0825-10**			Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2041012-MS1)	**Source: P2D0825-10**			Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	4.33	0.556	mg/l	4.41	ND	98.2	75-125			

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-LT2 Project Manager: James Feild	**Reported:** 05/10/02 14:24

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2041012 - Wet Chem										
Matrix Spike Dup (2041012-MSD1)		**Source: P2D0825-10**		Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	4.38	0.556	mg/l	4.41	ND	99.3	75-125	1.15	40	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

P2D0825

1044

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

CHAIN OF CUSTODY

PROJECT: CADET
PROJECT No.: 2-61M-10135-LTZ
REPORT TO: JAMES FEILD
PHONE No.: 503-639-3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.:
SAMPLER'S NAME (please print): SONIA KOHES
PHONE No.:
SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0	RUSH
1. DPW-3-1	[illegible]	1120	WATER	ICE	1	[illegible]		
2. DPW-3-2		1220						
3. DPW-3-3		1320						X
4. DPW-3-4		1420						
5. DPW-3-5		1520						
6. DPW-3-6		1620						X
7. DPW-3-7		1720						
8. DPW-3-8		1820						
9. DPW-3-9		1920						X
10. DPW-3-10		2020						

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS
RUSH SAMPLES:
DPW-3-3
DPW-3-6
DPW-3-9

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. AMEC	4/30/02	915	1.	4/30/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

PAGE 1 OF 3
COOLER 2 OF 6

AMEC Earth & Environmental, Inc. (2/02)

P2D0825
1045

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

CHAIN OF CUSTODY

PROJECT: CADET
PROJECT No.: 2-61M-10135-LT2
REPORT TO: JAMES FEILD
PHONE No.: 503-639 3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.: ↓
SAMPLER'S NAME (please print): SONIA KOHES
PHONE No.:
SAMPLER'S SIGNATURE: For AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0	RUSH
1. DPW-3-11	4/26/02	2120	WATER	ICE	1	500 ml		
2. DPW-3-12		2220						X
3. DPW-3-13	↓	2320						
4. DPW-3-14	4/27/02	0020						
5. DPW-3-15		0120						X
6. DPW-3-16		0220						
7. DPW-3-17		0320						
8. DPW-3-18		0420						X
9. DPW-3-19		0520						
10. DPW-3-20	↓	0620	↓	↓	↓	↓	↓	

SAMPLE RECEIPT		LABORATORY		TURNAROUND TIME	QC Reporting Requirements	COMMENTS / INSTRUCTIONS
TOTAL # CONTAINERS		SHIPPING I.D. / AIRBILL #		☐ 8 HOUR ☐ 24 HOUR		RUSH SAMPLES: DPW-3-12 DPW-3-15 DPW-3-18
CONDITION OF CONTAINERS		CARRIER		☐ 1 WEEK ☐ 2 WEEK (standard)		
CONDITION OF SEALS		DOT DESTINATION		☐ OTHER ____		

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. / AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

PAGE 2 OF 3
COOLER 2 OF 6

2.6°C

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

P2D0825
1046

CHAIN OF CUSTODY

PROJECT: CADET
PROJECT No.: 2-101M-16135-LT2
REPORT TO: JAMES FELD
PHONE No.: 503 639-3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.: ↓
SAMPLER'S NAME (please print): SONIA KOHES
PHONE No.: ↓
SAMPLER'S SIGNATURE: For AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS		3000	RUSH																	
					No.	VOL.																			
1. DPW-3-21	4/27/02	0720	WATER	ICE	1	500 ML	↓	X																	
2. DPW-3-22	↓	0820	↓	↓	↓		↓																		
3. DPN-3-23	↓	0920	↓	↓	↓	↓	↓																		
4. DPW-3-24	↓	1020	↓	↓	↓	↓	↓	X																	
5. DPN-11-Tracer Soln	4/24/02	1100	↓	↓	↓	↓	↓	X																	
6.																									
7.																									
8.																									
9.																									
10.																									

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS
RUSH SAMPLES:
DPW-3-21
DPW-3-24
DPN-11-TRACER SOLN.

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. / AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

PAGE 3 OF 3
COOLER 2 OF 6

2.6°C

AMEC Earth & Environmental, Inc. (2/02)

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DPW-7-1	P2D0827-01	Water	04/26/02 11:20	04/29/02 11:15
DPW-7-2	P2D0827-02	Water	04/26/02 12:20	04/29/02 11:15
DPW-7-3	P2D0827-03	Water	04/26/02 13:20	04/29/02 11:15
DPW-7-4	P2D0827-04	Water	04/26/02 14:20	04/29/02 11:15
DPW-7-5	P2D0827-05	Water	04/26/02 15:20	04/29/02 11:15
DPW-7-6	P2D0827-06	Water	04/26/02 16:20	04/29/02 11:15
DPW-7-7	P2D0827-07	Water	04/26/02 17:20	04/29/02 11:15
DPW-7-8	P2D0827-08	Water	04/26/02 18:20	04/29/02 11:15
DPW-7-9	P2D0827-09	Water	04/26/02 19:20	04/29/02 11:15
DPW-7-10	P2D0827-10	Water	04/26/02 20:20	04/29/02 11:15
DPW-7-11	P2D0827-11	Water	04/26/02 21:20	04/29/02 11:15
DPW-7-12	P2D0827-12	Water	04/26/02 22:20	04/29/02 11:15
DPW-7-13	P2D0827-13	Water	04/26/02 23:20	04/29/02 11:15
DPW-7-14	P2D0827-14	Water	04/27/02 00:20	04/29/02 11:15
DPW-7-15	P2D0827-15	Water	04/27/02 01:20	04/29/02 11:15
DPW-7-16	P2D0827-16	Water	04/27/02 02:20	04/29/02 11:15
DPW-7-17	P2D0827-17	Water	04/27/02 03:20	04/29/02 11:15
DPW-7-18	P2D0827-18	Water	04/27/02 04:20	04/29/02 11:15
DPW-7-19	P2D0827-19	Water	04/27/02 05:20	04/29/02 11:15
DPW-7-20	P2D0827-20	Water	04/27/02 06:20	04/29/02 11:15
DPW-7-21	P2D0827-21	Water	04/27/02 07:20	04/29/02 11:15
DPW-7-22	P2D0827-22	Water	04/27/02 08:20	04/29/02 11:15
DPW-7-23	P2D0827-23	Water	04/27/02 09:20	04/29/02 11:15
DPW-7-24	P2D0827-24	Water	04/27/02 10:20	04/29/02 11:15

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:26

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-7-1 (P2D0827-01) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-7-2 (P2D0827-02) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-7-3 (P2D0827-03) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-7-4 (P2D0827-04) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-7-5 (P2D0827-05) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-7-6 (P2D0827-06) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-7-7 (P2D0827-07) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-7-8 (P2D0827-08) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-7-9 (P2D0827-09) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:26

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-7-10 (P2D0827-10) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	04/30/02	05/01/02	2041012	
DPW-7-11 (P2D0827-11) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/01/02	2050020	
DPW-7-12 (P2D0827-12) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-13 (P2D0827-13) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-14 (P2D0827-14) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-15 (P2D0827-15) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-16 (P2D0827-16) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-17 (P2D0827-17) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-18 (P2D0827-18) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:26

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-7-19 (P2D0827-19) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-20 (P2D0827-20) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-21 (P2D0827-21) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-22 (P2D0827-22) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-23 (P2D0827-23) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-7-24 (P2D0827-24) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:26

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2041012 - Wet Chem										
Blank (2041012-BLK1)				Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	ND	0.500	mg/l							
LCS (2041012-BS1)				Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	19.7	0.500	mg/l	20.0		98.5	85-115			
Duplicate (2041012-DUP1)	**Source: P2D0825-10**			Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2041012-MS1)	**Source: P2D0825-10**			Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	4.33	0.556	mg/l	4.41	ND	98.2	75-125			
Matrix Spike Dup (2041012-MSD1)	**Source: P2D0825-10**			Prepared: 04/30/02 Analyzed: 05/01/02						
Bromide	4.38	0.556	mg/l	4.41	ND	99.3	75-125	1.15	40	
Batch 2050020 - Wet Chem										
Blank (2050020-BLK1)				Prepared & Analyzed: 05/01/02						
Bromide	ND	0.500	mg/l							
LCS (2050020-BS1)				Prepared & Analyzed: 05/01/02						
Bromide	19.5	0.500	mg/l	20.0		97.5	85-115			
Duplicate (2050020-DUP1)	**Source: P2D0827-11**			Prepared: 05/01/02 Analyzed: 05/02/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2050020-MS1)	**Source: P2D0827-11**			Prepared: 05/01/02 Analyzed: 05/02/02						
Bromide	4.42	0.556	mg/l	4.41	ND	100	75-125			

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:26

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2050020 - Wet Chem										
Matrix Spike Dup (2050020-MSD1)	**Source: P2D0827-11**			Prepared: 05/01/02	Analyzed: 05/02/02					
Bromide	4.34	0.556	mg/l	4.41	ND	98.4	75-125	1.83	40	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

amec

Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

1041

CHAIN OF CUSTODY

PROJECT: CADET

PROJECT No.: 2-61M-10135-L T2

REPORT TO: JAMES FEILD

PHONE No.: 503-639-3400

PROJECT MANAGER: JOHN KUIPER

PHONE No.:

SAMPLER'S NAME (please print): SONJA KOHES

PHONE No.:

SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-7-1	4/26/02	1120	WATER	ICE	1	500 ml	
2. DPW-7-2		1220					
3. DPW-7-3		1320					
4. DPW-7-4		1420					
5. DPW-7-5		1520					
6. DPW-7-6		1620					
7. DPW-7-7		1720					
8. DPW-7-8		1820					
9. DPW-7-9		1920					
10. DPW-7-10		2020					

SAMPLE RECEIPT

TOTAL # CONTAINERS

CONDITION OF CONTAINERS

CONDITION OF SEALS

LABORATORY

SHIPPING I.D. / AIRBILL #

CARRIER

DOT DESTINATION

TURNAROUND TIME

☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. /AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

PAGE 1 OF 3
COOLER 4 OF 6

AMEC Earth & Environmental, Inc. (2/02)

4.9°C

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

1042

CHAIN OF CUSTODY

PROJECT: CADET
PROJECT No.: 2-61M-1035-LT2
REPORT TO: JAMES FEILD
PHONE No.: 503-639-3400
PROJECT MANAGER: JOHN KOIPER
PHONE No.: ↓
SAMPLER'S NAME (please print): JUNIA KOHRS
PHONE No.: ↓
SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-7-11	4/20/02	2120	WATER	ICE	1	475 mL	↓
2. DPW-7-12	↓	2220	↓	↓	↓	↓	↓
3. DPW-7-13	↓	2320	↓	↓	↓	↓	↓
4. DPW-7-14	4/21/02	0020	↓	↓	↓	↓	↓
5. DPW-7-15	↓	0120	↓	↓	↓	↓	↓
6. DPW-7-16	↓	0220	↓	↓	↓	↓	↓
7. DPW-7-17	↓	0320	↓	↓	↓	↓	↓
8. DPW-7-18	↓	0420	↓	↓	↓	↓	↓
9. DPW-7-19	↓	0520	↓	↓	↓	↓	↓
10. DPW-7-20	↓	0620	↓	↓	↓	↓	↓

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. SUBK/AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elste	4/29/02	11:15
3.			3.		

PAGE 2 OF 3
COOLER 4 of 6

4.9°C

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

1043

CHAIN OF CUSTODY

PROJECT: CADET
PROJECT No.: 2-UM-10135-LT2
REPORT TO: JAMES GEILD
PHONE No.: 503-639-3400
PROJECT MANAGER: JOHN KUIPEC
PHONE No.:
SAMPLER'S NAME (please print): SONIA KOHES
PHONE No.: ↓
SAMPLER'S SIGNATURE:

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-7-21	4/27/02	0720	WATER	ICE	1	500 ml	↓
2. DPW-7-22	↓	0820	↓	↓	↓	↓	
3. DPW-7-23		0920					
4. DPW-7-24		1020					
5.							
6.							
7.							
8.							
9.							
10.							

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. SAMPLE / AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

PAGE 3 OF 3
COOLER 4 OF 6

4.9°C

AMEC Earth & Environmental, Inc. (2/02)

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DPW-13-1	P2D0833-01	Water	04/26/02 11:20	04/29/02 11:15
DPW-13-2	P2D0833-02	Water	04/26/02 12:20	04/29/02 11:15
DPW-13-3	P2D0833-03	Water	04/26/02 13:20	04/29/02 11:15
DPW-13-4	P2D0833-04	Water	04/26/02 14:20	04/29/02 11:15
DPW-13-5	P2D0833-05	Water	04/26/02 15:20	04/29/02 11:15
DPW-13-6	P2D0833-06	Water	04/26/02 16:20	04/29/02 11:15
DPW-13-7	P2D0833-07	Water	04/26/02 17:20	04/29/02 11:15
DPW-13-8	P2D0833-08	Water	04/26/02 18:20	04/29/02 11:15
DPW-13-9	P2D0833-09	Water	04/26/02 19:20	04/29/02 11:15
DPW-13-10	P2D0833-10	Water	04/26/02 20:20	04/29/02 11:15
DPW-13-11	P2D0833-11	Water	04/26/02 21:20	04/29/02 11:15
DPW-13-12	P2D0833-12	Water	04/26/02 22:20	04/29/02 11:15
DPW-13-13	P2D0833-13	Water	04/26/02 23:20	04/29/02 11:15
DPW-13-14	P2D0833-14	Water	04/27/02 00:20	04/29/02 11:15
DPW-13-15	P2D0833-15	Water	04/27/02 01:20	04/29/02 11:15
DPW-13-16	P2D0833-16	Water	04/27/02 02:20	04/29/02 11:15
DPW-13-17	P2D0833-17	Water	04/27/02 03:20	04/29/02 11:15
DPW-13-18	P2D0833-18	Water	04/27/02 04:20	04/29/02 11:15
DPW-13-19	P2D0833-19	Water	04/27/02 05:20	04/29/02 11:15
DPW-13-20	P2D0833-20	Water	04/27/02 06:20	04/29/02 11:15
DPW-13-21	P2D0833-21	Water	04/27/02 07:20	04/29/02 11:15
DPW-13-22	P2D0833-22	Water	04/27/02 08:20	04/29/02 11:15
DPW-13-23	P2D0833-23	Water	04/27/02 09:20	04/29/02 11:15
DPW-13-24	P2D0833-24	Water	04/27/02 10:20	04/29/02 11:15

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:29

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-13-1 (P2D0833-01) Water					Sampled: 04/26/02 Received: 04/29/02				
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-13-2 (P2D0833-02) Water					Sampled: 04/26/02 Received: 04/29/02				
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-13-3 (P2D0833-03) Water					Sampled: 04/26/02 Received: 04/29/02				
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-13-4 (P2D0833-04) Water					Sampled: 04/26/02 Received: 04/29/02				
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-13-5 (P2D0833-05) Water					Sampled: 04/26/02 Received: 04/29/02				
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-13-6 (P2D0833-06) Water					Sampled: 04/26/02 Received: 04/29/02				
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/01/02	05/02/02	2050020	
DPW-13-7 (P2D0833-07) Water					Sampled: 04/26/02 Received: 04/29/02				
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/02/02	2050088	
DPW-13-8 (P2D0833-08) Water					Sampled: 04/26/02 Received: 04/29/02				
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/02/02	2050088	
DPW-13-9 (P2D0833-09) Water					Sampled: 04/26/02 Received: 04/29/02				
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/02/02	2050088	

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:29

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-13-10 (P2D0833-10) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/02/02	2050088	
DPW-13-11 (P2D0833-11) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-12 (P2D0833-12) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-13 (P2D0833-13) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-14 (P2D0833-14) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-15 (P2D0833-15) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-16 (P2D0833-16) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-17 (P2D0833-17) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-18 (P2D0833-18) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Burkholder, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-LT2 Project Manager: James Feild	Reported: 05/10/02 14:29

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-13-19 (P2D0833-19) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-20 (P2D0833-20) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-21 (P2D0833-21) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-22 (P2D0833-22) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-23 (P2D0833-23) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	
DPW-13-24 (P2D0833-24) Water					Sampled: 04/27/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/02/02	05/03/02	2050088	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 14:29

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2050020 - Wet Chem										
Blank (2050020-BLK1)				Prepared & Analyzed: 05/01/02						
Bromide	ND	0.500	mg/l							
LCS (2050020-BS1)				Prepared & Analyzed: 05/01/02						
Bromide	19.5	0.500	mg/l	20.0		97.5	85-115			
Duplicate (2050020-DUP1)	**Source: P2D0827-11**			Prepared: 05/01/02 Analyzed: 05/02/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2050020-MS1)	**Source: P2D0827-11**			Prepared: 05/01/02 Analyzed: 05/02/02						
Bromide	4.42	0.556	mg/l	4.41	ND	100	75-125			
Matrix Spike Dup (2050020-MSD1)	**Source: P2D0827-11**			Prepared: 05/01/02 Analyzed: 05/02/02						
Bromide	4.34	0.556	mg/l	4.41	ND	98.4	75-125	1.83	40	
Batch 2050088 - Wet Chem										
Blank (2050088-BLK1)				Prepared & Analyzed: 05/02/02						
Bromide	ND	0.500	mg/l							
LCS (2050088-BS1)				Prepared & Analyzed: 05/02/02						
Bromide	19.4	0.500	mg/l	20.0		97.0	85-115			
Duplicate (2050088-DUP1)	**Source: P2D0833-07**			Prepared & Analyzed: 05/02/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2050088-MS1)	**Source: P2D0833-07**			Prepared & Analyzed: 05/02/02						
Bromide	4.29	0.556	mg/l	4.41	ND	97.3	75-125			

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-LT2 Project Manager: James Feild	**Reported:** 05/10/02 14:29

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2050088 - Wet Chem										
Matrix Spike Dup (2050088-MSD1)	**Source: P2D0833-07**			Prepared & Analyzed: 05/02/02						
Bromide	4.35	0.556	mg/l	4.41	ND	98.6	75-125	1.39	40	

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Crystal Burkholder, Project Manager

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

P2D0833
1156

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

CHAIN OF CUSTODY

PROJECT: Cadet
PROJECT No.: 2-01M-10135-L T2
REPORT TO: JAMES FEILD
PHONE No.: 503-639-3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.:
SAMPLER'S NAME (please print): SONIA KOHRS
PHONE No.:
SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-13-1	4/26/02	1120	WATER	ICE	1	500ml	
2. DPW-13-2	↓	1220	↓	↓	↓	↓	↓
3. DPW-13-3		1320					
4. DPW-13-4		1420					
5. DPW-13-5		1520					
6. DPW-13-6		1620					
7. DPW-13-7		1720					
8. DPW-13-8		1820					
9. DPW-13-9		1920					
10. DPW-13-10		2020					

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. / AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

PAGE 1 OF 3
COOLER 6 OF 6

AMEC Earth & Environmental, Inc. (2/02)

0.2 °C

P2D0833
1157

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

CHAIN OF CUSTODY

PROJECT: CADET
PROJECT No.: 2-61M-10135-LT2
REPORT TO: JAMES FEILD
PHONE No.: 503-639-3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.: ↓
SAMPLER'S NAME (please print): SONIA COHRS
PHONE No.:
SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-13-11	4/26/02	2120	WATER	ICE	1	500ml	
2. DPW-13-12	↓	2220	↓	↓	↓	↓	↓
3. DPW-13-13		2320					
4. DPW-13-14	4/27/02	0020					
5. DPW-13-15	↓	0120					
6. DPW-13-16		0220					
7. DPW-13-17		0320					
8. DPW-13-18		0420					
9. DPW-13-19		0520					
10. DPW-13-20		0620					

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. / AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

0.20C

PAGE 2 OF 3
COOLER 6 OF 6

AMEC Earth & Environmental, Inc. (2/02)

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

P2D0833
1158

CHAIN OF CUSTODY

PROJECT: CADET
PROJECT No.: 2-1dM-10135-LT2
REPORT TO: JAMES FEILD
PHONE No.: 503-639-3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.: ↓
SAMPLER'S NAME (please print): DONIA KOHRS
PHONE No.: ↓
SAMPLER'S SIGNATURE: FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-13-21	4/27/02	0720	WATER	ICE	1	500mL	↓
2. DPW-13-22	↓	0820	↓	↓	↓	↓	↓
3. DPW-13-23	↓	0920	↓	↓	↓	↓	↓
4. DPW-13-24	↓	1020	↓	↓	↓	↓	↓
5.							
6.							
7.							
8.							
9.							
10.							

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. FOR AMEC	4/29/02	915	1.	4/29/02	915
2.			2.	4/29/02	11:15
3.			3.		

PAGE 3 OF 3
COOLER 6096

AMEC Earth & Environmental, Inc. (2/02)

0.2°C

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DPW-4-1	P2D0840-01	Water	04/26/02 11:20	04/29/02 11:15
DPW-4-2	P2D0840-02	Water	04/26/02 12:20	04/29/02 11:15
DPW-4-3	P2D0840-03	Water	04/26/02 13:20	04/29/02 11:15
DPW-4-4	P2D0840-04	Water	04/26/02 14:20	04/29/02 11:15
DPW-4-5	P2D0840-05	Water	04/26/02 15:20	04/29/02 11:15

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:54

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-4-1 (P2D0840-01) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	
DPW-4-2 (P2D0840-02) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	
DPW-4-3 (P2D0840-03) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	
DPW-4-4 (P2D0840-04) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	
DPW-4-5 (P2D0840-05) Water					Sampled: 04/26/02	Received: 04/29/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/08/02	05/09/02	2050338	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: James Feild

Reported:
05/10/02 16:54

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2050338 - Wet Chem										
Blank (2050338-BLK1)				Prepared: 05/08/02 Analyzed: 05/09/02						
Bromide	ND	0.500	mg/l							
LCS (2050338-BS1)				Prepared: 05/08/02 Analyzed: 05/09/02						
Bromide	19.5	0.500	mg/l	20.0		97.5	85-115			
Duplicate (2050338-DUP1)	**Source: P2D0835-19**			Prepared: 05/08/02 Analyzed: 05/09/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2050338-MS1)	**Source: P2D0835-19**			Prepared: 05/08/02 Analyzed: 05/09/02						
Bromide	4.72	0.556	mg/l	4.41	ND	107	75-125			
Matrix Spike Dup (2050338-MSD1)	**Source: P2D0835-19**			Prepared: 05/08/02 Analyzed: 05/09/02						
Bromide	4.71	0.556	mg/l	4.41	ND	107	75-125	0.212	40	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-LT2 Project Manager: James Feild	**Reported:** 05/10/02 16:54

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

amec
Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224
Phone Number (503) 639-3400
Fax Number (503) 620-7892

P2D0840
1159

CHAIN OF CUSTODY

PROJECT: Cadet
PROJECT No. 2-61M-10135-LT2
REPORT TO: JAMES FEILD
PHONE No. 503-639-3400
PROJECT MANAGER: JOHN KUIPER
PHONE No.
SAMPLER'S NAME (please print): SONIA KOHRS
PHONE No. ↓
SAMPLER'S SIGNATURE: Bl... FOR AMEC

ANALYSIS REQUESTED (circle, check box or write preferred method in box)

SAMPLE I.D.	DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS No.	CONTAINERS VOL.	300.0
1. DPW-4-1	4/26/02	1120	WATER	ICE	1		↓
2. DPW-4-2	↓	1220	↓	↓	↓	↓	
3. DPW-4-3		1320					
4. DPW-4-4		1420					
5. DPW-4-5		1520					
6. ~~DPW-4-6~~		~~1620~~					
7. ~~DPW-4-7~~		~~1720~~					
8. ~~DPW-4-8~~		~~1820~~					
9. ~~DPW-4-9~~		~~1920~~					
10. ~~DPW-4-10~~		~~2020~~					

SAMPLE RECEIPT
TOTAL # CONTAINERS
CONDITION OF CONTAINERS
CONDITION OF SEALS

LABORATORY
SHIPPING I.D. / AIRBILL #
CARRIER
DOT DESTINATION

TURNAROUND TIME
☐ 8 HOUR
☐ 24 HOUR
☐ 1 WEEK
☐ 2 WEEK (standard)
☐ OTHER ____

QC Reporting Requirements

COMMENTS / INSTRUCTIONS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1. Sublette / AMEC	4/29/02	915	1.	4/29/02	915
2.			2. Tammy Elston	4/29/02	11:15
3.			3.		

PAGE 1 OF 1
COOLER 3 OF 6

AMEC Earth & Environmental, Inc. (2/02)

4.7°C

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509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: Barb Lary

Reported:
05/06/02 14:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DPW-12/GW	P2E0084-01	Water	05/02/02 15:50	05/03/02 07:23
DPW-13/GW	P2E0084-02	Water	05/02/02 15:55	05/03/02 07:23
DPW-5/GW	P2E0084-03	Water	05/02/02 16:05	05/03/02 07:23
DPW-1/GW	P2E0084-04	Water	05/02/02 16:07	05/03/02 07:23
DPW-11/GW	P2E0084-05	Water	05/02/02 16:15	05/03/02 07:23
DPW-14/GW	P2E0084-06	Water	05/02/02 16:18	05/03/02 07:23
DPW-4/GW	P2E0084-07	Water	05/02/02 16:22	05/03/02 07:23
DPW-15/GW	P2E0084-08	Water	05/02/02 16:28	05/03/02 07:23
DPW-3/GW	P2E0084-09	Water	05/02/02 16:35	05/03/02 07:23
DPW-2/GW	P2E0084-10	Water	05/02/02 16:28	05/03/02 07:23
DPW-10/GW	P2E0084-11	Water	05/02/02 16:45	05/03/02 07:23
DPW-9/GW	P2E0084-12	Water	05/02/02 16:55	05/03/02 07:23
DPW-8/GW	P2E0084-13	Water	05/02/02 17:00	05/03/02 07:23
DPW-6/GW	P2E0084-14	Water	05/02/02 17:07	05/03/02 07:23
DPW-7/GW	P2E0084-15	Water	05/02/02 17:15	05/03/02 07:23
DPW-16/GW	P2E0084-16	Water	05/02/02 17:18	05/03/02 07:23

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: Barb Lary

Reported:
05/06/02 14:33

Anions per EPA Method 300.0
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-12/GW (P2E0084-01) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/03/02	2050115	
DPW-13/GW (P2E0084-02) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/03/02	2050115	
DPW-5/GW (P2E0084-03) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/03/02	2050115	
DPW-1/GW (P2E0084-04) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/03/02	2050115	
DPW-11/GW (P2E0084-05) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	**3.80**	0.500	mg/l	1	EPA 300.0	05/03/02	05/06/02	2050115	
DPW-14/GW (P2E0084-06) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	
DPW-4/GW (P2E0084-07) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	
DPW-15/GW (P2E0084-08) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	
DPW-3/GW (P2E0084-09) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: Barb Lary

Reported:
05/06/02 14:33

Anions per EPA Method 300.0

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DPW-2/GW (P2E0084-10) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	
DPW-10/GW (P2E0084-11) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	
DPW-9/GW (P2E0084-12) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	
DPW-8/GW (P2E0084-13) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	
DPW-6/GW (P2E0084-14) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	
DPW-7/GW (P2E0084-15) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	
DPW-16/GW (P2E0084-16) Water					Sampled: 05/02/02	Received: 05/03/02			
Bromide	ND	0.500	mg/l	1	EPA 300.0	05/03/02	05/04/02	2050115	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: Barb Lary

Reported:
05/06/02 14:33

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2050115 - Wet Chem										
Blank (2050115-BLK1)				Prepared & Analyzed: 05/03/02						
Bromide	ND	0.500	mg/l							
LCS (2050115-BS1)				Prepared & Analyzed: 05/03/02						
Bromide	19.8	0.500	mg/l	20.0		99.0	85-115			
Duplicate (2050115-DUP1)		**Source: P2E0084-01**		Prepared & Analyzed: 05/03/02						
Bromide	ND	0.500	mg/l		ND				20	
Matrix Spike (2050115-MS1)		**Source: P2E0084-01**		Prepared & Analyzed: 05/03/02						
Bromide	4.37	0.556	mg/l	4.41	ND	99.1	75-125			
Matrix Spike Dup (2050115-MSD1)		**Source: P2E0084-01**		Prepared & Analyzed: 05/03/02						
Bromide	4.40	0.556	mg/l	4.41	ND	99.8	75-125	0.684	40	

North Creek Analytical - Portland

Crystal Burkholder, Project Manager

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AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-LT2
Project Manager: Barb Lary

Reported:
05/06/02 14:33

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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Crystal Burkholder, Project Manager

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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: P2E0084

CLIENT: AMEC
REPORT TO: SONIA KOHRS
ADDRESS:
PHONE: 503-639-3400 FAX: 903-620-7892
INVOICE TO:
P.O. NUMBER:
PROJECT NAME: ~~CADET~~
PROJECT NUMBER: 2-61M-10135-LT2
SAMPLED BY: BARB LARY/SONIA KOHRS

TURNAROUND REQUEST in Business Days*
Organic & Inorganic Analyses
☐ 10 ☐ 7 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1
STD.
Petroleum Hydrocarbon Analyses
☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1
STD.
☒ OTHER Please Specify: [✓ 24 HR]
*Turnaround Requests less than standard may incur Rush Charges.

REQUESTED ANALYSES

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME		EPA 300.0 BROMIDE											MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1. DPW-12/GW	5/2/02 1550		X														
2. DPW-13/GW	1555		X														
3. DPW-5/GW	1605		X														
4. DPW-1/GW	1607		X														
5. DPW-11/GW	1615		X														
6. DPW-14/GW	1618		X														
7. DPW-4/GW	1622		X														
8. DPW-15/GW	1628		X														
9. DPW-3/GW	1635		X														
10. DPW-2/GW	1628		X														
11. DPW-10/GW	1645		X														
12. DPW-9/GW	1655		X														
13. DPW-8/GW	1700		X														
14. DPW-6/GW	1707		X														
15. DPW-7/GW	1715		X														

RELINQUISHED BY: Barb Lary DATE: 5/3/02 RECEIVED BY: Kim Davis DATE: 5/3/02
PRINT NAME: BARB LARY FIRM: AMEC TIME: 723 PRINT NAME: KIM DAVIS FIRM: NCA TIME: 0723
RELINQUISHED BY: DATE: RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME: PRINT NAME: FIRM: TIME:
ADDITIONAL REMARKS: cc client TEMP: 3.2°C PAGE 1 OF 2
COC REV 3/99

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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: P2E0084

CLIENT: AMEC
REPORT TO: SONIA KOHRS
ADDRESS:
PHONE: 503-639-3400 FAX: 503-620-7892
INVOICE TO:
P.O. NUMBER:
PROJECT NAME: CADET
PROJECT NUMBER: Z-61M-10135-L T2
SAMPLED BY: BARB LARY / SONIA KOHRS

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyses
10 7 5 4 3 2 1 <1
STD.

Petroleum Hydrocarbon Analyses
5 4 3 2 1 <1
STD.

~~OTHER~~ Please Specify 24HR

*Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	REQUESTED ANALYSES													MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
			EPA 300.0 BROMIDE															
1. DPW-16/GW	5/2/02 1718		X															
2.																		
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		
11.																		
12.																		
13.																		
14.																		
15.																		

RELINQUISHED BY: Barb Lary
PRINT NAME: BARB LARY FIRM: AMEC DATE: 5/3/02 TIME: 723
RECEIVED BY:
PRINT NAME: KIM DAVIS FIRM: NCA DATE: 5/3/02 TIME: 0723

RELINQUISHED BY:
PRINT NAME: FIRM: DATE: TIME:
RECEIVED BY:
PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS: cc: client
TEMP: 3.2°C PAGE 2 OF 2

COC REV 3/99

APPENDIX K

Tidal Influence Investigation

APPENDIX F: TIDAL EVALUATION

The Washington State Department of Ecology (Ecology) has required that groundwater elevations in Project Area wells be measured monthly in concert with other sites, and that the data be evaluated as part of the monitoring efforts at the Cadet Site. Data collection typically takes at least four hours to complete. The elevations are to be used, in part, to measure groundwater gradients at the Site and Project Area and therefore to determine the direction and velocity of groundwater flow. AMEC has conducted a tidal evaluation to investigate whether this monthly coordination of groundwater measurements is appropriate for wells at the Site considering the likelihood of strong tidal influences on the wells.

1.0 Background

The Site is situated between 2,500 and 3,100 feet north of the Columbia River (Figure 1). The Columbia River shows tidal influence upstream of Vancouver, Washington. Therefore, groundwater elevations and gradients at the Site (downstream of Vancouver) are likely to be influenced by tidal conditions. Previous investigations between 1986 and 2000 at the other nearby sites (Alcoa, Port of Vancouver, and ST Services) compared hourly groundwater elevations to river stage fluctuations and concluded that there was a correlation. In the Remedial Investigation Work Plan (RIWP) submitted to Ecology in April 2002, AMEC confirmed that fluctuations in river stage correlated with the area of groundwater under investigation.

2.0 Data Collection

During the fall of 2001 and winter of 2002, AMEC compared groundwater elevations in the Project Area to river stage elevations of the Columbia River. This comparison appeared to support a link between river and groundwater elevations. To quantify the tidal influence, pressure transducers were placed in three monitoring wells beginning April 26, 2002. The transducers monitored the water pressure at wells MW-2s, MW-3s, and MW-9s until May 1, 2002. The water pressure was then translated into the depth of water above the transducer and the corresponding groundwater elevation.

Well MW-9s is located 2,516 feet from the river. The other two wells are further from the river. MW-2s is 2,863 feet from the river on the west side of the Site, and MW-3s is 2,884 feet from the river on the east side of the Site. (Figures F-4 through F-7 show the location of the three wells.)

3.0 Data Analysis

3.1 Groundwater Gradients

River stages and groundwater elevations at the three wells for the monitoring period are shown on Figure F-2. A clear pattern of tidal influence is apparent for all three wells. Simple Harmonic Motion Curve Analysis showed that the average tidal fluctuation for MW-2s is 0.30 feet, for MW-3s it is 0.37 feet, and for MW-9s it is 0.12 feet. Details of the harmonic analysis are presented as Tables F-1, F-2, and F-3.

Comparing the groundwater elevations of the three wells at the same time shows that the gradients can change markedly over relatively short time periods (Figure F-3). Table F-4 shows the groundwater elevations at the measurement times shown on Figure F-3. The first set of elevations shows the highest groundwater elevation was at MW-3s, therefore, the gradient and groundwater flow was towards the west. Within 2.5 hours, the head at MW-3s had lessened and the gradient was to the northwest. The gradient shifted to the north during the next 3.5 hours, and was back to the southwest 5.5 hours later, approximately 12 hours after the start of the cycle. Weather during this time period was dry. The last recorded rainfall was less than 0.5 inches of rain on April 26–27, 2002.

Figures F-4, F-5, F-6, and F-7 illustrate the radical changes in the direction of the groundwater gradient. They show just how difficult it is to meaningfully compare groundwater elevations taken even a short time apart.

3.2 Aquifer Characteristics

Various methods have been suggested for establishing a numeric relationship between tidal cycles and aquifers. The Stage Ratio Method (Ferris, 1963) was used with the data collected during this study to estimate the aquifer transmissivity. The method assumes that the response of the aquifer decreases with distance from the surface water body, in this case the Columbia River. The method may be applied to both unconfined and confined aquifers provided:

1. The aquifer is relatively large and homogenous
2. Water is released immediately with a decline in pressure
3. Vertical components of flow do not affect the observation well
4. The cyclic fluctuation in the observation well is only a small fraction of the aquifer's saturated thickness

The Stage Ratio Method involved several steps. Water elevations were plotted as hydrographs throughout monitored tidal cycles and the peak and low elevations were identified for each well (Figures F-8, F-9, and F-10). The ratio of each change in the groundwater level in each well was compared to the corresponding change in the river stage (Table F-5). The ratios for the three monitored wells were then plotted against the distance of that well to the river on a semi-log graph (Figure F-11). The slope of the best-fit straight line through the data points is input into the following formula:

$$T = \frac{4.4\,(dx)^2\,S}{t}$$

Where:
T = aquifer transmissivity (gpd / ft)
dx = slope of the best-fit straight line over one log cycle (unitless)
S = aquifer storage coefficient (unitless), 0.15 was used[1]
t = period of the surface water tide (days)

In this case $T = (4.4 \times (368)^2 \times 0.15) / 0.52 = 171{,}884$ gpd / ft

Dividing the transmissivity by the depth of the aquifer, approximately 215 feet, yields an estimated hydraulic conductivity, K, of 800 feet/day or 0.003 meters/sec. This is within the range for coarse sand (Istok, 1989).

4.0 Conclusions

The aquifer underlying the Cadet Site has characteristics typical of a sandy aquifer, including relatively large hydraulic conductivity and transmissivity values. These characteristics help explain the large tidal influence exerted on the aquifer by the Columbia River. As a result of the tidal influence, groundwater gradients vary in direction and intensity within just a few hours.

The rapid changes in groundwater gradient make it difficult to draw firm conclusions about the direction and speed of groundwater and/or HVOC travel from the Site using only isolated measurements of depth of groundwater. Also, the length of time that it takes (4 hours) to collect a round of groundwater measurements in conjunction with other consultants at other nearby sites, is too long for the resulting data to be useful in determining accurate Project Area groundwater gradients. Chemical data should give

---

[1] Assuming that water and aquifer matrix elasticity are generally negligible in unconfined aquifers (Kruseman et al., 1994), a specific yield or effective porosity value appropriate for silty sand was used (Anderson, 1992).

a better picture of the overall rate and direction of HVOC movement. It is recommended, therefore, that coordinated monthly monitoring of groundwater elevations in wells be discontinued.

ATTACHMENTS:

Table F-1	Determination of Tidal Cycle at Monitoring Well MW-2s Using the Simple Harmonic Motion Curve Analysis
Table F-2	Determination of Tidal Cycle at Monitoring Well MW-3 Using the Simple Harmonic Motion Curve Analysis
Table F-3	Determination of Tidal Cycle at Monitoring Well MW-9 Using the Simple Harmonic Motion Curve Analysis
Table F-4	Groundwater Elevations and Gradients for Wells at Selected Times
Table F-5	Transmissivity Calculations
Figure F-1	Site Location
Figure F-2	Test Well versus River Elevations
Figure F-3	Comparison of Tidal Fluctuations
Figure F-4	Groundwater Elevations for Tidal Study at Time 1 04/28/02 21:46AM
Figure F-5	Groundwater Elevations for Tidal Study at Time 2 04/29/02 00:16AM
Figure F-6	Groundwater Elevations for Tidal Study at Time 3 04/29/02 03:56AM
Figure F-7	Groundwater Elevations for Tidal Study at Time 4 04/29/02 09:16AM
Figure F-8	River and MW-2 Data
Figure F-9	River and MW-3 Data
Figure F-10	River and MW-9 Data
Figure F-11	Stage Ratio versus Distance

REFERENCES:

Anderson, M.P., and W.W. Woessner, 1992. Applied Groundwater Modeling: Simulation of Flow and Advective Transport. San Diego: Academic Press.

Ferris, J.G., 1963. Cyclic Water Level Fluctuations as a Basis for Determining Aquifer Transmissivity, in Methods of Determining Permeability, Transmissivity and Drawdown. Geological Survey Water Supply Paper 1536 – I.

Istok, J.D., 1989. Groundwater Modeling by the Finite Element Method. American Geophysical Union, Washington, D.C.

Kruseman, G.P., N.A. de Ridder, J.M. Verweij, 1994. Analysis and Evaluation of Pumping Test Data, Second Edition. The Netherlands: International Institute for Land Reclamation and Improvement.

Table F-1
Determination of Tidal Cycle at Monitoring Well MW-2s Using the Simple Harmonic Motion Curve Analysis

DATE	TIME	Time Between Peak & Trough		Wave Period (P)		Peak or Trough Value	Tidal Fluctuation	Wave Amplitude (A) (Fluctuation/2)
		(MINUTES)	(HOURS)	(MINUTES)	(HOURS)	(FEET-MSL)	(FEET)	(FEET)
4/26/02	15:14:31					11.87		
		300	5.0				0.07	0.04
4/26/02	20:14:31			680	11.3	11.94		
		380	6.3				0.09	0.04
4/27/02	2:34:31			675	11.3	11.86		
		295	4.9				0.14	0.07
4/27/02	7:29:31			815	13.6	11.99		
		520	8.7				0.41	0.20
4/27/02	16:09:31			805	13.4	11.59		
		285	4.8				0.30	0.15
4/27/02	20:54:31			690	11.5	11.89		
		405	6.8				0.25	0.13
4/28/02	3:39:31			680	11.3	11.64		
		275	4.6				0.34	0.17
4/28/02	8:14:31			845	14.1	11.98		
		570	9.5				0.62	0.31
4/28/02	17:44:31			765	12.8	11.36		
		195	3.3				0.10	0.05
4/28/02	20:59:31			635	10.6	11.46		
		440	7.3				0.40	0.20
4/29/02	4:19:31			710	11.8	11.06		
		270	4.5				0.39	0.19
4/29/02	8:49:31			835	13.9	11.45		
		565	9.4				0.56	0.28
4/29/02	18:14:31			810	13.5	10.89		
		245	4.1				0.17	0.08
4/29/02	22:19:31			625	10.4	11.06		
		380	6.3				0.24	0.12
4/30/02	4:39:31			710	11.8	10.82		
		330	5.5				0.50	0.25
4/30/02	10:09:31			855	14.3	11.32		
		525	8.8				0.40	0.20
4/30/02	18:54:31			785	13.1	10.92		
		260	4.3				0.21	0.11
4/30/02	23:14:31			640	10.7	11.14		
		380	6.3				0.23	0.11
5/1/02	5:34:31			690	11.5	10.91		
		310	5.2				0.33	0.16
5/1/02	10:44:31					11.24		
Average:		**365**	**6.1**	**736**	**12.3**	**11.42**	**0.30**	**0.15**

Tidal Harmonic Calculations:

P = 2π/B

Therefore, B = 2π/P = 2π/736 minutes = 0.009/minute

Water Level = Asin(B*time)*mean water level = 0.15(sin(0.009*time)) + 11.42

Table F-2
Determination of Tidal Cycle at Monitoring Well MW-3s Using the Simple Harmonic Motion Curve Analysis

		Time Between Peak & Trough		Wave Period (P)		Peak or Trough Value	Tidal Fluctuation	Wave Amplitude (A) (Fluctuation/2)
DATE	TIME	(MINUTES)	(HOURS)	(MINUTES)	(HOURS)	(FEET-MSL)	(FEET)	(FEET)
4/26/02	14:26:22					9.72		
		315	5.3				0.17	0.08
4/26/02	19:41:22			700	11.7	9.88		
		385	6.4				0.32	0.16
4/27/02	2:06:22			650	10.8	9.57		
		265	4.4				0.32	0.16
4/27/02	6:31:22			790	13.2	9.88		
		525	8.8				0.40	0.20
4/27/02	15:16:22			805	13.4	9.48		
		280	4.7				0.30	0.15
4/27/02	19:56:22			685	11.4	9.78		
		405	6.8				0.25	0.13
4/28/02	2:41:22			690	11.5	9.53		
		285	4.8				0.34	0.17
4/28/02	7:26:22			835	13.9	9.87		
		550	9.2				0.62	0.31
4/28/02	16:36:22			755	12.6	9.25		
		205	3.4				0.10	0.05
4/28/02	20:01:22			650	10.8	9.35		
		445	7.4				0.50	0.25
4/29/02	3:26:22			710	11.8	9.85		
		265	4.4				0.52	0.26
4/29/02	7:51:22			835	13.9	9.33		
		570	9.5				0.42	0.21
4/29/02	17:21:22			805	13.4	9.75		
		235	3.9				0.83	0.42
4/29/02	21:16:22			615	10.3	8.92		
		380	6.3				0.24	0.12
4/30/02	3:36:22			710	11.8	8.68		
		330	5.5				0.50	0.25
4/30/02	9:06:22			865	14.4	9.18		
		535	8.9				0.39	0.19
4/30/02	18:01:22			790	13.2	8.79		
		255	4.3				0.21	0.10
4/30/02	22:16:22			630	10.5	9.00		
		375	6.3				0.22	0.11
5/1/02	4:31:22			695	11.6	8.78		
		320	5.3				0.32	0.16
5/1/02	9:51:22					9.10		
Average:		**364**	**6.1**	**734**	**12.2**	**9.38**	**0.37**	**0.18**

Tidal Harmonic Calculations:

P = 2π/B

Therefore, B = 2π/P = 2π/ 734 minutes = 0.009/minute

Water Level = Asin(B*time)*mean water level = 0.18(sin(0.009*time)) + 9.38

Table F-3
Determination of Tidal Cycle at Monitoring Well MW-9s
Using the Simple Harmonic Motion Curve Analysis

DATE	TIME	Time Between Peak & Trough (MINUTES)	Time Between Peak & Trough (HOURS)	Wave Period (P) (MINUTES)	Wave Period (P) (HOURS)	Peak or Trough Value (FEET-msl)	Tidal Fluctuation (FEET)	Wave Amplitude (A) (Fluctuation/2) (FEET)
4/26/02	12:54:16					13.73		
		385	6.4				0.06	0.03
4/26/02	19:19:16			750	12.5	13.79		
		365	6.1				0.18	0.09
4/27/02	1:24:16			705	11.8	13.61		
		340	5.7				0.08	0.04
4/27/02	7:04:16			915	15.3	13.70		
		575	9.6				0.17	0.09
4/27/02	16:39:16			805	13.4	13.52		
		230	3.8				0.07	0.04
4/27/02	20:29:16			670	11.2	13.60		
		440	7.3				0.11	0.05
4/28/02	3:49:16			720	12.0	13.49		
		280	4.7				0.10	0.05
4/28/02	8:29:16			860	14.3	13.59		
		580	9.7				0.22	0.11
4/28/02	18:09:16			700	11.7	13.36		
		120	2.0				0.02	0.01
4/28/02	20:09:16			620	10.3	13.38		
		500	8.3				0.17	0.09
4/29/02	4:29:16			770	12.8	13.21		
		270	4.5				0.11	0.05
4/29/02	8:59:16			840	14.0	13.32		
		570	9.5				0.21	0.11
4/29/02	18:29:16			760	12.7	13.10		
		190	3.2				0.03	0.01
4/29/02	21:39:16			620	10.3	13.13		
		430	7.2				0.12	0.06
4/30/02	4:49:16			745	12.4	13.01		
		315	5.3				0.14	0.07
4/30/02	10:04:16			910	15.2	13.15		
		595	9.9				0.18	0.09
4/30/02	19:59:16			785	13.1	12.97		
		190	3.2				0.05	0.03
4/30/02	23:09:16			570	9.5	13.02		
		380	6.3				0.11	0.05
5/1/02	5:29:16			690	11.5	12.91		
		310	5.2				0.10	0.05
5/1/02	10:39:16					13.01		
Average:		**372**	**6.2**	**746**	**12.4**	**13.33**	**0.12**	**0.06**

Tidal Harmonic Calculations:
P = 2π/B
Therefore, B = 2π/P = 2π/746 minutes = 0.008/minute
Water Level = Asin(B*time)*mean water level = 0.52(sin(0.008*time) + 13.33

Table F-4
Groundwater Elevations and Gradients for Wells at Selected Times

Date	Time	MW-9s	MW-2s	MW-3s	Approximate Direction
4/28/02	21:46:22	11.39	11.44	11.54	W
4/29/02	0:16:22	11.34	11.31	11.38	NW
4/29/02	3:56:22	11.24	11.07	11.22	N
4/29/02	9:16:22	11.33	11.44	11.53	SW

Table F-5
Transmissivity Calculations

Rising Limb

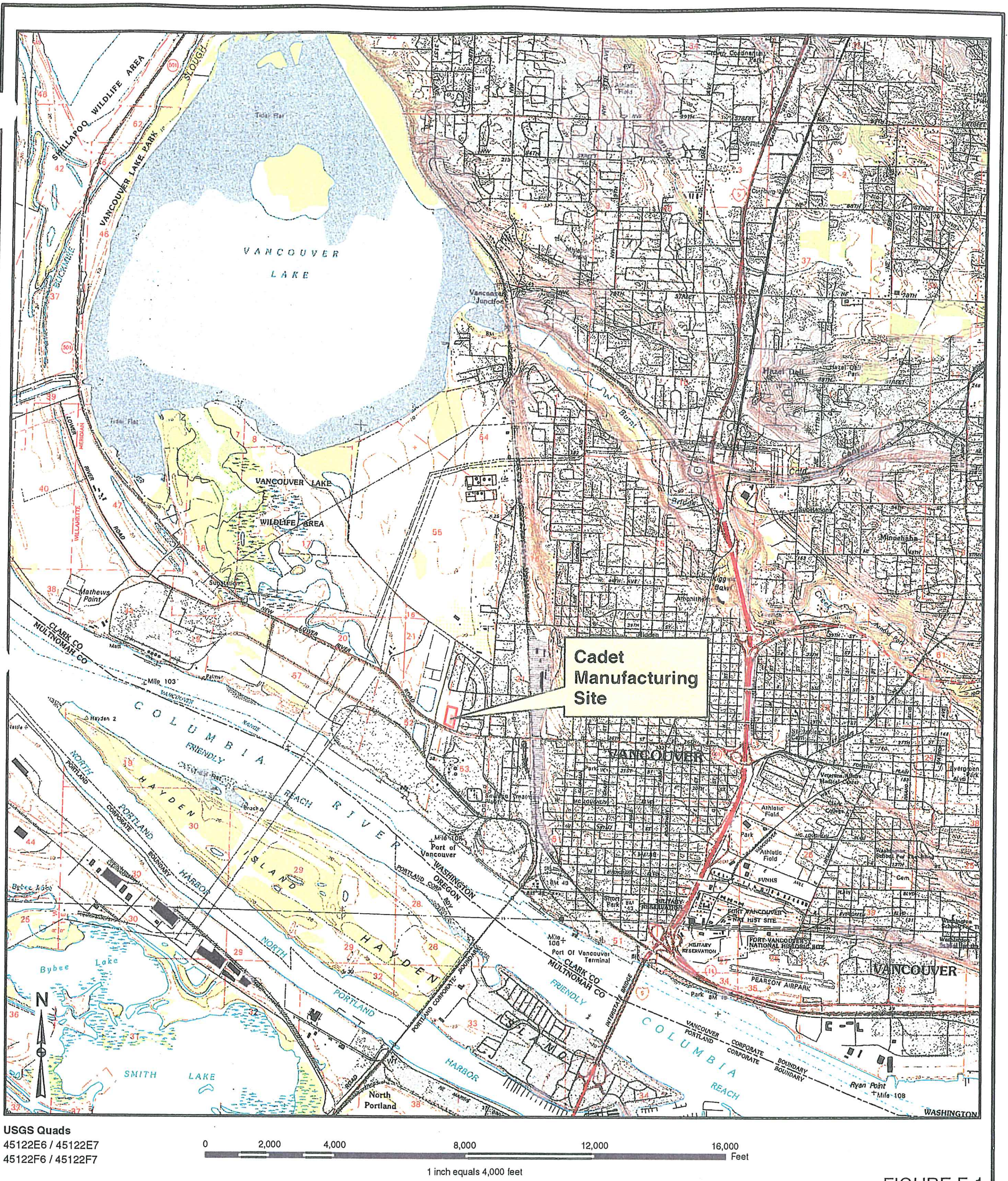
Low River	Peak River	Increase	MW-2s Low	MW-2s Peak	Increase	MW-3s Low	MW-3s Peak	Increase	MW-9s Low	MW-9s Peak	Increase
8.63	9.54	0.91	11.87	11.94	0.07	11.97	12.13	0.16	11.75	11.81	0.06
8.27	9.63	1.36	11.86	11.99	0.13	11.82	12.13	0.31	11.63	11.71	0.08
8.28	9.51	1.23	11.59	11.89	0.3	11.73	12.03	0.3	11.54	11.62	0.08
8.62	9.83	1.21	11.64	11.98	0.34	11.78	12.12	0.34	11.51	11.61	0.1
7.68	8.44	0.76	11.35	11.46	0.11	11.5	11.6	0.1	11.38	11.4	0.02
7.17	8.88	1.71	11.06	11.44	0.38	11.2	11.58	0.38	11.23	11.34	0.11
7.03	8.07	1.04	10.89	11.06	0.17	11	11.17	0.17	11.12	11.15	0.03
7.26	9.13	1.87	10.81	11.32	0.51	10.93	11.43	0.5	11.03	11.17	0.14
7.66	8.55	0.89	10.92	11.14	0.22	11.04	11.25	0.21	10.99	11.04	0.05
7.76	8.9	1.14	10.91	11.24	0.33	11.03	11.35	0.32	10.93	11.03	0.1
Average		**1.212**			**0.256**			**0.279**			**0.077**
Ratio to River					**0.21**			**0.23**			**0.06**

Falling Limb

Peak River	Low River	Decrease	MW-2s Peak	MW-2s Low	Decrease	MW-3s Peak	MW-3s Low	Decrease	MW-9s Peak	MW-9s Low	Decrease
9.54	8.27	1.27	11.94	11.86	0.08	12.13	11.82	0.31	11.81	11.63	0.18
9.63	8.28	1.35	11.99	11.59	0.4	12.13	11.73	0.4	11.71	11.54	0.17
9.51	8.62	0.89	11.89	11.64	0.25	12.03	11.78	0.25	11.62	11.51	0.11
9.83	7.68	2.15	11.98	11.35	0.63	12.12	11.5	0.62	11.61	11.38	0.23
8.44	7.17	1.27	11.46	11.06	0.4	11.6	11.2	0.4	11.4	11.23	0.17
8.88	7.03	1.85	11.44	10.89	0.55	11.58	11	0.58	11.34	11.12	0.22
8.07	7.26	0.81	11.06	10.81	0.25	11.17	10.93	0.24	11.15	11.03	0.12
9.13	7.66	1.47	11.32	10.92	0.4	11.43	11.04	0.39	11.17	10.99	0.18
8.55	7.76	0.79	11.14	10.91	0.23	11.25	11.03	0.22	11.04	10.93	0.11
Average		**1.317**			**0.354**			**0.379**			**0.166**
Ratio to River					**0.27**			**0.29**			**0.13**

average ratio	**0.24**	**0.26**	**0.09**

	Distance from River (feet)	Average Ratio
MW-2s	2,863	0.24
MW-3s	2,884	0.26
MW-9s	2,516	0.09



USGS Quads
45122E6 / 45122E7
45122F6 / 45122F7

FIGURE F-1

amec

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Portland, OR, U.S.A. 97224

W.O. 2-61M-10135-R T1
DESIGN BEL
DRAWN BRJ
DATE DECEMBER 2002

CADET MANUFACTURING CO.
2500 W FOURTH PLAIN BLVD.
VANCOUVER, WASHINGTON

SITE LOCATION

K:\10000\10100\10135\DWG\arcview\RI Report\Figure F-1 Site Location.mxd

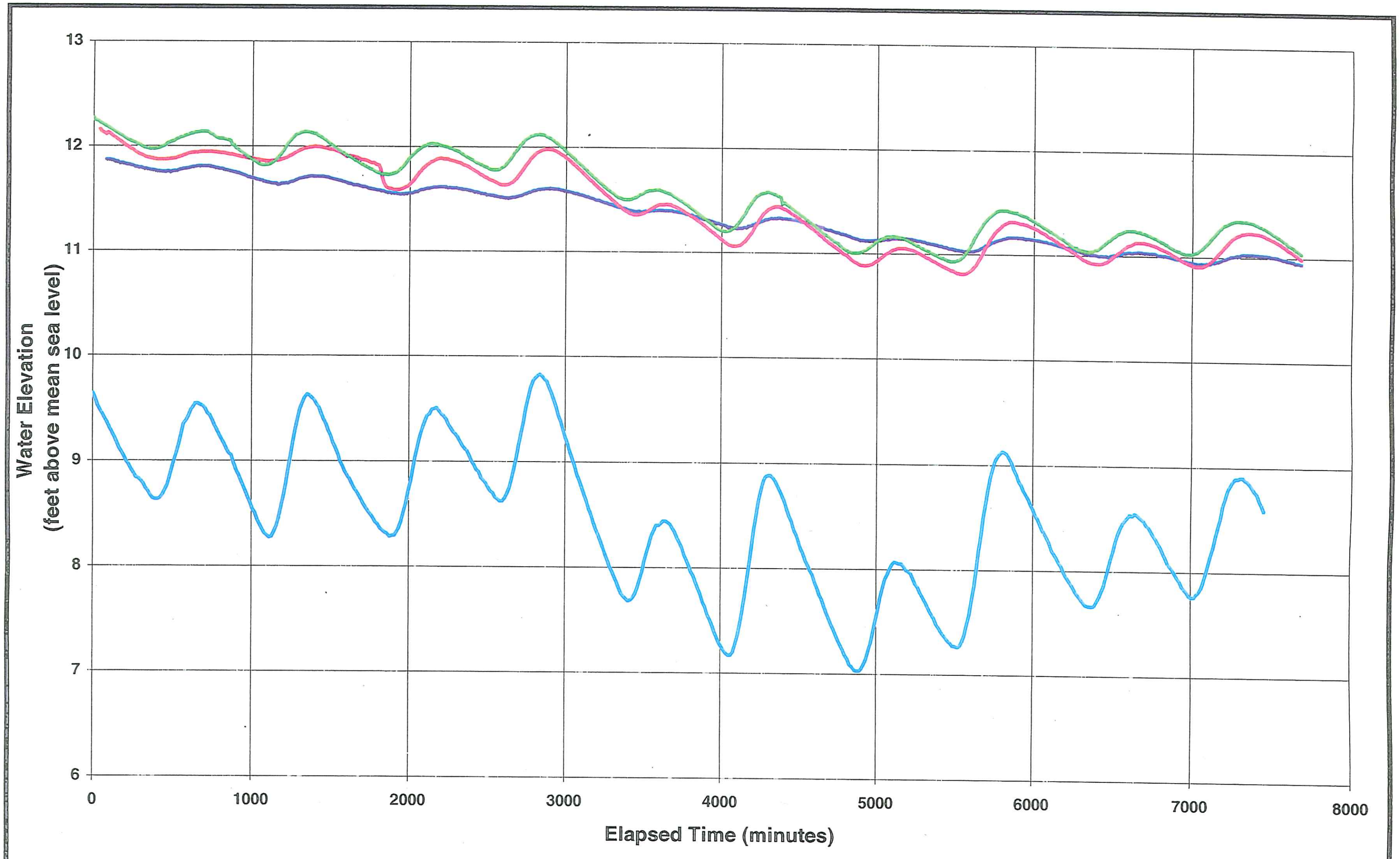

FIGURE F-2

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7376 SW Durham Road
Portland, Oregon USA 97224

Job: 2-61M-10135-R
Design: DF
Drawn: DF
Date: 12/14/02

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TEST WELL VERSUS RIVER ELEVATIONS

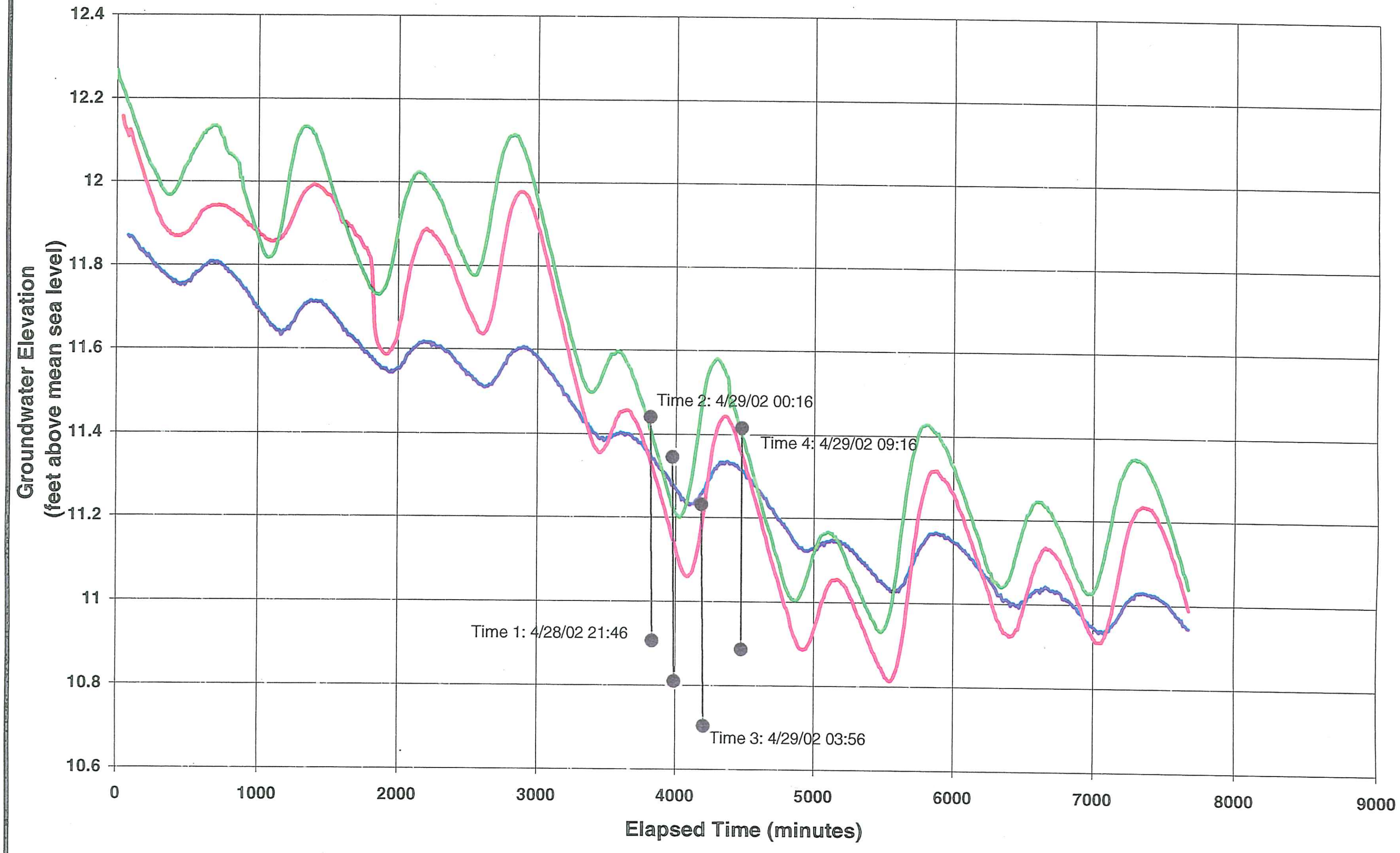

FIGURE F-3

amec
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Design: DF
Drawn: DF
Date: 12/14/02

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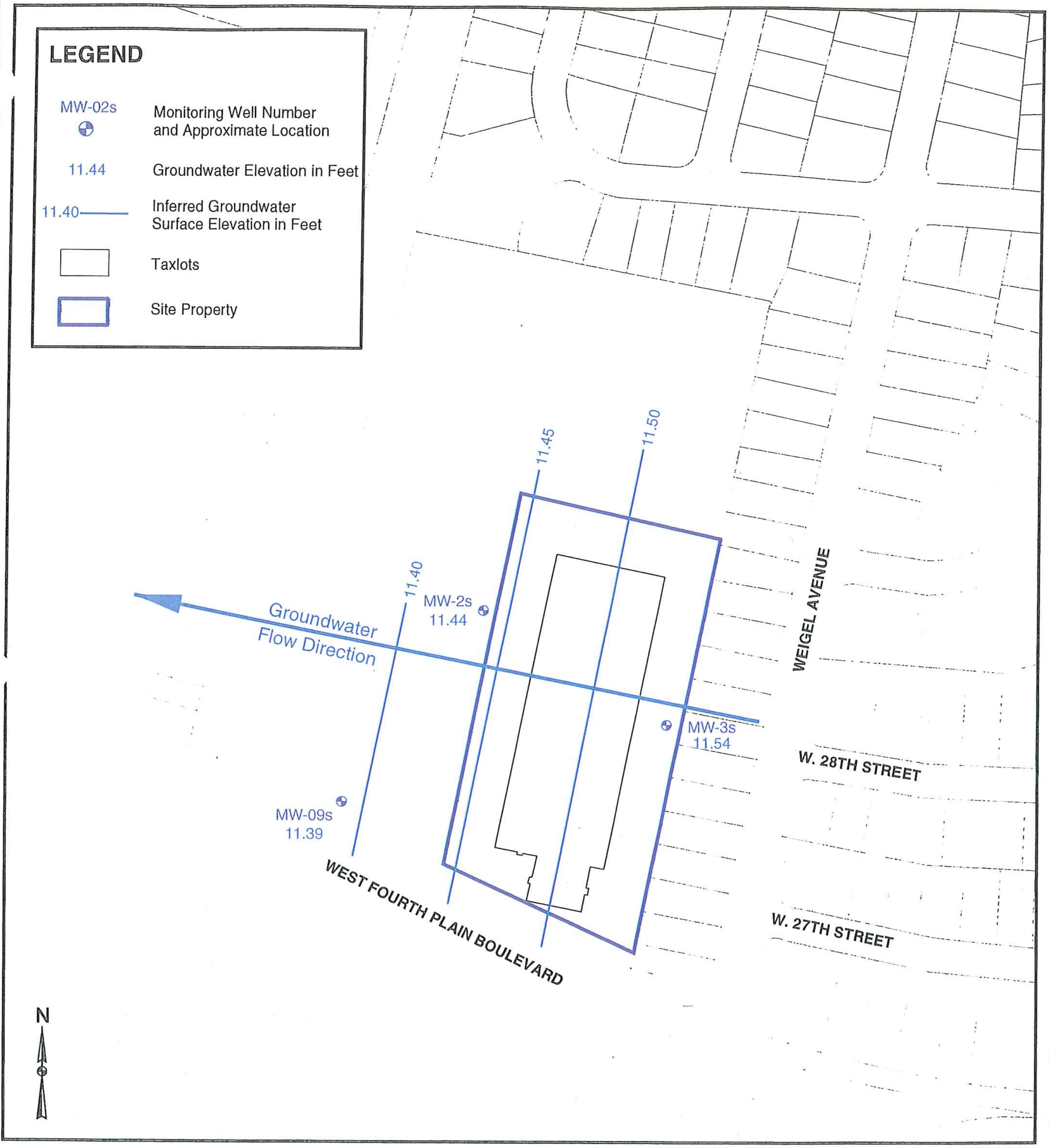
COMPARISON OF TIDAL FLUCTUATIONS



0 100 200 400 Feet

1 inch equals 200 feet

FIGURE F-4

amec

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Portland, OR, U.S.A. 97224

W.O.	2-61M-10135-R T1
DESIGN	BEL
DRAWN	BRJ
DATE	NOVEMBER 2002

CADET MANUFACTURING CO.
2500 W FOURTH PLAIN BLVD.
VANCOUVER, WASHINGTON

GROUNDWATER ELEVATIONS FOR TIDAL STUDY AT TIME 1 04/28/02 21:46AM

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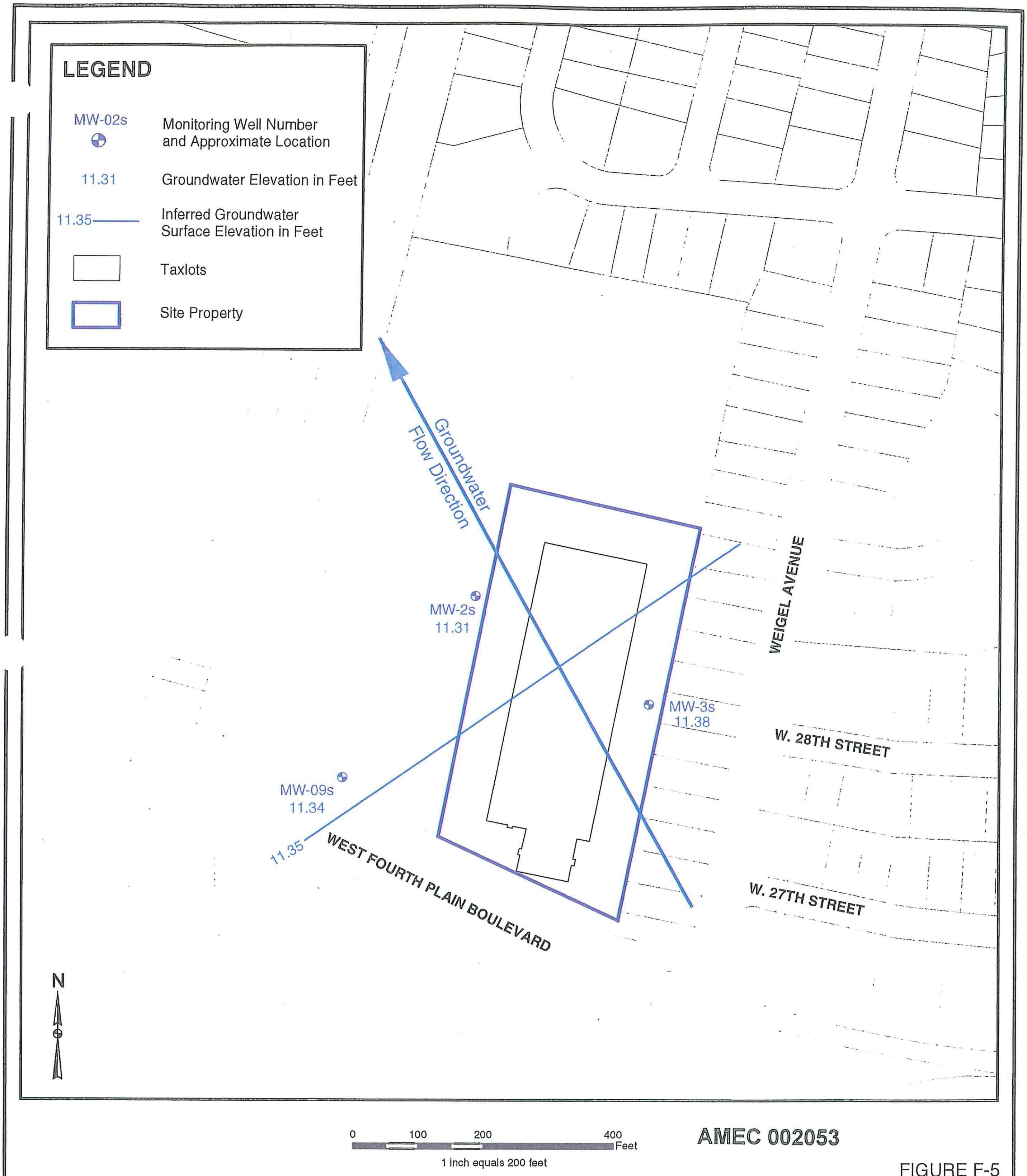

FIGURE F-5

amec

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W.O. 2-61M-10135-R T1
DESIGN BEL
DRAWN BRJ
DATE NOVEMBER 2002

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GROUNDWATER ELEVATIONS FOR TIDAL
STUDY AT TIME 2 04/29/02 00:16AM

K:\10000\10100\10135\DWG\arcview\RI Report\Figure F-5.mxd

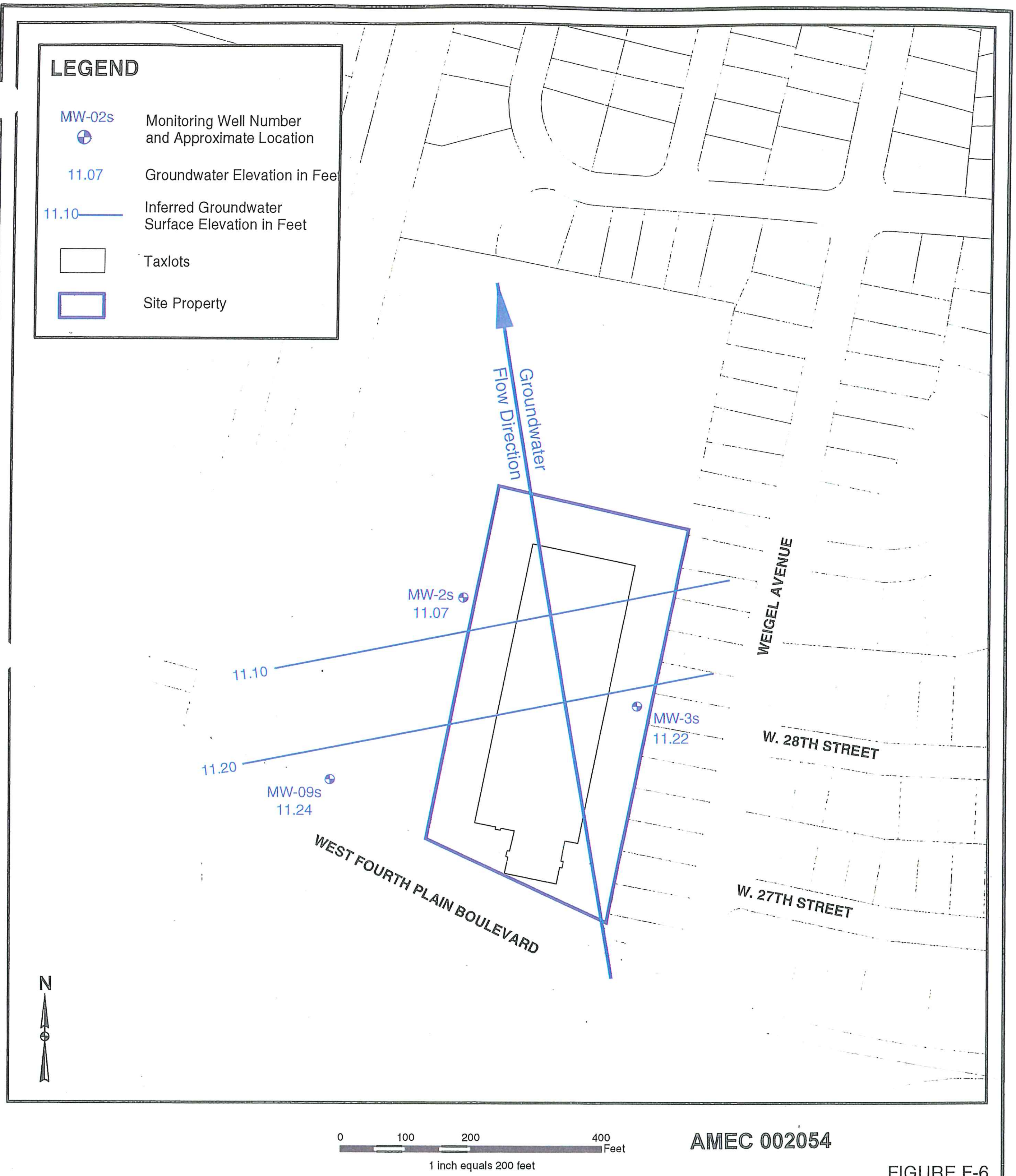

FIGURE F-6

amec

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W.O. 2-61M-10135-R T1
DESIGN BEL
DRAWN BRJ
DATE NOVEMBER 2002

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GROUNDWATER ELEVATIONS FOR TIDAL STUDY AT TIME 3 04/29/02 03:56AM

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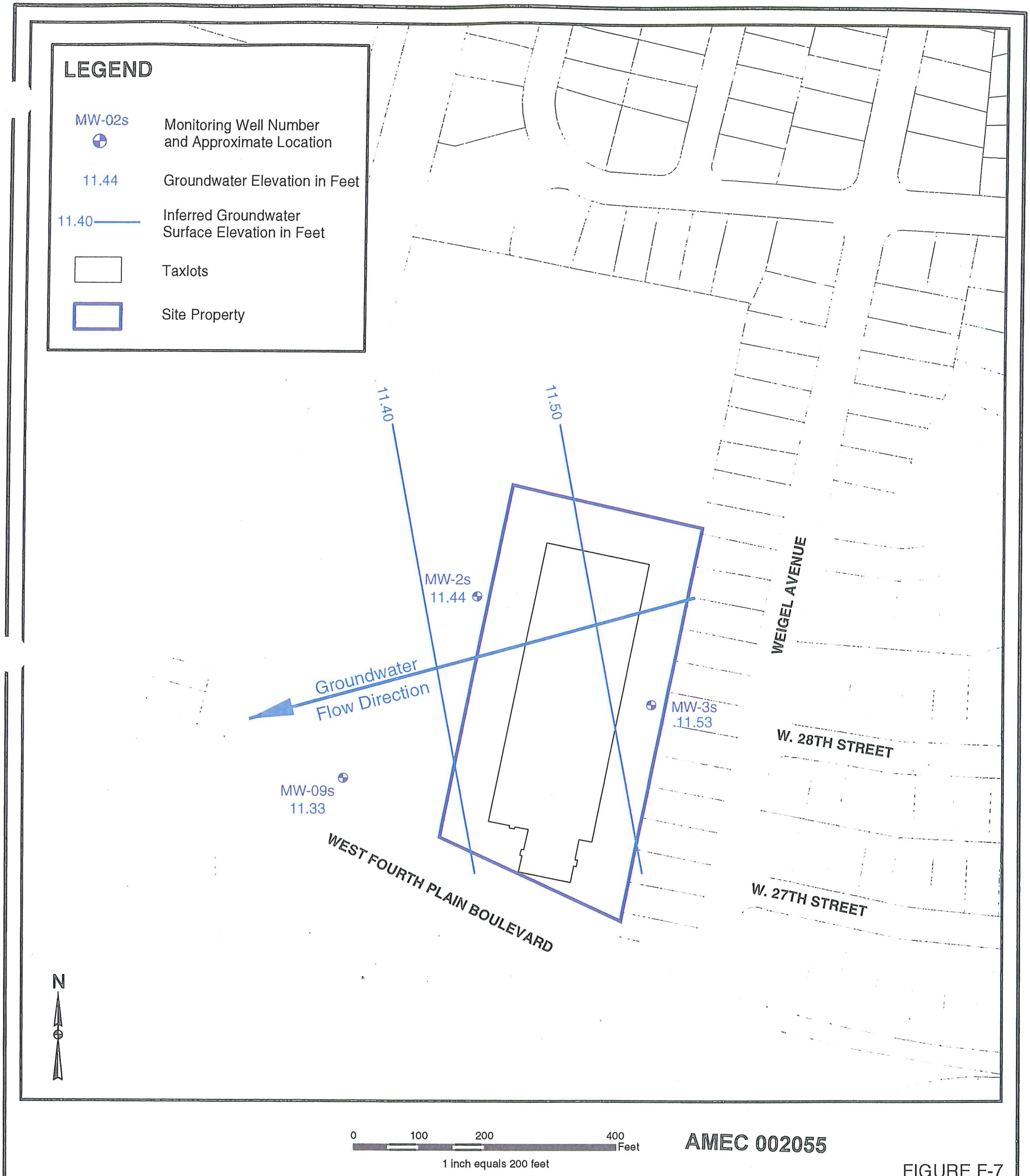

FIGURE F-7

amec

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Portland, OR, U.S.A. 97224

W.O.	2-61M-10135-R T1
DESIGN	BEL
DRAWN	BRJ
DATE	NOVEMBER 2002

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GROUNDWATER ELEVATIONS FOR TIDAL STUDY AT TIME 4 04/29/02 09:16AM

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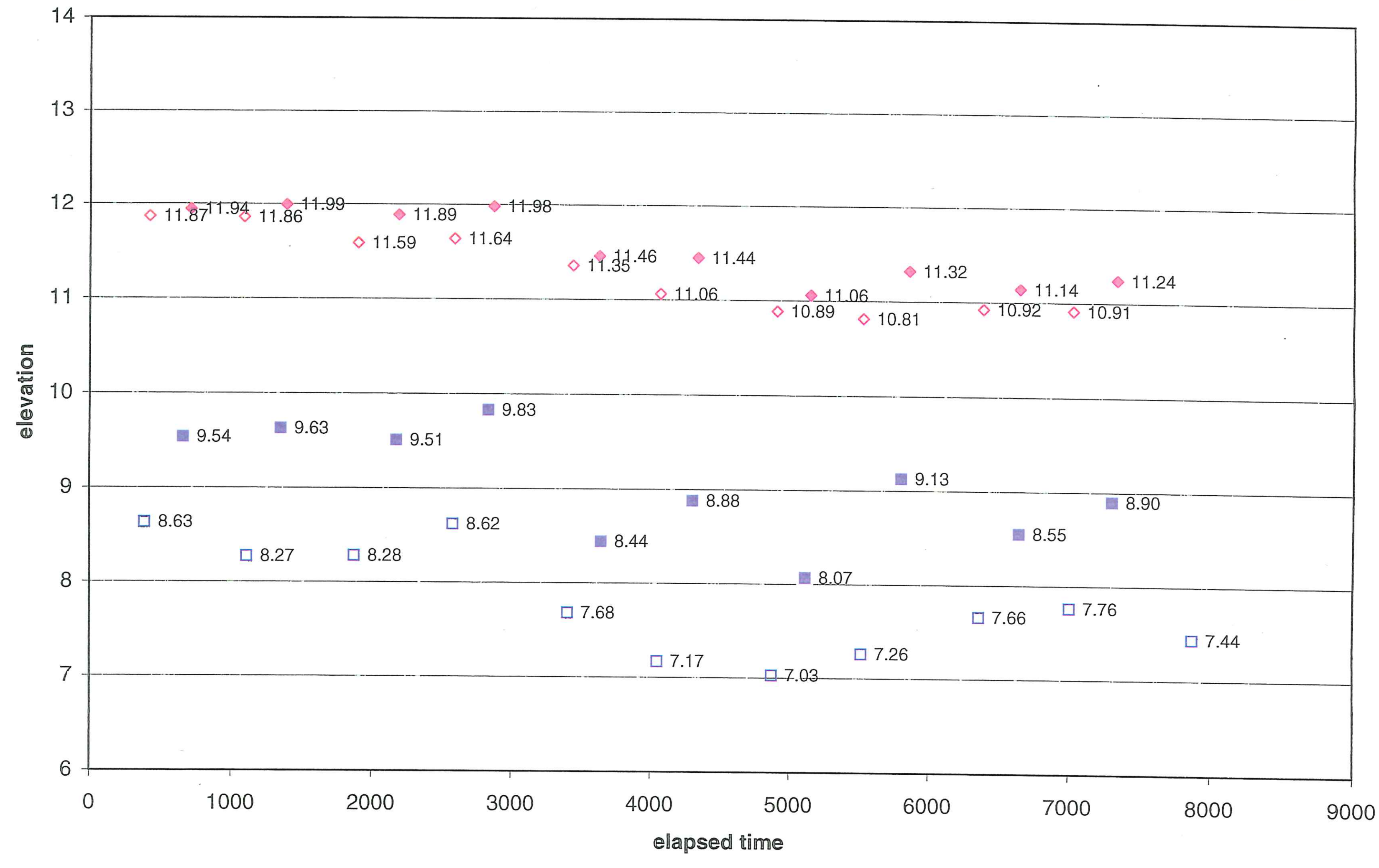

FIGURE F-8

amec

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Portland, Oregon USA 97224

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Design: DF
Drawn: DF
Date: 12/14/02

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RIVER AND MW-2 DATA

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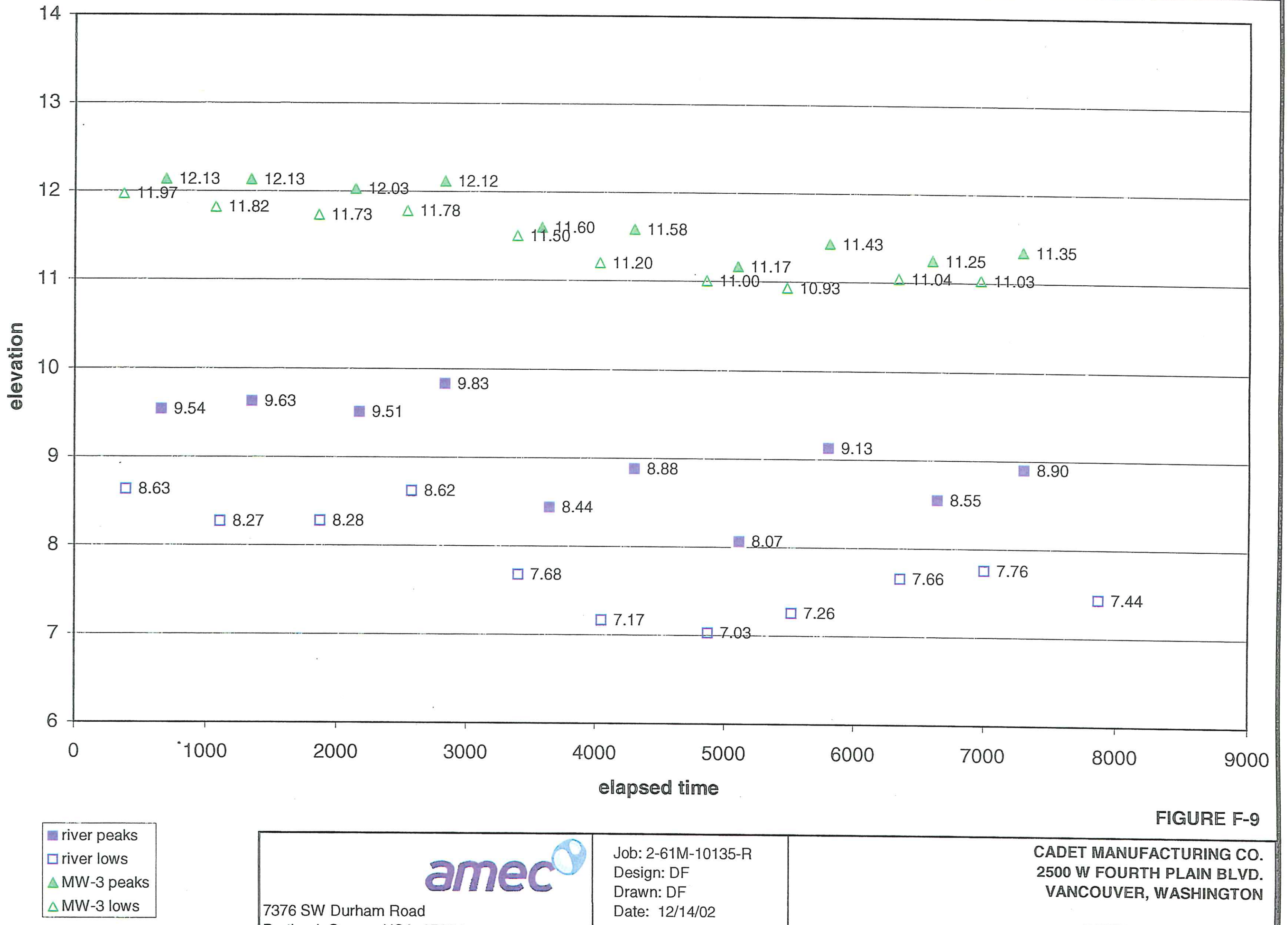

FIGURE F-9

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Job: 2-61M-10135-R
Design: DF
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Date: 12/14/02

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RIVER AND MW-3 DATA

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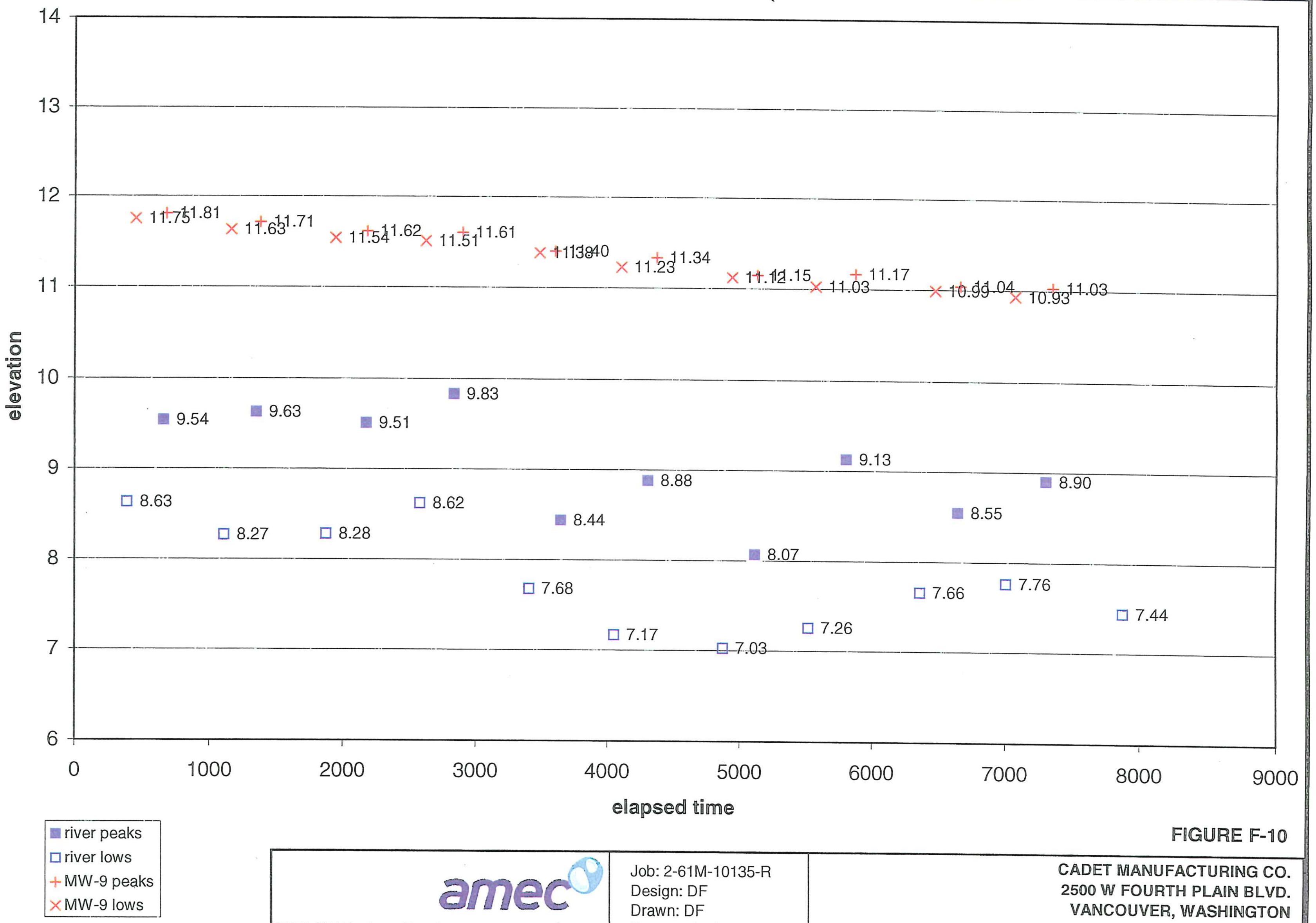

FIGURE F-10

amec
7376 SW Durham Road
Portland, Oregon USA 97224

Job: 2-61M-10135-R
Design: DF
Drawn: DF
Date: 12/14/02

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RIVER AND MW-9 DATA

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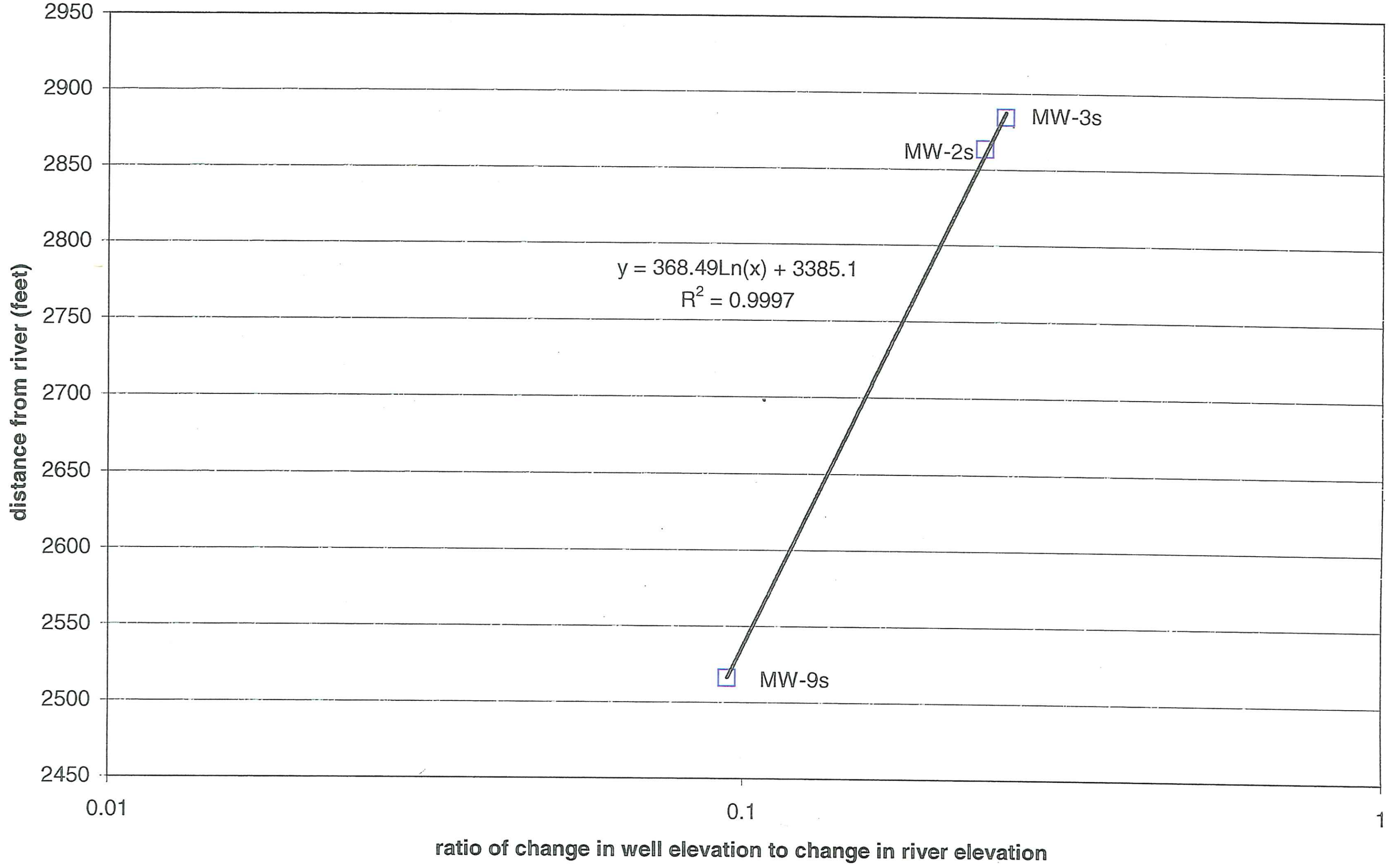

FIGURE F-11

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7376 SW Durham Road
Portland, Oregon USA 97224

Job: 2-61M-10135-R
Design: DF
Drawn: DF
Date: 12/14/02

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STAGE RATIO VERSUS DISTANCE

APPENDIX L

Groundwater Geochemistry Investigation

APPENDIX G: SUMMARY OF GROUNDWATER CHARACTERIZATION DATA

Groundwater characterization data were collected as part of the Remedial Investigation (RI) groundwater monitoring program for three purposes: 1) to obtain general groundwater data that may be useful in remedy design; 2) to evaluate whether conditions conducive to natural attenuation of constituents of potential concern (COPCs) are present; and 3) to evaluate whether remedial activities underway at the nearby Swan site have influenced groundwater chemistry in the Project Area.

1.0 Field Water Quality Parameters

Groundwater samples collected at Site monitoring wells are routinely analyzed for the following standard water quality parameters during low-flow water sampling: oxidation-reduction (redox) potential (ORP), dissolved oxygen (DO), pH, temperature, and specific conductivity. The historical data set is summarized in Table G-1.

The pH values in groundwater samples collected in August through October 2002 ranged between 5.77 and 8.58 standard units, and the groundwater temperature varied between 12.36 and 19.16 °C. Generally, higher pH and lower temperature results were recorded in groundwater from deeper monitoring points. Temperature in shallow groundwater appears to be affected more by seasonal variations. Conductivity ranged between 0.038 and 0.975 milliSiemens (mS). In October 2002, turbidity measurements ranged from 1.38 to 12.1 nephelometric turbidity units (NTUs). Turbidity readings and observations generally indicate that Site groundwater has very low turbidity.

Groundwater ORP varied across the Project Area. The lowest groundwater ORP values were observed at monitoring wells MW-1d-121 and MW-2d (–304 and –229 millivolts [mV], respectively) which are located at the Cadet facility. The highest ORP values were recorded at MW-19i (upgradient of Cadet facility) and MW-5i (downgradient of Cadet facility) at 168 and 157 mV, respectively, in the intermediate depth groundwater. Generally, positive ORP values were observed in shallow and intermediate downgradient and crossgradient/background monitoring wells. In general, low and negative ORP readings (<50 mV) indicate an environment where oxygen is either deficient (anoxic) or nearly absent (anaerobic). Relatively higher ORP values (>50 mV) would generally correlate with systems containing oxygen (aerobic) (Wiedemeier, et al., 1999).

Localized redox conditions may be the result of differing rates of infiltration. Paved surface areas are located near the Cadet building where negative ORP values (more reducing conditions) occur in shallow wells (August data). Likewise, more oxidizing conditions are noted in groundwater at crossgradient/background wells located in a neighborhood with more lawns, downspouts, etc. where increased water infiltration may be possible.

Measurements of DO in the groundwater varied between 0.17 milligrams per liter (mg/L) (MW-01d-121) and 8.54 mg/L (MW-19d). Groundwater DO concentrations appeared to be higher at shallow monitoring points and lower in intermediate and deeper monitoring points. As a general pattern, relatively higher DO concentrations have been measured in upgradient/crossgradient background wells. Overall, DO measurements appear to be affected by seasonal groundwater changes but not as significantly as ORP levels. It is important to note that due to the equilibration time and high sensitivity of the ORP and DO probe instruments, the DO and ORP data are often not considered absolutely reliable in assessing the redox state of groundwater.

The geochemical data indicate that ORP values in shallow, intermediate and deep groundwater across the Site are affected by seasonal fluctuations (Figure G-1). Periods of infiltration (high water) or drought (low water) appear to play a significant role in redox conditions. The 2001 and 2002 water quality data indicate that decreases in ORP and DO at shallow monitoring points correspond to increasing shallow groundwater elevations (noted as "SWL" on Figures G-2, G-3, and G-4). In addition, groundwater ORP swings negative most frequently at shallow, intermediate, and deep monitoring points during the summer. Groundwater ORP at intermediate monitoring points also commonly swing negative during late spring, and groundwater at shallow and deep monitoring points shows a higher frequency for negative ORP swings in the fall.

2.0 Specific Geochemical Parameters

Data collection in 2002 for groundwater characterization focused on shallow, intermediate, and deep monitoring wells in the Project Area. Most shallow depth monitoring wells contained insufficient water for groundwater sampling in October 2002. Data were collected from several intermediate depth monitoring points (MW-1d-121, MW-05i, MW-04i, MW-19i, MW-20i) and one shallow monitoring point (MW-1d-40) in October 2002. Further groundwater characterization sampling occurred during a November 2002 quarterly sampling event at several shallow (MW-1d-40, MW-2s, MW-4s, MW-5s, MW-20s, MW-3d-59.5, and MW-21s) and deep (MW-1d-224, MW-3d-226.5, MW-5d, MW-7d, and MW-18d) monitoring wells. However, the November 2002 data were collected too late for inclusion in this RI report, and will be reported and discussed in a future deliverable. The well locations are shown on Figure G-5.

The data for 2002 have been collected at locations generally approximating upgradient to downgradient transects by depth interval as follows:

- MW-2s, MW-19i, and MW-18d (representing potentially upgradient and/or natural groundwater at shallow, intermediate and deep monitoring intervals);
- MW-1d-40, MW-3d-59.5, MW-1d-121, MW-1d-224, and MW-3d-226.5 (representing groundwater at the Cadet facility at shallow, intermediate, and deep monitoring intervals);
- MW-5s, MW-20s, MW-5i, MW-20i, and MW-5d (representing groundwater downgradient of the Cadet facility at shallow, intermediate, and deep monitoring intervals);
- MW-04s, MW-04i (representing groundwater further downgradient of the Cadet facility at shallow and intermediate monitoring intervals); and
- MW-7d (representing deeper groundwater near the eastern leading edge of the area of COPCs emanating from Cadet).

The October 2002 samples were tested for pH, temperature, conductivity, ORP, DO, turbidity, nitrate as nitrogen, total metals (Fe, Mn, As, V, Se, Cr, Pb), dissolved metals (Fe, Mn, As, V, Se, Cr, Pb), sulfate, sulfide, dissolved methane, total alkalinity, chloride, total organic carbon (TOC), dissolved organic carbon (DOC), chemical oxygen demand (COD), ammonia nitrogen, and phosphorous as orthophosphate. A summary of the geochemical data set to date is presented in Table G-2.

Various groundwater characterization data including organics (such as VOCs, methane/ethene/ethane) and inorganics (such as nitrate, ferrous iron, sulfate) were collected at shallow monitoring wells during sampling events in October and November 1999 and July 2000.

Concentrations of nitrate from the 1999 and 2000 data show ranges from 0.24 to 18 mg/L, and nitrate concentrations in October 2002 ranged from below reporting limits to 2.68 mg/L. The higher values (7 to 18 mg/L) are located closer to the Cadet facility. Little historic variation between values at shallow and intermediate/deep monitoring wells has been noted; however, many shallow wells were too dry to sample during the October 2002 sampling event. The concentrations of nitrate may be either naturally occurring or from fertilizer applications.

Sulfate ranged from 1.5 to 49 mg/L in samples from 1999 and 2000, and in October 2002 ranged from below reporting limits to 261 mg/L. In the data collected overall, sulfate concentrations are generally lower in the summer. The highest values are found near the Cadet facility (MW-1d-40 and MW-1d-121), and concentrations of sulfate decrease eastward of the Cadet facility. Sulfide, the reduced product of sulfate, was not detected in the six samples analyzed from the October 2002 sampling event. Sulfide had not been analyzed previously.

Historically, total iron concentrations ranged from below reporting limit to 6.22 mg/L. Iron concentrations at locations sampled in October 2002 ranged from below reporting limit to 5.32 mg/L. Concentrations of ferrous iron were below reporting limit except at two locations, MW-5i and MW-1d-121 at 2.4 and 3.7 mg/L, respectively). Manganese concentrations in groundwater at five monitoring wells ranged from 0.0528 to 3.05 mg/L in October 2002. The highest manganese concentration was also detected at MW-1d-121.

Methane concentrations (from 1999 and 2000) have ranged from below reporting limit to 10.4 micrograms per liter (µg/L) and in October 2002 ranged from below reporting limits to 4.8 µg/L. The highest methane concentration in October 2002 was from the monitoring well closest to the Port of Vancouver (POV) treatment area (MW-20i). Carbon measurements included TOC and DOC, and concentrations were low overall (2 to 3 mg/L range).

Chloride concentrations historically have ranged from below reporting limits to 16.7 mg/L (MW-1s in July 2000), and recently during the October 2002 sampling event ranged from below reporting limits to 7.77 mg/L. Recent data show higher values in shallow wells near the Cadet building (7.77 and 16 mg/L), and slightly lower concentrations (4 to 5 mg/L) at locations south and east of the Cadet building. The chloride concentration of 16.7 mg/L observed in MW-1s in July 2000 represents an enrichment over background levels, which typically range from 1 to 5 mg/L.

3.0 Assessment for Natural Attenuation

Biotransformations can take place under two basic conditions: aerobic/anoxic (in the presence of oxygen or other readily used electron acceptors such as nitrate or sulfate), and anaerobic (in the absence of readily used electron acceptors) (Wiedemeier, et al., 1999). Electron-rich organic compounds in groundwater, such as diesel fuel, gasoline, and cis-1,2-DCE generally are most susceptible to biodegradation under aerobic conditions. Anaerobic conditions are often conducive to the biodegradation of more highly chlorinated compounds, such as trichloroethene (TCE), through reductive dechlorination mechanisms.

The Project Area monitoring and geochemical data are presented in Tables G-1 and G-2. The data can be approached in two different ways: 1) questioning whether there is evidence for biological processes that would support natural attenuation (biodegradation) of COPCs, and 2) questioning whether there is evidence that natural attenuation of COPCs is actually occurring.

The first requirement for biological reductive dechlorination of the COPCs is an anaerobic environment. The water quality and geochemical parameters previously discussed (section 2.0 of this appendix) indicate a variable redox environment with time and with location in the Project Area. The groundwater beneath and just downgradient of the Cadet facility has had the lowest ORP results, and highest ferrous iron, manganese, and chloride concentrations observed in the Project Area. These factors would indicate that anaerobic reductive dechlorination conditions are a possibility. Sulfate and nitrate concentrations have also been elevated, however, and sulfide has not been detected, arguing for anoxic but not anaerobic conditions.

Alkalinity can be a useful indicator of biological activity, sometimes reflecting production of carbon dioxide via bacterial respiration. Alkalinity has ranged from 12 to 138 mg/L, and in October 2002 ranged from 56 to 105 mg/L. The highest levels are observed in shallow (MW-05s and MW-04s) and intermediate wells (MW-20i and MW-04i) located downgradient of the Cadet building. The concentrations appear to be fairly consistent with time at a given monitoring well, and no significant shifts, seasonal changes, or trends across the Project Area were observed.

Reductive dechlorination may be occurring periodically at a very slow rate, however. The geochemical data do not indicate a strong propensity for the type of anaerobic conditions necessary to stimulate significant anaerobic reductive dechlorination.

The primary nutrients necessary for biological growth include carbon, nitrogen, and phosphate. In October 2002, organic carbon (TOC) was detected in four out of five monitoring wells sampled ranging in concentrations from 1.6 to 3.79 mg/L. Ammonia and orthophosphate have been detected at trace levels in several monitoring wells. However, occurrence of TOC, ammonia or orthophosphate at any monitoring well is often counterbalanced by the non-detection of one or two of the other nutrients. Thus, nutrition of the bacteria may be deficient at many locations.

Enumeration of anaerobic bacteria was performed in association with an HRC pilot study conducted in 2000 (AMEC, October 2000, Interim Action Source Investigation Report; also see Section 8.0 of the RI). Very low populations of anaerobic bacteria were observed in the groundwater, even after HRC injection, indicating that anaerobic biodegradation processes may not be favored.

The shallow groundwater across the Project Area generally contains the highest levels of COPCs. Values for the redox parameters DO and ORP have been plotted along with static water levels and VOC concentrations for groundwater for the three monitoring points MW-01s, MW-04s and MW-05s on Figures G-2, G-3, and G-4, respectively. At two of these monitoring locations (MW-01s and MW-04s) fluctuations in groundwater concentrations of TCE appear to correlate with fluctuations in ORP. In addition, the concentrations of cis-1,2-DCE appear to inversely correlate with ORP and TCE fluctuations at these two locations. Thus, these observations are the first indication to date that reductive dechlorination of TCE to cis-1,2-DCE may be occurring in the Project Area.

The changes in molar quantities of TCE and cis-1,2-DCE do not closely correlate. In each instance where cis-1,2-DCE appears to form from TCE, there is a fifteen- to twenty-fold or greater difference in micromoles of TCE degraded per liter (µmol/L) (0.84 µmol/L at MW-1s, 1.01 µmol/L at MW-4s) to moles of cis-1,2-DCE formed (0.05 µmol/L at MW-1s and MW-4s). Because anaerobic reductive dechlorination of cis-1,2-DCE to vinyl chloride is more difficult than reductive dechlorination of TCE to cis-1,2-DCE (Wiedemeier, et al., 1999), cis-1,2-DCE concentrations would be expected to build under anaerobic conditions. The lack of cis-1,2-DCE buildup coupled with the lack of detection of vinyl chloride suggests that cis-1,2-DCE may be degrading aerobically. This hypothesis would correlate with the observed fluctuation between aerobic and anaerobic conditions historically observed in Project Area groundwater. The groundwater may also contain pockets of aerobic and anaerobic character simultaneously.

The data show a general trend of a higher concentration ratio of cis-1,2-DCE to TCE in intermediate and deeper groundwater (at approximately 90 to 200 feet bgs) than that found in shallower groundwater. This enrichment in cis-1,2-DCE may indicate an increased propensity for reductive dechlorination at depth. The concentration ratio of cis-1,2-DCE to TCE also increases with time in groundwater at several intermediate and deep wells.

Therefore, groundwater geochemistry and COPC concentration changes in the Project Area indicate some potential for reductive dechlorination. However, the relatively small magnitude of change observed in TCE and cis-1,2-DCE concentrations would indicate that reductive dechlorination may have little significant effect in the higher concentration areas of the COPCs emanating from Cadet.

4.0 Assessment of Potential Effects from POV Groundwater Treatment

Iron, sulfate, total chromium, chromium (VI), and manganese concentrations were measured to assess the effect, if any, along the southern Project Area boundary from the POV treatment of Swan site groundwater with Fenton's Reagent and permanganate (see Section 8.0 of the RI). None of the five chemicals listed were observed at elevated concentrations in areas closest to the POV Swan treatment site (MW-20i, MW-5i, MW-4i). Total chromium was detected in one monitoring well (MW-19i), which is located in an upgradient/background location far from the POV treatment area. With the exception of MW-8s (19.16 °C), the highest groundwater temperatures recorded during the August 2002 sampling event were observed along the southern boundary of the Project Area. Temperatures at MW-20s and MW-20i (the two wells closest to the POV Swan treatment site) were 18.18 °C and 17.32 °C, respectively. The average temperatures observed during August 2002 in the shallow and intermediate groundwater in the Project Area were 15.04°C and 15.13°C, respectively.

While the data collected as of October 2002 may indicate some residual effects of treatment, no clear evidence of an impact to the Project Area from the POV Swan treatment process has yet been noted. It is important to note that the shallow and deep wells were not sampled in October. The POV treatment injections generally occurred in shallow groundwater (to about 50 feet below ground surface). Therefore, effects of the POV Swan treatment process may be detected in the November 2002 data set from the shallow monitoring points.

5.0 Conclusion

There is limited evidence for TCE transformation to cis-1,2-DCE in groundwater at two monitoring wells (MW-1s and MW-4s). The highest chloride and methane concentrations are observed in the Cadet building vicinity, coincident with the highest COPC levels. Sulfate and nitrate levels are also highest in groundwater in the vicinity of the Cadet building. The evidence suggests that minor natural attenuation may be occurring under weak and transient anaerobic conditions. The possibility for aerobic TCE degradation also exists. These potential degradation scenarios will be further evaluated following additional groundwater data collection and interpretation.

No significant effects of the POV Swan groundwater treatment had been observed as of October 2002. A slight elevation in groundwater temperature was noticed at monitoring points MW-20s and MW-20i, along the southern boundary of the Project Area, in August 2002. Further sampling and monitoring for potential effects is planned.

ATTACHMENTS:

Table G-1	Field Water Quality Parameters and Select VOC Data
Table G-2	Field Geochemical Characterization Data
Figure G-1	Negative ORP Readings over Time 1999 through 2002
Figure G-2	Groundwater Geochemistry Data for MW-1s
Figure G-3	Groundwater Geochemistry Data for MW-4s
Figure G-4	Groundwater Geochemistry Data for MW-5s
Figure G-5	Cadet Monitoring Well Network
Attachment G-1	Analytical Laboratory Reports: Groundwater Geochemistry Data

REFERENCES:

Wiedemeier, T.H., H.S. Rifai, C.J. Newell, and J.T. Wilson, 1999. Natural Attenuation of Fuels and Chlorinated Solvents in the Subsurface. John Wiley & Sons, Inc., New York, New York.

Table G-1
Field Water Quality Parameters and Select VOC Data

Monitoring Well ID	Date	pH (S.U.)	Conductivity (mS)	Temperature (degrees C)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
Shallow Monitoring Wells									
MW-1s	10/20/99	9.52	0.472	11.22	-60	1.9	102.00	1 U	1 U
	7/17/00	6.10	—	16.01	255	11.54	73.10	1 U	1 U
	1/30/01	6.35	0.209	13.37	187.0	6.74	—	—	—
	2/7/01	6.38	0.183	13.80	195	10.57	61.50	1U	1 U
	5/16/01	6.22	0.206	14.19	169.3	10.47	143.00	1.11	0.5 U
	8/27/01	6.16	0.209	15.62	219.7	7.91	77.60	0.86	0.500 U
	11/7/01	6.32	0.297	13.67	281.2	16.24	80.60	1.45	0.500 U
	1/30/02	—	—	—	—	—	15.90	5.96	0.500 U
	5/29/02	6.10	0.166	13.79	10.6	—	33.00	3.67	0.500 U
	8/20/02	6.12	0.245	15.51	57.8	7.47	36.10	0.84	0.500 U
MW-1d-40	5/17/01	6.98	0.568	13.89	—	1.7	473.00	14.70	2.5 U
	8/27/01	6.83	0.297	14.64	129.3	0.29	993.00	29.30	5.00 U
	11/9/01	7.57	0.220	13.72	-88.4	2.59	1150.00	32.30	5.00 U
	2/4/02	6.75	0.267	12.82	30.4	0.44	1230.00	34.50	5.00 U
	5/28/02	6.74	0.637	13.20	-245.2	14.5	13.30	5.92	0.500 U
	8/20/02	6.40	0.278	15.35	-187.8	3.76	907.00	30.40	2.50 U
	10/2/02	6.52	0.919	15.34	143.9	6.03	—	—	—
MW-2s	10/20/99	9.55	0.490	11.17	-60	1.9	1U	1U	1 U
	11/16/99	6.77	0.0119	11.20	103	2.0	2.11	1 U	1U
	7/17/00	6.25	—	13.08	298.9	11.84	1U	1U	1 U
	2/9/01	6.32	0.058	11.19	205.5	9.41	1 U	1U	1 U
	5/16/01	6.22	0.08	11.54	136.8	8.72	0.5 U	0.5 U	0.5 U
	8/28/01	6.11	0.109	13.07	187.5	7.62	0.5 U	0.5 U	0.5 U
	11/7/01	6.20	0.175	12.72	288.3	9.32	0.92	0.5 U	0.5 U
	1/30/02	6.91	0.032	9.52	212.7	9.74	0.5 U	0.5 U	0.5 U
	5/29/02	6.33	0.028	10.49	32.1	62.7	0.5 U	0.5 U	0.5 U
	8/20/02	6.49	0.038	12.93	-39.9	5.77	0.5 U	0.5 U	0.5 U
	10/2/02	7.07	0.243	15.7	151	3.83	0.5 U	0.5 U	0.5 U

Table G-1
Field Water Quality Parameters and Select VOC Data

Monitoring Well ID	Date	pH (S.U.)	Conductivity (mS)	Temperature (degrees C)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-3s	10/20/99	9.57	0.392	11.67	-66	2.4	440.00	6.10	2 U
	7/17/00	6.25	—	16.94	271.6	12.33	410.00	3.60	2 U
	2/7/01	6.45	0.166	14.54	200.9	7.07	5240.00	29.10	1 U
	5/16/01	6.37	0.181	14.9	159.1	6.61	2250.00	16.00	10 U
	8/27/01	6.37	0.143	16.21	203.1	7.03	605.00	6.90	2.50 U
	11/7/01	6.37	0.313	15.52	323.2	8.20	1240.00	16.50	5.00 U
	1/30/02	6.50	0.192	14.71	199.0	7.56	1410.00	19.60	5.00 U
	5/29/02	6.28	0.149	14.63	36.4	53.8	462.00	8.10	2.50 U
	8/20/02	6.36	0.139	15.15	-49.2	5.42	252.00	4.42	1.00 U
MW-3d-60	9/11/02	6.58	0.327	15.25	59.0	3.91	9.02	5.17	0.500 U
MW-4s	10/20/99	8.75	0.492	11.22	-62	1.0	1700.00	11.00	10 U
	11/16/99	6.69	0.296	12.30	181	3.1	—	—	—
	7/17/00	6.31	—	16	254.2	7.32	620.00	8.80	5 U
	2/8/01	6.49	0.260	9.26	324.6	2.93	254.00	7.20	5 U
	5/16/01	6.38	0.272	13.75	142.3	6.46	273.00	6.34	1 U
	8/28/01	6.39	0.294	18.92	191.0	5.17	145.00	6.98	0.500 U
	11/8/01	7.62	0.166	13.13	113.6	9.06	165.00	8.56	0.500 U
	1/29/02	6.64	0.137	12.70	157.2	3.55	140.00	10.90	0.500 U
	5/30/02	6.45	0.230	13.36	-88.8	31.3	156.00	11.40	1.00 U
	8/21/02	6.84	0.244	14.61	-95.4	0.91	196.00	9.54	0.500 U
MW-5s	11/16/99	6.68	0.382	12.70	240	1.7	3300.00	11.10	1U
	7/17/00	6.17	—	17.19	287.9	7.84	3800.00	11.00	20 U
	2/8/01	6.57	0.267	12.60	265	3.74	2900.00	10.00	20 U
	5/16/01	6.45	0.244	13.71	184.4	6.26	5010.00	12.50	25 U
	8/28/01	6.40	0.253	14.28	210.4	6.79	1420.00	5.20	5.00 U
	11/7/01	6.48	0.418	13.76	299.1	9.05	2020.00	13.00	10.0 U
	1/29/02	6.68	0.144	12.61	127.5	3.60	2990.00	12.50	25.0 U
	5/30/02	6.48	0.222	13.63	-25.0	55.1	2600.00	12.80	10.0 U
	8/22/02	6.32	0.283	15.90	86.1	5.87	1960.00	12.70	5.00 U

Table G-1
Field Water Quality Parameters and Select VOC Data

Monitoring Well ID	Date	pH (S.U.)	Conductivity (mS)	Temperature (degrees C)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-6s	6/20/00	—	—	—	—	—	680.00	5.20	5 U
	3/2/01	6.42	0.23	19.07	153.1	5.97	611.00	5U	5 U
	8/28/01	6.37	0.265	16.75	185.2	4.06	636.00	8.55	2.50 U
	11/7/01	6.56	0.433	13.31	293.9	7.65	807.00	9.55	2.50 U
	1/30/02	6.50	0.237	13.01	219.9	10.00	824.00	10.00	5.00 U
	5/30/02	6.47	0.239	14.63	-11.5	35.2	552.00	11.70	2.50 U
	8/21/02	6.38	0.248	14.70	-64.3	2.56	557.00	12.80	2.50 U
MW-7s	6/20/00	—	—	—	—	—	138.00	2.68	1 U
	2/9/01	—	—	—	—	—	295.00	6.36	1 U
	8/29/01	6.22	0.258	17.10	181.4	7.91	264.00	6.04	1.00 U
	11/8/01	7.14	0.159	13.16	207.7	9.64	437.00	7.45	2.50 U
	1/30/02	6.54	0.242	12.73	234.0	6.53	541.00	9.20	2.50 U
	8/22/02	7.42	0.401	15.63	92.7	1.41	74.80	1.57	0.500 U
MW-8s	6/20/00	—	—	—	—	—	84.40	1.18	1 U
	2/9/01	6.22	0.188	13.00	191.5	11.24	903.00	4.51	1 U
	5/16/01	6.17	0.226	13.24	246.5	7.7	663.00	3.75	2.5 U
	8/28/01	6.04	0.205	15.25	223.4	7.29	478.00	4.05	2.50 U
	11/7/01	6.30	0.373	13.55	317.8	10.20	510.00	4.65	2.50 U
	2/4/02	6.24	0.250	13.25	197.5	7.37	462.00	6.50	2.50 U
	5/31/02	6.25	0.211	13.29	50.4	41.7	312.00	4.42	1.00 U
	8/21/02	6.44	0.260	19.16	-32.3	4.86	58.30	0.71	0.500 U
MW-9s	6/20/00	—	—	—	—	—	1 U	1 U	1 U
	2/7/01	5.94	0.115	11.30	221.9	7.31	1.01	1 U	1 U
	8/28/01	5.75	0.146	13.99	200.8	2.44	0.500 U	0.500 U	0.500 U
	11/7/01	5.86	0.260	12.39	283.8	3.90	0.53	0.500 U	0.500 U
	2/4/02	5.79	0.132	12.49	197.3	11.93	0.500 U	0.500 U	0.500 U
	5/29/02	5.55	0.100	12.33	106.7	20.8	0.500 U	0.500 U	0.500 U
	8/21/02	5.77	0.108	12.42	1.6	2.09	0.5 U	0.5 U	0.500 U

Table G-1
Field Water Quality Parameters and Select VOC Data

Monitoring Well ID	Date	pH (S.U.)	Conductivity (mS)	Temperature (degrees C)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-10s	11/10/00	—	—	—	—	—	2.53	1 U	1 U
	12/14/00	—	—	—	—	—	3.50	1 U	1 U
	2/9/01	6.48	0.131	11.04	181.4	2.67	13.30	1 U	1 U
	8/29/01	6.24	0.208	22.34	238.9	10.22	3.09	0.500 U	0.500 U
	11/8/01	7.14	0.117	14.38	241.2	10.74	2.74	0.500 U	0.500 U
	2/4/02	6.67	0.190	14.01	143.7	13.12	2.34	0.60	0.500 U
	5/29/02	6.40	0.168	15.26	-47.5	82.0	2.33	0.68	0.500 U
	8/21/02	6.41	0.177	15.40	-29.4	3.06	2.76	0.5 U	0.500 U
MW-15s	8/23/02	6.23	0.240	13.66	8.0	2.63	6.51	3.96	0.500 U
MW-16s	8/23/02	6.17	0.268	12.98	-27.2	3.28	0.5 U	0.5 U	0.500 U
MW-18s	8/23/02	6.13	0.186	14.48	131.5	7.11	0.98	0.5 U	0.500 U
MW-19s	8/22/02	6.41	0.235	14.35	88.6	5.16	3.83	1.72	0.500 U
MW-20s	8/22/02	5.98	0.298	18.18	49.0	6.83	4.95	1.11	0.500 U
MW-21s	8/22/02	7.09	0.162	14.98	47.3	6.85	0.5 U	0.5 U	0.500 U
Intermediate Monitoring Wells									
MW-1i	10/20/99	9.60	0.482	11.67	-0.54	2.6	11.5	7.48	1 U
	2/8/01	7.35	0.262	12.43	155.5	6.88	3.29	10.00	1 U
	5/16/01	6.96	0.239	13.47	—	0.73	1.73	8.92	0.5 U
	8/27/01	7.05	0.321	16.41	-14.0	0.51	5.36	10.50	0.500 U
	11/7/01	7.13	0.542	12.81	60.3	0.19	17.20	12.60	0.500 U
	2/4/02	7.12	0.269	12.73	-37.9	0.54	23.30	16.60	0.500 U
	5/29/02	6.86	0.252	13.33	-50.1	0.80	21.80	10.50	0.500 U
	8/20/02	7.60	0.265	16.08	-209.4	0.87	19.40	14.30	0.500 U
MW-01D-121	05/17/01	6.94	0.636	13.3	—	3.39	10.4	2.26	0.5 U
	08/27/01	6.75	0.540	13.73	98.0	0.91	12.2	2.65	0.500 U
	11/09/01	7.69	0.356	13.80	-117.9	0.29	15.3	5.04	0.500 U
	02/04/02	6.85	0.504	12.34	-49.1	0.42	20.8	7.12	0.500 U
	05/28/02	6.77	0.472	13.16	-276.3	40.1	19.8	7.47	0.500 U
	08/20/02	6.80	0.531	15.81	-303.6	0.17	21.4	7.85	0.500 U
	10/03/02	6.44	0.975	13.30	137.7	0.35	—	—	—
MW-3d-100	9/11/02	5.94	0.251	14.78	148.0	0.89	37.2	3.06	0.500 U
MW-3d-140	9/11/02	6.36	0.449	16.62	104.1	8.07	21	4.43	0.500 U

Table G-1
Field Water Quality Parameters and Select VOC Data

Monitoring Well ID	Date	pH (S.U.)	Conductivity (mS)	Temperature (degrees C)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-4i	6/20/00	—	—	—	—	—	31.70	16.20	1 U
	2/8/01	7.06	0.286	9.54	317.6	0.38	10.00	1.87	1 U
	8/29/01	7.35	0.298	18.11	113.5	1.65	3.48	1.43	0.500 U
	11/8/01	8.25	0.162	13.26	85.4	0.63	4.11	1.88	0.500 U
	1/29/02	7.30	0.134	11.96	137.2	1.40	2.01	1.40	0.500 U
	5/30/02	7.25	0.216	12.64	-59.6	17.2	2.30	1.73	0.500 U
	8/21/02	7.63	0.244	15.23	-142.2	1.14	5.50	3.32	0.500 U
	10/3/02	7.07	0.838	12.36	144.0	0.31	—	—	—
MW-5i	11/16/99	7.03	0.354	11.80	159	3.2	161.00	11.10	1 U
	2/8/01	6.74	0.244	11.51	249	3.09	12.50	8.10	1 U
	5/16/01	6.63	0.23	12.5	—	1.1	11.10	10.30	0.5 U
	8/28/01	6.62	0.230	13.70	190.4	0.35	11.30	11.10	0.500 U
	11/7/01	6.68	0.414	12.41	297.2	1.22	33.00	19.80	0.500 U
	1/29/02	6.98	0.124	11.88	167.6	4.06	25.70	19.60	0.500 U
	5/28/02	6.78	0.231	12.42	-14.2	4.0	25.00	13.60	0.500 U
	8/21/02	6.93	0.247	13.79	-83.6	0.26	27.40	17.70	0.500 U
	10/3/02	6.64	0.810	12.64	157.1	0.53	—	—	—
MW-7i	8/22/02	7.56	0.256	15.42	78.9	1.46	10.60	3.46	0.500 U
MW-17i	8/23/02	6.01	0.250	14.69	36.41	2.60	18.00	7.50	0.500 U
MW-18i	8/23/02	7.42	0.296	14.76	-32.7	0.61	2.81	0.500 U	0.500 U
MW-19i	8/22/02	6.30	0.290	13.67	112.6	1.17	21.10	8.10	0.500 U
	10/4/02	6.67	0.918	13.18	168.2	1.99	—	—	—
MW-20i	8/22/02	6.43	0.276	17.32	54.7	6.92	1.23	1.94	0.500 U
	10/3/02	7.33	0.807	12.53	115.9	0.21	—	—	—
MW-21i	8/22/02	6.96	0.250	14.09	59.7	6.21	0.500 U	0.500 U	0.500 U
Deep Monitoring Wells									
MW-1d-161	5/17/01	6.72	0.616	13.57	30.1	6.83	17	4.55	0.500 U
	8/27/01	6.17	0.622	14.75	108	2.96	8.92	3.67	0.500 U
	11/9/01	7.55	0.423	13.83	-102.1	1.05	7.74	4.32	0.500 U
	2/4/02	6.60	0.618	12.46	44.8	0.92	11.1	4.9	0.500 U
	5/28/02	6.54	0.588	12.89	-205.1	—	9.48	4.74	0.500 U
	8/20/02	6.66	0.652	16.12	—	0.45	9.97	7.04	0.500 U

Table G-1
Field Water Quality Parameters and Select VOC Data

Monitoring Well ID	Date	pH (S.U.)	Conductivity (mS)	Temperature (degrees C)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-1d-194	5/17/01	6.7	0.671	13.69	64.5	4.68	14.1	4.76	0.500 U
	8/27/01	6.42	0.662	15.14	103.8	4.37	11.9	4.87	0.500 U
	11/9/01	7.70	0.443	13.66	-112.5	0.50	12.1	6.33	0.500 U
	2/4/02	6.89	0.636	12.57	176.7	11.12	29.2	9.95	0.500 U
	5/28/02	6.72	0.636	13.01	-167.7	—	13.9	5.8	0.500 U
	8/20/02	6.80	0.705	16.30	-179.8	—	12	6.55	0.500 U
MW-1d-224	5/17/01	6.86	0.705	14.34	—	4.35	14.9	6.62	0.500 U
	8/27/01	6.70	0.690	15.70	50.7	1.05	18.4	7.01	0.500 U
	11/9/01	7.83	0.447	13.90	-119.3	1.22	14.1	7.03	0.500 U
	1/30/02	7.02	0.659	12.23	-29.2	0.09	21.8	7.08	0.500 U
	5/28/02	6.86	0.626	13.10	-214.2	2.3	21.9	6.95	0.500 U
	8/20/02	6.84	0.694	16.44	-167.2	0.25	14.9	7.45	0.500 U
MW-2d	12/14/00	—	—	—	—	—	39.3	10.6	1 U
	2/8/01	7.05	0.718	10.70	207	0.47	34.7	10.2	1U
	8/30/01	7.16	0.672	15.69	56.4	1.36	21.9	7.2	0.500 U
	11/9/01	8.02	0.399	10.07	-144.2	0.07	21.1	6.8	0.500 U
	2/4/02	7.09	0.615	11.63	46.4	1.4	21.6	6.26	0.500 U
	5/30/02	7.14	0.609	12.50	-42.2	7.2	26	8.3	0.500 U
	8/20/02	8.58	0.660	14.97	-228.5	0.83	20.7	6.96	0.500 U
MW-3d-181	9/11/02	6.86	0.595	15.69	56.2	3.03	11.7	4.69	0.500 U
MW-3d-226	9/11/02	6.94	0.636	15.38	128.9	1.61	23.6	9.08	0.500 U
MW-5d	2/8/01	7.40	0.478	10.12	232.8	2.08	15.6	5.4	0.500 U
	5/17/01	7.17	0.66	14.44	6.8	4.2	31.6	11.2	0.500 U
	8/29/01	7.28	0.668	14.29	39.9	3.76	28.8	12.1	0.500 U
	11/8/01	8.41	0.275	13.79	50	1	11.6	4.41	0.500 U
	1/29/02	7.17	0.380	11.87	176	0.6	35.8	13.3	0.500 U
	5/30/02	7.23	0.625	13.54	-81.6	—	30.4	11.3	0.500 U
	8/21/02	8.09	0.645	14.20	-243.7	0.36	29.3	9.63	0.500 U
MW-7d	8/22/02	7.82	0.181	15.05	-68.8	0.87	3.03	0.500 U	0.500 U

Table G-1
Field Water Quality Parameters and Select VOC Data

Monitoring Well ID	Date	pH (S.U.)	Conductivity (mS)	Temperature (degrees C)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-10d	2/8/01	7.85	0.152	11.08	233.6	0.48	4.69	1 U	0.500 U
	8/30/01	7.86	0.139	16.16	113.9	0.66	0.500 U	0.500 U	0.500 U
	11/8/01	8.74	0.091	13.64	-102.6	0.2	0.500 U	0.500 U	0.500 U
	2/4/02	7.73	0.143	13.24	-97.9	1.15	0.500 U	0.500 U	0.500 U
	5/29/02	7.66	0.122	13.82	-137.3	0.6	0.500 U	0.500 U	0.500 U
	8/21/02	7.84	0.137	15.21	-93.7	0.17	0.500 U	0.500 U	0.500 U
MW-18d	9/11/02	6.82	0.364	15.73	46.5	1.62	7.15	2.26	0.500 U
MW-19d	9/11/02	7.19	0.523	16.01	43	8.54	0.500 U	0.500 U	0.500 U

Notes:

U = Analyte not detected above method reporting limit.

— = Not tested or field probe not operational.

S.U. = standard units

mS = milliSiemens

°C = degrees centigrade

mV = millivolts

mg/L = milligrams per liter

µg/L = micrograms per liter

Table G-2

Field Geochemical Groundwater Characterization Data

Shallow Monitoring Wells

		MW-2s	MW-2s	MW-1d-40	MW-1d-40	MW-1s	MW-3s	MW-5s	MW-5s	MW-4s	MW-4s
Date	**Units**	11/16/99	7/17/00	8/20/02	10/2/02	7/17/00	7/17/00	11/16/99	7/17/00	11/16/99	7/17/00
pH	SU	6.77	6.25	6.40	6.52	6.10	6.25	6.68	6.17	6.69	6.31
Conductivity	mS	0.0119	—	0.278	0.919	—	—	0.382	—	0.296	—
Temperature	°C	11.20	13.08	15.35	15.34	16.01	16.94	12.70	17.19	12.30	16
Oxidation Reduction Potential (ORP)	mV	103	298.9	-187.8	143.9	255	271.6	240	287.9	181	254.2
Dissolved Oxygen	mg/L	2.0	11.84	3.76	6.03	11.54	12.33	1.7	7.84	3.1	7.32
Turbidity[1]	N.T.U.	—	—	1 U	3.73	—	—	—	—	—	—
Manganese	mg/L	—	—	—	0.744	—	—	—	—	—	—
Nitrate	mg/L	0.2 U	0.24	—	2.34	9.9	1.53	8.70	18	2.9	2.54
Iron	mg/L	—	6.22	—	0.100 U	0.241	0.375	—	0.396	—	0.121
Ferrous Iron	mg/L	—	0.1 U	—	0.1 U	0.1 U	0.1 U	—	0.1 U	—	0.1 U
Sulfate	mg/L	1.5	5.04	—	98.8	13.7	9.98	26.5	21.8	45.4	49
Sulfide	mg/L	—	—	—	1.00 U	—	—	—	—	—	—
Methane	µg/L	0.5 U	10.4	—	1.6	1.2 U	1.2 U	0.68	2.38	0.5 U	1.2 U
Alkalinity, Hydroxide (as $CaCO_3$)	mg/L	12	31	—	56.6	60	45.8	132	138	96	86
Chloride	mg/L	1	0.844	—	7.77	16.7	2.35	4.2	4.59	6.60	6.91
Total Organic Carbon (TOC)	mg/L	0.5 U	3 U	—	1.00 U	3 U	3 U	0.5 U	3 U	0.5 U	3 U
Dissolved Organic Carbon (DOC)	mg/L	—	—	—	1.00 U	—	—	—	—	—	—
Chemical Oxygen Demand (COD)	mg/L	—	—	—	6.60	—	—	—	—	—	—
Ethene	µg/L	0.5 U	10 U	—	—	10 U	10 U	0.5 U	10 U	0.5 U	10 U
Ethane	µg/L	0.5 U	10 U	—	—	10 U	10 U	0.5 U	10 U	0.5 U	10 U
Trichloroethene	µg/L	2.11	1 U	907	—	73.1	410	3300	3800	1200	620
cis-1,2-Dichloroethene	µg/L	1 U	1 U	30.4	—	1 U	3.6	11.1	11	8.41	8.8
Vinyl chloride	µg/L	1 U	1 U	2.50 U	—	1 U	2 U	1 U	20 U	1 U	5 U
1,1,1-Trichloroethane	µg/L	1 U	1 U	9	—	1.78	25	143	120	37.7	22
1,1,2-Trichloroethane	µg/L	1 U	1 U	2.50 U	—	1 U	2 U	0.44	20 U	1 U	5 U
1,1-Dichloroethane	µg/L	1 U	1 U	2.50 U	—	1 U	2 U	0.7	20 U	0.58	5 U
1,2-Dichloroethane	µg/L	1 U	1 U	2.50 U	—	1 U	2 U	1 U	20 U	1 U	5 U
1,1-Dichloroethene	µg/L	1 U	1 U	2.50 U	—	1 U	3.1	12.8	9.4	4.81	3.6
Ammonia (as Nitrogen)	mg/L	0.16	0.05 U	—	0.09	0.05 U	0.05 U	0.05 U	0.05 U	0.93	0.05 U
Orthophosphate	mg/L	0.09	0.0613	—	0.0100 U	0.0816	0.127	0.11	0.0688	0.07	0.0976
Selenium	mg/L	—	—	—	0.00213	—	—	—	—	—	—
Vanadium	mg/L	—	—	—	0.00500 U	—	—	—	—	—	—
Arsenic	mg/L	—	—	—	0.00100 U	—	—	—	—	—	—
Lead	mg/L	—	—	—	0.00100 U	—	—	—	—	—	—
Chromium (total)	mg/L	—	—	—	0.00100 U	—	—	—	—	—	—
Chromium (VI)	mg/L	—	—	—	0.0100 U	—	—	—	—	—	—

Intermediate Monitoring Wells

		MW-19i	MW-19i	MW-1d-121	MW-1d-121	MW-5i	MW-5i	MW-20i	MW-20i	MW-4i	MW-4i
Date	**Units**	8/22/02	10/4/02	8/20/02	10/2/02	8/21/02	10/3/02	8/22/02	10/3/02	8/21/02	10/3/02
pH	SU	6.30	6.67	6.80	6.44	6.93	6.64	6.43	7.33	7.63	7.07
Conductivity	mS	0.290	0.918	0.531	0.975	0.247	0.810	0.276	0.807	0.244	0.838
Temperature	°C	13.67	13.18	15.81	13.30	13.79	12.64	17.32	12.53	15.23	12.36
Oxidation Reduction Potential (ORP)	mV	112.6	168.2	-303.6	137.7	-83.6	157.1	54.7	115.9	-142.2	144.0
Dissolved Oxygen	mg/L	1.17	1.99	0.17	0.35	0.26	0.53	6.92	0.21	1.14	0.31
Turbidity[1]	N.T.U.	6.42	1 U	1 U	2.15	1 U	12.1	1 U	6.66	1 U	1.38
Manganese	mg/L	—	0.0528	—	3.05	—	0.204	—	0.441	—	0.0563
Nitrate	mg/L	—	2.68	—	0.100 U	—	1.45	—	0.100 U	—	0.91
Iron	mg/L	—	0.245	—	3.86	—	5.32	—	0.100 U	—	0.100 U
Ferrous Iron	mg/L	—	0.1 U	—	3.7	—	2.4	—	0.1 U	—	0.1 U
Sulfate	mg/L	—	90.7	—	261	—	71.4	—	34	—	48.4
Sulfide	mg/L	—	1.00 U	—	1.00 U	—	1.00 U	—	1.00 U	—	1.00 U
Methane	µg/L	—	1.20 U	—	1.20 U	—	0.950 J	—	4.8	—	1.20 U
Alkalinity, Hydroxide (as $CaCO_3$)	mg/L	—	80.5	—	78.3	—	69.8	—	105	—	103
Chloride	mg/L	—	5.81	—	5.23	—	4.98	—	4.66	—	5.34
Total Organic Carbon (TOC)	mg/L	—	3.79	—	1.06	—	2.53	—	2.85	—	2.33
Dissolved Organic Carbon (DOC)	mg/L	—	2.65	—	1.00 U	—	2.09	—	2.32	—	2.09
Chemical Oxygen Demand (COD)	mg/L	—	13.7	—	5.55	—	13.2	—	14.5	—	11.4
Ethene	µg/L	—	—	—	—	—	—	—	—	—	—
Ethane	µg/L	—	—	—	—	—	—	—	—	—	—
Trichloroethene	µg/L	21.1	—	21.4	—	27.4	—	1.23	—	5.5	—
cis-1,2-Dichloroethene	µg/L	8.1	—	7.85	—	17.7	—	1.94	—	3.32	—
Vinyl chloride	µg/L	0.500 U	—	0.500 U	—	0.500 U	—	0.500 U	—	0.500 U	—
1,1,1-Trichloroethane	µg/L	1.22	—	0.500 U	—	0.500 U	—	0.6	—	1.34	—
1,1,2-Trichloroethane	µg/L	0.500 U	—	0.500 U	—	0.500 U	—	0.500 U	—	0.500 U	—
1,1-Dichloroethane	µg/L	0.72	—	1.16	—	1.71	—	1.49	—	1.39	—
1,2-Dichloroethane	µg/L	0.500 U	—	0.500 U	—	0.500 U	—	0.500 U	—	0.500 U	—
1,1-Dichloroethene	µg/L	0.500 U	—	0.500 U	—	0.62	—	0.500 U	—	0.77	—
Ammonia (as Nitrogen)	mg/L	—	0.065	—	0.0500 U	—	0.664	—	0.0500 U	—	0.0500 U
Orthophosphate	mg/L	—	0.0557	—	0.0100 U	—	0.0100 U	—	0.0621	—	0.0946
Selenium	mg/L	—	0.00172	—	0.00100 U	—	0.00100 U	—	0.00100 U	—	0.00100 U
Vanadium	mg/L	—	0.00500 U	—	0.00500 U	—	0.00500 U	—	0.00722	—	0.011
Arsenic	mg/L	—	0.00100 U	—	0.00100 U	—	0.00100 U	—	0.00187	—	0.00152
Lead	mg/L	—	0.00101	—	0.00100 U	—	0.00100 U	—	0.00100 U	—	0.00100 U
Chromium (total)	mg/L	—	0.00253	—	0.00100 U	—	0.00100 U	—	0.00100 U	—	0.00100 U
Chromium (VI)	mg/L	—	0.0100 U	—	0.0100 U	—	0.0100 U	—	0.0100 U	—	0.0100 U

Notes

[1] Turbidity readings noted as 1 U represent no detectable turbidity.

— = Not tested or field probe not operational.

$CaCO_3$ = calcium carbonate

µg/L = micrograms per liter

mg/L = milligrams per liter

N.T.U. = nephelometric turbidity units

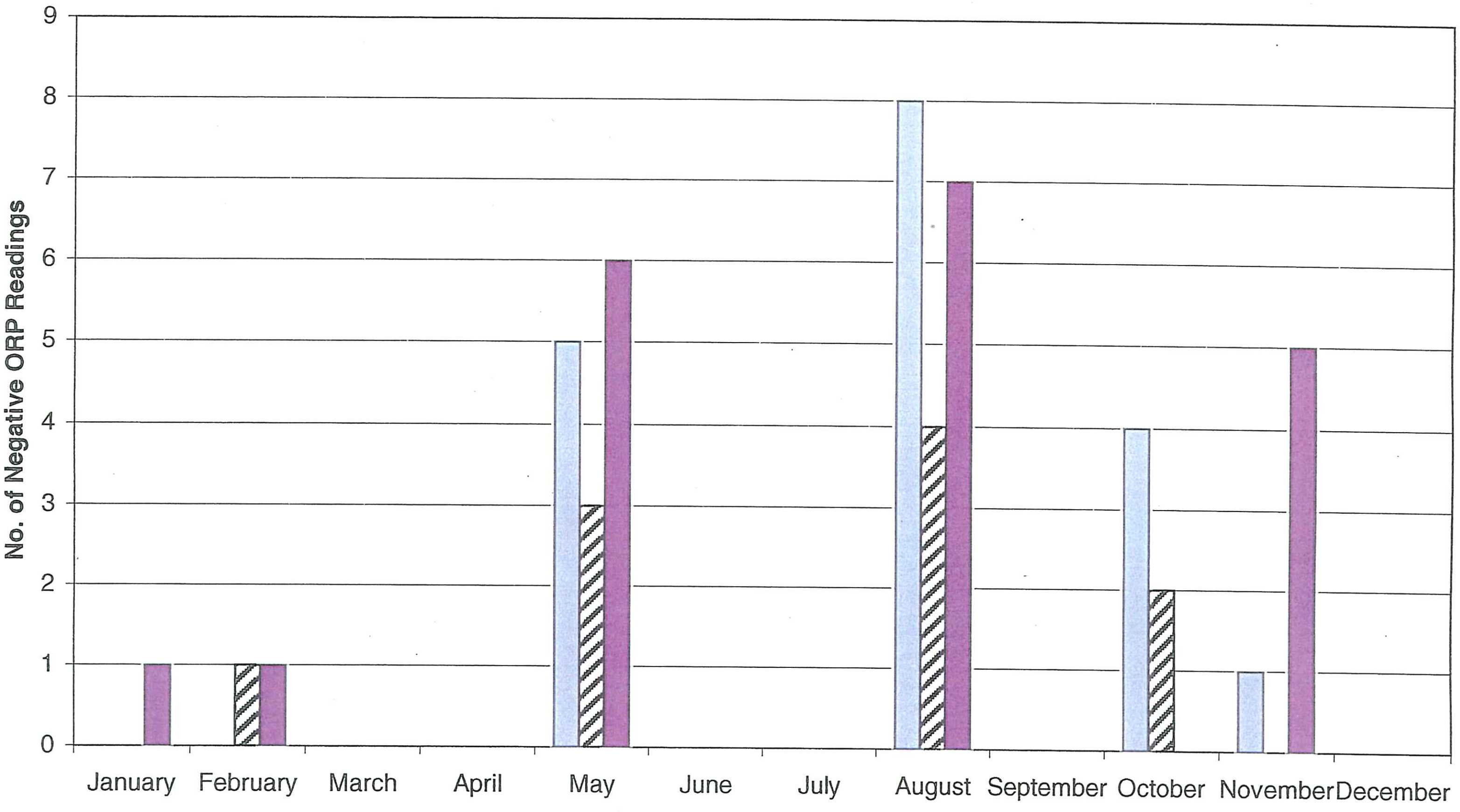
U = Analyte not detected above method reporting limit.

S.U. = standard units

mS = milliSiemens

°C = degrees centigrade

mV = millivolts



amec

7376 SW Durham Road
Portland, Oregon USA 97224

Job: 2-61M-10135-R
Design: BEL
Drawn: BEL
Date: 12/20/02

FIGURE G-1

CADET MANUFACTURING CO.
2500 W FOURTH PLAIN BLVD.
VANCOUVER, WASHINGTON

NEGATIVE ORP READINGS OVER TIME
1999 THROUGH 2002

K:\10135\Reports\RI\App G GW Char\GW Geochemistry Tables.xls

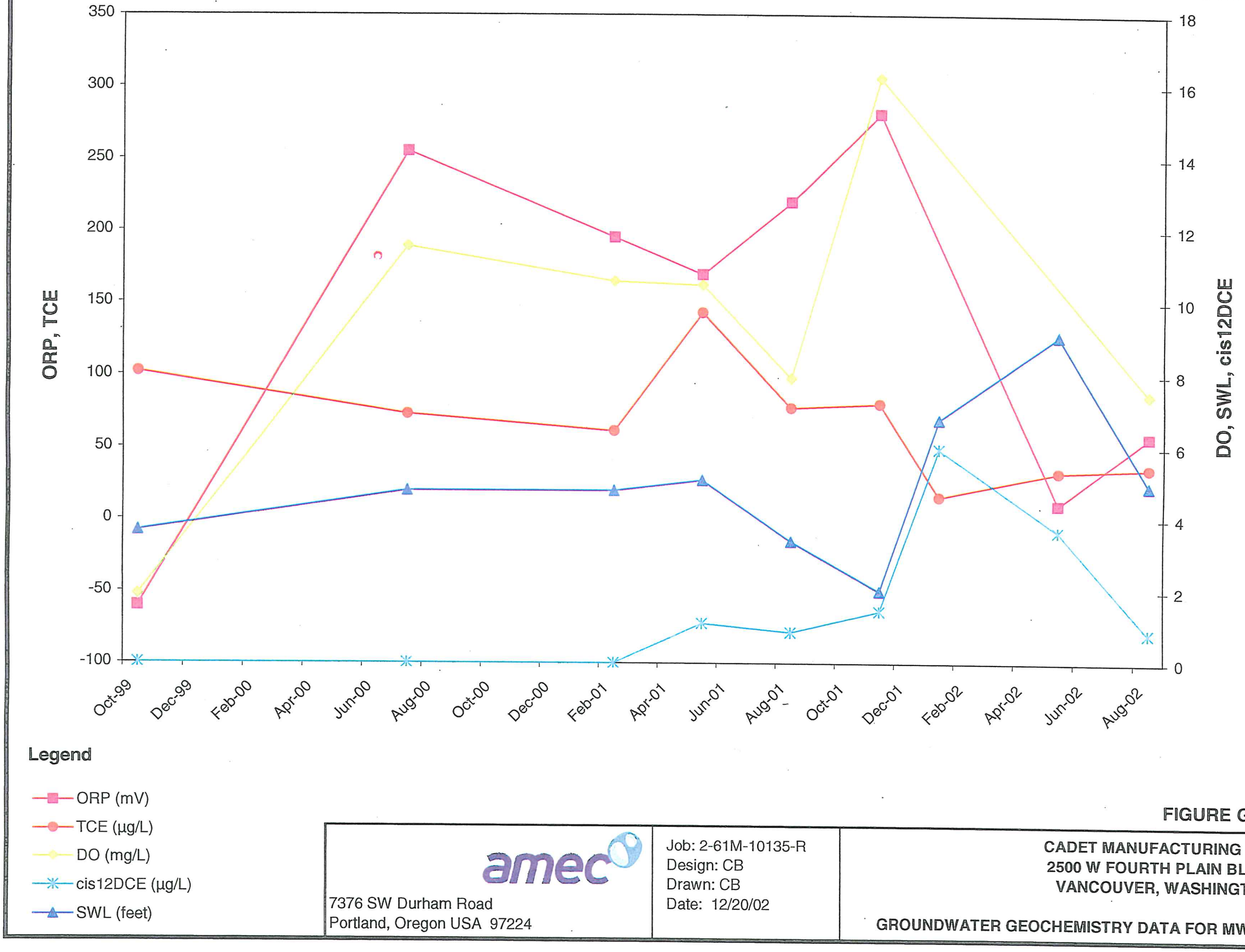


FIGURE G-2

amec

7376 SW Durham Road
Portland, Oregon USA 97224

Job: 2-61M-10135-R
Design: CB
Drawn: CB
Date: 12/20/02

CADET MANUFACTURING CO.
2500 W FOURTH PLAIN BLVD.
VANCOUVER, WASHINGTON

GROUNDWATER GEOCHEMISTRY DATA FOR MW-1s

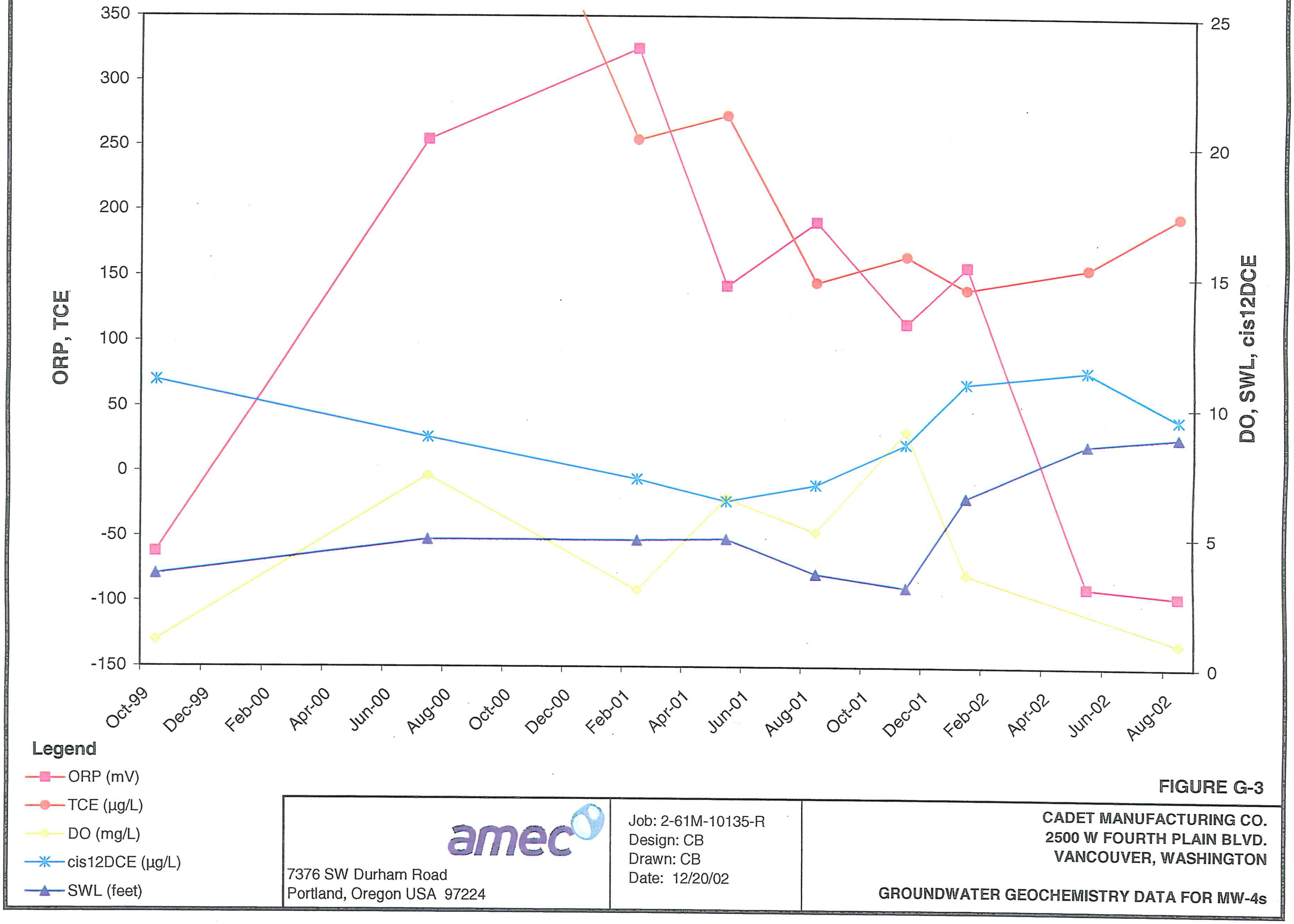


FIGURE G-3

amec

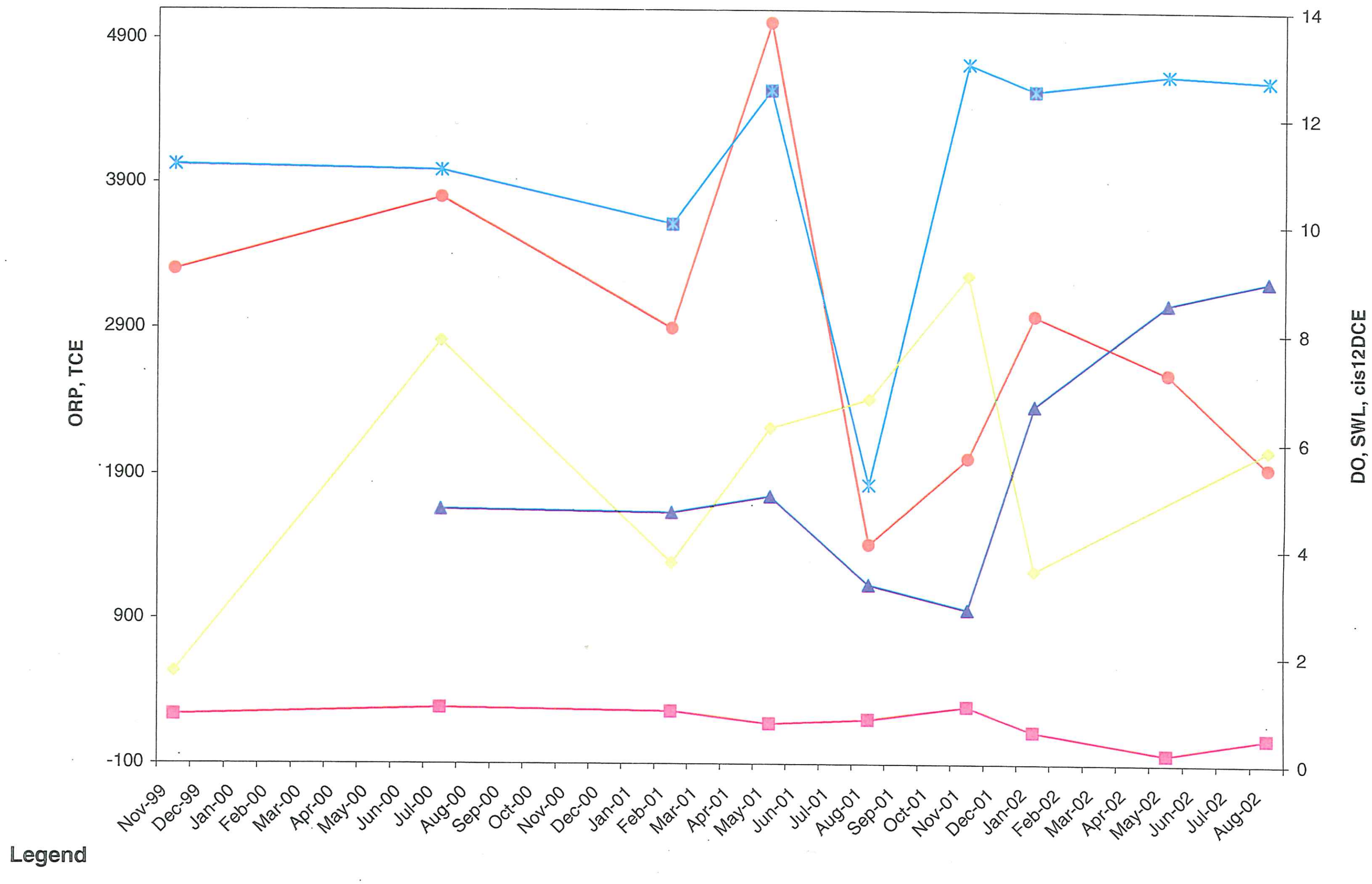
7376 SW Durham Road
Portland, Oregon USA 97224

Job: 2-61M-10135-R
Design: CB
Drawn: CB
Date: 12/20/02

CADET MANUFACTURING CO.
2500 W FOURTH PLAIN BLVD.
VANCOUVER, WASHINGTON

GROUNDWATER GEOCHEMISTRY DATA FOR MW-4s

K:\10135\Reports\RI\App G GW Char\GW Geochemistry Tables.xls



Shaded cis-1,2-DCE data points indicate values graphed as half the detection limit.

FIGURE G-4

amec

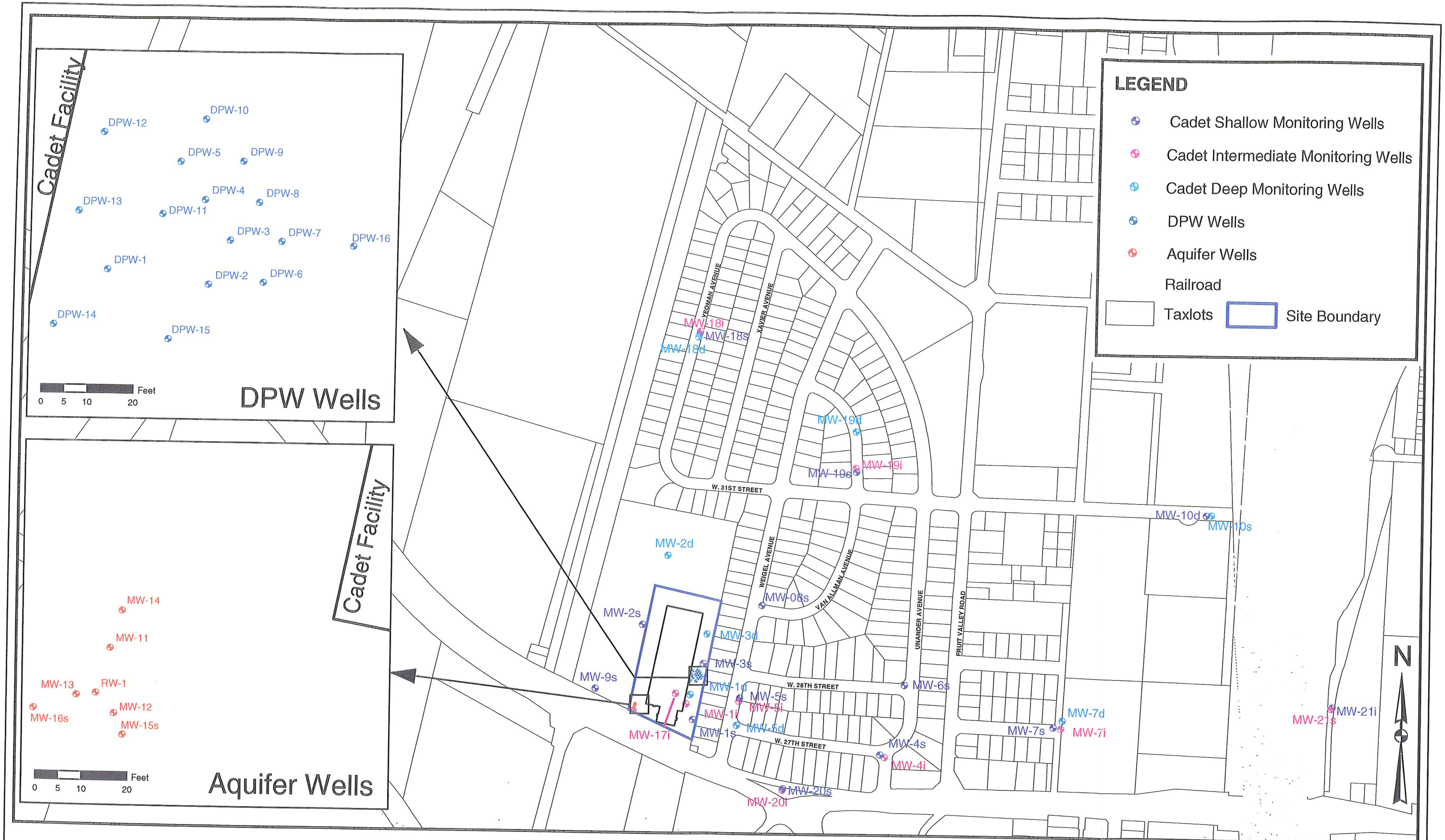
7376 SW Durham Road
Portland, Oregon USA 97224

Job: 2-61M-10135-R
Design: CB
Drawn: CB
Date: 12/20/02

CADET MANUFACTURING CO.
2500 W FOURTH PLAIN BLVD.
VANCOUVER, WASHINGTON

GROUNDWATER GEOCHEMISTRY DATA FOR MW-5s

K:\10135\Reports\RI\App G GW Char\GW Geochemistry Tables.xls



TAXLOT AND RAILROAD THEMES FROM CLARK COUNTY GIS DATABASE.

FIGURE G-5

0 200 400 800 Feet

1 inch equals 400 feet

amec

7376 SW Durham Road
Portland, OR, U.S.A. 97224

W.O. 2-61M-10135-U T4
DESIGN CB
DRAWN BRJ
DATE DECEMBER 2002

CADET MANUFACTURING CO.
2500 W FOURTH PLAIN BLVD.
VANCOUVER, WASHINGTON

CADET MONITORING WELL NETWORK

K:\10000\10100\10135\DWG\arcview\RI Report\Figure G-5 Cadet Monitoring Well Network.mxd

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 0-61M-10135-Q T1
Project Manager: Barb Lary

Reported:
10/17/02 15:58

Total Alkalinity by Conventional Chemistry Parameters per APHA/EPA Methods

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-1d/40/GW (P2J0099-01) Water					Sampled: 10/02/02	Received: 10/03/02			
Total Alkalinity	56.6	10.0	mg/L as CaCO3	1	EPA 310.1	10/10/02	10/11/02	2100365	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 0-61M-10135-Q T1
Project Manager: Barb Lary

Reported:
10/17/02 15:58

Hydrocarbons by GC/FID Headspace

North Creek Analytical - Bend

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-1d/40/GW (P2J0099-01) Water					Sampled: 10/02/02	Received: 10/03/02			
Methane	**1.60**	1.20	ug/l	1	RSK 175	10/14/02	10/14/02	0210043	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100220 - EPA 200/3005										
Blank (2100220-BLK1)				Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	ND	0.100	mg/l							
LCS (2100220-BS1)				Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	4.14	0.100	mg/l	4.00		104	80-120			
Duplicate (2100220-DUP1)		**Source: P2J0092-01**		Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	0.179	0.100	mg/l		0.177			1.12	20	
Matrix Spike (2100220-MS1)		**Source: P2J0092-01**		Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	4.38	0.100	mg/l	4.00	0.177	105	75-125			
Matrix Spike (2100220-MS2)		**Source: P2J0116-05**		Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	4.26	0.100	mg/l	4.00	ND	105	75-125			
Batch 2100465 - EPA 200/3005										
Blank (2100465-BLK1)				Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	ND	0.00100	mg/l							
Chromium	ND	0.00100	"							
Lead	ND	0.00100	"							
Manganese	ND	0.00200	"							
Selenium	ND	0.00100	"							
Vanadium	ND	0.00500	"							
LCS (2100465-BS1)				Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	0.0992	0.00100	mg/l	0.100		99.2	80-120			
Chromium	0.108	0.00100	"	0.100		108	80-120			
Lead	0.104	0.00100	"	0.100		104	80-120			
Manganese	0.106	0.00200	"	0.100		106	80-120			
Selenium	0.0986	0.00100	"	0.100		98.6	80-120			
Vanadium	0.108	0.00500	"	0.100		108	80-120			

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 0-61M-10135-Q T1
Project Manager: Barb Lary

Reported:
10/17/02 15:58

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100465 - EPA 200/3005										
Duplicate (2100465-DUP1)		**Source: P2I0542-01**		Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	0.00433	0.00100	mg/l		0.00461			6.26	20	
Chromium	ND	0.00100	"		ND				20	
Lead	ND	0.00100	"		ND				20	
Manganese	0.0117	0.00200	"		0.0119			1.69	20	
Selenium	ND	0.00100	"		ND				20	
Vanadium	ND	0.00500	"		ND			8.04	20	
Matrix Spike (2100465-MS1)		**Source: P2I0542-01**		Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	0.109	0.00100	mg/l	0.100	0.00461	104	75-125			
Chromium	0.107	0.00100	"	0.100	ND	107	75-125			
Lead	0.100	0.00100	"	0.100	ND	100	75-125			
Manganese	0.117	0.00200	"	0.100	0.0119	105	75-125			
Selenium	0.103	0.00100	"	0.100	ND	102	75-125			
Vanadium	0.115	0.00500	"	0.100	ND	111	75-125			
Matrix Spike (2100465-MS2)		**Source: P2I0542-02**		Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	0.105	0.00100	mg/l	0.100	0.00126	104	75-125			
Chromium	0.107	0.00100	"	0.100	ND	107	75-125			
Lead	0.103	0.00100	"	0.100	ND	103	75-125			
Manganese	0.126	0.00200	"	0.100	0.0204	106	75-125			
Selenium	0.106	0.00100	"	0.100	ND	105	75-125			
Vanadium	0.111	0.00500	"	0.100	ND	109	75-125			

Crystal Jones, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 0-61M-10135-Q T1 Project Manager: Barb Lary	**Reported:** 10/17/02 15:58

Hexavalent Chromium per EPA Method 7195 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100131 - Metals										
Blank (2100131-BLK1)				Prepared: 10/03/02	Analyzed: 10/07/02					
Hexavalent Chromium	ND	0.0100	mg/l							
LCS (2100131-BS1)				Prepared: 10/03/02	Analyzed: 10/07/02					
Hexavalent Chromium	0.939	0.0100	mg/l	1.00		93.9	85-115			
Duplicate (2100131-DUP1)	**Source: P2J0099-01**			Prepared: 10/03/02	Analyzed: 10/07/02					
Hexavalent Chromium	ND	0.0100	mg/l		ND				20	
Matrix Spike (2100131-MS1)	**Source: P2J0099-01**			Prepared: 10/03/02	Analyzed: 10/07/02					
Hexavalent Chromium	0.956	0.0100	mg/l	1.00	ND	95.6	80-120			

North Creek Analytical - Portland

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Crystal Jones, Project Manager

Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100149 - Wet Chem										
Blank (2100149-BLK1)				Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	ND	0.0100	mg/l							
LCS (2100149-BS1)				Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	0.0949	0.0100	mg/l	0.100		94.9	85-115			
Duplicate (2100149-DUP1)	**Source: P2I0392-11**			Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	1.79	0.250	mg/l		1.94			8.04	20	
Matrix Spike (2100149-MS1)	**Source: P2I0392-11**			Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	4.50	0.250	mg/l	2.50	1.94	102	75-125			
Batch 2100206 - Wet Chem										
Blank (2100206-BLK1)				Prepared & Analyzed: 10/07/02						
Chemical Oxygen Demand	ND	5.00	mg/l							
LCS (2100206-BS1)				Prepared & Analyzed: 10/07/02						
Chemical Oxygen Demand	32.0	5.00	mg/l	30.0		107	75-125			
Duplicate (2100206-DUP1)	**Source: P2J0155-01**			Prepared & Analyzed: 10/07/02						
Chemical Oxygen Demand	12.4	5.00	mg/l		13.7			9.96	20	
Batch 2100238 - Wet Chem										
Blank (2100238-BLK1)				Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	ND	0.0500	mg/l							

Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100238 - Wet Chem										
LCS (2100238-BS1)				Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	2.06	0.0500	mg/l	2.00		103	85-115			
Duplicate (2100238-DUP1)	**Source: P2J0132-04**			Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	ND	0.0500	mg/l		ND				20	
Matrix Spike (2100238-MS1)	**Source: P2J0132-04**			Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	2.06	0.0500	mg/l	2.00	ND	103	75-125			
Matrix Spike Dup (2100238-MSD1)	**Source: P2J0132-04**			Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	2.06	0.0500	mg/l	2.00	ND	103	75-125	0.00	20	
Batch 2100279 - Wet Chem										
Blank (2100279-BLK1)				Prepared & Analyzed: 10/09/02						
Sulfide	ND	1.00	mg/l							
LCS (2100279-BS1)				Prepared & Analyzed: 10/09/02						
Sulfide	19.0	1.00	mg/l	20.2		94.1	75-125			
Duplicate (2100279-DUP1)	**Source: P2J0099-01**			Prepared & Analyzed: 10/09/02						
Sulfide	ND	1.00	mg/l		ND				20	
Matrix Spike (2100279-MS1)	**Source: P2J0099-01**			Prepared & Analyzed: 10/09/02						
Sulfide	19.1	1.00	mg/l	22.0	ND	86.8	75-125			
Batch 2100380 - Wet Chem										
Blank (2100380-BLK1)				Prepared: 10/10/02 Analyzed: 10/11/02						
Total Organic Carbon	ND	1.00	mg/l							

Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 0-61M-10135-Q T1
Project Manager: Barb Lary

Reported:
10/17/02 15:58

Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100380 - Wet Chem										
LCS (2100380-BS1)				Prepared: 10/10/02 Analyzed: 10/11/02						
Total Organic Carbon	19.5	1.00	mg/l	20.0		97.5	85-115			
Duplicate (2100380-DUP1)	**Source: P2J0045-05**			Prepared: 10/10/02 Analyzed: 10/11/02						
Total Organic Carbon	ND	1.00	mg/l		ND			1.89	20	
Matrix Spike (2100380-MS1)	**Source: P2J0045-05**			Prepared: 10/10/02 Analyzed: 10/11/02						
Total Organic Carbon	24.4	1.00	mg/l	25.0	ND	96.3	70-130			
Batch 2100523 - Wet Chem										
Blank (2100523-BLK1)				Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	ND	1.00	mg/l							
LCS (2100523-BS1)				Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	20.3	1.00	mg/l	20.0		102	85-115			
Duplicate (2100523-DUP1)	**Source: P2I0392-10**			Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	55.2	1.00	mg/l		55.7			0.902	20	
Matrix Spike (2100523-MS1)	**Source: P2I0392-10**			Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	80.7	1.00	mg/l	25.3	55.7	98.8	0-200			

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 0-61M-10135-Q T1 Project Manager: Barb Lary	**Reported:** 10/17/02 15:58

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100122 - Wet Chem										
Blank (2100122-BLK1)				Prepared & Analyzed: 10/03/02						
Chloride	ND	0.500	mg/l							
Nitrate-Nitrogen	ND	0.100	"							
Sulfate	ND	1.00	"							
LCS (2100122-BS1)				Prepared & Analyzed: 10/03/02						
Chloride	10.1	0.500	mg/l	10.0		101	85-115			
Nitrate-Nitrogen	4.82	0.100	"	5.00		96.4	85-115			
Sulfate	29.6	1.00	"	30.0		98.7	85-115			
Duplicate (2100122-DUP1)		**Source: P2J0076-03**		Prepared & Analyzed: 10/03/02						
Chloride	17.0	0.500	mg/l		17.0			0.00	20	
Nitrate-Nitrogen	ND	0.100	"		ND				20	
Sulfate	12.3	1.00	"		12.2			0.816	20	
Matrix Spike (2100122-MS1)		**Source: P2J0076-03**		Prepared & Analyzed: 10/03/02						
Chloride	19.3	0.556	mg/l	2.22	17.0	104	75-125			
Nitrate-Nitrogen	2.21	0.111	"	2.22	ND	99.5	75-125			
Sulfate	16.8	1.11	"	4.44	12.2	104	75-125			
Matrix Spike Dup (2100122-MSD1)		**Source: P2J0076-03**		Prepared & Analyzed: 10/03/02						
Chloride	19.3	0.556	mg/l	2.22	17.0	104	75-125	0.00	20	
Nitrate-Nitrogen	2.21	0.111	"	2.22	ND	99.5	75-125	0.00	20	
Sulfate	16.9	1.11	"	4.44	12.2	106	75-125	0.593	20	

North Creek Analytical - Portland

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Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 0-61M-10135-Q T1
Project Manager: Barb Lary

Reported:
10/17/02 15:58

Total Alkalinity by Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100365 - Wet Chem										
Blank (2100365-BLK1)				Prepared: 10/10/02 Analyzed: 10/11/02						
Total Alkalinity	ND	10.0	mg/L as CaCO3							
LCS (2100365-BS1)				Prepared: 10/10/02 Analyzed: 10/11/02						
Total Alkalinity	190	10.0	mg/L as CaCO3	200		95.0	85-115			
Duplicate (2100365-DUP1)		**Source: P2J0099-01**		Prepared: 10/10/02 Analyzed: 10/11/02						
Total Alkalinity	57.5	10.0	mg/L as CaCO3		56.6			1.58	20	

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Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 0-61M-10135-Q T1
Project Manager: Barb Lary

Reported:
10/17/02 15:58

Hydrocarbons by GC/FID Headspace - Quality Control

North Creek Analytical - Bend

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0210043 - GC Headspace										
Blank (0210043-BLK1)				Prepared & Analyzed: 10/14/02						
Methane	ND	1.20	ug/l							U
LCS (0210043-BS1)				Prepared & Analyzed: 10/14/02						
Methane	57.5	1.20	ug/l	64.9		88.6	70-130			
LCS Dup (0210043-BSD1)				Prepared & Analyzed: 10/14/02						
Methane	55.8	1.20	ug/l	64.9		86.0	70-130	3.00	25	
Duplicate (0210043-DUP1)	**Source: C210031-04**			Prepared & Analyzed: 10/14/02						
Methane	12.0	1.20	ug/l		5.91			68.0	35	Q-14,A-01

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Crystal Jones, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 0-61M-10135-Q T1 Project Manager: Barb Lary	**Reported:** 10/17/02 15:58

Notes and Definitions

A-01	The VOA used for the Duplicate, while bearing the same sample identification, appeared darker in color and more turbid than the VOA used for the samples quantification.
Q-14	The RPD is above the control limit due to a non-homogeneous sample matrix.
U	Analyte included in the analysis, but not detected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

Crystal Jones, Project Manager

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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: P2J0099

CLIENT: AMEC
REPORT TO: BARB LARY
ADDRESS:
PHONE: 503-639-3400 FAX: 503-620-7892
PROJECT NAME: CADET
PROJECT NUMBER: 2-61M-10135-QT1
SAMPLED BY: BARB LARY

INVOICE TO:

P.O. NUMBER:

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyses
[✓ 10] 7 5 4 3 2 1 <1
STD

Petroleum Hydrocarbon Analyses
5 4 3 2 1 <1
STD

OTHER Please Specify

*Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	REQUESTED ANALYSES													MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
		BSK methane	Total Fe, Mn, As, V, Se, Cr, Pb	Sulfide	NH3, TOC, COD	Alk, Nitrate, Sulfate, Chloride O-P	Cr(VI), DOC						HOLD					
1. MW-1d/40/GW	10/2/02 1610	X	X	X	X	X							FIELD FILTERED HNO3 bottle		W	8		
2.																		
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
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11.																		
12.																		
13.																		
14.																		
15.																		

