APPENDIX A

DIFFUSION SAMPLING DATA

Acronyms for Appendix A tables:

DL	=	detection limit
EPA	=	Environmental Protection Agency
ft bgs	=	feet below ground surface
J	=	estimated value
MW	=	Monitoring Well
NS	=	normal sample
QA	=	Quality Assurance
QESS	=	Quanterra Environmental Services
<QL	=	less than Quantitation Limit
RAS	=	Radian Analytical Services
µg/L	=	micrograms per liter

Table A.1. MW-136 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-136A-NS	231.5	1,1-Dichloroethane	1.79	µg/L			0.0588	RAS
MW-136B-NS	233	1,1-Dichloroethane	1.74	µg/L			0.0588	RAS
MW-136B-NS	233	1,1-Dichloroethane	1.5	µg/L			1	QESS
MW-136C-NS	234.5	1,1-Dichloroethane	1.77	µg/L			0.0588	RAS
MW-136D-NS	236	1,1-Dichloroethane	1.73	µg/L			0.0588	RAS
MW-136D-NS	236	1,1-Dichloroethane	1.5	µg/L			1	QESS
MW-136E-NS	237.5	1,1-Dichloroethane	1.72	µg/L			0.0588	RAS
MW-136F-NS	239	1,1-Dichloroethane	1.74	µg/L			0.0588	RAS
MW-136G-NS	240.5	1,1-Dichloroethane	1.78	µg/L			0.0588	RAS
MW-136H-NS	242	1,1-Dichloroethane	1.76	µg/L			0.0588	RAS
MW-136I-NS	243.5	1,1-Dichloroethane	1.79	µg/L			0.0588	RAS
MW-136A-NS	231.5	1,1-Dichloroethene	0.277	µg/L	<QL	J	0.0819	RAS
MW-136B-NS	233	1,1-Dichloroethene	0.226	µg/L	<QL	J	0.0819	RAS
MW-136C-NS	234.5	1,1-Dichloroethene	0.25	µg/L	<QL	J	0.0819	RAS
MW-136D-NS	236	1,1-Dichloroethene	0.229	µg/L	<QL	J	0.0819	RAS
MW-136E-NS	237.5	1,1-Dichloroethene	0.26	µg/L	<QL	J	0.0819	RAS
MW-136F-NS	239	1,1-Dichloroethene	0.256	µg/L	<QL	J	0.0819	RAS
MW-136G-NS	240.5	1,1-Dichloroethene	0.241	µg/L	<QL	J	0.0819	RAS
MW-136H-NS	242	1,1-Dichloroethene	0.252	µg/L	<QL	J	0.0819	RAS
MW-136I-NS	243.5	1,1-Dichloroethene	0.26	µg/L	<QL	J	0.0819	RAS
MW-136B-NS	233	Chloroform	0.0845	µg/L	<QL	J	0.06	RAS
MW-136C-NS	234.5	Chloroform	0.0951	µg/L	<QL	J	0.06	RAS
MW-136E-NS	237.5	Chloroform	0.0923	µg/L	<QL	J	0.06	RAS
MW-136F-NS	239	Chloroform	0.0964	µg/L	<QL	J	0.06	RAS
MW-136G-NS	240.5	Chloroform	0.0976	µg/L	<QL	J	0.06	RAS
MW-136H-NS	242	Chloroform	0.0948	µg/L	<QL	J	0.06	RAS
MW-136I-NS	243.5	Chloroform	0.0982	µg/L	<QL	J	0.06	RAS
MW-136A-NS	231.5	*cis*-1,2-Dichloroethene	0.599	µg/L	<QL	J	0.0407	RAS
MW-136B-NS	233	*cis*-1,2-Dichloroethene	0.622	µg/L	<QL	J	0.0407	RAS
MW-136B-NS	233	*cis*-1,2-Dichloroethene	0.58	µg/L	<QL	J	1	QESS
MW-136C-NS	234.5	*cis*-1,2-Dichloroethene	0.572	µg/L	<QL	J	0.0407	RAS
MW-136D-NS	236	*cis*-1,2-Dichloroethene	0.608	µg/L	<QL	J	0.0407	RAS
MW-136D-NS	236	*cis*-1,2-Dichloroethene	0.58	µg/L	<QL	J	1	QESS
MW-136E-NS	237.5	*cis*-1,2-Dichloroethene	0.58	µg/L	<QL	J	0.0407	RAS
MW-136F-NS	239	*cis*-1,2-Dichloroethene	0.581	µg/L	<QL	J	0.0407	RAS
MW-136G-NS	240.5	*cis*-1,2-Dichloroethene	0.606	µg/L	<QL	J	0.0407	RAS
MW-136H-NS	242	*cis*-1,2-Dichloroethene	0.572	µg/L	<QL	J	0.0407	RAS
MW-136I-NS	243.5	*cis*-1,2-Dichloroethene	0.63	µg/L	<QL	J	0.0407	RAS
MW-136B-NS	233	Naphthalene	0.16	µg/L	<QL	J	1	QESS
MW-136D-NS	236	Naphthalene	0.19	µg/L	<QL	J	1	QESS
MW-136B-NS	233	Toluene	0.114	µg/L	<QL	J	0.0645	RAS
MW-136H-NS	242	Toluene	0.11	µg/L	<QL	J	0.0645	RAS
MW-136A-NS	231.5	Trichloroethene	9.94	µg/L			0.0499	RAS
MW-136B-NS	233	Trichloroethene	9.75	µg/L			0.0499	RAS
MW-136B-NS	233	Trichloroethene	8.6	µg/L			1	QESS
MW-136C-NS	234.5	Trichloroethene	10	µg/L			0.0499	RAS
MW-136D-NS	236	Trichloroethene	9.49	µg/L			0.0499	RAS

Table A.1. MW-136 Diffusion Sampler Analytical Results (continued)

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-136D-NS	236	Trichloroethene	8.4	µg/L			1	QESS
MW-136E-NS	237.5	Trichloroethene	9.97	µg/L			0.0499	RAS
MW-136F-NS	239	Trichloroethene	9.76	µg/L			0.0499	RAS
MW-136G-NS	240.5	Trichloroethene	10.1	µg/L			0.0499	RAS
MW-136H-NS	242	Trichloroethene	9.55	µg/L			0.0499	RAS
MW-136I-NS	243.5	Trichloroethene	9.91	µg/L			0.0499	RAS

Table A.2. MW-148 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-148A-NS	290	*cis*-1,2-Dichloroethene	4.94	µg/L			0.0595	RAS
MW-148B-NS	291.5	*cis*-1,2-Dichloroethene	5.01	µg/L			0.0595	RAS
MW-148C-NS	293	*cis*-1,2-Dichloroethene	4.84	µg/L			0.0595	RAS
MW-148D-NS	294.5	*cis*-1,2-Dichloroethene	9.09	µg/L			0.0595	RAS
MW-148E-NS	296	*cis*-1,2-Dichloroethene	6.95	µg/L			0.0595	RAS
MW-148A-NS	290	Trichloroethene	13.5	µg/L			0.0929	RAS
MW-148B-NS	291.5	Trichloroethene	13.4	µg/L			0.0929	RAS
MW-148C-NS	293	Trichloroethene	12.8	µg/L			0.0929	RAS
MW-148D-NS	294.5	Trichloroethene	24.6	µg/L			0.0929	RAS
MW-148E-NS	296	Trichloroethene	18.9	µg/L			0.0929	RAS

Table A.3. MW-154 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-154A-NS	258.7	Carbon tetrachloride	0.646	µg/L	<QL	J	0.0962	RAS
MW-154B-NS	260.2	Carbon tetrachloride	0.936	µg/L	<QL	J	0.0962	RAS
MW-154C-NS	261.7	Carbon tetrachloride	0.717	µg/L	<QL	J	0.0962	RAS
MW-154D-NS	263.2	Carbon tetrachloride	0.736	µg/L	<QL	J	0.0962	RAS
MW-154E-NS	264.7	Carbon tetrachloride	0.641	µg/L	<QL	J	0.0962	RAS
MW-154A-NS	258.7	Chloroform	0.806	µg/L	<QL	J	0.0424	RAS
MW-154B-NS	260.2	Chloroform	1.27	µg/L			0.0424	RAS
MW-154C-NS	261.7	Chloroform	0.895	µg/L	<QL	J	0.0424	RAS
MW-154D-NS	263.2	Chloroform	0.927	µg/L	<QL	J	0.0424	RAS
MW-154E-NS	264.7	Chloroform	0.804	µg/L	<QL	J	0.0424	RAS
MW-154A-NS	258.7	*cis*-1,2-Dichloroethene	1.57	µg/L			0.0595	RAS
MW-154B-NS	260.2	*cis*-1,2-Dichloroethene	2.53	µg/L			0.0595	RAS
MW-154C-NS	261.7	*cis*-1,2-Dichloroethene	1.79	µg/L			0.0595	RAS
MW-154D-NS	263.2	*cis*-1,2-Dichloroethene	1.85	µg/L			0.0595	RAS
MW-154E-NS	264.7	*cis*-1,2-Dichloroethene	1.64	µg/L			0.0595	RAS
MW-154A-NS	258.7	Trichloroethene	20	µg/L			0.0929	RAS
MW-154B-NS	260.2	Trichloroethene	31.5	µg/L			0.0929	RAS
MW-154C-NS	261.7	Trichloroethene	22.1	µg/L			0.0929	RAS
MW-154D-NS	263.2	Trichloroethene	22.9	µg/L			0.0929	RAS
MW-154E-NS	264.7	Trichloroethene	20.4	µg/L			0.0929	RAS

Table A.4. MW-155 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-155A-NS	117.5	1,1-Dichloroethane	0.271	µg/L	<QL	J	0.0588	RAS
MW-155B-NS	119	1,1-Dichloroethane	0.349	µg/L	<QL	J	0.0588	RAS
MW-155C-NS	120.5	1,1-Dichloroethane	0.514	µg/L	<QL	J	0.0588	RAS
MW-155D-NS	122	1,1-Dichloroethane	0.486	µg/L	<QL	J	0.0588	RAS
MW-155D-NS	122	1,1-Dichloroethane	0.42	µg/L	<QL	J	1	QESS
MW-155E-NS	123.5	1,1-Dichloroethane	0.771	µg/L	<QL	J	0.0588	RAS
MW-155A-NS	117.5	1,1-Dichloroethene	0.834	µg/L	<QL	J	0.0819	RAS
MW-155B-NS	119	1,1-Dichloroethene	1.28	µg/L			0.0819	RAS
MW-155C-NS	120.5	1,1-Dichloroethene	1.74	µg/L			0.0819	RAS
MW-155D-NS	122	1,1-Dichloroethene	1.54	µg/L			0.0819	RAS
MW-155D-NS	122	1,1-Dichloroethene	1.6	µg/L			1	QESS
MW-155E-NS	123.5	1,1-Dichloroethene	2.94	µg/L			0.0819	RAS
MW-155A-NS	117.5	1,2-Dichloroethane	0.194	µg/L	<QL	J	0.0408	RAS
MW-155B-NS	119	1,2-Dichloroethane	0.229	µg/L	<QL	J	0.0408	RAS
MW-155C-NS	120.5	1,2-Dichloroethane	0.249	µg/L	<QL	J	0.0408	RAS
MW-155D-NS	122	1,2-Dichloroethane	0.26	µg/L	<QL	J	0.0408	RAS
MW-155D-NS	122	1,2-Dichloroethane	0.26	µg/L	<QL	J	1	QESS
MW-155E-NS	123.5	1,2-Dichloroethane	0.324	µg/L	<QL	J	0.0408	RAS
MW-155A-NS	117.5	Chloroform	0.642	µg/L	<QL	J	0.06	RAS
MW-155B-NS	119	Chloroform	0.638	µg/L	<QL	J	0.06	RAS
MW-155C-NS	120.5	Chloroform	0.671	µg/L	<QL	J	0.06	RAS
MW-155D-NS	122	Chloroform	0.661	µg/L	<QL	J	0.06	RAS
MW-155E-NS	123.5	Chloroform	0.85	µg/L	<QL	J	0.06	RAS
MW-155A-NS	117.5	*cis*-1,2-Dichloroethene	7.93	µg/L			0.0407	RAS
MW-155B-NS	119	*cis*-1,2-Dichloroethene	9.14	µg/L			0.0407	RAS
MW-155C-NS	120.5	*cis*-1,2-Dichloroethene	10.1	µg/L			0.0407	RAS
MW-155D-NS	122	*cis*-1,2-Dichloroethene	9.87	µg/L			0.0407	RAS
MW-155D-NS	122	*cis*-1,2-Dichloroethene	9.7	µg/L			1	QESS
MW-155E-NS	123.5	*cis*-1,2-Dichloroethene	13.5	µg/L			0.0407	RAS
MW-155D-NS	122	Tetrachloroethene	0.104	µg/L	<QL	J	0.0591	RAS
MW-155A-NS	117.5	Toluene	0.253	µg/L	<QL	J	0.0645	RAS
MW-155B-NS	119	Toluene	0.263	µg/L	<QL	J	0.0645	RAS
MW-155C-NS	120.5	Toluene	0.222	µg/L	<QL	J	0.0645	RAS
MW-155D-NS	122	Toluene	0.203	µg/L	<QL	J	0.0645	RAS
MW-155A-NS	117.5	*trans*-1,2-Dichloroethene	0.0854	µg/L	<QL	J	0.0422	RAS
MW-155B-NS	119	*trans*-1,2-Dichloroethene	0.123	µg/L	<QL	J	0.0422	RAS
MW-155C-NS	120.5	*trans*-1,2-Dichloroethene	0.119	µg/L	<QL	J	0.0422	RAS
MW-155D-NS	122	*trans*-1,2-Dichloroethene	0.0966	µg/L	<QL	J	0.0422	RAS
MW-155E-NS	123.5	*trans*-1,2-Dichloroethene	0.236	µg/L	<QL	J	0.0422	RAS
MW-155A-NS	117.5	Trichloroethene	10.1	µg/L			0.0499	RAS
MW-155B-NS	119	Trichloroethene	12	µg/L			0.0499	RAS
MW-155C-NS	120.5	Trichloroethene	15.7	µg/L			0.0499	RAS
MW-155D-NS	122	Trichloroethene	12.5	µg/L			0.0499	RAS
MW-155D-NS	122	Trichloroethene	11	µg/L			1	QESS
MW-155E-NS	123.5	Trichloroethene	30.5	µg/L			0.0499	RAS

Table A.5. MW-156 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-156A-NS	177.5	1,1,2-Trichloroethane	0.133	µg/L	<QL	J	0.0576	RAS
MW-156B-NS	179	1,1,2-Trichloroethane	0.116	µg/L	<QL	J	0.0576	RAS
MW-156C-NS	180.5	1,1,2-Trichloroethane	0.095	µg/L	<QL	J	0.0576	RAS
MW-156D-NS	182	1,1,2-Trichloroethane	0.0987	µg/L	<QL	J	0.0576	RAS
MW-156A-NS	177.5	1,1-Dichloroethane	1.52	µg/L			0.0588	RAS
MW-156B-NS	179	1,1-Dichloroethane	1.47	µg/L			0.0588	RAS
MW-156C-NS	180.5	1,1-Dichloroethane	1.46	µg/L			0.0588	RAS
MW-156D-NS	182	1,1-Dichloroethane	1.47	µg/L			0.0588	RAS
MW-156E-NS	183.5	1,1-Dichloroethane	1.44	µg/L			0.0588	RAS
MW-156E-NS	183.5	1,1-Dichloroethane	0.98	µg/L	J		2	QESS
MW-156A-NS	177.5	1,1-Dichloroethene	2.48	µg/L			0.0819	RAS
MW-156B-NS	179	1,1-Dichloroethene	2.37	µg/L			0.0819	RAS
MW-156C-NS	180.5	1,1-Dichloroethene	2.47	µg/L			0.0819	RAS
MW-156D-NS	182	1,1-Dichloroethene	2.36	µg/L			0.0819	RAS
MW-156E-NS	183.5	1,1-Dichloroethene	2.3	µg/L			0.0819	RAS
MW-156E-NS	183.5	1,1-Dichloroethene	2.1	µg/L			2	QESS
MW-156A-NS	177.5	1,2-Dichloroethane	0.772	µg/L	<QL	J	0.0408	RAS
MW-156B-NS	179	1,2-Dichloroethane	0.734	µg/L	<QL	J	0.0408	RAS
MW-156C-NS	180.5	1,2-Dichloroethane	0.748	µg/L	<QL	J	0.0408	RAS
MW-156D-NS	182	1,2-Dichloroethane	0.692	µg/L	<QL	J	0.0408	RAS
MW-156E-NS	183.5	1,2-Dichloroethane	0.762	µg/L	<QL	J	0.0408	RAS
MW-156E-NS	183.5	1,2-Dichloroethane	0.67	µg/L	J		2	QESS
MW-156A-NS	177.5	Benzene	0.0682	µg/L	<QL	J	0.0469	RAS
MW-156A-NS	177.5	Chloroform	1.01	µg/L			0.06	RAS
MW-156B-NS	179	Chloroform	0.978	µg/L	<QL	J	0.06	RAS
MW-156C-NS	180.5	Chloroform	0.97	µg/L	<QL	J	0.06	RAS
MW-156D-NS	182	Chloroform	0.97	µg/L	<QL	J	0.06	RAS
MW-156E-NS	183.5	Chloroform	0.979	µg/L	<QL	J	0.06	RAS
MW-156A-NS	177.5	*cis*-1,2-Dichloroethene	23.4	µg/L			0.0407	RAS
MW-156B-NS	179	*cis*-1,2-Dichloroethene	23	µg/L			0.0407	RAS
MW-156C-NS	180.5	*cis*-1,2-Dichloroethene	23.4	µg/L			0.0407	RAS
MW-156D-NS	182	*cis*-1,2-Dichloroethene	22.8	µg/L			0.0407	RAS
MW-156E-NS	183.5	*cis*-1,2-Dichloroethene	22.5	µg/L			0.0407	RAS
MW-156E-NS	183.5	*cis*-1,2-Dichloroethene	20	µg/L			2	QESS
MW-156A-NS	177.5	*trans*-1,2-Dichloroethene	0.396	µg/L	<QL	J	0.0422	RAS
MW-156B-NS	179	*trans*-1,2-Dichloroethene	0.377	µg/L	<QL	J	0.0422	RAS
MW-156C-NS	180.5	*trans*-1,2-Dichloroethene	0.409	µg/L	<QL	J	0.0422	RAS
MW-156D-NS	182	*trans*-1,2-Dichloroethene	0.312	µg/L	<QL	J	0.0422	RAS
MW-156E-NS	183.5	*trans*-1,2-Dichloroethene	0.36	µg/L	<QL	J	0.0422	RAS
MW-156A-NS	177.5	Trichloroethene	72.3	µg/L			0.0499	RAS
MW-156B-NS	179	Trichloroethene	73.2	µg/L			0.0499	RAS
MW-156C-NS	180.5	Trichloroethene	73	µg/L			0.0499	RAS
MW-156D-NS	182	Trichloroethene	72.8	µg/L			0.0499	RAS
MW-156E-NS	183.5	Trichloroethene	71.2	µg/L			0.0499	RAS
MW-156E-NS	183.5	Trichloroethene	64	µg/L			2	QESS