RELINQUISHED BY: Barb Lary
PRINT NAME: BARB LARY FIRM: AMEC DATE: 10/2/02 TIME: 1655
RECEIVED BY:
PRINT NAME: Tammy Elston FIRM: NCA DATE: 10/2/02 TIME: 16:50
RELINQUISHED BY:
PRINT NAME: FIRM: DATE: 10-2-02 TIME:
RECEIVED BY:
PRINT NAME: Kim Davis FIRM: NCA DATE: 10/3/02 TIME: 1115

ADDITIONAL REMARKS: PLEASE PROVIDE FINAL DATA IN GISKEY FORMAT

TEMP: 4.3°C PAGE 1 OF 1

COC REV 3/99

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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1
Project Manager: Barb Lary

Reported:
10/18/02 17:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW19i	P2J0155-01	Water	10/04/02 13:25	10/04/02 14:45

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1
Project Manager: Barb Lary

Reported:
10/18/02 17:40

Total Metals per EPA 6000/7000 Series Methods

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW19i (P2J0155-01) Water					Sampled: 10/04/02	Received: 10/04/02			
Arsenic	ND	0.00100	mg/l	1	EPA 6020	10/15/02	10/17/02	2100513	
Chromium	**0.00253**	0.00100	"	"	"	"	"	"	
Iron	**0.245**	0.100	"	"	EPA 6010B	10/07/02	10/08/02	2100220	
Lead	**0.00101**	0.00100	"	"	EPA 6020	10/15/02	10/17/02	2100513	
Manganese	**0.0528**	0.00200	"	"	"	"	"	"	
Selenium	**0.00172**	0.00100	"	"	"	"	"	"	
Vanadium	ND	0.00500	"	"	"	"	"	"	

Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1
Project Manager: Barb Lary

Reported:
10/18/02 17:40

Hexavalent Chromium per EPA Method 7195

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW19i (P2J0155-01) Water					Sampled: 10/04/02	Received: 10/04/02			
Hexavalent Chromium	ND	0.0100	mg/l	1	EPA 7195	10/04/02	10/07/02	2100168	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1 Project Manager: Barb Lary	**Reported:** 10/18/02 17:40

Conventional Chemistry Parameters per APHA/EPA Methods

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW19i (P2J0155-01) Water					Sampled: 10/04/02	Received: 10/04/02			
Ammonia-Nitrogen	**0.0650**	0.0500	mg/l	1	EPA 350.1	10/08/02	10/17/02	2100256	
Chemical Oxygen Demand	**13.7**	5.00	"	"	EPA 410.4	10/07/02	10/07/02	2100206	
Dissolved Organic Carbon	**2.65**	1.00	"	"	EPA 415.1	10/15/02	10/16/02	2100523	
Orthophosphate-phosphorus	**0.0557**	0.0100	"	"	EPA 365.2	10/04/02	10/04/02	2100170	
Sulfide	ND	1.00	"	"	EPA 376.1	10/09/02	10/09/02	2100279	
Total Organic Carbon	**3.79**	1.00	"	"	EPA 415.1	10/12/02	10/12/02	2100426	

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Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1
Project Manager: Barb Lary

Reported:
10/18/02 17:40

Anions per EPA Method 300.0

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW19i (P2J0155-01) Water					Sampled: 10/04/02	Received: 10/04/02			
Chloride	**5.81**	0.500	mg/l	1	EPA 300.0	10/07/02	10/08/02	2100148	
Nitrate-Nitrogen	**2.68**	0.100	"	"	"	"	"	"	A-06
Sulfate	**90.7**	1.00	"	"	"	"	"	"	

Crystal Jones, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1 Project Manager: Barb Lary	**Reported:** 10/18/02 17:40

Total Alkalinity by Conventional Chemistry Parameters per APHA/EPA Methods

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW19i (P2J0155-01) Water					Sampled: 10/04/02	Received: 10/04/02			
Total Alkalinity	**80.5**	10.0	mg/L as CaCO3	1	EPA 310.1	10/10/02	10/11/02	2100365	

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1 Project Manager: Barb Lary	**Reported:** 10/18/02 17:40

Hydrocarbons by GC/FID Headspace

North Creek Analytical - Bend

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW19i (P2J0155-01) Water					Sampled: 10/04/02	Received: 10/04/02			
Methane	ND	1.20	ug/l	1	RSK 175	10/14/02	10/14/02	0210043	U

AMEC- Portland	Project: Cadet Mfg.	
7376 SW Durham Road	Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1	**Reported:**
Portland, OR 97224	Project Manager: Barb Lary	10/18/02 17:40

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Batch 2100220 - EPA 200/3005

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (2100220-BLK1)				**Prepared: 10/07/02 Analyzed: 10/08/02**						
Iron	ND	0.100	mg/l							
LCS (2100220-BS1)				**Prepared: 10/07/02 Analyzed: 10/08/02**						
Iron	4.14	0.100	mg/l	4.00		104	80-120			
Duplicate (2100220-DUP1)		**Source: P2J0092-01**		**Prepared: 10/07/02 Analyzed: 10/08/02**						
Iron	0.179	0.100	mg/l		0.177			1.12	20	
Matrix Spike (2100220-MS1)		**Source: P2J0092-01**		**Prepared: 10/07/02 Analyzed: 10/08/02**						
Iron	4.38	0.100	mg/l	4.00	0.177	105	75-125			
Matrix Spike (2100220-MS2)		**Source: P2J0116-05**		**Prepared: 10/07/02 Analyzed: 10/08/02**						
Iron	4.26	0.100	mg/l	4.00	ND	105	75-125			

Batch 2100513 - EPA 200/3005

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (2100513-BLK1)				**Prepared: 10/15/02 Analyzed: 10/17/02**						
Arsenic	ND	0.00100	mg/l							
Chromium	ND	0.00100	"							
Lead	ND	0.00100	"							
Manganese	ND	0.00200	"							
Selenium	ND	0.00100	"							
Vanadium	ND	0.00500	"							
LCS (2100513-BS1)				**Prepared: 10/15/02 Analyzed: 10/17/02**						
Arsenic	0.100	0.00100	mg/l	0.100		100	80-120			
Chromium	0.0959	0.00100	"	0.100		95.9	80-120			
Lead	0.102	0.00100	"	0.100		102	80-120			
Manganese	0.0972	0.00200	"	0.100		97.2	80-120			
Selenium	0.0986	0.00100	"	0.100		98.6	80-120			
Vanadium	0.0960	0.00500	"	0.100		96.0	80-120			

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1
Project Manager: Barb Lary

Reported:
10/18/02 17:40

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100513 - EPA 200/3005										
Duplicate (2100513-DUP1)		**Source: P2J0155-01**		Prepared: 10/15/02	Analyzed: 10/17/02					
Arsenic	ND	0.00100	mg/l		ND				20	
Chromium	0.00252	0.00100	"		0.00253			0.396	20	
Lead	ND	0.00100	"		0.00101			17.2	20	
Manganese	0.0541	0.00200	"		0.0528			2.43	20	
Selenium	0.00160	0.00100	"		0.00172			7.23	20	
Vanadium	0.00544	0.00500	"		ND			9.63	20	
Matrix Spike (2100513-MS1)		**Source: P2J0155-01**		Prepared: 10/15/02	Analyzed: 10/17/02					
Arsenic	0.105	0.00100	mg/l	0.100	ND	105	75-125			
Chromium	0.0982	0.00100	"	0.100	0.00253	95.7	75-125			
Lead	0.105	0.00100	"	0.100	0.00101	104	75-125			
Manganese	0.143	0.00200	"	0.100	0.0528	90.2	75-125			
Selenium	0.104	0.00100	"	0.100	0.00172	102	75-125			
Vanadium	0.104	0.00500	"	0.100	ND	99.1	75-125			
Matrix Spike (2100513-MS2)		**Source: P2J0172-01**		Prepared: 10/15/02	Analyzed: 10/17/02					
Arsenic	0.101	0.00100	mg/l	0.100	ND	101	75-125			
Chromium	0.0975	0.00100	"	0.100	0.00176	95.7	75-125			
Lead	0.109	0.00100	"	0.100	ND	109	75-125			
Manganese	0.0930	0.00200	"	0.100	ND	92.1	75-125			
Selenium	0.102	0.00100	"	0.100	ND	101	75-125			
Vanadium	0.0973	0.00500	"	0.100	ND	97.3	75-125			

Crystal Jones, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1 Project Manager: Barb Lary	**Reported:** 10/18/02 17:40

Hexavalent Chromium per EPA Method 7195 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100168 - Metals										
Blank (2100168-BLK1)				Prepared: 10/04/02 Analyzed: 10/07/02						
Hexavalent Chromium	ND	0.0100	mg/l							
LCS (2100168-BS1)				Prepared: 10/04/02 Analyzed: 10/07/02						
Hexavalent Chromium	0.954	0.0100	mg/l	1.00		95.4	85-115			
Duplicate (2100168-DUP1)	**Source: P2J0116-01**			Prepared: 10/04/02 Analyzed: 10/07/02						
Hexavalent Chromium	ND	0.0100	mg/l		ND				20	
Matrix Spike (2100168-MS1)	**Source: P2J0116-01**			Prepared: 10/04/02 Analyzed: 10/07/02						
Hexavalent Chromium	0.850	0.0100	mg/l	1.00	ND	85.0	80-120			

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Crystal Jones, Project Manager

Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100170 - Wet Chem										
Blank (2100170-BLK1)				Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	ND	0.0100	mg/l							
LCS (2100170-BS1)				Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	0.220	0.0100	mg/l	0.200		110	85-115			
Duplicate (2100170-DUP1)		**Source: P2J0155-01**		Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	0.0575	0.0100	mg/l		0.0557			3.18	20	
Matrix Spike (2100170-MS1)		**Source: P2J0155-01**		Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	0.271	0.0100	mg/l	0.200	0.0557	108	75-125			
Batch 2100206 - Wet Chem										
Blank (2100206-BLK1)				Prepared & Analyzed: 10/07/02						
Chemical Oxygen Demand	ND	5.00	mg/l							
LCS (2100206-BS1)				Prepared & Analyzed: 10/07/02						
Chemical Oxygen Demand	32.0	5.00	mg/l	30.0		107	75-125			
Duplicate (2100206-DUP1)		**Source: P2J0155-01**		Prepared & Analyzed: 10/07/02						
Chemical Oxygen Demand	12.4	5.00	mg/l		13.7			9.96	20	
Batch 2100256 - Wet Chem										
Blank (2100256-BLK1)				Prepared: 10/08/02 Analyzed: 10/17/02						
Ammonia-Nitrogen	ND	0.0500	mg/l							

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Crystal Jones, Project Manager

Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100256 - Wet Chem										
LCS (2100256-BS1)				Prepared: 10/08/02 Analyzed: 10/17/02						
Ammonia-Nitrogen	2.07	0.0500	mg/l	2.00		104	85-115			
Duplicate (2100256-DUP1)	Source: P2J0106-01			Prepared: 10/08/02 Analyzed: 10/17/02						
Ammonia-Nitrogen	3.71	0.0500	mg/l		4.24			13.3	20	
Matrix Spike (2100256-MS1)	Source: P2J0106-01			Prepared: 10/08/02 Analyzed: 10/17/02						
Ammonia-Nitrogen	9.33	0.100	mg/l	4.00	4.24	127	75-125			Q-02
Matrix Spike Dup (2100256-MSD1)	Source: P2J0106-01			Prepared: 10/08/02 Analyzed: 10/17/02						
Ammonia-Nitrogen	8.98	0.100	mg/l	4.00	4.24	118	75-125	3.82	20	
Batch 2100279 - Wet Chem										
Blank (2100279-BLK1)				Prepared & Analyzed: 10/09/02						
Sulfide	ND	1.00	mg/l							
LCS (2100279-BS1)				Prepared & Analyzed: 10/09/02						
Sulfide	19.0	1.00	mg/l	20.2		94.1	75-125			
Duplicate (2100279-DUP1)	Source: P2J0099-01			Prepared & Analyzed: 10/09/02						
Sulfide	ND	1.00	mg/l		ND				20	
Matrix Spike (2100279-MS1)	Source: P2J0099-01			Prepared & Analyzed: 10/09/02						
Sulfide	19.1	1.00	mg/l	22.0	ND	86.8	75-125			
Batch 2100426 - Wet Chem										
Blank (2100426-BLK1)				Prepared & Analyzed: 10/12/02						
Total Organic Carbon	ND	1.00	mg/l							

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1
Project Manager: Barb Lary

Reported:
10/18/02 17:40

Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100426 - Wet Chem										
LCS (2100426-BS1)				Prepared & Analyzed: 10/12/02						
Total Organic Carbon	19.3	1.00	mg/l	20.0		96.5	85-115			
Duplicate (2100426-DUP1)		**Source: P2J0107-01**		Prepared & Analyzed: 10/12/02						
Total Organic Carbon	17.7	1.00	mg/l		17.3			2.29	20	
Matrix Spike (2100426-MS1)		**Source: P2J0107-01**		Prepared & Analyzed: 10/12/02						
Total Organic Carbon	41.7	1.00	mg/l	25.0	17.3	97.6	70-130			
Batch 2100523 - Wet Chem										
Blank (2100523-BLK1)				Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	ND	1.00	mg/l							
LCS (2100523-BS1)				Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	20.3	1.00	mg/l	20.0		102	85-115			
Duplicate (2100523-DUP1)		**Source: P2I0392-10**		Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	55.2	1.00	mg/l		55.7			0.902	20	
Matrix Spike (2100523-MS1)		**Source: P2I0392-10**		Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	80.7	1.00	mg/l	25.3	55.7	98.8	0-200			

Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1
Project Manager: Barb Lary

Reported:
10/18/02 17:40

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100148 - Wet Chem										
Blank (2100148-BLK1)				Prepared & Analyzed: 10/07/02						
Chloride	ND	0.500	mg/l							
Nitrate-Nitrogen	ND	0.100	"							
Sulfate	ND	1.00	"							
LCS (2100148-BS1)				Prepared & Analyzed: 10/07/02						
Chloride	10.3	0.500	mg/l	10.0		103	85-115			
Nitrate-Nitrogen	4.95	0.100	"	5.00		99.0	85-115			
Sulfate	30.1	1.00	"	30.0		100	85-115			
Duplicate (2100148-DUP1)		**Source: P2J0045-05**		Prepared & Analyzed: 10/07/02						
Chloride	2.48	0.500	mg/l		2.45			1.22	20	
Nitrate-Nitrogen	ND	0.100	"		0.100			10.5	20	
Sulfate	ND	1.00	"		ND			0.00	20	
Matrix Spike (2100148-MS1)		**Source: P2J0045-05**		Prepared & Analyzed: 10/07/02						
Chloride	4.63	0.556	mg/l	2.22	2.45	98.2	75-125			
Nitrate-Nitrogen	2.26	0.111	"	2.22	ND	97.3	75-125			
Sulfate	5.07	1.11	"	4.44	ND	98.4	75-125			
Matrix Spike Dup (2100148-MSD1)		**Source: P2J0045-05**		Prepared & Analyzed: 10/07/02						
Chloride	4.63	0.556	mg/l	2.22	2.45	98.2	75-125	0.00	20	
Nitrate-Nitrogen	2.29	0.111	"	2.22	ND	98.6	75-125	1.32	20	
Sulfate	5.03	1.11	"	4.44	ND	97.5	75-125	0.792	20	

Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1
Project Manager: Barb Lary

Reported:
10/18/02 17:40

Total Alkalinity by Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100365 - Wet Chem										
Blank (2100365-BLK1)				Prepared: 10/10/02 Analyzed: 10/11/02						
Total Alkalinity	ND	10.0	mg/L as CaCO3							
LCS (2100365-BS1)				Prepared: 10/10/02 Analyzed: 10/11/02						
Total Alkalinity	190	10.0	mg/L as CaCO3	200		95.0	85-115			
Duplicate (2100365-DUP1)	**Source: P2J0099-01**			Prepared: 10/10/02 Analyzed: 10/11/02						
Total Alkalinity	57.5	10.0	mg/L as CaCO3		56.6			1.58	20	

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Crystal Jones, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q-T1/2-61M-10323-Q-T1 Project Manager: Barb Lary	**Reported:** 10/18/02 17:40

Hydrocarbons by GC/FID Headspace - Quality Control

North Creek Analytical - Bend

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0210043 - GC Headspace										
Blank (0210043-BLK1)				Prepared & Analyzed: 10/14/02						
Methane	ND	1.20	ug/l							U
LCS (0210043-BS1)				Prepared & Analyzed: 10/14/02						
Methane	57.5	1.20	ug/l	64.9		88.6	70-130			
LCS Dup (0210043-BSD1)				Prepared & Analyzed: 10/14/02						
Methane	55.8	1.20	ug/l	64.9		86.0	70-130	3.00	25	
Duplicate (0210043-DUP1)	Source: C210031-04			Prepared & Analyzed: 10/14/02						
Methane	12.0	1.20	ug/l		5.91			68.0	35	Q-14,A-01

Crystal Jones, Project Manager

Notes and Definitions

A-01	The VOA used for the Duplicate, while bearing the same sample identification, appeared darker in color and more turbid than the VOA used for the samples quantification.
A-06	Sample was analyzed past the holding time due to an instrument malfunction on the initial run.
Q-02	The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
Q-14	The RPD is above the control limit due to a non-homogeneous sample matrix.
U	Analyte included in the analysis, but not detected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

Crystal Jones, Project Manager

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North Creek Analytical, Inc.
Environmental Laboratory Network
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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: P2J0155

CLIENT: AMEC
REPORT TO: Barb Lowy
ADDRESS: 7376 SW Durham Rd.
Portland, OR 97224
PHONE: 503-639-3400 FAX: 503-620-7892
INVOICE TO:
P.O. NUMBER:
PROJECT NAME: Cadet
PROJECT NUMBER: 2-61M-10135-(2-T1, 2-61M-10323-(2-T)
SAMPLED BY: Steve Rock

TURNAROUND REQUEST in Business Days*
Organic & Inorganic Analyses
[✓ 10] 7 5 4 3 2 1 <1
STD.
Petroleum Hydrocarbon Analyses
[✓ 5] 4 3 2 1 <1
STD.
OTHER Please Specify
*Turnaround Requests less than standard may incur Rush Charges.

		REQUESTED ANALYSES															
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	Total Metals *	Diss Metals *	Sulfide	Alkalinity	Nitrate, Sulfate Chloride	Ortho phosphate	Cr-(VI), DOC	NH₃, TOC, COD	Methane					MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1. MW-19i	10-4-02 13:25	X	X	X	X	X	X	X	X	X					W	8	* Fe, Mn, As, V,	
2.																	Se, Cr, Pb	
3.																		
4.																	-Please hold	
5.																	Diss metals	
6.																	sample.	
7.																		
8.																		
9.																		
10.																		
11.																		
12.																		
13.																		
14.																		
15.																		

RELINQUISHED BY: DATE: 10-4-02 RECEIVED BY: DATE: 10-4-02
PRINT NAME: Steve Rock FIRM: AMEC TIME: 14:45 PRINT NAME: Stan Passarge FIRM: NCA TIME: 1445
RELINQUISHED BY: DATE: RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME: PRINT NAME: FIRM: TIME:
ADDITIONAL REMARKS: @ client TEMP: 5.3 PAGE 1 OF 1
COC REV 3/99

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q T1 Project Manager: Barb Lary	**Reported:** 10/22/02 12:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1d/100/GW	P2J0116-01	Water	10/03/02 08:15	10/03/02 15:14
MW-5i/GW	P2J0116-02	Water	10/03/02 09:45	10/03/02 15:14
MW-5i/GW DUP	P2J0116-03	Water	10/03/02 09:45	10/03/02 15:14
MW-4i/GW	P2J0116-04	Water	10/03/02 11:30	10/03/02 15:14
MW-20i/GW	P2J0116-05	Water	10/03/02 13:45	10/03/02 15:14

North Creek Analytical - Portland

Crystal Jones, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q T1 Project Manager: Barb Lary	**Reported:** 10/22/02 12:12

Total Metals per EPA 6000/7000 Series Methods

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-1d/100/GW (P2J0116-01) Water					Sampled: 10/03/02	Received: 10/03/02			
Arsenic	ND	0.00100	mg/l	1	EPA 6020	10/14/02	10/16/02	2100465	
Chromium	ND	0.00100	"	"	"	"	"	"	
Iron	**3.86**	0.100	"	"	EPA 6010B	10/07/02	10/08/02	2100220	
Lead	ND	0.00100	"	"	EPA 6020	10/14/02	10/16/02	2100465	
Manganese	**3.05**	0.0200	"	10	"	"	10/16/02	"	
Selenium	ND	0.00100	"	1	"	"	10/16/02	"	
Vanadium	ND	0.00500	"	"	"	"	10/16/02	"	
MW-5i/GW (P2J0116-02) Water					Sampled: 10/03/02	Received: 10/03/02			
Arsenic	ND	0.00100	mg/l	1	EPA 6020	10/14/02	10/16/02	2100465	
Chromium	ND	0.00100	"	"	"	"	"	"	
Iron	**5.32**	0.100	"	"	EPA 6010B	10/07/02	10/08/02	2100220	
Lead	ND	0.00100	"	"	EPA 6020	10/14/02	10/16/02	2100465	
Manganese	**0.204**	0.00200	"	"	"	"	"	"	
Selenium	ND	0.00100	"	"	"	"	10/16/02	"	
Vanadium	ND	0.00500	"	"	"	"	10/16/02	"	
MW-5i/GW DUP (P2J0116-03) Water					Sampled: 10/03/02	Received: 10/03/02			
Arsenic	ND	0.00100	mg/l	1	EPA 6020	10/14/02	10/16/02	2100465	
Chromium	ND	0.00100	"	"	"	"	"	"	
Iron	**5.30**	0.100	"	"	EPA 6010B	10/07/02	10/08/02	2100220	
Lead	ND	0.00100	"	"	EPA 6020	10/14/02	10/16/02	2100465	
Manganese	**0.202**	0.00200	"	"	"	"	"	"	
Selenium	ND	0.00100	"	"	"	"	10/16/02	"	
Vanadium	ND	0.00500	"	"	"	"	10/16/02	"	

Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q T1
Project Manager: Barb Lary

Reported:
10/22/02 12:12

Total Metals per EPA 6000/7000 Series Methods
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-4i/GW (P2J0116-04) Water					Sampled: 10/03/02	Received: 10/03/02			
Arsenic	**0.00152**	0.00100	mg/l	1	EPA 6020	10/14/02	10/16/02	2100465	
Chromium	ND	0.00100	"	"	"	"	"	"	
Iron	ND	0.100	"	"	EPA 6010B	10/07/02	10/08/02	2100220	
Lead	ND	0.00100	"	"	EPA 6020	10/14/02	10/16/02	2100465	
Manganese	**0.0563**	0.00200	"	"	"	"	"	"	
Selenium	ND	0.00100	"	"	"	"	10/16/02	"	
Vanadium	**0.0110**	0.00500	"	"	"	"	10/16/02	"	
MW-20i/GW (P2J0116-05) Water					Sampled: 10/03/02	Received: 10/03/02			
Arsenic	**0.00187**	0.00100	mg/l	1	EPA 6020	10/14/02	10/16/02	2100465	
Chromium	ND	0.00100	"	"	"	"	"	"	
Iron	ND	0.100	"	"	EPA 6010B	10/07/02	10/08/02	2100220	
Lead	ND	0.00100	"	"	EPA 6020	10/14/02	10/16/02	2100465	
Manganese	**0.441**	0.00200	"	"	"	"	"	"	
Selenium	ND	0.00100	"	"	"	"	10/16/02	"	
Vanadium	**0.00722**	0.00500	"	"	"	"	10/16/02	"	

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Hexavalent Chromium per EPA Method 7195

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-1d/100/GW (P2J0116-01) Water					Sampled: 10/03/02 Received: 10/03/02				
Hexavalent Chromium	ND	0.0100	mg/l	1	EPA 7195	10/04/02	10/07/02	2100168	I-02
MW-5i/GW (P2J0116-02) Water					Sampled: 10/03/02 Received: 10/03/02				
Hexavalent Chromium	ND	0.0100	mg/l	1	EPA 7195	10/04/02	10/07/02	2100168	I-02
MW-5i/GW DUP (P2J0116-03) Water					Sampled: 10/03/02 Received: 10/03/02				
Hexavalent Chromium	ND	0.0100	mg/l	1	EPA 7195	10/04/02	10/07/02	2100168	I-02
MW-4i/GW (P2J0116-04) Water					Sampled: 10/03/02 Received: 10/03/02				
Hexavalent Chromium	ND	0.0100	mg/l	1	EPA 7195	10/04/02	10/07/02	2100168	I-02
MW-20i/GW (P2J0116-05) Water					Sampled: 10/03/02 Received: 10/03/02				
Hexavalent Chromium	ND	0.0100	mg/l	1	EPA 7195	10/04/02	10/07/02	2100168	I-02

Crystal Jones, Project Manager

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Project: Cadet Mfg.
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10/22/02 12:12

Conventional Chemistry Parameters per APHA/EPA Methods

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-1d/100/GW (P2J0116-01) Water					Sampled: 10/03/02	Received: 10/03/02			
Ammonia-Nitrogen	ND	0.0500	mg/l	1	EPA 350.1	10/08/02	10/09/02	2100238	
Chemical Oxygen Demand	**5.55**	5.00	"	"	EPA 410.4	10/07/02	10/07/02	2100206	
Dissolved Organic Carbon	ND	1.00	"	"	EPA 415.1	10/15/02	10/16/02	2100523	
Orthophosphate-phosphorus	ND	0.0100	"	"	EPA 365.1	10/04/02	10/04/02	2100149	
Sulfide	ND	1.00	"	"	EPA 376.1	10/09/02	10/09/02	2100279	
Total Organic Carbon	**1.06**	1.00	"	"	EPA 415.1	10/12/02	10/12/02	2100426	
MW-5i/GW (P2J0116-02) Water					Sampled: 10/03/02	Received: 10/03/02			
Ammonia-Nitrogen	**0.664**	0.0500	mg/l	1	EPA 350.1	10/08/02	10/09/02	2100238	
Chemical Oxygen Demand	**13.2**	5.00	"	"	EPA 410.4	10/07/02	10/07/02	2100206	
Dissolved Organic Carbon	**2.09**	1.00	"	"	EPA 415.1	10/15/02	10/16/02	2100523	
Orthophosphate-phosphorus	ND	0.0100	"	"	EPA 365.1	10/04/02	10/04/02	2100149	
Sulfide	ND	1.00	"	"	EPA 376.1	10/09/02	10/09/02	2100279	
Total Organic Carbon	**2.53**	1.00	"	"	EPA 415.1	10/12/02	10/12/02	2100426	
MW-4i/GW (P2J0116-04) Water					Sampled: 10/03/02	Received: 10/03/02			
Ammonia-Nitrogen	ND	0.0500	mg/l	1	EPA 350.1	10/08/02	10/09/02	2100238	
Chemical Oxygen Demand	**11.4**	5.00	"	"	EPA 410.4	10/07/02	10/07/02	2100206	
Dissolved Organic Carbon	**2.09**	1.00	"	"	EPA 415.1	10/15/02	10/16/02	2100523	
Orthophosphate-phosphorus	**0.0946**	0.0100	"	"	EPA 365.1	10/04/02	10/04/02	2100149	
Sulfide	ND	1.00	"	"	EPA 376.1	10/09/02	10/09/02	2100279	
Total Organic Carbon	**2.33**	1.00	"	"	EPA 415.1	10/12/02	10/12/02	2100426	
MW-20i/GW (P2J0116-05) Water					Sampled: 10/03/02	Received: 10/03/02			
Ammonia-Nitrogen	ND	0.0500	mg/l	1	EPA 350.1	10/08/02	10/09/02	2100238	
Chemical Oxygen Demand	**14.5**	5.00	"	"	EPA 410.4	10/07/02	10/07/02	2100206	
Dissolved Organic Carbon	**2.32**	1.00	"	"	EPA 415.1	10/15/02	10/16/02	2100523	
Orthophosphate-phosphorus	**0.0621**	0.0100	"	"	EPA 365.1	10/04/02	10/04/02	2100149	
Sulfide	ND	1.00	"	"	EPA 376.1	10/09/02	10/09/02	2100279	
Total Organic Carbon	**2.85**	1.00	"	"	EPA 415.1	10/12/02	10/12/02	2100426	

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q T1 Project Manager: Barb Lary	**Reported:** 10/22/02 12:12

Anions per EPA Method 300.0

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-1d/100/GW (P2J0116-01) Water					Sampled: 10/03/02	Received: 10/03/02			
Chloride	**5.23**	0.500	mg/l	1	EPA 300.0	10/07/02	10/07/02	2100148	
Nitrate-Nitrogen	ND	0.100	"	"	"	"	"	"	A-03
Sulfate	**261**	10.0	"	10	"	"	10/15/02	"	
MW-5i/GW (P2J0116-02) Water					Sampled: 10/03/02	Received: 10/03/02			
Chloride	**4.98**	0.500	mg/l	1	EPA 300.0	10/07/02	10/08/02	2100148	
Nitrate-Nitrogen	**1.45**	0.100	"	"	"	"	"	"	A-03
Sulfate	**71.4**	1.00	"	"	"	"	"	"	
MW-5i/GW DUP (P2J0116-03) Water					Sampled: 10/03/02	Received: 10/03/02			
Sulfate	**71.4**	1.00	mg/l	1	EPA 300.0	10/07/02	10/08/02	2100148	
MW-4i/GW (P2J0116-04) Water					Sampled: 10/03/02	Received: 10/03/02			
Chloride	**5.34**	0.500	mg/l	1	EPA 300.0	10/07/02	10/08/02	2100148	
Nitrate-Nitrogen	**0.910**	0.100	"	"	"	"	"	"	A-03
Sulfate	**48.4**	1.00	"	"	"	"	"	"	
MW-20i/GW (P2J0116-05) Water					Sampled: 10/03/02	Received: 10/03/02			
Chloride	**4.66**	0.500	mg/l	1	EPA 300.0	10/07/02	10/08/02	2100148	
Nitrate-Nitrogen	ND	0.100	"	"	"	"	"	"	A-03
Sulfate	**34.0**	1.00	"	"	"	"	"	"	

AMEC- Portland
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Portland, OR 97224

Project: Cadet Mfg.
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Total Alkalinity by Conventional Chemistry Parameters per APHA/EPA Methods

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-1d/100/GW (P2J0116-01) Water					Sampled: 10/03/02	Received: 10/03/02			
Total Alkalinity	78.3	10.0	mg/L as CaCO3	1	EPA 310.1	10/09/02	10/10/02	2100283	
MW-5i/GW (P2J0116-02) Water					Sampled: 10/03/02	Received: 10/03/02			
Total Alkalinity	69.8	10.0	mg/L as CaCO3	1	EPA 310.1	10/09/02	10/10/02	2100283	
MW-4i/GW (P2J0116-04) Water					Sampled: 10/03/02	Received: 10/03/02			
Total Alkalinity	103	10.0	mg/L as CaCO3	1	EPA 310.1	10/09/02	10/10/02	2100283	
MW-20i/GW (P2J0116-05) Water					Sampled: 10/03/02	Received: 10/03/02			
Total Alkalinity	105	10.0	mg/L as CaCO3	1	EPA 310.1	10/09/02	10/10/02	2100283	

Crystal Jones, Project Manager

Hydrocarbons by GC/FID Headspace

North Creek Analytical - Bend

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-1d/100/GW (P2J0116-01) Water					Sampled: 10/03/02	Received: 10/03/02			
Methane	ND	1.20	ug/l	1	RSK 175	10/14/02	10/14/02	0210043	U
MW-5i/GW (P2J0116-02) Water					Sampled: 10/03/02	Received: 10/03/02			
Methane	**0.950**	1.20	ug/l	1	RSK 175	10/14/02	10/14/02	0210043	J
MW-4i/GW (P2J0116-04) Water					Sampled: 10/03/02	Received: 10/03/02			
Methane	ND	1.20	ug/l	1	RSK 175	10/14/02	10/14/02	0210043	U
MW-20i/GW (P2J0116-05) Water					Sampled: 10/03/02	Received: 10/03/02			
Methane	**4.80**	1.20	ug/l	1	RSK 175	10/14/02	10/14/02	0210043	

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Crystal Jones, Project Manager

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100220 - EPA 200/3005										
Blank (2100220-BLK1)				Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	ND	0.100	mg/l							
LCS (2100220-BS1)				Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	4.14	0.100	mg/l	4.00		104	80-120			
Duplicate (2100220-DUP1)		**Source: P2J0092-01**		Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	0.179	0.100	mg/l		0.177			1.12	20	
Matrix Spike (2100220-MS1)		**Source: P2J0092-01**		Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	4.38	0.100	mg/l	4.00	0.177	105	75-125			
Matrix Spike (2100220-MS2)		**Source: P2J0116-05**		Prepared: 10/07/02 Analyzed: 10/08/02						
Iron	4.26	0.100	mg/l	4.00	ND	105	75-125			
Batch 2100465 - EPA 200/3005										
Blank (2100465-BLK1)				Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	ND	0.00100	mg/l							
Chromium	ND	0.00100	"							
Lead	ND	0.00100	"							
Manganese	ND	0.00200	"							
Selenium	ND	0.00100	"							
Vanadium	ND	0.00500	"							
LCS (2100465-BS1)				Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	0.0992	0.00100	mg/l	0.100		99.2	80-120			
Chromium	0.108	0.00100	"	0.100		108	80-120			
Lead	0.104	0.00100	"	0.100		104	80-120			
Manganese	0.106	0.00200	"	0.100		106	80-120			
Selenium	0.0986	0.00100	"	0.100		98.6	80-120			
Vanadium	0.108	0.00500	"	0.100		108	80-120			

AMEC- Portland
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Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100465 - EPA 200/3005										
Duplicate (2100465-DUP1)		**Source: P2I0542-01**		Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	0.00433	0.00100	mg/l		0.00461			6.26	20	
Chromium	ND	0.00100	"		ND				20	
Lead	ND	0.00100	"		ND				20	
Manganese	0.0117	0.00200	"		0.0119			1.69	20	
Selenium	ND	0.00100	"		ND				20	
Vanadium	ND	0.00500	"		ND			8.04	20	
Matrix Spike (2100465-MS1)		**Source: P2I0542-01**		Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	0.109	0.00100	mg/l	0.100	0.00461	104	75-125			
Chromium	0.107	0.00100	"	0.100	ND	107	75-125			
Lead	0.100	0.00100	"	0.100	ND	100	75-125			
Manganese	0.117	0.00200	"	0.100	0.0119	105	75-125			
Selenium	0.103	0.00100	"	0.100	ND	102	75-125			
Vanadium	0.115	0.00500	"	0.100	ND	111	75-125			
Matrix Spike (2100465-MS2)		**Source: P2I0542-02**		Prepared: 10/14/02 Analyzed: 10/15/02						
Arsenic	0.105	0.00100	mg/l	0.100	0.00126	104	75-125			
Chromium	0.107	0.00100	"	0.100	ND	107	75-125			
Lead	0.103	0.00100	"	0.100	ND	103	75-125			
Manganese	0.126	0.00200	"	0.100	0.0204	106	75-125			
Selenium	0.106	0.00100	"	0.100	ND	105	75-125			
Vanadium	0.111	0.00500	"	0.100	ND	109	75-125			

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Hexavalent Chromium per EPA Method 7195 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100168 - Metals										
Blank (2100168-BLK1)				Prepared: 10/04/02 Analyzed: 10/07/02						
Hexavalent Chromium	ND	0.0100	mg/l							
LCS (2100168-BS1)				Prepared: 10/04/02 Analyzed: 10/07/02						
Hexavalent Chromium	0.954	0.0100	mg/l	1.00		95.4	85-115			
Duplicate (2100168-DUP1)	**Source: P2J0116-01**			Prepared: 10/04/02 Analyzed: 10/07/02						
Hexavalent Chromium	ND	0.0100	mg/l		ND				20	
Matrix Spike (2100168-MS1)	**Source: P2J0116-01**			Prepared: 10/04/02 Analyzed: 10/07/02						
Hexavalent Chromium	0.850	0.0100	mg/l	1.00	ND	85.0	80-120			

Crystal Jones, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q T1 Project Manager: Barb Lary	**Reported:** 10/22/02 12:12

Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100149 - Wet Chem										
Blank (2100149-BLK1)				Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	ND	0.0100	mg/l							
LCS (2100149-BS1)				Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	0.0949	0.0100	mg/l	0.100		94.9	85-115			
Duplicate (2100149-DUP1)		**Source: P2I0392-11**		Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	1.79	0.250	mg/l		1.94			8.04	20	
Matrix Spike (2100149-MS1)		**Source: P2I0392-11**		Prepared & Analyzed: 10/04/02						
Orthophosphate-phosphorus	4.50	0.250	mg/l	2.50	1.94	102	75-125			
Batch 2100206 - Wet Chem										
Blank (2100206-BLK1)				Prepared & Analyzed: 10/07/02						
Chemical Oxygen Demand	ND	5.00	mg/l							
LCS (2100206-BS1)				Prepared & Analyzed: 10/07/02						
Chemical Oxygen Demand	32.0	5.00	mg/l	30.0		107	75-125			
Duplicate (2100206-DUP1)		**Source: P2J0155-01**		Prepared & Analyzed: 10/07/02						
Chemical Oxygen Demand	12.4	5.00	mg/l		13.7			9.96	20	
Batch 2100238 - Wet Chem										
Blank (2100238-BLK1)				Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	ND	0.0500	mg/l							

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Project: Cadet Mfg.
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Project Manager: Barb Lary

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Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100238 - Wet Chem										
LCS (2100238-BS1)				Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	2.06	0.0500	mg/l	2.00		103	85-115			
Duplicate (2100238-DUP1)		**Source: P2J0132-04**		Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	ND	0.0500	mg/l		ND				20	
Matrix Spike (2100238-MS1)		**Source: P2J0132-04**		Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	2.06	0.0500	mg/l	2.00	ND	103	75-125			
Matrix Spike Dup (2100238-MSD1)		**Source: P2J0132-04**		Prepared: 10/08/02 Analyzed: 10/09/02						
Ammonia-Nitrogen	2.06	0.0500	mg/l	2.00	ND	103	75-125	0.00	20	
Batch 2100279 - Wet Chem										
Blank (2100279-BLK1)				Prepared & Analyzed: 10/09/02						
Sulfide	ND	1.00	mg/l							
LCS (2100279-BS1)				Prepared & Analyzed: 10/09/02						
Sulfide	19.0	1.00	mg/l	20.2		94.1	75-125			
Duplicate (2100279-DUP1)		**Source: P2J0099-01**		Prepared & Analyzed: 10/09/02						
Sulfide	ND	1.00	mg/l		ND				20	
Matrix Spike (2100279-MS1)		**Source: P2J0099-01**		Prepared & Analyzed: 10/09/02						
Sulfide	19.1	1.00	mg/l	22.0	ND	86.8	75-125			
Batch 2100426 - Wet Chem										
Blank (2100426-BLK1)				Prepared & Analyzed: 10/12/02						
Total Organic Carbon	ND	1.00	mg/l							

North Creek Analytical - Portland

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Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100426 - Wet Chem										
LCS (2100426-BS1)				Prepared & Analyzed: 10/12/02						
Total Organic Carbon	19.3	1.00	mg/l	20.0		96.5	85-115			
Duplicate (2100426-DUP1)	**Source: P2J0107-01**			Prepared & Analyzed: 10/12/02						
Total Organic Carbon	17.7	1.00	mg/l		17.3			2.29	20	
Matrix Spike (2100426-MS1)	**Source: P2J0107-01**			Prepared & Analyzed: 10/12/02						
Total Organic Carbon	41.7	1.00	mg/l	25.0	17.3	97.6	70-130			
Batch 2100523 - Wet Chem										
Blank (2100523-BLK1)				Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	ND	1.00	mg/l							
LCS (2100523-BS1)				Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	20.3	1.00	mg/l	20.0		102	85-115			
Duplicate (2100523-DUP1)	**Source: P2I0392-10**			Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	55.2	1.00	mg/l		55.7			0.902	20	
Matrix Spike (2100523-MS1)	**Source: P2I0392-10**			Prepared: 10/15/02 Analyzed: 10/16/02						
Dissolved Organic Carbon	80.7	1.00	mg/l	25.3	55.7	98.8	0-200			

Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q T1
Project Manager: Barb Lary

Reported:
10/22/02 12:12

Anions per EPA Method 300.0 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100148 - Wet Chem										
Blank (2100148-BLK1)				Prepared & Analyzed: 10/07/02						
Chloride	ND	0.500	mg/l							
Nitrate-Nitrogen	ND	0.100	"							
Sulfate	ND	1.00	"							
LCS (2100148-BS1)				Prepared & Analyzed: 10/07/02						
Chloride	10.3	0.500	mg/l	10.0		103	85-115			
Nitrate-Nitrogen	4.95	0.100	"	5.00		99.0	85-115			
Sulfate	30.1	1.00	"	30.0		100	85-115			
Duplicate (2100148-DUP1)		**Source: P2J0045-05**		Prepared & Analyzed: 10/07/02						
Chloride	2.48	0.500	mg/l		2.45			1.22	20	
Nitrate-Nitrogen	ND	0.100	"		0.100			10.5	20	
Sulfate	ND	1.00	"		ND			0.00	20	
Matrix Spike (2100148-MS1)		**Source: P2J0045-05**		Prepared & Analyzed: 10/07/02						
Chloride	4.63	0.556	mg/l	2.22	2.45	98.2	75-125			
Nitrate-Nitrogen	2.26	0.111	"	2.22	ND	97.3	75-125			
Sulfate	5.07	1.11	"	4.44	ND	98.4	75-125			
Matrix Spike Dup (2100148-MSD1)		**Source: P2J0045-05**		Prepared & Analyzed: 10/07/02						
Chloride	4.63	0.556	mg/l	2.22	2.45	98.2	75-125	0.00	20	
Nitrate-Nitrogen	2.29	0.111	"	2.22	ND	98.6	75-125	1.32	20	
Sulfate	5.03	1.11	"	4.44	ND	97.5	75-125	0.792	20	

Crystal Jones, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q T1 Project Manager: Barb Lary	**Reported:** 10/22/02 12:12

Total Alkalinity by Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100283 - Wet Chem										
Blank (2100283-BLK1)				Prepared: 10/09/02 Analyzed: 10/10/02						
Total Alkalinity	ND	10.0	mg/L as CaCO3							
LCS (2100283-BS1)				Prepared: 10/09/02 Analyzed: 10/10/02						
Total Alkalinity	189	10.0	mg/L as CaCO3	200		94.5	85-115			
Duplicate (2100283-DUP1)	**Source: P2J0009-01**			Prepared: 10/09/02 Analyzed: 10/10/02						
Total Alkalinity	239	50.0	mg/L as CaCO3		237			0.840	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

AMEC- Portland
7376 SW Durham Road
Portland, OR 97224

Project: Cadet Mfg.
Project Number: 2-61M-10135-Q T1
Project Manager: Barb Lary

Reported:
10/22/02 12:12

Hydrocarbons by GC/FID Headspace - Quality Control

North Creek Analytical - Bend

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0210043 - GC Headspace										
Blank (0210043-BLK1)				Prepared & Analyzed: 10/14/02						
Methane	ND	1.20	ug/l							U
LCS (0210043-BS1)				Prepared & Analyzed: 10/14/02						
Methane	57.5	1.20	ug/l	64.9		88.6	70-130			
LCS Dup (0210043-BSD1)				Prepared & Analyzed: 10/14/02						
Methane	55.8	1.20	ug/l	64.9		86.0	70-130	3.00	25	
Duplicate (0210043-DUP1)		**Source: C210031-04**		Prepared & Analyzed: 10/14/02						
Methane	12.0	1.20	ug/l		5.91			68.0	35	Q-14,A-01

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Crystal Jones, Project Manager

AMEC- Portland 7376 SW Durham Road Portland, OR 97224	Project: Cadet Mfg. Project Number: 2-61M-10135-Q T1 Project Manager: Barb Lary	**Reported:** 10/22/02 12:12

Notes and Definitions

A-01	The VOA used for the Duplicate, while bearing the same sample identification, appeared darker in color and more turbid than the VOA used for the samples quantification.
A-03	Samples were analyzed outside of the holding time due to an instrument malfunction on the initial run.
I-02	This sample was analyzed outside of the EPA recommended holding time.
J	Estimated value.
Q-14	The RPD is above the control limit due to a non-homogeneous sample matrix.
U	Analyte included in the analysis, but not detected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

Crystal Jones, Project Manager

nca™
North Creek Analytical, Inc.
Environmental Laboratory Network
www.ncalabs.com

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: P2J0116

CLIENT: AMEC
REPORT TO: BARB LARY
ADDRESS:
PHONE: 503-639-3400 FAX:
PROJECT NAME: ~~CADET~~
PROJECT NUMBER: 2-61M-10135-Q T1
SAMPLED BY: Barb Lary
INVOICE TO:
P.O. NUMBER:

TURNAROUND REQUEST in Business Days*
Organic & Inorganic Analyses: [✓ 10 STD] 7 5 4 3 2 1 <1
Petroleum Hydrocarbon Analyses: 5 4 3 2 1 <1
STD.
OTHER Please Specify
*Turnaround Requests less than standard may incur Rush Charges.

REQUESTED ANALYSES

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME		methane	Total metals: Fe, Mn, As, V, Se, Cr, Pb	Sulfide	NH3, TOC, COD	Alk, Nitrate, Sulfate, Chloride, ortho-P, Cr(VI), DOC		Cr(VI), Sulfide				Hold-Field Filtered Dissolved Metals		MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1. MW-1d/100/GW	10/3/02	815	X	X	X	X	X						X		W	8		
2. MW-5i/GW		945	X	X	X	X	X						X					
3. MW-5i/GW ~~Dup~~		945		X					X				X					
4. MW-4i/GW		1130	X	X	X	X	X						X					
5. ~~MW-19i/GW~~																		
6. MW-20i/GW		1345	X	X	X	X	X						X					
7.																		
8.																		
9.																		
10.																		
11.																		
12.																		
13.																		
14.																		
15.																		

RELINQUISHED BY: Barb Lary
PRINT NAME: BARB LARY
FIRM: AMEC
DATE: 10/3/02
TIME: 1514

RECEIVED BY:
PRINT NAME: Saran Passerge
FIRM: NCA
DATE: 10-3-02
TIME: 1514

RELINQUISHED BY:
PRINT NAME:
FIRM:
DATE:
TIME:

RECEIVED BY:
PRINT NAME:
FIRM:
DATE:
TIME:

ADDITIONAL REMARKS: Please provide final results in GISKey format oc direct SP

TEMP: 5.7

PAGE 1 OF 1

COC REV 3/99

APPENDIX M

Transducer Study Supporting Information

S.S. PAPADOPULOS & ASSOCIATES, INC.
ENVIRONMENTAL & WATER-RESOURCE CONSULTANTS

Memorandum

Date: January 7, 2007

From: Michael J. Riley

To: POV/CPU Modeling Group

Subject: Summary of Transducer Data: Steady-State Modeling Period

---

I have reviewed and analyzed data to be used for the steady-state modeling analysis. This period is from October 19, 2006 at 16:30 to October 27, 2006 at 20:15. This period begins and ends at high tides of similar river stage elevation.

With respect to the data used here, there are two outstanding questions concerning time and datum:

- In the river stage data provided by PGG, there is a note that time was adjusted to PST and that they were still waiting to confirm this with the COE and USGS (see 'POV CPU data combined.xls' worksheet CPU4 in file sent by Adam Romey on 12/11/06).
- River stage reported by Parameterix (PMX) (worksheet River) and PGG (worksheet CPU4), different rive stages are reported. For instance, on the high tide on 10/14/06 at 23:15 (time adjusted to PST) PMX reports the raw data value as 3.15' and with datum adjustments comes to 5.029'. CPU reports a raw data value of 3.20' and adjusts the datum to 5.02' and 5.38'. PMX uses datum adjustments of 1.82' converting CRD to NGVD29/47 and 0.079' adjustment for the offset between the river gage benchmark and the benchmarks used for the site surveys. CPU uses a datum adjustment of 1.82' converting from CRD to NGVD29 to get 5.02' and 0.36' for the 1947 adjustment.

I believe the 1947 adjustment has been resolved and that there is no need to do this adjustment. However, the raw data are different by 0.05' and the adjustment for the gage benchmark needs to be confirmed. The spreadsheet then needs to be updated to show only the correct river stage to be used in the analysis.

Average Water Levels

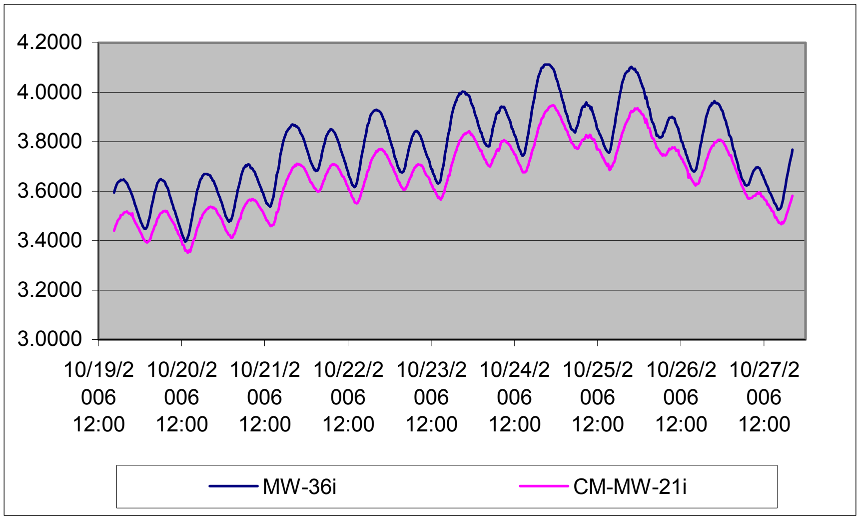
The data for the steady-state period have been averaged and the tidal efficiency computed. The tidal efficiency will not be affected by the river datum questions as it uses the standard deviation of the data, which will not change due to datum shifts. The average river stage may change depending on the final resolution of the datum questions above. The following table shows the average water levels and tidal efficiencys:

Easting	Northing	Location	Average	Standard Dev.	Tidal Efficiency
1084375	112632	River	4.008	0.978	
1082098	118143	MW-26i	3.848	0.122	12%
1076875	118876	MW-32i	3.839	0.386	40%
1080186	118217	MW-36i	3.771	0.162	17%
1079449	119388	MW-07i	3.790	0.155	16%
1079207	121201	CM-MW-19i	3.825	0.188	19%
1078512	118285	MW-34i	3.784	0.355	36%
1077318	120173	MW-13d	3.836	0.276	28%
1080161	117243	MW-35i	3.786	0.183	19%
1078511	121800	CM-MW-18i	3.858	0.141	14%
1079958	116550	MW-19i	3.733	0.223	23%
1081305	120171	CM-MW-21i	3.659	0.141	14%
1078711	120170	CM-MW-05i	3.794	0.245	25%
1069276	124055	Alcoa Well 16	3.859	0.203	21%
1091534	118265	COV WS-1 Well 8	3.932	0.458	NA
1078336	123778	Firestone South	3.919	0.148	15%
1088698	114266	Fort Vancouver	4.532	0.046	5%
1078861	128732	South Lake TW-4	4.029	0.138	14%
1075260	125400	Van_ Lake (TW-2s)	3.879	0.146	15%
1066855	132989	WSTW-2	3.969	0.232	24%
1069833	141012	WSTW-4	3.872	0.088	9%
1078056	132145	Vancouver Lake	3.770	0.179	18%

Tidal efficiency was not computed for COV WS-1 Well 8 because water level fluctuations at this well are due to pumping at COV WS-1 and not due to tidal effects.

Coordinates for WSTW-2, WSTW-4, Firestone, Alcoa Well 16, COV WS-1 Well 8 and the river gage were digitized from a base map. Correct coordinates for these wells need to be provided.

The location of the wells, the water level and the tidal efficiency are provided on the attached figure. Generally, the water level data look reasonable. However, data from two wells are anomalous. CM-MW-21i has the lowest average water level for all wells. Located NE of the SMC site and not near any pumping wells indicates a problem with the data from this well. The problem could be due to measuring point, transducer placement or transducer calibration. However, Hagedorn surveyed the measuring point within 0.03 of the original Cadet elevation, so surveying may not be the source of the problem. Water level data for this well do not show anything unusual as seen in comparison to a nearby well.

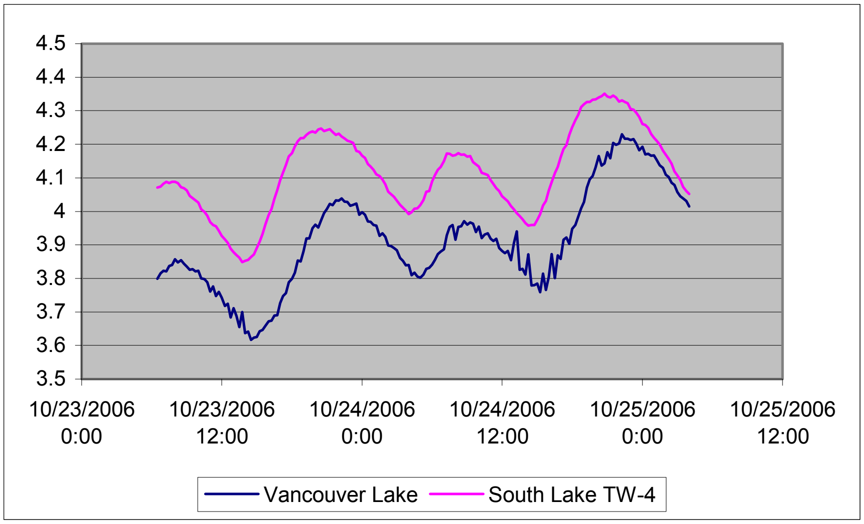


Since MW-36i is closer to the GWM pumping wells, the lower water levels at CM-MW-21 are anomalous.

Water levels at the Fort Vancouver well are also anomalous. This well has the highest water levels recorded and shows the lowest tidal efficiency. Located relatively close to the river, the high water level (one of only two wells above river stage) and the low tidal efficiency (considerably lower than wells located more than twice the distance from the river) are difficult to explain. The response at this well may indicate well completion problems although it is possible that the aquifer becomes less transmissive or very unconfined in this area. However, this well is located between the river and COV Well 8 and has a higher water level than each of these. Consequently, there would have to be considerable local recharge to explain the water level.

Other Observations

- The next lowest water level is MW-19i, which is influenced by pumping at GWM-5 located approximately 50 feet away. Consequently, the low water level is expected.
- In the SMC/Cadet area, water levels vary by less than 0.1 feet (3.771 to 3.858) with the exception of MW-19i and CM-MW-21i.
- South Lake TW-4 does not lag tidal stage in Vancouver Lake. Consequently, the tidal effect at TW-4 is due to river tidal stage and not to the tidal stage in Vancouver Lake.

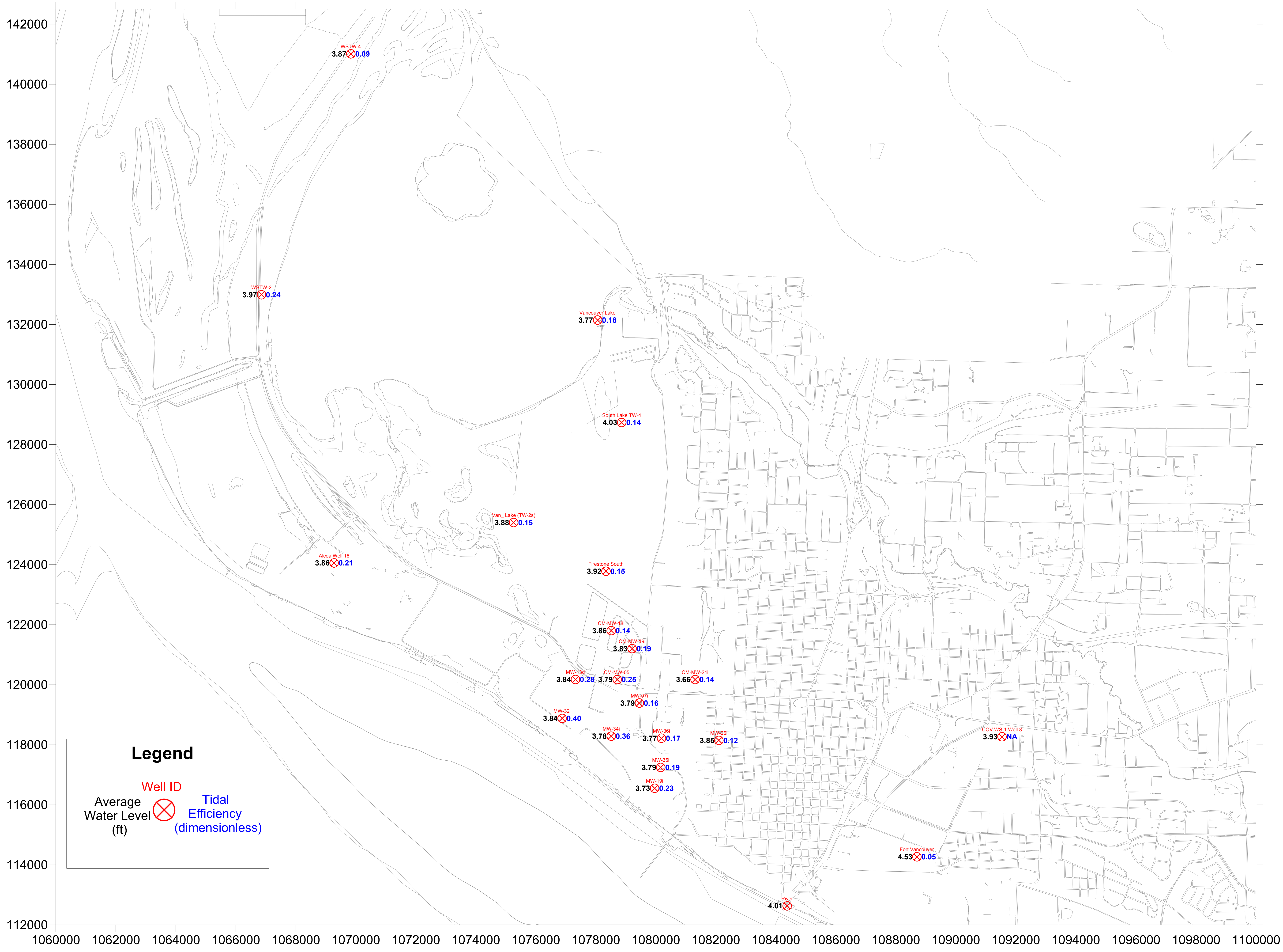


- WSTW-4 lags the tidal stage in Vancouver Lake. It may be influenced by both the lake and river tidal stage. The tidal efficiency of WSTW-4 is 9% with respect to river stage and 48% with respect to lake stage. The tidal efficiency with respect to the river is in agreement with other wells given the distance from WSTW-4 to the river. The tidal efficiency with respect to the lake however is quite high and would be the highest tidal efficiency at any well in the area. Consequently, it is more likely that the tidal response at WSTW-4 is due to the river and with less influence from the lake.

Moving Forward

The following issues need to be resolved in order to move forward:

Issue	How to Resolve
Time adjustment on river data to PST	PGG to confirm with COE/USGS
Difference in river stage between PMX and PGG	Adam Romey to talk to Dan Matlock and settle on final datum corrections. Adam to update spreadsheet to include only final river data (include raw data with datum correction as in worksheet River).
Water levels at CM-MW-21i	PMX to check hand measurements against transducer data.
Pump rates from Oct 18, 2006 to Dec 7, 2006	PMX to obtain COV, POV pump rates. PGG to obtain CPU pump rates.
Well coordinates: Coordinates are needed for WSTW-2, WSTW-4, Firestone, Fort Vancouver, COV WS-1 Well 8, Alcoa Well 16 and the river gage.	PGG to follow up.



142000
140000
138000
136000
134000
132000
130000
128000
126000
124000
122000
120000
118000
116000
114000
112000
1060000
1062000
1064000
1066000
1068000
1070000
1072000
1074000
1076000
1078000
1080000
1082000
1084000
1086000
1088000
1090000
1092000
1094000
1096000
1098000
1100000
WSTW-4
3.87 0.09
WSTW-2
3.97 0.24
Vancouver Lake
3.77 0.18
South Lake TW-4
4.03 0.14
Van_ Lake (TW-2s)
3.88 0.15
Alcoa Well 16
3.86 0.21
Firestone South
3.92 0.15
CM-MW-18i
3.86 0.14
CM-MW-19i
3.83 0.19
MW-13d
3.84 0.28
CM-MW-05i
3.79 0.25
CM-MW-21i
3.66 0.14
MW-07i
3.79 0.16
MW-32i
3.84 0.40
MW-34i
3.78 0.36
MW-36i
3.77 0.17
MW-26i
3.85 0.12
COV WS-1 Well 8
3.93 NA
MW-35i
3.79 0.19
MW-19i
3.73 0.23
Fort Vancouver
4.53 0.05
River
4.01
Legend
Well ID
Average Water Level (ft)
Tidal Efficiency (dimensionless)

APPENDIX N

Deep USA and TGA White Paper

Parametrix ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

TECHNICAL MEMORANDUM

Date:	December 10, 2008
To:	Craig Rankine, LHG – Washington Department of Ecology
From:	Rick Malin, LHG
Subject:	TGA and Deep USA White Paper – SMC and Cadet Site Area
cc:	Patty Boyden, Port of Vancouver Lisa Pearson, Washington Department of Ecology
Project Number:	275-1940-006 (0107/4975)
Project Name:	SMC/Cadet RI/FS

At the request of the Washington Department of Ecology (Ecology), this technical memorandum has been prepared to provide an updated summary of the nature and extent of contamination in the Troutdale Gravel Aquifer (TGA) and the deep zone of the Unconsolidated Sedimentary Aquifer (USA) beneath the former Swan Manufacturing Company (SMC) and Cadet Manufacturing (Cadet) sites in Vancouver, Washington (Figure 1). The term "project area" is used in this memorandum to describe the area around the SMC and Cadet sites that includes Port-owned property and property owned by others. More specifically, the project area overlies groundwater containing volatile organic compounds (VOCs) at levels above Ecology's Model Toxics Control Act (MTCA) Method A groundwater cleanup levels. The project area is situated in a region known as the Vancouver Lake Lowlands. The Vancouver Lake Lowlands area is shown on Figure 2.

The March 30, 2007 Final Remedial Investigation (RI) Report for the SMC site (Parametrix 2007) provides a comprehensive summary of investigations and interim remedial actions completed from 1998 through early 2007. The Final RI Report includes groundwater quality data collected from January 1998 through February 2007. In addition to this data, this technical memorandum considers data collected and interpretations made since the completion of the March 2007 RI Report.

Water quality data included in the SMC site Final RI Report indicate the TGA has not been significantly impacted by trichloroethene (TCE) and/or other VOCs. The SMC site Final RI Report also concludes that VOC contamination in the deep USA zone is limited to an erosional trough located beneath the SMC and Cadet sites, where TCE concentrations are typically less than 15 µg/L. Analytical results for groundwater samples collected during the first quarter of 2008 from 17 deep USA wells associated with the SMC and Cadet sites indicated the following TCE concentrations: non-detect (less than 0.5 ug/l) in 4 samples; less than 5 ug/l in 1 sample; between 15 and 20 ug/l in 4 samples; and between 20 and 30 ug/l in 5 samples. This contaminant distribution is consistent with the 2007 RI Report findings.

In a letter to Ecology dated June 23, 2008, the Washington Department of Health (DOH) provided comments related to the Final RI Report for the SMC site. Specific comments related to the TGA and the deep USA zone included: 1) portions of the TGA have been impacted by VOCs, potentially above maximum contaminant levels (MCLs); 2) additional investigation of the TGA needs to occur to determine the extent of contamination in the TGA; and 3) the TGA is a potential future groundwater source. DOH suggested that a contaminant plume exists in the TGA.

In June 2008, Ecology requested that this technical memorandum be prepared to summarize the Port's current understanding of the contamination in the TGA and deep USA zone. Interpretations in this memorandum are primarily based on:

- Data included in the Final RI Report.
- Data collected between February 2007 (cutoff for data included in the March 2007 RI Report) and February 2008.
- The findings of recent water supply investigations in the vicinity of the SMC site area.
- The anticipated effects of the groundwater pump and treat interim action (GPTIA) for the SMC/Cadet commingled plume.

This memorandum and data included in the Final RI Report will be the basis for Ecology's determination of the completeness of characterization of the TGA and deep USA zone in vicinity of the SMC site.

Introduction

The geology, hydrogeology, and distribution of contaminants in the TGA and the deep USA zone are documented in the Final RI Report for the SMC site and the February 2008 Vancouver Lake Lowlands Groundwater Model Summary Report (Parametrix et. al. 2008). These two documents provide extensive detail on regional and site geologic and hydrogeologic conditions and should be referred to by individuals reading this memorandum.

Three groundwater zones have been established for the USA in the project area, based on observed geologic conditions. The shallow USA groundwater zone extends from the water table down to -10 feet mean sea level (MSL), and primarily corresponds with the Quaternary-aged alluvial deposits. The intermediate USA groundwater zone extends from -10 feet MSL to -100 feet MSL, and primarily corresponds with the catastrophic flood deposits consisting of gravel and sand. This zone can also include channel fill deposits and re-worked Troutdale Formation material. The deep USA groundwater zone overlies the Troutdale Formation, and primarily corresponds with the channel fill deposits and re-worked Troutdale Formation material. The TGA is present in material associated with Pleistocene-aged deposits of the Troutdale Formation. Figure 3 shows the relationship of the deep zone USA and the TGA with respect to regional geologic and hydrogeologic units and depositional units in the project area. Groundwater flow in the USA in the project area is influenced by the operation of high production continuous rate water supply wells located at the Great Western Malting (GWM) Company facility. The location of the GWM wellfield is shown on Figure 1.

Sedimentary deposits that make up the USA and the TGA are part of a thick sequence of predominantly fluvial sediments that fill the Portland Basin, a northwest-southeast trending synclinal structure covering approximately 900 square miles of the Portland region. The USA and TGA are associated with the predominantly Quaternary-aged Upper Sedimentary subsystem of the Portland Basin. The Lower Sedimentary subsystem consists of Tertiary-aged deposits, which include the Upper and Lower Confining Units (also known as Confining Unit 1 and Confining Unit 2) and two water-producing formations known as the Lower Troutdale Aquifer (also referred to as the Troutdale Sandstone Aquifer [TSA]) and the Sand and Gravel Aquifer (SGA). Information regarding these deeper hydrogeologic units in the project area is based on USGS Portland Basin studies (Swanson 1995; Swanson et al. 1989, 1991, 1993) and investigations associated with development of Clark Public Utilities (CPU) South Lake wellfield site (PGG 2001, 2002, 2004, 2008).

Figure 4 shows the relationship between the geologic units in the Portland Basin and their associated hydrogeologic units, along with the different nomenclature that has been used in the south Clark County region. The Upper Confining Unit is a basin-wide aquitard that separates the deeper aquifers of the Lower Sedimentary subsystem from the Upper Sedimentary subsystem aquifers. Recent exploratory work in the Portland Basin, particularly in the Vancouver Lake Lowlands area, has helped further define the hydrogeologic characteristics of the Lower Sedimentary subsystem in Clark County.

Due to notable differences between the deep USA zone and the TGA, summary information regarding the two units is discussed separately below.

Deep USA Zone

Geology

The deep USA zone in the SMC site area is primarily present in an ancestral erosional feature incised into the top of the Troutdale Formation (Figure 5). Deep USA zone material consists of catastrophic flood deposits, channel fill sand, and re-worked Troutdale Formation material. The general distribution of these deep USA zone sub-units are shown in cross-sections (Figures 7-2, 7-3, 7-4, and 7-5) included in the 2007 SMC site RI Report. Channel fill deposits consist of sand with little to no gravel or with gravel occurring in lenses. All USA deposits in the SMC site area have been found to be loose with no cementation.

The re-worked Troutdale Formation is a basal deposit of the deep USA zone that consists of sandy gravel and, where present, directly overlies the Troutdale Formation. Re-worked Troutdale Formation material is usually described as poorly sorted gravel with silty sand or silty sand with gravel. Clast sizes range from small gravels up to cobbles, with a matrix ranging from sand to silt. The clasts consist mostly of basalt clasts and sand, but in places it contains quartzite clasts and a micaceous matrix. The re-worked Troutdale Formation subunit is generally not cemented, but indications of cementation can be observed prior to encountering the underlying Troutdale Formation.

The TGA and overlying USA consist of coarse-grained materials, predominantly sands and gravels, which can be difficult to differentiate on the basis of drilling conditions and/or the presence of cementation or a sandy matrix. The base of the USA in the SMC site project area is most commonly identified by a decrease in water production and harder drilling conditions.

Since the deep USA zone is based on the criteria of extending below -100 feet MSL, its areal extent is confined primarily to the area of the Troutdale Formation erosional trough; however, the deep USA zone does appear to extend to the river in the project area (Figure 6). The deep USA zone is thickest, up to 120 feet, in the Troutdale Formation erosional trough located beneath the SMC and Cadet sites. In the area east of the ST Services site and the area just south and east of the GWM facility, the deep USA zone, where present, is less than 15 feet thick as shown on Figure 6. In this area, the deep USA consist primary of sand with variable amounts of silt and gravel; material associated with the channel fill subunit.

Hydrogeology

The permeability and thickness of the USA contribute to its transmitting capacity and well yields. Due in part to the high transmissivity of the USA, groundwater gradients are relatively flat, particularly in the Vancouver Lake Lowlands area. Water level measurements indicate that the USA responds rapidly to changes in the Columbia River stage. The observed rapid response between changes in river stage and corresponding changes in groundwater levels indicates that there exists a high interconnectivity between the river and the USA. The combination of a flat groundwater gradient and tidal influences make estimating groundwater flow direction difficult using conventional methods. The relatively flat gradient in the groundwater levels and the effects of river tide and stage are further complicated by pumping of groundwater in the Vancouver Lake Lowlands and the lower terrace area. The effect of the high water usage and the high transmissivity is that capture zones are large with shallow gradients, making it nearly impossible to delineate capture zone based on water level data alone. Capture zones from various pumping centers interact with each other, as the total amount of groundwater pumped is approximately twice the estimated annual recharge from precipitation (Parametrix et. al. 2008). Consequently, the capture zones from the larger pumping centers must reach to the hydraulic boundary zones associated with the USA in project area to draw the amount of water being pumped.

The channel fill deposit and the re-worked Troutdale Formation material that predominantly make up the deep USA zone are permeable, but do not appear to be as permeable as the sand and gravel subunit of the intermediate USA zone. This apparent permeability difference is due to the overall finer size of the channel fill deposit (sand rather than gravel) and the finer matrix of the re-worked Troutdale Formation material (silty sand rather than clean sand or fine gravel).

The channel fill deposits and re-worked Troutdale Formation material are more permeable than the underlying consolidated (cemented) to semi-consolidated upper Troutdale Formation that makes up the TGA. The rate of groundwater movement is understood to be lower in the deep USA zone than in the intermediate zone of the USA, due to:

1. The deep zone's location primarily in the erosional Troutdale Formation trough, which serves to reduce pumping stresses associated with nearby GWM production wells. The GWM wells are screened in the intermediate zone of the USA and historically pumped in the range of 11 million gallons per day (Parametrix 2004). The GWM wells are presently pumping approximately 4 million gallons per day (Parametrix et. al. 2008).
2. The lower overall permeability of the material that makes up the deep USA zone, compared with its intermediate zone.

As shown in Figure 1, the SMC and Cadet sites are located northwest of the GWM wellfield. While pumping stresses from the GWM production wells are lower in the deep USA zone, groundwater flow in the deep USA zone is still influenced by these productions wells; consequently, groundwater flow in the deep zone is toward the GWM production wells but at a slower rate. Model results indicate this type of groundwater flow behavior in the deep USA zone. Potentiometric contour maps based on water level measurements from deep wells do not indicate a clear or consistent groundwater flow direction. These maps suggest that groundwater flow in the deep USA zone is in different directions at different times, with inconsistent gradients between measurement points. These potentiometric contour maps, based on single-point measurement events, do not accurately depict flow direction due to Columbia River stage fluctuations and the presence of strong hydraulic interconnectivity of the USA to the river. The use of manual water level measurements and, to some extent, transducer-based measurements to establish groundwater flow direction can result in erroneous interpretation. This is due to the presence of very flat gradients, high permeability, and high efficiency response to river stage changes, factors that can mask true groundwater flow in response to high-volume continuous production well pumping.

Analysis of stable hydrogen and oxygen isotopes in groundwater in the project area was completed as part of the SMC remedial investigation. The collection and evaluation of these stable isotopes is presented in the 2007 RI Report. The stable isotope ratios of oxygen and hydrogen in water are natural tracers that can be used to study the interaction between groundwater and surface water. This technique is most useful in studies where there is a significant contrast between the isotopic composition of surface water and local precipitation recharge. As presented in the 2007 RI Report, there is a distinct isotopic signature of the Columbia River at Vancouver as compared with groundwater recharged by local precipitation. Groundwater in the project area is recharged by varying mixtures of precipitation and Columbia River water and plot along a linear mixture line between the two end members. Figure 7 shows where samples collected from wells in the project area and analyzed for stable hydrogen and oxygen isotopes plot along the linear mixture line between the Columbia River and local precipitation end members. A mixing trend is apparent for intermediate and most deep wells.

Stable hydrogen and oxygen isotope data for the deep USA zone indicate water from this portion of the aquifer is characterized primarily by isotope values indicative of Columbia River water mixed with local precipitation. Deep USA wells where stable isotope samples were collected are shown on Figure 8. Figure 8 shows stable isotope results from deep USA wells MW-1d, MW-5d, MW-12d, MW-14d, CM-MW-1d-224, CM-MW-5d, and CM-MW-18d all have oxygen and hydrogen ratios that fall into an area indicating primarily Columbia River water mixed with local precipitation. Wells screened in the TGA where stable isotope samples were collected are also shown on Figure 8. Stable isotope values from wells in the TGA are indicative of local precipitation recharge source. Two exceptions to the Columbia River water signature pattern in deep USA wells are MW-2d and MW-13d, which had stable isotope results consistent with ratios of a local precipitation source, as observed in TGA wells. Based on geologic conditions noted during drilling, MW-2d and MW-13d have been interpreted as being screened just above the Troutdale Formation in material referred to as re-worked Troutdale Formation. With isotope results matching local precipitation values and no VOC detections, water from these wells is more indicative of TGA conditions.

Stable isotope data from the intermediate USA wells indicates that groundwater flow in the intermediate USA zone follows the flow paths produced by GWM wellfield pumping in the project area. Figure 9 shows isocontours based on intermediate USA well oxygen isotope results overlain on top of model produced groundwater flow paths. Available stable isotope data from deep USA zone wells are also presented on Figure 9. With the exception of wells MW-2d and MW-13d, the isotopic range for hydrogen and oxygen in the deep USA wells is less much smaller than observed in the intermediate USA zone indicating less mixing with local precipitation sourced water occurs in the deep USA zone. The isotope data indicates the river is the predominant source of recharge for the USA in response to high production pumping stresses; particularly for the deep zone of the USA. Model results, isotope data and, as discussed below, contaminant distribution all indicate groundwater flow in the deep USA in the project area is predominantly influenced by the operation of the large-scale production wells at GWM.

Contaminant Distribution

There are seven deep USA zone screened SMC site wells (MW-1d, MW-2d, MW-4d, MW-5dR, MW-12d, MW-13d and MW-14d) and 12 deep USA zone screened Cadet site wells (CM-MW-01d-161/194/224, CM-MW-02d, CM-MW-03d-141/181/227, CM-MW-05d, CM-MW-07d, CM-MW-18d, CM-MW-19d, and CM-MW-28USA-180). The locations of these wells are shown on Figure 10.

VOC contamination in the deep USA zone includes low concentrations of TCE, along with lesser amounts of PCE, limited detections of cis-1,2-DCE, 1,1,1-TCA, 1,1-DCE, 1,1-DCA, and traces of trichlorofluoromethane (TCFM). In general, VOCs detected in the deep USA zone wells are the same compounds detected in the intermediate USA zone wells. However, there are two notable differences. The detection frequency of 1,1-DCE is notably higher in the deep USA and the compound TCFM is only detected in deep USA well samples. Low concentrations of TCFM were detected in several shallow probe borings completed north of the Cadet facility and on three occasions in shallow well samples collected from the ST Services facility. With the exception of these isolated shallow zone detections, TCFM is only detected in deep USA zone wells.

VOC contamination in the deep USA zone is limited to the erosional trough area. The concentration of TCE detected in deep USA zone wells is generally less than 15 µg/L. Detections are below MCLs at CM-MW-28USA-180, with no VOCs detected at wells CM-MW-7d, MW-2d, MW-4d, and MW-13d. The highest concentrations of TCE in the deep USA zone (approximately 30 µg/L) generally occur in the area underlying or adjacent to the SMC and Cadet source areas (Figure 10). This distribution suggests that the SMC and Cadet sites are the source of VOCs in the deep USA zone. However, lower concentrations of VOCs have typically been detected in intermediate USA zone wells located near deep USA zone wells that have higher VOC concentrations. It is not clear if this is due to: 1) a greater amount of VOC flushing/removal in the intermediate USA zone due to GWM pumping stresses compared with the deep USA zone; 2) some of the contaminants present in the deep USA zone are sourced from the ST Services site and have migrated into the erosional trough due to pumping stresses; or 3) a combination of these two actions. For the three source areas, groundwater flow velocities are considered to be highest in the intermediate USA zone at the SMC site due to its location with respect to the GWM wellfield and the presence of a thinner USA just east of the SMC site (i.e., the elevation of the top of the Troutdale Formation rises just east of the SMC site). It appears that these conditions have resulted in a greater amount of flushing/removal of VOCs in the intermediate zone beneath the SMC site and may have also served to limit downward migration of VOCs to the deep zone beneath the site.

TCE concentration trends in the deep USA zone wells are either stable or declining, with the exception of MW-14d and CM-MW-28USA-180, which show slight increasing TCE concentration trends. A notable increase in concentration was previously noted at well MW-5d. However, as documented in the 2007 RI Report, it was determined that beginning in mid-2005, samples from MW-5d were not representative of formation conditions screened by the well. The well was discovered to be compromised and was decommissioned and replaced by well MW-5dR in 2006. Samples from MW-5dR are consistent with pre-2005 levels observed in decommissioned well MW-5d.

Troutdale Gravel Aquifer

Geology

The TGA occurs in water-bearing zones in the upper section of the Pleistocene-aged Troutdale Formation. This section of the formation consists of cemented basaltic or quartzite-bearing gravels and cobbles in a micaceous silty sand matrix that contains silt and clay lenses. The portion of the Troutdale Formation encountered in the project area consists of well-graded, cemented to semi-consolidated sandy gravel with varying amounts of sand, silt, and clay. Cementing materials are part iron oxides, silica, and clay minerals formed as alteration products during weathering (Mundorff 1964). Cobble clasts range up to 8 inches in diameter and generally consist of basalt and quartzite. The matrix usually consists of brown to green fine-grained silty sand with varying amounts of silt and clay, usually with mica flakes. The Troutdale Formation is distinguished from the overlying catastrophic flood deposits by the presence of cementation, consolidation, quartzite clasts, and its silty matrix containing mica.

The Troutdale Formation was exposed to a period of erosion prior to deposition of unconsolidated sediments through catastrophic flooding events. In the project area, the top of the Troutdale Formation has an uneven, undulating surface, with its elevation varying notably (see Figure 5). An erosional trough in the area of the SMC and Cadet sites has been identified. In the Vancouver Lake Lowlands, the top of the Troutdale Formation generally slopes downward to the west.

A review of deep well and anode boring logs suggests that the thickness of the TGA is 80 feet in the CPU Fruit Valley wellfield area, approximately 100 feet in the SMC and Cadet site area, and, is thicker near GWM (approximately 200 feet) and west of Vancouver Lake (approximately 140 feet at the Shillapoo Lake test well). As shown on Figure 5 the elevation of the top of the Troutdale Formation is higher in the area of the GWM wellfield (-100 feet MSL) compared with the SMC and Cadet (-200 feet MSL), and CPU Fruit Valley wellfield area (-168 feet MSL). Figure 11 shows the location of these deep well and anode borings.

As indicated on Figure 4, the regionally extensive sequence of silt and clay deposits associated with the Upper Confining Unit (or Confining Unit 1) underlies the TGA. North of the project area the Upper Confining Unit has been determined to be about 100 feet thick (PGG 2008). Clay soils of the Upper Confining Unit have been described as sticky (PGG 2008), indicating the plasticity of the material and that the material is unlikely to contain fractures that would enhance its vertical permeability.

Hydrogeology

The permeability and the transmissivity of the TGA have been noted to be at least an order of magnitude lower than the USA (Swanson 1991; McFarland and Morgan 1996; PGG 2002). This difference in permeability and transmissivity is due to the presence of more fines in the Troutdale Formation, along with considerable cementation, which reduces its capacity to transmit water. Due to variations in cementation and matrix type, the TGA consists of water-bearing zones, unlike the USA which has a fairly uniform capacity to transmit water.

Data collected as part of investigative work in the project area indicate that the contact between the TGA and the overlying USA is marked by a permeability contrast. Drilling completed in the project area shows a decrease in water production when the Troutdale Formation is encountered representing the contact between the USA and the TGA. A hydraulic connection between the TGA and the USA is assumed due to the lack of an apparent confining layer. Water level measurements collected from TGA and deep zone USA wells in the project area do not indicate a noticeable difference, suggesting that the two aquifers are hydraulically connected but with no notable vertical gradient. These observations in the SMC site area do not support the statement that the TGA is a confined aquifer (Golder 2007; Ecology 2008).

Based on observed conditions, the TGA in the SMC site area exhibits a similar response to river stage fluctuations as the USA. The TGA response is more attenuated due to its lower permeability and lack of direct connection with the river (i.e., the USA is situated between the river and the TGA).

Groundwater flow model results indicate that the flow pattern in the TGA is similar to the flow pattern observed in the USA—toward GWM production wells. Figure 12 shows model produced groundwater flow paths for TGA. Attempting to determine the actual groundwater flow direction of the TGA in the SMC site area by static water level or pressure measurements could lead to erroneous conclusions due to:

- Uncertainties regarding the effects of variations in the aquifer's elevation and resulting well screen elevations. For example, over a distance of approximately 500 feet, the top of the Troutdale Formation ranges from -67 feet MSL east of the SMC site to -201 feet MSL beneath the SMC site.
- Variations in well screen depths. TGA well screen depths have been installed as shallow as 20 feet below the top of the Troutdale Formation to depths up to 123 feet below the top of the Troutdale Formation. Consequently, TGA top of well screen elevations range from -97.9 feet MSL down to -169.5 feet MSL, a difference of more than 70 feet.
- Variations of permeability within the TGA. It is not clear if TGA wells are screened in the same water-bearing zones.
- Flat gradient conditions and response to river stage changes. These factors can mask true groundwater flow in response to high-volume continuous production well pumping.

As discussed in the 2007 RI Report, determination of groundwater flow in the project area based on single sets of manually collected water level measurements may not be accurate and may potentially result in misinterpretation due to fluctuations of the Columbia River. Stage levels of the Columbia River change throughout the day in response to tidal fluctuations, dam releases, and regional precipitation. Given these issues, hydraulic gradients and apparent groundwater flow in the project area are evaluated by examining 72-hour periods of water level measurements collected by pressure transducers equipped with data loggers that are time synchronized and barometrically corrected. As described in the Vancouver Lake Lowlands Groundwater Model Summary Report (Parametrix et. al. 2008), a similar method was used to obtain steady-state water levels to calibrate the groundwater flow model. Model calibration water levels were based on averaging water level data obtained every 15 minutes over an eight day period during stable river stage conditions; when stage fluctuations were largely due to tidal effects rather than storm or dam-release events.

Due to its finer matrix and cementation characteristic, the permeability and, consequently, the rate of groundwater flow in the TGA is lower than in the overlying USA. Recharge to the TGA is understood to be from exposed areas along the margins of the basin and percolation from upper aquifers with limited recharge from the Columbia River (Golder 2007). These conditions for the TGA result in well yields in the Vancouver Lake Lowlands and lower terrace area that are relatively low. Consequently, there are no large-scale withdrawal points (i.e., water supply wells) that produce water from the TGA in the Vancouver Lake Lowlands or the lower terrace area (i.e., the area between Vancouver Lake Lowlands and Burnt Bridge Creek shown on Figure 2). Large-volume supply wells (GWM production wells; POV production wells; City of Vancouver water stations #1, #3, and #4 wells) located in this area all produce from the USA. Future CPU water supply wells in this area are targeting the USA and the deeper SGA. Figure 13 shows the location of former, existing, and proposed wellfields in the Vancouver Lake Lowlands and Lower Terrace areas.

Stable oxygen and hydrogen isotope analysis of groundwater from TGA wells in the project area indicates that the source of water for the TGA is primarily from local precipitation with minor amounts of mixing with Columbia River water. This is consistent with the understanding that recharge to the TGA is from exposed areas along the margins of the basin with some percolation from upper aquifers along with limited recharge from the Columbia River (Golder 2007). As shown on Figure 8, TGA groundwater samples collected from the project area all have oxygen isotope ratios that fall in the range of local precipitation. A similar pattern is observed for hydrogen isotopes. All TGA groundwater samples fall into the range associated with local precipitation. An exception is CM-MW-10d with a hydrogen isotope result suggesting some mixing with Columbia River water. These results are consistent with the understanding that river recharge is more significant in the USA than the TGA, due to the USA's direct contact with the river. The presence of Columbia River water in the TGA is limited.

Contaminant Distribution

There are currently three SMC site wells (MW-15i, MW-16d, and MW-17d) and four Cadet site wells (CM-MW-10d, CM-MW-27TGA, CM-MW-28TGA, and CM-MW-29TGA) screened in the TGA. The locations of these TGA wells are shown on Figure 14. Based on water quality samples collected from the first quarter 2006 event through the first quarter 2008 event, the only SMC monitoring well screened in the TGA where VOCs (TCE and cis-1,2-DCE) are detected is well MW-15i, with a TCE concentration of approximately 3 µg/L. Based on the same data set, VOCs are not detected at Cadet site TGA wells CM-MW-10d, CM-MW-27TGA and CM-MW-28TGA. An exception is toluene, which is not a Cadet or SMC site source contaminant but is detected at CM-MW-27TGA and CM-MW-28TGA. Low concentrations of several VOCs, including TCE and PCE, were detected in Cadet well MW-29TGA, which is located in the northeast area of the North Fruit Valley Neighborhood.

Depth-specific samples from the TGA were collected at 27 different locations during the investigations completed at the SMC and Cadet sites. Figure 15 shows the locations of borings where depth-specific samples were collected. As summarized on Figure 16, TCE was not detected in depth-specific TGA samples collected from 11 borings advanced into the Troutdale Formation. Of the 16 remaining locations where depth-specific TGA samples were collected, most TCE detections were within the top 10 feet of the Troutdale Formation. There were only three locations (MW-7i, MW-35i, and MW-37i) where TCE was detected at a depth of penetration more than 20 feet into the Troutdale Formation. The maximum TCE concentration detected in these three locations was 2.66 µg/L (MW-37i) These depth-specific results are consistent with the understanding that the lower permeability of the TGA, along with the lack of pumping occurring in the TGA, limits the extent to which TCE has migrated into the TGA.

Since 2002, TCE has only been detected in two of the seven SMC and Cadet site TGA monitoring wells: CM-MW-29TGA (13.6 to 17.5 µg/L) and MW-15i (1.53 to 4.98 µg/L). These two TGA wells have screens set in the upper 20 feet of the Troutdale Formation. VOCs were not detected in the five TGA wells with screens set deeper than 20 feet into the Troutdale Formation. Similar observations were more recently documented during drilling of MW-5dR. The boring at MW-5dR, beneath the SMC site source area and in the area where higher concentrations have been detected in the deep USA zone, was advanced approximately 10 feet into the TGA. During advancement of the boring, three depth-specific groundwater samples for VOC analysis were collected at the top of the TGA and at 5 feet and 10 feet of penetration into the TGA. VOCs were not detected in the samples, except for toluene in one sample. As discussed previously, toluene was detected in two TGA wells, but is not sourced from the SMC or Cadet sites.

Water Resource Development Study Findings

The most extensive aquifers in Clark County occur within the Troutdale Formation and the Pleistocene alluvium. The Upper Troutdale aquifer (or TGA) is used extensively for public supply in the Hazel Dell and Salmon Creek Basin areas located north of the Vancouver Lake Lowlands and Lower Terrace Area and supports many private wells throughout Clark County. Although the TGA contains zones of significant cementation, it is sufficiently transmissive in these areas to produce high well yields. The Lower Troutdale aquifer (or TSA) has also been penetrated by a number of wells in the Hazel Dell and Salmon Creek Basin areas. However, the TSA is not always encountered within its expected geographic extent; it appears to be discontinuous or occurs in large lenses. Development of the deeper SGA has been more recent with the aquifer being developed as a public water supply source in the Orchards, Meadow Glade, Pioneer, and Battle Ground vicinities. Figure 2 shows locations of TSA and SGA wells in these areas.

The Pleistocene alluvium aquifer (or USA) functions as a highly permeable and productive aquifer in the southern portion of Clark County where it is coarse grained and saturated to an adequate thickness, which is not the case in the northern or upland areas of the county. The most transmissive portions of the USA occur within the Burnt Bridge Creek basin and within the Vancouver Lake and Camas-Washougal lowland areas. These areas are also shown on Figure 2. North of Burnt Bridge Creek, the deposits are fine-grained and the aquifer is used solely for domestic purposes. Many of the upland aquifers have experienced some water level decline in response to historic withdrawals of groundwater to meet municipal, industrial, and irrigation needs. These water level declines have reduced baseflow to streams that support endangered fish stock. Due to these conditions, future development of water resources has focused on the Vancouver Lake Lowlands.

A series of water resource development studies completed in the Vancouver Lake Lowlands during the past ten years have determined that the USA (commonly referred to as the Pleistocene Alluvial Aquifer [PAA] in these studies) is a highly transmissive and productive aquifer that consists primarily of gravel and sand. The transmissivity of the PAA in the South Lake wellfield area is reported to be approximately 13,500,000 gpd/ft based on a three-day constant-rate pump test completed on CPU well TW-8 located at CPU proposed Fruit Valley wellfield site (Parametrix et. al. 2008). The location of the Fruit Valley wellfield site (also referred to as the South Lake wellfield site) is shown on Figure 13. Based on pump tests completed as part of CPU’s and City of Vancouver’s Westside Groundwater Exploration and Testing project (PGG 2004), the transmissivity of the PAA in the westerly area of the Vancouver Lake Lowlands is notably lower; around 1,900,000 gpd/ft (Parametrix et. al. 2008). The location of the Westside test site (proposed Westside wellfield) is shown on Figure 13. The lower transmissivity of the USA in the western area of the Vancouver Lake Lowlands is due primarily to the presence of finer formation deposits. Due to the depth and its productivity, industrial and agricultural wells in the Vancouver Lake Lowlands have all targeted and produce from the USA.

The upper Troutdale Formation deposit, which underlies the loose un-cemented catastrophic flood deposits of the USA, has a lower permeability due in part to the presence of cementation and the presence of a silty/clayey matrix. The transmissivity of the USA is substantially higher than the transmissivity of the TGA in the Vancouver Lake Lowlands and therefore the USA is the preferred zone for wellfield development (PGG 2001). Due to variations in cementation and matrix type, the TGA consists of water-bearing zones, unlike the USA which has a fairly uniform capacity to transmit water.

The Upper Confining Unit (or Confining Unit 1) is a basin-wide aquitard that separates the deeper aquifers of the Lower Sedimentary subsystem (the TSA and the SGA) from the Upper Sedimentary subsystem aquifers (the USA and the TGA). Figure 4 shows the relationships between the basin-wide geologic and hydrogeologic units. As indicated in Figure 4, different terminology has been applied to the hydrogeologic units in the south Clark County region. The understood relationship of the hydrogeologic units also differs. For example, the lower confining unit as shown in the CPU hydrogeologic unit description suggests that it is not consistently present. In the South Lake wellfield area, the Upper Confining Unit is a least 72 feet thick consisting of blue and gray clay. Due to the presence of the Upper Confining Unit, while water levels in the USA and TGA respond to Columbia River stage changes, water levels in the TSA and SGA do not. The TSA and SGA are confined aquifers.

The TSA is a fairly distinct aquifer system in the City of Portland’s Columbia South Shore wellfield area and in the Orchards area. These areas are shown in Figure 2. The TSA also appears to extend northward into the Salmon Creek basin but becomes difficult to trace laterally to the north (PGG 2008). The TSA and the SGA are separated by the Lower Confining Unit (where it is present). Consequently, there are areas where the TSA and the SGA appear to be loosely interconnected. At CPU’s South Lake wellfield site, it is difficult to distinguish between the TSA and the SGA (PGG 2008). The Lower Confining Unit appears to be either not present or is interbedded within the lower sedimentary subsystem deposits. Due to the apparent absence of the Lower Confining Unit, the TSA and SGA appear interconnected at the South Lake wellfield site. Water levels in the SGA at the South Lake wellfield site show influence to pumping of TSA wells located in the Lakeshore and Hazel Dell area (PGG 2008) which suggest that the TSA and SGA are to some extent coupled at the South Lake wellfield site.

Testing of CPU deep well TW-7 indicated that there is no significant leakage from the Upper Sedimentary subsystem aquifers (the USA and the TGA) to the Lower Sedimentary subsystem aquifers (the TSA and the SGA) (PGG 2008).

Discussion

As presented above, the USA and the TGA have distinctly different water transmission characteristics. Consequently, the aquifers’ contaminant transport characteristics also differ notably.

The USA is characterized as consisting of loose sediments, predominantly gravel with various amounts of sand deposited by catastrophic flood events. The TGA is characterized as consisting of water-bearing zones that occur in the upper section of the heavily eroded and weathered Troutdale Formation. While the Troutdale Formation also consists of gravel and sand, it has a matrix consisting of silty sand with lenses silt and clay. A distinguishing characteristic of the Troutdale Formation is cementation by an iron silica matrix (Mundorff 1964; Golder 2007). The characteristics of the upper Troutdale Formation, where the TGA is present, limit the aquifer’s capability to transmit water. Consequently, the permeability of the TGA is described as moderate, and its transmissivities are noted to be one to two orders of magnitude lower than those of the USA. Due to these conditions, the TGA is not considered a potential future groundwater source in the Vancouver Lake Lowlands, and future water resource developments in the Vancouver Lake Lowlands have targeted the USA and the deeper SGA. The TSA and SGA are confined aquifers hydraulically separated from the TGA by the Upper Confining unit.

In the vicinity of the SMC and Cadet sites, the USA has been found to have a flat gradient and to be in direct connection with the Columbia River. While water levels in the USA show high efficiency response to changes in river stage, actual groundwater flow in the aquifer is controlled by high production pumping at GWM. The USA is able to supply continuous high production pumping due to river recharge. In the project area, recharge of the USA is from the Columbia River due to GWM pumping, with secondary recharge occurring in the form of precipitation.

The TGA differs from the USA in that it is not directly connected to the Columbia River and no production pumping occurs in the aquifer. While modeling indicates that groundwater flow in the TGA in the project area is influenced by and discharges to the USA in response to GWM pumping, regional studies indicate that recharge to the TGA is from exposed areas of the Troutdale Formation and from percolation from overlying aquifers. Stable oxygen and hydrogen isotope data collected from deep zone USA and TGA monitoring wells in the project area support regional studies. The stable isotope data indicates that the source of water for the TGA is primarily from local precipitation with some indications of mixing with Columbia River water while the water in the deep zone USA is primarily Columbia River water with some mixing with local precipitation.

The capacity of the USA and the TGA to transmit water and the understood flow of water in the two aquifers are consistent with the distribution of VOCs observed in the project area. The VOC plume is observed to be highly influenced, particularly in the intermediate zone of the USA, by continuous high production pumping occurring at GWM (between 5 to 10 mgd). The deep zone of the USA shows a more limited influence from this pumping due to the presence of the Troutdale Formation erosional trough. VOC concentrations in the deep USA zone decrease at much slower rates than observed in the shallow and intermediate zones of the USA, with the highest TCE concentrations observed near sources.

There is only one location (MW-CM-29TGA) where VOC concentrations are detected in the TGA above MCLs. The observed distribution of VOCs in the TGA is consistent with the understood characteristics of the aquifer. The presence of VOCs in the TGA appears to have occurred at locations where the Troutdale Formation has allowed contaminant migration via percolation from the USA consistent with the regional model. There is no VOC plume in the TGA. There are only locations where top-of-Troutdale Formation conditions have allowed for intrusion-type migration to occur due to percolation from the overlying USA. With limited exceptions noted, depth-specific data indicate that the extent of this type of VOC migration is limited to the upper 10 feet of the Troutdale Formation.

The remedial action objectives of the groundwater pump and treat interim action for the SMC/Cadet commingled plume are to:

- Achieve hydraulic containment of the SMC/Cadet dissolved-phase VOC plume.
- Remove dissolved-phase VOCs in groundwater.

These objectives will be obtained by continuous high extraction rate pumping of the USA at the SMC site. This action is similar to what has been occurring with the GWM production well pumping. Figure 17 shows the anticipated capture zone caused by an extraction well pumping at 2,500 gallons per minute at the SMC site. In response to continuous pumping of the proposed extraction well, water quality changes will occur most rapidly in the intermediate zone of the USA. Slower water quality changes will occur in the deep zone of the USA due to its hydrogeologic setting, as described. In addition, in response to extraction well pumping, percolation from the USA into the Troutdale Formation (or TGA) will decrease and potentially cease and reverse. Monitoring of TGA wells, particularly CM-MW-29TGA, will provide evidence if reversal is occurring in the area of the SMC and Cadet sites due to the interim action.

In conclusion, hydrogeologic characterization of the TGA is sufficient for RI purposes based on: 1) SMC and Cadet site investigative findings regarding hydrogeologic conditions of the deep USA zone and the TGA; 2) findings associated with water resource development studies that have been completed in the Vancouver Lake Lowlands; 3) implementation of the groundwater interim action at the SMC site; and 4) hydrogeologic characteristics of the TGA that indicate it would not be suitable as a future groundwater source in the Vancouver Lake Lowlands.

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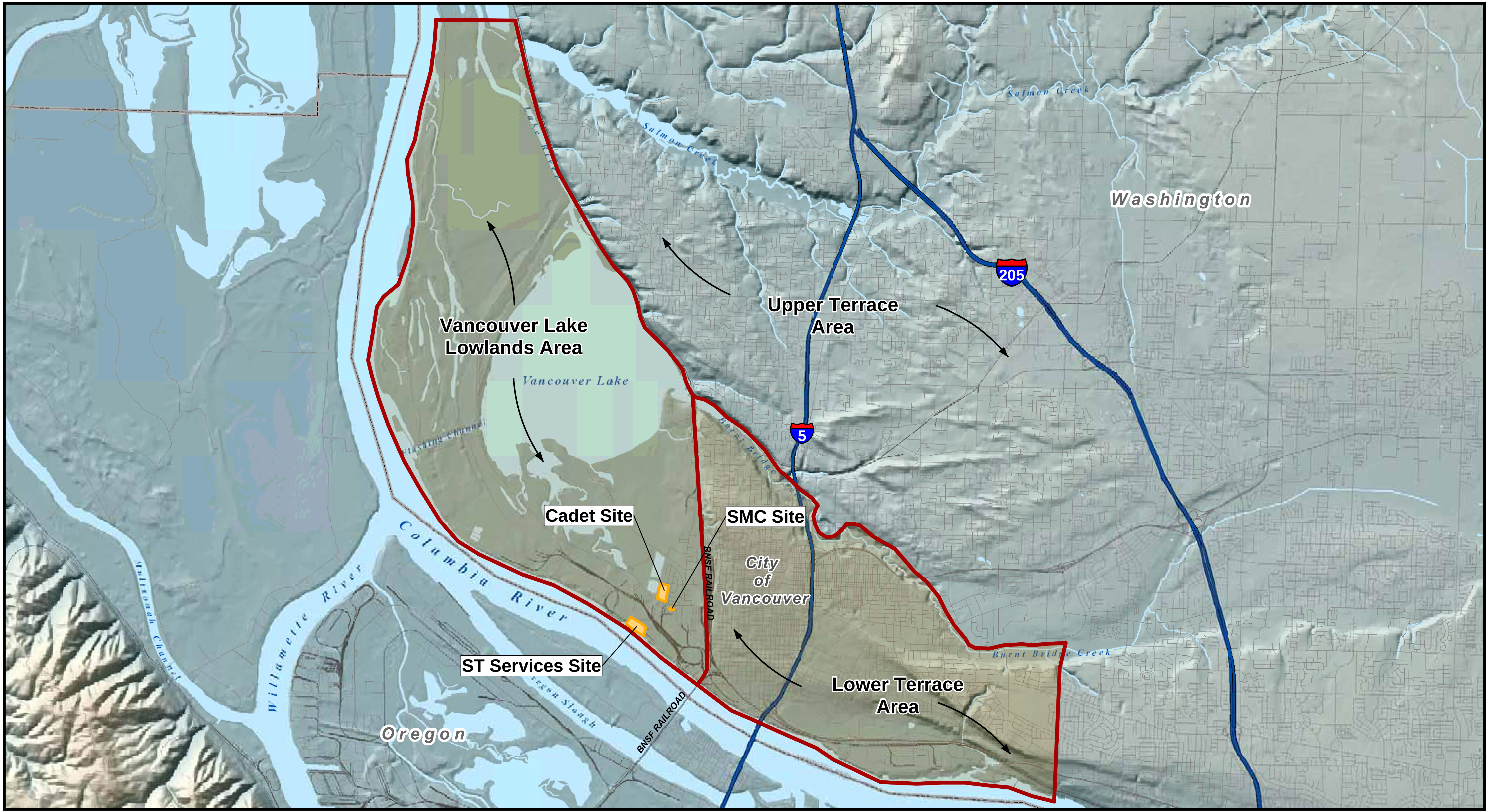
FIGURES

Parametrix

Analysis by C. Hainey; Plot Date: December 1, 2008; File Name: P:\GIS\POV_GIS\MXD_PDF\SiteLocationMap_TGAandDeepUSA.mxd

Figure 1
Site Location Map

TGA and Deep USA White Paper
Port of Vancouver, Washington



Parametrix Date: August, 2008 File: Figure2_VLL_Area.mxd

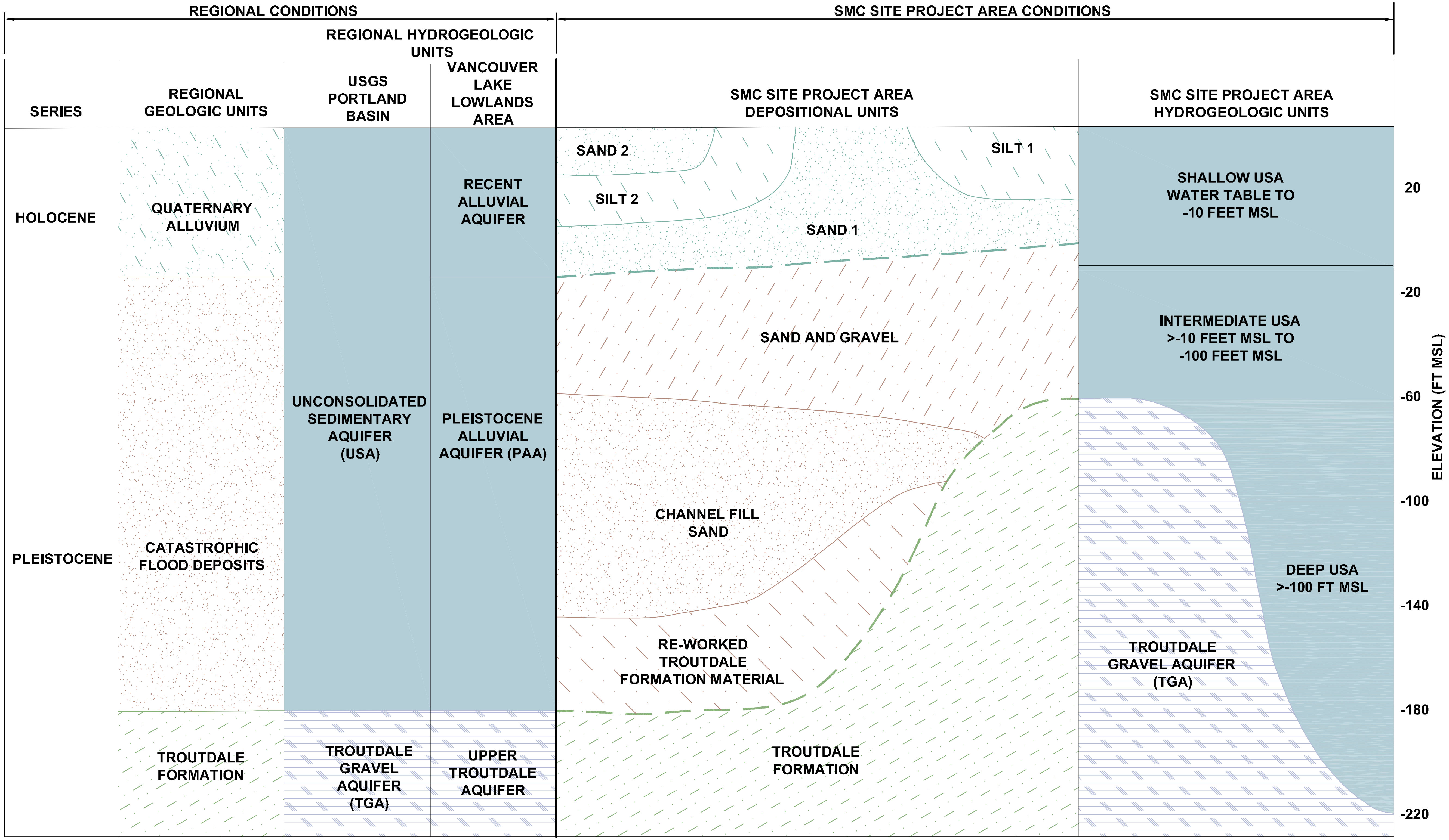
N

0 3,000 6,000

Scale in Feet

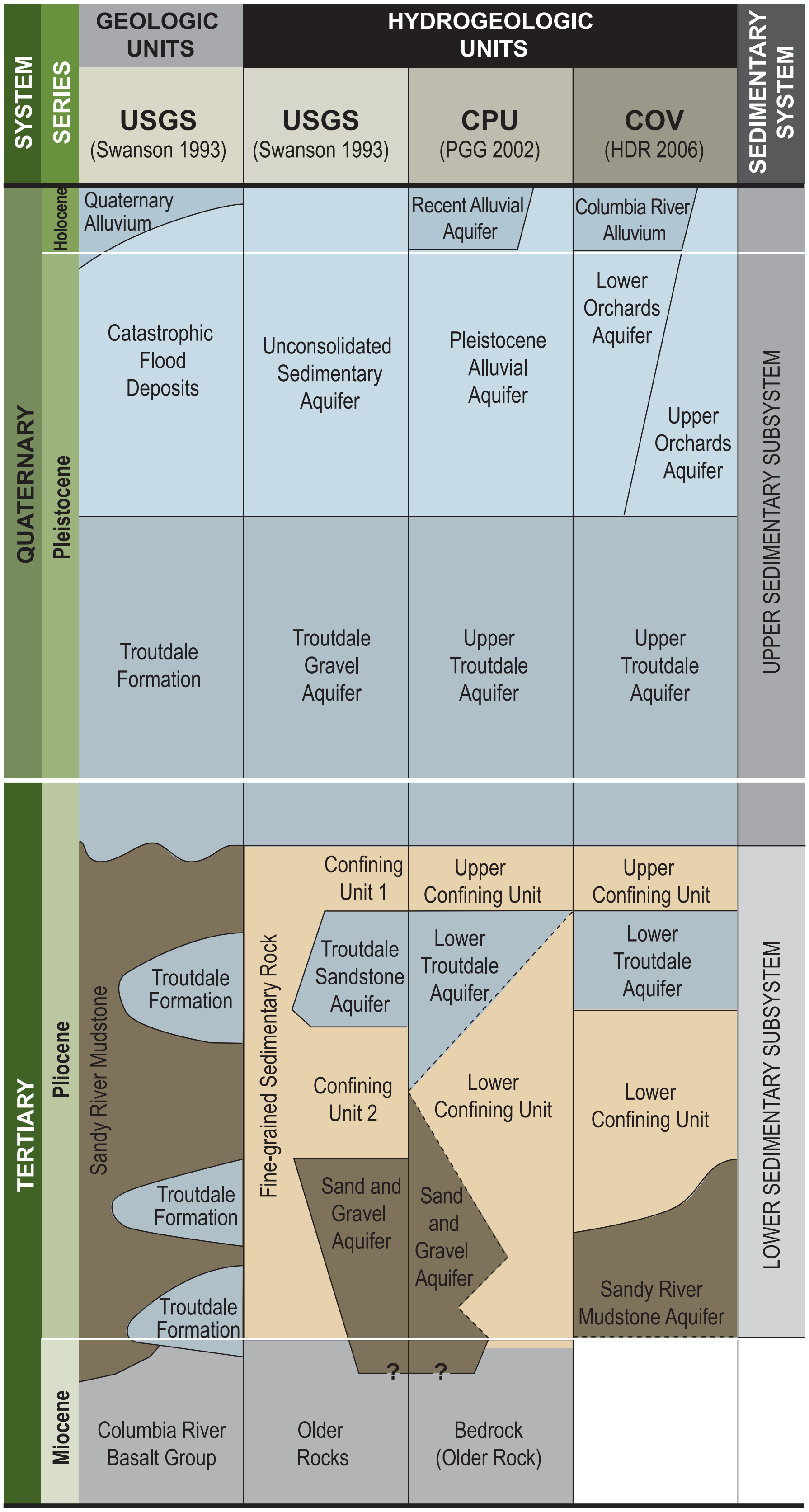
Figure 2
Vancouver Lake Lowlands Area

TGA AND DEEP USA WHITEPAPER
PORT OF VANCOUVER, WASHINGTON



Parametrix DATE: Aug 29, 2008 FILE: P194006782

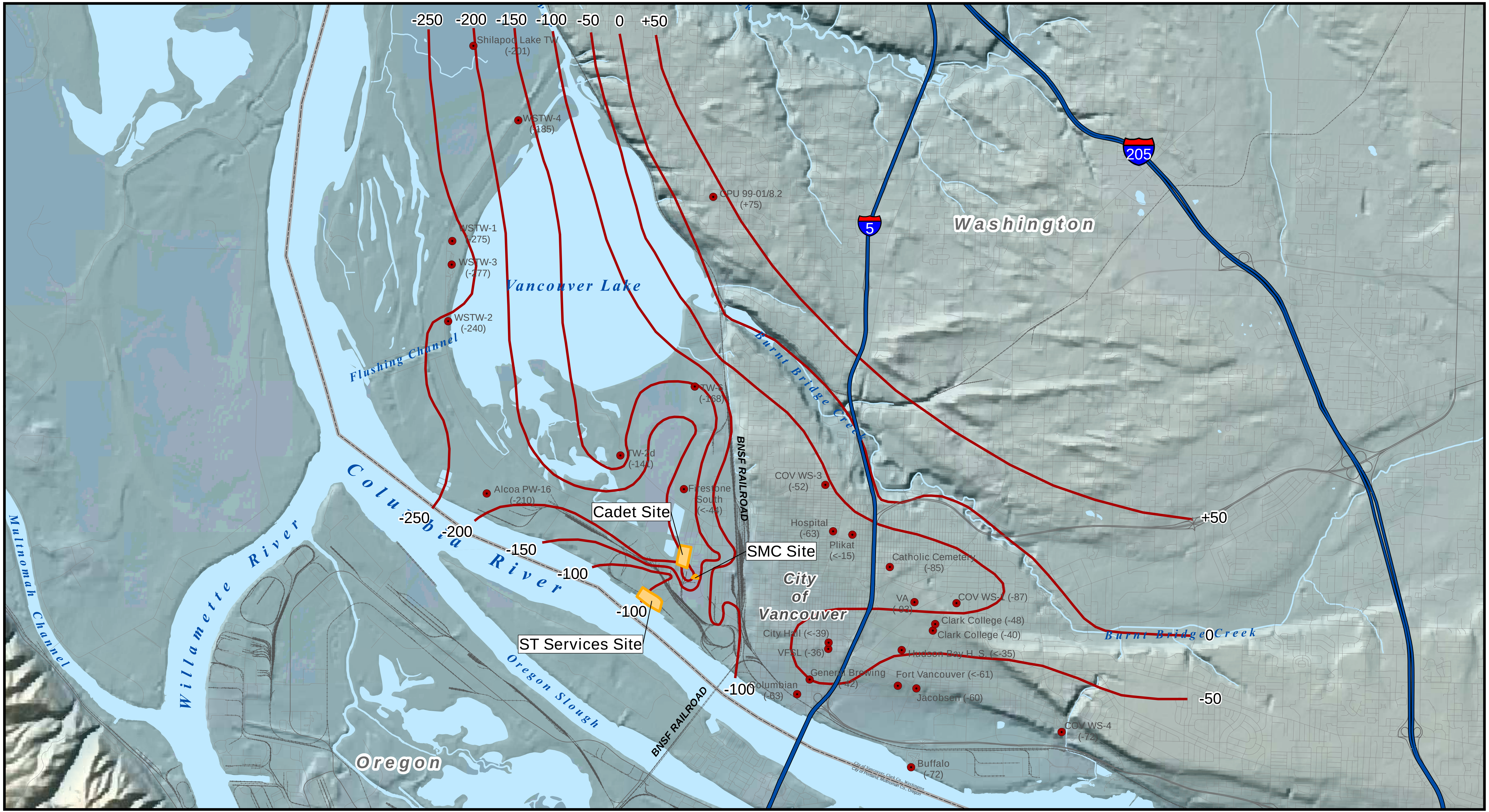
Figure 3
Regional and SMC Site Project Area Geologic and Hydrologic Units
TGA AND DEEP USA WHITEPAPER
PORT OF VANCOUVER, WA.



Parametrix 275-1940-006 0107 4975

Figure 4
Comparison of Hydrogeologic Unit Terminology – South Clark County

TGA AND DEEP USA WHITEPAPER
PORT OF VANCOUVER, WA.



Parametrix Date: August, 2008 File: Figure5 Top of Troutdale Formation.MXD

N

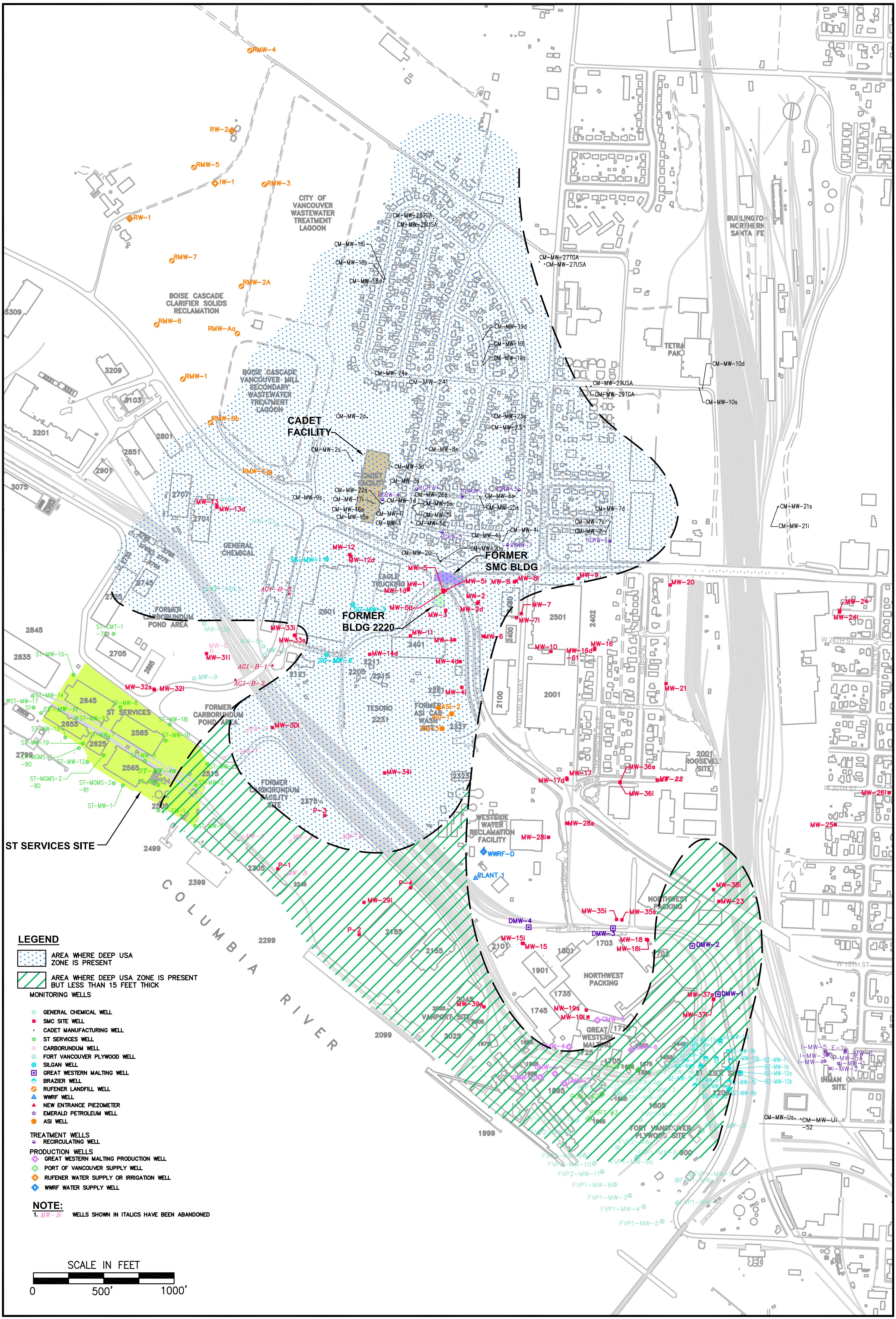
0 3,000 6,000

Scale in Feet

Contour Interval: 50 Feet MSL

Figure 5
Top of Troutdale Formation

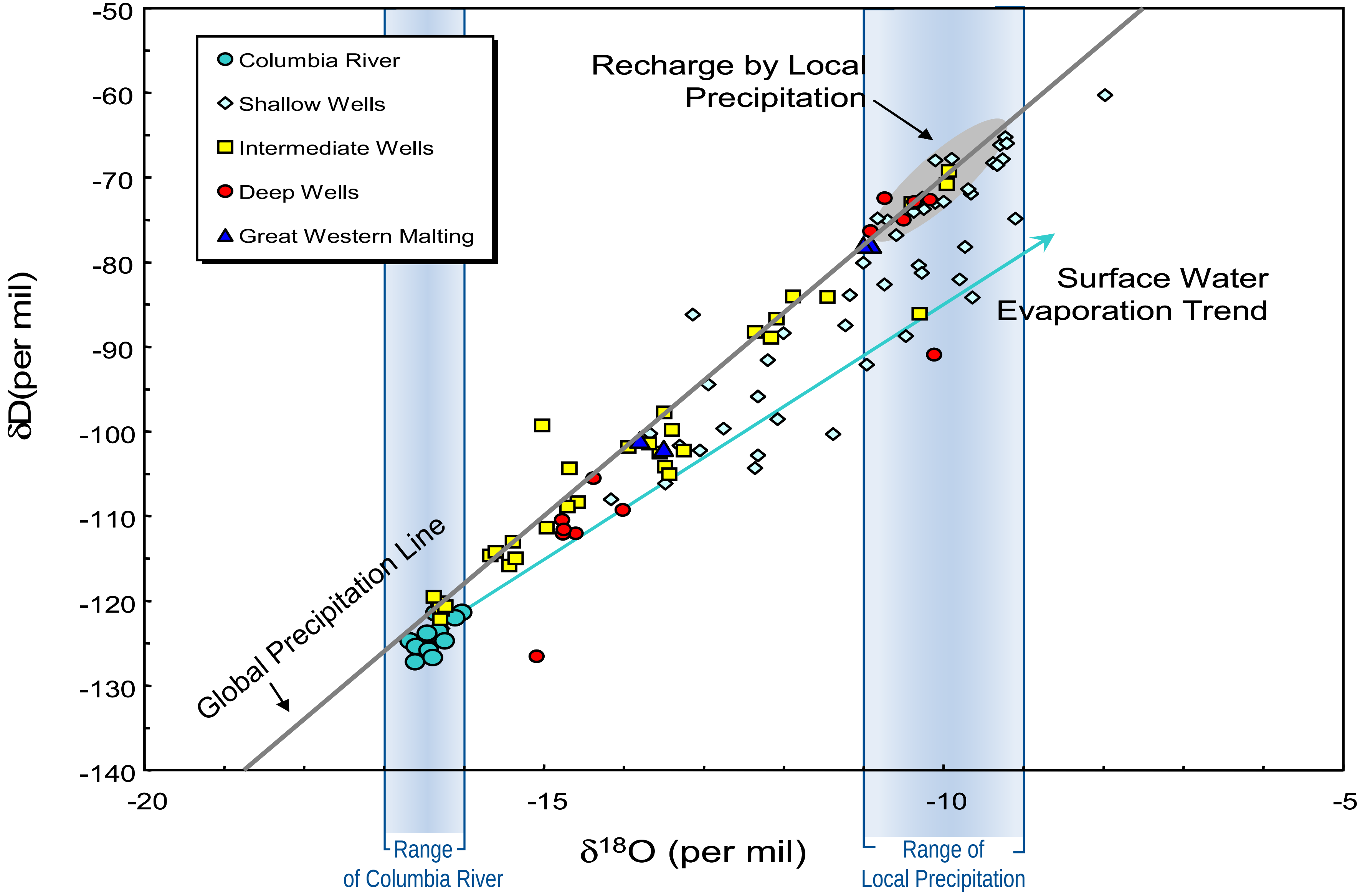
TGA AND DEEP USA WHITEPAPER
PORT OF VANCOUVER, WASHINGTON



Parametrix DATE: Aug 29, 2008 FILE: P194006783

Figure 6
Extent of the Deep USA Zone

TGA AND DEEP USA WHITEPAPER
PORT OF VANCOUVER, WASHINGTON



Notes:

1 Wells sampled in 2002, 2004, and 2005.

2 Columbia River sampled in 2004 and 2005; additional data from 1985-1987 (Coplen, T.B., and C. Kendall, 2000, U.S. Geological Survey Open-File Report 00-160, 409 p.) and 1990 (McCarthy, K.A., W.D. MacFarland, J.M. Wilkinson and L.D. White, 1992, The dynamic relationship between ground water and the Columbia River: using deuterium and oxygen-18 as tracers. Journal of Hydrology 135:1-12).

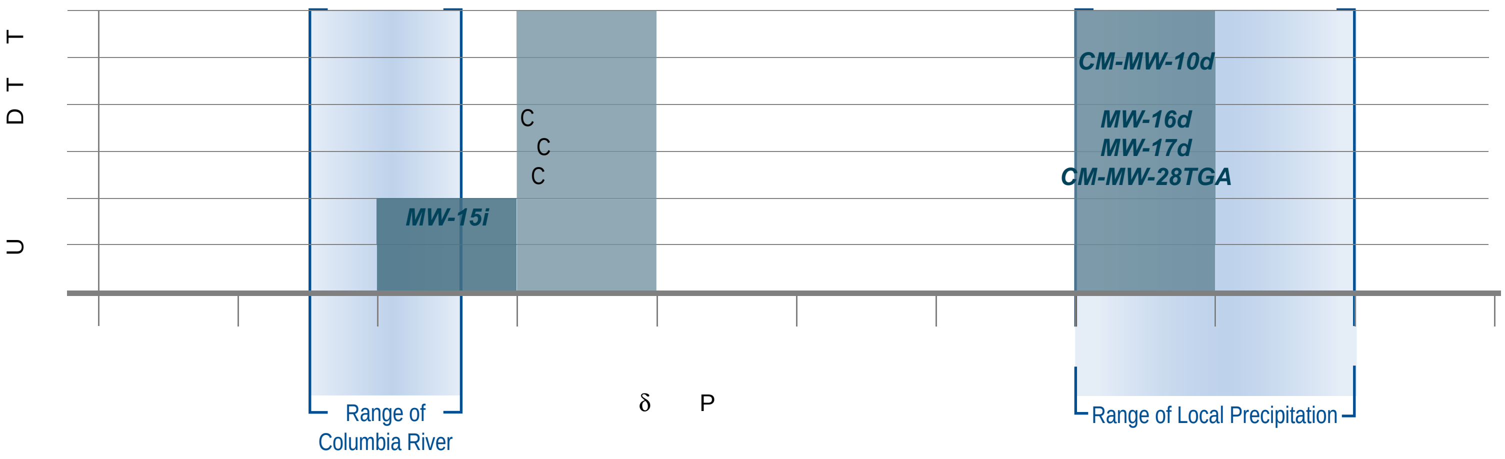
3 Range for Local Precipitation estimated from McCarthy et al. (1992)

Figure 7

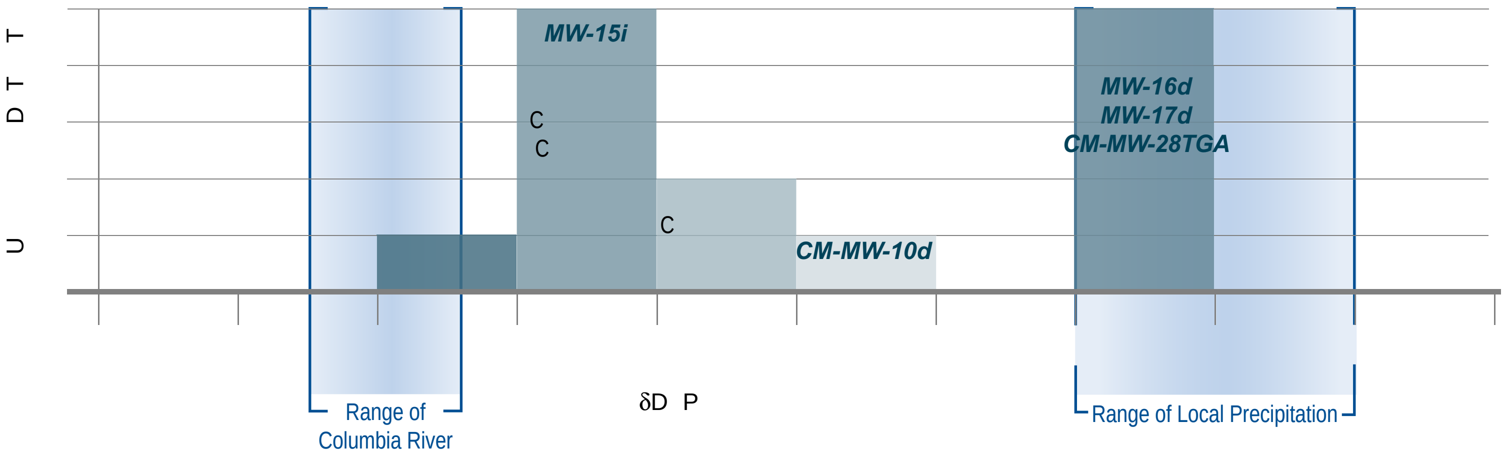
Stable Hydrogen vs. Oxygen Isotope Plot

TGA and Deep USA Whitepaper
Port of Vancouver, Washington

Stable Oxygen Isotope atio



Stable Hydrogen Isotope atio



eep one ell
e g

TGA Wells
(e.g., CM-MW-10d)

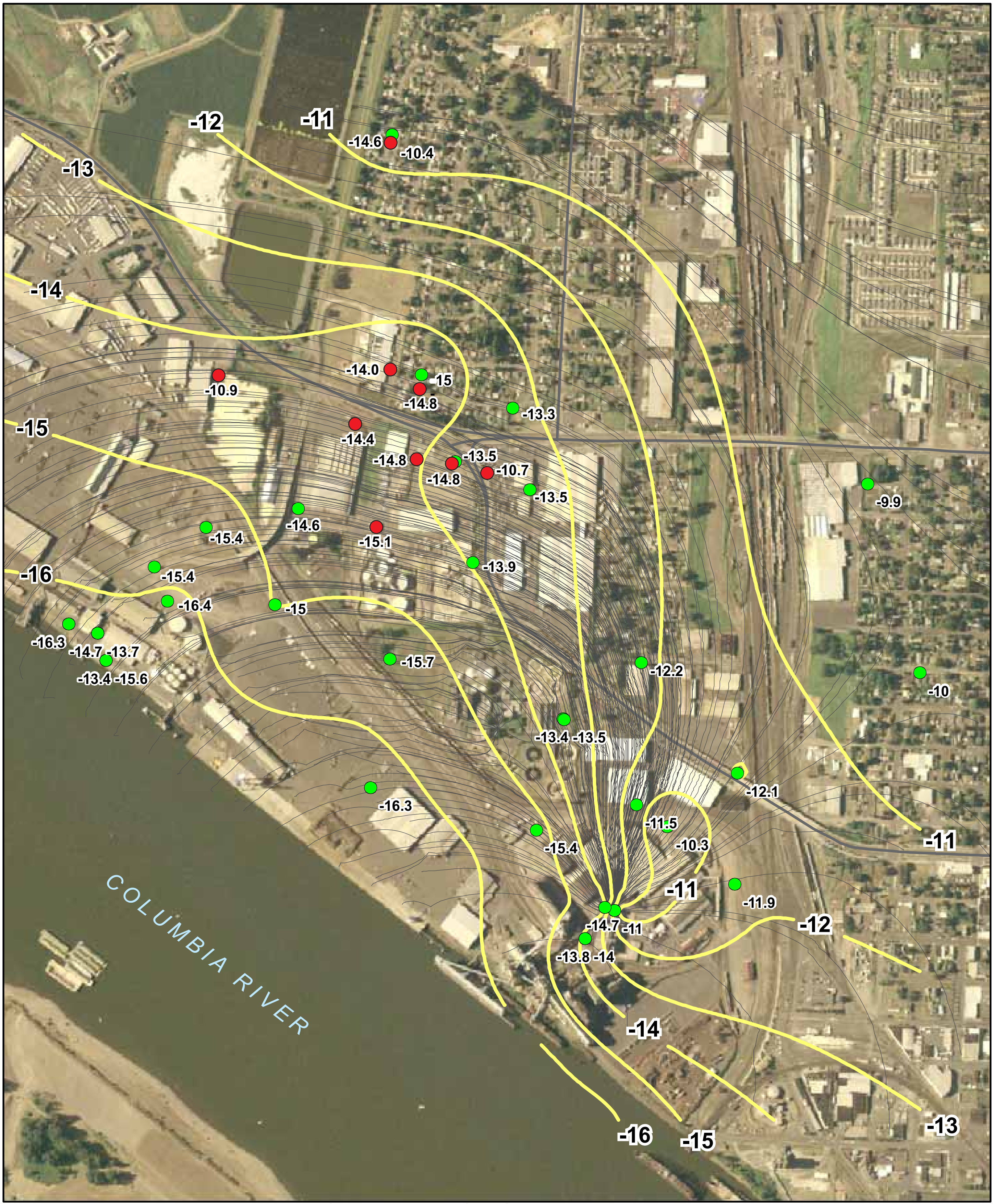
Stable isotope ratios of hydrogen and oxygen are reported as delta δ) values in units of per i parts per thousand relative to a standard of no n co position

- Oxygen: δ refers to ratio
- Hydrogen: δD refers to D/H or H/ H stable isotope ratio.

or natural water samples, δ and δD values are routine determined with a precision of and per i, respective

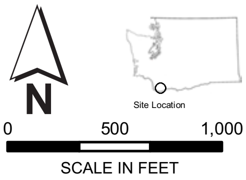
Note: Wells MW-2d and MW-13d are designated Deep USA Zone Wells.
We W i is designated a TGA We

Figure 8
Histograms for Stable Oxygen and Hydrogen Isotope Ratios
TGA and Deep USA Whitepaper
Port of Vancouver, Washington



Analysis by A Wainhouse; Analysis Date: 25-April-2006; Plot Date: October-2006; File Name: POV_F1_SiteLocation_Edit.mxd

Parametrix



Legend

● Intermediate USA Zone Well

● Deep USA Zone Well

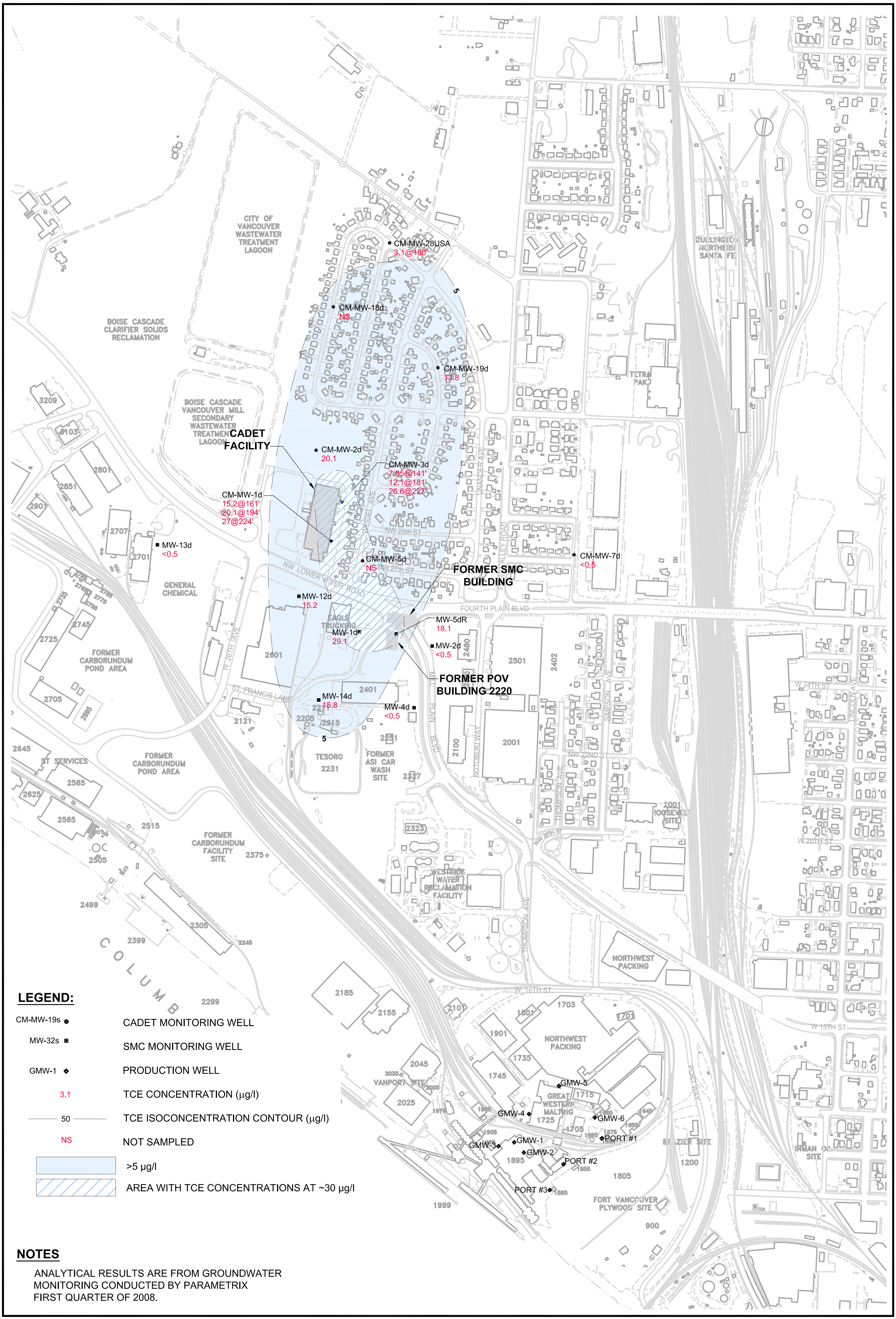
Isocontour Based on Intermediate Zone Well Data

Particle Track

Note: River Oxygen Isotope = -16.0 to -16.7

Figure 9
Oxygen Isotope Ratios and Model Groundwater Flow Paths

TGA and Deep USA Whitepaper
Port of Vancouver, Washington



LEGEND:

CM-MW-19s ●	CADET MONITORING WELL
MW-32s ▪	SMC MONITORING WELL
GMW-1 ◆	PRODUCTION WELL
3.1	TCE CONCENTRATION (µg/l)
—— 50 ——	TCE ISOCONCENTRATION CONTOUR (µg/l)
NS	NOT SAMPLED
▭	>5 µg/l
▨	AREA WITH TCE CONCENTRATIONS AT ~30 µg/l

NOTES

ANALYTICAL RESULTS ARE FROM GROUNDWATER MONITORING CONDUCTED BY PARAMETRIX FIRST QUARTER OF 2008.

Parametrix DATE: Dec 10, 2008 FILE: P194006768

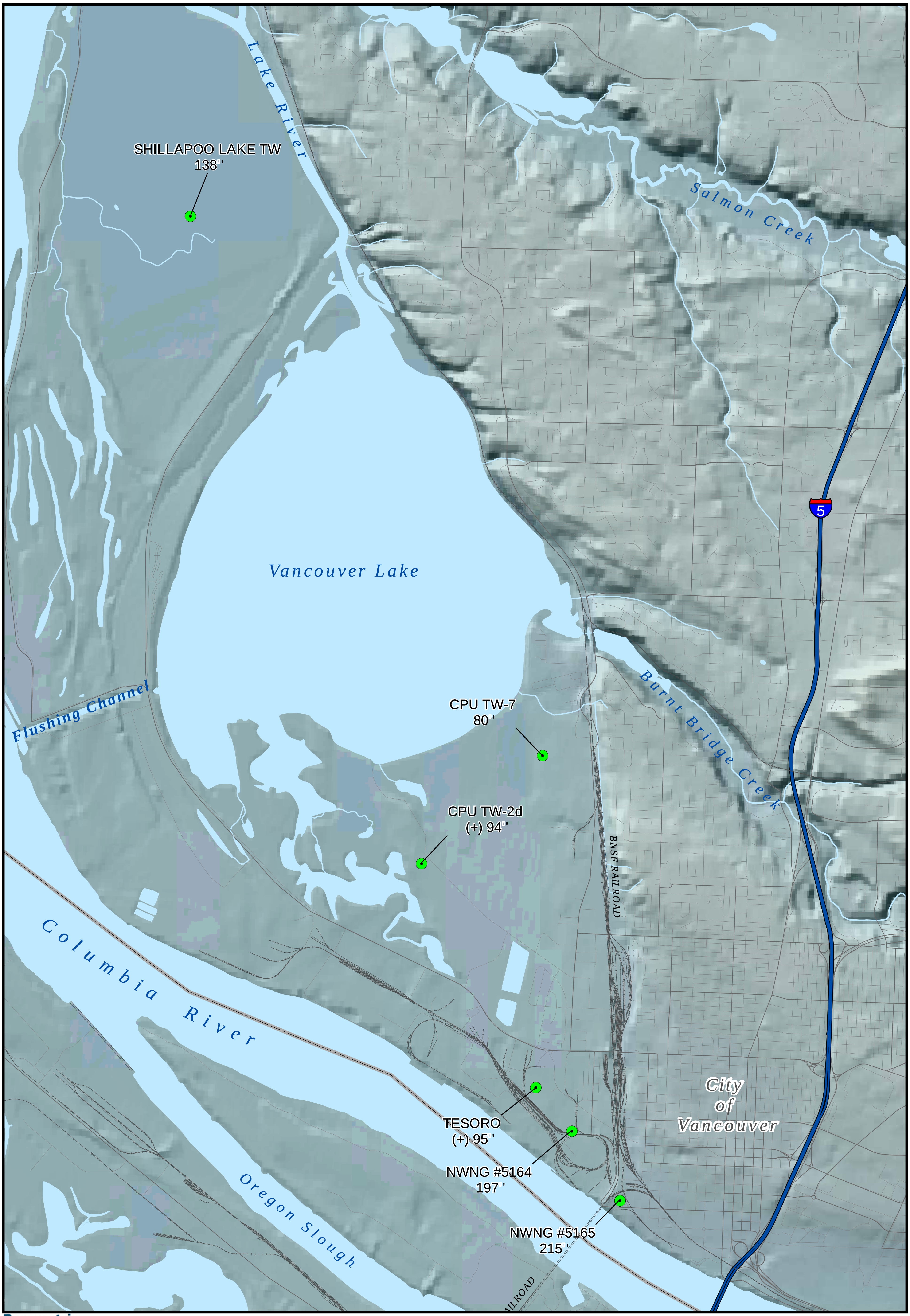
N

0 600'

SCALE IN FEET

Figure 10
TCE Isoconcentrations in Deep USA Zone First Quarter 2008

TGA AND DEEP USA WHITE PAPER
VANCOUVER, WASHINGTON



Parametrix Date: December 1, 2008 File: DeepWell_AnodeLocations.MXD

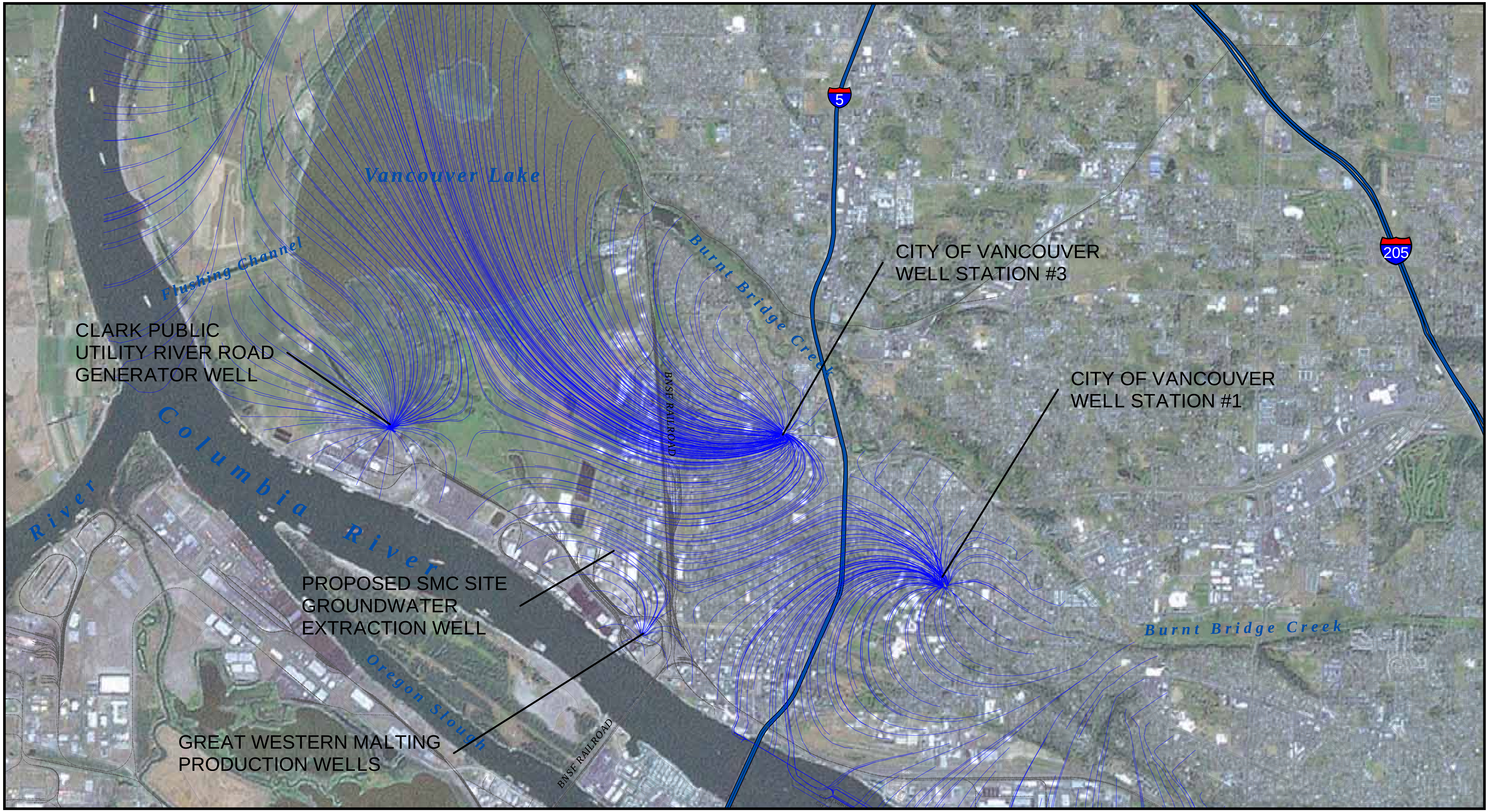
Legend

● CPU TW-7 — Boring ID
(+) 80 ' — Thickness of TGA
(+) — Indicates TGA was not Fully Penetrated

NOTE:
NWNG - NW Natural Gas
CPU - Clark Public Utilities

Figure 11
Deep Well and Anode
Boring Locations

TGA and Deep USA Whitepaper
Port of Vancouver, Washington



Parametrix Date: December 2, 2008 File: P:\GIS\POV\MXD_PDF\TGA_Flowpaths_120208.MXD

N

0 3,000 6,000

Scale in Feet

LEGEND

— GROUNDWATER FLOW LINE

Note:
Predicted Flowpaths in Layer 13 of the Vancouver Lake Lowlands Groundwater Flow Model. Great Western Malting Wells Pumping at 2900 Gallons Per Minute.

Figure 12
TGA Groundwater Flowpaths

TGA and Deep USA Whitepaper
Port of Vancouver, Washington

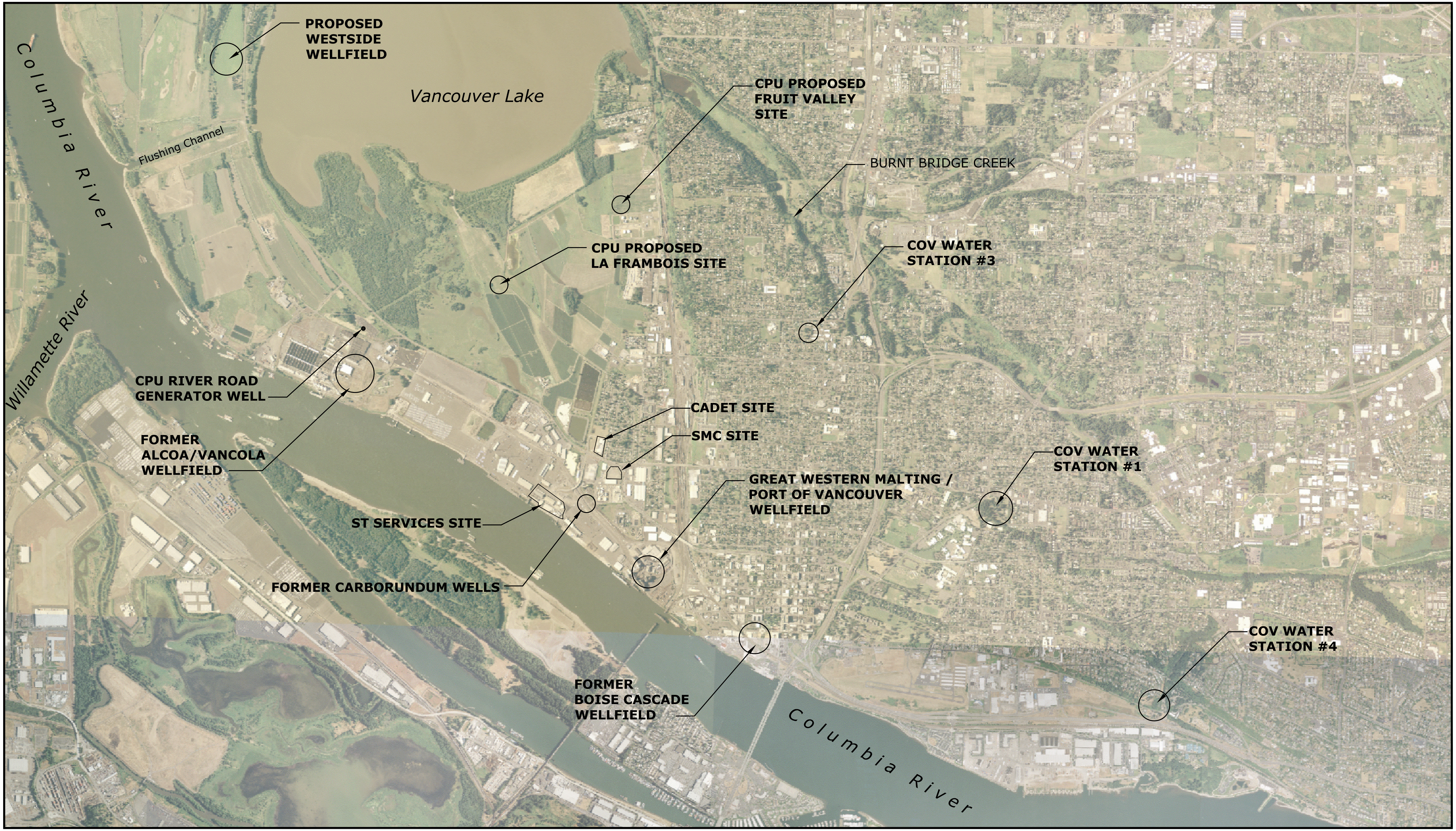
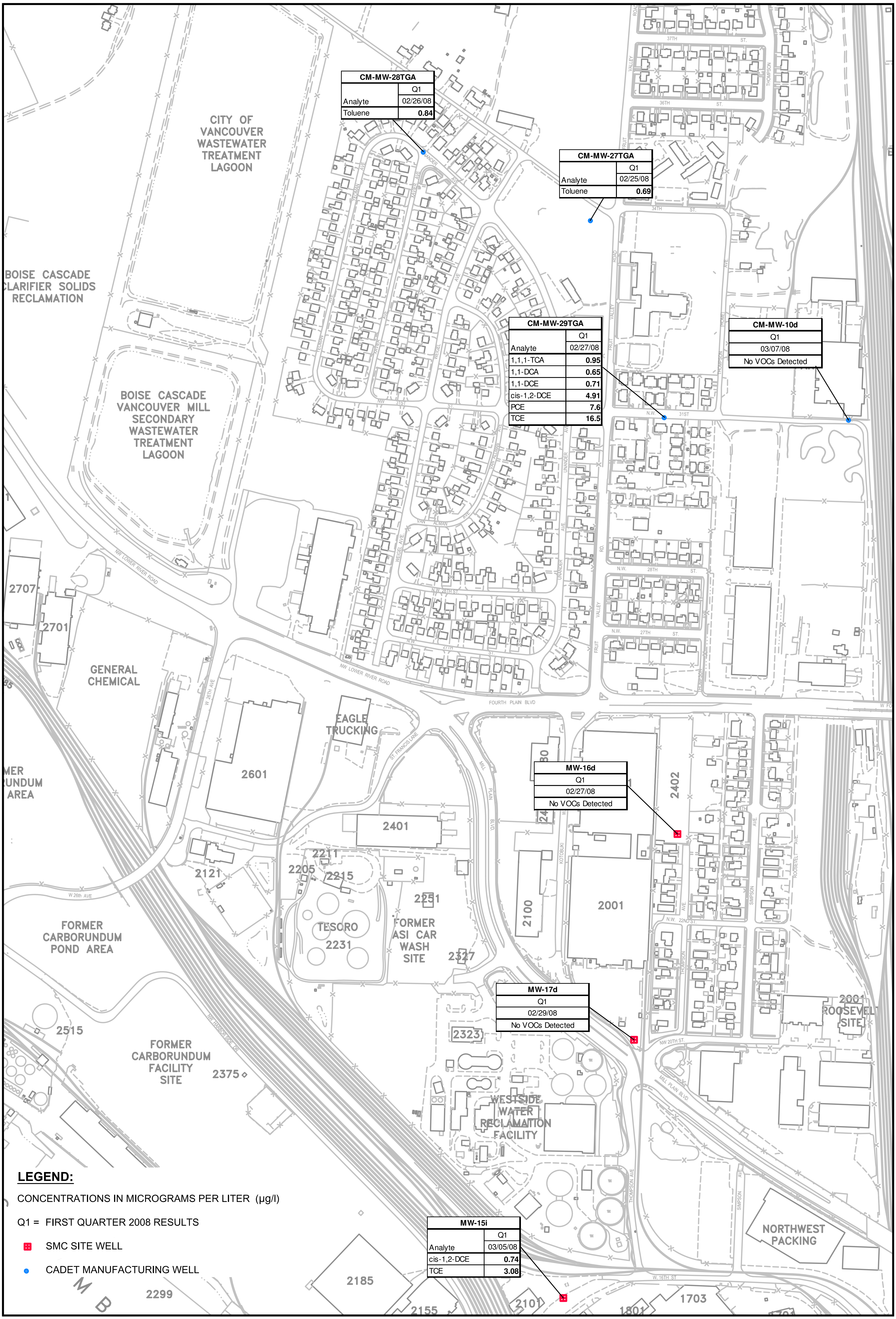


Figure 13
Wellfield Locations

TGA AND DEEP USA WHITE PAPER
VANCOVER, WASHINGTON



CM-MW-28TGA

	Q1
Analyte	02/26/08
Toluene	**0.84**

CM-MW-27TGA

	Q1
Analyte	02/25/08
Toluene	**0.69**

CM-MW-29TGA

	Q1
Analyte	02/27/08
1,1,1-TCA	**0.95**
1,1-DCA	**0.65**
1,1-DCE	**0.71**
cis-1,2-DCE	**4.91**
PCE	**7.6**
TCE	**16.5**

CM-MW-10d

Q1
03/07/08
No VOCs Detected

MW-16d

Q1
02/27/08
No VOCs Detected

MW-17d

Q1
02/29/08
No VOCs Detected

MW-15i

	Q1
Analyte	03/05/08
cis-1,2-DCE	**0.74**
TCE	**3.08**

LEGEND:

CONCENTRATIONS IN MICROGRAMS PER LITER (µg/l)

Q1 = FIRST QUARTER 2008 RESULTS

🟥 SMC SITE WELL

● CADET MANUFACTURING WELL

Parametrix DATE: Dec 11, 2008 FILE: P194006770

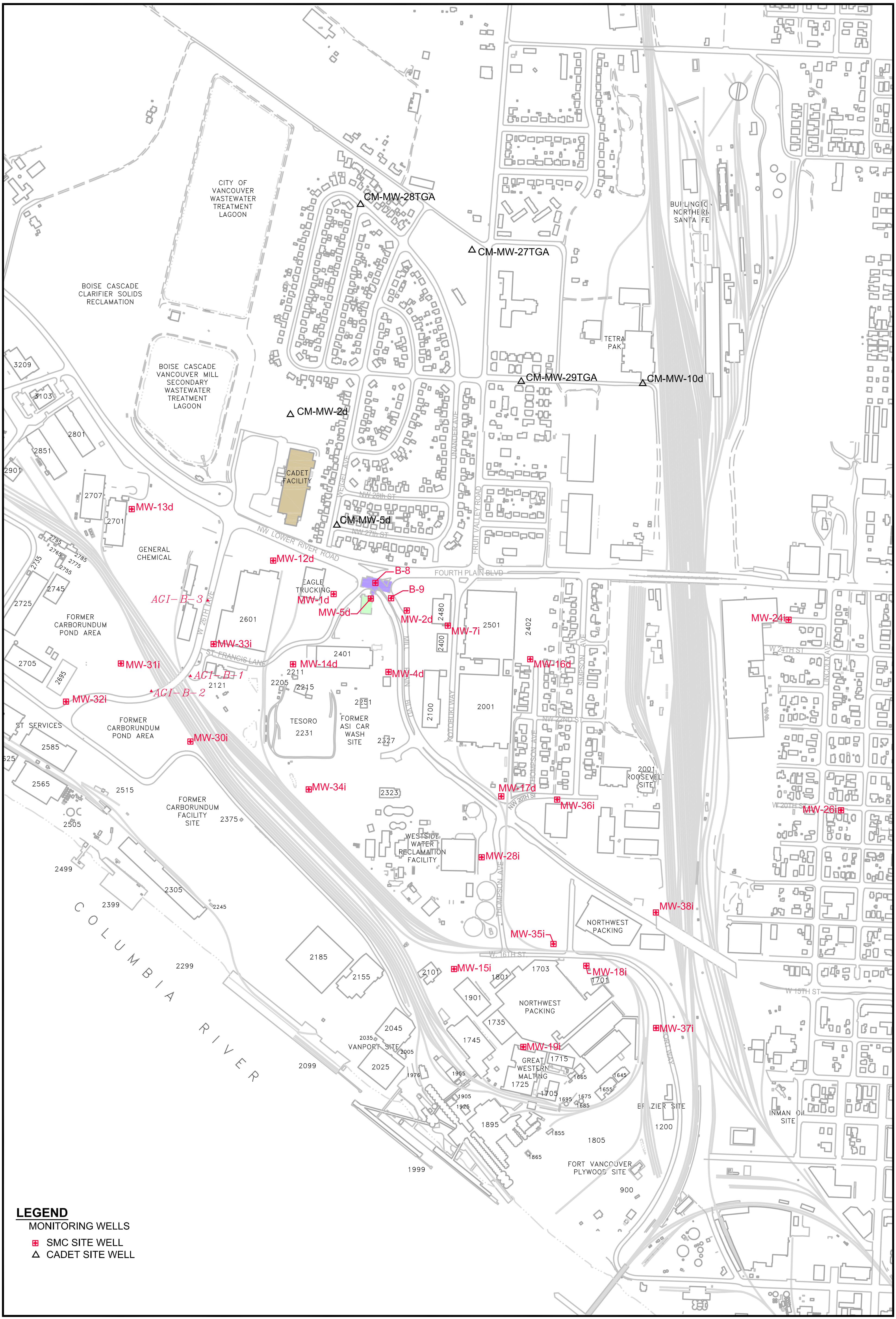
N

0 400'

SCALE IN FEET

Figure 14
VOCs in Wells Screened In TGA Zone
First Quarter 2008

TGA AND DEEP USA WHITE PAPER
VANCOUVER, WASHINGTON



LEGEND

MONITORING WELLS

⊞ SMC SITE WELL

△ CADET SITE WELL

Parametrix DATE: Dec 03, 2008 FILE: P194006784

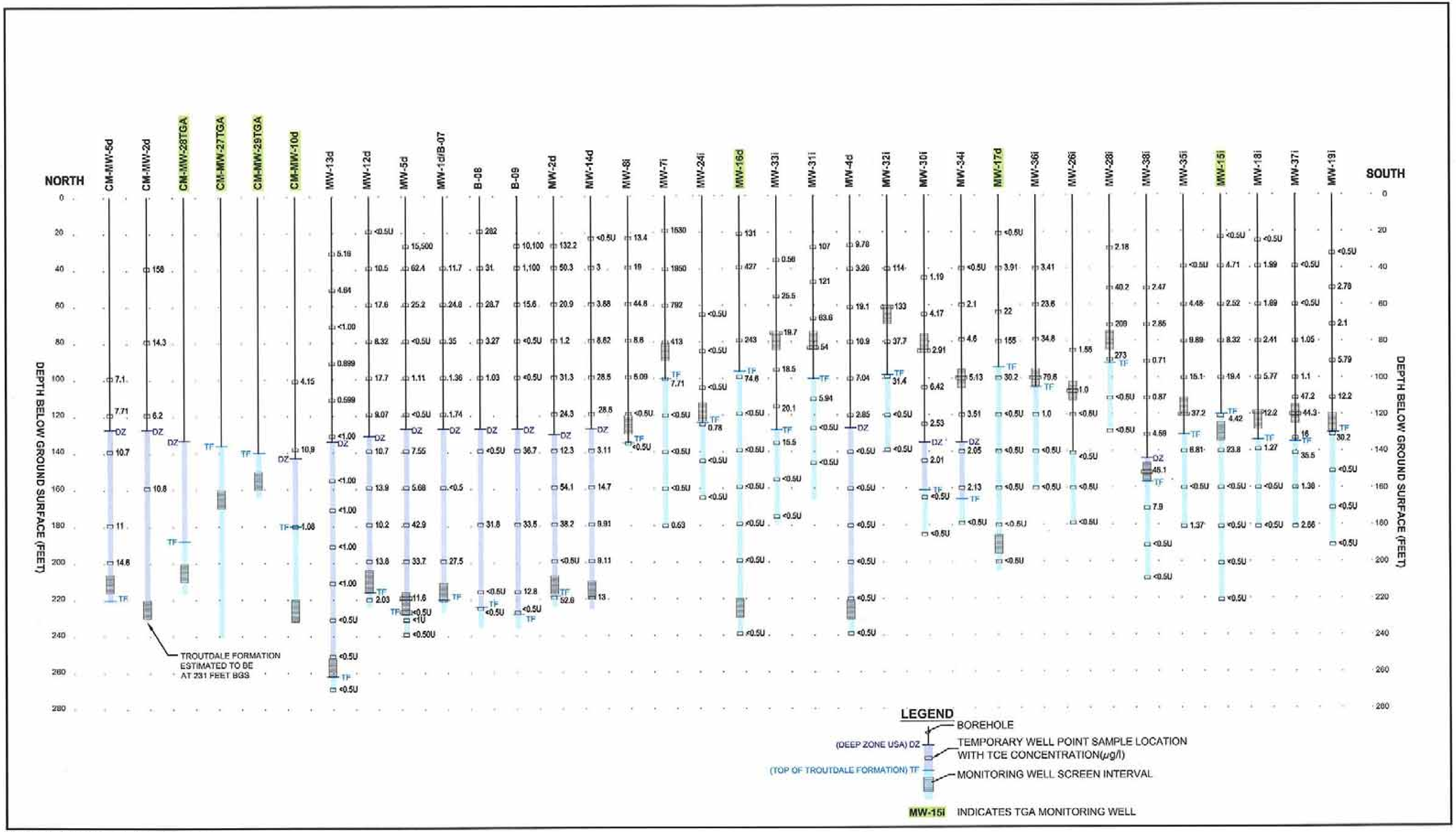
N

0 600'

SCALE IN FEET

Figure 15
Depth Specific
Sample Locations From TGA

TGA AND DEEP USA WHITE PAPER
VANCOUVER, WASHINGTON



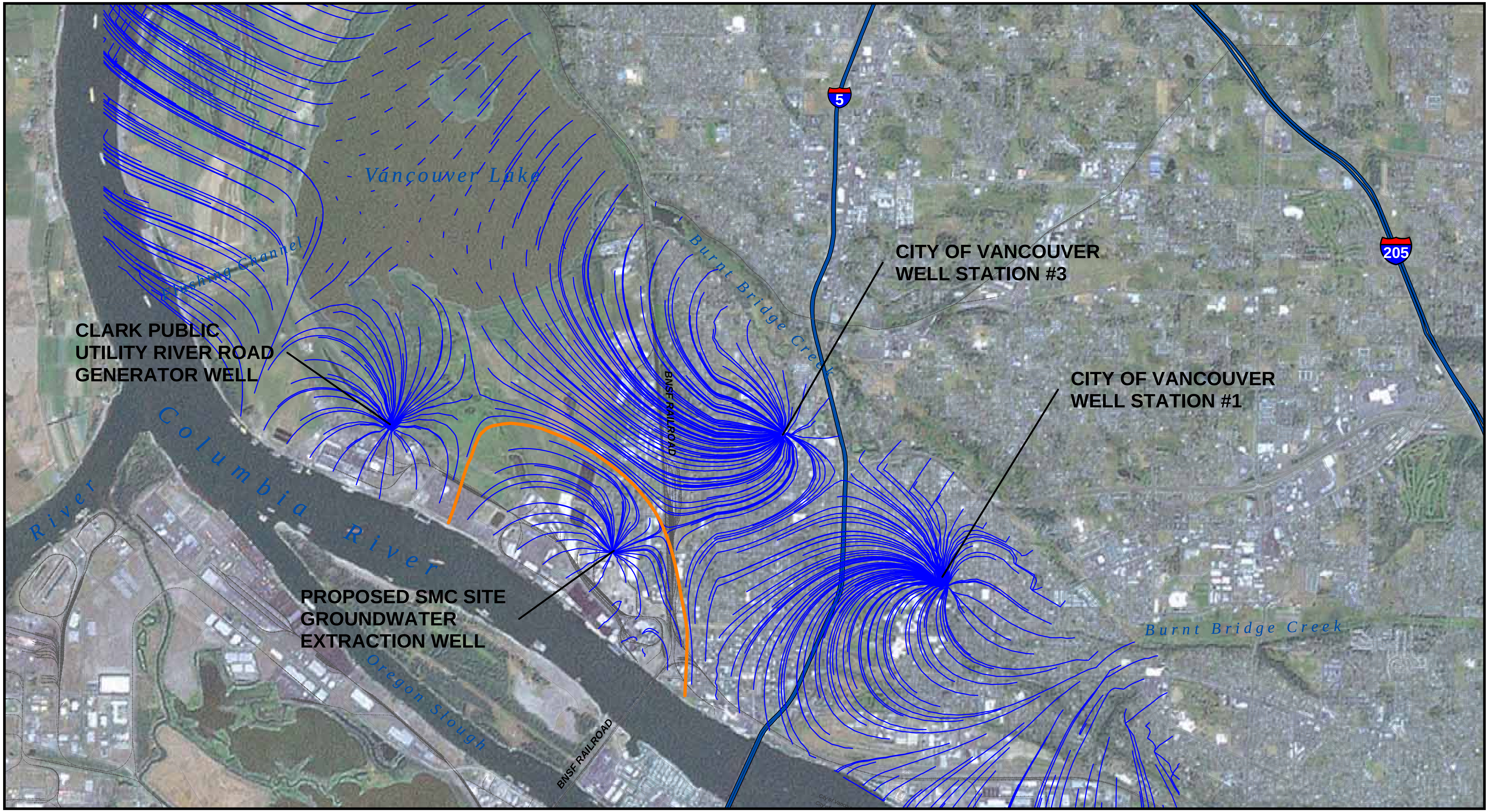
Parametrix DATE: Dec 02, 2008 FILE: P194006771

NOTE:
CONCENTRATIONS SHOWN ARE FROM VARIOUS SAMPLE COLLECTION AND WELL DRILLING EVENTS.

HORIZONTAL SCALE: NOT TO SCALE
VERTICAL SCALE : 1"=50'

Figure 16
Depth Specific TCE Concentrations

TGA AND DEEP USA WHITE PAPER
VANCOUVER, WASHINGTON



Parametrix Date: December 2, 2008 File: P:\GIS\POV\MXD_PDF\ExtractionWellCaptureZone_111808.MXD

N

0 3,000 6,000

Scale in Feet

LEGEND

—	GROUNDWATER FLOW LINE
—	PREDICTED CAPTURE ZONE IN MODEL LAYER 4 PRODUCED BY PROPOSED SMC SITE EXTRACTION WELL PUMPING AT 2,500 GALLONS PER MINUTE

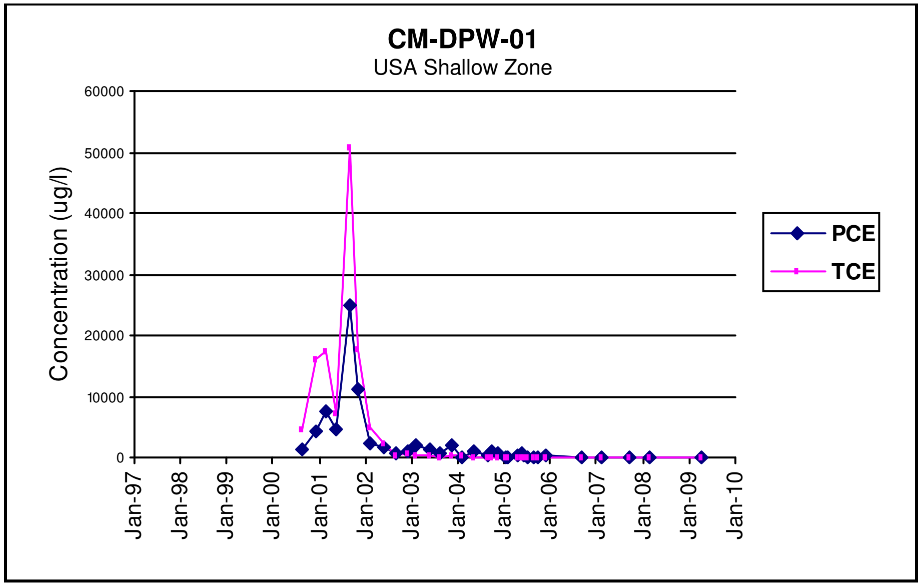
Note:
Great Western Malting Production Wells
Pump at a Total Rate of 900 Gallons Per Minute.