Table A.6. MW-159 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-159A-NS	109	Chloroform	1.02	µg/L			0.0424	RAS
MW-159B-NS	110.5	Chloroform	1.05	µg/L			0.0424	RAS
MW-159C-NS	112	Chloroform	1.01	µg/L			0.0424	RAS
MW-159D-NS	113.5	Chloroform	1.04	µg/L			0.0424	RAS
MW-159E-NS	115	Chloroform	1.02	µg/L			0.0424	RAS
MW-159A-NS	109	*cis*-1,2-Dichloroethene	17.9	µg/L			0.0595	RAS
MW-159B-NS	110.5	*cis*-1,2-Dichloroethene	18	µg/L			0.0595	RAS
MW-159C-NS	112	*cis*-1,2-Dichloroethene	18.3	µg/L			0.0595	RAS
MW-159D-NS	113.5	*cis*-1,2-Dichloroethene	18.2	µg/L			0.0595	RAS
MW-159E-NS	115	*cis*-1,2-Dichloroethene	17.1	µg/L			0.0595	RAS
MW-159A-NS	109	Tetrachloroethene	1.25	µg/L			0.114	RAS
MW-159B-NS	110.5	Tetrachloroethene	1.41	µg/L			0.114	RAS
MW-159C-NS	112	Tetrachloroethene	1.37	µg/L			0.114	RAS
MW-159D-NS	113.5	Tetrachloroethene	1.58	µg/L			0.114	RAS
MW-159E-NS	115	Tetrachloroethene	1.3	µg/L			0.114	RAS
MW-159A-NS	109	Trichloroethene	85.5	µg/L			0.0929	RAS
MW-159B-NS	110.5	Trichloroethene	86	µg/L			0.0929	RAS
MW-159C-NS	112	Trichloroethene	85.5	µg/L			0.0929	RAS
MW-159D-NS	113.5	Trichloroethene	89.8	µg/L			0.0929	RAS
MW-159E-NS	115	Trichloroethene	80.4	µg/L			0.0929	RAS

Table A.7. MW-166 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-166A-NS	239	1,1-Dichloroethane	0.394	µg/L	<QL	J	0.0588	RAS
MW-166B-NS	240.5	1,1-Dichloroethane	0.413	µg/L	<QL	J	0.0588	RAS
MW-166D-NS	243.5	1,1-Dichloroethane	0.414	µg/L	<QL	J	0.0588	RAS
MW-166D-NS	243.5	1,1-Dichloroethane	0.32	µg/L	<QL	J	2	QESS
MW-166E-NS	245	1,1-Dichloroethane	0.447	µg/L	<QL	J	0.0588	RAS
MW-166A-NS	239	1,1-Dichloroethene	0.297	µg/L	<QL	J	0.0819	RAS
MW-166B-NS	240.5	1,1-Dichloroethene	0.298	µg/L	<QL	J	0.0819	RAS
MW-166D-NS	243.5	1,1-Dichloroethene	0.331	µg/L	<QL	J	0.0819	RAS
MW-166E-NS	245	1,1-Dichloroethene	0.331	µg/L	<QL	J	0.0819	RAS
MW-166A-NS	239	1,2-Dichloroethane	0.4	µg/L	<QL	J	0.0408	RAS
MW-166B-NS	240.5	1,2-Dichloroethane	0.434	µg/L	<QL	J	0.0408	RAS
MW-166D-NS	243.5	1,2-Dichloroethane	0.473	µg/L	<QL	J	0.0408	RAS
MW-166E-NS	245	1,2-Dichloroethane	0.423	µg/L	<QL	J	0.0408	RAS
MW-166A-NS	239	Chloroform	0.342	µg/L	<QL	J	0.06	RAS
MW-166B-NS	240.5	Chloroform	0.384	µg/L	<QL	J	0.06	RAS
MW-166D-NS	243.5	Chloroform	0.365	µg/L	<QL	J	0.06	RAS
MW-166E-NS	245	Chloroform	0.368	µg/L	<QL	J	0.06	RAS
MW-166A-NS	239	*cis*-1,2-Dichloroethene	16	µg/L			0.0407	RAS
MW-166B-NS	240.5	*cis*-1,2-Dichloroethene	17.2	µg/L			0.0407	RAS
MW-166D-NS	243.5	*cis*-1,2-Dichloroethene	17.2	µg/L			0.0407	RAS
MW-166D-NS	243.5	*cis*-1,2-Dichloroethene	16	µg/L			2	QESS
MW-166E-NS	245	*cis*-1,2-Dichloroethene	17.3	µg/L			0.0407	RAS
MW-166A-NS	239	*trans*-1,2-Dichloroethene	0.213	µg/L	<QL	J	0.0422	RAS
MW-166B-NS	240.5	*trans*-1,2-Dichloroethene	0.289	µg/L	<QL	J	0.0422	RAS
MW-166D-NS	243.5	*trans*-1,2-Dichloroethene	0.304	µg/L	<QL	J	0.0422	RAS
MW-166E-NS	245	*trans*-1,2-Dichloroethene	0.34	µg/L	<QL	J	0.0422	RAS
MW-166A-NS	239	Trichloroethene	43	µg/L			0.0499	RAS
MW-166B-NS	240.5	Trichloroethene	46.1	µg/L			0.0499	RAS
MW-166D-NS	243.5	Trichloroethene	43.9	µg/L			0.0499	RAS
MW-166D-NS	243.5	Trichloroethene	41	µg/L			2	QESS
MW-166E-NS	245	Trichloroethene	44.6	µg/L			0.0499	RAS

Table A.8. MW-201 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-201A-NS	160	1,4-Dichlorobenzene	0.0819	µg/L	<QL	J	0.0651	RAS
MW-201A-NS	160	Chloroform	0.0996	µg/L	<QL	J	0.06	RAS
MW-201B-NS	161.5	Chloroform	0.0885	µg/L	<QL	J	0.06	RAS
MW-201C-NS	163	Chloroform	0.109	µg/L	<QL	J	0.06	RAS
MW-201D-NS	164.5	Chloroform	0.0994	µg/L	<QL	J	0.06	RAS
MW-201A-NS	160	*cis*-1,2-Dichloroethene	0.503	µg/L	<QL	J	0.0407	RAS
MW-201B-NS	161.5	*cis*-1,2-Dichloroethene	0.532	µg/L	<QL	J	0.0407	RAS
MW-201B-NS	161.5	*cis*-1,2-Dichloroethene	0.51	µg/L	<QL	J	1	QESS
MW-201C-NS	163	*cis*-1,2-Dichloroethene	0.48	µg/L	<QL	J	0.0407	RAS
MW-201D-NS	164.5	*cis*-1,2-Dichloroethene	0.478	µg/L	<QL	J	0.0407	RAS
MW-201E-NS	166	*cis*-1,2-Dichloroethene	0.497	µg/L	<QL	J	0.0407	RAS
MW-201A-NS	160	Trichloroethene	10.1	µg/L			0.0499	RAS
MW-201B-NS	161.5	Trichloroethene	10.2	µg/L			0.0499	RAS
MW-201B-NS	161.5	Trichloroethene	9.1	µg/L			1	QESS
MW-201C-NS	163	Trichloroethene	9.7	µg/L			0.0499	RAS
MW-201D-NS	164.5	Trichloroethene	9.81	µg/L			0.0499	RAS
MW-201E-NS	166	Trichloroethene	9.38	µg/L			0.0499	RAS

Table A.9. MW-206 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-206A-NS	99.1	1,1-Dichloroethane	1.65	µg/L			0.0736	RAS
MW-206B-NS	100.6	1,1-Dichloroethane	3.38	µg/L			0.0736	RAS
MW-206C-NS	102.1	1,1-Dichloroethane	4.06	µg/L			0.0736	RAS
MW-206D-NS	103.6	1,1-Dichloroethane	4.23	µg/L			0.0736	RAS
MW-206E-NS	105.1	1,1-Dichloroethane	4.15	µg/L			0.0736	RAS
MW-206F-NS	106.6	1,1-Dichloroethane	4.1	µg/L			0.0736	RAS
MW-206G-NS	108.1	1,1-Dichloroethane	4.23	µg/L			0.0736	RAS
MW-206H-NS	109.6	1,1-Dichloroethane	4.11	µg/L			0.0736	RAS
MW-206I-NS	111.1	1,1-Dichloroethane	4.35	µg/L			0.0736	RAS
MW-206A-NS	99.1	Chloroform	0.116	µg/L	<QL	J	0.0424	RAS
MW-206B-NS	100.6	Chloroform	0.269	µg/L	<QL	J	0.0424	RAS
MW-206C-NS	102.1	Chloroform	0.32	µg/L	<QL	J	0.0424	RAS
MW-206D-NS	103.6	Chloroform	0.313	µg/L	<QL	J	0.0424	RAS
MW-206E-NS	105.1	Chloroform	0.298	µg/L	<QL	J	0.0424	RAS
MW-206F-NS	106.6	Chloroform	0.269	µg/L	<QL	J	0.0424	RAS
MW-206G-NS	108.1	Chloroform	0.304	µg/L	<QL	J	0.0424	RAS
MW-206H-NS	109.6	Chloroform	0.294	µg/L	<QL	J	0.0424	RAS
MW-206I-NS	111.1	Chloroform	0.308	µg/L	<QL	J	0.0424	RAS
MW-206A-NS	99.1	*cis*-1,2-Dichloroethene	0.565	µg/L	<QL	J	0.0595	RAS
MW-206B-NS	100.6	*cis*-1,2-Dichloroethene	1.17	µg/L			0.0595	RAS
MW-206C-NS	102.1	*cis*-1,2-Dichloroethene	1.5	µg/L			0.0595	RAS
MW-206D-NS	103.6	*cis*-1,2-Dichloroethene	1.58	µg/L			0.0595	RAS
MW-206E-NS	105.1	*cis*-1,2-Dichloroethene	1.6	µg/L			0.0595	RAS
MW-206F-NS	106.6	*cis*-1,2-Dichloroethene	1.54	µg/L			0.0595	RAS
MW-206G-NS	108.1	*cis*-1,2-Dichloroethene	1.59	µg/L			0.0595	RAS
MW-206H-NS	109.6	*cis*-1,2-Dichloroethene	1.5	µg/L			0.0595	RAS
MW-206I-NS	111.1	*cis*-1,2-Dichloroethene	1.63	µg/L			0.0595	RAS
MW-206A-NS	99.1	Trichloroethene	1.65	µg/L			0.0929	RAS
MW-206B-NS	100.6	Trichloroethene	3.35	µg/L			0.0929	RAS
MW-206C-NS	102.1	Trichloroethene	3.78	µg/L			0.0929	RAS
MW-206D-NS	103.6	Trichloroethene	3.9	µg/L			0.0929	RAS
MW-206E-NS	105.1	Trichloroethene	3.71	µg/L			0.0929	RAS
MW-206F-NS	106.6	Trichloroethene	3.6	µg/L			0.0929	RAS
MW-206G-NS	108.1	Trichloroethene	3.65	µg/L			0.0929	RAS
MW-206H-NS	109.6	Trichloroethene	3.52	µg/L			0.0929	RAS
MW-206I-NS	111.1	Trichloroethene	3.73	µg/L			0.0929	RAS

Table A.10. MW-214 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-214A-NS	105.9	1,1-Dichloroethane	21.5	µg/L			0.0588	RAS
MW-214B-NS	107.4	1,1-Dichloroethane	21.6	µg/L			0.0588	RAS
MW-214C-NS	108.9	1,1-Dichloroethane	21.6	µg/L			0.0588	RAS
MW-214D-NS	110.4	1,1-Dichloroethane	21.6	µg/L			0.0588	RAS
MW-214E-NS	111.9	1,1-Dichloroethane	21.5	µg/L			0.0588	RAS
MW-214A-NS	105.9	1,1-Dichloroethene	1.2	µg/L			0.0819	RAS
MW-214B-NS	107.4	1,1-Dichloroethene	1.2	µg/L			0.0819	RAS
MW-214C-NS	108.9	1,1-Dichloroethene	1.23	µg/L			0.0819	RAS
MW-214D-NS	110.4	1,1-Dichloroethene	1.21	µg/L			0.0819	RAS
MW-214E-NS	111.9	1,1-Dichloroethene	1.21	µg/L			0.0819	RAS
MW-214A-NS	105.9	1,2-Dichloroethane	0.119	µg/L	<QL	J	0.0408	RAS
MW-214A-NS	105.9	Carbon tetrachloride	0.165	µg/L	<QL	J	0.0778	RAS
MW-214B-NS	107.4	Carbon tetrachloride	0.144	µg/L	<QL	J	0.0778	RAS
MW-214C-NS	108.9	Carbon tetrachloride	0.165	µg/L	<QL	J	0.0778	RAS
MW-214D-NS	110.4	Carbon tetrachloride	0.163	µg/L	<QL	J	0.0778	RAS
MW-214E-NS	111.9	Carbon tetrachloride	0.175	µg/L	<QL	J	0.0778	RAS
MW-214A-NS	105.9	Chloroform	0.372	µg/L	<QL	J	0.06	RAS
MW-214B-NS	107.4	Chloroform	0.369	µg/L	<QL	J	0.06	RAS
MW-214C-NS	108.9	Chloroform	0.375	µg/L	<QL	J	0.06	RAS
MW-214D-NS	110.4	Chloroform	0.382	µg/L	<QL	J	0.06	RAS
MW-214E-NS	111.9	Chloroform	0.37	µg/L	<QL	J	0.06	RAS
MW-214A-NS	105.9	*cis*-1,2-Dichloroethene	12.3	µg/L			0.0407	RAS
MW-214B-NS	107.4	*cis*-1,2-Dichloroethene	12.3	µg/L			0.0407	RAS
MW-214C-NS	108.9	*cis*-1,2-Dichloroethene	12.2	µg/L			0.0407	RAS
MW-214D-NS	110.4	*cis*-1,2-Dichloroethene	12.5	µg/L			0.0407	RAS
MW-214E-NS	111.9	*cis*-1,2-Dichloroethene	12.6	µg/L			0.0407	RAS
MW-214A-NS	105.9	Freon 113	0.79	µg/L	<QL	J	0.0599	RAS
MW-214B-NS	107.4	Freon 113	0.756	µg/L	<QL	J	0.0599	RAS
MW-214C-NS	108.9	Freon 113	0.714	µg/L	<QL	J	0.0599	RAS
MW-214D-NS	110.4	Freon 113	0.747	µg/L	<QL	J	0.0599	RAS
MW-214E-NS	111.9	Freon 113	0.789	µg/L	<QL	J	0.0599	RAS
MW-214A-NS	105.9	Tetrachloroethene	0.49	µg/L	<QL	J	0.0591	RAS
MW-214B-NS	107.4	Tetrachloroethene	0.416	µg/L	<QL	J	0.0591	RAS
MW-214C-NS	108.9	Tetrachloroethene	0.4	µg/L	<QL	J	0.0591	RAS
MW-214D-NS	110.4	Tetrachloroethene	0.473	µg/L	<QL	J	0.0591	RAS
MW-214E-NS	111.9	Tetrachloroethene	0.49	µg/L	<QL	J	0.0591	RAS
MW-214A-NS	105.9	*trans*-1,2-Dichloroethene	0.188	µg/L	<QL	J	0.0422	RAS
MW-214B-NS	107.4	*trans*-1,2-Dichloroethene	0.221	µg/L	<QL	J	0.0422	RAS
MW-214C-NS	108.9	*trans*-1,2-Dichloroethene	0.229	µg/L	<QL	J	0.0422	RAS
MW-214D-NS	110.4	*trans*-1,2-Dichloroethene	0.203	µg/L	<QL	J	0.0422	RAS
MW-214E-NS	111.9	*trans*-1,2-Dichloroethene	0.2	µg/L	<QL	J	0.0422	RAS
MW-214A-NS	105.9	Trichloroethene	12.1	µg/L			0.0499	RAS
MW-214B-NS	107.4	Trichloroethene	12	µg/L			0.0499	RAS
MW-214C-NS	108.9	Trichloroethene	11.9	µg/L			0.0499	RAS
MW-214D-NS	110.4	Trichloroethene	12.1	µg/L			0.0499	RAS
MW-214E-NS	111.9	Trichloroethene	12.4	µg/L			0.0499	RAS

Table A.11. MW-216 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-216A-NS	232.2	1,1-Dichloroethane	0.342	µg/L	<QL	J	0.0588	RAS
MW-216B-NS	233.7	1,1-Dichloroethane	0.327	µg/L	<QL	J	0.0588	RAS
MW-216C-NS	235.2	1,1-Dichloroethane	0.373	µg/L	<QL	J	0.0588	RAS
MW-216D-NS	236.7	1,1-Dichloroethane	0.376	µg/L	<QL	J	0.0588	RAS
MW-216E-NS	238.2	1,1-Dichloroethane	0.407	µg/L	<QL	J	0.0588	RAS
MW-216A-NS	232.2	1,1-Dichloroethene	0.243	µg/L	<QL	J	0.0819	RAS
MW-216B-NS	233.7	1,1-Dichloroethene	0.247	µg/L	<QL	J	0.0819	RAS
MW-216C-NS	235.2	1,1-Dichloroethene	0.274	µg/L	<QL	J	0.0819	RAS
MW-216D-NS	236.7	1,1-Dichloroethene	0.281	µg/L	<QL	J	0.0819	RAS
MW-216E-NS	238.2	1,1-Dichloroethene	0.313	µg/L	<QL	J	0.0819	RAS
MW-216A-NS	232.2	1,2-Dichloroethane	0.468	µg/L	<QL	J	0.0408	RAS
MW-216B-NS	233.7	1,2-Dichloroethane	0.442	µg/L	<QL	J	0.0408	RAS
MW-216C-NS	235.2	1,2-Dichloroethane	0.445	µg/L	<QL	J	0.0408	RAS
MW-216D-NS	236.7	1,2-Dichloroethane	0.491	µg/L	<QL	J	0.0408	RAS
MW-216E-NS	238.2	1,2-Dichloroethane	0.541	µg/L	<QL	J	0.0408	RAS
MW-216A-NS	232.2	Chloroform	0.277	µg/L	<QL	J	0.06	RAS
MW-216B-NS	233.7	Chloroform	0.292	µg/L	<QL	J	0.06	RAS
MW-216C-NS	235.2	Chloroform	0.277	µg/L	<QL	J	0.06	RAS
MW-216D-NS	236.7	Chloroform	0.317	µg/L	<QL	J	0.06	RAS
MW-216E-NS	238.2	Chloroform	0.347	µg/L	<QL	J	0.06	RAS
MW-216A-NS	232.2	*cis*-1,2-Dichloroethene	16.7	µg/L			0.0407	RAS
MW-216B-NS	233.7	*cis*-1,2-Dichloroethene	16.5	µg/L			0.0407	RAS
MW-216C-NS	235.2	*cis*-1,2-Dichloroethene	17.1	µg/L			0.0407	RAS
MW-216D-NS	236.7	*cis*-1,2-Dichloroethene	19.8	µg/L			0.0407	RAS
MW-216E-NS	238.2	*cis*-1,2-Dichloroethene	21.5	µg/L			0.0407	RAS
MW-216A-NS	232.2	*trans*-1,2-Dichloroethene	0.312	µg/L	<QL	J	0.0422	RAS
MW-216B-NS	233.7	*trans*-1,2-Dichloroethene	0.186	µg/L	<QL	J	0.0422	RAS
MW-216C-NS	235.2	*trans*-1,2-Dichloroethene	0.243	µg/L	<QL	J	0.0422	RAS
MW-216D-NS	236.7	*trans*-1,2-Dichloroethene	0.308	µg/L	<QL	J	0.0422	RAS
MW-216E-NS	238.2	*trans*-1,2-Dichloroethene	0.442	µg/L	<QL	J	0.0422	RAS
MW-216A-NS	232.2	Trichloroethene	37.8	µg/L			0.0499	RAS
MW-216B-NS	233.7	Trichloroethene	36.7	µg/L			0.0499	RAS
MW-216C-NS	235.2	Trichloroethene	38.2	µg/L			0.0499	RAS
MW-216D-NS	236.7	Trichloroethene	43.2	µg/L			0.0499	RAS
MW-216E-NS	238.2	Trichloroethene	46.9	µg/L			0.0499	RAS

Table A.12. MW-218 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-218B-NS	179.5	Chloroform	0.092	µg/L	<QL	J	0.0424	RAS
MW-218A-NS	178	*cis*-1,2-Dichloroethene	1.03	µg/L			0.0595	RAS
MW-218B-NS	179.5	*cis*-1,2-Dichloroethene	1.05	µg/L			0.0595	RAS
MW-218B-NS	179.5	*cis*-1,2-Dichloroethene	0.97	µg/L	<QL	J	1	QESS
MW-218C-NS	181	*cis*-1,2-Dichloroethene	1.08	µg/L			0.0595	RAS
MW-218D-NS	182.5	*cis*-1,2-Dichloroethene	0.986	µg/L	<QL	J	0.0595	RAS
MW-218E-NS	184	*cis*-1,2-Dichloroethene	0.986	µg/L	<QL	J	0.0595	RAS
MW-218B-NS	179.5	Tetrachloroethene	0.177	µg/L	<QL	J	0.114	RAS
MW-218A-NS	178	Trichloroethene	1.44	µg/L			0.0929	RAS
MW-218B-NS	179.5	Trichloroethene	1.47	µg/L			0.0929	RAS
MW-218B-NS	179.5	Trichloroethene	1.2	µg/L			1	QESS
MW-218C-NS	181	Trichloroethene	1.53	µg/L			0.0929	RAS
MW-218D-NS	182.5	Trichloroethene	1.43	µg/L			0.0929	RAS
MW-218E-NS	184	Trichloroethene	1.33	µg/L			0.0929	RAS

Table A.13. MW-235 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-235A-NS	108	1,1-Dichloroethene	0.186	µg/L	<QL	J	0.148	RAS
MW-235B-NS	109.5	1,1-Dichloroethene	0.23	µg/L	<QL	J	0.148	RAS
MW-235C-NS	111	1,1-Dichloroethene	0.197	µg/L	<QL	J	0.148	RAS
MW-235A-NS	108	Carbon tetrachloride	1.64	µg/L			0.137	RAS
MW-235B-NS	109.5	Carbon tetrachloride	1.47	µg/L			0.137	RAS
MW-235C-NS	111	Carbon tetrachloride	1.41	µg/L			0.137	RAS
MW-235D-NS	112.5	Carbon tetrachloride	0.14	µg/L	<QL	J	0.0778	RAS
MW-235A-NS	108	Chloroform	0.513	µg/L	<QL	J	0.158	RAS
MW-235B-NS	109.5	Chloroform	0.55	µg/L	<QL	J	0.158	RAS
MW-235C-NS	111	Chloroform	0.53	µg/L	<QL	J	0.158	RAS
MW-235D-NS	112.5	Chloroform	0.112	µg/L	<QL	J	0.06	RAS
MW-235E-NS	114	Chloroform	0.13	µg/L	<QL	J	0.06	RAS
MW-235A-NS	108	*cis*-1,2-Dichloroethene	0.845	µg/L	<QL	J	0.106	RAS
MW-235B-NS	109.5	*cis*-1,2-Dichloroethene	0.852	µg/L	<QL	J	0.106	RAS
MW-235C-NS	111	*cis*-1,2-Dichloroethene	0.935	µg/L	<QL	J	0.106	RAS
MW-235D-NS	112.5	*cis*-1,2-Dichloroethene	0.351	µg/L	<QL	J	0.0407	RAS
MW-235E-NS	114	*cis*-1,2-Dichloroethene	0.835	µg/L	<QL	J	0.0407	RAS
MW-235A-NS	108	Freon 113	1.46	µg/L			0.169	RAS
MW-235B-NS	109.5	Freon 113	1.32	µg/L			0.169	RAS
MW-235C-NS	111	Freon 113	1.28	µg/L			0.169	RAS
MW-235D-NS	112.5	Freon 113	0.18	µg/L	<QL	J	0.0599	RAS
MW-235E-NS	114	Freon 113	0.118	µg/L	<QL	J	0.0599	RAS
MW-235A-NS	108	Tetrachloroethene	14.4	µg/L			0.142	RAS
MW-235B-NS	109.5	Tetrachloroethene	13.4	µg/L			0.142	RAS
MW-235C-NS	111	Tetrachloroethene	13.5	µg/L			0.142	RAS
MW-235D-NS	112.5	Tetrachloroethene	3.34	µg/L			0.0591	RAS
MW-235E-NS	114	Tetrachloroethene	5.66	µg/L			0.0591	RAS
MW-235-EB		Toluene	0.154	µg/L	<QL	J	0.0645	RAS
MW-235A-NS	108	Trichloroethene	55.7	µg/L			0.161	RAS
MW-235B-NS	109.5	Trichloroethene	57.2	µg/L			0.161	RAS
MW-235C-NS	111	Trichloroethene	66.3	µg/L			0.161	RAS
MW-235D-NS	112.5	Trichloroethene	23.4	µg/L			0.0499	RAS
MW-235E-NS	114	Trichloroethene	63	µg/L			0.0499	RAS

Table A.14. MW-270 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-270A-NS	109.3	1,1-Dichloroethene	0.21	µg/L	<QL	J	0.102	RAS
MW-270B-NS	110.8	1,1-Dichloroethene	0.23	µg/L	<QL	J	0.148	RAS
MW-270C-NS	112.3	1,1-Dichloroethene	0.234	µg/L	<QL	J	0.148	RAS
MW-270D-NS	113.8	1,1-Dichloroethene	0.233	µg/L	<QL	J	0.148	RAS
MW-270E-NS	115.3	1,1-Dichloroethene	0.219	µg/L	<QL	J	0.148	RAS
MW-270A-NS	109.3	1,2-Dichloroethane	0.416	µg/L	<QL	J	0.0349	RAS
MW-270B-NS	110.8	1,2-Dichloroethane	0.436	µg/L	<QL	J	0.123	RAS
MW-270C-NS	112.3	1,2-Dichloroethane	0.419	µg/L	<QL	J	0.123	RAS
MW-270D-NS	113.8	1,2-Dichloroethane	0.395	µg/L	<QL	J	0.123	RAS
MW-270E-NS	115.3	1,2-Dichloroethane	0.416	µg/L	<QL	J	0.123	RAS
MW-270E-NS	115.3	Bromodichloromethane	1.8	µg/L	J	J	10	QESS
MW-270A-NS	109.3	Chloroform	0.533	µg/L	<QL	J	0.0424	RAS
MW-270B-NS	110.8	Chloroform	0.449	µg/L	<QL	J	0.158	RAS
MW-270C-NS	112.3	Chloroform	0.499	µg/L	<QL	J	0.158	RAS
MW-270D-NS	113.8	Chloroform	0.492	µg/L	<QL	J	0.158	RAS
MW-270E-NS	115.3	Chloroform	0.456	µg/L	<QL	J	0.158	RAS
MW-270A-NS	109.3	*cis*-1,2-Dichloroethene	4.49	µg/L			0.0595	RAS
MW-270B-NS	110.8	*cis*-1,2-Dichloroethene	3.8	µg/L			0.106	RAS
MW-270C-NS	112.3	*cis*-1,2-Dichloroethene	4.37	µg/L			0.106	RAS
MW-270D-NS	113.8	*cis*-1,2-Dichloroethene	3.99	µg/L			0.106	RAS
MW-270E-NS	115.3	*cis*-1,2-Dichloroethene	3.97	µg/L			0.106	RAS
MW-270E-NS	115.3	*cis*-1,2-Dichloroethene	4.5	µg/L	J		10	QESS
MW-270A-NS	109.3	Freon 113	1.1	µg/L			0.112	RAS
MW-270B-NS	110.8	Freon 113	0.817	µg/L	<QL	J	0.169	RAS
MW-270C-NS	112.3	Freon 113	0.817	µg/L	<QL	J	0.169	RAS
MW-270D-NS	113.8	Freon 113	0.806	µg/L	<QL	J	0.169	RAS
MW-270E-NS	115.3	Freon 113	0.656	µg/L	<QL	J	0.169	RAS
MW-270A-NS	109.3	Tetrachloroethene	8.25	µg/L			0.114	RAS
MW-270B-NS	110.8	Tetrachloroethene	5.97	µg/L			0.142	RAS
MW-270C-NS	112.3	Tetrachloroethene	6.14	µg/L			0.142	RAS
MW-270D-NS	113.8	Tetrachloroethene	6.23	µg/L			0.142	RAS
MW-270E-NS	115.3	Tetrachloroethene	4.47	µg/L			0.142	RAS
MW-270E-NS	115.3	Tetrachloroethene	4.8	µg/L	J		10	QESS
MW-270A-NS	109.3	Trichloroethene	170	µg/L			0.464	RAS
MW-270B-NS	110.8	Trichloroethene	180	µg/L			1.61	RAS
MW-270C-NS	112.3	Trichloroethene	178	µg/L			1.61	RAS
MW-270D-NS	113.8	Trichloroethene	179	µg/L			1.61	RAS
MW-270E-NS	115.3	Trichloroethene	174	µg/L			1.61	RAS
MW-270E-NS	115.3	Trichloroethene	170	µg/L			10	QESS

Table A.15. MW-271 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-271A-NS	113	1,1-Dichloroethene	0.868	µg/L	<QL	J	0.0819	RAS
MW-271B-NS	114.5	1,1-Dichloroethene	0.305	µg/L	<QL	J	0.0819	RAS
MW-271C-NS	116	1,1-Dichloroethene	0.476	µg/L	<QL	J	0.0819	RAS
MW-271D-NS	117.5	1,1-Dichloroethene	0.278	µg/L	<QL	J	0.0819	RAS
MW-271E-NS	119	1,1-Dichloroethene	0.264	µg/L	<QL	J	0.0819	RAS
MW-271F-NS	120.5	1,1-Dichloroethene	0.269	µg/L	<QL	J	0.0819	RAS
MW-271G-NS	122	1,1-Dichloroethene	0.246	µg/L	<QL	J	0.0819	RAS
MW-271B-NS	114.5	Carbon tetrachloride	0.181	µg/L	<QL	J	0.0778	RAS
MW-271C-NS	116	Carbon tetrachloride	0.156	µg/L	<QL	J	0.0778	RAS
MW-271D-NS	117.5	Carbon tetrachloride	0.18	µg/L	<QL	J	0.0778	RAS
MW-271E-NS	119	Carbon tetrachloride	0.157	µg/L	<QL	J	0.0778	RAS
MW-271F-NS	120.5	Carbon tetrachloride	0.15	µg/L	<QL	J	0.0778	RAS
MW-271G-NS	122	Carbon tetrachloride	0.162	µg/L	<QL	J	0.0778	RAS
MW-271A-NS	113	Chloroform	3.07	µg/L			0.06	RAS
MW-271A-NS	113	Chloroform	2.6	µg/L			1	QESS
MW-271B-NS	114.5	Chloroform	1.95	µg/L			0.06	RAS
MW-271C-NS	116	Chloroform	2.03	µg/L			0.06	RAS
MW-271D-NS	117.5	Chloroform	1.92	µg/L			0.06	RAS
MW-271E-NS	119	Chloroform	1.93	µg/L			0.06	RAS
MW-271F-NS	120.5	Chloroform	1.89	µg/L			0.06	RAS
MW-271G-NS	122	Chloroform	1.83	µg/L			0.06	RAS
MW-271A-NS	113	*cis*-1,2-Dichloroethene	0.555	µg/L	<QL	J	0.0407	RAS
MW-271A-NS	113	*cis*-1,2-Dichloroethene	0.47	µg/L	<QL	J	1	QESS
MW-271B-NS	114.5	*cis*-1,2-Dichloroethene	1.25	µg/L			0.0407	RAS
MW-271C-NS	116	*cis*-1,2-Dichloroethene	1.15	µg/L			0.0407	RAS
MW-271D-NS	117.5	*cis*-1,2-Dichloroethene	1.21	µg/L			0.0407	RAS
MW-271E-NS	119	*cis*-1,2-Dichloroethene	1.23	µg/L			0.0407	RAS
MW-271F-NS	120.5	*cis*-1,2-Dichloroethene	1.19	µg/L			0.0407	RAS
MW-271G-NS	122	*cis*-1,2-Dichloroethene	1.19	µg/L			0.0407	RAS
MW-271A-NS	113	Freon 113	1.02	µg/L			0.0599	RAS
MW-271B-NS	114.5	Freon 113	1.57	µg/L			0.0599	RAS
MW-271C-NS	116	Freon 113	1.32	µg/L			0.0599	RAS
MW-271D-NS	117.5	Freon 113	1.61	µg/L			0.0599	RAS
MW-271E-NS	119	Freon 113	1.46	µg/L			0.0599	RAS
MW-271F-NS	120.5	Freon 113	1.44	µg/L			0.0599	RAS
MW-271G-NS	122	Freon 113	1.63	µg/L			0.0599	RAS
MW-271A-NS	113	Tetrachloroethene	0.135	µg/L	<QL	J	0.0591	RAS
MW-271B-NS	114.5	Tetrachloroethene	0.361	µg/L	<QL	J	0.0591	RAS
MW-271C-NS	116	Tetrachloroethene	0.284	µg/L	<QL	J	0.0591	RAS
MW-271D-NS	117.5	Tetrachloroethene	0.347	µg/L	<QL	J	0.0591	RAS
MW-271E-NS	119	Tetrachloroethene	0.346	µg/L	<QL	J	0.0591	RAS
MW-271F-NS	120.5	Tetrachloroethene	0.353	µg/L	<QL	J	0.0591	RAS
MW-271G-NS	122	Tetrachloroethene	0.428	µg/L	<QL	J	0.0591	RAS
MW-271A-NS	113	Trichloroethene	35.4	µg/L			0.0499	RAS
MW-271A-NS	113	Trichloroethene	34	µg/L			1	QESS
MW-271B-NS	114.5	Trichloroethene	61	µg/L			0.0499	RAS
MW-271C-NS	116	Trichloroethene	55.6	µg/L			0.0499	RAS