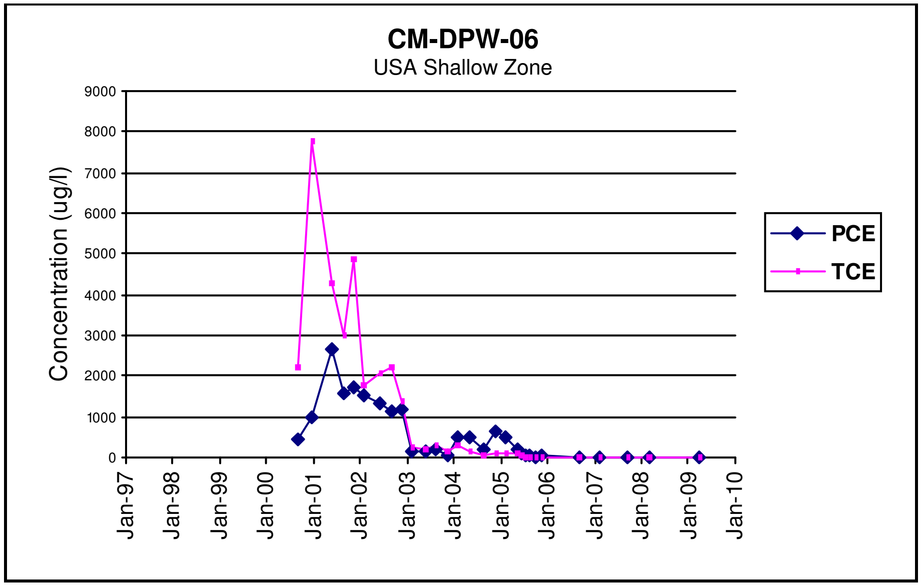
Figure 17
Extraction Well Capture Zone

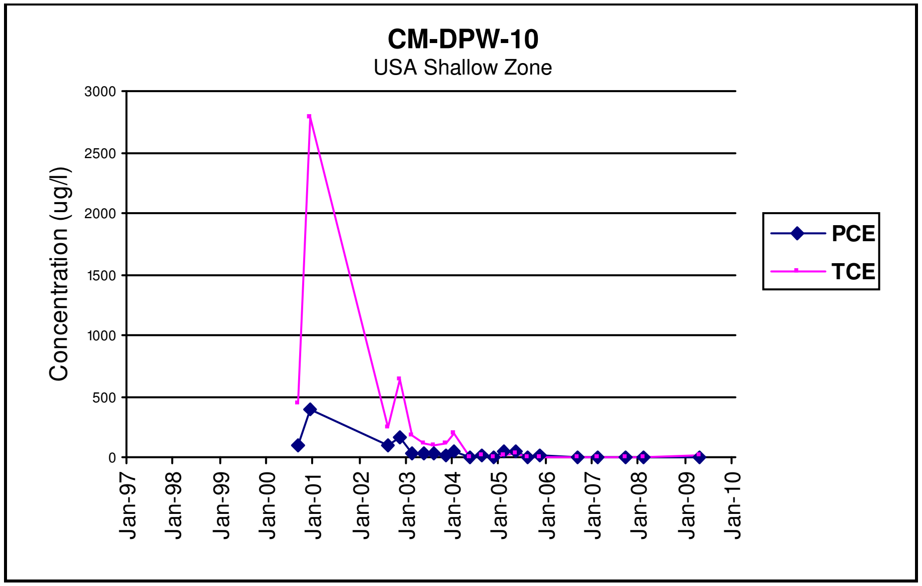
TGA and Deep USA Whitepaper
Port of Vancouver, Washington

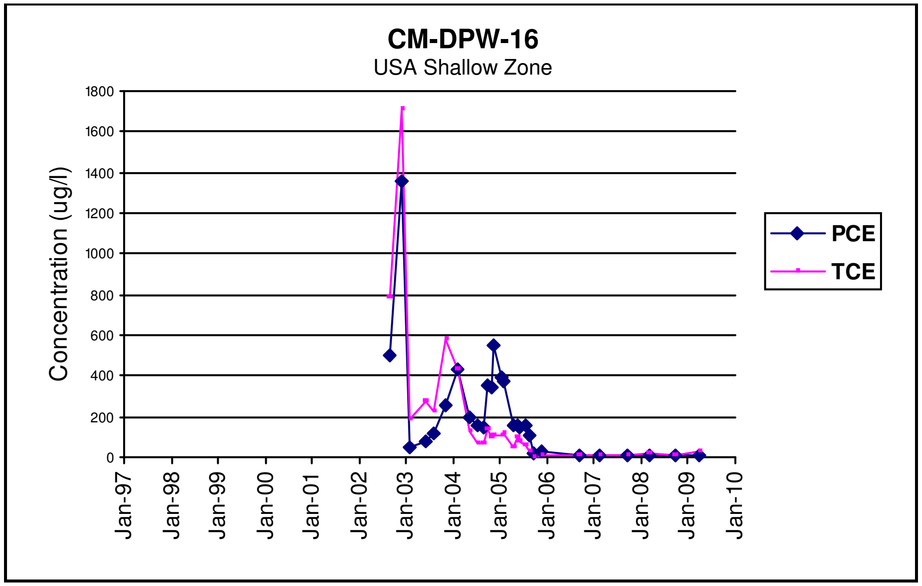
APPENDIX O

Time Series Plots for Cadet Groundwater Wells


CM-DPW-01
USA Shallow Zone
Concentration (ug/l)
60000
50000
40000
30000
20000
10000
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-DPW-06
USA Shallow Zone
Concentration (ug/l)
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-DPW-10
USA Shallow Zone
Concentration (ug/l)
3000
2500
2000
1500
1000
500
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-DPW-16
USA Shallow Zone
Concentration (ug/l)
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
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Jan-03
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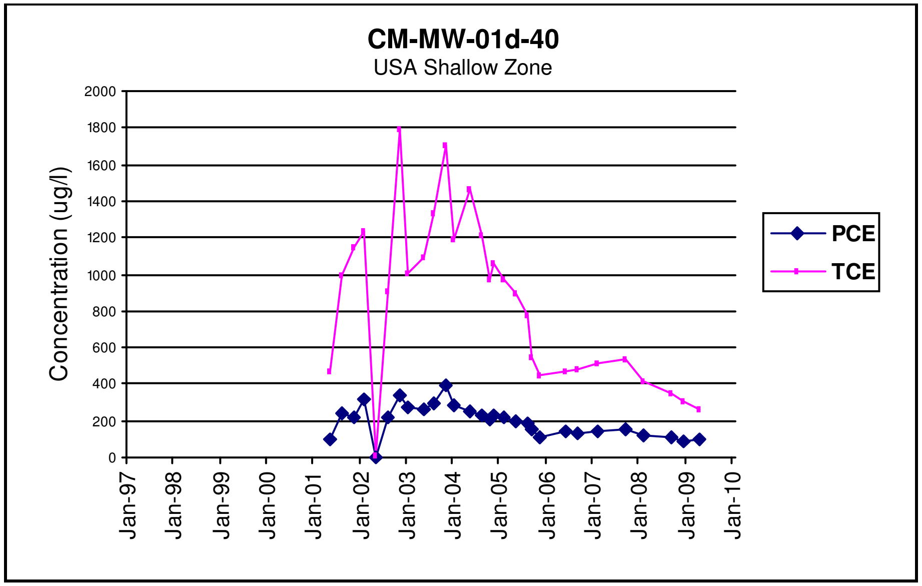
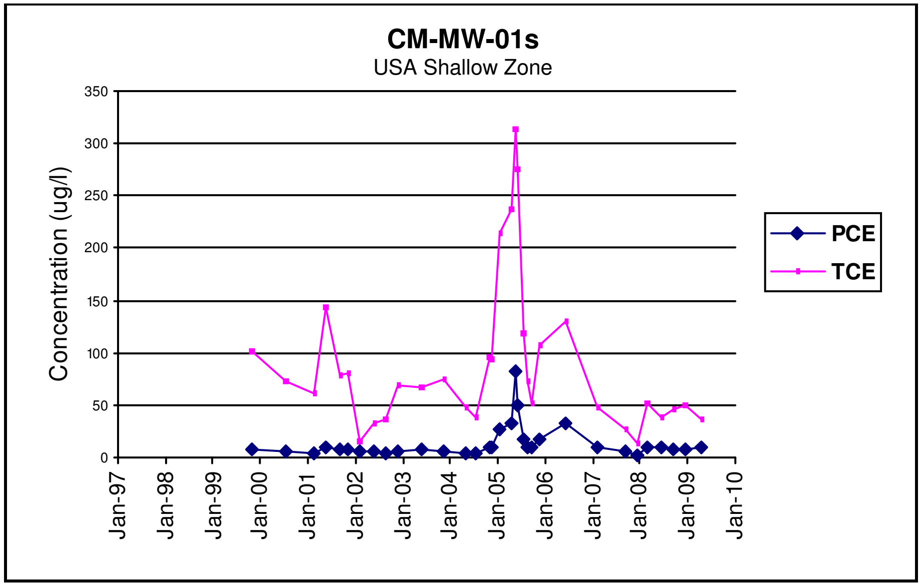
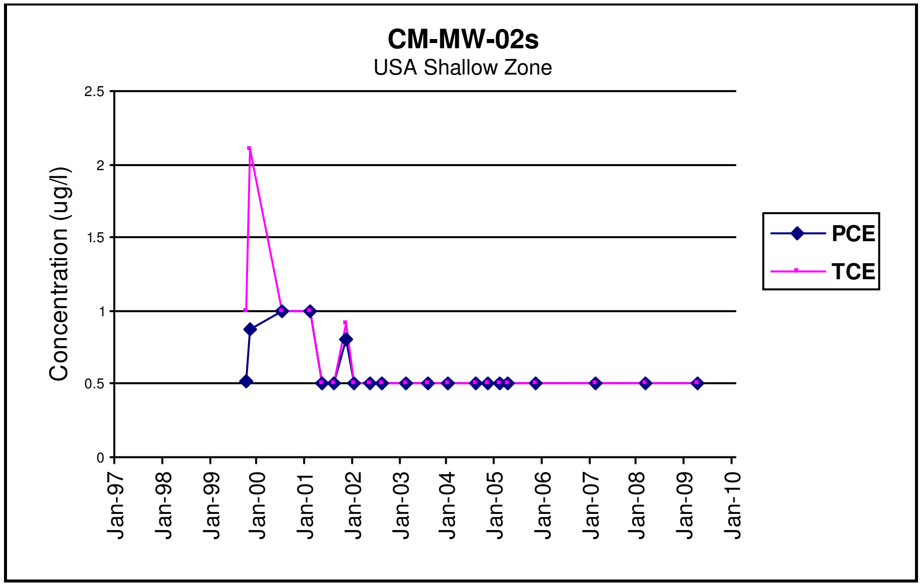
Jan-09
Jan-10
PCE
TCE



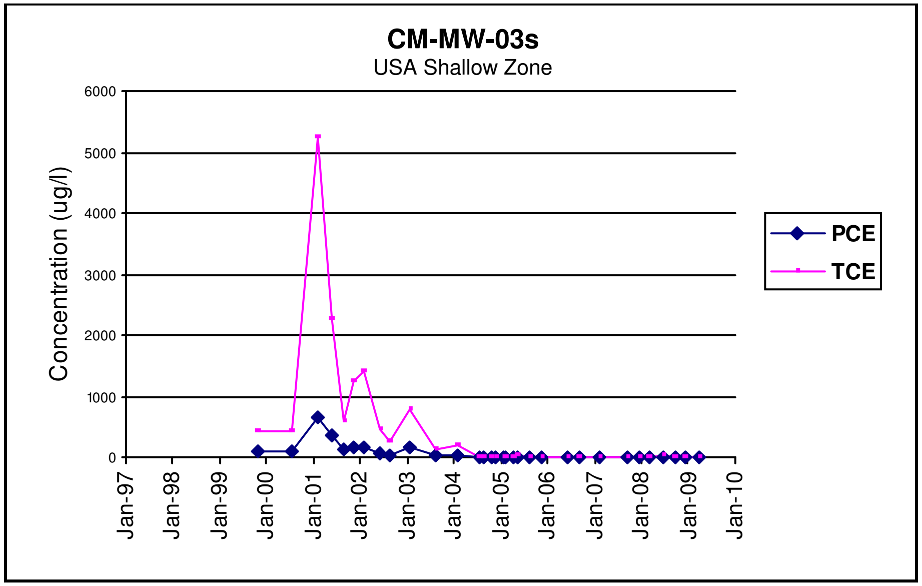
CM-MW-01d-40
USA Shallow Zone



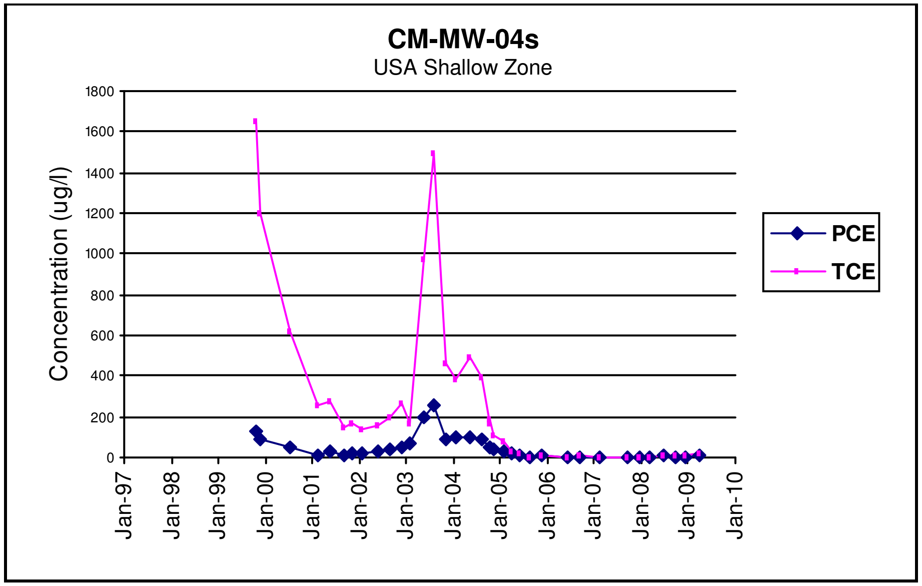
CM-MW-01s
USA Shallow Zone

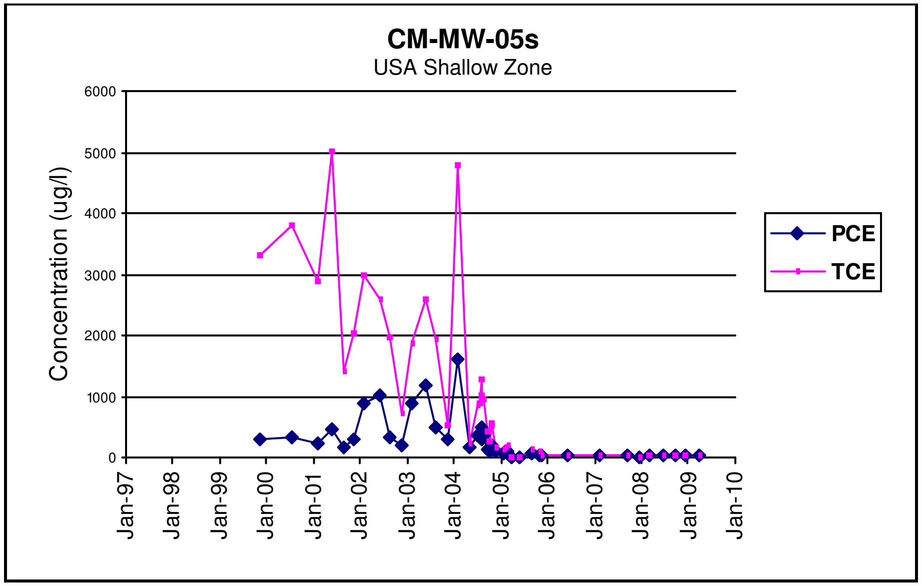


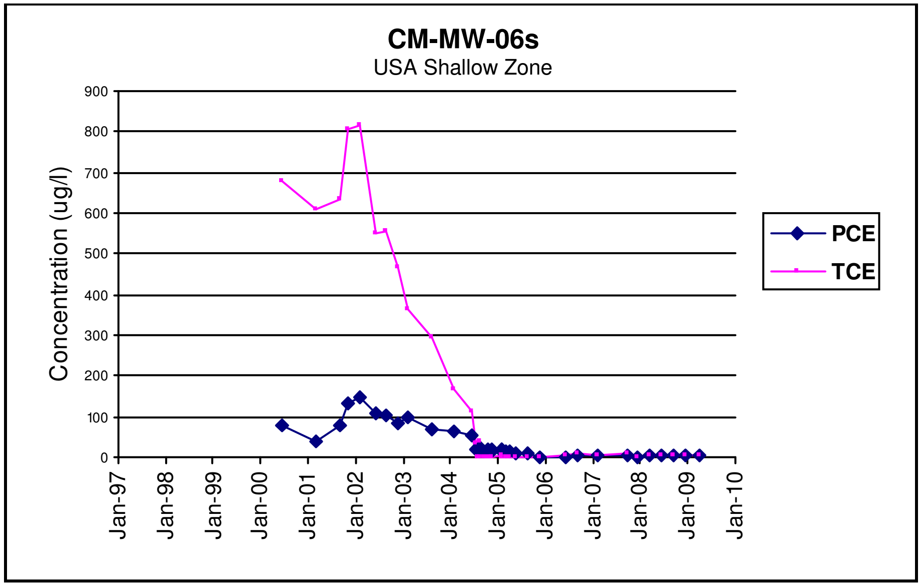
CM-MW-02s
USA Shallow Zone

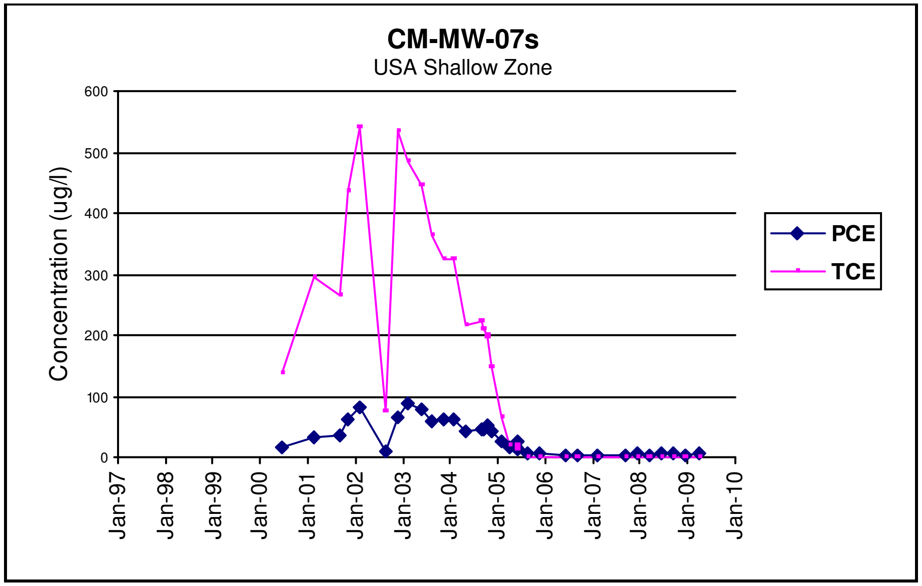


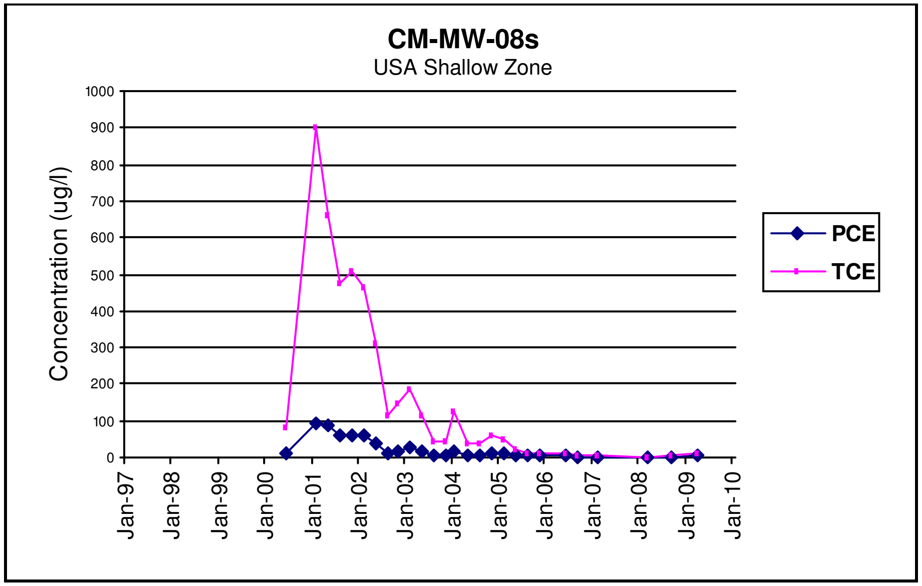
CM-MW-03s
USA Shallow Zone

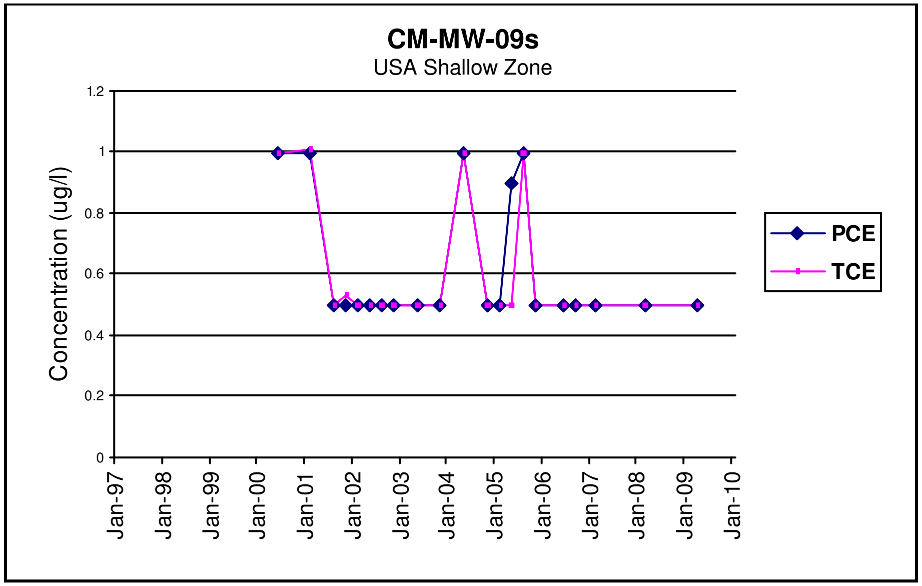

CM-MW-04s
USA Shallow Zone


CM-MW-05s
USA Shallow Zone


CM-MW-06s
USA Shallow Zone


CM-MW-07s
USA Shallow Zone


CM-MW-08s
USA Shallow Zone
Concentration (ug/l)
1000
900
800
700
600
500
400
300
200
100
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-09s
USA Shallow Zone
Concentration (ug/l)
1.2
1
0.8
0.6
0.4
0.2
0
Jan-97
Jan-98
Jan-99
Jan-00
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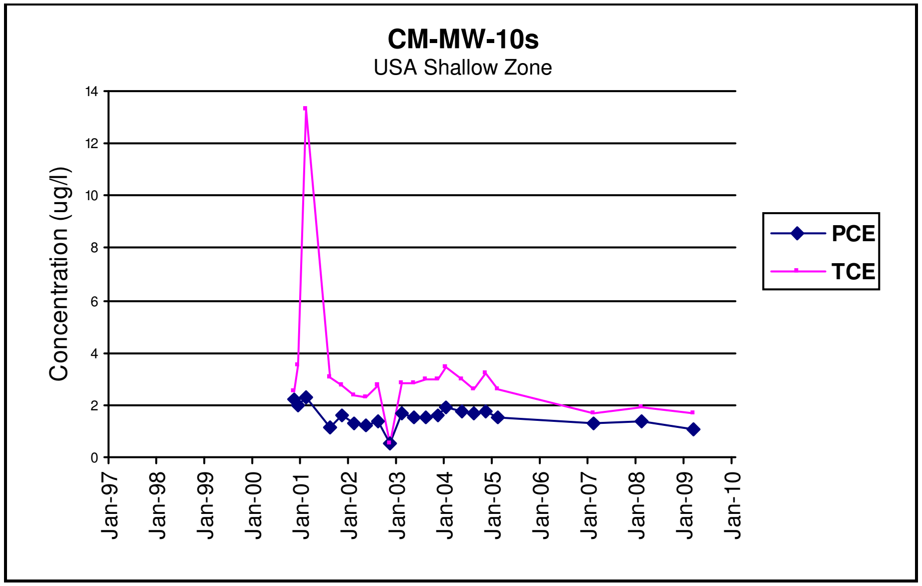
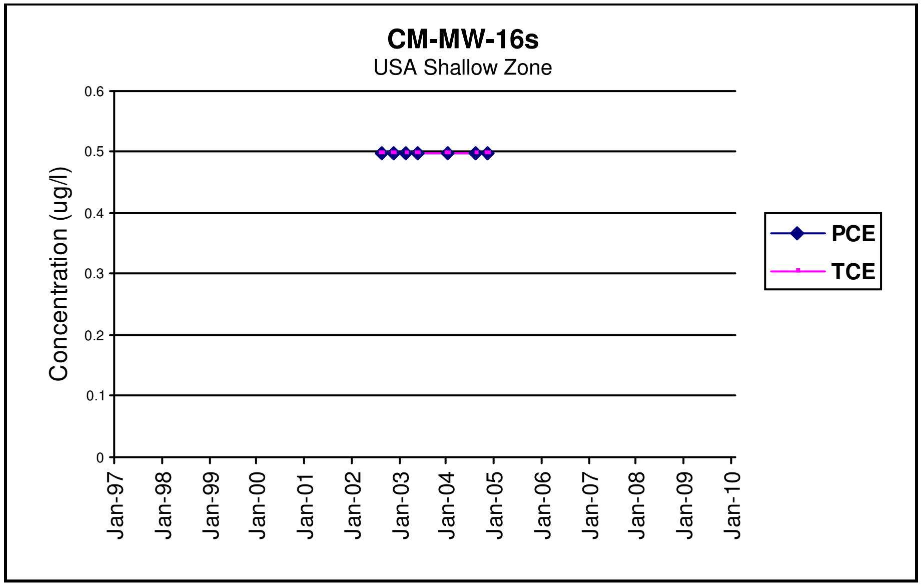
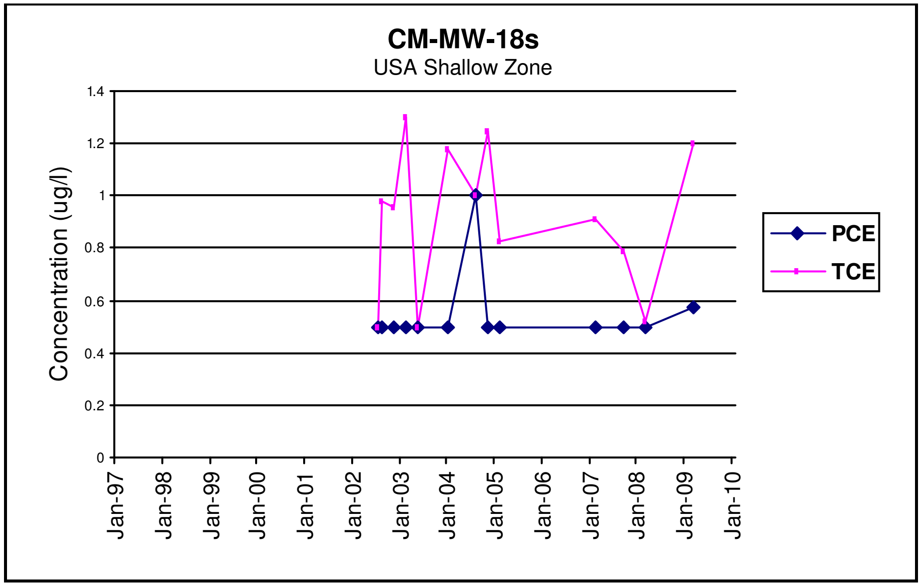
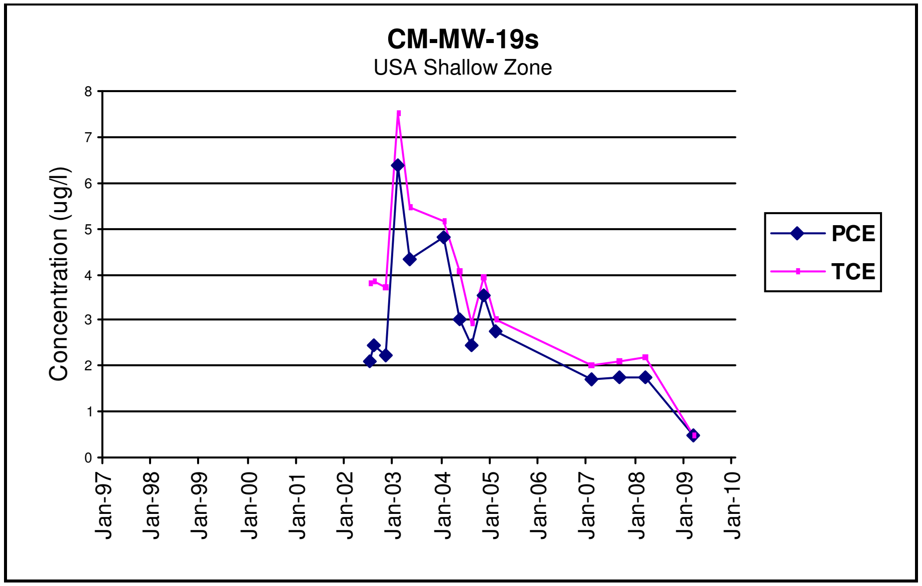
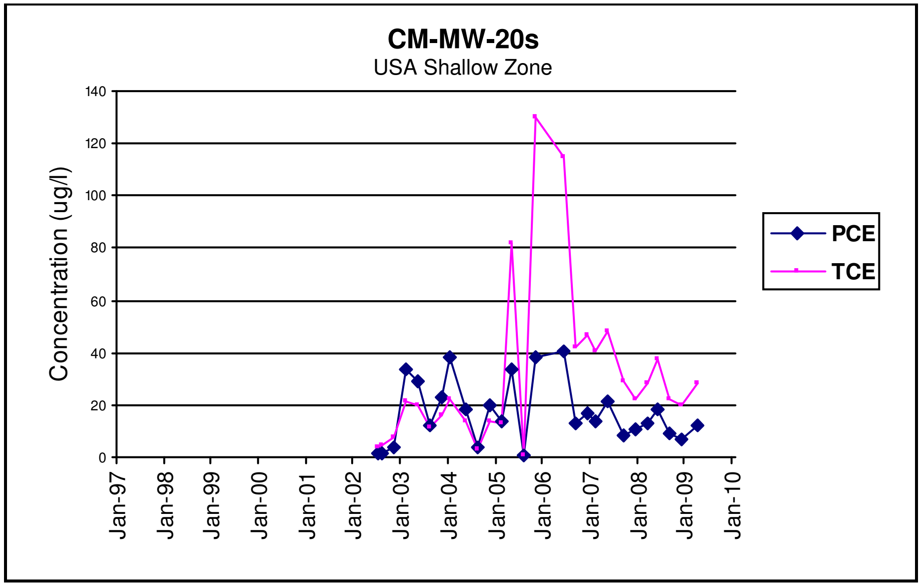
Jan-08
Jan-09
Jan-10
PCE
TCE

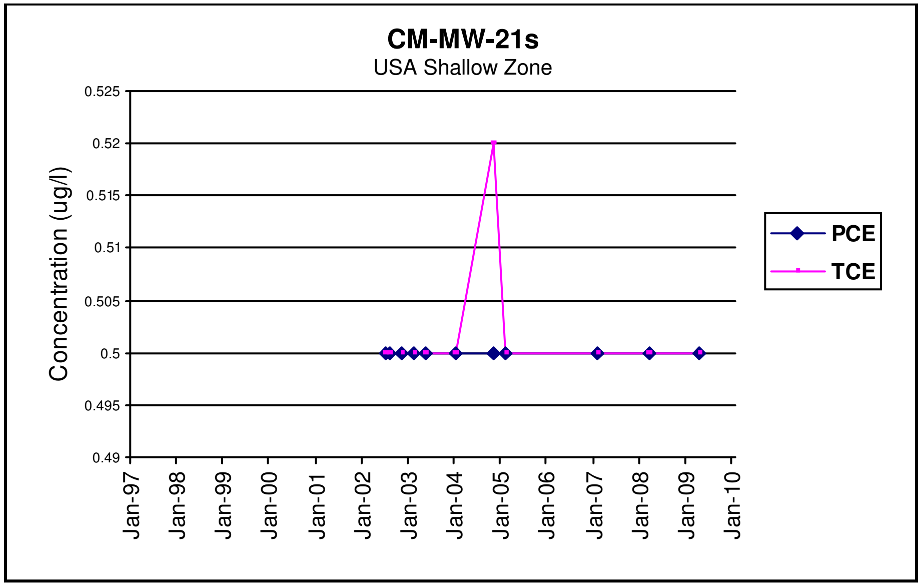

CM-MW-10s
USA Shallow Zone
Concentration (ug/l)
14
12
10
8
6
4
2
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE

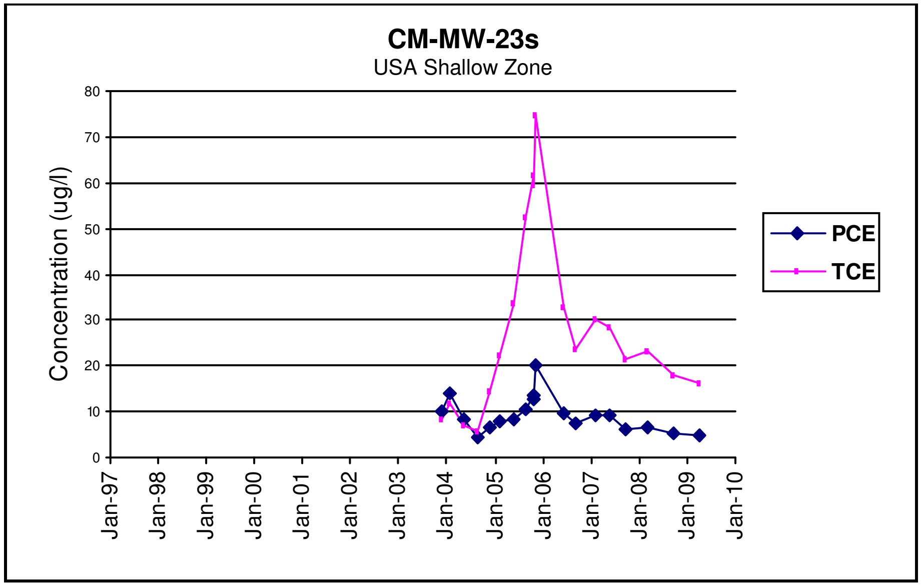

CM-MW-16s
USA Shallow Zone
Concentration (ug/l)
0.6
0.5
0.4
0.3
0.2
0.1
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE

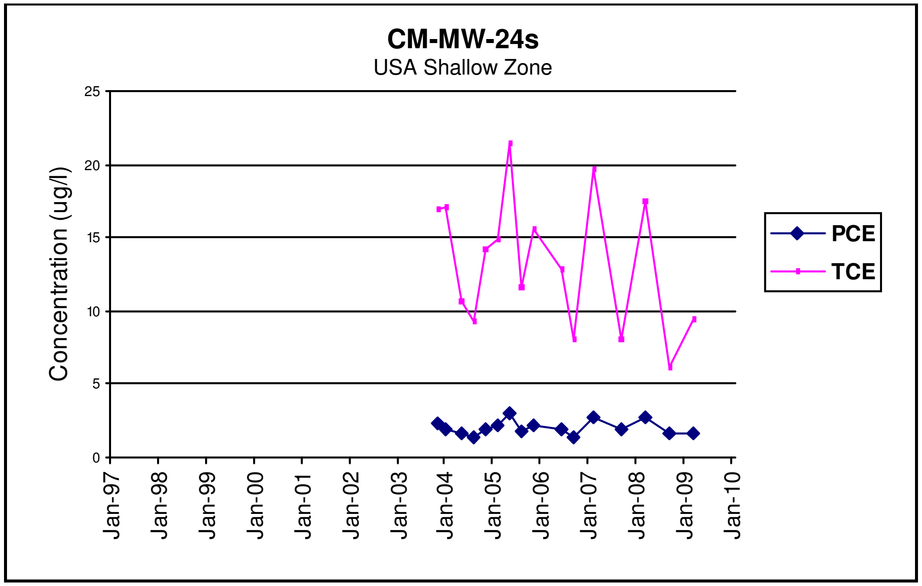

CM-MW-18s
USA Shallow Zone
Concentration (ug/l)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE

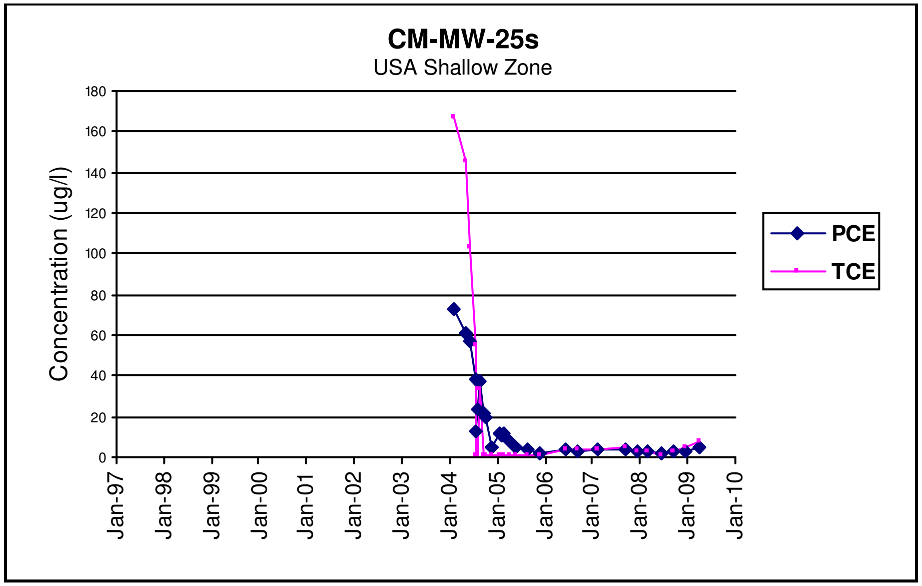

CM-MW-19s
USA Shallow Zone
Concentration (ug/l)
8
7
6
5
4
3
2
1
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE

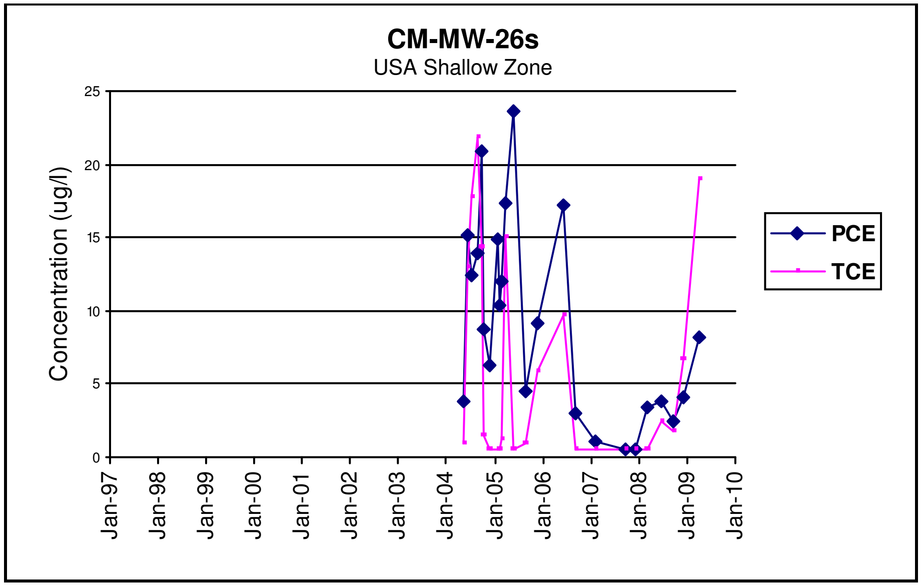

CM-MW-20s
USA Shallow Zone
Concentration (ug/l)
140
120
100
80
60
40
20
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-21s
USA Shallow Zone
Concentration (ug/l)
0.525
0.52
0.515
0.51
0.505
0.5
0.495
0.49
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-23s
USA Shallow Zone
Concentration (ug/l)
80
70
60
50
40
30
20
10
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-24s
USA Shallow Zone
Concentration (ug/l)
25
20
15
10
5
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-25s
USA Shallow Zone
Concentration (ug/l)
180
160
140
120
100
80
60
40
20
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-26s
USA Shallow Zone
Concentration (ug/l)
25
20
15
10
5
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
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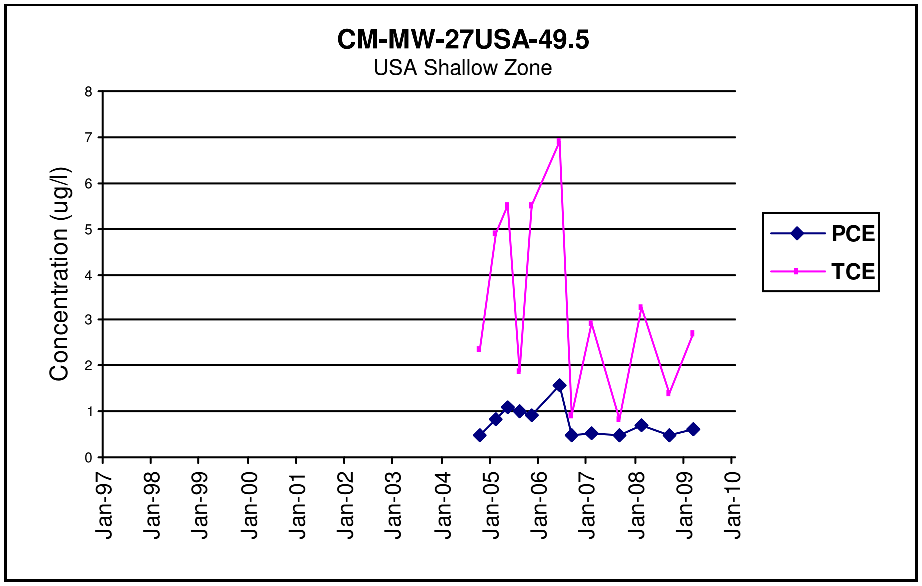
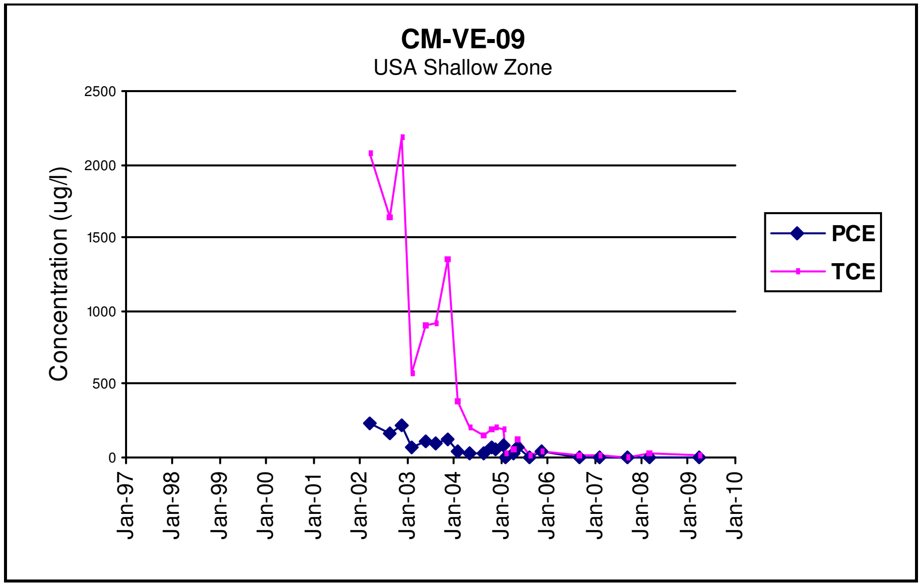
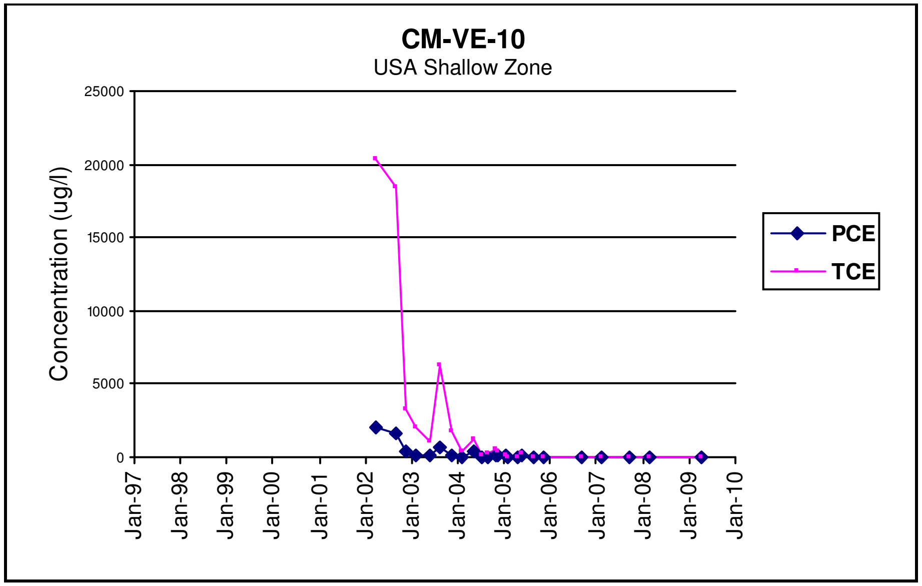
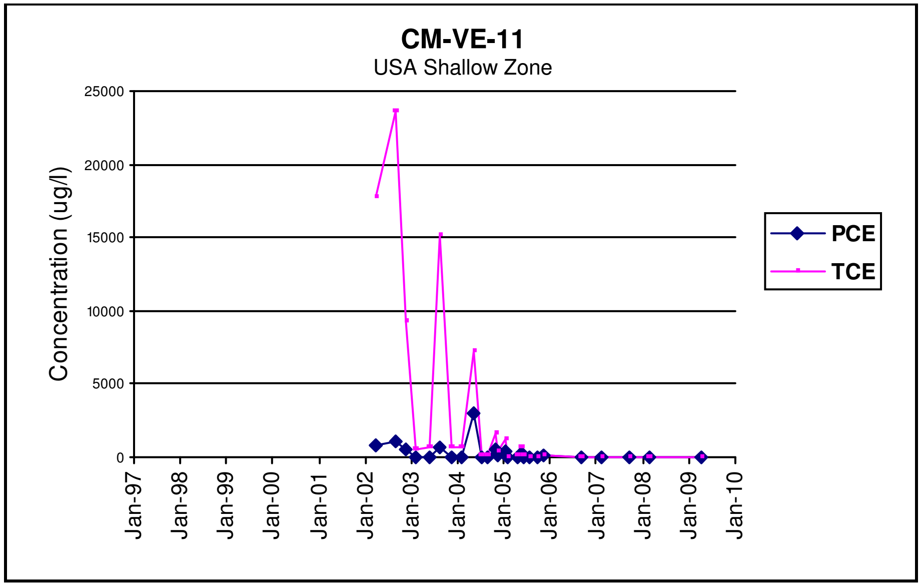
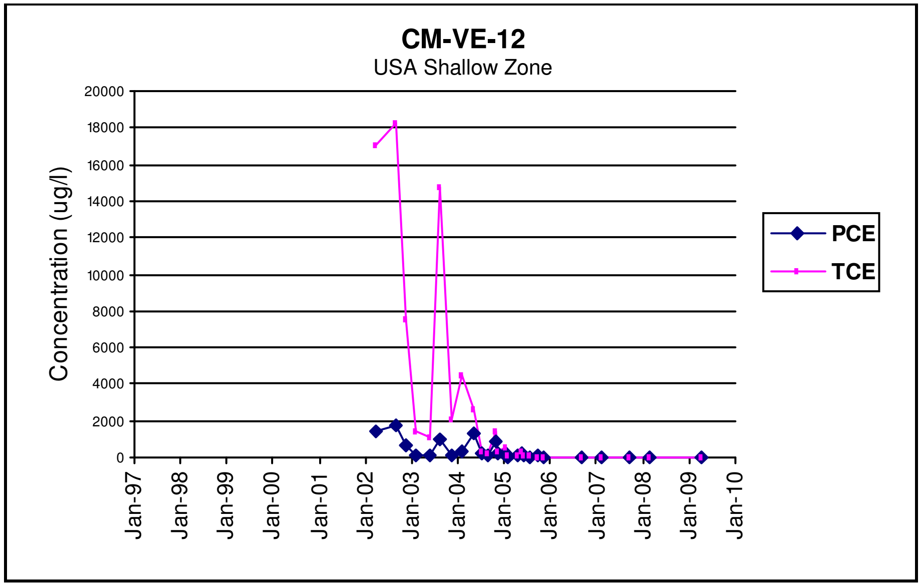
Jan-08
Jan-09
Jan-10
PCE
TCE

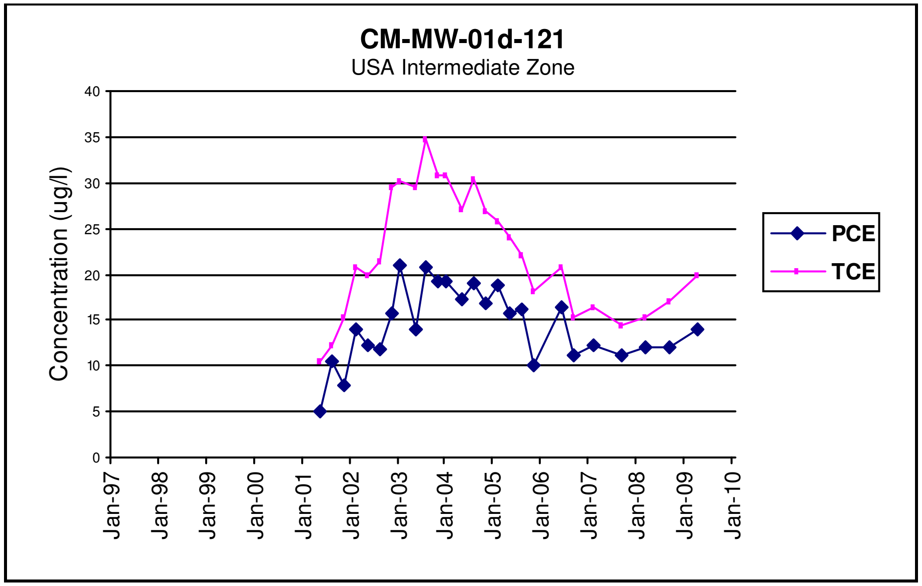

CM-MW-27USA-49.5
USA Shallow Zone
Concentration (ug/l)
0
1
2
3
4
5
6
7
8
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-VE-09
USA Shallow Zone
Concentration (ug/l)
0
500
1000
1500
2000
2500
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-VE-10
USA Shallow Zone
Concentration (ug/l)
0
5000
10000
15000
20000
25000
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE

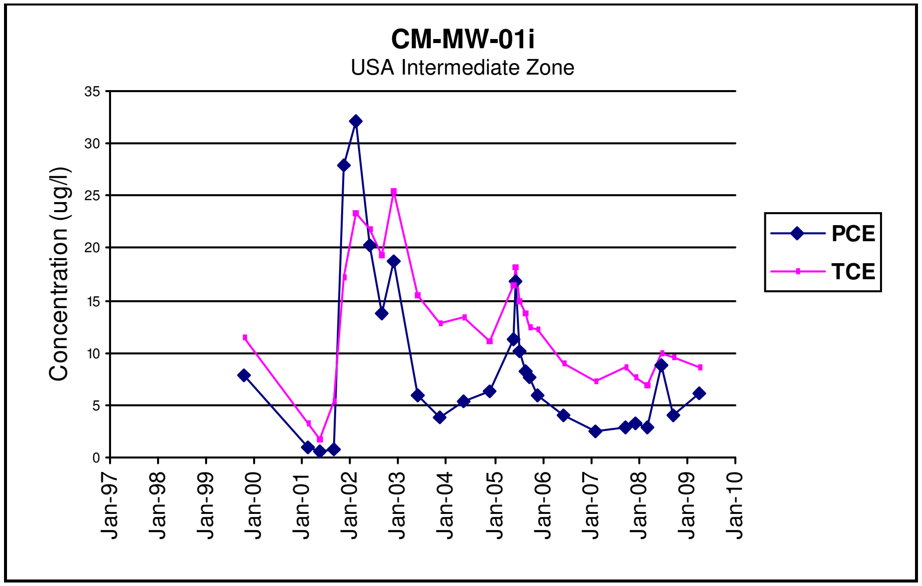

CM-VE-11
USA Shallow Zone
Concentration (ug/l)
0
5000
10000
15000
20000
25000
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-VE-12
USA Shallow Zone
Concentration (ug/l)
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE



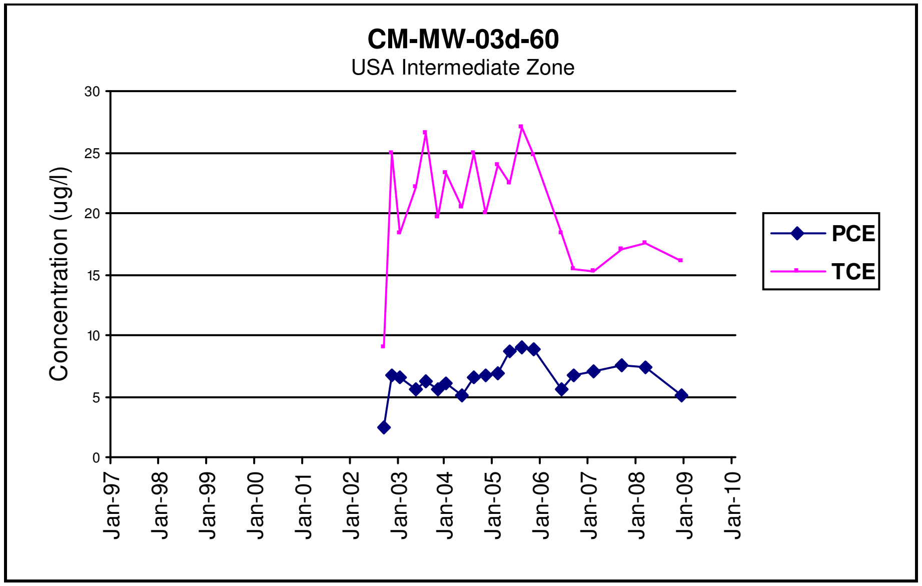
CM-MW-01d-121

USA Intermediate Zone



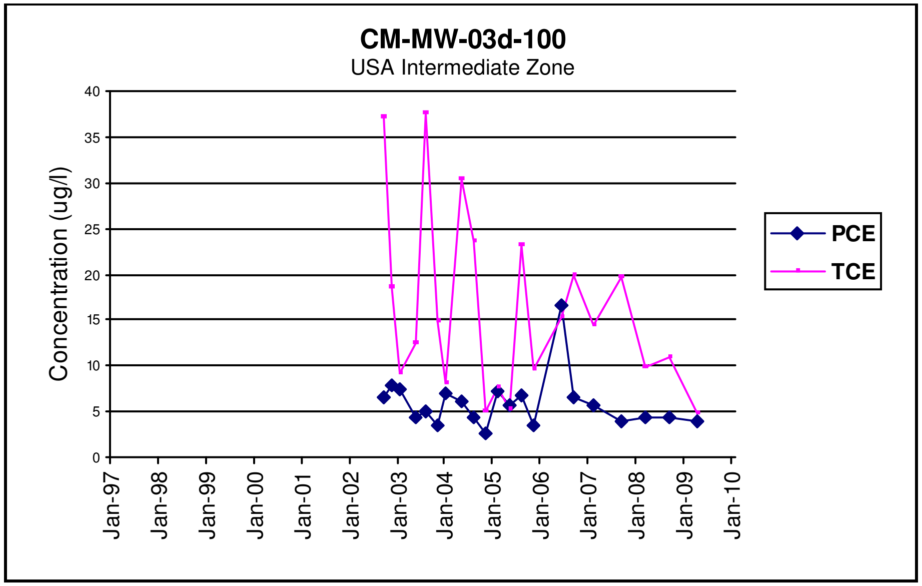
CM-MW-01i

USA Intermediate Zone



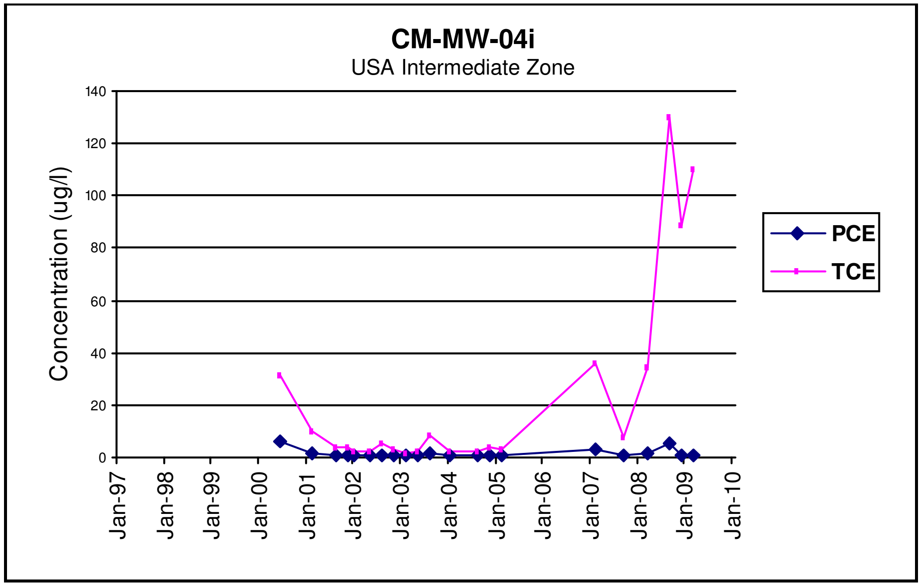
CM-MW-03d-60

USA Intermediate Zone



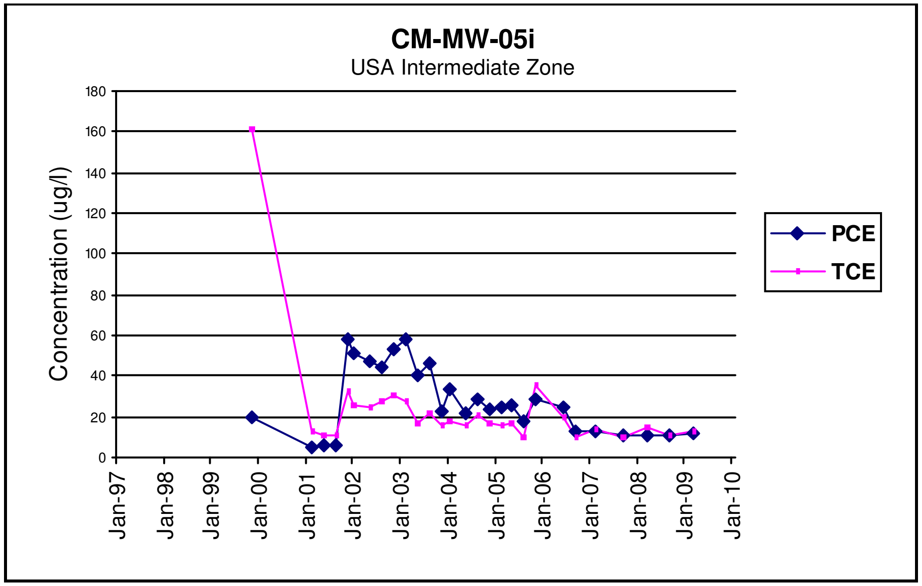
CM-MW-03d-100

USA Intermediate Zone



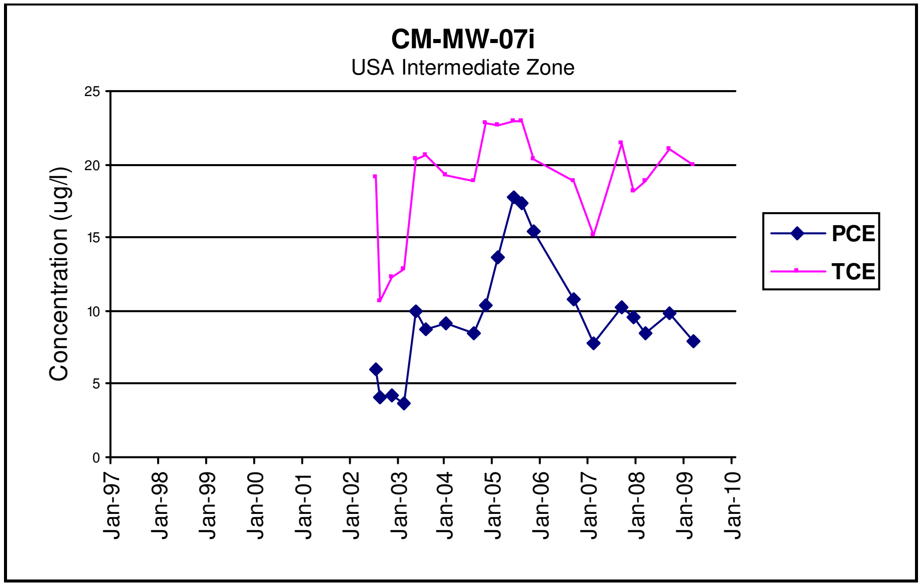
CM-MW-04i

USA Intermediate Zone



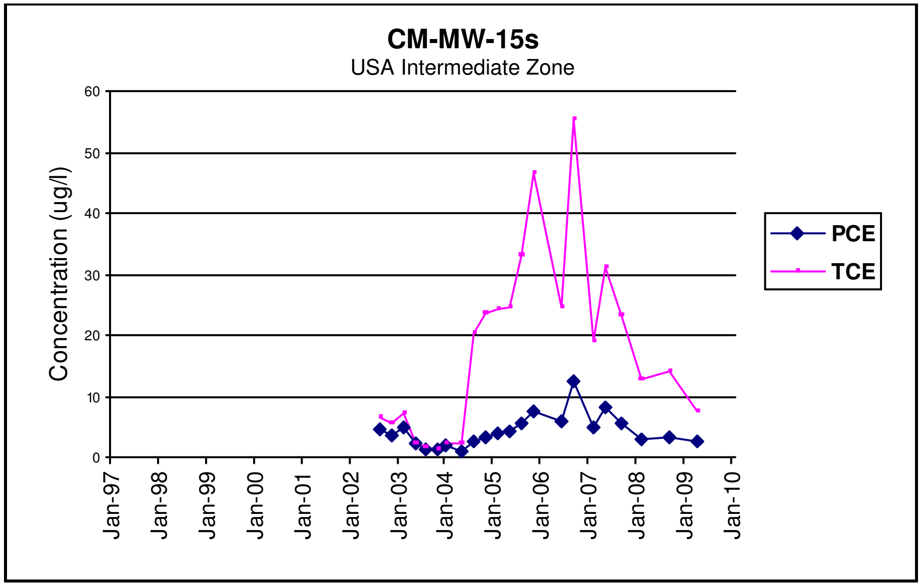
CM-MW-05i

USA Intermediate Zone



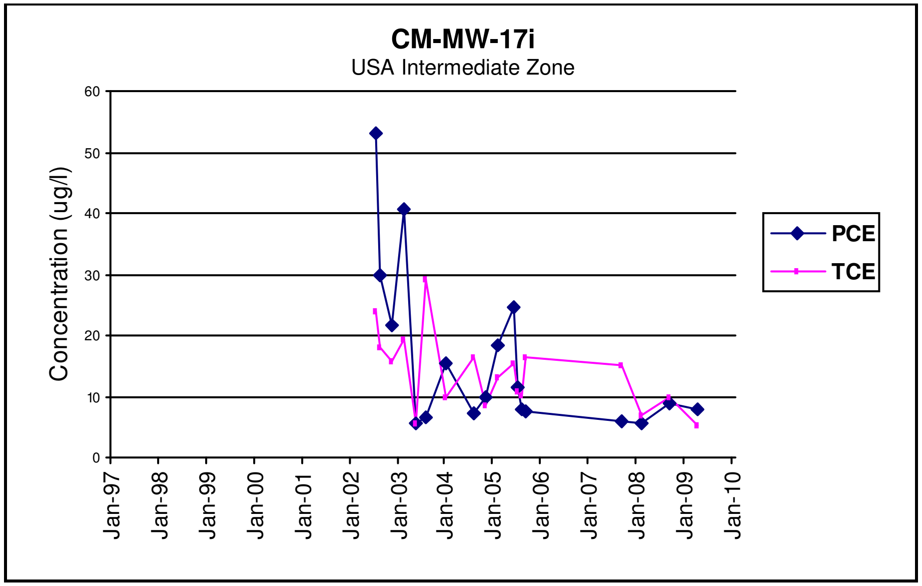
CM-MW-07i

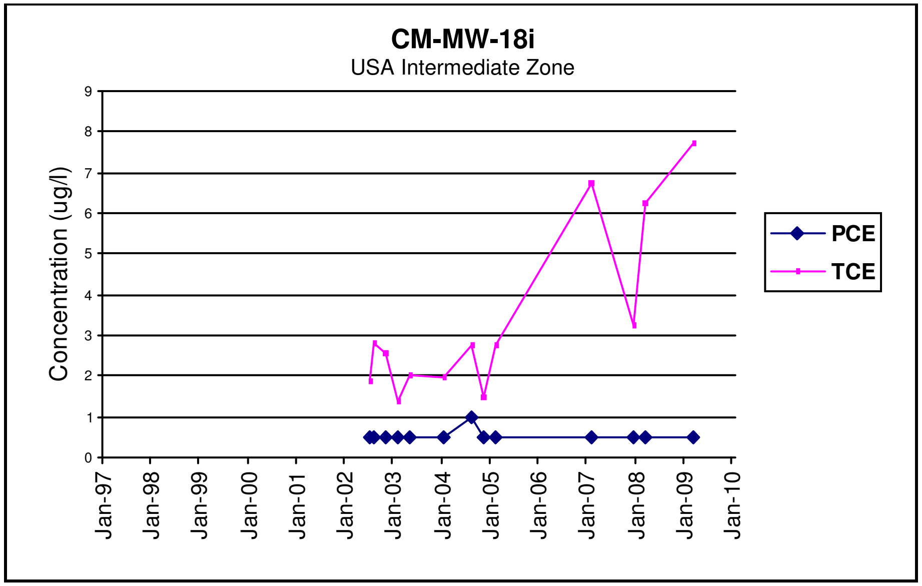
USA Intermediate Zone

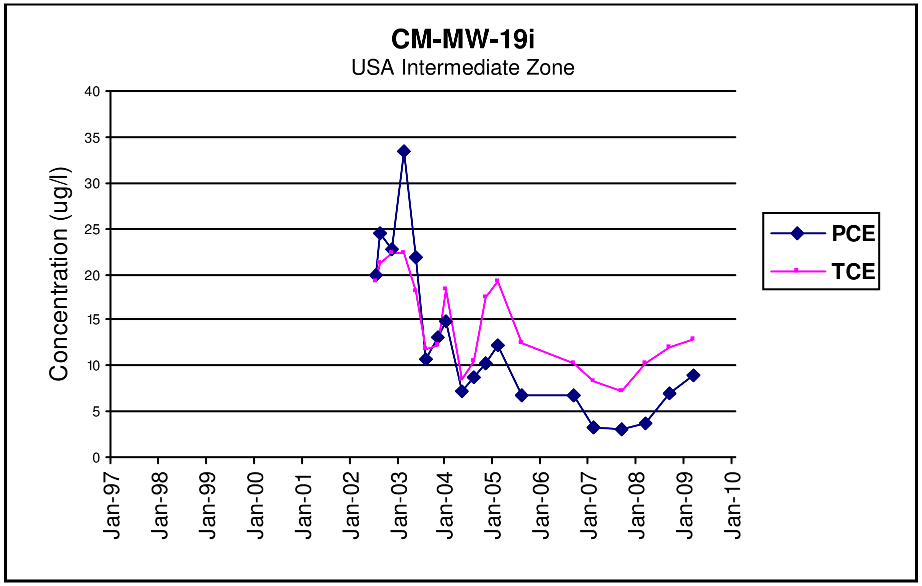


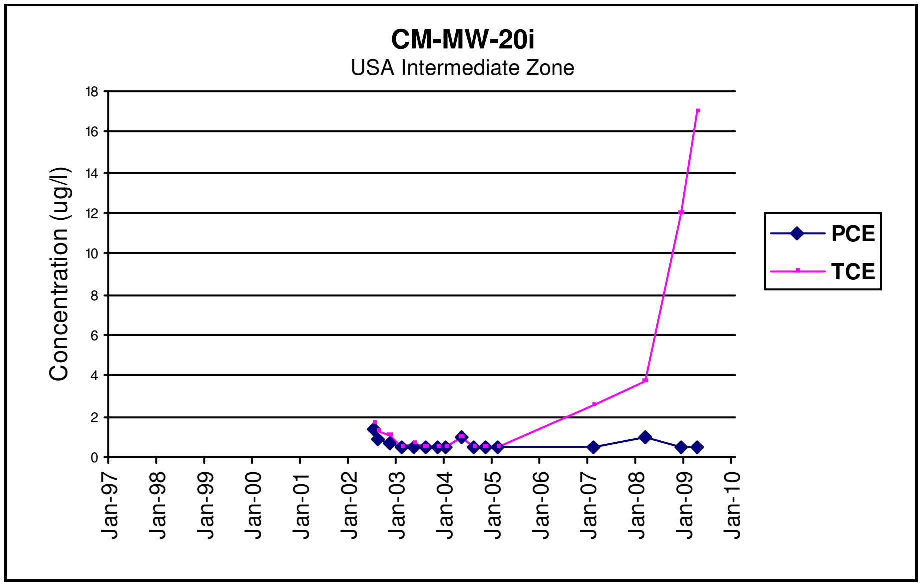
CM-MW-15s

USA Intermediate Zone


CM-MW-17i
USA Intermediate Zone
Concentration (ug/l)
0
10
20
30
40
50
60
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-18i
USA Intermediate Zone
Concentration (ug/l)
0
1
2
3
4
5
6
7
8
9
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-19i
USA Intermediate Zone
Concentration (ug/l)
0
5
10
15
20
25
30
35
40
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-20i
USA Intermediate Zone
Concentration (ug/l)
0
2
4
6
8
10
12
14
16
18
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
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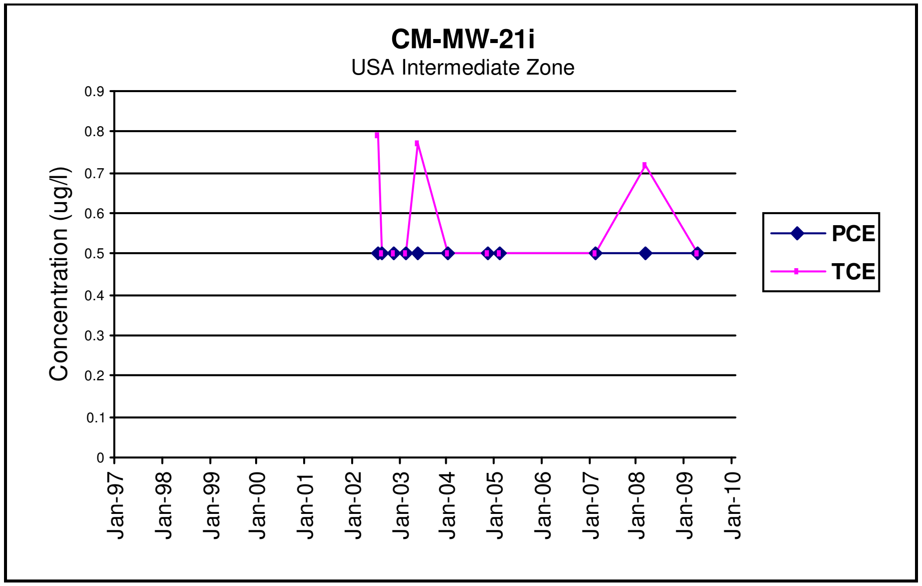
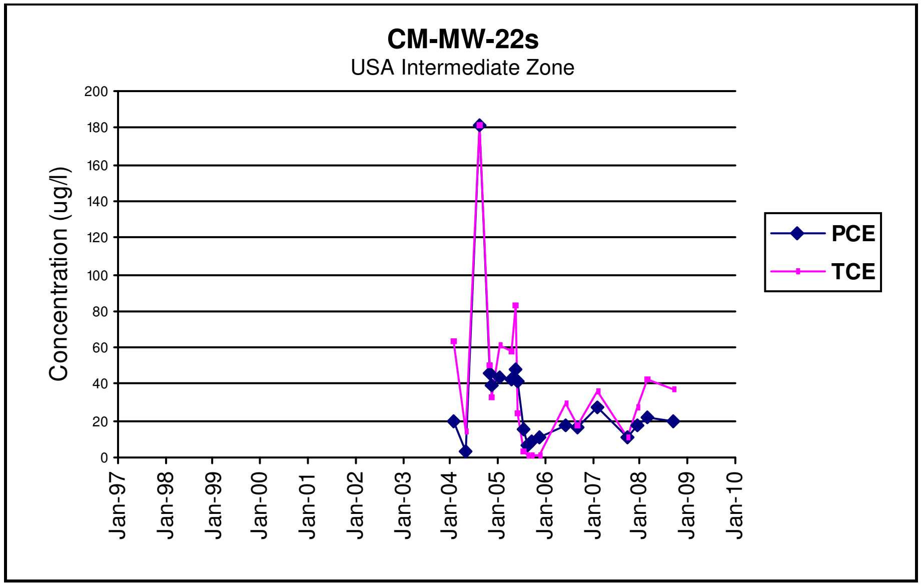
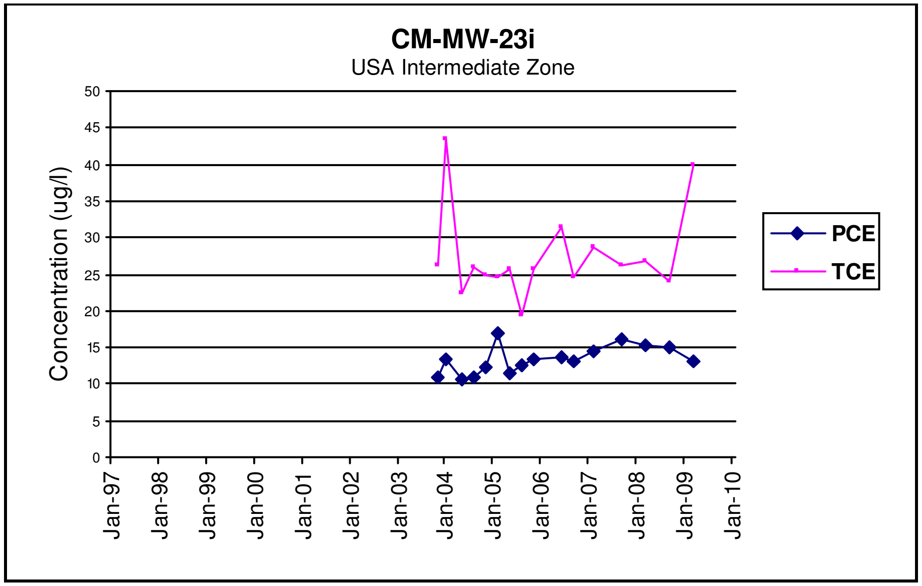
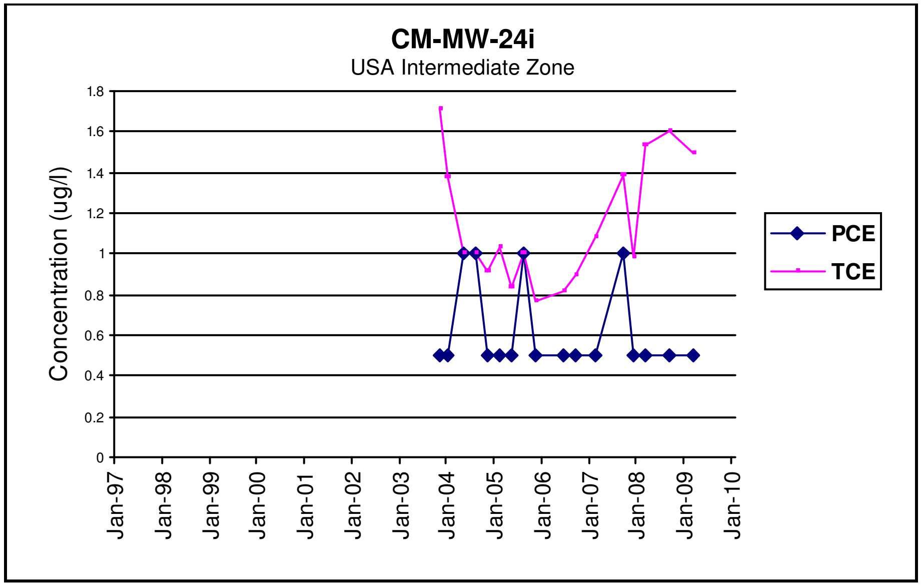
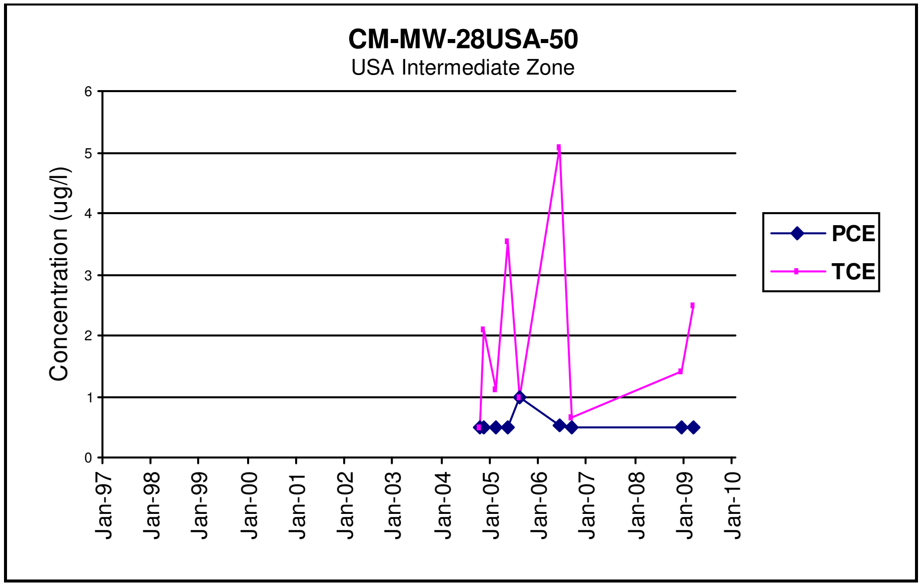
Jan-08
Jan-09
Jan-10
PCE
TCE

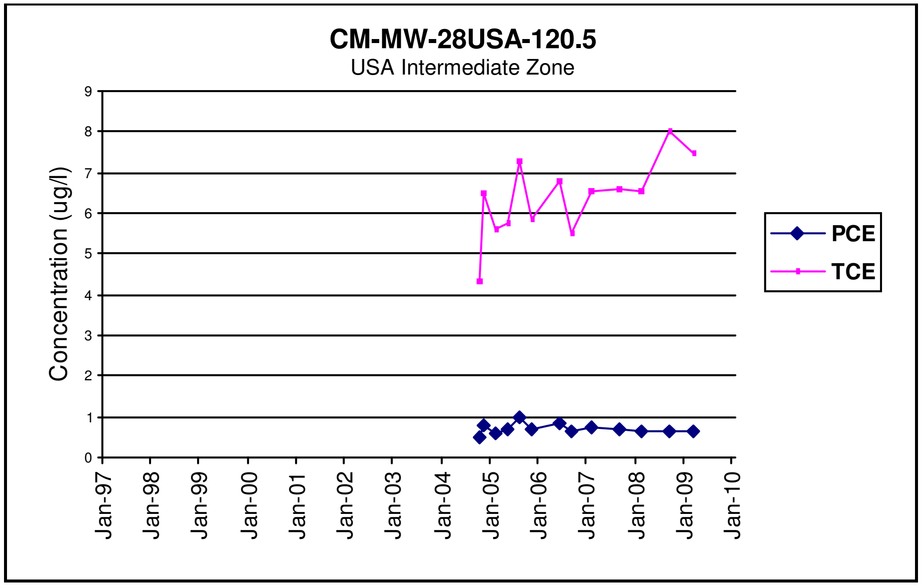

CM-MW-21i
USA Intermediate Zone
Concentration (ug/l)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-22s
USA Intermediate Zone
Concentration (ug/l)
200
180
160
140
120
100
80
60
40
20
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-23i
USA Intermediate Zone
Concentration (ug/l)
50
45
40
35
30
25
20
15
10
5
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-24i
USA Intermediate Zone
Concentration (ug/l)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-28USA-50
USA Intermediate Zone
Concentration (ug/l)
0
1
2
3
4
5
6
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-28USA-120.5
USA Intermediate Zone
Concentration (ug/l)
0
1
2
3
4
5
6
7
8
9
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
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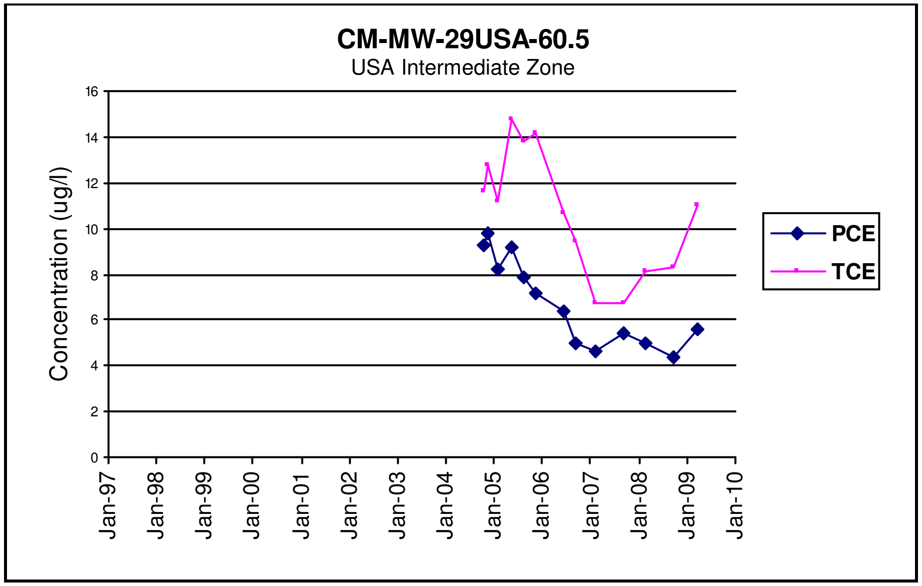
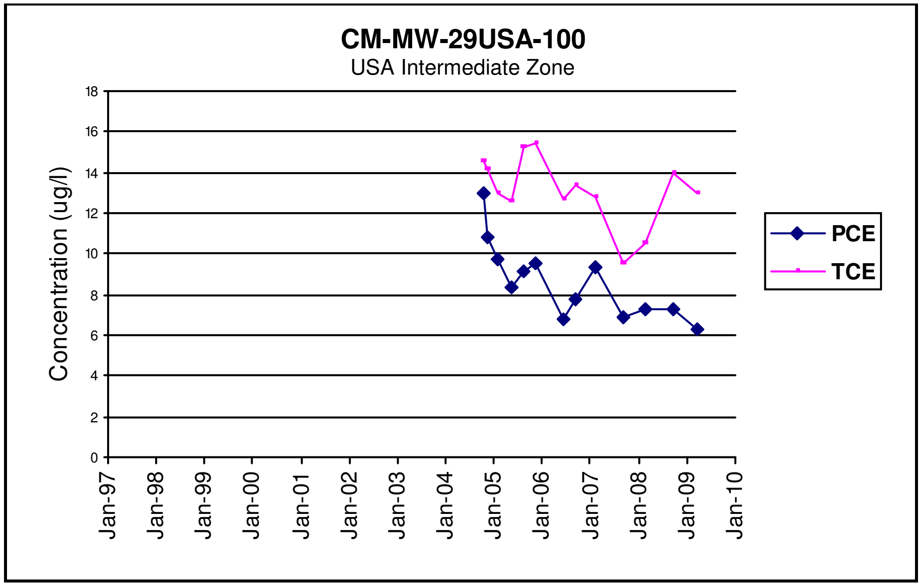
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-29USA-60.5
USA Intermediate Zone
Concentration (ug/l)
0
2
4
6
8
10
12
14
16
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-29USA-100
USA Intermediate Zone
Concentration (ug/l)
0
2
4
6
8
10
12
14
16
18
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
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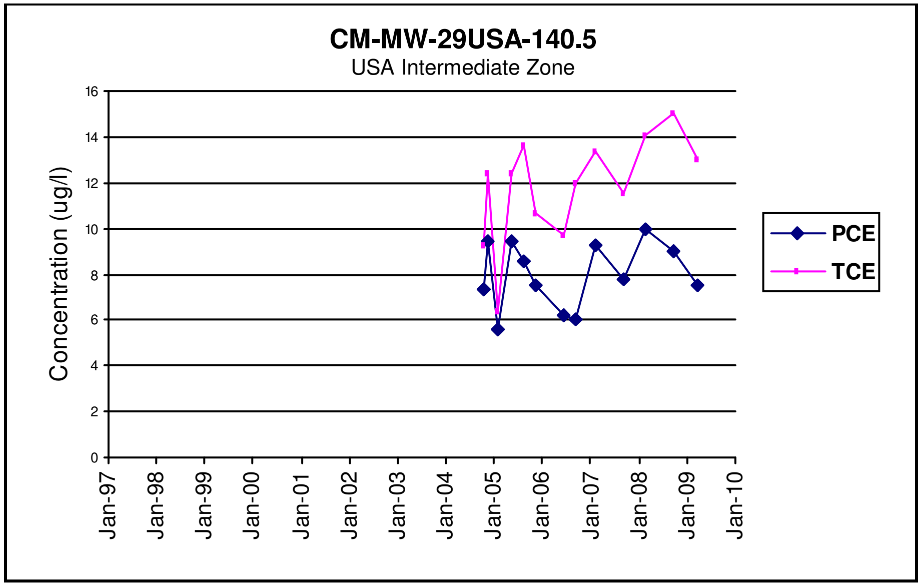
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-29USA-140.5
USA Intermediate Zone
Concentration (ug/l)
0
2
4
6
8
10
12
14
16
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
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Jan-06
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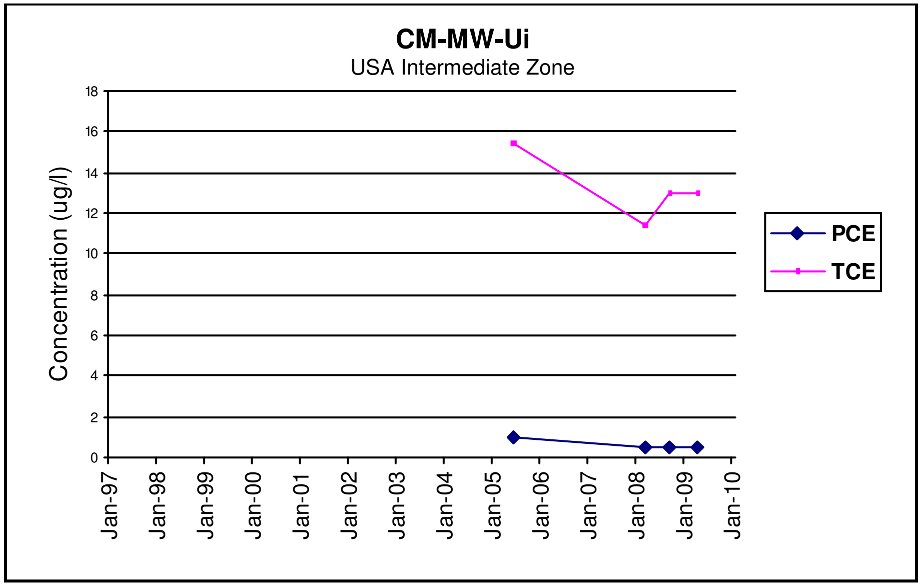
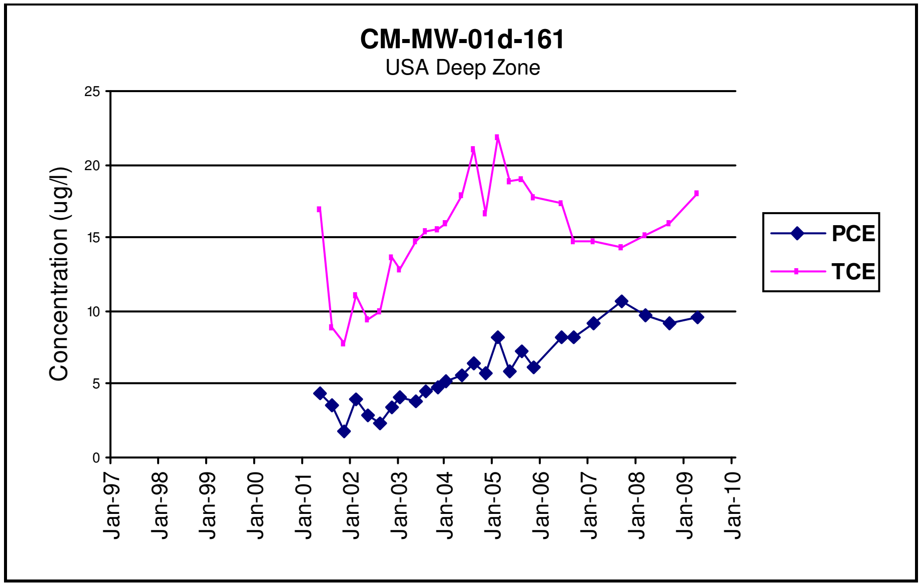
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-Ui
USA Intermediate Zone
Concentration (ug/l)
0
2
4
6
8
10
12
14
16
18
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-01d-161
USA Deep Zone
Concentration (ug/l)
0
5
10
15
20
25
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
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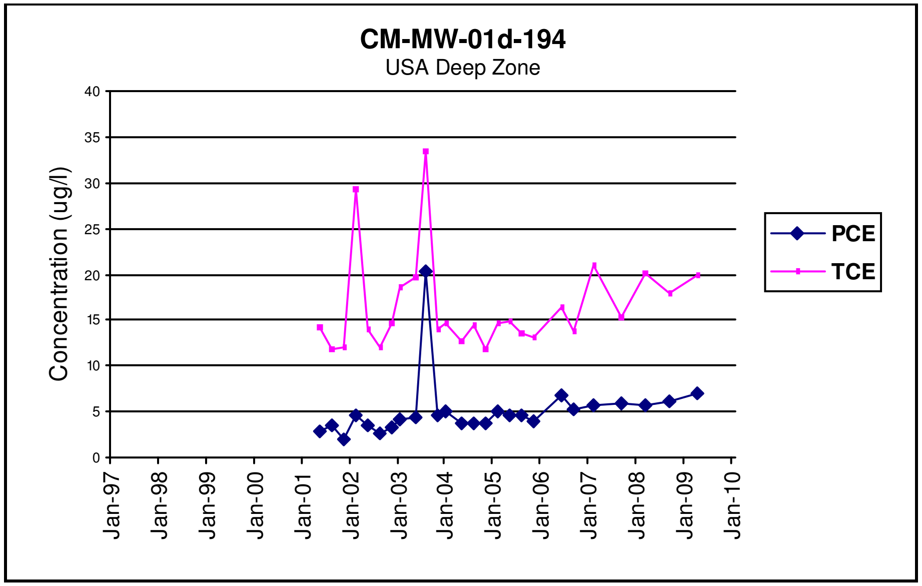
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-01d-194
USA Deep Zone
Concentration (ug/l)
0
5
10
15
20
25
30
35
40
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
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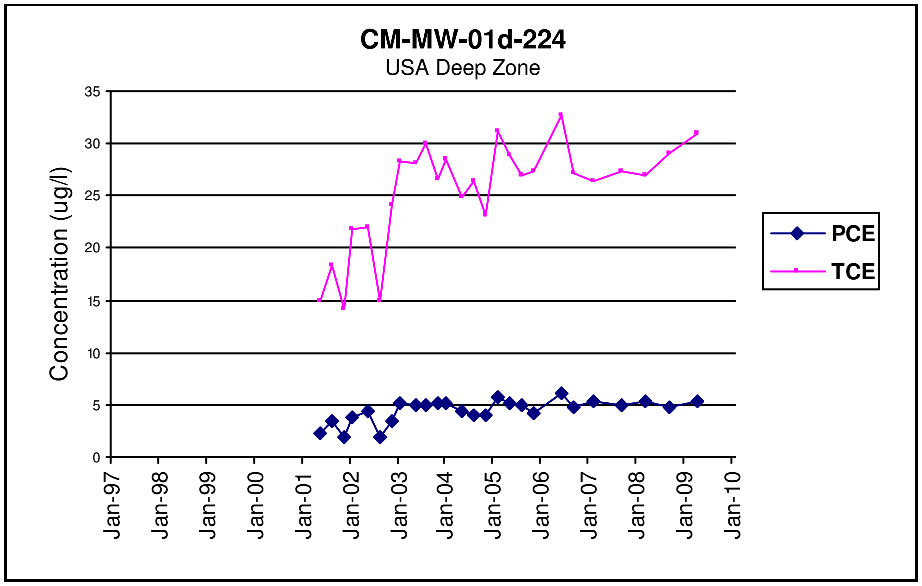
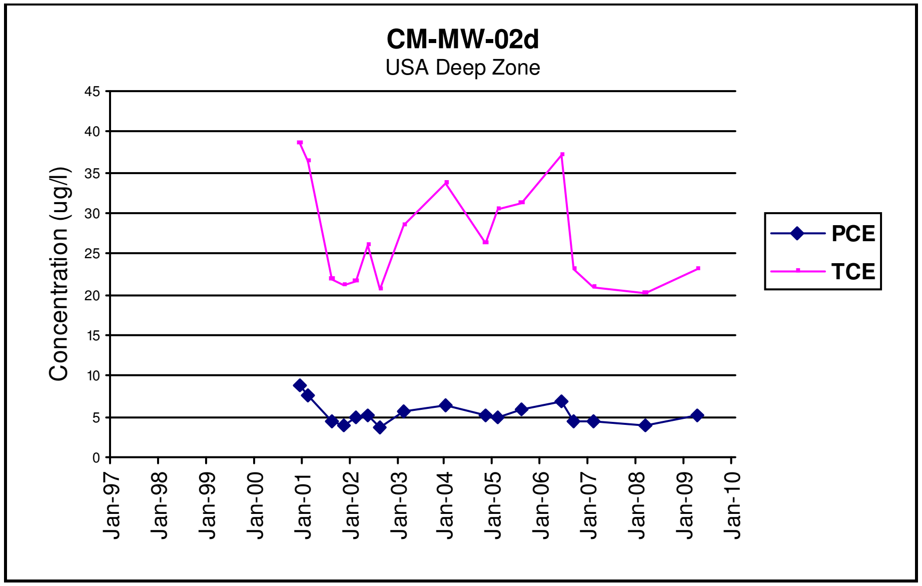
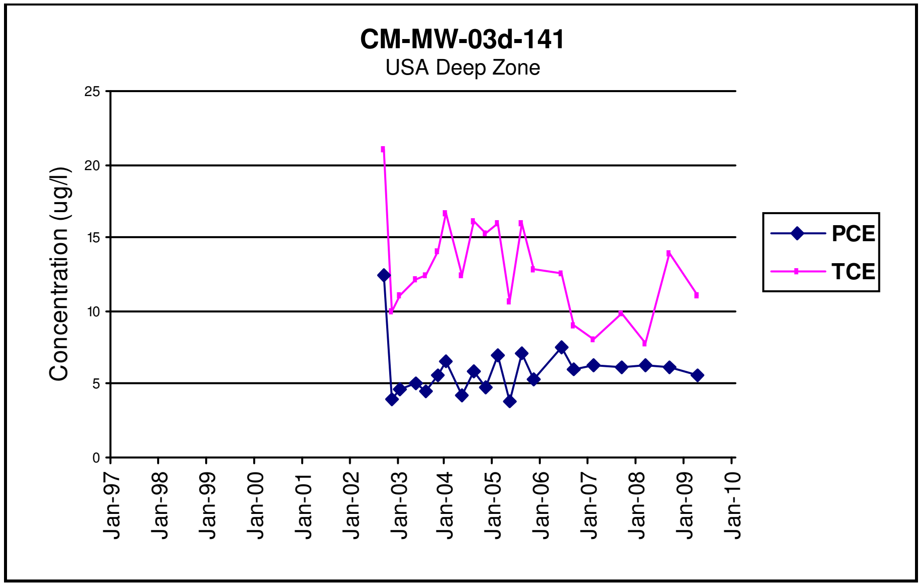
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-01d-224
USA Deep Zone
Concentration (ug/l)
0
5
10
15
20
25
30
35
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-02d
USA Deep Zone
Concentration (ug/l)
0
5
10
15
20
25
30
35
40
45
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE


CM-MW-03d-141
USA Deep Zone
Concentration (ug/l)
0
5
10
15
20
25
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
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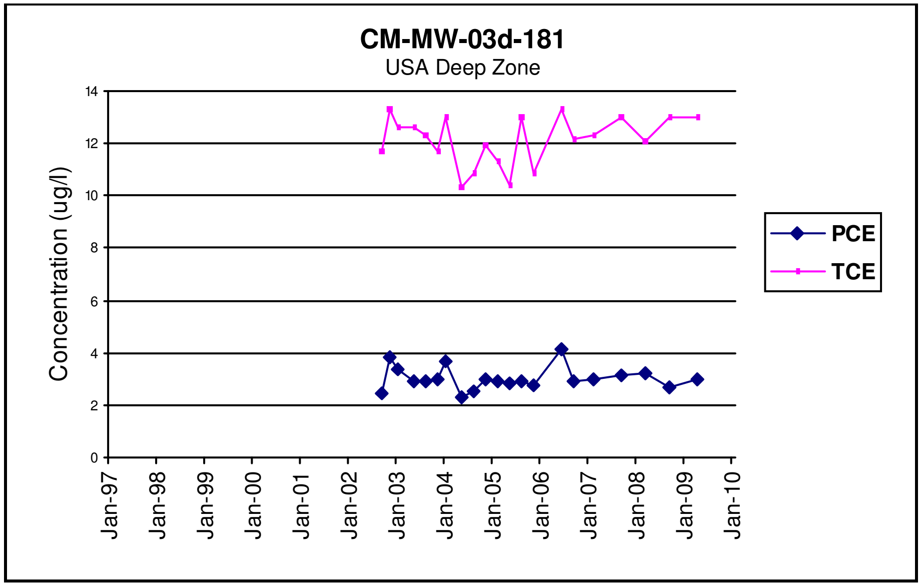
Jan-10
PCE
TCE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USA Deep Zone
Concentration (ug/l)
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2
4
6
8
10
12
14
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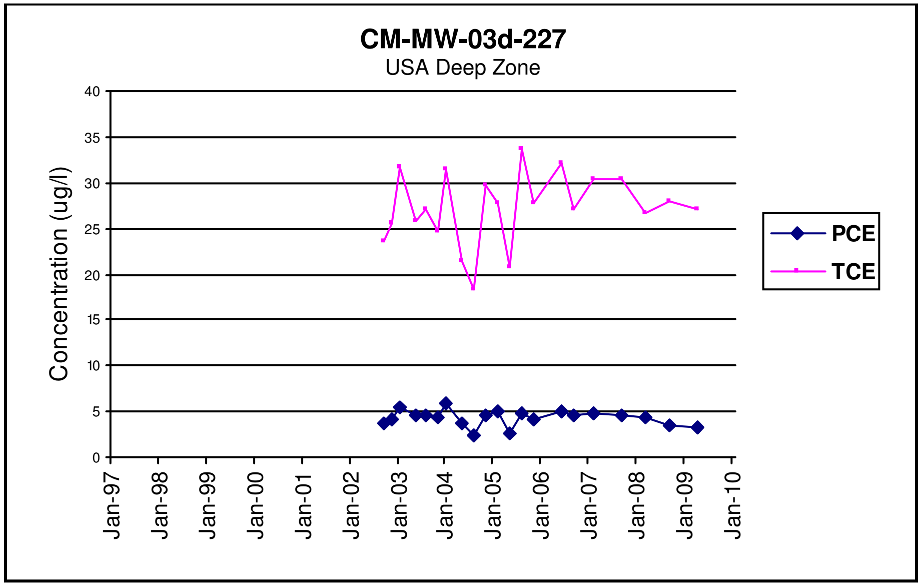
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE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10
15
20
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Jan-10
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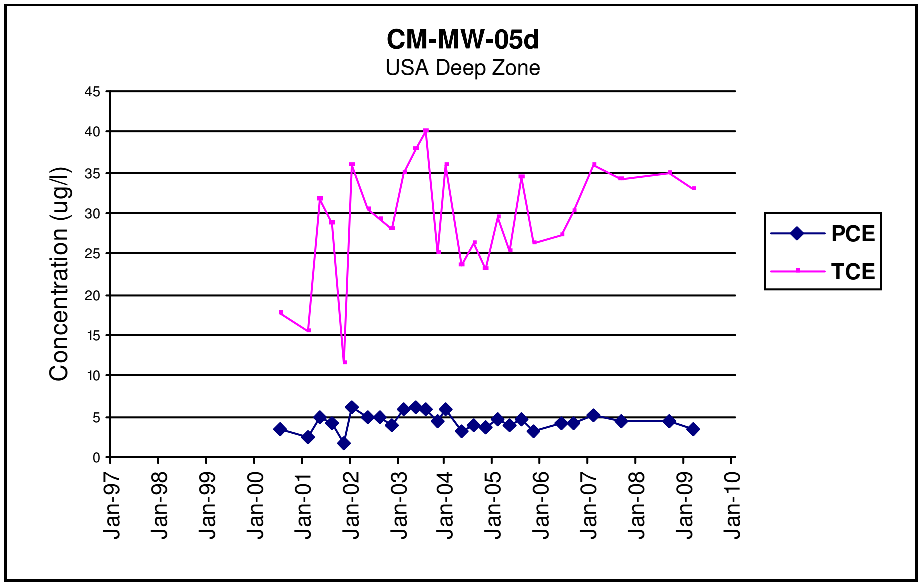
TCE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Concentration (ug/l)
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15
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25
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PCE
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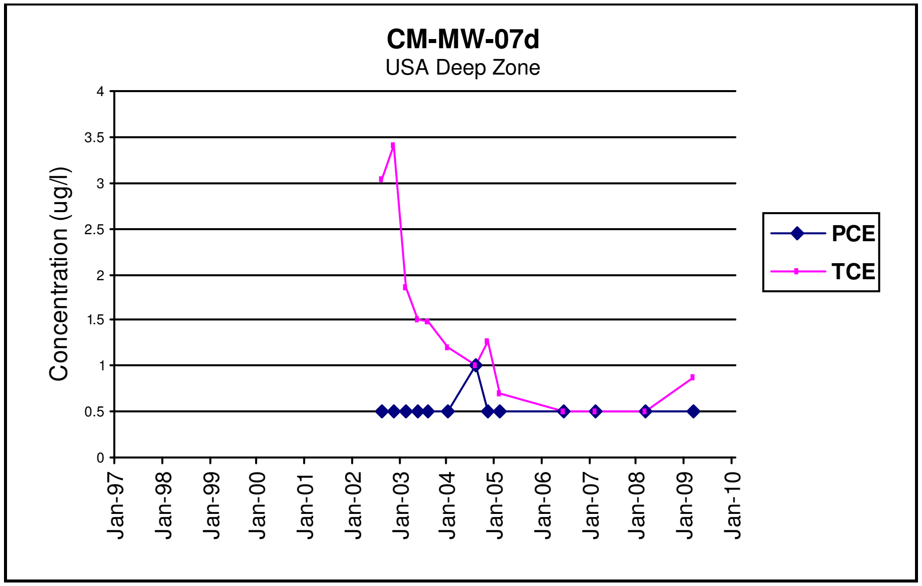
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Concentration (ug/l)
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1
1.5
2
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3
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4
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Jan-99
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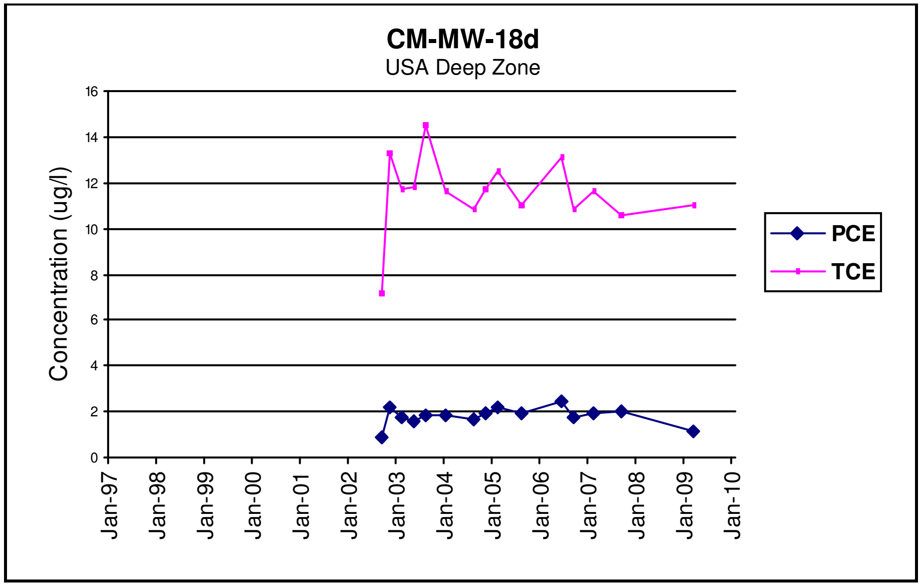
Jan-10
PCE
TCE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Concentration (ug/l)
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2
4
6
8
10
12
14
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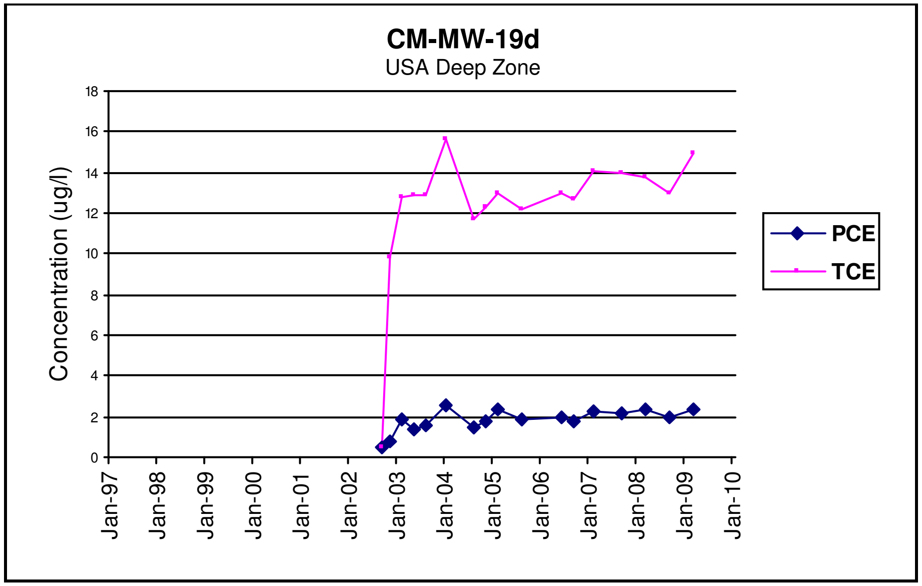
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Concentration (ug/l)
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6
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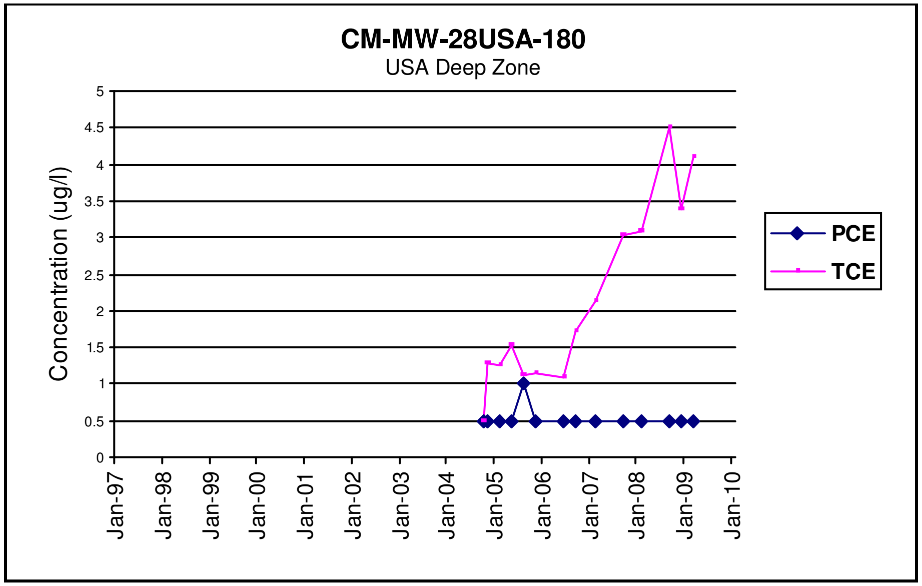
TCE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Concentration (ug/l)
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5
Jan-97
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Jan-99
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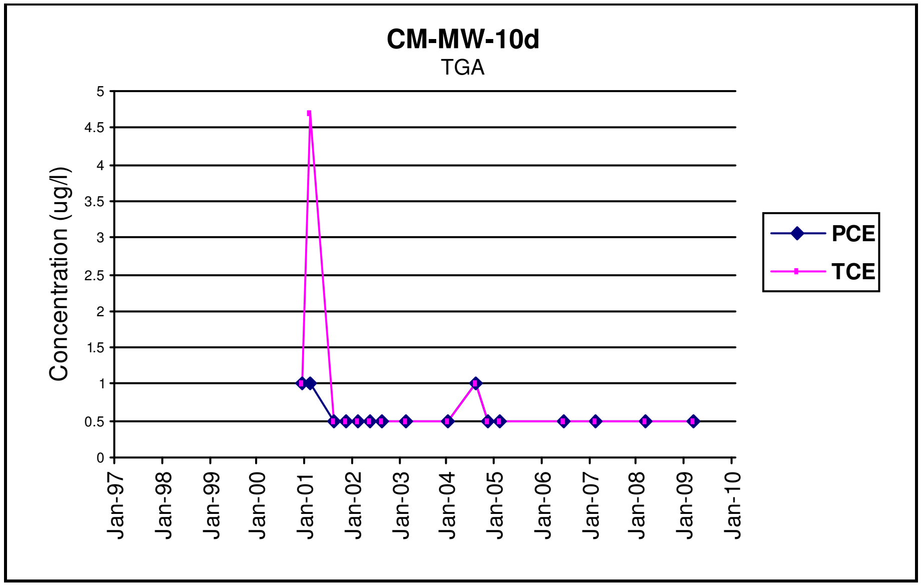
PCE
TCE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TGA
Concentration (ug/l)
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1.5
2
2.5
3
3.5
4
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5
Jan-97
Jan-98
Jan-99
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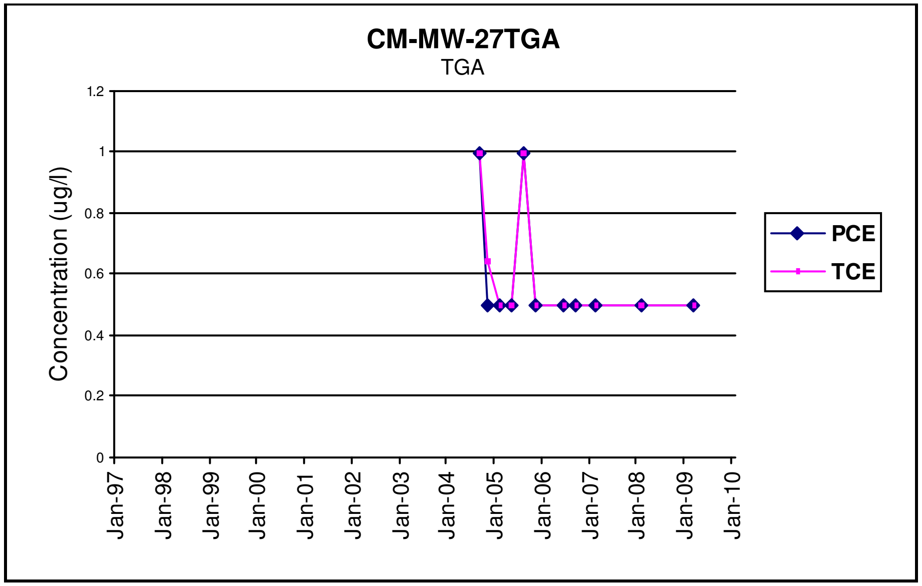
Jan-09
Jan-10
PCE
TCE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TGA
Concentration (ug/l)
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0.4
0.6
0.8
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1.2
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Jan-99
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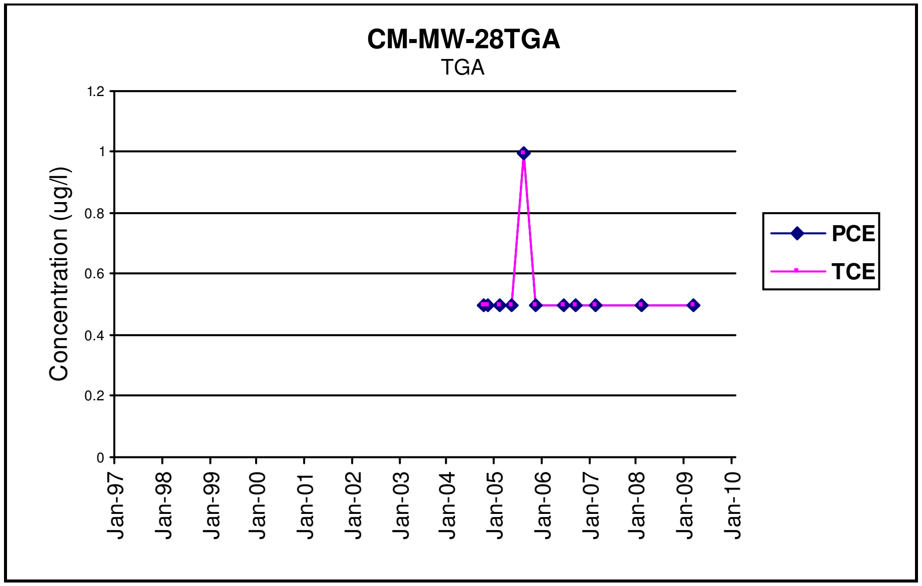
Jan-09
Jan-10
PCE
TCE


CM-MW-28TGA
TGA
Concentration (ug/l)
0
0.2
0.4
0.6
0.8
1
1.2
Jan-97
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Jan-99
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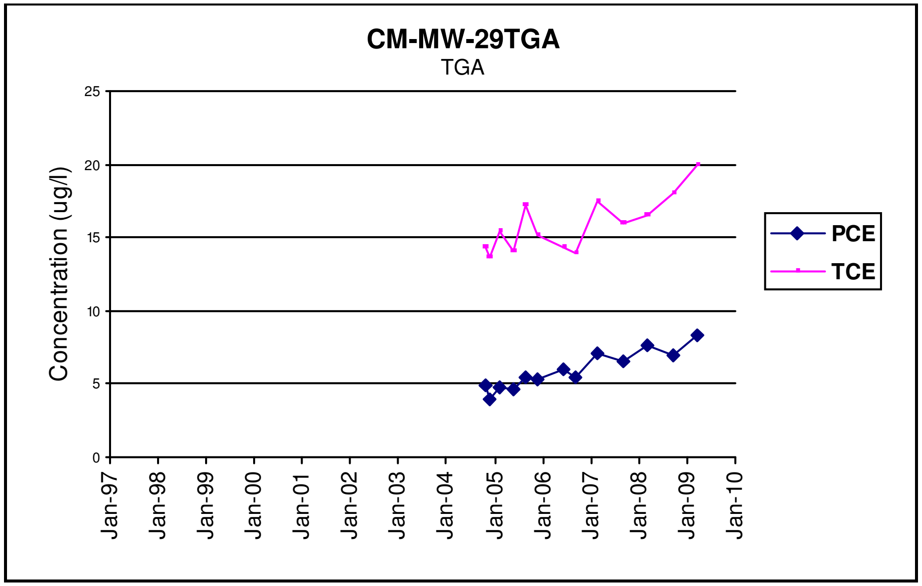
Jan-10
PCE
TCE


CM-MW-29TGA
TGA
Concentration (ug/l)
0
5
10
15
20
25
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
PCE
TCE

APPENDIX P

Final Risk Assessment - Cadet Manufacturing Company Site

Appendix P

Final Risk Assessment – Cadet Manufacturing Company Site

Prepared for

Port of Vancouver
3103 NW Lower River Road
Vancouver, WA 98660-1027

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May 25, 2010 | 275-1940-006

CITATION

Parametrix. 2009. Appendix P – Final Risk Assessment Cadet Manufacturing Company Site. Prepared by Parametrix, Portland, Oregon. May 25, 2010.

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ACRONYMS

ACGIH	American Conference of Governmental Industrial Hygienists
bgs	Below Ground Surface
CLARC	Cleanup Level and Risk Calculation
DOH	Washington Department of Health
Ecology	Washington Department of Ecology
ELCR	Excess Lifetime Cancer Risk
EPA	United States Environmental Protection Agency
FOD	Frequency of Detection
FS	Feasibility Study
HEAST	Health Effects Summary Tables
HQ	Hazard Quotient
IRIS	Integrated Risk Information System
J&E	Johnson and Ettinger
MCL	Maximum Contaminant Level
MTCA	Model Toxics Control Act
NFVN	North Fruit Valley Neighborhood
NIOSH	National Institute of Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PCE	Tetrachloroethene
PEL	Permissible Exposure Limit
RA	Risk Assessment
REL	Recommended Exposure Limit
RI/FS	Remedial Investigation and Feasibility Study
SFVN	South Fruit Valley Neighborhood
SMC	Swan Manufacturing Company
TCE	Trichloroethene
TGA	Troutdale Gravel Aquifer
the Port	Port of Vancouver, U.S.A.
UCL	Upper Confidence Level
USA	Unconsolidated Sedimentary Aquifer
VOCs	Volatile Organic Compounds

1. INTRODUCTION

On behalf of the Port of Vancouver, U.S.A. (the Port), Parametrix has prepared this Risk Assessment (RA) for the Cadet Manufacturing Company site. Since approximately 1999, the site has been undergoing a remedial investigation to address trichloroethene (TCE), tetrachloroethene (PCE) and other related volatile organic compounds (VOCs) in soil and groundwater. The Draft Final RI Report has been prepared to provide a comprehensive summary of Cadet site-related investigations and interim remedial actions completed from 1999 through March 2009, summarize the current understanding of site conditions, and provide a basis for completion of a Feasibility Study (FS) and selection of a site remedy. Much of the information in the Draft Final RI Report was used to develop potential exposure scenarios and contaminant characteristics utilized in this RA.

The RA is required by the Washington Department of Ecology (Ecology) to assess the risk to current and future potential receptors from site contaminants including soil, groundwater, and indoor and outdoor air. The results of the RA are used to determine whether remedial actions may be required to protect human health and/or the environment and to provide a basis for selection of remedial alternatives. This RA is considered representative of baseline conditions. It is expected that additional risk assessment activities may be completed during the feasibility study to determine the residual risk to potential receptors after the completion of a site remedy.

This RA has been prepared in accordance with the Model Toxics Control Act (MTCA) Cleanup Regulation (WAC [Washington Administrative Code] 173-340). Specific regulations regarding the purpose of the RA, procedures and methodology, and risk equations are included in WAC 173-340-357 and WAC 173-340-700 through WAC 173-340-760. The methodology included in MTCA is generally based on U.S. Environmental Protection Agency (EPA) guidance, including the Risk Assessment Guidance for Superfund (EPA 1989; 2004). Exposure intake assumptions and health effects and toxicological information for contaminants detected at the site were obtained from MTCA guidance and/or the latest databases published by the EPA, (e.g., Integrated Risk Information System [IRIS]).

At the request of Ecology and the Washington Department of Health (DOH), the Port prepared a Revised Draft Comprehensive Vapor Intrusion and Indoor Air Evaluation Plan (CAMP) (Parametrix 2009), which includes a discussion of the indoor air data collected at the site and provides recommendations for evaluating indoor air results. The purpose of the CAMP was to provide context for the indoor air results, including how background concentrations may potentially impact indoor air quality. The CAMP also includes recommended cleanup levels for site contaminants and provides a basis for further indoor air monitoring. The CAMP should be utilized as a companion document to this RA, specifically for evaluating the potential risks from indoor air.

1.1 OVERVIEW OF THE RISK ASSESSMENT

This document presents a risk assessment focusing on current conditions at the Cadet site. The human health risk assessment addresses VOCs present in groundwater, soil, soil gas, indoor and outdoor air. In addition, a terrestrial ecological evaluation was conducted for the soil present on the Cadet site. The remainder of this report is organized as follows:

Section 2:	Site Background
Section 3:	Data Evaluation and Contaminant Screening
Section 4:	Human Health Risk Assessment

Section 5: Terrestrial Ecological Evaluation
Section 6: Conclusions
Section 7: References

2. SITE BACKGROUND

2.1 SITE LOCATION AND DESCRIPTION

The Cadet site is a rectangular-shaped parcel located at 2500 Lower River Road in Vancouver, Washington (Figure 1). The site is located in the southwest quarter of Section 21, Township 2 North, Range 1 East. The property is occupied by a single building with associated asphalt and gravel parking areas, and landscaping. The majority of the building is a single-story manufacturing building approximately 15,750 square feet in size. A partial second floor mezzanine at the southern end of the building contains offices. Two paved access roads enter the south side of the Cadet Site from Lower River Road.

The Cadet site is surrounded predominantly by residential and industrial properties. Undeveloped property to the northwest of the Cadet site extends approximately 0.75 miles northwestward to Vancouver Lake. The Cadet site is bordered by two other areas that, in combination with the site, constitute the Project Area (Figure 1). The first area is identified as the “L-Shaped Parcel,” which is undeveloped land located adjacent to the Cadet site’s northern and western boundaries. The second area is the North Fruit Valley Neighborhood (NFVN), which is defined here as the area of single-family residences located north and east of the Cadet Site. The NFVN is bounded on the east by Burlington Northern Santa Fe Railroad (BNSF); on the south by West Fourth Plain Boulevard; to the west by Yeoman Avenue, and on the north by West 39th Street and La Frambois Road (Figure 1).

2.2 OWNERSHIP

Prior to the mid-1960s, the site appears to have been an undeveloped field, sometimes cultivated, with an orchard present in the northwest portion for an unknown length of time. In the mid-1960s, a single building was constructed in the same location as the present-day building. Swan Manufacturing apparently occupied this building until 1972, at which time Cadet assumed ownership of the property. Cadet continues to operate at the site, but in May 2006, ownership of the property was transferred to the Port as part of a settlement agreement.

2.3 PREVIOUS INDUSTRIAL USE OF CADET SITE

Swan Manufacturing reportedly used trichloroethylene (TCE) as a degreaser in their parts cleaning process at the time Cadet took over the property in 1972. This process involved a large dip tank or vault into which parts would be lowered on a rack. Parts would be lowered to just above the liquid TCE level, the lid of the tank closed, and the tank heated to produce TCE vapor. Once cleaning was complete, the temperature of the tank was lowered so the TCE would return to a liquid phase. Excess TCE was shaken off the parts inside the tank. The TCE tank was approximately 10 feet long by 5 feet wide by 12 feet deep, with 8 feet of the tank set below surface level inside a concrete containment bunker. No drains were present in the base of the containment bunker. Spent TCE from the tank was removed by pumping the product into drums placed next to the tank, which was subsequently placed outside for recycling pick-up. Fresh TCE was pumped into the tank from new drums of TCE. No remote pumping of TCE was performed (such as from outside the building), and no underground piping was in place for the remote delivery or removal of TCE (AMEC 2003).

Once clean, the parts were ready for painting. The parts were hung on racks in the painting area, where two waterfall structures were located. Each waterfall structure consisted of a 10-foot wide by 8-foot tall backdrop structure, over which water would cascade into a concrete trough that surrounded the backdrop structure and contained the water. Hence, the term "waterfall." Paint was sprayed onto the parts in front of the waterfall, which collected paint over-spray. A small hood covered the top of the backdrop structure to prevent discharge outside the waterfall structure. Water passed through filters and then flowed out of the trough through one of two drains. One drain was located in the bottom of the concrete trough, and allowed the trough to be completely emptied of water when the waterfall was not in use. The second drain was located near the top rim of the trough, and allowed water to drain from the trough while the waterfall was in use. During operation, a small amount of fresh water was continually added, so a small amount of water was always flowing out of the system. This type of system was referred to as an "overflow" system. Both drains were connected to piping that transported water via gravity flow to the sanitary sewer line (AMEC 2003).

Cadet continued to use TCE and the vapor degreasing process until approximately 1976, when they changed to a water soak cleaning process that used hot water and an alkaline cleaner. The waterfall painting system remained in use, and wastewater continued to be discharged to the City's sanitary sewer system. In 1987, Cadet switched to a powder-coating system for painting metal that includes a three-stage cleaning system. Rinse water from the cleaning system is continuously discharged to the sanitary sewer. The waterfall structures have been removed, and the powder-coating system continues to be used to this day.

2.4 DISCOVERY OF RELEASE

In the early 1990s and again in the mid-1990s, a break was detected in the sanitary sewer line at the site. The date of the first break is unknown, but it was discovered and repaired in the early 1990s. A small section of the line was replaced in the Cadet parking lot, approximately 30 feet east of the Cadet building. The second break apparently occurred shortly after the first, and was discovered during installation of the water and sewer line extensions to the north end of the building. A 20,000 square foot addition to the original building was constructed in the mid-1990s. The second break occurred in the same location as the first, and was repaired at the time of utility extension installations.

3. DATA EVALUATION AND CONTAMINANT SCREENING

The human health risk assessment for the Cadet site is based on chemical concentrations measured in groundwater, soil, soil gas, and indoor and outdoor air samples collected during remedial investigation activities. Media specific samples were collected between 1999 and March 2009 during Cadet's (and later the Port's) efforts to define the nature and extent of the TCE groundwater plume originating from the Cadet site and to determine the effectiveness of the interim remedial actions. This data evaluation is intended to summarize existing data and determine contaminants of potential concern that are further evaluated in the risk assessment. This evaluation focuses on recent data (2006 to 2009) to characterize risks based on current conditions (i.e., on the most recent data collection efforts) for groundwater. Due to the type of data collected, all soil, soil gas, and indoor and outdoor air data at the site are utilized (some dating to 1999). The following sections describe the available data sets that were evaluated and the selection of contaminants of potential concern.

3.1 DATA EVALUATION

The analytical laboratory reports and data validation reports for all data collected at the site is included in Appendix A of the Draft Final RI Report. As discussed above, the data evaluation focuses on data collected from 2006 to March 2009 for groundwater. All data was considered (some dating to 1999) for soil, soil gas, and indoor and outdoor air. The data tables used for this RA for groundwater, soil, soil gas, and indoor and outdoor air are included as Tables 1 through 5 (note that the tables only includes analytes that have been detected; Tables TA-1 through TA-5 include the full analyte list and results). The following sections provide a data summary for each media examined.

3.1.1 Groundwater Data

In order to comply with Ecology's request to develop a basis for water quality trend analysis, groundwater data from the established monitoring well network was collected on a quarterly basis. The groundwater sampling program has subsequently been modified based on decreasing groundwater concentrations. Currently, groundwater sampling from the monitoring well network is conducted semi-annually for most wells, and quarterly or annually in the remaining monitoring wells. The past and current groundwater sampling program and sampling procedures and methodology were approved by Ecology prior to implementation.

The Cadet site monitoring well network currently consists of shallow, intermediate, and deep groundwater monitoring wells in the unconsolidated sedimentary aquifer (USA) and monitoring wells in the Troutdale Gravel Aquifer (TGA). The well numbers by groundwater zone are listed below:

Shallow USA wells: CM-DPW-01, CM-DPW-06, CM-DPW-10, CM-DPW-16, CM-MW-01d-040, CM-MW-01s, CM-MW-02s, CM-MW-03s, CM-MW-04s, CM-MW-05s, CM-MW-06s, CM-MW-07s, CM-MW-08s, CM-MW-09s, CM-MW-10s, CM-MW-18s, CM-MW-19s, CM-MW-20s, CM-MW-21s, CM-MW-23s, CM-MW-24s, CM-MW-25s, CM-MW-26s, CM-MW-27USA-049.5, CM-VE-09, CM-VE-10, CM-VE-11, CM-VE-12.

Intermediate USA wells: CM-MW-01d-121, CM-MW-01i, CM-MW-03d-060, CM-MW-03d-100, CM-MW-04i, CM-MW-05i, CM-MW-07i, CM-MW-15s, CM-MW-17i, CM-MW-18i, CM-MW-19i, CM-MW-20i, CM-MW-21i, CM-MW-22s, CM-MW-23i, CM-MW-24i, CM-MW-28USA-050, CM-MW-28USA-120.5, CM-MW-29USA-060.5, CM-MW-29USA-100, CM-MW-29USA-140.5, CM-MW-Ui.

Deep USA wells: CM-MW-01d-161, CM-MW-01d-194, CM-MW-01d-224, CM-MW-02d, CM-MW-03d-141, CM-MW-03d-181, CM-MW-03d-227, CM-MW-05d, CM-MW-07d, CM-MW-18d, CM-MW-19d, CM-MW-28USA-180.

Troutdale gravel aquifer: CM-MW-10d, CM-MW-27TGA, CM-MW-28TGA, CM-MW-29TGA.

The shallow wells monitor water quality in the upper USA, the intermediate-depth wells monitor water quality in the middle to lower USA, and the deep wells monitor water quality in the deep USA. Four deeper monitoring wells also monitor groundwater quality in the upper TGA at the site. The hydrogeologic units are described in detail in Section 4 in the Draft Final RI Report. The monitoring well network locations are shown in Figure 2, and construction data and boring logs for these wells are presented in Appendix B of the Draft Final RI Report.

During the period 2006 to March 2009, groundwater samples collected from the Cadet site monitoring wells were analyzed for volatile organic compounds (VOCs) using EPA Method 8260B. Analytical results for the groundwater samples used in this RA are presented in Table 1 and laboratory reports and data validation are included in Appendix A of the Draft Final RI Report.

3.1.2 Residual Soil Data

Several soil investigations and interim actions have been conducted at the Cadet site and these are detailed in Section 3.1 of the Draft Final RI Report. Consistent with risk assessment practice, only those soil samples representing residual soil conditions were used in the data evaluation. Since no soil removal actions have been conducted at the Cadet site and confirmation soil samples have not been collected in areas of remediation (i.e. AS/SVE system in Cadet building) to confirm reduction of soil concentrations, all soil data collected at the site have been considered during this RA.

Soil samples collected in the saturated zone (i.e., deeper than 20 feet) were not used as part of the soil data set. Soil samples collected below the water table are thought to be impacted by contaminated groundwater and are not representative of soil concentrations. In addition, exposure to soil below 20 feet is not likely. EPA risk assessment assumptions generally include excavation up to 15 feet below ground surface (bgs). However, the Port chose to include data up to 20 feet bgs to provide a more conservative assessment of site risk. Using these criteria in the soil data evaluation resulted in a total of 75 soil samples collected from unsaturated residual soil at depths ranging from 1 foot bgs to 20 feet bgs. Soil sample locations from the residual soil at the site are included on Figure 3. Analytical results for the verification soil samples are included in Table 2. Laboratory reports and data validation are included in Appendix A of the Draft Final RI Report.

3.1.3 Soil Gas Data

The objective of the soil gas investigation was to determine the presence of VOCs in soil gas near the Cadet property and within the NFVN. A detailed description of the investigation is included in Section 3.2 of the Draft Final RI Report and also discussed in the Revised Draft CAMP (Parametrix 2009).

The soil gas investigation at the Cadet site and NFVN included the installation of a number of temporary borings and 10 soil gas wells (labeled CM-SG-1 through CM-SG-12) (Figure 4). For the purposes of evaluating soil gas content at discrete depths, each soil gas monitoring well was completed with three separate soil gas sample screens, which are isolated from each other to prevent migration of soil gas and potential cross-contamination. Each soil gas monitoring well includes a shallow screen at approximately 10 feet bgs, an intermediate screen at approximately 15 feet bgs, and a deeper screen at approximately 20 feet bgs. Some wells (CM-SG-09 and CM-SG-10) also have well screens at 30 feet bgs in a separate boring. Well construction details are presented in Appendix B of the Draft Final RI Report. After construction of the soil gas wells, quarterly sampling of the soil gas wells was initiated. The soil gas samples were analyzed for VOCs using EPA Method TO15. Analytical results for the soil gas samples are included in Table 3. Laboratory reports and data validation are included in Appendix A of the Draft Final RI Report.

3.1.4 Indoor Air Data

Between 2002 and March 2009, approximately 702 indoor air samples (living space, basement, and crawlspace) were collected from 121 homes in the NFVN. Figure 5 shows the residences in the NFVN which have had indoor air samples collected on at least one occasion. The laboratory analytical results are included in Table 4. Laboratory reports and data validation reports are included in Appendix A of the Draft Final RI Report.

As part of the indoor air sampling program, meteorological conditions such as outdoor and indoor temperature, and barometric pressure, were recorded before each sample was collected. Samples were collected using 6-liter capacity, stainless-steel Summa® canisters with mechanical flow controllers. The mechanical flow controllers were pre-set for a 24-hour air sampling duration. This duration was selected to allow air samples to be less influenced by hourly fluctuations in VOCs in indoor air that may be caused by meteorological conditions such as temperature, barometric pressure, or moisture level, and living conditions such as opening and closing of doors and windows, use of household chemicals, and turning heat on and off. At least one indoor air sample was collected in the living space and one from the basement or crawl space of each residence assessed. Living space air samples were collected near the center of the living room or living room/kitchen area. Air samples were obtained from the typical breathing zone at a height between 3 and 6 feet. Basement/crawl space samples were collected to assess the vertical distribution of VOCs. Samples were analyzed for VOCs by EPA Method TO15-SIM.

3.1.5 Outdoor Air Data

As part of the soil gas and indoor air investigations, ambient air samples were collected in the Cadet project area. The objective of the ambient air sampling was to evaluate VOC concentrations in outdoor air in the project area and to use that information to evaluate the contribution to indoor air and background conditions. The locations of outdoor air samples collected during the investigations are shown on Figure 6.

The ambient air samples were collected by placing a Summa canister, equipped with a 24-hour controller, at each location. The ambient air samples were analyzed for VOCs using EPA Method TO15-SIM. Analytical results for the outdoor air samples are included in Table 5. Laboratory reports and data validation are included in Appendix A of the Draft Final RI Report.

3.2 SELECTION OF CONTAMINANTS OF POTENTIAL CONCERN

Information related to the site history, analytical results from the RI, and a review of MTCA regulations were used to identify contaminants of potential concern for the Cadet site. The following media investigations utilized in this report focus on VOCs. The selection of indicator hazardous substances (i.e., contaminants of potential concern [COPCs]) was conducted in accordance with WAC 173-340-703. VOCs further evaluated in this RA were determined based upon: 1) the frequency of detection, 2) the potential for adversely affecting human health, 3) the chemical and physical characteristics of the contaminants, and 4) the identification of potential degradation by-products of TCE (e.g., 1,1-dichloroethane, 1,2-dichloroethene, cis-1,2-dichloroethene) (EPA 2001).

Tables 6 through 9 provide summary statistics, frequency of detection estimates, and comparisons to Ecology's MTCA Method B cleanup levels by medium. These tables were utilized to select the contaminants (by media) to further evaluate in the remainder of this risk assessment. The following is a summary of the screening process by medium and the identification of chemicals that were selected for evaluation based upon a frequency of detection (FOD) above 5%, an exceedance of MTCA Method B cleanup levels, or, if the chemical is considered a degradation by-product of TCE. If a contaminant was never detected it was not examined further in the risk assessment for that specific medium.

Groundwater: A summary of groundwater concentrations by groundwater zone is presented in Table 6. All groundwater samples collected from 2006 to March 2009 (with the exception of the lower concentration of duplicate samples) comprise the data summarized in Table 6. Analysis of chemical concentrations from all groundwater zones indicated that the following chemicals were detected above a frequency of 5% and at least one sample exceeded the MTCA Method B cleanup standards for groundwater: 1,1,1-trichloroethane, 1,1-dichloroethene, 1,1-dichloroethane, chloroform, cis-1,2-dichloroethene, tetrachloroethene, toluene, trichloroethene, and trichlorofluoromethane. These chemicals were carried forward through the risk assessment for groundwater.

Several compounds had MRLs above the MTCA Method B cleanup levels. These were further evaluated for inclusion as COPCs and are discussed below:

1,2-Dichloroethane

1,2-Dichloroethane was not detected in over 400 groundwater samples collected from the Cadet site. The majority of the groundwater samples had a MRL of 0.5 µg/l, which is consistent with the industry standard. The MTCA Method B groundwater cleanup level for 1,2-Dichloroethane is 0.48 µg/l.

There is no evidence to support the presence of 1,2-Dichloroethane at the site. Its historical use is as a gasoline additive and a pesticide. Neither of these sources are present at the Cadet site. In addition, 1,2-Dichloroethane is not a breakdown product or manufacturing additive of TCE or PCE. Therefore, based on the lack of a source material at the site and the lack of any detectable concentrations in over 400 groundwater samples, 1,2-Dichloroethane is not included as a COPC for groundwater.

Bromodichloromethane

Bromodichloromethane was detected at low concentrations in a total of 3 samples from the Cadet site. However, the total detections amounted to less than 5% of the total samples collected. The majority of the groundwater samples had a MRL of 0.5 µg/l, which is consistent with the industry standard. The MTCA Method B groundwater cleanup level for bromodichloromethane is 0.71 µg/l.

There is no evidence to support the presence of bromodichloromethane at the site. Bromodichloromethane is not a breakdown product or manufacturing additive of TCE or PCE. Therefore, based on the lack of a source material at the site and less than 5% detectable concentrations in over 400 groundwater samples, bromodichloromethane is not included as a COPC for groundwater.

Carbon tetrachloride

Carbon tetrachloride was detected at a low concentrations in a total of 1 sample from the Cadet site. The majority of the groundwater samples had a MRL of 0.5 µg/l, which is consistent with the industry standard. The MTCA Method B groundwater cleanup level for carbon tetrachloride is 0.34 µg/l.

There is no evidence to support the presence of carbon tetrachloride at the site. Carbon tetrachloride is not a breakdown product or manufacturing additive of TCE or PCE. Therefore, based on the lack of a source material at the site and less than 5% detectable concentrations in over 400 groundwater samples, carbon tetrachloride is not included as a COPC for groundwater.

1,2-Dibromoethane

1,2-Dibromoethane was not detected in over 400 groundwater samples collected from the Cadet site. The majority of the groundwater samples had a MRL of 0.5 µg/l, which is consistent with the industry standard. The MTCA Method B groundwater cleanup level for 1,2-Dibromoethane is 0.0065 µg/l.

There is no evidence to support the presence of 1,2-Dibromoethane at the site. Its historical use is as a gasoline additive and a pesticide. Neither of these sources are present at the Cadet site. In addition, 1,2-Dibromoethane is not a breakdown product or manufacturing additive of TCE or PCE. Therefore, based on the lack of a source material at the site and the lack of any detectable concentrations in over 400 groundwater samples, 1,2-Dibromoethane is not included as a COPC for groundwater.

1,2,3-Trichloropropane

1,2,3-Trichloropropane was not detected in over 400 groundwater samples collected from the Cadet site. The majority of the groundwater samples had an MRL of 0.5 µg/l, which is consistent with the industry standard. The MTCA Method B cleanup level for 1,2,3-Trichloropropane is 0.0063 µg/l.

There is no evidence to support the presence of 1,2,3-Trichloropropane above the MTCA cleanup level at the site. Its historical use is primarily as a pesticide, with some use as a degreasing agent. 1,2,3-Trichloropropane is not a breakdown product or manufacturing additive for TCE or PCE. Therefore, based on the lack of a source material at the site and the lack of any detectable concentrations in over 400 groundwater samples, 1,2,3-Trichloropropane is not included as a COPC for groundwater.

1,1,2,2-Tetrachloroethane

1,1,2,2-Tetrachloroethane was not detected in over 400 groundwater samples collected from the Cadet site. The majority of the groundwater samples had an MRL of 0.5 µg/l, which is consistent with the industry standard. The MTCA Method B cleanup level for 1,1,2,2-Tetrachloroethane is 0.22 µg/l.

There is no evidence to support the presence of 1,1,2,2-Tetrachloroethane above the MTCA cleanup level at the site. Based on the lack of any detectable concentrations in over 400 groundwater samples, 1,1,2,2-Tetrachloroethane is not included as a COPC for groundwater.

Vinyl Chloride

Vinyl chloride was not detected in over 400 groundwater samples collected from the Cadet site. The majority of the groundwater samples had an MRL of 0.5 µg/l, which is consistent with the industry standard. The MTCA Method B cleanup level for vinyl chloride is 0.029 µg/l.

There is no evidence to support the presence of vinyl chloride at the site above the MTCA cleanup level. The chemical process for producing vinyl chloride is not present in the Cadet area. Reductive chlorination is a common biodegradation pathway for chlorinated ethenes in groundwater, and involves stepwise removal of chlorine atoms (i.e. PCE to TCE to cis-1,2-DCE to vinyl chloride). However, the tendency of chloroethenes to undergo reductive dechlorination decreases as the number of chlorines decrease (i.e. PCE has more chlorines than vinyl chloride). The reaction sequence is mediated by anaerobic bacteria and does not occur under aerobic conditions, as is generally found in the Cadet area. The tendency to undergo oxidation increases with decreasing number of chlorines and the least chlorinated of the chloroethenes (vinyl chloride) has the greatest tendency to undergo oxidation. Therefore, based on the number of samples collected, the lack of vinyl chloride detected at the site, and the absence of amenable environmental conditions, vinyl chloride has not been included as a COPC for groundwater. It should be noted that Ecology has required low level analysis (EPA Method 8260B-SIM) for vinyl chloride on four wells in the project area (both SMC and Cadet sites) for four quarters beginning in June 2009. The low level analysis has a detection limit below the MTCA Method B groundwater cleanup level. The wells selected by Ecology for analysis are CM-MW-5i and CM-MW-29TGA on the Cadet site and MW-5dr and MW-10 on the SMC site. The results of the low level vinyl chloride analysis may be used to re-evaluate vinyl chloride as a COPC, as necessary or required by Ecology.

Soil: A summary of soil concentrations are presented in Table 7. In general, only five VOCs (1,1,1-trichloroethane, cis-1,2-trichloroethene, methylene chloride, tetrachloroethene, trichloroethene) were detected in soil samples. These chemicals were further evaluated in the risk assessment for soil contact pathways for site workers and for the terrestrial ecological evaluation. It should be noted that bromomethane and chloroform were detected on one occasion in a soil sample, but the detection frequency was significantly below the 5% threshold for retaining a COPC.

Soil Gas: Table 8 provides a summary of soil gas concentrations collected in the NVFN. The following chemicals were either detected at or above a FOD of 5%, exceeded the MTCA Method B cleanup level, or are known TCE degradation by-products: 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, chloroethane, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride. These chemicals were further evaluated in the risk assessment.

Indoor Air: Indoor air concentrations are summarized in Table 9. The following chemicals were either detected at or above a FOD of 5%, exceeded the MTCA B cleanup level, or are known TCE degradation by-products and are further evaluated in the risk assessment: 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, chloroethane, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride.

Outdoor Air: Outdoor air concentrations are summarized in Table 9. The following chemicals were either detected at or above a FOD of 5%, exceeded the MTCA B cleanup level, or are known TCE degradation by-products and are further evaluated in the risk assessment: 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, chloroethane, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride.

4. HUMAN HEALTH RISK ASSESSMENT

This section provides details on the human health risk assessment performed for the Cadet site to define potential risks based on current conditions. The following sections describe the methodologies used for the exposure assessment, toxicity assessment, risk characterization, and uncertainty analysis.

4.1 EXPOSURE ASSESSMENT

This section describes the site conceptual model, exposure pathways and receptors and methods to quantify potential exposure to the contaminants of interest.

4.1.1 Conceptual Site Model

Information about waste sources, exposure pathways, and receptors within the Cadet site project area were used to develop a conceptual understanding to evaluate potential risks to human health. The conceptual site model includes known and suspected sources of solvents, affected media, potential routes of migration to human receptors and potential exposure pathways. The conceptual model shown in Figure 7 describes the receptors and potential exposure pathways that are associated with groundwater or soil.

It should be noted that complete exposure pathways are included for a variety of contact mechanisms. For example, exposure to groundwater (for a source area worker or off-site resident) includes ingestion via drinking water, inhalation of vapors through bathing, and dermal contact. In addition, each receptor may have multiple exposure pathways. For example, an excavation worker includes exposure from incidental ingestion of soil, contact with soil, inhalation of outdoor air, ingestion of groundwater, inhalation of groundwater vapors (washing), and dermal contact with groundwater during trenching.

4.1.2 Exposure Populations

Receptors are defined as persons who may come into contact with site chemicals. Receptors in this analysis represent individuals who work or live within the Cadet site project area. Site workers include individuals who work at Cadet. Temporary workers, such as excavation workers on Cadet property, were also evaluated.

Residents include people who live east of the Cadet site in the NFVN, where groundwater containing VOCs has migrated.

4.1.3 Exposure Pathways

An exposure pathway is defined as the course that a chemical takes from its source to a given receptor (EPA 1989). A “complete” exposure pathway must include a chemical source, an exposure point (i.e., a point of receptor contact with the environmental media that contains the chemical of concern), and an exposure route (i.e., a route of entry into the body of the receptor such as ingestion, inhalation or skin contact). An incomplete pathway is missing one of these three components.

There are several potential exposure pathways for individuals identified in the project area, as shown on Figure 7. Groundwater in the project area contains VOCs that may potentially volatilize into the overlying soil column, and either discharge from the ground surface to the surrounding outdoor air or enter an enclosed structure as vapors. In addition, the groundwater may migrate east into residential areas of the NFVN with similar effect. The potential pathways of exposure from VOCs in groundwater are summarized in Figure 7.

The exposure pathways described in Figure 7 were selected based on information collected during the RI. The site worker scenario was examined for exposure to chemicals volatilizing from groundwater based on the identification of VOCs in these media.

Groundwater in the immediate project area (Cadet) is not currently used as a potable water source. However, both the Port and the GWM facility use groundwater as a potable source, and Clark Public Utilities is expected to use groundwater some time in the future; therefore, this pathway was examined for both current and potential future groundwater uses. In addition, the aquifer in the project area is designated as a sole-source aquifer. The calculation of risk by monitoring well in this RA provides a range of potential risk associated with drinking water at the site.

The Cadet excavation worker scenario was examined based on current and potential future remediation or utility work conducted near the Cadet property, which could result in exposure to contaminated soil, groundwater, or vapors. Examination of groundwater flow during the RI showed that the groundwater flows to the east and south in response to the pumping that occurs in the GWM well field (groundwater flow is expected to change due to the Port's interim groundwater pump and treatment system at SMC in June 2009). Therefore, NFVN residents and site workers were evaluated for potential exposure to chemicals volatilizing from groundwater.

4.1.4 Quantification of Exposure

Exposure assessment is the estimation (qualitative or quantitative) of the magnitude, frequency, duration and route of exposure of a receptor to a contaminant source (EPA 1989). Exposure was evaluated quantitatively for the exposure pathways and receptors defined in the conceptual model. The methodologies that were used to estimate exposures are largely based on those presented in the State of Washington's MTCA for cleanup level determination (Ecology 2005), although other guidance (e.g., EPA) was consulted when an exposure pathway was not specifically addressed in the MTCA (e.g., dermal contact with water).

4.1.4.1 Exposure Point Concentrations

Chemical concentrations in soil, groundwater, soil gas, and indoor and outdoor air were measured at and around the Cadet site as described in Section 2. The results of the data evaluation identified contaminants of potential concern that are evaluated in the risk assessment. Quantitative evaluation of exposure was conducted using the reasonable maximum exposure concentrations for each exposure pathway, location and receptor. The reasonable maximum exposure (RME) as defined in MTCA (Ecology 2005) is the highest exposure that is reasonably expected to occur at a site under current and potential future site use. The RME was calculated as follows:

- The data (by media) for each sample location and contaminants of potential concern was organized from investigations conducted from 1999 to 2009 (2006 to 2009 for groundwater).
- For samples where duplicate analysis was performed, only the highest sample was used in the RME estimate.
- For samples that were non-detects, one-half of the detection limit was used as a surrogate in the calculations of the RME estimate.
- For data sets with fewer than 10 samples, the maximum measured concentration was utilized as the RME.

- For data sets with greater than 50% non-detects, the maximum measured concentration was utilized as the RME.
- For data sets of 10 or greater, a 95% upper confidence level was calculated using the following steps:
  (1) A distribution test was performed using MTCA Stat software. The software evaluates the distribution of the data set and determines if the data are normal, lognormal or another distribution.
  (2) Based upon the distribution of the data, MTCA Stat software recommends an appropriate 95% upper confidence level estimation method, and this recommended 95% UCL was selected as the RME for the exposure location and pathway.

Chemical exposure concentrations were estimated on a media specific basis as follows:

Groundwater: Chemical concentrations evaluated in groundwater were estimated on a site-wide basis by groundwater zone, as well as a well-by-well basis. A summary of the RME for the groundwater zone and each groundwater well is presented in Tables 10a and 10b, respectively.

Soil: Soil concentrations were evaluated for the Cadet site at depths up to 20 ft bgs. This area of residual soil contamination represents a potential exposure pathway to Cadet workers or excavation workers at the Cadet site. The RME was calculated as the 95% UCL of the particular data set. The soil data was divided into samples collected from the Cadet facility area and those collected in the NFVN. Data from 0 to 3 feet bgs were used for Cadet workers (surface exposure) and data from 0 to 20 feet were used for excavation workers (deep exposure). Due to the minimal data from the NFVN, all data from 0 to 20 feet bgs was used for exposure of a NFVN resident to soil, which results in a conservative estimate. Exposure concentrations are presented in Table 11.

Soil Gas: Soil gas concentrations were evaluated for the potential for vapor intrusion into on and offsite buildings. Soil gas concentrations are summarized in Table 12 by sampling location. The results from soil gas analysis suggest that the vapor intrusion pathway is complete. <u>Therefore, only measured indoor air concentrations were used to estimate risks to human receptors. </u>Soil gas is not an Ecology-regulated exposure pathway and was not further evaluated in the risk assessment.

Indoor Air: Indoor air was collected from the Cadet building and NFVN residences. Indoor air concentrations of VOCs are presented in Table 13. Indoor air concentrations were used to estimate risks to site workers and off-site residents.

Outdoor Air: Outdoor air concentrations were measured at several locations throughout the project area. Chemical concentrations were combined to calculated one RME and is summarized in Table 14.

4.1.4.2 Receptor Intake Assumptions

Exposure assumptions are values used to quantify the assumed exposure to chemicals detected in soil, groundwater, and indoor or outdoor air. These assumptions include parameters needed to estimate chemical intake and include physiological parameters such as bodyweight or breathing volumes, times of exposure and rates of contact with contaminated media. Assumptions are either general and correspond to all the hypothetical receptors evaluated (e.g., averaging time), or receptor- and pathway-specific (e.g., body weight and inhalation rate). Exposure assumptions were developed for the RME scenario and are intended to be conservative to protect human health and generally tend to overestimate potential chemical exposure.

Exposure intake assumptions (Table 15) were compiled predominantly from MTCA guidance and from a variety of EPA sources when not available from MTCA:

- Model Toxics Control Act (MTCA) Cleanup Regulation (Ecology 2007)
- Exposure Factors Handbook (EPA 1997a)
- Child-specific Exposure Factors Handbook (EPA 2006)
- Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) (EPA 2004a).

4.2 TOXICITY ASSESSMENT

The toxicity assessment determines which potential adverse health effects are associated with specific chemicals of concern and identifies regulatory toxicity values used to evaluate the significance of predicted exposures estimated in the Exposure Assessment. Toxicity values are identified for both non-carcinogenic and carcinogenic health effects. The potential for non-carcinogenic health effects was represented by either a Reference Concentration (RfC; inhalation exposure) or a Reference Dose (RfD; oral exposure). Each value is defined as an estimate (with uncertainty spanning an order of magnitude or greater) of a daily exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious effects during a lifetime (EPA 1989). Carcinogenic effects for oral or inhalation exposure were represented by a cancer slope factor, defined as a plausible upper-bound estimate of the probability of a carcinogenic response per unit intake of a chemical over a lifetime (EPA 1989). The slope factor is used to estimate an upper-bound probability of an individual developing cancer as a result of a lifetime of exposure to a potential carcinogen (EPA 1989).

These values, referred to as toxicity values, were obtained from the following sources:

- Current Ecology guidance and the CLARC database (Ecology 2009).
- EPA Region 6 Human Health Medium-Specific Screening Levels (EPA 2009).
- EPA Integrated Risk Information System (IRIS) (EPA 2006),
- EPA Health Effects Summary Tables (HEAST) (EPA 1997b),

The toxicity values and references for all chemicals in the risk assessment are presented in Table 16.

4.3 RISK CHARACTERIZATION

The risk characterization provides a quantitative estimate of the potential for health risk through the comparison of the predicted exposure levels to the toxicity values for chemicals of potential concern. Methods for characterizing risks and results are presented below.

As previously discussed, exposures estimates were calculated for a reasonable maximum concentration. Non-cancer and cancer risks were calculated by comparing the exposure estimates to the toxicity values using the following equations:

Noncancer = Hazard Quotient = Dose (mg/kg-day) / Reference Dose (mg/kg-day)

Cancer Risk = Dose (mg/kg-day) x Cancer Slope Factor $(mg/kg\text{-}day)^{-1}$

According to MTCA, non-cancer risks should not exceed a hazard quotient (HQ) of 1 for individual chemicals or a hazard index of 1 for multiple chemicals (i.e., the sum of the HQ values). Cancer risks should not exceed $1x10^{-6}$ (i.e., one additional chance of contracting cancer per one million) for exposures to individual or $1x10^{-5}$ for multiple chemicals. The following is a summary of the risk estimates by media.

4.3.1 Risk Potential from Groundwater

Exposure to groundwater was evaluated on a site-wide groundwater zone basis and a well-by-well basis (i.e., chemical concentrations measured for each groundwater well were used to estimate exposure and risk). The well-by-well analysis was conducted to determine which wells pose the greatest risk and to avoid skewing the data evaluation from low or high concentrations present in individual wells. Exposure to groundwater includes ingestion via drinking water, inhalation of vapors (bathing), and dermal contact (see conceptual site model; Figure 7).

Groundwater wells were matched to potential human receptors based on the general vicinity of the well to the source area (Cadet site) or the NFVN. On occasion, groundwater wells bordered two areas within the project area and thus were used to estimate exposure and risk for multiple receptors.

Estimates of exposure (i.e., dose) and potential risks for each groundwater well, chemical, and human receptor are presented in Tables 17a and 17b. Dermal exposure calculations followed the methodology as presented in EPA (2004) Dermal Exposure Guidance and the parameters used are presented in Table 18. Cumulative risks for all groundwater contaminants on a aquifer zone and on a well-by-well basis are presented in Table 19.

If concentrations of VOCs remain consistent with those measured from 2006 to 2009, chronic exposure to groundwater may result in elevated risks. The following is a summary of potential risks by receptor:

Cadet Site Worker and Cadet Site Excavation Worker: No current use of groundwater as drinking water occurs at the Cadet site. Risk estimates for potential future use of groundwater from wells located on the Cadet site indicate elevated risks for regular or temporary workers at the Cadet site (Tables 17b and 19). Most wells indicate elevated non-cancer or cancer risks from regular use of groundwater. TCE typically contributed the most to overall risks from the use of groundwater, followed by PCE.

NFVN Residents: There is no current groundwater use in the NFVN. The potential risks to residential receptors from future use of groundwater wells are presented in Tables 17b and 19. All monitoring wells located in the NFVN have the potential for elevated risks to adult and child residents chronically using groundwater from wells within the NFVN. As with other receptors, TCE and PCE typically contributed most to overall risk from groundwater use.

Analysis of VOC concentrations from groundwater wells near the source area and within the project area suggests that long-term use of groundwater for domestic purposes (includes ingestion, dermal contact, and inhalation) could result in elevated risks (i.e., non-cancer risks above 1.0 and excess lifetime cancer risks [ELCR] above $1x10^{-6}$). The results indicate that a relatively wide range of risk is associated with groundwater in the project area (ELCRs ranging from $4.8x10^{-7}$ to $2.9x10^{-4}$) and indicate that remedial actions are necessary to reduce groundwater to levels protective of potential future receptors.

4.3.2 Risk Potential from Soil

Residual VOCs remain in on-site soils following remedial actions. Exposure to residual concentrations was assessed for source area workers for incidental ingestion and contact pathways. The results of the exposure and risk estimation are presented in Table 20. PCE, TCE, 1,1,1-trichloroethane, cis-1,2-trichloroethene, and methylene chloride were the only VOCs identified in remaining on-site soils. Estimated exposure to these soils does not indicate elevated risks to Cadet site workers, Cadet excavation workers, or NFVN residents.

4.3.3 Risk Potential from Indoor Air

Evaluation of potential risks to VOCs in measured indoor air concentrations from Cadet on-site buildings and off-site NFVN residences is presented in Tables 21 and 22.

4.3.3.1 Cadet Building

Indoor air concentrations from the Cadet building were evaluated for Cadet site workers. Estimates suggest that long-term exposure to measured concentrations of VOCs in indoor air from this building would result in elevated cancer risks (i.e., an ELCR of $5.4x10^{-6}$) for Cadet site workers. TCE typically contributed the most to overall risks from the exposure to indoor air.

It should be noted that TCE was detected in the building at a maximum concentration of 110 $\mu g/m^3$. For comparison, Occupational Safety and Health Administration (OSHA) standards for an 8-hour permissible exposure limit (PEL) for TCE is 537,000 $\mu g/m^3$, the National Institute of Occupational Safety and Health (NIOSH) recommended exposure limit (REL; 10-hour time-weighted average) is 134,000 $\mu g/m^3$, and the American Conference of Governmental Industrial Hygienists (ACGIH; 8-hour time-weighted average) is 269,000 $\mu g/m^3$. This demonstrates the very low threshold for long-term exposure versus occupational settings and the conservative nature of the risk assessment process.

In addition, the indoor air samples were collected between 2000 and 2005, prior to Cadet eliminating TCE use in the facility in 2006. Current indoor air samples may yield different results.

4.3.3.2 NFVN Residential Buildings

121 residences from the NFVN were also evaluated for risks to VOCs in indoor air (Tables 21 and 22). Current measured concentrations of VOCs at most residences indicate elevated cancer risks (i.e., above $1x10^{-6}$) from chronic exposure to indoor air (ELCRs ranging from $7.2x10^{-7}$ to $2.7x10^{-4}$). Compared to other COPCs, TCE typically contributed the most to overall risks from the exposure to indoor air.

VOC concentrations in indoor air of NFVN residences indicate the potential for elevated risks from long-term exposure. However, background air conditions should be considered when evaluating the indoor air results. The Final CAMP (Parametrix 2009) was prepared to provide recommendations for evaluating indoor air data and includes recommended management of the indoor air issues.

The results of the CAMP evaluation indicate that short-term health risks at the levels currently observed in the NFVN are low. In evaluating similar indoor air results for the SFVN (SMC site), the Washington DOH indicated that no short-term or immediate health risks exists from TCE in indoor air. The conservative nature of the risk assessment indicates that there is potential for long-term health risks associated with the current levels of TCE in indoor air. However, the presence of TCE in background concentrations (which are similar to national levels and could be sourced from the groundwater plume, local facility emissions, and/or other sources) in outdoor air suggests that the residents in the NFVN are not at significantly greater risks than residents in typical urban settings (Parametrix 2009). It should be noted that remedial efforts to mitigate indoor air concentrations may still be required and is likely to include the reduction of TCE in groundwater, which will reduce volatilization to indoor air.

4.3.4 Risk Potential from Outdoor Air

Outdoor (ambient) air concentrations of VOCs were measured at a total of 11 locations throughout the project area (Table 23). Estimated risks from the outdoor air stations located on the Cadet site and in the NFVN do not indicate elevated non-cancer or cancer risks to Cadet site workers or Cadet excavation workers. Risk estimates for NFVN residential receptors do not indicate elevated non-cancer or cancer risks. In all cases, TCE was the primary contributor to overall risks compared to other COPCs. Thus, chronic exposure to measured concentrations of VOCs in outdoor air indicates a low potential for risk to human health. It should be noted that the source of the outdoor air concentrations is unknown and could be sourced from the groundwater plume, local facility emissions, and/or other sources.

4.3.5 Cumulative Risks

The human health risk assessment consists of an analysis of multiple locations, exposure pathways and receptors. A summary table was developed (Table 24) to gain an understanding of overall cumulative risks from multiple pathways for the various receptors. Since multiple locations and groundwater wells were assessed (representing variable exposure rates) a range of risk estimates is presented in Table 24. In addition, cumulative risks from all pathways are presented. According to MTCA, non-cancer risks should not exceed a HQ of 1 for individual chemicals or a hazard index (HI) of 1 for multiple chemicals (i.e., the sum of the HQ values). Cancer risks should not exceed $1x10^{-5}$ (i.e., one additional chance of contracting cancer per one hundred thousand) for exposures to multiple chemicals. Conclusions for each type of receptor evaluated in the risk assessment are discussed below.

Cadet Site Workers: Exposure and risk estimates for Cadet site workers suggests that VOC contaminants in indoor air (Cadet building) pose a slightly elevated risk if workers are chronically exposed (maximum ELCR $5.4x10^{-6}$). However, the concentrations of COPCs in indoor air are significantly lower than OSHA or NIOSH levels for occupational workers. Outdoor air poses minimal risk to Cadet site workers at current concentrations. In addition, soil concentrations pose minimal risk to Cadet site workers at current concentrations.

Exposure and risk estimates for source area workers suggest that VOC contaminants in groundwater pose a potential risk if workers are chronically exposed (maximum ELCR $5.2x10^{-4}$). However, groundwater is not currently used at the Cadet site for domestic purposes at the levels evaluated in the RA. Therefore, when considering only air and soil pathways, estimated cancer risks to Cadet site workers are considered to be slightly elevated (i.e., above $5.6x10^{-6}$).

Cadet Site Excavation Worker: Outdoor air and soil concentrations pose minimal risk to Cadet excavation workers at current concentrations. Exposure and risk estimates for on-site excavation workers suggest that VOC contaminants in groundwater pose a slight potential risk if workers are chronically exposed (maximum ELCR $4x10^{-6}$). However, groundwater is not currently used at the Cadet site for domestic purposes at the levels evaluated in the RA.

Therefore, when considering only air and soil pathways, estimated risks to Cadet excavation workers are considered to be negligible.

NFVN Residents: Exposure and risk estimates for NFVN residents suggest that VOC contaminants in indoor air pose a potential risk if residents are chronically exposed (ELCRs ranging from $7.2x10^{-7}$ to $2.7x10^{-4}$). Outdoor air VOC concentrations pose minimal risk to residents at current concentrations.

Exposure and risk estimates for NFVN residents suggest that VOC contaminants in groundwater pose a potential risk if residents are chronically exposed (via ingestion, dermal contact, or inhalation of vapors). However, groundwater is not currently used for domestic purposes in the NFVN. Drinking water is supplied by the City of Vancouver from a well field away from the project area. When considering only air pathways, estimated risks from indoor air of some residences indicate the potential for elevated risks. However, the presence of TCE in background concentrations (which are similar to national levels and could be sourced from the groundwater plume, local facility emissions, and/or other sources) in outdoor air suggests that the residents in the NFVN are not at significantly greater risks than residents in typical urban settings. It should be noted that remedial efforts to mitigate indoor air concentrations may still be required and is likely to include the reduction of TCE in groundwater, which will reduce volatilization to indoor air.

4.3.6 Uncertainty Analysis

Analysis of uncertainty associated with the exposure assessment, toxicity assessment, and risk characterization is an important part of the risk assessment process. The uncertainty analysis provides insight into the significance of the risk assessment results that will support risk management decisions. The primary (rather than all possible) sources of uncertainty in the risk assessment are summarized below.

1. VOC concentrations have been measured in indoor air on a limited basis (generally only one to three times per residence; not all homes evaluated). Exposure estimates were based on measured rather than modeled air concentrations to represent exposure. Some uncertainty remains in measured air concentrations due to the few number of samples collected. Not all site buildings were sampled. Thus, there may be some uncertainty in the exposure concentrations used in the risk assessment that could be further refined with additional sampling.
2. Simplified assumptions were used (as described in MTCA) that addresses VOC inhalation through the use of an inhalation correction factor. This assumption may lead to over- or under-predictions of risk. Because no scientific studies were identified that evaluated the contribution of exposure to VOCs in groundwater among the inhalation and ingestion pathways, the accuracy of this correction factor in predicting inhalation exposures is unknown.
3. As noted in the risk assessment, the reasonable maximum exposure concentration was used to predict risks. These concentrations are intended to represent a conservative estimate of exposure and therefore may over-predict risks.
4. The major uncertainty in the toxicity assessment was the use of chronic toxicity values (oral and inhalation) for evaluating risk potential to temporary excavation workers. Consequently, risk predictions for excavation workers will tend to be overstated since the chronic toxicity values are designed to be used with long-term exposure scenarios and not the shorter-term scenario evaluated for the temporary excavation worker.

5. TERRESTRIAL ECOLOGICAL EVALUATION

As required under MTCA (WAC 173-340-7490), a terrestrial ecological evaluation must be considered to:

- Determine whether a release of hazardous substances to soil may pose a threat to the terrestrial environment;
- Characterize existing or potential threats to terrestrial plants or animals exposed to hazardous substances in soil; and
- Establish site-specific cleanup standards for the protection of terrestrial plants and animals.

Exposure pathways to sediments, surface water, or wetlands are not considered complete for this site. Therefore, this terrestrial ecological evaluation does not include an evaluation of potential threats to ecological receptors in these media or habitat areas. As discussed in the Draft Final RI Report, the GWM pumping wells have effectively contained the commingled plume and have limited the plume from entering the Columbia River. There is no evidence that the plume has reached any surface water or sediments in the project area. In addition, there are no wetlands located in the plume area; thus this pathway was not evaluated.

Since the residual contaminated soil is located on an area designated for industrial or commercial use only, this evaluation focuses only on exposure to soil contamination for terrestrial wildlife protection (per WAC 173-340-7490-03b).

A simplified terrestrial ecological evaluation was conducted for the Cadet site per WAC 173-340-7492. The Cadet site has a confined area with soil contamination that suggest that this site does not have a substantial potential for posing a threat of significant adverse effects to terrestrial ecological receptors. The simplified terrestrial wildlife evaluation consisted of calculating ecological indicator soil concentrations for the chemicals of concern at the Cadet site (Table 25). The methods for obtaining information and calculating ecological soil concentrations followed methodologies developed in MTCA (Ecology 2005). A comparison of the ecological indicator soil concentrations to the reasonable maximum soil concentrations found at the Cadet site indicates that no chemical exceeded its respective indicator soil concentration (Table 25). Thus, contaminant concentrations in exposed soil at the Cadet site do not pose a significant threat to terrestrial ecological receptors. Therefore, based on the size of the contaminated area, the land use at the site, and the relatively low contaminant concentrations (compared to ecological indicator soil concentrations), this site may be excluded from further ecological assessment per WAC 173-340-7492.

6. CONCLUSIONS

The Port has been conducting a remedial investigation and feasibility study of TCE and associated volatile organic compounds in groundwater, soil, soil gas, and indoor and outdoor air at the Cadet site. Contaminant concentration data from these media has been collected prior to and following remedial actions that treated contaminated groundwater from the Cadet site. The goals of this risk assessment were to:

- Identify potential risks to Cadet site workers and NFVN residents from chemicals originating from contaminated soil or groundwater, and
- To determine if on-site soils present a risk to terrestrial ecological receptors.

The risk assessment was conducted following standard risk assessment guidance, specifically the MTCA guidance (Ecology 2005). Risks to human health from exposure to contaminants in groundwater, soil, indoor air and outdoor air were examined. A summary of the risk characterizations by receptor type is presented in Table 24. Based on the results of the risk assessment, Parametrix reached the following conclusions for each of the media at the site.

1. **Groundwater:** The potential risk associated with groundwater was evaluated for a Cadet site worker, an Cadet site excavation worker, and an NFVN resident. While previous and ongoing remedial actions have significantly reduced groundwater concentrations, current concentrations are still at a level that suggests potentially elevated risks to human health for all receptors and exposure pathways evaluated. The results indicate continued remedial actions are necessary to reduce groundwater concentrations to levels that are protective of potential future receptors and should be evaluated in a feasibility study. Use of groundwater within the project area, in areas of contamination at levels evaluated in the RA, should continue to be restricted until contaminant concentrations do not exceed cleanup goals.

   The Port currently has a groundwater pump and treatment system in place at the SMC site; this system has been operational since June 2009.

2. **Soil:** The potential risk associated with soil was evaluated for a Cadet site worker and an Cadet excavation worker. Based on the human health risk assessment, the current risk associated with COPCs in soil in the source area is within the acceptable risk range. Further remediation of soil is not warranted, based on the potential receptor scenarios evaluated.

3. **Indoor Air:** The potential risk associated with indoor air was evaluated for Cadet site workers and NFVN residents. Current concentrations of VOCs at all NFVN residences indicate elevated cancer risks (i.e., above $1x10^{-6}$) from chronic exposure to indoor air (ELCRs ranging from $7.2x10^{-7}$ to $2.7x10^{-4}$). However, background air conditions should be considered when evaluating the indoor air results. The conservative nature of the risk assessment indicates that there is a potential for long-term health risks associated with the current levels of TCE in indoor air. However, the presence of TCE in background concentrations in outdoor air (which are similar to national levels and could be sourced from the groundwater plume, local facility emissions, and/or other sources) suggests that the residents in the NFVN are not at significantly greater risk than residents in typical urban settings. It should be noted that remedial efforts to mitigate indoor air concentrations may still be required and are likely to include the reduction of TCE in groundwater, which will reduce volatilization to indoor air. Based on the indoor air results, additional indoor air monitoring may be warranted and was recommended in the CAMP.

Exposure and risk estimates for Cadet site workers suggests that VOC contaminants in indoor air (Cadet building) pose an elevated risk if workers are chronically exposed (maximum ELCR $5.4x10^{-5}$). However, the concentrations of COPCs in indoor air are significantly lower than OSHA or NIOSH levels for occupational workers.

4. **Outdoor Air:** The risk from outdoor air was evaluated for a Cadet site worker and an NFVN resident (child and adult). Based on the human health risk assessment, the current risk associated with COPCs in outdoor air is within the acceptable risk range. Outdoor air was evaluated because it is a complete exposure pathway at the site. The source of the outdoor air concentrations is unknown and could be sourced from the groundwater plume, local facility emissions, and/or other sources.
5. **Ecological Receptors:** In accordance with WAC 173-340-7490, a simplified terrestrial ecological evaluation was conducted for the Cadet site. The Cadet site includes a confined area with no exposed soil contamination and minimal adjacent areas of undeveloped land; this suggests that this site does not have a substantial potential for posing a threat of significant adverse effects to terrestrial ecological receptors. Contaminant concentrations in subsurface soil at the Cadet site do not pose a significant threat to terrestrial ecological receptors. Based on the size of the contaminated area, the land use at the site, and the relatively low contaminant concentrations (compared to ecological indicator soil concentrations), this site may be excluded from further ecological assessment per WAC 173-340-7492.