Table A.15. MW-271 Diffusion Sampler Analytical Results (continued)

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-271D-NS	117.5	Trichloroethene	60.1	µg/L			0.0499	RAS
MW-271E-NS	119	Trichloroethene	59.3	µg/L			0.0499	RAS
MW-271F-NS	120.5	Trichloroethene	58.8	µg/L			0.0499	RAS
MW-271G-NS	122	Trichloroethene	57.5	µg/L			0.0499	RAS

Table A.16. MW-282 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-282E-NS	110.5	Bromodichloromethane	0.164	µg/L	<QL	J	0.0619	RAS
MW-282A-NS	104.5	Carbon tetrachloride	0.939	µg/L	<QL	J	0.0778	RAS
MW-282B-NS	106	Carbon tetrachloride	0.998	µg/L	<QL	J	0.0778	RAS
MW-282C-NS	107.5	Carbon tetrachloride	1.16	µg/L			0.0778	RAS
MW-282D-NS	109	Carbon tetrachloride	1.48	µg/L			0.0778	RAS
MW-282E-NS	110.5	Carbon tetrachloride	3.51	µg/L			0.0778	RAS
MW-282F-NS	112	Carbon tetrachloride	3.39	µg/L			0.0778	RAS
MW-282G-NS	113.5	Carbon tetrachloride	3.64	µg/L			0.0778	RAS
MW-282A-NS	104.5	Chloroform	0.289	µg/L	<QL	J	0.06	RAS
MW-282B-NS	106	Chloroform	0.276	µg/L	<QL	J	0.06	RAS
MW-282C-NS	107.5	Chloroform	0.32	µg/L	<QL	J	0.06	RAS
MW-282D-NS	109	Chloroform	0.419	µg/L	<QL	J	0.06	RAS
MW-282E-NS	110.5	Chloroform	0.993	µg/L	<QL	J	0.06	RAS
MW-282F-NS	112	Chloroform	0.973	µg/L	<QL	J	0.06	RAS
MW-282G-NS	113.5	Chloroform	0.976	µg/L	<QL	J	0.06	RAS
MW-282A-NS	104.5	Freon 113	19.2	µg/L			0.0599	RAS
MW-282B-NS	106	Freon 113	17.1	µg/L			0.0599	RAS
MW-282C-NS	107.5	Freon 113	15.5	µg/L			0.0599	RAS
MW-282D-NS	109	Freon 113	13	µg/L			0.0599	RAS
MW-282E-NS	110.5	Freon 113	16.9	µg/L			0.0599	RAS
MW-282F-NS	112	Freon 113	15.2	µg/L			0.0599	RAS
MW-282G-NS	113.5	Freon 113	16.5	µg/L			0.0599	RAS
MW-282A-NS	104.5	Trichloroethene	0.876	µg/L	<QL	J	0.0499	RAS
MW-282B-NS	106	Trichloroethene	0.888	µg/L	<QL	J	0.0499	RAS
MW-282C-NS	107.5	Trichloroethene	1.06	µg/L			0.0499	RAS
MW-282D-NS	109	Trichloroethene	1.43	µg/L			0.0499	RAS
MW-282E-NS	110.5	Trichloroethene	3.47	µg/L			0.0499	RAS
MW-282F-NS	112	Trichloroethene	3.21	µg/L			0.0499	RAS
MW-282G-NS	113.5	Trichloroethene	3.21	µg/L			0.0499	RAS

Table A.17. MW-286 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-286A-NS	104.7	1,1-Dichloroethane	15.6	µg/L			0.0588	RAS
MW-286A-NS	104.7	1,1-Dichloroethane	13	µg/L			1	QESS
MW-286B-NS	106.2	1,1-Dichloroethane	16.3	µg/L			0.0588	RAS
MW-286C-NS	107.7	1,1-Dichloroethane	16.1	µg/L			0.0588	RAS
MW-286D-NS	109.2	1,1-Dichloroethane	16.5	µg/L			0.0588	RAS
MW-286E-NS	110.7	1,1-Dichloroethane	16.7	µg/L			0.0588	RAS
MW-286F-NS	112.2	1,1-Dichloroethane	16.9	µg/L			0.0588	RAS
MW-286G-NS	113.7	1,1-Dichloroethane	16.9	µg/L			0.0588	RAS
MW-286H-NS	115.2	1,1-Dichloroethane	17.2	µg/L			0.0588	RAS
MW-286I-NS	116.7	1,1-Dichloroethane	16.5	µg/L			0.0588	RAS
MW-286I-NS	116.7	1,1-Dichloroethane	15	µg/L			1	QESS
MW-286A-NS	104.7	1,1-Dichloroethene	0.527	µg/L	<QL	J	0.0819	RAS
MW-286A-NS	104.7	1,1-Dichloroethene	0.58	µg/L	<QL	J	1	QESS
MW-286B-NS	106.2	1,1-Dichloroethene	0.535	µg/L	<QL	J	0.0819	RAS
MW-286C-NS	107.7	1,1-Dichloroethene	0.547	µg/L	<QL	J	0.0819	RAS
MW-286D-NS	109.2	1,1-Dichloroethene	0.577	µg/L	<QL	J	0.0819	RAS
MW-286E-NS	110.7	1,1-Dichloroethene	0.61	µg/L	<QL	J	0.0819	RAS
MW-286F-NS	112.2	1,1-Dichloroethene	0.604	µg/L	<QL	J	0.0819	RAS
MW-286G-NS	113.7	1,1-Dichloroethene	0.593	µg/L	<QL	J	0.0819	RAS
MW-286H-NS	115.2	1,1-Dichloroethene	0.628	µg/L	<QL	J	0.0819	RAS
MW-286I-NS	116.7	1,1-Dichloroethene	0.576	µg/L	<QL	J	0.0819	RAS
MW-286I-NS	116.7	1,1-Dichloroethene	0.63	µg/L	<QL	J	1	QESS
MW-286A-NS	104.7	1,2-Dichloroethane	0.339	µg/L	<QL	J	0.0408	RAS
MW-286A-NS	104.7	1,2-Dichloroethane	0.33	µg/L	<QL	J	1	QESS
MW-286B-NS	106.2	1,2-Dichloroethane	0.372	µg/L	<QL	J	0.0408	RAS
MW-286C-NS	107.7	1,2-Dichloroethane	0.375	µg/L	<QL	J	0.0408	RAS
MW-286D-NS	109.2	1,2-Dichloroethane	0.389	µg/L	<QL	J	0.0408	RAS
MW-286E-NS	110.7	1,2-Dichloroethane	0.39	µg/L	<QL	J	0.0408	RAS
MW-286F-NS	112.2	1,2-Dichloroethane	0.399	µg/L	<QL	J	0.0408	RAS
MW-286G-NS	113.7	1,2-Dichloroethane	0.417	µg/L	<QL	J	0.0408	RAS
MW-286H-NS	115.2	1,2-Dichloroethane	0.41	µg/L	<QL	J	0.0408	RAS
MW-286I-NS	116.7	1,2-Dichloroethane	0.406	µg/L	<QL	J	0.0408	RAS
MW-286I-NS	116.7	1,2-Dichloroethane	0.45	µg/L	<QL	J	1	QESS
MW-286A-NS	104.7	Chloroform	0.8	µg/L	<QL	J	0.06	RAS
MW-286B-NS	106.2	Chloroform	0.874	µg/L	<QL	J	0.06	RAS
MW-286C-NS	107.7	Chloroform	0.9	µg/L	<QL	J	0.06	RAS
MW-286D-NS	109.2	Chloroform	0.899	µg/L	<QL	J	0.06	RAS
MW-286E-NS	110.7	Chloroform	0.954	µg/L	<QL	J	0.06	RAS
MW-286F-NS	112.2	Chloroform	0.951	µg/L	<QL	J	0.06	RAS
MW-286G-NS	113.7	Chloroform	0.964	µg/L	<QL	J	0.06	RAS
MW-286H-NS	115.2	Chloroform	0.989	µg/L	<QL	J	0.06	RAS
MW-286I-NS	116.7	Chloroform	0.967	µg/L	<QL	J	0.06	RAS
MW-286I-NS	116.7	Chloroform	0.86	µg/L	<QL	J	1	QESS
MW-286A-NS	104.7	*cis*-1,2-Dichloroethene	6.46	µg/L			0.0407	RAS
MW-286A-NS	104.7	*cis*-1,2-Dichloroethene	6.2	µg/L			1	QESS
MW-286B-NS	106.2	*cis*-1,2-Dichloroethene	7.12	µg/L			0.0407	RAS
MW-286C-NS	107.7	*cis*-1,2-Dichloroethene	7.19	µg/L			0.0407	RAS

Table A.17. MW-286 Diffusion Sampler Analytical Results (continued)

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-286D-NS	109.2	*cis*-1,2-Dichloroethene	7.57	µg/L			0.0407	RAS
MW-286E-NS	110.7	*cis*-1,2-Dichloroethene	7.78	µg/L			0.0407	RAS
MW-286F-NS	112.2	*cis*-1,2-Dichloroethene	7.8	µg/L			0.0407	RAS
MW-286G-NS	113.7	*cis*-1,2-Dichloroethene	7.93	µg/L			0.0407	RAS
MW-286H-NS	115.2	*cis*-1,2-Dichloroethene	8.05	µg/L			0.0407	RAS
MW-286I-NS	116.7	*cis*-1,2-Dichloroethene	7.63	µg/L			0.0407	RAS
MW-286I-NS	116.7	*cis*-1,2-Dichloroethene	7.6	µg/L			1	QESS
MW-286A-NS	104.7	Freon 113	0.106	µg/L	<QL	J	0.0599	RAS
MW-286B-NS	106.2	Freon 113	0.158	µg/L	<QL	J	0.0599	RAS
MW-286C-NS	107.7	Freon 113	0.133	µg/L	<QL	J	0.0599	RAS
MW-286D-NS	109.2	Freon 113	0.158	µg/L	<QL	J	0.0599	RAS
MW-286E-NS	110.7	Freon 113	0.165	µg/L	<QL	J	0.0599	RAS
MW-286F-NS	112.2	Freon 113	0.162	µg/L	<QL	J	0.0599	RAS
MW-286G-NS	113.7	Freon 113	0.132	µg/L	<QL	J	0.0599	RAS
MW-286H-NS	115.2	Freon 113	0.147	µg/L	<QL	J	0.0599	RAS
MW-286I-NS	116.7	Freon 113	0.116	µg/L	<QL	J	0.0599	RAS
MW-286A-NS	104.7	Tetrachloroethene	0.379	µg/L	<QL	J	0.0591	RAS
MW-286A-NS	104.7	Tetrachloroethene	0.42	µg/L	<QL	J	1	QESS
MW-286B-NS	106.2	Tetrachloroethene	0.821	µg/L	<QL	J	0.0591	RAS
MW-286C-NS	107.7	Tetrachloroethene	0.787	µg/L	<QL	J	0.0591	RAS
MW-286D-NS	109.2	Tetrachloroethene	0.894	µg/L	<QL	J	0.0591	RAS
MW-286E-NS	110.7	Tetrachloroethene	0.898	µg/L	<QL	J	0.0591	RAS
MW-286F-NS	112.2	Tetrachloroethene	1	µg/L			0.0591	RAS
MW-286G-NS	113.7	Tetrachloroethene	0.994	µg/L	<QL	J	0.0591	RAS
MW-286H-NS	115.2	Tetrachloroethene	0.978	µg/L	<QL	J	0.0591	RAS
MW-286I-NS	116.7	Tetrachloroethene	0.702	µg/L	<QL	J	0.0591	RAS
MW-286I-NS	116.7	Tetrachloroethene	0.77	µg/L	<QL	J	1	QESS
MW-286A-NS	104.7	*trans*-1,2-Dichloroethene	0.0826	µg/L	<QL	J	0.0422	RAS
MW-286B-NS	106.2	*trans*-1,2-Dichloroethene	0.103	µg/L	<QL	J	0.0422	RAS
MW-286C-NS	107.7	*trans*-1,2-Dichloroethene	0.141	µg/L	<QL	J	0.0422	RAS
MW-286D-NS	109.2	*trans*-1,2-Dichloroethene	0.104	µg/L	<QL	J	0.0422	RAS
MW-286E-NS	110.7	*trans*-1,2-Dichloroethene	0.144	µg/L	<QL	J	0.0422	RAS
MW-286F-NS	112.2	*trans*-1,2-Dichloroethene	0.123	µg/L	<QL	J	0.0422	RAS
MW-286G-NS	113.7	*trans*-1,2-Dichloroethene	0.125	µg/L	<QL	J	0.0422	RAS
MW-286H-NS	115.2	*trans*-1,2-Dichloroethene	0.127	µg/L	<QL	J	0.0422	RAS
MW-286I-NS	116.7	*trans*-1,2-Dichloroethene	0.0983	µg/L	<QL	J	0.0422	RAS
MW-286A-NS	104.7	Trichloroethene	6.39	µg/L			0.0499	RAS
MW-286A-NS	104.7	Trichloroethene	5.6	µg/L			1	QESS
MW-286B-NS	106.2	Trichloroethene	7.44	µg/L			0.0499	RAS
MW-286C-NS	107.7	Trichloroethene	7.53	µg/L			0.0499	RAS
MW-286D-NS	109.2	Trichloroethene	7.86	µg/L			0.0499	RAS
MW-286E-NS	110.7	Trichloroethene	7.88	µg/L			0.0499	RAS
MW-286F-NS	112.2	Trichloroethene	8.14	µg/L			0.0499	RAS
MW-286G-NS	113.7	Trichloroethene	8.18	µg/L			0.0499	RAS
MW-286H-NS	115.2	Trichloroethene	8.46	µg/L			0.0499	RAS
MW-286I-NS	116.7	Trichloroethene	7.74	µg/L			0.0499	RAS
MW-286I-NS	116.7	Trichloroethene	6.9	µg/L			1	QESS

Table A.18. MW-287 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-287A-NS	117.5	1,1-Dichloroethane	0.586	µg/L	<QL	J	0.0736	RAS
MW-287B-NS	119	1,1-Dichloroethane	0.602	µg/L	<QL	J	0.0736	RAS
MW-287C-NS	120.5	1,1-Dichloroethane	0.564	µg/L	<QL	J	0.0736	RAS
MW-287D-NS	122	1,1-Dichloroethane	0.539	µg/L	<QL	J	0.0736	RAS
MW-287E-NS	123.5	1,1-Dichloroethane	0.475	µg/L	<QL	J	0.0736	RAS
MW-287A-NS	117.5	1,1-Dichloroethene	2.96	µg/L			0.102	RAS
MW-287B-NS	119	1,1-Dichloroethene	3.27	µg/L			0.102	RAS
MW-287C-NS	120.5	1,1-Dichloroethene	2.8	µg/L			0.102	RAS
MW-287D-NS	122	1,1-Dichloroethene	2.94	µg/L			0.102	RAS
MW-287E-NS	123.5	1,1-Dichloroethene	3.15	µg/L			0.102	RAS
MW-287A-NS	117.5	Carbon tetrachloride	0.265	µg/L	<QL	J	0.0962	RAS
MW-287B-NS	119	Carbon tetrachloride	0.348	µg/L	<QL	J	0.0962	RAS
MW-287C-NS	120.5	Carbon tetrachloride	0.293	µg/L	<QL	J	0.0962	RAS
MW-287D-NS	122	Carbon tetrachloride	0.302	µg/L	<QL	J	0.0962	RAS
MW-287E-NS	123.5	Carbon tetrachloride	0.307	µg/L	<QL	J	0.0962	RAS
MW-287A-NS	117.5	Chloroform	0.338	µg/L	<QL	J	0.0424	RAS
MW-287B-NS	119	Chloroform	0.363	µg/L	<QL	J	0.0424	RAS
MW-287C-NS	120.5	Chloroform	0.362	µg/L	<QL	J	0.0424	RAS
MW-287D-NS	122	Chloroform	0.335	µg/L	<QL	J	0.0424	RAS
MW-287E-NS	123.5	Chloroform	0.341	µg/L	<QL	J	0.0424	RAS
MW-287A-NS	117.5	*cis*-1,2-Dichloroethene	0.456	µg/L	<QL	J	0.0595	RAS
MW-287B-NS	119	*cis*-1,2-Dichloroethene	0.548	µg/L	<QL	J	0.0595	RAS
MW-287C-NS	120.5	*cis*-1,2-Dichloroethene	0.51	µg/L	<QL	J	0.0595	RAS
MW-287D-NS	122	*cis*-1,2-Dichloroethene	0.566	µg/L	<QL	J	0.0595	RAS
MW-287E-NS	123.5	*cis*-1,2-Dichloroethene	0.581	µg/L	<QL	J	0.0595	RAS
MW-287A-NS	117.5	Freon 113	43.4	µg/L			0.112	RAS
MW-287B-NS	119	Freon 113	48.3	µg/L			0.112	RAS
MW-287C-NS	120.5	Freon 113	42	µg/L			0.112	RAS
MW-287D-NS	122	Freon 113	48	µg/L			0.112	RAS
MW-287E-NS	123.5	Freon 113	55.5	µg/L			0.112	RAS
MW-287A-NS	117.5	Tetrachloroethene	23.1	µg/L			0.114	RAS
MW-287B-NS	119	Tetrachloroethene	27.9	µg/L			0.114	RAS
MW-287C-NS	120.5	Tetrachloroethene	21.7	µg/L			0.114	RAS
MW-287D-NS	122	Tetrachloroethene	21.1	µg/L			0.114	RAS
MW-287E-NS	123.5	Tetrachloroethene	19.4	µg/L			0.114	RAS
MW-287A-NS	117.5	Trichloroethene	144	µg/L			0.464	RAS
MW-287B-NS	119	Trichloroethene	148	µg/L			0.464	RAS
MW-287C-NS	120.5	Trichloroethene	135	µg/L			0.464	RAS
MW-287D-NS	122	Trichloroethene	147	µg/L			0.464	RAS
MW-287E-NS	123.5	Trichloroethene	162	µg/L			0.464	RAS

Table A.19. MW-288 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-288A-NS	107.7	1,1-Dichloroethane	0.504	µg/L	<QL	J	0.0736	RAS
MW-288B-NS	109.2	1,1-Dichloroethane	0.509	µg/L	<QL	J	0.0736	RAS
MW-288C-NS	110.7	1,1-Dichloroethane	0.533	µg/L	<QL	J	0.0736	RAS
MW-288D-NS	112.2	1,1-Dichloroethane	0.522	µg/L	<QL	J	0.0736	RAS
MW-288E-NS	113.7	1,1-Dichloroethane	0.568	µg/L	<QL	J	0.0736	RAS
MW-288F-NS	115.2	1,1-Dichloroethane	0.54	µg/L	<QL	J	0.0736	RAS
MW-288G-NS	116.7	1,1-Dichloroethane	0.326	µg/L	<QL	J	0.0736	RAS
MW-288H-NS	118.2	1,1-Dichloroethane	0.458	µg/L	<QL	J	0.0736	RAS
MW-288I-NS	119.7	1,1-Dichloroethane	0.706	µg/L	<QL	J	0.0736	RAS
MW-288A-NS	107.7	1,1-Dichloroethene	2.4	µg/L			0.102	RAS
MW-288B-NS	109.2	1,1-Dichloroethene	2.44	µg/L			0.102	RAS
MW-288C-NS	110.7	1,1-Dichloroethene	2.57	µg/L			0.102	RAS
MW-288D-NS	112.2	1,1-Dichloroethene	2.41	µg/L			0.102	RAS
MW-288E-NS	113.7	1,1-Dichloroethene	2.71	µg/L			0.102	RAS
MW-288F-NS	115.2	1,1-Dichloroethene	2.65	µg/L			0.102	RAS
MW-288G-NS	116.7	1,1-Dichloroethene	1.44	µg/L			0.102	RAS
MW-288H-NS	118.2	1,1-Dichloroethene	2.31	µg/L			0.102	RAS
MW-288I-NS	119.7	1,1-Dichloroethene	3.43	µg/L			0.102	RAS
MW-288A-NS	107.7	Chloroform	0.301	µg/L	<QL	J	0.0424	RAS
MW-288B-NS	109.2	Chloroform	0.31	µg/L	<QL	J	0.0424	RAS
MW-288C-NS	110.7	Chloroform	0.31	µg/L	<QL	J	0.0424	RAS
MW-288D-NS	112.2	Chloroform	0.305	µg/L	<QL	J	0.0424	RAS
MW-288E-NS	113.7	Chloroform	0.317	µg/L	<QL	J	0.0424	RAS
MW-288F-NS	115.2	Chloroform	0.319	µg/L	<QL	J	0.0424	RAS
MW-288G-NS	116.7	Chloroform	0.252	µg/L	<QL	J	0.0424	RAS
MW-288H-NS	118.2	Chloroform	0.301	µg/L	<QL	J	0.0424	RAS
MW-288I-NS	119.7	Chloroform	0.324	µg/L	<QL	J	0.0424	RAS
MW-288A-NS	107.7	*cis*-1,2-Dichloroethene	0.828	µg/L	<QL	J	0.0595	RAS
MW-288B-NS	109.2	*cis*-1,2-Dichloroethene	0.852	µg/L	<QL	J	0.0595	RAS
MW-288C-NS	110.7	*cis*-1,2-Dichloroethene	0.845	µg/L	<QL	J	0.0595	RAS
MW-288D-NS	112.2	*cis*-1,2-Dichloroethene	0.804	µg/L	<QL	J	0.0595	RAS
MW-288E-NS	113.7	*cis*-1,2-Dichloroethene	0.932	µg/L	<QL	J	0.0595	RAS
MW-288F-NS	115.2	*cis*-1,2-Dichloroethene	0.878	µg/L	<QL	J	0.0595	RAS
MW-288G-NS	116.7	*cis*-1,2-Dichloroethene	0.658	µg/L	<QL	J	0.0595	RAS
MW-288H-NS	118.2	*cis*-1,2-Dichloroethene	0.807	µg/L	<QL	J	0.0595	RAS
MW-288I-NS	119.7	*cis*-1,2-Dichloroethene	0.986	µg/L	<QL	J	0.0595	RAS
MW-288A-NS	107.7	Freon 113	35.6	µg/L			0.112	RAS
MW-288B-NS	109.2	Freon 113	38.9	µg/L			0.112	RAS
MW-288C-NS	110.7	Freon 113	39.2	µg/L			0.112	RAS
MW-288D-NS	112.2	Freon 113	38.7	µg/L			0.112	RAS
MW-288E-NS	113.7	Freon 113	43.6	µg/L			0.112	RAS
MW-288F-NS	115.2	Freon 113	41.6	µg/L			0.112	RAS
MW-288G-NS	116.7	Freon 113	25	µg/L			0.112	RAS
MW-288H-NS	118.2	Freon 113	37.9	µg/L			0.112	RAS
MW-288I-NS	119.7	Freon 113	50.8	µg/L			0.112	RAS
MW-288A-NS	107.7	Tetrachloroethene	20.1	µg/L			0.114	RAS
MW-288B-NS	109.2	Tetrachloroethene	24.6	µg/L			0.114	RAS

Table A.19. MW-288 Diffusion Sampler Analytical Results (continued)

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-288C-NS	110.7	Tetrachloroethene	25	µg/L			0.114	RAS
MW-288D-NS	112.2	Tetrachloroethene	25.4	µg/L			0.114	RAS
MW-288E-NS	113.7	Tetrachloroethene	28.8	µg/L			0.114	RAS
MW-288F-NS	115.2	Tetrachloroethene	27.1	µg/L			0.114	RAS
MW-288G-NS	116.7	Tetrachloroethene	17.5	µg/L			0.114	RAS
MW-288H-NS	118.2	Tetrachloroethene	23.5	µg/L			0.114	RAS
MW-288I-NS	119.7	Tetrachloroethene	26.8	µg/L			0.114	RAS
MW-288A-NS	107.7	Trichloroethene	164	µg/L			0.464	RAS
MW-288B-NS	109.2	Trichloroethene	167	µg/L			0.464	RAS
MW-288C-NS	110.7	Trichloroethene	173	µg/L			0.464	RAS
MW-288D-NS	112.2	Trichloroethene	168	µg/L			0.464	RAS
MW-288E-NS	113.7	Trichloroethene	188	µg/L			0.464	RAS
MW-288F-NS	115.2	Trichloroethene	174	µg/L			0.464	RAS
MW-288G-NS	116.7	Trichloroethene	111	µg/L			0.464	RAS
MW-288H-NS	118.2	Trichloroethene	156	µg/L			0.464	RAS
MW-288I-NS	119.7	Trichloroethene	206	µg/L			0.464	RAS

Table A.20. MW-314 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-314C-NS	160	1,1-Dichloroethene	0.122	µg/L	<QL	J	0.0819	RAS
MW-314D-NS	161.5	1,1-Dichloroethene	0.0879	µg/L	<QL	J	0.0819	RAS
MW-314D-NS	161.5	1,4-Dichlorobenzene	0.0681	µg/L	<QL	J	0.0651	RAS
MW-314A-NS	157	Chloroform	0.136	µg/L	<QL	J	0.06	RAS
MW-314B-NS	158.5	Chloroform	0.143	µg/L	<QL	J	0.06	RAS
MW-314C-NS	160	Chloroform	0.134	µg/L	<QL	J	0.06	RAS
MW-314D-NS	161.5	Chloroform	0.154	µg/L	<QL	J	0.06	RAS
MW-314E-NS	163	Chloroform	0.145	µg/L	<QL	J	0.06	RAS
MW-314A-NS	157	*cis*-1,2-Dichloroethene	1.22	µg/L			0.0407	RAS
MW-314B-NS	158.5	*cis*-1,2-Dichloroethene	1.2	µg/L			0.0407	RAS
MW-314C-NS	160	*cis*-1,2-Dichloroethene	1.22	µg/L			0.0407	RAS
MW-314C-NS	160	*cis*-1,2-Dichloroethene	1.1	µg/L			1	QESS
MW-314D-NS	161.5	*cis*-1,2-Dichloroethene	1.28	µg/L			0.0407	RAS
MW-314E-NS	163	*cis*-1,2-Dichloroethene	1.18	µg/L			0.0407	RAS
MW-314A-NS	157	Trichloroethene	6.39	µg/L			0.0499	RAS
MW-314B-NS	158.5	Trichloroethene	6.44	µg/L			0.0499	RAS
MW-314C-NS	160	Trichloroethene	6.25	µg/L			0.0499	RAS
MW-314C-NS	160	Trichloroethene	5.6	µg/L			1	QESS
MW-314D-NS	161.5	Trichloroethene	6.1	µg/L			0.0499	RAS
MW-314E-NS	163	Trichloroethene	6.04	µg/L			0.0499	RAS

Table A.21. MW-325 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-325A-NS	103.22	1,1-Dichloroethene	0.197	µg/L	<QL	J	0.0819	RAS
MW-325B-NS	104.72	1,1-Dichloroethene	0.215	µg/L	<QL	J	0.0819	RAS
MW-325C-NS	106.22	1,1-Dichloroethene	0.181	µg/L	<QL	J	0.0819	RAS
MW-325D-NS	107.72	1,1-Dichloroethene	0.189	µg/L	<QL	J	0.0819	RAS
MW-325E-NS	109.22	1,1-Dichloroethene	0.155	µg/L	<QL	J	0.0819	RAS
MW-325F-NS	110.72	1,1-Dichloroethene	0.185	µg/L	<QL	J	0.0819	RAS
MW-325G-NS	112.22	1,1-Dichloroethene	0.184	µg/L	<QL	J	0.0819	RAS
MW-325H-NS	113.72	1,1-Dichloroethene	0.188	µg/L	<QL	J	0.0819	RAS
MW-325I-NS	115.22	1,1-Dichloroethene	0.188	µg/L	<QL	J	0.0819	RAS
MW-325B-NS	104.72	*cis*-1,2-Dichloroethene	0.056	µg/L	<QL	J	0.0407	RAS
MW-325C-NS	106.22	*cis*-1,2-Dichloroethene	0.0563	µg/L	<QL	J	0.0407	RAS
MW-325D-NS	107.72	*cis*-1,2-Dichloroethene	0.059	µg/L	<QL	J	0.0407	RAS
MW-325F-NS	110.72	*cis*-1,2-Dichloroethene	0.0557	µg/L	<QL	J	0.0407	RAS
MW-325G-NS	112.22	*cis*-1,2-Dichloroethene	0.059	µg/L	<QL	J	0.0407	RAS
MW-325A-NS	103.22	Freon 113	0.194	µg/L	<QL	J	0.0599	RAS
MW-325B-NS	104.72	Freon 113	0.181	µg/L	<QL	J	0.0599	RAS
MW-325C-NS	106.22	Freon 113	0.183	µg/L	<QL	J	0.0599	RAS
MW-325D-NS	107.72	Freon 113	0.225	µg/L	<QL	J	0.0599	RAS
MW-325E-NS	109.22	Freon 113	0.206	µg/L	<QL	J	0.0599	RAS
MW-325F-NS	110.72	Freon 113	0.193	µg/L	<QL	J	0.0599	RAS
MW-325G-NS	112.22	Freon 113	0.203	µg/L	<QL	J	0.0599	RAS
MW-325H-NS	113.72	Freon 113	0.212	µg/L	<QL	J	0.0599	RAS
MW-325I-NS	115.22	Freon 113	0.193	µg/L	<QL	J	0.0599	RAS
MW-325A-NS	103.22	Trichloroethene	27.4	µg/L			0.0499	RAS
MW-325B-NS	104.72	Trichloroethene	26.3	µg/L			0.0499	RAS
MW-325B-NS	104.72	Trichloroethene	23	µg/L			1	QESS
MW-325C-NS	106.22	Trichloroethene	28.6	µg/L			0.0499	RAS
MW-325D-NS	107.72	Trichloroethene	29.1	µg/L			0.0499	RAS
MW-325E-NS	109.22	Trichloroethene	28.4	µg/L			0.0499	RAS
MW-325F-NS	110.72	Trichloroethene	29.2	µg/L			0.0499	RAS
MW-325G-NS	112.22	Trichloroethene	29.6	µg/L			0.0499	RAS
MW-325H-NS	113.72	Trichloroethene	29	µg/L			0.0499	RAS
MW-325I-NS	115.22	Trichloroethene	28.1	µg/L			0.0499	RAS

Table A.22. MW-326 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-326A-NS	180	1,1-Dichloroethane	1.65	µg/L			0.0736	RAS
MW-326B-NS	181.5	1,1-Dichloroethane	1.74	µg/L			0.0736	RAS
MW-326C-NS	183	1,1-Dichloroethane	1.66	µg/L			0.0736	RAS
MW-326D-NS	184.5	1,1-Dichloroethane	1.64	µg/L			0.0736	RAS
MW-326E-NS	186	1,1-Dichloroethane	2.31	µg/L			0.0588	RAS
MW-326A-NS	180	1,1-Dichloroethene	0.612	µg/L	<QL	J	0.102	RAS
MW-326B-NS	181.5	1,1-Dichloroethene	0.595	µg/L	<QL	J	0.102	RAS
MW-326C-NS	183	1,1-Dichloroethene	0.568	µg/L	<QL	J	0.102	RAS
MW-326D-NS	184.5	1,1-Dichloroethene	0.556	µg/L	<QL	J	0.102	RAS
MW-326E-NS	186	1,1-Dichloroethene	0.641	µg/L	<QL	J	0.0819	RAS
MW-326A-NS	180	Chloroform	0.123	µg/L	<QL	J	0.0424	RAS
MW-326B-NS	181.5	Chloroform	0.151	µg/L	<QL	J	0.0424	RAS
MW-326C-NS	183	Chloroform	0.142	µg/L	<QL	J	0.0424	RAS
MW-326D-NS	184.5	Chloroform	0.139	µg/L	<QL	J	0.0424	RAS
MW-326E-NS	186	Chloroform	0.182	µg/L	<QL	J	0.06	RAS
MW-326A-NS	180	*cis*-1,2-Dichloroethene	0.418	µg/L	<QL	J	0.0595	RAS
MW-326B-NS	181.5	*cis*-1,2-Dichloroethene	0.401	µg/L	<QL	J	0.0595	RAS
MW-326C-NS	183	*cis*-1,2-Dichloroethene	0.391	µg/L	<QL	J	0.0595	RAS
MW-326D-NS	184.5	*cis*-1,2-Dichloroethene	0.393	µg/L	<QL	J	0.0595	RAS
MW-326E-NS	186	*cis*-1,2-Dichloroethene	0.485	µg/L	<QL	J	0.0407	RAS
MW-326A-NS	180	Trichloroethene	7.86	µg/L			0.0929	RAS
MW-326B-NS	181.5	Trichloroethene	8.28	µg/L			0.0929	RAS
MW-326C-NS	183	Trichloroethene	7.95	µg/L			0.0929	RAS
MW-326D-NS	184.5	Trichloroethene	8.23	µg/L			0.0929	RAS
MW-326E-NS	186	Trichloroethene	8.64	µg/L			0.0499	RAS