7. REFERENCES

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FIGURES

Parametrix Date: 09/14/09; File Name: MXD_PDF\CadetReport_Final_09\RA_SiteLocation.mxd

N

0 1,000

SCALE IN FEET

Figure 1
Site Location Map

RISK ASSESSMENT
CADET MANUFACTURING COMPANY SITE
PORT OF VANCOUVER, WASHINGTON

Parametrix Date: March 2010 File: MXD_PDF\CadetReport_Final_09\RA_GW_WellLocations.mxd

△ Shallow USA Groundwater Monitoring Well

● Intermediate USA Groundwater Monitoring Well

⊗ Deep USA Groundwater Monitoring Well

▣ TGA Monitoring Well

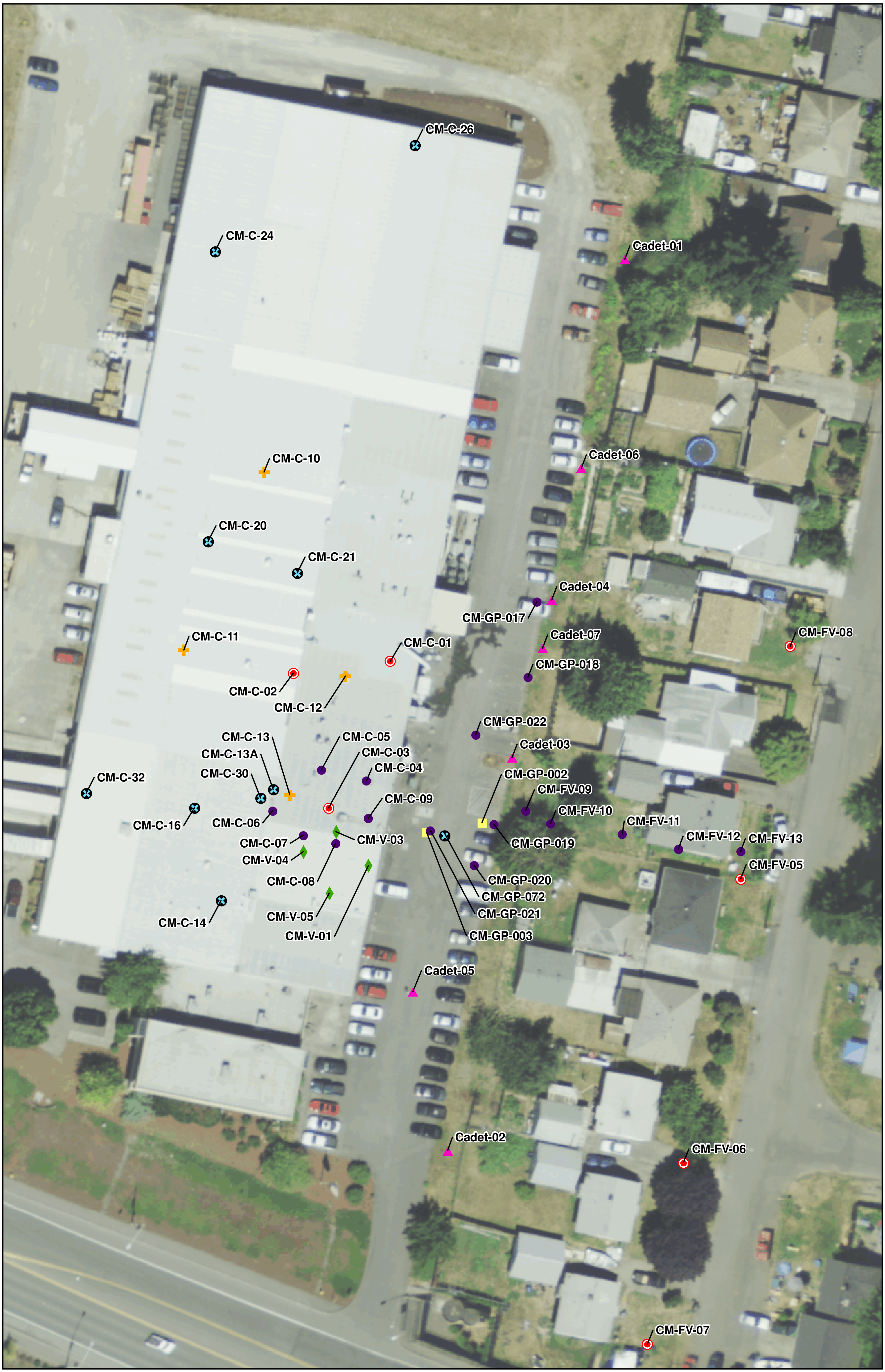
■ Recirculating Groundwater Remediation Well (RGRW)

N

0 250 500
Scale in Feet

Figure 2
Cadet Site Groundwater Monitoring Well Locations

RISK ASSESSMENT
CADET MANUFACTURING COMPANY SITE
PORT OF VANCOUVER, WASHINGTON



Parametrix Date: 09/10/09 File: MXD_PDF\CadetReport_Final_09\RA_SoilSampleLocations.mxd

▲ 1998 Soil Borings Completed by the Port of Vancouver

◉ 1999 Preliminary Subsurface Investigation

■ 1999 Soil Borings Completed as Part of Phase II ESA

● 2000 Interim Action Souce Investigation

✚ 2000 Interim Action Source Investigation Update

⊗ 2001 Soil Investigation

◆ 2001 Vapor Extraction Well Soil Sampling

N

0 25 50

Scale in Feet

Figure 3
Soil Sample Locations

RISK ASSESSMENT
CADET MANUFACTURING COMPANY SITE
PORT OF VANCOUVER, WASHINGTON

Parametrix Date: March 2010 File: MXD_PDF\CadetReport_Final_09\RA_SoilGasProbes.mxd

N

0 250 500

Scale in Feet

- ● Preliminary Soil Gas Probe Locations
- ⊗ Soil Gas Well
- ☐ Property Boundary with Street Address
- 🟦 Cadet Property
- 🟦 Cadet Building

Figure 4
Preliminary Soil Gas Probe and Soil Gas Well Locations

RISK ASSESSMENT
CADET MANUFACTURING COMPANY SITE
PORT OF VANCOUVER, WASHINGTON

Parametrix Date: 09/10/09 File: MXD_PDF\CadetReport_Final_09\RA_IndoorAir.mxd

N

0 250 500
Scale in Feet

⊗	Soil Gas Well
▭	Indoor Air Sampling Location
2810	Property Boundary with Street Address
▭	Cadet Property
▭	Cadet Building

Figure 5
Indoor Air Sample Locations North Fruit Valley Neighborhood

RISK ASSESSMENT
CADET MANUFACTURING COMPANY SITE
PORT OF VANCOUVER, WASHINGTON

Parametrix Date: 09/10/09 File: MXD_PDF\CadetReport_Final_09\RA_OutdoorAir.mxd

N

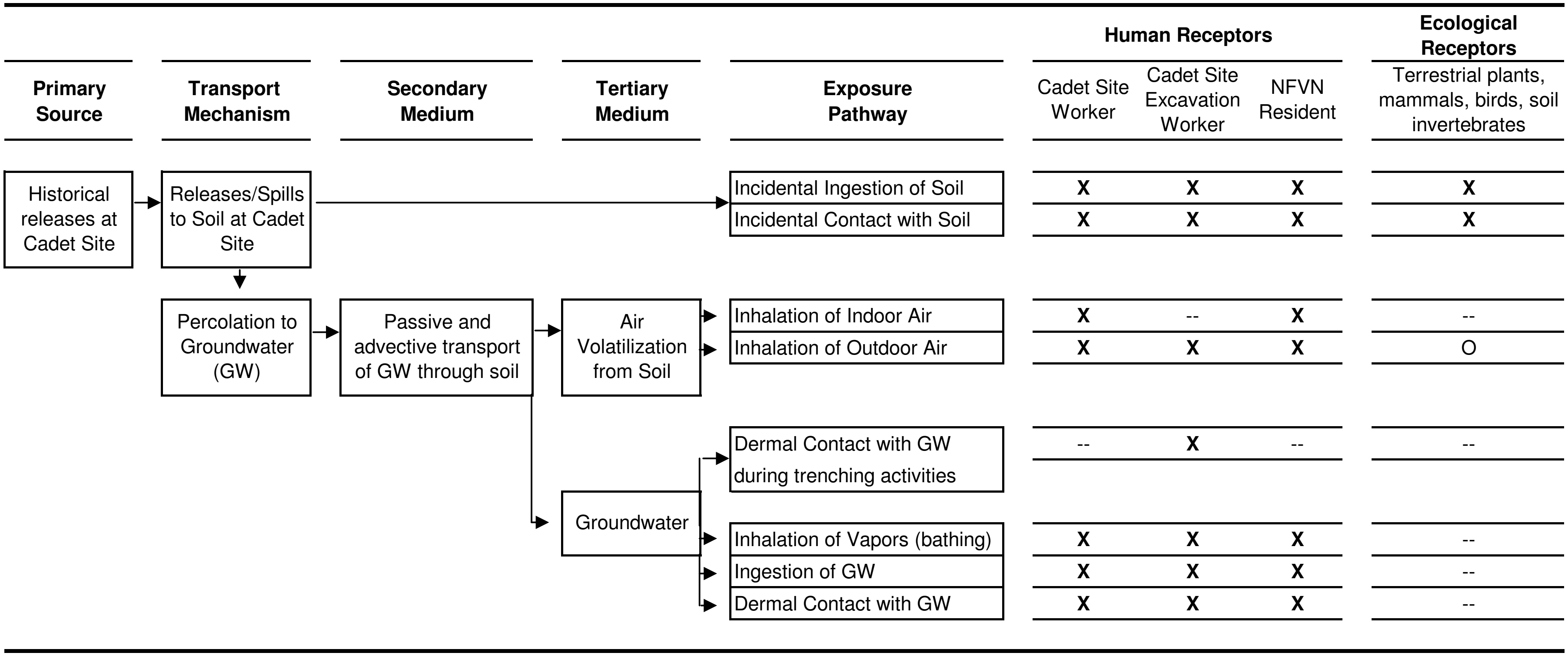
0 250 500

Scale in Feet

⊗ Outdoor Air Sampling Location

Figure 6
Outdoor Air Sampling Locations

RISK ASSESSMENT
CADET MANUFACTURING COMPANY SITE
PORT OF VANCOUVER, WASHINGTON



Exposure Pathway	Human Receptors			Ecological Receptors
	Cadet Site Worker	Cadet Site Excavation Worker	NFVN Resident	Terrestrial plants, mammals, birds, soil invertebrates
Incidental Ingestion of Soil	**X**	**X**	**X**	**X**
Incidental Contact with Soil	**X**	**X**	**X**	**X**
Inhalation of Indoor Air	**X**	--	**X**	--
Inhalation of Outdoor Air	**X**	**X**	**X**	O
Dermal Contact with GW during trenching activities	--	**X**	--	--
Inhalation of Vapors (bathing)	**X**	**X**	**X**	--
Ingestion of GW	**X**	**X**	**X**	--
Dermal Contact with GW	**X**	**X**	**X**	--

"**X**" Complete pathway evaluated in the risk assessment
"--" Incomplete pathway not evaluated in the risk assessment
"O" Potentially complete pathway not evaluated in the risk assessment

Figure 7
Conceptual Site Model

Risk Assessment
Appendix P, Cadet RI Report

ATTACHMENT A

Data Tables for Soil, Soil Gas, Groundwater, and Indoor and Outdoor Air

Table 1. Summary of Groundwater Analytical Results - 2006 through 2009 Quarter 1

Cadet Manufacturing Company
Port of Vancouver, Washington

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1-Trichloroethane (ug/l)	1,1-Dichloroethane (ug/l)	1,1-Dichloroethene (ug/l)	1,2-Dichloroethane (ug/l)	Bromo-dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2-Dichloroethene (ug/l)	Tetra-chloroethene (ug/l)	Toluene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloro-ethene (ug/l)	Trichloro-fluoromethane (ug/L)
USA Shallow Zone Monitoring Wells																			
CM-DPW-01		18	09/12/06	2006Q3	10:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	109	0.5 U	0.5 U	7.73	0.5 U
CM-DPW-01		18	02/11/07	2007Q1	14:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	39.3	0.5 U	0.5 U	6.03	0.5 U
CM-DPW-01		18	09/14/07	2007Q3	15:43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	17.8	1 U	1 U	2.86	1 U
CM-DPW-01		18	02/28/08	2008Q1	12:40	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	50.4	5 U	2.5 U	10.6	2.5 U
CM-DPW-01		18	04/03/09	2009Q1	10:30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	73	0.5 U	0.5 U	14	0.5 U
CM-DPW-06		23	09/12/06	2006Q3	11:10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	13	0.5 U	0.5 U	7.54	0.5 U
CM-DPW-06		23	02/11/07	2007Q1	15:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	12.2	0.5 U	0.5 U	9.3	0.5 U
CM-DPW-06		23	09/14/07	2007Q3	15:18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	15.6	1 U	1 U	11.5	1 U
CM-DPW-06		23	02/28/08	2008Q1	12:59	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	10	1 U	0.5 U	9.26	0.5 U
CM-DPW-06		23	04/03/09	2009Q1	11:02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.5	0.5 U	0.5 U	17	0.5 U
CM-DPW-10		23	09/12/06	2006Q3	11:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.65	0.5 U	0.5 U	1.92	0.5 U
CM-DPW-10		23	02/11/07	2007Q1	15:30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.36	0.5 U	0.5 U	4.51	0.5 U
CM-DPW-10		23	09/18/07	2007Q3	17:13	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.22	0.5 U	0.5 U	1.66	0.5 U
CM-DPW-10		23	02/28/08	2008Q1	13:20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	2.85	0.5 U	0.5 U	5.01	0.5 U
CM-DPW-10		23	04/03/09	2009Q1	11:52	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.1	0.5 U	0.5 U	20	0.5 U
CM-DPW-16		22.5	09/12/06	2006Q3	10:20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	11	0.5 U	0.5 U	7.8	0.5 U
CM-DPW-16		22.5	02/11/07	2007Q1	15:55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	14.1	0.5 U	0.5 U	14.2	0.5 U
CM-DPW-16		22.5	09/18/07	2007Q3	16:25	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	6.05	0.5 U	0.5 U	6.59	0.5 U
CM-DPW-16		22.5	02/28/08	2008Q1	13:43	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.58	11.4	0.5 U	0.5 U	19.1	0.5 U
CM-DPW-16		22.5	09/19/08	2008Q3	15:01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7.2	0.5 U	0.5 U	14	0.5 U
CM-DPW-16		22.5	04/03/09	2009Q1	12:37	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61	0.66	8.4	0.5 U	0.5 U	28	0.5 U
CM-MW-01d-040		40	06/08/06	2006Q2	14:20	5.3	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	8.35	142	2.5 U	2.5 U	473	2.5 U
CM-MW-01d-040	DP	40	09/12/06	2006Q3	19:10	4.8	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	7.85	124	2.5 U	2.5 U	470	2.5 U
CM-MW-01d-040	D	40	09/12/06	2006Q3	0:00	5.25	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	8.25	132	2.5 U	2.5 U	499	2.5 U
CM-MW-01d-040		40	02/10/07	2007Q1	14:15	4	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	8.15	138	2.5 U	2.5 U	516	2.5 U
CM-MW-01d-040		40	09/14/07	2007Q3	16:07	5.25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	9.2	158	5 U	5 U	536	5 U
CM-MW-01d-040		40	02/28/08	2008Q1	15:30	3.6	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	2.5 U	6.55	125	5 U	2.5 U	414	2.5 U
CM-MW-01d-040		40	09/22/08	2008Q3	12:30	2.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.2	110	1 U	1 U	350	1 U
CM-MW-01d-040		40	12/10/08	2008Q4	11:39	2.7	0.56	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.74	4.5	89	0.5 U	0.5 U	310	0.5 U
CM-MW-01d-040		40	04/03/09	2009Q1	14:35	2.6	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.76	4.6	95	0.5 U	0.5 U	260	0.5 U
CM-MW-01s		20	06/06/06	2006Q2	18:35	1.48	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.45	2.31	32.7	0.5 U	0.5 U	130	0.5 U
CM-MW-01s		20	02/10/07	2007Q1	13:18	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.54	10.5	0.5 U	0.5 U	48.6	0.5 U
CM-MW-01s		20	09/13/07	2007Q3	18:54	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.8	1 U	1 U	26	1 U
CM-MW-01s		20	12/10/07	2007Q4	11:12	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	2.38	0.5 U	0.5 U	14	0.5 U
CM-MW-01s		20	02/29/08	2008Q1	15:47	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.93	9.66	0.5 U	0.5 U	52.4	0.5 U
CM-MW-01s		20	06/18/08	2008Q2	15:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.17	0.94	10.2	0.5 U	0.5 U	38.1	0.5 U
CM-MW-01s		20	09/19/08	2008Q3	14:18	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.63	7.8	0.5 U	0.5 U	46	0.5 U
CM-MW-01s		20	12/10/08	2008Q4	12:15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.66	7.4	0.5 U	0.5 U	50	0.5 U
CM-MW-01s		20	04/16/09	2009Q1	10:25	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75	0.79	9.5 J	0.5 U	0.5 U	36	0.5 U
CM-MW-02s		15	02/12/07	2007Q1	15:15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-02s		15	03/03/08	2008Q1	12:12	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-02s		15	04/01/09	2009Q1	12:25	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-03s		20	06/06/06	2006Q2	17:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.79	0.5 U	0.5 U	3.41	0.5 U
CM-MW-03s		20	09/09/06	2006Q3	15:20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.23	0.5 U	0.5 U	2.91	0.5 U
CM-MW-03s		20	02/10/07	2007Q1	12:30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.06	0.5 U	0.5 U	2.06	0.5 U
CM-MW-03s		20	09/18/07	2007Q3	12:37	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.04	0.5 U	0.5 U	2.35	0.5 U

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1-Trichloroethane (ug/l)	1,1-Dichloroethane (ug/l)	1,1-Dichloroethene (ug/l)	1,2-Dichloroethane (ug/l)	Bromo-dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2-Dichloroethene (ug/l)	Tetra-chloroethene (ug/l)	Toluene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloro-ethene (ug/l)	Trichloro-fluoromethane (ug/L)
CM-MW-03s		20	12/12/07	2007Q4	14:30	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	1 UJ	0.5 UJ	0.5 UJ	0.52 J	5.43 J	0.5 UJ	0.5 UJ	11.5 J	0.5 UJ
CM-MW-03s		20	03/08/08	2008Q1	13:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.97	0.5 U	0.5 U	4.1	0.5 U
CM-MW-03s		20	06/18/08	2008Q2	15:55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.7	0.94	8.38	0.5 U	0.5 U	32	0.5 U
CM-MW-03s		20	09/19/08	2008Q3	15:55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.2	0.5 U	0.5 U	5.8	0.5 U
CM-MW-03s		20	12/10/08	2008Q4	11:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.3	0.5 U	0.5 U	8.1	0.5 U
CM-MW-03s		20	04/01/09	2009Q1	13:52	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.5	0.5 U	0.5 U	14	0.5 U
CM-MW-04s		22.5	06/05/06	2006Q2	14:05	3.7	0.88	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.3	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-04s		22.5	09/06/06	2006Q3	15:00	1.63	0.52	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.34	0.5 U	0.5 U	7.37	0.5 U
CM-MW-04s		22.5	02/09/07	2007Q1	11:40	1.78	0.61	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	2.65	0.5 U	0.5 U	2.91	0.5 U
CM-MW-04s		22.5	09/19/07	2007Q3	14:27	1.19	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	2.85	0.5 U	0.5 U	3.66	0.5 U
CM-MW-04s		22.5	12/11/07	2007Q4	15:27	1.6 J	0.65 J	0.5 UJ	0.5 UJ	0.5 UJ	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.86 J	0.5 UJ	0.5 UJ	1.14 J	0.5 UJ
CM-MW-04s		22.5	03/05/08	2008Q1	16:26	1.59	0.65	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	2.33	0.5 U	0.5 U	2.28	0.5 U
CM-MW-04s		22.5	06/18/08	2008Q2	13:15	1.82	0.67	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5	0.5 U	6.85	0.5 U	0.5 U	9.75	0.5 U
CM-MW-04s		22.5	09/18/08	2008Q3	14:59	1.4	0.58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.5	0.5 U	0.5 U	5.3	0.5 U
CM-MW-04s	DP	22.5	12/09/08	2008Q4	14:11	0.97	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.9	0.5 U	0.5 U	8	0.5 U
CM-MW-04s	D	22.5	12/09/08	2008Q4	0:00	0.95	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.6	0.5 U	0.5 U	7.8	0.5 U
CM-MW-04s		22.5	03/30/09	2009Q1	13:47	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.65	0.62	10	0.5 U	0.5 U	23	0.5 U
CM-MW-05s		20	06/01/06	2006Q2	10:45	1.03	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.69	30.6	0.5 U	0.5 U	22.6	0.5 U
CM-MW-05s		20	02/09/07	2007Q1	12:25	1.3	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	22	0.5 U	0.5 U	35.6	0.5 U
CM-MW-05s		20	09/17/07	2007Q3	11:05	1.26	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	25.8	0.5 U	0.5 U	44.2	0.5 U
CM-MW-05s		20	12/11/07	2007Q4	9:55	0.53 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	14.8 J	0.5 U	0.5 U	13.5 J	0.5 U
CM-MW-05s		20	02/29/08	2008Q1	16:10	0.71	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	18.8	0.5 U	0.5 U	22.7	0.5 U
CM-MW-05s		20	06/18/08	2008Q2	12:58	0.52	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8	0.89	17.5	0.5 U	0.5 U	31.4	0.5 U
CM-MW-05s		20	09/18/08	2008Q3	15:49	0.78	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	19	0.5 U	0.5 U	30	0.5 U
CM-MW-05s		20	12/09/08	2008Q4	13:09	0.71	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	17	0.5 U	0.5 U	33	0.5 U
CM-MW-05s		20	03/31/09	2009Q1	10:52	0.78	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.67	0.68	18	0.5 U	0.5 U	40	0.5 U
CM-MW-06s		26.5	06/05/06	2006Q2	13:20	2.67	0.82	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	2.28	0.5 U	0.5 U	3.12	0.5 U
CM-MW-06s		26.5	09/06/06	2006Q3	14:15	1.54	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	4.11	0.5 U	0.5 U	8.81	0.5 U
CM-MW-06s		26.5	02/09/07	2007Q1	13:33	1.88	0.56	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.35	0.5 U	0.5 U	6.11	0.5 U
CM-MW-06s		26.5	09/19/07	2007Q3	12:21	1.12	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.8	0.5 U	0.5 U	7.39	0.5 U
CM-MW-06s		26.5	12/11/07	2007Q4	12:15	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.54 J	0.5 UJ
CM-MW-06s		26.5	03/05/08	2008Q1	13:32	1.49	0.59	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	4.07	0.5 U	0.5 U	5.48	0.5 U
CM-MW-06s		26.5	06/18/08	2008Q2	12:00	0.96	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.79	0.5 U	3.5	0.5 U	0.5 U	3.23	0.5 U
CM-MW-06s		26.5	09/17/08	2008Q3	17:37	0.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.9	0.5 U	0.5 U	5.7	0.5 U
CM-MW-06s		26.5	12/08/08	2008Q4	14:59	0.68	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.74	0.5 U	3.1	0.5 U	0.5 U	4.7	0.5 U
CM-MW-06s		26.5	03/30/09	2009Q1	13:18	0.77	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U	3	0.5 U	0.5 U	4.8	0.5 U
CM-MW-07s		34	06/06/06	2006Q2	16:08	3.17	0.62	0.5 U	0.5 U	0.5 U	1.82	0.5 U	0.5 U	0.5 U	2.12	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07s		34	09/08/06	2006Q3	12:20	2.32	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	4.87	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07s		34	02/10/07	2007Q1	10:55	2.07	0.58	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	4.82	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07s		34	09/12/07	2007Q3	16:34	2.07 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 J	1 U	1 U	1 U	1 U
CM-MW-07s		34	12/11/07	2007Q4	16:25	2.41	0.59	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	6.14	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07s		34	03/06/08	2008Q1	11:32	2.21	0.65	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	4.61	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07s		34	06/18/08	2008Q2	11:34	2.18	0.66	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	7.66	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07s		34	09/18/08	2008Q3	11:10	1.7	0.51	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.2	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07s		34	12/08/08	2008Q4	14:07	1.8	0.58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.9	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07s		34	03/30/09	2009Q1	11:00	2.2	0.68	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.2	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-08s		19	06/05/06	2006Q2	15:30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.53	0.5 U	0.5 U	13.2	0.5 U
CM-MW-08s		19	09/08/06	2006Q3	14:50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	2.27	0.5 U	0.5 U	6.91	0.5 U
CM-MW-08s		19	02/09/07	2007Q1	14:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.97	0.5 U	0.5 U	4.25	0.5 U
CM-MW-08s		19	03/05/08	2008Q1	15:04	0.5 U	0.5 U	0.5 U	0.5 U	2.17	1 U	0.5 U	0.5 U	0.5 U	1.44	0.5 U	0.5 U	2.69	0.5 U
CM-MW-08s		19	09/17/08	2008Q3	11:47	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U	5.4	0.5 U

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1-Trichloroethane (ug/l)	1,1-Dichloroethane (ug/l)	1,1-Dichloroethene (ug/l)	1,2-Dichloroethane (ug/l)	Bromo-dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2-Dichloroethene (ug/l)	Tetra-chloroethene (ug/l)	Toluene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloro-ethene (ug/l)	Trichloro-fluoromethane (ug/L)
CM-MW-08s		19	04/01/09	2009Q1	10:15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.2	0.5 U	0.5 U	11	0.5 U
CM-MW-09s		15	06/06/06	2006Q2	17:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-09s		15	09/09/06	2006Q3	14:30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-09s		15	02/12/07	2007Q1	15:56	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-09s		15	03/03/08	2008Q1	12:49	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-09s		15	04/01/09	2009Q1	11:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-10s		54	02/15/07	2007Q1	16:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.28	0.5 U	0.5 U	1.71	0.5 U
CM-MW-10s		54	02/27/08	2008Q1	15:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.34	0.5 U	0.5 U	1.91	0.5 U
CM-MW-10s		54	03/23/09	2009Q1	11:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	0.5 U	0.5 U	1.7	0.5 U
CM-MW-18s		21.5	02/13/07	2007Q1	13:20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.91	0.5 U
CM-MW-18s		21.5	09/12/07	2007Q3	13:56	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.79	0.5 U
CM-MW-18s		21.5	03/04/08	2008Q1	12:33	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52	0.5 U
CM-MW-18s		21.5	03/25/09	2009Q1	12:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57	0.5 U	0.5 U	1.2	0.5 U
CM-MW-19s		26.5	02/14/07	2007Q1	10:04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.7	0.5 U	0.5 U	2.01	0.5 U
CM-MW-19s		26.5	09/12/07	2007Q3	17:44	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.76 J	1 U	1 U	2.12 J	1 U
CM-MW-19s		26.5	03/04/08	2008Q1	14:49	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.7	0.5 U	1.76	0.5 U	0.5 U	2.2	0.5 U
CM-MW-19s		26.5	03/27/09	2009Q1	12:40	0.5 U	0.5 U	0.5 U	0.5 U	8	0.5 U	0.5 U	13	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-20s		27.5	06/05/06	2006Q2	14:48	2.71	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.98	3.61	40.6	0.5 U	0.5 U	115	0.5 U
CM-MW-20s		27.5	09/09/06	2006Q3	13:20	0.94	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.18	13	0.5 U	0.5 U	42.2	0.5 U
CM-MW-20s		27.5	12/06/06	2006Q4	16:26	1.14	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.08	17.2	0.5 U	0.5 U	46.7	0.5 U
CM-MW-20s		27.5	02/10/07	2007Q1	11:45	0.86	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.88	13.9	0.5 U	0.5 U	40.2	0.5 U
CM-MW-20s		27.5	05/24/07	2007Q2	11:10	1.37	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.52 UB	1.59	21.4	0.5 U	0.5 U	48.3	0.5 U
CM-MW-20s		27.5	09/18/07	2007Q3	18:18	0.55	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.67	8.42	0.5 U	0.5 U	28.8	0.5 U
CM-MW-20s		27.5	12/17/07	2007Q4	12:34	0.74	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.38	10.4	0.5 U	0.5 U	22	0.5 U
CM-MW-20s		27.5	03/06/08	2008Q1	16:05	1	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.89	12.9	0.5 U	0.5 U	28.6	0.5 U
CM-MW-20s		27.5	06/18/08	2008Q2	13:55	0.91	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.72	1.95	18.3	0.5 U	0.5 U	37.2	0.5 U
CM-MW-20s		27.5	09/19/08	2008Q3	17:38	0.67	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59	9.4	0.5 U	0.5 U	22	0.5 U
CM-MW-20s		27.5	12/09/08	2008Q4	16:12	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54	6.8	0.5 U	0.5 U	20	0.5 U
CM-MW-20s		27.5	04/06/09	2009Q1	10:30	0.58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	12	0.5 U	0.5 U	28	0.5 U
CM-MW-21s	DP	56.5	02/16/07	2007Q1	10:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-21s	D	56.5	02/16/07	2007Q1	0:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.44	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-21s		56.5	03/06/08	2008Q1	14:50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.87	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-21s		56.5	04/06/09	2009Q1	11:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-23s		34	06/06/06	2006Q2	15:30	1.43	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.19	9.79	0.5 U	0.5 U	32.8	0.5 U
CM-MW-23s		34	09/08/06	2006Q3	13:23	1.68	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.23	7.48	0.5 U	0.5 U	23.8	0.5 U
CM-MW-23s		34	02/09/07	2007Q1	15:27	1.17	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.94	9.36	0.5 U	0.5 U	30.3	0.5 U
CM-MW-23s		34	05/24/07	2007Q2	11:50	1.2	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.81	9.2	0.5 U	0.5 U	28.4	0.5 U
CM-MW-23s		34	09/13/07	2007Q3	11:06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.97 J	1 U	1 U	21.3 J	1 U
CM-MW-23s		34	03/04/08	2008Q1	15:18	0.96	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.45	6.76	0.5 U	0.5 U	23.3	0.5 U
CM-MW-23s		34	09/17/08	2008Q3	16:19	0.59	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.85	5.4	0.5 U	0.5 U	18	0.5 U
CM-MW-23s		34	03/30/09	2009Q1	12:30	0.65	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2	4.6	0.5 U	0.5 U	16	0.5 U
CM-MW-24s		25	06/05/06	2006Q2	16:10	0.5	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.96	0.54	0.5 U	12.8	0.5 U
CM-MW-24s		25	09/08/06	2006Q3	15:28	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.35	0.5 U	0.5 U	8.06	0.5 U
CM-MW-24s		25	02/13/07	2007Q1	12:28	0.87	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.51	2.73	0.5 U	0.5 U	19.7	0.5 U
CM-MW-24s		25	09/13/07	2007Q3	12:41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.87 J	1 U	1 U	8.04 J	1 U
CM-MW-24s		25	03/04/08	2008Q1	13:00	0.76	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	2.67	0.5 U	0.5 U	17.5	0.5 U
CM-MW-24s		25	09/17/08	2008Q3	14:25	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6	0.5 U	0.5 U	6.1	0.5 U
CM-MW-24s		25	03/25/09	2009Q1	12:55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6	0.5 U	0.5 U	9.4	0.5 U
CM-MW-25s		21	06/05/06	2006Q2	12:35	1.85	0.58	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.92	1.11	0.5 U	4.18	0.5 U
CM-MW-25s		21	09/06/06	2006Q3	13:35	2.04	0.66	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3	0.5 U	0.5 U	4.16	0.5 U
CM-MW-25s		21	02/09/07	2007Q1	12:50	1.65	0.58	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.55	0.5 U	0.5 U	3.57	0.5 U

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1-Trichloroethane (ug/l)	1,1-Dichloroethane (ug/l)	1,1-Dichloroethene (ug/l)	1,2-Dichloroethane (ug/l)	Bromo-dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2-Dichloroethene (ug/l)	Tetra-chloroethene (ug/l)	Toluene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloro-ethene (ug/l)	Trichloro-fluoromethane (ug/L)
CM-MW-25s		21	09/19/07	2007Q3	11:36	0.9	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.89	0.6	0.5 U	5.31	0.5 U
CM-MW-25s		21	12/11/07	2007Q4	14:47	0.92 J	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	3.4 J	0.65 J	0.5 UJ	3.18 J	0.5 UJ
CM-MW-25s		21	03/05/08	2008Q1	14:06	0.97	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.51	0.5 U	3.36	0.5 U	0.5 U	2.83	0.5 U
CM-MW-25s		21	06/18/08	2008Q2	12:18	0.51	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.59	0.5 U	1.82	0.5 U	0.5 U	0.97	0.5 U
CM-MW-25s		21	09/18/08	2008Q3	13:09	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	0.5 U	3.3	0.5 U	0.5 U	3.4	0.5 U
CM-MW-25s		21	12/08/08	2008Q4	15:32	0.54	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4	0.5 U	3.2	0.5 U	0.5 U	4.6	0.5 U
CM-MW-25s		21	03/31/09	2009Q1	10:20	0.53	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.88	0.5 U	4.7	0.5 U	0.5 U	8.1	0.5 U
CM-MW-26s		24	06/05/06	2006Q2	12:00	0.61	0.81	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	6.11	17.2	0.5 U	0.5 U	9.71	0.5 U
CM-MW-26s		24	09/06/06	2006Q3	12:50	0.64	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-26s		24	02/09/07	2007Q1	14:03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.08	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-26s	DP	24	09/19/07	2007Q3	13:18	0.5	0.5 U	0.5 U	0.5 U	0.5 U	2.41	0.5 U	0.5 U	0.5 U	0.53	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-26s	D	24	09/19/07	2007Q3	0:00	0.56	0.5 U	0.5 U	0.5 U	0.5 U	2.42	0.5 U	0.5 U	0.5 U	0.57	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-26s		24	12/11/07	2007Q4	14:08	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.76	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-26s		24	03/05/08	2008Q1	14:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.42	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-26s	DP	24	06/18/08	2008Q2	12:37	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.91	0.5 U	0.5 U	2.42	0.5 U
CM-MW-26s	D	24	06/18/08	2008Q2	0:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.81	0.5 U	0.5 U	2.41	0.5 U
CM-MW-26s		24	09/18/08	2008Q3	13:55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.72	0.5 U	2.4	0.5 U	0.5 U	1.8	0.5 U
CM-MW-26s		24	12/08/08	2008Q4	16:15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.1	0.5 U	0.5 U	6.7	0.5 U
CM-MW-26s		24	03/31/09	2009Q1	12:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54	8.2	0.5 U	0.5 U	19	0.5 U
CM-MW-27USA-049.5		49.5	06/02/06	2006Q2	14:55	0.56	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.57	0.5 U	0.5 U	6.91	0.5 U
CM-MW-27USA-049.5		49.5	09/05/06	2006Q3	15:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.91	0.5 U
CM-MW-27USA-049.5		49.5	02/15/07	2007Q1	11:10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.51	0.5 U	0.5 U	2.94	0.5 U
CM-MW-27USA-049.5		49.5	09/10/07	2007Q3	16:04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.83	0.5 U
CM-MW-27USA-049.5		49.5	02/25/08	2008Q1	13:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U	0.5 U	3.27	0.5 U
CM-MW-27USA-049.5		49.5	09/16/08	2008Q3	16:54	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4	0.5 U
CM-MW-27USA-049.5		49.5	03/27/09	2009Q1	11:55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.63	0.5 U	0.5 U	2.7	0.5 U
CM-VE-09		17.5	09/12/06	2006Q3	14:25	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	4.49	0.5 U	0.5 U	11	0.5 U
CM-VE-09	DP	17.5	02/15/07	2007Q1	16:15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5.64	0.5 U	0.5 U	17.5	0.5 U
CM-VE-09	D	17.5	02/15/07	2007Q1	0:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	6.21	0.5 U	0.5 U	18.2	0.5 U
CM-VE-09		17.5	09/14/07	2007Q3	12:56	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.46	1 U	1 U	6.4	1 U
CM-VE-09		17.5	02/29/08	2008Q1	15:03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.6	5.74	0.5 U	0.5 U	22.2	0.5 U
CM-VE-09		17.5	04/02/09	2009Q1	12:10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.8	0.5 U	0.5 U	13	0.5 U
CM-VE-10		17.5	09/12/06	2006Q3	15:15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.72	0.5 U	0.5 U	7.38	0.5 U
CM-VE-10		17.5	02/14/07	2007Q1	15:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	3.81	0.5 U	0.5 U	10.5	0.5 U
CM-VE-10		17.5	09/14/07	2007Q3	13:33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.45	1 U	1 U	3.56	1 U
CM-VE-10	DP	17.5	02/29/08	2008Q1	14:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.59	4.36	0.5 U	0.5 U	16.9	0.5 U
CM-VE-10	D	17.5	02/29/08	2008Q1	0:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.62	4.39	0.5 U	0.5 U	17.4	0.5 U
CM-VE-10		17.5	04/02/09	2009Q1	11:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7	0.5 U	0.5 U	9.2	0.5 U
CM-VE-11		17.5	09/12/06	2006Q3	12:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.54	11.1	0.5 U	0.5 U	14.9	0.5 U
CM-VE-11		17.5	02/14/07	2007Q1	16:18	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	4.95	0.5 U	0.5 U	9.15	0.5 U
CM-VE-11		17.5	09/14/07	2007Q3	10:52	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.23	1 U
CM-VE-11		17.5	02/29/08	2008Q1	12:30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.77	4.27	0.5 U	0.5 U	14.5	0.5 U
CM-VE-11		17.5	04/02/09	2009Q1	10:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.9	0.5 U	0.5 U	8.6	0.5 U
CM-VE-12		17.5	09/12/06	2006Q3	13:28	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	8.41	0.5 U	0.5 U	11	0.5 U
CM-VE-12		17.5	02/14/07	2007Q1	15:48	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	4.33	0.5 U	0.5 U	8.5	0.5 U
CM-VE-12		17.5	09/14/07	2007Q3	11:47	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.75	1 U	1 U	3.44	1 U
CM-VE-12		17.5	02/29/08	2008Q1	13:58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.7	5.73	0.5 U	0.5 U	18.9	0.5 U
CM-VE-12		17.5	04/02/09	2009Q1	11:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.1	0.5 U	0.5 U	18	0.5 U
USA Intermediate Zone Monitoring Wells																			
CM-MW-01d-121		121	06/08/06	2006Q2	14:00	0.5 U	0.82	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	6.72	16.4	0.5 U	0.5 U	20.7	0.5 U
CM-MW-01d-121		121	09/12/06	2006Q3	18:52	0.5 U	0.61	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.56	11.1	0.5 U	0.5 U	15.2	0.5 U

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1- Trichloroethane (ug/l)	1,1- Dichloroethane (ug/l)	1,1- Dichloroethene (ug/l)	1,2- Dichloroethane (ug/l)	Bromo- dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2- Dichloroethene (ug/l)	Tetra- chloroethene (ug/l)	Toluene (ug/l)	trans-1,2- Dichloroethene (ug/l)	Trichloro- ethene (ug/l)	Trichloro- fluoromethane (ug/L)
CM-MW-01d-121		121	02/10/07	2007Q1	14:45	0.5 U	0.69	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.23	12.2	0.5 U	0.5 U	16.3	0.5 U
CM-MW-01d-121		121	09/17/07	2007Q3	16:05	0.5 U	0.64	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.08	11.2	0.5 U	0.5 U	14.4	0.5 U
CM-MW-01d-121		121	03/07/08	2008Q1	11:10	0.5 U	0.62	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.75	12.1	0.5 U	0.5 U	15.2	0.5 U
CM-MW-01d-121		121	09/22/08	2008Q3	13:02	0.5 U	0.57	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.6	12	0.5 U	0.5 U	17	0.5 U
CM-MW-01d-121		121	04/03/09	2009Q1	14:35	0.5 U	0.66	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.2	14	0.5 U	0.5 U	20	0.5 U
CM-MW-01i		86	06/07/06	2006Q2	18:10	0.5 U	0.92	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	21.6	4.02	0.5 U	0.61	8.98	0.5 U
CM-MW-01i		86	02/10/07	2007Q1	13:50	0.5 U	0.72	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	22.5	2.5	0.5 U	0.5 U	7.36	0.5 U
CM-MW-01i		86	09/18/07	2007Q3	11:53	0.5 U	0.6	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	19.5	2.78	0.5 U	0.5 U	8.63	0.5 U
CM-MW-01i		86	12/12/07	2007Q4	13:42	0.5 UJ	0.5 J	0.5 UJ	0.5 UJ	0.5 UJ	1 UJ	0.5 UJ	0.5 UJ	15.4 J	3.27 J	0.5 UJ	0.5 UJ	7.63 J	0.5 UJ
CM-MW-01i		86	02/28/08	2008Q1	15:02	0.5 U	0.58	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	16.6	2.87	0.5 U	0.5 U	6.97	0.5 U
CM-MW-01i		86	06/18/08	2008Q2	15:15	0.5 U	0.68	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	12.3	8.88	0.5 U	0.5 U	9.98	0.5 U
CM-MW-01i		86	09/19/08	2008Q3	13:44	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	15	4.1	0.5 U	0.5 U	9.5	0.5 U
CM-MW-01i		86	04/06/09	2009Q1	12:43	0.5 U	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	9.3	6.2	0.5 U	0.5 U	8.7	0.5 U
CM-MW-03d-060		60	06/07/06	2006Q2	15:40	0.52	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.62	5.57	0.5 U	0.5 U	18.4	0.5 U
CM-MW-03d-060		60	09/11/06	2006Q3	18:45	0.63	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.18	6.66	0.5 U	0.5 U	15.4	0.5 U
CM-MW-03d-060		60	02/11/07	2007Q1	12:40	0.56	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.06	7	0.5 U	0.5 U	15.2	0.5 U
CM-MW-03d-060		60	09/18/07	2007Q3	13:16	0.75	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.25	7.53	0.5 U	0.5 U	17.1	0.5 U
CM-MW-03d-060		60	03/08/08	2008Q1	13:28	0.56	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.28	7.42	0.5 U	0.5 U	17.5	0.5 U
CM-MW-03d-060		60	12/09/08	2008Q4	11:22	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	5.1	0.53	0.5 U	16	0.5 U
CM-MW-03d-100		100	06/07/06	2006Q2	15:15	0.53	0.71	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	9.5	16.6	0.5 U	0.5 U	15.2	0.5 U
CM-MW-03d-100		100	09/11/06	2006Q3	18:22	0.75	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.55	6.58	0.5 U	0.5 U	19.8	0.5 U
CM-MW-03d-100		100	02/11/07	2007Q1	13:03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.33	5.7	0.5 U	0.5 U	14.5	0.5 U
CM-MW-03d-100		100	09/18/07	2007Q3	13:45	0.62	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.95	3.99	0.5 U	0.5 U	19.6	0.5 U
CM-MW-03d-100		100	03/08/08	2008Q1	13:06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.76	4.36	0.5 U	0.5 U	9.75	0.5 U
CM-MW-03d-100	DP	100	09/22/08	2008Q3	15:32	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.9	4.3	0.5 U	0.5 U	11	0.5 U
CM-MW-03d-100	D	100	09/22/08	2008Q3	0:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8	4.4	0.5 U	0.5 U	11	0.5 U
CM-MW-03d-100	DP	100	04/06/09	2009Q1	13:25	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.9	3.5	0.5 U	0.5 U	4.5	0.5 U
CM-MW-03d-100	D	100	04/06/09	2009Q1	0:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.1	4.3	0.5 U	0.5 U	5.3	0.5 U
CM-MW-04i		90	02/12/07	2007Q1	16:45	2.72	1.77	1.71	0.5 U	0.5 U	1 U	0.5 U	0.5 U	7.17	2.97	0.5 U	0.5 U	35.7	0.5 U
CM-MW-04i		90	09/17/07	2007Q3	13:44	2.54	2.79	1.74	0.5 U	0.5 U	1 U	0.5 U	0.5 U	9.64	0.5 U	0.5 U	0.5 U	8.03	0.5 U
CM-MW-04i		90	03/05/08	2008Q1	16:55	4.2	3.53	3.09	0.5 U	0.5 U	1 U	0.5 U	0.5 U	14.3	1.26	0.5 U	0.5 U	34.7	0.5 U
CM-MW-04i		90	09/30/08	2008Q3	16:08	9.6	3.9	4.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	17	5.6	0.5 U	0.5 U	130	0.5 U
CM-MW-04i		90	12/09/08	2008Q4	9:29	6.7	5.3	6.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	23	0.84	0.5	0.5 U	89	0.5 U
CM-MW-04i		90	03/30/09	2009Q1	14:15	9	6.3	6.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	22	0.82	0.5 U	0.5 U	110	0.5 U
CM-MW-05i		90	06/01/06	2006Q2	11:15	0.69	0.99	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	11.9	24.1	0.5 U	0.5 U	19.2	0.5 U
CM-MW-05i		90	09/08/06	2006Q3	16:50	1.18	0.68	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.41	12.4	0.5 U	0.5 U	9.36	0.5 U
CM-MW-05i		90	02/12/07	2007Q1	17:45	0.71	0.65	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	5.21	13.1	0.5 U	0.5 U	13.6	0.5 U
CM-MW-05i		90	09/17/07	2007Q3	12:00	0.76	0.63	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.18	11.2	0.5 U	0.5 U	9.73	0.5 U
CM-MW-05i		90	03/05/08	2008Q1	16:00	0.53	0.58	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	6.46	11.2	0.5 U	0.5 U	14.9	0.5 U
CM-MW-05i		90	09/18/08	2008Q3	16:35	0.5 U	0.56	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.2	11	0.5 U	0.5 U	11	0.5 U
CM-MW-05i		90	03/31/09	2009Q1	11:20	0.5 U	0.73	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7.6	12	0.5 U	0.5 U	13	0.5 U
CM-MW-07i		104	09/08/06	2006Q3	12:42	1.57	0.56	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.25	10.8	0.5 U	0.5 U	18.8	0.5 U
CM-MW-07i		104	02/16/07	2007Q1	11:50	1.67	0.57	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.8	7.72	0.5 U	0.5 U	15.1	0.5 U
CM-MW-07i		104	09/12/07	2007Q3	15:49	1.57 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.11 J	10.3 J	1 U	1 U	21.4 J	1 U
CM-MW-07i		104	12/12/07	2007Q4	15:20	1.14 J	0.5 J	0.5 UJ	0.5 UJ	0.5 UJ	1 UJ	0.5 UJ	0.5 UJ	3.03 J	9.54 J	0.5 UJ	0.5 UJ	18.2 J	0.5 UJ
CM-MW-07i		104	03/06/08	2008Q1	12:05	2.13	0.81	0.5 U	0.5 U	2.32	1 U	0.5 U	0.5 U	2.21	8.52	0.5 U	0.5 U	18.8	0.5 U
CM-MW-07i		104	09/18/08	2008Q3	10:14	1.4	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3	9.9	0.5 U	0.5 U	21	0.5 U
CM-MW-07i		104	03/30/09	2009Q1	11:25	1.9	0.71	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.2	7.9	0.5 U	0.5 U	20	0.5 U
CM-MW-15s		52	06/07/06	2006Q2	17:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	2.69	0.62	5.84	0.5 U	0.5 U	24.5	0.5 U
CM-MW-15s	DP	52	09/09/06	2006Q3	13:52	0.6	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.45	1	12	0.5 U	0.5 U	53.6	0.5 U
CM-MW-15s	D	52	09/09/06	2006Q3	0:00	0.63	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.61	1.09	12.9	0.5 U	0.5 U	57.3	0.5 U

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1-Trichloroethane (ug/l)	1,1-Dichloroethane (ug/l)	1,1-Dichloroethene (ug/l)	1,2-Dichloroethane (ug/l)	Bromo-dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2-Dichloroethene (ug/l)	Tetra-chloroethene (ug/l)	Toluene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloro-ethene (ug/l)	Trichloro-fluoromethane (ug/L)
CM-MW-15s		52	02/13/07	2007Q1	9:47	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.61	0.5 U	4.83	0.5 U	0.5 U	19.1	0.5 U
CM-MW-15s		52	05/24/07	2007Q2	10:42	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.53 UB	0.82	8.24	0.5 U	0.5 U	31.1	0.5 U
CM-MW-15s		52	09/13/07	2007Q3	19:31	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.63	1 U	1 U	23.4	1 U
CM-MW-15s		52	02/28/08	2008Q1	11:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	2.9	1 U	0.5 U	12.8	0.5 U
CM-MW-15s		52	09/19/08	2008Q3	12:14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.73	0.5 U	3.4	0.5 U	0.5 U	14	0.5 U
CM-MW-15s		52	04/01/09	2009Q1	13:10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57	0.5 U	2.5	0.5 U	0.5 U	7.4	0.5 U
CM-MW-17i	DP	90	09/14/07	2007Q3	14:37	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.49 J	5.87 J	1 U	1 U	14.9 J	1 U
CM-MW-17i	D	90	09/14/07	2007Q3	0:00	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.6 J	6.23 J	1 U	1 U	15.4 J	1 U
CM-MW-17i		90	02/29/08	2008Q1	13:28	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.95	5.41	0.5 U	0.5 U	6.82	0.5 U
CM-MW-17i		90	09/19/08	2008Q3	10:44	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.4	8.9	0.5 U	0.5 U	10	0.5 U
CM-MW-17i		90	04/02/09	2009Q1	12:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.9	7.8	0.5 U	0.5 U	5.3	0.5 U
CM-MW-18i		93	02/13/07	2007Q1	14:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6.76	0.5 U
CM-MW-18i		93	12/11/07	2007Q4	12:42	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.23	0.5 U
CM-MW-18i		93	03/04/08	2008Q1	11:55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6.23	0.5 U
CM-MW-18i		93	03/25/09	2009Q1	10:35	0.55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7.7	0.5 U
CM-MW-19i	DP	89	09/11/06	2006Q3	12:38	0.55	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.7	6.78	0.5 U	0.5 U	10.3	0.5 U
CM-MW-19i	D	89	09/11/06	2006Q3	0:00	0.55	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.77	6.93	0.5 U	0.5 U	10.4	0.5 U
CM-MW-19i		89	02/14/07	2007Q1	11:33	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.06	3.36	0.5 U	0.5 U	8.39	0.5 U
CM-MW-19i		89	09/17/07	2007Q3	15:19	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.97	3.04	0.5 U	0.5 U	7.26	0.5 U
CM-MW-19i		89	03/04/08	2008Q1	14:25	0.5	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.01	3.69	0.5 U	0.5 U	10.2	0.5 U
CM-MW-19i		89	09/16/08	2008Q3	11:43	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7	6.9	0.5 U	0.5 U	12	0.5 U
CM-MW-19i		89	03/27/09	2009Q1	13:15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.2	9	0.5 U	0.5 U	13	0.5 U
CM-MW-20i		94	02/13/07	2007Q1	10:23	3.3	5.06	3.26	0.5 U	0.5 U	1 U	0.5 U	0.5 U	20.5	0.5 U	0.5 U	0.5 U	2.6	0.5 U
CM-MW-20i		94	03/06/08	2008Q1	15:40	1.78	3.32	1.68	1 U	1 U	2 U	1 U	1 U	13.2	1 U	1 U	1 U	3.7	1 U
CM-MW-20i		94	12/09/08	2008Q4	15:30	2.4	3.4	2.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20	0.5 U	0.65	0.5 U	12	0.5 U
CM-MW-20i		94	04/06/09	2009Q1	10:55	2.3	2.9	2.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	19	0.5 U	0.5 U	0.5 U	17	0.5 U
CM-MW-21i		115	02/16/07	2007Q1	10:20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-21i		115	03/06/08	2008Q1	14:30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	2.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.72	0.5 U
CM-MW-21i		115	04/06/09	2009Q1	12:15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-22s		40	06/06/06	2006Q2	18:08	0.57	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.89	0.8	17.2	0.5 U	0.5 U	30	0.5 U
CM-MW-22s		40	09/09/06	2006Q3	15:50	0.5	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	16.3	0.5 U	0.5 U	17.2	0.5 U
CM-MW-22s		40	02/10/07	2007Q1	12:55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8	0.86	27.3	0.5 U	0.5 U	36.1	0.5 U
CM-MW-22s		40	09/18/07	2007Q3	11:06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	11.1	0.5 U	0.5 U	11.2	0.5 U
CM-MW-22s		40	12/12/07	2007Q4	14:10	0.51 J	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	1 UJ	0.5 UJ	0.67 J	1.04 J	17.4 J	0.5 UJ	0.5 UJ	26.8 J	0.5 UJ
CM-MW-22s	DP	40	02/28/08	2008Q1	15:52	0.57	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.2	1.23	22.4	0.5 U	0.5 U	43	0.5 U
CM-MW-22s	D	40	02/28/08	2008Q1	0:00	0.57	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1.22	1.21	22.3	0.5 U	0.5 U	42.6	0.5 U
CM-MW-22s		40	09/19/08	2008Q3	13:07	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.85	1.1	20	0.5 U	0.5 U	37	0.5 U
CM-MW-23i		97	06/06/06	2006Q2	14:55	1.76	1.61	1.2	0.5 U	0.5 U	1 U	0.5 U	0.5 U	13.1	13.7	5.96	0.5 U	31.3	0.5 U
CM-MW-23i		97	09/08/06	2006Q3	13:56	1.54	1.02	0.65	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8.38	13.1	6.26	0.5 U	24.7	0.5 U
CM-MW-23i		97	02/13/07	2007Q1	12:08	1.47	1.29	1.06	0.5 U	0.5 U	1 U	0.5 U	0.5 U	11.4	14.4	8.96	0.5 U	28.6	0.5 U
CM-MW-23i		97	09/13/07	2007Q3	10:20	1.34 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6.66 J	16.2 J	8.3 J	1 U	26.3 J	1 U
CM-MW-23i		97	03/04/08	2008Q1	15:58	1.35	1.1	0.87	0.5 U	0.5 U	1 U	0.5 U	0.5 U	9.12	15.4	0.5 U	0.5 U	26.8	0.5 U
CM-MW-23i		97	09/17/08	2008Q3	15:28	1.1	0.89	0.85	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7.3	15	0.5 U	0.5 U	24	0.5 U
CM-MW-23i		97	03/30/09	2009Q1	12:00	2.2	1.8	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	12	13	0.5 U	0.5 U	40	0.5 U
CM-MW-24i		93	06/05/06	2006Q2	16:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.82	0.5 U
CM-MW-24i		93	09/08/06	2006Q3	16:05	0.56	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.54	0.5 U	0.5 U	0.5 U	0.9	0.5 U
CM-MW-24i		93	02/13/07	2007Q1	12:58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.08	0.5 U
CM-MW-24i		93	09/13/07	2007Q3	11:59	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.39 J	1 U
CM-MW-24i		93	12/11/07	2007Q4	10:53	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5	0.5 U	0.5 U	0.5 U	0.98	0.5 U
CM-MW-24i		93	03/04/08	2008Q1	13:35	0.61	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.79	0.5 U	0.5 U	0.5 U	1.53	0.5 U
CM-MW-24i	DP	93	09/17/08	2008Q3	13:01	0.53	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6	0.5 U

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1-Trichloroethane (ug/l)	1,1-Dichloroethane (ug/l)	1,1-Dichloroethene (ug/l)	1,2-Dichloroethane (ug/l)	Bromo-dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2-Dichloroethene (ug/l)	Tetra-chloroethene (ug/l)	Toluene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloro-ethene (ug/l)	Trichloro-fluoromethane (ug/L)
CM-MW-24i	D	93	09/17/08	2008Q3	0:00	0.52	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6	0.5 U
CM-MW-24i		93	03/25/09	2009Q1	14:00	0.59	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5	0.5 U
CM-MW-28USA-050		50	06/02/06	2006Q2	13:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.53	0.5 U	0.5 U	5.07	0.5 U
CM-MW-28USA-050		50	09/07/06	2006Q3	11:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.66	0.5 U
CM-MW-28USA-050		50	12/08/08	2008Q4	11:52	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4	0.5 U
CM-MW-28USA-050		50	03/24/09	2009Q1	13:10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5	0.5 U
CM-MW-28USA-120.5		120.5	06/02/06	2006Q2	12:10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.84	1.7	0.5 U	6.8	0.5 U
CM-MW-28USA-120.5		120.5	09/07/06	2006Q3	10:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.66	0.86	0.5 U	5.53	0.5 U
CM-MW-28USA-120.5		120.5	02/14/07	2007Q1	14:08	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.72	0.88	0.5 U	6.55	0.5 U
CM-MW-28USA-120.5		120.5	09/12/07	2007Q3	10:33	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.67	1.42	0.5 U	6.6	0.5 U
CM-MW-28USA-120.5		120.5	02/26/08	2008Q1	15:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.66	0.51	0.5 U	6.56	0.5 U
CM-MW-28USA-120.5		120.5	09/15/08	2008Q3	15:16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.65	0.5 U	0.5 U	8	0.5 U
CM-MW-28USA-120.5		120.5	03/24/09	2009Q1	11:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.62	0.5 U	0.5 U	7.5	0.5 U
CM-MW-29USA-060.5		60.5	06/06/06	2006Q2	11:15	0.53	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.36	6.42	2.03	0.5 U	10.7	0.5 U
CM-MW-29USA-060.5		60.5	09/08/06	2006Q3	11:47	0.54	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.47	4.95	0.5 U	0.5 U	9.43	0.5 U
CM-MW-29USA-060.5		60.5	02/15/07	2007Q1	12:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.33	4.62	0.5 U	0.5 U	6.74	0.5 U
CM-MW-29USA-060.5		60.5	09/11/07	2007Q3	11:03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.52	5.42	0.5 U	0.5 U	6.7	0.5 U
CM-MW-29USA-060.5		60.5	02/27/08	2008Q1	12:12	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.36	4.98	0.5 U	0.5 U	8.17	0.5 U
CM-MW-29USA-060.5		60.5	09/15/08	2008Q3	13:14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5	4.4	0.5 U	0.5 U	8.3	0.5 U
CM-MW-29USA-060.5		60.5	03/23/09	2009Q1	14:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6	5.6	0.5 U	0.5 U	11	0.5 U
CM-MW-29USA-100		100	06/06/06	2006Q2	11:45	0.64	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.29	6.77	4.41	0.5 U	12.7	0.5 U
CM-MW-29USA-100		100	09/08/06	2006Q3	11:22	0.83	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.83	7.78	1.11	0.5 U	13.4	0.5 U
CM-MW-29USA-100		100	02/15/07	2007Q1	13:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.69	9.31	0.5 U	0.5 U	12.8	0.5 U
CM-MW-29USA-100		100	09/11/07	2007Q3	10:27	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.66	6.84	0.5 U	0.5 U	9.5	0.5 U
CM-MW-29USA-100		100	02/27/08	2008Q1	13:10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.54	7.23	0.5 U	0.5 U	10.5	0.5 U
CM-MW-29USA-100		100	09/15/08	2008Q3	12:03	0.55	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.2	7.3	0.5 U	0.5 U	14	0.5 U
CM-MW-29USA-100		100	03/23/09	2009Q1	13:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.2	6.3	0.5 U	0.5 U	13	0.5 U
CM-MW-29USA-140.5		140.5	06/06/06	2006Q2	13:26	0.61	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.2	6.18	3.65	0.5 U	9.67	0.5 U
CM-MW-29USA-140.5		140.5	09/08/06	2006Q3	10:50	0.86	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.72	6.03	1.81	0.5 U	12	0.5 U
CM-MW-29USA-140.5		140.5	02/15/07	2007Q1	13:50	0.62	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.95	9.26	1.02	0.5 U	13.4	0.5 U
CM-MW-29USA-140.5		140.5	09/11/07	2007Q3	9:55	0.53	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.32	7.82	0.83	0.5 U	11.5	0.5 U
CM-MW-29USA-140.5		140.5	02/27/08	2008Q1	14:52	0.68	0.5	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	5.03	10	0.5 U	0.5 U	14.1	0.5 U
CM-MW-29USA-140.5		140.5	09/15/08	2008Q3	13:45	0.66	0.58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.2	9	0.5 U	0.5 U	15	0.5 U
CM-MW-29USA-140.5		140.5	03/23/09	2009Q1	13:25	0.5 U	0.61	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6	7.5	0.56	0.5 U	13	0.5 U
CM-MW-Ui		115	03/05/08	2008Q1	11:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 U	11.4	0.5 U
CM-MW-Ui		115	09/22/08	2008Q3	11:32	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75	0.5 U	0.5 U	0.5 U	0.5 U	13	0.5 U
CM-MW-Ui		115	04/16/09	2009Q1	10:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.73	0.5 U	0.5 U	0.5 U	0.5 U	13	0.5 U
USA Deep Zone Monitoring Wells																			
CM-MW-01d-161		161	06/08/06	2006Q2	13:32	0.56	0.81	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	9.36	8.21	0.5 U	0.5 U	17.4	0.5 U
CM-MW-01d-161		161	09/12/06	2006Q3	18:24	0.5 U	0.56	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	6.95	8.15	0.5 U	0.5 U	14.7	0.5 U
CM-MW-01d-161		161	02/10/07	2007Q1	15:25	0.5 U	0.59	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	7.19	9.17	0.5 U	0.5 U	14.8	0.5 U
CM-MW-01d-161		161	09/17/07	2007Q3	16:33	0.5 U	0.65	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.02	10.7	0.5 U	0.5 U	14.4	0.5 U
CM-MW-01d-161	DP	161	03/07/08	2008Q1	11:50	0.5 U	0.67	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	7.04	9.75	0.5 U	0.5 U	15.1	0.5 U
CM-MW-01d-161	D	161	03/07/08	2008Q1	0:00	0.5 U	0.68	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	7.03	9.77	0.5 U	0.5 U	15.2	0.5 U
CM-MW-01d-161		161	09/22/08	2008Q3	13:27	0.5 U	0.67	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7.8	9.2	0.5 U	0.5 U	16	0.5 U
CM-MW-01d-161		161	04/03/09	2009Q1	14:50	0.5	0.69	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.4	9.6	0.5 U	0.5 U	18	0.5 U
CM-MW-01d-194		194	06/08/06	2006Q2	12:55	0.67	0.77	0.5	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8.08	6.7	0.5 U	0.5 U	16.5	0.5 U
CM-MW-01d-194		194	09/12/06	2006Q3	17:47	0.54	0.61	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	6.79	5.16	0.5 U	0.5 U	13.8	0.5 U
CM-MW-01d-194		194	02/10/07	2007Q1	16:15	1.14	0.98	0.89	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8.33	5.67	0.5 U	0.5 U	21	0.5 U
CM-MW-01d-194		194	09/18/07	2007Q3	10:13	0.59	0.71	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8	5.83	0.5 U	0.5 U	15.4	0.5 U
CM-MW-01d-194		194	03/07/08	2008Q1	12:37	1.28	1.06	0.93	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8.06	5.65	0.5 U	0.5 U	20.1	0.5 U

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1-Trichloroethane (ug/l)	1,1-Dichloroethane (ug/l)	1,1-Dichloroethene (ug/l)	1,2-Dichloroethane (ug/l)	Bromo-dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2-Dichloroethene (ug/l)	Tetra-chloroethene (ug/l)	Toluene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloro-ethene (ug/l)	Trichloro-fluoromethane (ug/L)
CM-MW-01d-194		194	09/22/08	2008Q3	13:55	0.64	0.81	0.53	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7.6	6.2	0.5 U	0.5 U	18	0.5 U
CM-MW-01d-194		194	04/03/09	2009Q1	15:40	0.88	0.95	0.67	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.7	6.9	0.5 U	0.5 U	20	0.5 U
CM-MW-01d-224	DP	224	06/08/06	2006Q2	12:05	3.21	1.57	1.92	0.5 U	0.5 U	1 U	0.5 U	0.5 U	9.35	6.27	0.5 U	0.5 U	33.3	1.07
CM-MW-01d-224	D	224	06/08/06	2006Q2	9:00	2.93	1.49	1.76	0.5 U	0.5 U	1 U	0.5 U	0.5 U	9.14	5.95	0.5 U	0.5 U	32.2	0.94
CM-MW-01d-224		224	09/12/06	2006Q3	17:00	2.55	1.31	1.62	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8.02	4.87	0.5 U	0.5 U	27.2	0.65
CM-MW-01d-224		224	02/10/07	2007Q1	17:00	1.96	1.14	1.53	0.5 U	0.5 U	1 U	0.5 U	0.5 U	7.73	5.36	0.5 U	0.5 U	26.3	0.61
CM-MW-01d-224		224	09/18/07	2007Q3	10:31	2.27	1.34	1.54	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8.47	5.04	0.5 U	0.5 U	27.4	0.61
CM-MW-01d-224		224	03/07/08	2008Q1	13:35	2.17	1.3	1.46	0.5 U	0.5 U	1 U	0.5 U	0.5 U	7.56	5.41	0.5 U	0.5 U	27	0.66
CM-MW-01d-224		224	09/22/08	2008Q3	14:28	2.2	1.4	1.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.2	4.7	0.5 U	0.5 U	29	0.7
CM-MW-01d-224		224	04/03/09	2009Q1	16:05	2.7	1.5	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	9	5.4	0.5 U	0.5 U	31	0.89
CM-MW-02d		225	06/07/06	2006Q2	10:48	4.01	1.98	2.22	0.5 U	0.5 U	1 U	0.5 U	0.5 U	11.3	6.98	0.5 U	0.5 U	37.1	1.43
CM-MW-02d		225	09/11/06	2006Q3	13:50	2.36	1.15	1.49	0.5 U	0.5 U	1 U	0.5 U	0.5 U	7.25	4.46	0.5 U	0.5 U	23.2	0.74
CM-MW-02d		225	02/12/07	2007Q1	14:28	1.86	0.98	1.23	0.5 U	0.5 U	1 U	0.5 U	0.5 U	6.28	4.52	0.5 U	0.5 U	21	0.75
CM-MW-02d		225	03/03/08	2008Q1	13:50	1.92	1.1	1.15	0.5 U	0.5 U	1 U	0.5 U	0.5 U	5.78	3.94	0.5 U	0.5 U	20.1	0.63
CM-MW-02d		225	04/01/09	2009Q1	10:50	1.8	1.2	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6.6	5.1	0.5 U	0.5 U	23	0.75
CM-MW-03d-141		141	06/07/06	2006Q2	14:48	0.5 U	0.6	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	6.24	7.55	0.5 U	0.5 U	12.6	0.5 U
CM-MW-03d-141		141	09/11/06	2006Q3	17:52	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.33	6	0.5 U	0.5 U	8.98	0.5 U
CM-MW-03d-141		141	02/11/07	2007Q1	13:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.93	6.27	0.5 U	0.5 U	8.01	0.5 U
CM-MW-03d-141	DP	141	09/18/07	2007Q3	14:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.73	6.15	0.5 U	0.5 U	10.1	0.5 U
CM-MW-03d-141	D	141	09/18/07	2007Q3	0:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.76	6.01	0.5 U	0.5 U	9.7	0.5 U
CM-MW-03d-141		141	03/08/08	2008Q1	12:44	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.79	6.3	0.5 U	0.5 U	7.85	0.5 U
CM-MW-03d-141		141	09/22/08	2008Q3	16:01	0.5 U	0.75	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8	6.2	0.5 U	0.5 U	14	0.5 U
CM-MW-03d-141		141	04/06/09	2009Q1	13:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.4	5.6	0.5 U	0.5 U	11	0.5 U
CM-MW-03d-181		181	06/07/06	2006Q2	14:10	0.76	0.59	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	5.13	4.13	0.5 U	0.5 U	13.3	0.5 U
CM-MW-03d-181		181	09/11/06	2006Q3	17:15	0.91	0.55	0.51	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.55	2.94	0.5 U	0.5 U	12.2	0.5 U
CM-MW-03d-181		181	02/12/07	2007Q1	12:18	0.85	0.5 U	0.55	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.25	2.97	0.5 U	0.5 U	12.3	0.5 U
CM-MW-03d-181		181	09/18/07	2007Q3	14:27	1.05	0.63	0.54	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.83	3.11	0.5 U	0.5 U	13	0.5 U
CM-MW-03d-181	DP	181	03/08/08	2008Q1	12:12	0.81	0.51	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.28	3.18	0.5 U	0.5 U	12.1	0.5 U
CM-MW-03d-181	D	181	03/08/08	2008Q1	0:00	0.86	0.54	0.57	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.23	3.22	0.5 U	0.5 U	12	0.5 U
CM-MW-03d-181		181	09/22/08	2008Q3	16:27	0.83	0.62	0.58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.8	2.7	0.5 U	0.5 U	13	0.5 U
CM-MW-03d-181		181	04/06/09	2009Q1	14:15	0.78	0.67	0.51	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5	3	0.5 U	0.5 U	13	0.5 U
CM-MW-03d-227		227	06/07/06	2006Q2	13:30	3.67	1.8	1.85	0.5 U	0.5 U	1 U	0.5 U	0.5 U	9.72	4.99	0.5 U	0.5 U	32.2	1.29
CM-MW-03d-227		227	09/11/06	2006Q3	16:25	2.61	1.32	1.7	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8.18	4.55	0.5 U	0.5 U	27	0.87
CM-MW-03d-227		227	02/12/07	2007Q1	13:16	2.74	1.51	2.02	0.5 U	0.5 U	1 U	0.5 U	0.5 U	9.38	4.83	0.5 U	0.5 U	30.4	1.14
CM-MW-03d-227		227	09/18/07	2007Q3	14:47	3.27	1.77	2.02	0.5 U	0.5 U	1 U	0.5 U	0.5 U	10.5	4.54	0.5 U	0.5 U	30.4	1.22
CM-MW-03d-227		227	03/08/08	2008Q1	11:30	2.5	1.36	1.71	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8.4	4.43	0.5 U	0.5 U	26.6	0.95
CM-MW-03d-227		227	09/22/08	2008Q3	16:59	2.4	1.6	1.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.7	3.6	0.5 U	0.5 U	28	0.95
CM-MW-03d-227		227	04/06/09	2009Q1	14:50	2.5	1.8	1.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.7	3.2	0.5 U	0.5 U	27	0.81
CM-MW-05d	DP	211.5	06/05/06	2006Q2	11:15	3.57	1.73	1.73	0.5 U	0.5 U	1 U	0.5 U	0.5 U	9.27	4.4	0.5 U	0.5 U	28.1	1.02
CM-MW-05d	D	211.5	06/05/06	2006Q2	0:00	3.09	1.62	1.74	0.5 U	0.5 U	1 U	0.5 U	0.5 U	8.99	4.18	0.5 U	0.5 U	26.5	0.82
CM-MW-05d		211.5	09/11/06	2006Q3	14:50	3.62	1.79	2.11	0.5 U	0.5 U	1 U	0.5 U	0.5 U	10.4	4.15	0.5 U	0.5 U	30.3	0.95
CM-MW-05d	DP	211.5	02/13/07	2007Q1	11:17	3.69	2.01	2.57	0.5 U	0.5 U	1 U	0.5 U	0.5 U	12.7	4.88	0.5 U	0.5 U	35.5	1.34
CM-MW-05d	D	211.5	02/13/07	2007Q1	0:00	3.64	1.93	2.58	0.5 U	0.5 U	1 U	0.5 U	0.5 U	11.8	5.25	0.5 U	0.5 U	36.5	1.41
CM-MW-05d		211.5	09/19/07	2007Q3	9:29	3.94	2.2	2.35	0.5 U	0.5 U	1 U	0.5 U	0.5 U	12.3	4.45	0.5 U	0.5 U	34.2	1.15
CM-MW-05d		211.5	09/18/08	2008Q3	17:29	3.7	2.4	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	13	4.4	0.5 U	0.5 U	35	1.4
CM-MW-05d	DP	211.5	03/31/09	2009Q1	11:50	4.5	2.7	2.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11	3.3	0.62	0.5 U	33	1.1
CM-MW-05d	D	211.5	03/31/09	2009Q1	0:00	4.5	2.7	2.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11	3.4	0.77	0.5 U	33	1.2
CM-MW-07d	DP	220	06/07/06	2006Q2	9:58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07d	D	220	06/07/06	2006Q2	12:00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07d		220	02/16/07	2007Q1	11:28	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-07d		220	03/06/08	2008Q1	13:11	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1.23	0.5 U	0.5 U	0.5 U

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1-Trichloroethane (ug/l)	1,1-Dichloroethane (ug/l)	1,1-Dichloroethene (ug/l)	1,2-Dichloroethane (ug/l)	Bromo-dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2-Dichloroethene (ug/l)	Tetra-chloroethene (ug/l)	Toluene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloro-ethene (ug/l)	Trichloro-fluoromethane (ug/L)
CM-MW-07d		220	03/30/09	2009Q1	10:43	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.9	0.5 U	0.88	0.5 U
CM-MW-18d		193.5	06/01/06	2006Q2	15:00	1.92	0.61	0.78	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.03	2.43	0.5 U	0.5 U	13.1	0.65
CM-MW-18d		193.5	09/11/06	2006Q3	11:15	1.48	0.5 U	0.71	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.79	1.76	0.5 U	0.5 U	10.8	0.5 U
CM-MW-18d		193.5	02/13/07	2007Q1	14:55	1.34	0.5 U	0.76	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.93	1.96	0.5 U	0.5 U	11.6	0.5 U
CM-MW-18d		193.5	09/12/07	2007Q3	13:01	1.38	0.55	0.69	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.9	2.03	0.5 U	0.5 U	10.6	0.51
CM-MW-18d		193.5	03/25/09	2009Q1	11:45	1.6	0.61	0.88	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6	1.1	0.5 U	0.5 U	11	0.55
CM-MW-19d		173	06/01/06	2006Q2	15:30	1.97	0.83	0.67	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.69	2	0.5 U	0.5 U	13	0.79
CM-MW-19d		173	09/11/06	2006Q3	12:03	1.88	0.74	0.88	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.01	1.81	0.5 U	0.5 U	12.7	0.62
CM-MW-19d		173	02/14/07	2007Q1	11:08	1.69	0.75	0.94	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.46	2.27	0.5 U	0.5 U	14.1	0.69
CM-MW-19d		173	09/12/07	2007Q3	18:26	2.04 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.99 J	2.12 J	1 U	1 U	14 J	1 U
CM-MW-19d		173	03/07/08	2008Q1	9:55	1.78	0.83	0.99	0.5 U	0.5 U	1 U	0.5 U	0.5 U	3.37	2.35	0.5 U	0.5 U	13.8	0.71
CM-MW-19d		173	09/16/08	2008Q3	14:19	1.6	0.79	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.1	2	0.5 U	0.5 U	13	0.73
CM-MW-19d	DP	173	03/27/09	2009Q1	13:45	1.9	0.85	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.4	2.4	0.5 U	0.5 U	15	0.77
CM-MW-19d	D	173	03/27/09	2009Q1	0:00	2	0.86	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.4	2.4	0.5 U	0.5 U	15	0.79
CM-MW-28USA-180		180	06/02/06	2006Q2	17:05	0.72	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	10.4	0.5 U	1.08	0.5 U
CM-MW-28USA-180		180	09/07/06	2006Q3	10:10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	9.29	0.5 U	1.71	0.5 U
CM-MW-28USA-180		180	02/14/07	2007Q1	13:46	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	9.37	0.5 U	2.14	0.5 U
CM-MW-28USA-180		180	09/12/07	2007Q3	9:43	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	13.1	0.5 U	3.02	0.5 U
CM-MW-28USA-180		180	02/26/08	2008Q1	15:50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	8.78	0.5 U	3.1	0.5 U
CM-MW-28USA-180		180	09/15/08	2008Q3	15:47	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	9.5	0.5 U	4.5	0.5 U
CM-MW-28USA-180		180	12/08/08	2008Q4	12:19	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	15	0.5 U	3.4	0.5 U
CM-MW-28USA-180		180	03/24/09	2009Q1	11:10	0.53	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	16	0.5 U	4.1	0.5 U
TGA Zone Monitoring Wells																			
CM-MW-10d		225	06/06/06	2006Q2	14:20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-10d		225	02/15/07	2007Q1	15:40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-10d		225	03/10/08	2008Q1	10:05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-10d		225	03/23/09	2009Q1	12:20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-27TGA		165	06/02/06	2006Q2	15:48	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1.85	0.5 U	0.5 U	0.5 U
CM-MW-27TGA		165	09/05/06	2006Q3	14:10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3.32	0.5 U	0.5 U	0.5 U
CM-MW-27TGA		165	02/15/07	2007Q1	10:35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1.82	0.5 U	0.5 U	0.5 U
CM-MW-27TGA		165	02/25/08	2008Q1	16:15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.69	0.5 U	0.5 U	0.5 U
CM-MW-27TGA		165	03/27/09	2009Q1	12:20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56	0.5 U	0.5 U	0.5 U
CM-MW-28TGA		206	06/01/06	2006Q2	13:30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	4.71	0.5 U	0.5 U	0.5 U
CM-MW-28TGA		206	09/11/06	2006Q3	10:25	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-MW-28TGA		206	02/14/07	2007Q1	12:20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9	0.5 U	0.5 U	0.5 U
CM-MW-28TGA		206	02/26/08	2008Q1	16:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.84	0.5 U	0.5 U	0.5 U
CM-MW-28TGA		206	03/24/09	2009Q1	13:45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.1	0.5 U	0.5 U	0.5 U
CM-MW-29TGA		155	06/06/06	2006Q2	10:38	0.93	0.7	0.6	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.87	5.98	0.5 U	0.5 U	14.4	0.5 U
CM-MW-29TGA		155	09/07/06	2006Q3	12:40	0.87	0.63	0.61	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.77	5.49	0.5 U	0.5 U	13.9	0.5 U
CM-MW-29TGA		155	02/15/07	2007Q1	12:05	0.91	0.64	0.71	0.5 U	0.5 U	1 U	0.5 U	0.5 U	5.32	7.06	0.5 U	0.5 U	17.5	0.5 U
CM-MW-29TGA		155	09/11/07	2007Q3	12:04	0.87	0.64	0.5	0.5 U	0.5 U	1 U	0.5 U	0.5 U	5.24	6.61	0.5 U	0.5 U	16	0.5 U
CM-MW-29TGA		155	02/27/08	2008Q1	11:32	0.95	0.65	0.71	0.5 U	0.5 U	1 U	0.5 U	0.5 U	4.91	7.6	0.5 U	0.5 U	16.5	0.5 U
CM-MW-29TGA		155	09/15/08	2008Q3	11:22	0.87	0.72	0.67	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.1	6.9	0.5 U	0.5 U	18	0.5 U
CM-MW-29TGA		155	03/23/09	2009Q1	12:45	0.92	0.72	0.82	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.5	8.4	0.5 U	0.5 U	20	0.5 U

Notes

Abbreviations

QC Code: D = field duplicate sample; DP = assoicated field sample (the duplicate pair); ASC - sample preserved with ascorbic acid; R = resampled

Water Quality Zones: USA = Unconsolidated Sedimentary Aquifer; TGA = Troutdale Gravel Aquifer

ft bgs - feet below ground surface

Sample Location ID	QC Code	Sample Depth (ft bgs)	Sample Date	Sampling Event/ Quarter	Sample Time	1,1,1-Trichloroethane (ug/l)	1,1-Dichloroethane (ug/l)	1,1-Dichloroethene (ug/l)	1,2-Dichloroethane (ug/l)	Bromo-dichloromethane (ug/l)	Bromoform (ug/L)	Carbon tetrachloride (ug/l)	Chloroform (ug/l)	cis-1,2-Dichloroethene (ug/l)	Tetra-chloroethene (ug/l)	Toluene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloro-ethene (ug/l)	Trichloro-fluoromethane (ug/L)

Miscellaneous

NA = Not applicable or not sampled

Table includes constituents present above detection limits in at least one well.

Groundwater samples were analyzed for VOCs using Method 8021B/8260B

Units

ug/l = Micrograms per liter

Data Qualifiers

U = Not detected at or above the method reporting limit.

UJ = Not detected at or above the method reporting limit. However, the method reporting limit value is uncertain.

UB - Result qualified as undetected due to a concentration less than 5 times the concentration detected in a QC blank.

J = The analyte was positively identified but the associated value is approximate.

N = Indicates an analyte has been tentatively identified but not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Table 2. Summary of Soil Analytical Results
Cadet Manufacturing Company
Port of Vancouver, Washington

Sample ID	Sample Depth (ft bgs)	Sample Date	QC Code	1,1,1-Trichloroethane (mg/kg)	Bromomethane (mg/kg)	Chloroform (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	Methylene chloride (mg/kg)	Tetrachloroethene (mg/kg)	Trichloroethene (mg/kg)
Cadet Facility Locations										
Cadet-01	3	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-01	15	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-02	3	08/12/98	DP	0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-02	3	08/12/98	D	0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-02	15	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-03	3	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-03	18	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-04	3	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-04	18	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-05	3	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-05	18	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-06	3	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-06	18	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-07	3	08/12/98		0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-07	18	08/12/98	DP	0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Cadet-07	18	08/12/98	D	0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
CM-C-01	5	10/15/99		0.1 U	0.5 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U
CM-C-02	7	10/15/99		0.1 U	0.5 U	0.1 U	0.1 U	0.5 U	0.1 U	0.025
CM-C-03	13	10/15/99		0.1 U	0.5 U	0.1 U	0.04	0.5 U	0.15	0.84
CM-C-04	9	06/09/00		0.1 U	0.1 U	0.038 U	0.1 U	0.5 U	0.15	0.21
CM-C-05	5	06/09/00		0.1 U	0.1 U	0.041 U	0.1 U	0.5 U	0.13	0.3
CM-C-05	9	06/09/00		0.1 U	0.1 U	0.041 U	0.076	0.5 U	0.75	2.9
CM-C-05	13	06/09/00		0.048	0.1 U	0.033 U	0.077	0.5 U	1.7	5.1
CM-C-05	17	06/09/00		0.1 U	0.1 U	0.044 U	0.069	0.5 U	0.16	0.93
CM-C-06	5	06/09/00		0.1 U	0.1 U	0.044 U	0.1 U	0.5 U	0.094	0.24
CM-C-06	9	06/09/00		0.27	0.1 U	0.44 U	0.17	0.5 U	0.59	4.8
CM-C-06	13	06/09/00		0.093	0.1 U	0.04 U	0.27	0.5 U	1.5	14
CM-C-06	17	06/09/00		0.1 U	0.1 U	0.038 U	0.075	0.5 U	0.27	1.1
CM-C-07	5	06/09/00		0.1 U	0.1 U	0.042	0.1 U	0.5 U	0.16	0.33
CM-C-07	13	06/09/00		0.1 UJ	0.1 UJ	0.5 UJ	0.041 J	0.5 UJ	0.76 J	2 J
CM-C-08	5	06/09/00		0.1 U	0.1 U	0.041 U	0.1 U	0.5 U	0.25	0.38
CM-C-08	13	06/09/00		0.019 J	0.1 UJ	0.5 UJ	0.025 J	0.5 UJ	1.2 J	1.5 J
CM-C-09	5	06/09/00		0.1 U	0.1 U	0.041 U	0.1 U	0.5 U	0.42	0.34
CM-C-09	13	06/09/00		0.1 UJ	0.1 UJ	0.5 UJ	0.1 UJ	0.5 UJ	1.1 J	0.68 J
CM-C-10	17	11/03/00		0.1 U	0.1 U	0.5 U	0.1 U	0.5 U	0.1 U	0.12
CM-C-11	17	11/03/00		0.1 UJ	0.1 UJ	0.5 UJ	0.1 UJ	0.5 UJ	0.1 UJ	0.067 J
CM-C-12	17	11/03/00		0.1 U	0.1 U	0.5 U	0.1 U	0.5 U	1.7	0.12
CM-C-13	17	11/10/00		0.1 U	0.1 U	0.5 U	0.1 U	0.5 U	0.038	0.2
CM-C-13A	13	02/24/01		0.001 U	0.00506 U	0.005 U	0.001 U	0.00792	0.00547	0.00588
CM-C-14	5	02/24/01		0.001 U	0.00717 U	0.005 U	0.001 U	0.00975	0.001 U	0.001 U
CM-C-14	13	02/24/01		0.001 U	0.00618 U	0.005 U	0.001 U	0.00967	0.001 U	0.00145
CM-C-16	13	02/24/01		0.001 U	0.0056	0.005 U	0.001 U	0.00983	0.00103	0.00385
CM-C-20	5	02/24/01		0.001 U	0.00515 U	0.005 U	0.001 U	0.0102	0.00142	0.00262

Sample ID	Sample Depth (ft bgs)	Sample Date	QC Code	1,1,1-Trichloroethane (mg/kg)	Bromomethane (mg/kg)	Chloroform (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	Methylene chloride (mg/kg)	Tetrachloroethene (mg/kg)	Trichloroethene (mg/kg)
CM-C-21	13	02/24/01		0.001 U	0.005 U	0.005 U	0.001 U	0.005 U	0.001 U	0.00133
CM-C-24	5	02/25/01		0.001 U	0.005 U	0.005 U	0.001 U	0.00903	0.001 U	0.001 U
CM-C-26	5	02/25/01		0.001 U	0.005 U	0.005 U	0.001 U	0.005 U	0.001 U	0.001 U
CM-C-30	14.75	07/11/02		0.05 U	0.5 U	0.05 U	0.05 U	0.5 U	0.05 U	0.232
CM-C-32	15.5	07/13/02		0.05 U	0.5 U	0.05 U	0.127	0.5 U	0.375	3.61
CM-GP-002	10	03/10/99		0.1 U	0.1 U	0.1 U	0.058	0.1 U	0.14	0.36
CM-GP-003	14	03/10/99		0.1 U	0.1 U	0.1 U	0.042	0.1 U	0.21	0.4
CM-GP-017	3.5	06/05/00		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U
CM-GP-018	3.5	06/05/00		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.043
CM-GP-018	11.5	06/05/00		0.1 UJ	0.1 UJ	0.5 UJ	0.1 UJ	0.5 UJ	0.034 J	0.083 J
CM-GP-019	7.5	06/05/00		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U
CM-GP-020	4.5	06/05/00		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U
CM-GP-021	3.5	06/05/00		0.1 U	0.1 U	0.1 U	0.068	0.5 U	0.049	0.15
CM-GP-021	11.5	06/05/00		0.1 UJ	0.1 UJ	0.5 UJ	0.042 J	0.5 UJ	0.15 J	0.22 J
CM-GP-022	3.5	06/05/00		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.023
CM-GP-022	11.5	06/05/00		0.1 UJ	0.1 UJ	0.5 UJ	0.01 UJ	0.5 UJ	0.035 J	0.048 J
CM-GP-072	16	03/16/01		0.1 U	0.5 U	0.5 U	0.1 U	0.5 U	0.15	0.1 U
CM-V-01	20	09/14/01		0.005 U	0.02 U	0.005 U	0.005 U	0.025 U	0.0197	0.0177
CM-V-03	12	09/14/01		0.1 U	0.5 U	0.1 U	0.1 U	0.5 U	0.28	0.476
CM-V-04	16	09/14/01		0.005 U	0.02 U	0.005 U	0.005 U	0.025 U	0.0188	0.0249
CM-V-05	15	09/14/01		0.005 U	0.02 U	0.005 U	0.005 U	0.025 U	0.00923	0.0142
NFVN Locations										
CM-FV-05	17	10/11/99		0.012 U	0.016 U	0.016 U	0.013 U	0.012 U	0.017 U	0.031
CM-FV-06	17	10/12/99		0.012 U	0.016 U	0.016 U	0.013 U	0.052	0.017 U	0.015 U
CM-FV-07	17	10/12/99		0.012 U	0.016 U	0.016 U	0.013 U	0.047	0.017 U	0.015 U
CM-FV-08	17	10/12/99		0.012 U	0.016 U	0.016 U	0.013 U	0.012 U	0.017 U	0.015 U
CM-FV-09	9	06/06/00		0.012 U	0.016 U	0.016 U	0.013 U	0.12 U	0.017 U	0.015 U
CM-FV-09	13	06/06/00		0.1 UJ	0.1 UJ	0.5 UJ	0.1 UJ	0.5 UJ	0.026 J	0.024 J
CM-FV-10	9	06/06/00		0.012 U	0.016 U	0.016 U	0.013 U	0.12 U	0.017 U	0.015 U
CM-FV-11	5	06/06/00		0.012 U	0.016 U	0.016 U	0.013 U	0.11 U	0.017 U	0.015 U
CM-FV-11	9	06/06/00		0.012 U	0.016 U	0.016 U	0.013 U	0.13 U	0.017 U	0.015 U
CM-FV-12	9	06/06/00		0.012 U	0.016 U	0.016 U	0.013 U	0.11 U	0.017 U	0.015 U
CM-FV-13	13	06/06/00		0.012 U	0.016 U	0.016 U	0.013 U	0.16 U	0.017 U	0.015 U

Notes

Units
mg/kg - milligrams per kilogram

Miscellaneous
ft bgs = feet below ground surface
QC Code: D = field duplicate sample; DP = associated field sample (the duplicate parent)
NA = Not applicable or not sampled
Soil samples were analyzed for VOCs using Method 8021B/8260B.

Data Qualifiers
U = Not detected at or above the method reporting limit.
UJ = Not detected at or above the method reporting limit. However, the method reporting limit value is uncertain.
J = The analyte was positively identified but the associated value is approximate.
N = Indicates an analyte has been tentatively identified but not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.
R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Table 3. Summary of Soil Gas Analytical Results
Cadet Manufacturing Company
Port of Vancouver, Washington

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-C-08	4		06/09/00	1000 U	1000 U	870	1000 U	1000 U	3800	150000	1000 U	220000	1000 U
CM-C-09	4		06/09/00	2000 U	2000 U	3100	2000 U	2000 U	6100	710000	2000 U	610000	2000 U
CM-C-10	4		11/03/00	5400	2000 U	4700	2000 U	2000 U	2100 J	46000	2000 U	520000	2000 U
CM-C-11	4		11/03/00	11000 J	10000 U	9300 J	10000 U	10000 U	230000	130000	10000 U	1300000	10000 U
CM-C-12	4		11/03/00	6800 J	5000 U	5000 J	5000 U	5000 U	6900 J	170000	5000 U	650000	5000 U
CM-C-13	4		11/03/00	30000 U	30000 U	30000 U	30000 U	30000 U	150000	220000	30000 U	1800000	30000 U
CM-FV-09	8		06/06/00	510	10 U	10 U	10 U	10 U	10 U	2300	10 U	1500	10 U
CM-FV-11	4		06/06/00	7.6	1 U	1 U	1 U	1 U	1 U	52	1 U	2.4	1 U
CM-FV-11	8		06/06/00	34	2 U	2 U	2 U	2 U	2 U	180	2 U	35	2 U
CM-FV-13	8		06/06/00	49	1 U	1 U	1 U	1 U	1 U	220	1 U	7.4	1 U
CM-FV-14	3		08/16/01	6.1	NA	2 U	NA	NA	2 U	24	NA	2 U	NA
CM-FV-15	3		08/16/01	91	NA	4 U	NA	NA	4 U	400	NA	63	NA
CM-FV-16	3		08/16/01	140	NA	10 U	NA	NA	10 U	590	NA	1300	NA
CM-FV-17	3		08/16/01	200 U	NA	200 U	NA	NA	200 U	200 U	NA	200 U	NA
CM-FV-18	3		08/16/01	20 U	NA	20 U	NA	NA	20 U	1900	NA	770	NA
CM-FV-19	3		08/16/01	900	NA	20 U	NA	NA	20 U	2000	NA	550	NA
CM-FV-20	3		08/16/01	37	NA	4 U	NA	NA	4 U	330	NA	260	NA
CM-FV-21	3		08/16/01	2 U	NA	2 U	NA	NA	2 U	16	NA	2 U	NA
CM-FV-21D	3		08/16/01	8.7	NA	2 U	NA	NA	2 U	170	NA	2 U	NA
CM-FV-22	3		08/16/01	1300	NA	10 U	NA	NA	10 U	900	NA	97	NA
CM-FV-22D	3		08/16/01	1400	NA	10 U	NA	NA	10 U	1100	NA	180	NA
CM-FV-23	3		08/16/01	130	NA	5 U	NA	NA	5 U	520	NA	440	NA
CM-FV-24	3		08/16/01	610	NA	10 U	NA	NA	10 U	1000	NA	390	NA
CM-FV-25	3		08/16/01	1.5	NA	1 U	NA	NA	1 U	7.7	NA	3.8	NA
CM-FV-26	3		08/16/01	340	NA	20 U	NA	NA	20 U	1300	NA	1700	NA
CM-FV-27	3		08/16/01	2000	NA	100 U	NA	NA	100 U	3200	NA	4300	NA
CM-FV-28	3		08/16/01	190	NA	4 U	NA	NA	4 U	550	NA	370	NA
CM-FV-29	3		08/16/01	5.5	NA	1 U	NA	NA	1 U	53	NA	2.6	NA
CM-FV-30	3		08/16/01	800	NA	20 U	NA	NA	20 U	1500	NA	930	NA
CM-FV-31	3		08/16/01	730	NA	20 U	NA	NA	20 U	2200	NA	2300	NA
CM-FV-32	3		08/16/01	1100	NA	20 U	NA	NA	20 U	2300	NA	3000	NA
CM-FV-33	3		08/16/01	9.1	NA	1 U	NA	NA	1 U	36	NA	2.2	NA
CM-FV-34	3		08/16/01	46	NA	4 U	NA	NA	4 U	240	NA	47	NA
CM-FV-35	3		08/16/01	23	NA	2 U	NA	NA	2 U	56	NA	2.8	NA
CM-SG-01-10	10		01/27/04	170	0.39 J	3.3	1.5 U	1.5 U	2	610	1.5 U	1200	1.5 U
CM-SG-01-10	10		03/30/04	200	20 U	20 U	20 U	20 U	20 U	1100	20 U	1600	20 U
CM-SG-01-10	10		05/05/04	200	5.8 U	11	5.8 U	3.8 UJ	2	1000	5.7 U	1800	3.7 U
CM-SG-01-10	10		06/04/04	240	6.2 U	6.1 U	6.2 U	4.1 U	6.1 U	1800	6.1 U	2400	3.9 U
CM-SG-01-10	10		07/15/04	200	26 U	26 U	26 U	26 U	26 U	1600	26 U	2400	26 U
CM-SG-01-10	10		08/18/04	230	41 U	38 J	41 U	41 U	41 U	2300	41 U	3300	41 U
CM-SG-01-10	10		09/15/04	190	2.5 U	3.5	2.5 U	2.5 U	0.68 J	1600	2.5 U	2100	2.5 U
CM-SG-01-10	10		11/22/04	110	11 U	11 U	11 U	14 U	11 U	1200	11 U	1400	6.9 U
CM-SG-01-10	10		02/11/05	88	2.4 U	0.99 J	2.4 U	2.4 U	0.51 J	730	2.4 U	790	2.4 U
CM-SG-01-10	10		06/23/05	110	16 U	16 U	16 U	16 U	16 U	1100	16 U	1200	16 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-SG-01-10	10	DP	08/30/05	120	13 U	13 U	13 U	13 U	13 U	1300	13 U	1400	13 U
CM-SG-01-10	10	D	08/30/05	110	26 U	26 U	26 U	26 U	26 U	1200	26 U	1200	26 U
CM-SG-01-10	10		11/07/05	75	2.1 J	8.1 J	12 U	12 U	12 U	1200	12 U	1000	12 U
CM-SG-01-10	10		06/02/06	86	13 U	13 U	13 U	13 U	24	990	13 U	680	13 U
CM-SG-01-10	10		02/08/07	51	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	610	7.4 U	270	7.4 U
CM-SG-01-10	10		09/14/07	66	17 U	17 U	17 U	17 U	17 U	1000	17 U	390	17 U
CM-SG-01-10	10	DP	12/11/07	48	5 U	5 U	5 U	5 U	5 U	660	5 U	250	5 U
CM-SG-01-10	10	D	12/11/07	42	2.4	1.2 U	1.2 U	1.2 U	1.2 U	120	1.2 U	150	1.2 U
CM-SG-01-10	10		02/26/08	9.1	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	110	2.7 U	37	2.7 U
CM-SG-01-10	10		03/27/09	23	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	400	1.3 U	120	1.3 U
CM-SG-01-15	15		01/27/04	250	1 J	3.3 J	5.9 U	5.9 U	9.6	1500	5.9 U	2600	5.9 U
CM-SG-01-15	15		03/30/04	170	40 U	40 U	40 U	40 U	40 U	1700	40 U	2700	40 U
CM-SG-01-15	15	DP	05/05/04	190	5.5 U	16	5.5 U	3.6 U	4.4	1200	5.4 U	2100	3.5 U
CM-SG-01-15	15	D	05/05/04	190	5.5 U	11	5.5 U	3.6 U	4.8	1200	5.4 U	2100	3.5 U
CM-SG-01-15	15		06/04/04	240	9.7 U	9.5 U	9.7 U	6.3 U	9.5 U	1800	9.5 U	2600	6.1 U
CM-SG-01-15	15		07/15/04	190	25 U	25 U	25 U	25 U	25 U	1500	25 U	2300	25 U
CM-SG-01-15	15		08/18/04	180	41 U	41 U	41 U	41 U	41 U	1400	41 U	2300	41 U
CM-SG-01-15	15		09/15/04	210	4.1 U	2.9 J	4.1 U	4.1 U	3.1 J	1700	4.1 U	2300	4.1 U
CM-SG-01-15	15		11/22/04	140	10 U	10 U	10 U	13 U	10 U	1600	10 U	2200	6.5 U
CM-SG-01-15	15		02/11/05	100	0.6 J	0.86 J	3 U	3 U	2 J	1000	3 U	1200	3 U
CM-SG-01-15	15		06/23/05	110	12 U	12 U	12 U	12 U	1 J	1100	12 U	1300	12 U
CM-SG-01-15	15		08/30/05	120	1.8 J	16 U	16 U	16 U	1.6 J	1200	16 U	1400	16 U
CM-SG-01-15	15		02/08/07	66	13 U	13 U	13 U	13 U	13 U	980	13 U	390	13 U
CM-SG-01-15	15		02/26/08	51	13 U	13 U	13 U	13 U	13 U	710	13 U	240	13 U
CM-SG-01-20	20		03/30/04	280	50 U	50 U	50 U	50 U	50 U	2600	50 U	4600	50 U
CM-SG-01-20	20		05/05/04	280	3.9	10	11 U	7.3 U	16	2600	11 U	4800	7.1 U
CM-SG-01-20	20		07/15/04	200	24 U	24 U	24 U	24 U	24 U	2000	24 U	2800	24 U
CM-SG-01-20	20		08/18/04	190	61 U	8.5 J	61 U	61 U	13 J	2000	61 U	3500	61 U
CM-SG-01-20	20		09/15/04	230	2.7 J	11	6.1 U	6.1 U	18	3500	6.1 U	5200	6.1 U
CM-SG-01-20	20		11/22/04	170	3.2	12 U	13 U	16 U	12	2200	12 U	3200	8 U
CM-SG-01-20	20		02/11/05	140	5.4 J	1.6 J	5.9 U	5.9 U	8.8	1700	5.9 U	2100	5.9 U
CM-SG-01-20	20		06/23/05	130	12 J	1.1 NJ	18 U	18 U	12 J	1500	18 U	1500	18 U
CM-SG-01-20	20		08/30/05	140	13 J	0.95 J	16 U	16 U	10 J	1800	16 U	1600	16 U
CM-SG-01-20	20		02/08/07	120	39	10 U	10 U	10 U	14	1900	10 U	420	10 U
CM-SG-01-20	20		09/14/07	110	27	19 U	19 U	19 U	19 U	1100	19 U	420	19 U
CM-SG-01-20	20		02/26/08	76	15	14 U	14 U	14 U	14 U	920	14 U	320	14 U
CM-SG-02-10	10		01/27/04	41	1.2 U	1.7	1.2 U	1.2 U	1.2 U	72	1.2 U	14	0.16 J
CM-SG-02-10	10		05/03/04	28	1.3 U	0.21 J	1.3 U	1.3 U	1.3 U	49	1.3 U	1.6	1.3 U
CM-SG-02-10	10		08/17/04	53	1.3 U	0.4 J	1.3 U	0.37 J	1.3 U	88	1.3 U	5.8	1.3 U
CM-SG-02-10	10		11/23/04	93	0.81 U	0.79 U	0.81 U	1.1 U	0.79 U	150	0.79 U	7.5 J	0.51 U
CM-SG-02-10	10	DP	02/11/05	35	1.2 U	1.4	1.2 U	1.2 U	1.2 U	64	1.2 U	1.4	1.2 U
CM-SG-02-10	10	D	02/11/05	36	1.2 U	0.9 J	1.2 U	1.2 U	1.2 U	65	1.2 U	1.2 J	1.2 U
CM-SG-02-10	10		06/23/05	32	1.3 U	0.079 NJ	1.3 U	0.16 NJ	0.3 NJ	76	1.3 U	2.6	1.3 U
CM-SG-02-10	10		02/09/07	5.9	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	20	1.3 U	1.3 U	1.3 U
CM-SG-02-10	10		09/13/07	12	1.4 U	3.3	1.4 U	1.4 U	1.4 U	46	1.4 U	5.1	1.4 U
CM-SG-02-10	10		03/05/08	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
CM-SG-02-10	10		03/26/09	3.4	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	16	1.3 U	3.7	1.3 U
CM-SG-02-15	15	DP	01/27/04	250	1.5 U	15	1.5 U	1.5 U	0.24 J	640	1.5 U	990	1.5 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-SG-02-15	15	D	01/27/04	270	1.5 U	17	1.5 U	1.5 U	0.24 J	700	1.5 U	1100	1.5 U
CM-SG-02-15	15		05/03/04	160	1.2 U	2.5	1.2 U	1.2 U	1.2 U	400	1.2 U	580	1.2 U
CM-SG-02-15	15		08/17/04	180	1.3 U	2.5	1.3 U	1.3 U	0.1 J	460	1.3 U	660	1.3 U
CM-SG-02-15	15	DP	11/23/04	270	3.9 U	3.8 U	3.9 U	5.4 U	3.8 U	750	3.8 U	1000 J	2.5 U
CM-SG-02-15	15	D	11/23/04	280	4 U	3.9 U	4 U	5.4 U	3.9 U	830	3.9 U	1100 J	2.5 U
CM-SG-02-15	15		02/11/05	170	1.2 U	7.7	1.2 U	1.2 U	0.12 J	500	1.2 U	610	1.2 U
CM-SG-02-15	15		06/23/05	140	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	470	6.2 U	460	6.2 U
CM-SG-02-15	15		02/09/07	15	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	79	1.3 U	30	1.3 U
CM-SG-02-15	15		03/05/08	30	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	150	1.6 U	36	1.6 U
CM-SG-02-20	20		05/03/04	270	2.5 U	7.6	2.5 U	2.5 U	0.48 J	620	2.5 U	1300	2.5 U
CM-SG-02-20	20		08/18/04	260	0.53 J	8.5	1.2 U	1.2 U	0.46 J	650	1.2 U	1300	1.2 U
CM-SG-02-20	20		11/23/04	230	8.1 U	10	8.1 U	10 U	7.9 U	790	7.9 U	1400	5.1 U
CM-SG-02-20	20		02/11/05	260	0.61 J	7.3	2.9 U	2.9 U	0.73 J	720	2.9 U	1200	2.9 U
CM-SG-02-20	20		06/23/05	210	12 U	12 U	12 U	12 U	12 U	650	12 U	1000	12 U
CM-SG-02-20	20		02/09/07	26	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	180	1.4 U	84	1.4 U
CM-SG-02-20	20		09/13/07	28	1.5 U	8	3.5	1.5 U	1.5 U	150	1.5 U	110	1.5 U
CM-SG-02-20	20		03/05/08	35	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	150	1.7 U	75	1.7 U
CM-SG-03-10	10		01/27/04	46	1.2 U	3.3	1.2 U	1.2 U	0.12 J	160	1.2 U	420	1.2 U
CM-SG-03-10	10		05/05/04	64	3.1 U	2.1	3.1 U	2 U	3 U	450	3 U	870	1.9 U
CM-SG-03-10	10		08/18/04	67	27 U	27 U	27 U	27 U	27 U	630	27 U	960	27 U
CM-SG-03-10	10		11/22/04	69	3.3 U	3.2 U	3.3 U	4.5 U	3.2 U	800	3.2 U	1100 J	2.1 U
CM-SG-03-10	10		02/10/05	35	1.2 U	1.7	1.2 U	1.2 U	0.12 J	340	1.2 U	490	1.2 U
CM-SG-03-10	10		06/23/05	64	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	560	8.5 U	860	8.5 U
CM-SG-03-10	10		11/07/05	54	2.6 U	2.6 U	2.6 U	2.6 U	0.24 J	640	2.6 U	820	2.6 U
CM-SG-03-10	10		06/05/06	53	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	430	6.5 U	660	6.5 U
CM-SG-03-10	10		02/09/07	30	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	360	1.3 U	430	1.3 U
CM-SG-03-10	10		09/14/07	37	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	540	4.8 U	580	4.8 U
CM-SG-03-10	10		12/10/07	34	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	580	4.8 U	570	4.8 U
CM-SG-03-10	10		03/05/08	29	13 U	13 U	13 U	13 U	13 U	370	13 U	380	13 U
CM-SG-03-10	10		03/26/09	19	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	260	1.3 U	250	1.3 U
CM-SG-03-15	15		01/27/04	65	0.27 J	4.2	1.2 U	1.2 U	1.1 J	410	1.2 U	940	1.2 U
CM-SG-03-15	15		05/05/04	64	2.8 U	1.6	2.8 U	1.8 U	1	530	2.7 U	1200	1.7 U
CM-SG-03-15	15		08/18/04	72	16 U	16 U	16 U	16 U	16 U	650	16 U	1500	16 U
CM-SG-03-15	15		11/22/04	57	8.1 U	7.9 U	8.1 U	10 U	7.9 U	760	7.9 U	1400	5.1 U
CM-SG-03-15	15		02/10/05	50	2.4 U	0.41 J	2.4 U	2.4 U	0.72 J	560	2.4 U	1000	2.4 U
CM-SG-03-15	15		06/23/05	65	13 U	13 U	13 U	13 U	13 U	610	13 U	1200	13 U
CM-SG-03-15	15		02/09/07	43	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	570	7.1 U	950	7.1 U
CM-SG-03-15	15		03/05/08	37	13 U	13 U	13 U	13 U	13 U	560	13 U	720	13 U
CM-SG-03-20	20		01/27/04	65	0.46 J	4.2	1.5 U	1.5 U	2.6	620	1.5 U	1400	1.5 U
CM-SG-03-20	20		05/05/04	75	5.5 U	5.4 U	5.5 U	3.6 U	2.8	710	5.4 U	2000	3.5 U
CM-SG-03-20	20	DP	08/18/04	72	17 U	17 U	17 U	17 U	3.1 J	680	17 U	1900	17 U
CM-SG-03-20	20	D	08/18/04	71	17 U	17 U	17 U	17 U	3.1 J	670	17 U	1800	17 U
CM-SG-03-20	20		11/22/04	68	10 U	10 U	10 U	14 U	10 U	850	10 U	1900	6.6 U
CM-SG-03-20	20		02/10/05	60	0.48 J	3.2	2.4 U	2.4 U	2.3 J	670	2.4 U	1400	2.4 U
CM-SG-03-20	20		06/23/05	68	18 U	18 U	18 U	18 U	1.5 J	690	18 U	1600	18 U
CM-SG-03-20	20		02/09/07	55	25 U	25 U	25 U	25 U	25 U	940	25 U	1500	25 U
CM-SG-03-20	20		09/14/07	50	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	800	9.3 U	1100	9.3 U
CM-SG-03-20	20		03/05/08	50	13 U	13 U	13 U	13 U	13 U	910	13 U	1400	13 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-SG-03-20	20		03/26/09	30	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	740	1.3 U	840	1.3 U
CM-SG-04-10	10		01/27/04	800	6 U	120	6 U	6 U	1.2 J	1900	6 U	1900	6 U
CM-SG-04-10	10		05/05/04	1500	7.6 U	58	7.6 U	5 U	7.5 U	2800	7.5 U	3100	4.8 U
CM-SG-04-10	10		06/07/04	1700	11 U	62	11 U	7.4 U	11 U	4000	11 U	3800	7.2 U
CM-SG-04-10	10		07/15/04	1000	12 U	59	12 U	12 U	12 U	2900	12 U	2600	12 U
CM-SG-04-10	10		08/18/04	1700	26 U	67	26 U	26 U	26 U	3500	26 U	3700	26 U
CM-SG-04-10	10		09/15/04	1600	6.1 U	83	6.1 U	6.1 U	1.5 J	4100	6.1 U	3600	6.1 U
CM-SG-04-10	10		11/22/04	360	6.5	11	25 U	32 U	40	2900	24 U	5500	16 U
CM-SG-04-10	10		02/11/05	750	6.1 U	23	6.1 U	6.1 U	0.73 J	790	6.1 U	1900	6.1 U
CM-SG-04-10	10		06/23/05	720	32 U	11 NJ	32 U	32 U	32 U	2300	32 U	2100	32 U
CM-SG-04-10	10		08/30/05	1200	35 U	13 J	35 U	35 U	35 U	3400	35 U	2900	35 U
CM-SG-04-10	10		11/07/05	820	40 U	16 J	40 U	40 U	40 U	3100	40 U	2200	40 U
CM-SG-04-10	10	DP	06/05/06	500	44 U	44 U	44 U	44 U	44 U	1600	44 U	1200	44 U
CM-SG-04-10	10	D	06/05/06	560	27 U	27 U	27 U	27 U	27 U	1700	27 U	1300	27 U
CM-SG-04-10	10		02/08/07	310	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	1300	7.3 U	610	7.3 U
CM-SG-04-10	10		09/17/07	550	14 U	45	14 U	14 U	14 U	1800	14 U	740	14 U
CM-SG-04-10	10		12/11/07	310	13 U	13 U	13 U	13 U	13 U	1500	13 U	470	13 U
CM-SG-04-10	10		03/07/08	210	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	1000	9.7 U	320	9.7 U
CM-SG-04-10	10		03/27/09	150	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	700	1.4 U	140	1.4 U
CM-SG-04-15	15		01/27/04	2400	24 U	350	24 U	24 U	6.9 J	5300	24 U	9400	24 U
CM-SG-04-15	15		05/05/04	2400	28 U	150	28 U	19 U	28 U	6600	28 U	11000	18 U
CM-SG-04-15	15		06/07/04	2800	28 U	140	28 U	18 U	27 U	8900	27 U	12000	18 U
CM-SG-04-15	15		07/15/04	1900	25 U	130	25 U	25 U	25 U	6100	25 U	9100	25 U
CM-SG-04-15	15		08/18/04	1700	250 U	130 J	250 U	250 U	250 U	5300	250 U	8100	250 U
CM-SG-04-15	15		09/15/04	1700	12 U	140	12 U	12 U	6.2 J	6100	12 U	8000	12 U
CM-SG-04-15	15		11/22/04	1700	32 U	72	32 U	42 U	31 U	6500	31 U	8800	20 U
CM-SG-04-15	15		02/11/05	1000	80 U	42 J	80 U	80 U	80 U	3900	80 U	5000	80 U
CM-SG-04-15	15		06/23/05	640	2 J	28	6.3 U	0.6 J	5.7 J	1900	0.33 J	3000	6.3 U
CM-SG-04-15	15		08/30/05	770	60 U	13 J	60 U	60 U	60 U	2800	60 U	3600	60 U
CM-SG-04-15	15		11/07/05	810	60 U	13 J	60 U	60 U	60 U	3700	60 U	4200	60 U
CM-SG-04-15	15		06/05/06	580	27 U	27 U	27 U	27 U	27 U	2100	27 U	2500	27 U
CM-SG-04-15	15		02/08/07	370	17 U	17 U	17 U	17 U	17 U	1600	17 U	1500	17 U
CM-SG-04-15	15		03/07/08	260	15 U	15 U	15 U	15 U	15 U	1600	15 U	980	15 U
CM-SG-04-20	20		01/27/04	3200	400 U	760	400 U	400 U	270 J	22000	400 U	30000	400 U
CM-SG-04-20	20		05/05/04	3400	40	330	95 U	62 U	230	21000	93 U	33000	60 U
CM-SG-04-20	20		07/15/04	2100	62 U	250	62 U	62 U	210	14000	62 U	19000	62 U
CM-SG-04-20	20		08/18/04	2400	100 J	130	130 U	130 U	130 J	11000	130 U	9900	130 U
CM-SG-04-20	20		09/15/04	1800	110	110	15 U	15 U	81	9700	15 U	6000	15 U
CM-SG-04-20	20		11/22/04	2300	110	33	42 U	55 U	41 U	8800	41 U	4400	27 U
CM-SG-04-20	20	DP	02/11/05	1700	110	12 J	60 U	60 U	60 U	3900	60 U	1400	60 U
CM-SG-04-20	20	D	02/11/05	1400	83	15 J	60 U	60 U	60 U	4200	60 U	1200	60 U
CM-SG-04-20	20	DP	06/23/05	1600 J	160	9.3 J	32 U	32 U	2.4 NJ	3300 J	32 U	1200 J	4.3 J
CM-SG-04-20	20	D	06/23/05	1100	130	5.3 J	8.3 U	8.3 U	2.3 J	1800	8.3 U	630	1.5 J
CM-SG-04-20	20		08/30/05	1300	97	3.7 J	19 U	19 U	1.6 J	2000	19 U	950	3.5 J
CM-SG-04-20	20	DP	11/07/05	1300	99	4 J	24 U	2.7 J	24 U	1900	24 U	660	24 U
CM-SG-04-20	20	D	11/07/05	1300	100	4.5 J	24 U	24 U	24 U	1900	24 U	630	24 U
CM-SG-04-20	20		02/08/07	490	45	17 U	17 U	17 U	17 U	2200	17 U	1800	17 U
CM-SG-04-20	20		09/17/07	470	26	48	13 U	13 U	13 U	2100	13 U	2300	13 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-SG-04-20	20	DP	03/07/08	270	13 U	13 U	13 U	13 U	13 U	1500	13 U	1100	13 U
CM-SG-04-20	20	D	03/07/08	270	17 U	17 U	17 U	17 U	17 U	1700	17 U	1100	17 U
CM-SG-05-10	10		01/26/04	37	6.2 U	3.8 J	6.2 U	6.2 U	0.92 J	150	6.2 U	160	6.2 U
CM-SG-05-10	10		01/26/04	45 J	0.17	1.2 J	0.073	0.051	1 J	140 J	0.031 U	180 J	0.028 J
CM-SG-05-10	10		05/05/04	34	2.9 U	0.99	2.9 U	1.9 U	2.8 U	100	2.8 U	100	1.8 U
CM-SG-05-10	10		08/18/04	60	1.3 U	0.75 J	1.3 U	1.3 U	1.3 U	150	1.3 U	170	1.3 U
CM-SG-05-10	10		11/22/04	81	0.81 U	0.79 U	0.81 U	1.1 U	0.79 U	290	0.79 U	260 J	0.51 U
CM-SG-05-10	10		02/10/05	39	1.2 U	1 J	1.2 U	1.2 U	1.2 U	150	1.2 U	140	1.2 U
CM-SG-05-10	10		06/23/05	39	1.4 U	0.094 NJ	1.4 U	1.4 U	0.21 J	53	1.4 U	120	1.4 U
CM-SG-05-10	10		08/30/05	47	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	230	6.3 U	190	6.3 U
CM-SG-05-10	10		11/07/05	40	1.2 U	0.22 J	1.2 U	1.2 U	1.2 U	220	1.2 U	160	1.2 U
CM-SG-05-10	10		06/05/06	16	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	110	1.4 U	47	1.4 U
CM-SG-05-10	10		02/09/07	7.9	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	66	1.3 U	27	1.3 U
CM-SG-05-10	10		09/14/07	9.6	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	92	1.4 U	28	1.4 U
CM-SG-05-10	10		12/10/07	8.5	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	99	1.3 U	28	1.3 U
CM-SG-05-10	10		03/07/08	5	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	57	1.5 U	14	1.5 U
CM-SG-05-10	10		03/27/09	5.2	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	53	1.2 U	13	1.2 U
CM-SG-05-15	15		01/26/04	280	6.7 U	11	6.7 U	6.7 U	1.5 J	880	6.7 U	1700	6.7 U
CM-SG-05-15	15		05/05/04	270	0.77	7.3	5.6 U	3.6 U	5.5 U	940	5.5 U	2200	3.5 U
CM-SG-05-15	15		08/18/04	210	25 U	4 J	25 U	25 U	25 U	890	25 U	2000	25 U
CM-SG-05-15	15		11/22/04	180	8.1 U	7.9 U	8.1 U	10 U	7.9 U	1100	7.9 U	2100	5.1 U
CM-SG-05-15	15		02/10/05	150	3.1 U	1.8 J	3.1 U	3.1 U	0.21 J	750	3.1 U	1300	3.1 U
CM-SG-05-15	15		06/23/05	7.6	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	44	0.16 J	85	1.2 U
CM-SG-05-15	15		08/30/05	120	16 U	16 U	16 U	16 U	16 U	750	16 U	1400	16 U
CM-SG-05-15	15		11/07/05	110	16 U	16 U	16 U	16 U	16 U	820	16 U	1300	16 U
CM-SG-05-15	15		06/05/06	47	16 U	16 U	16 U	16 U	16 U	360	16 U	480	16 U
CM-SG-05-15	15	DP	02/09/07	26	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	310	1.2 U	310	1.2 U
CM-SG-05-15	15	D	02/09/07	27	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	320	1.3 U	310	1.3 U
CM-SG-05-15	15		03/07/08	15	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	220	1.8 U	150	1.8 U
CM-SG-05-20	20		01/26/04	450	36 J	140 J	240 U	240 U	310	6200	240 U	20000	240 U
CM-SG-05-20	20		05/05/04	1300	40	120	110 U	73 U	280	13000	110 U	40000	71 U
CM-SG-05-20	20		08/18/04	1900	1300 U	210 J	1300 U	1300 U	250 J	17000	1300 U	49000	1300 U
CM-SG-05-20	20		11/22/04	1100	41	96	100 U	140 U	110	12000	100 U	25000	66 U
CM-SG-05-20	20		02/10/05	690	37 J	83	60 U	60 U	91	7500	60 U	15000	60 U
CM-SG-05-20	20		06/23/05	700	41	28	25 U	25 U	30	4800	25 U	8400	25 U
CM-SG-05-20	20		08/30/05	580	41 J	200	4.1 J	60 U	56 J	7100	3.5 J	11000	11 J
CM-SG-05-20	20		11/07/05	580	63	9.3 J	30 U	30 U	7.4 J	2100	30 U	2400	30 U
CM-SG-05-20	20		02/09/07	220	26	8.9 U	8.9 U	8.9 U	8.9 U	600	8.9 U	760	8.9 U
CM-SG-05-20	20		09/14/07	270	38	9.2 U	9.2 U	9.2 U	9.2 U	370	9.2 U	430	9.2 U
CM-SG-05-20	20		03/07/08	230	35	4.9 U	4.9 U	4.9 U	4.9 U	450	4.9 U	280	4.9 U
CM-SG-06-10	10		01/26/04	950	2.7 J	33	25 U	25 U	15 J	2400	25 U	4900	25 U
CM-SG-06-10	10		05/05/04	660	16 U	63	16 U	10 UJ	8.4	2500	15 U	5300	10 U
CM-SG-06-10	10		06/07/04	790	19 U	7.8	19 U	12 U	19 U	4000	19 U	6500	12 U
CM-SG-06-10	10		07/15/04	630	31 U	31 U	31 U	31 U	31 U	2900	31 U	5100	31 U
CM-SG-06-10	10		08/18/04	630	180 U	180 U	180 U	180 U	180 U	3600	180 U	5100	180 U
CM-SG-06-10	10		09/15/04	660	6.1 U	18	6.1 U	6.1 U	7.2	4600	6.1 U	5200	6.1 U
CM-SG-06-10	10		11/22/04	360	16 U	16 U	16 U	21 U	16 U	3000	16 U	3300	10 U
CM-SG-06-10	10		02/11/05	170	4.8 U	0.73 J	4.8 U	4.8 U	1.8 J	1300	4.8 U	1400	4.8 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-SG-06-10	10		06/23/05	130	18 U	18 U	18 U	18 U	18 U	1300	18 U	1100	18 U
CM-SG-06-10	10		08/30/05	230	35 U	35 U	35 U	35 U	35 U	2200	35 U	1600	35 U
CM-SG-06-10	10		11/07/05	160	24 U	24 U	24 U	24 U	24 U	1900	24 U	1200	24 U
CM-SG-06-10	10		06/05/06	46	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	560	1.4 U	270	1.4 U
CM-SG-06-10	10		02/08/07	21	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	410	1.3 U	160	1.3 U
CM-SG-06-10	10		09/14/07	80	19 U	19 U	19 U	19 U	19 U	1100	19 U	380	19 U
CM-SG-06-10	10		12/11/07	23	5 U	5 U	5 U	5 U	5 U	570	5 U	120	5 U
CM-SG-06-10	10		03/06/08	6.6	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	130	1.5 U	29	1.5 U
CM-SG-06-10	10		03/26/09	11	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	250	1.3 U	48	1.3 U
CM-SG-06-15	15	DP	01/26/04	1200	17 J	70	24 U	24 U	140	3300 J	24 U	12000	24 U
CM-SG-06-15	15	D	01/26/04	1100	200 U	63 J	200 U	200 U	130 J	4900 J	200 U	14000	200 U
CM-SG-06-15	15	DP	05/05/04	630	9.9	47	22 U	14 UJ	64	2900	22 U	8800	14 U
CM-SG-06-15	15	D	05/05/04	560	9.2	80	22 U	14 UJ	65	2900	22 U	8900	14 U
CM-SG-06-15	15		06/07/04	720	8.2	24	28 U	18 U	56	4500	27 U	10000	18 U
CM-SG-06-15	15		07/15/04	460	25 U	25 U	25 U	25 U	49	2200	25 U	6800	25 U
CM-SG-06-15	15		08/18/04	130	85 U	9.3 J	85 U	85 U	35 J	810	85 U	2400	85 U
CM-SG-06-15	15		09/15/04	420	7.4 J	25	12 U	12 U	54	2800	12 U	5900	12 U
CM-SG-06-15	15		11/22/04	1300	16 U	35	16 U	21 U	16 U	3700	16 U	3400	10 U
CM-SG-06-15	15		02/11/05	240	10	7.1	6.1 U	6.1 U	45	1200	6.1 U	2800	6.1 U
CM-SG-06-15	15		06/23/05	160	8 J	1.8 J	18 U	18 U	16 J	1100	18 U	1800	18 U
CM-SG-06-15	15		08/30/05	150	9.7 J	1.5 J	16 U	16 U	13 J	1100	16 U	1600	16 U
CM-SG-06-15	15		11/07/05	170	12 J	24 U	24 U	24 U	10 J	1200	24 U	1500	24 U
CM-SG-06-15	15		06/05/06	120	13 U	13 U	13 U	13 U	13 U	520	13 U	530	13 U
CM-SG-06-15	15		02/08/07	68	10 U	10 U	10 U	10 U	10 U	550	10 U	480	10 U
CM-SG-06-15	15		03/06/08	40	3	1.4 U	1.4 U	1.4 U	1.4 U	350	1.4 U	300	1.4 U
CM-SG-06-20	20		01/26/04	800	22 J	68	24 U	24 U	200	3200 J	24 U	10000	24 U
CM-SG-06-20	20		05/05/04	530	13	58	22 U	14 UJ	84	2400	22 U	7500	14 U
CM-SG-06-20	20		06/07/04	590	11	32	28 U	18 U	86	3500	27 U	8400	18 U
CM-SG-06-20	20		07/15/04	360	25 U	25 U	25 U	25 U	80	2000	25 U	6300	25 U
CM-SG-06-20	20		08/18/04	290	85 U	18 J	85 U	85 U	42 J	1900	85 U	4900	85 U
CM-SG-06-20	20		09/15/04	320	13	29	12 U	12 U	78	1800	12 U	4700	12 U
CM-SG-06-20	20		11/22/04	210	13	15	16 U	20 U	65	1600	15 U	3800	9.8 U
CM-SG-06-20	20		02/11/05	240	16	10	6 U	6 U	54	1100	0.48 J	2500	6 U
CM-SG-06-20	20		06/23/05	220	20	3.2 J	18 U	18 U	21	980	18 U	1800	18 U
CM-SG-06-20	20		08/30/05	180	20	2.5 J	16 U	16 U	19	820	16 U	1500	16 U
CM-SG-06-20	20		11/07/05	220	20 J	3.2 J	24 U	24 U	13 J	890	24 U	1400	24 U
CM-SG-06-20	20		02/08/07	92	13	7.7 U	7.7 U	7.7 U	7.7 U	430	7.7 U	540	7.7 U
CM-SG-06-20	20		09/14/07	57	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	370	8.8 U	530	8.8 U
CM-SG-06-20	20		03/06/08	51	6.2	2.6 U	2.6 U	2.6 U	2.6 U	390	2.6 U	510	2.6 U
CM-SG-07-10	10		01/26/04	660	7.7 J	41	24 U	24 U	63	5300 J	24 U	15000	24 U
CM-SG-07-10	10		05/05/04	540	6.3	79	16 U	10 UJ	37	1900	15 U	5900	10 U
CM-SG-07-10	10		06/07/04	680	6.1	30	23 U	15 U	37	2900	22 U	7200	14 U
CM-SG-07-10	10		07/15/04	690	25 U	25 U	25 U	25 U	36	2400	25 U	5900	25 U
CM-SG-07-10	10		08/18/04	760	10 J	62	24 U	24 U	64	3000	24 U	7500	24 U
CM-SG-07-10	10		09/15/04	780	13	76	12 U	12 U	79	3800	12 U	7400	12 U
CM-SG-07-10	10		11/23/04	420	16	34	18 U	23 U	56	2700	18 U	4700	11 U
CM-SG-07-10	10		02/11/05	280	9	15	6 U	6 U	43	1300	6 U	2500	6 U
CM-SG-07-10	10		06/24/05	220	4.7 J	6.8 J	25 U	25 U	21 J	1400	25 U	2200	25 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-SG-07-10	10		08/30/05	350	11 J	9.5 J	27 U	27 U	24 J	2000	27 U	2800	27 U
CM-SG-07-10	10		11/07/05	340	15 J	12 J	30 U	30 U	20 J	1800	30 U	2200	30 U
CM-SG-07-10	10		06/06/06	82	14 U	14 U	14 U	14 U	14 U	640	14 U	690	14 U
CM-SG-07-10	10		02/07/07	31	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	450	1.4 U	340	1.4 U
CM-SG-07-10	10		09/18/07	71	14 U	14 U	14 U	14 U	14 U	860	14 U	550	14 U
CM-SG-07-10	10		12/11/07	38	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	560	5.2 U	390	5.2 U
CM-SG-07-10	10		03/06/08	23	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	260	1.4 U	150	1.4 U
CM-SG-07-10	10	DP	03/27/09	11	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	210	2.7 U	120	2.7 U
CM-SG-07-10	10	D	03/27/09	11	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	210	1.3 U	120	1.3 U
CM-SG-07-15	15		01/26/04	580	11 J	55	24 U	24 U	87	2800 J	24 U	7900	24 U
CM-SG-07-15	15		05/05/04	540	13	76	18 U	12 UJ	60	2200	18 U	6200	12 U
CM-SG-07-15	15		06/07/04	500	9.1	39	19 U	12 U	60	2900	19 U	6100	12 U
CM-SG-07-15	15		07/15/04	560	25 U	52	25 U	25 U	80	2500	25 U	6600	25 U
CM-SG-07-15	15		08/18/04	640	21 J	96	24 U	24 U	140	2700	24 U	6400	24 U
CM-SG-07-15	15		09/15/04	690	31	110	12 U	12 U	160	3800	1.2 J	7300	12 U
CM-SG-07-15	15		11/23/04	410	25	52	20 U	26 U	93	3000	20 U	5100	13 U
CM-SG-07-15	15		02/11/05	240	14	24	6 U	6 U	56	1300	6 U	2600	6 U
CM-SG-07-15	15		06/24/05	220	10 J	16 J	25 U	25 U	31	1300	25 U	2000	25 U
CM-SG-07-15	15		08/30/05	360	25	18 J	24 U	24 U	40	1800	24 U	2500	24 U
CM-SG-07-15	15		11/07/05	300	26 J	16 J	30 U	30 U	28 J	1700	30 U	2000	30 U
CM-SG-07-15	15		06/06/06	57	1.8	1.4 U	1.4 U	1.4 U	1.8	340	1.4 U	360	1.4 U
CM-SG-07-15	15		02/07/07	29	1.4	1.6	1.3 U	1.3 U	1.3 U	270	1.3 U	210	1.3 U
CM-SG-07-15	15		03/06/08	26	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	160	1.5 U	130	1.5 U
CM-SG-07-20	20		01/26/04	460	120 U	51 J	120 U	120 U	92 J	3400 J	120 U	8100	120 U
CM-SG-07-20	20		05/05/04	560	17	95	22 U	14 UJ	85	2600	22 U	7100	14 U
CM-SG-07-20	20		06/07/04	560	14	51	23 U	15 U	89	3700	22 U	7400	14 U
CM-SG-07-20	20		07/15/04	570	25 U	69	25 U	25 U	120	3000	25 U	7200	25 U
CM-SG-07-20	20		08/18/04	590	26 J	98 J	170 U	170 U	170 J	3300	170 U	7100	170 U
CM-SG-07-20	20		09/15/04	680	44	100	12 U	12 U	170	3500	1.2 J	5600	12 U
CM-SG-07-20	20		11/23/04	430	36	62	18 U	23 U	100	3200	17 U	4700	11 U
CM-SG-07-20	20		02/11/05	310	25	29	6 U	6 U	74	1600	0.54 J	2800	0.89 J
CM-SG-07-20	20		06/24/05	300	20 J	20 J	25 U	25 U	37	1500	25 U	2100	25 U
CM-SG-07-20	20		08/30/05	440	43	21	20 U	20 U	40	1600	20 U	2100	20 U
CM-SG-07-20	20		11/07/05	360	37	18 J	30 U	30 U	26 J	1600	30 U	1700	30 U
CM-SG-07-20	20		02/07/07	45	6 U	6 U	6 U	6 U	6 U	260	6 U	260	6 U
CM-SG-07-20	20		09/18/07	100	5.8	6.4	5.5 U	5.5 U	5.5 U	530	5.5 U	470	5.5 U
CM-SG-07-20	20		03/06/08	40	3	1.5 U	1.5 U	1.5 U	1.5 U	210	1.5 U	220	1.5 U
CM-SG-08-10	10		01/26/04	13	13 U	1.6 J	13 U	13 U	1.8 J	92	13 U	160	13 U
CM-SG-08-10	10		01/26/04	17 J	0.33	1.3 J	0.11	0.042	2.1 J	83 J	0.085 J	200 J	0.067
CM-SG-08-10	10		05/05/04	20	2.8 U	2.7 U	2.8 U	1.8 U	2.7 U	140	2.7 U	100	1.7 U
CM-SG-08-10	10		08/18/04	120	1.3 U	1.6	1.3 U	1.3 U	1.3 U	370	1.3 U	120	1.3 U
CM-SG-08-10	10	DP	11/22/04	110	2.6 U	2.5 U	2.6 U	3.5 U	2.5 U	530	2.5 U	73 J	1.6 U
CM-SG-08-10	10	D	11/22/04	110	2.6 U	2.5 U	2.6 U	3.5 U	2.5 U	610	2.5 U	78	1.6 U
CM-SG-08-10	10		02/10/05	18	1.2 U	0.39 J	1.2 U	1.2 U	1.2 U	180	1.2 U	16	1.2 U
CM-SG-08-10	10		06/24/05	20	1.3 U	0.095 NJ	1.3 U	0.11 J	0.35 J	140	1.3 U	39	1.3 U
CM-SG-08-10	10		11/07/05	92	1.2 U	0.56 J	1.2 U	1.2 U	0.1 J	420	1.2 U	55	1.2 U
CM-SG-08-10	10		06/06/06	14	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	140	1.3 U	11	1.3 U
CM-SG-08-10	10		02/09/07	7.3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	97	1.3 U	5.2	1.3 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-SG-08-10	10		09/14/07	36	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	280	5.5 U	15	5.5 U
CM-SG-08-10	10		12/10/07	24	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	230	1.3 U	10	1.3 U
CM-SG-08-10	10		03/07/08	6.5	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	110	1.4 U	3.6	1.4 U
CM-SG-08-10	10		03/27/09	8.5	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	110	1.4 U	5.6	1.4 U
CM-SG-08-15	15		01/26/04	750	200 U	190 J	200 U	200 U	71 J	7400	200 U	20000	200 U
CM-SG-08-15	15		05/05/04	710	13	53	55 U	36 U	93	6000	54 U	20000	35 U
CM-SG-08-15	15		08/18/04	860	500 U	100 J	500 U	500 U	190 J	6100	500 U	22000	500 U
CM-SG-08-15	15		11/22/04	910	85 U	86	85 U	110 U	120	7500	83 U	21000	54 U
CM-SG-08-15	15		02/10/05	520	9.6 J	46 J	48 U	48 U	65	4700	48 U	10000	48 U
CM-SG-08-15	15		06/24/05	450	17 J	27	25 U	25 U	54	3400	25 U	7600	25 U
CM-SG-08-15	15		02/09/07	99	7.7	7.4 U	7.4 U	7.4 U	7.4 U	600	7.4 U	600	7.4 U
CM-SG-08-15	15		03/07/08	57	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	500	5.4 U	380	5.4 U
CM-SG-08-20	20		01/26/04	1100	490 U	290 J	490 U	490 U	250 J	12000	490 U	38000	490 U
CM-SG-08-20	20		05/05/04	880	22	71	69 U	45 U	170	8100	68 U	27000	44 U
CM-SG-08-20	20		08/18/04	700	310 U	81 J	310 U	310 U	130 J	5300	310 U	18000	310 U
CM-SG-08-20	20		11/22/04	1100	130 U	100	130 U	170 U	170	9500	120 U	27000	81 U
CM-SG-08-20	20		02/10/05	680	16 J	58	47 U	47 U	110	5200	47 U	12000	47 U
CM-SG-08-20	20		06/24/05	570	26	33	25 U	25 U	82	4200	25 U	9800	25 U
CM-SG-08-20	20		02/09/07	130	13 U	13 U	13 U	13 U	13 U	730	13 U	830	13 U
CM-SG-08-20	20		09/14/07	89	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	640	6.9 U	780	6.9 U
CM-SG-08-20	20		03/07/08	66	6	5.6 U	5.6 U	5.6 U	5.6 U	560	5.6 U	470	5.6 U
CM-SG-09-10	10		01/28/04	19	0.67	6.6	0.29 J	0.85	0.72	53	0.34 U	6.4	0.64
CM-SG-09-10	10		05/03/04	20	3.2	1 J	2.4 U	1.7 J	0.78 J	100	2.4 U	7.3	0.87 J
CM-SG-09-10	10		08/17/04	13	6.5	0.7 J	1.4 U	2	1.2 J	140	1.4 U	12	0.65 J
CM-SG-09-10	10		11/23/04	32	3.4	0.79 U	0.81 U	1.1 U	0.79 U	230	0.79 U	7	0.51 U
CM-SG-09-10	10		02/10/05	15	0.97 J	0.36 J	1.3 U	1.3 U	1.3 U	80	1.3 U	1.6	1.3 U
CM-SG-09-10	10		06/24/05	34	1.3 J	0.089 NJ	1.7 U	1.7 U	1.7 U	140	1.7 U	13	1.7 U
CM-SG-09-10	10		02/08/07	11	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	42	1.4 U	1.4 U	1.4 U
CM-SG-09-10	10		09/11/07	11	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	83	1.4 U	2.5	1.4 U
CM-SG-09-10	10		12/10/07	29	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	130	1.3 U	1.3 U	1.3 U
CM-SG-09-10	10		03/04/08	18	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	86	1.3 U	5.2	1.3 U
CM-SG-09-10	10		03/27/09	26	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	110	1.3 U	1.7	1.3 U
CM-SG-09-15	15		01/28/04	49	0.16 J	5.2	0.41	0.61	0.049 J	97	0.36 U	7.7	0.59
CM-SG-09-15	15		05/03/04	120	0.19 J	0.44 J	1.3 U	1.3 U	1.3 U	270	1.3 U	6.4	1.3 U
CM-SG-09-15	15		08/17/04	150	0.56 J	1.5 J	1.5 U	1.4 J	0.26 J	320	1.5 U	12	1.5 U
CM-SG-09-15	15		11/23/04	270	1.2	0.79 U	0.81 U	0.6	0.79 U	330	0.79 U	20	0.51 U
CM-SG-09-15	15		02/10/05	120	0.42 J	4.2	1.3 U	0.3 J	1.3 U	330	1.3 U	9	1.3 U
CM-SG-09-15	15		06/24/05	130	6 U	6 U	6 U	6 U	6 U	370	6 U	11	6 U
CM-SG-09-15	15		02/08/07	58	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	300	1.4 U	4	1.4 U
CM-SG-09-15	15		03/04/08	53	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	280	2.4 U	2.4 U	2.4 U
CM-SG-09-20	20		01/28/04	140	7 U	11	7 U	7 U	7 U	540	7 U	130	7 U
CM-SG-09-20	20		05/03/04	180	0.61 J	1.9	1.3 U	0.38 J	1.3 U	530	1.3 U	130	0.18 J
CM-SG-09-20	20		08/17/04	200	4.8	2.3	1.3 U	1.3 J	1.3 U	530	1.3 U	120	0.31 J
CM-SG-09-20	20		11/23/04	310	6.4	4 U	4.1 U	5.6 U	4 U	1100	4 U	140	2.6 U
CM-SG-09-20	20		02/10/05	150 J	1.3 J	5.6 J	1.2 U	1.2 U	1.2 U	580 J	1.2 U	94 J	1.2 U
CM-SG-09-20	20		06/24/05	150	1.8	0.45 J	1.3 U	0.15 J	1.3 U	530	1.3 U	81	1.3 U
CM-SG-09-20	20		02/08/07	100	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	480	7.4 U	46	7.4 U
CM-SG-09-20	20	DP	03/04/08	59	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	390	2.8 U	20	2.8 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-SG-09-20	20	D	03/04/08	74	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	500	4.2 U	23	4.2 U
CM-SG-09-30	30		01/28/04	250	40 U	72	40 U	40 U	10 J	1100	40 U	2900	40 U
CM-SG-09-30	30		05/03/04	28	0.61 J	2.2	1.2 U	1.2 U	3	180	1.2 U	510	1.2 U
CM-SG-09-30	30		08/17/04	62	0.65 J	6.6	1.3 U	1.3 U	3.2	230	1.3 U	700	1.3 U
CM-SG-09-30	30		02/10/05	190	5.5	47	1.2 U	1.2 U	26	1200	0.3 J	2700	0.14 J
CM-SG-09-30	30		06/24/05	89	3.3 J	7.2 J	12 U	12 U	10 J	570	12 U	1100	12 U
CM-SG-09-30	30		02/08/07	4.1	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	35	1.3 U	36	1.3 U
CM-SG-09-30	30		09/11/07	17	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	41	1.4 U	40	1.4 U
CM-SG-09-30	30		03/04/08	1.6	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	21	1.2 U	16	1.2 U
CM-SG-10-10	10		01/28/04	28	0.73 J	1.3 J	2.4 U	2.4 U	1.1 J	180	2.4 U	26	2.4 U
CM-SG-10-10	10		05/03/04	24	0.16 J	0.12 J	1.2 U	1.2 U	0.17 J	230	1.2 U	14	1.2 U
CM-SG-10-10	10		08/17/04	35	0.17 J	0.39 J	1.3 U	0.39 J	0.13 J	380	1.3 U	16	1.3 U
CM-SG-10-10	10		11/23/04	36	0.81 U	0.79 U	0.81 U	1.1 U	0.79 U	420	0.79 U	18 J	0.51 U
CM-SG-10-10	10		04/08/05	18	1.2 U	0.34 J	1.2 U	1.2 U	1.2 U	220	1.2 U	11	1.2 U
CM-SG-10-10	10		06/24/05	25	1.3 UJ	1.3 U	1.3 U	0.15 J	1.3 U	280	1.3 U	15	1.3 U
CM-SG-10-10	10		02/12/07	22	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	170	1.3 U	33	1.3 U
CM-SG-10-10	10		09/17/07	77	7.2 U	7.2 U	7.2 U	7.2 U	8.7	640	7.2 U	660	7.2 U
CM-SG-10-10	10		12/11/07	33	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	260	1.3 U	60	1.3 U
CM-SG-10-10	10		03/04/08	21	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	100	1.2 U	26	1.2 U
CM-SG-10-10	10		03/27/09	16	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	150	1.3 U	20	1.3 U
CM-SG-10-15	15		01/28/04	49	2.6 J	4.5 J	6 U	6 U	8.6	600	6 U	190	6 U
CM-SG-10-15	15		05/03/04	41	1.7	1.8	1.2 U	1.2 U	7.1	530	0.14 J	140	1.2 U
CM-SG-10-15	15		08/17/04	53	2.1	0.97 J	1.3 U	0.46 J	8.5	690	0.23 J	180	1.3 U
CM-SG-10-15	15		11/23/04	60	2.1	3.8 U	3.9 U	5.3 U	6.5	970	3.8 U	210 J	2.4 U
CM-SG-10-15	15		04/08/05	32	0.84 J	0.8 J	1.2 U	1.2 U	2.5	480	0.048 J	120	1.2 U
CM-SG-10-15	15		06/24/05	43	0.89 J	2.5 U	2.5 U	2.5 U	2.1 J	510	2.5 U	150	2.5 U
CM-SG-10-15	15		02/12/07	55	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	400	6.8 U	320	6.8 U
CM-SG-10-15	15		03/04/08	38	3 U	3 U	3 U	3 U	3 U	390	3 U	250	3 U
CM-SG-10-20	20		01/28/04	64	5.5 J	8.2 J	12 U	12 U	29	1100 J	12 U	350	12 U
CM-SG-10-20	20		05/03/04	50	3.5	4	1.2 U	1.2 U	22	720	0.32 J	260	0.16 J
CM-SG-10-20	20		08/17/04	68	4.8	3.7	1.3 U	0.46 J	26	870	0.52 J	330	0.28 J
CM-SG-10-20	20		11/23/04	75	4.3	3.9 U	4 U	5.5 U	18	1100	3.9 U	360 J	2.5 U
CM-SG-10-20	20		04/08/05	43	2.1	1.7	1.2 U	1.2 U	7.3	530	0.14 J	190	1.2 U
CM-SG-10-20	20		06/24/05	63	2.6	0.99 J	2.5 U	2.5 U	6.4	540	2.5 U	270	2.5 U
CM-SG-10-20	20		02/12/07	64	2.6	3.2	1.4 U	1.4 U	8.2	520	1.4 U	580	1.4 U
CM-SG-10-20	20		03/04/08	36	2.6 U	2.6 U	2.6 U	2.6 U	5.8	210	2.6 U	350	2.6 U
CM-SG-10-30	30		08/17/04	87	8	15	1.3 U	1.3 U	59	1300	0.86 J	590	1.3 U
CM-SG-10-30	30		11/23/04	76	5.6	6	4 U	3.5	34	1300	3.9 U	560 J	3.9
CM-SG-10-30	30	DP	09/17/07	120	17 U	18	17 U	17 U	29	810	17 U	1400	17 U
CM-SG-10-30	30	D	09/17/07	120	16 U	18	16 U	16 U	29	820	16 U	1400	16 U
CM-SG-11-10	10		01/28/04	6.3	0.099	0.74	0.089 J	0.094 J	0.023 J	24	0.03 U	1.6	0.038
CM-SG-11-10	10		05/03/04	3.3	0.031 U	0.041	0.0056 J	0.019 UJ	0.031 U	37	0.031 U	0.6	0.031 U
CM-SG-11-10	10		08/17/04	5.4	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	92	1.3 U	1.2 J	1.3 U
CM-SG-11-10	10		11/23/04	5.8	0.81 U	0.79 U	0.81 U	1.1 U	0.79 U	95	0.79 U	1.3	0.51 U
CM-SG-11-10	10		04/08/05	3.4	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	49	1.2 U	1.1 J	1.2 U
CM-SG-11-10	10		06/24/05	8.6	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	60	1.3 U	0.99 J	1.3 U
CM-SG-11-10	10		02/12/07	5.2	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	30	1.3 U	1.3 U	1.3 U
CM-SG-11-10	10		09/14/07	7	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	64	1.4 U	3.1	1.4 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)
CM-SG-11-10	10		03/03/08	3.8	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	32	1.3 U	1.3 U	1.3 U
CM-SG-11-10	10		03/27/09	2.9	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	33	1.4 U	1.4 U	1.4 U
CM-SG-11-15	15		01/28/04	8.8	0.45	0.23	0.032 J	0.076 J	0.11	97	0.03 U	20	0.019 J
CM-SG-11-15	15		05/03/04	6.4	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	91	1.5 U	16	1.5 U
CM-SG-11-15	15		08/17/04	9.1	1.3 U	1.3 U	1.3 U	1.3 U	0.14 J	130	1.3 U	28	1.3 U
CM-SG-11-15	15		11/23/04	16	0.81 U	0.79 U	0.81 U	1.1 U	0.79 U	290	0.79 U	41	0.51 U
CM-SG-11-15	15		04/08/05	6.8	1.2 U	0.12 J	1.2 U	1.2 U	1.2 U	110	1.2 U	19	1.2 U
CM-SG-11-15	15		06/24/05	25	0.14 J	1.4	1.3 U	1.3 U	1.3 U	100	1.3 U	18	1.3 U
CM-SG-11-15	15		02/12/07	10	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	73	1.4 U	13	1.4 U
CM-SG-11-15	15		03/03/08	7.1	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	79	1.3 U	11	1.3 U
CM-SG-11-20	20		01/28/04	14	0.59 J	1.1 J	2.4 U	2.4 U	1.7 J	220	2.4 U	93	2.4 U
CM-SG-11-20	20		05/03/04	13	0.4 J	0.087 J	1.2 U	1.2 U	1.2 J	180	1.2 U	81	1.2 U
CM-SG-11-20	20		08/17/04	13	0.44 J	0.18 J	1.3 U	1.3 U	1.1 J	190	0.089 J	85	1.3 U
CM-SG-11-20	20		11/23/04	24	0.82	0.79 U	0.81 U	1.1 U	1.6	210	0.79 U	150	0.51 U
CM-SG-11-20	20		04/08/05	12	0.44 J	0.16 J	1.2 U	1.2 U	1.1 J	200	1.2 U	84	1.2 U
CM-SG-11-20	20	DP	06/24/05	19	0.25 J	0.31 J	1.3 U	0.076 J	0.59 J	180	1.3 U	62	1.3 U
CM-SG-11-20	20	D	06/24/05	19	0.24 J	0.29 J	1.2 U	0.21 J	0.74 J	180	1.2 U	62	1.2 U
CM-SG-11-20	20		02/12/07	16	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	120	1.2 U	48	1.2 U
CM-SG-11-20	20	DP	09/14/07	16	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	120	1.3 U	52	1.3 U
CM-SG-11-20	20	D	09/14/07	16	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	140	1.4 U	46	1.4 U
CM-SG-11-20	20		03/03/08	12	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	150	1.4 U	46	1.4 U
CM-SG-12-10	10		01/28/04	6.8	0.093	3.1	0.084 J	0.28 J	0.037 J	4	0.068 U	2.8	0.38
CM-SG-12-10	10		05/03/04	11	0.063 U	0.15	0.017 J	0.078	0.014 J	20	0.063 U	0.59	0.049 J
CM-SG-12-10	10		08/17/04	15	1.4 U	0.14 J	1.4 U	0.64 J	1.4 U	23	1.4 U	1.5	0.65 J
CM-SG-12-10	10		11/23/04	11	0.81 U	0.79 U	0.81 U	1.1 U	0.79 U	18	0.79 U	0.71	0.51 U
CM-SG-12-10	10		11/23/04	9.9	0.018	0.016	0.015	0.2	0.056 U	18	0.056 U	0.74	0.068 J
CM-SG-12-10	10	DP	04/08/05	7.5	1.2 U	0.12 J	1.2 U	1.2 U	1.2 U	15	1.2 U	0.43 J	1.2 U
CM-SG-12-10	10	D	04/08/05	7.6	1.2 U	0.12 J	1.2 U	1.2 U	1.2 U	16	1.2 U	0.51 J	1.2 U
CM-SG-12-10	10		06/24/05	11	1.3 U	1.3 U	1.3 U	0.19 J	1.3 U	22	1.3 U	0.97 J	1.3 U
CM-SG-12-10	10		02/12/07	3.1	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	11	1.4 U	1.4 U	1.4 U
CM-SG-12-10	10		09/17/07	4.7	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	21	1.4 U	1.4 U	1.4 U
CM-SG-12-10	10		03/03/08	3.4	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	15	1.3 U	1.3 U	1.3 U
CM-SG-12-10	10		03/27/09	3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	16	1.3 U	1.3 U	1.3 U
CM-SG-12-15	15		01/28/04	13	0.071	0.92	0.06 J	0.15 J	0.083	17	0.03 U	17	0.088
CM-SG-12-15	15		05/03/04	13	1.3 U	0.088 J	1.3 U	1.3 U	1.3 U	28	1.3 U	19	1.3 U
CM-SG-12-15	15		08/17/04	15	1.2 U	0.11 J	1.2 U	1.2 U	1.2 U	38	1.2 U	26	1.2 U
CM-SG-12-15	15		11/23/04	25	0.81 U	0.79 U	0.81 U	1.1 U	0.79 U	76	0.79 U	52	0.51 U
CM-SG-12-15	15		04/08/05	12	1.2 U	0.2 J	1.2 U	1.2 U	1.2 U	36	1.2 U	24	1.2 U
CM-SG-12-15	15		06/24/05	15	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	37	1.3 U	26	1.3 U
CM-SG-12-15	15		02/12/07	5.7	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	15	1.3 U	10	1.3 U
CM-SG-12-15	15		03/03/08	4.4	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	29	1.4 U	7.1	1.4 U
CM-SG-12-20	20		05/03/04	40	0.39 J	1.1 J	1.3 U	1.3 U	1.2 J	130	1.3 U	410	1.3 U
CM-SG-12-20	20		08/17/04	47	0.45 J	2	1.2 U	1.2 U	1.2 J	150	1.2 U	480	1.2 U
CM-SG-12-20	20		11/23/04	55	2.5 U	2.4 U	2.5 U	3.4 U	1.3	210	2.4 U	670	1.6 U
CM-SG-12-20	20		04/08/05	7.7	1.2 U	0.097 J	1.2 U	1.2 U	1.2 U	20	1.2 U	0.39 J	1.2 U
CM-SG-12-20	20		02/12/07	16	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	110	1.3 U	230	1.3 U
CM-SG-12-20	20		09/17/07	13	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	110	2.5 U	160	2.5 U
CM-SG-12-20	20		03/03/08	10	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	130	1.3 U	150	1.3 U

Sample Location ID (ZZ-SG-##)	Sample Depth (ft bgs)	QC Code	Sample Date	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl chloride (ug/m3)

Notes

Sample IDs
ZZZ = Site (e.g. CM = Cadet Manufacturing, POV = Port of Vancouver)
FV = Fruit Valley
SG = Soil Gas
= Soil Gas Monitoring Well Number

Units
μg/m^3 = micrograms per cubic meter

Miscellaneous
D = Field Duplicate
DP = Duplicate primary
NA = Not applicable or not sampled

Data Qualifiers
U = Not detected at or above the method reporting limit.
UJ = Not detected at or above the method reporting limit. However, the method reporting limit value is uncertain.
J = The analyte was positively identified but the associated value is approximate.
N = Indicates an analyte has been tentatively identified but not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.
R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Table 4. Summary of Indoor Air Analytical Results
Cadet Manufacturing Company
Port of Vancouver, Washington

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
Cadet Facility Locations												
2500-FO-IA-01	09/18/04		1.2	0.08 U	0.04	0.033	0.12 U	0.14	7.5	0.056 U	25	0.02 U
2500-FO-IA-02	09/18/04		0.41	0.08 U	0.029	0.033	0.032	0.11	15	0.056 U	11	0.02 U
2500-FO-IA-03	09/18/04		0.97	0.032	0.15	0.04	0.12 U	0.55	11	0.056 U	44	0.02 U
2500-FO-IA-04	09/18/04		0.8	0.015	0.045	0.031	0.12 U	0.23	9.4	0.056 U	23	0.02 U
2500-FO-IA-01	01/11/05		0.53	0.042 U	0.013 J	0.039 J	0.05	0.019 J	1.6	0.042 U	4.3	0.0073 J
2500-FO-IA-02	01/11/05		0.29	0.04 U	0.008 J	0.036 J	0.022 J	0.028 J	1.3	0.0092 J	3.2	0.006 J
2500-FO-IA-03	01/11/05		0.35	0.04 U	0.0066 J	0.028 J	0.021 J	0.036 J	1.2	0.04 U	3.9	0.0073 J
2500-FO-IA-04	01/11/05		0.29	0.032 U	0.011 J	0.039	0.02 J	0.034	1.1	0.015 J	3.3	0.0066 N
2500-FO-IA-01	03/02/05		0.58	0.036 U	0.049	0.045	0.036 U	0.1	3.3	0.018 N	9	0.036 U
2500-FO-IA-03	03/02/05		0.52	0.019 N	0.082	0.047	0.022	0.27	5.9	0.017 N	21	0.037 U
2500-FO-IA-04	03/02/05		0.63	0.022 N	0.068 N	0.076	0.035	0.33	7.2	0.026 N	21	0.042 U
2500-FO-IA-02	03/03/05		0.18	0.013 N	0.027 N	0.039	0.021	0.098	5.7	0.0099 N	6	0.006
2500-FO-IA-01	03/22/05		0.65	0.04 U	0.043	0.051	0.048	0.034	1.6	0.04 U	4.8	0.0086
2500-FO-IA-02	03/22/05		0.28	0.043 U	0.016	0.044	0.021	0.045	1.5	0.043 U	1.6	0.043 U
2500-FO-IA-03	03/22/05		0.44	0.043 U	0.028	0.075	0.021	0.059	1.6	0.043 U	3.4	0.043 U
2500-FO-IA-04	03/22/05	DP	0.55	0.099 U	0.037	0.051	0.029	0.059	1.8	0.099 U	3.2	0.099 U
2500-FO-IA-04	03/22/05	D	0.55	0.04 U	0.027	0.049	0.02	0.066	1.6	0.04 U	3.3	0.04 U
2500-FO-IA-01	04/05/05		0.65	0.046 U	0.031 N	0.047	0.027	0.046 N	1.3	0.046 U	4.8	0.046 U
2500-FO-IA-02	04/05/05		0.25	0.04 U	0.015 N	0.083	0.032	0.038 N	1.7	0.04 U	1.8	0.04 U
2500-FO-IA-03	04/05/05		0.46	0.039 U	0.033 N	0.069	0.036	0.066	1.5	0.039 U	4.7	0.006
2500-FO-IA-04	04/05/05	DP	0.44	0.038 U	0.03 N	0.048	0.025 U	0.05 N	1.4	0.038 U	3.8	0.038 U
2500-FO-IA-04	04/05/05	D	0.45	0.039 U	0.032 N	0.046	0.027	0.049 N	1.4	0.039 U	3.9	0.039 U
2500-FO-IA-01	04/19/05		0.5	0.038 U	0.009 N	0.039	0.018	0.019 N	0.5	0.038 U	2.5	0.038 U
2500-FO-IA-02	04/19/05		0.35	0.039 U	0.0094 N	0.04	0.028	0.042	0.67	0.039 U	1.4	0.039 U
2500-FO-IA-03	04/19/05		0.32	0.039 U	0.0084 N	0.042	0.12	0.026	0.47	0.039 U	1.5	0.039 U
2500-FO-IA-04	04/19/05		0.43	0.042 U	0.0085 N	0.044	0.03	0.019 N	0.51	0.042 U	1.5	0.042 U
CM-AS-01	12/10/00		3.6 U	2.6 U	2.6 U	2.6 U	1.7 U	2.6 U	8.5	10 U	27	1.7 U
CM-AS-02	12/10/00		3.6 U	2.6 U	2.6 U	2.6 U	1.7 U	2.6 U	8.7	10 U	62	1.7 U
CM-PAINTDEPT	08/25/00		1.8	1 U	1 U	1 U	1 U	5.8	35	1 U	110	1 U
CM-PAINTDEPT-SPRAY	08/25/00		1.9	1 U	1 U	1 U	1 U	6	35	1 U	110	1 U
NFVN Locations												
1903-27-IA-LS	01/30/04		0.23	0.0049 J	0.11	0.046	0.038	0.034 U	0.27	0.034 U	0.15	0.034 U
1903-28-IA-LS	01/29/04		0.39	0.008 J	0.43	0.062	0.035 J	0.04 U	0.72	0.04 U	0.21	0.037 J
1927-27-IA-LS	01/29/04		0.29	0.024 J	0.04	0.046	0.065	0.037 U	0.45	0.037 U	2	0.037 U
1927-27-IA-LS	06/02/05		0.21	0.039 U	0.067	0.051	0.034	0.039 U	0.43	0.039 U	0.39	0.039 U
1927-27-IA-LS	09/14/07		3.7 J	0.045 UJ	0.41 J	1.4 J	0.064 J	0.045 UJ	0.57 J	0.045 UJ	0.41 J	0.045 UJ
1927-28-IA-LS	02/01/04		0.49	0.036 U	0.087	0.14	0.11	0.036 U	0.74	0.036 U	0.84	0.012 J
2102-27-IA-CS	01/27/04		0.24	0.039 U	0.072	0.043	0.019 UJ	0.039 U	0.29	0.039 U	0.43	0.039 U
2102-27-IA-LS	01/27/04		0.27	0.043 U	0.34 J	2.3	0.47	0.043 U	0.32	0.043 U	0.51	0.066
2102-27-IA-CS	12/10/04	DP	0.11	0.036 U	0.0045 N	0.029 J	0.012 UJ	0.036 U	0.19	0.036 U	1.8	0.002 N
2102-27-IA-CS	12/10/04	D	0.1 J	0.049 UJ	0.049 UJ	0.03 J	0.019 UJ	0.049 UJ	0.24 J	0.049 UJ	1.7 J	0.0029 NJ
2102-27-IA-LS	12/10/04		0.16	0.033 U	0.047	1.3	0.4	0.033 U	0.74	0.033 U	1.4	0.03 J
2102-27-IA-CS	09/12/07		0.074	0.039 U	0.039 U	0.092	0.051	0.039 U	0.17	0.039 U	0.084	0.039 U
2102-27-IA-LS	09/12/07		0.1	0.045	0.14	2.1	0.28	0.033 U	0.45	0.036	0.31	0.033 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2102-27-IA-CS	12/18/07		0.068	0.039 U	0.039 U	0.043	0.039 U	0.039 U	0.1	0.039 U	0.039 U	0.039 U
2102-27-IA-LS	12/18/07		0.15	0.039 U	0.1	1.2	0.28	0.039 U	0.42	0.039 U	0.12	0.039 U
2102-28-IA-CS	09/20/07		0.064	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.11	0.04 U	0.04 U	0.04 U
2102-28-IA-LS	09/20/07	DP	0.064	0.042 U	0.43	0.042 U	0.042 U	0.042 U	0.1	0.042 U	0.042 U	0.042 U
2102-28-IA-LS	09/20/07	D	0.065	0.033 U	0.76	0.036	0.033 U	0.033 U	0.11	0.033 U	0.033 U	0.033 U
2103-28-IA-BS	01/26/02		3	NA	0.31	NA	NA	0.014	4.1	NA	11	0.011
2103-28-IA-LS	01/26/02		2.8	NA	0.062	NA	NA	0.016	0.7	NA	1.8	0.014
2103-28-IA-BS	09/08/02		2.1	1.5 U	0.1	0.023	0.072 U	1.5 U	2.5	1.5 U	5.6	0.31 U
2103-28-IA-LS	09/08/02		0.95	1.3 U	0.031	0.036	0.14	1.3 U	0.64	1.3 U	1.3	0.26 U
2103-28-IA-BS	10/02/03		3.3	0.03 J	0.15	0.03 U	0.034 J	0.048	5.4	0.0026 U	10	0.0076 U
2103-28-IA-LS	10/02/03		1.3	0.019 J	0.098	0.03 U	0.053 J	0.0049 U	3.2	0.0039	6.1	0.008 U
2103-28-IA-BS	01/27/04		1.7	0.021 J	0.052	0.05	0.041	0.024 J	1.1	0.038 U	3.5	0.0086 J
2103-28-IA-LS	01/27/04		0.39	0.039 U	0.036 J	0.07	0.037 J	0.039 U	0.59	0.039 U	1.5	0.039 U
2103-28-IA-BS	05/08/04		2.3	0.13 U	0.095	0.22	0.05 N	0.068	0.96	0.65 U	3.6	0.042 U
2103-28-IA-LS	05/08/04	DP	0.37	0.13 U	0.064 U	0.79	0.06	0.13 U	0.37	0.64 U	0.93	0.041 U
2103-28-IA-LS	05/08/04	D	0.38	0.13 U	0.035	1.1	0.22 U	0.13 U	0.37	0.65 U	1	0.042 U
2103-28-IA-BS	02/25/05		1.4	0.041	0.15	0.05	0.022	0.065	1	0.037 U	1.4	0.037 U
2103-28-IA-LS	02/25/05		0.17	0.026	0.042	0.042	0.018	0.038	0.44	0.0074	0.24	0.039 U
2103-28-IA-BS	11/08/05		1.4	0.035 U	0.034 J	0.053	0.018 UB	0.0079 J	0.6	0.015 J	0.51	0.0042 J
2103-28-IA-LS	11/08/05		0.16	0.038 U	0.026 J	0.068	0.023 J	0.038 U	0.33	0.012 J	0.12	0.038 U
2103-28-IA-BS	12/08/06		0.58	0.033 U	0.08	0.048	0.033 U	0.033 U	0.28	0.033 U	0.15	0.033 U
2103-28-IA-LS	12/08/06		0.18	0.075 U	0.075 U	0.32	0.075 U	0.075 U	0.25	0.075 U	0.1	0.075 U
2104-27-IA-BS	01/26/02		0.21	NA	0.0048	NA	NA	0.0036	0.22	NA	0.23	0.013
2104-27-IA-LS	01/26/02		0.22	NA	0.0048	NA	NA	1.2 U	0.19	NA	0.24	0.012
2104-27-IA-CS	01/30/04		0.29	0.034 U	0.027 J	0.045	0.039	0.034 U	0.57	0.034 U	0.71	0.007 J
2104-27-IA-LS	01/30/04		0.25	0.036 U	0.065	0.069	0.072	0.036 U	0.49	0.036 U	0.6	0.036 U
2104-28-IA-CS	01/30/04		0.17	0.033 U	0.0068 J	0.034	0.044 U	0.033 U	0.13	0.033 U	0.074	0.033 U
2104-28-IA-LS	01/30/04	DP	0.17	0.0067 J	0.13	0.037 J	0.034 J	0.038 U	0.33	0.038 U	0.087	0.038 U
2104-28-IA-LS	01/30/04	D	0.17	0.0051 J	0.13	0.036 J	0.025 J	0.036 U	0.33	0.036 U	0.087	0.036 U
2104-28-IA-CS	09/20/07		0.075	0.04 U	0.04 U	0.042	0.04 U	0.04 U	0.21	0.04 U	0.04 U	0.04 U
2104-28-IA-LS	09/20/07		0.1	0.043 U	0.067	0.046	0.2	0.043 U	1.9	0.043 U	0.043 U	0.043 U
2104-28-IA-CS	12/20/07		0.067	0.037 U	0.037 U	0.039	0.037 U	0.037 U	0.1	0.037 U	0.037 U	0.037 U
2104-28-IA-LS	12/20/07		0.091	0.082	0.06	0.045	0.038 U	0.038 U	1	0.038 U	0.041	0.038 U
2105-27-IA-CS	01/26/02		0.2	NA	0.061 U	NA	NA	1.2 U	0.14	NA	0.15	0.24 U
2105-27-IA-LS	01/26/02		0.19	NA	0.0085	NA	NA	1.7 U	0.14	NA	0.17	0.017
2105-27-IA-CS	03/05/05		0.12 J	0.032 UJ	0.0095 NJ	0.028 NJ	0.045 J	0.032 UJ	0.32 J	0.032 UJ	0.16 J	0.032 UJ
2105-27-IA-LS	03/05/05		0.18	0.034 U	0.045 N	0.15	0.068	0.034 U	0.41	0.011	0.31	0.0042
2105-28-IA-BS	01/26/02		2.3	NA	0.25	NA	NA	1.2 U	2.7	NA	6	0.24 U
2105-28-IA-LS	01/26/02		1.9	NA	0.22	NA	NA	2.1 U	2	NA	4.4	0.42 U
2105-28-IA-BS	09/08/02	DP	0.66	1.5 U	0.023	0.029	0.19	1.5 U	1	1.5 U	2.1	0.31 U
2105-28-IA-BS	09/08/02	D	0.66	1.5 U	0.022	1.5 U	0.055 U	1.5 U	1	1.5 U	2.1	0.3 U
2105-28-IA-LS	09/08/02		0.52	1.6 U	0.041	0.036	0.21	1.6 U	0.76	1.6 U	1.2	0.015
2105-28-IA-BS	09/05/03		0.27	0.041 U	1.3	0.11	0.061	0.041 U	0.67	0.041 U	0.76	0.014
2105-28-IA-LS	09/05/03		0.28	0.04 U	0.35	0.42	0.085	0.04 U	0.59	0.04 U	0.76	0.02
2105-28-IA-BS	09/13/03		0.22	0.033 U	0.71	0.067	0.039	0.033 U	0.69	0.033 U	0.33	0.033 U
2105-28-IA-LS	09/13/03		0.25	0.033 U	0.096	0.16	0.052	0.033 U	0.46	0.0069 J	0.45	0.033 U
2105-28-IA-BS	01/27/04		0.24	0.039 U	0.65 J	0.073	0.056	0.039 U	0.19	0.039 U	0.4	0.0085 J
2105-28-IA-LS	01/27/04		0.2	0.038 U	0.3 J	0.19	0.13	0.038 U	0.23	0.038 U	0.45	0.011 J
2105-28-IA-BS	05/07/04		0.31	0.12 U	0.034	0.068 N	0.2 U	0.12 U	0.16	0.6 U	0.15	0.039 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2105-28-IA-CS	05/07/04		0.24	0.12 U	0.059 U	0.054 N	0.2 U	0.12 U	0.13	0.59 U	0.39	0.038 U
2105-28-IA-LS	05/07/04		0.18	0.13 U	0.065 U	0.24	0.042	0.13 U	0.16	0.65 U	0.21	0.042 U
2105-28-IA-BS	02/23/05		0.11	0.035 U	0.032	0.2	0.043	0.0075	0.18	0.035 U	0.11	0.035 U
2105-28-IA-LS	02/23/05		0.12	0.035 U	0.03	0.29	0.089	0.014	0.2	0.035 U	0.13	0.015 N
2105-28-IA-BS	11/08/05		0.12	0.032 U	0.071	0.052	0.045	0.032 U	0.22	0.0082 J	0.098	0.0078 J
2105-28-IA-LS	11/08/05		0.13	0.04 U	0.082	0.067	0.057	0.04 U	0.25	0.011 J	0.11	0.012 J
2105-28-IA-BS	06/06/06		0.096 J	0.043 UJ	0.043 UJ	0.12 J	0.3 J	0.043 UJ	0.29 J	0.043 UJ	0.043 UJ	0.043 UJ
2105-28-IA-CS	06/06/06		0.089 J	0.045 UJ	0.045 UJ	0.045 UJ	0.045 UJ	0.045 UJ	0.15 J	0.045 UJ	0.045 UJ	0.045 UJ
2105-28-IA-LS	06/06/06		0.092 J	0.039 UJ	0.039 UJ	0.078 J	0.15 J	0.039 UJ	0.25 J	0.039 UJ	0.063 J	0.039 UJ
2105-28-IA-BS	11/28/06		0.097	0.041 U	0.077	0.23	0.15	0.041 U	0.19	0.041 U	0.041 U	0.041 U
2105-28-IA-CS	11/28/06		0.077	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.18	0.038 U	0.038 U	0.038 U
2105-28-IA-LS	11/28/06		0.13	0.04 U	0.091	0.57	0.088	0.04 U	0.21	0.04 U	0.052	0.04 U
2105-28-IA-BS	05/03/07		0.049	0.037 U	0.037 U	0.25	0.05	0.037 U	0.083	0.037 U	0.048	0.037 U
2105-28-IA-CS	05/03/07		0.041	0.036 U	0.036 U	0.043	0.036 U	0.036 U	0.07	0.036 U	0.041	0.036 U
2105-28-IA-LS	05/03/07		0.075	0.038 U	0.081	0.097	0.06	0.038 U	0.1	0.038 U	0.06	0.038 U
2105-28-IA-BS	11/07/07		0.099	0.034 U	0.061	0.47	0.037	0.034 U	0.31	0.034 U	0.17	0.034 U
2105-28-IA-CS	11/07/07		0.067 J	0.031 UJ	0.031 UJ	0.036 J	0.031 UJ	0.031 UJ	0.26 J	0.031 UJ	0.13 J	0.031 UJ
2105-28-IA-LS	11/07/07		0.1	0.037 U	0.043	0.33	0.037 U	0.037 U	0.31	0.037 U	0.21	0.037 U
2105-28-IA-BS	05/09/08		0.07	0.035 U	0.035 U	0.063	0.035 U	0.035 U	0.043	0.035 U	0.035 U	0.035 U
2105-28-IA-CS	05/09/08		0.066	0.032 U	0.032 U	0.055	0.032 U	0.032 U	0.037	0.032 U	0.032 U	0.032 U
2105-28-IA-LS	05/09/08		0.071	0.038 U	0.038 U	0.076	0.038 U	0.038 U	0.05	0.038 U	0.038 U	0.038 U
2106-27-IA-CS	01/26/02		0.25	NA	0.0094	NA	NA	0.0071	0.21	NA	0.36	0.24 U
2106-27-IA-LS	01/26/02		0.18	NA	0.022	NA	NA	0.01	0.2	NA	0.24	0.043
2106-28-IA-CS	01/26/02		0.2	NA	0.0059	NA	NA	1.2 U	0.11	NA	0.091	0.24 U
2106-28-IA-LS	01/26/02	DP	0.2	NA	0.07	NA	NA	1.4 U	0.11	NA	0.14	0.012
2106-28-IA-LS	01/26/02	D	0.19	NA	0.073	NA	NA	1.4 U	0.11	NA	0.1	0.02
2106-28-IA-LS	02/24/05		0.16	0.044 U	0.04	0.065	0.039	0.044 U	1.4	0.0067	0.087	0.044 U
2107-27-IA-BS	01/26/02	DP	0.49	NA	0.0067	NA	NA	1.7 U	0.33	NA	0.56	0.33 U
2107-27-IA-BS	01/26/02	D	0.5	NA	0.06 U	NA	NA	1.2 U	0.35	NA	0.49	0.014
2107-27-IA-LS	01/26/02		0.79	NA	0.0088	NA	NA	0.0088	0.3	NA	1.2	0.015
2107-27-IA-BS	10/02/03		0.21	0.036 U	0.0087	0.032	0.11	0.036 U	0.22	0.036 U	0.11	0.017
2107-27-IA-LS	10/02/03		2.2	0.0059	0.012	0.17	0.061	0.034 U	0.2	0.034 U	2.9	0.011
2107-27-IA-BS	06/05/07		0.046	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.2	0.039 U	0.039 U	0.039 U
2107-27-IA-LS	06/05/07		0.04 U	0.04 U	0.04 U	0.043	0.04 U	0.04 U	0.16	0.04 U	0.04 U	0.04 U
2107-28-IA-CS	01/29/04		0.14	0.0078 J	0.0069 J	0.031 J	0.038	0.034 U	0.13	0.034 U	0.1	0.034 U
2107-28-IA-LS	01/29/04		0.19	0.0069 J	0.032 J	0.22	0.044	0.035 U	0.13	0.035 U	0.18	0.035 U
2107-28-IA-CS	03/04/05		0.14	0.038 U	0.012 N	0.043	0.016	0.038 U	0.46	0.0055 N	0.15	0.038 U
2107-28-IA-LS	03/04/05		0.15	0.038 U	0.021 N	0.19	0.048	0.038 U	0.42	0.038 U	0.17	0.0046
2109-27-IA-CS	01/26/02		0.17	NA	0.0093	NA	NA	1.9 U	0.093	NA	0.23	0.37 U
2109-27-IA-LS	01/26/02		0.36	NA	0.03	NA	NA	1.5 U	0.44	NA	0.15	0.016
2109-27-IA-CS	01/29/04		0.14	0.035 U	0.0053 J	0.032 J	0.03 J	0.035 U	0.081	0.035 U	0.081	0.035 U
2109-27-IA-LS	01/29/04		0.1 J	0.068 UJ	0.26 J	0.05 J	0.043 UJ	0.068 UJ	0.71 J	0.068 UJ	0.12 J	0.068 UJ
2109-27-IA-CS	03/21/07		0.057	0.037 U	0.037 U	0.052	0.037 U	0.037 U	0.16	0.037 U	0.037 U	0.037 U
2109-27-IA-LS	03/21/07		0.061	0.038 U	0.13	0.086	0.038 U	0.038 U	0.64	0.038 U	1.5	0.038 U
2109-28-IA-CS	01/29/04		0.52	0.04 U	0.049	0.032 J	0.058	0.04 U	0.87	0.04 U	1.2	0.04 U
2109-28-IA-LS	01/29/04		0.35	0.0042 J	0.14	0.11	0.091	0.039 U	0.48	0.039 U	0.63	0.0084 J
2109-28-IA-CS	12/08/04		0.19	0.044 U	0.0087 N	0.04 J	0.02 UJ	0.044 U	0.59	0.044 U	0.66	0.0048 N
2109-28-IA-LS	12/08/04		0.19	0.039 U	0.035 N	0.12	0.09	0.039 U	0.7	0.039 U	0.62	0.0066 N
2109-28-IA-BS	06/01/05		0.14	0.033 U	0.011	0.025	0.19	0.033 U	0.46	0.033 U	0.22	0.033 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2109-28-IA-CS	06/01/05		0.13	0.035 U	0.0065	0.026	0.021	0.035 U	0.36	0.035 U	0.17	0.035 U
2109-28-IA-LS	06/01/05		0.14	0.043 U	0.027	0.087	0.041	0.043 U	0.26	0.043 U	0.12	0.043 U
2109-28-IA-BS	12/18/07		0.068	0.035 U	0.035 U	0.039	0.035 U	0.035 U	0.15	0.035 U	0.042	0.035 U
2109-28-IA-CS	12/18/07		0.069	0.04 U	0.04 U	0.043	0.05	0.04 U	0.17	0.04 U	0.046	0.04 U
2109-28-IA-LS	12/18/07		0.086	0.038 U	0.038 U	0.31	0.038 U	0.038 U	0.25	0.038 U	0.054	0.038 U
2110-28-IA-CS	06/07/05		0.1	0.037 U	0.037 U	0.029	0.017 U	0.037 U	0.18	0.037 U	0.061	0.037 U
2110-28-IA-LS	06/07/05		0.12	0.041 U	0.021	0.04	0.048	0.041 U	0.13	0.041 U	0.095	0.041 U
2110-28-IA-CS	12/21/07	DP	0.07	0.037 U	0.037 U	0.039	0.037 U	0.037 U	0.21	0.037 U	0.067	0.037 U
2110-28-IA-CS	12/21/07	D	0.073	0.035 U	0.035 U	0.041	0.035 U	0.035 U	0.2	0.035 U	0.069	0.035 U
2110-28-IA-LS	12/21/07		0.1	0.063	0.045	0.093	0.041 U	0.041 U	0.36	0.041 U	0.13	0.041 U
2111-27-IA-CS	01/29/04		0.19	0.0037 J	0.18	0.035	0.028 J	0.034 U	0.2	0.034 U	0.096	0.034 U
2111-27-IA-LS	01/29/04		0.35	0.033 U	0.06	0.17	0.21	0.033 U	0.29	0.033 U	0.15	0.0093 J
2111-27-IA-BS	12/15/04		0.13	0.038 U	0.012 N	0.04	0.025 UJ	0.038 U	0.28	0.038 U	0.3	0.0032 N
2111-27-IA-LS	12/15/04		0.18	0.042 U	0.018 N	0.14	0.11	0.042 U	0.35	0.042 U	0.35	0.006 N
2111-27-IA-BS	06/01/05		0.17	0.035 U	0.046	0.027	0.024	0.035 U	0.37	0.035 U	0.073	0.035 U
2111-27-IA-LS	06/01/05		0.22	0.046 U	0.017	0.13	0.11	0.046 U	0.81	0.046 U	0.12	0.046 U
2111-28-IA-CS	01/29/04		0.22	0.027 J	0.0083 J	0.034 J	0.019 J	0.036 U	0.26	0.036 U	0.35	0.036 U
2111-28-IA-LS	01/29/04		2.5	0.03 J	0.37	0.38	0.065	0.035 U	0.39	0.035 U	0.48	0.014 J
2111-28-IA-CS	06/13/05		0.13	0.034 U	0.01	0.029	0.045	0.034 U	0.28	0.034 U	0.13	0.0051
2111-28-IA-LS	06/13/05		0.35	0.039 U	0.15	0.16	0.074	0.034	0.11	0.039 U	0.052	0.013
2111-31-IA-CS	06/01/05		0.1	0.037 U	0.037 U	0.024	0.021	0.037 U	0.096	0.037 U	0.046	0.037 U
2111-31-IA-LS	06/01/05		0.1	0.037 U	0.015	0.031	0.033	0.037 U	0.1	0.037 U	0.059	0.0064
2112-27-IA-CS	02/01/04		0.15	0.0046 J	0.0074 J	0.037	0.041	0.034 U	0.13	0.034 U	0.059	0.012 J
2112-27-IA-LS	02/01/04		0.35	0.0039 J	0.012 J	0.049	0.038	0.027 U	1.5	0.027 U	0.12	0.069
2112-27-IA-CS	02/24/05		0.14	0.037 U	0.014	0.032	0.015 UB	0.0059	0.33	0.037 U	0.083	0.037 U
2112-27-IA-LS	02/24/05		0.2	0.036 U	0.017	0.049	0.024	0.0063	0.93	0.036 U	0.11	0.06
2112-28-IA-CS	01/29/04		0.14	0.0051 J	0.011 J	0.034	0.027 J	0.032 U	0.092	0.032 U	0.083	0.0067 J
2112-28-IA-LS	01/29/04		0.19	0.017 J	0.14	0.068	0.06	0.042 U	0.21	0.042 U	0.19	0.042 U
2112-28-IA-CS	09/03/04		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2112-28-IA-LS	09/03/04		1.1 U	0.81 U	0.79 U	0.81 U	1.1 U	0.79 U	1.4 U	0.79 U	1.1 U	0.51 U
2112-28-IA-CS	06/01/05		0.13	0.039 U	0.039 U	0.029	0.015 U	0.039 U	0.23	0.039 U	0.045	0.039 U
2112-28-IA-LS	06/01/05		0.12	0.046 U	0.013	0.042	0.14	0.046 U	0.14	0.046 U	0.056	0.046 U
2113-27-IA-LS	01/26/02		0.2	NA	0.39	NA	NA	0.0037	0.14	NA	0.15	0.04
2113-27-IA-CS	09/08/02		0.16	1.3 U	0.066 U	0.029	0.12	1.3 U	0.13	1.3 U	0.12	0.26 U
2113-27-IA-LS	09/08/02		0.16	1.5 U	0.018	0.083	0.039 U	1.5 U	0.54	1.5 U	0.14	0.3 U
2113-27-IA-CS	06/07/05	DP	0.097	0.036 U	0.004	0.029	0.015 U	0.036 U	0.093	0.036 U	0.06	0.036 U
2113-27-IA-CS	06/07/05	D	0.095	0.037 U	0.0046	0.029	0.014 U	0.037 U	0.092	0.037 U	0.058	0.037 U
2113-27-IA-LS	06/07/05		0.12	0.041 U	0.023	0.16	0.037	0.041 U	0.45	0.041 U	0.077	0.005
2113-28-IA-BS	01/30/04		21	7.6 UJ	0.61 J	7.6 U	7.6 U	7.6 U	25	7.6 U	42	7.6 U
2113-28-IA-BS	01/30/04		24	0.018 J	0.41	0.11	0.039 U	0.029 J	22	0.038 U	39	0.052
2113-28-IA-LS	01/30/04		21	0.014 J	0.32	0.11	0.033 U	0.022 J	16	0.032 U	30	0.05
2113-28-IA-BS	05/07/04		27	0.021	0.16	0.22	0.051 N	NA	20	0.62 U	24	0.068
2113-28-IA-LS	05/07/04		68	0.03	0.16	0.28	0.077	0.13 U	12	0.64 U	7.1	0.14
2113-28-IA-BS	07/23/04		11	0.035 U	0.31	0.12	0.065	0.035 U	9.1 J	0.037	8.9	0.05
2113-28-IA-LS	07/23/04		13	0.04 U	0.081 N	0.11	0.044	0.04 U	1.6 J	0.04 U	0.9	0.034 J
2113-28-IA-BS	12/08/04		12	0.042 U	0.1	0.097	0.025 J	0.042 U	11	0.042 U	14	0.034 N
2113-28-IA-LS	12/08/04		14 J	0.045 UJ	0.14 J	0.11 J	0.034 J	0.045 UJ	8.2 J	0.045 UJ	12 J	0.038 J
2113-28-IA-BS	04/12/05		10	0.039 U	0.37	0.091	0.038	0.039 U	6.9	0.039 U	4.8	0.039 U
2113-28-IA-LS	04/12/05		16	0.037 U	0.51	0.12	0.072	0.025 N	6.2	0.037 U	4.6	0.037 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2113-28-IA-BS	05/24/05		4.4	0.039 U	0.066	0.059	0.026	0.039 U	1.3	0.039 U	0.97	0.012
2113-28-IA-LS	05/24/05		5.6	0.034 U	0.037	0.065	0.037	0.034 U	0.5	0.034 U	1.1	0.016
2113-28-IA-BS	11/08/05		8.6	0.036 U	0.18	0.1	0.027 J	0.0046 J	2.8	0.015 J	1.5	0.027 J
2113-28-IA-LS	11/08/05		10	0.038 U	0.19	0.1	0.022 J	0.038 U	2.3	0.015 J	2.1	0.031 J
2113-28-IA-BS	06/07/06		9.2 J	0.037 UJ	0.1 J	0.12 J	0.077 J	0.037 UJ	4.8 J	0.037 UJ	21 J	0.037 UJ
2113-28-IA-LS	06/07/06		24 J	0.035 UJ	0.081 J	0.16 J	0.24 J	0.035 UJ	3.3 J	0.035 UJ	13 J	0.064 J
2113-28-IA-BS	09/14/06		8.5	0.036 U	1.4	0.11	0.051	0.036 U	5	0.036 U	95	0.036 U
2113-28-IA-LS	09/14/06		17	0.035 U	2.7	0.1	0.083	0.035 U	4.9	0.035 U	20	0.037
2113-28-IA-BS	10/19/06		9	0.042 U	0.31	0.098	0.047	0.042 U	2.1	0.042 U	4.6	0.042 U
2113-28-IA-LS	10/19/06		13	0.042 U	0.32	0.11	0.07	0.042 U	2.6	0.042 U	4.4	0.042 U
2113-28-IA-BS	11/16/06		8	0.035 U	0.31	0.093	0.038	0.035 U	1.1	0.035 U	1.5	0.035 U
2113-28-IA-LS	11/16/06		10	0.037 U	0.37	0.1	0.056	0.037 U	1.3	0.037 U	1.5	0.037 U
2113-28-IA-BS	02/07/07		5.7	0.04 U	1.3	0.13	0.04 U	0.04 U	0.88	0.04 U	1.9	0.04 U
2113-28-IA-LS	02/07/07		7.9	0.041 U	1.7	0.13	0.041 U	0.053	1	0.041 U	1.9	0.041 U
2113-28-IA-BS	09/18/07		7.1	0.041 U	0.69	0.11	0.041 U	0.041 U	0.56	0.041 U	2.5	0.041 U
2113-28-IA-LS	09/18/07		15	0.039 U	1.5	0.13	0.06	0.039 U	0.67	0.039 U	2.1	0.048
2113-28-IA-BS	12/18/07		7.2	0.039 U	0.11	0.088	0.039 U	0.039 U	0.53	0.039 U	1.4	0.039 U
2113-28-IA-LS	12/18/07		9.2	0.039 U	0.14	0.095	0.039 U	0.039 U	0.54	0.039 U	1.5	0.039 U
2114-27-IA-BS	01/31/04		0.15	0.032 U	0.0065 J	0.035	0.015 UJ	0.032 U	0.14	0.032 U	0.045	0.032 U
2114-27-IA-LS	01/31/04		0.17	0.0076 J	0.065	0.04 J	0.069	0.043 U	0.15	0.043 U	0.095	0.0098 J
2114-27-IA-CS	06/15/05		0.11	0.033 U	0.0064	0.028	0.034	0.033 U	0.096	0.033 U	0.013	0.033 U
2114-27-IA-LS	06/15/05		0.27	0.043 U	0.071	0.12	0.058	0.043 U	0.11	0.043 U	0.02	0.0064
2114-28-IA-CS	01/29/04		0.57	0.035 J	0.13	0.029 UJ	0.022 J	0.035 U	0.8	0.035 U	1.2	0.035 U
2114-28-IA-LS	01/29/04		0.65	0.027 J	0.66	0.076	0.075	0.034 U	0.38	0.034 U	0.76	0.034 U
2114-28-IA-CS	02/23/05		0.11	0.036 U	0.011	0.086	0.018 UB	0.065	0.45	0.011	0.16	0.0088
2114-28-IA-LS	02/23/05		0.15	0.036 U	0.048	0.066	0.052 U	0.036 U	0.59	0.011	0.22	0.036 U
2115-27-IA-CS	01/29/04		0.13	0.01 J	0.0063 J	0.033 J	0.028 J	0.035 U	0.07	0.035 U	0.07	0.035 J
2115-27-IA-LS	01/29/04		0.22	0.01 J	0.055	0.23	0.092 J	0.033 U	0.38	0.033 U	0.2	0.013 J
2115-27-IA-CS	09/20/07		0.098	0.039 U	0.039 U	0.043	0.039 U	0.039 U	0.12	0.039 U	0.039 U	0.039 U
2115-27-IA-LS	09/20/07		0.095	0.039 U	0.039	2.4	0.054	0.039 U	0.18	0.039 U	0.045	0.039 U
2115-28-IA-CS	01/29/04		0.32	0.013 J	0.0087 J	0.033	0.06	0.032 U	0.24	0.032 U	0.084	0.032 U
2115-28-IA-LS	01/29/04		0.61	0.017 J	0.92	0.11	0.099	0.036 U	1.2	0.036 U	0.4	0.0082 J
2115-28-IA-CS	06/07/05		0.2	0.039 U	0.0086	0.027	0.018 U	0.039 U	0.48	0.039 U	0.056	0.039 U
2115-28-IA-LS	06/07/05		0.17	0.041 U	0.12	0.12	0.037	0.041 U	0.26	0.041 U	0.058	0.041 U
2202-27-IA-CS	01/26/02		0.18	NA	0.0047	NA	NA	1.2 U	0.21	NA	0.1	0.012
2202-27-IA-LS	01/26/02		0.19	NA	0.041	NA	NA	1.5 U	0.33	NA	0.27	0.017
2202-28-IA-CS	01/26/02		3.6	NA	0.062	NA	NA	0.0024	2.5	NA	3.4	0.24 U
2202-28-IA-LS	01/26/02		1.7	NA	0.093	NA	NA	1.2 U	1.2	NA	1.7	0.24 U
2202-28-IA-CS	09/08/02		5.3	1.5 U	0.019	0.015	0.093	1.5 U	7.8	1.5 U	8.5	0.31 U
2202-28-IA-LS	09/08/02		0.49	1.2 U	0.055	0.044	0.18	1.2 U	0.74	1.2 U	0.72	0.015
2202-28-IA-CS	10/02/03		1.5	0.02	0.081	0.056	0.098	0.038 U	3.6	0.038 U	3	0.019
2202-28-IA-LS	10/02/03		0.18	0.004	0.24	0.095	0.15	0.037 U	0.19	0.037 U	0.1	0.018
2202-28-IA-CS	01/27/04		1.3 J	0.037 UJ	0.045 J	0.041 J	0.042 UJ	0.037 UJ	3.1 J	0.037 UJ	4.2 J	0.012 J
2202-28-IA-LS	01/27/04		0.19	0.031 U	0.17	0.05	0.16 U	0.031 U	0.14	0.031 U	0.17	0.015 J
2202-28-IA-CS	05/08/04		1.4	0.13 U	0.038	0.09	0.044	0.13 U	3.7	0.65 U	3	0.042 U
2202-28-IA-LS	05/08/04		0.18	0.14 U	0.094	0.14	0.15	0.14 U	0.2	0.69 U	0.13	0.044 U
2202-28-IA-CS	08/19/04		1 J	0.08 U	0.04 U	0.027	0.12 U	0.056 U	4.7	0.056 U	3	0.0054
2202-28-IA-LS	08/19/04		0.12 J	0.08 U	0.012	0.048	0.043	0.056 U	0.088	0.056 U	0.028	0.0075
2202-28-IA-CS	02/24/05		0.32	0.038 U	0.028	0.04	0.028	0.0065	1.9	0.038 U	0.91	0.038 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2202-28-IA-LS	02/24/05		0.15	0.05 U	0.035	0.2	0.075	0.03	1.5	0.05 U	0.2	0.0079 N
2202-28-IA-CS	11/08/05		0.26	0.037 U	0.016 J	0.045	0.014 UB	0.037 U	1.1	0.012 J	0.46	0.0048 J
2202-28-IA-LS	11/08/05		0.2	0.043 U	0.14	0.44	0.19	0.043 U	0.42	0.011 J	0.31	0.013 J
2202-28-IA-CS	06/06/06		0.2 J	0.043 UJ	0.043 UJ	0.064 J	0.045 J	0.043 UJ	1.3 J	0.043 UJ	0.46 J	0.043 UJ
2202-28-IA-LS	06/06/06		0.1 J	0.039 UJ	0.039 UJ	0.22 J	0.073 J	0.039 UJ	0.2 J	0.039 UJ	0.039 UJ	0.039 UJ
2202-28-IA-CS	11/29/06		0.11	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U	0.49	0.034 U	0.12	0.034 U
2202-28-IA-LS	11/29/06		0.12	0.038 U	0.13	0.35	0.15	0.038 U	0.41	0.038 U	0.13	0.038 U
2202-28-IA-CS	11/07/07		0.1	0.035 U	0.035 U	0.14	0.035 U	0.035 U	0.6	0.035 U	0.17	0.035 U
2202-28-IA-LS	11/07/07		0.27	0.037 U	0.06	5.3	0.061	0.037 U	0.32	0.037 U	0.14	0.037 U
2202-28-IA-CS	05/09/08		0.097	0.038 U	0.038 U	0.16	0.038 U	0.038 U	0.43	0.038 U	0.067	0.038 U
2202-28-IA-LS	05/09/08		0.074	0.038 U	0.048	3.5	0.043	0.038 U	0.23	0.038 U	0.044	0.038 U
2202-31-IA-CS	02/25/05	DP	0.13	0.038 U	0.29	0.035	0.017	0.038 U	0.5	0.038 U	0.15	0.038 U
2202-31-IA-CS	02/25/05	D	0.13	0.038 U	0.22	0.033	0.018	0.0059	0.47	0.0069	0.15	0.038 U
2202-31-IA-LS	02/25/05		0.17	0.054 U	0.066	0.04	0.031	0.054 U	1.4	0.054 U	0.24	0.054 U
2203-27-IA-CS	01/29/04		0.14	0.031 U	0.0067 J	0.032	0.027 UJ	0.031 U	0.17	0.031 U	0.094	0.031 U
2203-27-IA-LS	01/29/04		0.15	0.012 J	0.11	0.089	0.072	0.033 U	12	0.033 U	0.17	0.033 U
2203-27-IA-CS	12/08/04		0.12	0.034 U	0.034 U	0.033 J	0.027 UJ	0.034 U	0.4	0.034 U	0.5	0.0056 J
2203-27-IA-LS	12/08/04		0.12	0.079 U	0.031 N	0.1	0.14 UJ	0.079 U	15	0.079 U	0.39	0.0087 N
2203-27-IA-CS	04/05/07		0.078	0.034 U	0.034 U	0.082	0.034 U	0.034 U	0.72	0.034 U	0.21	0.034 U
2203-27-IA-LS	04/05/07		0.077	0.038 U	0.14	4.6	0.06	0.038 U	12	0.038 U	0.15	0.038 U
2203-27-IA-CS	09/12/07		0.076	0.039 U	0.039 U	0.7	0.049	0.039 U	2.2	0.039 U	0.086	0.039 U
2203-27-IA-LS	09/12/07		0.073	0.038 U	0.093 J	8.5	0.078	0.038 U	16	0.038 U	0.038 U	0.038 U
2203-27-IA-CS	12/18/07		0.067	0.037 U	0.037 U	0.073	0.037 U	0.037 U	0.37	0.037 U	0.081	0.037 U
2203-27-IA-LS	12/18/07		0.07	0.039 U	0.12	4.3	0.045	0.039 U	14	0.039 U	0.078	0.039 U
2203-28-IA-CS	01/29/04		0.52	0.018 J	0.011 J	0.033 J	0.021 J	0.046 U	0.82	0.046 U	1.7	0.046 U
2203-28-IA-LS	01/29/04		0.33	0.047	0.055	0.095	0.034 J	0.036 U	1.3	0.036 U	0.88	0.036 U
2203-28-IA-CS	12/09/04		0.27	0.039 U	0.039 U	0.036 J	0.024 J	0.039 U	0.96	0.039 U	1.2	0.0041 N
2203-28-IA-LS	12/09/04		0.25 J	0.052 UJ	0.01 NJ	0.12 J	0.075 J	0.052 UJ	1.1 J	0.052 UJ	0.99 J	0.0074 J
2203-28-IA-CS	06/01/05		0.2	0.039 U	0.039 U	0.028	0.035	0.039 U	0.86	0.039 U	0.92	0.039 U
2203-28-IA-LS	06/01/05		0.18	0.033 U	0.014	0.063	0.034	0.012	0.66	0.0044	0.61	0.033 U
2203-28-IA-CS	09/14/07		0.082	0.034 U	0.034 U	0.039	0.034 U	0.034 U	0.65	0.034 U	0.33	0.034 U
2203-28-IA-LS	09/14/07		0.097	0.034 U	0.048 J	0.1	0.13	0.053	0.7	0.034 U	0.24	0.034 U
2203-31-IA-CS	12/09/04		0.11	0.041 U	0.041 U	0.038 J	0.045	0.041 U	0.2	0.041 U	0.13	0.0044 N
2203-31-IA-LS	12/09/04		0.16	0.043 U	0.043 N	1.9	0.06	0.043 U	0.6	0.043 U	0.16	0.0085 N
2203-31-IA-CS	06/09/05		0.11	0.039 U	0.0083	0.032	0.035	0.039 U	0.092	0.039 U	0.018	0.039 U
2203-31-IA-LS	06/09/05		0.18	0.05 U	0.11	0.22	0.039	0.05 U	0.14	0.05 U	0.044	0.0062
2205-27-IA-CS	08/18/04		0.12 J	0.08 U	0.04 U	0.028	0.12 U	0.056 U	0.093	0.056 U	0.061	0.02 U
2205-27-IA-LS	08/18/04		0.14 J	0.08 U	0.04 U	0.11	0.038	0.056 U	0.25	0.056 U	0.71	0.0086
2205-27-IA-CS	12/09/04		0.11	0.038 U	0.038 U	0.038 J	0.014 UJ	0.038 U	0.21	0.038 U	0.16	0.0036 N
2205-27-IA-LS	12/09/04		0.13	0.04 U	0.02 N	0.077	0.092	0.04 U	0.3	0.04 U	0.43	0.0089 J
2205-28-IA-CS	01/26/02		0.28	NA	0.0057	NA	NA	1.4 U	0.16	NA	0.11	0.29 U
2205-28-IA-LS	01/26/02		0.26	NA	0.049	NA	NA	1.3 U	0.2	NA	0.11	0.26 U
2205-28-IA-CS	12/13/07		0.076	0.032 U	0.032 U	0.041	0.032 U	0.032 U	0.43	0.032 U	0.11	0.032 U
2205-28-IA-LS	12/13/07		0.091	0.038 U	0.041	0.048	0.038 U	0.038 U	0.38	0.038 U	0.12	0.038 U
2206-27-IA-CS	01/29/04		0.2	0.039 U	0.007 J	0.031 J	0.025 J	0.039 U	0.37	0.039 U	0.8	0.039 U
2206-27-IA-LS	01/29/04	DP	0.17	0.015 J	0.054	0.037 J	0.041	0.04 U	0.26	0.04 U	0.5	0.012 J
2206-27-IA-LS	01/29/04	D	0.17	0.059	0.052	0.035 J	0.077	0.039 U	0.26	0.039 U	0.46	0.015 J
2206-27-IA-CS	01/14/07		0.23	0.35	0.035 U	0.038	0.035 U	0.1	0.34	0.035 U	0.84	0.053
2206-27-IA-LS	01/14/07		0.079	0.039 U	0.067	0.042	0.039 U	0.039 U	0.83	0.039 U	0.61	0.039 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2206-27-IA-CS	09/30/07	DP	0.07 J	0.047 UJ	0.047 UJ	0.047 UJ	0.047 UJ	0.047 UJ	0.4 J	0.047 UJ	0.13 J	0.047 UJ
2206-27-IA-CS	09/30/07	D	0.07	0.035 U	0.035 U	0.04	0.035 U	0.035 U	0.39	0.035 U	0.14	0.035 U
2206-27-IA-LS	09/30/07		0.1	0.035 U	0.037	0.048	0.038	0.035 U	0.42	0.035 U	0.14	0.035 U
2206-28-IA-CS	01/26/02		8.8	NA	0.49	NA	NA	0.0024	5.4	NA	9.3	0.24 U
2206-28-IA-LS	01/26/02		3.8	NA	0.29	NA	NA	1.2 U	2.2	NA	3.6	0.027
2206-28-IA-CS	09/08/02		1.5	1.4 U	0.023	0.018	0.049 U	1.4 U	3.4	1.4 U	5.3	0.27 U
2206-28-IA-LS	09/08/02		0.76	1.3 U	0.072	0.056	0.13	1.3 U	1.1	1.3 U	1.6	0.026
2206-28-IA-CS	10/02/03		1.2	0.0062 J	0.012	0.038	0.051 J	0.0045 U	3.5	0.0025 U	3.8	0.0073 U
2206-28-IA-LS	10/02/03		1	0.029	0.14	0.17	0.11	0.0046 U	2.1	0.011	2.4	0.043
2206-28-IA-CS	01/27/04		1.7	0.037 U	0.11	0.038	0.021 UJ	0.037 U	3.7	0.037 U	5.3	0.037 U
2206-28-IA-LS	01/27/04		1	0.034 U	0.21	0.12	0.14 U	0.034 U	1.4	0.034 U	1.8	0.03 J
2206-28-IA-CS	05/07/04		1.2	0.12 U	0.09	0.15	0.2 U	0.12 U	3.3	0.6 U	3.7	0.039 U
2206-28-IA-LS	05/07/04		1.1	0.13 U	0.1	0.19	0.081	0.12 U	1.7	0.62 U	1.6	0.051
2206-28-IA-CS	08/19/04		0.53 J	0.08 U	0.04 U	0.032	0.12 U	0.056 U	2.6	0.056 U	2.6	0.014
2206-28-IA-LS	08/19/04		0.31 J	0.08 U	0.022	0.094	0.12 U	0.056 U	0.4	0.056 U	0.4	0.03
2206-28-IA-CS	02/23/05		0.55	0.035 U	0.051	0.036	0.021 UB	0.035 U	2.3	0.035 U	1.6	0.035 U
2206-28-IA-LS	02/23/05		0.54	0.036 U	0.13	0.12	0.058	0.036 U	1.5	0.013	0.77	0.027
2206-28-IA-CS	11/08/05		0.35	0.043 U	0.015 J	0.043	0.013 UB	0.043 U	1.4	0.012 J	0.69	0.043 U
2206-28-IA-LS	11/08/05		0.44	0.037 U	0.075	0.094	0.05	0.037 U	0.85	0.0089 J	0.38	0.017 J
2206-28-IA-CS	06/06/06		0.29 J	0.083 UJ	0.083 UJ	0.083 UJ	0.2 J	0.083 UJ	1.9 J	0.083 UJ	0.8 J	0.083 UJ
2206-28-IA-LS	06/06/06		0.24 J	0.076 UJ	0.076 UJ	0.1 J	0.088 J	0.076 UJ	0.46 J	0.076 UJ	0.3 J	0.076 UJ
2206-28-IA-CS	11/29/06		0.23	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	1.1	0.035 U	0.34	0.035 U
2206-28-IA-LS	11/29/06		0.37	0.039 U	0.1	0.092	0.042	0.039 U	0.67	0.039 U	0.19	0.039 U
2206-28-IA-CS	05/03/07		0.074	0.038 U	0.038 U	0.043	0.038 U	0.038 U	0.61	0.038 U	0.18	0.038 U
2206-28-IA-LS	05/03/07		0.28	0.037 U	0.14	0.11	0.049	0.037 U	0.72	0.037 U	0.25	0.037 U
2206-28-IA-CS	11/14/07		0.093	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.39	0.037 U	0.091	0.037 U
2206-28-IA-LS	11/14/07		0.27	0.037 U	0.066	0.075	0.055	0.037 U	0.58	0.037 U	0.19	0.037 U
2206-28-IA-CS	05/09/08	DP	0.18	0.037 U	0.037 U	0.054	0.037 U	0.037 U	0.96	0.037 U	0.14	0.037 U
2206-28-IA-CS	05/09/08	D	0.18	0.034 U	0.034 U	0.057	0.034 U	0.034 U	0.92	0.034 U	0.16	0.034 U
2206-28-IA-LS	05/09/08		0.51	0.035 U	0.11	0.16	0.046	0.035 U	0.57	0.035 U	0.24	0.035 U
2209-27-IA-CS	01/26/02		0.21	NA	0.0071	NA	NA	1.2 U	0.088	NA	0.057	0.012
2209-27-IA-LS	01/26/02		4.7	NA	0.037	NA	NA	0.0057	0.32	NA	0.16	0.013
2209-28-IA-CS	01/26/02		0.96	NA	0.018	NA	NA	1.2 U	1.2	NA	0.25	0.0094
2209-28-IA-LS	01/26/02		1	NA	0.025	NA	NA	0.0042	1.2	NA	0.33	0.42 U
2209-28-IA-CS	10/02/03		0.38	0.0032 U	0.0067	0.069	0.056	0.0051 U	1.1	0.0029 U	0.18	0.0083 U
2209-28-IA-LS	10/02/03		0.37	0.0039	0.029	0.037	0.076	0.0049 U	1.6	0.0028 U	0.42	0.0082
2210-28-IA-CS	01/29/04		1.2	0.012 J	0.012 J	0.033 J	0.033 J	0.041 U	0.89	0.041 U	0.19	0.041 U
2210-28-IA-LS	01/29/04		0.36	0.0062 J	0.048	0.054	0.14	0.039 U	0.39	0.039 U	0.14	0.014 J
2210-28-IA-CS	09/12/07		0.068	0.04 U	0.04 U	0.04	0.04 U	0.04 U	0.15	0.04 U	0.15	0.04 U
2210-28-IA-LS	09/12/07		0.095 J	0.046 UJ	0.046 UJ	0.058 J	0.046 UJ	0.046 UJ	0.46 J	0.046 UJ	0.22 J	0.046 UJ
2211-27-IA-LS	08/26/04		0.12 J	0.08 U	0.04 U	0.041	0.053	0.056 U	0.13	0.056 U	0.067	0.02 U
2211-27-IA-CS	08/27/04		0.12 J	0.08 U	0.04 U	0.016	0.12 U	0.056 U	0.24	0.056 U	0.084	0.02 U
2211-28-IA-CS	02/01/04		0.2	0.034 U	0.0082 J	0.041	0.048	0.034 U	0.54	0.034 U	0.06	0.034 U
2211-28-IA-LS	02/01/04		0.2 J	0.0043 J	0.27 J	0.16 J	0.1 J	0.029 UJ	0.42 J	0.029 UJ	0.092 J	0.029 UJ
2211-28-IA-LS	08/18/04		0.13 J	0.08 U	0.023	0.051	0.12 U	0.056 U	0.073	0.056 U	0.021	0.02 U
2211-28-IA-CS	12/21/07		0.069 J	0.029 UJ	0.029 UJ	0.046 J	0.029 UJ	0.029 UJ	0.14 J	0.029 UJ	0.061 J	0.029 UJ
2211-28-IA-LS	12/21/07		0.1	0.036 U	0.15	3.3	0.056	0.036 U	0.23	0.036 U	0.065	0.036 U
2212-27-IA-LS	08/27/04		0.12 J	0.08 U	0.04 U	0.022	0.029	0.056 U	0.26	0.056 U	0.087	0.02 U
2214-28-IA-LS	01/29/04		0.66	0.034 U	0.51	0.046	0.11	0.034 U	0.19	0.034 U	0.087	0.034 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2214-28-IA-CS	09/19/07		0.082 J	0.047 UJ	0.047 UJ	0.047 UJ	0.047 UJ	0.047 UJ	0.18 J	0.047 UJ	0.047 UJ	0.047 UJ
2214-28-IA-LS	09/19/07		0.071	0.037 U	0.037 U	0.082	0.048	0.037 U	0.093	0.037 U	0.037 U	0.037 U
2310-31-IA-CS	08/20/04		0.22 J	0.08 U	0.04 U	0.017	0.022	0.056 U	0.41	0.056 U	0.021	0.0067
2310-31-IA-LS	08/20/04		3.1 J	0.08 U	0.036	0.13	0.12 U	0.056 U	6.4	0.056 U	0.16	0.081
2310-31-IA-CS	03/04/05	DP	0.2	0.033 U	0.015 N	0.033	0.021	0.033 U	0.37	0.033 U	0.12	0.033 U
2310-31-IA-CS	03/04/05	D	0.23	0.036 U	0.014 N	0.045	0.027	0.036 U	0.35	0.036 U	0.1	0.036 U
2310-31-IA-LS	03/04/05		1.6	0.037 U	0.2 N	0.17	0.042	0.035 N	15	0.011	0.29	0.12
2405-31-IA-CS	03/21/07		0.064	0.036 U	0.036 U	0.052	0.036 U	0.036 U	0.23	0.036 U	0.15	0.036 U
2405-31-IA-LS	03/21/07		2.5	0.037 U	0.49	0.065	0.037 U	0.037 U	0.2	0.037 U	0.09	0.037 U
2407-31-IA-CS	06/01/05		0.1	0.039 U	0.039 U	0.027	0.021	0.0056	0.085	0.039 U	0.072	0.039 U
2407-31-IA-LS	06/01/05		0.12	0.038 U	0.014	0.031	0.025	0.038 U	0.094	0.038 U	0.075	0.038 U
2409-31-IA-CS	06/18/05		0.13	0.038 U	0.0076	0.024	0.019 U	0.038 U	0.09	0.038 U	0.028	0.038 U
2409-31-IA-LS	06/18/05		18	0.031 U	0.095	0.12	0.08	0.031 U	2.5	0.031 U	2.8	0.011
2409-31-IA-CS	03/22/07		0.09	0.035 U	0.035 U	0.043	0.035 U	0.035 U	0.25	0.035 U	0.1	0.035 U
2409-31-IA-LS	03/22/07		1.9	0.036 U	0.36	0.065	0.036 U	0.036 U	0.83	0.036 U	0.75	0.036 U
2412-31-IA-CS	08/18/04		0.11 J	0.08 U	0.04 U	0.021	0.018	0.056 U	0.041	0.056 U	0.0098	0.02 U
2412-31-IA-LS	08/20/04		0.11 J	0.08 U	0.04 U	0.036	0.029	0.056 U	0.069	0.056 U	0.013	0.02 U
2604-WE-IA-CS	05/08/04		0.18	0.13 U	0.065 U	0.074 N	0.22 U	0.13 U	0.3	0.65 U	0.12	0.042 U
2604-WE-IA-LS	05/08/04		2.6	0.13 U	0.062	0.12	0.083	0.12 U	73	0.62 U	0.36	0.04 U
2604-WE-IA-LS	06/22/04		0.19	0.01 N	0.043	0.046	0.075	0.037 U	25	0.037 U	0.23	0.037 U
2604-WE-IA-CS	09/11/07		0.069	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.62	0.042 U	0.042 U	0.042 U
2604-WE-IA-LS	09/11/07		0.089	0.04 U	0.19	0.072	0.052	0.04 U	5.7	0.04 U	0.18	0.04 U
2607-WE-IA-CS	01/26/02		0.17	NA	0.0047	NA	NA	1.2 U	0.077	NA	0.073	0.23 U
2607-WE-IA-LS	01/26/02	DP	0.18	NA	0.012	NA	NA	0.011	0.49	NA	0.098	0.0098
2607-WE-IA-LS	01/26/02	D	0.16	NA	0.0072	NA	NA	1.4 U	0.51	NA	0.089	0.022
2607-WE-IA-CS	01/30/04		0.13	0.033	0.0056 J	0.032 J	0.021 J	0.033 U	0.075	0.033 U	0.052	0.033 U
2607-WE-IA-LS	01/30/04		0.19	0.032 U	0.056	0.052	0.05 U	0.032 U	0.29	0.032 U	1.1	0.032 U
2608-UN-IA-CS	01/26/02		0.22	NA	0.0047	NA	NA	1.2 U	0.15	NA	0.19	0.0082
2608-UN-IA-LS	01/26/02		0.22	NA	0.015	NA	NA	0.003	0.29	NA	0.31	0.012
2608-UN-IA-CS	03/02/05		0.13	0.035 U	0.0091 N	0.073 J	0.016	0.035 U	0.15	0.035 U	0.082	0.035 U
2608-UN-IA-LS	03/02/05		0.16	0.035 U	0.045 N	0.11	0.029	0.035 U	0.36	0.035 U	0.14	0.0099
2608-WE-IA-CS	02/23/05		0.098	0.036 U	0.0084	0.033	0.014 UB	0.036 U	0.15	0.036 U	0.53	0.036 U
2608-WE-IA-LS	02/23/05		0.1	0.048 U	0.016	0.038	0.019 UB	0.007	0.19	0.048 U	0.47	0.048 U
2608-WE-IA-CS	09/30/07		0.06	0.033 U	0.033 U	0.035	0.033 U	0.033 U	0.4	0.033 U	0.033 U	0.033 U
2608-WE-IA-LS	09/30/07		0.068	0.041 U	0.041 U	0.047	0.068	0.041 U	0.33	0.041 U	0.041 U	0.041 U
2608-WE-IA-CS	11/09/07		0.064	0.035 U	0.035 U	0.041	0.035 U	0.035 U	0.22	0.035 U	0.12	0.035 U
2608-WE-IA-LS	11/09/07		0.081	0.035 U	0.036	0.052	0.035 U	0.035 U	0.31	0.035 U	0.14	0.035 U
2608-WE-IA-CS	12/07/07		0.057	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.11	0.039 U	0.039 U	0.039 U
2608-WE-IA-LS	12/07/07		0.07	0.035 U	0.035 U	0.059	0.035 U	0.035 U	0.12	0.035 U	0.035 U	0.035 U
2608-WE-IA-CS	01/05/08		0.06	0.041 U	0.041 U	0.045	0.041 U	0.041 U	0.11	0.041 U	0.041 U	0.041 U
2608-WE-IA-LS	01/05/08		0.061	0.035 U	0.035 U	0.065	0.064	0.035 U	0.066	0.035 U	0.035 U	0.035 U
2608-WE-IA-CS	02/27/08		0.07	0.039 U	0.039 U	0.05	0.039 U	0.039 U	0.94	0.039 U	0.073	0.039 U
2608-WE-IA-LS	02/27/08		0.084	0.04 U	0.04 U	0.15	0.04 U	0.04 U	1.2	0.04 U	0.075	0.04 U
2608-WE-IA-CS	03/26/08		0.066	0.04 U	0.04 U	0.058	0.04 U	0.04 U	0.091	0.04 U	0.065	0.04 U
2608-WE-IA-LS	03/26/08		0.081	0.045 U	0.045 U	0.15	0.056	0.045 U	0.14	0.045 U	0.067	0.045 U
2608-WE-IA-CS	04/23/08		0.065	0.034 U	0.034 U	0.057	0.034 U	0.034 U	0.077	0.034 U	0.034 U	0.034 U
2608-WE-IA-LS	04/23/08		0.073	0.035 U	0.035 U	0.19	0.035 U	0.035 U	0.097	0.035 U	0.035 U	0.035 U
2611-UN-IA-LS	01/29/04		0.17	0.005 J	0.057	0.17	0.12	0.032 U	0.15	0.032 U	0.48	0.007 J
2611-UN-IA-LS	08/18/04		0.16 J	0.08 U	0.04 U	0.068	0.024	0.056 U	0.056	0.056 U	0.058	0.0063