Table A.23. MW-343 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-343A-NS	162	Carbon tetrachloride	1.97	µg/L			0.0962	RAS
MW-343B-NS	163.5	Carbon tetrachloride	1.8	µg/L			0.0962	RAS
MW-343B-NS	163.5	Carbon Tetrachloride	1.4	µg/L			1	QESS
MW-343C-NS	165	Carbon tetrachloride	1.91	µg/L			0.0962	RAS
MW-343D-NS	166.5	Carbon tetrachloride	2.03	µg/L			0.0962	RAS
MW-343E-NS	168	Carbon tetrachloride	2.05	µg/L			0.0962	RAS
MW-343A-NS	162	Chloroform	0.184	µg/L	<QL	J	0.0424	RAS
MW-343B-NS	163.5	Chloroform	0.198	µg/L	<QL	J	0.0424	RAS
MW-343C-NS	165	Chloroform	0.17	µg/L	<QL	J	0.0424	RAS
MW-343D-NS	166.5	Chloroform	0.175	µg/L	<QL	J	0.0424	RAS
MW-343E-NS	168	Chloroform	0.192	µg/L	<QL	J	0.0424	RAS
MW-343A-NS	162	*cis*-1,2-Dichloroethene	0.11	µg/L	<QL	J	0.0595	RAS
MW-343B-NS	163.5	*cis*-1,2-Dichloroethene	0.122	µg/L	<QL	J	0.0595	RAS
MW-343B-NS	163.5	*cis*-1,2-Dichloroethene	0.11	µg/L	<QL	J	1	QESS
MW-343C-NS	165	*cis*-1,2-Dichloroethene	0.103	µg/L	<QL	J	0.0595	RAS
MW-343D-NS	166.5	*cis*-1,2-Dichloroethene	0.124	µg/L	<QL	J	0.0595	RAS
MW-343E-NS	168	*cis*-1,2-Dichloroethene	0.118	µg/L	<QL	J	0.0595	RAS
MW-343A-NS	162	Trichloroethene	1.47	µg/L			0.0929	RAS
MW-343B-NS	163.5	Trichloroethene	1.46	µg/L			0.0929	RAS
MW-343B-NS	163.5	Trichloroethene	1.1	µg/L			1	QESS
MW-343C-NS	165	Trichloroethene	1.43	µg/L			0.0929	RAS
MW-343D-NS	166.5	Trichloroethene	1.53	µg/L			0.0929	RAS
MW-343E-NS	168	Trichloroethene	1.56	µg/L			0.0929	RAS

Table A.24. MW-362 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-362B-NS	105.9	Freon 113	0.136	µg/L	<QL	J	0.112	RAS
MW-362C-NS	107.4	Freon 113	0.169	µg/L	<QL	J	0.112	RAS
MW-362C-NS	107.4	Tetrachloroethene	0.163	µg/L	<QL	J	0.114	RAS
MW-362A-NS	104.4	Toluene	0.215	µg/L	<QL	J	0.0766	RAS
MW-362B-NS	105.9	Toluene	0.242	µg/L	<QL	J	0.0766	RAS
MW-362A-NS	104.4	Trichloroethene	0.374	µg/L	<QL	J	0.0929	RAS
MW-362B-NS	105.9	Trichloroethene	0.355	µg/L	<QL	J	0.0929	RAS
MW-362C-NS	107.4	Trichloroethene	0.356	µg/L	<QL	J	0.0929	RAS

Table A.25. MW-364 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-364A-NS	123.5	1,1-Dichloroethene	0.226	µg/L	<QL	J	0.148	RAS
MW-364B-NS	125	1,1-Dichloroethene	0.243	µg/L	<QL	J	0.148	RAS
MW-364C-NS	126.5	1,1-Dichloroethene	0.254	µg/L	<QL	J	0.148	RAS
MW-364A-NS	123.5	Carbon tetrachloride	1.08	µg/L			0.137	RAS
MW-364B-NS	125	Carbon tetrachloride	1.06	µg/L			0.137	RAS
MW-364C-NS	126.5	Carbon tetrachloride	1.15	µg/L			0.137	RAS
MW-364A-NS	123.5	Chloroform	0.436	µg/L	<QL	J	0.158	RAS
MW-364B-NS	125	Chloroform	0.405	µg/L	<QL	J	0.158	RAS
MW-364C-NS	126.5	Chloroform	0.412	µg/L	<QL	J	0.158	RAS
MW-364A-NS	123.5	*cis*-1,2-Dichloroethene	1.02	µg/L			0.106	RAS
MW-364B-NS	125	*cis*-1,2-Dichloroethene	1.1	µg/L			0.106	RAS
MW-364C-NS	126.5	*cis*-1,2-Dichloroethene	1.18	µg/L			0.106	RAS
MW-364A-NS	123.5	Freon 113	3.6	µg/L			0.169	RAS
MW-364B-NS	125	Freon 113	3.66	µg/L			0.169	RAS
MW-364C-NS	126.5	Freon 113	4.08	µg/L			0.169	RAS
MW-364A-NS	123.5	Tetrachloroethene	3.02	µg/L			0.142	RAS
MW-364B-NS	125	Tetrachloroethene	3.08	µg/L			0.142	RAS
MW-364C-NS	126.5	Tetrachloroethene	3.76	µg/L			0.142	RAS
MW-364A-NS	123.5	Trichloroethene	104	µg/L			0.322	RAS
MW-364B-NS	125	Trichloroethene	114	µg/L			0.322	RAS
MW-364C-NS	126.5	Trichloroethene	121	µg/L			0.322	RAS

Table A.26. MW-366 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-366A-NS	107.1	1,1,2-Trichloroethane	0.575	µg/L	<QL	J	0.0392	RAS
MW-366B-NS	108.6	1,1,2-Trichloroethane	0.637	µg/L	<QL	J	0.0392	RAS
MW-366C-NS	110.1	1,1,2-Trichloroethane	0.701	µg/L	<QL	J	0.0392	RAS
MW-366D-NS	111.6	1,1,2-Trichloroethane	0.665	µg/L	<QL	J	0.0392	RAS
MW-366E-NS	113.1	1,1,2-Trichloroethane	0.653	µg/L	<QL	J	0.0392	RAS
MW-366E-NS	113.1	1,1,2-Trichloroethane	0.67	µg/L	<QL	J	1	QESS
MW-366F-NS	114.6	1,1,2-Trichloroethane	0.602	µg/L	<QL	J	0.0392	RAS
MW-366G-NS	116.1	1,1,2-Trichloroethane	0.669	µg/L	<QL	J	0.0392	RAS
MW-366H-NS	117.6	1,1,2-Trichloroethane	0.683	µg/L	<QL	J	0.0392	RAS
MW-366I-NS	119.1	1,1,2-Trichloroethane	0.72	µg/L	<QL	J	0.0392	RAS
MW-366J-NS	120.6	1,1,2-Trichloroethane	0.691	µg/L	<QL	J	0.0392	RAS
MW-366K-NS	122.1	1,1,2-Trichloroethane	0.609	µg/L	<QL	J	0.0392	RAS
MW-366K-NS	122.1	1,1-Dichloroethene	0.205	µg/L	<QL	J	0.102	RAS
MW-366A-NS	107.1	Carbon tetrachloride	1.35	µg/L			0.0962	RAS
MW-366B-NS	108.6	Carbon tetrachloride	1.39	µg/L			0.0962	RAS
MW-366C-NS	110.1	Carbon tetrachloride	1.41	µg/L			0.0962	RAS
MW-366D-NS	111.6	Carbon tetrachloride	1.36	µg/L			0.0962	RAS
MW-366E-NS	113.1	Carbon tetrachloride	1.26	µg/L			0.0962	RAS
MW-366E-NS	113.1	Carbon Tetrachloride	1.2	µg/L			1	QESS
MW-366F-NS	114.6	Carbon tetrachloride	1.37	µg/L			0.0962	RAS
MW-366G-NS	116.1	Carbon tetrachloride	1.34	µg/L			0.0962	RAS
MW-366H-NS	117.6	Carbon tetrachloride	1.19	µg/L			0.0962	RAS
MW-366I-NS	119.1	Carbon tetrachloride	1.12	µg/L			0.0962	RAS
MW-366J-NS	120.6	Carbon tetrachloride	1.06	µg/L			0.0962	RAS
MW-366K-NS	122.1	Carbon tetrachloride	0.829	µg/L	<QL	J	0.0962	RAS
MW-366A-NS	107.1	Chloroform	0.416	µg/L	<QL	J	0.0424	RAS
MW-366B-NS	108.6	Chloroform	0.416	µg/L	<QL	J	0.0424	RAS
MW-366C-NS	110.1	Chloroform	0.424	µg/L	<QL	J	0.0424	RAS
MW-366D-NS	111.6	Chloroform	0.415	µg/L	<QL	J	0.0424	RAS
MW-366E-NS	113.1	Chloroform	0.418	µg/L	<QL	J	0.0424	RAS
MW-366F-NS	114.6	Chloroform	0.423	µg/L	<QL	J	0.0424	RAS
MW-366G-NS	116.1	Chloroform	0.412	µg/L	<QL	J	0.0424	RAS
MW-366H-NS	117.6	Chloroform	0.423	µg/L	<QL	J	0.0424	RAS
MW-366I-NS	119.1	Chloroform	0.404	µg/L	<QL	J	0.0424	RAS
MW-366J-NS	120.6	Chloroform	0.408	µg/L	<QL	J	0.0424	RAS
MW-366K-NS	122.1	Chloroform	0.42	µg/L	<QL	J	0.0424	RAS
MW-366A-NS	107.1	*cis*-1,2-Dichloroethene	0.144	µg/L	<QL	J	0.0595	RAS
MW-366B-NS	108.6	*cis*-1,2-Dichloroethene	0.157	µg/L	<QL	J	0.0595	RAS
MW-366C-NS	110.1	*cis*-1,2-Dichloroethene	0.14	µg/L	<QL	J	0.0595	RAS
MW-366D-NS	111.6	*cis*-1,2-Dichloroethene	0.121	µg/L	<QL	J	0.0595	RAS
MW-366E-NS	113.1	*cis*-1,2-Dichloroethene	0.0904	µg/L	<QL	J	0.0595	RAS
MW-366E-NS	113.1	*cis*-1,2-Dichloroethene	0.15	µg/L	<QL	J	1	QESS
MW-366F-NS	114.6	*cis*-1,2-Dichloroethene	0.138	µg/L	<QL	J	0.0595	RAS
MW-366G-NS	116.1	*cis*-1,2-Dichloroethene	0.125	µg/L	<QL	J	0.0595	RAS
MW-366H-NS	117.6	*cis*-1,2-Dichloroethene	0.126	µg/L	<QL	J	0.0595	RAS
MW-366I-NS	119.1	*cis*-1,2-Dichloroethene	0.0777	µg/L	<QL	J	0.0595	RAS
MW-366J-NS	120.6	*cis*-1,2-Dichloroethene	0.127	µg/L	<QL	J	0.0595	RAS

Table A.26. MW-366 Diffusion Sampler Analytical Results (continued)

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-366K-NS	122.1	*cis*-1,2-Dichloroethene	0.112	µg/L	<QL	J	0.0595	RAS
MW-366A-NS	107.1	Freon 113	3.09	µg/L			0.112	RAS
MW-366B-NS	108.6	Freon 113	3.07	µg/L			0.112	RAS
MW-366C-NS	110.1	Freon 113	3.04	µg/L			0.112	RAS
MW-366D-NS	111.6	Freon 113	3.05	µg/L			0.112	RAS
MW-366E-NS	113.1	Freon 113	2.64	µg/L			0.112	RAS
MW-366E-NS	113.1	Freon 113	2.7	µg/L			1	QESS
MW-366F-NS	114.6	Freon 113	2.82	µg/L			0.112	RAS
MW-366G-NS	116.1	Freon 113	2.74	µg/L			0.112	RAS
MW-366H-NS	117.6	Freon 113	2.49	µg/L			0.112	RAS
MW-366I-NS	119.1	Freon 113	2.18	µg/L			0.112	RAS
MW-366J-NS	120.6	Freon 113	2.02	µg/L			0.112	RAS
MW-366K-NS	122.1	Freon 113	1.73	µg/L			0.112	RAS
MW-366A-NS	107.1	Tetrachloroethene	0.531	µg/L	<QL	J	0.114	RAS
MW-366B-NS	108.6	Tetrachloroethene	0.582	µg/L	<QL	J	0.114	RAS
MW-366C-NS	110.1	Tetrachloroethene	0.524	µg/L	<QL	J	0.114	RAS
MW-366D-NS	111.6	Tetrachloroethene	0.472	µg/L	<QL	J	0.114	RAS
MW-366E-NS	113.1	Tetrachloroethene	0.372	µg/L	<QL	J	0.114	RAS
MW-366F-NS	114.6	Tetrachloroethene	0.427	µg/L	<QL	J	0.114	RAS
MW-366G-NS	116.1	Tetrachloroethene	0.388	µg/L	<QL	J	0.114	RAS
MW-366H-NS	117.6	Tetrachloroethene	0.29	µg/L	<QL	J	0.114	RAS
MW-366I-NS	119.1	Tetrachloroethene	0.225	µg/L	<QL	J	0.114	RAS
MW-366J-NS	120.6	Tetrachloroethene	0.184	µg/L	<QL	J	0.114	RAS
MW-366K-NS	122.1	Tetrachloroethene	0.188	µg/L	<QL	J	0.114	RAS
MW-366A-NS	107.1	Trichloroethene	1.94	µg/L			0.0929	RAS
MW-366B-NS	108.6	Trichloroethene	1.97	µg/L			0.0929	RAS
MW-366C-NS	110.1	Trichloroethene	1.94	µg/L			0.0929	RAS
MW-366D-NS	111.6	Trichloroethene	1.9	µg/L			0.0929	RAS
MW-366E-NS	113.1	Trichloroethene	1.85	µg/L			0.0929	RAS
MW-366E-NS	113.1	Trichloroethene	1.8	µg/L			1	QESS
MW-366F-NS	114.6	Trichloroethene	1.89	µg/L			0.0929	RAS
MW-366G-NS	116.1	Trichloroethene	1.86	µg/L			0.0929	RAS
MW-366H-NS	117.6	Trichloroethene	1.86	µg/L			0.0929	RAS
MW-366I-NS	119.1	Trichloroethene	1.64	µg/L			0.0929	RAS
MW-366J-NS	120.6	Trichloroethene	1.59	µg/L			0.0929	RAS
MW-366K-NS	122.1	Trichloroethene	1.38	µg/L			0.0929	RAS

Table A.27. MW-381 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-381B-NS	112.2	1,2-Dichloroethane	0.168	µg/L	<QL	J	0.0408	RAS
MW-381D-NS	115.2	1,2-Dichloroethane	0.23	µg/L	<QL	J	0.0408	RAS
MW-381E-NS	116.7	1,2-Dichloroethane	0.38	µg/L	<QL	J	0.0408	RAS
MW-381F-NS	118.2	1,2-Dichloroethane	0.316	µg/L	<QL	J	0.0408	RAS
MW-381G-NS	119.7	1,2-Dichloroethane	0.362	µg/L	<QL	J	0.0408	RAS
MW-381H-NS	121.2	1,2-Dichloroethane	0.448	µg/L	<QL	J	0.0408	RAS
MW-381I-NS	122.7	1,2-Dichloroethane	0.444	µg/L	<QL	J	0.0408	RAS
MW-381J-NS	124.2	1,2-Dichloroethane	0.429	µg/L	<QL	J	0.0408	RAS
MW-381K-NS	125.7	1,2-Dichloroethane	0.413	µg/L	<QL	J	0.0408	RAS
MW-381L-NS	127.2	1,2-Dichloroethane	0.411	µg/L	<QL	J	0.0408	RAS
MW-381M-NS	128.7	1,2-Dichloroethane	0.427	µg/L	<QL	J	0.0408	RAS
MW-381A-NS	110.7	Carbon tetrachloride	7.2	µg/L			0.0778	RAS
MW-381A-NS	110.7	Carbon Tetrachloride	7.3	µg/L			1	QESS
MW-381B-NS	112.2	Carbon tetrachloride	8.57	µg/L			0.0778	RAS
MW-381B-NS	112.2	Carbon Tetrachloride	8.5	µg/L			1	QESS
MW-381C-NS	113.7	Carbon tetrachloride	10.3	µg/L			0.0778	RAS
MW-381D-NS	115.2	Carbon tetrachloride	11.1	µg/L			0.0778	RAS
MW-381E-NS	116.7	Carbon tetrachloride	10.2	µg/L			0.0778	RAS
MW-381F-NS	118.2	Carbon tetrachloride	11.8	µg/L			0.0778	RAS
MW-381G-NS	119.7	Carbon tetrachloride	11.3	µg/L			0.0778	RAS
MW-381H-NS	121.2	Carbon tetrachloride	11.7	µg/L			0.0778	RAS
MW-381I-NS	122.7	Carbon tetrachloride	11.5	µg/L			0.0778	RAS
MW-381J-NS	124.2	Carbon tetrachloride	11	µg/L			0.0778	RAS
MW-381K-NS	125.7	Carbon tetrachloride	11.1	µg/L			0.0778	RAS
MW-381L-NS	127.2	Carbon tetrachloride	11.7	µg/L			0.0778	RAS
MW-381M-NS	128.7	Carbon tetrachloride	11.8	µg/L			0.0778	RAS
MW-381A-NS	110.7	Chloroform	3.32	µg/L			0.06	RAS
MW-381A-NS	110.7	Chloroform	3	µg/L			1	QESS
MW-381B-NS	112.2	Chloroform	3.64	µg/L			0.06	RAS
MW-381B-NS	112.2	Chloroform	3.1	µg/L			1	QESS
MW-381C-NS	113.7	Chloroform	3.64	µg/L			0.06	RAS
MW-381D-NS	115.2	Chloroform	5.02	µg/L			0.06	RAS
MW-381E-NS	116.7	Chloroform	7.49	µg/L			0.06	RAS
MW-381F-NS	118.2	Chloroform	7.13	µg/L			0.06	RAS
MW-381G-NS	119.7	Chloroform	7.27	µg/L			0.06	RAS
MW-381H-NS	121.2	Chloroform	8.87	µg/L			0.06	RAS
MW-381I-NS	122.7	Chloroform	8.37	µg/L			0.06	RAS
MW-381J-NS	124.2	Chloroform	7.91	µg/L			0.06	RAS
MW-381K-NS	125.7	Chloroform	7.93	µg/L			0.06	RAS
MW-381L-NS	127.2	Chloroform	8.25	µg/L			0.06	RAS
MW-381M-NS	128.7	Chloroform	8.32	µg/L			0.06	RAS
MW-381A-NS	110.7	Chloromethane	0.33	µg/L	<QL	J	1	QESS
MW-381A-NS	110.7	*cis*-1,2-Dichloroethene	0.0579	µg/L	<QL	J	0.0407	RAS
MW-381B-NS	112.2	*cis*-1,2-Dichloroethene	0.0695	µg/L	<QL	J	0.0407	RAS
MW-381C-NS	113.7	*cis*-1,2-Dichloroethene	0.0699	µg/L	<QL	J	0.0407	RAS
MW-381D-NS	115.2	*cis*-1,2-Dichloroethene	0.112	µg/L	<QL	J	0.0407	RAS
MW-381E-NS	116.7	*cis*-1,2-Dichloroethene	0.157	µg/L	<QL	J	0.0407	RAS