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2611-UN-IA-LS	09/13/07		0.089	0.037 U	0.037 U	0.098	0.064	0.037 U	0.099	0.037 U	0.037 U	0.037 U
2702-WE-IA-CS	01/26/02		0.31	NA	0.0058	NA	NA	1.4 U	0.5	NA	0.086	0.29 U
2702-WE-IA-LS	01/26/02		1.4	NA	0.012	NA	NA	0.0036	0.65	NA	0.067	0.013
2702-WE-IA-CS	01/27/04		0.16	0.034 U	0.018 J	0.042	0.042	0.034 U	0.39	0.034 U	0.22	0.034 U
2702-WE-IA-LS	01/27/04		0.26	0.036 U	0.037	0.045	0.061	0.036 U	1.3	0.036 U	0.21	0.009 J
2702-WE-IA-CS	06/03/05		0.1	0.035 U	0.0035	0.027	0.033	0.035 U	0.29	0.035 U	0.035	0.035 U
2702-WE-IA-LS	06/03/05		0.11	0.037 U	0.01	0.025	0.027	0.037 U	0.31	0.037 U	0.04	0.037 U
2703-UN-IA-BS	02/25/05		0.12	0.035 U	0.013	0.055	0.016	0.023	0.42	0.012	0.27	0.035 U
2703-UN-IA-CS	02/25/05		0.12	0.043 U	0.013	0.037	0.014 UB	0.043 U	0.43	0.043 U	0.26	0.043 U
2703-UN-IA-LS	02/25/05		0.17	0.04 U	0.063	0.068	0.05	0.04 U	0.54	0.0093	0.36	0.04 U
2703-UN-IA-BS	09/20/07		0.075	0.04 U	0.04 U	0.057	0.04 U	0.04 U	0.17	0.04 U	0.04 U	0.04 U
2703-UN-IA-CS	09/20/07		0.079	0.039 U	0.039 U	0.05	0.039 U	0.039 U	0.19	0.039 U	0.046	0.039 U
2703-UN-IA-LS	09/20/07		0.11	0.039 U	0.057	0.083	0.039 U	0.039 U	0.8	0.039 U	0.062	0.039 U
2703-WE-IA-CS	01/29/04		0.16	0.034 U	0.013 J	0.033 J	0.029 J	0.034 U	0.16	0.034 U	0.12	0.034 U
2703-WE-IA-LS	01/29/04		0.2	0.0078 J	0.2	0.11	0.054	0.034 U	0.25	0.034 U	0.2	0.034 U
2703-WE-IA-LS	08/18/04		0.18 J	0.08 U	0.024	0.22	0.12 U	0.056 U	0.29	0.056 U	0.18	0.02 U
2703-WE-IA-CS	08/19/04		0.15 J	0.08 U	0.04 U	0.029	0.12 U	0.056 U	0.31	0.056 U	0.16	0.02 U
2704-UN-IA-CS	01/26/02		0.99	NA	0.0053	NA	NA	1.3 U	1.2	NA	0.85	0.26 U
2704-UN-IA-LS	01/26/02		1.7	NA	0.023	NA	NA	1.6 U	0.62	NA	0.58	0.13
2704-UN-IA-CS	03/03/05		0.18	0.039 U	0.016 N	0.043	0.027 N	0.0099 N	0.46	0.039 U	0.091	0.039 U
2704-UN-IA-LS	03/03/05		0.68	0.035 U	0.061 N	0.75 J	0.079 N	0.035 U	0.31	0.035 U	0.15 N	0.047 J
2704-WE-IA-CS	01/26/02		0.16	NA	0.069 U	NA	NA	1.4 U	0.081	NA	0.069	0.28 U
2704-WE-IA-LS	01/26/02		0.17	NA	0.023	NA	NA	0.0091	0.12	NA	0.1	0.015
2704-WE-IA-LS	01/27/04		0.21	0.0067 J	0.21	0.23	0.041	0.039 U	1	0.039 U	0.33	0.0092 J
2704-WE-IA-CS	01/28/04		0.23	0.015 J	0.12 J	0.047	0.018 J	0.038 U	0.22	0.038 U	0.13	0.038 U
2705-UN-IA-CS	01/26/02		0.28	NA	0.059 U	NA	NA	0.0023	0.27	NA	0.75	0.23 U
2705-UN-IA-LS	01/26/02		0.32	NA	0.0049	NA	NA	0.0037	0.27	NA	0.73	0.016
2705-UN-IA-CS	01/12/07		0.058	0.034 U	0.034 U	0.036	0.034 U	0.034 U	0.11	0.034 U	0.034 U	0.034 U
2705-UN-IA-LS	01/12/07		0.069	0.037 U	0.057	0.059	0.037 U	0.037 U	0.26	0.037 U	0.052	0.037 U
2706-WE-IA-CS	10/02/03		0.17	0.037 U	0.0072	0.027	0.13	0.037 U	0.24	0.037 U	0.19	0.017
2706-WE-IA-LS	10/02/03		0.18 J	0.012 J	0.19 J	0.061 J	0.063 J	0.03 UJ	0.21 J	0.03 UJ	0.53 J	0.03 UJ
2706-WE-IA-CS	01/27/04		0.15	0.038 U	0.0088 J	0.038 J	0.017 UJ	0.038 U	0.19	0.038 U	0.18	0.038 U
2706-WE-IA-LS	01/27/04		0.18	0.081 U	0.32 J	0.092	0.06 J	0.081 U	0.24	0.081 U	0.23	0.081 U
2706-WE-IA-LS	08/27/04		0.13 J	0.08 UJ	0.04 UJ	0.32 J	0.056 J	0.056 UJ	13 J	0.056 UJ	0.25 J	0.0094 J
2708-UN-IA-CS	01/29/04		0.16	0.037 U	0.0078 J	0.03 J	0.059	0.037 U	0.18	0.037 U	0.27	0.037 U
2708-UN-IA-LS	01/29/04		0.65	0.012 J	0.73	0.038 J	0.047	0.04 U	0.26	0.04 U	0.38	0.013 J
2708-UN-IA-CS	06/07/05		0.099	0.037 U	0.0052	0.025	0.018 U	0.037 U	0.17	0.037 U	0.055	0.037 U
2708-UN-IA-LS	06/07/05		0.2	0.035 U	0.13	0.044	0.054	0.035 U	0.81	0.035 U	0.11	0.019
2708-UN-IA-CS	08/28/07		0.053	0.035 U	0.035 U	0.054	0.035 U	0.035 U	0.11	0.035 U	0.035 U	0.035 U
2708-UN-IA-LS	08/28/07		0.063	0.038 U	0.095	0.46	0.06	0.038 U	0.13	0.038 U	0.058	0.038 U
2708-UN-IA-CS	03/12/08		0.07	0.037 U	0.037 U	0.071	0.037 U	0.037 U	0.13	0.037 U	0.037	0.037 U
2708-UN-IA-LS	03/12/08		0.12	0.038 U	0.074	0.9	0.038 U	0.038 U	0.18	0.038 U	0.076	0.038 U
2709-UN-IA-CS	01/29/04		0.2	0.0089 J	0.008 J	0.034 J	0.023 UJ	0.05 U	0.23	0.05 U	0.84	0.05 U
2709-UN-IA-LS	01/29/04	DP	0.19	0.0036 J	0.027 J	0.12	0.13	0.038 U	1.2	0.038 U	1	0.008 J
2709-UN-IA-LS	01/29/04	D	0.18	0.099	0.026 J	0.13	0.11	0.044 U	1.2	0.044 U	1.1	0.044 U
2709-UN-IA-CS	02/23/05		0.1	0.036 U	0.0099	0.036	0.018 UB	0.036 U	0.2	0.036 U	0.077	0.036 U
2709-UN-IA-LS	02/23/05		0.12	0.037 U	0.039	0.13	0.087	0.037 U	0.58	0.037 U	0.11	0.0052
2709-WE-IA-CS	01/26/02		0.41	NA	0.0047	NA	NA	1.2 U	0.74	NA	0.48	0.24 U
2709-WE-IA-LS	01/26/02		0.56	NA	0.04	NA	NA	1.2 U	0.97	NA	1.7	0.011

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2709-WE-IA-CS	10/02/03		0.34	0.023	0.011	0.031	0.037	0.039 U	1.1	0.039 U	0.78	0.039 U
2709-WE-IA-LS	10/02/03		0.28 J	0.01 J	0.33 J	0.035 J	0.15 J	0.03 UJ	0.74 J	0.03 UJ	0.83 J	0.03 UJ
2709-WE-IA-CS	09/03/04		0.18 J	0.08 U	0.04 U	0.018	0.12 U	0.056 U	0.78	0.056 U	0.46	0.02 U
2709-WE-IA-LS	09/03/04	DP	0.2 J	0.08 U	0.013	0.025	0.12 U	0.056 U	0.7	0.056 U	0.69	0.02 U
2709-WE-IA-LS	09/03/04	D	0.22 J	0.08 U	0.012	0.024	0.02	0.056 U	0.75	0.056 U	0.73	0.02 U
2710-WE-IA-CS	01/26/02		0.64	NA	0.0087	NA	NA	1.2 U	1.3	NA	1.2	0.25 U
2710-WE-IA-LS	01/26/02		0.58	NA	0.01	NA	NA	1.5 U	1.9	NA	1	0.3 U
2710-WE-IA-CS	10/02/03	DP	0.19	0.008	0.0066	0.022	0.067	0.038 U	0.37	0.038 U	0.35	0.038 U
2710-WE-IA-CS	10/02/03	D	0.18	0.0057	0.0068	0.024	0.2	0.037 U	0.35	0.037 U	0.33	0.037 U
2710-WE-IA-LS	10/03/03	DP	1.7	0.017 J	0.035	0.039	0.047 J	0.0045 U	0.42	0.0026 U	0.37	0.0074 U
2710-WE-IA-LS	10/03/03	D	1.7	0.013	0.035	0.047	0.16 J	0.005 U	0.45	0.0028 U	0.38	0.0081 U
2710-WE-IA-CS	01/27/04		0.32	0.036 U	0.0077 J	0.036	0.019 UJ	0.036 U	1.3	0.036 U	1.1	0.036 U
2710-WE-IA-LS	01/27/04		2	0.0057 J	0.061	0.051	0.041 UJ	0.042 U	1	0.042 U	0.89	0.042 U
2710-WE-IA-CS	12/08/04		0.2	0.04 U	0.04 U	0.038 J	0.023 J	0.04 U	1	0.04 U	0.71	0.0062 J
2710-WE-IA-LS	12/08/04		0.22	0.0093 J	0.03 N	0.051	0.03 J	0.04 U	0.79	0.04 U	0.6	0.0044 N
2710-WE-IA-CS	09/15/07		0.056	0.034 U	0.034 U	0.057	0.034 U	0.034 U	0.17	0.034 U	0.037	0.034 U
2710-WE-IA-LS	09/15/07		0.14	0.039 U	0.23	1	0.039 U	0.039 U	0.25	0.039 U	0.21	0.039 U
2710-WE-IA-CS	10/12/07		0.17	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U	0.39	0.034 U	0.078	0.034 U
2710-WE-IA-LS	10/12/07		0.21	0.039 U	0.21	0.85	0.039 U	0.039 U	0.41	0.039 U	0.2	0.039 U
2710-WE-IA-CS	11/09/07		0.075	0.031 U	0.031 U	0.055	0.031 U	0.031 U	0.42	0.031 U	0.16	0.031 U
2710-WE-IA-LS	11/09/07		0.14	0.038 U	0.11	0.54	0.038 U	0.038 U	0.43	0.038 U	0.23	0.038 U
2710-WE-IA-CS	12/07/07		0.064	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.21	0.037 U	0.057	0.037 U
2710-WE-IA-LS	12/07/07		0.18	0.031 U	0.18	0.74	0.031 U	0.031 U	0.6	0.031 U	0.21	0.031 U
2710-WE-IA-CS	01/04/08	DP	0.092	0.038 U	0.038 U	0.048	0.038 U	0.038 U	0.62	0.038 U	0.14	0.038 U
2710-WE-IA-CS	01/04/08	D	0.089	0.04 U	0.04 U	0.048	0.04 U	0.04 U	0.62	0.04 U	0.14	0.04 U
2710-WE-IA-LS	01/04/08		0.17	0.039 U	0.14	0.85	0.039 U	0.039 U	0.59	0.039 U	0.19	0.039 U
2710-WE-IA-CS	02/27/08		0.08	0.037 U	0.037 U	0.055	0.037 U	0.037 U	1.1	0.037 U	0.14	0.037 U
2710-WE-IA-LS	02/27/08		0.15	0.041 U	0.13	0.17	0.056	0.041 U	0.78	0.041 U	0.18	0.041 U
2710-WE-IA-CS	03/26/08		0.088	0.054 U	0.054 U	0.075	0.068	0.054 U	0.48	0.054 U	0.15	0.054 U
2710-WE-IA-LS	03/26/08		0.17	0.049 U	0.11	0.2	0.091	0.049 U	0.44	0.049 U	0.17	0.049 U
2710-WE-IA-LS	04/23/08		0.19	0.038 U	0.098	0.11	0.042	0.038 U	0.36	0.038 U	0.15	0.038 U
2710-WE-IA-CS	04/24/08		0.073	0.035 U	0.035 U	0.2	0.035 U	0.035 U	0.46	0.035 U	0.11	0.035 U
2711-UN-IA-LS	01/29/04		0.52	0.004 J	0.023 J	0.038	0.1	0.035 U	0.22	0.035 U	0.65	0.0083 J
2711-UN-IA-CS	09/13/07		0.057	0.037 U	0.037 U	0.043	0.037 U	0.037 U	0.18	0.037 U	0.097	0.037 U
2711-UN-IA-LS	09/13/07		0.071	0.042 U	0.099 J	0.2	0.042 U	0.042 U	0.19	0.042 U	0.11	0.042 U
2712-WE-IA-CS	01/26/02		0.17	NA	0.064 U	NA	NA	1.3 U	0.11	NA	0.076	0.26 U
2712-WE-IA-LS	01/26/02		1.1	NA	0.02	NA	NA	1.5 U	0.18	NA	0.11	0.014
2712-WE-IA-CS	01/27/04		0.14	0.0035 J	0.013 J	0.045	0.035 UJ	0.012 J	0.18	0.012 J	0.2	0.011 J
2712-WE-IA-LS	01/27/04		0.19	0.063 U	0.29	0.093	0.23	0.063 U	0.18	0.063 U	0.2	0.017 J
2802-WE-IA-CS	10/02/03		0.16	0.012	0.041	0.028 U	0.085	0.0044 U	0.16	0.0025 U	0.1	0.0072 U
2802-WE-IA-LS	10/02/03		0.36	0.0025 U	0.051	0.026 U	0.03	0.004 U	1.1 J	0.0023 U	0.99	0.0066 U
2802-WE-IA-BS	01/27/04		0.22	0.16	0.044	0.043	0.025 J	0.037 U	0.47	0.037 U	0.67	0.037 U
2802-WE-IA-LS	01/27/04		0.2	0.12	0.1	0.053	0.049	0.041 U	0.3	0.041 U	0.37	0.015 J
2802-WE-IA-BS	08/27/04		0.12 J	0.08 U	0.04 U	0.016	0.12 U	0.056 U	0.19	0.056 U	0.14	0.02 U
2802-WE-IA-LS	08/27/04		0.13 J	0.08 UJ	0.04 UJ	0.031 J	0.12 UJ	0.056 UJ	0.2 J	0.056 UJ	0.12 J	0.02 UJ
2802-WE-IA-BS	09/12/07		0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
2802-WE-IA-CS	09/12/07		0.055	0.041 U	0.041 U	0.064	0.041 U	0.041 U	0.077	0.041 U	0.041 U	0.041 U
2802-WE-IA-LS	09/12/07		0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
2802-WE-IA-BS	10/12/07		0.9	0.039 U	0.12	0.043	0.039 U	0.039 U	0.33	0.039 U	0.057	0.039 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2802-WE-IA-CS	10/12/07		0.82	0.036 U	0.094	0.036 U	0.036 U	0.036 U	0.25	0.036 U	0.043	0.036 U
2802-WE-IA-LS	10/12/07		1	0.032 U	0.18	0.047	0.032 U	0.032 U	0.36	0.032 U	0.12	0.032 U
2802-WE-IA-BS	11/09/07		0.071	0.033 U	0.056	0.05	0.033 U	0.033 U	0.33	0.033 U	0.14	0.033 U
2802-WE-IA-CS	11/09/07		0.068	0.033 U	0.033 U	0.045	0.033 U	0.033 U	0.24	0.033 U	0.12	0.033 U
2802-WE-IA-LS	11/09/07		0.081	0.032 U	0.045	0.056	0.032 U	0.032 U	0.39	0.032 U	0.17	0.032 U
2802-WE-IA-BS	12/07/07		0.057	0.037 U	0.037 U	0.04	0.037 U	0.037 U	0.14	0.037 U	0.037 U	0.037 U
2802-WE-IA-CS	12/07/07		0.055	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.085	0.038 U	0.038 U	0.038 U
2802-WE-IA-LS	12/07/07		0.08 J	0.061 UJ	0.061 UJ	0.061 UJ	0.061 UJ	0.061 UJ	0.21 J	0.061 UJ	0.061 UJ	0.061 UJ
2802-WE-IA-BS	01/04/08		0.068	0.04 U	0.04 U	0.045	0.04 U	0.04 U	0.19	0.04 U	0.055	0.04 U
2802-WE-IA-CS	01/04/08		0.063	0.041 U	0.041 U	0.042	0.041 U	0.041 U	0.11	0.041 U	0.041 U	0.041 U
2802-WE-IA-LS	01/04/08		0.091	0.044 U	0.049	0.052	0.044 U	0.044 U	0.15	0.044 U	0.05	0.044 U
2802-WE-IA-BS	02/28/08	DP	0.075 U	0.075 U	0.075 U	0.12	0.075 U	0.081	0.44	0.075 U	0.12	0.075 U
2802-WE-IA-BS	02/28/08	D	0.12 U	0.12 U	0.12 U	0.45	0.12 U	0.4	0.51	0.12 U	0.14	0.12 U
2802-WE-IA-CS	02/28/08		0.074	0.045 U	0.045 U	0.059	0.049	0.045 U	0.44	0.045 U	0.13	0.045 U
2802-WE-IA-LS	02/28/08		0.08	0.038 U	0.038 U	0.053	0.038 U	0.038 U	0.46	0.038 U	0.11	0.038 U
2802-WE-IA-BS	04/23/08		0.068	0.036 U	0.036 U	0.082	0.036 U	0.036 U	0.26	0.036 U	0.055	0.036 U
2802-WE-IA-CS	04/23/08		0.064	0.04 U	0.04 U	0.06	0.04 U	0.04 U	0.11	0.04 U	0.045	0.04 U
2802-WE-IA-LS	04/23/08	DP	0.076	0.037 U	0.037 U	0.07	0.037 U	0.037 U	0.17	0.037 U	0.044	0.037 U
2802-WE-IA-LS	04/23/08	D	0.08	0.037 U	0.037 U	0.076	0.037 U	0.037 U	0.18	0.037 U	0.046	0.037 U
2803-UN-IA-CS	01/26/02	DP	0.49	NA	0.0093	NA	NA	1.2 U	0.3	NA	0.67	0.23 U
2803-UN-IA-CS	01/26/02	D	0.74	NA	0.015	NA	NA	1.4 U	0.44	NA	0.9	0.28 U
2803-UN-IA-LS	01/26/02		0.92	NA	0.058	NA	NA	1.3 U	0.52	NA	0.83	0.25 U
2803-UN-IA-CS	03/05/05		0.11	0.033 U	0.0082 N	0.032	0.033	0.033 U	0.31	0.033 U	0.1	0.033 U
2803-UN-IA-LS	03/05/05		0.14	0.046 U	0.024 N	0.035	0.029	0.046 U	0.37	0.013 N	0.13	0.0058
2804-UN-IA-LS	01/26/02		0.5	NA	0.016	NA	NA	1.6 U	0.16	NA	0.18	0.32 U
2804-UN-IA-CS	01/30/04		0.16	0.0035 J	0.0096 J	0.031 J	0.036 U	0.036 U	0.12	0.036 U	0.17	0.036 U
2804-UN-IA-LS	01/30/04		0.29	0.015 J	0.039	0.1	0.04 U	0.035 U	0.099	0.035 U	0.17	0.035 U
2804-WE-IA-CS	10/02/03		0.5	0.0065 J	0.012	0.024 U	0.045 J	0.013	1.7	0.003 U	2.9	0.0085 U
2804-WE-IA-LS	10/02/03	DP	0.25	0.0065 J	0.18	0.036	0.1 J	0.0047 U	0.46	0.0027 U	0.9	0.0077 U
2804-WE-IA-LS	10/02/03	D	0.24	0.009 J	0.16	0.034	0.045 J	0.004 U	0.45	0.0023 U	0.84	0.0066 U
2804-WE-IA-CS	01/27/04		0.27	0.04 U	0.027 J	0.047	0.025 J	0.009 J	0.67	0.0033 J	1.6	0.04 U
2804-WE-IA-LS	01/27/04		0.26	0.015 J	0.18	0.052	0.062	0.039 U	0.51	0.039 U	1.1	0.012 J
2804-WE-IA-CS	05/31/07		0.046	0.037 U	0.037 U	0.045	0.037 U	0.037 U	0.15	0.037 U	0.09	0.037 U
2804-WE-IA-LS	05/31/07		0.049	0.036 U	0.12	0.12	0.044	0.036 U	0.11	0.036 U	0.068	0.036 U
2804-WE-IA-CS	09/11/07		0.076 J	0.053 UJ	0.053 UJ	0.061 J	0.053 UJ	0.053 UJ	0.31 J	0.053 UJ	0.23 J	0.053 UJ
2804-WE-IA-LS	09/11/07		0.13	0.04 U	0.16	0.15	0.04 U	0.04 U	0.27	0.04 U	0.33	0.04 U
2804-WE-IA-CS	10/12/07		1.6	0.035 U	0.17	0.035 U	0.035 U	0.035 U	0.42	0.035 U	0.15	0.035 U
2804-WE-IA-LS	10/12/07		1.1	0.034 U	0.27	0.12	0.034 U	0.034 U	0.51	0.034 U	0.18	0.034 U
2804-WE-IA-CS	11/09/07		0.14	0.031 U	0.15	0.095	0.037	0.031 U	0.42	0.031 U	0.22	0.031 U
2804-WE-IA-LS	11/09/07		0.079	0.037 U	0.037 U	0.04	0.037 U	0.037 U	0.3	0.037 U	0.17	0.037 U
2804-WE-IA-CS	12/07/07	DP	0.072	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.24	0.038 U	0.11	0.038 U
2804-WE-IA-CS	12/07/07	D	0.071	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U	0.23	0.034 U	0.1	0.034 U
2804-WE-IA-LS	12/07/07		0.14	0.032 U	0.11	0.085	0.032 U	0.032 U	0.33	0.032 U	0.19	0.032 U
2804-WE-IA-CS	01/04/08		0.076	0.037 U	0.037 U	0.039	0.037 U	0.037 U	0.28	0.037 U	0.084	0.037 U
2804-WE-IA-LS	01/04/08		0.13	0.13	0.12	0.098	0.039 U	0.039 U	0.21	0.039 U	0.12	0.039 U
2804-WE-IA-CS	02/27/08		0.076	0.037 U	0.037 U	0.048	0.037 U	0.037 U	0.84	0.037 U	0.1	0.037 U
2804-WE-IA-LS	02/27/08		0.11	0.04 U	0.11	0.12	0.04 U	0.04 U	0.76	0.04 U	0.12	0.04 U
2804-WE-IA-CS	03/26/08		0.066	0.047 U	0.047 U	0.076	0.047 U	0.047 U	0.1	0.047 U	0.076	0.047 U
2804-WE-IA-LS	03/26/08		0.12	0.04 U	0.081	0.09	0.056	0.04 U	0.15	0.04 U	0.14	0.04 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2804-WE-IA-CS	04/23/08		0.059	0.035 U	0.035 U	0.048	0.035 U	0.035 U	0.084	0.035 U	0.039	0.035 U
2804-WE-IA-LS	04/23/08		0.12	0.04 U	0.066	0.38	0.04 U	0.04 U	0.11	0.04 U	0.1	0.04 U
2805-UN-IA-BS	01/26/02		5.7	NA	0.36	NA	NA	0.032	7.8	NA	25	0.018
2805-UN-IA-LS	01/26/02		1.1	NA	0.069	NA	NA	0.0066	1.9	NA	4.6	0.04
2805-UN-IA-BS	09/08/02		1.6	27 U	1.4 U	27 U	27 U	27 U	3.3	27 U	7.5	5.5 U
2805-UN-IA-LS	09/08/02		0.2	1.5 U	0.074 U	0.048	0.2	1.5 U	0.22	1.5 U	0.39	0.3 U
2805-UN-IA-BS	10/02/03		0.46	0.032	0.11	0.062	0.033	0.023	1.5	0.036 U	2	0.033
2805-UN-IA-LS	10/02/03		0.29	0.011	0.026	0.081	0.041	0.041 U	0.39	0.041 U	0.74	0.011
2805-UN-IA-BS	01/27/04		0.26	0.039 U	0.15	0.045	0.029 UJ	0.011 J	0.43	0.039 U	0.73	0.016 J
2805-UN-IA-LS	01/27/04		0.24	0.04 U	0.12	0.07	0.079 U	0.04 U	0.3	0.04 U	0.67	0.012 J
2805-UN-IA-BS	05/08/04		0.2	0.12 U	0.06 U	0.063 N	0.2 U	0.12 U	0.41	0.6 U	0.2	0.039 U
2805-UN-IA-LS	05/08/04		0.24	0.13 U	0.07	0.15	0.27	0.13 U	0.3	0.65 U	0.24	0.042 U
2805-UN-IA-BS	08/24/04		0.15 J	0.08 U	0.04 U	0.028	0.02	0.056 U	0.35	0.056 U	0.48	0.017
2805-UN-IA-BS	03/03/05		0.13	0.038 U	0.017 N	0.069	0.051	0.038 U	0.51	0.038 U	0.14	0.011
2805-UN-IA-LS	03/03/05		0.14	0.054 U	0.033 N	0.097	0.11	0.054 U	0.35	0.054 U	0.14	0.0092
2805-UN-IA-BS	11/15/05	DP	0.11	0.041 U	0.031 J	0.036 J	0.019 J	0.041 U	0.25	0.041 U	0.046	0.0087 J
2805-UN-IA-BS	11/15/05	D	0.12	0.038 U	0.03 J	0.038	0.017 J	0.038 U	0.25	0.038 U	0.045	0.012 J
2805-UN-IA-LS	11/15/05		0.12	0.042 U	0.027 J	0.044	0.14	0.042 U	0.24	0.042 U	0.065	0.012 J
2805-UN-IA-BS	06/08/06		0.095 J	0.049 UJ	0.049 UJ	0.052 J	0.068 J	0.049 UJ	0.16 J	0.049 UJ	0.049 UJ	0.049 UJ
2805-UN-IA-LS	06/08/06		0.092 J	0.038 UJ	0.038 UJ	0.085 J	0.16 J	0.038 UJ	0.17 J	0.038 UJ	0.038 UJ	0.038 UJ
2805-UN-IA-BS	11/28/06		0.069	0.037 U	0.043	0.045	0.037 U	0.037 U	0.16	0.037 U	0.042	0.037 U
2805-UN-IA-LS	11/28/06		0.067	0.04 U	0.04 U	0.089	0.099	0.04 U	0.13	0.04 U	0.055	0.04 U
2805-UN-IA-BS	05/03/07		0.045 U	0.045 U	0.045 U	0.046	0.045 U	0.045 U	0.096	0.045 U	0.05	0.045 U
2805-UN-IA-LS	05/03/07		0.046	0.04 U	0.04 U	0.086	0.14	0.04 U	0.1	0.04 U	0.059	0.04 U
2805-UN-IA-BS	11/08/07		0.082	0.032 U	0.032 U	0.066	0.032 U	0.032 U	0.52	0.032 U	0.22	0.032 U
2805-UN-IA-LS	11/08/07		0.098	0.043 U	0.043 U	0.11	0.25	0.043 U	0.52	0.043 U	0.24	0.043 U
2805-UN-IA-BS	05/09/08		0.069	0.035 U	0.035 U	0.065	0.035 U	0.035 U	0.054	0.035 U	0.035 U	0.035 U
2805-UN-IA-LS	05/09/08		0.077 J	0.066 UJ	0.066 UJ	0.12 J	0.14 J	0.066 UJ	0.14 J	0.066 UJ	0.066 UJ	0.066 UJ
2806-WE-IA-CS	10/02/03		0.39	0.0041	0.007	0.017 U	0.032	0.0044 U	0.96	0.0025 U	1.4	0.0071 U
2806-WE-IA-LS	10/02/03		1.6	0.0058	0.4	0.12	0.06	0.0045 U	0.43	0.0025 U	0.45	0.0073 U
2806-WE-IA-CS	01/30/04		0.17	0.016 J	0.0064 J	0.033 J	0.04	0.034 U	0.16	0.034 U	0.24	0.034 U
2806-WE-IA-LS	01/30/04		1.1	0.0088 J	0.16	0.074	0.031 J	0.035 U	0.18	0.035 U	0.22	0.035 U
2806-WE-IA-CS	06/17/05		0.12	0.037 U	0.0072	0.022	0.019 U	0.037 U	0.27	0.037 U	0.12	0.037 U
2806-WE-IA-LS	06/17/05	DP	0.89	0.07 U	0.11	0.11	0.032	0.07 U	0.95	0.026	0.12	0.07 U
2806-WE-IA-LS	06/17/05	D	1	0.084 U	0.11	0.13	0.046	0.084 U	1.1	0.084 U	0.12	0.084 U
2806-WE-IA-CS	09/11/07		0.15	0.036 U	0.036 U	0.055	0.036 U	0.036 U	0.38	0.036 U	0.13	0.036 U
2806-WE-IA-LS	09/11/07		0.36	0.036 U	0.08 J	0.14	0.042	0.036 U	0.62	0.036 U	0.21	0.036 U
2806-WE-IA-CS	10/12/07		1.3	0.036 U	0.15	0.036 U	0.036 U	0.036 U	0.31	0.036 U	0.057	0.036 U
2806-WE-IA-LS	10/12/07		1.7	0.038 U	0.23	0.092	0.038 U	0.038 U	0.71	0.038 U	0.078	0.038 U
2806-WE-IA-CS	11/09/07		0.07	0.034 U	0.034 U	0.039	0.034 U	0.034 U	0.27	0.034 U	0.12	0.034 U
2806-WE-IA-LS	11/09/07		0.36	0.039 U	0.039 U	0.099	0.039 U	0.039 U	0.72	0.039 U	0.14	0.039 U
2806-WE-IA-CS	12/07/07		0.062 J	0.03 UJ	0.03 UJ	0.034 J	0.03 UJ	0.03 UJ	0.19 J	0.03 UJ	0.039 J	0.03 UJ
2806-WE-IA-LS	12/07/07		0.3	0.041 U	0.041 U	0.13	0.041 U	0.041 U	0.59	0.041 U	0.05	0.041 U
2806-WE-IA-CS	01/10/08		0.061	0.036 U	0.036 U	0.037	0.036 U	0.036 U	0.16	0.036 U	0.036 U	0.036 U
2806-WE-IA-LS	01/10/08		0.31	0.033 U	0.033 U	0.087	0.033 U	0.033 U	0.49	0.033 U	0.045	0.033 U
2806-WE-IA-CS	02/27/08		0.073	0.038 U	0.038 U	0.058	0.038 U	0.038 U	0.77	0.038 U	0.12	0.038 U
2806-WE-IA-LS	02/27/08		0.36	0.038 U	0.038 U	0.087	0.038 U	0.038 U	1.1	0.038 U	0.084	0.038 U
2806-WE-IA-CS	03/26/08		0.066	0.038 U	0.038 U	0.057	0.038 U	0.038 U	0.08	0.038 U	0.038 U	0.038 U
2806-WE-IA-LS	03/26/08		0.47	0.044 U	0.044 U	0.1	0.067	0.044 U	0.43	0.044 U	0.07	0.044 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2806-WE-IA-CS	04/23/08		0.064	0.032 U	0.032 U	0.058	0.033	0.032 U	0.12	0.032 U	0.033	0.032 U
2806-WE-IA-LS	04/23/08		0.44	0.034 U	0.034 U	0.1	0.034 U	0.034 U	0.42	0.034 U	0.048	0.034 U
2807-VA-IA-CS	01/29/04		0.17	0.0094 J	0.0087 J	0.034 J	0.029 J	0.035 U	0.11	0.035 U	0.076	0.035 U
2807-VA-IA-LS	01/29/04		0.2	0.0037 J	0.051	0.054	0.063	0.036 U	0.13	0.036 U	0.19	0.011 J
2808-UN-IA-CS	01/26/02		0.16	NA	0.018	NA	NA	4.4 U	0.098	NA	0.13	0.89 U
2808-UN-IA-LS	01/26/02		4.8	NA	0.021	NA	NA	1.2 U	0.37	NA	0.23	0.25 U
2808-UN-IA-LS	08/24/04		3.6 J	0.08 U	0.04 U	0.072	0.019	0.056 U	0.54	0.056 U	0.32	0.02 U
2808-UN-IA-CS	08/25/04		0.13 J	0.08 U	0.04 U	0.017	0.12 U	0.056 U	0.14	0.056 U	0.097	0.02 U
2808-UN-IA-CS	06/02/05		0.1	0.054 U	0.054 U	0.029	0.027	0.0095	0.07	0.054 U	0.015	0.054 U
2808-UN-IA-LS	06/02/05		1.5	0.041 U	0.018	0.062	0.036	0.041 U	0.56	0.041 U	0.038	0.041 U
2808-WE-IA-CS	01/26/02		0.49	NA	0.006	NA	NA	0.0024	0.39	NA	0.12	0.011
2808-WE-IA-LS	01/26/02		0.33	NA	0.013	NA	NA	1.2 U	1.1	NA	0.13	0.013
2808-WE-IA-CS	10/02/03		0.32	0.0031 U	0.0063	0.022 U	0.03	0.0049 U	1.2	0.0028 U	0.066	0.008 U
2808-WE-IA-LS	10/02/03		0.24	0.015	0.1	0.33	0.15	0.0046 U	2.3	0.0026 U	0.085	0.0093
2809-UN-IA-BS	01/26/02		6.4	NA	0.55	NA	NA	0.064	9	NA	31	0.011
2809-UN-IA-LS	01/26/02		4.7	NA	0.48	NA	NA	0.059	6.9	NA	25	0.012
2809-UN-IA-BS	09/08/02		1.1	1.2 U	0.042	0.027	0.34	1.2 U	2.8	1.2 U	6.8	0.24 U
2809-UN-IA-LS	09/08/02		0.83	1.5 U	0.038	0.049	0.085 U	1.5 U	2.1	1.5 U	5	0.31 U
2809-UN-IA-BS	10/02/03		0.31	0.02	0.015	0.035	0.028	0.0049 U	0.39	0.0028 U	0.56	0.008 U
2809-UN-IA-LS	10/02/03		0.31	0.023	0.014	0.058	0.13	0.0048 U	0.35	0.0027 U	0.47	0.01
2809-UN-IA-BS	01/27/04		0.18	0.041 U	0.021 J	0.059	0.061	0.041 U	0.28	0.041 U	0.41	0.041 U
2809-UN-IA-LS	01/27/04		0.17	0.064	0.021 J	0.07	0.041	0.04 U	0.27	0.04 U	0.47	0.01 J
2809-UN-IA-BS	07/21/04		0.15	0.045 U	0.008 NJ	0.096	0.031 UJ	0.014 J	1.1 J	0.045 U	0.29	0.045 U
2809-UN-IA-LS	07/21/04		0.13	0.04 U	0.04 U	0.064	0.027 UJ	0.04 U	2.2 J	0.04 U	0.07	0.04 U
2809-UN-IA-BS	04/14/05		0.1	0.041 U	0.011 N	0.051	0.022	0.041 U	0.15	0.041 U	0.075	0.041 U
2809-UN-IA-LS	04/14/05		0.11	0.037 U	0.011 N	0.05	0.035	0.037 U	0.18	0.037 U	0.081	0.037 U
2809-UN-IA-BS	11/09/05		0.13	0.044 U	0.014 J	0.36	0.027 J	0.044 U	0.37	0.044 U	0.082	0.0048 J
2809-UN-IA-LS	11/09/05		0.13	0.047 U	0.018 J	0.33	0.053	0.047 U	0.34	0.047 U	0.082	0.0067 J
2809-UN-IA-BS	12/08/06		0.081	0.035 U	0.048	0.18	0.035 U	0.035 U	0.24	0.035 U	0.07	0.035 U
2809-UN-IA-LS	12/08/06		0.085	0.038 U	0.053	0.16	0.038 U	0.038 U	0.32	0.038 U	0.084	0.038 U
2809-UN-IA-BS	05/03/07		0.066	0.035 U	0.035 U	0.28	0.035 U	0.035 U	0.15	0.035 U	0.17	0.035 U
2809-UN-IA-LS	05/03/07		0.057	0.035 U	0.035 U	0.44	0.038	0.035 U	0.13	0.035 U	0.12	0.035 U
2809-UN-IA-BS	11/07/07		0.08	0.038 U	0.038 U	0.21	0.038 U	0.038 U	0.28	0.038 U	0.14	0.038 U
2809-UN-IA-LS	11/07/07		0.11	0.036 U	0.036 U	0.22	0.036 U	0.036 U	0.29	0.036 U	0.15	0.036 U
2809-UN-IA-BS	05/09/08		0.074	0.033 U	0.033 U	0.072	0.22	0.033 U	0.058	0.033 U	0.033 U	0.033 U
2809-UN-IA-LS	05/09/08		0.15	0.037 U	0.05	0.13	0.057	0.037 U	0.077	0.037 U	0.06	0.037 U
2809-WE-IA-CS	01/29/04	DP	0.17	0.14	0.0078 J	0.033 J	0.026 J	0.039 U	0.077	0.039 U	0.06	0.039 U
2809-WE-IA-CS	01/29/04	D	0.17	0.019 J	0.04	0.046	0.025 J	0.014 J	0.1	0.038 U	0.091	0.038 U
2809-WE-IA-LS	01/29/04	DP	2.7	0.01 J	0.29	0.054	0.045	0.035 U	0.5	0.035 U	0.32	0.011 J
2809-WE-IA-LS	01/29/04	D	2.5	0.039 U	0.034 J	0.054	0.043	0.039 U	0.5	0.039 U	0.31	0.011 J
2810-UN-IA-CS	01/29/04		0.16	0.0024 J	0.0076 J	0.032	0.05	0.03 U	0.14	0.03 U	0.3	0.03 U
2810-UN-IA-LS	01/29/04		3.4	0.012 J	0.064	0.075	0.058	0.043 U	0.15	0.043 U	0.32	0.017 J
2810-UN-IA-CS	09/11/07		0.07	0.041 U	0.041 U	0.041 U	0.041	0.041 U	0.27	0.041 U	0.041 U	0.041 U
2810-UN-IA-LS	09/11/07		0.088	0.039 U	0.054 J	0.073	0.039 U	0.039 U	0.31	0.039 U	0.52	0.039 U
2810-UN-IA-CS	12/21/07		0.07	0.097	0.037 U	0.041	0.038	0.037 U	0.17	0.037 U	0.057	0.037 U
2810-UN-IA-LS	12/21/07		0.11	0.039 U	0.039 U	0.26	0.039 U	0.039 U	0.15	0.039 U	0.084	0.039 U
2810-WE-IA-CS	10/02/03		0.25	0.0071	0.47	0.13	0.12	0.0051 U	0.59 J	0.0065	0.33	0.031
2810-WE-IA-LS	10/02/03		0.23	0.63 J	0.011	0.021	0.04 J	0.0049 U	0.19	0.0028 U	0.26	0.008 U
2810-WE-IA-CS	01/27/04		0.22	0.033 U	0.039	0.026 J	0.038 U	0.033 U	0.18	0.033 U	0.19	0.033 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2810-WE-IA-LS	01/27/04		0.2	0.045 U	0.33	0.085	0.042 UJ	0.045 U	0.32	0.045 U	1.3	0.021 J
2810-WE-IA-CS	06/01/05		0.13	0.05 U	0.05 U	0.022	0.05	0.05 U	0.22	0.0075 N	0.057	0.05 U
2810-WE-IA-LS	06/01/05		0.14	0.037 U	0.05	0.073	0.069	0.037 U	0.28	0.023	1.1	0.012
2811-UN-IA-CS	01/29/04		0.18 J	0.0061 J	0.081 J	0.036 J	0.034 J	0.03 UJ	0.35 J	0.03 UJ	0.45 J	0.03 UJ
2811-UN-IA-LS	01/29/04		0.21	0.011 J	0.5	0.058	0.12	0.033 U	0.15	0.033 U	0.44	0.013 J
2811-UN-IA-CS	09/03/04		0.11 J	0.08 U	0.04 U	0.017	0.12 U	0.056 U	0.14	0.056 U	0.052	0.02 U
2811-UN-IA-LS	09/03/04		0.12 J	0.08 U	0.04 U	0.063	0.12 U	0.056 U	0.12	0.056 U	0.066	0.0068
2811-UN-IA-CS	09/14/07		0.056	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.11	0.036 U	0.066	0.036 U
2811-UN-IA-LS	09/14/07		0.075 J	0.03 UJ	0.11 J	0.89 J	0.053 J	0.03 UJ	0.15 J	0.03 UJ	0.096 J	0.03 UJ
2812-WE-IA-CS	10/02/03		0.18	0.037 U	0.0087	0.027	0.079	0.014	0.13	0.0057	0.031	0.037 U
2812-WE-IA-LS	10/02/03		1.1	0.44	0.16	0.13	0.1	0.042 U	0.15	0.042 U	0.043	0.042 U
2812-WE-IA-CS	01/27/04		0.18	0.037 U	0.014 J	0.045	0.029 J	0.037 U	0.19	0.037 U	0.27	0.037 U
2812-WE-IA-LS	01/27/04		2	0.04 U	0.24	0.21	0.089	0.04 U	0.22	0.0033 J	0.31	0.0087 J
2812-WE-IA-CS	06/03/05		0.11	0.037 U	0.037 U	0.023	0.025	0.037 U	0.073	0.037 U	0.023 N	0.037 U
2812-WE-IA-LS	06/03/05		0.13	0.04 U	0.033	0.15	0.035	0.04 U	0.3	0.04 U	0.06	0.04 U
2901-FR-IA-BS	08/27/04		0.12 J	0.08 U	0.04 U	0.031	0.12 U	0.056 U	0.1	0.056 U	0.091	0.02 U
2901-FR-IA-LS	08/27/04		0.12 J	0.08 U	0.04 U	0.42	0.029	0.056 U	0.095	0.056 U	0.13	0.02 U
2901-FR-IA-BS	02/23/05		0.11	0.039 U	0.017	0.24	0.077	0.19	0.16	0.024	0.068	0.052
2901-FR-IA-LS	02/23/05		0.11	0.034 U	0.015	0.12	0.022 UB	0.034 U	0.15	0.034 U	0.066	0.034 U
2902-UN-IA-CS	12/17/04		0.12	0.035 U	0.035 U	0.048	0.026 UJ	0.035 U	0.41	0.035 U	0.61	0.0032 J
2902-UN-IA-LS	12/17/04		0.93	0.042 U	0.049 N	0.18	0.059	0.042 U	0.57	0.013 J	0.72	0.0077 J
2902-UN-IA-CS	03/03/05		0.13	0.037 U	0.0078 N	0.038	0.018	0.037 U	0.33	0.037 U	0.063	0.037 U
2902-UN-IA-LS	03/03/05		0.89	0.044 U	0.1 N	0.23	0.052	0.044 U	0.4	0.019 N	0.39	0.0094
2902-VA-IA-CS	06/15/05		0.12	0.037 U	0.0095	0.028	0.034	0.037 U	0.16	0.037 U	0.037	0.004
2902-VA-IA-LS	06/15/05		0.13	0.038 U	0.23	0.057	0.044	0.038 U	0.15	0.038 U	0.057	0.0059
2902-WE-IA-CS	09/25/07		0.069	0.032 U	0.032 U	0.049	0.032 U	0.032 U	0.063	0.032 U	0.032 U	0.032 U
2902-WE-IA-LS	09/25/07		0.19 U	0.19 U	0.19 U	2.1	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
2903-UN-IA-CS	09/20/07		0.069	0.034 U	0.034 U	0.035	0.034 U	0.065	0.15	0.034 U	0.081	0.034 U
2903-UN-IA-LS	09/20/07		0.088	0.038 U	0.038 U	0.31	0.038 U	0.038 U	0.33	0.038 U	0.096	0.038 U
2903-VA-IA-CS	12/18/07		0.065	0.032 U	0.032 U	0.036	0.032 U	0.032 U	0.087	0.032 U	0.032 U	0.032 U
2903-VA-IA-LS	12/18/07		0.098 J	0.055 UJ	0.096 J	0.064 J	0.055 UJ	0.055 UJ	0.16 J	0.055 UJ	0.06 J	0.055 UJ
2903-WE-IA-CS	09/13/07		0.061	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.26	0.038 U	0.11	0.038 U
2903-WE-IA-LS	09/13/07		0.056	0.039 U	0.039 U	0.063	0.039 U	0.039 U	0.069	0.039 U	0.065	0.039 U
2904-UN-IA-CS	12/20/07		0.064	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.082	0.038 U	0.038 U	0.038 U
2904-UN-IA-LS	12/20/07		0.097	0.04 U	0.04 U	0.06	0.04 U	0.04 U	0.14	0.04 U	0.047	0.04 U
2904-WE-IA-CS	06/07/05		0.11	0.037 U	0.0039	0.024	0.022 U	0.037 U	0.11	0.037 U	0.03	0.037 U
2904-WE-IA-LS	06/07/05		0.1	0.043 U	0.02	0.047	0.17 U	0.043 U	0.084	0.043 U	0.044	0.021
2905-WE-IA-CS	06/03/05		0.14	0.04 U	0.0088	0.018	0.02 U	0.04 U	0.11	0.04 U	0.02	0.04 U
2905-WE-IA-LS	06/03/05		1.6	0.04 U	0.01	0.063	0.064	0.04 U	0.063	0.04 U	0.035	0.04 U
2907-UN-IA-CS	01/29/04		0.17	0.033 U	0.049	0.032 J	0.027 J	0.033 U	0.097	0.033 U	0.42	0.033 U
2907-UN-IA-LS	01/29/04		0.47	0.013 J	0.072	0.059	0.042 J	0.036 U	1.5	0.036 U	0.45	0.036 U
2907-UN-IA-LS	03/05/05		0.14	0.039 U	0.022 N	0.055	0.032	0.039 U	0.37	0.013 N	0.14	0.039 U
2907-UN-IA-LS	12/18/07		0.13	0.036 U	0.066	1.9	0.071	0.036 U	0.14	0.036 U	0.055	0.036 U
2907-VA-IA-CS	09/30/07		0.087	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.082	0.038 U	0.038 U	0.038 U
2907-VA-IA-LS	09/30/07		0.14	0.036 U	0.14	0.19	0.036 U	0.036 U	0.1	0.036 U	0.038	0.036 U
2910-UN-IA-CS	12/18/07		0.055	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.092	0.036 U	0.036 U	0.036 U
2910-UN-IA-LS	12/18/07		0.12	0.041 U	0.18	1.5	0.041 U	0.041 U	0.1	0.041 U	0.046	0.041 U
2910-WE-IA-CS	03/20/07		0.053	0.042 U	0.042 U	0.046	0.042 U	0.042 U	0.1	0.042 U	0.042 U	0.042 U
2910-WE-IA-LS	03/20/07		0.057	0.035 U	0.035	0.14	0.035 U	0.035 U	0.14	0.035 U	0.038	0.035 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
2912-WE-IA-BS	08/18/04		0.13 J	0.08 U	0.043	0.019	0.12 U	0.056 U	0.031	0.056 U	0.042	0.013
2912-WE-IA-BS	02/23/05		0.12	0.046 U	0.026	0.073	0.037	0.028	0.33	0.0066	0.22	0.007 N
2912-WE-IA-LS	02/23/05		0.15	0.042 U	0.058	0.071	0.023	0.042 U	0.3	0.042 U	0.67	0.012 N
2912-WE-IA-BS	12/18/07		0.1	0.035 U	0.049	0.071	0.035 U	0.035 U	0.11	0.035 U	0.15	0.035 U
2912-WE-IA-CS	12/18/07		0.079 J	0.031 UJ	0.031 UJ	0.058 J	0.031 UJ	0.031 UJ	0.089 J	0.031 UJ	0.096 J	0.031 UJ
2912-WE-IA-LS	12/18/07		0.099	0.034 U	0.078	0.2	0.041	0.067	0.14	0.034 U	0.14	0.034 U
2913-UN-IA-BS	09/19/04	DP	1.6	0.08 U	0.04 U	0.055	0.12 U	0.056 U	0.15	0.056 U	0.11	0.025
2913-UN-IA-BS	09/19/04	D	1.2 J	0.08 UJ	0.04 UJ	0.038 J	0.12 UJ	0.056 UJ	0.14 J	0.056 UJ	0.14 J	0.016 J
2913-UN-IA-BS	10/08/04	DP	0.64	0.039 U	0.014 J	0.049	0.054	0.039 U	0.21	0.039 U	0.12	0.0059 J
2913-UN-IA-BS	10/08/04	D	0.65	0.044 U	0.012 J	0.046	0.026 J	0.044 U	0.21	0.044 U	0.12	0.0068 J
2913-UN-IA-LS	10/08/04	DP	0.43 J	0.048 UJ	0.013 J	0.042 J	0.021 J	0.048 UJ	0.16 J	0.048 UJ	0.089 J	0.0086 J
2913-UN-IA-LS	10/08/04	D	0.51	0.035 U	0.013 J	0.052	0.04	0.035 U	0.23	0.035 U	0.14	0.0095 J
2914-UN-IA-BS	01/26/02		0.18	NA	0.032	NA	NA	1.3 U	0.17	NA	0.14	0.028
2914-UN-IA-LS	01/26/02		0.18	NA	0.04	NA	NA	1.3 U	0.17	NA	0.15	0.028
2914-UN-IA-BS	01/29/04	DP	0.16	0.013 J	0.069	0.087	0.045	0.029 U	0.17	0.029 U	0.26	0.013 J
2914-UN-IA-BS	01/29/04	D	0.16	0.04 U	0.071	0.087	0.1	0.04 U	0.16	0.04 U	0.26	0.014 J
2914-UN-IA-LS	01/29/04		0.18	0.019 J	0.13	0.13	0.086	0.034 U	0.18	0.034 U	0.29	0.022 J
2914-UN-IA-BS	09/13/07		0.07	0.034 U	0.034 U	0.076	0.034 U	0.034 U	0.22	0.034 U	0.13	0.034 U
2914-UN-IA-LS	09/13/07		0.059	0.032 U	0.032 U	0.05	0.032 U	0.032 U	0.17	0.032 U	0.082	0.032 U
2914-UN-IA-BS	12/18/07		0.065	0.04 U	0.04 U	0.083	0.04 U	0.04 U	0.13	0.04 U	0.049	0.04 U
2914-UN-IA-LS	12/18/07		0.068	0.035 U	0.035 U	0.11	0.035 U	0.035 U	0.14	0.035 U	0.065	0.035 U
2915-FR-IA-CS	12/08/04		0.11 J	0.047 UJ	0.047 UJ	0.032 J	0.02 UJ	0.047 UJ	0.12 J	0.047 UJ	0.11 J	0.0039 NJ
2915-FR-IA-LS	12/08/04		0.11	0.0087 J	0.039 U	0.046	0.055	0.039 U	0.24	0.039 U	0.12	0.0077 N
2915-VA-IA-CS	03/05/05		0.11	0.035 U	0.0074 N	0.034	0.034	0.035 U	0.7	0.035 U	0.1	0.035 U
2915-VA-IA-LS	03/05/05		0.16	0.033 U	0.057 N	0.04	0.047	0.033 U	0.41	0.014 N	0.15	0.0055
3003-UN-IA-BS	01/29/04		0.15	0.0036 J	0.063	0.041	0.037 J	0.037 U	0.22	0.037 U	0.36	0.035 J
3003-UN-IA-LS	01/29/04		0.21	0.012 J	0.21	0.051	0.13	0.036 U	0.19	0.036 U	0.41	0.013 J
3003-UN-IA-BS	12/18/04		0.14	0.036 U	0.011 N	0.05	0.018 UJ	0.036 U	0.33	0.036 U	0.55	0.031 J
3003-UN-IA-LS	12/18/04		0.18	0.038 U	0.034 N	0.085	0.04	0.038 U	0.36	0.038 U	0.59	0.019 J
3003-UN-IA-CS	06/07/05		0.093	0.045 U	0.016	0.027	0.016 U	0.045 U	0.077	0.045 U	0.04	0.045 U
3003-UN-IA-LS	06/07/05		0.31	0.039 U	0.11	0.07	0.05	0.039 U	0.12	0.039 U	0.099	0.039 U
3106-UN-IA-BS	08/18/04		0.17 J	0.08 U	0.04 U	0.027	0.12 U	0.056 U	0.17	0.056 U	0.034	0.02 U
3106-UN-IA-LS	08/18/04		0.11 J	0.08 U	0.04 U	0.026	0.12 U	0.056 U	0.072	0.056 U	0.025	0.02 U
3106-YE-IA-BS	06/08/05		0.12	0.035 U	0.082	0.085 N	0.027	0.035 U	0.43	0.035 U	0.037	0.035 U
3106-YE-IA-LS	06/08/05	DP	0.17	0.039 U	0.084	0.096	0.053	0.034	0.47 J	0.039 U	0.07	0.0085
3106-YE-IA-LS	06/08/05	D	0.18	0.04 U	0.086	0.1	0.085	0.04 U	0.34 J	0.04 U	0.046	0.016
3107-YE-IA-BS	06/14/05		0.1	0.037 U	0.18	0.029	0.046	0.037 U	0.037	0.037 U	7.5	0.012
3107-YE-IA-LS	06/14/05		0.28	0.036 U	0.19	0.064	0.058	0.036 U	0.073	0.036 U	5.9	0.005
3107-YE-IA-BS	03/21/07		0.064	0.036 U	0.036 U	0.064	0.036 U	0.036 U	0.21	0.036 U	0.13	0.036 U
3107-YE-IA-LS	03/21/07		0.076	0.037 U	0.057	0.13	0.037 U	0.037 U	0.18	0.037 U	2.3	0.037 U
3110-YE-IA-BS	08/20/04	DP	0.69 J	0.08 U	0.04 U	0.052	0.12 U	0.056 U	0.082	0.056 U	0.02	0.02 U
3110-YE-IA-BS	08/20/04	D	0.74 J	0.08 U	0.04 U	0.052	0.12 U	0.056 U	0.085	0.056 U	0.022	0.02 U
3110-YE-IA-LS	08/20/04		7.1 J	0.051	0.35	0.92	0.047	0.056	1.2	0.056 U	0.11	0.025
3110-YE-IA-BS	12/18/07		0.28	0.041 U	0.041 U	0.17	0.041 U	0.041 U	0.11	0.041 U	0.041 U	0.041 U
3110-YE-IA-LS	12/18/07		1.7 J	0.049 UJ	0.049 UJ	1.1 J	0.049 UJ	0.049 UJ	0.12 J	0.049 UJ	0.049 J	0.049 UJ
3112-UN-IA-CS	01/29/04		0.35	0.013 J	0.3	0.037	0.029 J	0.033 U	0.13	0.033 U	0.2	0.033 U
3112-UN-IA-LS	01/29/04		0.42	0.0091 J	0.47	0.23	0.06	0.035 U	5.2	0.035 U	0.33	0.035 U
3112-WE-IA-BS	08/19/04		0.11 J	0.08 U	0.04 U	0.038	0.12 U	0.056 U	0.054	0.056 U	0.027	0.02 U
3112-WE-IA-LS	08/19/04		0.12 J	0.08 U	0.04 U	0.14	0.12 U	0.056 U	0.052	0.056 U	0.012	0.02 U

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
3112-WE-IA-BS	03/04/05		0.17	0.038 U	0.05 N	1.1	0.04	0.03	2.8	0.038 U	0.25	0.0066 N
3112-WE-IA-LS	03/04/05		0.17	0.04 U	0.06 N	1.4	0.041	0.04 U	3	0.04 U	0.21	0.007 N
3112-WE-IA-BS	09/11/07		0.077	0.041 U	0.041 U	0.49	0.045	0.041 U	0.22	0.041 U	0.11	0.041 U
3112-WE-IA-CS	09/11/07		0.073	0.032 U	0.032 U	0.19	0.042	0.032 U	0.16	0.032 U	0.047	0.032 U
3112-WE-IA-LS	09/11/07		0.092 J	0.053 UJ	0.1 J	1.1 J	0.053 UJ	0.053 UJ	0.27 J	0.053 UJ	0.083 J	0.053 UJ
3112-YE-IA-CS	03/30/07		0.091	0.033 U	0.033 U	0.051	0.033 U	0.033 U	0.38	0.033 U	0.086	0.033 U
3112-YE-IA-LS	03/30/07		0.44	0.034 U	0.17	0.061	0.052	0.034 U	0.47	0.034 U	0.098	0.034 U
3114-WE-IA-BS	08/19/04		0.27 J	0.08 U	0.04 U	0.064	0.12 U	0.056 U	0.075	0.056 U	0.046	0.02
3114-WE-IA-LS	08/19/04		0.12 J	0.08 U	0.04 U	0.022	0.12 U	0.056 U	0.061	0.056 U	0.02	0.02 U
3114-WE-IA-BS	03/05/05		0.14	0.034 U	0.012 N	0.065	0.035	0.016	0.32	0.0088 N	0.16	0.014
3114-WE-IA-LS	03/05/05		0.14	0.041 U	0.026 N	0.071 N	0.031	0.041 U	0.8	0.041 U	0.18	0.011
3116-UN-IA-LS	06/02/05		0.12	0.031 U	0.01	0.17	0.03	0.031 U	0.54	0.031 U	0.05	0.0046
3116-WE-IA-BS	01/29/04		0.15	0.07 U	0.037 J	0.12	0.039 J	0.07 U	0.09	0.07 U	0.069 J	0.07 U
3116-WE-IA-LS	01/29/04		0.19	0.17	0.039	0.17	0.14	0.032 U	0.13	0.032 U	0.1	0.012 J
3116-YE-IA-CS	08/26/04		0.12 J	0.08 U	0.04 U	0.019	0.12 U	0.056 U	0.085	0.056 U	0.11	0.02 U
3116-YE-IA-LS	08/26/04		0.2 J	0.08 U	0.027	0.16	0.033	0.056 U	0.12	0.056 U	0.3	0.076
3116-YE-IA-CS	06/14/05		0.097	0.035 U	0.05	0.027	0.015	0.035 U	0.08	0.035 U	0.0075	0.035 U
3116-YE-IA-LS	06/14/05		0.12	0.04 U	0.19	0.065	0.041	0.04 U	0.048	0.04 U	0.034	0.021
3117-XA-IA-CS	03/21/07		0.066	0.034 U	0.034 U	0.052	0.034 U	0.034 U	0.19	0.034 U	0.097	0.034 U
3117-XA-IA-LS	03/21/07		0.15	0.062 U	0.062 U	0.078	0.062 U	0.062 U	3	0.062 U	0.13	0.062 U
3205-YE-IA-CS	08/25/04		0.12 J	0.08 U	0.04 U	0.015	0.12 U	0.056 U	0.058	0.056 U	0.088	0.02 U
3205-YE-IA-LS	08/25/04		1.4 J	0.08 U	0.04 U	0.15	0.12 U	0.056 U	0.37	0.056 U	0.69	0.0066
3209-WE-IA-BS	08/26/04		0.12 J	0.08 U	0.04 U	0.065	0.039	0.056 U	0.086	0.056 U	0.12	0.031
3209-WE-IA-LS	08/26/04		0.25 J	0.08 U	0.04 U	0.055	0.12 U	0.056 U	3.5	0.056 U	0.1	0.02 U
3209-WE-IA-BS	02/26/05		0.2	0.043 U	0.062	0.084	0.092	0.028	0.66	0.043 U	0.25	0.011 N
3209-WE-IA-LS	02/26/05		0.19	0.032 U	0.06	0.081	0.13	0.032 U	0.48	0.013	0.17	0.0087 N
3209-WE-IA-BS	09/11/07		0.082	0.037 U	0.065 J	0.16	0.05	0.037 U	0.11	0.037 U	0.067	0.037 U
3209-WE-IA-LS	09/11/07		0.088	0.045 U	0.05 J	0.32	0.045 U	0.045 U	0.11	0.045 U	0.054	0.045 U
3302-UN-IA-CS	03/29/07		0.068	0.036 U	0.036 U	0.043	0.036 U	0.036 U	0.12	0.036 U	0.036 U	0.036 U
3302-UN-IA-LS	03/29/07		0.11	0.033 U	0.2	0.066	0.033 U	0.033 U	0.53	0.033 U	0.055	0.033 U
3304-XA-IA-LS	09/10/04		0.14	0.08 U	0.013	0.12	0.12 U	0.056 U	0.12	0.056 U	0.062	0.0063
3407-YE-IA-CS	08/24/04		0.11 J	0.08 U	0.04 U	0.018	0.015	0.056 U	0.15	0.056 U	0.1	0.02 U
3407-YE-IA-LS	08/24/04		0.16 J	0.08 U	0.022	0.19	0.12 U	0.056 U	0.18	0.056 U	0.17	0.02 U

Notes

Sample IDs
= Street Address (e.g. 2804)
XX = Street Abbreviation (e.g. FR = Fruit Valley Rd, UN = Unander Ave, VA = Van Allman Ave, 27 = W 27th St, FO = W 4th Plain Blvd, WE = Weigel Ave, XA = Xavier Ave, YE = Yeoman Ave)
2500-FO = 2500 W. Fourth Plain Blvd (Cadet Manufacturing facility address)
IA = Indoor Air
ZZ = Sample Location or Type (BS = Basement, CS = Crawl space, LS = Living Space, BR = Bedroom)

Units
$\mu g/m^3$ = micrograms per cubic meter

Miscellaneous
NA = Not applicable or not sampled

Data Qualifiers
U = Not detected at or above the method reporting limit.
UB = Result qualified as undetected due to a concentration less than 5 times the concentration detected in a QC blank.

Sample ID (####-XX-IA-ZZ)	Sample Date	QC Code	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)

UJ = Not detected at or above the method reporting limit. However, the method reporting limit value is uncertain.

J = The analyte was positively identified but the associated value is approximate.

N = Indicates an analyte has been tentatively identified but not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.

R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Table 5. Summary of Outdoor Air Analytical Results
Cadet Manufacturing Company
Port of Vancouver, Washington

Sample ID	QC Code	Sample Date	Method	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
1616-31-OA		07/21/04	TO-15 MOD	0.13 N	0.13 U	0.065 U	0.074 N	0.08 J	0.029 N	0.9	0.65 U	0.13	0.042 U
1616-31-OA		01/06/05	TO-15 SIM	0.11	0.036 U	0.0063 J	0.037	0.019 J	0.036 U	0.18	0.0055 J	0.11	0.036 U
1616-31-OA		02/25/05	TO-15 SIM	0.11	0.036 U	0.0093	0.034	0.022	0.036 U	0.34	0.0069	0.099	0.036 U
1616-31-OA		06/15/05	TO-15 SIM	0.097	0.039 U	0.0068	0.029	0.026	0.039 U	0.041	0.039 U	0.0096	0.039 U
1616-31-OA		08/31/05	TO-15 SIM	0.093	0.034 U	0.0096 J	0.02 J	0.019 UJ	0.034 U	0.038	0.034 U	0.0061 J	0.034 U
1616-31-OA		09/13/07	TO-15 SIM	0.056	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U	0.1	0.034 U	0.034 U	0.034 U
1616-31-OA		09/15/07	TO-15 SIM	0.062	0.038 U	0.038 U	0.04	0.038 U	0.038 U	0.077	0.038 U	0.038 U	0.038 U
1616-31-OA		09/20/07	TO-15 SIM	0.069	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.17	0.037 U	0.063	0.037 U
1616-31-OA		09/30/07	TO-15 SIM	0.062	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.057	0.036 U	0.036 U	0.036 U
1616-31-OA		12/18/07	TO-15 SIM	0.064	0.044 U	0.044 U	0.052	0.044 U	0.044 U	0.3	0.044 U	0.044 U	0.044 U
1616-31-OA		12/19/07	TO-15 SIM	0.077	0.036 U	0.036 U	0.038	0.036 U	0.036 U	0.072	0.036 U	0.036 U	0.036 U
1616-31-OA		12/21/07	TO-15 SIM	0.071	0.039 U	0.039 U	0.04	0.039 U	0.039 U	0.4	0.039 U	0.099	0.039 U
2105-28-OA		09/16/03	TO-15 SIM	0.23	0.037 U	0.037 U	0.027	0.022	0.037 U	0.39	0.037 U	0.62	0.037 U
2105-28-OA		10/02/03	TO-15	0.31	0.0084	0.017	0.022	0.025	0.01	0.57	0.031 U	0.81	0.031 U
2105-28-OA		01/30/04	TO-15	0.13	0.021 J	0.0061 J	0.032 J	0.077	0.036 U	0.062	0.036 U	0.1	0.036 U
2105-28-OA		01/06/05	TO-15 SIM	0.11	0.032 U	0.0063 J	0.036	0.017 J	0.032 U	0.25	0.004 J	0.51	0.0042 J
2105-28-OA		02/25/05	TO-15 SIM	0.11	0.037 U	0.014	0.034	0.035	0.0093	0.3	0.0053	0.2	0.037 U
2105-28-OA		06/15/05	TO-15 SIM	0.1	0.04 U	0.0066	0.029	0.028	0.04 U	0.089	0.04 U	0.0071	0.04 U
2105-28-OA		08/31/05	TO-15 SIM	0.099	0.041 U	0.0089 J	0.025 J	0.018 UJ	0.041 U	0.036 J	0.041 U	0.0096 J	0.041 U
2206-28-OA		09/08/02	TO-15	0.14	1.5 U	0.075 U	0.019	0.077 U	1.5 U	0.13	1.5 U	0.14	0.3 U
2206-28-OA		05/07/04	TO-15 MOD	0.18	0.13 U	0.062 U	0.064 N	0.15	0.12 U	0.12	0.62 U	0.066 U	0.04 U
2500-FO-OA	DP	08/31/05	TO-15 SIM	0.095	0.032 U	0.008 J	0.02 J	0.013 UJ	0.032 U	0.023 J	0.032 U	0.0057 J	0.032 U
2500-FO-OA (Dup)	D	08/31/05	TO-15 SIM	0.093	0.041 U	0.012 J	0.02 J	0.032 J	0.041 U	0.025 J	0.041 U	0.0057 J	0.0056 J
2805-UN-OA		09/08/02	TO-15	0.14	1.4 U	0.068 U	0.022	0.18	1.4 U	0.093	1.4 U	0.065	0.27 U
2805-UN-OA		10/02/03	TO-15	0.4	0.0065	0.029	0.025	0.086	0.018	0.66	0.039 U	1.7	0.039 U
2805-UN-OA		01/30/04	TO-15	0.13	0.036 U	0.0091 J	0.032 J	0.029 J	0.036 U	0.061	0.036 U	0.29	0.036 U
2809-UN-OA		09/08/02	TO-15	0.14	1.5 U	0.073 U	0.021	0.15	1.5 U	0.087	1.5 U	0.068	0.29 U
2914-UN-OA		01/30/04	TO-15	0.13	0.021 J	0.0069 J	0.033 J	0.04	0.037 U	0.066	0.037 U	0.14	0.037 U
2914-UN-OA		07/21/04	TO-15 MOD	0.13	0.13 U	0.062 U	0.041 N	0.026 NJ	0.12 U	0.48	0.62 U	0.038 U	0.04 U
2914-UN-OA	DP	01/06/05	TO-15 SIM	0.11 J	0.049 UJ	0.0055 J	0.035 J	0.014 J	0.049 UJ	0.16 J	0.049 UJ	0.18 J	0.049 UJ
2914-UN-OA		02/25/05	TO-15 SIM	0.11	0.037 U	0.01	0.035	0.013 UB	0.0073	0.32	0.0051	0.17	0.037 U
2914-UN-OA		06/15/05	TO-15 SIM	0.1	0.038 U	0.0069	0.029	0.019 U	0.038 U	0.29	0.038 U	0.0049	0.038 U
2914-UN-OA		08/31/05	TO-15 SIM	0.1 J	0.043 U	0.015 J	0.026 J	0.017 UJ	0.043 U	0.042 J	0.043 U	0.014	0.043 U
2914-UN-OA (Dup)	D	01/06/05	TO-15 SIM	0.11 J	0.042 UJ	0.042 UJ	0.034 J	0.047 J	0.042 UJ	0.17 J	0.005 J	0.18 J	0.0059 J
3301-FR-OA		01/25/02	TO-15	0.56	NA	0.063 U	NA	NA	0.005	0.11	NA	0.11	0.011
CM-MW-09s-OA		09/08/02	TO-15	0.14	1.5 U	0.076 U	0.018	0.068 U	1.5 U	0.073	1.5 U	0.078	0.3 U
CM-MW-09s-OA		10/02/03	TO-15	0.15	0.0036	0.04 U	0.024	0.021	0.04 U	0.12	0.04 U	0.085	0.04 U
CM-MW-09s-OA		01/30/04	TO-15	0.13	0.14	0.0065 J	0.034 J	0.034 J	0.046 U	0.062	0.046 U	0.033 J	0.046 U
CM-MW-09s-OA		07/21/04	TO-15 MOD	0.12 J	0.13 U	0.066 U	0.1 N	0.044 J	0.13 U	0.03 N	0.66 U	0.027 U	0.043 U
CM-MW-09s-OA		01/06/05	TO-15 SIM	0.11	0.033 U	0.0039 J	0.037	0.013 J	0.033 U	0.19	0.033 U	0.19	0.033 U
CM-MW-09s-OA		02/25/05	TO-15 SIM	0.11	0.039 U	0.01	0.049	0.25	0.039 U	0.32	0.039 U	0.22	0.039 U
CM-MW-09s-OA		06/15/05	TO-15 SIM	0.11	0.038 U	0.0066	0.036	0.036	0.038 U	0.059	0.038 U	0.0094	0.038 U
CM-MW-09s-OA		02/16/07	TO-15 SIM	0.051	0.032 U	0.032 U	0.043	0.067	0.032 U	0.11	0.032 U	0.032 U	0.032 U
CM-MW-09s-OA		05/31/07	TO-15 SIM	0.051 UJ	0.051 UJ	0.051 UJ	0.051 UJ	0.051 UJ	0.051 UJ	0.094 J	0.051 UJ	0.21 J	0.051 UJ

Sample ID	QC Code	Sample Date	Method	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)
CM-MW-09s-OA		09/13/07	TO-15 SIM	0.055	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.089	0.04 U	0.04 U	0.04 U
CM-MW-09s-OA		09/15/07	TO-15 SIM	0.057	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.068	0.037 U	0.037 U	0.037 U
CM-MW-09s-OA		09/20/07	TO-15 SIM	0.061	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.088	0.037 U	0.037 U	0.037 U
CM-MW-09s-OA	DP	09/30/07	TO-15 SIM	0.06 J	0.047 UJ	0.047 UJ	0.047 UJ	0.047 UJ	0.047 UJ	0.099 J	0.047 UJ	0.047 UJ	0.047 UJ
CM-MW-09s-OA		12/07/07	TO-15 SIM	0.055	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.082	0.038 U	0.038 U	0.038 U
CM-MW-09s-OA		12/18/07	TO-15 SIM	0.063	0.037 U	0.037 U	0.04	0.037 U	0.037 U	0.065	0.037 U	0.037 U	0.037 U
CM-MW-09s-OA		12/19/07	TO-15 SIM	0.061	0.036 U	0.036 U	0.039	0.036 U	0.036 U	0.058	0.036 U	0.036 U	0.036 U
CM-MW-09s-OA		12/21/07	TO-15 SIM	0.067	0.036 U	0.036 U	0.04	0.036 U	0.036 U	0.16	0.036 U	0.069	0.036 U
CM-MW-09s-OA		01/04/08	TO-15 SIM	0.06	0.04 U	0.04 U	0.04	0.04 U	0.04 U	0.094	0.04 U	0.04 U	0.04 U
CM-MW-09s-OA		02/27/08	TO-15 SIM	0.071	0.039 U	0.039 U	0.066	0.039 U	0.039 U	0.71	0.039 U	0.085	0.039 U
CM-MW-09s-OA		03/26/08	TO-15 SIM	0.071	0.036 U	0.036 U	0.067	0.063	0.036 U	0.18	0.036 U	0.045	0.036 U
CM-MW-09s-OA		04/23/08	TO-15 SIM	0.066	0.034 U	0.034 U	0.067	0.034 U	0.034 U	0.079	0.034 U	0.034 U	0.034 U
CM-MW-09s-OA		05/09/08	TO-15 SIM	0.068 J	0.046 UJ	0.046 UJ	0.056 J	0.046 UJ	0.046 UJ	0.046 J	0.046 UJ	0.046 UJ	0.046 UJ
CM-MW-09s-OA (Dup)	D	09/30/07	TO-15 SIM	0.061	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.092	0.037 U	0.037 U	0.037 U
CM-MW-21i-OA		02/16/07	TO-15 SIM	0.053	0.036 U	0.036 U	0.046	0.036 U	0.036 U	0.12	0.036 U	0.057	0.036 U
CM-MW-21i-OA		05/31/07	TO-15 SIM	0.037 U	0.037 U	0.037 U	0.046	0.037 U	0.037 U	0.066	0.037 U	0.037 U	0.037 U
FRAM-OA		02/16/07	TO-15 SIM	0.05	0.032 U	0.032 U	0.043	0.032 U	0.032 U	0.088	0.032 U	0.032 U	0.032 U
FRAM-OA		05/31/07	TO-15 SIM	0.036	0.031 U	0.031 U	0.047	0.031 U	0.031 U	0.11	0.031 U	0.031 U	0.031 U
FRAM-OA		09/13/07	TO-15 SIM	0.05	0.035 U	0.035 U	0.047	0.035 U	0.035 U	0.077	0.035 U	0.056	0.035 U
FRAM-OA		09/15/07	TO-15 SIM	0.077	0.038 U	0.038 U	0.043	0.038 U	0.038 U	0.11	0.038 U	0.075	0.038 U
FRAM-OA		09/20/07	TO-15 SIM	0.059 J	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ	0.056 J	0.03 UJ	0.03 UJ	0.03 UJ
FRAM-OA		09/30/07	TO-15 SIM	0.06	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	0.064	0.041 U	0.041 U	0.041 U
FRAM-OA		12/18/07	TO-15 SIM	0.064	0.033 U	0.033 U	0.04	0.033 U	0.033 U	0.098	0.033 U	0.033 U	0.033 U
FRAM-OA		12/19/07	TO-15 SIM	0.063	0.036 U	0.036 U	0.039	0.036 U	0.036 U	0.059	0.036 U	0.036 U	0.036 U
FRAM-OA		12/21/07	TO-15 SIM	0.069	0.037 U	0.037 U	0.042	0.037 U	0.037 U	0.17	0.037 U	0.061	0.037 U
RGRW-03-OA	DP	02/16/07	TO-15 SIM	0.053	0.037 U	0.037 U	0.045	0.037 U	0.037 U	0.098	0.037 U	0.037 U	0.037 U
RGRW-03-OA		05/31/07	TO-15 SIM	0.045 UJ	0.045 UJ	0.045 UJ	0.049 J	0.045 UJ	0.045 UJ	0.07 J	0.045 UJ	0.045 UJ	0.045 UJ
RGRW-03-OA	DP	09/13/07	TO-15 SIM	0.055	0.034 U	0.034 U	0.034 U	0.072	0.034 U	0.087	0.034 U	0.034 U	0.034 U
RGRW-03-OA		09/15/07	TO-15 SIM	0.058	0.04 U	0.04 U	0.13	0.04 U	0.04 U	0.34	0.04 U	0.04 U	0.04 U
RGRW-03-OA		09/20/07	TO-15 SIM	0.064 J	0.053 UJ	0.053 UJ	0.053 UJ	0.053 UJ	0.053 UJ	0.19 J	0.053 UJ	0.053 UJ	0.053 UJ
RGRW-03-OA		09/30/07	TO-15 SIM	0.061	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.076	0.04 U	0.04 U	0.04 U
RGRW-03-OA		12/07/07	TO-15 SIM	0.057	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.12	0.038 U	0.038 U	0.038 U
RGRW-03-OA		12/18/07	TO-15 SIM	0.065	0.034 U	0.034 U	0.04	0.034 U	0.034 U	0.076	0.034 U	0.034 U	0.034 U
RGRW-03-OA		12/19/07	TO-15 SIM	0.064	0.036 U	0.036 U	0.038	0.036 U	0.036 U	0.058	0.036 U	0.043	0.036 U
RGRW-03-OA		12/21/07	TO-15 SIM	0.072	0.038 U	0.038 U	0.045	0.038 U	0.038 U	0.18	0.038 U	0.075	0.038 U
RGRW-03-OA		01/04/08	TO-15 SIM	0.064	0.037 U	0.037 U	0.043	0.037 U	0.037 U	0.092	0.037 U	0.037 U	0.037 U
RGRW-03-OA		02/28/08	TO-15 SIM	0.064	0.14	0.04 U	0.12	0.04 U	0.1	1.1	0.04 U	0.13	0.04 U
RGRW-03-OA		03/26/08	TO-15 SIM	0.065	0.046 U	0.046 U	0.054	0.046 U	0.046 U	0.09	0.046 U	0.058	0.046 U
RGRW-03-OA		04/24/08	TO-15 SIM	0.065	0.032 U	0.032 U	0.061	0.032 U	0.032 U	0.067	0.032 U	0.032 U	0.032 U
RGRW-03-OA		05/09/08	TO-15 SIM	0.08	0.037 U	0.037 U	0.064	0.037 U	0.037 U	0.063	0.037 U	0.054	0.037 U
RGRW-03-OA (Dup)	D	02/16/07	TO-15 SIM	0.053 J	0.051 UJ	0.051 UJ	0.051 UJ	0.069 J	0.051 UJ	0.1 J	0.051 UJ	0.051 UJ	0.051 UJ
RGRW-03-OA (Dup)	D	09/13/07	TO-15 SIM	0.055	0.035 U	0.035 U	5.9	0.07	0.035 U	1.6	0.035 U	2.1	0.035 U

Notes

Sample IDs
= Street Address (e.g. 2804)
XX = Street Abbreviation (e.g. FR = Fruit Valley Rd, UN = Unander Ave, VA = Van Allman Ave, 27 = W 27th St, FO = W 4th Plain Blvd, WE = Weigel Ave, XA = Xavier Ave, YE = Yeoman Ave)
OA = Outdoor Air
ZZ = Sample Location or Type (24 = 24 Hour Sample, GB = Grab Sample)

Sample ID	QC Code	Sample Date	Method	1,1,1-Trichloroethane (ug/m3)	1,1-Dichloroethane (ug/m3)	1,1-Dichloroethene (ug/m3)	1,2-Dichloroethane (ug/m3)	Chloroethane (ug/m3)	cis-1,2-Dichloroethene (ug/m3)	Tetrachloroethene (ug/m3)	trans-1,2-Dichloroethene (ug/m3)	Trichloroethene (ug/m3)	Vinyl Chloride (ug/m3)

Other Outdoor Air Sample IDs: 31-ONST = W 31st St on street, CM-AS = Cadet Manufaturing Air Sparging system, CM-MW = Cadet Manufaturing Monitoring Well, Fram = La Frambois Rd on street, RGRW = Recirculating Groundwater Remediation Well

Units

$\mu g/m^3$ = Micrograms per cubic meter

Miscellaneous

(Dup) = Field duplicate
NA = Not applicable or not sampled

Data Qualifiers

U = Not detected at or above the method reporting limit.
UB = Result qualified as undetected due to a concentration less than 5 times the concentration detected in a QC blank.
UJ = Not detected at or above the method reporting limit. However, the method reporting limit value is uncertain.
J = The analyte was positively identified but the associated value is approximate.
N = Indicates an analyte has been tentatively identified but not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.
R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Table 6. Screening of Contaminants of Potential Concern in Groundwater (µg/l)
Cadet Manufacturing Company
Port of Vancouver, Washington

	MTCA A-B CL[1]	Groundwater Zone[2]																												
		Shallow							Intermediate							Deep							TGA							
Chemical	GW (µg/L)	N	Detects	FOD%	Min	Max	Min DL	Max DL	N	Detects	FOD%	Min	Max	Min DL	Max DL	N	Detects	FOD%	Min	Max	Min DL	Max DL	N	Detects	FOD%	Min	Max	Min DL	Max DL	COPC
1,1,1-Trichloroethane	200 n	189	82	**43%**	0.5	5.3	0.5	5	134	60	**45%**	0.5	9.6	0.5	1	77	55	**71%**	0.5	4.5	0.5	1	21	7	**33%**	0.87	0.95	0.5	0.5	×
1,1-Dichloroethane	1600 n	189	25	**13%**	0.5	0.88	0.5	5	134	48	**36%**	0.5	6.3	0.5	1	77	56	**73%**	0.51	2.7	0.5	1	21	7	**33%**	0.63	0.72	0.5	0.5	×
1,1-Dichloroethene	400 n	189	0	0%			0.5	5	134	16	**12%**	0.65	6.4	0.5	1	77	46	**60%**	0.5	3	0.5	1	21	7	**33%**	0.5	0.82	0.5	0.5	×
1,2-Dichloroethane	0.48 c	189	0	0%			**0.5**	**5**	134	0	0%			**0.5**	**1**	77	0	0%			**0.5**	**1**	21	0	0%			**0.5**	**0.5**	
Bromodichloromethane	0.71 c	189	2	1%	**2.17**	**8**	0.5	**5**	134	1	1%	**2.32**	**2.32**	0.5	**1**	77	0	0%			0.5	**1**	21	0	0%			0.5	0.5	
Bromoform	5.5 c	189	2	1%	1.82	2.41	0.5	5	134	0	0%			0.5	2	77	0	0%			0.5	1	21	0	0%			0.5	1	
Carbon tetrachloride	0.34 c	189	0	0%			**0.5**	**5**	134	1	1%	**2.2**	**2.2**	**0.5**	**1**	77	0	0%			**0.5**	**1**	21	0	0%			**0.5**	**0.5**	
Chloroform	7.2 c	189	28	**15%**	0.5	**13**	0.5	5	134	13	**10%**	0.57	2.69	0.5	1	77	0	0%			0.5	1	21	0	0%			0.5	0.5	×
cis-1,2-Dichloroethene	80 n	189	50	**26%**	0.51	9.2	0.5	5	134	101	**75%**	0.5	23	0.5	1	77	65	**84%**	1.6	13	0.5	1	21	7	**33%**	4.77	5.5	0.5	0.5	×
Tetrachloroethene	0.081 c	189	168	**89%**	**0.51**	**158**	**0.5**	**5**	134	108	**81%**	**0.53**	**27.3**	**0.5**	**1**	77	65	**84%**	**1.1**	**10.7**	**0.5**	**1**	21	7	**33%**	**5.49**	**8.4**	**0.5**	**0.5**	×
Toluene	640 n	189	4	2%	0.54	1.11	0.5	5	134	20	**15%**	0.5	8.96	0.5	1	77	11	**14%**	0.62	16	0.5	1	21	9	**43%**	0.56	4.71	0.5	0.5	×
trans-1,2-Dichloroethene	160 n	189	0	0%			0.5	5	134	1	1%	0.61	0.61	0.5	1	77	0	0%			0.5	1	21	0	0%			0.5	0.5	
Trichloroethene	0.49 c	189	161	**85%**	**0.52**	**536**	0.5	10	134	132	**99%**	**0.66**	**130**	**0.5**	**5**	77	74	**96%**	**0.88**	**37.1**	**0.5**	**1**	21	7	**33%**	**13.9**	**20**	**0.5**	**0.5**	×
Trichlorofluoromethane	2400 n	189	0	0%			0.5	5	134	0	0%			0.5	1	77	34	**44%**	0.51	1.43	0.5	1	21	0	0%			0.5	0.5	×
1,1,1,2-Tetrachloroethane	1.7 c	189	0	0%			0.5	5	134	0	0%			0.5	1	77	0	0%			0.5	1	21	0	0%			0.5	0.5	
1,1,2,2-Tetrachloroethane	0.22 c	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
1,1,2-Trichloroethane	0.77 c	189	0	0%			0.5	5	134	0	0%			0.5	1	77	0	0%			0.5	1	21	0	0%			0.5	0.5	
1,1-Dichloropropene	NA	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
1,2,3-Trichlorobenzene	NA	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
1,2,3-Trichloropropane	0.0063 c	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
1,2,4-Trichlorobenzene	8 n	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
1,2,4-Trimethylbenzene	400 n	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
1,2-Dibromo-3-chloropropane	0.031 c	12	0	0%			5	25	5	0	0%			5	5	1	0	0%			5	5	0	0	0%					
1,2-Dibromoethane	0.0065 c	185	0	0%			0.5	5	126	0	0%			0.5	2	76	0	0%			0.5	2	20	0	0%			0.5	2	
1,2-Dichlorobenzene	720 n	189	0	0%			0.5	5	134	0	0%			0.5	1	77	0	0%			0.5	1	21	0	0%			0.5	0.5	
1,2-Dichloropropane	0.64 c	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
1,3,5-Trimethylbenzene	400 n	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
1,3-Dichlorobenzene	NA	189	0	0%			0.5	5	134	0	0%			0.5	1	77	0	0%			0.5	1	21	0	0%			0.5	0.5	
1,3-Dichloropropane	730 n	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
1,4-Dichlorobenzene	0.43 c	189	0	0%			0.5	5	134	0	0%			0.5	1	77	0	0%			0.5	1	21	0	0%			0.5	0.5	
2,2-Dichloropropane	NA	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
2-Butanone (MEK)	7100 n	12	0	0%			10	50	5	0	0%			10	10	1	0	0%			10	10	0	0	0%					
2-Chlorotoluene	730 n	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
2-Hexanone	NA	12	0	0%			10	50	5	0	0%			10	10	1	0	0%			10	10	0	0	0%					
4-Chlorotoluene	2600 n	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
4-Methyl-2-pentanone	2000 n	12	0	0%			5	25	5	0	0%			5	5	1	0	0%			5	5	0	0	0%					
Acetone	800 n	12	0	0%			25	125	5	0	0%			25	25	1	0	0%			25	25	0	0	0%					
Benzene	0.8 c	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
Bromobenzene	20 n	185	0	0%			0.5	5	126	0	0%			0.5	2	76	0	0%			0.5	2	20	0	0%			0.5	2	
Bromochloromethane	NA	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
Bromomethane	11 n	185	0	0%			0.5	25	126	0	0%			0.5	10	76	0	0%			0.5	5	20	0	0%			0.5	5	
Carbon disulfide	800 n	12	0	0%			10	50	5	0	0%			10	10	1	0	0%			10	10	0	0	0%					
Chlorobenzene	160	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
Chloroethane	21000 n	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
Chloromethane	3.4 c	189	0	0%			0.5	25	134	0	0%			0.5	10	77	0	0%			0.5	5	21	0	0%			0.5	5	
cis-1,3-Dichloropropene	NA	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
Dibromochloromethane	0.52 c	189	1	1%	3.8	3.8	0.5	5	134	0	0%			0.5	2	77	0	0%			0.5	1	21	0	0%			0.5	1	
Dibromomethane	370 n	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
Dichlorodifluoromethane	1600 n	185	0	0%			0.5	25	126	0	0%			0.5	10	76	0	0%			0.5	5	20	0	0%			0.5	5	
Ethylbenzene	700	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
Hexachlorobutadiene	0.56 c	12	0	0%			4	20	5	0	0%			4	4	1	0	0%			4	4	0	0	0%					

		Groundwater Zone [2]																												
	MTCA A-B CL[1]	Shallow							Intermediate							Deep							TGA							
Chemical	GW (µg/L)	N	Detects	FOD%	Min	Max	Min DL	Max DL	N	Detects	FOD%	Min	Max	Min DL	Max DL	N	Detects	FOD%	Min	Max	Min DL	Max DL	N	Detects	FOD%	Min	Max	Min DL	Max DL	COPC
Isopropylbenzene	680 n	12	0	0%			2	10	5	0	0%			2	2	1	0	0%			2	2	0	0	0%					
m,p-Xylene	1000 n	185	0	0%			0.5	10	126	0	0%			0.5	2	76	0	0%			0.5	2	20	0	0%			0.5	1	
Methyl tert-butyl ether	20	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
Methylene chloride	5	189	0	0%			2	25	134	0	0%			2	10	77	0	0%			2	5	21	0	0%			2	5	
Naphthalene	160	12	0	0%			2	10	5	0	0%			2	2	1	0	0%			2	2	0	0	0%					
n-Butylbenzene	NA	12	0	0%			5	25	5	0	0%			5	5	1	0	0%			5	5	0	0	0%					
n-Propylbenzene	NR	16	0	0%			1	5	13	0	0%			1	2	2	0	0%			1	2	1	0	0%			2	2	
o-Xylene	16000 n	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
p-Isopropyltoluene	NA	12	0	0%			2	10	5	0	0%			2	2	1	0	0%			2	2	0	0	0%					
sec-Butylbenzene	NR	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
Styrene	1.5 c	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
tert-Butylbenzene	NA	12	0	0%			1	5	5	0	0%			1	1	1	0	0%			1	1	0	0	0%					
trans-1,3-Dichloropropene	NA	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	
Vinyl chloride	0.029 c	185	0	0%			0.5	5	126	0	0%			0.5	1	76	0	0%			0.5	1	20	0	0%			0.5	0.5	

Acronyms

[1] - Lowest value (Methods A and B, cancer or noncancer from Ecology CLARC Database)
In the absence of values in Ecology CLARC Database, US EPA (2009) Region 6 Preliminary Remediation Goals were supplemented.

[2] - The data summary provided in this table includes quartertly monitoring results collected from 1st quarter 2006 through 1st quarter 2009.

c - Cancer value
n - Non cancer value
x - Indicates analyte is a COPC
N - Number of samples
COPC - Contaminant of Potential Concern
DL - Detection Limit
FOD - Frequency of detection (number of detected samples / number of total samples)
Min - Minimum detected concentration
Max - Maximum detected concentration
MTCA - Model Toxics Control Act
TGA - Troutdale Gravel Aquifer

Notes

1. **Bold** Bold indicates measured concentrations exceeding the MTCA screening levels or FODs greater than 5%. These chemicals will be further evaluated in the risk assessment.
2. The lower concentration of duplicate samples are not included in this analysis.

Units

µg/l - Micrograms per liter

Table 7. Screening of Contaminants of Potential Concern in Soil (mg/kg)

Cadet Manufacturing Company
Port of Vancouver, Washington

	MTCA A-B CL[1]	Soil (POV)							
Chemical	Soil (mg/kg)	N	Detects	FOD%	Min	Max	Min DL	Max DL	COPC
1,1,1-Trichloroethane	2 n	73	4	5%	0.019	0.27	0.001	50	×
cis-1,2-Dichloroethene	800 n	73	14	19%	0.025	0.27	0.001	50	×
Methylene chloride	0.02 n	73	8	11%	0.00792	0.052	0.005	50	×
Tetrachloroethene	0.05 n	73	34	47%	0.00103	1.7	0.001	50	×
Trichloroethene	0.03 n	73	42	58%	0.00133	14	0.001	50	×
1,1,1,2-Tetrachloroethane	38 c	22	0	0%			0.005	50	
1,1,2,2-Tetrachloroethane	5 c	73	0	0%			0.001	50	
1,1,2-Trichloroethane	18 c	73	0	0%			0.001	50	
1,1-Dichloroethane	3.4 c	73	0	0%			0.001	50	
1,1-Dichloroethene	250 n	73	0	0%			0.001	50	
1,1-Dichloropropene	NA	6	0	0%			0.005	0.1	
1,2,3-Trichlorobenzene	NA	6	0	0%			0.005	2.5	
1,2,3-Trichloropropane	0.14 c	8	0	0%			0.005	0.1	
1,2,4-Trichlorobenzene	87 n	6	0	0%			0.005	2.5	
1,2,4-Trimethylbenzene	4000 n	6	0	0%			0.005	0.1	
1,2-Dibromo-3-chloropropane	0.71 c	6	0	0%			0.01	0.5	
1,2-Dibromoethane	0.034 c	59	0	0%			0.001	0.1	
1,2-Dichlorobenzene	7200 n	59	0	0%			0.001	0.1	
1,2-Dichloroethane	11 c	73	0	0%			0.001	50	
1,2-Dichloropropane	0.93c	59	0	0%			0.001	0.1	
1,3,5-Trimethylbenzene	4000 n	6	0	0%			0.005	0.1	
1,3-Dichlorobenzene	NA	59	0	0%			0.001	0.1	
1,3-Dichloropropane	1600 n	6	0	0%			0.005	0.1	
1,4-Dichlorobenzene	42 c	59	0	0%			0.001	0.1	
2,2-Dichloropropane	NA	6	0	0%			0.005	0.1	
2-Butanone (MEK)	28000 n	6	0	0%			0.02	1	
2-Chlorotoluene	1600 n	6	0	0%			0.005	0.1	
2-Hexanone	NA	6	0	0%			0.02	1	
4-Chlorotoluene	5500 n	6	0	0%			0.005	0.1	
4-methyl-2-pentanone	5300 n	6	0	0%			0.02	1	
Acetone	8000 n	6	0	0%			0.02	2.5	
Benzene	0.03	6	0	0%			0.005	0.1	

	MTCA A-B CL[1]	Soil (POV)							
Chemical	Soil (mg/kg)	N	Detects	FOD%	Min	Max	Min DL	Max DL	COPC
Bromobenzene	94 n	8	0	0%			0.005	0.1	
Bromochloromethane	NA	6	0	0%			0.005	0.1	
Bromodichloromethane	0.28 c	59	0	0%			0.001	0.1	
Bromoform	130	59	0	0%			0.005	0.5	
Bromomethane	110 n	59	1	2%	0.0056	0.0056	0.005	0.5	
Carbon disulfide	8000 n	6	0	0%			0.02	1	
Carbon tetrachloride	7.7	73	0	0%			0.001	50	
Chlorobenzene	1600 n	59	0	0%			0.001	0.1	
Chloroethane	15000 n	59	0	0%			0.005	0.5	
Chloroform	160 c	73	1	1%	0.042	0.042	0.005	50	
Chloromethane	77 c	59	0	0%			0.005	0.5	
cis-1,3-Dichloropropene	NA	59	0	0%			0.001	0.1	
Dibromochloromethane	12 c	59	0	0%			0.001	0.1	
Dibromomethane	780 n	8	0	0%			0.005	0.1	
Dichlorodifluoromethane	16000 n	8	0	0%			0.01	0.5	
Ethylbenzene	6	6	0	0%			0.005	0.1	
Hexachlorobutadiene	13 c	6	0	0%			0.005	2.5	
Isopropylbenzene	2200 n	6	0	0%			0.005	0.2	
Methyl tert-butyl ether	39 c	6	0	0%			0.1	0.1	
Naphthalene	5	6	0	0%			0.005	2.5	
n-Butylbenzene	NA	6	0	0%			0.005	0.5	
n-Propylbenzene	NA	6	0	0%			0.005	0.1	
p-Isopropyltoluene	NA	6	0	0%			0.005	0.2	
sec-Butylbenzene	NA	6	0	0%			0.005	0.1	
Styrene	33 c	6	0	0%			0.005	0.1	
tert-Butylbenzene	NA	6	0	0%			0.005	0.1	
Toluene	7	6	0	0%			0.005	0.1	
trans-1,2-Dichloroethene	110 n	73	0	0%			0.001	50	
trans-1,3-Dichloropropene	NA	59	0	0%			0.001	0.1	
Trichlorofluoromethane	800 n	59	0	0%			0.001	0.1	
Vinyl chloride	0.67 c	73	0	0%			0.005	50	
Xylene (m,p)	9 n	6	0	0%			0.005	0.2	
Xylene (o)	160000 n	6	0	0%			0.005	0.1	

Acronyms

[1] - Lowest value (Methods A and B, cancer or noncancer from Ecology CLARC Database)
In the absence of values in Ecology CLARC Database, US EPA (2009) Region 6 Preliminary Remediation Goals were supplemented.

c - Cancer value

Chemical	MTCA A-B CL [1] Soil (mg/kg)	Soil (POV) N	Detects	FOD%	Min	Max	Min DL	Max DL	COPC

n - Non cancer value

x - Indicates analyte is a COPC

N - Number of samples

COPC - Contaminant of Potential Concern

DL - Detection Limit

FOD - Frequency of detection (number of detected samples / number of total samples)

Min - Minimum detected concentration

Max - Maximum detected concentration

MTCA - Model Toxics Control Act

TGA - Troutdale Gravel Aquifer

Notes

1. **Bold** Bold indicates measured concentrations exceeding the MTCA screening levels or FODs greater than 5%. These chemicals will be further evaluated in the risk assessment.
2. The lower concentration of duplicate samples are not included in this analysis.
3. The data summary provided in this table includes various soil samples collected from 1998 through 2002.

Units

mg/kg - milligrams per kilogram

Table 8. Screening of Contaminants of Potential Concern in Soil Gas (µg/m^3)

Cadet Manufacturing Company
Port of Vancouver, Washington

Chemical	MTCA B CL [1] Air (µg/m^3)	Soil Gas (NFVN and Cadet Facility Properties) N	Detects	FOD%	Min	Max	Min DL	Max DL	COPC
1,1,1-Trichloroethane	4800 n	454	447	**98%**	1.5	**11000**	1.2	**30000**	×
1,1-Dichloroethane	320 n	430	158	**37%**	0.018	160	0.031	**30000**	×
1,1-Dichloroethene	91n	454	231	**51%**	0.016	**9300**	0.79	**30000**	×
1,2-Dichloroethane	0.096 c	430	13	3%	0.0056	**4.1**	**0.81**	**30000**	×
Chloroethane	3.0 c	430	31	**7%**	0.042	**3.5**	0.019	**30000**	×
cis-1,2-Dichloroethene	16 n	454	191	**42%**	0.014	**230000**	0.031	**250**	×
Tetrachloroethene	0.42 c	454	452	**100%**	**4**	**710000**	**1.2**	**200**	×
trans-1,2-Dichloroethene	32 n	430	17	4%	0.048	3.5	0.03	**30000**	×
Trichloroethene	0.1 c	454	438	**96%**	**0.39**	**1800000**	**1.2**	**200**	×
Vinyl chloride	0.28 c	430	24	**6%**	0.019	**11**	0.031	**30000**	×

Acronyms

[1] - Lowest value (cancer or noncancer from Ecology CLARC Database)
c - Cancer value
n - Non cancer value
x - Indicates analyte is a COPC
COPC - Contaminant of Potential Concern
DL - Detection Limit
FOD - Frequency of detection (number of detected samples / number of total samples)
Min - Minimum detected concentration
Max - Maximum detected concentration
MTCA - Model Toxics Control Act
N - Number of samples
NFVN - North Fruit Valley Neigborhood

Units

µg/m^3 - micrograms per cubic meter

Notes

1. **Bold** indicates measured concentrations exceeding the MTCA screening levels or FODs greater than 5%. These chemicals will be further evaluated in the risk assessment.
2. The lower concentration of duplicate samples are not included in this analysis.
3. The data summary provided in this table for the NFVN and Cadet facility properties includes monitoring results collected from 2000 through 2009 Quarter 1.

Table 9. Screening of Contaminants of Potential Concern in Indoor and Outdoor Air (µg/m^3)

Cadet Manufacturing Company
Port of Vancouver, Washington

	MTCA B CL [1]	Indoor Air - Cadet Building							Indoor Air - NVFN							Outdoor Air							
Chemical	Air (µg/m^3)	N	Detects	FOD	Min	Max	Min DL	Max DL	N	Detects	FOD	Min	Max	Min DL	Max DL	N	Detects	FOD	Min	Max	Min DL	Max DL	COPC
1,1,1-Trichloroethane	4800 n	28	26	**93%**	0.18	1.9	NA	NA	696	689	**99%**	0.041	68	0.029	1.1	81	78	**96%**	0.036	0.56	0.03	0.053	×
1,1-Dichloroethane	320 n	28	5	**18%**	0.013	0.032	NA	NA	636	106	**17%**	0.0024	0.63	0.0025	27	80	7	**9%**	0.0036	0.14	0.03	1.5	×
1,1-Dichloroethene	91n	28	24	**86%**	0.028	0.15	NA	NA	696	471	**68%**	0.0035	2.7	0.029	1.4	81	22	**27%**	0.0039	0.029	0.03	0.076	×
1,2-Dichloroethane	0.096 c	28	24	**86%**	0.028	0.083	NA	NA	636	596	**94%**	0.015	8.5	0.017	27	80	65	**81%**	0.018	**0.13**	0.03	0.053	×
Chloroethane	3.0 c	28	19	**68%**	0.018	0.12	0.025	1.7	636	355	**56%**	0.015	0.47	0.012	27	80	27	**34%**	0.013	0.25	0.013	0.077	×
cis-1,2-Dichloroethene	16 n	28	26	**93%**	0.019	6	NA	NA	695	67	**10%**	0.0023	0.19	0.004	27	81	7	**9%**	0.005	0.1	0.03	1.5	×
Tetrachloroethene	0.42 c	28	28	**100%**	**0.47**	**35**	NA	NA	696	692	**99%**	0.031	73	0.029	1.4	81	81	**100%**	0.023	**1.1**	0.03	0.053	×
trans-1,2-Dichloroethene	32 n	28	6	**21%**	0.0092	0.026	0.038	10	636	43	**7%**	0.0033	0.037	0.0023	27	80	5	**6%**	0.004	0.0069	0.03	1.5	×
Trichloroethene	0.1 c	28	28	**100%**	**1.4**	**110**	NA	NA	696	637	**92%**	0.0075	95	0.029	1.1	81	45	**56%**	0.0049	**1.7**	0.027	0.066	×
Vinyl chloride	0.28 c	28	7	**25%**	0.006	0.0086	0.02	**1.7**	696	208	**30%**	0.002	0.14	0.0066	7.6	81	2	2%	0.0042	0.011	0.03	**0.3**	×

Acronyms

[1] - Lowest value (cancer or noncancer from Ecology CLARC Database)
c - Cancer value
n - Non cancer value
x - Indicates analyte is a COPC
COPC - Contaminant of Potential Concern
DL - Detection Limit
FOD - Frequency of detection (number of detected samples / number of total samples)
Min - Minimum detected concentration
Max - Maximum detected concentration
MTCA - Model Toxics Control Act
N - Number of samples
NA - Not available
NFVN - North Fruit Valley Neigborhood

Notes

1. **Bold** indicates measured concentrations exceeding the MTCA screening levels or FODs greater than 5%. These chemicals will be further evaluated in the risk assessment.
2. The lower concentration of duplicate samples are not included in this analysis.

Units

µg/m^3 - micrograms per cubic meter

Table 10a. Reasonable Maximum Exposure Concentrations for Groundwater by Zone (µg/l)

Cadet Manufacturing Company
Port of Vancouver, Washington

Groundwater Zone	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
Shallow	1,1,1-Trichloroethane	189	82	0.25	5.30	0.826	-	-	5.300	Maximum (>50% NDs)
	1,1-Dichloroethane	189	25	0.25	2.50	0.354	-	-	2.500	Maximum (>50% NDs)
	1,1-Dichloroethene	189	0	0.25	2.50	0.304	Non-parametric	0.332	0.332	95% UCL
	Chloroform	189	29	0.25	13.00	0.466	-	-	13.000	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	189	50	0.25	9.20	0.752	-	-	9.200	Maximum (>50% NDs)
	Tetrachloroethene	189	168	0.25	158.00	12.119	Lognormal	15.470	15.470	95% UCL
	Toluene	189	4	0.25	2.50	0.329			2.500	Maximum (>50% NDs)
	Trichloroethene	189	161	0.25	536.00	29.828	Lognormal	47.341	47.341	95% UCL
	Trichlorofluoromethane	189	0	0.25	2.50	0.304	Non-parametric	0.332	0.332	95% UCL
Intermediate	1,1,1-Trichloroethane	134	60	0.25	9.60	0.809	-	-	9.600	Maximum (>50% NDs)
	1,1-Dichloroethane	134	48	0.25	6.30	0.667	-	-	6.300	Maximum (>50% NDs)
	1,1-Dichloroethene	134	16	0.25	6.40	0.527	-	-	6.400	Maximum (>50% NDs)
	Chloroform	134	14	0.25	2.69	0.341	-	-	2.690	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	134	101	0.25	23	4.407	Lognormal	7.049	7.049	95% UCL
	Tetrachloroethene	134	108	0.25	27.30	6.538	Normal	7.349	7.349	95% UCL
	Toluene	134	20	0.25	8.96	0.612	-	-	8.960	Maximum (>50% NDs)
	Trichloroethene	134	132	0.25	130.00	15.706	Non-parametric	18.170	18.170	95% UCL
	Trichlorofluoromethane	134	0	0.25	0.50	0.261	Non-parametric	0.269	0.269	95% UCL
Deep	1,1,1-Trichloroethane	77	55	0.25	4.50	1.454	Lognormal	2.035	2.035	95% UCL
	1,1-Dichloroethane	77	56	0.25	2.70	0.877	Lognormal	1.057	1.057	95% UCL
	1,1-Dichloroethene	77	47	0.25	3.00	0.924	Lognormal	1.164	1.164	95% UCL
	Chloroform	77	0	0.25	0.50	0.253	Non-parametric	0.259	0.259	95% UCL
	cis-1,2-Dichloroethene	77	65	0.25	13.00	5.619	Normal	6.297	6.297	95% UCL
	Tetrachloroethene	77	65	0.25	10.70	4.137	Normal	4.634	4.634	95% UCL
	Toluene	77	11	0.25	16.00	1.456	-	-	16.000	Maximum (>50% NDs)
	Trichloroethene	77	74	0.25	37.10	16.863	Normal	18.758	18.758	95% UCL
	Trichlorofluoromethane	77	34	0.25	1.43	0.531	-	-	1.430	Maximum (>50% NDs)
TGA	1,1,1-Trichloroethane	21	7	0.25	0.95	0.468	-	-	0.950	Maximum (>50% NDs)
	1,1-Dichloroethane	21	7	0.25	0.72	0.390	-	-	0.720	Maximum (>50% NDs)
	1,1-Dichloroethene	21	7	0.25	0.82	0.387	-	-	0.820	Maximum (>50% NDs)
	Chloroform	21	0	0.25	0.25	0.250	-	-	0.250	Maximum (sample results identical)
	cis-1,2-Dichloroethene	21	7	0.25	5.5	1.867	-	-	5.500	Maximum (>50% NDs)
	Tetrachloroethene	21	7	0.25	8.40	2.454	-	-	8.400	Maximum (>50% NDs)
	Toluene	21	9	0.25	4.71	0.942	-	-	4.710	Maximum (>50% NDs)
	Trichloroethene	21	7	0.25	20.00	5.705	-	-	20.000	Maximum (>50% NDs)
	Trichlorofluoromethane	21	0	0.25	0.25	0.250	-	-	0.250	Maximum (sample results identical)

Notes

[1] Concentrations below the detection limit were assigned a value of one-half the detection limit of the method used.

[2] The data distribution and associated 95% UCL were calculated using the Washington Department of Ecology MTCA *Stat* 97 Site Module software.

95% UCL - 95th percentile upper confidence limit

Groundwater Zone	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on

DL - Detection limit
N - Number of samples
ND - Not detected
RME - Reasonable maximum exposure
TGA - Troutdale Gravel Aquifer
μg/l - Micrograms per liter

Table 10b. Reasonable Maximum Exposure Concentrations for Groundwater by Well (µg/l)
Cadet Manufacturing Company
Port of Vancouver, Washington

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
USA Shallow Zone Monitoring Wells										
CM-DPW-01	1,1,1-Trichloroethane	5	0	0.25	1.25	0.50	-	-	1.250	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.25	1.25	0.50	-	-	1.250	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	1.25	0.50	-	-	1.250	Maximum (N<10)
	Chloroform	5	0	0.25	1.25	0.50	-	-	1.250	Maximum (N<10)
	cis-1,2-Dichloroethene	5	0	0.25	1.25	0.50	-	-	1.250	Maximum (N<10)
	Tetrachloroethene	5	5	17.8	109.00	57.90	-	-	109.000	Maximum (N<10)
	Toluene	5	0	0.25	2.50	0.75	-	-	2.500	Maximum (N<10)
	Trichloroethene	5	5	2.86	14.00	8.24	-	-	14.000	Maximum (N<10)
	Trichlorofluoromethane	5	0	0.25	1.25	0.50	-	-	1.250	Maximum (N<10)
CM-DPW-06	1,1,1-Trichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Chloroform	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Tetrachloroethene	5	5	8.5	15.60	11.86	-	-	15.600	Maximum (N<10)
	Toluene	5	0	0.25	0.50	0.35	-	-	0.500	Maximum (N<10)
	Trichloroethene	5	5	7.54	17.00	10.92	-	-	17.000	Maximum (N<10)
	Trichlorofluoromethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
CM-DPW-10	1,1,1-Trichloroethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	5	5	1.22	5.10	2.84	-	-	5.100	Maximum (N<10)
	Toluene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	5	5	1.66	20.00	6.62	-	-	20.000	Maximum (N<10)
	Trichlorofluoromethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-DPW-16	1,1,1-Trichloroethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	6	1	0.25	0.61	0.31	-	-	0.610	Maximum (N<10)
	cis-1,2-Dichloroethene	6	2	0.25	0.66	0.37	-	-	0.660	Maximum (N<10)

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Tetrachloroethene	6	6	6.05	14.10	9.69	-	-	14.100	Maximum (N<10)
	Toluene	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	6	6	6.59	28.00	14.95	-	-	28.000	Maximum (N<10)
	Trichlorofluoromethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-01d-040	1,1,1-Trichloroethane	8	8	2.6	5.30	3.94	-	-	5.300	Maximum (N<10)
	1,1-Dichloroethane	8	2	0.5	2.50	1.15	-	-	2.500	Maximum (N<10)
	1,1-Dichloroethene	8	0	0.25	2.50	1.06	-	-	2.500	Maximum (N<10)
	Chloroform	8	2	0.5	2.50	1.19	-	-	2.500	Maximum (N<10)
	cis-1,2-Dichloroethene	8	8	4.5	9.20	6.85	-	-	9.200	Maximum (N<10)
	Tetrachloroethene	8	8	89	158.00	123.63	-	-	158.000	Maximum (N<10)
	Toluene	8	0	0.25	2.50	1.22	-	-	2.500	Maximum (N<10)
	Trichloroethene	8	8	260	536.00	419.75	-	-	536.000	Maximum (N<10)
	Trichlorofluoromethane	8	0	0.25	2.50	1.06	-	-	2.500	Maximum (N<10)
CM-MW-01s	1,1,1-Trichloroethane	9	1	0.25	1.48	0.41	-	-	1.480	Maximum (N<10)
	1,1-Dichloroethane	9	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	9	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	Chloroform	9	3	0.25	1.45	0.57	-	-	1.450	Maximum (N<10)
	cis-1,2-Dichloroethene	9	7	0.25	2.31	0.84	-	-	2.310	Maximum (N<10)
	Tetrachloroethene	9	9	2.38	32.70	10.66	-	-	32.700	Maximum (N<10)
	Toluene	9	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	Trichloroethene	9	9	14	130.00	49.01	-	-	130.000	Maximum (N<10)
	Trichlorofluoromethane	9	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
CM-MW-02s	1,1,1-Trichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichlorofluoromethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-03s	1,1,1-Trichloroethane	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	1,1-Dichloroethane	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	1,1-Dichloroethene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Chloroform	10	1	0.25	0.70	0.30	-	-	0.700	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	10	2	0.25	0.94	0.35	-	-	0.940	Maximum (>50% NDs)
	Tetrachloroethene	10	10	1.04	8.38	2.99	Lognormal	5.535	5.535	95% UCL

Well Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	Toluene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Trichloroethene	10	10	2.06	32.00	8.62	Lognormal	20.198	20.198	95% UCL
	Trichlorofluoromethane	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
CM-MW-04s	1,1,1-Trichloroethane	10	10	0.97	3.70	1.71	Lognormal	2.162	2.162	95% UCL
	1,1-Dichloroethane	10	8	0.25	0.88	0.56	Normal	0.667	0.667	95% UCL
	1,1-Dichloroethene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Chloroform	10	2	0.25	0.65	0.32	-	-	0.650	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	10	1	0.25	0.62	0.29	-	-	0.620	Maximum (>50% NDs)
	Tetrachloroethene	10	10	0.86	10.00	3.76	Lognormal	7.130	7.130	95% UCL
	Toluene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Trichloroethene	10	9	0.25	23.00	6.37	Lognormal	38.866	23.000	Maximum (Max<95% UCL)
	Trichlorofluoromethane	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
CM-MW-05s	1,1,1-Trichloroethane	9	9	0.52	1.30	0.85	-	-	1.300	Maximum (N<10)
	1,1-Dichloroethane	9	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	9	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	9	2	0.25	0.80	0.36	-	-	0.800	Maximum (N<10)
	cis-1,2-Dichloroethene	9	3	0.25	0.89	0.42	-	-	0.890	Maximum (N<10)
	Tetrachloroethene	9	9	14.8	30.60	20.39	-	-	30.600	Maximum (N<10)
	Toluene	9	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	9	9	13.5	44.20	30.33	-	-	44.200	Maximum (N<10)
	Trichlorofluoromethane	9	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-06s	1,1,1-Trichloroethane	10	9	0.25	2.67	1.21	Lognormal	2.189	2.189	95% UCL
	1,1-Dichloroethane	10	3	0.25	0.82	0.37	-	-	0.820	Maximum (>50% NDs)
	1,1-Dichloroethene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Chloroform	10	3	0.25	1.00	0.43	-	-	1.000	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Tetrachloroethene	10	9	0.25	4.11	3.14	Non-parametric	3.739	3.739	95% UCL
	Toluene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Trichloroethene	10	10	0.54	8.81	4.99	Normal	6.339	6.339	95% UCL
	Trichlorofluoromethane	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
CM-MW-07s	1,1,1-Trichloroethane	10	10	1.7	3.17	2.21	Lognormal	2.460	2.460	95% UCL
	1,1-Dichloroethane	10	8	0.25	0.68	0.56	Non-parametric	0.627	0.627	95% UCL
	1,1-Dichloroethene	10	0	0.25	0.50	0.28	Non-parametric	0.316	0.316	95% UCL
	Chloroform	10	0	0.25	0.50	0.28	Non-parametric	0.316	0.316	95% UCL
	cis-1,2-Dichloroethene	10	0	0.25	0.50	0.28	Non-parametric	0.316	0.316	95% UCL
	Tetrachloroethene	10	10	2.12	7.66	4.85	Normal	5.732	5.732	95% UCL
	Toluene	10	0	0.25	0.50	0.28	Non-parametric	0.316	0.316	95% UCL

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Trichloroethene	10	0	0.25	0.50	0.28	Non-parametric	0.316	0.316	95% UCL
	Trichlorofluoromethane	10	0	0.25	0.50	0.28	Non-parametric	0.316	0.316	95% UCL
CM-MW-08s	1,1,1-Trichloroethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	6	6	1.44	3.53	2.40	-	-	3.530	Maximum (N<10)
	Toluene	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	6	6	2.69	13.20	7.24	-	-	13.200	Maximum (N<10)
	Trichlorofluoromethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-09s	1,1,1-Trichloroethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichlorofluoromethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-10s	1,1,1-Trichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	3	3	1.1	1.34	1.24	-	-	1.340	Maximum (N<10)
	Toluene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	3	3	1.7	1.91	1.77	-	-	1.910	Maximum (N<10)
	Trichlorofluoromethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-18s	1,1,1-Trichloroethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	4	1	0.25	0.57	0.33	-	-	0.570	Maximum (N<10)
	Toluene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	4	4	0.52	1.20	0.86	-	-	1.200	Maximum (N<10)

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Trichlorofluoromethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-19s	1,1,1-Trichloroethane	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	Chloroform	4	2	0.25	13.00	3.61	-	-	13.000	Maximum (N<10)
	cis-1,2-Dichloroethene	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	Tetrachloroethene	4	3	0.25	1.76	1.37	-	-	1.760	Maximum (N<10)
	Toluene	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	Trichloroethene	4	3	0.25	2.20	1.65	-	-	2.200	Maximum (N<10)
	Trichlorofluoromethane	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
CM-MW-20s	1,1,1-Trichloroethane	12	11	0.25	2.71	0.98	Lognormal	1.456	1.456	95% UCL
	1,1-Dichloroethane	12	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	1,1-Dichloroethene	12	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Chloroform	12	3	0.25	0.98	0.37	-	-	0.980	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	12	12	0.54	3.61	1.29	Lognormal	1.831	1.831	95% UCL
	Tetrachloroethene	12	12	6.8	40.60	15.36	Lognormal	20.724	20.724	95% UCL
	Toluene	12	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Trichloroethene	12	12	20	115.00	39.92	Lognormal	53.697	53.697	95% UCL
	Trichlorofluoromethane	12	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
CM-MW-21s	1,1,1-Trichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	3	3	0.87	1.58	1.18	-	-	1.580	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichlorofluoromethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-23s	1,1,1-Trichloroethane	8	7	0.5	1.68	1.02	-	-	1.680	Maximum (N<10)
	1,1-Dichloroethane	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	Chloroform	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	8	7	0.5	2.19	1.40	-	-	2.190	Maximum (N<10)
	Tetrachloroethene	8	8	4.6	9.79	7.32	-	-	9.790	Maximum (N<10)
	Toluene	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	Trichloroethene	8	8	16	32.80	24.24	-	-	32.800	Maximum (N<10)
	Trichlorofluoromethane	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
CM-MW-24s	1,1,1-Trichloroethane	7	3	0.25	0.87	0.48	-	-	0.870	Maximum (N<10)
	1,1-Dichloroethane	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	Chloroform	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	7	1	0.25	0.51	0.32	-	-	0.510	Maximum (N<10)
	Tetrachloroethene	7	7	1.35	2.73	1.97	-	-	2.730	Maximum (N<10)
	Toluene	7	1	0.25	0.54	0.33	-	-	0.540	Maximum (N<10)
	Trichloroethene	7	7	6.1	19.70	11.66	-	-	19.700	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
CM-MW-25s	1,1,1-Trichloroethane	10	10	0.51	2.04	1.05	Lognormal	1.596	1.596	95% UCL
	1,1-Dichloroethane	10	3	0.25	0.66	0.36	-	-	0.660	Maximum (>50% NDs)
	1,1-Dichloroethene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Chloroform	10	5	0.25	1.59	0.67	Non-parametric	0.948	0.948	95% UCL
	cis-1,2-Dichloroethene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Tetrachloroethene	10	10	1.82	4.70	3.41	Lognormal	4.025	4.025	95% UCL
	Toluene	10	3	0.25	1.11	0.41	-	-	1.110	Maximum (>50% NDs)
	Trichloroethene	10	10	0.97	8.10	4.03	Lognormal	6.361	6.361	95% UCL
	Trichlorofluoromethane	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
CM-MW-26s	1,1,1-Trichloroethane	10	3	0.25	0.64	0.36	-	-	0.640	Maximum (>50% NDs)
	1,1-Dichloroethane	10	1	0.25	0.81	0.31	-	-	0.810	Maximum (>50% NDs)
	1,1-Dichloroethene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Chloroform	10	2	0.25	0.76	0.35	-	-	0.760	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	10	2	0.25	6.11	0.87	-	-	6.110	Maximum (>50% NDs)
	Tetrachloroethene	10	9	0.25	17.20	4.41	Lognormal	24.016	17.200	Maximum (Max<95% UCL)
	Toluene	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
	Trichloroethene	10	5	0.25	19.00	4.09	Non-parametric	7.297	7.297	95% UCL
	Trichlorofluoromethane	10	0	0.25	0.25	0.25	-	-	0.250	Maximum (identical sample results)
CM-MW-27USA-049.5	1,1,1-Trichloroethane	7	1	0.25	0.56	0.29	-	-	0.560	Maximum (N<10)
	1,1-Dichloroethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	7	4	0.25	1.57	0.59	-	-	1.570	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	0.83	6.91	2.71	-	-	6.910	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-VE-09	1,1,1-Trichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	1,1-Dichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Chloroform	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	5	1	0.25	0.60	0.37	-	-	0.600	Maximum (N<10)
	Tetrachloroethene	5	5	2.46	6.21	4.54	-	-	6.210	Maximum (N<10)
	Toluene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Trichloroethene	5	5	6.4	22.20	14.16	-	-	22.200	Maximum (N<10)
	Trichlorofluoromethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
CM-VE-10	1,1,1-Trichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Chloroform	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	5	1	0.25	0.62	0.37	-	-	0.620	Maximum (N<10)
	Tetrachloroethene	5	5	1.45	4.39	3.21	-	-	4.390	Maximum (N<10)
	Toluene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Trichloroethene	5	5	3.56	17.40	9.61	-	-	17.400	Maximum (N<10)
	Trichlorofluoromethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
CM-VE-11	1,1,1-Trichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Chloroform	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	5	2	0.25	0.77	0.46	-	-	0.770	Maximum (N<10)
	Tetrachloroethene	5	4	0.5	11.10	4.54	-	-	11.100	Maximum (N<10)
	Toluene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Trichloroethene	5	5	2.23	14.90	9.88	-	-	14.900	Maximum (N<10)
	Trichlorofluoromethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
CM-VE-12	1,1,1-Trichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Chloroform	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	5	1	0.25	0.70	0.39	-	-	0.700	Maximum (N<10)
	Tetrachloroethene	5	5	1.75	8.41	5.06	-	-	8.410	Maximum (N<10)
	Toluene	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
	Trichloroethene	5	5	3.44	18.90	11.97	-	-	18.900	Maximum (N<10)
	Trichlorofluoromethane	5	0	0.25	0.50	0.30	-	-	0.500	Maximum (N<10)
USA Intermediate Zone Monitoring Wells										
CM-MW-01d-121	1,1,1-Trichloroethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)

Well Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	1,1-Dichloroethane	7	7	0.57	0.82	0.66	-	-	0.820	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	3.08	6.72	4.59	-	-	6.720	Maximum (N<10)
	Tetrachloroethene	7	7	11.1	16.40	12.71	-	-	16.400	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	14.4	20.70	16.97	-	-	20.700	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-01i	1,1,1-Trichloroethane	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	8	8	0.5	0.92	0.64	-	-	0.920	Maximum (N<10)
	1,1-Dichloroethene	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	8	8	9.3	22.50	16.53	-	-	22.500	Maximum (N<10)
	Tetrachloroethene	8	8	2.5	8.88	4.33	-	-	8.880	Maximum (N<10)
	Toluene	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	8	8	6.97	9.98	8.47	-	-	9.980	Maximum (N<10)
	Trichlorofluoromethane	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-03d-060	1,1,1-Trichloroethane	6	5	0.25	0.75	0.55	-	-	0.750	Maximum (N<10)
	1,1-Dichloroethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	6	6	1.06	1.62	1.25	-	-	1.620	Maximum (N<10)
	Tetrachloroethene	6	6	5.1	7.53	6.55	-	-	7.530	Maximum (N<10)
	Toluene	6	1	0.25	0.53	0.30	-	-	0.530	Maximum (N<10)
	Trichloroethene	6	6	15.2	18.40	16.60	-	-	18.400	Maximum (N<10)
	Trichlorofluoromethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-03d-100	1,1,1-Trichloroethane	7	3	0.25	0.75	0.41	-	-	0.750	Maximum (N<10)
	1,1-Dichloroethane	7	1	0.25	0.71	0.32	-	-	0.710	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	0.95	9.50	3.01	-	-	9.500	Maximum (N<10)
	Tetrachloroethene	7	7	3.99	16.60	6.56	-	-	16.600	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	5.3	19.80	13.59	-	-	19.800	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-04i	1,1,1-Trichloroethane	6	6	2.54	9.60	5.79	-	-	9.600	Maximum (N<10)
	1,1-Dichloroethane	6	6	1.77	6.30	3.93	-	-	6.300	Maximum (N<10)

Well Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	1,1-Dichloroethene	6	6	1.71	6.40	3.97	-	-	6.400	Maximum (N<10)
	Chloroform	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	6	6	7.17	23.00	15.52	-	-	23.000	Maximum (N<10)
	Tetrachloroethene	6	5	0.25	5.60	1.96	-	-	5.600	Maximum (N<10)
	Toluene	6	1	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	Trichloroethene	6	6	8.03	130.00	67.91	-	-	130.000	Maximum (N<10)
	Trichlorofluoromethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-05i	1,1,1-Trichloroethane	7	5	0.25	1.18	0.62	-	-	1.180	Maximum (N<10)
	1,1-Dichloroethane	7	7	0.56	0.99	0.69	-	-	0.990	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	3.18	11.90	6.14	-	-	11.900	Maximum (N<10)
	Tetrachloroethene	7	7	11	24.10	13.57	-	-	24.100	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	9.36	19.20	12.97	-	-	19.200	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-07i	1,1,1-Trichloroethane	7	7	1.14	2.13	1.63	-	-	2.130	Maximum (N<10)
	1,1-Dichloroethane	7	6	0.5	0.81	0.61	-	-	0.810	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	Chloroform	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	1.8	3.25	2.66	-	-	3.250	Maximum (N<10)
	Tetrachloroethene	7	7	7.72	10.80	9.24	-	-	10.800	Maximum (N<10)
	Toluene	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	Trichloroethene	7	7	15.1	21.40	19.04	-	-	21.400	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
CM-MW-15s	1,1,1-Trichloroethane	8	1	0.25	0.63	0.33	-	-	0.630	Maximum (N<10)
	1,1-Dichloroethane	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	Chloroform	8	6	0.25	2.69	1.06	-	-	2.690	Maximum (N<10)
	cis-1,2-Dichloroethene	8	3	0.25	1.09	0.50	-	-	1.090	Maximum (N<10)
	Tetrachloroethene	8	8	2.5	12.90	5.78	-	-	12.900	Maximum (N<10)
	Toluene	8	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	Trichloroethene	8	8	7.4	57.30	23.70	-	-	57.300	Maximum (N<10)
	Trichlorofluoromethane	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
CM-MW-17i	1,1,1-Trichloroethane	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Chloroform	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	4	4	1.6	3.40	2.46	-	-	3.400	Maximum (N<10)
	Tetrachloroethene	4	4	5.41	8.90	7.09	-	-	8.900	Maximum (N<10)
	Toluene	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	Trichloroethene	4	4	5.3	15.40	9.38	-	-	15.400	Maximum (N<10)
	Trichlorofluoromethane	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
CM-MW-18i	1,1,1-Trichloroethane	4	1	0.25	0.55	0.33	-	-	0.550	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	4	4	3.23	7.70	5.98	-	-	7.700	Maximum (N<10)
	Trichlorofluoromethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-19i	1,1,1-Trichloroethane	6	2	0.25	0.55	0.34	-	-	0.550	Maximum (N<10)
	1,1-Dichloroethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	6	6	0.97	4.20	1.95	-	-	4.200	Maximum (N<10)
	Tetrachloroethene	6	6	3.04	9.00	5.49	-	-	9.000	Maximum (N<10)
	Toluene	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	6	6	7.26	13.00	10.21	-	-	13.000	Maximum (N<10)
	Trichlorofluoromethane	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-20i	1,1,1-Trichloroethane	4	4	1.78	3.30	2.45	-	-	3.300	Maximum (N<10)
	1,1-Dichloroethane	4	4	2.9	5.06	3.67	-	-	5.060	Maximum (N<10)
	1,1-Dichloroethene	4	4	1.68	3.26	2.44	-	-	3.260	Maximum (N<10)
	Chloroform	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	4	4	13.2	20.50	18.18	-	-	20.500	Maximum (N<10)
	Tetrachloroethene	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
	Toluene	4	1	0.25	0.65	0.41	-	-	0.650	Maximum (N<10)
	Trichloroethene	4	4	2.6	17.00	8.83	-	-	17.000	Maximum (N<10)
	Trichlorofluoromethane	4	0	0.25	0.50	0.31	-	-	0.500	Maximum (N<10)
CM-MW-21i	1,1,1-Trichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)

Well Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	cis-1,2-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	3	1	0.25	0.72	0.41	-	-	0.720	Maximum (N<10)
	Trichlorofluoromethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-22s	1,1,1-Trichloroethane	7	4	0.25	0.57	0.41	-	-	0.570	Maximum (N<10)
	1,1-Dichloroethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	5	0.25	1.22	0.70	-	-	1.220	Maximum (N<10)
	cis-1,2-Dichloroethene	7	5	0.25	1.23	0.79	-	-	1.230	Maximum (N<10)
	Tetrachloroethene	7	7	11.1	27.30	18.81	-	-	27.300	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	11.2	43.00	28.76	-	-	43.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-23i	1,1,1-Trichloroethane	7	7	1.1	2.20	1.54	-	-	2.200	Maximum (N<10)
	1,1-Dichloroethane	7	6	0.5	1.80	1.17	-	-	1.800	Maximum (N<10)
	1,1-Dichloroethene	7	6	0.5	1.60	0.96	-	-	1.600	Maximum (N<10)
	Chloroform	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	6.66	13.10	9.71	-	-	13.100	Maximum (N<10)
	Tetrachloroethene	7	7	13	16.20	14.40	-	-	16.200	Maximum (N<10)
	Toluene	7	4	0.25	8.96	4.32	-	-	8.960	Maximum (N<10)
	Trichloroethene	7	7	24	40.00	28.81	-	-	40.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
CM-MW-24i	1,1,1-Trichloroethane	8	4	0.25	0.61	0.44	-	-	0.610	Maximum (N<10)
	1,1-Dichloroethane	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	Chloroform	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	8	3	0.25	0.79	0.42	-	-	0.790	Maximum (N<10)
	Tetrachloroethene	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	Toluene	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
	Trichloroethene	8	8	0.82	1.60	1.23	-	-	1.600	Maximum (N<10)
	Trichlorofluoromethane	8	0	0.25	0.50	0.28	-	-	0.500	Maximum (N<10)
CM-MW-28USA-050	1,1,1-Trichloroethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Tetrachloroethene	4	1	0.25	0.53	0.32	-	-	0.530	Maximum (N<10)
	Toluene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	4	4	0.66	5.07	2.41	-	-	5.070	Maximum (N<10)
	Trichlorofluoromethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-28USA-120.5	1,1,1-Trichloroethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	7	7	0.62	0.84	0.69	-	-	0.840	Maximum (N<10)
	Toluene	7	5	0.25	1.70	0.84	-	-	1.700	Maximum (N<10)
	Trichloroethene	7	7	5.53	8.00	6.79	-	-	8.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-29USA-060.5	1,1,1-Trichloroethane	7	2	0.25	0.54	0.33	-	-	0.540	Maximum (N<10)
	1,1-Dichloroethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	1.33	2.60	1.73	-	-	2.600	Maximum (N<10)
	Tetrachloroethene	7	7	4.4	6.42	5.20	-	-	6.420	Maximum (N<10)
	Toluene	7	1	0.25	2.03	0.50	-	-	2.030	Maximum (N<10)
	Trichloroethene	7	7	6.7	11.00	8.72	-	-	11.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-29USA-100	1,1,1-Trichloroethane	7	3	0.25	0.83	0.43	-	-	0.830	Maximum (N<10)
	1,1-Dichloroethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	2.29	3.69	2.92	-	-	3.690	Maximum (N<10)
	Tetrachloroethene	7	7	6.3	9.31	7.36	-	-	9.310	Maximum (N<10)
	Toluene	7	2	0.25	4.41	0.97	-	-	4.410	Maximum (N<10)
	Trichloroethene	7	7	9.5	14.00	12.27	-	-	14.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-29USA-140.5	1,1,1-Trichloroethane	7	6	0.25	0.86	0.60	-	-	0.860	Maximum (N<10)
	1,1-Dichloroethane	7	3	0.25	0.61	0.38	-	-	0.610	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	2.72	5.60	4.29	-	-	5.600	Maximum (N<10)
	Tetrachloroethene	7	7	6.03	10.00	7.97	-	-	10.000	Maximum (N<10)

Well Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	Toluene	7	5	0.25	3.65	1.20	-	-	3.650	Maximum (N<10)
	Trichloroethene	7	7	9.67	15.00	12.67	-	-	15.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-Ui	1,1,1-Trichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	3	3	0.6	0.75	0.69	-	-	0.750	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	3	3	11.4	13.00	12.47	-	-	13.000	Maximum (N<10)
	Trichlorofluoromethane	3	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
USA Deep Zone Monitoring Wells										
CM-MW-01d-161	1,1,1-Trichloroethane	7	2	0.25	0.56	0.33	-	-	0.560	Maximum (N<10)
	1,1-Dichloroethane	7	7	0.56	0.81	0.66	-	-	0.810	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	3.02	9.36	7.11	-	-	9.360	Maximum (N<10)
	Tetrachloroethene	7	7	8.15	10.70	9.26	-	-	10.700	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	14.4	18.00	15.79	-	-	18.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-01d-194	1,1,1-Trichloroethane	7	7	0.54	1.28	0.82	-	-	1.280	Maximum (N<10)
	1,1-Dichloroethane	7	7	0.61	1.06	0.84	-	-	1.060	Maximum (N<10)
	1,1-Dichloroethene	7	5	0.25	0.93	0.57	-	-	0.930	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	6.79	8.70	7.94	-	-	8.700	Maximum (N<10)
	Tetrachloroethene	7	7	5.16	6.90	6.02	-	-	6.900	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	13.8	21.00	17.83	-	-	21.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-01d-224	1,1,1-Trichloroethane	7	7	1.96	3.21	2.44	-	-	3.210	Maximum (N<10)
	1,1-Dichloroethane	7	7	1.14	1.57	1.37	-	-	1.570	Maximum (N<10)
	1,1-Dichloroethene	7	7	1.46	2.00	1.70	-	-	2.000	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	7.56	9.35	8.33	-	-	9.350	Maximum (N<10)
	Tetrachloroethene	7	7	4.7	6.27	5.29	-	-	6.270	Maximum (N<10)

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	26.3	33.30	28.74	-	-	33.300	Maximum (N<10)
	Trichlorofluoromethane	7	7	0.61	1.07	0.74	-	-	1.070	Maximum (N<10)
CM-MW-02d	1,1,1-Trichloroethane	5	5	1.8	4.01	2.39	-	-	4.010	Maximum (N<10)
	1,1-Dichloroethane	5	5	0.98	1.98	1.28	-	-	1.980	Maximum (N<10)
	1,1-Dichloroethene	5	5	1.15	2.22	1.50	-	-	2.220	Maximum (N<10)
	Chloroform	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	5	5	5.78	11.30	7.44	-	-	11.300	Maximum (N<10)
	Tetrachloroethene	5	5	3.94	6.98	5.00	-	-	6.980	Maximum (N<10)
	Toluene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	5	5	20.1	37.10	24.88	-	-	37.100	Maximum (N<10)
	Trichlorofluoromethane	5	5	0.63	1.43	0.86	-	-	1.430	Maximum (N<10)
CM-MW-03d-141	1,1,1-Trichloroethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	7	2	0.25	0.75	0.37	-	-	0.750	Maximum (N<10)
	1,1-Dichloroethene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	2.93	8.00	4.64	-	-	8.000	Maximum (N<10)
	Tetrachloroethene	7	7	5.6	7.55	6.30	-	-	7.550	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	7.85	14.00	10.36	-	-	14.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-03d-181	1,1,1-Trichloroethane	7	7	0.76	1.05	0.86	-	-	1.050	Maximum (N<10)
	1,1-Dichloroethane	7	6	0.25	0.67	0.55	-	-	0.670	Maximum (N<10)
	1,1-Dichloroethene	7	6	0.25	0.58	0.50	-	-	0.580	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	4.25	5.13	4.69	-	-	5.130	Maximum (N<10)
	Tetrachloroethene	7	7	2.7	4.13	3.15	-	-	4.130	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	12.1	13.30	12.70	-	-	13.300	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-03d-227	1,1,1-Trichloroethane	7	7	2.4	3.67	2.81	-	-	3.670	Maximum (N<10)
	1,1-Dichloroethane	7	7	1.32	1.80	1.59	-	-	1.800	Maximum (N<10)
	1,1-Dichloroethene	7	7	1.7	2.02	1.87	-	-	2.020	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	8.18	10.50	9.08	-	-	10.500	Maximum (N<10)
	Tetrachloroethene	7	7	3.2	4.99	4.31	-	-	4.990	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)

Well Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	Trichloroethene	7	7	26.6	32.20	28.80	-	-	32.200	Maximum (N<10)
	Trichlorofluoromethane	7	7	0.81	1.29	1.03	-	-	1.290	Maximum (N<10)
CM-MW-05d	1,1,1-Trichloroethane	6	6	3.57	4.50	3.84	-	-	4.500	Maximum (N<10)
	1,1-Dichloroethane	6	6	1.73	2.70	2.14	-	-	2.700	Maximum (N<10)
	1,1-Dichloroethene	6	6	1.74	3.00	2.43	-	-	3.000	Maximum (N<10)
	Chloroform	6	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	6	6	9.27	13.00	11.45	-	-	13.000	Maximum (N<10)
	Tetrachloroethene	6	6	3.4	5.25	4.34	-	-	5.250	Maximum (N<10)
	Toluene	6	1	0.25	0.77	0.34	-	-	0.770	Maximum (N<10)
	Trichloroethene	6	6	28.1	36.50	32.85	-	-	36.500	Maximum (N<10)
	Trichlorofluoromethane	6	6	0.95	1.41	1.19	-	-	1.410	Maximum (N<10)
CM-MW-07d	1,1,1-Trichloroethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	4	2	0.25	1.90	0.91	-	-	1.900	Maximum (N<10)
	Trichloroethene	4	1	0.25	0.88	0.41	-	-	0.880	Maximum (N<10)
	Trichlorofluoromethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-18d	1,1,1-Trichloroethane	5	5	1.34	1.92	1.54	-	-	1.920	Maximum (N<10)
	1,1-Dichloroethane	5	3	0.25	0.61	0.45	-	-	0.610	Maximum (N<10)
	1,1-Dichloroethene	5	5	0.69	0.88	0.76	-	-	0.880	Maximum (N<10)
	Chloroform	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	5	5	1.6	2.03	1.85	-	-	2.030	Maximum (N<10)
	Tetrachloroethene	5	5	1.1	2.43	1.86	-	-	2.430	Maximum (N<10)
	Toluene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	5	5	10.6	13.10	11.42	-	-	13.100	Maximum (N<10)
	Trichlorofluoromethane	5	3	0.25	0.65	0.44	-	-	0.650	Maximum (N<10)
CM-MW-19d	1,1,1-Trichloroethane	7	7	1.6	2.04	1.85	-	-	2.040	Maximum (N<10)
	1,1-Dichloroethane	7	6	0.5	0.86	0.76	-	-	0.860	Maximum (N<10)
	1,1-Dichloroethene	7	6	0.5	1.20	0.90	-	-	1.200	Maximum (N<10)
	Chloroform	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	2.69	3.46	3.15	-	-	3.460	Maximum (N<10)
	Tetrachloroethene	7	7	1.81	2.40	2.14	-	-	2.400	Maximum (N<10)
	Toluene	7	0	0.25	0.50	0.29	-	-	0.500	Maximum (N<10)
	Trichloroethene	7	7	12.7	15.00	13.66	-	-	15.000	Maximum (N<10)

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Trichlorofluoromethane	7	6	0.5	0.79	0.69	-	-	0.790	Maximum (N<10)
CM-MW-28USA-180	1,1,1-Trichloroethane	8	2	0.25	0.72	0.34	-	-	0.720	Maximum (N<10)
	1,1-Dichloroethane	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	8	8	8.78	16.00	11.43	-	-	16.000	Maximum (N<10)
	Trichloroethene	8	8	1.08	4.50	2.88	-	-	4.500	Maximum (N<10)
	Trichlorofluoromethane	8	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
TGA Zone Monitoring Wells										
CM-MW-10d	1,1,1-Trichloroethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichlorofluoromethane	4	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-27TGA	1,1,1-Trichloroethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	5	5	0.56	3.32	1.65	-	-	3.320	Maximum (N<10)
	Trichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichlorofluoromethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-28TGA	1,1,1-Trichloroethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Chloroform	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Tetrachloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Toluene	5	4	0.25	4.71	1.76	-	-	4.710	Maximum (N<10)
	Trichloroethene	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)

Well Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Trichlorofluoromethane	5	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
CM-MW-29TGA	1,1,1-Trichloroethane	7	7	0.87	0.95	0.90	-	-	0.950	Maximum (N<10)
	1,1-Dichloroethane	7	7	0.63	0.72	0.67	-	-	0.720	Maximum (N<10)
	1,1-Dichloroethene	7	7	0.5	0.82	0.66	-	-	0.820	Maximum (N<10)
	Chloroform	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	cis-1,2-Dichloroethene	7	7	4.77	5.50	5.10	-	-	5.500	Maximum (N<10)
	Tetrachloroethene	7	7	5.49	8.40	6.86	-	-	8.400	Maximum (N<10)
	Toluene	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)
	Trichloroethene	7	7	13.9	20.00	16.61	-	-	20.000	Maximum (N<10)
	Trichlorofluoromethane	7	0	0.25	0.25	0.25	-	-	0.250	Maximum (N<10)

95% UCL - 95th percentile upper confidence limit

[1] Concentrations below the detection limit were assigned a value of one-half the detection limit of the method used.

[2] The data distribution and associated 95% UCL were calculated using the Washington Department of Ecology MTCA*Stat* 97 Site Module software.

N - Number of samples

ND - Not detected

RME - Reasonable maximum exposure

TGA - Troutdale Gravel Aquifer

Table 11. Reasonable Maximum Exposure Estimates for VOCs in Soil (mg/kg)

Cadet Manufacturing Company
Port of Vancouver, Washington

Sample Location (Depth)	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
Cadet Facility (0-3 ft.)	1,1,1-Trichloroethane	7	0	0.025	0.025	0.025	-	-	0.025	Maximum (N<10)
	cis-1,2-Dichloroethene	7	0	0.025	0.025	0.025	-	-	0.025	Maximum (N<10)
	Methylene chloride	7	0	0.025	0.025	0.025	-	-	0.025	Maximum (N<10)
	Tetrachloroethene	7	0	0.025	0.025	0.025	-	-	0.025	Maximum (N<10)
	Trichloroethene	7	0	0.025	0.025	0.025	-	-	0.025	Maximum (N<10)
Cadet Facility (0-20 ft.)	1,1,1-Trichloroethane	62	4	0.001	0.27	0.04	-	-	0.270	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	62	14	0.001	0.27	0.04	-	-	0.270	Maximum (>50% NDs)
	Methylene chloride	62	6	0.003	0.25	0.15	-	-	0.250	Maximum (>50% NDs)
	Tetrachloroethene	62	33	0.001	1.70	0.22	Lognormal	0.982	0.982	95% UCL
	Trichloroethene	62	40	0.001	14.00	0.69	Lognormal	3.109	3.109	95% UCL
NFVN (0-20 ft.)	1,1,1-Trichloroethane	11	0	0.006	0.05	0.01	Non-parametric	0.017	0.017	95% UCL
	cis-1,2-Dichloroethene	11	0	0.007	0.05	0.01	Non-parametric	0.017	0.017	95% UCL
	Methylene chloride	11	2	0.006	0.25	0.07	Non-parametric	0.099	0.099	95% UCL
	Tetrachloroethene	11	1	0.009	0.03	0.01	Non-parametric	0.013	0.013	95% UCL
	Trichloroethene	11	2	0.008	0.03	0.01	Non-parametric	0.015	0.015	95% UCL

Notes

[1] Concentrations below the detection limit were assigned a value of one-half the detection limit of the method used.

[2] The data distribution and associated 95% UCL were calculated using the Washington Department of Ecology MTCA*Stat* 97 Site Module software.