Table A.27. MW-381 Diffusion Sampler Analytical Results (continued)

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-381F-NS	118.2	*cis*-1,2-Dichloroethene	0.162	µg/L	<QL	J	0.0407	RAS
MW-381G-NS	119.7	*cis*-1,2-Dichloroethene	0.171	µg/L	<QL	J	0.0407	RAS
MW-381H-NS	121.2	*cis*-1,2-Dichloroethene	0.196	µg/L	<QL	J	0.0407	RAS
MW-381I-NS	122.7	*cis*-1,2-Dichloroethene	0.197	µg/L	<QL	J	0.0407	RAS
MW-381J-NS	124.2	*cis*-1,2-Dichloroethene	0.186	µg/L	<QL	J	0.0407	RAS
MW-381K-NS	125.7	*cis*-1,2-Dichloroethene	0.181	µg/L	<QL	J	0.0407	RAS
MW-381L-NS	127.2	*cis*-1,2-Dichloroethene	0.199	µg/L	<QL	J	0.0407	RAS
MW-381M-NS	128.7	*cis*-1,2-Dichloroethene	0.186	µg/L	<QL	J	0.0407	RAS
MW-381A-NS	110.7	Tetrachloroethene	0.464	µg/L	<QL	J	0.0591	RAS
MW-381A-NS	110.7	Tetrachloroethene	0.54	µg/L	<QL	J	1	QESS
MW-381B-NS	112.2	Tetrachloroethene	0.595	µg/L	<QL	J	0.0591	RAS
MW-381B-NS	112.2	Tetrachloroethene	0.67	µg/L	<QL	J	1	QESS
MW-381C-NS	113.7	Tetrachloroethene	1.04	µg/L			0.0591	RAS
MW-381D-NS	115.2	Tetrachloroethene	1.36	µg/L			0.0591	RAS
MW-381E-NS	116.7	Tetrachloroethene	1.11	µg/L			0.0591	RAS
MW-381F-NS	118.2	Tetrachloroethene	1.41	µg/L			0.0591	RAS
MW-381G-NS	119.7	Tetrachloroethene	1.3	µg/L			0.0591	RAS
MW-381H-NS	121.2	Tetrachloroethene	1.42	µg/L			0.0591	RAS
MW-381I-NS	122.7	Tetrachloroethene	1.36	µg/L			0.0591	RAS
MW-381J-NS	124.2	Tetrachloroethene	1.31	µg/L			0.0591	RAS
MW-381K-NS	125.7	Tetrachloroethene	1.31	µg/L			0.0591	RAS
MW-381L-NS	127.2	Tetrachloroethene	1.34	µg/L			0.0591	RAS
MW-381M-NS	128.7	Tetrachloroethene	1.24	µg/L			0.0591	RAS
MW-381A-NS	110.7	Trichloroethene	13.9	µg/L			0.0499	RAS
MW-381A-NS	110.7	Trichloroethene	13	µg/L			1	QESS
MW-381B-NS	112.2	Trichloroethene	16.5	µg/L			0.0499	RAS
MW-381B-NS	112.2	Trichloroethene	15	µg/L			1	QESS
MW-381C-NS	113.7	Trichloroethene	18.3	µg/L			0.0499	RAS
MW-381D-NS	115.2	Trichloroethene	23.1	µg/L			0.0499	RAS
MW-381E-NS	116.7	Trichloroethene	22.7	µg/L			0.0499	RAS
MW-381F-NS	118.2	Trichloroethene	26.4	µg/L			0.0499	RAS
MW-381G-NS	119.7	Trichloroethene	25.9	µg/L			0.0499	RAS
MW-381H-NS	121.2	Trichloroethene	28.1	µg/L			0.0499	RAS
MW-381I-NS	122.7	Trichloroethene	26.9	µg/L			0.0499	RAS
MW-381J-NS	124.2	Trichloroethene	25.6	µg/L			0.0499	RAS
MW-381K-NS	125.7	Trichloroethene	26	µg/L			0.0499	RAS
MW-381L-NS	127.2	Trichloroethene	26.9	µg/L			0.0499	RAS
MW-381M-NS	128.7	Trichloroethene	27.1	µg/L			0.0499	RAS

Table A.28. MW-382 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-382B-NS	114.2	Carbon tetrachloride	0.285	µg/L	<QL	J	0.0778	RAS
MW-382C-NS	115.7	Carbon tetrachloride	0.286	µg/L	<QL	J	0.0778	RAS
MW-382D-NS	117.2	Carbon tetrachloride	0.46	µg/L	<QL	J	0.0778	RAS
MW-382E-NS	118.7	Carbon tetrachloride	0.48	µg/L	<QL	J	0.0778	RAS
MW-382F-NS	120.2	Carbon tetrachloride	0.518	µg/L	<QL	J	0.0778	RAS
MW-382G-NS	121.7	Carbon tetrachloride	0.48	µg/L	<QL	J	0.0778	RAS
MW-382G-NS	121.7	Carbon Tetrachloride	0.44	µg/L	<QL	J	1	QESS
MW-382H-NS	123.2	Carbon tetrachloride	0.46	µg/L	<QL	J	0.0778	RAS
MW-382I-NS	124.7	Carbon tetrachloride	0.49	µg/L	<QL	J	0.0778	RAS
MW-382D-NS	117.2	Chloroform	0.108	µg/L	<QL	J	0.06	RAS
MW-382E-NS	118.7	Chloroform	0.121	µg/L	<QL	J	0.06	RAS
MW-382F-NS	120.2	Chloroform	0.114	µg/L	<QL	J	0.06	RAS
MW-382G-NS	121.7	Chloroform	0.115	µg/L	<QL	J	0.06	RAS
MW-382H-NS	123.2	Chloroform	0.1	µg/L	<QL	J	0.06	RAS
MW-382I-NS	124.7	Chloroform	0.111	µg/L	<QL	J	0.06	RAS
MW-382F-NS	120.2	*cis*-1,2-Dichloroethene	0.0528	µg/L	<QL	J	0.0407	RAS
MW-382A-NS	112.7	Trichloroethene	0.581	µg/L	<QL	J	0.0929	RAS
MW-382B-NS	114.2	Trichloroethene	2.56	µg/L			0.0499	RAS
MW-382C-NS	115.7	Trichloroethene	2.42	µg/L			0.0499	RAS
MW-382D-NS	117.2	Trichloroethene	5.48	µg/L			0.0499	RAS
MW-382E-NS	118.7	Trichloroethene	6.06	µg/L			0.0499	RAS
MW-382F-NS	120.2	Trichloroethene	6.08	µg/L			0.0499	RAS
MW-382G-NS	121.7	Trichloroethene	5.96	µg/L			0.0499	RAS
MW-382G-NS	121.7	Trichloroethene	5	µg/L			1	QESS
MW-382H-NS	123.2	Trichloroethene	5.47	µg/L			0.0499	RAS
MW-382I-NS	124.7	Trichloroethene	5.89	µg/L			0.0499	RAS

Table A.29. MW-64 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-64B-NS	167.5	1,1-Dichloroethene	0.203	µg/L	<QL	J	0.102	RAS
MW-64D-NS	170.5	1,1-Dichloroethene	0.112	µg/L	<QL	J	0.102	RAS
MW-64A-NS	166	*cis*-1,2-Dichloroethene	0.189	µg/L	<QL	J	0.0595	RAS
MW-64B-NS	167.5	*cis*-1,2-Dichloroethene	0.201	µg/L	<QL	J	0.0595	RAS
MW-64B-NS	167.5	*cis*-1,2-Dichloroethene	0.96	µg/L	<QL	J	1	QESS
MW-64C-NS	169	*cis*-1,2-Dichloroethene	0.207	µg/L	<QL	J	0.0595	RAS
MW-64D-NS	170.5	*cis*-1,2-Dichloroethene	0.172	µg/L	<QL	J	0.0595	RAS
MW-64E-NS	172	*cis*-1,2-Dichloroethene	0.199	µg/L	<QL	J	0.0595	RAS
MW-64A-NS	166	Trichloroethene	0.372	µg/L	<QL	J	0.0929	RAS
MW-64B-NS	167.5	Trichloroethene	0.392	µg/L	<QL	J	0.0929	RAS
MW-64B-NS	167.5	Trichloroethene	1.2	µg/L		J	1	QESS
MW-64C-NS	169	Trichloroethene	0.353	µg/L	<QL	J	0.0929	RAS
MW-64D-NS	170.5	Trichloroethene	0.336	µg/L	<QL	J	0.0929	RAS
MW-64E-NS	172	Trichloroethene	0.341	µg/L	<QL	J	0.0929	RAS

Table A.30. MW-75 Diffusion Sampler Analytical Results

Sample Number	Sampler Depth (ft bgs)	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL	Lab Code
MW-75A-NS	117	1,1-Dichloroethene	2.27	µg/L			0.148	RAS
MW-75B-NS	118.5	1,1-Dichloroethene	1.97	µg/L			0.148	RAS
MW-75C-NS	120	1,1-Dichloroethene	1.53	µg/L			0.148	RAS
MW-75D-NS	121.5	1,1-Dichloroethene	1.57	µg/L			0.148	RAS
MW-75E-NS	123	1,1-Dichloroethene	1.83	µg/L			0.148	RAS
MW-75C-NS	120	Chloroform	0.17	µg/L	<QL	J	0.158	RAS
MW-75D-NS	121.5	Chloroform	0.205	µg/L	<QL	J	0.158	RAS
MW-75A-NS	117	*cis*-1,2-Dichloroethene	16.2	µg/L			0.106	RAS
MW-75B-NS	118.5	*cis*-1,2-Dichloroethene	15.6	µg/L			0.106	RAS
MW-75C-NS	120	*cis*-1,2-Dichloroethene	15.3	µg/L			0.106	RAS
MW-75D-NS	121.5	*cis*-1,2-Dichloroethene	15.5	µg/L			0.106	RAS
MW-75E-NS	123	*cis*-1,2-Dichloroethene	15.6	µg/L			0.106	RAS
MW-75A-NS	117	*trans*-1,2-Dichloroethene	0.24	µg/L	<QL	J	0.15	RAS
MW-75B-NS	118.5	*trans*-1,2-Dichloroethene	0.25	µg/L	<QL	J	0.15	RAS
MW-75C-NS	120	*trans*-1,2-Dichloroethene	0.241	µg/L	<QL	J	0.15	RAS
MW-75D-NS	121.5	*trans*-1,2-Dichloroethene	0.254	µg/L	<QL	J	0.15	RAS
MW-75E-NS	123	*trans*-1,2-Dichloroethene	0.258	µg/L	<QL	J	0.15	RAS
MW-75A-NS	117	Trichloroethene	241	µg/L			3.22	RAS
MW-75B-NS	118.5	Trichloroethene	239	µg/L			3.22	RAS
MW-75C-NS	120	Trichloroethene	258	µg/L			3.22	RAS
MW-75D-NS	121.5	Trichloroethene	278	µg/L			3.22	RAS
MW-75E-NS	123	Trichloroethene	280	µg/L			3.22	RAS
MW-75A-NS	117	Vinyl chloride	7.99	µg/L			0.136	RAS
MW-75B-NS	118.5	Vinyl chloride	8.66	µg/L			0.136	RAS
MW-75C-NS	120	Vinyl chloride	7.89	µg/L			0.136	RAS
MW-75D-NS	121.5	Vinyl chloride	7.81	µg/L			0.136	RAS
MW-75E-NS	123	Vinyl chloride	8.75	µg/L			0.136	RAS

Table A.31. Diffusion Sampler Descriptive Statistics

Well Number	Analyte	Count	Mean	St Dev	Variance	SE Mean	Minimum	Maximum	Median	Sum of Squares	Skewness	Kurtosis	MSSD
MW-136	1,1-DCA	9	1.76	0.03	0.00	0.01	1.72	1.79	1.76	28	(0.06)	(1.65)	0
	1,1-DCE	9	0.250	0.016	0.000	0.005	0.226	0.277	0.252	1	(0.100)	(0.211)	0
	Chloroform	7	0.0940	0.0047	0.0000	0.0018	0.0850	0.0980	0.0950	0	(1.7713)	3.4319	0
	cis-1,2-DCE	9	0.597	0.022	0.000	0.007	0.572	0.630	0.599	3	0.275	(1.404)	0.001
	TCE	9	9.83	0.21	0.04	0.07	9.49	10.10	9.91	870	(0.59)	(0.79)	0.07
MW-148	cis-1,2-DCE	5	6.17	1.85	3.44	0.83	4.84	9.09	5.01	204	1.29	0.51	3.14
	TCE	5	16.6	5.1	25.9	2.3	12.8	24.6	13.5	1488	1.2	0.3	21.5
MW-154	Carbon tetrachloride	5	0.735	0.120	0.014	0.054	0.641	0.936	0.717	3	1.583	2.701	0.023
	Chloroform	5	0.940	0.192	0.037	0.086	0.804	1.270	0.895	5	1.808	3.464	0.045
	cis-1,2-DCE	5	1.88	0.38	0.15	0.17	1.57	2.53	1.79	18	1.77	3.38	0.19
	TCE	5	23.4	4.7	22.0	2.1	20.0	31.5	22.1	2821	1.9	3.7	10.7
MW-155	1,1-DCA	5	0.478	0.192	0.037	0.086	0.271	0.771	0.486	1	0.836	0.804	0.028
	1,1-DCE	5	1.67	0.79	0.62	0.35	0.83	2.94	1.54	16	1.21	2.14	0.59
	1,2-DCA	5	0.251	0.048	0.002	0.021	0.194	0.324	0.249	0	0.718	1.333	0.003
	Chloroform	5	0.692	0.089	0.008	0.040	0.638	0.850	0.661	2	2.109	4.540	0.011
	cis-1,2-DCE	5	10.1	2.1	4.3	0.9	7.9	13.5	9.9	528	1.3	2.5	5.9
	Toluene	4	0.235	0.028	0.001	0.014	0.203	0.263	0.237	0	(0.280)	(3.271)	0.001
	trans-1,2-DCE	5	0.132	0.060	0.004	0.027	0.085	0.236	0.119	0	1.866	3.745	0.002
	TCE	5	16.2	8.3	68.3	3.7	10.1	30.5	12.5	1579	1.9	3.8	94.7
MW-156	1,1,2-TCA	4	0.111	0.018	0.000	0.009	0.095	0.133	0.107	0	0.714	(1.692)	0.000
	1,1-DCA	5	1.47	0.03	0.00	0.01	1.44	1.52	1.47	11	1.24	2.53	0.00
	1,1-DCE	5	2.40	0.08	0.01	0.03	2.30	2.48	2.37	29	0.04	(2.07)	0.01
	1,2-DCA	5	0.742	0.031	0.001	0.014	0.692	0.772	0.748	3	(1.172)	1.320	0.001
	Chloroform	5	0.98	0.02	0.00	0.01	0.97	1.01	0.98	5	1.87	3.72	0.00
	cis-1,2-DCE	5	23.0	0.4	0.2	0.2	22.5	23.4	23.0	2650	(0.3)	(1.7)	0.1
	trans-1,2-DCE	5	0.371	0.038	0.001	0.017	0.312	0.409	0.377	1	(1.025)	0.906	0.002
	TCE	5	72.5	0.8	0.6	0.4	71.2	73.2	72.8	26284	(1.4)	1.7	0.7
MW-159	Chloroform	5	1.03	0.02	0.00	0.01	1.01	1.05	1.02	5	0.52	(1.69)	0.00
	cis-1,2-DCE	5	17.9	0.5	0.2	0.2	17.1	18.3	18.0	1603	(1.6)	2.9	0.3

Table A.31. Diffusion Sampler Descriptive Statistics (continued)