95% UCL - 95th percentile upper confidence limit

N - Number of samples

RME - Reasonable maximum exposure

mg/kg - milligrams per kilogram

Table 12. Reasonable Maximum Exposure Estimates for VOCs in Soil Gas ($\mu g/m^3$)
Cadet Manufacturing Company
Port of Vancouver, Washington

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
CM-C-08	4	1,1,1-Trichloroethane	1	0	500	500	500	500.00
		1,1-Dichloroethane	1	0	500	500	500	500.00
		1,1-Dichloroethene	1	1	870	870	870	870.00
		1,2-Dichloroethane	1	0	500	500	500	500.00
		Chloroethane	1	0	500	500	500	500.00
		cis-1,2-Dichloroethene	1	1	3800	3800	3800	3800.00
		Tetrachloroethene	1	1	150000	150000	150000	150000.00
		trans-1,2-Dichloroethene	1	0	500	500	500	500.00
		Trichloroethene	1	1	220000	220000	220000	220000.00
		Vinyl Chloride	1	0	500	500	500	500.00
CM-C-09	4	1,1,1-Trichloroethane	1	0	1000	1000	1000	1000.00
		1,1-Dichloroethane	1	0	1000	1000	1000	1000.00
		1,1-Dichloroethene	1	1	3100	3100	3100	3100.00
		1,2-Dichloroethane	1	0	1000	1000	1000	1000.00
		Chloroethane	1	0	1000	1000	1000	1000.00
		cis-1,2-Dichloroethene	1	1	6100	6100	6100	6100.00
		Tetrachloroethene	1	1	710000	710000	710000	710000.00
		trans-1,2-Dichloroethene	1	0	1000	1000	1000	1000.00
		Trichloroethene	1	1	610000	610000	610000	610000.00
		Vinyl Chloride	1	0	1000	1000	1000	1000.00
CM-C-10	4	1,1,1-Trichloroethane	1	1	5400	5400	5400	5400.00
		1,1-Dichloroethane	1	0	1000	1000	1000	1000.00
		1,1-Dichloroethene	1	1	4700	4700	4700	4700.00
		1,2-Dichloroethane	1	0	1000	1000	1000	1000.00
		Chloroethane	1	0	1000	1000	1000	1000.00
		cis-1,2-Dichloroethene	1	1	2100	2100	2100	2100.00
		Tetrachloroethene	1	1	46000	46000	46000	46000.00
		trans-1,2-Dichloroethene	1	0	1000	1000	1000	1000.00
		Trichloroethene	1	1	520000	520000	520000	520000.00
		Vinyl Chloride	1	0	1000	1000	1000	1000.00
CM-C-11	4	1,1,1-Trichloroethane	1	1	11000	11000	11000	11000.00
		1,1-Dichloroethane	1	0	5000	5000	5000	5000.00
		1,1-Dichloroethene	1	1	9300	9300	9300	9300.00
		1,2-Dichloroethane	1	0	5000	5000	5000	5000.00
		Chloroethane	1	0	5000	5000	5000	5000.00
		cis-1,2-Dichloroethene	1	1	230000	230000	230000	230000.00
		Tetrachloroethene	1	1	130000	130000	130000	130000.00
		trans-1,2-Dichloroethene	1	0	5000	5000	5000	5000.00
		Trichloroethene	1	1	1300000	1300000	1300000	1300000.00
		Vinyl Chloride	1	0	5000	5000	5000	5000.00
CM-C-12	4	1,1,1-Trichloroethane	1	1	6800	6800	6800	6800.00
		1,1-Dichloroethane	1	0	2500	2500	2500	2500.00
		1,1-Dichloroethene	1	1	5000	5000	5000	5000.00
		1,2-Dichloroethane	1	0	2500	2500	2500	2500.00
		Chloroethane	1	0	2500	2500	2500	2500.00
		cis-1,2-Dichloroethene	1	1	6900	6900	6900	6900.00
		Tetrachloroethene	1	1	170000	170000	170000	170000.00

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		trans-1,2-Dichloroethene	1	0	2500	2500	2500	2500.00
		Trichloroethene	1	1	650000	650000	650000	650000.00
		Vinyl Chloride	1	0	2500	2500	2500	2500.00
CM-C-13	4	1,1,1-Trichloroethane	1	0	15000	15000	15000	15000.00
		1,1-Dichloroethane	1	0	15000	15000	15000	15000.00
		1,1-Dichloroethene	1	0	15000	15000	15000	15000.00
		1,2-Dichloroethane	1	0	15000	15000	15000	15000.00
		Chloroethane	1	0	15000	15000	15000	15000.00
		cis-1,2-Dichloroethene	1	1	150000	150000	150000	150000.00
		Tetrachloroethene	1	1	220000	220000	220000	220000.00
		trans-1,2-Dichloroethene	1	0	15000	15000	15000	15000.00
		Trichloroethene	1	1	1800000	1800000	1800000	1800000.00
		Vinyl Chloride	1	0	15000	15000	15000	15000.00
CM-FV-09	8	1,1,1-Trichloroethane	1	1	510	510	510.00	510.00
		1,1-Dichloroethane	1	0	5	5	5.00	5.00
		1,1-Dichloroethene	1	0	5	5	5.00	5.00
		1,2-Dichloroethane	1	0	5	5	5.00	5.00
		Chloroethane	1	0	5	5	5.00	5.00
		cis-1,2-Dichloroethene	1	0	5	5	5.00	5.00
		Tetrachloroethene	1	1	2300	2300	2300.00	2300.00
		trans-1,2-Dichloroethene	1	0	5	5	5.00	5.00
		Trichloroethene	1	1	1500	1500	1500.00	1500.00
		Vinyl Chloride	1	0	5	5	5.00	5.00
CM-FV-11	4	1,1,1-Trichloroethane	1	1	7.6	7.6	7.60	7.60
		1,1-Dichloroethane	1	0	0.5	0.5	0.50	0.50
		1,1-Dichloroethene	1	0	0.5	0.5	0.50	0.50
		1,2-Dichloroethane	1	0	0.5	0.5	0.50	0.50
		Chloroethane	1	0	0.5	0.5	0.50	0.50
		cis-1,2-Dichloroethene	1	0	0.5	0.5	0.50	0.50
		Tetrachloroethene	1	1	52	52	52.00	52.00
		trans-1,2-Dichloroethene	1	0	0.5	0.5	0.50	0.50
		Trichloroethene	1	1	2.4	2.4	2.40	2.40
		Vinyl Chloride	1	0	0.5	0.5	0.50	0.50
CM-FV-11	8	1,1,1-Trichloroethane	1	1	34	34	34.00	34.00
		1,1-Dichloroethane	1	0	1	1	1.00	1.00
		1,1-Dichloroethene	1	0	1	1	1.00	1.00
		1,2-Dichloroethane	1	0	1	1	1.00	1.00
		Chloroethane	1	0	1	1	1.00	1.00
		cis-1,2-Dichloroethene	1	0	1	1	1.00	1.00
		Tetrachloroethene	1	1	180	180	180.00	180.00
		trans-1,2-Dichloroethene	1	0	1	1	1.00	1.00
		Trichloroethene	1	1	35	35	35.00	35.00
		Vinyl Chloride	1	0	1	1	1.00	1.00
CM-FV-13	8	1,1,1-Trichloroethane	1	1	49	49	49.00	49.00
		1,1-Dichloroethane	1	0	0.5	0.5	0.50	0.50
		1,1-Dichloroethene	1	0	0.5	0.5	0.50	0.50
		1,2-Dichloroethane	1	0	0.5	0.5	0.50	0.50
		Chloroethane	1	0	0.5	0.5	0.50	0.50
		cis-1,2-Dichloroethene	1	0	0.5	0.5	0.50	0.50
		Tetrachloroethene	1	1	220	220	220.00	220.00
		trans-1,2-Dichloroethene	1	0	0.5	0.5	0.50	0.50

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		Trichloroethene	1	1	7.4	7.4	7.40	7.40
		Vinyl Chloride	1	0	0.5	0.5	0.50	0.50
CM-FV-14	3	1,1,1-Trichloroethane	1	1	6.1	6.1	6.1	6.10
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	1	1	1	1.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	1	1	1	1.00
		Tetrachloroethene	1	1	24	24	24	24.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	0	1	1	1	1.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-15	3	1,1,1-Trichloroethane	1	1	91	91	91	91.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	2	2	2	NA
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	2	2	2	NA
		Tetrachloroethene	1	1	400	400	400	400.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	63	63	63	NA
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-16	3	1,1,1-Trichloroethane	1	1	140	140	140	NA
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	5	5	5	5.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	5	5	5	5.00
		Tetrachloroethene	1	1	590	590	590	590.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	1300	1300	1300	1300.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-17	3	1,1,1-Trichloroethane	1	0	100	100	100	100.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	100	100	100	100.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	100	100	100	100.00
		Tetrachloroethene	1	0	100	100	100	100.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	0	100	100	100	100.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-18	3	1,1,1-Trichloroethane	1	0	10	10	10	10.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	10	10	10	10.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	10	10	10	10.00
		Tetrachloroethene	1	1	1900	1900	1900	1900.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	770	770	770	770.00

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-19	3	1,1,1-Trichloroethane	1	1	900	900	900	900.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	10	10	10	10.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	10	10	10	10.00
		Tetrachloroethene	1	1	2000	2000	2000	2000.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	550	550	550	550.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-20	3	1,1,1-Trichloroethane	1	1	37	37	37	37.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	2	2	2	2.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	2	2	2	2.00
		Tetrachloroethene	1	1	330	330	330	330.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	260	260	260	260.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-21	3	1,1,1-Trichloroethane	1	0	1	1	1	1.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	1	1	1	1.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	1	1	1	1.00
		Tetrachloroethene	1	1	16	16	16	16.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	0	1	1	1	1.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-21D	3	1,1,1-Trichloroethane	1	1	8.7	8.7	8.7	8.70
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	1	1	1	1.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	1	1	1	1.00
		Tetrachloroethene	1	1	170	170	170	170.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	0	1	1	1	1.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-22	3	1,1,1-Trichloroethane	1	1	1300	1300	1300	1300.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	5	5	5	5.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	5	5	5	5.00
		Tetrachloroethene	1	1	900	900	900	900.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	97	97	97	97.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
CM-FV-22D	3	1,1,1-Trichloroethane	1	1	1400	1400	1400	1400.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	5	5	5	5.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	5	5	5	5.00
		Tetrachloroethene	1	1	1100	1100	1100	1100.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	180	180	180	180.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-23	3	1,1,1-Trichloroethane	1	1	130	130	130	130.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	2.5	2.5	2.5	2.50
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	2.5	2.5	2.5	2.50
		Tetrachloroethene	1	1	520	520	520	520.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	440	440	440	440.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-24	3	1,1,1-Trichloroethane	1	1	610	610	610	610.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	5	5	5	5.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	5	5	5	5.00
		Tetrachloroethene	1	1	1000	1000	1000	1000.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	390	390	390	390.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-25	3	1,1,1-Trichloroethane	1	1	1.5	1.5	1.5	1.50
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	0.5	0.5	0.5	0.50
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	0.5	0.5	0.5	0.50
		Tetrachloroethene	1	1	7.7	7.7	7.7	7.70
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	3.8	3.8	3.8	3.80
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-26	3	1,1,1-Trichloroethane	1	1	340	340	340	340.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	10	10	10	10.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	10	10	10	10.00
		Tetrachloroethene	1	1	1300	1300	1300	1300.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	1700	1700	1700	1700.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-27	3	1,1,1-Trichloroethane	1	1	2000	2000	2000	2000.00

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	50	50	50	50.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	50	50	50	50.00
		Tetrachloroethene	1	1	3200	3200	3200	3200.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	4300	4300	4300	4300.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-28	3	1,1,1-Trichloroethane	1	1	190	190	190	190.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	2	2	2	2.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	2	2	2	2.00
		Tetrachloroethene	1	1	550	550	550	550.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	370	370	370	370.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-29	3	1,1,1-Trichloroethane	1	1	5.5	5.5	5.5	5.50
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	0.5	0.5	0.5	0.50
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	0.5	0.5	0.5	0.50
		Tetrachloroethene	1	1	53	53	53	53.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	2.6	2.6	2.6	2.60
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-30	3	1,1,1-Trichloroethane	1	1	800	800	800	800.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	10	10	10	10.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	10	10	10	10.00
		Tetrachloroethene	1	1	1500	1500	1500	1500.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	930	930	930	930.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-31	3	1,1,1-Trichloroethane	1	1	730	730	730	730.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	10	10	10	10.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	10	10	10	10.00
		Tetrachloroethene	1	1	2200	2200	2200	2200.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	2300	2300	2300	2300.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-32	3	1,1,1-Trichloroethane	1	1	1100	1100	1100	1100.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	RME[2]
		1,1-Dichloroethene	1	0	10	10	10	10.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	10	10	10	10.00
		Tetrachloroethene	1	1	2300	2300	2300	2300.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	3000	3000	3000	3000.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-33	3	1,1,1-Trichloroethane	1	1	9.1	9.1	9.1	9.10
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	0.5	0.5	0.5	0.50
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	0.5	0.5	0.5	0.50
		Tetrachloroethene	1	1	36	36	36	36.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	2.2	2.2	2.2	2.20
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-34	3	1,1,1-Trichloroethane	1	1	46	46	46	46.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	2	2	2	2.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	2	2	2	2.00
		Tetrachloroethene	1	1	240	240	240	240.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	47	47	47	47.00
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-FV-35	3	1,1,1-Trichloroethane	1	1	23	23	23	23.00
		1,1-Dichloroethane	0	NA	NA	NA	NA	NA
		1,1-Dichloroethene	1	0	1	1	1	1.00
		1,2-Dichloroethane	0	NA	NA	NA	NA	NA
		Chloroethane	0	NA	NA	NA	NA	NA
		cis-1,2-Dichloroethene	1	0	1	1	1	1.00
		Tetrachloroethene	1	1	56	56	56	56.00
		trans-1,2-Dichloroethene	0	NA	NA	NA	NA	NA
		Trichloroethene	1	1	2.8	2.8	2.8	2.80
		Vinyl Chloride	0	NA	NA	NA	NA	NA
CM-SG-01-10	10	1,1,1-Trichloroethane	18	18	9.1	240	123.12	240.00
		1,1-Dichloroethane	18	2	0.39	20.5	5.79	20.50
		1,1-Dichloroethene	18	6	0.65	38	7.81	38.00
		1,2-Dichloroethane	18	0	0.65	20.5	6.02	20.50
		Chloroethane	18	0	0.65	20.5	5.99	20.50
		cis-1,2-Dichloroethene	18	5	0.51	24	6.94	24.00
		Tetrachloroethene	18	18	110	2300	1072.78	2300.00
		trans-1,2-Dichloroethene	18	0	0.65	20.5	6.02	20.50
		Trichloroethene	18	18	37	3300	1240.94	3300.00
		Vinyl Chloride	18	0	0.65	20.5	5.79	20.50
CM-SG-01-15	15	1,1,1-Trichloroethane	13	13	0.7	250	155.15	250.00
		1,1-Dichloroethane	13	3	0.6	20.5	6.93	20.50
		1,1-Dichloroethene	13	4	0.86	20.5	8.68	20.50

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		1,2-Dichloroethane	13	0	1.5	20.5	7.62	20.50
		Chloroethane	13	0	1.5	20.5	7.53	20.50
		cis-1,2-Dichloroethene	13	6	1	20.5	7.53	20.50
		Tetrachloroethene	13	13	710	1800	1337.69	1800.00
		trans-1,2-Dichloroethene	13	0	1.5	20.5	7.61	20.50
		Trichloroethene	13	13	240	2700	1817.69	2700.00
		Vinyl Chloride	13	0	1.5	20.5	7.27	20.50
CM-SG-01-20	20	1,1,1-Trichloroethane	12	12	0.7	280	172.17	280.00
		1,1-Dichloroethane	12	9	2.7	39	15.73	39.00
		1,1-Dichloroethene	12	6	0.95	25	8.14	25.00
		1,2-Dichloroethane	12	0	2.95	30.5	10.33	30.50
		Chloroethane	12	0	2.95	30.5	10.30	30.50
		cis-1,2-Dichloroethene	12	8	7	25	13.11	25.00
		Tetrachloroethene	12	12	920	3500	1985.00	3500.00
		trans-1,2-Dichloroethene	12	0	2.95	30.5	10.29	30.50
		Trichloroethene	12	12	320	5200	2538.33	5200.00
		Vinyl Chloride	12	0	2.95	30.5	9.96	30.50
CM-SG-02-10	10	1,1,1-Trichloroethane	10	9	0.7	93	30.50	93.00
		1,1-Dichloroethane	10	0	0.405	0.7	0.63	0.70
		1,1-Dichloroethene	10	6	0.079	3.3	0.95	3.30
		1,2-Dichloroethane	10	0	0.405	0.7	0.63	0.70
		Chloroethane	10	2	0.16	0.7	0.56	0.70
		cis-1,2-Dichloroethene	10	1	0.3	0.7	0.59	0.70
		Tetrachloroethene	10	9	0.7	150	58.27	150.00
		trans-1,2-Dichloroethene	10	0	0.395	0.7	0.62	0.70
		Trichloroethene	10	8	0.65	14	4.31	14.00
		Vinyl Chloride	10	1	0.16	0.7	0.57	0.70
CM-SG-02-15	15	1,1,1-Trichloroethane	8	8	15	280	155.63	280.00
		1,1-Dichloroethane	8	0	0.6	3.1	1.14	3.10
		1,1-Dichloroethene	8	4	0.65	17	4.53	17.00
		1,2-Dichloroethane	8	0	0.6	3.1	1.14	3.10
		Chloroethane	8	0	0.6	3.1	1.23	3.10
		cis-1,2-Dichloroethene	8	3	0.1	3.1	0.95	3.10
		Tetrachloroethene	8	8	79	830	448.63	830.00
		trans-1,2-Dichloroethene	8	0	0.6	3.1	1.14	3.10
		Trichloroethene	8	8	30	1100	572.00	1100.00
		Vinyl Chloride	8	0	0.6	3.1	1.05	3.10
CM-SG-02-20	20	1,1,1-Trichloroethane	8	8	26	270	164.88	270.00
		1,1-Dichloroethane	8	2	0.53	6	1.84	6.00
		1,1-Dichloroethene	8	5	0.7	10	6.12	10.00
		1,2-Dichloroethane	8	1	0.6	6	2.30	6.00
		Chloroethane	8	0	0.6	6	2.08	6.00
		cis-1,2-Dichloroethene	8	3	0.46	6	1.74	6.00
		Tetrachloroethene	8	8	150	790	488.75	790.00
		trans-1,2-Dichloroethene	8	0	0.6	6	1.94	6.00
		Trichloroethene	8	8	75	1400	808.63	1400.00
		Vinyl Chloride	8	0	0.6	6	1.77	6.00
CM-SG-03-10	10	1,1,1-Trichloroethane	13	13	1.6	69	46.23	69.00
		1,1-Dichloroethane	13	0	0.6	13.5	3.02	13.50
		1,1-Dichloroethene	13	3	0.65	13.5	3.35	13.50
		1,2-Dichloroethane	13	0	0.6	13.5	3.02	13.50

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		Chloroethane	13	0	0.6	13.5	3.03	13.50
		cis-1,2-Dichloroethene	13	3	0.12	13.5	2.86	13.50
		Tetrachloroethene	13	13	160	800	470.77	800.00
		trans-1,2-Dichloroethene	13	0	0.6	13.5	3.02	13.50
		Trichloroethene	13	13	250	1100	645.38	1100.00
		Vinyl Chloride	13	0	0.6	13.5	2.93	13.50
CM-SG-03-15	15	1,1,1-Trichloroethane	8	8	37	72	56.63	72.00
		1,1-Dichloroethane	8	1	0.27	8	3.93	8.00
		1,1-Dichloroethene	8	3	0.41	8	4.34	8.00
		1,2-Dichloroethane	8	0	0.6	8	3.98	8.00
		Chloroethane	8	0	0.6	8	4.03	8.00
		cis-1,2-Dichloroethene	8	3	0.72	8	3.92	8.00
		Tetrachloroethene	8	8	410	760	581.25	760.00
		trans-1,2-Dichloroethene	8	0	0.6	8	3.96	8.00
		Trichloroethene	8	8	720	1500	1113.75	1500.00
		Vinyl Chloride	8	0	0.6	8	3.72	8.00
CM-SG-03-20	20	1,1,1-Trichloroethane	10	10	30	75	59.30	75.00
		1,1-Dichloroethane	10	2	0.46	12.5	5.05	12.50
		1,1-Dichloroethene	10	2	0.65	12.5	5.69	12.50
		1,2-Dichloroethane	10	0	0.65	12.5	5.15	12.50
		Chloroethane	10	0	0.65	12.5	5.26	12.50
		cis-1,2-Dichloroethene	10	5	0.65	12.5	4.16	12.50
		Tetrachloroethene	10	10	620	940	761.00	940.00
		trans-1,2-Dichloroethene	10	0	0.65	12.5	5.15	12.50
		Trichloroethene	10	10	840	2000	1504.00	2000.00
		Vinyl Chloride	10	0	0.65	12.5	4.88	12.50
CM-SG-04-10	10	1,1,1-Trichloroethane	17	17	1.6	1700	837.65	1700.00
		1,1-Dichloroethane	17	1	0.7	22	8.36	22.00
		1,1-Dichloroethene	17	12	0.7	120	35.63	120.00
		1,2-Dichloroethane	17	0	0.7	22	8.71	22.00
		Chloroethane	17	0	0.7	22	8.74	22.00
		cis-1,2-Dichloroethene	17	4	0.7	40	9.99	40.00
		Tetrachloroethene	17	17	700	4100	2334.71	4100.00
		trans-1,2-Dichloroethene	17	0	0.7	22	8.68	22.00
		Trichloroethene	17	17	140	5500	2169.41	5500.00
		Vinyl Chloride	17	0	0.7	22	8.25	22.00
CM-SG-04-15	15	1,1,1-Trichloroethane	14	14	1.6	2800	1359.29	2800.00
		1,1-Dichloroethane	14	1	2	125	23.64	125.00
		1,1-Dichloroethene	14	11	7.5	350	88.39	350.00
		1,2-Dichloroethane	14	0	3.15	125	23.73	125.00
		Chloroethane	14	1	0.6	125	23.22	125.00
		cis-1,2-Dichloroethene	14	3	5.7	125	23.49	125.00
		Tetrachloroethene	14	14	1600	8900	4457.14	8900.00
		trans-1,2-Dichloroethene	14	1	0.33	125	23.45	125.00
		Trichloroethene	14	14	980	12000	6227.14	12000.00
		Vinyl Chloride	14	0	3.15	125	22.58	125.00
CM-SG-04-20	20	1,1,1-Trichloroethane	13	13	1.6	3400	1717.69	3400.00
		1,1-Dichloroethane	13	10	8.5	200	87.50	200.00
		1,1-Dichloroethene	13	11	3.7	760	131.58	760.00
		1,2-Dichloroethane	13	0	6.5	200	35.62	200.00
		Chloroethane	13	1	2.7	200	34.13	200.00

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		cis-1,2-Dichloroethene	13	7	1.6	270	77.77	270.00
		Tetrachloroethene	13	13	1700	22000	7992.31	22000.00
		trans-1,2-Dichloroethene	13	0	6.5	200	35.50	200.00
		Trichloroethene	13	13	660	33000	8593.08	33000.00
		Vinyl Chloride	13	2	3.5	200	32.33	200.00
CM-SG-05-10	10	1,1,1-Trichloroethane	15	15	1.6	81	31.61	81.00
		1,1-Dichloroethane	15	1	0.17	3.15	0.99	3.15
		1,1-Dichloroethene	15	7	0.094	3.8	1.04	3.80
		1,2-Dichloroethane	15	1	0.073	3.15	0.99	3.15
		Chloroethane	15	1	0.051	3.15	0.96	3.15
		cis-1,2-Dichloroethene	15	3	0.21	3.15	0.87	3.15
		Tetrachloroethene	15	15	53	290	130.67	290.00
		trans-1,2-Dichloroethene	15	0	0.0155	3.15	0.98	3.15
		Trichloroethene	15	15	13	260	109.13	260.00
		Vinyl Chloride	15	1	0.028	3.15	0.94	3.15
CM-SG-05-15	15	1,1,1-Trichloroethane	11	11	7.6	280	128.78	280.00
		1,1-Dichloroethane	11	1	0.6	12.5	4.40	12.50
		1,1-Dichloroethene	11	4	0.6	11	4.93	11.00
		1,2-Dichloroethane	11	0	0.6	12.5	4.58	12.50
		Chloroethane	11	0	0.6	12.5	4.58	12.50
		cis-1,2-Dichloroethene	11	2	0.21	12.5	4.28	12.50
		Tetrachloroethene	11	11	44	1100	643.09	1100.00
		trans-1,2-Dichloroethene	11	1	0.16	12.5	4.53	12.50
		Trichloroethene	11	11	85	2200	1184.09	2200.00
		Vinyl Chloride	11	0	0.6	12.5	4.35	12.50
CM-SG-05-20	20	1,1,1-Trichloroethane	11	11	220	1900	729.09	1900.00
		1,1-Dichloroethane	11	10	26	650	95.27	650.00
		1,1-Dichloroethene	11	8	2.45	210	81.62	210.00
		1,2-Dichloroethane	11	1	2.45	650	86.19	650.00
		Chloroethane	11	0	2.45	650	88.68	650.00
		cis-1,2-Dichloroethene	11	8	2.45	310	104.17	310.00
		Tetrachloroethene	11	11	370	17000	6465.45	17000.00
		trans-1,2-Dichloroethene	11	1	2.45	650	86.14	650.00
		Trichloroethene	11	11	280	49000	15660.91	49000.00
		Vinyl Chloride	11	1	2.45	650	83.50	650.00
CM-SG-06-10	10	1,1,1-Trichloroethane	17	17	1.6	950	326.92	950.00
		1,1-Dichloroethane	17	1	0.65	90	11.32	90.00
		1,1-Dichloroethene	17	5	0.65	90	17.02	90.00
		1,2-Dichloroethane	17	0	0.65	90	11.89	90.00
		Chloroethane	17	0	0.65	90	11.66	90.00
		cis-1,2-Dichloroethene	17	4	0.65	90	12.27	90.00
		Tetrachloroethene	17	17	130	4600	1924.71	4600.00
		trans-1,2-Dichloroethene	17	0	0.65	90	11.86	90.00
		Trichloroethene	17	17	29	6500	2453.35	6500.00
		Vinyl Chloride	17	0	0.65	90	11.34	90.00
CM-SG-06-15	15	1,1,1-Trichloroethane	14	14	1.6	1300	414.86	1300.00
		1,1-Dichloroethane	14	9	3	42.5	11.41	42.50
		1,1-Dichloroethene	14	9	0.7	80	20.74	80.00
		1,2-Dichloroethane	14	0	0.7	100	17.02	100.00
		Chloroethane	14	0	0.7	100	16.55	100.00
		cis-1,2-Dichloroethene	14	10	0.7	140	35.94	140.00

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		Tetrachloroethene	14	14	350	4900	1987.86	4900.00
		trans-1,2-Dichloroethene	14	0	0.7	100	16.98	100.00
		Trichloroethene	14	14	300	14000	4315.00	14000.00
		Vinyl Chloride	14	0	0.7	100	16.16	100.00
CM-SG-06-20	20	1,1,1-Trichloroethane	14	14	1.6	800	297.14	800.00
		1,1-Dichloroethane	14	11	4.4	42.5	16.19	42.50
		1,1-Dichloroethene	14	10	1.3	68	18.64	68.00
		1,2-Dichloroethane	14	0	1.3	42.5	10.54	42.50
		Chloroethane	14	0	1.3	42.5	10.04	42.50
		cis-1,2-Dichloroethene	14	11	1.3	200	53.68	200.00
		Tetrachloroethene	14	14	370	3500	1527.14	3500.00
		trans-1,2-Dichloroethene	14	1	0.48	42.5	10.29	42.50
		Trichloroethene	14	14	510	10000	3884.29	10000.00
		Vinyl Chloride	14	0	1.3	42.5	9.68	42.50
CM-SG-07-10	10	1,1,1-Trichloroethane	17	17	1.6	780	351.53	780.00
		1,1-Dichloroethane	17	10	0.7	16	7.69	16.00
		1,1-Dichloroethene	17	10	0.7	79	23.36	79.00
		1,2-Dichloroethane	17	0	0.7	15	7.90	15.00
		Chloroethane	17	0	0.7	15	7.64	15.00
		cis-1,2-Dichloroethene	17	11	0.7	79	29.37	79.00
		Tetrachloroethene	17	17	210	5300	1851.76	5300.00
		trans-1,2-Dichloroethene	17	0	0.7	15	7.84	15.00
		Trichloroethene	17	17	120	15000	3855.29	15000.00
		Vinyl Chloride	17	0	0.7	15	7.26	15.00
CM-SG-07-15	15	1,1,1-Trichloroethane	14	14	1.6	690	368.00	690.00
		1,1-Dichloroethane	14	12	0.75	31	14.40	31.00
		1,1-Dichloroethene	14	12	0.7	110	39.79	110.00
		1,2-Dichloroethane	14	0	0.65	15	8.26	15.00
		Chloroethane	14	0	0.65	15	8.01	15.00
		cis-1,2-Dichloroethene	14	12	0.65	160	59.87	160.00
		Tetrachloroethene	14	14	160	3800	1912.14	3800.00
		trans-1,2-Dichloroethene	14	1	0.65	15	7.91	15.00
		Trichloroethene	14	14	130	7900	3957.14	7900.00
		Vinyl Chloride	14	0	0.65	15	7.54	15.00
CM-SG-07-20	20	1,1,1-Trichloroethane	14	14	1.6	680	388.93	680.00
		1,1-Dichloroethane	14	11	3	60	24.74	60.00
		1,1-Dichloroethene	14	12	0.75	100	44.58	100.00
		1,2-Dichloroethane	14	0	0.75	85	17.29	85.00
		Chloroethane	14	0	0.75	85	16.89	85.00
		cis-1,2-Dichloroethene	14	11	0.75	170	72.11	170.00
		Tetrachloroethene	14	14	210	3700	2142.86	3700.00
		trans-1,2-Dichloroethene	14	2	0.54	85	16.70	85.00
		Trichloroethene	14	14	220	8100	4060.71	8100.00
		Vinyl Chloride	14	1	0.75	85	16.28	85.00
CM-SG-08-10	10	1,1,1-Trichloroethane	14	14	1.6	120	36.16	120.00
		1,1-Dichloroethane	14	1	0.33	6.5	1.30	6.50
		1,1-Dichloroethene	14	6	0.095	2.75	1.02	2.75
		1,2-Dichloroethane	14	1	0.11	6.5	1.28	6.50
		Chloroethane	14	2	0.042	6.5	1.23	6.50
		cis-1,2-Dichloroethene	14	4	0.1	2.75	1.02	2.75
		Tetrachloroethene	14	14	83	610	214.43	610.00

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		trans-1,2-Dichloroethene	14	1	0.085	6.5	1.27	6.50
		Trichloroethene	14	14	3.6	200	58.46	200.00
		Vinyl Chloride	14	1	0.067	6.5	1.20	6.50
CM-SG-08-15	15	1,1,1-Trichloroethane	8	8	57	910	544.50	910.00
		1,1-Dichloroethane	8	4	2.7	250	55.31	250.00
		1,1-Dichloroethene	8	6	2.7	190	63.55	190.00
		1,2-Dichloroethane	8	0	2.7	250	57.86	250.00
		Chloroethane	8	0	2.7	250	58.24	250.00
		cis-1,2-Dichloroethene	8	6	2.7	190	74.93	190.00
		Tetrachloroethene	8	8	500	7500	4525.00	7500.00
		trans-1,2-Dichloroethene	8	0	2.7	250	57.68	250.00
		Trichloroethene	8	8	380	22000	12697.50	22000.00
		Vinyl Chloride	8	0	2.7	250	54.68	250.00
CM-SG-08-20	20	1,1,1-Trichloroethane	9	9	66	1100	590.56	1100.00
		1,1-Dichloroethane	9	4	3.45	245	60.55	245.00
		1,1-Dichloroethene	9	6	2.8	290	71.75	290.00
		1,2-Dichloroethane	9	0	2.8	245	60.92	245.00
		Chloroethane	9	0	2.8	245	61.81	245.00
		cis-1,2-Dichloroethene	9	6	2.8	250	102.75	250.00
		Tetrachloroethene	9	9	560	12000	5136.67	12000.00
		trans-1,2-Dichloroethene	9	0	2.8	245	60.31	245.00
		Trichloroethene	9	9	470	38000	14875.56	38000.00
		Vinyl Chloride	9	0	2.8	245	56.81	245.00
CM-SG-09-10	10	1,1,1-Trichloroethane	11	11	11	34	20.73	34.00
		1,1-Dichloroethane	11	6	0.65	6.5	1.76	6.50
		1,1-Dichloroethene	11	5	0.089	6.6	1.14	6.60
		1,2-Dichloroethane	11	1	0.29	1.2	0.68	1.20
		Chloroethane	11	3	0.55	2	0.90	2.00
		cis-1,2-Dichloroethene	11	3	0.395	1.2	0.72	1.20
		Tetrachloroethene	11	11	42	230	108.55	230.00
		trans-1,2-Dichloroethene	11	0	0.17	1.2	0.67	1.20
		Trichloroethene	11	9	0.65	13	5.28	13.00
		Vinyl Chloride	11	3	0.255	0.87	0.66	0.87
CM-SG-09-15	15	1,1,1-Trichloroethane	8	8	49	270	118.75	270.00
		1,1-Dichloroethane	8	5	0.16	3	0.93	3.00
		1,1-Dichloroethene	8	4	0.395	5.2	2.08	5.20
		1,2-Dichloroethane	8	1	0.405	3	0.97	3.00
		Chloroethane	8	4	0.3	3	1.06	3.00
		cis-1,2-Dichloroethene	8	2	0.049	3	0.86	3.00
		Tetrachloroethene	8	8	97	370	287.13	370.00
		trans-1,2-Dichloroethene	8	0	0.18	3	0.94	3.00
		Trichloroethene	8	7	1.2	20	8.91	20.00
		Vinyl Chloride	8	1	0.255	3	0.97	3.00
CM-SG-09-20	20	1,1,1-Trichloroethane	8	8	74	310	163.00	310.00
		1,1-Dichloroethane	8	5	0.61	6.4	3.03	6.40
		1,1-Dichloroethene	8	5	0.45	11	3.63	11.00
		1,2-Dichloroethane	8	0	0.6	3.7	1.74	3.70
		Chloroethane	8	3	0.15	3.7	1.82	3.70
		cis-1,2-Dichloroethene	8	0	0.6	3.7	1.73	3.70
		Tetrachloroethene	8	8	480	1100	598.75	1100.00
		trans-1,2-Dichloroethene	8	0	0.6	3.7	1.73	3.70

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		Trichloroethene	8	8	23	140	95.50	140.00
		Vinyl Chloride	8	2	0.18	3.7	1.54	3.70
CM-SG-09-30	30	1,1,1-Trichloroethane	8	8	1.6	250	80.21	250.00
		1,1-Dichloroethane	8	4	0.6	20	4.00	20.00
		1,1-Dichloroethene	8	5	0.6	72	17.12	72.00
		1,2-Dichloroethane	8	0	0.6	20	3.73	20.00
		Chloroethane	8	0	0.6	20	3.73	20.00
		cis-1,2-Dichloroethene	8	5	0.6	26	6.77	26.00
		Tetrachloroethene	8	8	21	1200	422.13	1200.00
		trans-1,2-Dichloroethene	8	1	0.3	20	3.69	20.00
		Trichloroethene	8	8	16	2900	1000.25	2900.00
		Vinyl Chloride	8	1	0.14	20	3.67	20.00
CM-SG-10-10	10	1,1,1-Trichloroethane	11	11	16	77	30.45	77.00
		1,1-Dichloroethane	11	3	0.16	3.6	0.81	3.60
		1,1-Dichloroethene	11	4	0.12	3.6	0.85	3.60
		1,2-Dichloroethane	11	0	0.405	3.6	0.93	3.60
		Chloroethane	11	2	0.15	3.6	0.88	3.60
		cis-1,2-Dichloroethene	11	4	0.13	8.7	1.30	8.70
		Tetrachloroethene	11	11	100	640	275.45	640.00
		trans-1,2-Dichloroethene	11	0	0.395	3.6	0.93	3.60
		Trichloroethene	11	11	11	660	81.73	660.00
		Vinyl Chloride	11	0	0.255	3.6	0.92	3.60
CM-SG-10-15	15	1,1,1-Trichloroethane	8	8	32	60	46.38	60.00
		1,1-Dichloroethane	8	6	0.84	3.4	1.89	3.40
		1,1-Dichloroethene	8	4	0.8	4.5	2.02	4.50
		1,2-Dichloroethane	8	0	0.6	3.4	1.62	3.40
		Chloroethane	8	1	0.46	3.4	1.68	3.40
		cis-1,2-Dichloroethene	8	6	1.5	8.6	5.03	8.60
		Tetrachloroethene	8	8	390	970	571.25	970.00
		trans-1,2-Dichloroethene	8	3	0.048	3.4	1.43	3.40
		Trichloroethene	8	8	120	320	195.00	320.00
		Vinyl Chloride	8	0	0.6	3.4	1.53	3.40
CM-SG-10-20	20	1,1,1-Trichloroethane	8	8	36	75	57.88	75.00
		1,1-Dichloroethane	8	7	1.3	5.5	3.34	5.50
		1,1-Dichloroethene	8	6	0.99	8.2	3.13	8.20
		1,2-Dichloroethane	8	0	0.6	6	1.64	6.00
		Chloroethane	8	1	0.46	6	1.71	6.00
		cis-1,2-Dichloroethene	8	8	5.8	29	15.34	29.00
		Tetrachloroethene	8	8	210	1100	698.75	1100.00
		trans-1,2-Dichloroethene	8	3	0.14	6	1.52	6.00
		Trichloroethene	8	8	190	580	336.25	580.00
		Vinyl Chloride	8	2	0.16	6	1.44	6.00
CM-SG-10-30	30	1,1,1-Trichloroethane	3	3	76	120	94.33	120.00
		1,1-Dichloroethane	3	2	5.6	8.5	7.37	8.50
		1,1-Dichloroethene	3	3	6	18	13.00	18.00
		1,2-Dichloroethane	3	0	0.65	8.5	3.72	8.50
		Chloroethane	3	1	0.65	8.5	4.22	8.50
		cis-1,2-Dichloroethene	3	3	29	59	40.67	59.00
		Tetrachloroethene	3	3	820	1300	1140.00	1300.00
		trans-1,2-Dichloroethene	3	1	0.86	8.5	3.77	8.50
		Trichloroethene	3	3	560	1400	850.00	1400.00

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		Vinyl Chloride	3	1	0.65	8.5	4.35	8.50
CM-SG-11-10	10	1,1,1-Trichloroethane	10	10	2.9	8.6	5.17	8.60
		1,1-Dichloroethane	10	1	0.0155	0.7	0.51	0.70
		1,1-Dichloroethene	10	2	0.041	0.74	0.58	0.74
		1,2-Dichloroethane	10	2	0.0056	0.7	0.51	0.70
		Chloroethane	10	1	0.0095	0.7	0.53	0.70
		cis-1,2-Dichloroethene	10	1	0.0155	0.7	0.50	0.70
		Tetrachloroethene	10	10	24	95	51.60	95.00
		trans-1,2-Dichloroethene	10	0	0.015	0.7	0.50	0.70
		Trichloroethene	10	7	0.6	3.1	1.19	3.10
		Vinyl Chloride	10	1	0.0155	0.7	0.49	0.70
CM-SG-11-15	15	1,1,1-Trichloroethane	8	8	6.4	25	11.15	25.00
		1,1-Dichloroethane	8	2	0.14	0.75	0.54	0.75
		1,1-Dichloroethene	8	3	0.12	1.4	0.61	1.40
		1,2-Dichloroethane	8	1	0.032	0.75	0.55	0.75
		Chloroethane	8	1	0.076	0.75	0.58	0.75
		cis-1,2-Dichloroethene	8	2	0.11	0.75	0.50	0.75
		Tetrachloroethene	8	8	73	290	121.25	290.00
		trans-1,2-Dichloroethene	8	0	0.015	0.75	0.55	0.75
		Trichloroethene	8	8	11	41	20.75	41.00
		Vinyl Chloride	8	1	0.019	0.75	0.53	0.75
CM-SG-11-20	20	1,1,1-Trichloroethane	9	9	12	24	15.44	24.00
		1,1-Dichloroethane	9	6	0.25	0.82	0.55	0.82
		1,1-Dichloroethene	9	5	0.087	1.1	0.47	1.10
		1,2-Dichloroethane	9	0	0.405	1.2	0.68	1.20
		Chloroethane	9	1	0.21	1.2	0.65	1.20
		cis-1,2-Dichloroethene	9	6	0.6	1.7	1.05	1.70
		Tetrachloroethene	9	9	120	220	176.67	220.00
		trans-1,2-Dichloroethene	9	1	0.089	1.2	0.61	1.20
		Trichloroethene	9	9	46	150	77.89	150.00
		Vinyl Chloride	9	0	0.255	1.2	0.66	1.20
CM-SG-12-10	10	1,1,1-Trichloroethane	11	11	3	15	7.86	15.00
		1,1-Dichloroethane	11	2	0.018	0.7	0.47	0.70
		1,1-Dichloroethene	11	5	0.016	3.1	0.66	3.10
		1,2-Dichloroethane	11	3	0.015	0.7	0.47	0.70
		Chloroethane	11	5	0.078	0.7	0.48	0.70
		cis-1,2-Dichloroethene	11	2	0.014	0.7	0.47	0.70
		Tetrachloroethene	11	11	4	23	16.73	23.00
		trans-1,2-Dichloroethene	11	0	0.028	0.7	0.47	0.70
		Trichloroethene	11	7	0.51	2.8	0.96	2.80
		Vinyl Chloride	11	4	0.049	0.7	0.49	0.70
CM-SG-12-15	15	1,1,1-Trichloroethane	8	8	4.4	25	12.89	25.00
		1,1-Dichloroethane	8	1	0.071	0.7	0.54	0.70
		1,1-Dichloroethene	8	4	0.088	0.92	0.46	0.92
		1,2-Dichloroethane	8	1	0.06	0.7	0.54	0.70
		Chloroethane	8	1	0.15	0.7	0.57	0.70
		cis-1,2-Dichloroethene	8	1	0.083	0.7	0.54	0.70
		Tetrachloroethene	8	8	15	76	34.50	76.00
		trans-1,2-Dichloroethene	8	0	0.015	0.7	0.53	0.70
		Trichloroethene	8	8	7.1	52	22.64	52.00
		Vinyl Chloride	8	1	0.088	0.7	0.52	0.70
CM-SG-12-20	20	1,1,1-Trichloroethane	7	7	7.7	55	26.96	55.00

Sample Location	Sample Depth (ft bgs)	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	RME [2]
		1,1-Dichloroethane	7	2	0.39	1.25	0.75	1.25
		1,1-Dichloroethene	7	3	0.097	2	0.99	2.00
		1,2-Dichloroethane	7	0	0.6	1.25	0.81	1.25
		Chloroethane	7	0	0.6	1.7	0.87	1.70
		cis-1,2-Dichloroethene	7	3	0.6	1.3	0.98	1.30
		Tetrachloroethene	7	7	20	210	122.86	210.00
		trans-1,2-Dichloroethene	7	0	0.6	1.25	0.80	1.25
		Trichloroethene	7	7	0.39	670	300.06	670.00
		Vinyl Chloride	7	0	0.6	1.25	0.74	1.25

Acronyms

N - Number of samples

NA - Not applicable or not sampled

RME - Reasonable maximum exposure

Units

µg/m^3 - micrograms per cubic meter

Notes

[1] Concentrations below the detection limit were assigned a value of one-half the detection limit of the method used.

[2] The maximum concentration is used for the RME value.

Table 13. Reasonable Maximum Exposure Estimates for VOCs in Indoor Air (μg/m^3)

Cadet Manufacturing Company
Port of Vancouver, Washington

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
2500-FO-IA-01	1,1,1-Trichloroethane	6	6	0.5	1.2	0.685	-	-	1.200	Maximum (N<10)
	1,1-Dichloroethane	6	0	0.018	0.04	0.024	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	6	6	0.009	0.049	0.031	-	-	0.049	Maximum (N<10)
	1,2-Dichloroethane	6	6	0.033	0.051	0.042	-	-	0.051	Maximum (N<10)
	Chloroethane	6	4	0.018	0.06	0.037	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	6	6	0.019	0.14	0.060	-	-	0.140	Maximum (N<10)
	Tetrachloroethene	6	6	0.5	7.5	2.633	-	-	7.500	Maximum (N<10)
	trans-1,2-Dichloroethene	6	1	0.018	0.028	0.022	-	-	0.028	Maximum (N<10)
	Trichloroethene	6	6	2.5	25	8.400	-	-	25.000	Maximum (N<10)
	Vinyl chloride	6	2	0.0073	0.023	0.014	-	-	0.023	Maximum (N<10)
2500-FO-IA-02	1,1,1-Trichloroethane	6	6	0.18	0.41	0.293	-	-	0.410	Maximum (N<10)
	1,1-Dichloroethane	6	1	0.013	0.04	0.022	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	6	6	0.008	0.029	0.017	-	-	0.029	Maximum (N<10)
	1,2-Dichloroethane	6	6	0.033	0.083	0.046	-	-	0.083	Maximum (N<10)
	Chloroethane	6	6	0.021	0.032	0.026	-	-	0.032	Maximum (N<10)
	cis-1,2-Dichloroethene	6	6	0.028	0.11	0.060	-	-	0.110	Maximum (N<10)
	Tetrachloroethene	6	6	0.67	15	4.312	-	-	15.000	Maximum (N<10)
	trans-1,2-Dichloroethene	6	2	0.0092	0.028	0.018	-	-	0.028	Maximum (N<10)
	Trichloroethene	6	6	1.4	11	4.167	-	-	11.000	Maximum (N<10)
	Vinyl chloride	6	2	0.006	0.0215	0.014	-	-	0.022	Maximum (N<10)
2500-FO-IA-03	1,1,1-Trichloroethane	6	6	0.32	0.97	0.510	-	-	0.970	Maximum (N<10)
	1,1-Dichloroethane	6	2	0.019	0.032	0.022	-	-	0.032	Maximum (N<10)
	1,1-Dichloroethene	6	6	0.0066	0.15	0.051	-	-	0.150	Maximum (N<10)
	1,2-Dichloroethane	6	6	0.028	0.075	0.050	-	-	0.075	Maximum (N<10)
	Chloroethane	6	5	0.021	0.12	0.047	-	-	0.120	Maximum (N<10)
	cis-1,2-Dichloroethene	6	6	0.026	0.55	0.168	-	-	0.550	Maximum (N<10)
	Tetrachloroethene	6	6	0.47	11	3.612	-	-	11.000	Maximum (N<10)
	trans-1,2-Dichloroethene	6	1	0.017	0.028	0.021	-	-	0.028	Maximum (N<10)
	Trichloroethene	6	6	1.5	44	13.083	-	-	44.000	Maximum (N<10)
	Vinyl chloride	6	2	0.006	0.0215	0.014	-	-	0.022	Maximum (N<10)
2500-FO-IA-04	1,1,1-Trichloroethane	6	6	0.29	0.8	0.525	-	-	0.800	Maximum (N<10)
	1,1-Dichloroethane	6	2	0.015	0.0495	0.024	-	-	0.050	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	1,1-Dichloroethene	6	6	0.0085	0.068	0.034	-	-	0.068	Maximum (N<10)
	1,2-Dichloroethane	6	6	0.031	0.076	0.048	-	-	0.076	Maximum (N<10)
	Chloroethane	6	5	0.02	0.06	0.034	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	6	6	0.019	0.33	0.122	-	-	0.330	Maximum (N<10)
	Tetrachloroethene	6	6	0.51	9.4	3.568	-	-	9.400	Maximum (N<10)
	trans-1,2-Dichloroethene	6	2	0.015	0.0495	0.027	-	-	0.050	Maximum (N<10)
	Trichloroethene	6	6	1.5	23	9.333	-	-	23.000	Maximum (N<10)
	Vinyl chloride	6	1	0.0066	0.0495	0.021	-	-	0.050	Maximum (N<10)
CM-AS-01	1,1,1-Trichloroethane	1	0	1.8	1.8	1.800	-	-	1.800	Maximum (N<10)
	1,1-Dichloroethane	1	0	1.3	1.3	1.300	-	-	1.300	Maximum (N<10)
	1,1-Dichloroethene	1	0	1.3	1.3	1.300	-	-	1.300	Maximum (N<10)
	1,2-Dichloroethane	1	0	1.3	1.3	1.300	-	-	1.300	Maximum (N<10)
	Chloroethane	1	0	0.85	0.85	0.850	-	-	0.850	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	1.3	1.3	1.300	-	-	1.300	Maximum (N<10)
	Tetrachloroethene	1	1	8.5	8.5	8.500	-	-	8.500	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	5	5	5.000	-	-	5.000	Maximum (N<10)
	Trichloroethene	1	1	27	27	27.000	-	-	27.000	Maximum (N<10)
	Vinyl chloride	1	0	0.85	0.85	0.850	-	-	0.850	Maximum (N<10)
CM-AS-02	1,1,1-Trichloroethane	1	0	1.8	1.8	1.800	-	-	1.800	Maximum (N<10)
	1,1-Dichloroethane	1	0	1.3	1.3	1.300	-	-	1.300	Maximum (N<10)
	1,1-Dichloroethene	1	0	1.3	1.3	1.300	-	-	1.300	Maximum (N<10)
	1,2-Dichloroethane	1	0	1.3	1.3	1.300	-	-	1.300	Maximum (N<10)
	Chloroethane	1	0	0.85	0.85	0.850	-	-	0.850	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	1.3	1.3	1.300	-	-	1.300	Maximum (N<10)
	Tetrachloroethene	1	1	8.7	8.7	8.700	-	-	8.700	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	5	5	5.000	-	-	5.000	Maximum (N<10)
	Trichloroethene	1	1	62	62	62.000	-	-	62.000	Maximum (N<10)
	Vinyl chloride	1	0	0.85	0.85	0.850	-	-	0.850	Maximum (N<10)
CM-PAINTDEPT	1,1,1-Trichloroethane	1	1	1.8	1.8	1.800	-	-	1.800	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	1,2-Dichloroethane	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	Chloroethane	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	1	1	5.8	5.8	5.800	-	-	5.800	Maximum (N<10)
	Tetrachloroethene	1	1	35	35	35.000	-	-	35.000	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)

Site Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	Trichloroethene	1	1	110	110	110.000	-	-	110.000	Maximum (N<10)
	Vinyl chloride	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
CM-PAINTDEPT-	1,1,1-Trichloroethane	1	1	1.9	1.9	1.900	-	-	1.900	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	1,2-Dichloroethane	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	Chloroethane	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	cis-1,2-Dichloroethene	1	1	6	6	6.000	-	-	6.000	Maximum (N<10)
	Tetrachloroethene	1	1	35	35	35.000	-	-	35.000	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	Trichloroethene	1	1	110	110	110.000	-	-	110.000	Maximum (N<10)
	Vinyl chloride	1	0	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
Cadet Building	1,1,1-Trichloroethane	28	26	0.18	1.9	0.692	Lognormal	0.882	0.882	95% UCL
	1,1-Dichloroethane	28	5	0.013	1.3	0.148	-	-	1.300	Maximum (>50% NDs)
	1,1-Dichloroethene	28	24	0.0066	1.3	0.157	Non-parametric	0.265	0.265	95% UCL
	1,2-Dichloroethane	28	24	0.028	1.3	0.169	Non-parametric	0.275	0.275	95% UCL
	Chloroethane	28	20	0.018	0.85	0.127	Non-parametric	0.201	0.201	95% UCL
	cis-1,2-Dichloroethene	28	26	0.019	6	0.602	Non-parametric	1.079	1.079	95% UCL
	Tetrachloroethene	28	28	0.47	35	6.141	Lognormal	11.702	11.702	95% UCL
	trans-1,2-Dichloroethene	28	6	0.0092	5	0.411	-	-	5.000	Maximum (>50% NDs)
	Trichloroethene	28	28	1.4	110	18.532	Lognormal	36.680	36.680	95% UCL
	Vinyl Chloride	28	7	0.006	0.85	0.110	-	-	0.850	Maximum (>50% NDs)
1903-27	1,1,1-Trichloroethane	1	1	0.23	0.23	0.230	-	-	0.230	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.0049	0.0049	0.005	-	-	0.005	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.11	0.11	0.110	-	-	0.110	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.046	0.046	0.046	-	-	0.046	Maximum (N<10)
	Chloroethane	1	1	0.038	0.038	0.038	-	-	0.038	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.017	0.017	0.017	-	-	0.017	Maximum (N<10)
	Tetrachloroethene	1	1	0.27	0.27	0.270	-	-	0.270	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.017	0.017	0.017	-	-	0.017	Maximum (N<10)
	Trichloroethene	1	1	0.15	0.15	0.150	-	-	0.150	Maximum (N<10)
	Vinyl Chloride	1	0	0.017	0.017	0.017	-	-	0.017	Maximum (N<10)
1903-28	1,1,1-Trichloroethane	1	1	0.39	0.39	0.390	-	-	0.390	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.008	0.008	0.008	-	-	0.008	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.43	0.43	0.430	-	-	0.430	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.062	0.062	0.062	-	-	0.062	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Chloroethane	1	1	0.035	0.035	0.035	-	-	0.035	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	1	1	0.72	0.72	0.720	-	-	0.720	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	Trichloroethene	1	1	0.21	0.21	0.210	-	-	0.210	Maximum (N<10)
	Vinyl Chloride	1	1	0.037	0.037	0.037	-	-	0.037	Maximum (N<10)
1927-27	1,1,1-Trichloroethane	3	3	0.21	3.7	1.400	-	-	3.700	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.0195	0.024	0.022	-	-	0.024	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.04	0.41	0.172	-	-	0.410	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.046	1.4	0.499	-	-	1.400	Maximum (N<10)
	Chloroethane	3	3	0.034	0.065	0.054	-	-	0.065	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.0185	0.0225	0.020	-	-	0.023	Maximum (N<10)
	Tetrachloroethene	3	3	0.43	0.57	0.483	-	-	0.570	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.0185	0.0225	0.020	-	-	0.023	Maximum (N<10)
	Trichloroethene	3	3	0.39	2	0.933	-	-	2.000	Maximum (N<10)
	Vinyl Chloride	3	0	0.0185	0.0225	0.020	-	-	0.023	Maximum (N<10)
1927-28	1,1,1-Trichloroethane	1	1	0.49	0.49	0.490	-	-	0.490	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.087	0.087	0.087	-	-	0.087	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.14	0.14	0.140	-	-	0.140	Maximum (N<10)
	Chloroethane	1	1	0.11	0.11	0.110	-	-	0.110	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	Tetrachloroethene	1	1	0.74	0.74	0.740	-	-	0.740	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	Trichloroethene	1	1	0.84	0.84	0.840	-	-	0.840	Maximum (N<10)
	Vinyl Chloride	1	1	0.012	0.012	0.012	-	-	0.012	Maximum (N<10)
2102-27	1,1,1-Trichloroethane	4	4	0.1	0.27	0.170	-	-	0.270	Maximum (N<10)
	1,1-Dichloroethane	4	1	0.0165	0.045	0.026	-	-	0.045	Maximum (N<10)
	1,1-Dichloroethene	4	4	0.047	0.34	0.157	-	-	0.340	Maximum (N<10)
	1,2-Dichloroethane	4	4	1.2	2.3	1.725	-	-	2.300	Maximum (N<10)
	Chloroethane	4	4	0.28	0.47	0.358	-	-	0.470	Maximum (N<10)
	cis-1,2-Dichloroethene	4	0	0.0165	0.0215	0.019	-	-	0.022	Maximum (N<10)
	Tetrachloroethene	4	4	0.32	0.74	0.483	-	-	0.740	Maximum (N<10)
	trans-1,2-Dichloroethene	4	1	0.0165	0.036	0.023	-	-	0.036	Maximum (N<10)
	Trichloroethene	4	4	0.12	1.4	0.585	-	-	1.400	Maximum (N<10)
	Vinyl Chloride	4	2	0.0165	0.066	0.033	-	-	0.066	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
2102-28	1,1,1-Trichloroethane	1	1	0.065	0.065	0.065	-	-	0.065	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.021	0.021	0.021	-	-	0.021	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.76	0.76	0.760	-	-	0.760	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.036	0.036	0.036	-	-	0.036	Maximum (N<10)
	Chloroethane	1	0	0.021	0.021	0.021	-	-	0.021	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.021	0.021	0.021	-	-	0.021	Maximum (N<10)
	Tetrachloroethene	1	1	0.11	0.11	0.110	-	-	0.110	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.021	0.021	0.021	-	-	0.021	Maximum (N<10)
	Trichloroethene	1	0	0.021	0.021	0.021	-	-	0.021	Maximum (N<10)
	Vinyl Chloride	1	0	0.021	0.021	0.021	-	-	0.021	Maximum (N<10)
2103-28	1,1,1-Trichloroethane	16	16	0.16	3.3	1.382	Lognormal	3.467	3.300	95% UCL
	1,1-Dichloroethane	14	5	0.017	0.75	0.127	-	-	0.750	Maximum (>50% NDs)
	1,1-Dichloroethene	16	15	0.026	0.31	0.084	Lognormal	0.126	0.126	95% UCL
	1,2-Dichloroethane	14	12	0.015	1.1	0.151	Lognormal	0.357	0.357	95% UCL
	Chloroethane	14	10	0.009	0.14	0.041	Lognormal	0.059	0.059	95% UCL
	cis-1,2-Dichloroethene	16	8	0.002	0.75	0.115	Lognormal	0.366	0.366	95% UCL
	Tetrachloroethene	16	16	0.25	5.4	1.404	Lognormal	2.702	2.702	95% UCL
	trans-1,2-Dichloroethene	14	4	0.001	0.75	0.157	-	-	0.750	Maximum (>50% NDs)
	Trichloroethene	16	16	0.1	11	2.995	Lognormal	18.304	11.000	Maximum (<95% UCL)
	Vinyl Chloride	16	4	0.004	0.155	0.031	-	-	0.155	Maximum (>50% NDs)
2104-27	1,1,1-Trichloroethane	3	3	0.21	0.25	0.227	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.0048	0.065	0.025	-	-	0.065	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.069	0.069	0.069	-	-	0.069	Maximum (N<10)
	Chloroethane	1	1	0.072	0.072	0.072	-	-	0.072	Maximum (N<10)
	cis-1,2-Dichloroethene	3	1	0.0036	0.6	0.207	-	-	0.600	Maximum (N<10)
	Tetrachloroethene	3	3	0.19	0.49	0.300	-	-	0.490	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	Trichloroethene	3	3	0.23	0.6	0.357	-	-	0.600	Maximum (N<10)
	Vinyl Chloride	3	2	0.012	0.018	0.014	-	-	0.018	Maximum (N<10)
2104-28	1,1,1-Trichloroethane	3	3	0.091	0.17	0.120	-	-	0.170	Maximum (N<10)
	1,1-Dichloroethane	3	2	0.0067	0.082	0.037	-	-	0.082	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.06	0.13	0.086	-	-	0.130	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.037	0.046	0.043	-	-	0.046	Maximum (N<10)
	Chloroethane	3	2	0.019	0.2	0.084	-	-	0.200	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.019	0.0215	0.020	-	-	0.022	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Tetrachloroethene	3	3	0.33	1.9	1.077	-	-	1.900	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.019	0.0215	0.020	-	-	0.022	Maximum (N<10)
	Trichloroethene	3	2	0.0215	0.087	0.050	-	-	0.087	Maximum (N<10)
	Vinyl Chloride	3	0	0.019	0.0215	0.020	-	-	0.022	Maximum (N<10)
2105-27	1,1,1-Trichloroethane	2	2	0.18	0.19	0.185	-	-	0.190	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.017	0.017	0.017	-	-	0.017	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.0085	0.045	0.027	-	-	0.045	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.15	0.15	0.150	-	-	0.150	Maximum (N<10)
	Chloroethane	1	1	0.068	0.068	0.068	-	-	0.068	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.017	0.85	0.434	-	-	0.850	Maximum (N<10)
	Tetrachloroethene	2	2	0.14	0.41	0.275	-	-	0.410	Maximum (N<10)
	trans-1,2-Dichloroethene	1	1	0.011	0.011	0.011	-	-	0.011	Maximum (N<10)
	Trichloroethene	2	2	0.17	0.31	0.240	-	-	0.310	Maximum (N<10)
	Vinyl Chloride	2	2	0.0042	0.017	0.011	-	-	0.017	Maximum (N<10)
2105-28	1,1,1-Trichloroethane	26	26	0.049	2.3	0.334	Non-parametric	0.509	0.509	95% UCL
	1,1-Dichloroethane	24	0	0.016	0.8	0.085	-	-	0.800	Maximum (>50% NDs)
	1,1-Dichloroethene	26	20	0.0175	1.3	0.180	Lognormal	0.336	0.336	95% UCL
	1,2-Dichloroethane	24	24	0.029	0.57	0.179	Lognormal	0.272	0.272	95% UCL
	Chloroethane	24	20	0.0175	0.3	0.087	Lognormal	0.126	0.126	95% UCL
	cis-1,2-Dichloroethene	26	2	0.0075	1.05	0.142	-	-	1.050	Maximum (>50% NDs)
	Tetrachloroethene	26	26	0.043	2.7	0.473	Lognormal	0.753	0.753	95% UCL
	trans-1,2-Dichloroethene	24	3	0.0069	0.8	0.105	-	-	0.800	Maximum (>50% NDs)
	Trichloroethene	26	22	0.0175	6	0.705	Lognormal	2.093	2.093	95% UCL
	Vinyl Chloride	26	8	0.0078	0.21	0.033	-	-	0.210	Maximum (>50% NDs)
2106-27	1,1,1-Trichloroethane	1	1	0.18	0.18	0.180	-	-	0.180	Maximum (N<10)
	1,1-Dichloroethane	0	-	-	-	-	-	-	-	N/A (not sampled)
	1,1-Dichloroethene	1	1	0.022	0.022	0.022	-	-	0.022	Maximum (N<10)
	1,2-Dichloroethane	0	-	-	-	-	-	-	-	N/A (not sampled)
	Chloroethane	0	-	-	-	-	-	-	-	N/A (not sampled)
	cis-1,2-Dichloroethene	1	1	0.01	0.01	0.010	-	-	0.010	Maximum (N<10)
	Tetrachloroethene	1	1	0.2	0.2	0.200	-	-	0.200	Maximum (N<10)
	trans-1,2-Dichloroethene	0	-	-	-	-	-	-	-	N/A (not sampled)
	Trichloroethene	1	1	0.24	0.24	0.240	-	-	0.240	Maximum (N<10)
	Vinyl Chloride	1	1	0.043	0.043	0.043	-	-	0.043	Maximum (N<10)
2106-28	1,1,1-Trichloroethane	2	2	0.16	0.2	0.180	-	-	0.200	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.022	0.022	0.022	-	-	0.022	Maximum (N<10)

Site Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	1,1-Dichloroethene	2	2	0.04	0.073	0.057	-	-	0.073	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.065	0.065	0.065	-	-	0.065	Maximum (N<10)
	Chloroethane	1	1	0.039	0.039	0.039	-	-	0.039	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.022	0.7	0.361	-	-	0.700	Maximum (N<10)
	Tetrachloroethene	2	2	0.11	1.4	0.755	-	-	1.400	Maximum (N<10)
	trans-1,2-Dichloroethene	1	1	0.0067	0.0067	0.007	-	-	0.007	Maximum (N<10)
	Trichloroethene	2	2	0.087	0.14	0.114	-	-	0.140	Maximum (N<10)
	Vinyl Chloride	2	1	0.02	0.022	0.021	-	-	0.022	Maximum (N<10)
2107-27	1,1,1-Trichloroethane	6	5	0.02	2.2	0.628	-	-	2.200	Maximum (N<10)
	1,1-Dichloroethane	4	1	0.0059	0.02	0.016	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	6	4	0.0067	0.02	0.013	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	4	3	0.0195	0.17	0.066	-	-	0.170	Maximum (N<10)
	Chloroethane	4	2	0.0195	0.11	0.053	-	-	0.110	Maximum (N<10)
	cis-1,2-Dichloroethene	6	1	0.0088	0.85	0.156	-	-	0.850	Maximum (N<10)
	Tetrachloroethene	6	6	0.16	0.35	0.238	-	-	0.350	Maximum (N<10)
	trans-1,2-Dichloroethene	4	0	0.017	0.02	0.019	-	-	0.020	Maximum (N<10)
	Trichloroethene	6	4	0.0195	2.9	0.802	-	-	2.900	Maximum (N<10)
	Vinyl Chloride	6	4	0.011	0.02	0.016	-	-	0.020	Maximum (N<10)
2107-28	1,1,1-Trichloroethane	2	2	0.15	0.19	0.170	-	-	0.190	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.0069	0.019	0.013	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.021	0.032	0.027	-	-	0.032	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.19	0.22	0.205	-	-	0.220	Maximum (N<10)
	Chloroethane	2	2	0.044	0.048	0.046	-	-	0.048	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0175	0.019	0.018	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	2	2	0.13	0.42	0.275	-	-	0.420	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0175	0.019	0.018	-	-	0.019	Maximum (N<10)
	Trichloroethene	2	2	0.17	0.18	0.175	-	-	0.180	Maximum (N<10)
	Vinyl Chloride	2	1	0.0046	0.0175	0.011	-	-	0.018	Maximum (N<10)
2109-27	1,1,1-Trichloroethane	3	3	0.061	0.36	0.174	-	-	0.360	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.019	0.034	0.027	-	-	0.034	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.03	0.26	0.140	-	-	0.260	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.05	0.086	0.068	-	-	0.086	Maximum (N<10)
	Chloroethane	2	0	0.019	0.0215	0.020	-	-	0.022	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.019	0.75	0.268	-	-	0.750	Maximum (N<10)
	Tetrachloroethene	3	3	0.44	0.71	0.597	-	-	0.710	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.019	0.034	0.027	-	-	0.034	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Trichloroethene	3	3	0.12	1.5	0.590	-	-	1.500	Maximum (N<10)
	Vinyl Chloride	3	1	0.016	0.034	0.023	-	-	0.034	Maximum (N<10)
2109-28	1,1,1-Trichloroethane	6	6	0.068	0.35	0.162	-	-	0.350	Maximum (N<10)
	1,1-Dichloroethane	6	1	0.0042	0.0215	0.016	-	-	0.022	Maximum (N<10)
	1,1-Dichloroethene	6	4	0.011	0.14	0.042	-	-	0.140	Maximum (N<10)
	1,2-Dichloroethane	6	6	0.025	0.31	0.115	-	-	0.310	Maximum (N<10)
	Chloroethane	6	4	0.0175	0.19	0.075	-	-	0.190	Maximum (N<10)
	cis-1,2-Dichloroethene	6	0	0.0165	0.0215	0.019	-	-	0.022	Maximum (N<10)
	Tetrachloroethene	6	6	0.15	0.7	0.383	-	-	0.700	Maximum (N<10)
	trans-1,2-Dichloroethene	6	0	0.0165	0.0215	0.019	-	-	0.022	Maximum (N<10)
	Trichloroethene	6	6	0.042	0.63	0.281	-	-	0.630	Maximum (N<10)
	Vinyl Chloride	6	2	0.0066	0.0215	0.015	-	-	0.022	Maximum (N<10)
2110-28	1,1,1-Trichloroethane	2	2	0.1	0.12	0.110	-	-	0.120	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.0205	0.063	0.042	-	-	0.063	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.021	0.045	0.033	-	-	0.045	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.04	0.093	0.067	-	-	0.093	Maximum (N<10)
	Chloroethane	2	1	0.0205	0.048	0.034	-	-	0.048	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0205	0.0205	0.021	-	-	0.021	Maximum (N<10)
	Tetrachloroethene	2	2	0.13	0.36	0.245	-	-	0.360	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0205	0.0205	0.021	-	-	0.021	Maximum (N<10)
	Trichloroethene	2	2	0.095	0.13	0.113	-	-	0.130	Maximum (N<10)
	Vinyl Chloride	2	0	0.0205	0.0205	0.021	-	-	0.021	Maximum (N<10)
2111-27	1,1,1-Trichloroethane	5	5	0.13	0.35	0.210	-	-	0.350	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.0165	0.023	0.019	-	-	0.023	Maximum (N<10)
	1,1-Dichloroethene	5	5	0.012	0.06	0.031	-	-	0.060	Maximum (N<10)
	1,2-Dichloroethane	5	5	0.027	0.17	0.101	-	-	0.170	Maximum (N<10)
	Chloroethane	5	4	0.0125	0.21	0.093	-	-	0.210	Maximum (N<10)
	cis-1,2-Dichloroethene	5	0	0.0165	0.023	0.019	-	-	0.023	Maximum (N<10)
	Tetrachloroethene	5	5	0.28	0.81	0.420	-	-	0.810	Maximum (N<10)
	trans-1,2-Dichloroethene	5	0	0.0165	0.023	0.019	-	-	0.023	Maximum (N<10)
	Trichloroethene	5	5	0.073	0.35	0.199	-	-	0.350	Maximum (N<10)
	Vinyl Chloride	5	3	0.0032	0.023	0.012	-	-	0.023	Maximum (N<10)
2111-28	1,1,1-Trichloroethane	2	2	0.35	2.5	1.425	-	-	2.500	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.0195	0.03	0.025	-	-	0.030	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.15	0.37	0.260	-	-	0.370	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.16	0.38	0.270	-	-	0.380	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Chloroethane	2	2	0.065	0.074	0.070	-	-	0.074	Maximum (N<10)
	cis-1,2-Dichloroethene	2	1	0.0175	0.034	0.026	-	-	0.034	Maximum (N<10)
	Tetrachloroethene	2	2	0.11	0.39	0.250	-	-	0.390	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0175	0.0195	0.019	-	-	0.020	Maximum (N<10)
	Trichloroethene	2	2	0.052	0.48	0.266	-	-	0.480	Maximum (N<10)
	Vinyl Chloride	2	2	0.013	0.014	0.014	-	-	0.014	Maximum (N<10)
2111-31	1,1,1-Trichloroethane	1	1	0.1	0.1	0.100	-	-	0.100	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.015	0.015	0.015	-	-	0.015	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.031	0.031	0.031	-	-	0.031	Maximum (N<10)
	Chloroethane	1	1	0.033	0.033	0.033	-	-	0.033	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	1	1	0.1	0.1	0.100	-	-	0.100	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	Trichloroethene	1	1	0.059	0.059	0.059	-	-	0.059	Maximum (N<10)
	Vinyl Chloride	1	1	0.0064	0.0064	0.006	-	-	0.006	Maximum (N<10)
2112-27	1,1,1-Trichloroethane	2	2	0.2	0.35	0.275	-	-	0.350	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.0039	0.018	0.011	-	-	0.018	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.012	0.017	0.015	-	-	0.017	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.049	0.049	0.049	-	-	0.049	Maximum (N<10)
	Chloroethane	2	2	0.024	0.038	0.031	-	-	0.038	Maximum (N<10)
	cis-1,2-Dichloroethene	2	1	0.0063	0.0135	0.010	-	-	0.014	Maximum (N<10)
	Tetrachloroethene	2	2	0.93	1.5	1.215	-	-	1.500	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0135	0.018	0.016	-	-	0.018	Maximum (N<10)
	Trichloroethene	2	2	0.11	0.12	0.115	-	-	0.120	Maximum (N<10)
	Vinyl Chloride	2	2	0.06	0.069	0.065	-	-	0.069	Maximum (N<10)
2112-28	1,1,1-Trichloroethane	3	2	0.12	0.55	0.287	-	-	0.550	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.017	0.405	0.148	-	-	0.405	Maximum (N<10)
	1,1-Dichloroethene	3	2	0.013	0.395	0.183	-	-	0.395	Maximum (N<10)
	1,2-Dichloroethane	3	2	0.042	0.405	0.172	-	-	0.405	Maximum (N<10)
	Chloroethane	3	2	0.06	0.55	0.250	-	-	0.550	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.021	0.395	0.146	-	-	0.395	Maximum (N<10)
	Tetrachloroethene	3	2	0.14	0.7	0.350	-	-	0.700	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.021	0.395	0.146	-	-	0.395	Maximum (N<10)
	Trichloroethene	3	2	0.056	0.55	0.265	-	-	0.550	Maximum (N<10)
	Vinyl Chloride	3	0	0.021	0.255	0.100	-	-	0.255	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
2113-27	1,1,1-Trichloroethane	3	3	0.12	0.2	0.160	-	-	0.200	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.0205	0.75	0.385	-	-	0.750	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.018	0.39	0.144	-	-	0.390	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.083	0.16	0.122	-	-	0.160	Maximum (N<10)
	Chloroethane	2	1	0.0195	0.037	0.028	-	-	0.037	Maximum (N<10)
	cis-1,2-Dichloroethene	3	1	0.0037	0.75	0.258	-	-	0.750	Maximum (N<10)
	Tetrachloroethene	3	3	0.14	0.54	0.377	-	-	0.540	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0205	0.75	0.385	-	-	0.750	Maximum (N<10)
	Trichloroethene	3	3	0.077	0.15	0.122	-	-	0.150	Maximum (N<10)
	Vinyl Chloride	3	2	0.005	0.15	0.065	-	-	0.150	Maximum (N<10)
2113-28	1,1,1-Trichloroethane	28	28	4.4	68	14.014	Lognormal	16.890	16.890	95% UCL
	1,1-Dichloroethane	28	3	0.014	3.8	0.155	-	-	3.800	Maximum (>50% NDs)
	1,1-Dichloroethene	28	28	0.037	2.7	0.509	Lognormal	0.878	0.878	95% UCL
	1,2-Dichloroethane	28	27	0.059	3.8	0.248	Non-parametric	0.465	0.465	95% UCL
	Chloroethane	28	21	0.017	3.8	0.184	Non-parametric	0.405	0.405	95% UCL
	cis-1,2-Dichloroethene	27	4	0.005	3.8	0.162	-	-	3.800	Maximum (>50% NDs)
	Tetrachloroethene	28	28	0.5	25	5.435	Lognormal	10.931	10.931	95% UCL
	trans-1,2-Dichloroethene	28	3	0.015	3.8	0.176	-	-	3.800	Maximum (>50% NDs)
	Trichloroethene	28	28	0.9	95	11.653	Lognormal	22.962	22.962	95% UCL
	Vinyl Chloride	28	14	0.012	3.80	0.168	Non-parametric	0.389	0.389	95% UCL
2114-27	1,1,1-Trichloroethane	3	3	0.15	0.27	0.197	-	-	0.270	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.0076	0.0215	0.015	-	-	0.022	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.0065	0.071	0.048	-	-	0.071	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.035	0.12	0.065	-	-	0.120	Maximum (N<10)
	Chloroethane	3	2	0.0075	0.069	0.045	-	-	0.069	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.016	0.0215	0.020	-	-	0.022	Maximum (N<10)
	Tetrachloroethene	3	3	0.11	0.15	0.133	-	-	0.150	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.016	0.0215	0.020	-	-	0.022	Maximum (N<10)
	Trichloroethene	3	3	0.02	0.095	0.053	-	-	0.095	Maximum (N<10)
	Vinyl Chloride	3	2	0.0064	0.016	0.011	-	-	0.016	Maximum (N<10)
2114-28	1,1,1-Trichloroethane	2	2	0.15	0.65	0.400	-	-	0.650	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.018	0.027	0.023	-	-	0.027	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.048	0.66	0.354	-	-	0.660	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.066	0.076	0.071	-	-	0.076	Maximum (N<10)
	Chloroethane	2	1	0.026	0.075	0.051	-	-	0.075	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.017	0.018	0.018	-	-	0.018	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Tetrachloroethene	2	2	0.38	0.59	0.485	-	-	0.590	Maximum (N<10)
	trans-1,2-Dichloroethene	2	1	0.011	0.017	0.014	-	-	0.017	Maximum (N<10)
	Trichloroethene	2	2	0.22	0.76	0.490	-	-	0.760	Maximum (N<10)
	Vinyl Chloride	2	0	0.017	0.018	0.018	-	-	0.018	Maximum (N<10)
2115-27	1,1,1-Trichloroethane	2	2	0.095	0.22	0.158	-	-	0.220	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.01	0.0195	0.015	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.039	0.055	0.047	-	-	0.055	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.23	2.4	1.315	-	-	2.400	Maximum (N<10)
	Chloroethane	2	2	0.054	0.092	0.073	-	-	0.092	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0165	0.0195	0.018	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	2	2	0.18	0.38	0.280	-	-	0.380	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0165	0.0195	0.018	-	-	0.020	Maximum (N<10)
	Trichloroethene	2	2	0.045	0.2	0.123	-	-	0.200	Maximum (N<10)
	Vinyl Chloride	2	1	0.013	0.0195	0.016	-	-	0.020	Maximum (N<10)
2115-28	1,1,1-Trichloroethane	2	2	0.17	0.61	0.390	-	-	0.610	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.017	0.0205	0.019	-	-	0.021	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.12	0.92	0.520	-	-	0.920	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.11	0.12	0.115	-	-	0.120	Maximum (N<10)
	Chloroethane	2	2	0.037	0.099	0.068	-	-	0.099	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.018	0.0205	0.019	-	-	0.021	Maximum (N<10)
	Tetrachloroethene	2	2	0.26	1.2	0.730	-	-	1.200	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.018	0.0205	0.019	-	-	0.021	Maximum (N<10)
	Trichloroethene	2	2	0.058	0.4	0.229	-	-	0.400	Maximum (N<10)
	Vinyl Chloride	2	1	0.0082	0.0205	0.014	-	-	0.021	Maximum (N<10)
2202-27	1,1,1-Trichloroethane	1	1	0.19	0.19	0.190	-	-	0.190	Maximum (N<10)
	1,1-Dichloroethane	0	-	-	-	-	-	-	-	N/A (not sampled)
	1,1-Dichloroethene	1	1	0.041	0.041	0.041	-	-	0.041	Maximum (N<10)
	1,2-Dichloroethane	0	-	-	-	-	-	-	-	N/A (not sampled)
	Chloroethane	0	-	-	-	-	-	-	-	N/A (not sampled)
	cis-1,2-Dichloroethene	1	0	0.75	0.75	0.750	-	-	0.750	Maximum (N<10)
	Tetrachloroethene	1	1	0.33	0.33	0.330	-	-	0.330	Maximum (N<10)
	trans-1,2-Dichloroethene	0	-	-	-	-	-	-	-	N/A (not sampled)
	Trichloroethene	1	1	0.27	0.27	0.270	-	-	0.270	Maximum (N<10)
	Vinyl Chloride	1	1	0.017	0.017	0.017	-	-	0.017	Maximum (N<10)
2202-28	1,1,1-Trichloroethane	12	12	0.074	1.7	0.315	Non-parametric	0.528	0.528	95% UCL
	1,1-Dichloroethane	11	1	0.004	0.6	0.077	-	-	0.600	Maximum (>50% NDs)

Site Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	1,1-Dichloroethene	12	11	0.012	0.24	0.091	Lognormal	0.208	0.208	95% UCL
	1,2-Dichloroethane	11	11	0.044	5.3	0.944	Lognormal	8.323	5.300	95% UCL
	Chloroethane	11	10	0.043	0.19	0.109	Lognormal	0.166	0.166	95% UCL
	cis-1,2-Dichloroethene	12	1	0.0155	0.6	0.122	-	-	0.600	Maximum (>50% NDs)
	Tetrachloroethene	12	12	0.088	1.5	0.470	Lognormal	0.951	0.951	95% UCL
	trans-1,2-Dichloroethene	11	1	0.011	0.6	0.102	-	-	0.600	Maximum (>50% NDs)
	Trichloroethene	12	11	0.0195	1.7	0.308	Lognormal	1.179	1.179	95% UCL
	Vinyl Chloride	12	6	0.0075	0.12	0.025	Non-parametric	0.039	0.039	95% UCL
2202-31	1,1,1-Trichloroethane	1	1	0.17	0.17	0.170	-	-	0.170	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.027	0.027	0.027	-	-	0.027	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.066	0.066	0.066	-	-	0.066	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.04	0.04	0.040	-	-	0.040	Maximum (N<10)
	Chloroethane	1	1	0.031	0.031	0.031	-	-	0.031	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.027	0.027	0.027	-	-	0.027	Maximum (N<10)
	Tetrachloroethene	1	1	1.4	1.4	1.400	-	-	1.400	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.027	0.027	0.027	-	-	0.027	Maximum (N<10)
	Trichloroethene	1	1	0.24	0.24	0.240	-	-	0.240	Maximum (N<10)
	Vinyl Chloride	1	0	0.027	0.027	0.027	-	-	0.027	Maximum (N<10)
2203-27	1,1,1-Trichloroethane	5	5	0.07	0.15	0.098	-	-	0.150	Maximum (N<10)
	1,1-Dichloroethane	5	1	0.012	0.0395	0.022	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	5	5	0.031	0.14	0.099	-	-	0.140	Maximum (N<10)
	1,2-Dichloroethane	5	5	0.089	8.5	3.518	-	-	8.500	Maximum (N<10)
	Chloroethane	5	4	0.045	0.078	0.065	-	-	0.078	Maximum (N<10)
	cis-1,2-Dichloroethene	5	0	0.0165	0.0395	0.023	-	-	0.040	Maximum (N<10)
	Tetrachloroethene	5	5	12	16	13.800	-	-	16.000	Maximum (N<10)
	trans-1,2-Dichloroethene	5	0	0.0165	0.0395	0.023	-	-	0.040	Maximum (N<10)
	Trichloroethene	5	4	0.019	0.39	0.161	-	-	0.390	Maximum (N<10)
	Vinyl Chloride	5	1	0.0087	0.0195	0.017	-	-	0.020	Maximum (N<10)
2203-28	1,1,1-Trichloroethane	4	4	0.097	0.33	0.214	-	-	0.330	Maximum (N<10)
	1,1-Dichloroethane	4	1	0.0165	0.047	0.027	-	-	0.047	Maximum (N<10)
	1,1-Dichloroethene	4	4	0.01	0.055	0.032	-	-	0.055	Maximum (N<10)
	1,2-Dichloroethane	4	4	0.063	0.12	0.095	-	-	0.120	Maximum (N<10)
	Chloroethane	4	4	0.034	0.13	0.068	-	-	0.130	Maximum (N<10)
	cis-1,2-Dichloroethene	4	2	0.012	0.053	0.027	-	-	0.053	Maximum (N<10)
	Tetrachloroethene	4	4	0.66	1.3	0.940	-	-	1.300	Maximum (N<10)
	trans-1,2-Dichloroethene	4	1	0.0044	0.026	0.016	-	-	0.026	Maximum (N<10)

Site Name	Analyte	N	Detects	Min 1	Max 1	Mean 1	Distribution 2	95% UCL 2	RME	RME Based on
	Trichloroethene	4	4	0.24	0.99	0.680	-	-	0.990	Maximum (N<10)
	Vinyl Chloride	4	1	0.0074	0.018	0.015	-	-	0.018	Maximum (N<10)
2203-31	1,1,1-Trichloroethane	2	2	0.16	0.18	0.170	-	-	0.180	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.0215	0.025	0.023	-	-	0.025	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.043	0.11	0.077	-	-	0.110	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.22	1.9	1.060	-	-	1.900	Maximum (N<10)
	Chloroethane	2	2	0.039	0.06	0.050	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0215	0.025	0.023	-	-	0.025	Maximum (N<10)
	Tetrachloroethene	2	2	0.14	0.6	0.370	-	-	0.600	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0215	0.025	0.023	-	-	0.025	Maximum (N<10)
	Trichloroethene	2	2	0.044	0.16	0.102	-	-	0.160	Maximum (N<10)
	Vinyl Chloride	2	2	0.0062	0.0085	0.007	-	-	0.009	Maximum (N<10)
2205-27	1,1,1-Trichloroethane	2	2	0.13	0.14	0.135	-	-	0.140	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.02	0.04	0.030	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	2	1	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.077	0.11	0.094	-	-	0.110	Maximum (N<10)
	Chloroethane	2	2	0.038	0.092	0.065	-	-	0.092	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.02	0.028	0.024	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	2	2	0.25	0.3	0.275	-	-	0.300	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.02	0.028	0.024	-	-	0.028	Maximum (N<10)
	Trichloroethene	2	2	0.43	0.71	0.570	-	-	0.710	Maximum (N<10)
	Vinyl Chloride	2	2	0.0086	0.0089	0.009	-	-	0.009	Maximum (N<10)
2205-28	1,1,1-Trichloroethane	2	2	0.091	0.26	0.176	-	-	0.260	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.041	0.049	0.045	-	-	0.049	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.048	0.048	0.048	-	-	0.048	Maximum (N<10)
	Chloroethane	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.019	0.65	0.335	-	-	0.650	Maximum (N<10)
	Tetrachloroethene	2	2	0.2	0.38	0.290	-	-	0.380	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	Trichloroethene	2	2	0.11	0.12	0.115	-	-	0.120	Maximum (N<10)
	Vinyl Chloride	2	0	0.019	0.13	0.075	-	-	0.130	Maximum (N<10)
2206-27	1,1,1-Trichloroethane	3	3	0.079	0.17	0.116	-	-	0.170	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.0175	0.059	0.032	-	-	0.059	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.037	0.067	0.053	-	-	0.067	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.037	0.048	0.042	-	-	0.048	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Chloroethane	3	2	0.0195	0.077	0.045	-	-	0.077	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.0175	0.02	0.019	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	3	3	0.26	0.83	0.503	-	-	0.830	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.0175	0.02	0.019	-	-	0.020	Maximum (N<10)
	Trichloroethene	3	3	0.14	0.61	0.417	-	-	0.610	Maximum (N<10)
	Vinyl Chloride	3	1	0.015	0.0195	0.017	-	-	0.020	Maximum (N<10)
2206-28	1,1,1-Trichloroethane	13	13	0.24	3.8	0.817	Lognormal	1.358	1.358	95% UCL
	1,1-Dichloroethane	12	1	0.017	0.65	0.079	-	-	0.650	Maximum (>50% NDs)
	1,1-Dichloroethene	13	12	0.022	0.29	0.115	Lognormal	0.189	0.189	95% UCL
	1,2-Dichloroethane	12	12	0.056	0.19	0.115	Lognormal	0.142	0.142	95% UCL
	Chloroethane	12	10	0.042	0.13	0.070	Lognormal	0.087	0.087	95% UCL
	cis-1,2-Dichloroethene	13	0	0.0023	0.65	0.116	-	-	0.650	Maximum (>50% NDs)
	Tetrachloroethene	13	13	0.4	2.2	1.096	Lognormal	1.613	1.613	95% UCL
	trans-1,2-Dichloroethene	12	3	0.0089	0.65	0.096	-	-	0.650	Maximum (>50% NDs)
	Trichloroethene	13	13	0.19	3.6	1.055	Lognormal	2.745	2.745	95% UCL
	Vinyl Chloride	13	8	0.017	0.051	0.028	Lognormal	0.034	0.034	95% UCL
2209-27	1,1,1-Trichloroethane	1	1	4.7	4.7	4.700	-	-	4.700	Maximum (N<10)
	1,1-Dichloroethane	0	-	-	-	-	-	-	-	N/A (not sampled)
	1,1-Dichloroethene	1	1	0.037	0.037	0.037	-	-	0.037	Maximum (N<10)
	1,2-Dichloroethane	0	-	-	-	-	-	-	-	N/A (not sampled)
	Chloroethane	0	-	-	-	-	-	-	-	N/A (not sampled)
	cis-1,2-Dichloroethene	1	1	0.0057	0.0057	0.006	-	-	0.006	Maximum (N<10)
	Tetrachloroethene	1	1	0.32	0.32	0.320	-	-	0.320	Maximum (N<10)
	trans-1,2-Dichloroethene	0	-	-	-	-	-	-	-	N/A (not sampled)
	Trichloroethene	1	1	0.16	0.16	0.160	-	-	0.160	Maximum (N<10)
	Vinyl Chloride	1	1	0.013	0.013	0.013	-	-	0.013	Maximum (N<10)
2209-28	1,1,1-Trichloroethane	2	2	0.37	1	0.685	-	-	1.000	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.0039	0.0039	0.004	-	-	0.004	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.025	0.029	0.027	-	-	0.029	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.037	0.037	0.037	-	-	0.037	Maximum (N<10)
	Chloroethane	1	1	0.076	0.076	0.076	-	-	0.076	Maximum (N<10)
	cis-1,2-Dichloroethene	2	1	0.00245	0.0042	0.003	-	-	0.004	Maximum (N<10)
	Tetrachloroethene	2	2	1.2	1.6	1.400	-	-	1.600	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0014	0.0014	0.001	-	-	0.001	Maximum (N<10)
	Trichloroethene	2	2	0.33	0.42	0.375	-	-	0.420	Maximum (N<10)
	Vinyl Chloride	2	1	0.0082	0.21	0.109	-	-	0.210	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
2210-28	1,1,1-Trichloroethane	2	2	0.095	0.36	0.228	-	-	0.360	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.0062	0.023	0.015	-	-	0.023	Maximum (N<10)
	1,1-Dichloroethene	2	1	0.023	0.048	0.036	-	-	0.048	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.054	0.058	0.056	-	-	0.058	Maximum (N<10)
	Chloroethane	2	1	0.023	0.14	0.082	-	-	0.140	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0195	0.023	0.021	-	-	0.023	Maximum (N<10)
	Tetrachloroethene	2	2	0.39	0.46	0.425	-	-	0.460	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0195	0.023	0.021	-	-	0.023	Maximum (N<10)
	Trichloroethene	2	2	0.14	0.22	0.180	-	-	0.220	Maximum (N<10)
	Vinyl Chloride	2	1	0.014	0.023	0.019	-	-	0.023	Maximum (N<10)
2211-27	1,1,1-Trichloroethane	1	1	0.12	0.12	0.120	-	-	0.120	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.04	0.04	0.040	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.041	0.041	0.041	-	-	0.041	Maximum (N<10)
	Chloroethane	1	1	0.053	0.053	0.053	-	-	0.053	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	1	1	0.13	0.13	0.130	-	-	0.130	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Trichloroethene	1	1	0.067	0.067	0.067	-	-	0.067	Maximum (N<10)
	Vinyl Chloride	1	0	0.01	0.01	0.010	-	-	0.010	Maximum (N<10)
2211-28	1,1,1-Trichloroethane	3	3	0.1	0.2	0.143	-	-	0.200	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.0043	0.04	0.021	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.023	0.27	0.148	-	-	0.270	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.051	3.3	1.170	-	-	3.300	Maximum (N<10)
	Chloroethane	3	2	0.056	0.1	0.072	-	-	0.100	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.0145	0.028	0.020	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	3	3	0.073	0.42	0.241	-	-	0.420	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.0145	0.028	0.020	-	-	0.028	Maximum (N<10)
	Trichloroethene	3	3	0.021	0.092	0.059	-	-	0.092	Maximum (N<10)
	Vinyl Chloride	3	0	0.01	0.018	0.014	-	-	0.018	Maximum (N<10)
2212-27	1,1,1-Trichloroethane	1	1	0.12	0.12	0.120	-	-	0.120	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.04	0.04	0.040	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.022	0.022	0.022	-	-	0.022	Maximum (N<10)
	Chloroethane	1	1	0.029	0.029	0.029	-	-	0.029	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Tetrachloroethene	1	1	0.26	0.26	0.260	-	-	0.260	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Trichloroethene	1	1	0.087	0.087	0.087	-	-	0.087	Maximum (N<10)
	Vinyl Chloride	1	0	0.01	0.01	0.010	-	-	0.010	Maximum (N<10)
2214-28	1,1,1-Trichloroethane	2	2	0.071	0.66	0.366	-	-	0.660	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.017	0.0185	0.018	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	2	1	0.0185	0.51	0.264	-	-	0.510	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.046	0.082	0.064	-	-	0.082	Maximum (N<10)
	Chloroethane	2	2	0.048	0.11	0.079	-	-	0.110	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.017	0.0185	0.018	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	2	2	0.093	0.19	0.142	-	-	0.190	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.017	0.0185	0.018	-	-	0.019	Maximum (N<10)
	Trichloroethene	2	1	0.0185	0.087	0.053	-	-	0.087	Maximum (N<10)
	Vinyl Chloride	2	0	0.017	0.0185	0.018	-	-	0.019	Maximum (N<10)
2310-31	1,1,1-Trichloroethane	2	2	1.6	3.1	2.350	-	-	3.100	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.0185	0.04	0.029	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.036	0.2	0.118	-	-	0.200	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.13	0.17	0.150	-	-	0.170	Maximum (N<10)
	Chloroethane	2	1	0.042	0.06	0.051	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	2	1	0.028	0.035	0.032	-	-	0.035	Maximum (N<10)
	Tetrachloroethene	2	2	6.4	15	10.700	-	-	15.000	Maximum (N<10)
	trans-1,2-Dichloroethene	2	1	0.011	0.028	0.020	-	-	0.028	Maximum (N<10)
	Trichloroethene	2	2	0.16	0.29	0.225	-	-	0.290	Maximum (N<10)
	Vinyl Chloride	2	2	0.081	0.12	0.101	-	-	0.120	Maximum (N<10)
2405-31	1,1,1-Trichloroethane	1	1	2.5	2.5	2.500	-	-	2.500	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.49	0.49	0.490	-	-	0.490	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.065	0.065	0.065	-	-	0.065	Maximum (N<10)
	Chloroethane	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	1	1	0.2	0.2	0.200	-	-	0.200	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	Trichloroethene	1	1	0.09	0.09	0.090	-	-	0.090	Maximum (N<10)
	Vinyl Chloride	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
2407-31	1,1,1-Trichloroethane	1	1	0.12	0.12	0.120	-	-	0.120	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	1,1-Dichloroethene	1	1	0.014	0.014	0.014	-	-	0.014	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.031	0.031	0.031	-	-	0.031	Maximum (N<10)
	Chloroethane	1	1	0.025	0.025	0.025	-	-	0.025	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	1	1	0.094	0.094	0.094	-	-	0.094	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	Trichloroethene	1	1	0.075	0.075	0.075	-	-	0.075	Maximum (N<10)
	Vinyl Chloride	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
2409-31	1,1,1-Trichloroethane	2	2	1.9	18	9.950	-	-	18.000	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.0155	0.018	0.017	-	-	0.018	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.095	0.36	0.228	-	-	0.360	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.065	0.12	0.093	-	-	0.120	Maximum (N<10)
	Chloroethane	2	1	0.018	0.08	0.049	-	-	0.080	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0155	0.018	0.017	-	-	0.018	Maximum (N<10)
	Tetrachloroethene	2	2	0.83	2.5	1.665	-	-	2.500	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0155	0.018	0.017	-	-	0.018	Maximum (N<10)
	Trichloroethene	2	2	0.75	2.8	1.775	-	-	2.800	Maximum (N<10)
	Vinyl Chloride	2	1	0.011	0.018	0.015	-	-	0.018	Maximum (N<10)
2412-31	1,1,1-Trichloroethane	1	1	0.11	0.11	0.110	-	-	0.110	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.04	0.04	0.040	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.036	0.036	0.036	-	-	0.036	Maximum (N<10)
	Chloroethane	1	1	0.029	0.029	0.029	-	-	0.029	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	1	1	0.069	0.069	0.069	-	-	0.069	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Trichloroethene	1	1	0.013	0.013	0.013	-	-	0.013	Maximum (N<10)
	Vinyl Chloride	1	0	0.01	0.01	0.010	-	-	0.010	Maximum (N<10)
2604-WE	1,1,1-Trichloroethane	3	3	0.089	2.6	0.960	-	-	2.600	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.01	0.065	0.032	-	-	0.065	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.043	0.19	0.098	-	-	0.190	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.046	0.12	0.079	-	-	0.120	Maximum (N<10)
	Chloroethane	3	3	0.052	0.083	0.070	-	-	0.083	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.0185	0.06	0.033	-	-	0.060	Maximum (N<10)
	Tetrachloroethene	3	3	5.7	73	34.567	-	-	73.000	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.0185	0.31	0.116	-	-	0.310	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Trichloroethene	3	3	0.18	0.36	0.257	-	-	0.360	Maximum (N<10)
	Vinyl Chloride	3	0	0.0185	0.02	0.020	-	-	0.020	Maximum (N<10)
2607-WE	1,1,1-Trichloroethane	2	2	0.18	0.19	0.185	-	-	0.190	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.016	0.016	0.016	-	-	0.016	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.012	0.056	0.034	-	-	0.056	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.052	0.052	0.052	-	-	0.052	Maximum (N<10)
	Chloroethane	1	0	0.025	0.025	0.025	-	-	0.025	Maximum (N<10)
	cis-1,2-Dichloroethene	2	1	0.011	0.016	0.014	-	-	0.016	Maximum (N<10)
	Tetrachloroethene	2	2	0.29	0.51	0.400	-	-	0.510	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.016	0.016	0.016	-	-	0.016	Maximum (N<10)
	Trichloroethene	2	2	0.098	1.1	0.599	-	-	1.100	Maximum (N<10)
	Vinyl Chloride	2	1	0.016	0.022	0.019	-	-	0.022	Maximum (N<10)
2608-UN	1,1,1-Trichloroethane	2	2	0.16	0.22	0.190	-	-	0.220	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.015	0.045	0.030	-	-	0.045	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.11	0.11	0.110	-	-	0.110	Maximum (N<10)
	Chloroethane	1	1	0.029	0.029	0.029	-	-	0.029	Maximum (N<10)
	cis-1,2-Dichloroethene	2	1	0.003	0.0175	0.010	-	-	0.018	Maximum (N<10)
	Tetrachloroethene	2	2	0.29	0.36	0.325	-	-	0.360	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	Trichloroethene	2	2	0.14	0.31	0.225	-	-	0.310	Maximum (N<10)
	Vinyl Chloride	2	2	0.0099	0.012	0.011	-	-	0.012	Maximum (N<10)
2608-WE	1,1,1-Trichloroethane	8	8	0.061	0.1	0.077	-	-	0.100	Maximum (N<10)
	1,1-Dichloroethane	8	0	0.0175	0.024	0.020	-	-	0.024	Maximum (N<10)
	1,1-Dichloroethene	8	2	0.016	0.036	0.021	-	-	0.036	Maximum (N<10)
	1,2-Dichloroethane	8	8	0.038	0.19	0.094	-	-	0.190	Maximum (N<10)
	Chloroethane	8	3	0.0095	0.068	0.034	-	-	0.068	Maximum (N<10)
	cis-1,2-Dichloroethene	8	1	0.007	0.0225	0.018	-	-	0.023	Maximum (N<10)
	Tetrachloroethene	8	8	0.066	1.2	0.307	-	-	1.200	Maximum (N<10)
	trans-1,2-Dichloroethene	8	0	0.0175	0.024	0.020	-	-	0.024	Maximum (N<10)
	Trichloroethene	8	4	0.0175	0.47	0.103	-	-	0.470	Maximum (N<10)
	Vinyl Chloride	8	0	0.0175	0.024	0.020	-	-	0.024	Maximum (N<10)
2611-UN	1,1,1-Trichloroethane	3	3	0.089	0.17	0.140	-	-	0.170	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.005	0.04	0.021	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	3	1	0.0185	0.057	0.032	-	-	0.057	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.068	0.17	0.112	-	-	0.170	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Chloroethane	3	3	0.024	0.12	0.069	-	-	0.120	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.016	0.028	0.021	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	3	3	0.056	0.15	0.102	-	-	0.150	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.016	0.028	0.021	-	-	0.028	Maximum (N<10)
	Trichloroethene	3	2	0.0185	0.48	0.186	-	-	0.480	Maximum (N<10)
	Vinyl Chloride	3	2	0.0063	0.0185	0.011	-	-	0.019	Maximum (N<10)
2702-WE	1,1,1-Trichloroethane	3	3	0.11	1.4	0.590	-	-	1.400	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.018	0.0185	0.018	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.01	0.037	0.020	-	-	0.037	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.025	0.045	0.035	-	-	0.045	Maximum (N<10)
	Chloroethane	2	2	0.027	0.061	0.044	-	-	0.061	Maximum (N<10)
	cis-1,2-Dichloroethene	3	1	0.0036	0.0185	0.013	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	3	3	0.31	1.3	0.753	-	-	1.300	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.018	0.0185	0.018	-	-	0.019	Maximum (N<10)
	Trichloroethene	3	3	0.04	0.21	0.106	-	-	0.210	Maximum (N<10)
	Vinyl Chloride	3	2	0.009	0.0185	0.014	-	-	0.019	Maximum (N<10)
2703-UN	1,1,1-Trichloroethane	4	4	0.075	0.17	0.119	-	-	0.170	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.0175	0.02	0.019	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	4	3	0.013	0.063	0.038	-	-	0.063	Maximum (N<10)
	1,2-Dichloroethane	4	4	0.055	0.083	0.066	-	-	0.083	Maximum (N<10)
	Chloroethane	4	2	0.016	0.05	0.026	-	-	0.050	Maximum (N<10)
	cis-1,2-Dichloroethene	4	1	0.0195	0.023	0.021	-	-	0.023	Maximum (N<10)
	Tetrachloroethene	4	4	0.17	0.8	0.483	-	-	0.800	Maximum (N<10)
	trans-1,2-Dichloroethene	4	2	0.0093	0.02	0.015	-	-	0.020	Maximum (N<10)
	Trichloroethene	4	3	0.02	0.36	0.178	-	-	0.360	Maximum (N<10)
	Vinyl Chloride	4	0	0.0175	0.02	0.019	-	-	0.020	Maximum (N<10)
2703-WE	1,1,1-Trichloroethane	2	2	0.18	0.2	0.190	-	-	0.200	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.0078	0.04	0.024	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.024	0.2	0.112	-	-	0.200	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.11	0.22	0.165	-	-	0.220	Maximum (N<10)
	Chloroethane	2	1	0.054	0.06	0.057	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.017	0.028	0.023	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	2	2	0.25	0.29	0.270	-	-	0.290	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.017	0.028	0.023	-	-	0.028	Maximum (N<10)
	Trichloroethene	2	2	0.18	0.2	0.190	-	-	0.200	Maximum (N<10)
	Vinyl Chloride	2	0	0.01	0.017	0.014	-	-	0.017	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
2704-UN	1,1,1-Trichloroethane	2	2	0.68	1.7	1.190	-	-	1.700	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.023	0.061	0.042	-	-	0.061	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.75	0.75	0.750	-	-	0.750	Maximum (N<10)
	Chloroethane	1	1	0.079	0.079	0.079	-	-	0.079	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0175	0.8	0.409	-	-	0.800	Maximum (N<10)
	Tetrachloroethene	2	2	0.31	0.62	0.465	-	-	0.620	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	Trichloroethene	2	2	0.15	0.58	0.365	-	-	0.580	Maximum (N<10)
	Vinyl Chloride	2	2	0.047	0.13	0.089	-	-	0.130	Maximum (N<10)
2704-WE	1,1,1-Trichloroethane	2	2	0.17	0.21	0.190	-	-	0.210	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.0067	0.0067	0.007	-	-	0.007	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.023	0.21	0.117	-	-	0.210	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.23	0.23	0.230	-	-	0.230	Maximum (N<10)
	Chloroethane	1	1	0.041	0.041	0.041	-	-	0.041	Maximum (N<10)
	cis-1,2-Dichloroethene	2	1	0.0091	0.0195	0.014	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	2	2	0.12	1	0.560	-	-	1.000	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	Trichloroethene	2	2	0.1	0.33	0.215	-	-	0.330	Maximum (N<10)
	Vinyl Chloride	2	2	0.0092	0.015	0.012	-	-	0.015	Maximum (N<10)
2705-UN	1,1,1-Trichloroethane	2	2	0.069	0.32	0.195	-	-	0.320	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.0049	0.057	0.031	-	-	0.057	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.059	0.059	0.059	-	-	0.059	Maximum (N<10)
	Chloroethane	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	cis-1,2-Dichloroethene	2	1	0.0037	0.0185	0.011	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	2	2	0.26	0.27	0.265	-	-	0.270	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0185	0.0185	0.019	-	-	0.019	Maximum (N<10)
	Trichloroethene	2	2	0.052	0.73	0.391	-	-	0.730	Maximum (N<10)
	Vinyl Chloride	2	1	0.016	0.0185	0.017	-	-	0.019	Maximum (N<10)
2706-WE	1,1,1-Trichloroethane	3	3	0.13	0.18	0.163	-	-	0.180	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.012	0.0405	0.031	-	-	0.041	Maximum (N<10)
	1,1-Dichloroethene	3	2	0.02	0.32	0.177	-	-	0.320	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.061	0.32	0.158	-	-	0.320	Maximum (N<10)
	Chloroethane	3	3	0.056	0.063	0.060	-	-	0.063	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.015	0.0405	0.028	-	-	0.041	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Tetrachloroethene	3	3	0.21	13	4.483	-	-	13.000	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.015	0.0405	0.028	-	-	0.041	Maximum (N<10)
	Trichloroethene	3	3	0.23	0.53	0.337	-	-	0.530	Maximum (N<10)
	Vinyl Chloride	3	1	0.0094	0.0405	0.022	-	-	0.041	Maximum (N<10)
2708-UN	1,1,1-Trichloroethane	4	4	0.063	0.65	0.258	-	-	0.650	Maximum (N<10)
	1,1-Dichloroethane	4	1	0.012	0.019	0.017	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	4	4	0.074	0.73	0.257	-	-	0.730	Maximum (N<10)
	1,2-Dichloroethane	4	4	0.038	0.9	0.361	-	-	0.900	Maximum (N<10)
	Chloroethane	4	3	0.019	0.06	0.045	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	4	0	0.0175	0.02	0.019	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	4	4	0.13	0.81	0.345	-	-	0.810	Maximum (N<10)
	trans-1,2-Dichloroethene	4	0	0.0175	0.02	0.019	-	-	0.020	Maximum (N<10)
	Trichloroethene	4	4	0.058	0.38	0.156	-	-	0.380	Maximum (N<10)
	Vinyl Chloride	4	2	0.013	0.019	0.018	-	-	0.019	Maximum (N<10)
2709-UN	1,1,1-Trichloroethane	2	2	0.12	0.19	0.155	-	-	0.190	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.0185	0.099	0.059	-	-	0.099	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.027	0.039	0.033	-	-	0.039	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.13	0.13	0.130	-	-	0.130	Maximum (N<10)
	Chloroethane	2	2	0.087	0.13	0.109	-	-	0.130	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0185	0.022	0.020	-	-	0.022	Maximum (N<10)
	Tetrachloroethene	2	2	0.58	1.2	0.890	-	-	1.200	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0185	0.022	0.020	-	-	0.022	Maximum (N<10)
	Trichloroethene	2	2	0.11	1.1	0.605	-	-	1.100	Maximum (N<10)
	Vinyl Chloride	2	2	0.0052	0.008	0.007	-	-	0.008	Maximum (N<10)
2709-WE	1,1,1-Trichloroethane	3	3	0.22	0.56	0.353	-	-	0.560	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.01	0.04	0.025	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.013	0.33	0.128	-	-	0.330	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.025	0.035	0.030	-	-	0.035	Maximum (N<10)
	Chloroethane	2	2	0.02	0.15	0.085	-	-	0.150	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.015	0.6	0.214	-	-	0.600	Maximum (N<10)
	Tetrachloroethene	3	3	0.74	0.97	0.820	-	-	0.970	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.015	0.028	0.022	-	-	0.028	Maximum (N<10)
	Trichloroethene	3	3	0.73	1.7	1.087	-	-	1.700	Maximum (N<10)
	Vinyl Chloride	3	1	0.01	0.015	0.012	-	-	0.015	Maximum (N<10)
2710-WE	1,1,1-Trichloroethane	12	12	0.14	2	0.488	Non-parametric	0.796	0.796	95% UCL
	1,1-Dichloroethane	11	3	0.0057	0.0245	0.017	-	-	0.025	Maximum (>50% NDs)

Site Name	Analyte	N	Detects	Min[1]	Max[1]	Mean[1]	Distribution[2]	95% UCL[2]	RME	RME Based on
	1,1-Dichloroethene	12	12	0.01	0.23	0.112	Normal	0.149	0.149	95% UCL
	1,2-Dichloroethane	11	11	0.047	1	0.419	Lognormal	2.000	1.000	95% UCL
	Chloroethane	11	5	0.0155	0.16	0.045	-	-	0.160	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	12	0	0.0025	0.75	0.079	-	-	0.750	Maximum (>50% NDs)
	Tetrachloroethene	12	12	0.25	1.9	0.667	Lognormal	0.947	0.947	95% UCL
	trans-1,2-Dichloroethene	11	0	0.0014	0.0245	0.018	-	-	0.025	Maximum (>50% NDs)
	Trichloroethene	12	12	0.15	1	0.368	Non-parametric	0.509	0.509	95% UCL
	Vinyl Chloride	12	1	0.00405	0.15	0.028	-	-	0.150	Maximum (>50% NDs)
2711-UN	1,1,1-Trichloroethane	2	2	0.071	0.52	0.296	-	-	0.520	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.004	0.021	0.013	-	-	0.021	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.023	0.099	0.061	-	-	0.099	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.038	0.2	0.119	-	-	0.200	Maximum (N<10)
	Chloroethane	2	1	0.021	0.1	0.061	-	-	0.100	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0175	0.021	0.019	-	-	0.021	Maximum (N<10)
	Tetrachloroethene	2	2	0.19	0.22	0.205	-	-	0.220	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0175	0.021	0.019	-	-	0.021	Maximum (N<10)
	Trichloroethene	2	2	0.11	0.65	0.380	-	-	0.650	Maximum (N<10)
	Vinyl Chloride	2	1	0.0083	0.021	0.015	-	-	0.021	Maximum (N<10)
2712-WE	1,1,1-Trichloroethane	2	2	0.19	1.1	0.645	-	-	1.100	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0315	0.0315	0.032	-	-	0.032	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.02	0.29	0.155	-	-	0.290	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.093	0.093	0.093	-	-	0.093	Maximum (N<10)
	Chloroethane	1	1	0.23	0.23	0.230	-	-	0.230	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0315	0.75	0.391	-	-	0.750	Maximum (N<10)
	Tetrachloroethene	2	2	0.18	0.18	0.180	-	-	0.180	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0315	0.0315	0.032	-	-	0.032	Maximum (N<10)
	Trichloroethene	2	2	0.11	0.2	0.155	-	-	0.200	Maximum (N<10)
	Vinyl Chloride	2	2	0.014	0.017	0.016	-	-	0.017	Maximum (N<10)
2802-WE	1,1,1-Trichloroethane	19	16	0.057	1	0.217	Non-parametric	0.319	0.319	95% UCL
	1,1-Dichloroethane	19	2	0.00125	0.27	0.057	-	-	0.270	Maximum (>50% NDs)
	1,1-Dichloroethene	19	8	0.018	0.27	0.070	-	-	0.270	Maximum (>50% NDs)
	1,2-Dichloroethane	19	15	0.013	0.45	0.086	Non-parametric	0.127	0.127	95% UCL
	Chloroethane	19	3	0.016	0.27	0.050	-	-	0.270	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	19	1	0.002	0.4	0.061	-	-	0.400	Maximum (>50% NDs)
	Tetrachloroethene	19	17	0.14	1.1	0.328	Lognormal	0.413	0.413	95% UCL
	trans-1,2-Dichloroethene	19	0	0.00115	0.27	0.043	-	-	0.270	Maximum (>50% NDs)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Trichloroethene	19	15	0.0185	0.99	0.197	Lognormal	0.368	0.368	95% UCL
	Vinyl Chloride	19	1	0.0033	0.27	0.041	-	-	0.270	Maximum (>50% NDs)
2803-UN	1,1,1-Trichloroethane	2	2	0.14	0.92	0.530	-	-	0.920	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.023	0.023	0.023	-	-	0.023	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.024	0.058	0.041	-	-	0.058	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.035	0.035	0.035	-	-	0.035	Maximum (N<10)
	Chloroethane	1	1	0.029	0.029	0.029	-	-	0.029	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.023	0.65	0.337	-	-	0.650	Maximum (N<10)
	Tetrachloroethene	2	2	0.37	0.52	0.445	-	-	0.520	Maximum (N<10)
	trans-1,2-Dichloroethene	1	1	0.013	0.013	0.013	-	-	0.013	Maximum (N<10)
	Trichloroethene	2	2	0.13	0.83	0.480	-	-	0.830	Maximum (N<10)
	Vinyl Chloride	2	1	0.0058	0.125	0.065	-	-	0.125	Maximum (N<10)
2804-UN	1,1,1-Trichloroethane	2	2	0.29	0.5	0.395	-	-	0.500	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.015	0.015	0.015	-	-	0.015	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.016	0.039	0.028	-	-	0.039	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.1	0.1	0.100	-	-	0.100	Maximum (N<10)
	Chloroethane	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0175	0.8	0.409	-	-	0.800	Maximum (N<10)
	Tetrachloroethene	2	2	0.099	0.16	0.130	-	-	0.160	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	Trichloroethene	2	2	0.17	0.18	0.175	-	-	0.180	Maximum (N<10)
	Vinyl Chloride	2	0	0.0175	0.16	0.089	-	-	0.160	Maximum (N<10)
2804-WE	1,1,1-Trichloroethane	11	11	0.049	1.1	0.226	Lognormal	0.411	0.411	95% UCL
	1,1-Dichloroethane	11	3	0.009	0.13	0.028	-	-	0.130	Maximum (>50% NDs)
	1,1-Dichloroethene	11	10	0.0185	0.27	0.129	Normal	0.165	0.165	95% UCL
	1,2-Dichloroethane	11	11	0.036	0.38	0.117	Lognormal	0.195	0.195	95% UCL
	Chloroethane	11	4	0.016	0.1	0.036	-	-	0.100	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	11	0	0.00235	0.02	0.017	-	-	0.020	Maximum (>50% NDs)
	Tetrachloroethene	11	11	0.11	0.76	0.338	Lognormal	0.570	0.570	95% UCL
	trans-1,2-Dichloroethene	11	0	0.00135	0.02	0.017	-	-	0.020	Maximum (>50% NDs)
	Trichloroethene	11	11	0.068	1.1	0.311	Lognormal	0.652	0.652	95% UCL
	Vinyl Chloride	11	1	0.00385	0.02	0.017	-	-	0.020	Maximum (>50% NDs)
2805-UN	1,1,1-Trichloroethane	25	24	0.0225	5.7	0.467	Non-parametric	0.844	0.844	95% UCL
	1,1-Dichloroethane	23	2	0.011	13.5	0.643	-	-	13.500	Maximum (>50% NDs)
	1,1-Dichloroethene	25	12	0.016	0.7	0.081	-	-	0.700	Maximum (>50% NDs)
	1,2-Dichloroethane	23	22	0.028	13.5	0.655	Non-parametric	1.615	1.615	95% UCL

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Chloroethane	23	15	0.0145	13.5	0.673	Non-parametric	1.632	1.632	95% UCL
	cis-1,2-Dichloroethene	25	4	0.0066	13.5	0.593	-	-	13.500	Maximum (>50% NDs)
	Tetrachloroethene	25	25	0.054	7.8	0.812	Lognormal	1.245	1.245	95% UCL
	trans-1,2-Dichloroethene	23	0	0.016	13.5	0.664	-	-	13.500	Maximum (>50% NDs)
	Trichloroethene	25	21	0.0175	25	1.748	Lognormal	6.108	6.108	95% UCL
	Vinyl Chloride	25	11	0.0092	2.75	0.134	-	-	2.750	Maximum (>50% NDs)
2806-WE	1,1,1-Trichloroethane	11	11	0.3	1.7	0.727	Non-parametric	0.991	0.991	95% UCL
	1,1-Dichloroethane	11	2	0.0058	0.042	0.019	-	-	0.042	Maximum (>50% NDs)
	1,1-Dichloroethene	11	5	0.0165	0.4	0.100	-	-	0.400	Maximum (>50% NDs)
	1,2-Dichloroethane	11	11	0.074	0.14	0.105	Lognormal	0.119	0.119	95% UCL
	Chloroethane	11	5	0.0165	0.067	0.033	-	-	0.067	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	11	0	0.00225	0.042	0.019	-	-	0.042	Maximum (>50% NDs)
	Tetrachloroethene	11	11	0.18	1.1	0.617	Lognormal	0.897	0.897	95% UCL
	trans-1,2-Dichloroethene	11	1	0.00125	0.026	0.018	-	-	0.026	Maximum (>50% NDs)
	Trichloroethene	11	11	0.045	0.45	0.138	Lognormal	0.248	0.248	95% UCL
	Vinyl Chloride	11	0	0.00365	0.042	0.020	-	-	0.042	Maximum (>50% NDs)
2807-VA	1,1,1-Trichloroethane	1	1	0.2	0.2	0.200	-	-	0.200	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.0037	0.0037	0.004	-	-	0.004	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.051	0.051	0.051	-	-	0.051	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.054	0.054	0.054	-	-	0.054	Maximum (N<10)
	Chloroethane	1	1	0.063	0.063	0.063	-	-	0.063	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	Tetrachloroethene	1	1	0.13	0.13	0.130	-	-	0.130	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	Trichloroethene	1	1	0.19	0.19	0.190	-	-	0.190	Maximum (N<10)
	Vinyl Chloride	1	1	0.011	0.011	0.011	-	-	0.011	Maximum (N<10)
2808-UN	1,1,1-Trichloroethane	3	3	1.5	4.8	3.300	-	-	4.800	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.0205	0.04	0.030	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	3	2	0.018	0.021	0.020	-	-	0.021	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.062	0.072	0.067	-	-	0.072	Maximum (N<10)
	Chloroethane	2	2	0.019	0.036	0.028	-	-	0.036	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.0205	0.6	0.216	-	-	0.600	Maximum (N<10)
	Tetrachloroethene	3	3	0.37	0.56	0.490	-	-	0.560	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0205	0.028	0.024	-	-	0.028	Maximum (N<10)
	Trichloroethene	3	3	0.038	0.32	0.196	-	-	0.320	Maximum (N<10)
	Vinyl Chloride	3	0	0.01	0.125	0.052	-	-	0.125	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
2808-WE	1,1,1-Trichloroethane	2	2	0.24	0.33	0.285	-	-	0.330	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.015	0.015	0.015	-	-	0.015	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.013	0.1	0.057	-	-	0.100	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.33	0.33	0.330	-	-	0.330	Maximum (N<10)
	Chloroethane	1	1	0.15	0.15	0.150	-	-	0.150	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.0023	0.6	0.301	-	-	0.600	Maximum (N<10)
	Tetrachloroethene	2	2	1.1	2.3	1.700	-	-	2.300	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0013	0.0013	0.001	-	-	0.001	Maximum (N<10)
	Trichloroethene	2	2	0.085	0.13	0.108	-	-	0.130	Maximum (N<10)
	Vinyl Chloride	2	2	0.0093	0.013	0.011	-	-	0.013	Maximum (N<10)
2809-UN	1,1,1-Trichloroethane	22	22	0.057	6.4	0.702	Non-parametric	1.267	1.267	95% UCL
	1,1-Dichloroethane	20	3	0.0165	0.75	0.087	-	-	0.750	Maximum (>50% NDs)
	1,1-Dichloroethene	22	16	0.008	0.55	0.068	Non-parametric	0.119	0.119	95% UCL
	1,2-Dichloroethane	20	20	0.027	0.44	0.147	Lognormal	0.238	0.238	95% UCL
	Chloroethane	20	12	0.0135	0.34	0.061	Non-parametric	0.091	0.091	95% UCL
	cis-1,2-Dichloroethene	22	3	0.0024	0.75	0.081	-	-	0.750	Maximum (>50% NDs)
	Tetrachloroethene	22	22	0.058	9	1.272	Lognormal	2.817	2.817	95% UCL
	trans-1,2-Dichloroethene	20	0	0.00135	0.75	0.083	-	-	0.750	Maximum (>50% NDs)
	Trichloroethene	22	21	0.0165	31	3.236	Non-parametric	6.128	6.128	95% UCL
	Vinyl Chloride	22	6	0.004	0.155	0.026	-	-	0.155	Maximum (>50% NDs)
2809-WE	1,1,1-Trichloroethane	1	1	2.7	2.7	2.700	-	-	2.700	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.01	0.01	0.010	-	-	0.010	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.034	0.034	0.034	-	-	0.034	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.054	0.054	0.054	-	-	0.054	Maximum (N<10)
	Chloroethane	1	1	0.045	0.045	0.045	-	-	0.045	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	1	1	0.5	0.5	0.500	-	-	0.500	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	Trichloroethene	1	1	0.32	0.32	0.320	-	-	0.320	Maximum (N<10)
	Vinyl Chloride	1	1	0.011	0.011	0.011	-	-	0.011	Maximum (N<10)
2810-UN	1,1,1-Trichloroethane	3	3	0.088	3.4	1.199	-	-	3.400	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.012	0.0195	0.017	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	3	2	0.0195	0.064	0.046	-	-	0.064	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.073	0.26	0.136	-	-	0.260	Maximum (N<10)
	Chloroethane	3	1	0.0195	0.058	0.032	-	-	0.058	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.0195	0.0215	0.020	-	-	0.022	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Tetrachloroethene	3	3	0.15	0.31	0.203	-	-	0.310	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.0195	0.0215	0.020	-	-	0.022	Maximum (N<10)
	Trichloroethene	3	3	0.084	0.52	0.308	-	-	0.520	Maximum (N<10)
	Vinyl Chloride	3	1	0.017	0.0195	0.019	-	-	0.020	Maximum (N<10)
2810-WE	1,1,1-Trichloroethane	3	3	0.14	0.23	0.190	-	-	0.230	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.0185	0.63	0.224	-	-	0.630	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.011	0.33	0.130	-	-	0.330	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.021	0.085	0.060	-	-	0.085	Maximum (N<10)
	Chloroethane	3	2	0.021	0.069	0.043	-	-	0.069	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.00245	0.0225	0.014	-	-	0.023	Maximum (N<10)
	Tetrachloroethene	3	3	0.19	0.32	0.263	-	-	0.320	Maximum (N<10)
	trans-1,2-Dichloroethene	3	1	0.0014	0.023	0.016	-	-	0.023	Maximum (N<10)
	Trichloroethene	3	3	0.26	1.3	0.887	-	-	1.300	Maximum (N<10)
	Vinyl Chloride	3	2	0.004	0.021	0.012	-	-	0.021	Maximum (N<10)
2811-UN	1,1,1-Trichloroethane	3	3	0.075	0.21	0.135	-	-	0.210	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.011	0.04	0.022	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	3	2	0.02	0.5	0.210	-	-	0.500	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.058	0.89	0.337	-	-	0.890	Maximum (N<10)
	Chloroethane	3	2	0.053	0.12	0.078	-	-	0.120	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.015	0.028	0.020	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	3	3	0.12	0.15	0.140	-	-	0.150	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.015	0.028	0.020	-	-	0.028	Maximum (N<10)
	Trichloroethene	3	3	0.066	0.44	0.201	-	-	0.440	Maximum (N<10)
	Vinyl Chloride	3	2	0.0068	0.015	0.012	-	-	0.015	Maximum (N<10)
2812-WE	1,1,1-Trichloroethane	3	3	0.13	2	1.077	-	-	2.000	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.02	0.44	0.160	-	-	0.440	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.033	0.24	0.144	-	-	0.240	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.13	0.21	0.163	-	-	0.210	Maximum (N<10)
	Chloroethane	3	3	0.035	0.1	0.075	-	-	0.100	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.02	0.021	0.020	-	-	0.021	Maximum (N<10)
	Tetrachloroethene	3	3	0.15	0.3	0.223	-	-	0.300	Maximum (N<10)
	trans-1,2-Dichloroethene	3	1	0.0033	0.021	0.015	-	-	0.021	Maximum (N<10)
	Trichloroethene	3	3	0.043	0.31	0.138	-	-	0.310	Maximum (N<10)
	Vinyl Chloride	3	1	0.0087	0.021	0.017	-	-	0.021	Maximum (N<10)
2901-FR	1,1,1-Trichloroethane	4	4	0.11	0.12	0.115	-	-	0.120	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.017	0.04	0.029	-	-	0.040	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	1,1-Dichloroethene	4	2	0.015	0.02	0.018	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	4	4	0.031	0.42	0.203	-	-	0.420	Maximum (N<10)
	Chloroethane	4	2	0.011	0.077	0.044	-	-	0.077	Maximum (N<10)
	cis-1,2-Dichloroethene	4	1	0.017	0.19	0.066	-	-	0.190	Maximum (N<10)
	Tetrachloroethene	4	4	0.095	0.16	0.126	-	-	0.160	Maximum (N<10)
	trans-1,2-Dichloroethene	4	1	0.017	0.028	0.024	-	-	0.028	Maximum (N<10)
	Trichloroethene	4	4	0.066	0.13	0.089	-	-	0.130	Maximum (N<10)
	Vinyl Chloride	4	1	0.01	0.052	0.022	-	-	0.052	Maximum (N<10)
2902-UN	1,1,1-Trichloroethane	2	2	0.89	0.93	0.910	-	-	0.930	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.021	0.022	0.022	-	-	0.022	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.049	0.1	0.075	-	-	0.100	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.18	0.23	0.205	-	-	0.230	Maximum (N<10)
	Chloroethane	2	2	0.052	0.059	0.056	-	-	0.059	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.021	0.022	0.022	-	-	0.022	Maximum (N<10)
	Tetrachloroethene	2	2	0.4	0.57	0.485	-	-	0.570	Maximum (N<10)
	trans-1,2-Dichloroethene	2	2	0.013	0.019	0.016	-	-	0.019	Maximum (N<10)
	Trichloroethene	2	2	0.39	0.72	0.555	-	-	0.720	Maximum (N<10)
	Vinyl Chloride	2	2	0.0077	0.0094	0.009	-	-	0.009	Maximum (N<10)
2902-VA	1,1,1-Trichloroethane	1	1	0.13	0.13	0.130	-	-	0.130	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.23	0.23	0.230	-	-	0.230	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.057	0.057	0.057	-	-	0.057	Maximum (N<10)
	Chloroethane	1	1	0.044	0.044	0.044	-	-	0.044	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	1	1	0.15	0.15	0.150	-	-	0.150	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	Trichloroethene	1	1	0.057	0.057	0.057	-	-	0.057	Maximum (N<10)
	Vinyl Chloride	1	1	0.0059	0.0059	0.006	-	-	0.006	Maximum (N<10)
2902-WE	1,1,1-Trichloroethane	1	0	0.095	0.095	0.095	-	-	0.095	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.095	0.095	0.095	-	-	0.095	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.095	0.095	0.095	-	-	0.095	Maximum (N<10)
	1,2-Dichloroethane	1	1	2.1	2.1	2.100	-	-	2.100	Maximum (N<10)
	Chloroethane	1	0	0.095	0.095	0.095	-	-	0.095	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.095	0.095	0.095	-	-	0.095	Maximum (N<10)
	Tetrachloroethene	1	0	0.095	0.095	0.095	-	-	0.095	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.095	0.095	0.095	-	-	0.095	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Trichloroethene	1	0	0.095	0.095	0.095	-	-	0.095	Maximum (N<10)
	Vinyl Chloride	1	0	0.095	0.095	0.095	-	-	0.095	Maximum (N<10)
2903-UN	1,1,1-Trichloroethane	1	1	0.088	0.088	0.088	-	-	0.088	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.31	0.31	0.310	-	-	0.310	Maximum (N<10)
	Chloroethane	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	1	1	0.33	0.33	0.330	-	-	0.330	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
	Trichloroethene	1	1	0.096	0.096	0.096	-	-	0.096	Maximum (N<10)
	Vinyl Chloride	1	0	0.019	0.019	0.019	-	-	0.019	Maximum (N<10)
2903-VA	1,1,1-Trichloroethane	1	1	0.098	0.098	0.098	-	-	0.098	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0275	0.0275	0.028	-	-	0.028	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.096	0.096	0.096	-	-	0.096	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.064	0.064	0.064	-	-	0.064	Maximum (N<10)
	Chloroethane	1	0	0.0275	0.0275	0.028	-	-	0.028	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0275	0.0275	0.028	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	1	1	0.16	0.16	0.160	-	-	0.160	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0275	0.0275	0.028	-	-	0.028	Maximum (N<10)
	Trichloroethene	1	1	0.06	0.06	0.060	-	-	0.060	Maximum (N<10)
	Vinyl Chloride	1	0	0.0275	0.0275	0.028	-	-	0.028	Maximum (N<10)
2903-WE	1,1,1-Trichloroethane	1	1	0.056	0.056	0.056	-	-	0.056	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.063	0.063	0.063	-	-	0.063	Maximum (N<10)
	Chloroethane	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	1	1	0.069	0.069	0.069	-	-	0.069	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	Trichloroethene	1	1	0.065	0.065	0.065	-	-	0.065	Maximum (N<10)
	Vinyl Chloride	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
2904-UN	1,1,1-Trichloroethane	1	1	0.097	0.097	0.097	-	-	0.097	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.06	0.06	0.060	-	-	0.060	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Chloroethane	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	1	1	0.14	0.14	0.140	-	-	0.140	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	Trichloroethene	1	1	0.047	0.047	0.047	-	-	0.047	Maximum (N<10)
	Vinyl Chloride	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
2904-WE	1,1,1-Trichloroethane	1	1	0.1	0.1	0.100	-	-	0.100	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0215	0.0215	0.022	-	-	0.022	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.047	0.047	0.047	-	-	0.047	Maximum (N<10)
	Chloroethane	1	0	0.085	0.085	0.085	-	-	0.085	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0215	0.0215	0.022	-	-	0.022	Maximum (N<10)
	Tetrachloroethene	1	1	0.084	0.084	0.084	-	-	0.084	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0215	0.0215	0.022	-	-	0.022	Maximum (N<10)
	Trichloroethene	1	1	0.044	0.044	0.044	-	-	0.044	Maximum (N<10)
	Vinyl Chloride	1	1	0.021	0.021	0.021	-	-	0.021	Maximum (N<10)
2905-WE	1,1,1-Trichloroethane	1	1	1.6	1.6	1.600	-	-	1.600	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.01	0.01	0.010	-	-	0.010	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.063	0.063	0.063	-	-	0.063	Maximum (N<10)
	Chloroethane	1	1	0.064	0.064	0.064	-	-	0.064	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	1	1	0.063	0.063	0.063	-	-	0.063	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	Trichloroethene	1	1	0.035	0.035	0.035	-	-	0.035	Maximum (N<10)
	Vinyl Chloride	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
2907-UN	1,1,1-Trichloroethane	3	3	0.13	0.47	0.247	-	-	0.470	Maximum (N<10)
	1,1-Dichloroethane	3	1	0.013	0.0195	0.017	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	3	3	0.022	0.072	0.053	-	-	0.072	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.055	1.9	0.671	-	-	1.900	Maximum (N<10)
	Chloroethane	3	3	0.032	0.071	0.048	-	-	0.071	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.018	0.0195	0.019	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	3	3	0.14	1.5	0.670	-	-	1.500	Maximum (N<10)
	trans-1,2-Dichloroethene	3	1	0.013	0.018	0.016	-	-	0.018	Maximum (N<10)
	Trichloroethene	3	3	0.055	0.45	0.215	-	-	0.450	Maximum (N<10)
	Vinyl Chloride	3	0	0.018	0.0195	0.019	-	-	0.020	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
2907-VA	1,1,1-Trichloroethane	1	1	0.14	0.14	0.140	-	-	0.140	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.14	0.14	0.140	-	-	0.140	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.19	0.19	0.190	-	-	0.190	Maximum (N<10)
	Chloroethane	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	Tetrachloroethene	1	1	0.1	0.1	0.100	-	-	0.100	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
	Trichloroethene	1	1	0.038	0.038	0.038	-	-	0.038	Maximum (N<10)
	Vinyl Chloride	1	0	0.018	0.018	0.018	-	-	0.018	Maximum (N<10)
2910-UN	1,1,1-Trichloroethane	1	1	0.12	0.12	0.120	-	-	0.120	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0205	0.0205	0.021	-	-	0.021	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.18	0.18	0.180	-	-	0.180	Maximum (N<10)
	1,2-Dichloroethane	1	1	1.5	1.5	1.500	-	-	1.500	Maximum (N<10)
	Chloroethane	1	0	0.0205	0.0205	0.021	-	-	0.021	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0205	0.0205	0.021	-	-	0.021	Maximum (N<10)
	Tetrachloroethene	1	1	0.1	0.1	0.100	-	-	0.100	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0205	0.0205	0.021	-	-	0.021	Maximum (N<10)
	Trichloroethene	1	1	0.046	0.046	0.046	-	-	0.046	Maximum (N<10)
	Vinyl Chloride	1	0	0.0205	0.0205	0.021	-	-	0.021	Maximum (N<10)
2910-WE	1,1,1-Trichloroethane	1	1	0.057	0.057	0.057	-	-	0.057	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.035	0.035	0.035	-	-	0.035	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.14	0.14	0.140	-	-	0.140	Maximum (N<10)
	Chloroethane	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	Tetrachloroethene	1	1	0.14	0.14	0.140	-	-	0.140	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	Trichloroethene	1	1	0.038	0.038	0.038	-	-	0.038	Maximum (N<10)
	Vinyl Chloride	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
2912-WE	1,1,1-Trichloroethane	5	5	0.099	0.15	0.120	-	-	0.150	Maximum (N<10)
	1,1-Dichloroethane	5	0	0.017	0.04	0.024	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	5	5	0.026	0.078	0.051	-	-	0.078	Maximum (N<10)
	1,2-Dichloroethane	5	5	0.019	0.2	0.087	-	-	0.200	Maximum (N<10)
	Chloroethane	5	3	0.0175	0.06	0.036	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	5	2	0.0175	0.067	0.032	-	-	0.067	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Tetrachloroethene	5	5	0.031	0.33	0.182	-	-	0.330	Maximum (N<10)
	trans-1,2-Dichloroethene	5	1	0.0066	0.028	0.018	-	-	0.028	Maximum (N<10)
	Trichloroethene	5	5	0.042	0.67	0.244	-	-	0.670	Maximum (N<10)
	Vinyl Chloride	5	3	0.007	0.0175	0.013	-	-	0.018	Maximum (N<10)
2913-UN	1,1,1-Trichloroethane	3	3	0.51	1.6	0.920	-	-	1.600	Maximum (N<10)
	1,1-Dichloroethane	3	0	0.022	0.04	0.029	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	3	2	0.013	0.02	0.016	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	3	3	0.049	0.055	0.052	-	-	0.055	Maximum (N<10)
	Chloroethane	3	2	0.04	0.06	0.051	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	3	0	0.022	0.028	0.025	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	3	3	0.15	0.23	0.197	-	-	0.230	Maximum (N<10)
	trans-1,2-Dichloroethene	3	0	0.022	0.028	0.025	-	-	0.028	Maximum (N<10)
	Trichloroethene	3	3	0.12	0.14	0.133	-	-	0.140	Maximum (N<10)
	Vinyl Chloride	3	3	0.0068	0.025	0.014	-	-	0.025	Maximum (N<10)
2914-UN	1,1,1-Trichloroethane	8	8	0.059	0.18	0.120	-	-	0.180	Maximum (N<10)
	1,1-Dichloroethane	6	2	0.013	0.02	0.017	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	8	4	0.016	0.13	0.043	-	-	0.130	Maximum (N<10)
	1,2-Dichloroethane	6	6	0.05	0.13	0.089	-	-	0.130	Maximum (N<10)
	Chloroethane	6	2	0.016	0.1	0.043	-	-	0.100	Maximum (N<10)
	cis-1,2-Dichloroethene	8	0	0.016	0.65	0.176	-	-	0.650	Maximum (N<10)
	Tetrachloroethene	8	8	0.13	0.22	0.169	-	-	0.220	Maximum (N<10)
	trans-1,2-Dichloroethene	6	0	0.016	0.02	0.018	-	-	0.020	Maximum (N<10)
	Trichloroethene	8	8	0.049	0.29	0.146	-	-	0.290	Maximum (N<10)
	Vinyl Chloride	8	4	0.014	0.028	0.020	-	-	0.028	Maximum (N<10)
2915-FR	1,1,1-Trichloroethane	1	1	0.11	0.11	0.110	-	-	0.110	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.0087	0.0087	0.009	-	-	0.009	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.046	0.046	0.046	-	-	0.046	Maximum (N<10)
	Chloroethane	1	1	0.055	0.055	0.055	-	-	0.055	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	1	1	0.24	0.24	0.240	-	-	0.240	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0195	0.0195	0.020	-	-	0.020	Maximum (N<10)
	Trichloroethene	1	1	0.12	0.12	0.120	-	-	0.120	Maximum (N<10)
	Vinyl Chloride	1	1	0.0077	0.0077	0.008	-	-	0.008	Maximum (N<10)
2915-VA	1,1,1-Trichloroethane	1	1	0.16	0.16	0.160	-	-	0.160	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0165	0.0165	0.017	-	-	0.017	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	1,1-Dichloroethene	1	1	0.057	0.057	0.057	-	-	0.057	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.04	0.04	0.040	-	-	0.040	Maximum (N<10)
	Chloroethane	1	1	0.047	0.047	0.047	-	-	0.047	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0165	0.0165	0.017	-	-	0.017	Maximum (N<10)
	Tetrachloroethene	1	1	0.41	0.41	0.410	-	-	0.410	Maximum (N<10)
	trans-1,2-Dichloroethene	1	1	0.014	0.014	0.014	-	-	0.014	Maximum (N<10)
	Trichloroethene	1	1	0.15	0.15	0.150	-	-	0.150	Maximum (N<10)
	Vinyl Chloride	1	1	0.0055	0.0055	0.006	-	-	0.006	Maximum (N<10)
3003-UN	1,1,1-Trichloroethane	5	5	0.14	0.31	0.198	-	-	0.310	Maximum (N<10)
	1,1-Dichloroethane	5	2	0.0036	0.0195	0.014	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	5	5	0.011	0.21	0.086	-	-	0.210	Maximum (N<10)
	1,2-Dichloroethane	5	5	0.041	0.085	0.059	-	-	0.085	Maximum (N<10)
	Chloroethane	5	4	0.009	0.13	0.053	-	-	0.130	Maximum (N<10)
	cis-1,2-Dichloroethene	5	0	0.018	0.0195	0.019	-	-	0.020	Maximum (N<10)
	Tetrachloroethene	5	5	0.12	0.36	0.244	-	-	0.360	Maximum (N<10)
	trans-1,2-Dichloroethene	5	0	0.018	0.0195	0.019	-	-	0.020	Maximum (N<10)
	Trichloroethene	5	5	0.099	0.59	0.402	-	-	0.590	Maximum (N<10)
	Vinyl Chloride	5	4	0.013	0.035	0.024	-	-	0.035	Maximum (N<10)
3106-UN	1,1,1-Trichloroethane	2	2	0.11	0.17	0.140	-	-	0.170	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.04	0.04	0.040	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	2	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.026	0.027	0.027	-	-	0.027	Maximum (N<10)
	Chloroethane	2	0	0.06	0.06	0.060	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	2	2	0.072	0.17	0.121	-	-	0.170	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Trichloroethene	2	2	0.025	0.034	0.030	-	-	0.034	Maximum (N<10)
	Vinyl Chloride	2	0	0.01	0.01	0.010	-	-	0.010	Maximum (N<10)
3106-YE	1,1,1-Trichloroethane	2	2	0.12	0.18	0.150	-	-	0.180	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.0175	0.02	0.019	-	-	0.020	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.082	0.086	0.084	-	-	0.086	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.085	0.1	0.093	-	-	0.100	Maximum (N<10)
	Chloroethane	2	2	0.027	0.085	0.056	-	-	0.085	Maximum (N<10)
	cis-1,2-Dichloroethene	2	1	0.0175	0.034	0.026	-	-	0.034	Maximum (N<10)
	Tetrachloroethene	2	2	0.43	0.47	0.450	-	-	0.470	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.0175	0.02	0.019	-	-	0.020	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Trichloroethene	2	2	0.037	0.07	0.054	-	-	0.070	Maximum (N<10)
	Vinyl Chloride	2	1	0.016	0.0175	0.017	-	-	0.018	Maximum (N<10)
3107-YE	1,1,1-Trichloroethane	4	4	0.064	0.28	0.130	-	-	0.280	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.018	0.0185	0.018	-	-	0.019	Maximum (N<10)
	1,1-Dichloroethene	4	3	0.018	0.19	0.111	-	-	0.190	Maximum (N<10)
	1,2-Dichloroethane	4	4	0.029	0.13	0.072	-	-	0.130	Maximum (N<10)
	Chloroethane	4	2	0.018	0.058	0.035	-	-	0.058	Maximum (N<10)
	cis-1,2-Dichloroethene	4	0	0.018	0.0185	0.018	-	-	0.019	Maximum (N<10)
	Tetrachloroethene	4	4	0.037	0.21	0.125	-	-	0.210	Maximum (N<10)
	trans-1,2-Dichloroethene	4	0	0.018	0.0185	0.018	-	-	0.019	Maximum (N<10)
	Trichloroethene	4	4	0.13	7.5	3.958	-	-	7.500	Maximum (N<10)
	Vinyl Chloride	4	2	0.005	0.0185	0.013	-	-	0.019	Maximum (N<10)
3110-YE	1,1,1-Trichloroethane	4	4	0.28	7.1	2.455	-	-	7.100	Maximum (N<10)
	1,1-Dichloroethane	4	1	0.0205	0.051	0.034	-	-	0.051	Maximum (N<10)
	1,1-Dichloroethene	4	1	0.02	0.35	0.104	-	-	0.350	Maximum (N<10)
	1,2-Dichloroethane	4	4	0.052	1.1	0.561	-	-	1.100	Maximum (N<10)
	Chloroethane	4	1	0.0205	0.06	0.038	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	4	1	0.0205	0.056	0.032	-	-	0.056	Maximum (N<10)
	Tetrachloroethene	4	4	0.085	1.2	0.379	-	-	1.200	Maximum (N<10)
	trans-1,2-Dichloroethene	4	0	0.0205	0.028	0.025	-	-	0.028	Maximum (N<10)
	Trichloroethene	4	3	0.0205	0.11	0.050	-	-	0.110	Maximum (N<10)
	Vinyl Chloride	4	1	0.01	0.025	0.020	-	-	0.025	Maximum (N<10)
3112-UN	1,1,1-Trichloroethane	1	1	0.42	0.42	0.420	-	-	0.420	Maximum (N<10)
	1,1-Dichloroethane	1	1	0.0091	0.0091	0.009	-	-	0.009	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.47	0.47	0.470	-	-	0.470	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.23	0.23	0.230	-	-	0.230	Maximum (N<10)
	Chloroethane	1	1	0.06	0.06	0.060	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	Tetrachloroethene	1	1	5.2	5.2	5.200	-	-	5.200	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
	Trichloroethene	1	1	0.33	0.33	0.330	-	-	0.330	Maximum (N<10)
	Vinyl Chloride	1	0	0.0175	0.0175	0.018	-	-	0.018	Maximum (N<10)
3112-WE	1,1,1-Trichloroethane	6	6	0.077	0.17	0.123	-	-	0.170	Maximum (N<10)
	1,1-Dichloroethane	6	0	0.019	0.04	0.028	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	6	3	0.02	0.1	0.045	-	-	0.100	Maximum (N<10)
	1,2-Dichloroethane	6	6	0.038	1.4	0.711	-	-	1.400	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Chloroethane	6	3	0.0265	0.06	0.045	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	6	1	0.02	0.03	0.026	-	-	0.030	Maximum (N<10)
	Tetrachloroethene	6	6	0.052	3	1.066	-	-	3.000	Maximum (N<10)
	trans-1,2-Dichloroethene	6	0	0.019	0.028	0.024	-	-	0.028	Maximum (N<10)
	Trichloroethene	6	6	0.012	0.25	0.115	-	-	0.250	Maximum (N<10)
	Vinyl Chloride	6	2	0.0066	0.0265	0.013	-	-	0.027	Maximum (N<10)
3112-YE	1,1,1-Trichloroethane	1	1	0.44	0.44	0.440	-	-	0.440	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.017	0.017	0.017	-	-	0.017	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.17	0.17	0.170	-	-	0.170	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.061	0.061	0.061	-	-	0.061	Maximum (N<10)
	Chloroethane	1	1	0.052	0.052	0.052	-	-	0.052	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.017	0.017	0.017	-	-	0.017	Maximum (N<10)
	Tetrachloroethene	1	1	0.47	0.47	0.470	-	-	0.470	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.017	0.017	0.017	-	-	0.017	Maximum (N<10)
	Trichloroethene	1	1	0.098	0.098	0.098	-	-	0.098	Maximum (N<10)
	Vinyl Chloride	1	0	0.017	0.017	0.017	-	-	0.017	Maximum (N<10)
3114-WE	1,1,1-Trichloroethane	4	4	0.12	0.27	0.168	-	-	0.270	Maximum (N<10)
	1,1-Dichloroethane	4	0	0.017	0.04	0.029	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	4	2	0.012	0.026	0.020	-	-	0.026	Maximum (N<10)
	1,2-Dichloroethane	4	4	0.022	0.071	0.056	-	-	0.071	Maximum (N<10)
	Chloroethane	4	2	0.031	0.06	0.047	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	4	1	0.016	0.028	0.023	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	4	4	0.061	0.8	0.314	-	-	0.800	Maximum (N<10)
	trans-1,2-Dichloroethene	4	1	0.0088	0.028	0.021	-	-	0.028	Maximum (N<10)
	Trichloroethene	4	4	0.02	0.18	0.102	-	-	0.180	Maximum (N<10)
	Vinyl Chloride	4	3	0.01	0.02	0.014	-	-	0.020	Maximum (N<10)
3116-UN	1,1,1-Trichloroethane	1	1	0.12	0.12	0.120	-	-	0.120	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0155	0.0155	0.016	-	-	0.016	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.01	0.01	0.010	-	-	0.010	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.17	0.17	0.170	-	-	0.170	Maximum (N<10)
	Chloroethane	1	1	0.03	0.03	0.030	-	-	0.030	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0155	0.0155	0.016	-	-	0.016	Maximum (N<10)
	Tetrachloroethene	1	1	0.54	0.54	0.540	-	-	0.540	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0155	0.0155	0.016	-	-	0.016	Maximum (N<10)
	Trichloroethene	1	1	0.05	0.05	0.050	-	-	0.050	Maximum (N<10)
	Vinyl Chloride	1	1	0.0046	0.0046	0.005	-	-	0.005	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
3116-WE	1,1,1-Trichloroethane	2	2	0.15	0.19	0.170	-	-	0.190	Maximum (N<10)
	1,1-Dichloroethane	2	1	0.035	0.17	0.103	-	-	0.170	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.037	0.039	0.038	-	-	0.039	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.12	0.17	0.145	-	-	0.170	Maximum (N<10)
	Chloroethane	2	2	0.039	0.14	0.090	-	-	0.140	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.016	0.035	0.026	-	-	0.035	Maximum (N<10)
	Tetrachloroethene	2	2	0.09	0.13	0.110	-	-	0.130	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.016	0.035	0.026	-	-	0.035	Maximum (N<10)
	Trichloroethene	2	2	0.069	0.1	0.085	-	-	0.100	Maximum (N<10)
	Vinyl Chloride	2	1	0.012	0.035	0.024	-	-	0.035	Maximum (N<10)
3116-YE	1,1,1-Trichloroethane	2	2	0.12	0.2	0.160	-	-	0.200	Maximum (N<10)
	1,1-Dichloroethane	2	0	0.02	0.04	0.030	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	2	2	0.027	0.19	0.109	-	-	0.190	Maximum (N<10)
	1,2-Dichloroethane	2	2	0.065	0.16	0.113	-	-	0.160	Maximum (N<10)
	Chloroethane	2	2	0.033	0.041	0.037	-	-	0.041	Maximum (N<10)
	cis-1,2-Dichloroethene	2	0	0.02	0.028	0.024	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	2	2	0.048	0.12	0.084	-	-	0.120	Maximum (N<10)
	trans-1,2-Dichloroethene	2	0	0.02	0.028	0.024	-	-	0.028	Maximum (N<10)
	Trichloroethene	2	2	0.034	0.3	0.167	-	-	0.300	Maximum (N<10)
	Vinyl Chloride	2	2	0.021	0.076	0.049	-	-	0.076	Maximum (N<10)
3117-XA	1,1,1-Trichloroethane	1	1	0.15	0.15	0.150	-	-	0.150	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.031	0.031	0.031	-	-	0.031	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.031	0.031	0.031	-	-	0.031	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.078	0.078	0.078	-	-	0.078	Maximum (N<10)
	Chloroethane	1	0	0.031	0.031	0.031	-	-	0.031	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.031	0.031	0.031	-	-	0.031	Maximum (N<10)
	Tetrachloroethene	1	1	3	3	3.000	-	-	3.000	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.031	0.031	0.031	-	-	0.031	Maximum (N<10)
	Trichloroethene	1	1	0.13	0.13	0.130	-	-	0.130	Maximum (N<10)
	Vinyl Chloride	1	0	0.031	0.031	0.031	-	-	0.031	Maximum (N<10)
3205-YE	1,1,1-Trichloroethane	1	1	1.4	1.4	1.400	-	-	1.400	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.04	0.04	0.040	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	1	0	0.02	0.02	0.020	-	-	0.020	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.15	0.15	0.150	-	-	0.150	Maximum (N<10)
	Chloroethane	1	0	0.06	0.06	0.060	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	Tetrachloroethene	1	1	0.37	0.37	0.370	-	-	0.370	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Trichloroethene	1	1	0.69	0.69	0.690	-	-	0.690	Maximum (N<10)
	Vinyl Chloride	1	1	0.0066	0.0066	0.007	-	-	0.007	Maximum (N<10)
3209-WE	1,1,1-Trichloroethane	6	6	0.082	0.25	0.155	-	-	0.250	Maximum (N<10)
	1,1-Dichloroethane	6	0	0.016	0.04	0.026	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	6	4	0.02	0.065	0.046	-	-	0.065	Maximum (N<10)
	1,2-Dichloroethane	6	6	0.055	0.32	0.128	-	-	0.320	Maximum (N<10)
	Chloroethane	6	4	0.0225	0.13	0.066	-	-	0.130	Maximum (N<10)
	cis-1,2-Dichloroethene	6	1	0.016	0.028	0.024	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	6	6	0.086	3.5	0.824	-	-	3.500	Maximum (N<10)
	trans-1,2-Dichloroethene	6	1	0.013	0.028	0.022	-	-	0.028	Maximum (N<10)
	Trichloroethene	6	6	0.054	0.25	0.127	-	-	0.250	Maximum (N<10)
	Vinyl Chloride	6	3	0.0087	0.031	0.017	-	-	0.031	Maximum (N<10)
3302-UN	1,1,1-Trichloroethane	1	1	0.11	0.11	0.110	-	-	0.110	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.0165	0.0165	0.017	-	-	0.017	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.2	0.2	0.200	-	-	0.200	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.066	0.066	0.066	-	-	0.066	Maximum (N<10)
	Chloroethane	1	0	0.0165	0.0165	0.017	-	-	0.017	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.0165	0.0165	0.017	-	-	0.017	Maximum (N<10)
	Tetrachloroethene	1	1	0.53	0.53	0.530	-	-	0.530	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.0165	0.0165	0.017	-	-	0.017	Maximum (N<10)
	Trichloroethene	1	1	0.055	0.055	0.055	-	-	0.055	Maximum (N<10)
	Vinyl Chloride	1	0	0.0165	0.0165	0.017	-	-	0.017	Maximum (N<10)
3304-XA	1,1,1-Trichloroethane	1	1	0.14	0.14	0.140	-	-	0.140	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.04	0.04	0.040	-	-	0.040	Maximum (N<10)
	1,1-Dichloroethene	1	1	0.013	0.013	0.013	-	-	0.013	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.12	0.12	0.120	-	-	0.120	Maximum (N<10)
	Chloroethane	1	0	0.06	0.06	0.060	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	1	1	0.12	0.12	0.120	-	-	0.120	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Trichloroethene	1	1	0.062	0.062	0.062	-	-	0.062	Maximum (N<10)
	Vinyl Chloride	1	1	0.0063	0.0063	0.006	-	-	0.006	Maximum (N<10)
3407-YE	1,1,1-Trichloroethane	1	1	0.16	0.16	0.160	-	-	0.160	Maximum (N<10)
	1,1-Dichloroethane	1	0	0.04	0.04	0.040	-	-	0.040	Maximum (N<10)

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
	1,1-Dichloroethene	1	1	0.022	0.022	0.022	-	-	0.022	Maximum (N<10)
	1,2-Dichloroethane	1	1	0.19	0.19	0.190	-	-	0.190	Maximum (N<10)
	Chloroethane	1	0	0.06	0.06	0.060	-	-	0.060	Maximum (N<10)
	cis-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Tetrachloroethene	1	1	0.18	0.18	0.180	-	-	0.180	Maximum (N<10)
	trans-1,2-Dichloroethene	1	0	0.028	0.028	0.028	-	-	0.028	Maximum (N<10)
	Trichloroethene	1	1	0.17	0.17	0.170	-	-	0.170	Maximum (N<10)
	Vinyl Chloride	1	0	0.01	0.01	0.010	-	-	0.010	Maximum (N<10)

Notes

[1] Concentrations below the detection limit were assigned a value of one-half the detection limit of the method used.

[2] The data distribution and associated 95% UCL were calculated using the Washington Department of Ecology MTCA*Stat* 97 Site Module software.

J - Estimated value

N - Number of samples

RME - Reasonable maximum exposure

U - Non-detected value

μg/m^3 - micrograms per cubic meter

Table 14. Resonable Maximum Exposure Estimates for VOCs in Outdoor Air (µg/m^3)

Cadet Manufacturing Company
Port of Vancouver, Washington

Site Name	Analyte	N	Detects	Min [1]	Max [1]	Mean [1]	Distribution [2]	95% UCL [2]	RME	RME Based on
Cadet Site Area	1,1,1-Trichloroethane	81	78	0.019	0.56	0.097	Lognormal	0.106	0.106	95% UCL
	1,1-Dichloroethane	80	7	0.004	0.75	0.060	-	-	0.750	Maximum (>50% NDs)
	1,1-Dichloroethene	81	22	0.004	0.038	0.018	-	-	0.038	Maximum (>50% NDs)
	1,2-Dichloroethane	80	66	0.015	5.9	0.112	Non-parametric	0.232	0.232	95% UCL
	Chloroethane	80	30	0.009	0.25	0.034	-	-	0.250	Maximum (>50% NDs)
	cis-1,2-Dichloroethene	81	7	0.005	0.75	0.057	-	-	0.750	Maximum (>50% NDs)
	Tetrachloroethene	81	81	0.025	1.6	0.187	Lognormal	0.209	0.209	95% UCL
	trans-1,2-Dichloroethene	80	6	0.004	0.75	0.069	-	-	0.750	Maximum (>50% NDs)
	Trichloroethene	81	46	0.005	2.1	0.124	Lognormal	0.136	0.136	95% UCL
	Vinyl chloride	81	4	0.004	0.15	0.025	-	-	0.150	Maximum (>50% NDs)

Notes

[1] Concentrations below the detection limit were assigned a value of one-half the detection limit of the method used.

[2] The data distribution and associated 95% UCL were calculated using the Washington Department of Ecology MTCA*Stat* 97 Site Module software.

95% UCL - 95th percentile upper confidence limit

RME - Reasonable maximum exposure

µg/m^3 - Micrograms per cubic meter

Table 15. Summary of Exposure Factors by Receptor Group

Cadet Manufacturing Company
Port of Vancouver, Washington

Exposure Pathway	Parameter	Units	Cadet Site Worker	Cadet Site Excavation Worker	NFVN Adult Resident	NFVN Child Resident	Reference		Equation
Ingestion of	Concentration in water (CW)	µg/L	Chemical Specific				Calculated		
Groundwater	Drinking water ingestion rate (DWIR	L/day	2	2	2	1	Ecology 2005, USEPA 1997a	Dose =	CW x DWIR x INH x DWF x ED x EF
	Inhalation Correction factor (INH)	unitless	2	2	2	2	Ecology 2005	(mg/kg-day)	ABW x UCF x AT
	Drinking water fraction (DWF)	unitless	1	1	1	1	Ecology 2005		
	Exposure Frequency (EF)	days/yr	219	30	365	365	USEPA 2004		
	Exposure Duration (ED)	years	20	1	30	6	Ecology 2005		
	Average body weight (ABW)	kg	70	70	70	16	Ecology 2005		
	Unit conversion factor (UCF)	µg/mg	1000	1000	1000	1000			
	Averaging time - noncancer (AT)	days	7300	365	10950	2190	Ecology 2005		
	Averaging time - cancer (AT)	days	27375	27375	27375	-	Ecology 2005		
Dermal Contact	Dermal absorption (DA)	mg/cm^2-event	Chemical Specific				Calculated	DA =	(CW x UCF x UCF x KP x ET)
with Groundwater	Concentration in water (CW)	ug/L	Chemical Specific				Calculated	(mg/cm^2-event)	
	Event Time (ET)	hours	0.58	2	0.58	0.58	USEPA 1997a, 2006		
	Dermal Absorption Rate (KP)	cm/hr	Chemical Specific				USEPA 2004		
	Unit conversion factor (UCF)	mg/µg	0.001	0.001	0.001	0.001			
	Unit conversion factor (UCF)	L/cm^3	0.001	0.001	0.001	0.001			
	Surface area (SA)	cm^2	19400	23000	19400	7800	Ecology 2005, USEPA 1997a, USEPA 2006	Dose =	DA x SA x ED x EV x EF
	Exposure Duration (ED)	years	20	1	30	6	Ecology 2005, Professional Judgement	(mg/kg-day)	ABW x AT
	Event Frequency (EV)	events/day	1	1	1	1	USEPA 2004		
	Exposure Frequency (EF)	days/year	219	30	365	365	Ecology 2005, USEPA 2004, Professional Judgement		
	Average body weight (ABW)	kg	70	70	70	16	Ecology 2005		
	Averaging time - noncancer (AT)	days	7300	365	10950	2190	Ecology 2005		
	Averaging time - cancer (AT)	days	27375	27375	27375	-	Ecology 2005		
Ingestion of	Concentration in soil (CS)	µg/kg	Chemical Specific				Calculated		
Soil	Soil ingestion rate (SIR)	mg/day	50	300	100	200	Ecology 2005, USEPA 1997a	Dose =	CS x SIR x ABS x ED x EF
	Absorption fraction (ABS)	unitless	1	1	1	1	Ecology 2005	(mg/kg-day)	ABW x UCF x UCF x AT
	Exposure Duration (ED)	years	20	1	30	6	Ecology 2005, Professional Judgement		
	Exposure frequency (EF)	days/year	219	30	365	365	Ecology 2005, USEPA 2004		
	Average body weight (ABW)	kg	70	70	70	16	Ecology 2005		
	Unit conversion factor (UCF)	mg/kg	1E+06	1E+06	1E+06	1E+06			
	Unit conversion factor (UCF)	µg/mg	1000	1000	1000	1000			
	Averaging time - noncancer (AT)	days	7300	365	10950	2190	Ecology 2005		
	Averaging time - cancer (AT)	days	27375	27375	27375	-	Ecology 2005		
Dermal Contact	Concentration in soil (CS)	µg/kg	Chemical Specific				Calculated		
Soil	Surface area (SA)	cm^2	3300	23000	5700	2800	Ecology 2005, USEPA 2004	Dose =	CS x SA x AF x DA x ED x EV x EF
	Adherence Factor (AF)	mg/cm^2-event	0.07	0.3	0.2	0.4	USEPA 2004	(mg/kg-day)	ABW x UCF x UCF x AT
	Dermal Absorption Fraction (DA)	unitless	0.03	0.03	0.03	0.03	USEPA 2004, Ecology 2005		
	Exposure Duration (ED)	years	20	1	30	6	Ecology 2005, Professional Judgement		
	Event Frequency (EV)	events/day	1	1	1	1	USEPA 2004		
	Exposure Frequency (EF)	days/yr	219	30	365	365	USEPA 2004		
	Average body weight (ABW)	kg	70	70	70	16	Ecology 2005		
	Unit conversion factor (UCF)	mg/kg	1E+06	1E+06	1E+06	1E+06			
	Unit conversion factor (UCF)	ug/kg	1000	1000	1000	1000			
	Averaging time - noncancer (AT)	days	7300	365	10950	2190	Ecology 2005		
	Averaging time - cancer (AT)	days	27375	27375	27375	-	Ecology 2005		
Inhalation of	Concentration in air (CA)	µg/m^3	Chemical Specific				Calculated		
Indoor Air	Breathing rate (BR)	m^3/day	6.67 (8hr-day)	-	20	10	Ecology 2005	Dose =	CA x BR x ABS x ED x EF
	Inhalation absorption fraction (ABS)	unitless	1	-	1	1	Ecology 2005	(mg/kg-day)	ABW x UCF x AT
	Exposure duration (ED)	years	20	-	30	6	Ecology 2005		
	Exposure frequency (EF)	days/year	219	-	365	365	Ecology 2005, USEPA 2004		
	Average body weight (ABW)	kg	70	-	70	16	Ecology 2005		
	Unit conversion factor (UCF)	µg/mg	1000	-	1000	1000			
	Averaging time - noncancer (AT)	days	7300	-	10950	2190	Ecology 2005		
	Averaging time - cancer (AT)	days	27375	-	27375	-	Ecology 2005		
Inhalation of	Concentration in air (CA)	µg/m^3	Chemical Specific				Calculated		
Outdoor Air	Breathing rate (BR)	m^3/day	1.67 (2hr-outdoors)	20 (8hr -outdoors, heavy activity)	1.67 (2hr-outdoors)	2.92 (7hr-outside)	Ecology 2005, USEPA 1997a	Dose = (mg/kg-day)	CA x BR x ABS x ED x EF ABW x UCF x AT
	Inhalation absorption fraction (ABS)	unitless	1	1	1	1	Ecology 2005		
	Exposure duration (ED)	years	20	1	30	6	Ecology 2005, Professional Judgement		
	Exposure frequency (EF)	days/year	219	30	365	365	Ecology 2005, USEPA 2004		
	Average body weight (ABW)	kg	70	70	70	16	Ecology 2005		
	Unit conversion factor (UCF)	µg/mg	1000	1000	1000	1000			
	Averaging time - noncancer (AT)	days	7300	365	10950	2190	Ecology 2005		
	Averaging time - cancer (AT)	days	27375	27375	27375	-	Ecology 2005		

Table 16. Summary of Toxicity Values

Cadet Manufacturing Company
Port of Vancouver, Washington

Chemical	Oral Reference Dose (mg/kg-day)	Oral Cancer Slope Factor $(mg/kg\text{-}day)^{-1}$	Inhalation Reference Dose (mg/kg-day)	Inhalation Cancer Slope Factor $(mg/kg\text{-}day)^{-1}$
1,1,1-Trichloroethane	0.9	NC	3	NC
1,1-Dichloroethane	0.2	0.0057	0.2	NA
1,1-Dichloroethene	0.05	NA	0.057	NA
1,2-Dichloroethane	0.02	0.091	0.001	0.091
1,2-Dichloroethene (cis-)	0.01	NC	0.01	NC
1,2-Dichloroethene (trans-)	0.02	NA	0.02	NA
Chloroethane	0.4	0.0029	2.90	0.0029
Chloroform	0.01	0.0061	0.13	0.081
Methylene chloride	0.06	0.0075	0.857	0.0016
Tetrachloroethene	0.01	0.54	0.017	0.021
Toluene	0.08	NA	1.4	NA
Trichloroethene	0.0003	0.089	0.01	0.089
Trichlorofluoromethane	0.3	NA	0.2	NA
Vinyl chloride	0.003	1.5	0.029	0.0308

Abbreviations

NA - Not available
NC - Non carcinogenic

Units

mg/kg-day - milligrams per killogram per day

Notes

1. Lowest value (Methods A and B, cancer or noncancer from Ecology CLARC Database)
2. In the absence of values in Ecology CLARC Database, US EPA (2009) Region 6 Preliminary Remediation Goals were supplemented.

Table 17a. Exposure Quantification and Risk Estimation for Groundwater Wells by Water Bearing Zone

Cadet Manufacturing Company
Port of Vancouver, Washington

					Cadet Site Worker									Cadet Site Excavation Worker									NFVN Resident (adult)									NFVN Resident (child)				
Well Locations	Analyte	RME (ug/l)	RfDi (mg/kg-d)	CSFi (mg/kg-d)-1	Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion / Inhalation Dose (mg/kg-d)	Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)	Total Dose (mg/kg-d)	Total Risk (unitless)
					NC	C		NC	C	NC	C	NC	C	NC	C		NC	C	NC	C	NC	C	NC	C		NC	C	NC	C	NC	C	NC		NC	NC	NC
Shallow	1,1,1-Trichloroethane	5.300	3.00	NC	1.82E-04	4.85E-05	1.09E-07	1.81E-05	4.84E-06	2.00E-04	5.33E-05	6.66E-05	-	2.49E-05	3.32E-07	2.11E-07	5.70E-06	7.60E-08	3.06E-05	4.08E-07	1.02E-05	-	3.03E-04	1.21E-04	1.09E-07	3.02E-05	#######	3.33E-04	1.33E-04	1.11E-04	-	6.63E-04	1.09E-07	5.32E-05	7.16E-04	2.39E-04
	1,1-Dichloroethane	2.500	0.2	NA	8.57E-05	2.29E-05	2.20E-08	3.66E-06	9.76E-07	8.94E-05	2.38E-05	4.47E-04	-	1.17E-05	1.57E-07	4.61E-08	1.25E-06	1.66E-08	1.30E-05	1.73E-07	6.49E-05	-	1.43E-04	5.71E-05	2.20E-08	6.10E-06	#######	1.49E-04	5.96E-05	7.45E-04	-	3.13E-04	2.20E-08	1.07E-05	3.23E-04	1.62E-03
	1,1-Dichloroethene	0.332	0.057	NA	1.14E-05	3.04E-06	4.98E-09	8.28E-07	2.21E-07	1.22E-05	3.26E-06	2.14E-04	-	1.56E-06	2.08E-08	1.04E-08	2.81E-07	3.75E-09	1.84E-06	2.45E-08	3.23E-05	-	1.90E-05	7.59E-06	4.98E-09	1.38E-06	#######	2.04E-05	8.14E-06	3.57E-04	-	4.15E-05	4.98E-09	2.43E-06	4.39E-05	7.71E-04
	Chloroform	13.000	0.13	0.0805	4.46E-04	1.19E-04	1.32E-07	2.20E-05	5.86E-06	4.68E-04	1.25E-04	3.60E-03	1E-05	6.11E-05	8.14E-07	2.63E-07	7.11E-06	9.48E-08	6.82E-05	9.09E-07	5.24E-04	7E-08	7.43E-04	2.97E-04	1.32E-07	3.66E-05	#######	7.79E-04	3.12E-04	6.00E-03	3E-05	1.63E-03	1.32E-07	6.44E-05	1.69E-03	1.30E-02
	cis-1,2-Dichloroethene	9.200	0.01	NC	3.15E-04	8.41E-05	9.13E-08	1.52E-05	4.05E-06	3.31E-04	8.82E-05	3.31E-02	-	4.32E-05	5.76E-07	1.92E-07	5.19E-06	6.92E-08	4.84E-05	6.45E-07	4.84E-03	-	5.26E-04	2.10E-04	9.13E-08	2.53E-05	#######	5.51E-04	2.20E-04	5.51E-02	-	1.15E-03	9.13E-08	4.45E-05	1.19E-03	1.19E-01
	Tetrachloroethene	15.470	0.017	0.021	5.30E-04	1.41E-04	1.04E-06	1.73E-04	4.61E-05	7.03E-04	1.88E-04	4.14E-02	4E-06	7.27E-05	9.69E-07	1.92E-06	5.20E-05	6.93E-07	1.25E-04	1.66E-06	7.33E-03	3E-08	8.84E-04	3.54E-04	1.04E-06	2.88E-04	#######	1.17E-03	4.69E-04	6.89E-02	1E-05	1.93E-03	1.04E-06	5.07E-04	2.44E-03	1.44E-01
	Toluene	2.500	1.4	NA	8.57E-05	2.29E-05	9.70E-08	1.61E-05	4.30E-06	1.02E-04	2.72E-05	7.27E-05	-	1.17E-05	1.57E-07	2.00E-07	5.40E-06	7.19E-08	1.71E-05	2.29E-07	1.22E-05	-	1.43E-04	5.71E-05	9.70E-08	2.69E-05	#######	1.70E-04	6.79E-05	1.21E-04	-	3.13E-04	9.70E-08	4.73E-05	3.60E-04	2.57E-04
	Trichloroethene	47.341	0.0100	0.089	1.62E-03	4.33E-04	8.87E-07	1.47E-04	3.93E-05	1.77E-03	4.72E-04	1.77E-01	4E-05	2.22E-04	2.96E-06	1.72E-06	4.65E-05	6.20E-07	2.69E-04	3.58E-06	2.69E-02	3E-07	2.71E-03	1.08E-03	8.87E-07	2.46E-04	#######	2.95E-03	1.18E-03	2.95E-01	1E-04	5.92E-03	8.87E-07	4.32E-04	6.35E-03	6.35E-01
	Trichlorofluoromethane	0.332	0.2	NA	1.14E-05	3.04E-06	7.08E-09	1.18E-06	3.14E-07	1.26E-05	3.35E-06	6.28E-05	-	1.56E-06	2.08E-08	1.36E-08	3.68E-07	4.91E-09	1.93E-06	2.57E-08	9.64E-06	-	1.90E-05	7.59E-06	7.08E-09	1.96E-06	#######	2.09E-05	8.37E-06	1.05E-04	-	4.15E-05	7.08E-09	3.45E-06	4.50E-05	2.25E-04
Intermediate	1,1,1-Trichloroethane	9.600	3.00	NC	3.29E-04	8.78E-05	1.98E-07	3.28E-05	8.76E-06	3.62E-04	9.65E-05	1.21E-04	-	4.51E-05	6.01E-07	3.82E-07	1.03E-05	1.38E-07	5.54E-05	7.39E-07	1.85E-05	-	5.49E-04	2.19E-04	1.98E-07	5.47E-05	#######	6.03E-04	2.41E-04	2.01E-04	-	1.20E-03	1.98E-07	9.63E-05	1.30E-03	4.32E-04
	1,1-Dichloroethane	6.300	0.2	NA	2.16E-04	5.76E-05	5.55E-08	9.22E-06	2.46E-06	2.25E-04	6.01E-05	1.13E-03	-	2.96E-05	3.95E-07	1.16E-07	3.14E-06	4.18E-08	3.27E-05	4.36E-07	1.64E-04	-	3.60E-04	1.44E-04	5.55E-08	1.54E-05	#######	3.75E-04	1.50E-04	1.88E-03	-	7.88E-04	5.55E-08	2.70E-05	8.15E-04	4.07E-03
	1,1-Dichloroethene	6.400	0.057	NA	2.19E-04	5.85E-05	9.60E-08	1.60E-05	4.26E-06	2.35E-04	6.28E-05	4.13E-03	-	3.01E-05	4.01E-07	2.01E-07	5.42E-06	7.23E-08	3.55E-05	4.73E-07	6.22E-04	-	3.66E-04	1.46E-04	9.60E-08	2.66E-05	#######	3.92E-04	1.57E-04	6.88E-03	-	8.00E-04	9.60E-08	4.68E-05	8.47E-04	1.49E-02
	Chloroform	2.690	0.13	0.0805	9.22E-05	2.46E-05	2.73E-08	4.55E-06	1.21E-06	9.68E-05	2.58E-05	7.44E-04	2E-06	1.26E-05	1.68E-07	5.45E-08	1.47E-06	1.96E-08	1.41E-05	1.88E-07	1.09E-04	2E-08	1.54E-04	6.15E-05	2.73E-08	7.58E-06	#######	1.61E-04	6.45E-05	1.24E-03	5E-06	3.36E-04	2.73E-08	1.33E-05	3.50E-04	2.69E-03
	cis-1,2-Dichloroethene	7.049	0.01	NC	2.42E-04	6.44E-05	7.00E-08	1.16E-05	3.10E-06	2.53E-04	6.75E-05	2.53E-02	-	3.31E-05	4.41E-07	1.47E-07	3.97E-06	5.30E-08	3.71E-05	4.94E-07	3.71E-03	-	4.03E-04	1.61E-04	7.00E-08	1.94E-05	#######	4.22E-04	1.69E-04	4.22E-02	-	8.81E-04	7.00E-08	3.41E-05	9.15E-04	9.15E-02
	Tetrachloroethene	7.349	0.017	0.021	2.52E-04	6.72E-05	4.94E-07	8.21E-05	2.19E-05	3.34E-04	8.91E-05	1.97E-02	2E-06	3.45E-05	4.60E-07	9.14E-07	2.47E-05	3.29E-07	5.92E-05	7.89E-07	3.48E-03	2E-08	4.20E-04	1.68E-04	4.94E-07	1.37E-04	#######	5.57E-04	2.23E-04	3.28E-02	5E-06	9.19E-04	4.94E-07	2.41E-04	1.16E-03	6.82E-02
	Toluene	8.960	1.4	NA	3.07E-04	8.19E-05	3.47E-07	5.78E-05	1.54E-05	3.65E-04	9.73E-05	2.61E-04	-	4.21E-05	5.61E-07	7.16E-07	1.93E-05	2.58E-07	6.14E-05	8.19E-07	4.39E-05	-	5.12E-04	2.05E-04	3.47E-07	9.63E-05	#######	6.08E-04	2.43E-04	4.35E-04	-	1.12E-03	3.47E-07	1.69E-04	1.29E-03	9.21E-04
	Trichloroethene	18.170	0.0100	0.089	6.23E-04	1.66E-04	3.40E-07	5.66E-05	1.51E-05	6.80E-04	1.81E-04	6.80E-02	2E-05	8.53E-05	1.14E-06	6.61E-07	1.78E-05	2.38E-07	1.03E-04	1.38E-06	1.03E-02	1E-07	1.04E-03	4.15E-04	3.40E-07	9.43E-05	#######	1.13E-03	4.53E-04	1.13E-01	4E-05	2.27E-03	3.40E-07	1.66E-04	2.44E-03	2.44E-01
	Trichlorofluoromethane	0.269	0.2	NA	9.22E-06	2.46E-06	5.74E-09	9.54E-07	2.54E-07	1.02E-05	2.71E-06	5.09E-05	-	1.26E-06	1.68E-08	1.10E-08	2.98E-07	3.97E-09	1.56E-06	2.08E-08	7.81E-06	-	1.54E-05	6.15E-06	5.74E-09	1.59E-06	#######	1.70E-05	6.78E-06	8.48E-05	-	3.36E-05	5.74E-09	2.80E-06	3.64E-05	1.82E-04
Deep	1,1,1-Trichloroethane	2.035	3.00	NC	6.98E-05	1.86E-05	4.19E-08	6.96E-06	1.86E-06	7.67E-05	2.05E-05	2.56E-05	-	9.56E-06	1.27E-07	8.10E-08	2.19E-06	2.92E-08	1.17E-05	1.57E-07	3.92E-06	-	1.16E-04	4.65E-05	4.19E-08	1.16E-05	#######	1.28E-04	5.12E-05	4.26E-05	-	2.54E-04	4.19E-08	2.04E-05	2.75E-04	9.16E-05
	1,1-Dichloroethane	1.057	0.2	NA	3.62E-05	9.66E-06	9.31E-09	1.55E-06	4.13E-07	3.78E-05	1.01E-05	1.89E-04	-	4.96E-06	6.62E-08	1.95E-08	5.26E-07	7.02E-09	5.49E-06	7.32E-08	2.75E-05	-	6.04E-05	2.42E-05	9.31E-09	2.58E-06	#######	6.30E-05	2.52E-05	3.15E-04	-	1.32E-04	9.31E-09	4.54E-06	1.37E-04	6.83E-04
	1,1-Dichloroethene	1.164	0.057	NA	3.99E-05	1.06E-05	1.75E-08	2.90E-06	7.74E-07	4.28E-05	1.14E-05	7.51E-04	-	5.47E-06	7.29E-08	3.65E-08	9.86E-07	1.31E-08	6.45E-06	8.60E-08	1.13E-04	-	6.65E-05	2.66E-05	1.75E-08	4.84E-06	#######	7.13E-05	2.85E-05	1.25E-03	-	1.45E-04	1.75E-08	8.51E-06	1.54E-04	2.70E-03
	Chloroform	0.259	0.13	0.0805	8.88E-06	2.37E-06	2.63E-09	4.38E-07	1.17E-07	9.32E-06	2.48E-06	7.17E-05	2E-07	1.22E-06	1.62E-08	5.25E-09	1.42E-07	1.89E-09	1.36E-06	1.81E-08	1.04E-05	1E-09	1.48E-05	5.92E-06	2.63E-09	7.30E-07	#######	1.55E-05	6.21E-06	1.19E-04	5E-07	3.24E-05	2.63E-09	1.28E-06	3.37E-05	2.59E-04
	cis-1,2-Dichloroethene	6.297	0.01	NC	2.16E-04	5.76E-05	6.25E-08	1.04E-05	2.77E-06	2.26E-04	6.03E-05	2.26E-02	-	2.96E-05	3.94E-07	1.31E-07	3.55E-06	4.73E-08	3.31E-05	4.42E-07	3.31E-03	-	3.60E-04	1.44E-04	6.25E-08	1.73E-05	#######	3.77E-04	1.51E-04	3.77E-02	-	7.87E-04	6.25E-08	3.05E-05	8.18E-04	8.18E-02
	Tetrachloroethene	4.634	0.017	0.021	1.59E-04	4.24E-05	3.11E-07	5.18E-05	1.38E-05	2.11E-04	5.62E-05	1.24E-02	1E-06	2.18E-05	2.90E-07	5.76E-07	1.56E-05	2.08E-07	3.73E-05	4.98E-07	2.20E-03	1E-08	2.65E-04	1.06E-04	3.11E-07	8.63E-05	#######	3.51E-04	1.40E-04	2.07E-02	3E-06	5.79E-04	3.11E-07	1.52E-04	7.31E-04	4.30E-02
	Toluene	16.000	1.4	NA	5.49E-04	1.46E-04	6.21E-07	1.03E-04	2.75E-05	6.52E-04	1.74E-04	4.66E-04	-	7.51E-05	1.00E-06	1.28E-06	3.45E-05	4.60E-07	1.10E-04	1.46E-06	7.83E-05	-	9.14E-04	3.66E-04	6.21E-07	1.72E-04	#######	1.09E-03	4.35E-04	7.76E-04	-	2.00E-03	6.21E-07	3.03E-04	2.30E-03	1.64E-03
	Trichloroethene	18.758	0.0100	0.089	6.43E-04	1.71E-04	3.51E-07	5.84E-05	1.56E-05	7.02E-04	1.87E-04	7.02E-02	2E-05	8.81E-05	1.17E-06	6.82E-07	1.84E-05	2.46E-07	1.07E-04	1.42E-06	1.07E-02	1E-07	1.07E-03	4.29E-04	3.51E-07	9.74E-05	#######	1.17E-03	4.68E-04	1.17E-01	4E-05	2.34E-03	3.51E-07	1.71E-04	2.52E-03	2.52E-01
	Trichlorofluoromethane	1.430	0.2	NA	4.90E-05	1.31E-05	3.05E-08	5.07E-06	1.35E-06	5.41E-05	1.44E-05	2.70E-04	-	6.72E-06	8.95E-08	5.87E-08	1.58E-06	2.11E-08	8.30E-06	1.11E-07	4.15E-05	-	8.17E-05	3.27E-05	3.05E-08	8.45E-06	#######	9.02E-05	3.61E-05	4.51E-04	-	1.79E-04	3.05E-08	1.49E-05	1.94E-04	9.68E-04
TGA	1,1,1-Trichloroethane	0.950	3.00	NC	3.26E-05	8.69E-06	1.95E-08	3.25E-06	8.67E-07	3.58E-05	9.55E-06	1.19E-05	-	4.46E-06	5.95E-08	3.78E-08	1.02E-06	1.36E-08	5.48E-06	7.31E-08	1.83E-06	-	5.43E-05	2.17E-05	1.95E-08	5.42E-06	#######	5.97E-05	2.39E-05	1.99E-05	-	1.19E-04	1.95E-08	9.53E-06	1.28E-04	4.28E-05
	1,1-Dichloroethane	0.720	0.2	NA	2.47E-05	6.58E-06	6.34E-09	1.05E-06	2.81E-07	2.57E-05	6.86E-06	1.29E-04	-	3.38E-06	4.51E-08	1.33E-08	3.59E-07	4.78E-09	3.74E-06	4.99E-08	1.87E-05	-	4.11E-05	1.65E-05	6.34E-09	1.76E-06	#######	4.29E-05	1.72E-05	2.14E-04	-	9.00E-05	6.34E-09	3.09E-06	9.31E-05	4.65E-04
	1,1-Dichloroethene	0.820	0.057	NA	2.81E-05	7.50E-06	1.23E-08	2.05E-06	5.46E-07	3.02E-05	8.04E-06	5.29E-04	-	3.85E-06	5.14E-08	2.57E-08	6.95E-07	9.26E-09	4.55E-06	6.06E-08	7.98E-05	-	4.69E-05	1.87E-05	1.23E-08	3.41E-06	#######	5.03E-05	2.01E-05	8.82E-04	-	1.03E-04	1.23E-08	6.00E-06	1.08E-04	1.90E-03
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	1.43E-05	5.71E-06	2.54E-09	7.04E-07	#######	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	5.500	0.01	NC	1.89E-04	5.03E-05	5.46E-08	9.08E-06	2.42E-06	1.98E-04	5.27E-05	1.98E-02	-	2.58E-05	3.44E-07	1.15E-07	3.10E-06	4.14E-08	2.89E-05	3.86E-07	2.89E-03	-	3.14E-04	1.26E-04	5.46E-08	1.51E-05	#######	3.29E-04	1.32E-04	3.29E-02	-	6.88E-04	5.46E-08	2.66E-05	7.14E-04	7.14E-02
	Tetrachloroethene	8.400	0.017	0.021	2.88E-04	7.68E-05	5.64E-07	9.38E-05	2.50E-05	3.82E-04	1.02E-04	2.25E-02	2E-06	3.95E-05	5.26E-07	1.04E-06	2.82E-05	3.76E-07	6.77E-05	9.02E-07	3.98E-03	2E-08	4.80E-04	1.92E-04	5.64E-07	1.56E-04	#######	6.36E-04	2.55E-04	3.74E-02	5E-06	1.05E-03	5.64E-07	2.75E-04	1.33E-03	7.79E-02
	Toluene	4.710	1.4	NA	1.61E-04	4.31E-05	1.83E-07	3.04E-05	8.10E-06	1.92E-04	5.12E-05	1.37E-04	-	2.21E-05	2.95E-07	3.76E-07	1.02E-05	1.36E-07	3.23E-05	4.30E-07	2.31E-05	-	2.69E-04	1.08E-04	1.83E-07	5.06E-05	#######	3.20E-04	1.28E-04	2.28E-04	-	5.89E-04	1.83E-07	8.91E-05	6.78E-04	4.84E-04
	Trichloroethene	20.000	0.0100	0.089	6.86E-04	1.83E-04	3.75E-07	6.23E-05	1.66E-05	7.48E-04	1.99E-04	7.48E-02	2E-05	9.39E-05	1.25E-06	7.27E-07	1.96E-05	2.62E-07	1.14E-04	1.51E-06	1.14E-02	1E-07	1.14E-03	4.57E-04	3.75E-07	1.04E-04	#######	1.25E-03	4.99E-04	1.25E-01	4E-05	2.50E-03	3.75E-07	1.83E-04	2.68E-03	2.68E-01
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	1.43E-05	5.71E-06	5.33E-09	1.48E-06	#######	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04

NC - Noncancer
C - Cancer
- - No samples contained detected concentrations of this contaminant

Table 17a. Exposure Quantification and Risk Estimation for Groundwater Wells by Water Bearing Zone

Cadet Manufacturing Company
Port of Vancouver, Washington

					Cadet Site Worker									Cadet Site Excavation Worker									NFVN Resident (adult)									NFVN Resident (child)				
Well Locations	Analyte	RME (ug/l)	RfDi (mg/kg-d)	CSFi (mg/kg-d)-1	Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Inhalation Dose (mg/kg-d)	Dermal Absorption (mg/cm^2-	Dermal Dose (mg/kg-d)	Total Dose (mg/kg-d)	Total Risk (unitless)
					NC	C		NC	C	NC	C	NC	C	NC	C		NC	C	NC	C	NC	C	NC	C		NC	C	NC	C	NC	C	NC		NC	NC	NC
Shallow	1,1,1-Trichloroethane	5.300	3.00	NC	1.82E-04	4.85E-05	1.09E-07	1.81E-05	4.84E-06	2.00E-04	5.33E-05	6.66E-05	-	2.49E-05	3.32E-07	2.11E-07	5.70E-06	7.60E-08	3.06E-05	4.08E-07	1.02E-05	-	3.03E-04	1.21E-04	1.09E-07	3.02E-05	1.21E-05	3.33E-04	1.33E-04	1.11E-04	-	6.63E-04	1.09E-07	5.32E-05	7.16E-04	2.39E-04
	1,1-Dichloroethane	2.500	0.2	NA	8.57E-05	2.29E-05	2.20E-08	3.66E-06	9.76E-07	8.94E-05	2.38E-05	4.47E-04	-	1.17E-05	1.57E-07	4.61E-08	1.25E-06	1.66E-08	1.30E-05	1.73E-07	6.49E-05	-	1.43E-04	5.71E-05	2.20E-08	6.10E-06	2.44E-06	1.49E-04	5.96E-05	7.45E-04	-	3.13E-04	2.20E-08	1.07E-05	3.23E-04	1.62E-03
	1,1-Dichloroethene	0.332	0.057	NA	1.14E-05	3.04E-06	4.98E-09	8.28E-07	2.21E-07	1.22E-05	3.26E-06	2.14E-04	-	1.56E-06	2.08E-08	1.04E-08	2.81E-07	3.75E-09	1.84E-06	2.45E-08	3.23E-05	-	1.90E-05	7.59E-06	4.98E-09	1.38E-06	5.52E-07	2.04E-05	8.14E-06	3.57E-04	-	4.15E-05	4.98E-09	2.43E-06	4.39E-05	7.71E-04
	Chloroform	13.000	0.13	0.0805	4.46E-04	1.19E-04	1.32E-07	2.20E-05	5.86E-06	4.68E-04	1.25E-04	3.60E-03	1E-05	6.11E-05	8.14E-07	2.63E-07	7.11E-06	9.48E-08	6.82E-05	9.09E-07	5.24E-04	7E-08	7.43E-04	2.97E-04	1.32E-07	3.66E-05	1.46E-05	7.79E-04	3.12E-04	6.00E-03	3E-05	1.63E-03	1.32E-07	6.44E-05	1.69E-03	1.30E-02
	cis-1,2-Dichloroethene	9.200	0.01	NC	3.15E-04	8.41E-05	9.13E-08	1.52E-05	4.05E-06	3.31E-04	8.82E-05	3.31E-02	-	4.32E-05	5.76E-07	1.92E-07	5.19E-06	6.92E-08	4.84E-05	6.45E-07	4.84E-03	-	5.26E-04	2.10E-04	9.13E-08	2.53E-05	1.01E-05	5.51E-04	2.20E-04	5.51E-02	-	1.15E-03	9.13E-08	4.45E-05	1.19E-03	1.19E-01
	Tetrachloroethene	15.470	0.017	0.021	5.30E-04	1.41E-04	1.04E-06	1.73E-04	4.61E-05	7.03E-04	1.88E-04	4.14E-02	4E-06	7.27E-05	9.69E-07	1.92E-06	5.20E-05	6.93E-07	1.25E-04	1.66E-06	7.33E-03	3E-08	8.84E-04	3.54E-04	1.04E-06	2.88E-04	1.15E-04	1.17E-03	4.69E-04	6.89E-02	1E-05	1.93E-03	1.04E-06	5.07E-04	2.44E-03	1.44E-01
	Toluene	2.500	1.4	NA	8.57E-05	2.29E-05	9.70E-08	1.61E-05	4.30E-06	1.02E-04	2.72E-05	7.27E-05	-	1.17E-05	1.57E-07	2.00E-07	5.40E-06	7.19E-08	1.71E-05	2.29E-07	1.22E-05	-	1.43E-04	5.71E-05	9.70E-08	2.69E-05	1.07E-05	1.70E-04	6.79E-05	1.21E-04	-	3.13E-04	9.70E-08	4.73E-05	3.60E-04	2.57E-04
	Trichloroethene	47.341	0.0100	0.089	1.62E-03	4.33E-04	8.87E-07	1.47E-04	3.93E-05	1.77E-03	4.72E-04	1.77E-01	4E-05	2.22E-04	2.96E-06	1.72E-06	4.65E-05	6.20E-07	2.69E-04	3.58E-06	2.69E-02	3E-07	2.71E-03	1.08E-03	8.87E-07	2.46E-04	9.83E-05	2.95E-03	1.18E-03	2.95E-01	1E-04	5.92E-03	8.87E-07	4.32E-04	6.35E-03	6.35E-01
	Trichlorofluoromethane	0.332	0.2	NA	1.14E-05	3.04E-06	7.08E-09	1.18E-06	3.14E-07	1.26E-05	3.35E-06	6.28E-05	-	1.56E-06	2.08E-08	1.36E-08	3.68E-07	4.91E-09	1.93E-06	2.57E-08	9.64E-06	-	1.90E-05	7.59E-06	7.08E-09	1.96E-06	7.85E-07	2.09E-05	8.37E-06	1.05E-04	-	4.15E-05	7.08E-09	3.45E-06	4.50E-05	2.25E-04
Intermediate	1,1,1-Trichloroethane	9.600	3.00	NC	3.29E-04	8.78E-05	1.98E-07	3.28E-05	8.76E-06	3.62E-04	9.65E-05	1.21E-04	-	4.51E-05	6.01E-07	3.82E-07	1.03E-05	1.38E-07	5.54E-05	7.39E-07	1.85E-05	-	5.49E-04	2.19E-04	1.98E-07	5.47E-05	2.19E-05	6.03E-04	2.41E-04	2.01E-04	-	1.20E-03	1.98E-07	9.63E-05	1.30E-03	4.32E-04
	1,1-Dichloroethane	6.300	0.2	NA	2.16E-04	5.76E-05	5.55E-08	9.22E-06	2.46E-06	2.25E-04	6.01E-05	1.13E-03	-	2.96E-05	3.95E-07	1.16E-07	3.14E-06	4.18E-08	3.27E-05	4.36E-07	1.64E-04	-	3.60E-04	1.44E-04	5.55E-08	1.54E-05	6.15E-06	3.75E-04	1.50E-04	1.88E-03	-	7.88E-04	5.55E-08	2.70E-05	8.15E-04	4.07E-03
	1,1-Dichloroethene	6.400	0.057	NA	2.19E-04	5.85E-05	9.60E-08	1.60E-05	4.26E-06	2.35E-04	6.28E-05	4.13E-03	-	3.01E-05	4.01E-07	2.01E-07	5.42E-06	7.23E-08	3.55E-05	4.73E-07	6.22E-04	-	3.66E-04	1.46E-04	9.60E-08	2.66E-05	1.06E-05	3.92E-04	1.57E-04	6.88E-03	-	8.00E-04	9.60E-08	4.68E-05	8.47E-04	1.49E-02
	Chloroform	2.690	0.13	0.0805	9.22E-05	2.46E-05	2.73E-08	4.55E-06	1.21E-06	9.68E-05	2.58E-05	7.44E-04	2E-06	1.26E-05	1.68E-07	5.45E-08	1.47E-06	1.96E-08	1.41E-05	1.88E-07	1.09E-04	2E-08	1.54E-04	6.15E-05	2.73E-08	7.58E-06	3.03E-06	1.61E-04	6.45E-05	1.24E-03	5E-06	3.36E-04	2.73E-08	1.33E-05	3.50E-04	2.69E-03
	cis-1,2-Dichloroethene	7.049	0.01	NC	2.42E-04	6.44E-05	7.00E-08	1.16E-05	3.10E-06	2.53E-04	6.75E-05	2.53E-02	-	3.31E-05	4.41E-07	1.47E-07	3.97E-06	5.30E-08	3.71E-05	4.94E-07	3.71E-03	-	4.03E-04	1.61E-04	7.00E-08	1.94E-05	7.76E-06	4.22E-04	1.69E-04	4.22E-02	-	8.81E-04	7.00E-08	3.41E-05	9.15E-04	9.15E-02
	Tetrachloroethene	7.349	0.017	0.021	2.52E-04	6.72E-05	4.94E-07	8.21E-05	2.19E-05	3.34E-04	8.91E-05	1.97E-02	2E-06	3.45E-05	4.60E-07	9.14E-07	2.47E-05	3.29E-07	5.92E-05	7.89E-07	3.48E-03	2E-08	4.20E-04	1.68E-04	4.94E-07	1.37E-04	5.47E-05	5.57E-04	2.23E-04	3.28E-02	5E-06	9.19E-04	4.94E-07	2.41E-04	1.16E-03	6.82E-02
	Toluene	8.960	1.4	NA	3.07E-04	8.19E-05	3.47E-07	5.78E-05	1.54E-05	3.65E-04	9.73E-05	2.61E-04	-	4.21E-05	5.61E-07	7.16E-07	1.93E-05	2.58E-07	6.14E-05	8.19E-07	4.39E-05	-	5.12E-04	2.05E-04	3.47E-07	9.63E-05	3.85E-05	6.08E-04	2.43E-04	4.35E-04	-	1.12E-03	3.47E-07	1.69E-04	1.29E-03	9.21E-04
	Trichloroethene	18.170	0.0100	0.089	6.23E-04	1.66E-04	3.40E-07	5.66E-05	1.51E-05	6.80E-04	1.81E-04	6.80E-02	2E-05	8.53E-05	1.14E-06	6.61E-07	1.78E-05	2.38E-07	1.03E-04	1.38E-06	1.03E-02	1E-07	1.04E-03	4.15E-04	3.40E-07	9.43E-05	3.77E-05	1.13E-03	4.53E-04	1.13E-01	4E-05	2.27E-03	3.40E-07	1.66E-04	2.44E-03	2.44E-01
	Trichlorofluoromethane	0.269	0.2	NA	9.22E-06	2.46E-06	5.74E-09	9.54E-07	2.54E-07	1.02E-05	2.71E-06	5.09E-05	-	1.26E-06	1.68E-08	1.10E-08	2.98E-07	3.97E-09	1.56E-06	2.08E-08	7.81E-06	-	1.54E-05	6.15E-06	5.74E-09	1.59E-06	6.36E-07	1.70E-05	6.78E-06	8.48E-05	-	3.36E-05	5.74E-09	2.80E-06	3.64E-05	1.82E-04
Deep	1,1,1-Trichloroethane	2.035	3.00	NC	6.98E-05	1.86E-05	4.19E-08	6.96E-06	1.86E-06	7.67E-05	2.05E-05	2.56E-05	-	9.56E-06	1.27E-07	8.10E-08	2.19E-06	2.92E-08	1.17E-05	1.57E-07	3.92E-06	-	1.16E-04	4.65E-05	4.19E-08	1.16E-05	4.64E-06	1.28E-04	5.12E-05	4.26E-05	-	2.54E-04	4.19E-08	2.04E-05	2.75E-04	9.16E-05
	1,1-Dichloroethane	1.057	0.2	NA	3.62E-05	9.66E-06	9.31E-09	1.55E-06	4.13E-07	3.78E-05	1.01E-05	1.89E-04	-	4.96E-06	6.62E-08	1.95E-08	5.26E-07	7.02E-09	5.49E-06	7.32E-08	2.75E-05	-	6.04E-05	2.42E-05	9.31E-09	2.58E-06	1.03E-06	6.30E-05	2.52E-05	3.15E-04	-	1.32E-04	9.31E-09	4.54E-06	1.37E-04	6.83E-04
	1,1-Dichloroethene	1.164	0.057	NA	3.99E-05	1.06E-05	1.75E-08	2.90E-06	7.74E-07	4.28E-05	1.14E-05	7.51E-04	-	5.47E-06	7.29E-08	3.65E-08	9.86E-07	1.31E-08	6.45E-06	8.60E-08	1.13E-04	-	6.65E-05	2.66E-05	1.75E-08	4.84E-06	1.94E-06	7.13E-05	2.85E-05	1.25E-03	-	1.45E-04	1.75E-08	8.51E-06	1.54E-04	2.70E-03
	Chloroform	0.259	0.13	0.0805	8.88E-06	2.37E-06	2.63E-09	4.38E-07	1.17E-07	9.32E-06	2.48E-06	7.17E-05	2E-07	1.22E-06	1.62E-08	5.25E-09	1.42E-07	1.89E-09	1.36E-06	1.81E-08	1.04E-05	1E-09	1.48E-05	5.92E-06	2.63E-09	7.30E-07	2.92E-07	1.55E-05	6.21E-06	1.19E-04	5E-07	3.24E-05	2.63E-09	1.28E-06	3.37E-05	2.59E-04
	cis-1,2-Dichloroethene	6.297	0.01	NC	2.16E-04	5.76E-05	6.25E-08	1.04E-05	2.77E-06	2.26E-04	6.03E-05	2.26E-02	-	2.96E-05	3.94E-07	1.31E-07	3.55E-06	4.73E-08	3.31E-05	4.42E-07	3.31E-03	-	3.60E-04	1.44E-04	6.25E-08	1.73E-05	6.93E-06	3.77E-04	1.51E-04	3.77E-02	-	7.87E-04	6.25E-08	3.05E-05	8.18E-04	8.18E-02
	Tetrachloroethene	4.634	0.017	0.021	1.59E-04	4.24E-05	3.11E-07	5.18E-05	1.38E-05	2.11E-04	5.62E-05	1.24E-02	1E-06	2.18E-05	2.90E-07	5.76E-07	1.56E-05	2.08E-07	3.73E-05	4.98E-07	2.20E-03	1E-08	2.65E-04	1.06E-04	3.11E-07	8.63E-05	3.45E-05	3.51E-04	1.40E-04	2.07E-02	3E-06	5.79E-04	3.11E-07	1.52E-04	7.31E-04	4.30E-02
	Toluene	16.000	1.4	NA	5.49E-04	1.46E-04	6.21E-07	1.03E-04	2.75E-05	6.52E-04	1.74E-04	4.66E-04	-	7.51E-05	1.00E-06	1.28E-06	3.45E-05	4.60E-07	1.10E-04	1.46E-06	7.83E-05	-	9.14E-04	3.66E-04	6.21E-07	1.72E-04	6.88E-05	1.09E-03	4.35E-04	7.76E-04	-	2.00E-03	6.21E-07	3.03E-04	2.30E-03	1.64E-03
	Trichloroethene	18.758	0.0100	0.089	6.43E-04	1.71E-04	3.51E-07	5.84E-05	1.56E-05	7.02E-04	1.87E-04	7.02E-02	2E-05	8.81E-05	1.17E-06	6.82E-07	1.84E-05	2.46E-07	1.07E-04	1.42E-06	1.07E-02	1E-07	1.07E-03	4.29E-04	3.51E-07	9.74E-05	3.89E-05	1.17E-03	4.68E-04	1.17E-01	4E-05	2.34E-03	3.51E-07	1.71E-04	2.52E-03	2.52E-01
	Trichlorofluoromethane	1.430	0.2	NA	4.90E-05	1.31E-05	3.05E-08	5.07E-06	1.35E-06	5.41E-05	1.44E-05	2.70E-04	-	6.72E-06	8.95E-08	5.87E-08	1.58E-06	2.11E-08	8.30E-06	1.11E-07	4.15E-05	-	8.17E-05	3.27E-05	3.05E-08	8.45E-06	3.38E-06	9.02E-05	3.61E-05	4.51E-04	-	1.79E-04	3.05E-08	1.49E-05	1.94E-04	9.68E-04
TGA	1,1,1-Trichloroethane	0.950	3.00	NC	3.26E-05	8.69E-06	1.95E-08	3.25E-06	8.67E-07	3.58E-05	9.55E-06	1.19E-05	-	4.46E-06	5.95E-08	3.78E-08	1.02E-06	1.36E-08	5.48E-06	7.31E-08	1.83E-06	-	5.43E-05	2.17E-05	1.95E-08	5.42E-06	2.17E-06	5.97E-05	2.39E-05	1.99E-05	-	1.19E-04	1.95E-08	9.53E-06	1.28E-04	4.28E-05
	1,1-Dichloroethane	0.720	0.2	NA	2.47E-05	6.58E-06	6.34E-09	1.05E-06	2.81E-07	2.57E-05	6.86E-06	1.29E-04	-	3.38E-06	4.51E-08	1.33E-08	3.59E-07	4.78E-09	3.74E-06	4.99E-08	1.87E-05	-	4.11E-05	1.65E-05	6.34E-09	1.76E-06	7.03E-07	4.29E-05	1.72E-05	2.14E-04	-	9.00E-05	6.34E-09	3.09E-06	9.31E-05	4.65E-04
	1,1-Dichloroethene	0.820	0.057	NA	2.81E-05	7.50E-06	1.23E-08	2.05E-06	5.46E-07	3.02E-05	8.04E-06	5.29E-04	-	3.85E-06	5.14E-08	2.57E-08	6.95E-07	9.26E-09	4.55E-06	6.06E-08	7.98E-05	-	4.69E-05	1.87E-05	1.23E-08	3.41E-06	1.36E-06	5.03E-05	2.01E-05	8.82E-04	-	1.03E-04	1.23E-08	6.00E-06	1.08E-04	1.90E-03
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	5.500	0.01	NC	1.89E-04	5.03E-05	5.46E-08	9.08E-06	2.42E-06	1.98E-04	5.27E-05	1.98E-02	-	2.58E-05	3.44E-07	1.15E-07	3.10E-06	4.14E-08	2.89E-05	3.86E-07	2.89E-03	-	3.14E-04	1.26E-04	5.46E-08	1.51E-05	6.05E-06	3.29E-04	1.32E-04	3.29E-02	-	6.88E-04	5.46E-08	2.66E-05	7.14E-04	7.14E-02
	Tetrachloroethene	8.400	0.017	0.021	2.88E-04	7.68E-05	5.64E-07	9.38E-05	2.50E-05	3.82E-04	1.02E-04	2.25E-02	2E-06	3.95E-05	5.26E-07	1.04E-06	2.82E-05	3.76E-07	6.77E-05	9.02E-07	3.98E-03	2E-08	4.80E-04	1.92E-04	5.64E-07	1.56E-04	6.26E-05	6.36E-04	2.55E-04	3.74E-02	5E-06	1.05E-03	5.64E-07	2.75E-04	1.33E-03	7.79E-02
	Toluene	4.710	1.4	NA	1.61E-04	4.31E-05	1.83E-07	3.04E-05	8.10E-06	1.92E-04	5.12E-05	1.37E-04	-	2.21E-05	2.95E-07	3.76E-07	1.02E-05	1.36E-07	3.23E-05	4.30E-07	2.31E-05	-	2.69E-04	1.08E-04	1.83E-07	5.06E-05	2.02E-05	3.20E-04	1.28E-04	2.28E-04	-	5.89E-04	1.83E-07	8.91E-05	6.78E-04	4.84E-04
	Trichloroethene	20.000	0.0100	0.089	6.86E-04	1.83E-04	3.75E-07	6.23E-05	1.66E-05	7.48E-04	1.99E-04	7.48E-02	2E-05	9.39E-05	1.25E-06	7.27E-07	1.96E-05	2.62E-07	1.14E-04	1.51E-06	1.14E-02	1E-07	1.14E-03	4.57E-04	3.75E-07	1.04E-04	4.15E-05	1.25E-03	4.99E-04	1.25E-01	4E-05	2.50E-03	3.75E-07	1.83E-04	2.68E-03	2.68E-01
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04

NC - Noncancer
C - Cancer
- - No samples contained detected concentrations of this contaminant

Table 17b. Exposure Quantification and Risk Estimation for Groundwater Wells

Cadet Manufacturing Company
Port of Vancouver, Washington

					Cadet Site Worker									Cadet Site Excavation Worker									NFVN Resident (adult)									NFVN Resident (child)				
Well Name	Analyte	RME (ug/l)	RfDi (mg/kg-d)	CSFi $(mg/kg\text{-}d)^{-1}$	Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)	Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)	Total Dose (mg/kg-d)	Total Risk (unitless)
Shallow Groundwater Zone					NC	C		NC	C	NC	C	NC	C	NC	C		NC	C	NC	C	NC	C	NC	C		NC	C	NC	C	NC	C	NC		NC	NC	NC
CM-DPW-01	1,1,1-Trichloroethane	1.250	3.00	NC	4.29E-05	1.14E-05	2.57E-08	4.28E-06	1.14E-06	4.71E-05	1.26E-05	1.57E-05	-	5.87E-06	7.83E-08	4.98E-08	1.34E-06	1.79E-08	7.21E-06	9.62E-08	2.40E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	1.250	0.2	NA	4.29E-05	1.14E-05	1.10E-08	1.83E-06	4.88E-07	4.47E-05	1.19E-05	2.23E-04	-	5.87E-06	7.83E-08	2.31E-08	6.23E-07	8.30E-09	6.49E-06	8.66E-08	3.25E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	1.250	0.057	NA	4.29E-05	1.14E-05	1.88E-08	3.12E-06	8.32E-07	4.60E-05	1.23E-05	8.07E-04	-	5.87E-06	7.83E-08	3.92E-08	1.06E-06	1.41E-08	6.93E-06	9.24E-08	1.22E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	1.250	0.13	0.0805	4.29E-05	1.14E-05	1.27E-08	2.11E-06	5.63E-07	4.50E-05	1.20E-05	3.46E-04	1E-06	5.87E-06	7.83E-08	2.53E-08	6.84E-07	9.12E-09	6.55E-06	8.74E-08	5.04E-05	7E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	1.250	0.01	NC	4.29E-05	1.14E-05	1.24E-08	2.06E-06	5.50E-07	4.49E-05	1.20E-05	4.49E-03	-	5.87E-06	7.83E-08	2.61E-08	7.05E-07	9.40E-09	6.58E-06	8.77E-08	6.58E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	109.000	0.017	0.021	3.74E-03	9.97E-04	7.32E-06	1.22E-03	3.25E-04	4.95E-03	1.32E-03	2.91E-01	3E-05	5.12E-04	6.83E-06	1.36E-05	3.66E-04	4.88E-06	8.78E-04	1.17E-05	5.17E-02	2E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	2.500	1.4	NA	8.57E-05	2.29E-05	9.70E-08	1.61E-05	4.30E-06	1.02E-04	2.72E-05	7.27E-05	-	1.17E-05	1.57E-07	2.00E-07	5.40E-06	7.19E-08	1.71E-05	2.29E-07	1.22E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	14.000	0.0100	0.089	4.80E-04	1.28E-04	2.62E-07	4.36E-05	1.16E-05	5.24E-04	1.40E-04	5.24E-02	1E-05	6.58E-05	8.77E-07	5.09E-07	1.37E-05	1.83E-07	7.95E-05	1.06E-06	7.95E-03	9E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	1.250	0.2	NA	4.29E-05	1.14E-05	2.67E-08	4.43E-06	1.18E-06	4.73E-05	1.26E-05	2.36E-04	-	5.87E-06	7.83E-08	5.13E-08	1.39E-06	1.85E-08	7.26E-06	9.67E-08	3.63E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-DPW-06	1,1,1-Trichloroethane	0.500	3.00	NC	1.71E-05	4.57E-06	1.03E-08	1.71E-06	4.56E-07	1.89E-05	5.03E-06	6.28E-06	-	2.35E-06	3.13E-08	1.99E-08	5.37E-07	7.17E-09	2.89E-06	3.85E-08	9.62E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.500	0.2	NA	1.71E-05	4.57E-06	4.40E-09	7.32E-07	1.95E-07	1.79E-05	4.77E-06	8.94E-05	-	2.35E-06	3.13E-08	9.22E-09	2.49E-07	3.32E-09	2.60E-06	3.46E-08	1.30E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.500	0.057	NA	1.71E-05	4.57E-06	7.50E-09	1.25E-06	3.33E-07	1.84E-05	4.90E-06	3.23E-04	-	2.35E-06	3.13E-08	1.57E-08	4.24E-07	5.65E-09	2.77E-06	3.70E-08	4.86E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.500	0.13	0.0805	1.71E-05	4.57E-06	5.08E-09	8.45E-07	2.25E-07	1.80E-05	4.80E-06	1.38E-04	4E-07	2.35E-06	3.13E-08	1.01E-08	2.74E-07	3.65E-09	2.62E-06	3.50E-08	2.02E-05	3E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.500	0.01	NC	1.71E-05	4.57E-06	4.96E-09	8.25E-07	2.20E-07	1.80E-05	4.79E-06	1.80E-03	-	2.35E-06	3.13E-08	1.04E-08	2.82E-07	3.76E-09	2.63E-06	3.51E-08	2.63E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	15.600	0.017	0.021	5.35E-04	1.43E-04	1.05E-06	1.74E-04	4.65E-05	7.09E-04	1.89E-04	4.17E-02	4E-06	7.33E-05	9.77E-07	1.94E-06	5.24E-05	6.99E-07	1.26E-04	1.68E-06	7.39E-03	4E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.500	1.4	NA	1.71E-05	4.57E-06	1.94E-08	3.22E-06	8.60E-07	2.04E-05	5.43E-06	1.45E-05	-	2.35E-06	3.13E-08	4.00E-08	1.08E-06	1.44E-08	3.43E-06	4.57E-08	2.45E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	17.000	0.0100	0.089	5.83E-04	1.55E-04	3.18E-07	5.29E-05	1.41E-05	6.36E-04	1.70E-04	6.36E-02	2E-05	7.98E-05	1.06E-06	6.18E-07	1.67E-05	2.23E-07	9.65E-05	1.29E-06	9.65E-03	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.500	0.2	NA	1.71E-05	4.57E-06	1.07E-08	1.77E-06	4.73E-07	1.89E-05	5.04E-06	9.46E-05	-	2.35E-06	3.13E-08	2.05E-08	5.54E-07	7.39E-09	2.90E-06	3.87E-08	1.45E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-DPW-10	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.250	0.01	NC	8.57E-06	2.29E-06	2.48E-09	4.13E-07	1.10E-07	8.98E-06	2.40E-06	8.98E-04	-	1.17E-06	1.57E-08	5.22E-09	1.41E-07	1.88E-09	1.32E-06	1.75E-08	1.32E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	5.100	0.017	0.021	1.75E-04	4.66E-05	3.43E-07	5.70E-05	1.52E-05	2.32E-04	6.18E-05	1.36E-02	1E-06	2.40E-05	3.19E-07	6.34E-07	1.71E-05	2.28E-07	4.11E-05	5.48E-07	2.42E-03	1E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	20.000	0.0100	0.089	6.86E-04	1.83E-04	3.75E-07	6.23E-05	1.66E-05	7.48E-04	1.99E-04	7.48E-02	2E-05	9.39E-05	1.25E-06	7.27E-07	1.96E-05	2.62E-07	1.14E-04	1.51E-06	1.14E-02	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-DPW-16	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.610	0.13	0.0805	2.09E-05	5.58E-06	6.20E-09	1.03E-06	2.75E-07	2.19E-05	5.85E-06	1.69E-04	5E-07	2.86E-06	3.82E-08	1.24E-08	3.34E-07	4.45E-09	3.20E-06	4.26E-08	2.46E-05	3E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.660	0.01	NC	2.26E-05	6.03E-06	6.55E-09	1.09E-06	2.91E-07	2.37E-05	6.32E-06	2.37E-03	-	3.10E-06	4.13E-08	1.38E-08	3.72E-07	4.96E-09	3.47E-06	4.63E-08	3.47E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	14.100	0.017	0.021	4.83E-04	1.29E-04	9.47E-07	1.58E-04	4.20E-05	6.41E-04	1.71E-04	3.77E-02	4E-06	6.62E-05	8.83E-07	1.75E-06	4.74E-05	6.32E-07	1.14E-04	1.51E-06	6.68E-03	3E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	28.000	0.0100	0.089	9.60E-04	2.56E-04	5.24E-07	8.72E-05	2.33E-05	1.05E-03	2.79E-04	1.05E-01	2E-05	1.32E-04	1.75E-06	1.02E-06	2.75E-05	3.67E-07	1.59E-04	2.12E-06	1.59E-02	2E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-01d-040	1,1,1-Trichloroethane	5.300	3.00	NC	1.82E-04	4.85E-05	1.09E-07	1.81E-05	4.84E-06	2.00E-04	5.33E-05	6.66E-05	-	2.49E-05	3.32E-07	2.11E-07	5.70E-06	7.60E-08	3.06E-05	4.08E-07	1.02E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	2.500	0.2	NA	8.57E-05	2.29E-05	2.20E-08	3.66E-06	9.76E-07	8.94E-05	2.38E-05	4.47E-04	-	1.17E-05	1.57E-07	4.61E-08	1.25E-06	1.66E-08	1.30E-05	1.73E-07	6.49E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	2.500	0.057	NA	8.57E-05	2.29E-05	3.75E-08	6.24E-06	1.66E-06	9.20E-05	2.45E-05	1.61E-03	-	1.17E-05	1.57E-07	7.84E-08	2.12E-06	2.82E-08	1.39E-05	1.85E-07	2.43E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	2.500	0.13	0.0805	8.57E-05	2.29E-05	2.54E-08	4.23E-06	1.13E-06	8.99E-05	2.40E-05	6.92E-04	2E-06	1.17E-05	1.57E-07	5.06E-08	1.37E-06	1.82E-08	1.31E-05	1.75E-07	1.01E-04	1E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	9.200	0.01	NC	3.15E-04	8.41E-05	9.13E-08	1.52E-05	4.05E-06	3.31E-04	8.82E-05	3.31E-02	-	4.32E-05	5.76E-07	1.92E-07	5.19E-06	6.92E-08	4.84E-05	6.45E-07	4.84E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	158.000	0.017	0.021	5.42E-03	1.44E-03	1.06E-05	1.77E-03	4.71E-04	7.18E-03	1.92E-03	4.22E-01	4E-05	7.42E-04	9.89E-06	1.97E-05	5.31E-04	7.08E-06	1.27E-03	1.70E-05	7.49E-02	4E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	2.500	1.4	NA	8.57E-05	2.29E-05	9.70E-08	1.61E-05	4.30E-06	1.02E-04	2.72E-05	7.27E-05	-	1.17E-05	1.57E-07	2.00E-07	5.40E-06	7.19E-08	1.71E-05	2.29E-07	1.22E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	536.000	0.0100	0.089	1.84E-02	4.90E-03	1.00E-05	1.67E-03	4.45E-04	2.00E-02	5.35E-03	2.00E+00	5E-04	2.52E-03	3.36E-05	1.95E-05	5.26E-04	7.02E-06	3.04E-03	4.06E-05	3.04E-01	4E-06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	2.500	0.2	NA	8.57E-05	2.29E-05	5.33E-08	8.86E-06	2.36E-06	9.46E-05	2.52E-05	4.73E-04	-	1.17E-05	1.57E-07	1.03E-07	2.77E-06	3.69E-08	1.45E-05	1.93E-07	7.26E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-01s	1,1,1-Trichloroethane	1.480	3.00	NC	5.07E-05	1.35E-05	3.05E-08	5.06E-06	1.35E-06	5.58E-05	1.49E-05	1.86E-05	-	6.95E-06	9.27E-08	5.89E-08	1.59E-06	2.12E-08	8.54E-06	1.14E-07	2.85E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.500	0.2	NA	1.71E-05	4.57E-06	4.40E-09	7.32E-07	1.95E-07	1.79E-05	4.77E-06	8.94E-05	-	2.35E-06	3.13E-08	9.22E-09	2.49E-07	3.32E-09	2.60E-06	3.46E-08	1.30E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.500	0.057	NA	1.71E-05	4.57E-06	7.50E-09	1.25E-06	3.33E-07	1.84E-05	4.90E-06	3.23E-04	-	2.35E-06	3.13E-08	1.57E-08	4.24E-07	5.65E-09	2.77E-06	3.70E-08	4.86E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	1.450	0.13	0.0805	4.97E-05	1.33E-05	1.47E-08	2.45E-06	6.54E-07	5.22E-05	1.39E-05	4.01E-04	1E-06	6.81E-06	9.08E-08	2.94E-08	7.93E-07	1.06E-08	7.60E-06	1.01E-07	5.85E-05	8E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	2.310	0.01	NC	7.92E-05	2.11E-05	2.29E-08	3.81E-06	1.02E-06	8.30E-05	2.21E-05	8.30E-03	-	1.08E-05	1.45E-07	4.82E-08	1.30E-06	1.74E-08	1.22E-05	1.62E-07	1.22E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	32.700	0.017	0.021	1.12E-03	2.99E-04	2.20E-06	3.65E-04	9.74E-05	1.49E-03	3.96E-04	8.74E-02	8E-06	1.54E-04	2.05E-06	4.07E-06	1.10E-04	1.46E-06	2.63E-04	3.51E-06	1.55E-02	7E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.500	1.4	NA	1.71E-05	4.57E-06	1.94E-08	3.22E-06	8.60E-07	2.04E-05	5.43E-06	1.45E-05	-	2.35E-06	3.13E-08	4.00E-08	1.08E-06	1.44E-08	3.43E-06	4.57E-08	2.45E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	130.000	0.0100	0.089	4.46E-03	1.19E-03	2.43E-06	4.05E-04	1.08E-04	4.86E-03	1.30E-03	4.86E-01	1E-04	6.11E-04	8.14E-06	4.73E-06	1.28E-04	1.70E-06	7.38E-04	9.84E-06	7.38E-02	9E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.500	0.2	NA	1.71E-05	4.57E-06	1.07E-08	1.77E-06	4.73E-07	1.89E-05	5.04E-06	9.46E-05	-	2.35E-06	3.13E-08	2.05E-08	5.54E-07	7.39E-09	2.90E-06	3.87E-08	1.45E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-02s	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.250	0.01	NC	8.57E-06	2.29E-06	2.48E-09	4.13E-07	1.10E-07	8.98E-06	2.40E-06	8.98E-04	-	1.17E-06	1.57E-08	5.22E-09	1.41E-07	1.88E-09	1.32E-06	1.75E-08	1.32E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	0.250	0.017	0.021	8.57E-06	2.29E-06	1.68E-08	2.79E-06	7.45E-07	1.14E-05	3.03E-06	6.68E-04	6E-08	1.17E-06	1.57E-08	3.11E-08	8.40E-07	1.12E-08	2.01E-06	2.69E-08	1.18E-04	6E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	0.250	0.0100	0.089	8.57E-06	2.29E-06	4.68E-09	7.79E-07	2.08E-07	9.35E-06	2.49E-06	9.35E-04	2E-07	1.17E-06	1.57E-08	9.09E-09	2.45E-07	3.27E-09	1.42E-06	1.89E-08	1.42E-04	2E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-03s	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.700	0.13	0.0805	2.40E-05	6.40E-06	7.12E-09	1.18E-06	3.16E-07	2.52E-05	6.72E-06	1.94E-04	5E-07	3.29E-06	4.38E-08	1.42E-08	3.83E-07	5.11E-09	3.67E-06	4.89E-08	2.82E-05	4E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.940	0.01	NC	3.22E-05	8.59E-06	9.33E-09	1.55E-06	4.14E-07	3.38E-05	9.01E-06	3.38E-03	-	4.41E-06	5.89E-08	1.96E-08	5.30E-07	7.07E-09	4.94E-06	6.59E-08	4.94E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	5.535	0.017	0.021	1.90E-04	5.06E-05	3.72E-07	6.18E-05	1.65E-05	2.52E-04	6.71E-05	1.48E-02	1E-06	2.60E-05	3.47E-07	6.89E-07	1.86E-05	2.48E-07	4.46E-05	5.95E-07	2.62E-03	1E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	20.198	0.0100	0.089	6.92E-04	1.85E-04	3.78E-07	6.29E-05	1.68E-05	7.55E-04	2.01E-04	7.55E-02	2E-05	9.49E-05	1.26E-06	7.34E-07	1.98E-05	2.64E-07	1.15E-04	1.53E-06	1.15E-02	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-04s	1,1,1-Trichloroethane	2.162	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.24E-04	4.94E-05	4.45E-08	1.23E-05	4.93E-06	1.36E-04	5.44E-05	4.53E-05	-	2.70E-04	4.45E-08	2.17E-05	2.92E-04	9.73E-05
	1,1-Dichloroethane	0.667	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.81E-05	1.52E-05	5.87E-09	1.63E-06	6.51E-07	3.97E-05	1.59E-05	1.99E-04	-	8.34E-05	5.87E-09	2.86E-06	8.63E-05	4.31E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.650	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.71E-05	1.49E-05	6.61E-09	1.83E-06	7.32E-07	3.90E-05	1.56E-05	3.00E-04	1E-06	8.13E-05	6.61E-09	3.22E-06	8.45E-05	6.50E-04
	cis-1,2-Dichloroethene	0.620	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.54E-05	1.42E-05	6.16E-09	1.71E-06	6.82E-07	3.71E-05	1.49E-05	3.71E-03	-	7.75E-05	6.16E-09	3.00E-06	8.05E-05	8.05E-03
	Tetrachloroethene	7.130	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.07E-04	1.63E-04	4.79E-07	1.33E-04	5.31E-05	5.40E-04	2.16E-04	3.18E-02	5E-06	8.91E-04	4.79E-07	2.34E-04	1.12E-03	6.62E-02
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	23.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.31E-03	5.26E-04	4.31E-07	1.19E-04	4.78E-05	1.43E-03	5.73E-04	1.43E-01	5E-05	2.88E-03	4.31E-07	2.10E-04	3.08E-03	3.08E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-05s	1,1,1-Trichloroethane	1.300	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.43E-05	2.97E-05	2.68E-08	7.41E-06	2.97E-06	8.17E-05	3.27E-05	2.72E-05	-	1.63E-04	2.68E-08	1.30E-05	1.76E-04	5.85E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.800	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.57E-05	1.83E-05	8.13E-09	2.25E-06	9.01E-07	4.80E-05	1.92E-05	3.69E-04	2E-06	1.00E-04	8.13E-09	3.96E-06	1.04E-04	8.00E-04
	cis-1,2-Dichloroethene	0.890	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.09E-05	2.03E-05	8.84E-09	2.45E-06	9.79E-07	5.33E-05	2.13E-05	5.33E-03	-	1.11E-04	8.84E-09	4.31E-06	1.16E-04	1.16E-02
	Tetrachloroethene	30.600	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.75E-03	6.99E-04	2.06E-06	5.70E-04	2.28E-04	2.32E-03	9.27E-04	1.36E-01	2E-05	3.83E-03	2.06E-06	1.00E-03	4.83E-03	2.84E-01
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	44.200	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.53E-03	1.01E-03	8.28E-07	2.29E-04	9.18E-05	2.76E-03	1.10E-03	2.76E-01	1E-04	5.53E-03	8.28E-07	4.04E-04	5.93E-03	5.93E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-06s	1,1,1-Trichloroethane	2.189	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.25E-04	5.00E-05	4.50E-08	1.25E-05	4.99E-06	1.38E-04	5.50E-05	4.59E-05	-	2.74E-04	4.50E-08	2.20E-05	2.96E-04	9.85E-05
	1,1-Dichloroethane	0.820	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.69E-05	1.87E-05	7.22E-09	2.00E-06	8.00E-07	4.89E-05	1.95E-05	2.44E-04	-	1.03E-04	7.22E-09	3.52E-06	1.06E-04	5.30E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	1.000	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.71E-05	2.29E-05	1.02E-08	2.82E-06	1.13E-06	6.00E-05	2.40E-05	4.61E-04	2E-06	1.25E-04	1.02E-08	4.96E-06	1.30E-04	1.00E-03
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	3.739	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.14E-04	8.55E-05	2.51E-07	6.96E-05	2.78E-05	2.83E-04	1.13E-04	1.67E-02	2E-06	4.67E-04	2.51E-07	1.22E-04	5.90E-04	3.47E-02
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	6.339	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.62E-04	1.45E-04	1.19E-07	3.29E-05	1.32E-05	3.95E-04	1.58E-04	3.95E-02	1E-05	7.92E-04	1.19E-07	5.79E-05	8.50E-04	8.50E-02
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-07s	1,1,1-Trichloroethane	2.460	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.41E-04	5.62E-05	5.06E-08	1.40E-05	5.61E-06	1.55E-04	6.18E-05	5.15E-05	-	3.07E-04	5.06E-08	2.47E-05	3.32E-04	1.11E-04
	1,1-Dichloroethane	0.627	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.58E-05	1.43E-05	5.52E-09	1.53E-06	6.12E-07	3.74E-05	1.49E-05	1.87E-04	-	7.84E-05	5.52E-09	2.69E-06	8.11E-05	4.05E-04
	1,1-Dichloroethene	0.316	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.81E-05	7.22E-06	4.74E-09	1.31E-06	5.26E-07	1.94E-05	7.75E-06	3.40E-04	-	3.95E-05	4.74E-09	2.31E-06	4.18E-05	7.34E-04
	Chloroform	0.316	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.81E-05	7.22E-06	3.21E-09	8.90E-07	3.56E-07	1.89E-05	7.58E-06	1.46E-04	6E-07	3.95E-05	3.21E-09	1.57E-06	4.11E-05	3.16E-04
	cis-1,2-Dichloroethene	0.316	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.81E-05	7.22E-06	3.14E-09	8.69E-07	3.48E-07	1.89E-05	7.57E-06	1.89E-03	-	3.95E-05	3.14E-09	1.53E-06	4.10E-05	4.10E-03
	Tetrachloroethene	5.732	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.28E-04	1.31E-04	3.85E-07	1.07E-04	4.27E-05	4.34E-04	1.74E-04	2.55E-02	4E-06	7.16E-04	3.85E-07	1.88E-04	9.04E-04	5.32E-02
	Toluene	0.316	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.81E-05	7.22E-06	1.23E-08	3.40E-06	1.36E-06	2.15E-05	8.58E-06	1.53E-05	-	3.95E-05	1.23E-08	5.97E-06	4.55E-05	3.25E-05
	Trichloroethene	0.316	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.81E-05	7.22E-06	5.92E-09	1.64E-06	6.56E-07	1.97E-05	7.88E-06	1.97E-03	7E-07	3.95E-05	5.92E-09	2.89E-06	4.24E-05	4.24E-03
	Trichlorofluoromethane	0.316	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.81E-05	7.22E-06	6.74E-09	1.87E-06	7.47E-07	1.99E-05	7.97E-06	9.96E-05	-	3.95E-05	6.74E-09	3.28E-06	4.28E-05	2.14E-04
CM-MW-08s	1,1,1-Trichloroethane	0.250	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.14E-09	1.43E-06	5.70E-07	1.57E-05	6.28E-06	5.24E-06	-	3.13E-05	5.14E-09	2.51E-06	3.38E-05	1.13E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	3.530	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.02E-04	8.07E-05	2.37E-07	6.57E-05	2.63E-05	2.67E-04	1.07E-04	1.57E-02	2E-06	4.41E-04	2.37E-07	1.16E-04	5.57E-04	3.28E-02

					Cadet Site Worker									Cadet Site Excavation Worker									NFVN Resident (adult)									NFVN Resident (child)				
Well Name	Analyte	RME (ug/l)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)	Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)	Total Dose (mg/kg-d)	Total Risk (unitless)
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	13.200	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.54E-04	3.02E-04	2.47E-07	6.85E-05	2.74E-05	8.23E-04	3.29E-04	8.23E-02	3E-05	1.65E-03	2.47E-07	1.21E-04	1.77E-03	1.77E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-09s	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.250	0.01	NC	8.57E-06	2.29E-06	2.48E-09	4.13E-07	1.10E-07	8.98E-06	2.40E-06	8.98E-04	-	1.17E-06	1.57E-08	5.22E-09	1.41E-07	1.88E-09	1.32E-06	1.75E-08	1.32E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	0.250	0.017	0.021	8.57E-06	2.29E-06	1.68E-08	2.79E-06	7.45E-07	1.14E-05	3.03E-06	6.68E-04	6E-08	1.17E-06	1.57E-08	3.11E-08	8.40E-07	1.12E-08	2.01E-06	2.69E-08	1.18E-04	6E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	0.250	0.0100	0.089	8.57E-06	2.29E-06	4.68E-09	7.79E-07	2.08E-07	9.35E-06	2.49E-06	9.35E-04	2E-07	1.17E-06	1.57E-08	9.09E-09	2.45E-07	3.27E-09	1.42E-06	1.89E-08	1.42E-04	2E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-10s	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.250	0.01	NC	8.57E-06	2.29E-06	2.48E-09	4.13E-07	1.10E-07	8.98E-06	2.40E-06	8.98E-04	-	1.17E-06	1.57E-08	5.22E-09	1.41E-07	1.88E-09	1.32E-06	1.75E-08	1.32E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	1.340	0.017	0.021	4.59E-05	1.23E-05	9.00E-08	1.50E-05	3.99E-06	6.09E-05	1.62E-05	3.58E-03	3E-07	6.29E-06	8.39E-08	1.67E-07	4.50E-06	6.00E-08	1.08E-05	1.44E-07	6.35E-04	3E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	1.910	0.0100	0.089	6.55E-05	1.75E-05	3.58E-08	5.95E-06	1.59E-06	7.14E-05	1.90E-05	7.14E-03	2E-06	8.97E-06	1.20E-07	6.94E-08	1.88E-06	2.50E-08	1.08E-05	1.45E-07	1.08E-03	1E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-18s	1,1,1-Trichloroethane	0.250	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.14E-09	1.43E-06	5.70E-07	1.57E-05	6.28E-06	5.24E-06	-	3.13E-05	5.14E-09	2.51E-06	3.38E-05	1.13E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	0.570	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.26E-05	1.30E-05	3.83E-08	1.06E-05	4.25E-06	4.32E-05	1.73E-05	2.54E-03	4E-07	7.13E-05	3.83E-08	1.87E-05	8.99E-05	5.29E-03
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	1.200	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.86E-05	2.74E-05	2.25E-08	6.23E-06	2.49E-06	7.48E-05	2.99E-05	7.48E-03	3E-06	1.50E-04	2.25E-08	1.10E-05	1.61E-04	1.61E-02
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-19s	1,1,1-Trichloroethane	0.500	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.03E-08	2.85E-06	1.14E-06	3.14E-05	1.26E-05	1.05E-05	-	6.25E-05	1.03E-08	5.02E-06	6.75E-05	2.25E-05
	1,1-Dichloroethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	4.40E-09	1.22E-06	4.88E-07	2.98E-05	1.19E-05	1.49E-04	-	6.25E-05	4.40E-09	2.15E-06	6.46E-05	3.23E-04
	1,1-Dichloroethene	0.500	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	7.50E-09	2.08E-06	8.32E-07	3.07E-05	1.23E-05	5.38E-04	-	6.25E-05	7.50E-09	3.66E-06	6.62E-05	1.16E-03
	Chloroform	13.000	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.43E-04	2.97E-04	1.32E-07	3.66E-05	1.46E-05	7.79E-04	3.12E-04	6.00E-03	3E-05	1.63E-03	1.32E-07	6.44E-05	1.69E-03	1.30E-02
	cis-1,2-Dichloroethene	0.500	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	4.96E-09	1.38E-06	5.50E-07	2.99E-05	1.20E-05	2.99E-03	-	6.25E-05	4.96E-09	2.42E-06	6.49E-05	6.49E-03
	Tetrachloroethene	1.760	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.01E-04	4.02E-05	1.18E-07	3.28E-05	1.31E-05	1.33E-04	5.33E-05	7.84E-03	1E-06	2.20E-04	1.18E-07	5.76E-05	2.78E-04	1.63E-02
	Toluene	0.500	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.94E-08	5.37E-06	2.15E-06	3.39E-05	1.36E-05	2.42E-05	-	6.25E-05	1.94E-08	9.45E-06	7.20E-05	5.14E-05
	Trichloroethene	2.200	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.26E-04	5.03E-05	4.12E-08	1.14E-05	4.57E-06	1.37E-04	5.49E-05	1.37E-02	5E-06	2.75E-04	4.12E-08	2.01E-05	2.95E-04	2.95E-02
	Trichlorofluoromethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.07E-08	2.95E-06	1.18E-06	3.15E-05	1.26E-05	1.58E-04	-	6.25E-05	1.07E-08	5.20E-06	6.77E-05	3.38E-04
CM-MW-20s	1,1,1-Trichloroethane	1.456	3.00	NC	4.99E-05	1.33E-05	3.00E-08	4.98E-06	1.33E-06	5.49E-05	1.46E-05	1.83E-05	-	6.84E-06	9.11E-08	5.79E-08	1.56E-06	2.09E-08	8.40E-06	1.12E-07	2.80E-06	-	8.32E-05	3.33E-05	3.00E-08	8.30E-06	3.32E-06	9.15E-05	3.66E-05	3.05E-05	-	1.82E-04	3.00E-08	1.46E-05	1.97E-04	6.55E-05
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.980	0.13	0.0805	3.36E-05	8.96E-06	9.96E-09	1.66E-06	4.42E-07	3.53E-05	9.40E-06	2.71E-04	8E-07	4.60E-06	6.14E-08	1.99E-08	5.36E-07	7.15E-09	5.14E-06	6.85E-08	3.95E-05	6E-09	5.60E-05	2.24E-05	9.96E-09	2.76E-06	1.10E-06	5.88E-05	2.35E-05	4.52E-04	2E-06	1.23E-04	9.96E-09	4.86E-06	1.27E-04	9.80E-04
	cis-1,2-Dichloroethene	1.831	0.01	NC	6.28E-05	1.67E-05	1.82E-08	3.02E-06	8.06E-07	6.58E-05	1.76E-05	6.58E-03	-	8.60E-06	1.15E-07	3.82E-08	1.03E-06	1.38E-08	9.63E-06	1.28E-07	9.63E-04	-	1.05E-04	4.19E-05	1.82E-08	5.04E-06	2.02E-06	1.10E-04	4.39E-05	1.10E-02	-	2.29E-04	1.82E-08	8.86E-06	2.38E-04	2.38E-02
	Tetrachloroethene	20.724	0.017	0.021	7.11E-04	1.89E-04	1.39E-06	2.32E-04	6.17E-05	9.42E-04	2.51E-04	5.54E-02	5E-06	9.73E-05	1.30E-06	2.58E-06	6.96E-05	9.28E-07	1.67E-04	2.23E-06	9.82E-03	5E-08	1.18E-03	4.74E-04	1.39E-06	3.86E-04	1.54E-04	1.57E-03	6.28E-04	9.24E-02	1E-05	2.59E-03	1.39E-06	6.79E-04	3.27E-03	1.92E-01
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	53.697	0.0100	0.089	1.84E-03	4.91E-04	1.01E-06	1.67E-04	4.46E-05	2.01E-03	5.36E-04	2.01E-01	5E-05	2.52E-04	3.36E-06	1.95E-06	5.27E-05	7.03E-07	3.05E-04	4.07E-06	3.05E-02	4E-07	3.07E-03	1.23E-03	1.01E-06	2.79E-04	1.11E-04	3.35E-03	1.34E-03	3.35E-01	1E-04	6.71E-03	1.01E-06	4.90E-04	7.20E-03	7.20E-01
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-21s	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	1.580	0.13	0.0805	5.42E-05	1.44E-05	1.61E-08	2.67E-06	7.12E-07	5.68E-05	1.52E-05	4.37E-04	1E-06	7.42E-06	9.89E-08	3.20E-08	8.64E-07	1.15E-08	8.29E-06	1.10E-07	6.37E-05	9E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.250	0.01	NC	8.57E-06	2.29E-06	2.48E-09	4.13E-07	1.10E-07	8.98E-06	2.40E-06	8.98E-04	-	1.17E-06	1.57E-08	5.22E-09	1.41E-07	1.88E-09	1.32E-06	1.75E-08	1.32E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	0.250	0.017	0.021	8.57E-06	2.29E-06	1.68E-08	2.79E-06	7.45E-07	1.14E-05	3.03E-06	6.68E-04	6E-08	1.17E-06	1.57E-08	3.11E-08	8.40E-07	1.12E-08	2.01E-06	2.69E-08	1.18E-04	6E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	0.250	0.0100	0.089	8.57E-06	2.29E-06	4.68E-09	7.79E-07	2.08E-07	9.35E-06	2.49E-06	9.35E-04	2E-07	1.17E-06	1.57E-08	9.09E-09	2.45E-07	3.27E-09	1.42E-06	1.89E-08	1.42E-04	2E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-23s	1,1,1-Trichloroethane	1.680	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.60E-05	3.84E-05	3.46E-08	9.58E-06	3.83E-06	1.06E-04	4.22E-05	3.52E-05	-	2.10E-04	3.46E-08	1.69E-05	2.27E-04	7.56E-05
	1,1-Dichloroethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	4.40E-09	1.22E-06	4.88E-07	2.98E-05	1.19E-05	1.49E-04	-	6.25E-05	4.40E-09	2.15E-06	6.46E-05	3.23E-04
	1,1-Dichloroethene	0.500	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	7.50E-09	2.08E-06	8.32E-07	3.07E-05	1.23E-05	5.38E-04	-	6.25E-05	7.50E-09	3.66E-06	6.62E-05	1.16E-03
	Chloroform	0.500	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	5.08E-09	1.41E-06	5.63E-07	3.00E-05	1.20E-05	2.31E-04	1E-06	6.25E-05	5.08E-09	2.48E-06	6.50E-05	5.00E-04
	cis-1,2-Dichloroethene	2.190	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.25E-04	5.01E-05	2.17E-08	6.03E-06	2.41E-06	1.31E-04	5.25E-05	1.31E-02	-	2.74E-04	2.17E-08	1.06E-05	2.84E-04	2.84E-02
	Tetrachloroethene	9.790	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.59E-04	2.24E-04	6.58E-07	1.82E-04	7.29E-05	7.42E-04	2.97E-04	4.36E-02	6E-06	1.22E-03	6.58E-07	3.21E-04	1.54E-03	9.08E-02
	Toluene	0.500	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.94E-08	5.37E-06	2.15E-06	3.39E-05	1.36E-05	2.42E-05	-	6.25E-05	1.94E-08	9.45E-06	7.20E-05	5.14E-05
	Trichloroethene	32.800	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.87E-03	7.50E-04	6.14E-07	1.70E-04	6.81E-05	2.04E-03	8.18E-04	2.04E-01	7E-05	4.10E-03	6.14E-07	2.99E-04	4.40E-03	4.40E-01
	Trichlorofluoromethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.07E-08	2.95E-06	1.18E-06	3.15E-05	1.26E-05	1.58E-04	-	6.25E-05	1.07E-08	5.20E-06	6.77E-05	3.38E-04
CM-MW-24s	1,1,1-Trichloroethane	0.870	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.97E-05	1.99E-05	1.79E-08	4.96E-06	1.98E-06	5.47E-05	2.19E-05	1.82E-05	-	1.09E-04	1.79E-08	8.73E-06	1.17E-04	3.92E-05
	1,1-Dichloroethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	4.40E-09	1.22E-06	4.88E-07	2.98E-05	1.19E-05	1.49E-04	-	6.25E-05	4.40E-09	2.15E-06	6.46E-05	3.23E-04
	1,1-Dichloroethene	0.500	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	7.50E-09	2.08E-06	8.32E-07	3.07E-05	1.23E-05	5.38E-04	-	6.25E-05	7.50E-09	3.66E-06	6.62E-05	1.16E-03
	Chloroform	0.500	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	5.08E-09	1.41E-06	5.63E-07	3.00E-05	1.20E-05	2.31E-04	1E-06	6.25E-05	5.08E-09	2.48E-06	6.50E-05	5.00E-04
	cis-1,2-Dichloroethene	0.510	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.91E-05	1.17E-05	5.06E-09	1.40E-06	5.61E-07	3.05E-05	1.22E-05	3.05E-03	-	6.38E-05	5.06E-09	2.47E-06	6.62E-05	6.62E-03
	Tetrachloroethene	2.730	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.56E-04	6.24E-05	1.83E-07	5.08E-05	2.03E-05	2.07E-04	8.27E-05	1.22E-02	2E-06	3.41E-04	1.83E-07	8.94E-05	4.31E-04	2.53E-02
	Toluene	0.540	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.09E-05	1.23E-05	2.09E-08	5.80E-06	2.32E-06	3.67E-05	1.47E-05	2.62E-05	-	6.75E-05	2.09E-08	1.02E-05	7.77E-05	5.55E-05
	Trichloroethene	19.700	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.13E-03	4.50E-04	3.69E-07	1.02E-04	4.09E-05	1.23E-03	4.91E-04	1.23E-01	4E-05	2.46E-03	3.69E-07	1.80E-04	2.64E-03	2.64E-01
	Trichlorofluoromethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.07E-08	2.95E-06	1.18E-06	3.15E-05	1.26E-05	1.58E-04	-	6.25E-05	1.07E-08	5.20E-06	6.77E-05	3.38E-04
CM-MW-25s	1,1,1-Trichloroethane	1.596	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.12E-05	3.65E-05	3.28E-08	9.10E-06	3.64E-06	1.00E-04	4.01E-05	3.34E-05	-	1.99E-04	3.28E-08	1.60E-05	2.15E-04	7.18E-05
	1,1-Dichloroethane	0.660	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.77E-05	1.51E-05	5.81E-09	1.61E-06	6.44E-07	3.93E-05	1.57E-05	1.97E-04	-	8.25E-05	5.81E-09	2.83E-06	8.53E-05	4.27E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.948	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.42E-05	2.17E-05	9.64E-09	2.67E-06	1.07E-06	5.68E-05	2.27E-05	4.37E-04	2E-06	1.19E-04	9.64E-09	4.70E-06	1.23E-04	9.48E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	4.025	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.30E-04	9.20E-05	2.70E-07	7.49E-05	3.00E-05	3.05E-04	1.22E-04	1.79E-02	3E-06	5.03E-04	2.70E-07	1.32E-04	6.35E-04	3.74E-02
	Toluene	1.110	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.34E-05	2.54E-05	4.30E-08	1.19E-05	4.77E-06	7.54E-05	3.01E-05	5.38E-05	-	1.39E-04	4.30E-08	2.10E-05	1.60E-04	1.14E-04
	Trichloroethene	6.361	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.63E-04	1.45E-04	1.19E-07	3.30E-05	1.32E-05	3.97E-04	1.59E-04	3.97E-02	1E-05	7.95E-04	1.19E-07	5.81E-05	8.53E-04	8.53E-02
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-26s	1,1,1-Trichloroethane	0.640	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.66E-05	1.46E-05	1.32E-08	3.65E-06	1.46E-06	4.02E-05	1.61E-05	1.34E-05	-	8.00E-05	1.32E-08	6.42E-06	8.64E-05	2.88E-05
	1,1-Dichloroethane	0.810	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.63E-05	1.85E-05	7.13E-09	1.98E-06	7.91E-07	4.83E-05	1.93E-05	2.41E-04	-	1.01E-04	7.13E-09	3.48E-06	1.05E-04	5.24E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.760	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.34E-05	1.74E-05	7.73E-09	2.14E-06	8.56E-07	4.56E-05	1.82E-05	3.51E-04	1E-06	9.50E-05	7.73E-09	3.77E-06	9.88E-05	7.60E-04
	cis-1,2-Dichloroethene	6.110	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.49E-04	1.40E-04	6.07E-08	1.68E-05	6.72E-06	3.66E-04	1.46E-04	3.66E-02	-	7.64E-04	6.07E-08	2.96E-05	7.93E-04	7.93E-02
	Tetrachloroethene	17.200	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.83E-04	3.93E-04	1.16E-06	3.20E-04	1.28E-04	1.30E-03	5.21E-04	7.67E-02	1E-05	2.15E-03	1.16E-06	5.63E-04	2.71E-03	1.60E-01
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	7.297	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.17E-04	1.67E-04	1.37E-07	3.79E-05	1.51E-05	4.55E-04	1.82E-04	4.55E-02	2E-05	9.12E-04	1.37E-07	6.66E-05	9.79E-04	9.79E-02
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-27USA-049.5	1,1,1-Trichloroethane	0.560	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.20E-05	1.28E-05	1.15E-08	3.19E-06	1.28E-06	3.52E-05	1.41E-05	1.17E-05	-	7.00E-05	1.15E-08	5.62E-06	7.56E-05	2.52E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	1.570	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.97E-05	3.59E-05	1.05E-07	2.92E-05	1.17E-05	1.19E-04	4.76E-05	7.00E-03	1E-06	1.96E-04	1.05E-07	5.14E-05	2.48E-04	1.46E-02
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	6.910	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.95E-04	1.58E-04	1.29E-07	3.59E-05	1.43E-05	4.31E-04	1.72E-04	4.31E-02	2E-05	8.64E-04	1.29E-07	6.31E-05	9.27E-04	9.27E-02
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-VE-09	1,1,1-Trichloroethane	0.500	3.00	NC	1.71E-05	4.57E-06	1.03E-08	1.71E-06	4.56E-07	1.89E-05	5.03E-06	6.28E-06	-	2.35E-06	3.13E-08	1.99E-08	5.37E-07	7.17E-09	2.89E-06	3.85E-08	9.62E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.500	0.2	NA	1.71E-05	4.57E-06	4.40E-09	7.32E-07	1.95E-07	1.79E-05	4.77E-06	8.94E-05	-	2.35E-06	3.13E-08	9.22E-09	2.49E-07	3.32E-09	2.60E-06	3.46E-08	1.30E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.500	0.057	NA	1.71E-05	4.57E-06	7.50E-09	1.25E-06	3.33E-07	1.84E-05	4.90E-06	3.23E-04	-	2.35E-06	3.13E-08	1.57E-08	4.24E-07	5.65E-09	2.77E-06	3.70E-08	4.86E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.500	0.13	0.0805	1.71E-05	4.57E-06	5.08E-09	8.45E-07	2.25E-07	1.80E-05	4.80E-06	1.38E-04	4E-07	2.35E-06	3.13E-08	1.01E-08	2.74E-07	3.65E-09	2.62E-06	3.50E-08	2.02E-05	3E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.600	0.01	NC	2.06E-05	5.49E-06	5.96E-09	9.90E-07	2.64E-07	2.16E-05	5.75E-06	2.16E-03	-	2.82E-06	3.76E-08	1.25E-08	3.38E-07	4.51E-09	3.16E-06	4.21E-08	3.16E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	6.210	0.017	0.021	2.13E-04	5.68E-05	4.17E-07	6.94E-05	1.85E-05	2.82E-04	7.53E-05	1.66E-02	2E-06	2.92E-05	3.89E-07	7.73E-07	2.09E-05	2.78E-07	5.00E-05	6.67E-07	2.94E-03	1E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.500	1.4	NA	1.71E-05	4.57E-06	1.94E-08	3.22E-06	8.60E-07	2.04E-05	5.43E-06	1.45E-05	-	2.35E-06	3.13E-08	4.00E-08	1.08E-06	1.44E-08	3.43E-06	4.57E-08	2.45E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	22.200	0.0100	0.089	7.61E-04	2.03E-04	4.16E-07	6.91E-05	1.84E-05	8.30E-04	2.21E-04	8.30E-02	2E-05	1.04E-04	1.39E-06	8.07E-07	2.18E-05	2.91E-07	1.26E-04	1.68E-06	1.26E-02	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.500	0.2	NA	1.71E-05	4.57E-06	1.07E-08	1.77E-06	4.73E-07	1.89E-05	5.04E-06	9.46E-05	-	2.35E-06	3.13E-08	2.05E-08	5.54E-07	7.39E-09	2.90E-06	3.87E-08	1.45E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-VE-10	1,1,1-Trichloroethane	0.500	3.00	NC	1.71E-05	4.57E-06	1.03E-08	1.71E-06	4.56E-07	1.89E-05	5.03E-06	6.28E-06	-	2.35E-06	3.13E-08	1.99E-08	5.37E-07	7.17E-09	2.89E-06	3.85E-08	9.62E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.500	0.2	NA	1.71E-05	4.57E-06	4.40E-09	7.32E-07	1.95E-07	1.79E-05	4.77E-06	8.94E-05	-	2.35E-06	3.13E-08	9.22E-09	2.49E-07	3.32E-09	2.60E-06	3.46E-08	1.30E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.500	0.057	NA	1.71E-05	4.57E-06	7.50E-09	1.25E-06	3.33E-07	1.84E-05	4.90E-06	3.23E-04	-	2.35E-06	3.13E-08	1.57E-08	4.24E-07	5.65E-09	2.77E-06	3.70E-08	4.86E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.500	0.13	0.0805	1.71E-05	4.57E-06	5.08E-09	8.45E-07	2.25E-07	1.80E-05	4.80E-06	1.38E-04	4E-07	2.35E-06	3.13E-08	1.01E-08	2.74E-07	3.65E-09	2.62E-06	3.50E-08	2.02E-05	3E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.620	0.01	NC	2.13E-05	5.67E-06	6.16E-09	1.02E-06	2.73E-07	2.23E-05	5.94E-06	2.23E-03	-	2.91E-06	3.88E-08	1.29E-08	3.50E-07	4.66E-09	3.26E-06	4.35E-08	3.26E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	4.390	0.017	0.021	1.51E-04	4.01E-05	2.95E-07	4.90E-05	1.31E-05	2.00E-04	5.32E-05	1.17E-02	1E-06	2.06E-05	2.75E-07	5.46E-07	1.47E-05	1.97E-07	3.54E-05	4.72E-07	2.08E-03	1E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.500	1.4	NA	1.71E-05	4.57E-06	1.94E-08	3.22E-06	8.60E-07	2.04E-05	5.43E-06	1.45E-05	-	2.35E-06	3.13E-08	4.00E-08	1.08E-06	1.44E-08	3.43E-06	4.57E-08	2.45E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	17.400	0.0100	0.089	5.97E-04	1.59E-04	3.26E-07	5.42E-05	1.44E-05	6.51E-04	1.74E-04	6.51E-02	2E-05	8.17E-05	1.09E-06	6.33E-07	1.71E-05	2.28E-07	9.88E-05	1.32E-06	9.88E-03	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Well Name	Analyte	RME (ug/l)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	Cadet Site Worker									Cadet Site Excavation Worker									NFVN Resident (adult)									NFVN Resident (child)				
					Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)	Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)	Total Dose (mg/kg-d)	Total Risk (unitless)
	Trichlorofluoromethane	0.500	0.2	NA	1.71E-05	4.57E-06	1.07E-08	1.77E-06	4.73E-07	1.89E-05	5.04E-06	9.46E-05	-	2.35E-06	3.13E-08	2.05E-08	5.54E-07	7.39E-09	2.90E-06	3.87E-08	1.45E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-VE-11	1,1,1-Trichloroethane	0.500	3.00	NC	1.71E-05	4.57E-06	1.03E-08	1.71E-06	4.56E-07	1.89E-05	5.03E-06	6.28E-06	-	2.35E-06	3.13E-08	1.99E-08	5.37E-07	7.17E-09	2.89E-06	3.85E-08	9.62E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.500	0.2	NA	1.71E-05	4.57E-06	4.40E-09	7.32E-07	1.95E-07	1.79E-05	4.77E-06	8.94E-05	-	2.35E-06	3.13E-08	9.22E-09	2.49E-07	3.32E-09	2.60E-06	3.46E-08	1.30E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.500	0.057	NA	1.71E-05	4.57E-06	7.50E-09	1.25E-06	3.33E-07	1.84E-05	4.90E-06	3.23E-04	-	2.35E-06	3.13E-08	1.57E-08	4.24E-07	5.65E-09	2.77E-06	3.70E-08	4.86E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.500	0.13	0.0805	1.71E-05	4.57E-06	5.08E-09	8.45E-07	2.25E-07	1.80E-05	4.80E-06	1.38E-04	4E-07	2.35E-06	3.13E-08	1.01E-08	2.74E-07	3.65E-09	2.62E-06	3.50E-08	2.02E-05	3E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.770	0.01	NC	2.64E-05	7.04E-06	7.64E-09	1.27E-06	3.39E-07	2.77E-05	7.38E-06	2.77E-03	-	3.62E-06	4.82E-08	1.61E-08	4.34E-07	5.79E-09	4.05E-06	5.40E-08	4.05E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	11.100	0.017	0.021	3.81E-04	1.01E-04	7.46E-07	1.24E-04	3.31E-05	5.05E-04	1.35E-04	2.97E-02	3E-06	5.21E-05	6.95E-07	1.38E-06	3.73E-05	4.97E-07	8.94E-05	1.19E-06	5.26E-03	3E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.500	1.4	NA	1.71E-05	4.57E-06	1.94E-08	3.22E-06	8.60E-07	2.04E-05	5.43E-06	1.45E-05	-	2.35E-06	3.13E-08	4.00E-08	1.08E-06	1.44E-08	3.43E-06	4.57E-08	2.45E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	14.900	0.0100	0.089	5.11E-04	1.36E-04	2.79E-07	4.64E-05	1.24E-05	5.57E-04	1.49E-04	5.57E-02	1E-05	7.00E-05	9.33E-07	5.42E-07	1.46E-05	1.95E-07	8.46E-05	1.13E-06	8.46E-03	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.500	0.2	NA	1.71E-05	4.57E-06	1.07E-08	1.77E-06	4.73E-07	1.89E-05	5.04E-06	9.46E-05	-	2.35E-06	3.13E-08	2.05E-08	5.54E-07	7.39E-09	2.90E-06	3.87E-08	1.45E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-VE-12	1,1,1-Trichloroethane	0.500	3.00	NC	1.71E-05	4.57E-06	1.03E-08	1.71E-06	4.56E-07	1.89E-05	5.03E-06	6.28E-06	-	2.35E-06	3.13E-08	1.99E-08	5.37E-07	7.17E-09	2.89E-06	3.85E-08	9.62E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.500	0.2	NA	1.71E-05	4.57E-06	4.40E-09	7.32E-07	1.95E-07	1.79E-05	4.77E-06	8.94E-05	-	2.35E-06	3.13E-08	9.22E-09	2.49E-07	3.32E-09	2.60E-06	3.46E-08	1.30E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.500	0.057	NA	1.71E-05	4.57E-06	7.50E-09	1.25E-06	3.33E-07	1.84E-05	4.90E-06	3.23E-04	-	2.35E-06	3.13E-08	1.57E-08	4.24E-07	5.65E-09	2.77E-06	3.70E-08	4.86E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.500	0.13	0.0805	1.71E-05	4.57E-06	5.08E-09	8.45E-07	2.25E-07	1.80E-05	4.80E-06	1.38E-04	4E-07	2.35E-06	3.13E-08	1.01E-08	2.74E-07	3.65E-09	2.62E-06	3.50E-08	2.02E-05	3E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.700	0.01	NC	2.40E-05	6.40E-06	6.95E-09	1.16E-06	3.08E-07	2.52E-05	6.71E-06	2.52E-03	-	3.29E-06	4.38E-08	1.46E-08	3.95E-07	5.26E-09	3.68E-06	4.91E-08	3.68E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	8.410	0.017	0.021	2.88E-04	7.69E-05	5.65E-07	9.40E-05	2.51E-05	3.82E-04	1.02E-04	2.25E-02	2E-06	3.95E-05	5.27E-07	1.05E-06	2.83E-05	3.77E-07	6.78E-05	9.03E-07	3.99E-03	2E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.500	1.4	NA	1.71E-05	4.57E-06	1.94E-08	3.22E-06	8.60E-07	2.04E-05	5.43E-06	1.45E-05	-	2.35E-06	3.13E-08	4.00E-08	1.08E-06	1.44E-08	3.43E-06	4.57E-08	2.45E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	18.900	0.0100	0.089	6.48E-04	1.73E-04	3.54E-07	5.89E-05	1.57E-05	7.07E-04	1.88E-04	7.07E-02	2E-05	8.88E-05	1.18E-06	6.87E-07	1.86E-05	2.47E-07	1.07E-04	1.43E-06	1.07E-02	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.500	0.2	NA	1.71E-05	4.57E-06	1.07E-08	1.77E-06	4.73E-07	1.89E-05	5.04E-06	9.46E-05	-	2.35E-06	3.13E-08	2.05E-08	5.54E-07	7.39E-09	2.90E-06	3.87E-08	1.45E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Intermediate Groundwater Zone				-																																
CM-MW-01d-121	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.820	0.2	NA	2.81E-05	7.50E-06	7.22E-09	1.20E-06	3.20E-07	2.93E-05	7.82E-06	1.47E-04	-	3.85E-06	5.14E-08	1.51E-08	4.08E-07	5.45E-09	4.26E-06	5.68E-08	2.13E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	6.720	0.01	NC	2.30E-04	6.14E-05	6.67E-08	1.11E-05	2.96E-06	2.41E-04	6.44E-05	2.41E-02	-	3.16E-05	4.21E-07	1.40E-07	3.79E-06	5.05E-08	3.54E-05	4.71E-07	3.54E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	16.400	0.017	0.021	5.62E-04	1.50E-04	1.10E-06	1.83E-04	4.89E-05	7.45E-04	1.99E-04	4.39E-02	4E-06	7.70E-05	1.03E-06	2.04E-06	5.51E-05	7.35E-07	1.32E-04	1.76E-06	7.77E-03	4E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	20.700	0.0100	0.089	7.10E-04	1.89E-04	3.88E-07	6.45E-05	1.72E-05	7.74E-04	2.06E-04	7.74E-02	2E-05	9.72E-05	1.30E-06	7.53E-07	2.03E-05	2.71E-07	1.18E-04	1.57E-06	1.18E-02	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-01i	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.920	0.2	NA	3.15E-05	8.41E-06	8.10E-09	1.35E-06	3.59E-07	3.29E-05	8.77E-06	1.64E-04	-	4.32E-06	5.76E-08	1.70E-08	4.58E-07	6.11E-09	4.78E-06	6.37E-08	2.39E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	22.500	0.01	NC	7.71E-04	2.06E-04	2.23E-07	3.71E-05	9.90E-06	8.09E-04	2.16E-04	8.09E-02	-	1.06E-04	1.41E-06	4.70E-07	1.27E-05	1.69E-07	1.18E-04	1.58E-06	1.18E-02	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	8.880	0.017	0.021	3.04E-04	8.12E-05	5.97E-07	9.92E-05	2.65E-05	4.04E-04	1.08E-04	2.37E-02	2E-06	4.17E-05	5.56E-07	1.10E-06	2.98E-05	3.98E-07	7.15E-05	9.54E-07	4.21E-03	2E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	9.980	0.0100	0.089	3.42E-04	9.12E-05	1.87E-07	3.11E-05	8.29E-06	3.73E-04	9.95E-05	3.73E-02	9E-06	4.69E-05	6.25E-07	3.63E-07	9.80E-06	1.31E-07	5.67E-05	7.56E-07	5.67E-03	7E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-03d-060	1,1,1-Trichloroethane	0.750	3.00	NC	2.57E-05	6.86E-06	1.54E-08	2.57E-06	6.84E-07	2.83E-05	7.54E-06	9.43E-06	-	3.52E-06	4.70E-08	2.99E-08	8.06E-07	1.07E-08	4.33E-06	5.77E-08	1.44E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	1.620	0.01	NC	5.55E-05	1.48E-05	1.61E-08	2.67E-06	7.13E-07	5.82E-05	1.55E-05	5.82E-03	-	7.61E-06	1.01E-07	3.38E-08	9.13E-07	1.22E-08	8.52E-06	1.14E-07	8.52E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	7.530	0.017	0.021	2.58E-04	6.88E-05	5.06E-07	8.41E-05	2.24E-05	3.42E-04	9.13E-05	2.01E-02	2E-06	3.54E-05	4.72E-07	9.37E-07	2.53E-05	3.37E-07	6.07E-05	8.09E-07	3.57E-03	2E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.530	1.4	NA	1.82E-05	4.85E-06	2.06E-08	3.42E-06	9.11E-07	2.16E-05	5.76E-06	1.54E-05	-	2.49E-06	3.32E-08	4.24E-08	1.14E-06	1.53E-08	3.63E-06	4.84E-08	2.60E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	18.400	0.0100	0.089	6.31E-04	1.68E-04	3.45E-07	5.73E-05	1.53E-05	6.88E-04	1.84E-04	6.88E-02	2E-05	8.64E-05	1.15E-06	6.69E-07	1.81E-05	2.41E-07	1.04E-04	1.39E-06	1.04E-02	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-03d-100	1,1,1-Trichloroethane	0.750	3.00	NC	2.57E-05	6.86E-06	1.54E-08	2.57E-06	6.84E-07	2.83E-05	7.54E-06	9.43E-06	-	3.52E-06	4.70E-08	2.99E-08	8.06E-07	1.07E-08	4.33E-06	5.77E-08	1.44E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.710	0.2	NA	2.43E-05	6.49E-06	6.25E-09	1.04E-06	2.77E-07	2.54E-05	6.77E-06	1.27E-04	-	3.33E-06	4.45E-08	1.31E-08	3.54E-07	4.71E-09	3.69E-06	4.92E-08	1.84E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	9.500	0.01	NC	3.26E-04	8.69E-05	9.43E-08	1.57E-05	4.18E-06	3.41E-04	9.10E-05	3.41E-02	-	4.46E-05	5.95E-07	1.98E-07	5.36E-06	7.14E-08	5.00E-05	6.66E-07	5.00E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	16.600	0.017	0.021	5.69E-04	1.52E-04	1.12E-06	1.85E-04	4.95E-05	7.55E-04	2.01E-04	4.44E-02	4E-06	7.80E-05	1.04E-06	2.07E-06	5.58E-05	7.44E-07	1.34E-04	1.78E-06	7.87E-03	4E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	19.800	0.0100	0.089	6.79E-04	1.81E-04	3.71E-07	6.17E-05	1.64E-05	7.41E-04	1.97E-04	7.41E-02	2E-05	9.30E-05	1.24E-06	7.20E-07	1.94E-05	2.59E-07	1.12E-04	1.50E-06	1.12E-02	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-04i	1,1,1-Trichloroethane	9.600	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.49E-04	2.19E-04	1.98E-07	5.47E-05	2.19E-05	6.03E-04	2.41E-04	2.01E-04	-	1.20E-03	1.98E-07	9.63E-05	1.30E-03	4.32E-04
	1,1-Dichloroethane	6.300	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.60E-04	1.44E-04	5.55E-08	1.54E-05	6.15E-06	3.75E-04	1.50E-04	1.88E-03	-	7.88E-04	5.55E-08	2.70E-05	8.15E-04	4.07E-03
	1,1-Dichloroethene	6.400	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.66E-04	1.46E-04	9.60E-08	2.66E-05	1.06E-05	3.92E-04	1.57E-04	6.88E-03	-	8.00E-04	9.60E-08	4.68E-05	8.47E-04	1.49E-02
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	23.000	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.31E-03	5.26E-04	2.28E-07	6.33E-05	2.53E-05	1.38E-03	5.51E-04	1.38E-01	-	2.88E-03	2.28E-07	1.11E-04	2.99E-03	2.99E-01
	Tetrachloroethene	5.600	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.20E-04	1.28E-04	3.76E-07	1.04E-04	4.17E-05	4.24E-04	1.70E-04	2.50E-02	4E-06	7.00E-04	3.76E-07	1.83E-04	8.83E-04	5.20E-02
	Toluene	0.500	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.94E-08	5.37E-06	2.15E-06	3.39E-05	1.36E-05	2.42E-05	-	6.25E-05	1.94E-08	9.45E-06	7.20E-05	5.14E-05
	Trichloroethene	130.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.43E-03	2.97E-03	2.43E-06	6.75E-04	2.70E-04	8.10E-03	3.24E-03	8.10E-01	3E-04	1.63E-02	2.43E-06	1.19E-03	1.74E-02	1.74E+00
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-05i	1,1,1-Trichloroethane	1.180	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.74E-05	2.70E-05	2.43E-08	6.73E-06	2.69E-06	7.42E-05	2.97E-05	2.47E-05	-	1.48E-04	2.43E-08	1.18E-05	1.59E-04	5.31E-05
	1,1-Dichloroethane	0.990	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.66E-05	2.26E-05	8.72E-09	2.42E-06	9.66E-07	5.90E-05	2.36E-05	2.95E-04	-	1.24E-04	8.72E-09	4.25E-06	1.28E-04	6.40E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	11.900	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.80E-04	2.72E-04	1.18E-07	3.27E-05	1.31E-05	7.13E-04	2.85E-04	7.13E-02	-	1.49E-03	1.18E-07	5.76E-05	1.55E-03	1.55E-01
	Tetrachloroethene	24.100	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.38E-03	5.51E-04	1.62E-06	4.49E-04	1.79E-04	1.83E-03	7.30E-04	1.07E-01	2E-05	3.01E-03	1.62E-06	7.89E-04	3.80E-03	2.24E-01
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	19.200	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.10E-03	4.39E-04	3.60E-07	9.97E-05	3.99E-05	1.20E-03	4.79E-04	1.20E-01	4E-05	2.40E-03	3.60E-07	1.75E-04	2.58E-03	2.58E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-07i	1,1,1-Trichloroethane	2.130	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.22E-04	4.87E-05	4.38E-08	1.21E-05	4.86E-06	1.34E-04	5.35E-05	4.46E-05	-	2.66E-04	4.38E-08	2.14E-05	2.88E-04	9.59E-05
	1,1-Dichloroethane	0.810	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.63E-05	1.85E-05	7.13E-09	1.98E-06	7.91E-07	4.83E-05	1.93E-05	2.41E-04	-	1.01E-04	7.13E-09	3.48E-06	1.05E-04	5.24E-04
	1,1-Dichloroethene	0.500	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	7.50E-09	2.08E-06	8.32E-07	3.07E-05	1.23E-05	5.38E-04	-	6.25E-05	7.50E-09	3.66E-06	6.62E-05	1.16E-03
	Chloroform	0.500	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	5.08E-09	1.41E-06	5.63E-07	3.00E-05	1.20E-05	2.31E-04	1E-06	6.25E-05	5.08E-09	2.48E-06	6.50E-05	5.00E-04
	cis-1,2-Dichloroethene	3.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.86E-04	7.43E-05	3.23E-08	8.94E-06	3.58E-06	1.95E-04	7.79E-05	1.95E-02	-	4.06E-04	3.23E-08	1.57E-05	4.22E-04	4.22E-02
	Tetrachloroethene	10.800	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.17E-04	2.47E-04	7.26E-07	2.01E-04	8.04E-05	8.18E-04	3.27E-04	4.81E-02	7E-06	1.35E-03	7.26E-07	3.54E-04	1.70E-03	1.00E-01
	Toluene	0.500	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.94E-08	5.37E-06	2.15E-06	3.39E-05	1.36E-05	2.42E-05	-	6.25E-05	1.94E-08	9.45E-06	7.20E-05	5.14E-05
	Trichloroethene	21.400	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.22E-03	4.89E-04	4.01E-07	1.11E-04	4.44E-05	1.33E-03	5.34E-04	1.33E-01	5E-05	2.68E-03	4.01E-07	1.95E-04	2.87E-03	2.87E-01
	Trichlorofluoromethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.07E-08	2.95E-06	1.18E-06	3.15E-05	1.26E-05	1.58E-04	-	6.25E-05	1.07E-08	5.20E-06	6.77E-05	3.38E-04
CM-MW-15s	1,1,1-Trichloroethane	0.630	3.00	NC	2.16E-05	5.76E-06	1.30E-08	2.16E-06	5.75E-07	2.38E-05	6.33E-06	7.92E-06	-	2.96E-06	3.95E-08	2.51E-08	6.77E-07	9.03E-09	3.64E-06	4.85E-08	1.21E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.500	0.2	NA	1.71E-05	4.57E-06	4.40E-09	7.32E-07	1.95E-07	1.79E-05	4.77E-06	8.94E-05	-	2.35E-06	3.13E-08	9.22E-09	2.49E-07	3.32E-09	2.60E-06	3.46E-08	1.30E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.500	0.057	NA	1.71E-05	4.57E-06	7.50E-09	1.25E-06	3.33E-07	1.84E-05	4.90E-06	3.23E-04	-	2.35E-06	3.13E-08	1.57E-08	4.24E-07	5.65E-09	2.77E-06	3.70E-08	4.86E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	2.690	0.13	0.0805	9.22E-05	2.46E-05	2.73E-08	4.55E-06	1.21E-06	9.68E-05	2.58E-05	7.44E-04	2E-06	1.26E-05	1.68E-07	5.45E-08	1.47E-06	1.96E-08	1.41E-05	1.88E-07	1.09E-04	2E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	1.090	0.01	NC	3.74E-05	9.97E-06	1.08E-08	1.80E-06	4.80E-07	3.92E-05	1.04E-05	3.92E-03	-	5.12E-06	6.83E-08	2.28E-08	6.15E-07	8.20E-09	5.73E-06	7.65E-08	5.73E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	12.900	0.017	0.021	4.42E-04	1.18E-04	8.67E-07	1.44E-04	3.84E-05	5.86E-04	1.56E-04	3.45E-02	3E-06	6.06E-05	8.08E-07	1.60E-06	4.33E-05	5.78E-07	1.04E-04	1.39E-06	6.11E-03	3E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.500	1.4	NA	1.71E-05	4.57E-06	1.94E-08	3.22E-06	8.60E-07	2.04E-05	5.43E-06	1.45E-05	-	2.35E-06	3.13E-08	4.00E-08	1.08E-06	1.44E-08	3.43E-06	4.57E-08	2.45E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	57.300	0.0100	0.089	1.96E-03	5.24E-04	1.07E-06	1.78E-04	4.76E-05	2.14E-03	5.71E-04	2.14E-01	5E-05	2.69E-04	3.59E-06	2.08E-06	5.63E-05	7.50E-07	3.25E-04	4.34E-06	3.25E-02	4E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.500	0.2	NA	1.71E-05	4.57E-06	1.07E-08	1.77E-06	4.73E-07	1.89E-05	5.04E-06	9.46E-05	-	2.35E-06	3.13E-08	2.05E-08	5.54E-07	7.39E-09	2.90E-06	3.87E-08	1.45E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-17i	1,1,1-Trichloroethane	0.500	3.00	NC	1.71E-05	4.57E-06	1.03E-08	1.71E-06	4.56E-07	1.89E-05	5.03E-06	6.28E-06	-	2.35E-06	3.13E-08	1.99E-08	5.37E-07	7.17E-09	2.89E-06	3.85E-08	9.62E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.500	0.2	NA	1.71E-05	4.57E-06	4.40E-09	7.32E-07	1.95E-07	1.79E-05	4.77E-06	8.94E-05	-	2.35E-06	3.13E-08	9.22E-09	2.49E-07	3.32E-09	2.60E-06	3.46E-08	1.30E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.500	0.057	NA	1.71E-05	4.57E-06	7.50E-09	1.25E-06	3.33E-07	1.84E-05	4.90E-06	3.23E-04	-	2.35E-06	3.13E-08	1.57E-08	4.24E-07	5.65E-09	2.77E-06	3.70E-08	4.86E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.500	0.13	0.0805	1.71E-05	4.57E-06	5.08E-09	8.45E-07	2.25E-07	1.80E-05	4.80E-06	1.38E-04	4E-07	2.35E-06	3.13E-08	1.01E-08	2.74E-07	3.65E-09	2.62E-06	3.50E-08	2.02E-05	3E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	3.400	0.01	NC	1.17E-04	3.11E-05	3.38E-08	5.61E-06	1.50E-06	1.22E-04	3.26E-05	1.22E-02	-	1.60E-05	2.13E-07	7.10E-08	1.92E-06	2.56E-08	1.79E-05	2.38E-07	1.79E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	8.900	0.017	0.021	3.05E-04	8.14E-05	5.98E-07	9.94E-05	2.65E-05	4.05E-04	1.08E-04	2.38E-02	2E-06	4.18E-05	5.57E-07	1.11E-06	2.99E-05	3.99E-07	7.17E-05	9.56E-07	4.22E-03	2E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.500	1.4	NA	1.71E-05	4.57E-06	1.94E-08	3.22E-06	8.60E-07	2.04E-05	5.43E-06	1.45E-05	-	2.35E-06	3.13E-08	4.00E-08	1.08E-06	1.44E-08	3.43E-06	4.57E-08	2.45E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	15.400	0.0100	0.089	5.28E-04	1.41E-04	2.88E-07	4.80E-05	1.28E-05	5.76E-04	1.54E-04	5.76E-02	1E-05	7.23E-05	9.64E-07	5.60E-07	1.51E-05	2.02E-07	8.74E-05	1.17E-06	8.74E-03	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.500	0.2	NA	1.71E-05	4.57E-06	1.07E-08	1.77E-06	4.73E-07	1.89E-05	5.04E-06	9.46E-05	-	2.35E-06	3.13E-08	2.05E-08	5.54E-07	7.39E-09	2.90E-06	3.87E-08	1.45E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-18i	1,1,1-Trichloroethane	0.550	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.14E-05	1.26E-05	1.13E-08	3.14E-06	1.25E-06	3.46E-05	1.38E-05	1.15E-05	-	6.88E-05	1.13E-08	5.52E-06	7.43E-05	2.48E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	0.250	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	1.68E-08	4.65E-06	1.86E-06	1.89E-05	7.58E-06	1.11E-03	2E-07	3.13E-05	1.68E-08	8.19E-06	3.94E-05	2.32E-03
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	7.700	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.40E-04	1.76E-04	1.44E-07	4.00E-05	1.60E-05	4.80E-04	1.92E-04	4.80E-02	2E-05	9.63E-04	1.44E-07	7.03E-05	1.03E-03	1.03E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-19i	1,1,1-Trichloroethane	0.550	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.14E-05	1.26E-05	1.13E-08	3.14E-06	1.25E-06	3.46E-05	1.38E-05	1.15E-05	-	6.88E-05	1.13E-08	5.52E-06	7.43E-05	2.48E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	4.200	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.40E-04	9.60E-05	4.17E-08	1.16E-05	4.62E-06	2.52E-04	1.01E-04	2.52E-02	-	5.25E-04	4.17E-08	2.03E-05	5.45E-04	5.45E-02
	Tetrachloroethene	9.000	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.14E-04	2.06E-04	6.05E-07	1.68E-04	6.70E-05	6.82E-04	2.73E-04	4.01E-02	6E-06	1.13E-03	6.05E-07	2.95E-04	1.42E-03	8.35E-02
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	13.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.43E-04	2.97E-04	2.43E-07	6.75E-05	2.70E-05	8.10E-04	3.24E-04	8.10E-02	3E-05	1.63E-03	2.43E-07	1.19E-04	1.74E-03	1.74E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04

					Cadet Site Worker									Cadet Site Excavation Worker									NFVN Resident (adult)									NFVN Resident (child)				
Well Name	Analyte	RME (ug/l)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)	Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)	Total Dose (mg/kg-d)	Total Risk (unitless)
CM-MW-20i	1,1,1-Trichloroethane	3.300	3.00	NC	1.13E-04	3.02E-05	6.79E-08	1.13E-05	3.01E-06	1.24E-04	3.32E-05	4.15E-05	-	1.55E-05	2.07E-07	1.31E-07	3.55E-06	4.73E-08	1.90E-05	2.54E-07	6.35E-06	-	1.89E-04	7.54E-05	6.79E-08	1.88E-05	7.53E-06	2.07E-04	8.30E-05	6.91E-05	-	4.13E-04	6.79E-08	3.31E-05	4.46E-04	1.49E-04
	1,1-Dichloroethane	5.060	0.2	NA	1.73E-04	4.63E-05	4.46E-08	7.41E-06	1.98E-06	1.81E-04	4.82E-05	9.04E-04	-	2.38E-05	3.17E-07	9.33E-08	2.52E-06	3.36E-08	2.63E-05	3.50E-07	1.31E-04	-	2.89E-04	1.16E-04	4.46E-08	1.23E-05	4.94E-06	3.01E-04	1.21E-04	1.51E-03	-	6.33E-04	4.46E-08	2.17E-05	6.54E-04	3.27E-03
	1,1-Dichloroethene	3.260	0.057	NA	1.12E-04	2.98E-05	4.89E-08	8.13E-06	2.17E-06	1.20E-04	3.20E-05	2.10E-03	-	1.53E-05	2.04E-07	1.02E-07	2.76E-06	3.68E-08	1.81E-05	2.41E-07	3.17E-04	-	1.86E-04	7.45E-05	4.89E-08	1.36E-05	5.42E-06	2.00E-04	7.99E-05	3.51E-03	-	4.08E-04	4.89E-08	2.38E-05	4.31E-04	7.57E-03
	Chloroform	0.500	0.13	0.0805	1.71E-05	4.57E-06	5.08E-09	8.45E-07	2.25E-07	1.80E-05	4.80E-06	1.38E-04	4E-07	2.35E-06	3.13E-08	1.01E-08	2.74E-07	3.65E-09	2.62E-06	3.50E-08	2.02E-05	3E-09	2.86E-05	1.14E-05	5.08E-09	1.41E-06	5.63E-07	3.00E-05	1.20E-05	2.31E-04	1E-06	6.25E-05	5.08E-09	2.48E-06	6.50E-05	5.00E-04
	cis-1,2-Dichloroethene	20.500	0.01	NC	7.03E-04	1.87E-04	2.04E-07	3.38E-05	9.02E-06	7.37E-04	1.96E-04	7.37E-02	-	9.63E-05	1.28E-06	4.28E-07	1.16E-05	1.54E-07	1.08E-04	1.44E-06	1.08E-02	-	1.17E-03	4.69E-04	2.04E-07	5.64E-05	2.26E-05	1.23E-03	4.91E-04	1.23E-01	-	2.56E-03	2.04E-07	9.92E-05	2.66E-03	2.66E-01
	Tetrachloroethene	0.500	0.017	0.021	1.71E-05	4.57E-06	3.36E-08	5.59E-06	1.49E-06	2.27E-05	6.06E-06	1.34E-03	1E-07	2.35E-06	3.13E-08	6.22E-08	1.68E-06	2.24E-08	4.03E-06	5.37E-08	2.37E-04	1E-09	2.86E-05	1.14E-05	3.36E-08	9.31E-06	3.72E-06	3.79E-05	1.52E-05	2.23E-03	3E-07	6.25E-05	3.36E-08	1.64E-05	7.89E-05	4.64E-03
	Toluene	0.650	1.4	NA	2.23E-05	5.94E-06	2.52E-08	4.19E-06	1.12E-06	2.65E-05	7.06E-06	1.89E-05	-	3.05E-06	4.07E-08	5.20E-08	1.40E-06	1.87E-08	4.46E-06	5.94E-08	3.18E-06	-	3.71E-05	1.49E-05	2.52E-08	6.99E-06	2.79E-06	4.41E-05	1.77E-05	3.15E-05	-	8.13E-05	2.52E-08	1.23E-05	9.35E-05	6.68E-05
	Trichloroethene	17.000	0.0100	0.089	5.83E-04	1.55E-04	3.18E-07	5.29E-05	1.41E-05	6.36E-04	1.70E-04	6.36E-02	2E-05	7.98E-05	1.06E-06	6.18E-07	1.67E-05	2.23E-07	9.65E-05	1.29E-06	9.65E-03	1E-07	9.71E-04	3.89E-04	3.18E-07	8.82E-05	3.53E-05	1.06E-03	4.24E-04	1.06E-01	4E-05	2.13E-03	3.18E-07	1.55E-04	2.28E-03	2.28E-01
	Trichlorofluoromethane	0.500	0.2	NA	1.71E-05	4.57E-06	1.07E-08	1.77E-06	4.73E-07	1.89E-05	5.04E-06	9.46E-05	-	2.35E-06	3.13E-08	2.05E-08	5.54E-07	7.39E-09	2.90E-06	3.87E-08	1.45E-05	-	2.86E-05	1.14E-05	1.07E-08	2.95E-06	1.18E-06	3.15E-05	1.26E-05	1.58E-04	-	6.25E-05	1.07E-08	5.20E-06	6.77E-05	3.38E-04
CM-MW-21i	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.250	0.01	NC	8.57E-06	2.29E-06	2.48E-09	4.13E-07	1.10E-07	8.98E-06	2.40E-06	8.98E-04	-	1.17E-06	1.57E-08	5.22E-09	1.41E-07	1.88E-09	1.32E-06	1.75E-08	1.32E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	0.250	0.017	0.021	8.57E-06	2.29E-06	1.68E-08	2.79E-06	7.45E-07	1.14E-05	3.03E-06	6.68E-04	6E-08	1.17E-06	1.57E-08	3.11E-08	8.40E-07	1.12E-08	2.01E-06	2.69E-08	1.18E-04	6E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	0.720	0.0100	0.089	2.47E-05	6.58E-06	1.35E-08	2.24E-06	5.98E-07	2.69E-05	7.18E-06	2.69E-03	6E-07	3.38E-06	4.51E-08	2.62E-08	7.07E-07	9.43E-09	4.09E-06	5.45E-08	4.09E-04	5E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-22s	1,1,1-Trichloroethane	0.570	3.00	NC	1.95E-05	5.21E-06	1.17E-08	1.95E-06	5.20E-07	2.15E-05	5.73E-06	7.16E-06	-	2.68E-06	3.57E-08	2.27E-08	6.13E-07	8.17E-09	3.29E-06	4.39E-08	1.10E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	1.220	0.13	0.0805	4.18E-05	1.12E-05	1.24E-08	2.06E-06	5.50E-07	4.39E-05	1.17E-05	3.38E-04	9E-07	5.73E-06	7.64E-08	2.47E-08	6.67E-07	8.90E-09	6.40E-06	8.53E-08	4.92E-05	7E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	1.230	0.01	NC	4.22E-05	1.12E-05	1.22E-08	2.03E-06	5.41E-07	4.42E-05	1.18E-05	4.42E-03	-	5.78E-06	7.70E-08	2.57E-08	6.94E-07	9.25E-09	6.47E-06	8.63E-08	6.47E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	27.300	0.017	0.021	9.36E-04	2.50E-04	1.83E-06	3.05E-04	8.13E-05	1.24E-03	3.31E-04	7.30E-02	7E-06	1.28E-04	1.71E-06	3.40E-06	9.17E-05	1.22E-06	2.20E-04	2.93E-06	1.29E-02	6E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	43.000	0.0100	0.089	1.47E-03	3.93E-04	8.05E-07	1.34E-04	3.57E-05	1.61E-03	4.29E-04	1.61E-01	4E-05	2.02E-04	2.69E-06	1.56E-06	4.22E-05	5.63E-07	2.44E-04	3.26E-06	2.44E-02	3E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-23i	1,1,1-Trichloroethane	2.200	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.26E-04	5.03E-05	4.53E-08	1.25E-05	5.02E-06	1.38E-04	5.53E-05	4.61E-05	-	2.75E-04	4.53E-08	2.21E-05	2.97E-04	9.90E-05
	1,1-Dichloroethane	1.800	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.03E-04	4.11E-05	1.58E-08	4.39E-06	1.76E-06	1.07E-04	4.29E-05	5.36E-04	-	2.25E-04	1.58E-08	7.73E-06	2.33E-04	1.16E-03
	1,1-Dichloroethene	1.600	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.14E-05	3.66E-05	2.40E-08	6.65E-06	2.66E-06	9.81E-05	3.92E-05	1.72E-03	-	2.00E-04	2.40E-08	1.17E-05	2.12E-04	3.71E-03
	Chloroform	0.500	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	5.08E-09	1.41E-06	5.63E-07	3.00E-05	1.20E-05	2.31E-04	1E-06	6.25E-05	5.08E-09	2.48E-06	6.50E-05	5.00E-04
	cis-1,2-Dichloroethene	13.100	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.49E-04	2.99E-04	1.30E-07	3.60E-05	1.44E-05	7.85E-04	3.14E-04	7.85E-02	-	1.64E-03	1.30E-07	6.34E-05	1.70E-03	1.70E-01
	Tetrachloroethene	16.200	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.26E-04	3.70E-04	1.09E-06	3.02E-04	1.21E-04	1.23E-03	4.91E-04	7.22E-02	1E-05	2.03E-03	1.09E-06	5.31E-04	2.56E-03	1.50E-01
	Toluene	8.960	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.12E-04	2.05E-04	3.47E-07	9.63E-05	3.85E-05	6.08E-04	2.43E-04	4.35E-04	-	1.12E-03	3.47E-07	1.69E-04	1.29E-03	9.21E-04
	Trichloroethene	40.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.29E-03	9.14E-04	7.49E-07	2.08E-04	8.30E-05	2.49E-03	9.97E-04	2.49E-01	9E-05	5.00E-03	7.49E-07	3.65E-04	5.37E-03	5.37E-01
	Trichlorofluoromethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.07E-08	2.95E-06	1.18E-06	3.15E-05	1.26E-05	1.58E-04	-	6.25E-05	1.07E-08	5.20E-06	6.77E-05	3.38E-04
CM-MW-24i	1,1,1-Trichloroethane	0.610	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.49E-05	1.39E-05	1.26E-08	3.48E-06	1.39E-06	3.83E-05	1.53E-05	1.28E-05	-	7.63E-05	1.26E-08	6.12E-06	8.24E-05	2.75E-05
	1,1-Dichloroethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	4.40E-09	1.22E-06	4.88E-07	2.98E-05	1.19E-05	1.49E-04	-	6.25E-05	4.40E-09	2.15E-06	6.46E-05	3.23E-04
	1,1-Dichloroethene	0.500	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	7.50E-09	2.08E-06	8.32E-07	3.07E-05	1.23E-05	5.38E-04	-	6.25E-05	7.50E-09	3.66E-06	6.62E-05	1.16E-03
	Chloroform	0.500	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	5.08E-09	1.41E-06	5.63E-07	3.00E-05	1.20E-05	2.31E-04	1E-06	6.25E-05	5.08E-09	2.48E-06	6.50E-05	5.00E-04
	cis-1,2-Dichloroethene	0.790	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.51E-05	1.81E-05	7.84E-09	2.17E-06	8.69E-07	4.73E-05	1.89E-05	4.73E-03	-	9.88E-05	7.84E-09	3.82E-06	1.03E-04	1.03E-02
	Tetrachloroethene	0.500	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	3.36E-08	9.31E-06	3.72E-06	3.79E-05	1.52E-05	2.23E-03	3E-07	6.25E-05	3.36E-08	1.64E-05	7.89E-05	4.64E-03
	Toluene	0.500	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.94E-08	5.37E-06	2.15E-06	3.39E-05	1.36E-05	2.42E-05	-	6.25E-05	1.94E-08	9.45E-06	7.20E-05	5.14E-05
	Trichloroethene	1.600	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.14E-05	3.66E-05	3.00E-08	8.30E-06	3.32E-06	9.97E-05	3.99E-05	9.97E-03	4E-06	2.00E-04	3.00E-08	1.46E-05	2.15E-04	2.15E-02
	Trichlorofluoromethane	0.500	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.07E-08	2.95E-06	1.18E-06	3.15E-05	1.26E-05	1.58E-04	-	6.25E-05	1.07E-08	5.20E-06	6.77E-05	3.38E-04
CM-MW-28USA-050	1,1,1-Trichloroethane	0.250	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.14E-09	1.43E-06	5.70E-07	1.57E-05	6.28E-06	5.24E-06	-	3.13E-05	5.14E-09	2.51E-06	3.38E-05	1.13E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	0.530	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.03E-05	1.21E-05	3.56E-08	9.87E-06	3.95E-06	4.02E-05	1.61E-05	2.36E-03	3E-07	6.63E-05	3.56E-08	1.74E-05	8.36E-05	4.92E-03
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	5.070	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.90E-04	1.16E-04	9.49E-08	2.63E-05	1.05E-05	3.16E-04	1.26E-04	3.16E-02	1E-05	6.34E-04	9.49E-08	4.63E-05	6.80E-04	6.80E-02
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-28USA-120.5	1,1,1-Trichloroethane	0.250	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.14E-09	1.43E-06	5.70E-07	1.57E-05	6.28E-06	5.24E-06	-	3.13E-05	5.14E-09	2.51E-06	3.38E-05	1.13E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	0.840	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.80E-05	1.92E-05	5.64E-08	1.56E-05	6.26E-06	6.36E-05	2.55E-05	3.74E-03	5E-07	1.05E-04	5.64E-08	2.75E-05	1.33E-04	7.79E-03
	Toluene	1.700	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.71E-05	3.89E-05	6.59E-08	1.83E-05	7.31E-06	1.15E-04	4.62E-05	8.24E-05	-	2.13E-04	6.59E-08	3.21E-05	2.45E-04	1.75E-04
	Trichloroethene	8.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.57E-04	1.83E-04	1.50E-07	4.15E-05	1.66E-05	4.99E-04	1.99E-04	4.99E-02	2E-05	1.00E-03	1.50E-07	7.30E-05	1.07E-03	1.07E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-29USA-060.5	1,1,1-Trichloroethane	0.540	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.09E-05	1.23E-05	1.11E-08	3.08E-06	1.23E-06	3.39E-05	1.36E-05	1.13E-05	-	6.75E-05	1.11E-08	5.42E-06	7.29E-05	2.43E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	2.600	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.49E-04	5.94E-05	2.58E-08	7.15E-06	2.86E-06	1.56E-04	6.23E-05	1.56E-02	-	3.25E-04	2.58E-08	1.26E-05	3.38E-04	3.38E-02
	Tetrachloroethene	6.420	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.67E-04	1.47E-04	4.31E-07	1.20E-04	4.78E-05	4.86E-04	1.95E-04	2.86E-02	4E-06	8.03E-04	4.31E-07	2.10E-04	1.01E-03	5.96E-02
	Toluene	2.030	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.16E-04	4.64E-05	7.87E-08	2.18E-05	8.73E-06	1.38E-04	5.51E-05	9.84E-05	-	2.54E-04	7.87E-08	3.84E-05	2.92E-04	2.09E-04
	Trichloroethene	11.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.29E-04	2.51E-04	2.06E-07	5.71E-05	2.28E-05	6.86E-04	2.74E-04	6.86E-02	2E-05	1.38E-03	2.06E-07	1.00E-04	1.48E-03	1.48E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-29USA-100	1,1,1-Trichloroethane	0.830	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.74E-05	1.90E-05	1.71E-08	4.73E-06	1.89E-06	5.22E-05	2.09E-05	1.74E-05	-	1.04E-04	1.71E-08	8.33E-06	1.12E-04	3.74E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	3.690	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.11E-04	8.43E-05	3.66E-08	1.02E-05	4.06E-06	2.21E-04	8.84E-05	2.21E-02	-	4.61E-04	3.66E-08	1.79E-05	4.79E-04	4.79E-02
	Tetrachloroethene	9.310	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.32E-04	2.13E-04	6.25E-07	1.73E-04	6.93E-05	7.05E-04	2.82E-04	4.15E-02	6E-06	1.16E-03	6.25E-07	3.05E-04	1.47E-03	8.64E-02
	Toluene	4.410	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.52E-04	1.01E-04	1.71E-07	4.74E-05	1.90E-05	2.99E-04	1.20E-04	2.14E-04	-	5.51E-04	1.71E-07	8.34E-05	6.35E-04	4.53E-04
	Trichloroethene	14.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.00E-04	3.20E-04	2.62E-07	7.27E-05	2.91E-05	8.73E-04	3.49E-04	8.73E-02	3E-05	1.75E-03	2.62E-07	1.28E-04	1.88E-03	1.88E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-29USA-140.5	1,1,1-Trichloroethane	0.860	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.91E-05	1.97E-05	1.77E-08	4.90E-06	1.96E-06	5.40E-05	2.16E-05	1.80E-05	-	1.08E-04	1.77E-08	8.63E-06	1.16E-04	3.87E-05
	1,1-Dichloroethane	0.610	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.49E-05	1.39E-05	5.37E-09	1.49E-06	5.95E-07	3.63E-05	1.45E-05	1.82E-04	-	7.63E-05	5.37E-09	2.62E-06	7.89E-05	3.94E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	5.600	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.20E-04	1.28E-04	5.56E-08	1.54E-05	6.16E-06	3.35E-04	1.34E-04	3.35E-02	-	7.00E-04	5.56E-08	2.71E-05	7.27E-04	7.27E-02
	Tetrachloroethene	10.000	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.71E-04	2.29E-04	6.72E-07	1.86E-04	7.45E-05	7.58E-04	3.03E-04	4.46E-02	6E-06	1.25E-03	6.72E-07	3.28E-04	1.58E-03	9.28E-02
	Toluene	3.650	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.09E-04	8.34E-05	1.42E-07	3.92E-05	1.57E-05	2.48E-04	9.91E-05	1.77E-04	-	4.56E-04	1.42E-07	6.90E-05	5.25E-04	3.75E-04
	Trichloroethene	15.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.57E-04	3.43E-04	2.81E-07	7.79E-05	3.11E-05	9.35E-04	3.74E-04	9.35E-02	3E-05	1.88E-03	2.81E-07	1.37E-04	2.01E-03	2.01E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-Ui	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.750	0.13	0.0805	2.57E-05	6.86E-06	7.62E-09	1.27E-06	3.38E-07	2.70E-05	7.20E-06	2.08E-04	6E-07	3.52E-06	4.70E-08	1.52E-08	4.10E-07	5.47E-09	3.93E-06	5.24E-08	3.03E-05	4E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.250	0.01	NC	8.57E-06	2.29E-06	2.48E-09	4.13E-07	1.10E-07	8.98E-06	2.40E-06	8.98E-04	-	1.17E-06	1.57E-08	5.22E-09	1.41E-07	1.88E-09	1.32E-06	1.75E-08	1.32E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	0.250	0.017	0.021	8.57E-06	2.29E-06	1.68E-08	2.79E-06	7.45E-07	1.14E-05	3.03E-06	6.68E-04	6E-08	1.17E-06	1.57E-08	3.11E-08	8.40E-07	1.12E-08	2.01E-06	2.69E-08	1.18E-04	6E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	13.000	0.0100	0.089	4.46E-04	1.19E-04	2.43E-07	4.05E-05	1.08E-05	4.86E-04	1.30E-04	4.86E-02	1E-05	6.11E-05	8.14E-07	4.73E-07	1.28E-05	1.70E-07	7.38E-05	9.84E-07	7.38E-03	9E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Deep Groundwater Zone																																				
CM-MW-01d-161	1,1,1-Trichloroethane	0.560	3.00	NC	1.92E-05	5.12E-06	1.15E-08	1.92E-06	5.11E-07	2.11E-05	5.63E-06	7.04E-06	-	2.63E-06	3.51E-08	2.23E-08	6.02E-07	8.03E-09	3.23E-06	4.31E-08	1.08E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.810	0.2	NA	2.78E-05	7.41E-06	7.13E-09	1.19E-06	3.16E-07	2.90E-05	7.72E-06	1.45E-04	-	3.80E-06	5.07E-08	1.49E-08	4.03E-07	5.38E-09	4.21E-06	5.61E-08	2.10E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	9.360	0.01	NC	3.21E-04	8.56E-05	9.29E-08	1.55E-05	4.12E-06	3.36E-04	8.97E-05	3.36E-02	-	4.40E-05	5.86E-07	1.95E-07	5.28E-06	7.04E-08	4.92E-05	6.57E-07	4.92E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	10.700	0.017	0.021	3.67E-04	9.78E-05	7.19E-07	1.20E-04	3.19E-05	4.86E-04	1.30E-04	2.86E-02	3E-06	5.03E-05	6.70E-07	1.33E-06	3.59E-05	4.79E-07	8.62E-05	1.15E-06	5.07E-03	2E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	18.000	0.0100	0.089	6.17E-04	1.65E-04	3.37E-07	5.61E-05	1.49E-05	6.73E-04	1.80E-04	6.73E-02	2E-05	8.45E-05	1.13E-06	6.54E-07	1.77E-05	2.36E-07	1.02E-04	1.36E-06	1.02E-02	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-01d-194	1,1,1-Trichloroethane	1.280	3.00	NC	4.39E-05	1.17E-05	2.63E-08	4.38E-06	1.17E-06	4.83E-05	1.29E-05	1.61E-05	-	6.01E-06	8.02E-08	5.09E-08	1.38E-06	1.83E-08	7.39E-06	9.85E-08	2.46E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	1.060	0.2	NA	3.63E-05	9.69E-06	9.33E-09	1.55E-06	4.14E-07	3.79E-05	1.01E-05	1.89E-04	-	4.98E-06	6.64E-08	1.95E-08	5.28E-07	7.04E-09	5.51E-06	7.34E-08	2.75E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.930	0.057	NA	3.19E-05	8.50E-06	1.40E-08	2.32E-06	6.19E-07	3.42E-05	9.12E-06	6.00E-04	-	4.37E-06	5.82E-08	2.92E-08	7.88E-07	1.05E-08	5.16E-06	6.87E-08	9.05E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	8.700	0.01	NC	2.98E-04	7.95E-05	8.64E-08	1.44E-05	3.83E-06	3.13E-04	8.34E-05	3.13E-02	-	4.09E-05	5.45E-07	1.82E-07	4.91E-06	6.54E-08	4.58E-05	6.10E-07	4.58E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	6.900	0.017	0.021	2.37E-04	6.31E-05	4.64E-07	7.71E-05	2.06E-05	3.14E-04	8.36E-05	1.85E-02	2E-06	3.24E-05	4.32E-07	8.58E-07	2.32E-05	3.09E-07	5.56E-05	7.41E-07	3.27E-03	2E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	21.000	0.0100	0.089	7.20E-04	1.92E-04	3.93E-07	6.54E-05	1.74E-05	7.85E-04	2.09E-04	7.85E-02	2E-05	9.86E-05	1.32E-06	7.63E-07	2.06E-05	2.75E-07	1.19E-04	1.59E-06	1.19E-02	1E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-01d-224	1,1,1-Trichloroethane	3.210	3.00	NC	1.10E-04	2.93E-05	6.61E-08	1.10E-05	2.93E-06	1.21E-04	3.23E-05	4.03E-05	-	1.51E-05	2.01E-07	1.28E-07	3.45E-06	4.60E-08	1.85E-05	2.47E-07	6.18E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

					Cadet Site Worker									Cadet Site Excavation Worker									NFVN Resident (adult)									NFVN Resident (child)				
Well Name	Analyte	RME (ug/l)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)	Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)	Total Dose (mg/kg-d)	Total Risk (unitless)
	1,1-Dichloroethane	1.570	0.2	NA	5.38E-05	1.44E-05	1.38E-08	2.30E-06	6.13E-07	5.61E-05	1.50E-05	2.81E-04	-	7.37E-06	9.83E-08	2.90E-08	7.82E-07	1.04E-08	8.16E-06	1.09E-07	4.08E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	2.000	0.057	NA	6.86E-05	1.83E-05	3.00E-08	4.99E-06	1.33E-06	7.36E-05	1.96E-05	1.29E-03	-	9.39E-06	1.25E-07	6.27E-08	1.69E-06	2.26E-08	1.11E-05	1.48E-07	1.95E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	9.350	0.01	NC	3.21E-04	8.55E-05	9.28E-08	1.54E-05	4.12E-06	3.36E-04	8.96E-05	3.36E-02	-	4.39E-05	5.86E-07	1.95E-07	5.27E-06	7.03E-08	4.92E-05	6.56E-07	4.92E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	6.270	0.017	0.021	2.15E-04	5.73E-05	4.21E-07	7.00E-05	1.87E-05	2.85E-04	7.60E-05	1.68E-02	2E-06	2.94E-05	3.93E-07	7.80E-07	2.11E-05	2.81E-07	5.05E-05	6.73E-07	2.97E-03	1E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	33.300	0.0100	0.089	1.14E-03	3.04E-04	6.24E-07	1.04E-04	2.77E-05	1.25E-03	3.32E-04	1.25E-01	3E-05	1.56E-04	2.09E-06	1.21E-06	3.27E-05	4.36E-07	1.89E-04	2.52E-06	1.89E-02	2E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	1.070	0.2	NA	3.67E-05	9.78E-06	2.28E-08	3.79E-06	1.01E-06	4.05E-05	1.08E-05	2.02E-04	-	5.03E-06	6.70E-08	4.39E-08	1.19E-06	1.58E-08	6.21E-06	8.28E-08	3.11E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-02d	1,1,1-Trichloroethane	4.010	3.00	NC	1.37E-04	3.67E-05	8.25E-08	1.37E-05	3.66E-06	1.51E-04	4.03E-05	5.04E-05	-	1.88E-05	2.51E-07	1.60E-07	4.31E-06	5.75E-08	2.31E-05	3.09E-07	7.71E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	1.980	0.2	NA	6.79E-05	1.81E-05	1.74E-08	2.90E-06	7.73E-07	7.08E-05	1.89E-05	3.54E-04	-	9.30E-06	1.24E-07	3.65E-08	9.86E-07	1.31E-08	1.03E-05	1.37E-07	5.14E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	2.220	0.057	NA	7.61E-05	2.03E-05	3.33E-08	5.54E-06	1.48E-06	8.17E-05	2.18E-05	1.43E-03	-	1.04E-05	1.39E-07	6.96E-08	1.88E-06	2.51E-08	1.23E-05	1.64E-07	2.16E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	11.300	0.01	NC	3.87E-04	1.03E-04	1.12E-07	1.87E-05	4.97E-06	4.06E-04	1.08E-04	4.06E-02	-	5.31E-05	7.08E-07	2.36E-07	6.37E-06	8.50E-08	5.94E-05	7.93E-07	5.94E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	6.980	0.017	0.021	2.39E-04	6.38E-05	4.69E-07	7.80E-05	2.08E-05	3.17E-04	8.46E-05	1.87E-02	2E-06	3.28E-05	4.37E-07	8.68E-07	2.34E-05	3.13E-07	5.62E-05	7.50E-07	3.31E-03	2E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	37.100	0.0100	0.089	1.27E-03	3.39E-04	6.95E-07	1.16E-04	3.08E-05	1.39E-03	3.70E-04	1.39E-01	3E-05	1.74E-04	2.32E-06	1.35E-06	3.64E-05	4.86E-07	2.11E-04	2.81E-06	2.11E-02	2E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	1.430	0.2	NA	4.90E-05	1.31E-05	3.05E-08	5.07E-06	1.35E-06	5.41E-05	1.44E-05	2.70E-04	-	6.72E-06	8.95E-08	5.87E-08	1.58E-06	2.11E-08	8.30E-06	1.11E-07	4.15E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-03d-141	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.750	0.2	NA	2.57E-05	6.86E-06	6.60E-09	1.10E-06	2.93E-07	2.68E-05	7.15E-06	1.34E-04	-	3.52E-06	4.70E-08	1.38E-08	3.74E-07	4.98E-09	3.90E-06	5.19E-08	1.95E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	8.000	0.01	NC	2.74E-04	7.31E-05	7.94E-08	1.32E-05	3.52E-06	2.87E-04	7.67E-05	2.87E-02	-	3.76E-05	5.01E-07	1.67E-07	4.51E-06	6.01E-08	4.21E-05	5.61E-07	4.21E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	7.550	0.017	0.021	2.59E-04	6.90E-05	5.07E-07	8.43E-05	2.25E-05	3.43E-04	9.15E-05	2.02E-02	2E-06	3.55E-05	4.73E-07	9.39E-07	2.54E-05	3.38E-07	6.08E-05	8.11E-07	3.58E-03	2E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	14.000	0.0100	0.089	4.80E-04	1.28E-04	2.62E-07	4.36E-05	1.16E-05	5.24E-04	1.40E-04	5.24E-02	1E-05	6.58E-05	8.77E-07	5.09E-07	1.37E-05	1.83E-07	7.95E-05	1.06E-06	7.95E-03	9E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-03d-181	1,1,1-Trichloroethane	1.050	3.00	NC	3.60E-05	9.60E-06	2.16E-08	3.59E-06	9.58E-07	3.96E-05	1.06E-05	1.32E-05	-	4.93E-06	6.58E-08	4.18E-08	1.13E-06	1.50E-08	6.06E-06	8.08E-08	2.02E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.670	0.2	NA	2.30E-05	6.13E-06	5.90E-09	9.81E-07	2.62E-07	2.40E-05	6.39E-06	1.20E-04	-	3.15E-06	4.20E-08	1.24E-08	3.34E-07	4.45E-09	3.48E-06	4.64E-08	1.74E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.580	0.057	NA	1.99E-05	5.30E-06	8.70E-09	1.45E-06	3.86E-07	2.13E-05	5.69E-06	3.74E-04	-	2.72E-06	3.63E-08	1.82E-08	4.91E-07	6.55E-09	3.22E-06	4.29E-08	5.64E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	5.130	0.01	NC	1.76E-04	4.69E-05	5.09E-08	8.47E-06	2.26E-06	1.84E-04	4.92E-05	1.84E-02	-	2.41E-05	3.21E-07	1.07E-07	2.89E-06	3.86E-08	2.70E-05	3.60E-07	2.70E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	4.130	0.017	0.021	1.42E-04	3.78E-05	2.77E-07	4.61E-05	1.23E-05	1.88E-04	5.01E-05	1.10E-02	1E-06	1.94E-05	2.59E-07	5.14E-07	1.39E-05	1.85E-07	3.33E-05	4.44E-07	1.96E-03	9E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	13.300	0.0100	0.089	4.56E-04	1.22E-04	2.49E-07	4.14E-05	1.10E-05	4.97E-04	1.33E-04	4.97E-02	1E-05	6.25E-05	8.33E-07	4.84E-07	1.31E-05	1.74E-07	7.55E-05	1.01E-06	7.55E-03	9E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-03d-227	1,1,1-Trichloroethane	3.670	3.00	NC	1.26E-04	3.36E-05	7.55E-08	1.26E-05	3.35E-06	1.38E-04	3.69E-05	4.61E-05	-	1.72E-05	2.30E-07	1.46E-07	3.94E-06	5.26E-08	2.12E-05	2.82E-07	7.06E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	1.800	0.2	NA	6.17E-05	1.65E-05	1.58E-08	2.64E-06	7.03E-07	6.43E-05	1.72E-05	3.22E-04	-	8.45E-06	1.13E-07	3.32E-08	8.96E-07	1.20E-08	9.35E-06	1.25E-07	4.68E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	2.020	0.057	NA	6.93E-05	1.85E-05	3.03E-08	5.04E-06	1.34E-06	7.43E-05	1.98E-05	1.30E-03	-	9.49E-06	1.26E-07	6.34E-08	1.71E-06	2.28E-08	1.12E-05	1.49E-07	1.96E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	10.500	0.01	NC	3.60E-04	9.60E-05	1.04E-07	1.73E-05	4.62E-06	3.77E-04	1.01E-04	3.77E-02	-	4.93E-05	6.58E-07	2.19E-07	5.92E-06	7.89E-08	5.52E-05	7.36E-07	5.52E-03	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	4.990	0.017	0.021	1.71E-04	4.56E-05	3.35E-07	5.57E-05	1.49E-05	2.27E-04	6.05E-05	1.33E-02	1E-06	2.34E-05	3.12E-07	6.21E-07	1.68E-05	2.24E-07	4.02E-05	5.36E-07	2.36E-03	1E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	32.200	0.0100	0.089	1.10E-03	2.94E-04	6.03E-07	1.00E-04	2.67E-05	1.20E-03	3.21E-04	1.20E-01	3E-05	1.51E-04	2.02E-06	1.17E-06	3.16E-05	4.22E-07	1.83E-04	2.44E-06	1.83E-02	2E-07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	1.290	0.2	NA	4.42E-05	1.18E-05	2.75E-08	4.57E-06	1.22E-06	4.88E-05	1.30E-05	2.44E-04	-	6.06E-06	8.08E-08	5.29E-08	1.43E-06	1.91E-08	7.49E-06	9.98E-08	3.74E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-05d	1,1,1-Trichloroethane	4.500	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.57E-04	1.03E-04	9.26E-08	2.57E-05	1.03E-05	2.83E-04	1.13E-04	9.43E-05	-	5.63E-04	9.26E-08	4.51E-05	6.08E-04	2.03E-04
	1,1-Dichloroethane	2.700	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.54E-04	6.17E-05	2.38E-08	6.59E-06	2.64E-06	1.61E-04	6.43E-05	8.04E-04	-	3.38E-04	2.38E-08	1.16E-05	3.49E-04	1.75E-03
	1,1-Dichloroethene	3.000	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.71E-04	6.86E-05	4.50E-08	1.25E-05	4.99E-06	1.84E-04	7.36E-05	3.23E-03	-	3.75E-04	4.50E-08	2.19E-05	3.97E-04	6.96E-03
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	13.000	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.43E-04	2.97E-04	1.29E-07	3.58E-05	1.43E-05	7.79E-04	3.11E-04	7.79E-02	-	1.63E-03	1.29E-07	6.29E-05	1.69E-03	1.69E-01
	Tetrachloroethene	5.250	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.00E-04	1.20E-04	3.53E-07	9.78E-05	3.91E-05	3.98E-04	1.59E-04	2.34E-02	3E-06	6.56E-04	3.53E-07	1.72E-04	8.28E-04	4.87E-02
	Toluene	0.770	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.40E-05	1.76E-05	2.99E-08	8.28E-06	3.31E-06	5.23E-05	2.09E-05	3.73E-05	-	9.63E-05	2.99E-08	1.46E-05	1.11E-04	7.91E-05
	Trichloroethene	36.500	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.09E-03	8.34E-04	6.84E-07	1.89E-04	7.58E-05	2.28E-03	9.10E-04	2.28E-01	8E-05	4.56E-03	6.84E-07	3.33E-04	4.90E-03	4.90E-01
	Trichlorofluoromethane	1.410	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.06E-05	3.22E-05	3.01E-08	8.33E-06	3.33E-06	8.89E-05	3.56E-05	4.45E-04	-	1.76E-04	3.01E-08	1.47E-05	1.91E-04	9.55E-04
CM-MW-07d	1,1,1-Trichloroethane	0.250	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.14E-09	1.43E-06	5.70E-07	1.57E-05	6.28E-06	5.24E-06	-	3.13E-05	5.14E-09	2.51E-06	3.38E-05	1.13E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	0.250	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	1.68E-08	4.65E-06	1.86E-06	1.89E-05	7.58E-06	1.11E-03	2E-07	3.13E-05	1.68E-08	8.19E-06	3.94E-05	2.32E-03
	Toluene	1.900	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.09E-04	4.34E-05	7.37E-08	2.04E-05	8.17E-06	1.29E-04	5.16E-05	9.21E-05	-	2.38E-04	7.37E-08	3.59E-05	2.73E-04	1.95E-04
	Trichloroethene	0.880	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.03E-05	2.01E-05	1.65E-08	4.57E-06	1.83E-06	5.49E-05	2.19E-05	5.49E-03	2E-06	1.10E-04	1.65E-08	8.03E-06	1.18E-04	1.18E-02
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-18d	1,1,1-Trichloroethane	1.920	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.10E-04	4.39E-05	3.95E-08	1.09E-05	4.38E-06	1.21E-04	4.83E-05	4.02E-05	-	2.40E-04	3.95E-08	1.93E-05	2.59E-04	8.64E-05
	1,1-Dichloroethane	0.610	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.49E-05	1.39E-05	5.37E-09	1.49E-06	5.95E-07	3.63E-05	1.45E-05	1.82E-04	-	7.63E-05	5.37E-09	2.62E-06	7.89E-05	3.94E-04
	1,1-Dichloroethene	0.880	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.03E-05	2.01E-05	1.32E-08	3.66E-06	1.46E-06	5.39E-05	2.16E-05	9.46E-04	-	1.10E-04	1.32E-08	6.44E-06	1.16E-04	2.04E-03
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	2.030	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.16E-04	4.64E-05	2.02E-08	5.59E-06	2.23E-06	1.22E-04	4.86E-05	1.22E-02	-	2.54E-04	2.02E-08	9.82E-06	2.64E-04	2.64E-02
	Tetrachloroethene	2.430	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.39E-04	5.55E-05	1.63E-07	4.52E-05	1.81E-05	1.84E-04	7.36E-05	1.08E-02	2E-06	3.04E-04	1.63E-07	7.96E-05	3.83E-04	2.25E-02
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	13.100	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.49E-04	2.99E-04	2.45E-07	6.80E-05	2.72E-05	8.17E-04	3.27E-04	8.17E-02	3E-05	1.64E-03	2.45E-07	1.20E-04	1.76E-03	1.76E-01
	Trichlorofluoromethane	0.650	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.71E-05	1.49E-05	1.39E-08	3.84E-06	1.54E-06	4.10E-05	1.64E-05	2.05E-04	-	8.13E-05	1.39E-08	6.76E-06	8.80E-05	4.40E-04
CM-MW-19d	1,1,1-Trichloroethane	2.040	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.17E-04	4.66E-05	4.20E-08	1.16E-05	4.65E-06	1.28E-04	5.13E-05	4.27E-05	-	2.55E-04	4.20E-08	2.05E-05	2.75E-04	9.18E-05
	1,1-Dichloroethane	0.860	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.91E-05	1.97E-05	7.57E-09	2.10E-06	8.39E-07	5.12E-05	2.05E-05	2.56E-04	-	1.08E-04	7.57E-09	3.69E-06	1.11E-04	5.56E-04
	1,1-Dichloroethene	1.200	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.86E-05	2.74E-05	1.80E-08	4.99E-06	2.00E-06	7.36E-05	2.94E-05	1.29E-03	-	1.50E-04	1.80E-08	8.78E-06	1.59E-04	2.79E-03
	Chloroform	0.500	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	5.08E-09	1.41E-06	5.63E-07	3.00E-05	1.20E-05	2.31E-04	1E-06	6.25E-05	5.08E-09	2.48E-06	6.50E-05	5.00E-04
	cis-1,2-Dichloroethene	3.460	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.98E-04	7.91E-05	3.43E-08	9.52E-06	3.81E-06	2.07E-04	8.29E-05	2.07E-02	-	4.33E-04	3.43E-08	1.67E-05	4.49E-04	4.49E-02
	Tetrachloroethene	2.400	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.37E-04	5.49E-05	1.61E-07	4.47E-05	1.79E-05	1.82E-04	7.27E-05	1.07E-02	2E-06	3.00E-04	1.61E-07	7.86E-05	3.79E-04	2.23E-02
	Toluene	0.500	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86E-05	1.14E-05	1.94E-08	5.37E-06	2.15E-06	3.39E-05	1.36E-05	2.42E-05	-	6.25E-05	1.94E-08	9.45E-06	7.20E-05	5.14E-05
	Trichloroethene	15.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.57E-04	3.43E-04	2.81E-07	7.79E-05	3.11E-05	9.35E-04	3.74E-04	9.35E-02	3E-05	1.88E-03	2.81E-07	1.37E-04	2.01E-03	2.01E-01
	Trichlorofluoromethane	0.790	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.51E-05	1.81E-05	1.68E-08	4.67E-06	1.87E-06	4.98E-05	1.99E-05	2.49E-04	-	9.88E-05	1.68E-08	8.21E-06	1.07E-04	5.35E-04
CM-MW-28USA-180	1,1,1-Trichloroethane	0.720	3.00	NC	2.47E-05	6.58E-06	1.48E-08	2.46E-06	6.57E-07	2.71E-05	7.24E-06	9.05E-06	-	3.38E-06	4.51E-08	2.87E-08	7.74E-07	1.03E-08	4.16E-06	5.54E-08	1.39E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.250	0.01	NC	8.57E-06	2.29E-06	2.48E-09	4.13E-07	1.10E-07	8.98E-06	2.40E-06	8.98E-04	-	1.17E-06	1.57E-08	5.22E-09	1.41E-07	1.88E-09	1.32E-06	1.75E-08	1.32E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	0.250	0.017	0.021	8.57E-06	2.29E-06	1.68E-08	2.79E-06	7.45E-07	1.14E-05	3.03E-06	6.68E-04	6E-08	1.17E-06	1.57E-08	3.11E-08	8.40E-07	1.12E-08	2.01E-06	2.69E-08	1.18E-04	6E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	16.000	1.4	NA	5.49E-04	1.46E-04	6.21E-07	1.03E-04	2.75E-05	6.52E-04	1.74E-04	4.66E-04	-	7.51E-05	1.00E-06	1.28E-06	3.45E-05	4.60E-07	1.10E-04	1.46E-06	7.83E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	4.500	0.0100	0.089	1.54E-04	4.11E-05	8.43E-08	1.40E-05	3.74E-06	1.68E-04	4.49E-05	1.68E-02	4E-06	2.11E-05	2.82E-07	1.64E-07	4.42E-06	5.89E-08	2.56E-05	3.41E-07	2.56E-03	3E-08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Troutdale Groundwater Zone																																				
CM-MW-10d	1,1,1-Trichloroethane	0.250	3.00	NC	8.57E-06	2.29E-06	5.14E-09	8.55E-07	2.28E-07	9.43E-06	2.51E-06	3.14E-06	-	1.17E-06	1.57E-08	9.95E-09	2.69E-07	3.58E-09	1.44E-06	1.92E-08	4.81E-07	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	0.250	0.2	NA	8.57E-06	2.29E-06	2.20E-09	3.66E-07	9.76E-08	8.94E-06	2.38E-06	4.47E-05	-	1.17E-06	1.57E-08	4.61E-09	1.25E-07	1.66E-09	1.30E-06	1.73E-08	6.49E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.250	0.057	NA	8.57E-06	2.29E-06	3.75E-09	6.24E-07	1.66E-07	9.20E-06	2.45E-06	1.61E-04	-	1.17E-06	1.57E-08	7.84E-09	2.12E-07	2.82E-09	1.39E-06	1.85E-08	2.43E-05	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chloroform	0.250	0.13	0.0805	8.57E-06	2.29E-06	2.54E-09	4.23E-07	1.13E-07	8.99E-06	2.40E-06	6.92E-05	2E-07	1.17E-06	1.57E-08	5.06E-09	1.37E-07	1.82E-09	1.31E-06	1.75E-08	1.01E-05	1E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	0.250	0.01	NC	8.57E-06	2.29E-06	2.48E-09	4.13E-07	1.10E-07	8.98E-06	2.40E-06	8.98E-04	-	1.17E-06	1.57E-08	5.22E-09	1.41E-07	1.88E-09	1.32E-06	1.75E-08	1.32E-04	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	0.250	0.017	0.021	8.57E-06	2.29E-06	1.68E-08	2.79E-06	7.45E-07	1.14E-05	3.03E-06	6.68E-04	6E-08	1.17E-06	1.57E-08	3.11E-08	8.40E-07	1.12E-08	2.01E-06	2.69E-08	1.18E-04	6E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Toluene	0.250	1.4	NA	8.57E-06	2.29E-06	9.70E-09	1.61E-06	4.30E-07	1.02E-05	2.72E-06	7.27E-06	-	1.17E-06	1.57E-08	2.00E-08	5.40E-07	7.19E-09	1.71E-06	2.29E-08	1.22E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	0.250	0.0100	0.089	8.57E-06	2.29E-06	4.68E-09	7.79E-07	2.08E-07	9.35E-06	2.49E-06	9.35E-04	2E-07	1.17E-06	1.57E-08	9.09E-09	2.45E-07	3.27E-09	1.42E-06	1.89E-08	1.42E-04	2E-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichlorofluoromethane	0.250	0.2	NA	8.57E-06	2.29E-06	5.33E-09	8.86E-07	2.36E-07	9.46E-06	2.52E-06	4.73E-05	-	1.17E-06	1.57E-08	1.03E-08	2.77E-07	3.69E-09	1.45E-06	1.93E-08	7.26E-06	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CM-MW-27TGA	1,1,1-Trichloroethane	0.250	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.14E-09	1.43E-06	5.70E-07	1.57E-05	6.28E-06	5.24E-06	-	3.13E-05	5.14E-09	2.51E-06	3.38E-05	1.13E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	0.250	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	1.68E-08	4.65E-06	1.86E-06	1.89E-05	7.58E-06	1.11E-03	2E-07	3.13E-05	1.68E-08	8.19E-06	3.94E-05	2.32E-03
	Toluene	3.320	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.90E-04	7.59E-05	1.29E-07	3.57E-05	1.43E-05	2.25E-04	9.02E-05	1.61E-04	-	4.15E-04	1.29E-07	6.28E-05	4.78E-04	3.41E-04
	Trichloroethene	0.250	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	4.68E-09	1.30E-06	5.19E-07	1.56E-05	6.23E-06	1.56E-03	6E-07	3.13E-05	4.68E-09	2.28E-06	3.35E-05	3.35E-03
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-28TGA	1,1,1-Trichloroethane	0.250	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.14E-09	1.43E-06	5.70E-07	1.57E-05	6.28E-06	5.24E-06	-	3.13E-05	5.14E-09	2.51E-06	3.38E-05	1.13E-05
	1,1-Dichloroethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.20E-09	6.10E-07	2.44E-07	1.49E-05	5.96E-06	7.45E-05	-	3.13E-05	2.20E-09	1.07E-06	3.23E-05	1.62E-04
	1,1-Dichloroethene	0.250	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	3.75E-09	1.04E-06	4.16E-07	1.53E-05	6.13E-06	2.69E-04	-	3.13E-05	3.75E-09	1.83E-06	3.31E-05	5.80E-04
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	0.250	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.48E-09	6.88E-07	2.75E-07	1.50E-05	5.99E-06	1.50E-03	-	3.13E-05	2.48E-09	1.21E-06	3.25E-05	3.25E-03
	Tetrachloroethene	0.250	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	1.68E-08	4.65E-06	1.86E-06	1.89E-05	7.58E-06	1.11E-03	2E-07	3.13E-05	1.68E-08	8.19E-06	3.94E-05	2.32E-03
	Toluene	4.710	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.69E-04	1.08E-04	1.83E-07	5.06E-05	2.02E-05	3.20E-04	1.28E-04	2.28E-04	-	5.89E-04	1.83E-07	8.91E-05	6.78E-04	4.84E-04
	Trichloroethene	0.250	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	4.68E-09	1.30E-06	5.19E-07	1.56E-05	6.23E-06	1.56E-03	6E-07	3.13E-05	4.68E-09	2.28E-06	3.35E-05	3.35E-03
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04
CM-MW-29TGA	1,1,1-Trichloroethane	0.950	3.00	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.43E-05	2.17E-05	1.95E-08	5.42E-06	2.17E-06	5.97E-05	2.39E-05	1.99E-05	-	1.19E-04	1.95E-08	9.53E-06	1.28E-04	4.28E-05
	1,1-Dichloroethane	0.720	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.11E-05	1.65E-05	6.34E-09	1.76E-06	7.03E-07	4.29E-05	1.72E-05	2.14E-04	-	9.00E-05	6.34E-09	3.09E-06	9.31E-05	4.65E-04

					Cadet Site Worker									Cadet Site Excavation Worker									NFVN Resident (adult)									NFVN Resident (child)				
Well Name	Analyte	RME (ug/l)	RfDi (mg/kg-d)	CSFi $(mg/kg-d)^{-1}$	Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)		Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion/ Inhalation Dose (mg/kg-d)	Dermal Absorption (mg/cm^2-event)	Dermal Dose (mg/kg-d)	Total Dose (mg/kg-d)	Total Risk (unitless)
	1,1-Dichloroethene	0.820	0.057	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.69E-05	1.87E-05	1.23E-08	3.41E-06	1.36E-06	5.03E-05	2.01E-05	8.82E-04	-	1.03E-04	1.23E-08	6.00E-06	1.08E-04	1.90E-03
	Chloroform	0.250	0.13	0.0805	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	2.54E-09	7.04E-07	2.82E-07	1.50E-05	6.00E-06	1.15E-04	5E-07	3.13E-05	2.54E-09	1.24E-06	3.25E-05	2.50E-04
	cis-1,2-Dichloroethene	5.500	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.14E-04	1.26E-04	5.46E-08	1.51E-05	6.05E-06	3.29E-04	1.32E-04	3.29E-02	-	6.88E-04	5.46E-08	2.66E-05	7.14E-04	7.14E-02
	Tetrachloroethene	8.400	0.017	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.80E-04	1.92E-04	5.64E-07	1.56E-04	6.26E-05	6.36E-04	2.55E-04	3.74E-02	5E-06	1.05E-03	5.64E-07	2.75E-04	1.33E-03	7.79E-02
	Toluene	0.250	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	9.70E-09	2.69E-06	1.07E-06	1.70E-05	6.79E-06	1.21E-05	-	3.13E-05	9.70E-09	4.73E-06	3.60E-05	2.57E-05
	Trichloroethene	20.000	0.0100	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.14E-03	4.57E-04	3.75E-07	1.04E-04	4.15E-05	1.25E-03	4.99E-04	1.25E-01	4E-05	2.50E-03	3.75E-07	1.83E-04	2.68E-03	2.68E-01
	Trichlorofluoromethane	0.250	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.43E-05	5.71E-06	5.33E-09	1.48E-06	5.91E-07	1.58E-05	6.31E-06	7.88E-05	-	3.13E-05	5.33E-09	2.60E-06	3.38E-05	1.69E-04

Notes

C - Cancer

NA - This location is not applicable to this receptor group.

NC - Noncancer

"-" - No samples contained detected concentrations of this contaminant

Table 18. Dermal Absorption Evaluation for Contact with Groundwater
Cadet Manufacturing Company
Port of Vancouver, Washington

Chemical	DA_event (cm/evt)	t_event = hr/event	Isc =	MWT	logKow	Kp (cm/hr) predicted	B	tau (hr)	t_star (hr)	FA	Kp used in DA_event	log(Ds/lsc)	Dsc/lsc	Dsc	b	c	t_star3 B<=0.6
Cadet Site Worker or Residential (NFVN) Receptor																	
1,1,1-Trichloroethane	2.06E-02	0.58	1.00E-03	133.4	2.49	1.3E-02	0.1	0.60	1.43	1.0	1.3E-02	-3.6E+00	2.79E-04	2.79E-07	3.4E-01	3.7E-01	1.43
1,1-Dichloroethane	8.80E-03	0.58	1.00E-03	99.0	1.79	6.7E-03	0.0	0.38	0.92	1.0	6.7E-03	-3.4E+00	4.36E-04	4.36E-07	3.2E-01	3.5E-01	0.92
1,1-Dichloroethene	1.50E-02	0.58	1.00E-03	97.0	2.13	1.2E-02	0.0	0.37	0.89	1.0	1.2E-02	-3.3E+00	4.47E-04	4.47E-07	3.3E-01	3.6E-01	0.89
Chloroform	1.02E-02	0.58	1.00E-03	119.4	1.97	6.8E-03	0.0	0.50	1.19	1.0	6.8E-03	-3.5E+00	3.35E-04	3.35E-07	3.2E-01	3.5E-01	1.19
cis-1,2-Dichloroethene	9.93E-03	0.58	1.00E-03	97.0	1.86	7.7E-03	0.0	0.37	0.89	1.0	7.7E-03	-3.3E+00	4.47E-04	4.47E-07	3.2E-01	3.5E-01	0.89
Tetrachloroethene	6.72E-02	0.58	1.00E-03	165.8	3.40	3.3E-02	0.2	0.91	2.18	1.0	3.3E-02	-3.7E+00	1.84E-04	1.84E-07	4.1E-01	4.5E-01	2.18
Toluene	3.88E-02	0.58	1.00E-03	92.2	2.73	3.1E-02	0.1	0.35	0.84	1.0	3.1E-02	-3.3E+00	4.76E-04	4.76E-07	3.8E-01	4.1E-01	0.84
Trichloroethene	1.87E-02	0.58	1.00E-03	131.4	2.42	1.2E-02	0.1	0.58	1.39	1.0	1.2E-02	-3.5E+00	2.87E-04	2.87E-07	3.4E-01	3.7E-01	1.39
Trichlorofluoromethane	2.13E-02	0.58	1.00E-03	137.4	2.53	1.3E-02	0.1	0.63	1.51	1.0	1.3E-02	-3.6E+00	2.65E-04	2.65E-07	3.4E-01	3.7E-01	1.51
Cadet Site Excavation Worker																	
1,1,1-Trichloroethane	3.98E-02	2.00	1.00E-03	133.4	2.49	1.3E-02	0.1	0.60	1.43	1.0	1.3E-02	-3.6E+00	2.79E-04	2.79E-07	3.4E-01	3.7E-01	1.43
1,1-Dichloroethane	1.84E-02	2.00	1.00E-03	99.0	1.79	6.7E-03	0.0	0.38	0.92	1.0	6.7E-03	-3.4E+00	4.36E-04	4.36E-07	3.2E-01	3.5E-01	0.92
1,1-Dichloroethene	3.14E-02	2.00	1.00E-03	97.0	2.13	1.2E-02	0.0	0.37	0.89	1.0	1.2E-02	-3.3E+00	4.47E-04	4.47E-07	3.3E-01	3.6E-01	0.89
Chloroform	2.03E-02	2.00	1.00E-03	119.4	1.97	6.8E-03	0.0	0.50	1.19	1.0	6.8E-03	-3.5E+00	3.35E-04	3.35E-07	3.2E-01	3.5E-01	1.19
cis-1,2-Dichloroethene	2.09E-02	2.00	1.00E-03	97.0	1.86	7.7E-03	0.0	0.37	0.89	1.0	7.7E-03	-3.3E+00	4.47E-04	4.47E-07	3.2E-01	3.5E-01	0.89
Tetrachloroethene	1.24E-01	2.00	1.00E-03	165.8	3.40	3.3E-02	0.2	0.91	2.18	1.0	3.3E-02	-3.7E+00	1.84E-04	1.84E-07	4.1E-01	4.5E-01	2.18
Toluene	7.99E-02	2.00	1.00E-03	92.2	2.73	3.1E-02	0.1	0.35	0.84	1.0	3.1E-02	-3.3E+00	4.76E-04	4.76E-07	3.8E-01	4.1E-01	0.84
Trichloroethene	3.64E-02	2.00	1.00E-03	131.4	2.42	1.2E-02	0.1	0.58	1.39	1.0	1.2E-02	-3.5E+00	2.87E-04	2.87E-07	3.4E-01	3.7E-01	1.39
Trichlorofluoromethane	4.10E-02	2.00	1.00E-03	137.4	2.53	1.3E-02	0.1	0.63	1.51	1.0	1.3E-02	-3.6E+00	2.65E-04	2.65E-07	3.4E-01	3.7E-01	1.51

Notes
1. DA_event was calculated using the assumptions and equations as outlined by USEPA in the Dermal Assessment Guidance (USEPA 2004).
2. The DA calculation does not include the concentration term as shown in USEPA 2004, rather the DA event is calculated with the concentration term in Table 17a and 17b.

Table 19. Summary of Cumulative Risks from Groundwater Exposure

Cadet Manufacturing Company
Port of Vancouver, Washington

	Cadet Site Worker		Cadet Site Excavation Worker		NFVN Resident (adult)		NFVN Resident (child)
Location Name	Noncancer Hazard Quotient	ELCR	Noncancer Hazard Quotient	ELCR	Noncancer Hazard Quotient	ELCR	Noncancer Hazard Quotient
Water Bearing Zone Summary							
Shallow	2.6E-01	5.6E-05	4.0E-02	4.3E-07	4.3E-01	1.4E-04	9.1E-01
Intermediate	1.2E-01	2.0E-05	1.8E-02	1.5E-07	2.0E-01	5.0E-05	4.3E-01
Deep	1.1E-01	1.8E-05	1.6E-02	1.4E-07	1.8E-01	4.5E-05	3.8E-01
TGA	1.2E-01	2.0E-05	1.8E-02	1.6E-07	2.0E-01	5.0E-05	4.2E-01
Shallow Groundwater Zone							
CM-DPW-01	3.5E-01	4.1E-05	6.1E-02	3.5E-07	NA	NA	NA
CM-DPW-06	1.1E-01	1.9E-05	1.7E-02	1.5E-07	NA	NA	NA
CM-DPW-10	9.0E-02	1.9E-05	1.4E-02	1.5E-07	NA	NA	NA
CM-DPW-16	1.5E-01	2.9E-05	2.3E-02	2.2E-07	NA	NA	NA
CM-MW-01d-040	2.5E+00	5.2E-04	3.8E-01	4.0E-06	NA	NA	NA
CM-MW-01s	5.8E-01	1.2E-04	9.1E-02	9.6E-07	NA	NA	NA
CM-MW-02s	2.8E-03	4.8E-07	4.4E-04	3.7E-09	NA	NA	NA
CM-MW-03s	9.4E-02	2.0E-05	1.5E-02	1.5E-07	NA	NA	NA
CM-MW-04s	NA	NA	NA	NA	1.8E-01	5.7E-05	3.8E-01
CM-MW-05s	NA	NA	NA	NA	4.2E-01	1.2E-04	8.9E-01
CM-MW-06s	NA	NA	NA	NA	5.9E-02	1.8E-05	1.3E-01
CM-MW-07s	NA	NA	NA	NA	3.0E-02	5.0E-06	6.3E-02
CM-MW-08s	NA	NA	NA	NA	1.0E-01	3.2E-05	2.1E-01
CM-MW-09s	2.8E-03	4.8E-07	4.4E-04	3.7E-09	NA	NA	NA
CM-MW-10s	1.2E-02	2.2E-06	1.9E-03	1.7E-08	NA	NA	NA
CM-MW-18s	NA	NA	NA	NA	1.2E-02	3.5E-06	2.6E-02
CM-MW-19s	NA	NA	NA	NA	3.1E-02	3.1E-05	6.7E-02
CM-MW-20s	2.6E-01	5.4E-05	4.1E-02	4.1E-07	4.4E-01	1.3E-04	9.4E-01
CM-MW-21s	3.2E-03	1.5E-06	5.0E-04	1.1E-08	NA	NA	NA
CM-MW-23s	NA	NA	NA	NA	2.6E-01	8.0E-05	5.6E-01
CM-MW-24s	NA	NA	NA	NA	1.4E-01	4.6E-05	3.0E-01
CM-MW-25s	NA	NA	NA	NA	6.0E-02	1.9E-05	1.3E-01
CM-MW-26s	NA	NA	NA	NA	1.6E-01	2.9E-05	3.4E-01
CM-MW-27USA-049.5	NA	NA	NA	NA	5.2E-02	1.7E-05	1.1E-01
CM-VE-09	1.0E-01	2.2E-05	1.6E-02	1.7E-07	NA	NA	NA
CM-VE-10	8.0E-02	1.7E-05	1.2E-02	1.3E-07	NA	NA	NA

	Cadet Site Worker		Cadet Site Excavation Worker		NFVN Resident (adult)		NFVN Resident (child)
Location Name	Noncancer Hazard Quotient	ELCR	Noncancer Hazard Quotient	ELCR	Noncancer Hazard Quotient	ELCR	Noncancer Hazard Quotient
CM-VE-11	8.9E-02	1.6E-05	1.4E-02	1.3E-07	NA	NA	NA
CM-VE-12	9.6E-02	1.9E-05	1.5E-02	1.5E-07	NA	NA	NA
Intermediate Groundwater Zone							
CM-MW-01d-121	1.5E-01	2.3E-05	2.3E-02	1.8E-07	NA	NA	NA
CM-MW-01i	1.4E-01	1.1E-05	2.2E-02	8.9E-08	NA	NA	NA
CM-MW-03d-060	9.5E-02	1.8E-05	1.5E-02	1.4E-07	NA	NA	NA
CM-MW-03d-100	1.5E-01	2.2E-05	2.4E-02	1.7E-07	NA	NA	NA
CM-MW-04i	NA	NA	NA	NA	9.8E-01	2.9E-04	2.1E+00
CM-MW-05i	NA	NA	NA	NA	3.0E-01	5.8E-05	6.4E-01
CM-MW-07i	NA	NA	NA	NA	2.0E-01	5.5E-05	4.3E-01
CM-MW-15s	2.5E-01	5.6E-05	3.9E-02	4.3E-07	NA	NA	NA
CM-MW-17i	9.4E-02	1.6E-05	1.5E-02	1.3E-07	NA	NA	NA
CM-MW-18i	NA	NA	NA	NA	5.1E-02	1.8E-05	1.1E-01
CM-MW-19i	NA	NA	NA	NA	1.5E-01	3.5E-05	3.1E-01
CM-MW-20i	1.4E-01	1.6E-05	2.1E-02	1.2E-07	2.4E-01	3.9E-05	5.1E-01
CM-MW-21i	4.6E-03	9.0E-07	7.1E-04	6.8E-09	NA	NA	NA
CM-MW-22s	2.4E-01	4.6E-05	3.8E-02	3.6E-07	NA	NA	NA
CM-MW-23i	NA	NA	NA	NA	4.0E-01	1.0E-04	8.6E-01
CM-MW-24i	NA	NA	NA	NA	1.8E-02	4.8E-06	3.9E-02
CM-MW-28USA-050	NA	NA	NA	NA	3.6E-02	1.2E-05	7.7E-02
CM-MW-28USA-120.5	NA	NA	NA	NA	5.6E-02	1.9E-05	1.2E-01
CM-MW-29USA-060.5	NA	NA	NA	NA	1.1E-01	2.9E-05	2.4E-01
CM-MW-29USA-100	NA	NA	NA	NA	1.5E-01	3.7E-05	3.2E-01
CM-MW-29USA-140.5	NA	NA	NA	NA	1.7E-01	4.0E-05	3.7E-01
CM-MW-Ui	5.1E-02	1.2E-05	7.7E-03	9.2E-08	NA	NA	NA
Deep Groundwater Zone							
CM-MW-01d-161	1.30E-01	1.89E-05	2.03E-02	1.47E-07	NA	NA	NA
CM-MW-01d-194	1.29E-01	2.06E-05	1.99E-02	1.58E-07	NA	NA	NA
CM-MW-01d-224	1.77E-01	3.13E-05	2.71E-02	2.40E-07	NA	NA	NA
CM-MW-02d	2.00E-01	3.49E-05	3.06E-02	2.67E-07	NA	NA	NA
CM-MW-03d-141	1.02E-01	1.45E-05	1.58E-02	1.13E-07	NA	NA	NA
CM-MW-03d-181	7.99E-02	1.30E-05	1.23E-02	1.00E-07	NA	NA	NA
CM-MW-03d-227	1.73E-01	3.00E-05	2.65E-02	2.30E-07	NA	NA	NA
CM-MW-05d	NA	NA	NA	NA	3.33E-01	8.48E-05	7.17E-01
CM-MW-07d	NA	NA	NA	NA	8.73E-03	2.59E-06	1.87E-02

	Cadet Site Worker		Cadet Site Excavation Worker		NFVN Resident (adult)		NFVN Resident (child)
Location Name	Noncancer Hazard Quotient	ELCR	Noncancer Hazard Quotient	ELCR	Noncancer Hazard Quotient	ELCR	Noncancer Hazard Quotient
CM-MW-18d	NA	NA	NA	NA	1.06E-01	3.11E-05	2.28E-01
CM-MW-19d	NA	NA	NA	NA	1.27E-01	3.58E-05	2.73E-01
CM-MW-28USA-180	1.92E-02	4.25E-06	2.93E-03	3.23E-08	NA	NA	NA
Troutdale Groundwater Zone							
CM-MW-10d	2.8E-03	4.8E-07	4.4E-04	3.7E-09	NA	NA	NA
CM-MW-27TGA	NA	NA	NA	NA	4.9E-03	1.2E-06	1.0E-02
CM-MW-28TGA	NA	NA	NA	NA	4.9E-03	1.2E-06	1.1E-02
CM-MW-29TGA	NA	NA	NA	NA	2.0E-01	5.0E-05	4.2E-01

Notes

NA - Groundwater well not applicable to receptor

Table 20. Exposure Quantification and Risk Estimation for Cadet Site Soil

Cadet Manufacturing Company
Port of Vancouver, Washington

					Cadet Site Worker								Cadet Site Excavation Worker								NFVN Resident (Adult)								NFVN Resident (Child)			
Sample Location (Depth)	Analyte	RME (µg/kg)	(mg/kg-d)	CSF (mg/kg-d)-1	Ingestion Dose (mg/kg-d)		Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion Dose (mg/kg-d)		Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion Dose (mg/kg-d)		Dermal Dose (mg/kg-d)		Total Dose (mg/kg-d)		Total Risk (unitless)		Ingestion Dose (mg/kg-d)	Dermal Dose (mg/kg-d)	Total Dose (mg/kg-d)	Total Risk (unitless)
					NC	C	NC	C	NC	C	NC	C	NC	C	NC	C	NC	C	NC	C	NC	C	NC	C	NC	C	NC	C	NC	NC	NC	NC
Cadet Facility (0-3 ft.)	1,1,1-Trichloroethane	2.5E-05	0.9	NC	1.07E-14	2.86E-15	1.49E-15	3.96E-16	1.22E-14	3.25E-15	1.36E-14	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	2.5E-05	0.01	NC	1.07E-14	2.86E-15	1.49E-15	3.96E-16	1.22E-14	3.25E-15	1.22E-12	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methylene chloride	2.5E-05	0.06	0.0075	1.07E-14	2.86E-15	1.49E-15	3.96E-16	1.22E-14	3.25E-15	2.03E-13	2.44E-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	2.5E-05	0.01	0.54	1.07E-14	2.86E-15	1.49E-15	3.96E-16	1.22E-14	3.25E-15	1.22E-12	1.76E-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	2.5E-05	0.0003	0.089	1.07E-14	2.86E-15	1.49E-15	3.96E-16	1.22E-14	3.25E-15	4.07E-11	2.90E-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadet Facility (0-20 ft.)	1,1,1-Trichloroethane	2.7E-04	0.9	NC	NA	NA	NA	NA	NA	NA	NA	NA	9.51E-14	1.27E-15	6.56E-14	8.75E-16	1.61E-13	2.14E-15	1.79E-13	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	2.7E-04	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	9.51E-14	1.27E-15	6.56E-14	8.75E-16	1.61E-13	2.14E-15	1.61E-11	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Methylene chloride	2.5E-04	0.06	0.0075	NA	NA	NA	NA	NA	NA	NA	NA	8.81E-14	1.17E-15	6.08E-14	8.10E-16	1.49E-13	1.98E-15	2.48E-12	1.49E-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	9.8E-04	0.01	0.54	NA	NA	NA	NA	NA	NA	NA	NA	3.46E-13	4.61E-15	2.39E-13	3.18E-15	5.85E-13	7.79E-15	5.85E-11	4.21E-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trichloroethene	3.1E-03	0.0003	0.089	NA	NA	NA	NA	NA	NA	NA	NA	1.10E-12	1.46E-14	7.56E-13	1.01E-14	1.85E-12	2.47E-14	6.17E-09	2.20E-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NFVN (0-20 ft.)	1,1,1-Trichloroethane	1.7E-05	0.9	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.43E-14	9.71E-15	8.31E-15	3.32E-15	3.26E-14	1.30E-14	3.62E-14	-	2.13E-13	3.57E-14	2.48E-13	2.76E-13
	cis-1,2-Dichloroethene	1.7E-05	0.01	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.43E-14	9.71E-15	8.31E-15	3.32E-15	3.26E-14	1.30E-14	3.26E-12	-	2.13E-13	3.57E-14	2.48E-13	2.48E-11
	Methylene chloride	9.9E-05	0.06	0.0075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.41E-13	5.66E-14	4.84E-14	1.93E-14	1.90E-13	7.59E-14	3.16E-12	5.69E-16	1.24E-12	2.08E-13	1.45E-12	2.41E-11
	Tetrachloroethene	1.3E-05	0.01	0.54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.86E-14	7.43E-15	6.35E-15	2.54E-15	2.49E-14	9.97E-15	2.49E-12	5.38E-15	1.63E-13	2.73E-14	1.90E-13	1.90E-11
	Trichloroethene	1.5E-05	0.0003	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.14E-14	8.57E-15	7.33E-15	2.93E-15	2.88E-14	1.15E-14	9.59E-11	1.02E-15	1.88E-13	3.15E-14	2.19E-13	7.30E-10
									Cumulative Risk =		4.3E-11	2.1E-15					Cumulative Risk =		6.2E-09	6.4E-15					Cumulative Risk =		1.0E-10	7.0E-15				8.0E-10

Notes

NA - This location is not applicable to this receptor group.
NC - Noncancer
C - Cancer
"-" - No samples contained detected concentrations of this contaminant

Table 21. Exposure Quantification and Risk Estimation for Indoor Air
Cadet Manufacturing Company
Port of Vancouver, Washington

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
Cadet Building	1,1,1-Trichloroethane	0.882	3	NC	5.0E-05	1.3E-06	1.7E-05	-	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethane	1.300	0.20	NA	7.4E-05	2.0E-06	3.7E-04	-	NA	NA	NA	NA	NA	NA
	1,1-Dichloroethene	0.265	0.057	NA	1.5E-05	4.0E-07	2.7E-04	-	NA	NA	NA	NA	NA	NA
	1,2-Dichloroethane	0.275	0.001	0.091	1.6E-05	4.2E-07	1.1E-02	3.8E-08	NA	NA	NA	NA	NA	NA
	Chloroethane	0.201	2.90	0.003	1.1E-05	3.1E-07	4.0E-06	8.9E-10	NA	NA	NA	NA	NA	NA
	cis-1,2-Dichloroethene	1.079	0.01	NC	6.2E-05	1.6E-06	6.2E-03	-	NA	NA	NA	NA	NA	NA
	Tetrachloroethene	11.702	0.017	0.021	6.7E-04	1.8E-05	3.9E-02	3.7E-07	NA	NA	NA	NA	NA	NA
	trans-1,2-Dichloroethene	5.000	0.02	NA	2.9E-04	7.6E-06	1.4E-02	-	NA	NA	NA	NA	NA	NA
	Trichloroethene	36.680	0.01	0.089	2.1E-03	5.6E-05	2.1E-01	5.0E-06	NA	NA	NA	NA	NA	NA
	Vinyl chloride	0.850	0.029	0.031	4.9E-05	1.3E-06	1.7E-03	4.0E-08	NA	NA	NA	NA	NA	NA
1903-27	1,1,1-Trichloroethane	0.230	3	NC	NA	NA	NA	NA	6.6E-05	2.6E-05	2.2E-05	-	1.4E-04	4.8E-05
	1,1-Dichloroethane	0.005	0.20	NA	NA	NA	NA	NA	1.4E-06	5.6E-07	7.0E-06	-	3.1E-06	1.5E-05
	1,1-Dichloroethene	0.110	0.057	NA	NA	NA	NA	NA	3.1E-05	1.3E-05	5.5E-04	-	6.9E-05	1.2E-03
	1,2-Dichloroethane	0.046	0.001	0.091	NA	NA	NA	NA	1.3E-05	5.3E-06	9.4E-03	4.8E-07	2.9E-05	2.1E-02
	Chloroethane	0.038	2.90	0.003	NA	NA	NA	NA	1.1E-05	4.3E-06	3.7E-06	1.3E-08	2.4E-05	8.2E-06
	cis-1,2-Dichloroethene	0.017	0.01	NC	NA	NA	NA	NA	4.9E-06	1.9E-06	4.9E-04	-	1.1E-05	1.1E-03
	Tetrachloroethene	0.270	0.017	0.021	NA	NA	NA	NA	7.7E-05	3.1E-05	4.5E-03	6.5E-07	1.7E-04	9.9E-03
	trans-1,2-Dichloroethene	0.017	0.02	NA	NA	NA	NA	NA	4.9E-06	1.9E-06	2.4E-04	-	1.1E-05	5.3E-04
	Trichloroethene	0.150	0.01	0.089	NA	NA	NA	NA	4.3E-05	1.7E-05	4.3E-03	1.5E-06	9.4E-05	9.4E-03
	Vinyl chloride	0.017	0.029	0.031	NA	NA	NA	NA	4.9E-06	1.9E-06	1.7E-04	6.0E-08	1.1E-05	3.7E-04
1903-28	1,1,1-Trichloroethane	0.390	3	NC	NA	NA	NA	NA	1.1E-04	4.5E-05	3.7E-05	-	2.4E-04	8.1E-05
	1,1-Dichloroethane	0.008	0.20	NA	NA	NA	NA	NA	2.3E-06	9.1E-07	1.1E-05	-	5.0E-06	2.5E-05
	1,1-Dichloroethene	0.430	0.057	NA	NA	NA	NA	NA	1.2E-04	4.9E-05	2.2E-03	-	2.7E-04	4.7E-03
	1,2-Dichloroethane	0.062	0.001	0.091	NA	NA	NA	NA	1.8E-05	7.1E-06	1.3E-02	6.4E-07	3.9E-05	2.8E-02
	Chloroethane	0.035	2.90	0.003	NA	NA	NA	NA	1.0E-05	4.0E-06	3.4E-06	1.2E-08	2.2E-05	7.5E-06
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.7E-06	2.3E-06	5.7E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.720	0.017	0.021	NA	NA	NA	NA	2.1E-04	8.2E-05	1.2E-02	1.7E-06	4.5E-04	2.6E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	0.210	0.01	0.089	NA	NA	NA	NA	6.0E-05	2.4E-05	6.0E-03	2.1E-06	1.3E-04	1.3E-02
	Vinyl chloride	0.037	0.029	0.031	NA	NA	NA	NA	1.1E-05	4.2E-06	3.7E-04	1.3E-07	2.3E-05	8.1E-04
1927-27	1,1,1-Trichloroethane	3.700	3	NC	NA	NA	NA	NA	1.1E-03	4.2E-04	3.5E-04	-	2.3E-03	7.7E-04
	1,1-Dichloroethane	0.024	0.20	NA	NA	NA	NA	NA	6.9E-06	2.7E-06	3.4E-05	-	1.5E-05	7.5E-05
	1,1-Dichloroethene	0.410	0.057	NA	NA	NA	NA	NA	1.2E-04	4.7E-05	2.1E-03	-	2.6E-04	4.5E-03
	1,2-Dichloroethane	1.400	0.001	0.091	NA	NA	NA	NA	4.0E-04	1.6E-04	2.9E-01	1.5E-05	8.8E-04	6.3E-01
	Chloroethane	0.065	2.90	0.003	NA	NA	NA	NA	1.9E-05	7.4E-06	6.4E-06	2.2E-08	4.1E-05	1.4E-05
	cis-1,2-Dichloroethene	0.023	0.01	NC	NA	NA	NA	NA	6.4E-06	2.6E-06	6.4E-04	-	1.4E-05	1.4E-03
	Tetrachloroethene	0.570	0.017	0.021	NA	NA	NA	NA	1.6E-04	6.5E-05	9.6E-03	1.4E-06	3.6E-04	2.1E-02
	trans-1,2-Dichloroethene	0.023	0.02	NA	NA	NA	NA	NA	6.4E-06	2.6E-06	3.2E-04	-	1.4E-05	7.0E-04
	Trichloroethene	2.000	0.01	0.089	NA	NA	NA	NA	5.7E-04	2.3E-04	5.7E-02	2.0E-05	1.3E-03	1.3E-01
	Vinyl chloride	0.023	0.029	0.031	NA	NA	NA	NA	6.4E-06	2.6E-06	2.3E-04	7.9E-08	1.4E-05	4.9E-04
1927-28	1,1,1-Trichloroethane	0.490	3	NC	NA	NA	NA	NA	1.4E-04	5.6E-05	4.7E-05	-	3.1E-04	1.0E-04
	1,1-Dichloroethane	0.018	0.20	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-05	-	1.1E-05	5.6E-05
	1,1-Dichloroethene	0.087	0.057	NA	NA	NA	NA	NA	2.5E-05	9.9E-06	4.4E-04	-	5.4E-05	9.5E-04
	1,2-Dichloroethane	0.140	0.001	0.091	NA	NA	NA	NA	4.0E-05	1.6E-05	2.9E-02	1.5E-06	8.8E-05	6.3E-02
	Chloroethane	0.110	2.90	0.003	NA	NA	NA	NA	3.1E-05	1.3E-05	1.1E-05	3.6E-08	6.9E-05	2.4E-05
	cis-1,2-Dichloroethene	0.018	0.01	NC	NA	NA	NA	NA	5.1E-06	2.1E-06	5.1E-04	-	1.1E-05	1.1E-03

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME ($\mu g/m^3$)	RfDi (mg/kg-d)	CSFi $(mg/kg\text{-}d)^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Tetrachloroethene	0.740	0.017	0.021	NA	NA	NA	NA	2.1E-04	8.5E-05	1.2E-02	1.8E-06	4.6E-04	2.7E-02
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-04	-	1.1E-05	5.6E-04
	Trichloroethene	0.840	0.01	0.089	NA	NA	NA	NA	2.4E-04	9.6E-05	2.4E-02	8.5E-06	5.3E-04	5.3E-02
	Vinyl chloride	0.012	0.029	0.031	NA	NA	NA	NA	3.4E-06	1.4E-06	1.2E-04	4.2E-08	7.5E-06	2.6E-04
2102-27	1,1,1-Trichloroethane	0.270	3	NC	NA	NA	NA	NA	7.7E-05	3.1E-05	2.6E-05	-	1.7E-04	5.6E-05
	1,1-Dichloroethane	0.045	0.20	NA	NA	NA	NA	NA	1.3E-05	5.1E-06	6.4E-05	-	2.8E-05	1.4E-04
	1,1-Dichloroethene	0.340	0.057	NA	NA	NA	NA	NA	9.7E-05	3.9E-05	1.7E-03	-	2.1E-04	3.7E-03
	1,2-Dichloroethane	2.300	0.001	0.091	NA	NA	NA	NA	6.6E-04	2.6E-04	4.7E-01	2.4E-05	1.4E-03	1.0E+00
	Chloroethane	0.470	2.90	0.003	NA	NA	NA	NA	1.3E-04	5.4E-05	4.6E-05	1.6E-07	2.9E-04	1.0E-04
	cis-1,2-Dichloroethene	0.022	0.01	NC	NA	NA	NA	NA	6.1E-06	2.5E-06	6.1E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.740	0.017	0.021	NA	NA	NA	NA	2.1E-04	8.5E-05	1.2E-02	1.8E-06	4.6E-04	2.7E-02
	trans-1,2-Dichloroethene	0.036	0.02	NA	NA	NA	NA	NA	1.0E-05	4.1E-06	5.1E-04	-	2.3E-05	1.1E-03
	Trichloroethene	1.400	0.01	0.089	NA	NA	NA	NA	4.0E-04	1.6E-04	4.0E-02	1.4E-05	8.8E-04	8.8E-02
	Vinyl chloride	0.066	0.029	0.031	NA	NA	NA	NA	1.9E-05	7.5E-06	6.6E-04	2.3E-07	4.1E-05	1.4E-03
2102-28	1,1,1-Trichloroethane	0.065	3	NC	NA	NA	NA	NA	1.9E-05	7.4E-06	6.2E-06	-	4.1E-05	1.4E-05
	1,1-Dichloroethane	0.021	0.20	NA	NA	NA	NA	NA	6.0E-06	2.4E-06	3.0E-05	-	1.3E-05	6.6E-05
	1,1-Dichloroethene	0.760	0.057	NA	NA	NA	NA	NA	2.2E-04	8.7E-05	3.8E-03	-	4.8E-04	8.3E-03
	1,2-Dichloroethane	0.036	0.001	0.091	NA	NA	NA	NA	1.0E-05	4.1E-06	7.3E-03	3.7E-07	2.3E-05	1.6E-02
	Chloroethane	0.021	2.90	0.003	NA	NA	NA	NA	6.0E-06	2.4E-06	2.1E-06	7.0E-09	1.3E-05	4.5E-06
	cis-1,2-Dichloroethene	0.021	0.01	NC	NA	NA	NA	NA	6.0E-06	2.4E-06	6.0E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.110	0.017	0.021	NA	NA	NA	NA	3.1E-05	1.3E-05	1.8E-03	2.6E-07	6.9E-05	4.0E-03
	trans-1,2-Dichloroethene	0.021	0.02	NA	NA	NA	NA	NA	6.0E-06	2.4E-06	3.0E-04	-	1.3E-05	6.6E-04
	Trichloroethene	0.021	0.01	0.089	NA	NA	NA	NA	6.0E-06	2.4E-06	6.0E-04	2.1E-07	1.3E-05	1.3E-03
	Vinyl chloride	0.021	0.029	0.031	NA	NA	NA	NA	6.0E-06	2.4E-06	2.1E-04	7.4E-08	1.3E-05	4.6E-04
2103-28	1,1,1-Trichloroethane	3.300	3	NC	NA	NA	NA	NA	9.4E-04	3.8E-04	3.1E-04	-	2.1E-03	6.9E-04
	1,1-Dichloroethane	0.750	0.20	NA	NA	NA	NA	NA	2.1E-04	8.6E-05	1.1E-03	-	4.7E-04	2.3E-03
	1,1-Dichloroethene	0.126	0.057	NA	NA	NA	NA	NA	3.6E-05	1.4E-05	6.3E-04	-	7.8E-05	1.4E-03
	1,2-Dichloroethane	0.357	0.001	0.091	NA	NA	NA	NA	1.0E-04	4.1E-05	7.3E-02	3.7E-06	2.2E-04	1.6E-01
	Chloroethane	0.059	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.7E-06	5.8E-06	2.0E-08	3.7E-05	1.3E-05
	cis-1,2-Dichloroethene	0.366	0.01	NC	NA	NA	NA	NA	1.0E-04	4.2E-05	1.0E-02	-	2.3E-04	2.3E-02
	Tetrachloroethene	2.702	0.017	0.021	NA	NA	NA	NA	7.7E-04	3.1E-04	4.5E-02	6.5E-06	1.7E-03	9.9E-02
	trans-1,2-Dichloroethene	0.750	0.02	NA	NA	NA	NA	NA	2.1E-04	8.6E-05	1.1E-02	-	4.7E-04	2.3E-02
	Trichloroethene	11.000	0.01	0.089	NA	NA	NA	NA	3.1E-03	1.3E-03	3.1E-01	1.1E-04	6.9E-03	6.9E-01
	Vinyl chloride	0.155	0.029	0.031	NA	NA	NA	NA	4.4E-05	1.8E-05	1.6E-03	5.5E-07	9.7E-05	3.4E-03
2104-27	1,1,1-Trichloroethane	0.250	3	NC	NA	NA	NA	NA	7.1E-05	2.9E-05	2.4E-05	-	1.6E-04	5.2E-05
	1,1-Dichloroethane	0.018	0.20	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-05	-	1.1E-05	5.6E-05
	1,1-Dichloroethene	0.065	0.057	NA	NA	NA	NA	NA	1.9E-05	7.4E-06	3.3E-04	-	4.1E-05	7.1E-04
	1,2-Dichloroethane	0.069	0.001	0.091	NA	NA	NA	NA	2.0E-05	7.9E-06	1.4E-02	7.2E-07	4.3E-05	3.1E-02
	Chloroethane	0.072	2.90	0.003	NA	NA	NA	NA	2.1E-05	8.2E-06	7.1E-06	2.4E-08	4.5E-05	1.6E-05
	cis-1,2-Dichloroethene	0.600	0.01	NC	NA	NA	NA	NA	1.7E-04	6.9E-05	1.7E-02	-	3.8E-04	3.8E-02
	Tetrachloroethene	0.490	0.017	0.021	NA	NA	NA	NA	1.4E-04	5.6E-05	8.2E-03	1.2E-06	3.1E-04	1.8E-02
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-04	-	1.1E-05	5.6E-04
	Trichloroethene	0.600	0.01	0.089	NA	NA	NA	NA	1.7E-04	6.9E-05	1.7E-02	6.1E-06	3.8E-04	3.8E-02
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.1E-06	2.1E-06	1.8E-04	6.3E-08	1.1E-05	3.9E-04
2104-28	1,1,1-Trichloroethane	0.170	3	NC	NA	NA	NA	NA	4.9E-05	1.9E-05	1.6E-05	-	1.1E-04	3.5E-05
	1,1-Dichloroethane	0.082	0.20	NA	NA	NA	NA	NA	2.3E-05	9.4E-06	1.2E-04	-	5.1E-05	2.6E-04
	1,1-Dichloroethene	0.130	0.057	NA	NA	NA	NA	NA	3.7E-05	1.5E-05	6.5E-04	-	8.1E-05	1.4E-03
	1,2-Dichloroethane	0.046	0.001	0.091	NA	NA	NA	NA	1.3E-05	5.3E-06	9.4E-03	4.8E-07	2.9E-05	2.1E-02
	Chloroethane	0.200	2.90	0.003	NA	NA	NA	NA	5.7E-05	2.3E-05	2.0E-05	6.6E-08	1.3E-04	4.3E-05
	cis-1,2-Dichloroethene	0.022	0.01	NC	NA	NA	NA	NA	6.1E-06	2.5E-06	6.1E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	1.900	0.017	0.021	NA	NA	NA	NA	5.4E-04	2.2E-04	3.2E-02	4.6E-06	1.2E-03	7.0E-02
	trans-1,2-Dichloroethene	0.022	0.02	NA	NA	NA	NA	NA	6.1E-06	2.5E-06	3.1E-04	-	1.3E-05	6.7E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Trichloroethene	0.087	0.01	0.089	NA	NA	NA	NA	2.5E-05	9.9E-06	2.5E-03	8.8E-07	5.4E-05	5.4E-03
	Vinyl chloride	0.022	0.029	0.031	NA	NA	NA	NA	6.1E-06	2.5E-06	2.2E-04	7.6E-08	1.3E-05	4.7E-04
2105-27	1,1,1-Trichloroethane	0.190	3	NC	NA	NA	NA	NA	5.4E-05	2.2E-05	1.8E-05	-	1.2E-04	4.0E-05
	1,1-Dichloroethane	0.017	0.20	NA	NA	NA	NA	NA	4.9E-06	1.9E-06	2.4E-05	-	1.1E-05	5.3E-05
	1,1-Dichloroethene	0.045	0.057	NA	NA	NA	NA	NA	1.3E-05	5.1E-06	2.3E-04	-	2.8E-05	4.9E-04
	1,2-Dichloroethane	0.150	0.001	0.091	NA	NA	NA	NA	4.3E-05	1.7E-05	3.1E-02	1.6E-06	9.4E-05	6.7E-02
	Chloroethane	0.068	2.90	0.003	NA	NA	NA	NA	1.9E-05	7.8E-06	6.7E-06	2.3E-08	4.3E-05	1.5E-05
	cis-1,2-Dichloroethene	0.850	0.01	NC	NA	NA	NA	NA	2.4E-04	9.7E-05	2.4E-02	-	5.3E-04	5.3E-02
	Tetrachloroethene	0.410	0.017	0.021	NA	NA	NA	NA	1.2E-04	4.7E-05	6.9E-03	9.8E-07	2.6E-04	1.5E-02
	trans-1,2-Dichloroethene	0.011	0.02	NA	NA	NA	NA	NA	3.1E-06	1.3E-06	1.6E-04	-	6.9E-06	3.4E-04
	Trichloroethene	0.310	0.01	0.089	NA	NA	NA	NA	8.9E-05	3.5E-05	8.9E-03	3.2E-06	1.9E-04	1.9E-02
	Vinyl chloride	0.017	0.029	0.031	NA	NA	NA	NA	4.9E-06	1.9E-06	1.7E-04	6.0E-08	1.1E-05	3.7E-04
2105-28	1,1,1-Trichloroethane	0.509	3	NC	NA	NA	NA	NA	1.5E-04	5.8E-05	4.8E-05	-	3.2E-04	1.1E-04
	1,1-Dichloroethane	0.800	0.20	NA	NA	NA	NA	NA	2.3E-04	9.1E-05	1.1E-03	-	5.0E-04	2.5E-03
	1,1-Dichloroethene	0.336	0.057	NA	NA	NA	NA	NA	9.6E-05	3.8E-05	1.7E-03	-	2.1E-04	3.7E-03
	1,2-Dichloroethane	0.272	0.001	0.091	NA	NA	NA	NA	7.8E-05	3.1E-05	5.6E-02	2.8E-06	1.7E-04	1.2E-01
	Chloroethane	0.126	2.90	0.003	NA	NA	NA	NA	3.6E-05	1.4E-05	1.2E-05	4.2E-08	7.8E-05	2.7E-05
	cis-1,2-Dichloroethene	1.050	0.01	NC	NA	NA	NA	NA	3.0E-04	1.2E-04	3.0E-02	-	6.6E-04	6.6E-02
	Tetrachloroethene	0.753	0.017	0.021	NA	NA	NA	NA	2.2E-04	8.6E-05	1.3E-02	1.8E-06	4.7E-04	2.8E-02
	trans-1,2-Dichloroethene	0.800	0.02	NA	NA	NA	NA	NA	2.3E-04	9.1E-05	1.1E-02	-	5.0E-04	2.5E-02
	Trichloroethene	2.093	0.01	0.089	NA	NA	NA	NA	6.0E-04	2.4E-04	6.0E-02	2.1E-05	1.3E-03	1.3E-01
	Vinyl chloride	0.210	0.029	0.031	NA	NA	NA	NA	6.0E-05	2.4E-05	2.1E-03	7.4E-07	1.3E-04	4.6E-03
2106-27	1,1,1-Trichloroethane	0.180	3	NC	NA	NA	NA	NA	5.1E-05	2.1E-05	1.7E-05	-	1.1E-04	3.8E-05
	1,1-Dichloroethane	-	0.20	NA	NA	NA	NA	NA	-	-	-	-	-	-
	1,1-Dichloroethene	0.022	0.057	NA	NA	NA	NA	NA	6.3E-06	2.5E-06	1.1E-04	-	1.4E-05	2.4E-04
	1,2-Dichloroethane	-	0.001	0.091	NA	NA	NA	NA	-	-	-	-	-	-
	Chloroethane	-	2.90	0.003	NA	NA	NA	NA	-	-	-	-	-	-
	cis-1,2-Dichloroethene	0.010	0.01	NC	NA	NA	NA	NA	2.9E-06	1.1E-06	2.9E-04	-	6.3E-06	6.3E-04
	Tetrachloroethene	0.200	0.017	0.021	NA	NA	NA	NA	5.7E-05	2.3E-05	3.4E-03	4.8E-07	1.3E-04	7.4E-03
	trans-1,2-Dichloroethene	-	0.02	NA	NA	NA	NA	NA	-	-	-	-	-	-
	Trichloroethene	0.240	0.01	0.089	NA	NA	NA	NA	6.9E-05	2.7E-05	6.9E-03	2.4E-06	1.5E-04	1.5E-02
	Vinyl chloride	0.043	0.029	0.031	NA	NA	NA	NA	1.2E-05	4.9E-06	4.3E-04	1.5E-07	2.7E-05	9.4E-04
2106-28	1,1,1-Trichloroethane	0.200	3	NC	NA	NA	NA	NA	5.7E-05	2.3E-05	1.9E-05	-	1.3E-04	4.2E-05
	1,1-Dichloroethane	0.022	0.20	NA	NA	NA	NA	NA	6.3E-06	2.5E-06	3.1E-05	-	1.4E-05	6.9E-05
	1,1-Dichloroethene	0.073	0.057	NA	NA	NA	NA	NA	2.1E-05	8.3E-06	3.7E-04	-	4.6E-05	8.0E-04
	1,2-Dichloroethane	0.065	0.001	0.091	NA	NA	NA	NA	1.9E-05	7.4E-06	1.3E-02	6.8E-07	4.1E-05	2.9E-02
	Chloroethane	0.039	2.90	0.003	NA	NA	NA	NA	1.1E-05	4.5E-06	3.8E-06	1.3E-08	2.4E-05	8.4E-06
	cis-1,2-Dichloroethene	0.700	0.01	NC	NA	NA	NA	NA	2.0E-04	8.0E-05	2.0E-02	-	4.4E-04	4.4E-02
	Tetrachloroethene	1.400	0.017	0.021	NA	NA	NA	NA	4.0E-04	1.6E-04	2.4E-02	3.4E-06	8.8E-04	5.1E-02
	trans-1,2-Dichloroethene	0.007	0.02	NA	NA	NA	NA	NA	1.9E-06	7.7E-07	9.6E-05	-	4.2E-06	2.1E-04
	Trichloroethene	0.140	0.01	0.089	NA	NA	NA	NA	4.0E-05	1.6E-05	4.0E-03	1.4E-06	8.8E-05	8.8E-03
	Vinyl chloride	0.022	0.029	0.031	NA	NA	NA	NA	6.3E-06	2.5E-06	2.2E-04	7.7E-08	1.4E-05	4.8E-04
2107-27	1,1,1-Trichloroethane	2.200	3	NC	NA	NA	NA	NA	6.3E-04	2.5E-04	2.1E-04	-	1.4E-03	4.6E-04
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-05	-	1.3E-05	6.3E-05
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.170	0.001	0.091	NA	NA	NA	NA	4.9E-05	1.9E-05	3.5E-02	1.8E-06	1.1E-04	7.6E-02
	Chloroethane	0.110	2.90	0.003	NA	NA	NA	NA	3.1E-05	1.3E-05	1.1E-05	3.6E-08	6.9E-05	2.4E-05
	cis-1,2-Dichloroethene	0.850	0.01	NC	NA	NA	NA	NA	2.4E-04	9.7E-05	2.4E-02	-	5.3E-04	5.3E-02
	Tetrachloroethene	0.350	0.017	0.021	NA	NA	NA	NA	1.0E-04	4.0E-05	5.9E-03	8.4E-07	2.2E-04	1.3E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	2.900	0.01	0.089	NA	NA	NA	NA	8.3E-04	3.3E-04	8.3E-02	2.9E-05	1.8E-03	1.8E-01
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.7E-06	2.3E-06	2.0E-04	7.0E-08	1.3E-05	4.4E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME ($\mu g/m^3$)	RfDi (mg/kg-d)	CSFi $(mg/kg\text{-}d)^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
2107-28	1,1,1-Trichloroethane	0.190	3	NC	NA	NA	NA	NA	5.4E-05	2.2E-05	1.8E-05	-	1.2E-04	4.0E-05
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-05	-	1.2E-05	5.9E-05
	1,1-Dichloroethene	0.032	0.057	NA	NA	NA	NA	NA	9.1E-06	3.7E-06	1.6E-04	-	2.0E-05	3.5E-04
	1,2-Dichloroethane	0.220	0.001	0.091	NA	NA	NA	NA	6.3E-05	2.5E-05	4.5E-02	2.3E-06	1.4E-04	9.8E-02
	Chloroethane	0.048	2.90	0.003	NA	NA	NA	NA	1.4E-05	5.5E-06	4.7E-06	1.6E-08	3.0E-05	1.0E-05
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.4E-06	2.2E-06	5.4E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.420	0.017	0.021	NA	NA	NA	NA	1.2E-04	4.8E-05	7.1E-03	1.0E-06	2.6E-04	1.5E-02
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-04	-	1.2E-05	5.9E-04
	Trichloroethene	0.180	0.01	0.089	NA	NA	NA	NA	5.1E-05	2.1E-05	5.1E-03	1.8E-06	1.1E-04	1.1E-02
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.0E-06	2.0E-06	1.8E-04	6.2E-08	1.1E-05	3.8E-04
2109-27	1,1,1-Trichloroethane	0.360	3	NC	NA	NA	NA	NA	1.0E-04	4.1E-05	3.4E-05	-	2.3E-04	7.5E-05
	1,1-Dichloroethane	0.034	0.20	NA	NA	NA	NA	NA	9.7E-06	3.9E-06	4.9E-05	-	2.1E-05	1.1E-04
	1,1-Dichloroethene	0.260	0.057	NA	NA	NA	NA	NA	7.4E-05	3.0E-05	1.3E-03	-	1.6E-04	2.9E-03
	1,2-Dichloroethane	0.086	0.001	0.091	NA	NA	NA	NA	2.5E-05	9.8E-06	1.8E-02	8.9E-07	5.4E-05	3.8E-02
	Chloroethane	0.022	2.90	0.003	NA	NA	NA	NA	6.1E-06	2.5E-06	2.1E-06	7.1E-09	1.3E-05	4.6E-06
	cis-1,2-Dichloroethene	0.750	0.01	NC	NA	NA	NA	NA	2.1E-04	8.6E-05	2.1E-02	-	4.7E-04	4.7E-02
	Tetrachloroethene	0.710	0.017	0.021	NA	NA	NA	NA	2.0E-04	8.1E-05	1.2E-02	1.7E-06	4.4E-04	2.6E-02
	trans-1,2-Dichloroethene	0.034	0.02	NA	NA	NA	NA	NA	9.7E-06	3.9E-06	4.9E-04	-	2.1E-05	1.1E-03
	Trichloroethene	1.500	0.01	0.089	NA	NA	NA	NA	4.3E-04	1.7E-04	4.3E-02	1.5E-05	9.4E-04	9.4E-02
	Vinyl chloride	0.034	0.029	0.031	NA	NA	NA	NA	9.7E-06	3.9E-06	3.4E-04	1.2E-07	2.1E-05	7.4E-04
2109-28	1,1,1-Trichloroethane	0.350	3	NC	NA	NA	NA	NA	1.0E-04	4.0E-05	3.3E-05	-	2.2E-04	7.3E-05
	1,1-Dichloroethane	0.022	0.20	NA	NA	NA	NA	NA	6.1E-06	2.5E-06	3.1E-05	-	1.3E-05	6.7E-05
	1,1-Dichloroethene	0.140	0.057	NA	NA	NA	NA	NA	4.0E-05	1.6E-05	7.0E-04	-	8.8E-05	1.5E-03
	1,2-Dichloroethane	0.310	0.001	0.091	NA	NA	NA	NA	8.9E-05	3.5E-05	6.3E-02	3.2E-06	1.9E-04	1.4E-01
	Chloroethane	0.190	2.90	0.003	NA	NA	NA	NA	5.4E-05	2.2E-05	1.9E-05	6.3E-08	1.2E-04	4.1E-05
	cis-1,2-Dichloroethene	0.022	0.01	NC	NA	NA	NA	NA	6.1E-06	2.5E-06	6.1E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.700	0.017	0.021	NA	NA	NA	NA	2.0E-04	8.0E-05	1.2E-02	1.7E-06	4.4E-04	2.6E-02
	trans-1,2-Dichloroethene	0.022	0.02	NA	NA	NA	NA	NA	6.1E-06	2.5E-06	3.1E-04	-	1.3E-05	6.7E-04
	Trichloroethene	0.630	0.01	0.089	NA	NA	NA	NA	1.8E-04	7.2E-05	1.8E-02	6.4E-06	3.9E-04	3.9E-02
	Vinyl chloride	0.022	0.029	0.031	NA	NA	NA	NA	6.1E-06	2.5E-06	2.2E-04	7.6E-08	1.3E-05	4.7E-04
2110-28	1,1,1-Trichloroethane	0.120	3	NC	NA	NA	NA	NA	3.4E-05	1.4E-05	1.1E-05	-	7.5E-05	2.5E-05
	1,1-Dichloroethane	0.063	0.20	NA	NA	NA	NA	NA	1.8E-05	7.2E-06	9.0E-05	-	3.9E-05	2.0E-04
	1,1-Dichloroethene	0.045	0.057	NA	NA	NA	NA	NA	1.3E-05	5.1E-06	2.3E-04	-	2.8E-05	4.9E-04
	1,2-Dichloroethane	0.093	0.001	0.091	NA	NA	NA	NA	2.7E-05	1.1E-05	1.9E-02	9.7E-07	5.8E-05	4.2E-02
	Chloroethane	0.048	2.90	0.003	NA	NA	NA	NA	1.4E-05	5.5E-06	4.7E-06	1.6E-08	3.0E-05	1.0E-05
	cis-1,2-Dichloroethene	0.021	0.01	NC	NA	NA	NA	NA	5.9E-06	2.3E-06	5.9E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.360	0.017	0.021	NA	NA	NA	NA	1.0E-04	4.1E-05	6.1E-03	8.6E-07	2.3E-04	1.3E-02
	trans-1,2-Dichloroethene	0.021	0.02	NA	NA	NA	NA	NA	5.9E-06	2.3E-06	2.9E-04	-	1.3E-05	6.4E-04
	Trichloroethene	0.130	0.01	0.089	NA	NA	NA	NA	3.7E-05	1.5E-05	3.7E-03	1.3E-06	8.1E-05	8.1E-03
	Vinyl chloride	0.021	0.029	0.031	NA	NA	NA	NA	5.9E-06	2.3E-06	2.1E-04	7.2E-08	1.3E-05	4.5E-04
2111-27	1,1,1-Trichloroethane	0.350	3	NC	NA	NA	NA	NA	1.0E-04	4.0E-05	3.3E-05	-	2.2E-04	7.3E-05
	1,1-Dichloroethane	0.023	0.20	NA	NA	NA	NA	NA	6.6E-06	2.6E-06	3.3E-05	-	1.4E-05	7.2E-05
	1,1-Dichloroethene	0.060	0.057	NA	NA	NA	NA	NA	1.7E-05	6.9E-06	3.0E-04	-	3.8E-05	6.6E-04
	1,2-Dichloroethane	0.170	0.001	0.091	NA	NA	NA	NA	4.9E-05	1.9E-05	3.5E-02	1.8E-06	1.1E-04	7.6E-02
	Chloroethane	0.210	2.90	0.003	NA	NA	NA	NA	6.0E-05	2.4E-05	2.1E-05	7.0E-08	1.3E-04	4.5E-05
	cis-1,2-Dichloroethene	0.023	0.01	NC	NA	NA	NA	NA	6.6E-06	2.6E-06	6.6E-04	-	1.4E-05	1.4E-03
	Tetrachloroethene	0.810	0.017	0.021	NA	NA	NA	NA	2.3E-04	9.3E-05	1.4E-02	1.9E-06	5.1E-04	3.0E-02
	trans-1,2-Dichloroethene	0.023	0.02	NA	NA	NA	NA	NA	6.6E-06	2.6E-06	3.3E-04	-	1.4E-05	7.2E-04
	Trichloroethene	0.350	0.01	0.089	NA	NA	NA	NA	1.0E-04	4.0E-05	1.0E-02	3.6E-06	2.2E-04	2.2E-02
	Vinyl chloride	0.023	0.029	0.031	NA	NA	NA	NA	6.6E-06	2.6E-06	2.3E-04	8.1E-08	1.4E-05	5.0E-04
2111-28	1,1,1-Trichloroethane	2.500	3	NC	NA	NA	NA	NA	7.1E-04	2.9E-04	2.4E-04	-	1.6E-03	5.2E-04
	1,1-Dichloroethane	0.030	0.20	NA	NA	NA	NA	NA	8.6E-06	3.4E-06	4.3E-05	-	1.9E-05	9.4E-05

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	1,1-Dichloroethene	0.370	0.057	NA	NA	NA	NA	NA	1.1E-04	4.2E-05	1.9E-03	-	2.3E-04	4.1E-03
	1,2-Dichloroethane	0.380	0.001	0.091	NA	NA	NA	NA	1.1E-04	4.3E-05	7.8E-02	4.0E-06	2.4E-04	1.7E-01
	Chloroethane	0.074	2.90	0.003	NA	NA	NA	NA	2.1E-05	8.5E-06	7.3E-06	2.5E-08	4.6E-05	1.6E-05
	cis-1,2-Dichloroethene	0.034	0.01	NC	NA	NA	NA	NA	9.7E-06	3.9E-06	9.7E-04	-	2.1E-05	2.1E-03
	Tetrachloroethene	0.390	0.017	0.021	NA	NA	NA	NA	1.1E-04	4.5E-05	6.6E-03	9.4E-07	2.4E-04	1.4E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-04	-	1.2E-05	6.1E-04
	Trichloroethene	0.480	0.01	0.089	NA	NA	NA	NA	1.4E-04	5.5E-05	1.4E-02	4.9E-06	3.0E-04	3.0E-02
	Vinyl chloride	0.014	0.029	0.031	NA	NA	NA	NA	4.0E-06	1.6E-06	1.4E-04	4.9E-08	8.8E-06	3.1E-04
2111-31	1,1,1-Trichloroethane	0.100	3	NC	NA	NA	NA	NA	2.9E-05	1.1E-05	9.5E-06	-	6.3E-05	2.1E-05
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-05	-	1.2E-05	5.8E-05
	1,1-Dichloroethene	0.015	0.057	NA	NA	NA	NA	NA	4.3E-06	1.7E-06	7.5E-05	-	9.4E-06	1.6E-04
	1,2-Dichloroethane	0.031	0.001	0.091	NA	NA	NA	NA	8.9E-06	3.5E-06	6.3E-03	3.2E-07	1.9E-05	1.4E-02
	Chloroethane	0.033	2.90	0.003	NA	NA	NA	NA	9.4E-06	3.8E-06	3.3E-06	1.1E-08	2.1E-05	7.1E-06
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.3E-06	2.1E-06	5.3E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.100	0.017	0.021	NA	NA	NA	NA	2.9E-05	1.1E-05	1.7E-03	2.4E-07	6.3E-05	3.7E-03
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-04	-	1.2E-05	5.8E-04
	Trichloroethene	0.059	0.01	0.089	NA	NA	NA	NA	1.7E-05	6.7E-06	1.7E-03	6.0E-07	3.7E-05	3.7E-03
	Vinyl chloride	0.006	0.029	0.031	NA	NA	NA	NA	1.8E-06	7.3E-07	6.4E-05	2.3E-08	4.0E-06	1.4E-04
2112-27	1,1,1-Trichloroethane	0.350	3	NC	NA	NA	NA	NA	1.0E-04	4.0E-05	3.3E-05	-	2.2E-04	7.3E-05
	1,1-Dichloroethane	0.018	0.20	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-05	-	1.1E-05	5.6E-05
	1,1-Dichloroethene	0.017	0.057	NA	NA	NA	NA	NA	4.9E-06	1.9E-06	8.5E-05	-	1.1E-05	1.9E-04
	1,2-Dichloroethane	0.049	0.001	0.091	NA	NA	NA	NA	1.4E-05	5.6E-06	1.0E-02	5.1E-07	3.1E-05	2.2E-02
	Chloroethane	0.038	2.90	0.003	NA	NA	NA	NA	1.1E-05	4.3E-06	3.7E-06	1.3E-08	2.4E-05	8.2E-06
	cis-1,2-Dichloroethene	0.014	0.01	NC	NA	NA	NA	NA	3.9E-06	1.5E-06	3.9E-04	-	8.4E-06	8.4E-04
	Tetrachloroethene	1.500	0.017	0.021	NA	NA	NA	NA	4.3E-04	1.7E-04	2.5E-02	3.6E-06	9.4E-04	5.5E-02
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-04	-	1.1E-05	5.6E-04
	Trichloroethene	0.120	0.01	0.089	NA	NA	NA	NA	3.4E-05	1.4E-05	3.4E-03	1.2E-06	7.5E-05	7.5E-03
	Vinyl chloride	0.069	0.029	0.031	NA	NA	NA	NA	2.0E-05	7.9E-06	6.9E-04	2.4E-07	4.3E-05	1.5E-03
2112-28	1,1,1-Trichloroethane	0.550	3	NC	NA	NA	NA	NA	1.6E-04	6.3E-05	5.2E-05	-	3.4E-04	1.1E-04
	1,1-Dichloroethane	0.405	0.20	NA	NA	NA	NA	NA	1.2E-04	4.6E-05	5.8E-04	-	2.5E-04	1.3E-03
	1,1-Dichloroethene	0.395	0.057	NA	NA	NA	NA	NA	1.1E-04	4.5E-05	2.0E-03	-	2.5E-04	4.3E-03
	1,2-Dichloroethane	0.405	0.001	0.091	NA	NA	NA	NA	1.2E-04	4.6E-05	8.3E-02	4.2E-06	2.5E-04	1.8E-01
	Chloroethane	0.550	2.90	0.003	NA	NA	NA	NA	1.6E-04	6.3E-05	5.4E-05	1.8E-07	3.4E-04	1.2E-04
	cis-1,2-Dichloroethene	0.395	0.01	NC	NA	NA	NA	NA	1.1E-04	4.5E-05	1.1E-02	-	2.5E-04	2.5E-02
	Tetrachloroethene	0.700	0.017	0.021	NA	NA	NA	NA	2.0E-04	8.0E-05	1.2E-02	1.7E-06	4.4E-04	2.6E-02
	trans-1,2-Dichloroethene	0.395	0.02	NA	NA	NA	NA	NA	1.1E-04	4.5E-05	5.6E-03	-	2.5E-04	1.2E-02
	Trichloroethene	0.550	0.01	0.089	NA	NA	NA	NA	1.6E-04	6.3E-05	1.6E-02	5.6E-06	3.4E-04	3.4E-02
	Vinyl chloride	0.255	0.029	0.031	NA	NA	NA	NA	7.3E-05	2.9E-05	2.6E-03	9.0E-07	1.6E-04	5.6E-03
2113-27	1,1,1-Trichloroethane	0.200	3	NC	NA	NA	NA	NA	5.7E-05	2.3E-05	1.9E-05	-	1.3E-04	4.2E-05
	1,1-Dichloroethane	0.750	0.20	NA	NA	NA	NA	NA	2.1E-04	8.6E-05	1.1E-03	-	4.7E-04	2.3E-03
	1,1-Dichloroethene	0.390	0.057	NA	NA	NA	NA	NA	1.1E-04	4.5E-05	2.0E-03	-	2.4E-04	4.3E-03
	1,2-Dichloroethane	0.160	0.001	0.091	NA	NA	NA	NA	4.6E-05	1.8E-05	3.3E-02	1.7E-06	1.0E-04	7.1E-02
	Chloroethane	0.037	2.90	0.003	NA	NA	NA	NA	1.1E-05	4.2E-06	3.6E-06	1.2E-08	2.3E-05	8.0E-06
	cis-1,2-Dichloroethene	0.750	0.01	NC	NA	NA	NA	NA	2.1E-04	8.6E-05	2.1E-02	-	4.7E-04	4.7E-02
	Tetrachloroethene	0.540	0.017	0.021	NA	NA	NA	NA	1.5E-04	6.2E-05	9.1E-03	1.3E-06	3.4E-04	2.0E-02
	trans-1,2-Dichloroethene	0.750	0.02	NA	NA	NA	NA	NA	2.1E-04	8.6E-05	1.1E-02	-	4.7E-04	2.3E-02
	Trichloroethene	0.150	0.01	0.089	NA	NA	NA	NA	4.3E-05	1.7E-05	4.3E-03	1.5E-06	9.4E-05	9.4E-03
	Vinyl chloride	0.150	0.029	0.031	NA	NA	NA	NA	4.3E-05	1.7E-05	1.5E-03	5.3E-07	9.4E-05	3.3E-03
2113-28	1,1,1-Trichloroethane	16.890	3	NC	NA	NA	NA	NA	4.8E-03	1.9E-03	1.6E-03	-	1.1E-02	3.5E-03
	1,1-Dichloroethane	3.800	0.20	NA	NA	NA	NA	NA	1.1E-03	4.3E-04	5.4E-03	-	2.4E-03	1.2E-02
	1,1-Dichloroethene	0.878	0.057	NA	NA	NA	NA	NA	2.5E-04	1.0E-04	4.4E-03	-	5.5E-04	9.6E-03
	1,2-Dichloroethane	0.465	0.001	0.091	NA	NA	NA	NA	1.3E-04	5.3E-05	9.5E-02	4.8E-06	2.9E-04	2.1E-01

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME ($\mu g/m^3$)	RfDi (mg/kg-d)	CSFi $(mg/kg\text{-}d)^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Chloroethane	0.405	2.90	0.003	NA	NA	NA	NA	1.2E-04	4.6E-05	4.0E-05	1.3E-07	2.5E-04	8.7E-05
	cis-1,2-Dichloroethene	3.800	0.01	NC	NA	NA	NA	NA	1.1E-03	4.3E-04	1.1E-01	-	2.4E-03	2.4E-01
	Tetrachloroethene	10.931	0.017	0.021	NA	NA	NA	NA	3.1E-03	1.2E-03	1.8E-01	2.6E-05	6.8E-03	4.0E-01
	trans-1,2-Dichloroethene	3.800	0.02	NA	NA	NA	NA	NA	1.1E-03	4.3E-04	5.4E-02	-	2.4E-03	1.2E-01
	Trichloroethene	22.962	0.01	0.089	NA	NA	NA	NA	6.6E-03	2.6E-03	6.6E-01	2.3E-04	1.4E-02	1.4E+00
	Vinyl chloride	0.389	0.029	0.031	NA	NA	NA	NA	1.1E-04	4.4E-05	3.9E-03	1.4E-06	2.4E-04	8.5E-03
2114-27	1,1,1-Trichloroethane	0.270	3	NC	NA	NA	NA	NA	7.7E-05	3.1E-05	2.6E-05	-	1.7E-04	5.6E-05
	1,1-Dichloroethane	0.022	0.20	NA	NA	NA	NA	NA	6.1E-06	2.5E-06	3.1E-05	-	1.3E-05	6.7E-05
	1,1-Dichloroethene	0.071	0.057	NA	NA	NA	NA	NA	2.0E-05	8.1E-06	3.6E-04	-	4.4E-05	7.8E-04
	1,2-Dichloroethane	0.120	0.001	0.091	NA	NA	NA	NA	3.4E-05	1.4E-05	2.4E-02	1.2E-06	7.5E-05	5.4E-02
	Chloroethane	0.069	2.90	0.003	NA	NA	NA	NA	2.0E-05	7.9E-06	6.8E-06	2.3E-08	4.3E-05	1.5E-05
	cis-1,2-Dichloroethene	0.022	0.01	NC	NA	NA	NA	NA	6.1E-06	2.5E-06	6.1E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.150	0.017	0.021	NA	NA	NA	NA	4.3E-05	1.7E-05	2.5E-03	3.6E-07	9.4E-05	5.5E-03
	trans-1,2-Dichloroethene	0.022	0.02	NA	NA	NA	NA	NA	6.1E-06	2.5E-06	3.1E-04	-	1.3E-05	6.7E-04
	Trichloroethene	0.095	0.01	0.089	NA	NA	NA	NA	2.7E-05	1.1E-05	2.7E-03	9.7E-07	5.9E-05	5.9E-03
	Vinyl chloride	0.016	0.029	0.031	NA	NA	NA	NA	4.6E-06	1.8E-06	1.6E-04	5.6E-08	1.0E-05	3.5E-04
2114-28	1,1,1-Trichloroethane	0.650	3	NC	NA	NA	NA	NA	1.9E-04	7.4E-05	6.2E-05	-	4.1E-04	1.4E-04
	1,1-Dichloroethane	0.027	0.20	NA	NA	NA	NA	NA	7.7E-06	3.1E-06	3.9E-05	-	1.7E-05	8.4E-05
	1,1-Dichloroethene	0.660	0.057	NA	NA	NA	NA	NA	1.9E-04	7.5E-05	3.3E-03	-	4.1E-04	7.2E-03
	1,2-Dichloroethane	0.076	0.001	0.091	NA	NA	NA	NA	2.2E-05	8.7E-06	1.6E-02	7.9E-07	4.8E-05	3.4E-02
	Chloroethane	0.075	2.90	0.003	NA	NA	NA	NA	2.1E-05	8.6E-06	7.4E-06	2.5E-08	4.7E-05	1.6E-05
	cis-1,2-Dichloroethene	0.018	0.01	NC	NA	NA	NA	NA	5.1E-06	2.1E-06	5.1E-04	-	1.1E-05	1.1E-03
	Tetrachloroethene	0.590	0.017	0.021	NA	NA	NA	NA	1.7E-04	6.7E-05	9.9E-03	1.4E-06	3.7E-04	2.2E-02
	trans-1,2-Dichloroethene	0.017	0.02	NA	NA	NA	NA	NA	4.9E-06	1.9E-06	2.4E-04	-	1.1E-05	5.3E-04
	Trichloroethene	0.760	0.01	0.089	NA	NA	NA	NA	2.2E-04	8.7E-05	2.2E-02	7.7E-06	4.8E-04	4.8E-02
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.1E-06	2.1E-06	1.8E-04	6.3E-08	1.1E-05	3.9E-04
2115-27	1,1,1-Trichloroethane	0.220	3	NC	NA	NA	NA	NA	6.3E-05	2.5E-05	2.1E-05	-	1.4E-04	4.6E-05
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-05	-	1.2E-05	6.1E-05
	1,1-Dichloroethene	0.055	0.057	NA	NA	NA	NA	NA	1.6E-05	6.3E-06	2.8E-04	-	3.4E-05	6.0E-04
	1,2-Dichloroethane	2.400	0.001	0.091	NA	NA	NA	NA	6.9E-04	2.7E-04	4.9E-01	2.5E-05	1.5E-03	1.1E+00
	Chloroethane	0.092	2.90	0.003	NA	NA	NA	NA	2.6E-05	1.1E-05	9.1E-06	3.0E-08	5.8E-05	2.0E-05
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.6E-06	2.2E-06	5.6E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.380	0.017	0.021	NA	NA	NA	NA	1.1E-04	4.3E-05	6.4E-03	9.1E-07	2.4E-04	1.4E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-04	-	1.2E-05	6.1E-04
	Trichloroethene	0.200	0.01	0.089	NA	NA	NA	NA	5.7E-05	2.3E-05	5.7E-03	2.0E-06	1.3E-04	1.3E-02
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.6E-06	2.2E-06	2.0E-04	6.9E-08	1.2E-05	4.3E-04
2115-28	1,1,1-Trichloroethane	0.610	3	NC	NA	NA	NA	NA	1.7E-04	7.0E-05	5.8E-05	-	3.8E-04	1.3E-04
	1,1-Dichloroethane	0.021	0.20	NA	NA	NA	NA	NA	5.9E-06	2.3E-06	2.9E-05	-	1.3E-05	6.4E-05
	1,1-Dichloroethene	0.920	0.057	NA	NA	NA	NA	NA	2.6E-04	1.1E-04	4.6E-03	-	5.8E-04	1.0E-02
	1,2-Dichloroethane	0.120	0.001	0.091	NA	NA	NA	NA	3.4E-05	1.4E-05	2.4E-02	1.2E-06	7.5E-05	5.4E-02
	Chloroethane	0.099	2.90	0.003	NA	NA	NA	NA	2.8E-05	1.1E-05	9.8E-06	3.3E-08	6.2E-05	2.1E-05
	cis-1,2-Dichloroethene	0.021	0.01	NC	NA	NA	NA	NA	5.9E-06	2.3E-06	5.9E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	1.200	0.017	0.021	NA	NA	NA	NA	3.4E-04	1.4E-04	2.0E-02	2.9E-06	7.5E-04	4.4E-02
	trans-1,2-Dichloroethene	0.021	0.02	NA	NA	NA	NA	NA	5.9E-06	2.3E-06	2.9E-04	-	1.3E-05	6.4E-04
	Trichloroethene	0.400	0.01	0.089	NA	NA	NA	NA	1.1E-04	4.6E-05	1.1E-02	4.1E-06	2.5E-04	2.5E-02
	Vinyl chloride	0.021	0.029	0.031	NA	NA	NA	NA	5.9E-06	2.3E-06	2.1E-04	7.2E-08	1.3E-05	4.5E-04
2202-27	1,1,1-Trichloroethane	0.190	3	NC	NA	NA	NA	NA	5.4E-05	2.2E-05	1.8E-05	-	1.2E-04	4.0E-05
	1,1-Dichloroethane	-	0.20	NA	NA	NA	NA	NA	-	-	-	-	-	-
	1,1-Dichloroethene	0.041	0.057	NA	NA	NA	NA	NA	1.2E-05	4.7E-06	2.1E-04	-	2.6E-05	4.5E-04
	1,2-Dichloroethane	-	0.001	0.091	NA	NA	NA	NA	-	-	-	-	-	-
	Chloroethane	-	2.90	0.003	NA	NA	NA	NA	-	-	-	-	-	-
	cis-1,2-Dichloroethene	0.750	0.01	NC	NA	NA	NA	NA	2.1E-04	8.6E-05	2.1E-02	-	4.7E-04	4.7E-02

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME ($\mu g/m^3$)	RfDi (mg/kg-d)	CSFi $(mg/kg\text{-}d)^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Tetrachloroethene	0.330	0.017	0.021	NA	NA	NA	NA	9.4E-05	3.8E-05	5.5E-03	7.9E-07	2.1E-04	1.2E-02
	trans-1,2-Dichloroethene	-	0.02	NA	NA	NA	NA	NA	-	-	-	-	-	-
	Trichloroethene	0.270	0.01	0.089	NA	NA	NA	NA	7.7E-05	3.1E-05	7.7E-03	2.7E-06	1.7E-04	1.7E-02
	Vinyl chloride	0.017	0.029	0.031	NA	NA	NA	NA	4.9E-06	1.9E-06	1.7E-04	6.0E-08	1.1E-05	3.7E-04
2202-28	1,1,1-Trichloroethane	0.528	3	NC	NA	NA	NA	NA	1.5E-04	6.0E-05	5.0E-05	-	3.3E-04	1.1E-04
	1,1-Dichloroethane	0.600	0.20	NA	NA	NA	NA	NA	1.7E-04	6.9E-05	8.6E-04	-	3.8E-04	1.9E-03
	1,1-Dichloroethene	0.208	0.057	NA	NA	NA	NA	NA	6.0E-05	2.4E-05	1.0E-03	-	1.3E-04	2.3E-03
	1,2-Dichloroethane	5.300	0.001	0.091	NA	NA	NA	NA	1.5E-03	6.1E-04	1.1E+00	5.5E-05	3.3E-03	2.4E+00
	Chloroethane	0.166	2.90	0.003	NA	NA	NA	NA	4.7E-05	1.9E-05	1.6E-05	5.5E-08	1.0E-04	3.6E-05
	cis-1,2-Dichloroethene	0.600	0.01	NC	NA	NA	NA	NA	1.7E-04	6.9E-05	1.7E-02	-	3.8E-04	3.8E-02
	Tetrachloroethene	0.951	0.017	0.021	NA	NA	NA	NA	2.7E-04	1.1E-04	1.6E-02	2.3E-06	5.9E-04	3.5E-02
	trans-1,2-Dichloroethene	0.600	0.02	NA	NA	NA	NA	NA	1.7E-04	6.9E-05	8.6E-03	-	3.8E-04	1.9E-02
	Trichloroethene	1.179	0.01	0.089	NA	NA	NA	NA	3.4E-04	1.3E-04	3.4E-02	1.2E-05	7.4E-04	7.4E-02
	Vinyl chloride	0.039	0.029	0.031	NA	NA	NA	NA	1.1E-05	4.5E-06	3.9E-04	1.4E-07	2.4E-05	8.5E-04
2202-31	1,1,1-Trichloroethane	0.170	3	NC	NA	NA	NA	NA	4.9E-05	1.9E-05	1.6E-05	-	1.1E-04	3.5E-05
	1,1-Dichloroethane	0.027	0.20	NA	NA	NA	NA	NA	7.7E-06	3.1E-06	3.9E-05	-	1.7E-05	8.4E-05
	1,1-Dichloroethene	0.066	0.057	NA	NA	NA	NA	NA	1.9E-05	7.5E-06	3.3E-04	-	4.1E-05	7.2E-04
	1,2-Dichloroethane	0.040	0.001	0.091	NA	NA	NA	NA	1.1E-05	4.6E-06	8.2E-03	4.2E-07	2.5E-05	1.8E-02
	Chloroethane	0.031	2.90	0.003	NA	NA	NA	NA	8.9E-06	3.5E-06	3.1E-06	1.0E-08	1.9E-05	6.7E-06
	cis-1,2-Dichloroethene	0.027	0.01	NC	NA	NA	NA	NA	7.7E-06	3.1E-06	7.7E-04	-	1.7E-05	1.7E-03
	Tetrachloroethene	1.400	0.017	0.021	NA	NA	NA	NA	4.0E-04	1.6E-04	2.4E-02	3.4E-06	8.8E-04	5.1E-02
	trans-1,2-Dichloroethene	0.027	0.02	NA	NA	NA	NA	NA	7.7E-06	3.1E-06	3.9E-04	-	1.7E-05	8.4E-04
	Trichloroethene	0.240	0.01	0.089	NA	NA	NA	NA	6.9E-05	2.7E-05	6.9E-03	2.4E-06	1.5E-04	1.5E-02
	Vinyl chloride	0.027	0.029	0.031	NA	NA	NA	NA	7.7E-06	3.1E-06	2.7E-04	9.5E-08	1.7E-05	5.9E-04
2203-27	1,1,1-Trichloroethane	0.150	3	NC	NA	NA	NA	NA	4.3E-05	1.7E-05	1.4E-05	-	9.4E-05	3.1E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.5E-06	5.6E-05	-	2.5E-05	1.2E-04
	1,1-Dichloroethene	0.140	0.057	NA	NA	NA	NA	NA	4.0E-05	1.6E-05	7.0E-04	-	8.8E-05	1.5E-03
	1,2-Dichloroethane	8.500	0.001	0.091	NA	NA	NA	NA	2.4E-03	9.7E-04	1.7E+00	8.8E-05	5.3E-03	3.8E+00
	Chloroethane	0.078	2.90	0.003	NA	NA	NA	NA	2.2E-05	8.9E-06	7.7E-06	2.6E-08	4.9E-05	1.7E-05
	cis-1,2-Dichloroethene	0.040	0.01	NC	NA	NA	NA	NA	1.1E-05	4.5E-06	1.1E-03	-	2.5E-05	2.5E-03
	Tetrachloroethene	16.000	0.017	0.021	NA	NA	NA	NA	4.6E-03	1.8E-03	2.7E-01	3.8E-05	1.0E-02	5.9E-01
	trans-1,2-Dichloroethene	0.040	0.02	NA	NA	NA	NA	NA	1.1E-05	4.5E-06	5.6E-04	-	2.5E-05	1.2E-03
	Trichloroethene	0.390	0.01	0.089	NA	NA	NA	NA	1.1E-04	4.5E-05	1.1E-02	4.0E-06	2.4E-04	2.4E-02
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.6E-06	2.2E-06	2.0E-04	6.9E-08	1.2E-05	4.3E-04
2203-28	1,1,1-Trichloroethane	0.330	3	NC	NA	NA	NA	NA	9.4E-05	3.8E-05	3.1E-05	-	2.1E-04	6.9E-05
	1,1-Dichloroethane	0.047	0.20	NA	NA	NA	NA	NA	1.3E-05	5.4E-06	6.7E-05	-	2.9E-05	1.5E-04
	1,1-Dichloroethene	0.055	0.057	NA	NA	NA	NA	NA	1.6E-05	6.3E-06	2.8E-04	-	3.4E-05	6.0E-04
	1,2-Dichloroethane	0.120	0.001	0.091	NA	NA	NA	NA	3.4E-05	1.4E-05	2.4E-02	1.2E-06	7.5E-05	5.4E-02
	Chloroethane	0.130	2.90	0.003	NA	NA	NA	NA	3.7E-05	1.5E-05	1.3E-05	4.3E-08	8.1E-05	2.8E-05
	cis-1,2-Dichloroethene	0.053	0.01	NC	NA	NA	NA	NA	1.5E-05	6.1E-06	1.5E-03	-	3.3E-05	3.3E-03
	Tetrachloroethene	1.300	0.017	0.021	NA	NA	NA	NA	3.7E-04	1.5E-04	2.2E-02	3.1E-06	8.1E-04	4.8E-02
	trans-1,2-Dichloroethene	0.026	0.02	NA	NA	NA	NA	NA	7.4E-06	3.0E-06	3.7E-04	-	1.6E-05	8.1E-04
	Trichloroethene	0.990	0.01	0.089	NA	NA	NA	NA	2.8E-04	1.1E-04	2.8E-02	1.0E-05	6.2E-04	6.2E-02
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.1E-06	2.1E-06	1.8E-04	6.3E-08	1.1E-05	3.9E-04
2203-31	1,1,1-Trichloroethane	0.180	3	NC	NA	NA	NA	NA	5.1E-05	2.1E-05	1.7E-05	-	1.1E-04	3.8E-05
	1,1-Dichloroethane	0.025	0.20	NA	NA	NA	NA	NA	7.1E-06	2.9E-06	3.6E-05	-	1.6E-05	7.8E-05
	1,1-Dichloroethene	0.110	0.057	NA	NA	NA	NA	NA	3.1E-05	1.3E-05	5.5E-04	-	6.9E-05	1.2E-03
	1,2-Dichloroethane	1.900	0.001	0.091	NA	NA	NA	NA	5.4E-04	2.2E-04	3.9E-01	2.0E-05	1.2E-03	8.5E-01
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.025	0.01	NC	NA	NA	NA	NA	7.1E-06	2.9E-06	7.1E-04	-	1.6E-05	1.6E-03
	Tetrachloroethene	0.600	0.017	0.021	NA	NA	NA	NA	1.7E-04	6.9E-05	1.0E-02	1.4E-06	3.8E-04	2.2E-02
	trans-1,2-Dichloroethene	0.025	0.02	NA	NA	NA	NA	NA	7.1E-06	2.9E-06	3.6E-04	-	1.6E-05	7.8E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME ($\mu g/m^3$)	RfDi (mg/kg-d)	CSFi $(mg/kg-d)^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Trichloroethene	0.160	0.01	0.089	NA	NA	NA	NA	4.6E-05	1.8E-05	4.6E-03	1.6E-06	1.0E-04	1.0E-02
	Vinyl chloride	0.009	0.029	0.031	NA	NA	NA	NA	2.4E-06	9.7E-07	8.5E-05	3.0E-08	5.3E-06	1.9E-04
2205-27	1,1,1-Trichloroethane	0.140	3	NC	NA	NA	NA	NA	4.0E-05	1.6E-05	1.3E-05	-	8.8E-05	2.9E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.110	0.001	0.091	NA	NA	NA	NA	3.1E-05	1.3E-05	2.2E-02	1.1E-06	6.9E-05	4.9E-02
	Chloroethane	0.092	2.90	0.003	NA	NA	NA	NA	2.6E-05	1.1E-05	9.1E-06	3.0E-08	5.8E-05	2.0E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.300	0.017	0.021	NA	NA	NA	NA	8.6E-05	3.4E-05	5.0E-03	7.2E-07	1.9E-04	1.1E-02
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.710	0.01	0.089	NA	NA	NA	NA	2.0E-04	8.1E-05	2.0E-02	7.2E-06	4.4E-04	4.4E-02
	Vinyl chloride	0.009	0.029	0.031	NA	NA	NA	NA	2.5E-06	1.0E-06	8.9E-05	3.1E-08	5.6E-06	1.9E-04
2205-28	1,1,1-Trichloroethane	0.260	3	NC	NA	NA	NA	NA	7.4E-05	3.0E-05	2.5E-05	-	1.6E-04	5.4E-05
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-05	-	1.2E-05	5.9E-05
	1,1-Dichloroethene	0.049	0.057	NA	NA	NA	NA	NA	1.4E-05	5.6E-06	2.5E-04	-	3.1E-05	5.4E-04
	1,2-Dichloroethane	0.048	0.001	0.091	NA	NA	NA	NA	1.4E-05	5.5E-06	9.8E-03	5.0E-07	3.0E-05	2.1E-02
	Chloroethane	0.019	2.90	0.003	NA	NA	NA	NA	5.4E-06	2.2E-06	1.9E-06	6.3E-09	1.2E-05	4.1E-06
	cis-1,2-Dichloroethene	0.650	0.01	NC	NA	NA	NA	NA	1.9E-04	7.4E-05	1.9E-02	-	4.1E-04	4.1E-02
	Tetrachloroethene	0.380	0.017	0.021	NA	NA	NA	NA	1.1E-04	4.3E-05	6.4E-03	9.1E-07	2.4E-04	1.4E-02
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-04	-	1.2E-05	5.9E-04
	Trichloroethene	0.120	0.01	0.089	NA	NA	NA	NA	3.4E-05	1.4E-05	3.4E-03	1.2E-06	7.5E-05	7.5E-03
	Vinyl chloride	0.130	0.029	0.031	NA	NA	NA	NA	3.7E-05	1.5E-05	1.3E-03	4.6E-07	8.1E-05	2.8E-03
2206-27	1,1,1-Trichloroethane	0.170	3	NC	NA	NA	NA	NA	4.9E-05	1.9E-05	1.6E-05	-	1.1E-04	3.5E-05
	1,1-Dichloroethane	0.059	0.20	NA	NA	NA	NA	NA	1.7E-05	6.7E-06	8.4E-05	-	3.7E-05	1.8E-04
	1,1-Dichloroethene	0.067	0.057	NA	NA	NA	NA	NA	1.9E-05	7.7E-06	3.4E-04	-	4.2E-05	7.3E-04
	1,2-Dichloroethane	0.048	0.001	0.091	NA	NA	NA	NA	1.4E-05	5.5E-06	9.8E-03	5.0E-07	3.0E-05	2.1E-02
	Chloroethane	0.077	2.90	0.003	NA	NA	NA	NA	2.2E-05	8.8E-06	7.6E-06	2.6E-08	4.8E-05	1.7E-05
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.7E-06	2.3E-06	5.7E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.830	0.017	0.021	NA	NA	NA	NA	2.4E-04	9.5E-05	1.4E-02	2.0E-06	5.2E-04	3.1E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	0.610	0.01	0.089	NA	NA	NA	NA	1.7E-04	7.0E-05	1.7E-02	6.2E-06	3.8E-04	3.8E-02
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.6E-06	2.2E-06	2.0E-04	6.9E-08	1.2E-05	4.3E-04
2206-28	1,1,1-Trichloroethane	1.358	3	NC	NA	NA	NA	NA	3.9E-04	1.6E-04	1.3E-04	-	8.5E-04	2.8E-04
	1,1-Dichloroethane	0.650	0.20	NA	NA	NA	NA	NA	1.9E-04	7.4E-05	9.3E-04	-	4.1E-04	2.0E-03
	1,1-Dichloroethene	0.189	0.057	NA	NA	NA	NA	NA	5.4E-05	2.2E-05	9.5E-04	-	1.2E-04	2.1E-03
	1,2-Dichloroethane	0.142	0.001	0.091	NA	NA	NA	NA	4.1E-05	1.6E-05	2.9E-02	1.5E-06	8.9E-05	6.4E-02
	Chloroethane	0.087	2.90	0.003	NA	NA	NA	NA	2.5E-05	9.9E-06	8.5E-06	2.9E-08	5.4E-05	1.9E-05
	cis-1,2-Dichloroethene	0.650	0.01	NC	NA	NA	NA	NA	1.9E-04	7.4E-05	1.9E-02	-	4.1E-04	4.1E-02
	Tetrachloroethene	1.613	0.017	0.021	NA	NA	NA	NA	4.6E-04	1.8E-04	2.7E-02	3.9E-06	1.0E-03	5.9E-02
	trans-1,2-Dichloroethene	0.650	0.02	NA	NA	NA	NA	NA	1.9E-04	7.4E-05	9.3E-03	-	4.1E-04	2.0E-02
	Trichloroethene	2.745	0.01	0.089	NA	NA	NA	NA	7.8E-04	3.1E-04	7.8E-02	2.8E-05	1.7E-03	1.7E-01
	Vinyl chloride	0.034	0.029	0.031	NA	NA	NA	NA	9.8E-06	3.9E-06	3.4E-04	1.2E-07	2.1E-05	7.5E-04
2209-27	1,1,1-Trichloroethane	4.700	3	NC	NA	NA	NA	NA	1.3E-03	5.4E-04	4.5E-04	-	2.9E-03	9.8E-04
	1,1-Dichloroethane	-	0.20	NA	NA	NA	NA	NA	-	-	-	-	-	-
	1,1-Dichloroethene	0.037	0.057	NA	NA	NA	NA	NA	1.1E-05	4.2E-06	1.9E-04	-	2.3E-05	4.1E-04
	1,2-Dichloroethane	-	0.001	0.091	NA	NA	NA	NA	-	-	-	-	-	-
	Chloroethane	-	2.90	0.003	NA	NA	NA	NA	-	-	-	-	-	-
	cis-1,2-Dichloroethene	0.006	0.01	NC	NA	NA	NA	NA	1.6E-06	6.5E-07	1.6E-04	-	3.6E-06	3.6E-04
	Tetrachloroethene	0.320	0.017	0.021	NA	NA	NA	NA	9.1E-05	3.7E-05	5.4E-03	7.7E-07	2.0E-04	1.2E-02
	trans-1,2-Dichloroethene	-	0.02	NA	NA	NA	NA	NA	-	-	-	-	-	-
	Trichloroethene	0.160	0.01	0.089	NA	NA	NA	NA	4.6E-05	1.8E-05	4.6E-03	1.6E-06	1.0E-04	1.0E-02
	Vinyl chloride	0.013	0.029	0.031	NA	NA	NA	NA	3.7E-06	1.5E-06	1.3E-04	4.6E-08	8.1E-06	2.8E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME ($\mu g/m^3$)	RfDi (mg/kg-d)	CSFi $(mg/kg\text{-}d)^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
2209-28	1,1,1-Trichloroethane	1.000	3	NC	NA	NA	NA	NA	2.9E-04	1.1E-04	9.5E-05	-	6.3E-04	2.1E-04
	1,1-Dichloroethane	0.004	0.20	NA	NA	NA	NA	NA	1.1E-06	4.5E-07	5.6E-06	-	2.4E-06	1.2E-05
	1,1-Dichloroethene	0.029	0.057	NA	NA	NA	NA	NA	8.3E-06	3.3E-06	1.5E-04	-	1.8E-05	3.2E-04
	1,2-Dichloroethane	0.037	0.001	0.091	NA	NA	NA	NA	1.1E-05	4.2E-06	7.6E-03	3.8E-07	2.3E-05	1.7E-02
	Chloroethane	0.076	2.90	0.003	NA	NA	NA	NA	2.2E-05	8.7E-06	7.5E-06	2.5E-08	4.8E-05	1.6E-05
	cis-1,2-Dichloroethene	0.004	0.01	NC	NA	NA	NA	NA	1.2E-06	4.8E-07	1.2E-04	-	2.6E-06	2.6E-04
	Tetrachloroethene	1.600	0.017	0.021	NA	NA	NA	NA	4.6E-04	1.8E-04	2.7E-02	3.8E-06	1.0E-03	5.9E-02
	trans-1,2-Dichloroethene	0.001	0.02	NA	NA	NA	NA	NA	4.0E-07	1.6E-07	2.0E-05	-	8.8E-07	4.4E-05
	Trichloroethene	0.420	0.01	0.089	NA	NA	NA	NA	1.2E-04	4.8E-05	1.2E-02	4.3E-06	2.6E-04	2.6E-02
	Vinyl chloride	0.210	0.029	0.031	NA	NA	NA	NA	6.0E-05	2.4E-05	2.1E-03	7.4E-07	1.3E-04	4.6E-03
2210-28	1,1,1-Trichloroethane	0.360	3	NC	NA	NA	NA	NA	1.0E-04	4.1E-05	3.4E-05	-	2.3E-04	7.5E-05
	1,1-Dichloroethane	0.023	0.20	NA	NA	NA	NA	NA	6.6E-06	2.6E-06	3.3E-05	-	1.4E-05	7.2E-05
	1,1-Dichloroethene	0.048	0.057	NA	NA	NA	NA	NA	1.4E-05	5.5E-06	2.4E-04	-	3.0E-05	5.3E-04
	1,2-Dichloroethane	0.058	0.001	0.091	NA	NA	NA	NA	1.7E-05	6.6E-06	1.2E-02	6.0E-07	3.6E-05	2.6E-02
	Chloroethane	0.140	2.90	0.003	NA	NA	NA	NA	4.0E-05	1.6E-05	1.4E-05	4.6E-08	8.8E-05	3.0E-05
	cis-1,2-Dichloroethene	0.023	0.01	NC	NA	NA	NA	NA	6.6E-06	2.6E-06	6.6E-04	-	1.4E-05	1.4E-03
	Tetrachloroethene	0.460	0.017	0.021	NA	NA	NA	NA	1.3E-04	5.3E-05	7.7E-03	1.1E-06	2.9E-04	1.7E-02
	trans-1,2-Dichloroethene	0.023	0.02	NA	NA	NA	NA	NA	6.6E-06	2.6E-06	3.3E-04	-	1.4E-05	7.2E-04
	Trichloroethene	0.220	0.01	0.089	NA	NA	NA	NA	6.3E-05	2.5E-05	6.3E-03	2.2E-06	1.4E-04	1.4E-02
	Vinyl chloride	0.023	0.029	0.031	NA	NA	NA	NA	6.6E-06	2.6E-06	2.3E-04	8.1E-08	1.4E-05	5.0E-04
2211-27	1,1,1-Trichloroethane	0.120	3	NC	NA	NA	NA	NA	3.4E-05	1.4E-05	1.1E-05	-	7.5E-05	2.5E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.041	0.001	0.091	NA	NA	NA	NA	1.2E-05	4.7E-06	8.4E-03	4.3E-07	2.6E-05	1.8E-02
	Chloroethane	0.053	2.90	0.003	NA	NA	NA	NA	1.5E-05	6.1E-06	5.2E-06	1.8E-08	3.3E-05	1.1E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.130	0.017	0.021	NA	NA	NA	NA	3.7E-05	1.5E-05	2.2E-03	3.1E-07	8.1E-05	4.8E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.067	0.01	0.089	NA	NA	NA	NA	1.9E-05	7.7E-06	1.9E-03	6.8E-07	4.2E-05	4.2E-03
	Vinyl chloride	0.010	0.029	0.031	NA	NA	NA	NA	2.9E-06	1.1E-06	1.0E-04	3.5E-08	6.3E-06	2.2E-04
2211-28	1,1,1-Trichloroethane	0.200	3	NC	NA	NA	NA	NA	5.7E-05	2.3E-05	1.9E-05	-	1.3E-04	4.2E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.270	0.057	NA	NA	NA	NA	NA	7.7E-05	3.1E-05	1.4E-03	-	1.7E-04	3.0E-03
	1,2-Dichloroethane	3.300	0.001	0.091	NA	NA	NA	NA	9.4E-04	3.8E-04	6.7E-01	3.4E-05	2.1E-03	1.5E+00
	Chloroethane	0.100	2.90	0.003	NA	NA	NA	NA	2.9E-05	1.1E-05	9.9E-06	3.3E-08	6.3E-05	2.2E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.420	0.017	0.021	NA	NA	NA	NA	1.2E-04	4.8E-05	7.1E-03	1.0E-06	2.6E-04	1.5E-02
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.092	0.01	0.089	NA	NA	NA	NA	2.6E-05	1.1E-05	2.6E-03	9.4E-07	5.8E-05	5.8E-03
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.1E-06	2.1E-06	1.8E-04	6.3E-08	1.1E-05	3.9E-04
2212-27	1,1,1-Trichloroethane	0.120	3	NC	NA	NA	NA	NA	3.4E-05	1.4E-05	1.1E-05	-	7.5E-05	2.5E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.022	0.001	0.091	NA	NA	NA	NA	6.3E-06	2.5E-06	4.5E-03	2.3E-07	1.4E-05	9.8E-03
	Chloroethane	0.029	2.90	0.003	NA	NA	NA	NA	8.3E-06	3.3E-06	2.9E-06	9.6E-09	1.8E-05	6.3E-06
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.260	0.017	0.021	NA	NA	NA	NA	7.4E-05	3.0E-05	4.4E-03	6.2E-07	1.6E-04	9.6E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.087	0.01	0.089	NA	NA	NA	NA	2.5E-05	9.9E-06	2.5E-03	8.8E-07	5.4E-05	5.4E-03
	Vinyl chloride	0.010	0.029	0.031	NA	NA	NA	NA	2.9E-06	1.1E-06	1.0E-04	3.5E-08	6.3E-06	2.2E-04
2214-28	1,1,1-Trichloroethane	0.660	3	NC	NA	NA	NA	NA	1.9E-04	7.5E-05	6.3E-05	-	4.1E-04	1.4E-04
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-05	-	1.2E-05	5.8E-05

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	1,1-Dichloroethene	0.510	0.057	NA	NA	NA	NA	NA	1.5E-04	5.8E-05	2.6E-03	-	3.2E-04	5.6E-03
	1,2-Dichloroethane	0.082	0.001	0.091	NA	NA	NA	NA	2.3E-05	9.4E-06	1.7E-02	8.5E-07	5.1E-05	3.7E-02
	Chloroethane	0.110	2.90	0.003	NA	NA	NA	NA	3.1E-05	1.3E-05	1.1E-05	3.6E-08	6.9E-05	2.4E-05
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.3E-06	2.1E-06	5.3E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.190	0.017	0.021	NA	NA	NA	NA	5.4E-05	2.2E-05	3.2E-03	4.6E-07	1.2E-04	7.0E-03
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-04	-	1.2E-05	5.8E-04
	Trichloroethene	0.087	0.01	0.089	NA	NA	NA	NA	2.5E-05	9.9E-06	2.5E-03	8.8E-07	5.4E-05	5.4E-03
	Vinyl chloride	0.019	0.029	0.031	NA	NA	NA	NA	5.3E-06	2.1E-06	1.9E-04	6.5E-08	1.2E-05	4.0E-04
2310-31	1,1,1-Trichloroethane	3.100	3	NC	NA	NA	NA	NA	8.9E-04	3.5E-04	3.0E-04	-	1.9E-03	6.5E-04
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.200	0.057	NA	NA	NA	NA	NA	5.7E-05	2.3E-05	1.0E-03	-	1.3E-04	2.2E-03
	1,2-Dichloroethane	0.170	0.001	0.091	NA	NA	NA	NA	4.9E-05	1.9E-05	3.5E-02	1.8E-06	1.1E-04	7.6E-02
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.035	0.01	NC	NA	NA	NA	NA	1.0E-05	4.0E-06	1.0E-03	-	2.2E-05	2.2E-03
	Tetrachloroethene	15.000	0.017	0.021	NA	NA	NA	NA	4.3E-03	1.7E-03	2.5E-01	3.6E-05	9.4E-03	5.5E-01
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.290	0.01	0.089	NA	NA	NA	NA	8.3E-05	3.3E-05	8.3E-03	2.9E-06	1.8E-04	1.8E-02
	Vinyl chloride	0.120	0.029	0.031	NA	NA	NA	NA	3.4E-05	1.4E-05	1.2E-03	4.2E-07	7.5E-05	2.6E-03
2405-31	1,1,1-Trichloroethane	2.500	3	NC	NA	NA	NA	NA	7.1E-04	2.9E-04	2.4E-04	-	1.6E-03	5.2E-04
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-05	-	1.2E-05	5.8E-05
	1,1-Dichloroethene	0.490	0.057	NA	NA	NA	NA	NA	1.4E-04	5.6E-05	2.5E-03	-	3.1E-04	5.4E-03
	1,2-Dichloroethane	0.065	0.001	0.091	NA	NA	NA	NA	1.9E-05	7.4E-06	1.3E-02	6.8E-07	4.1E-05	2.9E-02
	Chloroethane	0.019	2.90	0.003	NA	NA	NA	NA	5.3E-06	2.1E-06	1.8E-06	6.1E-09	1.2E-05	4.0E-06
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.3E-06	2.1E-06	5.3E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.200	0.017	0.021	NA	NA	NA	NA	5.7E-05	2.3E-05	3.4E-03	4.8E-07	1.3E-04	7.4E-03
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-04	-	1.2E-05	5.8E-04
	Trichloroethene	0.090	0.01	0.089	NA	NA	NA	NA	2.6E-05	1.0E-05	2.6E-03	9.2E-07	5.6E-05	5.6E-03
	Vinyl chloride	0.019	0.029	0.031	NA	NA	NA	NA	5.3E-06	2.1E-06	1.9E-04	6.5E-08	1.2E-05	4.0E-04
2407-31	1,1,1-Trichloroethane	0.120	3	NC	NA	NA	NA	NA	3.4E-05	1.4E-05	1.1E-05	-	7.5E-05	2.5E-05
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-05	-	1.2E-05	5.9E-05
	1,1-Dichloroethene	0.014	0.057	NA	NA	NA	NA	NA	4.0E-06	1.6E-06	7.0E-05	-	8.8E-06	1.5E-04
	1,2-Dichloroethane	0.031	0.001	0.091	NA	NA	NA	NA	8.9E-06	3.5E-06	6.3E-03	3.2E-07	1.9E-05	1.4E-02
	Chloroethane	0.025	2.90	0.003	NA	NA	NA	NA	7.1E-06	2.9E-06	2.5E-06	8.3E-09	1.6E-05	5.4E-06
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.4E-06	2.2E-06	5.4E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.094	0.017	0.021	NA	NA	NA	NA	2.7E-05	1.1E-05	1.6E-03	2.3E-07	5.9E-05	3.5E-03
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-04	-	1.2E-05	5.9E-04
	Trichloroethene	0.075	0.01	0.089	NA	NA	NA	NA	2.1E-05	8.6E-06	2.1E-03	7.6E-07	4.7E-05	4.7E-03
	Vinyl chloride	0.019	0.029	0.031	NA	NA	NA	NA	5.4E-06	2.2E-06	1.9E-04	6.7E-08	1.2E-05	4.2E-04
2409-31	1,1,1-Trichloroethane	18.000	3	NC	NA	NA	NA	NA	5.1E-03	2.1E-03	1.7E-03	-	1.1E-02	3.8E-03
	1,1-Dichloroethane	0.018	0.20	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-05	-	1.1E-05	5.6E-05
	1,1-Dichloroethene	0.360	0.057	NA	NA	NA	NA	NA	1.0E-04	4.1E-05	1.8E-03	-	2.3E-04	3.9E-03
	1,2-Dichloroethane	0.120	0.001	0.091	NA	NA	NA	NA	3.4E-05	1.4E-05	2.4E-02	1.2E-06	7.5E-05	5.4E-02
	Chloroethane	0.080	2.90	0.003	NA	NA	NA	NA	2.3E-05	9.1E-06	7.9E-06	2.7E-08	5.0E-05	1.7E-05
	cis-1,2-Dichloroethene	0.018	0.01	NC	NA	NA	NA	NA	5.1E-06	2.1E-06	5.1E-04	-	1.1E-05	1.1E-03
	Tetrachloroethene	2.500	0.017	0.021	NA	NA	NA	NA	7.1E-04	2.9E-04	4.2E-02	6.0E-06	1.6E-03	9.2E-02
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-04	-	1.1E-05	5.6E-04
	Trichloroethene	2.800	0.01	0.089	NA	NA	NA	NA	8.0E-04	3.2E-04	8.0E-02	2.8E-05	1.8E-03	1.8E-01
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.1E-06	2.1E-06	1.8E-04	6.3E-08	1.1E-05	3.9E-04
2412-31	1,1,1-Trichloroethane	0.110	3	NC	NA	NA	NA	NA	3.1E-05	1.3E-05	1.0E-05	-	6.9E-05	2.3E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.036	0.001	0.091	NA	NA	NA	NA	1.0E-05	4.1E-06	7.3E-03	3.7E-07	2.3E-05	1.6E-02

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Chloroethane	0.029	2.90	0.003	NA	NA	NA	NA	8.3E-06	3.3E-06	2.9E-06	9.6E-09	1.8E-05	6.3E-06
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.069	0.017	0.021	NA	NA	NA	NA	2.0E-05	7.9E-06	1.2E-03	1.7E-07	4.3E-05	2.5E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.013	0.01	0.089	NA	NA	NA	NA	3.7E-06	1.5E-06	3.7E-04	1.3E-07	8.1E-06	8.1E-04
	Vinyl chloride	0.010	0.029	0.031	NA	NA	NA	NA	2.9E-06	1.1E-06	1.0E-04	3.5E-08	6.3E-06	2.2E-04
2604-WE	1,1,1-Trichloroethane	2.600	3	NC	NA	NA	NA	NA	7.4E-04	3.0E-04	2.5E-04	-	1.6E-03	5.4E-04
	1,1-Dichloroethane	0.065	0.20	NA	NA	NA	NA	NA	1.9E-05	7.4E-06	9.3E-05	-	4.1E-05	2.0E-04
	1,1-Dichloroethene	0.190	0.057	NA	NA	NA	NA	NA	5.4E-05	2.2E-05	9.5E-04	-	1.2E-04	2.1E-03
	1,2-Dichloroethane	0.120	0.001	0.091	NA	NA	NA	NA	3.4E-05	1.4E-05	2.4E-02	1.2E-06	7.5E-05	5.4E-02
	Chloroethane	0.083	2.90	0.003	NA	NA	NA	NA	2.4E-05	9.5E-06	8.2E-06	2.8E-08	5.2E-05	1.8E-05
	cis-1,2-Dichloroethene	0.060	0.01	NC	NA	NA	NA	NA	1.7E-05	6.9E-06	1.7E-03	-	3.8E-05	3.8E-03
	Tetrachloroethene	73.000	0.017	0.021	NA	NA	NA	NA	2.1E-02	8.3E-03	1.2E+00	1.8E-04	4.6E-02	2.7E+00
	trans-1,2-Dichloroethene	0.310	0.02	NA	NA	NA	NA	NA	8.9E-05	3.5E-05	4.4E-03	-	1.9E-04	9.7E-03
	Trichloroethene	0.360	0.01	0.089	NA	NA	NA	NA	1.0E-04	4.1E-05	1.0E-02	3.7E-06	2.3E-04	2.3E-02
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.7E-06	2.3E-06	2.0E-04	7.0E-08	1.3E-05	4.4E-04
2607-WE	1,1,1-Trichloroethane	0.190	3	NC	NA	NA	NA	NA	5.4E-05	2.2E-05	1.8E-05	-	1.2E-04	4.0E-05
	1,1-Dichloroethane	0.016	0.20	NA	NA	NA	NA	NA	4.6E-06	1.8E-06	2.3E-05	-	1.0E-05	5.0E-05
	1,1-Dichloroethene	0.056	0.057	NA	NA	NA	NA	NA	1.6E-05	6.4E-06	2.8E-04	-	3.5E-05	6.1E-04
	1,2-Dichloroethane	0.052	0.001	0.091	NA	NA	NA	NA	1.5E-05	5.9E-06	1.1E-02	5.4E-07	3.3E-05	2.3E-02
	Chloroethane	0.025	2.90	0.003	NA	NA	NA	NA	7.1E-06	2.9E-06	2.5E-06	8.3E-09	1.6E-05	5.4E-06
	cis-1,2-Dichloroethene	0.016	0.01	NC	NA	NA	NA	NA	4.6E-06	1.8E-06	4.6E-04	-	1.0E-05	1.0E-03
	Tetrachloroethene	0.510	0.017	0.021	NA	NA	NA	NA	1.5E-04	5.8E-05	8.6E-03	1.2E-06	3.2E-04	1.9E-02
	trans-1,2-Dichloroethene	0.016	0.02	NA	NA	NA	NA	NA	4.6E-06	1.8E-06	2.3E-04	-	1.0E-05	5.0E-04
	Trichloroethene	1.100	0.01	0.089	NA	NA	NA	NA	3.1E-04	1.3E-04	3.1E-02	1.1E-05	6.9E-04	6.9E-02
	Vinyl chloride	0.022	0.029	0.031	NA	NA	NA	NA	6.3E-06	2.5E-06	2.2E-04	7.7E-08	1.4E-05	4.8E-04
2608-UN	1,1,1-Trichloroethane	0.220	3	NC	NA	NA	NA	NA	6.3E-05	2.5E-05	2.1E-05	-	1.4E-04	4.6E-05
	1,1-Dichloroethane	0.018	0.20	NA	NA	NA	NA	NA	5.0E-06	2.0E-06	2.5E-05	-	1.1E-05	5.5E-05
	1,1-Dichloroethene	0.045	0.057	NA	NA	NA	NA	NA	1.3E-05	5.1E-06	2.3E-04	-	2.8E-05	4.9E-04
	1,2-Dichloroethane	0.110	0.001	0.091	NA	NA	NA	NA	3.1E-05	1.3E-05	2.2E-02	1.1E-06	6.9E-05	4.9E-02
	Chloroethane	0.029	2.90	0.003	NA	NA	NA	NA	8.3E-06	3.3E-06	2.9E-06	9.6E-09	1.8E-05	6.3E-06
	cis-1,2-Dichloroethene	0.018	0.01	NC	NA	NA	NA	NA	5.0E-06	2.0E-06	5.0E-04	-	1.1E-05	1.1E-03
	Tetrachloroethene	0.360	0.017	0.021	NA	NA	NA	NA	1.0E-04	4.1E-05	6.1E-03	8.6E-07	2.3E-04	1.3E-02
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.0E-06	2.0E-06	2.5E-04	-	1.1E-05	5.5E-04
	Trichloroethene	0.310	0.01	0.089	NA	NA	NA	NA	8.9E-05	3.5E-05	8.9E-03	3.2E-06	1.9E-04	1.9E-02
	Vinyl chloride	0.012	0.029	0.031	NA	NA	NA	NA	3.4E-06	1.4E-06	1.2E-04	4.2E-08	7.5E-06	2.6E-04
2608-WE	1,1,1-Trichloroethane	0.100	3	NC	NA	NA	NA	NA	2.9E-05	1.1E-05	9.5E-06	-	6.3E-05	2.1E-05
	1,1-Dichloroethane	0.024	0.20	NA	NA	NA	NA	NA	6.9E-06	2.7E-06	3.4E-05	-	1.5E-05	7.5E-05
	1,1-Dichloroethene	0.036	0.057	NA	NA	NA	NA	NA	1.0E-05	4.1E-06	1.8E-04	-	2.3E-05	3.9E-04
	1,2-Dichloroethane	0.190	0.001	0.091	NA	NA	NA	NA	5.4E-05	2.2E-05	3.9E-02	2.0E-06	1.2E-04	8.5E-02
	Chloroethane	0.068	2.90	0.003	NA	NA	NA	NA	1.9E-05	7.8E-06	6.7E-06	2.3E-08	4.3E-05	1.5E-05
	cis-1,2-Dichloroethene	0.023	0.01	NC	NA	NA	NA	NA	6.4E-06	2.6E-06	6.4E-04	-	1.4E-05	1.4E-03
	Tetrachloroethene	1.200	0.017	0.021	NA	NA	NA	NA	3.4E-04	1.4E-04	2.0E-02	2.9E-06	7.5E-04	4.4E-02
	trans-1,2-Dichloroethene	0.024	0.02	NA	NA	NA	NA	NA	6.9E-06	2.7E-06	3.4E-04	-	1.5E-05	7.5E-04
	Trichloroethene	0.470	0.01	0.089	NA	NA	NA	NA	1.3E-04	5.4E-05	1.3E-02	4.8E-06	2.9E-04	2.9E-02
	Vinyl chloride	0.024	0.029	0.031	NA	NA	NA	NA	6.9E-06	2.7E-06	2.4E-04	8.4E-08	1.5E-05	5.2E-04
2611-UN	1,1,1-Trichloroethane	0.170	3	NC	NA	NA	NA	NA	4.9E-05	1.9E-05	1.6E-05	-	1.1E-04	3.5E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.057	0.057	NA	NA	NA	NA	NA	1.6E-05	6.5E-06	2.9E-04	-	3.6E-05	6.3E-04
	1,2-Dichloroethane	0.170	0.001	0.091	NA	NA	NA	NA	4.9E-05	1.9E-05	3.5E-02	1.8E-06	1.1E-04	7.6E-02
	Chloroethane	0.120	2.90	0.003	NA	NA	NA	NA	3.4E-05	1.4E-05	1.2E-05	4.0E-08	7.5E-05	2.6E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME ($\mu g/m^3$)	RfDi (mg/kg-d)	CSFi $(mg/kg\text{-}d)^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Tetrachloroethene	0.150	0.017	0.021	NA	NA	NA	NA	4.3E-05	1.7E-05	2.5E-03	3.6E-07	9.4E-05	5.5E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.480	0.01	0.089	NA	NA	NA	NA	1.4E-04	5.5E-05	1.4E-02	4.9E-06	3.0E-04	3.0E-02
	Vinyl chloride	0.019	0.029	0.031	NA	NA	NA	NA	5.3E-06	2.1E-06	1.9E-04	6.5E-08	1.2E-05	4.0E-04
2702-WE	1,1,1-Trichloroethane	1.400	3	NC	NA	NA	NA	NA	4.0E-04	1.6E-04	1.3E-04	-	8.8E-04	2.9E-04
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-05	-	1.2E-05	5.8E-05
	1,1-Dichloroethene	0.037	0.057	NA	NA	NA	NA	NA	1.1E-05	4.2E-06	1.9E-04	-	2.3E-05	4.1E-04
	1,2-Dichloroethane	0.045	0.001	0.091	NA	NA	NA	NA	1.3E-05	5.1E-06	9.2E-03	4.7E-07	2.8E-05	2.0E-02
	Chloroethane	0.061	2.90	0.003	NA	NA	NA	NA	1.7E-05	7.0E-06	6.0E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.3E-06	2.1E-06	5.3E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	1.300	0.017	0.021	NA	NA	NA	NA	3.7E-04	1.5E-04	2.2E-02	3.1E-06	8.1E-04	4.8E-02
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-04	-	1.2E-05	5.8E-04
	Trichloroethene	0.210	0.01	0.089	NA	NA	NA	NA	6.0E-05	2.4E-05	6.0E-03	2.1E-06	1.3E-04	1.3E-02
	Vinyl chloride	0.019	0.029	0.031	NA	NA	NA	NA	5.3E-06	2.1E-06	1.9E-04	6.5E-08	1.2E-05	4.0E-04
2703-UN	1,1,1-Trichloroethane	0.170	3	NC	NA	NA	NA	NA	4.9E-05	1.9E-05	1.6E-05	-	1.1E-04	3.5E-05
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-05	-	1.3E-05	6.3E-05
	1,1-Dichloroethene	0.063	0.057	NA	NA	NA	NA	NA	1.8E-05	7.2E-06	3.2E-04	-	3.9E-05	6.9E-04
	1,2-Dichloroethane	0.083	0.001	0.091	NA	NA	NA	NA	2.4E-05	9.5E-06	1.7E-02	8.6E-07	5.2E-05	3.7E-02
	Chloroethane	0.050	2.90	0.003	NA	NA	NA	NA	1.4E-05	5.7E-06	4.9E-06	1.7E-08	3.1E-05	1.1E-05
	cis-1,2-Dichloroethene	0.023	0.01	NC	NA	NA	NA	NA	6.6E-06	2.6E-06	6.6E-04	-	1.4E-05	1.4E-03
	Tetrachloroethene	0.800	0.017	0.021	NA	NA	NA	NA	2.3E-04	9.1E-05	1.3E-02	1.9E-06	5.0E-04	2.9E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	0.360	0.01	0.089	NA	NA	NA	NA	1.0E-04	4.1E-05	1.0E-02	3.7E-06	2.3E-04	2.3E-02
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.7E-06	2.3E-06	2.0E-04	7.0E-08	1.3E-05	4.4E-04
2703-WE	1,1,1-Trichloroethane	0.200	3	NC	NA	NA	NA	NA	5.7E-05	2.3E-05	1.9E-05	-	1.3E-04	4.2E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.200	0.057	NA	NA	NA	NA	NA	5.7E-05	2.3E-05	1.0E-03	-	1.3E-04	2.2E-03
	1,2-Dichloroethane	0.220	0.001	0.091	NA	NA	NA	NA	6.3E-05	2.5E-05	4.5E-02	2.3E-06	1.4E-04	9.8E-02
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.290	0.017	0.021	NA	NA	NA	NA	8.3E-05	3.3E-05	4.9E-03	7.0E-07	1.8E-04	1.1E-02
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.200	0.01	0.089	NA	NA	NA	NA	5.7E-05	2.3E-05	5.7E-03	2.0E-06	1.3E-04	1.3E-02
	Vinyl chloride	0.017	0.029	0.031	NA	NA	NA	NA	4.9E-06	1.9E-06	1.7E-04	6.0E-08	1.1E-05	3.7E-04
2704-UN	1,1,1-Trichloroethane	1.700	3	NC	NA	NA	NA	NA	4.9E-04	1.9E-04	1.6E-04	-	1.1E-03	3.5E-04
	1,1-Dichloroethane	0.018	0.20	NA	NA	NA	NA	NA	5.0E-06	2.0E-06	2.5E-05	-	1.1E-05	5.5E-05
	1,1-Dichloroethene	0.061	0.057	NA	NA	NA	NA	NA	1.7E-05	7.0E-06	3.1E-04	-	3.8E-05	6.7E-04
	1,2-Dichloroethane	0.750	0.001	0.091	NA	NA	NA	NA	2.1E-04	8.6E-05	1.5E-01	7.8E-06	4.7E-04	3.3E-01
	Chloroethane	0.079	2.90	0.003	NA	NA	NA	NA	2.3E-05	9.0E-06	7.8E-06	2.6E-08	4.9E-05	1.7E-05
	cis-1,2-Dichloroethene	0.800	0.01	NC	NA	NA	NA	NA	2.3E-04	9.1E-05	2.3E-02	-	5.0E-04	5.0E-02
	Tetrachloroethene	0.620	0.017	0.021	NA	NA	NA	NA	1.8E-04	7.1E-05	1.0E-02	1.5E-06	3.9E-04	2.3E-02
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.0E-06	2.0E-06	2.5E-04	-	1.1E-05	5.5E-04
	Trichloroethene	0.580	0.01	0.089	NA	NA	NA	NA	1.7E-04	6.6E-05	1.7E-02	5.9E-06	3.6E-04	3.6E-02
	Vinyl chloride	0.130	0.029	0.031	NA	NA	NA	NA	3.7E-05	1.5E-05	1.3E-03	4.6E-07	8.1E-05	2.8E-03
2704-WE	1,1,1-Trichloroethane	0.210	3	NC	NA	NA	NA	NA	6.0E-05	2.4E-05	2.0E-05	-	1.3E-04	4.4E-05
	1,1-Dichloroethane	0.007	0.20	NA	NA	NA	NA	NA	1.9E-06	7.7E-07	9.6E-06	-	4.2E-06	2.1E-05
	1,1-Dichloroethene	0.210	0.057	NA	NA	NA	NA	NA	6.0E-05	2.4E-05	1.1E-03	-	1.3E-04	2.3E-03
	1,2-Dichloroethane	0.230	0.001	0.091	NA	NA	NA	NA	6.6E-05	2.6E-05	4.7E-02	2.4E-06	1.4E-04	1.0E-01
	Chloroethane	0.041	2.90	0.003	NA	NA	NA	NA	1.2E-05	4.7E-06	4.0E-06	1.4E-08	2.6E-05	8.8E-06
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.6E-06	2.2E-06	5.6E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	1.000	0.017	0.021	NA	NA	NA	NA	2.9E-04	1.1E-04	1.7E-02	2.4E-06	6.3E-04	3.7E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-04	-	1.2E-05	6.1E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Trichloroethene	0.330	0.01	0.089	NA	NA	NA	NA	9.4E-05	3.8E-05	9.4E-03	3.4E-06	2.1E-04	2.1E-02
	Vinyl chloride	0.015	0.029	0.031	NA	NA	NA	NA	4.3E-06	1.7E-06	1.5E-04	5.3E-08	9.4E-06	3.3E-04
2705-UN	1,1,1-Trichloroethane	0.320	3	NC	NA	NA	NA	NA	9.1E-05	3.7E-05	3.0E-05	-	2.0E-04	6.7E-05
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-05	-	1.2E-05	5.8E-05
	1,1-Dichloroethene	0.057	0.057	NA	NA	NA	NA	NA	1.6E-05	6.5E-06	2.9E-04	-	3.6E-05	6.3E-04
	1,2-Dichloroethane	0.059	0.001	0.091	NA	NA	NA	NA	1.7E-05	6.7E-06	1.2E-02	6.1E-07	3.7E-05	2.6E-02
	Chloroethane	0.019	2.90	0.003	NA	NA	NA	NA	5.3E-06	2.1E-06	1.8E-06	6.1E-09	1.2E-05	4.0E-06
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.3E-06	2.1E-06	5.3E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.270	0.017	0.021	NA	NA	NA	NA	7.7E-05	3.1E-05	4.5E-03	6.5E-07	1.7E-04	9.9E-03
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-04	-	1.2E-05	5.8E-04
	Trichloroethene	0.730	0.01	0.089	NA	NA	NA	NA	2.1E-04	8.3E-05	2.1E-02	7.4E-06	4.6E-04	4.6E-02
	Vinyl chloride	0.019	0.029	0.031	NA	NA	NA	NA	5.3E-06	2.1E-06	1.9E-04	6.5E-08	1.2E-05	4.0E-04
2706-WE	1,1,1-Trichloroethane	0.180	3	NC	NA	NA	NA	NA	5.1E-05	2.1E-05	1.7E-05	-	1.1E-04	3.8E-05
	1,1-Dichloroethane	0.041	0.20	NA	NA	NA	NA	NA	1.2E-05	4.6E-06	5.8E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.320	0.057	NA	NA	NA	NA	NA	9.1E-05	3.7E-05	1.6E-03	-	2.0E-04	3.5E-03
	1,2-Dichloroethane	0.320	0.001	0.091	NA	NA	NA	NA	9.1E-05	3.7E-05	6.5E-02	3.3E-06	2.0E-04	1.4E-01
	Chloroethane	0.063	2.90	0.003	NA	NA	NA	NA	1.8E-05	7.2E-06	6.2E-06	2.1E-08	3.9E-05	1.4E-05
	cis-1,2-Dichloroethene	0.041	0.01	NC	NA	NA	NA	NA	1.2E-05	4.6E-06	1.2E-03	-	2.5E-05	2.5E-03
	Tetrachloroethene	13.000	0.017	0.021	NA	NA	NA	NA	3.7E-03	1.5E-03	2.2E-01	3.1E-05	8.1E-03	4.8E-01
	trans-1,2-Dichloroethene	0.041	0.02	NA	NA	NA	NA	NA	1.2E-05	4.6E-06	5.8E-04	-	2.5E-05	1.3E-03
	Trichloroethene	0.530	0.01	0.089	NA	NA	NA	NA	1.5E-04	6.1E-05	1.5E-02	5.4E-06	3.3E-04	3.3E-02
	Vinyl chloride	0.041	0.029	0.031	NA	NA	NA	NA	1.2E-05	4.6E-06	4.1E-04	1.4E-07	2.5E-05	8.9E-04
2708-UN	1,1,1-Trichloroethane	0.650	3	NC	NA	NA	NA	NA	1.9E-04	7.4E-05	6.2E-05	-	4.1E-04	1.4E-04
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-05	-	1.2E-05	5.9E-05
	1,1-Dichloroethene	0.730	0.057	NA	NA	NA	NA	NA	2.1E-04	8.3E-05	3.7E-03	-	4.6E-04	8.0E-03
	1,2-Dichloroethane	0.900	0.001	0.091	NA	NA	NA	NA	2.6E-04	1.0E-04	1.8E-01	9.4E-06	5.6E-04	4.0E-01
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.7E-06	2.3E-06	5.7E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.810	0.017	0.021	NA	NA	NA	NA	2.3E-04	9.3E-05	1.4E-02	1.9E-06	5.1E-04	3.0E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	0.380	0.01	0.089	NA	NA	NA	NA	1.1E-04	4.3E-05	1.1E-02	3.9E-06	2.4E-04	2.4E-02
	Vinyl chloride	0.019	0.029	0.031	NA	NA	NA	NA	5.4E-06	2.2E-06	1.9E-04	6.7E-08	1.2E-05	4.2E-04
2709-UN	1,1,1-Trichloroethane	0.190	3	NC	NA	NA	NA	NA	5.4E-05	2.2E-05	1.8E-05	-	1.2E-04	4.0E-05
	1,1-Dichloroethane	0.099	0.20	NA	NA	NA	NA	NA	2.8E-05	1.1E-05	1.4E-04	-	6.2E-05	3.1E-04
	1,1-Dichloroethene	0.039	0.057	NA	NA	NA	NA	NA	1.1E-05	4.5E-06	2.0E-04	-	2.4E-05	4.3E-04
	1,2-Dichloroethane	0.130	0.001	0.091	NA	NA	NA	NA	3.7E-05	1.5E-05	2.7E-02	1.4E-06	8.1E-05	5.8E-02
	Chloroethane	0.130	2.90	0.003	NA	NA	NA	NA	3.7E-05	1.5E-05	1.3E-05	4.3E-08	8.1E-05	2.8E-05
	cis-1,2-Dichloroethene	0.022	0.01	NC	NA	NA	NA	NA	6.3E-06	2.5E-06	6.3E-04	-	1.4E-05	1.4E-03
	Tetrachloroethene	1.200	0.017	0.021	NA	NA	NA	NA	3.4E-04	1.4E-04	2.0E-02	2.9E-06	7.5E-04	4.4E-02
	trans-1,2-Dichloroethene	0.022	0.02	NA	NA	NA	NA	NA	6.3E-06	2.5E-06	3.1E-04	-	1.4E-05	6.9E-04
	Trichloroethene	1.100	0.01	0.089	NA	NA	NA	NA	3.1E-04	1.3E-04	3.1E-02	1.1E-05	6.9E-04	6.9E-02
	Vinyl chloride	0.008	0.029	0.031	NA	NA	NA	NA	2.3E-06	9.1E-07	8.0E-05	2.8E-08	5.0E-06	1.8E-04
2709-WE	1,1,1-Trichloroethane	0.560	3	NC	NA	NA	NA	NA	1.6E-04	6.4E-05	5.3E-05	-	3.5E-04	1.2E-04
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.330	0.057	NA	NA	NA	NA	NA	9.4E-05	3.8E-05	1.7E-03	-	2.1E-04	3.6E-03
	1,2-Dichloroethane	0.035	0.001	0.091	NA	NA	NA	NA	1.0E-05	4.0E-06	7.1E-03	3.6E-07	2.2E-05	1.6E-02
	Chloroethane	0.150	2.90	0.003	NA	NA	NA	NA	4.3E-05	1.7E-05	1.5E-05	5.0E-08	9.4E-05	3.2E-05
	cis-1,2-Dichloroethene	0.600	0.01	NC	NA	NA	NA	NA	1.7E-04	6.9E-05	1.7E-02	-	3.8E-04	3.8E-02
	Tetrachloroethene	0.970	0.017	0.021	NA	NA	NA	NA	2.8E-04	1.1E-04	1.6E-02	2.3E-06	6.1E-04	3.6E-02
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	1.700	0.01	0.089	NA	NA	NA	NA	4.9E-04	1.9E-04	4.9E-02	1.7E-05	1.1E-03	1.1E-01
	Vinyl chloride	0.015	0.029	0.031	NA	NA	NA	NA	4.3E-06	1.7E-06	1.5E-04	5.3E-08	9.4E-06	3.3E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
2710-WE	1,1,1-Trichloroethane	0.796	3	NC	NA	NA	NA	NA	2.3E-04	9.1E-05	7.6E-05	-	5.0E-04	1.7E-04
	1,1-Dichloroethane	0.025	0.20	NA	NA	NA	NA	NA	7.0E-06	2.8E-06	3.5E-05	-	1.5E-05	7.7E-05
	1,1-Dichloroethene	0.149	0.057	NA	NA	NA	NA	NA	4.2E-05	1.7E-05	7.5E-04	-	9.3E-05	1.6E-03
	1,2-Dichloroethane	1.000	0.001	0.091	NA	NA	NA	NA	2.9E-04	1.1E-04	2.0E-01	1.0E-05	6.3E-04	4.5E-01
	Chloroethane	0.160	2.90	0.003	NA	NA	NA	NA	4.6E-05	1.8E-05	1.6E-05	5.3E-08	1.0E-04	3.4E-05
	cis-1,2-Dichloroethene	0.750	0.01	NC	NA	NA	NA	NA	2.1E-04	8.6E-05	2.1E-02	-	4.7E-04	4.7E-02
	Tetrachloroethene	0.947	0.017	0.021	NA	NA	NA	NA	2.7E-04	1.1E-04	1.6E-02	2.3E-06	5.9E-04	3.5E-02
	trans-1,2-Dichloroethene	0.025	0.02	NA	NA	NA	NA	NA	7.0E-06	2.8E-06	3.5E-04	-	1.5E-05	7.7E-04
	Trichloroethene	0.509	0.01	0.089	NA	NA	NA	NA	1.5E-04	5.8E-05	1.5E-02	5.2E-06	3.2E-04	3.2E-02
	Vinyl chloride	0.150	0.029	0.031	NA	NA	NA	NA	4.3E-05	1.7E-05	1.5E-03	5.3E-07	9.4E-05	3.3E-03
2711-UN	1,1,1-Trichloroethane	0.520	3	NC	NA	NA	NA	NA	1.5E-04	5.9E-05	5.0E-05	-	3.3E-04	1.1E-04
	1,1-Dichloroethane	0.021	0.20	NA	NA	NA	NA	NA	6.0E-06	2.4E-06	3.0E-05	-	1.3E-05	6.6E-05
	1,1-Dichloroethene	0.099	0.057	NA	NA	NA	NA	NA	2.8E-05	1.1E-05	5.0E-04	-	6.2E-05	1.1E-03
	1,2-Dichloroethane	0.200	0.001	0.091	NA	NA	NA	NA	5.7E-05	2.3E-05	4.1E-02	2.1E-06	1.3E-04	8.9E-02
	Chloroethane	0.100	2.90	0.003	NA	NA	NA	NA	2.9E-05	1.1E-05	9.9E-06	3.3E-08	6.3E-05	2.2E-05
	cis-1,2-Dichloroethene	0.021	0.01	NC	NA	NA	NA	NA	6.0E-06	2.4E-06	6.0E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.220	0.017	0.021	NA	NA	NA	NA	6.3E-05	2.5E-05	3.7E-03	5.3E-07	1.4E-04	8.1E-03
	trans-1,2-Dichloroethene	0.021	0.02	NA	NA	NA	NA	NA	6.0E-06	2.4E-06	3.0E-04	-	1.3E-05	6.6E-04
	Trichloroethene	0.650	0.01	0.089	NA	NA	NA	NA	1.9E-04	7.4E-05	1.9E-02	6.6E-06	4.1E-04	4.1E-02
	Vinyl chloride	0.021	0.029	0.031	NA	NA	NA	NA	6.0E-06	2.4E-06	2.1E-04	7.4E-08	1.3E-05	4.6E-04
2712-WE	1,1,1-Trichloroethane	1.100	3	NC	NA	NA	NA	NA	3.1E-04	1.3E-04	1.0E-04	-	6.9E-04	2.3E-04
	1,1-Dichloroethane	0.032	0.20	NA	NA	NA	NA	NA	9.0E-06	3.6E-06	4.5E-05	-	2.0E-05	9.8E-05
	1,1-Dichloroethene	0.290	0.057	NA	NA	NA	NA	NA	8.3E-05	3.3E-05	1.5E-03	-	1.8E-04	3.2E-03
	1,2-Dichloroethane	0.093	0.001	0.091	NA	NA	NA	NA	2.7E-05	1.1E-05	1.9E-02	9.7E-07	5.8E-05	4.2E-02
	Chloroethane	0.230	2.90	0.003	NA	NA	NA	NA	6.6E-05	2.6E-05	2.3E-05	7.6E-08	1.4E-04	5.0E-05
	cis-1,2-Dichloroethene	0.750	0.01	NC	NA	NA	NA	NA	2.1E-04	8.6E-05	2.1E-02	-	4.7E-04	4.7E-02
	Tetrachloroethene	0.180	0.017	0.021	NA	NA	NA	NA	5.1E-05	2.1E-05	3.0E-03	4.3E-07	1.1E-04	6.6E-03
	trans-1,2-Dichloroethene	0.032	0.02	NA	NA	NA	NA	NA	9.0E-06	3.6E-06	4.5E-04	-	2.0E-05	9.8E-04
	Trichloroethene	0.200	0.01	0.089	NA	NA	NA	NA	5.7E-05	2.3E-05	5.7E-03	2.0E-06	1.3E-04	1.3E-02
	Vinyl chloride	0.017	0.029	0.031	NA	NA	NA	NA	4.9E-06	1.9E-06	1.7E-04	6.0E-08	1.1E-05	3.7E-04
2802-WE	1,1,1-Trichloroethane	0.319	3	NC	NA	NA	NA	NA	9.1E-05	3.6E-05	3.0E-05	-	2.0E-04	6.6E-05
	1,1-Dichloroethane	0.270	0.20	NA	NA	NA	NA	NA	7.7E-05	3.1E-05	3.9E-04	-	1.7E-04	8.4E-04
	1,1-Dichloroethene	0.270	0.057	NA	NA	NA	NA	NA	7.7E-05	3.1E-05	1.4E-03	-	1.7E-04	3.0E-03
	1,2-Dichloroethane	0.127	0.001	0.091	NA	NA	NA	NA	3.6E-05	1.5E-05	2.6E-02	1.3E-06	7.9E-05	5.7E-02
	Chloroethane	0.270	2.90	0.003	NA	NA	NA	NA	7.7E-05	3.1E-05	2.7E-05	8.9E-08	1.7E-04	5.8E-05
	cis-1,2-Dichloroethene	0.400	0.01	NC	NA	NA	NA	NA	1.1E-04	4.6E-05	1.1E-02	-	2.5E-04	2.5E-02
	Tetrachloroethene	0.413	0.017	0.021	NA	NA	NA	NA	1.2E-04	4.7E-05	6.9E-03	9.9E-07	2.6E-04	1.5E-02
	trans-1,2-Dichloroethene	0.270	0.02	NA	NA	NA	NA	NA	7.7E-05	3.1E-05	3.9E-03	-	1.7E-04	8.4E-03
	Trichloroethene	0.368	0.01	0.089	NA	NA	NA	NA	1.1E-04	4.2E-05	1.1E-02	3.7E-06	2.3E-04	2.3E-02
	Vinyl chloride	0.270	0.029	0.031	NA	NA	NA	NA	7.7E-05	3.1E-05	2.7E-03	9.5E-07	1.7E-04	5.9E-03
2803-UN	1,1,1-Trichloroethane	0.920	3	NC	NA	NA	NA	NA	2.6E-04	1.1E-04	8.8E-05	-	5.8E-04	1.9E-04
	1,1-Dichloroethane	0.023	0.20	NA	NA	NA	NA	NA	6.6E-06	2.6E-06	3.3E-05	-	1.4E-05	7.2E-05
	1,1-Dichloroethene	0.058	0.057	NA	NA	NA	NA	NA	1.7E-05	6.6E-06	2.9E-04	-	3.6E-05	6.4E-04
	1,2-Dichloroethane	0.035	0.001	0.091	NA	NA	NA	NA	1.0E-05	4.0E-06	7.1E-03	3.6E-07	2.2E-05	1.6E-02
	Chloroethane	0.029	2.90	0.003	NA	NA	NA	NA	8.3E-06	3.3E-06	2.9E-06	9.6E-09	1.8E-05	6.3E-06
	cis-1,2-Dichloroethene	0.650	0.01	NC	NA	NA	NA	NA	1.9E-04	7.4E-05	1.9E-02	-	4.1E-04	4.1E-02
	Tetrachloroethene	0.520	0.017	0.021	NA	NA	NA	NA	1.5E-04	5.9E-05	8.7E-03	1.2E-06	3.3E-04	1.9E-02
	trans-1,2-Dichloroethene	0.013	0.02	NA	NA	NA	NA	NA	3.7E-06	1.5E-06	1.9E-04	-	8.1E-06	4.1E-04
	Trichloroethene	0.830	0.01	0.089	NA	NA	NA	NA	2.4E-04	9.5E-05	2.4E-02	8.4E-06	5.2E-04	5.2E-02
	Vinyl chloride	0.125	0.029	0.031	NA	NA	NA	NA	3.6E-05	1.4E-05	1.3E-03	4.4E-07	7.8E-05	2.7E-03
2804-UN	1,1,1-Trichloroethane	0.500	3	NC	NA	NA	NA	NA	1.4E-04	5.7E-05	4.8E-05	-	3.1E-04	1.0E-04
	1,1-Dichloroethane	0.015	0.20	NA	NA	NA	NA	NA	4.3E-06	1.7E-06	2.1E-05	-	9.4E-06	4.7E-05

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	1,1-Dichloroethene	0.039	0.057	NA	NA	NA	NA	NA	1.1E-05	4.5E-06	2.0E-04	-	2.4E-05	4.3E-04
	1,2-Dichloroethane	0.100	0.001	0.091	NA	NA	NA	NA	2.9E-05	1.1E-05	2.0E-02	1.0E-06	6.3E-05	4.5E-02
	Chloroethane	0.020	2.90	0.003	NA	NA	NA	NA	5.7E-06	2.3E-06	2.0E-06	6.6E-09	1.3E-05	4.3E-06
	cis-1,2-Dichloroethene	0.800	0.01	NC	NA	NA	NA	NA	2.3E-04	9.1E-05	2.3E-02	-	5.0E-04	5.0E-02
	Tetrachloroethene	0.160	0.017	0.021	NA	NA	NA	NA	4.6E-05	1.8E-05	2.7E-03	3.8E-07	1.0E-04	5.9E-03
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.0E-06	2.0E-06	2.5E-04	-	1.1E-05	5.5E-04
	Trichloroethene	0.180	0.01	0.089	NA	NA	NA	NA	5.1E-05	2.1E-05	5.1E-03	1.8E-06	1.1E-04	1.1E-02
	Vinyl chloride	0.160	0.029	0.031	NA	NA	NA	NA	4.6E-05	1.8E-05	1.6E-03	5.6E-07	1.0E-04	3.5E-03
2804-WE	1,1,1-Trichloroethane	0.411	3	NC	NA	NA	NA	NA	1.2E-04	4.7E-05	3.9E-05	-	2.6E-04	8.6E-05
	1,1-Dichloroethane	0.130	0.20	NA	NA	NA	NA	NA	3.7E-05	1.5E-05	1.9E-04	-	8.1E-05	4.1E-04
	1,1-Dichloroethene	0.165	0.057	NA	NA	NA	NA	NA	4.7E-05	1.9E-05	8.3E-04	-	1.0E-04	1.8E-03
	1,2-Dichloroethane	0.195	0.001	0.091	NA	NA	NA	NA	5.6E-05	2.2E-05	4.0E-02	2.0E-06	1.2E-04	8.7E-02
	Chloroethane	0.100	2.90	0.003	NA	NA	NA	NA	2.9E-05	1.1E-05	9.9E-06	3.3E-08	6.3E-05	2.2E-05
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.7E-06	2.3E-06	5.7E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.570	0.017	0.021	NA	NA	NA	NA	1.6E-04	6.5E-05	9.6E-03	1.4E-06	3.6E-04	2.1E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	0.652	0.01	0.089	NA	NA	NA	NA	1.9E-04	7.5E-05	1.9E-02	6.6E-06	4.1E-04	4.1E-02
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.7E-06	2.3E-06	2.0E-04	7.0E-08	1.3E-05	4.4E-04
2805-UN	1,1,1-Trichloroethane	0.844	3	NC	NA	NA	NA	NA	2.4E-04	9.6E-05	8.0E-05	-	5.3E-04	1.8E-04
	1,1-Dichloroethane	13.500	0.20	NA	NA	NA	NA	NA	3.9E-03	1.5E-03	1.9E-02	-	8.4E-03	4.2E-02
	1,1-Dichloroethene	0.700	0.057	NA	NA	NA	NA	NA	2.0E-04	8.0E-05	3.5E-03	-	4.4E-04	7.7E-03
	1,2-Dichloroethane	1.615	0.001	0.091	NA	NA	NA	NA	4.6E-04	1.8E-04	3.3E-01	1.7E-05	1.0E-03	7.2E-01
	Chloroethane	1.632	2.90	0.003	NA	NA	NA	NA	4.7E-04	1.9E-04	1.6E-04	5.4E-07	1.0E-03	3.5E-04
	cis-1,2-Dichloroethene	13.500	0.01	NC	NA	NA	NA	NA	3.9E-03	1.5E-03	3.9E-01	-	8.4E-03	8.4E-01
	Tetrachloroethene	1.245	0.017	0.021	NA	NA	NA	NA	3.6E-04	1.4E-04	2.1E-02	3.0E-06	7.8E-04	4.6E-02
	trans-1,2-Dichloroethene	13.500	0.02	NA	NA	NA	NA	NA	3.9E-03	1.5E-03	1.9E-01	-	8.4E-03	4.2E-01
	Trichloroethene	6.108	0.01	0.089	NA	NA	NA	NA	1.7E-03	7.0E-04	1.7E-01	6.2E-05	3.8E-03	3.8E-01
	Vinyl chloride	2.750	0.029	0.031	NA	NA	NA	NA	7.9E-04	3.1E-04	2.8E-02	9.7E-06	1.7E-03	6.0E-02
2806-WE	1,1,1-Trichloroethane	0.991	3	NC	NA	NA	NA	NA	2.8E-04	1.1E-04	9.4E-05	-	6.2E-04	2.1E-04
	1,1-Dichloroethane	0.042	0.20	NA	NA	NA	NA	NA	1.2E-05	4.8E-06	6.0E-05	-	2.6E-05	1.3E-04
	1,1-Dichloroethene	0.400	0.057	NA	NA	NA	NA	NA	1.1E-04	4.6E-05	2.0E-03	-	2.5E-04	4.4E-03
	1,2-Dichloroethane	0.119	0.001	0.091	NA	NA	NA	NA	3.4E-05	1.4E-05	2.4E-02	1.2E-06	7.4E-05	5.3E-02
	Chloroethane	0.067	2.90	0.003	NA	NA	NA	NA	1.9E-05	7.7E-06	6.6E-06	2.2E-08	4.2E-05	1.4E-05
	cis-1,2-Dichloroethene	0.042	0.01	NC	NA	NA	NA	NA	1.2E-05	4.8E-06	1.2E-03	-	2.6E-05	2.6E-03
	Tetrachloroethene	0.897	0.017	0.021	NA	NA	NA	NA	2.6E-04	1.0E-04	1.5E-02	2.2E-06	5.6E-04	3.3E-02
	trans-1,2-Dichloroethene	0.026	0.02	NA	NA	NA	NA	NA	7.4E-06	3.0E-06	3.7E-04	-	1.6E-05	8.1E-04
	Trichloroethene	0.248	0.01	0.089	NA	NA	NA	NA	7.1E-05	2.8E-05	7.1E-03	2.5E-06	1.6E-04	1.6E-02
	Vinyl chloride	0.042	0.029	0.031	NA	NA	NA	NA	1.2E-05	4.8E-06	4.2E-04	1.5E-07	2.6E-05	9.2E-04
2807-VA	1,1,1-Trichloroethane	0.200	3	NC	NA	NA	NA	NA	5.7E-05	2.3E-05	1.9E-05	-	1.3E-04	4.2E-05
	1,1-Dichloroethane	0.004	0.20	NA	NA	NA	NA	NA	1.1E-06	4.2E-07	5.3E-06	-	2.3E-06	1.2E-05
	1,1-Dichloroethene	0.051	0.057	NA	NA	NA	NA	NA	1.5E-05	5.8E-06	2.6E-04	-	3.2E-05	5.6E-04
	1,2-Dichloroethane	0.054	0.001	0.091	NA	NA	NA	NA	1.5E-05	6.2E-06	1.1E-02	5.6E-07	3.4E-05	2.4E-02
	Chloroethane	0.063	2.90	0.003	NA	NA	NA	NA	1.8E-05	7.2E-06	6.2E-06	2.1E-08	3.9E-05	1.4E-05
	cis-1,2-Dichloroethene	0.018	0.01	NC	NA	NA	NA	NA	5.1E-06	2.1E-06	5.1E-04	-	1.1E-05	1.1E-03
	Tetrachloroethene	0.130	0.017	0.021	NA	NA	NA	NA	3.7E-05	1.5E-05	2.2E-03	3.1E-07	8.1E-05	4.8E-03
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-04	-	1.1E-05	5.6E-04
	Trichloroethene	0.190	0.01	0.089	NA	NA	NA	NA	5.4E-05	2.2E-05	5.4E-03	1.9E-06	1.2E-04	1.2E-02
	Vinyl chloride	0.011	0.029	0.031	NA	NA	NA	NA	3.1E-06	1.3E-06	1.1E-04	3.9E-08	6.9E-06	2.4E-04
2808-UN	1,1,1-Trichloroethane	4.800	3	NC	NA	NA	NA	NA	1.4E-03	5.5E-04	4.6E-04	-	3.0E-03	1.0E-03
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.021	0.057	NA	NA	NA	NA	NA	6.0E-06	2.4E-06	1.1E-04	-	1.3E-05	2.3E-04
	1,2-Dichloroethane	0.072	0.001	0.091	NA	NA	NA	NA	2.1E-05	8.2E-06	1.5E-02	7.5E-07	4.5E-05	3.2E-02

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Chloroethane	0.036	2.90	0.003	NA	NA	NA	NA	1.0E-05	4.1E-06	3.5E-06	1.2E-08	2.3E-05	7.8E-06
	cis-1,2-Dichloroethene	0.600	0.01	NC	NA	NA	NA	NA	1.7E-04	6.9E-05	1.7E-02	-	3.8E-04	3.8E-02
	Tetrachloroethene	0.560	0.017	0.021	NA	NA	NA	NA	1.6E-04	6.4E-05	9.4E-03	1.3E-06	3.5E-04	2.1E-02
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.320	0.01	0.089	NA	NA	NA	NA	9.1E-05	3.7E-05	9.1E-03	3.3E-06	2.0E-04	2.0E-02
	Vinyl chloride	0.125	0.029	0.031	NA	NA	NA	NA	3.6E-05	1.4E-05	1.3E-03	4.4E-07	7.8E-05	2.7E-03
2808-WE	1,1,1-Trichloroethane	0.330	3	NC	NA	NA	NA	NA	9.4E-05	3.8E-05	3.1E-05	-	2.1E-04	6.9E-05
	1,1-Dichloroethane	0.015	0.20	NA	NA	NA	NA	NA	4.3E-06	1.7E-06	2.1E-05	-	9.4E-06	4.7E-05
	1,1-Dichloroethene	0.100	0.057	NA	NA	NA	NA	NA	2.9E-05	1.1E-05	5.0E-04	-	6.3E-05	1.1E-03
	1,2-Dichloroethane	0.330	0.001	0.091	NA	NA	NA	NA	9.4E-05	3.8E-05	6.7E-02	3.4E-06	2.1E-04	1.5E-01
	Chloroethane	0.150	2.90	0.003	NA	NA	NA	NA	4.3E-05	1.7E-05	1.5E-05	5.0E-08	9.4E-05	3.2E-05
	cis-1,2-Dichloroethene	0.600	0.01	NC	NA	NA	NA	NA	1.7E-04	6.9E-05	1.7E-02	-	3.8E-04	3.8E-02
	Tetrachloroethene	2.300	0.017	0.021	NA	NA	NA	NA	6.6E-04	2.6E-04	3.9E-02	5.5E-06	1.4E-03	8.5E-02
	trans-1,2-Dichloroethene	0.001	0.02	NA	NA	NA	NA	NA	3.7E-07	1.5E-07	1.9E-05	-	8.1E-07	4.1E-05
	Trichloroethene	0.130	0.01	0.089	NA	NA	NA	NA	3.7E-05	1.5E-05	3.7E-03	1.3E-06	8.1E-05	8.1E-03
	Vinyl chloride	0.013	0.029	0.031	NA	NA	NA	NA	3.7E-06	1.5E-06	1.3E-04	4.6E-08	8.1E-06	2.8E-04
2809-UN	1,1,1-Trichloroethane	1.267	3	NC	NA	NA	NA	NA	3.6E-04	1.4E-04	1.2E-04	-	7.9E-04	2.6E-04
	1,1-Dichloroethane	0.750	0.20	NA	NA	NA	NA	NA	2.1E-04	8.6E-05	1.1E-03	-	4.7E-04	2.3E-03
	1,1-Dichloroethene	0.119	0.057	NA	NA	NA	NA	NA	3.4E-05	1.4E-05	6.0E-04	-	7.4E-05	1.3E-03
	1,2-Dichloroethane	0.238	0.001	0.091	NA	NA	NA	NA	6.8E-05	2.7E-05	4.9E-02	2.5E-06	1.5E-04	1.1E-01
	Chloroethane	0.091	2.90	0.003	NA	NA	NA	NA	2.6E-05	1.0E-05	9.0E-06	3.0E-08	5.7E-05	2.0E-05
	cis-1,2-Dichloroethene	0.750	0.01	NC	NA	NA	NA	NA	2.1E-04	8.6E-05	2.1E-02	-	4.7E-04	4.7E-02
	Tetrachloroethene	2.817	0.017	0.021	NA	NA	NA	NA	8.0E-04	3.2E-04	4.7E-02	6.8E-06	1.8E-03	1.0E-01
	trans-1,2-Dichloroethene	0.750	0.02	NA	NA	NA	NA	NA	2.1E-04	8.6E-05	1.1E-02	-	4.7E-04	2.3E-02
	Trichloroethene	6.128	0.01	0.089	NA	NA	NA	NA	1.8E-03	7.0E-04	1.8E-01	6.2E-05	3.8E-03	3.8E-01
	Vinyl chloride	0.155	0.029	0.031	NA	NA	NA	NA	4.4E-05	1.8E-05	1.6E-03	5.5E-07	9.7E-05	3.4E-03
2809-WE	1,1,1-Trichloroethane	2.700	3	NC	NA	NA	NA	NA	7.7E-04	3.1E-04	2.6E-04	-	1.7E-03	5.6E-04
	1,1-Dichloroethane	0.010	0.20	NA	NA	NA	NA	NA	2.9E-06	1.1E-06	1.4E-05	-	6.3E-06	3.1E-05
	1,1-Dichloroethene	0.034	0.057	NA	NA	NA	NA	NA	9.7E-06	3.9E-06	1.7E-04	-	2.1E-05	3.7E-04
	1,2-Dichloroethane	0.054	0.001	0.091	NA	NA	NA	NA	1.5E-05	6.2E-06	1.1E-02	5.6E-07	3.4E-05	2.4E-02
	Chloroethane	0.045	2.90	0.003	NA	NA	NA	NA	1.3E-05	5.1E-06	4.4E-06	1.5E-08	2.8E-05	9.7E-06
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.6E-06	2.2E-06	5.6E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.500	0.017	0.021	NA	NA	NA	NA	1.4E-04	5.7E-05	8.4E-03	1.2E-06	3.1E-04	1.8E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-04	-	1.2E-05	6.1E-04
	Trichloroethene	0.320	0.01	0.089	NA	NA	NA	NA	9.1E-05	3.7E-05	9.1E-03	3.3E-06	2.0E-04	2.0E-02
	Vinyl chloride	0.011	0.029	0.031	NA	NA	NA	NA	3.1E-06	1.3E-06	1.1E-04	3.9E-08	6.9E-06	2.4E-04
2810-UN	1,1,1-Trichloroethane	3.400	3	NC	NA	NA	NA	NA	9.7E-04	3.9E-04	3.2E-04	-	2.1E-03	7.1E-04
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-05	-	1.2E-05	6.1E-05
	1,1-Dichloroethene	0.064	0.057	NA	NA	NA	NA	NA	1.8E-05	7.3E-06	3.2E-04	-	4.0E-05	7.0E-04
	1,2-Dichloroethane	0.260	0.001	0.091	NA	NA	NA	NA	7.4E-05	3.0E-05	5.3E-02	2.7E-06	1.6E-04	1.2E-01
	Chloroethane	0.058	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.6E-06	5.7E-06	1.9E-08	3.6E-05	1.3E-05
	cis-1,2-Dichloroethene	0.022	0.01	NC	NA	NA	NA	NA	6.1E-06	2.5E-06	6.1E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.310	0.017	0.021	NA	NA	NA	NA	8.9E-05	3.5E-05	5.2E-03	7.4E-07	1.9E-04	1.1E-02
	trans-1,2-Dichloroethene	0.022	0.02	NA	NA	NA	NA	NA	6.1E-06	2.5E-06	3.1E-04	-	1.3E-05	6.7E-04
	Trichloroethene	0.520	0.01	0.089	NA	NA	NA	NA	1.5E-04	5.9E-05	1.5E-02	5.3E-06	3.3E-04	3.3E-02
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.6E-06	2.2E-06	2.0E-04	6.9E-08	1.2E-05	4.3E-04
2810-WE	1,1,1-Trichloroethane	0.230	3	NC	NA	NA	NA	NA	6.6E-05	2.6E-05	2.2E-05	-	1.4E-04	4.8E-05
	1,1-Dichloroethane	0.630	0.20	NA	NA	NA	NA	NA	1.8E-04	7.2E-05	9.0E-04	-	3.9E-04	2.0E-03
	1,1-Dichloroethene	0.330	0.057	NA	NA	NA	NA	NA	9.4E-05	3.8E-05	1.7E-03	-	2.1E-04	3.6E-03
	1,2-Dichloroethane	0.085	0.001	0.091	NA	NA	NA	NA	2.4E-05	9.7E-06	1.7E-02	8.8E-07	5.3E-05	3.8E-02
	Chloroethane	0.069	2.90	0.003	NA	NA	NA	NA	2.0E-05	7.9E-06	6.8E-06	2.3E-08	4.3E-05	1.5E-05
	cis-1,2-Dichloroethene	0.023	0.01	NC	NA	NA	NA	NA	6.4E-06	2.6E-06	6.4E-04	-	1.4E-05	1.4E-03

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Tetrachloroethene	0.320	0.017	0.021	NA	NA	NA	NA	9.1E-05	3.7E-05	5.4E-03	7.7E-07	2.0E-04	1.2E-02
	trans-1,2-Dichloroethene	0.023	0.02	NA	NA	NA	NA	NA	6.6E-06	2.6E-06	3.3E-04	-	1.4E-05	7.2E-04
	Trichloroethene	1.300	0.01	0.089	NA	NA	NA	NA	3.7E-04	1.5E-04	3.7E-02	1.3E-05	8.1E-04	8.1E-02
	Vinyl chloride	0.021	0.029	0.031	NA	NA	NA	NA	6.0E-06	2.4E-06	2.1E-04	7.4E-08	1.3E-05	4.6E-04
2811-UN	1,1,1-Trichloroethane	0.210	3	NC	NA	NA	NA	NA	6.0E-05	2.4E-05	2.0E-05	-	1.3E-04	4.4E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.500	0.057	NA	NA	NA	NA	NA	1.4E-04	5.7E-05	2.5E-03	-	3.1E-04	5.5E-03
	1,2-Dichloroethane	0.890	0.001	0.091	NA	NA	NA	NA	2.5E-04	1.0E-04	1.8E-01	9.3E-06	5.6E-04	4.0E-01
	Chloroethane	0.120	2.90	0.003	NA	NA	NA	NA	3.4E-05	1.4E-05	1.2E-05	4.0E-08	7.5E-05	2.6E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.150	0.017	0.021	NA	NA	NA	NA	4.3E-05	1.7E-05	2.5E-03	3.6E-07	9.4E-05	5.5E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.440	0.01	0.089	NA	NA	NA	NA	1.3E-04	5.0E-05	1.3E-02	4.5E-06	2.8E-04	2.8E-02
	Vinyl chloride	0.015	0.029	0.031	NA	NA	NA	NA	4.3E-06	1.7E-06	1.5E-04	5.3E-08	9.4E-06	3.3E-04
2812-WE	1,1,1-Trichloroethane	2.000	3	NC	NA	NA	NA	NA	5.7E-04	2.3E-04	1.9E-04	-	1.3E-03	4.2E-04
	1,1-Dichloroethane	0.440	0.20	NA	NA	NA	NA	NA	1.3E-04	5.0E-05	6.3E-04	-	2.8E-04	1.4E-03
	1,1-Dichloroethene	0.240	0.057	NA	NA	NA	NA	NA	6.9E-05	2.7E-05	1.2E-03	-	1.5E-04	2.6E-03
	1,2-Dichloroethane	0.210	0.001	0.091	NA	NA	NA	NA	6.0E-05	2.4E-05	4.3E-02	2.2E-06	1.3E-04	9.4E-02
	Chloroethane	0.100	2.90	0.003	NA	NA	NA	NA	2.9E-05	1.1E-05	9.9E-06	3.3E-08	6.3E-05	2.2E-05
	cis-1,2-Dichloroethene	0.021	0.01	NC	NA	NA	NA	NA	6.0E-06	2.4E-06	6.0E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.300	0.017	0.021	NA	NA	NA	NA	8.6E-05	3.4E-05	5.0E-03	7.2E-07	1.9E-04	1.1E-02
	trans-1,2-Dichloroethene	0.021	0.02	NA	NA	NA	NA	NA	6.0E-06	2.4E-06	3.0E-04	-	1.3E-05	6.6E-04
	Trichloroethene	0.310	0.01	0.089	NA	NA	NA	NA	8.9E-05	3.5E-05	8.9E-03	3.2E-06	1.9E-04	1.9E-02
	Vinyl chloride	0.021	0.029	0.031	NA	NA	NA	NA	6.0E-06	2.4E-06	2.1E-04	7.4E-08	1.3E-05	4.6E-04
2901-FR	1,1,1-Trichloroethane	0.120	3	NC	NA	NA	NA	NA	3.4E-05	1.4E-05	1.1E-05	-	7.5E-05	2.5E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.420	0.001	0.091	NA	NA	NA	NA	1.2E-04	4.8E-05	8.6E-02	4.4E-06	2.6E-04	1.9E-01
	Chloroethane	0.077	2.90	0.003	NA	NA	NA	NA	2.2E-05	8.8E-06	7.6E-06	2.6E-08	4.8E-05	1.7E-05
	cis-1,2-Dichloroethene	0.190	0.01	NC	NA	NA	NA	NA	5.4E-05	2.2E-05	5.4E-03	-	1.2E-04	1.2E-02
	Tetrachloroethene	0.160	0.017	0.021	NA	NA	NA	NA	4.6E-05	1.8E-05	2.7E-03	3.8E-07	1.0E-04	5.9E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.130	0.01	0.089	NA	NA	NA	NA	3.7E-05	1.5E-05	3.7E-03	1.3E-06	8.1E-05	8.1E-03
	Vinyl chloride	0.052	0.029	0.031	NA	NA	NA	NA	1.5E-05	5.9E-06	5.2E-04	1.8E-07	3.3E-05	1.1E-03
2902-UN	1,1,1-Trichloroethane	0.930	3	NC	NA	NA	NA	NA	2.7E-04	1.1E-04	8.9E-05	-	5.8E-04	1.9E-04
	1,1-Dichloroethane	0.022	0.20	NA	NA	NA	NA	NA	6.3E-06	2.5E-06	3.1E-05	-	1.4E-05	6.9E-05
	1,1-Dichloroethene	0.100	0.057	NA	NA	NA	NA	NA	2.9E-05	1.1E-05	5.0E-04	-	6.3E-05	1.1E-03
	1,2-Dichloroethane	0.230	0.001	0.091	NA	NA	NA	NA	6.6E-05	2.6E-05	4.7E-02	2.4E-06	1.4E-04	1.0E-01
	Chloroethane	0.059	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.7E-06	5.8E-06	2.0E-08	3.7E-05	1.3E-05
	cis-1,2-Dichloroethene	0.022	0.01	NC	NA	NA	NA	NA	6.3E-06	2.5E-06	6.3E-04	-	1.4E-05	1.4E-03
	Tetrachloroethene	0.570	0.017	0.021	NA	NA	NA	NA	1.6E-04	6.5E-05	9.6E-03	1.4E-06	3.6E-04	2.1E-02
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-04	-	1.2E-05	5.9E-04
	Trichloroethene	0.720	0.01	0.089	NA	NA	NA	NA	2.1E-04	8.2E-05	2.1E-02	7.3E-06	4.5E-04	4.5E-02
	Vinyl chloride	0.009	0.029	0.031	NA	NA	NA	NA	2.7E-06	1.1E-06	9.4E-05	3.3E-08	5.9E-06	2.1E-04
2902-VA	1,1,1-Trichloroethane	0.130	3	NC	NA	NA	NA	NA	3.7E-05	1.5E-05	1.2E-05	-	8.1E-05	2.7E-05
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-05	-	1.2E-05	5.9E-05
	1,1-Dichloroethene	0.230	0.057	NA	NA	NA	NA	NA	6.6E-05	2.6E-05	1.2E-03	-	1.4E-04	2.5E-03
	1,2-Dichloroethane	0.057	0.001	0.091	NA	NA	NA	NA	1.6E-05	6.5E-06	1.2E-02	5.9E-07	3.6E-05	2.5E-02
	Chloroethane	0.044	2.90	0.003	NA	NA	NA	NA	1.3E-05	5.0E-06	4.3E-06	1.5E-08	2.8E-05	9.5E-06
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.4E-06	2.2E-06	5.4E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.150	0.017	0.021	NA	NA	NA	NA	4.3E-05	1.7E-05	2.5E-03	3.6E-07	9.4E-05	5.5E-03
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-04	-	1.2E-05	5.9E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Trichloroethene	0.057	0.01	0.089	NA	NA	NA	NA	1.6E-05	6.5E-06	1.6E-03	5.8E-07	3.6E-05	3.6E-03
	Vinyl chloride	0.006	0.029	0.031	NA	NA	NA	NA	1.7E-06	6.7E-07	5.9E-05	2.1E-08	3.7E-06	1.3E-04
2902-WE	1,1,1-Trichloroethane	0.095	3	NC	NA	NA	NA	NA	2.7E-05	1.1E-05	9.0E-06	-	5.9E-05	2.0E-05
	1,1-Dichloroethane	0.095	0.20	NA	NA	NA	NA	NA	2.7E-05	1.1E-05	1.4E-04	-	5.9E-05	3.0E-04
	1,1-Dichloroethene	0.095	0.057	NA	NA	NA	NA	NA	2.7E-05	1.1E-05	4.8E-04	-	5.9E-05	1.0E-03
	1,2-Dichloroethane	2.100	0.001	0.091	NA	NA	NA	NA	6.0E-04	2.4E-04	4.3E-01	2.2E-05	1.3E-03	9.4E-01
	Chloroethane	0.095	2.90	0.003	NA	NA	NA	NA	2.7E-05	1.1E-05	9.4E-06	3.1E-08	5.9E-05	2.0E-05
	cis-1,2-Dichloroethene	0.095	0.01	NC	NA	NA	NA	NA	2.7E-05	1.1E-05	2.7E-03	-	5.9E-05	5.9E-03
	Tetrachloroethene	0.095	0.017	0.021	NA	NA	NA	NA	2.7E-05	1.1E-05	1.6E-03	2.3E-07	5.9E-05	3.5E-03
	trans-1,2-Dichloroethene	0.095	0.02	NA	NA	NA	NA	NA	2.7E-05	1.1E-05	1.4E-03	-	5.9E-05	3.0E-03
	Trichloroethene	0.095	0.01	0.089	NA	NA	NA	NA	2.7E-05	1.1E-05	2.7E-03	9.7E-07	5.9E-05	5.9E-03
	Vinyl chloride	0.095	0.029	0.031	NA	NA	NA	NA	2.7E-05	1.1E-05	9.5E-04	3.3E-07	5.9E-05	2.1E-03
2903-UN	1,1,1-Trichloroethane	0.088	3	NC	NA	NA	NA	NA	2.5E-05	1.0E-05	8.4E-06	-	5.5E-05	1.8E-05
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-05	-	1.2E-05	5.9E-05
	1,1-Dichloroethene	0.019	0.057	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	9.5E-05	-	1.2E-05	2.1E-04
	1,2-Dichloroethane	0.310	0.001	0.091	NA	NA	NA	NA	8.9E-05	3.5E-05	6.3E-02	3.2E-06	1.9E-04	1.4E-01
	Chloroethane	0.019	2.90	0.003	NA	NA	NA	NA	5.4E-06	2.2E-06	1.9E-06	6.3E-09	1.2E-05	4.1E-06
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.4E-06	2.2E-06	5.4E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.330	0.017	0.021	NA	NA	NA	NA	9.4E-05	3.8E-05	5.5E-03	7.9E-07	2.1E-04	1.2E-02
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.4E-06	2.2E-06	2.7E-04	-	1.2E-05	5.9E-04
	Trichloroethene	0.096	0.01	0.089	NA	NA	NA	NA	2.7E-05	1.1E-05	2.7E-03	9.8E-07	6.0E-05	6.0E-03
	Vinyl chloride	0.019	0.029	0.031	NA	NA	NA	NA	5.4E-06	2.2E-06	1.9E-04	6.7E-08	1.2E-05	4.2E-04
2903-VA	1,1,1-Trichloroethane	0.098	3	NC	NA	NA	NA	NA	2.8E-05	1.1E-05	9.3E-06	-	6.1E-05	2.0E-05
	1,1-Dichloroethane	0.028	0.20	NA	NA	NA	NA	NA	7.9E-06	3.1E-06	3.9E-05	-	1.7E-05	8.6E-05
	1,1-Dichloroethene	0.096	0.057	NA	NA	NA	NA	NA	2.7E-05	1.1E-05	4.8E-04	-	6.0E-05	1.1E-03
	1,2-Dichloroethane	0.064	0.001	0.091	NA	NA	NA	NA	1.8E-05	7.3E-06	1.3E-02	6.7E-07	4.0E-05	2.9E-02
	Chloroethane	0.028	2.90	0.003	NA	NA	NA	NA	7.9E-06	3.1E-06	2.7E-06	9.1E-09	1.7E-05	5.9E-06
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	7.9E-06	3.1E-06	7.9E-04	-	1.7E-05	1.7E-03
	Tetrachloroethene	0.160	0.017	0.021	NA	NA	NA	NA	4.6E-05	1.8E-05	2.7E-03	3.8E-07	1.0E-04	5.9E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	7.9E-06	3.1E-06	3.9E-04	-	1.7E-05	8.6E-04
	Trichloroethene	0.060	0.01	0.089	NA	NA	NA	NA	1.7E-05	6.9E-06	1.7E-03	6.1E-07	3.8E-05	3.8E-03
	Vinyl chloride	0.028	0.029	0.031	NA	NA	NA	NA	7.9E-06	3.1E-06	2.8E-04	9.7E-08	1.7E-05	6.0E-04
2903-WE	1,1,1-Trichloroethane	0.056	3	NC	NA	NA	NA	NA	1.6E-05	6.4E-06	5.3E-06	-	3.5E-05	1.2E-05
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-05	-	1.2E-05	6.1E-05
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	9.8E-05	-	1.2E-05	2.1E-04
	1,2-Dichloroethane	0.063	0.001	0.091	NA	NA	NA	NA	1.8E-05	7.2E-06	1.3E-02	6.6E-07	3.9E-05	2.8E-02
	Chloroethane	0.020	2.90	0.003	NA	NA	NA	NA	5.6E-06	2.2E-06	1.9E-06	6.5E-09	1.2E-05	4.2E-06
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.6E-06	2.2E-06	5.6E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.069	0.017	0.021	NA	NA	NA	NA	2.0E-05	7.9E-06	1.2E-03	1.7E-07	4.3E-05	2.5E-03
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-04	-	1.2E-05	6.1E-04
	Trichloroethene	0.065	0.01	0.089	NA	NA	NA	NA	1.9E-05	7.4E-06	1.9E-03	6.6E-07	4.1E-05	4.1E-03
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.6E-06	2.2E-06	2.0E-04	6.9E-08	1.2E-05	4.3E-04
2904-UN	1,1,1-Trichloroethane	0.097	3	NC	NA	NA	NA	NA	2.8E-05	1.1E-05	9.2E-06	-	6.1E-05	2.0E-05
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-05	-	1.3E-05	6.3E-05
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.060	0.001	0.091	NA	NA	NA	NA	1.7E-05	6.9E-06	1.2E-02	6.2E-07	3.8E-05	2.7E-02
	Chloroethane	0.020	2.90	0.003	NA	NA	NA	NA	5.7E-06	2.3E-06	2.0E-06	6.6E-09	1.3E-05	4.3E-06
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.7E-06	2.3E-06	5.7E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.140	0.017	0.021	NA	NA	NA	NA	4.0E-05	1.6E-05	2.4E-03	3.4E-07	8.8E-05	5.1E-03
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	0.047	0.01	0.089	NA	NA	NA	NA	1.3E-05	5.4E-06	1.3E-03	4.8E-07	2.9E-05	2.9E-03
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.7E-06	2.3E-06	2.0E-04	7.0E-08	1.3E-05	4.4E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
2904-WE	1,1,1-Trichloroethane	0.100	3	NC	NA	NA	NA	NA	2.9E-05	1.1E-05	9.5E-06	-	6.3E-05	2.1E-05
	1,1-Dichloroethane	0.022	0.20	NA	NA	NA	NA	NA	6.1E-06	2.5E-06	3.1E-05	-	1.3E-05	6.7E-05
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.047	0.001	0.091	NA	NA	NA	NA	1.3E-05	5.4E-06	9.6E-03	4.9E-07	2.9E-05	2.1E-02
	Chloroethane	0.085	2.90	0.003	NA	NA	NA	NA	2.4E-05	9.7E-06	8.4E-06	2.8E-08	5.3E-05	1.8E-05
	cis-1,2-Dichloroethene	0.022	0.01	NC	NA	NA	NA	NA	6.1E-06	2.5E-06	6.1E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.084	0.017	0.021	NA	NA	NA	NA	2.4E-05	9.6E-06	1.4E-03	2.0E-07	5.3E-05	3.1E-03
	trans-1,2-Dichloroethene	0.022	0.02	NA	NA	NA	NA	NA	6.1E-06	2.5E-06	3.1E-04	-	1.3E-05	6.7E-04
	Trichloroethene	0.044	0.01	0.089	NA	NA	NA	NA	1.3E-05	5.0E-06	1.3E-03	4.5E-07	2.8E-05	2.8E-03
	Vinyl chloride	0.021	0.029	0.031	NA	NA	NA	NA	6.0E-06	2.4E-06	2.1E-04	7.4E-08	1.3E-05	4.6E-04
2905-WE	1,1,1-Trichloroethane	1.600	3	NC	NA	NA	NA	NA	4.6E-04	1.8E-04	1.5E-04	-	1.0E-03	3.3E-04
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-05	-	1.3E-05	6.3E-05
	1,1-Dichloroethene	0.010	0.057	NA	NA	NA	NA	NA	2.9E-06	1.1E-06	5.0E-05	-	6.3E-06	1.1E-04
	1,2-Dichloroethane	0.063	0.001	0.091	NA	NA	NA	NA	1.8E-05	7.2E-06	1.3E-02	6.6E-07	3.9E-05	2.8E-02
	Chloroethane	0.064	2.90	0.003	NA	NA	NA	NA	1.8E-05	7.3E-06	6.3E-06	2.1E-08	4.0E-05	1.4E-05
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.7E-06	2.3E-06	5.7E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.063	0.017	0.021	NA	NA	NA	NA	1.8E-05	7.2E-06	1.1E-03	1.5E-07	3.9E-05	2.3E-03
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	0.035	0.01	0.089	NA	NA	NA	NA	1.0E-05	4.0E-06	1.0E-03	3.6E-07	2.2E-05	2.2E-03
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.7E-06	2.3E-06	2.0E-04	7.0E-08	1.3E-05	4.4E-04
2907-UN	1,1,1-Trichloroethane	0.470	3	NC	NA	NA	NA	NA	1.3E-04	5.4E-05	4.5E-05	-	2.9E-04	9.8E-05
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-05	-	1.2E-05	6.1E-05
	1,1-Dichloroethene	0.072	0.057	NA	NA	NA	NA	NA	2.1E-05	8.2E-06	3.6E-04	-	4.5E-05	7.9E-04
	1,2-Dichloroethane	1.900	0.001	0.091	NA	NA	NA	NA	5.4E-04	2.2E-04	3.9E-01	2.0E-05	1.2E-03	8.5E-01
	Chloroethane	0.071	2.90	0.003	NA	NA	NA	NA	2.0E-05	8.1E-06	7.0E-06	2.4E-08	4.4E-05	1.5E-05
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.6E-06	2.2E-06	5.6E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	1.500	0.017	0.021	NA	NA	NA	NA	4.3E-04	1.7E-04	2.5E-02	3.6E-06	9.4E-04	5.5E-02
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-04	-	1.1E-05	5.6E-04
	Trichloroethene	0.450	0.01	0.089	NA	NA	NA	NA	1.3E-04	5.1E-05	1.3E-02	4.6E-06	2.8E-04	2.8E-02
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.6E-06	2.2E-06	2.0E-04	6.9E-08	1.2E-05	4.3E-04
2907-VA	1,1,1-Trichloroethane	0.140	3	NC	NA	NA	NA	NA	4.0E-05	1.6E-05	1.3E-05	-	8.8E-05	2.9E-05
	1,1-Dichloroethane	0.018	0.20	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-05	-	1.1E-05	5.6E-05
	1,1-Dichloroethene	0.140	0.057	NA	NA	NA	NA	NA	4.0E-05	1.6E-05	7.0E-04	-	8.8E-05	1.5E-03
	1,2-Dichloroethane	0.190	0.001	0.091	NA	NA	NA	NA	5.4E-05	2.2E-05	3.9E-02	2.0E-06	1.2E-04	8.5E-02
	Chloroethane	0.018	2.90	0.003	NA	NA	NA	NA	5.1E-06	2.1E-06	1.8E-06	6.0E-09	1.1E-05	3.9E-06
	cis-1,2-Dichloroethene	0.018	0.01	NC	NA	NA	NA	NA	5.1E-06	2.1E-06	5.1E-04	-	1.1E-05	1.1E-03
	Tetrachloroethene	0.100	0.017	0.021	NA	NA	NA	NA	2.9E-05	1.1E-05	1.7E-03	2.4E-07	6.3E-05	3.7E-03
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.1E-06	2.1E-06	2.6E-04	-	1.1E-05	5.6E-04
	Trichloroethene	0.038	0.01	0.089	NA	NA	NA	NA	1.1E-05	4.3E-06	1.1E-03	3.9E-07	2.4E-05	2.4E-03
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.1E-06	2.1E-06	1.8E-04	6.3E-08	1.1E-05	3.9E-04
2910-UN	1,1,1-Trichloroethane	0.120	3	NC	NA	NA	NA	NA	3.4E-05	1.4E-05	1.1E-05	-	7.5E-05	2.5E-05
	1,1-Dichloroethane	0.021	0.20	NA	NA	NA	NA	NA	5.9E-06	2.3E-06	2.9E-05	-	1.3E-05	6.4E-05
	1,1-Dichloroethene	0.180	0.057	NA	NA	NA	NA	NA	5.1E-05	2.1E-05	9.0E-04	-	1.1E-04	2.0E-03
	1,2-Dichloroethane	1.500	0.001	0.091	NA	NA	NA	NA	4.3E-04	1.7E-04	3.1E-01	1.6E-05	9.4E-04	6.7E-01
	Chloroethane	0.021	2.90	0.003	NA	NA	NA	NA	5.9E-06	2.3E-06	2.0E-06	6.8E-09	1.3E-05	4.4E-06
	cis-1,2-Dichloroethene	0.021	0.01	NC	NA	NA	NA	NA	5.9E-06	2.3E-06	5.9E-04	-	1.3E-05	1.3E-03
	Tetrachloroethene	0.100	0.017	0.021	NA	NA	NA	NA	2.9E-05	1.1E-05	1.7E-03	2.4E-07	6.3E-05	3.7E-03
	trans-1,2-Dichloroethene	0.021	0.02	NA	NA	NA	NA	NA	5.9E-06	2.3E-06	2.9E-04	-	1.3E-05	6.4E-04
	Trichloroethene	0.046	0.01	0.089	NA	NA	NA	NA	1.3E-05	5.3E-06	1.3E-03	4.7E-07	2.9E-05	2.9E-03
	Vinyl chloride	0.021	0.029	0.031	NA	NA	NA	NA	5.9E-06	2.3E-06	2.1E-04	7.2E-08	1.3E-05	4.5E-04
2910-WE	1,1,1-Trichloroethane	0.057	3	NC	NA	NA	NA	NA	1.6E-05	6.5E-06	5.4E-06	-	3.6E-05	1.2E-05
	1,1-Dichloroethane	0.018	0.20	NA	NA	NA	NA	NA	5.0E-06	2.0E-06	2.5E-05	-	1.1E-05	5.5E-05

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (μg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	1,1-Dichloroethene	0.035	0.057	NA	NA	NA	NA	NA	1.0E-05	4.0E-06	1.8E-04	-	2.2E-05	3.8E-04
	1,2-Dichloroethane	0.140	0.001	0.091	NA	NA	NA	NA	4.0E-05	1.6E-05	2.9E-02	1.5E-06	8.8E-05	6.3E-02
	Chloroethane	0.018	2.90	0.003	NA	NA	NA	NA	5.0E-06	2.0E-06	1.7E-06	5.8E-09	1.1E-05	3.8E-06
	cis-1,2-Dichloroethene	0.018	0.01	NC	NA	NA	NA	NA	5.0E-06	2.0E-06	5.0E-04	-	1.1E-05	1.1E-03
	Tetrachloroethene	0.140	0.017	0.021	NA	NA	NA	NA	4.0E-05	1.6E-05	2.4E-03	3.4E-07	8.8E-05	5.1E-03
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.0E-06	2.0E-06	2.5E-04	-	1.1E-05	5.5E-04
	Trichloroethene	0.038	0.01	0.089	NA	NA	NA	NA	1.1E-05	4.3E-06	1.1E-03	3.9E-07	2.4E-05	2.4E-03
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.0E-06	2.0E-06	1.8E-04	6.2E-08	1.1E-05	3.8E-04
2912-WE	1,1,1-Trichloroethane	0.150	3	NC	NA	NA	NA	NA	4.3E-05	1.7E-05	1.4E-05	-	9.4E-05	3.1E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.078	0.057	NA	NA	NA	NA	NA	2.2E-05	8.9E-06	3.9E-04	-	4.9E-05	8.6E-04
	1,2-Dichloroethane	0.200	0.001	0.091	NA	NA	NA	NA	5.7E-05	2.3E-05	4.1E-02	2.1E-06	1.3E-04	8.9E-02
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.067	0.01	NC	NA	NA	NA	NA	1.9E-05	7.7E-06	1.9E-03	-	4.2E-05	4.2E-03
	Tetrachloroethene	0.330	0.017	0.021	NA	NA	NA	NA	9.4E-05	3.8E-05	5.5E-03	7.9E-07	2.1E-04	1.2E-02
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.670	0.01	0.089	NA	NA	NA	NA	1.9E-04	7.7E-05	1.9E-02	6.8E-06	4.2E-04	4.2E-02
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.0E-06	2.0E-06	1.8E-04	6.2E-08	1.1E-05	3.8E-04
2913-UN	1,1,1-Trichloroethane	1.600	3	NC	NA	NA	NA	NA	4.6E-04	1.8E-04	1.5E-04	-	1.0E-03	3.3E-04
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.055	0.001	0.091	NA	NA	NA	NA	1.6E-05	6.3E-06	1.1E-02	5.7E-07	3.4E-05	2.5E-02
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.230	0.017	0.021	NA	NA	NA	NA	6.6E-05	2.6E-05	3.9E-03	5.5E-07	1.4E-04	8.5E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.140	0.01	0.089	NA	NA	NA	NA	4.0E-05	1.6E-05	4.0E-03	1.4E-06	8.8E-05	8.8E-03
	Vinyl chloride	0.025	0.029	0.031	NA	NA	NA	NA	7.1E-06	2.9E-06	2.5E-04	8.8E-08	1.6E-05	5.5E-04
2914-UN	1,1,1-Trichloroethane	0.180	3	NC	NA	NA	NA	NA	5.1E-05	2.1E-05	1.7E-05	-	1.1E-04	3.8E-05
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-05	-	1.3E-05	6.3E-05
	1,1-Dichloroethene	0.130	0.057	NA	NA	NA	NA	NA	3.7E-05	1.5E-05	6.5E-04	-	8.1E-05	1.4E-03
	1,2-Dichloroethane	0.130	0.001	0.091	NA	NA	NA	NA	3.7E-05	1.5E-05	2.7E-02	1.4E-06	8.1E-05	5.8E-02
	Chloroethane	0.100	2.90	0.003	NA	NA	NA	NA	2.9E-05	1.1E-05	9.9E-06	3.3E-08	6.3E-05	2.2E-05
	cis-1,2-Dichloroethene	0.650	0.01	NC	NA	NA	NA	NA	1.9E-04	7.4E-05	1.9E-02	-	4.1E-04	4.1E-02
	Tetrachloroethene	0.220	0.017	0.021	NA	NA	NA	NA	6.3E-05	2.5E-05	3.7E-03	5.3E-07	1.4E-04	8.1E-03
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	0.290	0.01	0.089	NA	NA	NA	NA	8.3E-05	3.3E-05	8.3E-03	2.9E-06	1.8E-04	1.8E-02
	Vinyl chloride	0.028	0.029	0.031	NA	NA	NA	NA	8.0E-06	3.2E-06	2.8E-04	9.9E-08	1.8E-05	6.1E-04
2915-FR	1,1,1-Trichloroethane	0.110	3	NC	NA	NA	NA	NA	3.1E-05	1.3E-05	1.0E-05	-	6.9E-05	2.3E-05
	1,1-Dichloroethane	0.009	0.20	NA	NA	NA	NA	NA	2.5E-06	9.9E-07	1.2E-05	-	5.4E-06	2.7E-05
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	9.8E-05	-	1.2E-05	2.1E-04
	1,2-Dichloroethane	0.046	0.001	0.091	NA	NA	NA	NA	1.3E-05	5.3E-06	9.4E-03	4.8E-07	2.9E-05	2.1E-02
	Chloroethane	0.055	2.90	0.003	NA	NA	NA	NA	1.6E-05	6.3E-06	5.4E-06	1.8E-08	3.4E-05	1.2E-05
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.6E-06	2.2E-06	5.6E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.240	0.017	0.021	NA	NA	NA	NA	6.9E-05	2.7E-05	4.0E-03	5.8E-07	1.5E-04	8.8E-03
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-04	-	1.2E-05	6.1E-04
	Trichloroethene	0.120	0.01	0.089	NA	NA	NA	NA	3.4E-05	1.4E-05	3.4E-03	1.2E-06	7.5E-05	7.5E-03
	Vinyl chloride	0.008	0.029	0.031	NA	NA	NA	NA	2.2E-06	8.8E-07	7.7E-05	2.7E-08	4.8E-06	1.7E-04
2915-VA	1,1,1-Trichloroethane	0.160	3	NC	NA	NA	NA	NA	4.6E-05	1.8E-05	1.5E-05	-	1.0E-04	3.3E-05

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	1,1-Dichloroethane	0.017	0.20	NA	NA	NA	NA	NA	4.7E-06	1.9E-06	2.4E-05	-	1.0E-05	5.2E-05
	1,1-Dichloroethene	0.057	0.057	NA	NA	NA	NA	NA	1.6E-05	6.5E-06	2.9E-04	-	3.6E-05	6.3E-04
	1,2-Dichloroethane	0.040	0.001	0.091	NA	NA	NA	NA	1.1E-05	4.6E-06	8.2E-03	4.2E-07	2.5E-05	1.8E-02
	Chloroethane	0.047	2.90	0.003	NA	NA	NA	NA	1.3E-05	5.4E-06	4.6E-06	1.6E-08	2.9E-05	1.0E-05
	cis-1,2-Dichloroethene	0.017	0.01	NC	NA	NA	NA	NA	4.7E-06	1.9E-06	4.7E-04	-	1.0E-05	1.0E-03
	Tetrachloroethene	0.410	0.017	0.021	NA	NA	NA	NA	1.2E-04	4.7E-05	6.9E-03	9.8E-07	2.6E-04	1.5E-02
	trans-1,2-Dichloroethene	0.014	0.02	NA	NA	NA	NA	NA	4.0E-06	1.6E-06	2.0E-04	-	8.8E-06	4.4E-04
	Trichloroethene	0.150	0.01	0.089	NA	NA	NA	NA	4.3E-05	1.7E-05	4.3E-03	1.5E-06	9.4E-05	9.4E-03
	Vinyl chloride	0.006	0.029	0.031	NA	NA	NA	NA	1.6E-06	6.3E-07	5.5E-05	1.9E-08	3.4E-06	1.2E-04
3003-UN	1,1,1-Trichloroethane	0.310	3	NC	NA	NA	NA	NA	8.9E-05	3.5E-05	3.0E-05	-	1.9E-04	6.5E-05
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-05	-	1.2E-05	6.1E-05
	1,1-Dichloroethene	0.210	0.057	NA	NA	NA	NA	NA	6.0E-05	2.4E-05	1.1E-03	-	1.3E-04	2.3E-03
	1,2-Dichloroethane	0.085	0.001	0.091	NA	NA	NA	NA	2.4E-05	9.7E-06	1.7E-02	8.8E-07	5.3E-05	3.8E-02
	Chloroethane	0.130	2.90	0.003	NA	NA	NA	NA	3.7E-05	1.5E-05	1.3E-05	4.3E-08	8.1E-05	2.8E-05
	cis-1,2-Dichloroethene	0.020	0.01	NC	NA	NA	NA	NA	5.6E-06	2.2E-06	5.6E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.360	0.017	0.021	NA	NA	NA	NA	1.0E-04	4.1E-05	6.1E-03	8.6E-07	2.3E-04	1.3E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.6E-06	2.2E-06	2.8E-04	-	1.2E-05	6.1E-04
	Trichloroethene	0.590	0.01	0.089	NA	NA	NA	NA	1.7E-04	6.7E-05	1.7E-02	6.0E-06	3.7E-04	3.7E-02
	Vinyl chloride	0.035	0.029	0.031	NA	NA	NA	NA	1.0E-05	4.0E-06	3.5E-04	1.2E-07	2.2E-05	7.7E-04
3106-UN	1,1,1-Trichloroethane	0.170	3	NC	NA	NA	NA	NA	4.9E-05	1.9E-05	1.6E-05	-	1.1E-04	3.5E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04
	1,2-Dichloroethane	0.027	0.001	0.091	NA	NA	NA	NA	7.7E-06	3.1E-06	5.5E-03	2.8E-07	1.7E-05	1.2E-02
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.170	0.017	0.021	NA	NA	NA	NA	4.9E-05	1.9E-05	2.9E-03	4.1E-07	1.1E-04	6.3E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.034	0.01	0.089	NA	NA	NA	NA	9.7E-06	3.9E-06	9.7E-04	3.5E-07	2.1E-05	2.1E-03
	Vinyl chloride	0.010	0.029	0.031	NA	NA	NA	NA	2.9E-06	1.1E-06	1.0E-04	3.5E-08	6.3E-06	2.2E-04
3106-YE	1,1,1-Trichloroethane	0.180	3	NC	NA	NA	NA	NA	5.1E-05	2.1E-05	1.7E-05	-	1.1E-04	3.8E-05
	1,1-Dichloroethane	0.020	0.20	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-05	-	1.3E-05	6.3E-05
	1,1-Dichloroethene	0.086	0.057	NA	NA	NA	NA	NA	2.5E-05	9.8E-06	4.3E-04	-	5.4E-05	9.4E-04
	1,2-Dichloroethane	0.100	0.001	0.091	NA	NA	NA	NA	2.9E-05	1.1E-05	2.0E-02	1.0E-06	6.3E-05	4.5E-02
	Chloroethane	0.085	2.90	0.003	NA	NA	NA	NA	2.4E-05	9.7E-06	8.4E-06	2.8E-08	5.3E-05	1.8E-05
	cis-1,2-Dichloroethene	0.034	0.01	NC	NA	NA	NA	NA	9.7E-06	3.9E-06	9.7E-04	-	2.1E-05	2.1E-03
	Tetrachloroethene	0.470	0.017	0.021	NA	NA	NA	NA	1.3E-04	5.4E-05	7.9E-03	1.1E-06	2.9E-04	1.7E-02
	trans-1,2-Dichloroethene	0.020	0.02	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	2.9E-04	-	1.3E-05	6.3E-04
	Trichloroethene	0.070	0.01	0.089	NA	NA	NA	NA	2.0E-05	8.0E-06	2.0E-03	7.1E-07	4.4E-05	4.4E-03
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.0E-06	2.0E-06	1.8E-04	6.2E-08	1.1E-05	3.8E-04
3107-YE	1,1,1-Trichloroethane	0.280	3	NC	NA	NA	NA	NA	8.0E-05	3.2E-05	2.7E-05	-	1.8E-04	5.8E-05
	1,1-Dichloroethane	0.019	0.20	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-05	-	1.2E-05	5.8E-05
	1,1-Dichloroethene	0.190	0.057	NA	NA	NA	NA	NA	5.4E-05	2.2E-05	9.5E-04	-	1.2E-04	2.1E-03
	1,2-Dichloroethane	0.130	0.001	0.091	NA	NA	NA	NA	3.7E-05	1.5E-05	2.7E-02	1.4E-06	8.1E-05	5.8E-02
	Chloroethane	0.058	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.6E-06	5.7E-06	1.9E-08	3.6E-05	1.3E-05
	cis-1,2-Dichloroethene	0.019	0.01	NC	NA	NA	NA	NA	5.3E-06	2.1E-06	5.3E-04	-	1.2E-05	1.2E-03
	Tetrachloroethene	0.210	0.017	0.021	NA	NA	NA	NA	6.0E-05	2.4E-05	3.5E-03	5.0E-07	1.3E-04	7.7E-03
	trans-1,2-Dichloroethene	0.019	0.02	NA	NA	NA	NA	NA	5.3E-06	2.1E-06	2.6E-04	-	1.2E-05	5.8E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME ($\mu g/m^3$)	RfDi (mg/kg-d)	CSFi $(mg/kg\text{-}d)^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	Trichloroethene	7.500	0.01	0.089	NA	NA	NA	NA	2.1E-03	8.6E-04	2.1E-01	7.6E-05	4.7E-03	4.7E-01
	Vinyl chloride	0.019	0.029	0.031	NA	NA	NA	NA	5.3E-06	2.1E-06	1.9E-04	6.5E-08	1.2E-05	4.0E-04
3110-YE	1,1,1-Trichloroethane	7.100	3	NC	NA	NA	NA	NA	2.0E-03	8.1E-04	6.8E-04	-	4.4E-03	1.5E-03
	1,1-Dichloroethane	0.051	0.20	NA	NA	NA	NA	NA	1.5E-05	5.8E-06	7.3E-05	-	3.2E-05	1.6E-04
	1,1-Dichloroethene	0.350	0.057	NA	NA	NA	NA	NA	1.0E-04	4.0E-05	1.8E-03	-	2.2E-04	3.8E-03
	1,2-Dichloroethane	1.100	0.001	0.091	NA	NA	NA	NA	3.1E-04	1.3E-04	2.2E-01	1.1E-05	6.9E-04	4.9E-01
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.056	0.01	NC	NA	NA	NA	NA	1.6E-05	6.4E-06	1.6E-03	-	3.5E-05	3.5E-03
	Tetrachloroethene	1.200	0.017	0.021	NA	NA	NA	NA	3.4E-04	1.4E-04	2.0E-02	2.9E-06	7.5E-04	4.4E-02
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.110	0.01	0.089	NA	NA	NA	NA	3.1E-05	1.3E-05	3.1E-03	1.1E-06	6.9E-05	6.9E-03
	Vinyl chloride	0.025	0.029	0.031	NA	NA	NA	NA	7.1E-06	2.9E-06	2.5E-04	8.8E-08	1.6E-05	5.5E-04
3112-UN	1,1,1-Trichloroethane	0.420	3	NC	NA	NA	NA	NA	1.2E-04	4.8E-05	4.0E-05	-	2.6E-04	8.8E-05
	1,1-Dichloroethane	0.009	0.20	NA	NA	NA	NA	NA	2.6E-06	1.0E-06	1.3E-05	-	5.7E-06	2.8E-05
	1,1-Dichloroethene	0.470	0.057	NA	NA	NA	NA	NA	1.3E-04	5.4E-05	2.4E-03	-	2.9E-04	5.2E-03
	1,2-Dichloroethane	0.230	0.001	0.091	NA	NA	NA	NA	6.6E-05	2.6E-05	4.7E-02	2.4E-06	1.4E-04	1.0E-01
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.018	0.01	NC	NA	NA	NA	NA	5.0E-06	2.0E-06	5.0E-04	-	1.1E-05	1.1E-03
	Tetrachloroethene	5.200	0.017	0.021	NA	NA	NA	NA	1.5E-03	5.9E-04	8.7E-02	1.2E-05	3.3E-03	1.9E-01
	trans-1,2-Dichloroethene	0.018	0.02	NA	NA	NA	NA	NA	5.0E-06	2.0E-06	2.5E-04	-	1.1E-05	5.5E-04
	Trichloroethene	0.330	0.01	0.089	NA	NA	NA	NA	9.4E-05	3.8E-05	9.4E-03	3.4E-06	2.1E-04	2.1E-02
	Vinyl chloride	0.018	0.029	0.031	NA	NA	NA	NA	5.0E-06	2.0E-06	1.8E-04	6.2E-08	1.1E-05	3.8E-04
3112-WE	1,1,1-Trichloroethane	0.170	3	NC	NA	NA	NA	NA	4.9E-05	1.9E-05	1.6E-05	-	1.1E-04	3.5E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.100	0.057	NA	NA	NA	NA	NA	2.9E-05	1.1E-05	5.0E-04	-	6.3E-05	1.1E-03
	1,2-Dichloroethane	1.400	0.001	0.091	NA	NA	NA	NA	4.0E-04	1.6E-04	2.9E-01	1.5E-05	8.8E-04	6.3E-01
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.030	0.01	NC	NA	NA	NA	NA	8.6E-06	3.4E-06	8.6E-04	-	1.9E-05	1.9E-03
	Tetrachloroethene	3.000	0.017	0.021	NA	NA	NA	NA	8.6E-04	3.4E-04	5.0E-02	7.2E-06	1.9E-03	1.1E-01
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.250	0.01	0.089	NA	NA	NA	NA	7.1E-05	2.9E-05	7.1E-03	2.5E-06	1.6E-04	1.6E-02
	Vinyl chloride	0.027	0.029	0.031	NA	NA	NA	NA	7.6E-06	3.0E-06	2.7E-04	9.3E-08	1.7E-05	5.8E-04
3112-YE	1,1,1-Trichloroethane	0.440	3	NC	NA	NA	NA	NA	1.3E-04	5.0E-05	4.2E-05	-	2.8E-04	9.2E-05
	1,1-Dichloroethane	0.017	0.20	NA	NA	NA	NA	NA	4.9E-06	1.9E-06	2.4E-05	-	1.1E-05	5.3E-05
	1,1-Dichloroethene	0.170	0.057	NA	NA	NA	NA	NA	4.9E-05	1.9E-05	8.5E-04	-	1.1E-04	1.9E-03
	1,2-Dichloroethane	0.061	0.001	0.091	NA	NA	NA	NA	1.7E-05	7.0E-06	1.2E-02	6.3E-07	3.8E-05	2.7E-02
	Chloroethane	0.052	2.90	0.003	NA	NA	NA	NA	1.5E-05	5.9E-06	5.1E-06	1.7E-08	3.3E-05	1.1E-05
	cis-1,2-Dichloroethene	0.017	0.01	NC	NA	NA	NA	NA	4.9E-06	1.9E-06	4.9E-04	-	1.1E-05	1.1E-03
	Tetrachloroethene	0.470	0.017	0.021	NA	NA	NA	NA	1.3E-04	5.4E-05	7.9E-03	1.1E-06	2.9E-04	1.7E-02
	trans-1,2-Dichloroethene	0.017	0.02	NA	NA	NA	NA	NA	4.9E-06	1.9E-06	2.4E-04	-	1.1E-05	5.3E-04
	Trichloroethene	0.098	0.01	0.089	NA	NA	NA	NA	2.8E-05	1.1E-05	2.8E-03	1.0E-06	6.1E-05	6.1E-03
	Vinyl chloride	0.017	0.029	0.031	NA	NA	NA	NA	4.9E-06	1.9E-06	1.7E-04	6.0E-08	1.1E-05	3.7E-04
3114-WE	1,1,1-Trichloroethane	0.270	3	NC	NA	NA	NA	NA	7.7E-05	3.1E-05	2.6E-05	-	1.7E-04	5.6E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.026	0.057	NA	NA	NA	NA	NA	7.4E-06	3.0E-06	1.3E-04	-	1.6E-05	2.9E-04
	1,2-Dichloroethane	0.071	0.001	0.091	NA	NA	NA	NA	2.0E-05	8.1E-06	1.4E-02	7.4E-07	4.4E-05	3.2E-02
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME (µg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.800	0.017	0.021	NA	NA	NA	NA	2.3E-04	9.1E-05	1.3E-02	1.9E-06	5.0E-04	2.9E-02
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.180	0.01	0.089	NA	NA	NA	NA	5.1E-05	2.1E-05	5.1E-03	1.8E-06	1.1E-04	1.1E-02
	Vinyl chloride	0.020	0.029	0.031	NA	NA	NA	NA	5.7E-06	2.3E-06	2.0E-04	7.0E-08	1.3E-05	4.4E-04
3116-UN	1,1,1-Trichloroethane	0.120	3	NC	NA	NA	NA	NA	3.4E-05	1.4E-05	1.1E-05	-	7.5E-05	2.5E-05
	1,1-Dichloroethane	0.016	0.20	NA	NA	NA	NA	NA	4.4E-06	1.8E-06	2.2E-05	-	9.7E-06	4.8E-05
	1,1-Dichloroethene	0.010	0.057	NA	NA	NA	NA	NA	2.9E-06	1.1E-06	5.0E-05	-	6.3E-06	1.1E-04
	1,2-Dichloroethane	0.170	0.001	0.091	NA	NA	NA	NA	4.9E-05	1.9E-05	3.5E-02	1.8E-06	1.1E-04	7.6E-02
	Chloroethane	0.030	2.90	0.003	NA	NA	NA	NA	8.6E-06	3.4E-06	3.0E-06	9.9E-09	1.9E-05	6.5E-06
	cis-1,2-Dichloroethene	0.016	0.01	NC	NA	NA	NA	NA	4.4E-06	1.8E-06	4.4E-04	-	9.7E-06	9.7E-04
	Tetrachloroethene	0.540	0.017	0.021	NA	NA	NA	NA	1.5E-04	6.2E-05	9.1E-03	1.3E-06	3.4E-04	2.0E-02
	trans-1,2-Dichloroethene	0.016	0.02	NA	NA	NA	NA	NA	4.4E-06	1.8E-06	2.2E-04	-	9.7E-06	4.8E-04
	Trichloroethene	0.050	0.01	0.089	NA	NA	NA	NA	1.4E-05	5.7E-06	1.4E-03	5.1E-07	3.1E-05	3.1E-03
	Vinyl chloride	0.005	0.029	0.031	NA	NA	NA	NA	1.3E-06	5.3E-07	4.6E-05	1.6E-08	2.9E-06	1.0E-04
3116-WE	1,1,1-Trichloroethane	0.190	3	NC	NA	NA	NA	NA	5.4E-05	2.2E-05	1.8E-05	-	1.2E-04	4.0E-05
	1,1-Dichloroethane	0.170	0.20	NA	NA	NA	NA	NA	4.9E-05	1.9E-05	2.4E-04	-	1.1E-04	5.3E-04
	1,1-Dichloroethene	0.039	0.057	NA	NA	NA	NA	NA	1.1E-05	4.5E-06	2.0E-04	-	2.4E-05	4.3E-04
	1,2-Dichloroethane	0.170	0.001	0.091	NA	NA	NA	NA	4.9E-05	1.9E-05	3.5E-02	1.8E-06	1.1E-04	7.6E-02
	Chloroethane	0.140	2.90	0.003	NA	NA	NA	NA	4.0E-05	1.6E-05	1.4E-05	4.6E-08	8.8E-05	3.0E-05
	cis-1,2-Dichloroethene	0.035	0.01	NC	NA	NA	NA	NA	1.0E-05	4.0E-06	1.0E-03	-	2.2E-05	2.2E-03
	Tetrachloroethene	0.130	0.017	0.021	NA	NA	NA	NA	3.7E-05	1.5E-05	2.2E-03	3.1E-07	8.1E-05	4.8E-03
	trans-1,2-Dichloroethene	0.035	0.02	NA	NA	NA	NA	NA	1.0E-05	4.0E-06	5.0E-04	-	2.2E-05	1.1E-03
	Trichloroethene	0.100	0.01	0.089	NA	NA	NA	NA	2.9E-05	1.1E-05	2.9E-03	1.0E-06	6.3E-05	6.3E-03
	Vinyl chloride	0.035	0.029	0.031	NA	NA	NA	NA	1.0E-05	4.0E-06	3.5E-04	1.2E-07	2.2E-05	7.7E-04
3116-YE	1,1,1-Trichloroethane	0.200	3	NC	NA	NA	NA	NA	5.7E-05	2.3E-05	1.9E-05	-	1.3E-04	4.2E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.190	0.057	NA	NA	NA	NA	NA	5.4E-05	2.2E-05	9.5E-04	-	1.2E-04	2.1E-03
	1,2-Dichloroethane	0.160	0.001	0.091	NA	NA	NA	NA	4.6E-05	1.8E-05	3.3E-02	1.7E-06	1.0E-04	7.1E-02
	Chloroethane	0.041	2.90	0.003	NA	NA	NA	NA	1.2E-05	4.7E-06	4.0E-06	1.4E-08	2.6E-05	8.8E-06
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.120	0.017	0.021	NA	NA	NA	NA	3.4E-05	1.4E-05	2.0E-03	2.9E-07	7.5E-05	4.4E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.300	0.01	0.089	NA	NA	NA	NA	8.6E-05	3.4E-05	8.6E-03	3.1E-06	1.9E-04	1.9E-02
	Vinyl chloride	0.076	0.029	0.031	NA	NA	NA	NA	2.2E-05	8.7E-06	7.6E-04	2.7E-07	4.8E-05	1.7E-03
3117-XA	1,1,1-Trichloroethane	0.150	3	NC	NA	NA	NA	NA	4.3E-05	1.7E-05	1.4E-05	-	9.4E-05	3.1E-05
	1,1-Dichloroethane	0.031	0.20	NA	NA	NA	NA	NA	8.9E-06	3.5E-06	4.4E-05	-	1.9E-05	9.7E-05
	1,1-Dichloroethene	0.031	0.057	NA	NA	NA	NA	NA	8.9E-06	3.5E-06	1.6E-04	-	1.9E-05	3.4E-04
	1,2-Dichloroethane	0.078	0.001	0.091	NA	NA	NA	NA	2.2E-05	8.9E-06	1.6E-02	8.1E-07	4.9E-05	3.5E-02
	Chloroethane	0.031	2.90	0.003	NA	NA	NA	NA	8.9E-06	3.5E-06	3.1E-06	1.0E-08	1.9E-05	6.7E-06
	cis-1,2-Dichloroethene	0.031	0.01	NC	NA	NA	NA	NA	8.9E-06	3.5E-06	8.9E-04	-	1.9E-05	1.9E-03
	Tetrachloroethene	3.000	0.017	0.021	NA	NA	NA	NA	8.6E-04	3.4E-04	5.0E-02	7.2E-06	1.9E-03	1.1E-01
	trans-1,2-Dichloroethene	0.031	0.02	NA	NA	NA	NA	NA	8.9E-06	3.5E-06	4.4E-04	-	1.9E-05	9.7E-04
	Trichloroethene	0.130	0.01	0.089	NA	NA	NA	NA	3.7E-05	1.5E-05	3.7E-03	1.3E-06	8.1E-05	8.1E-03
	Vinyl chloride	0.031	0.029	0.031	NA	NA	NA	NA	8.9E-06	3.5E-06	3.1E-04	1.1E-07	1.9E-05	6.8E-04
3205-YE	1,1,1-Trichloroethane	1.400	3	NC	NA	NA	NA	NA	4.0E-04	1.6E-04	1.3E-04	-	8.8E-04	2.9E-04
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.020	0.057	NA	NA	NA	NA	NA	5.7E-06	2.3E-06	1.0E-04	-	1.3E-05	2.2E-04

					Cadet Site Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)	Risk
Site Name	Analyte	RME ($\mu g/m^3$)	RfDi (mg/kg-d)	CSFi $(mg/kg\text{-}d)^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	NC
	1,2-Dichloroethane	0.150	0.001	0.091	NA	NA	NA	NA	4.3E-05	1.7E-05	3.1E-02	1.6E-06	9.4E-05	6.7E-02
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.370	0.017	0.021	NA	NA	NA	NA	1.1E-04	4.2E-05	6.2E-03	8.9E-07	2.3E-04	1.4E-02
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.690	0.01	0.089	NA	NA	NA	NA	2.0E-04	7.9E-05	2.0E-02	7.0E-06	4.3E-04	4.3E-02
	Vinyl chloride	0.007	0.029	0.031	NA	NA	NA	NA	1.9E-06	7.5E-07	6.6E-05	2.3E-08	4.1E-06	1.4E-04
3209-WE	1,1,1-Trichloroethane	0.250	3	NC	NA	NA	NA	NA	7.1E-05	2.9E-05	2.4E-05	-	1.6E-04	5.2E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.065	0.057	NA	NA	NA	NA	NA	1.9E-05	7.4E-06	3.3E-04	-	4.1E-05	7.1E-04
	1,2-Dichloroethane	0.320	0.001	0.091	NA	NA	NA	NA	9.1E-05	3.7E-05	6.5E-02	3.3E-06	2.0E-04	1.4E-01
	Chloroethane	0.130	2.90	0.003	NA	NA	NA	NA	3.7E-05	1.5E-05	1.3E-05	4.3E-08	8.1E-05	2.8E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	3.500	0.017	0.021	NA	NA	NA	NA	1.0E-03	4.0E-04	5.9E-02	8.4E-06	2.2E-03	1.3E-01
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.250	0.01	0.089	NA	NA	NA	NA	7.1E-05	2.9E-05	7.1E-03	2.5E-06	1.6E-04	1.6E-02
	Vinyl chloride	0.031	0.029	0.031	NA	NA	NA	NA	8.9E-06	3.5E-06	3.1E-04	1.1E-07	1.9E-05	6.8E-04
3302-UN	1,1,1-Trichloroethane	0.110	3	NC	NA	NA	NA	NA	3.1E-05	1.3E-05	1.0E-05	-	6.9E-05	2.3E-05
	1,1-Dichloroethane	0.017	0.20	NA	NA	NA	NA	NA	4.7E-06	1.9E-06	2.4E-05	-	1.0E-05	5.2E-05
	1,1-Dichloroethene	0.200	0.057	NA	NA	NA	NA	NA	5.7E-05	2.3E-05	1.0E-03	-	1.3E-04	2.2E-03
	1,2-Dichloroethane	0.066	0.001	0.091	NA	NA	NA	NA	1.9E-05	7.5E-06	1.3E-02	6.9E-07	4.1E-05	2.9E-02
	Chloroethane	0.017	2.90	0.003	NA	NA	NA	NA	4.7E-06	1.9E-06	1.6E-06	5.5E-09	1.0E-05	3.6E-06
	cis-1,2-Dichloroethene	0.017	0.01	NC	NA	NA	NA	NA	4.7E-06	1.9E-06	4.7E-04	-	1.0E-05	1.0E-03
	Tetrachloroethene	0.530	0.017	0.021	NA	NA	NA	NA	1.5E-04	6.1E-05	8.9E-03	1.3E-06	3.3E-04	1.9E-02
	trans-1,2-Dichloroethene	0.017	0.02	NA	NA	NA	NA	NA	4.7E-06	1.9E-06	2.4E-04	-	1.0E-05	5.2E-04
	Trichloroethene	0.055	0.01	0.089	NA	NA	NA	NA	1.6E-05	6.3E-06	1.6E-03	5.6E-07	3.4E-05	3.4E-03
	Vinyl chloride	0.017	0.029	0.031	NA	NA	NA	NA	4.7E-06	1.9E-06	1.7E-04	5.8E-08	1.0E-05	3.6E-04
3304-XA	1,1,1-Trichloroethane	0.140	3	NC	NA	NA	NA	NA	4.0E-05	1.6E-05	1.3E-05	-	8.8E-05	2.9E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.013	0.057	NA	NA	NA	NA	NA	3.7E-06	1.5E-06	6.5E-05	-	8.1E-06	1.4E-04
	1,2-Dichloroethane	0.120	0.001	0.091	NA	NA	NA	NA	3.4E-05	1.4E-05	2.4E-02	1.2E-06	7.5E-05	5.4E-02
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.120	0.017	0.021	NA	NA	NA	NA	3.4E-05	1.4E-05	2.0E-03	2.9E-07	7.5E-05	4.4E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.062	0.01	0.089	NA	NA	NA	NA	1.8E-05	7.1E-06	1.8E-03	6.3E-07	3.9E-05	3.9E-03
	Vinyl chloride	0.006	0.029	0.031	NA	NA	NA	NA	1.8E-06	7.2E-07	6.3E-05	2.2E-08	3.9E-06	1.4E-04
3407-YE	1,1,1-Trichloroethane	0.160	3	NC	NA	NA	NA	NA	4.6E-05	1.8E-05	1.5E-05	-	1.0E-04	3.3E-05
	1,1-Dichloroethane	0.040	0.20	NA	NA	NA	NA	NA	1.1E-05	4.6E-06	5.7E-05	-	2.5E-05	1.3E-04
	1,1-Dichloroethene	0.022	0.057	NA	NA	NA	NA	NA	6.3E-06	2.5E-06	1.1E-04	-	1.4E-05	2.4E-04
	1,2-Dichloroethane	0.190	0.001	0.091	NA	NA	NA	NA	5.4E-05	2.2E-05	3.9E-02	2.0E-06	1.2E-04	8.5E-02
	Chloroethane	0.060	2.90	0.003	NA	NA	NA	NA	1.7E-05	6.9E-06	5.9E-06	2.0E-08	3.8E-05	1.3E-05
	cis-1,2-Dichloroethene	0.028	0.01	NC	NA	NA	NA	NA	8.0E-06	3.2E-06	8.0E-04	-	1.8E-05	1.8E-03
	Tetrachloroethene	0.180	0.017	0.021	NA	NA	NA	NA	5.1E-05	2.1E-05	3.0E-03	4.3E-07	1.1E-04	6.6E-03
	trans-1,2-Dichloroethene	0.028	0.02	NA	NA	NA	NA	NA	8.0E-06	3.2E-06	4.0E-04	-	1.8E-05	8.8E-04
	Trichloroethene	0.170	0.01	0.089	NA	NA	NA	NA	4.9E-05	1.9E-05	4.9E-03	1.7E-06	1.1E-04	1.1E-02
	Vinyl chloride	0.010	0.029	0.031	NA	NA	NA	NA	2.9E-06	1.1E-06	1.0E-04	3.5E-08	6.3E-06	2.2E-04

Notes

C - Cancer

NA - This location is not applicable to this receptor group.

NC - Noncancer

- - No samples contained detected concentrations of this contaminant

Table 22. Cumulative Risk Estimation for Indoor Air
Cadet Manufacturing Company
Port of Vancouver, Washington

Site Name	Cadet Site Worker		NFVN Adult Resident		NFVN Child Resident
	Risk		Risk		Risk
	NC	C	NC	C	NC
Cadet Building	2.8E-01	5.4E-06	NA	NA	NA
1903 W 27th St	NA	NA	2.0E-02	2.7E-06	4.3E-02
1903 W 28th St	NA	NA	3.4E-02	4.7E-06	7.5E-02
1927 W 27th St	NA	NA	3.6E-01	3.6E-05	7.8E-01
1927 W 28th St	NA	NA	6.6E-02	1.2E-05	1.5E-01
2102 W 27th St	NA	NA	5.3E-01	4.0E-05	1.1E+00
2102 W 28th St	NA	NA	1.5E-02	9.3E-07	3.2E-02
2103 W 28th St	NA	NA	4.6E-01	1.2E-04	1.0E+00
2104 W 27th St	NA	NA	5.7E-02	8.1E-06	1.3E-01
2104 W 28th St	NA	NA	4.6E-02	6.1E-06	1.0E-01
2105 W 27th St	NA	NA	7.1E-02	5.8E-06	1.6E-01
2105 W 28th St	NA	NA	1.7E-01	2.7E-05	3.8E-01
2106 W 27th St	NA	NA	1.1E-02	3.1E-06	2.4E-02
2106 W 28th St	NA	NA	6.2E-02	5.6E-06	1.3E-01
2107 W 27th St	NA	NA	1.5E-01	3.2E-05	3.2E-01
2107 W 28th St	NA	NA	5.8E-02	5.2E-06	1.3E-01
2109 W 27th St	NA	NA	9.6E-02	1.8E-05	2.1E-01
2109 W 28th St	NA	NA	9.5E-02	1.1E-05	2.1E-01
2110 W 28th St	NA	NA	3.0E-02	3.2E-06	6.6E-02
2111 W 27th St	NA	NA	6.0E-02	7.4E-06	1.3E-01
2111 W 28th St	NA	NA	1.0E-01	9.8E-06	2.2E-01
2111 W 31st St	NA	NA	1.1E-02	1.2E-06	2.3E-02
2112 W 27th St	NA	NA	4.0E-02	5.6E-06	8.8E-02
2112 W 28th St	NA	NA	1.3E-01	1.3E-05	2.9E-01
2113 W 27th St	NA	NA	8.3E-02	5.0E-06	1.8E-01
2113 W 28th St	NA	NA	1.1E+00	2.7E-04	2.4E+00
2114 W 27th St	NA	NA	3.1E-02	2.7E-06	6.8E-02
2114 W 28th St	NA	NA	5.1E-02	1.0E-05	1.1E-01
2115 W 27th St	NA	NA	5.0E-01	2.8E-05	1.1E+00
2115 W 28th St	NA	NA	6.2E-02	8.3E-06	1.4E-01
2202 W 27th St	NA	NA	3.5E-02	3.6E-06	7.7E-02
2202 W 28th St	NA	NA	1.2E+00	7.0E-05	2.5E+00
2202 W 31st St	NA	NA	4.0E-02	6.3E-06	8.8E-02
2203 W 27th St	NA	NA	2.0E+00	1.3E-04	4.4E+00
2203 W 28th St	NA	NA	7.7E-02	1.5E-05	1.7E-01
2203 W 31st St	NA	NA	4.0E-01	2.3E-05	8.8E-01
2205 W 27th St	NA	NA	4.9E-02	9.1E-06	1.1E-01
2205 W 28th St	NA	NA	4.0E-02	3.1E-06	8.8E-02
2206 W 27th St	NA	NA	4.3E-02	8.8E-06	9.3E-02
2206 W 28th St	NA	NA	1.6E-01	3.3E-05	3.6E-01
2209 W 27th St	NA	NA	1.1E-02	2.4E-06	2.4E-02
2209 W 28th St	NA	NA	4.9E-02	9.3E-06	1.1E-01
2210 W 28th St	NA	NA	2.7E-02	4.1E-06	6.0E-02
2211 W 27th St	NA	NA	1.4E-02	1.5E-06	3.0E-02
2211 W 28th St	NA	NA	6.9E-01	3.6E-05	1.5E+00

Site Name	Cadet Site Worker		NFVN Adult Resident		NFVN Child Resident
	Risk		Risk		Risk
	NC	C	NC	C	NC
2212 W 27th St	NA	NA	1.3E-02	1.8E-06	2.8E-02
2214 W 28th St	NA	NA	2.6E-02	2.3E-06	5.7E-02
2310 W 31st St	NA	NA	3.0E-01	4.1E-05	6.5E-01
2405 W 31st St	NA	NA	2.3E-02	2.1E-06	5.0E-02
2407 W 31st St	NA	NA	1.1E-02	1.4E-06	2.4E-02
2409 W 31st St	NA	NA	1.5E-01	3.6E-05	3.3E-01
2412 W 31st St	NA	NA	1.0E-02	7.2E-07	2.3E-02
2604 Weigel Ave	NA	NA	1.3E+00	1.8E-04	2.8E+00
2607 Weigel Ave	NA	NA	5.2E-02	1.3E-05	1.1E-01
2608 Unander Ave	NA	NA	3.9E-02	5.2E-06	8.4E-02
2608 Weigel Ave	NA	NA	7.4E-02	9.7E-06	1.6E-01
2611 Unander Ave	NA	NA	5.3E-02	7.1E-06	1.2E-01
2702 Weigel Ave	NA	NA	3.8E-02	5.8E-06	8.4E-02
2703 Unander Ave	NA	NA	4.2E-02	6.5E-06	9.2E-02
2703 Weigel Ave	NA	NA	5.8E-02	5.1E-06	1.3E-01
2704 Unander Ave	NA	NA	2.0E-01	1.6E-05	4.5E-01
2704 Weigel Ave	NA	NA	7.5E-02	8.2E-06	1.6E-01
2705 Unander Ave	NA	NA	3.9E-02	8.8E-06	8.5E-02
2706 Weigel Ave	NA	NA	3.0E-01	4.0E-05	6.6E-01
2708 Unander Ave	NA	NA	2.1E-01	1.5E-05	4.7E-01
2709 Unander Ave	NA	NA	8.0E-02	1.5E-05	1.7E-01
2709 Weigel Ave	NA	NA	9.1E-02	2.0E-05	2.0E-01
2710 Weigel Ave	NA	NA	2.6E-01	1.8E-05	5.7E-01
2711 Unander Ave	NA	NA	6.5E-02	9.3E-06	1.4E-01
2712 Weigel Ave	NA	NA	5.1E-02	3.6E-06	1.1E-01
2802 Weigel Ave	NA	NA	6.3E-02	7.1E-06	1.4E-01
2803 Unander Ave	NA	NA	6.0E-02	1.1E-05	1.3E-01
2804 Unander Ave	NA	NA	5.3E-02	3.8E-06	1.2E-01
2804 Weigel Ave	NA	NA	7.0E-02	1.0E-05	1.5E-01
2805 Unander Ave	NA	NA	1.2E+00	9.2E-05	2.5E+00
2806 Weigel Ave	NA	NA	5.1E-02	6.1E-06	1.1E-01
2807 Van Allman Ave	NA	NA	2.0E-02	2.9E-06	4.3E-02
2808 Unander Ave	NA	NA	5.3E-02	5.8E-06	1.2E-01
2808 Weigel Ave	NA	NA	1.3E-01	1.0E-05	2.8E-01
2809 Unander Ave	NA	NA	3.1E-01	7.2E-05	6.7E-01
2809 Weigel Ave	NA	NA	3.0E-02	5.1E-06	6.6E-02
2810 Unander Ave	NA	NA	7.5E-02	8.8E-06	1.6E-01
2810 Weigel Ave	NA	NA	6.4E-02	1.5E-05	1.4E-01
2811 Unander Ave	NA	NA	2.0E-01	1.4E-05	4.4E-01
2812 Weigel Ave	NA	NA	6.0E-02	6.2E-06	1.3E-01
2901 Fruit Valley Rd	NA	NA	9.9E-02	6.3E-06	2.2E-01
2902 Unander Ave	NA	NA	7.9E-02	1.1E-05	1.7E-01
2902 Van Allman Ave	NA	NA	1.8E-02	1.6E-06	3.9E-02
2902 Weigel Ave	NA	NA	4.4E-01	2.3E-05	9.6E-01
2903 Unander Ave	NA	NA	7.3E-02	5.1E-06	1.6E-01
2903 Van Allman Ave	NA	NA	1.9E-02	1.8E-06	4.3E-02
2903 Weigel Ave	NA	NA	1.7E-02	1.6E-06	3.7E-02
2904 Unander Ave	NA	NA	1.7E-02	1.5E-06	3.7E-02
2904 Weigel Ave	NA	NA	1.4E-02	1.2E-06	3.0E-02
2905 Weigel Ave	NA	NA	1.6E-02	1.3E-06	3.5E-02

Site Name	Cadet Site Worker		NFVN Adult Resident		NFVN Child Resident
	Risk		Risk		Risk
	NC	C	NC	C	NC
2907 Unander Ave	NA	NA	4.3E-01	2.8E-05	9.3E-01
2907 Van Allman Ave	NA	NA	4.3E-02	2.7E-06	9.5E-02
2910 Unander Ave	NA	NA	3.1E-01	1.6E-05	6.8E-01
2910 Weigel Ave	NA	NA	3.3E-02	2.2E-06	7.2E-02
2912 Weigel Ave	NA	NA	6.8E-02	9.8E-06	1.5E-01
2913 Unander Ave	NA	NA	2.1E-02	2.7E-06	4.6E-02
2914 Unander Ave	NA	NA	5.8E-02	5.0E-06	1.3E-01
2915 Fruit Valley Rd	NA	NA	1.8E-02	2.3E-06	3.9E-02
2915 Van Allman Ave	NA	NA	2.0E-02	3.0E-06	4.5E-02
3003 Unander Ave	NA	NA	4.3E-02	7.9E-06	9.3E-02
3106 Unander Ave	NA	NA	1.1E-02	1.1E-06	2.4E-02
3106 Yeoman Ave	NA	NA	3.2E-02	3.0E-06	7.0E-02
3107 Yeoman Ave	NA	NA	2.5E-01	7.8E-05	5.4E-01
3110 Yeoman Ave	NA	NA	2.5E-01	1.6E-05	5.5E-01
3112 Unander Ave	NA	NA	1.5E-01	1.8E-05	3.2E-01
3112 Weigel Ave	NA	NA	3.5E-01	2.4E-05	7.6E-01
3112 Yeoman Ave	NA	NA	2.5E-02	2.8E-06	5.5E-02
3114 Weigel Ave	NA	NA	3.5E-02	4.6E-06	7.6E-02
3116 Unander Ave	NA	NA	4.6E-02	3.6E-06	1.0E-01
3116 Weigel Ave	NA	NA	4.2E-02	3.3E-06	9.2E-02
3116 Yeoman Ave	NA	NA	4.6E-02	5.3E-06	1.0E-01
3117 Xavier Ave	NA	NA	7.2E-02	9.5E-06	1.6E-01
3205 Yeoman Ave	NA	NA	5.8E-02	9.5E-06	1.3E-01
3209 Weigel Ave	NA	NA	1.3E-01	1.4E-05	2.9E-01
3302 Unander Ave	NA	NA	2.6E-02	2.6E-06	5.7E-02
3304 Xavier Ave	NA	NA	3.0E-02	2.2E-06	6.5E-02
3407 Yeoman Ave	NA	NA	4.8E-02	4.2E-06	1.1E-01

Notes

C - Cancer

NA - This location is not applicable to this receptor group.

NC - Noncancer

Table 23. Exposure Quantification and Risk Estimation for Outdoor Air

Cadet Manufacturing Company

Port of Vancouver, Washington

					Cadet Site Worker				Cadet Site Excavation Worker				NFVN Adult Resident				NFVN Child Resident	
					Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Inhalation Dose (mg/kg-d)		Risk		Dose (mg/kg-d)	Risk
Location Name	Analyte	RME (μg/m^3)	RfDi (mg/kg-d)	CSFi (mg/kg-d)$^{-1}$	NC	C	NC	C	NC	C	NC	C	NC	C	NC	C	NC	NC
Cadet Site Area	1,1,1-Trichloroethane	0.106	3.000	NC	1.51E-06	4.03E-07	5.04E-07	-	2.48E-06	3.31E-08	8.27E-07	-	2.52E-06	1.01E-06	8.40E-07	-	1.93E-05	6.43E-06
	1,1-Dichloroethane	0.750	0.200	NA	1.07E-05	2.86E-06	5.37E-05	-	1.76E-05	2.35E-07	8.81E-05	-	1.79E-05	7.16E-06	8.95E-05	-	1.37E-04	6.84E-04
	1,1-Dichloroethene	0.038	0.057	NA	5.44E-07	1.45E-07	9.54E-06	-	8.92E-07	1.19E-08	1.57E-05	-	9.07E-07	3.63E-07	1.59E-05	-	6.94E-06	1.22E-04
	1,2-Dichloroethane	0.232	0.001	0.091	3.32E-06	8.86E-07	2.37E-03	8.06E-08	5.45E-06	7.26E-08	3.89E-03	6.61E-09	5.53E-06	2.21E-06	3.95E-03	2.01E-07	4.23E-05	3.02E-02
	Chloroethane	0.250	2.900	0.003	3.58E-06	9.54E-07	1.23E-06	2.77E-09	5.87E-06	7.83E-08	2.02E-06	2.27E-10	5.96E-06	2.39E-06	2.06E-06	6.92E-09	4.56E-05	1.57E-05
	cis-1,2-Dichloroethene	0.750	0.010	NC	1.07E-05	2.86E-06	1.07E-03	-	1.76E-05	2.35E-07	1.76E-03	-	1.79E-05	7.16E-06	1.79E-03	-	1.37E-04	1.37E-02
	Tetrachloroethene	0.209	0.017	0.021	2.99E-06	7.98E-07	1.76E-04	1.68E-08	4.91E-06	6.54E-08	2.89E-04	1.37E-09	4.99E-06	1.99E-06	2.93E-04	4.19E-08	3.81E-05	2.24E-03
	trans-1,2-Dichloroethene	0.750	0.020	NA	1.07E-05	2.86E-06	5.37E-04	-	1.76E-05	2.35E-07	8.81E-04	-	1.79E-05	7.16E-06	8.95E-04	-	1.37E-04	6.84E-03
	Trichloroethene	0.136	0.010	0.089	1.94E-06	5.18E-07	1.94E-04	4.61E-08	3.19E-06	4.25E-08	3.19E-04	3.78E-09	3.24E-06	1.29E-06	3.24E-04	1.15E-07	2.48E-05	2.48E-03
	Vinyl Chloride	0.150	0.029	0.031	2.15E-06	5.73E-07	7.51E-05	1.76E-08	3.52E-06	4.70E-08	1.23E-04	1.45E-09	3.58E-06	1.43E-06	1.25E-04	4.41E-08	2.74E-05	9.58E-04
				Cumulative Risk =			4.49E-03	1.64E-07			7.37E-03	1.34E-08			7.49E-03	4.10E-07		5.73E-02

Notes

NA - Not available

NC - Noncancer

C - Cancer

mg/kg-d - Milligrams per kilogram per day

μg/m^3 - Micrograms per cubic meter

Table 24. Cumulative Risk Characterization for all Pathways and Human Receptors

Cadet Manufacturing Company
Port of Vancouver, Washington

	Cadet Site Worker				Cadet Site Excavation Worker				NFVN Adult Resident				NFVN Child Resident	
	Cumulative Noncancer Risks (HI)		Cumulative Cancer Risks (ELCR)		Cumulative Noncancer Risks (HI)		Cumulative Cancer Risks (ELCR)		Cumulative Noncancer Risks (HI)		Cumulative Cancer Risks (ELCR)		Cumulative Noncancer Risks (HI)	
Media (Location)	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Groundwater (measured)														
Cadet Site Wells	2.8E-03	2.5E+00	4.8E-07	5.2E-04	4.4E-04	3.8E-01	3.7E-09	4.0E-06	NA	NA	NA	NA	NA	NA
NFVN Site Wells	NA	NA	NA	NA	NA	NA	NA	NA	4.9E-03	9.8E-01	1.2E-06	2.9E-04	1.0E-02	2.1E+00
Soil (measured)														
Cadet Site Area	4.3E-11	4.3E-11	2.1E-15	2.1E-15	6.2E-09	6.2E-09	6.4E-15	6.4E-15	1.0E-10	1.0E-10	7.0E-15	7.0E-15	8.0E-10	8.0E-10
Indoor Air (measured)														
Cadet Facility	2.8E-01	2.8E-01	5.4E-06	5.4E-06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NFVN Residences	NA	NA	NA	NA	NA	NA	NA	NA	1.0E-02	2.0E+00	7.2E-07	2.7E-04	2.3E-02	4.4E+00
Outdoor Air (measured)														
Cadet Site Area	4.5E-03	4.5E-03	1.6E-07	1.6E-07	7.4E-03	7.4E-03	1.3E-08	1.3E-08	7.5E-03	7.5E-03	4.1E-07	4.1E-07	5.7E-02	5.7E-02
Cumulative - All Pathways	2.9E-01	2.8E+00	6.1E-06	5.2E-04	7.8E-03	3.9E-01	1.7E-08	4.0E-06	2.3E-02	3.0E+00	2.3E-06	5.6E-04	9.0E-02	6.6E+00
Cumulative - No Groundwater	2.9E-01	2.9E-01	5.6E-06	5.6E-06	7.4E-03	7.4E-03	1.3E-08	1.3E-08	1.8E-02	2.0E+00	1.1E-06	2.7E-04	8.0E-02	4.5E+00

Notes

NA - Location not applicable to this receptor group.
NFVN - North Fruit Valley Neighborhood

Table 25. Simplified Terrestrial Ecological Evaluation

Cadet Manufacturing Company
Port of Vancouver, Washington

Contaminant	Log K_{ow} [1]	Concentration at Cadet Site (mg/kg)	LOAEL (mg/kg-d) [2]	Test species	Estimated LOAEL (mg/kg-d) [2] Shrew	Robin [3]	Vole	Ecological Indicator Soil Concentration (mg/kg) [4] Mammalian Predator (Shrew)	Avian Predator (Robin)	Mammalian Herbivore (Vole)
1,1,1-Trichloroethane	2.49	0.270	NA	Mouse	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	1.86	0.270	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	1.25	0.250	50	Rat	109.9	50	84.0	103	95	36
Tetrachloroethene	3.40	0.982	7	Mouse	8.3	7	6.4	8	13	45
Trichloroethene	2.61	3.109	7	Mouse	8.3	7	6.4	8	13	16

Notes

LOAEL - Lowest observed adverse effect level.

NA - Not available

[1] Values obtained from the Hazardous Substances Databank (HSDB) (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB).

[2] Values obtained from *Toxicological Benchmarks for Wildlife: 1996 Revision. Oak Ridge National Laboroatory, 1996* . (ORNL 1996)

[3] No toxicity values for avian species were available, therefore a mammalian species LOAEL was used as a surrogate for avian species.

[4] Ecological indicator soil concentrations calculated based on equations and assumptions present in Table 749-4 of MTCA (Ecology 2005).