Well Number	Analyte	Count	Mean	St Dev	Variance	SE Mean	Minimum	Maximum	Median	Sum of Squares	Skewness	Kurtosis	MSSD
MW-159	PCE	5	1.38	0.13	0.02	0.06	1.25	1.58	1.37	10	1.01	1.13	0.02
(cont.)	TCE	5	85.4	3.3	11.2	1.5	80.4	89.8	85.5	36545	(0.5)	2.1	9.5
MW-166	1,1-DCA	4	0.417	0.022	0.000	0.011	0.394	0.447	0.413	1	0.921	1.970	0.000
	1,1-DCE	4	0.314	0.019	0.000	0.010	0.297	0.331	0.315	0	(0.002)	(5.987)	0.000
	1,2-DCA	4	0.433	0.031	0.001	0.015	0.400	0.473	0.428	1	0.735	1.211	0.001
	Chloroform	4	0.365	0.017	0.000	0.009	0.342	0.384	0.366	1	(0.592)	1.553	0.000
	cis-1,2-DCE	4	16.9	0.6	0.4	0.3	16.0	17.3	17.2	1147	(2.0)	3.9	0.3
	trans-1,2-DCE	4	0.286	0.054	0.003	0.027	0.213	0.340	0.296	0	(1.040)	1.781	0.001
	TCE	4	44.4	1.3	1.7	0.7	43.0	46.1	44.3	7891	0.6	0.4	2.1
MW-201	Chloroform	4	0.099	0.008	0.000	0.004	0.088	0.109	0.100	0	(0.268)	1.537	0.000
	cis-1,2-DCE	5	0.50	0.02	0.00	0.01	0.48	0.53	0.50	1	1.03	0.82	0.00
	TCE	5	9.8	0.3	0.1	0.1	9.4	10.2	9.8	484	(0.4)	(0.8)	0.2
MW-206	1,1-DCA	9	3.81	0.85	0.73	0.28	1.65	4.35	4.11	136	(2.49)	6.39	0.90
	Chloroform	9	0.277	0.063	0.004	0.021	0.116	0.320	0.298	1	(2.564)	7.010	0.005
	cis-1,2-DCE	9	1.4	0.3	0.1	0.1	0.6	1.6	1.5	19	(2.3)	5.2	0.1
	TCE	9	3.43	0.69	0.47	0.23	1.65	3.90	3.65	110	(2.71)	7.68	0.61
MW-214	Freon 113	5	0.759	0.032	0.001	0.014	0.714	0.790	0.756	3	(0.500)	(0.785)	0.001
	1,1-DCA	5	21.6	0.1	0.0	0.0	21.5	21.6	21.6	2324	(0.6)	(3.3)	0.0
	1,1-DCE	5	1.21	0.01	0.00	0.01	1.20	1.23	1.21	7	1.36	2.00	0.00
	Carbon tetrachloride	5	0.162	0.011	0.000	0.005	0.144	0.175	0.165	0	(1.209)	2.708	0.000
	Chloroform	5	0.374	0.005	0.000	0.002	0.369	0.382	0.372	1	1.307	1.400	0.000
	cis-1,2-DCE	5	12.4	0.2	0.0	0.1	12.2	12.6	12.3	766	0.5	(1.7)	0.0
	PCE	5	0.5	0.0	0.0	0.0	0.4	0.5	0.5	1	(0.6)	(2.8)	0.0
	trans-1,2-DCE	5	0.208	0.017	0.000	0.007	0.188	0.229	0.203	0	0.198	(1.610)	0.000
	TCE	5	12.10	0.19	0.04	0.08	11.90	12.40	12.10	732	1.15	2.00	0.04
MW-216	1,1-DCA	5	0.365	0.031	0.001	0.014	0.327	0.407	0.373	1	0.121	(0.855)	0.002
	1,1-DCE	5	0.272	0.028	0.001	0.013	0.243	0.313	0.274	0	0.608	(0.374)	0.001
	1,2-DCA	5	0.477	0.041	0.002	0.018	0.442	0.541	0.468	1	1.117	0.703	0.001

Table A.31. Diffusion Sampler Descriptive Statistics (continued)

Well Number	Analyte	Count	Mean	St Dev	Variance	SE Mean	Minimum	Maximum	Median	Sum of Squares	Skewness	Kurtosis	MSSD
MW-216	Chloroform	5	0.302	0.030	0.001	0.013	0.277	0.347	0.292	0	0.961	(0.373)	0.001
(cont.)	cis-1,2-DCE	5	18.3	2.2	4.9	1.0	16.5	21.5	17.1	1698	0.9	(1.5)	3.3
	trans-1,2-DCE	5	0.298	0.096	0.009	0.043	0.186	0.442	0.308	0	0.665	0.889	0.007
	TCE	5	40.6	4.3	18.8	1.9	36.7	46.9	38.2	8301	0.9	(1.0)	20.1
MW-218	cis-1,2-DCE	5	1.03	0.04	0.00	0.02	0.99	1.08	1.03	5	0.21	(1.82)	0.00
	TCE	5	1.44	0.07	0.01	0.03	1.33	1.53	1.44	10	(0.62)	1.47	0.01
MW-235	Freon 113	5	0.87	0.66	0.44	0.30	0.12	1.46	1.28	6	(0.57)	(3.23)	0.58
	1,1-DCE	3	0.204	0.023	0.001	0.013	0.186	0.230	0.197	0	1.293	*	*
	Carbon tetrachloride	4	1.17	0.69	0.48	0.35	0.14	1.64	1.44	7	(1.88)	3.64	0.57
	Chloroform	5	0.37	0.23	0.05	0.10	0.11	0.55	0.51	1	(0.60)	(3.29)	0.06
	cis-1,2-DCE	5	0.764	0.234	0.055	0.105	0.351	0.935	0.845	3	(2.067)	4.482	0.032
	PCE	5	10.1	5.2	26.6	2.3	3.3	14.4	13.4	612	(0.7)	(2.6)	35.5
	TCE	5	53.1	17.2	294.5	7.7	23.4	66.3	57.2	15287	(1.9)	3.8	251.3
MW-270	Freon 113	5	0.839	0.161	0.026	0.072	0.656	1.100	0.817	4	1.152	2.709	0.013
	1,1-DCE	5	0.225	0.010	0.000	0.005	0.210	0.234	0.230	0	(0.926)	(0.986)	0.000
	1,2-DCA	5	0.416	0.015	0.000	0.007	0.395	0.436	0.416	1	(0.304)	1.911	0.000
	Chloroform	5	0.486	0.034	0.001	0.015	0.449	0.533	0.492	1	0.327	(1.052)	0.001
	cis-1,2-DCE	5	4.12	0.29	0.09	0.13	3.80	4.49	3.99	85	0.40	(2.24)	0.08
	PCE	5	6.21	1.35	1.81	0.60	4.47	8.25	6.14	200	0.54	2.06	0.85
	TCE	5	176.2	4.1	17.2	1.9	170.0	180.0	178.0	155301	(1.0)	(0.5)	12.8
MW-271	Freon 113	7	1.44	0.21	0.05	0.08	1.02	1.63	1.46	15	(1.40)	1.98	0.02
	1,1-DCE	7	0.387	0.226	0.051	0.085	0.246	0.868	0.278	1	2.103	4.375	0.049
	Carbon tetrachloride	6	0.16	0.01	0.00	0.01	0.15	0.18	0.16	0	0.61	(1.79)	0.00
	Chloroform	7	2.09	0.44	0.19	0.17	1.83	3.07	1.93	32	2.54	6.57	0.22
	cis-1,2-DCE	7	1.11	0.25	0.06	0.09	0.56	1.25	1.19	9	(2.55)	6.63	0.03
	PCE	7	0.322	0.093	0.009	0.035	0.135	0.428	0.347	1	(1.558)	3.240	0.006
	TCE	7	55.4	9.0	80.8	3.4	35.4	61.0	58.8	21958	(2.4)	6.1	98.8
MW-282	Freon 113	7	16.2	1.9	3.7	0.7	13.0	19.2	16.5	1859	(0.2)	1.1	3.1

Table A.31. Diffusion Sampler Descriptive Statistics (continued)

Well Number	Analyte	Count	Mean	St Dev	Variance	SE Mean	Minimum	Maximum	Median	Sum of Squares	Skewness	Kurtosis	MSSD
MW-282 (cont.)	Carbon tetrachloride	7	2.16	1.28	1.64	0.48	0.94	3.64	1.48	42	0.32	(2.67)	1.83
	Chloroform	7	0.607	0.353	0.125	0.133	0.276	0.993	0.419	3	0.313	(2.723)	0.165
	TCE	7	2.02	1.21	1.47	0.46	0.88	3.47	1.43	37	0.31	(2.63)	0.88
MW-286	Freon 113	9	0.142	0.021	0.000	0.007	0.106	0.165	0.147	0	(0.606)	(1.026)	0.000
	1,1-DCA	9	16.5	0.5	0.2	0.2	15.6	17.2	16.5	2459	(0.6)	0.5	0.1
	1,1-DCE	9	0.58	0.04	0.00	0.01	0.53	0.63	0.58	3	(0.17)	(1.24)	0.00
	1,2-DCA	9	0.39	0.02	0.00	0.01	0.34	0.42	0.39	1	(1.04)	1.19	0.00
	Chloroform	9	0.922	0.060	0.004	0.020	0.800	0.989	0.951	8	(1.087)	0.901	0.004
	cis-1,2-DCE	9	7.50	0.50	0.25	0.17	6.46	8.05	7.63	509	(1.20)	1.23	0.36
	PCE	9	0.828	0.196	0.039	0.065	0.379	1.000	0.894	6	(1.680)	3.215	0.041
	trans-1,2-DCE	9	0.116	0.021	0.000	0.007	0.083	0.144	0.123	0	(0.205)	(0.959)	0.000
	TCE	9	7.74	0.60	0.36	0.20	6.39	8.46	7.86	541	(1.45)	3.02	0.34
MW-287	Freon 113	5	47.4	5.3	28.0	2.4	42.0	55.5	48.0	11365	0.8	0.6	33.4
	1,1-DCA	5	0.553	0.050	0.002	0.022	0.475	0.602	0.564	2	(1.113)	1.052	0.004
	1,1-DCE	5	3.02	0.19	0.03	0.08	2.80	3.27	2.96	46	0.31	(1.15)	0.03
	Carbon tetrachloride	5	0.303	0.030	0.001	0.013	0.265	0.348	0.302	0	0.548	1.637	0.001
	Chloroform	5	0.348	0.014	0.000	0.006	0.335	0.363	0.341	1	0.502	(3.154)	0.000
	cis-1,2-DCE	5	0.53	0.05	0.00	0.02	0.46	0.58	0.55	1	(0.97)	0.08	0.00
	PCE	5	22.640	3.226	10.408	1.443	19.400	27.900	21.700	2604	1.329	2.179	7.781
	TCE	5	147.2	9.7	94.7	4.4	135.0	162.0	147.0	108718	0.6	1.8	129.5
MW-288	Freon 113	9	39.0	6.9	47.0	2.3	25.0	50.8	38.9	14088	(0.5)	2.5	66.5
	1,1-DCA	9	0.518	0.100	0.010	0.033	0.326	0.706	0.522	2	(0.101)	2.593	0.008
	1,1-DCE	9	2.48	0.51	0.26	0.17	1.44	3.43	2.44	58	(0.34)	3.06	0.18
	Chloroform	9	0.304	0.021	0.000	0.007	0.252	0.324	0.310	1	(2.204)	5.715	0.001
	cis-1,2-DCE	9	0.843	0.092	0.008	0.030	0.658	0.986	0.845	6	(0.595)	1.784	0.006
	PCE	9	24.3	3.5	12.6	1.2	17.5	28.8	25.0	5420	(0.9)	0.5	17.2
	TCE	9	167.4	25.8	664.0	8.6	111.0	206.0	168.0	257651	(1.1)	3.1	594.5
MW-314	Chloroform	5	0.142	0.008	0.000	0.004	0.134	0.154	0.143	0	0.599	(0.261)	0.000
	cis-1,2-DCE	5	1.22	0.04	0.00	0.02	1.18	1.28	1.22	7	1.15	2.00	0.00

Table A.31. Diffusion Sampler Descriptive Statistics (continued)

Well Number	Analyte	Count	Mean	St Dev	Variance	SE Mean	Minimum	Maximum	Median	Sum of Squares	Skewness	Kurtosis	MSSD
MW-314	TCE	5	6.24	0.17	0.03	0.08	6.04	6.44	6.25	195	(0.07)	(2.51)	0.04
MW-325	Freon 113	9	0.199	0.014	0.000	0.005	0.181	0.225	0.194	0	0.588	(0.035)	0.000
	1,1-DCE	9	0.187	0.016	0.000	0.005	0.155	0.215	0.188	0	(0.393)	2.860	0.000
	cis-1,2-DCE	5	0.057	0.002	0.000	0.001	0.056	0.059	0.056	0	0.534	(3.224)	0.000
	TCE	9	28.4	1.0	1.1	0.3	26.3	29.6	28.6	7273	(1.1)	1.1	1.1
MW-326	1,1-DCA	5	1.80	0.29	0.08	0.13	1.64	2.31	1.66	17	2.14	4.60	0.11
	1,1-DCE	5	0.594	0.034	0.001	0.015	0.556	0.641	0.595	2	0.332	(1.098)	0.001
	Chloroform	5	0.147	0.022	0.000	0.010	0.123	0.182	0.142	0	1.050	1.883	0.001
	cis-1,2-DCE	5	0.418	0.039	0.002	0.018	0.391	0.485	0.401	1	1.860	3.481	0.001
	TCE	5	8.19	0.31	0.10	0.14	7.86	8.64	8.23	336	0.57	(0.20)	0.11
MW-343	Carbon tetrachloride	5	1.95	0.10	0.01	0.05	1.80	2.05	1.97	19	(0.87)	(0.03)	0.01
	Chloroform	5	0.18	0.01	0.00	0.01	0.17	0.20	0.18	0	0.03	(1.93)	0.00
	cis-1,2-DCE	5	0.115	0.009	0.000	0.004	0.103	0.124	0.118	0	(0.695)	(1.238)	0.000
	TCE	5	1.49	0.05	0.00	0.02	1.43	1.56	1.47	11	0.43	(1.77)	0.00
MW-362	Freon 113	2	0.153	0.023	0.001	0.017	0.136	0.169	0.153	0	*	*	0.001
	Toluene	2	0.228	0.019	0.000	0.014	0.215	0.242	0.228	0	*	*	0.000
	TCE	3	0.362	0.011	0.000	0.006	0.355	0.374	0.356	0	1.715	*	0.000
MW-364	Freon 113	3	3.78	0.26	0.07	0.15	3.60	4.08	3.66	43	1.63	*	0.06
	1,1-DCE	3	0.241	0.014	0.000	0.008	0.226	0.254	0.243	0	(0.625)	*	0.000
	Carbon tetrachloride	3	1.10	0.05	0.00	0.03	1.06	1.15	1.08	4	1.39	*	0.00
	Chloroform	3	0.418	0.016	0.000	0.009	0.405	0.436	0.412	1	1.378	*	0.000
	cis-1,2-DCE	3	1.1	0.1	0.0	0.0	1.0	1.2	1.1	4	0.0	*	0.0
	PCE	3	3.29	0.41	0.17	0.24	3.02	3.76	3.08	33	1.69	*	0.12
	TCE	3	113.0	8.5	73.0	4.9	104.0	121.0	114.0	38453	(0.5)	*	37.3
MW-366	1,1,2-TCA	11	0.655	0.045	0.002	0.014	0.575	0.720	0.665	5	(0.425)	(0.716)	0.002
	Freon 113	11	2.63	0.47	0.22	0.14	1.73	3.09	2.74	78	(0.80)	(0.52)	0.27
	Carbon tetrachloride	11	1.24	0.18	0.03	0.05	0.83	1.41	1.34	17	(1.39)	1.59	0.04
	Chloroform	11	0.416	0.006	0.000	0.002	0.404	0.424	0.416	2	(0.646)	(0.214)	0.000

Table A.31. Diffusion Sampler Descriptive Statistics (continued)

Well Number	Analyte	Count	Mean	St Dev	Variance	SE Mean	Minimum	Maximum	Median	Sum of Squares	Skewness	Kurtosis	MSSD
MW-366	cis-1,2-DCE	11	0.123	0.023	0.001	0.007	0.078	0.157	0.126	0	(0.779)	0.373	0.001
(cont.)	PCE	11	0.380	0.142	0.020	0.043	0.184	0.582	0.388	2	(0.156)	(1.408)	0.007
	TCE	11	1.80	0.18	0.03	0.06	1.38	1.97	1.86	36	(1.48)	1.49	0.04
MW-381	1,2-DCA	11	0.366	0.092	0.009	0.028	0.168	0.448	0.411	2	(1.361)	0.923	0.008
	Carbon tetrachloride	13	10.7	1.4	1.9	0.4	7.2	11.8	11.1	1515	(1.8)	2.8	2.2
	Chloroform	13	6.71	2.03	4.13	0.56	3.32	8.87	7.49	634	(0.87)	(1.00)	3.40
	cis-1,2-DCE	13	0.150	0.053	0.003	0.015	0.058	0.199	0.171	0	(0.908)	(0.885)	0.003
	PCE	13	1.2	0.3	0.1	0.1	0.5	1.4	1.3	19	(1.7)	1.9	0.1
	TCE	13	23.6	4.6	20.9	1.3	13.9	28.1	25.9	7520	(1.2)	0.3	24.1
MW-382	Carbon tetrachloride	8	0.43	0.09	0.01	0.03	0.29	0.52	0.47	2	(1.27)	(0.18)	0.01
	Chloroform	6	0.112	0.007	0.000	0.003	0.100	0.121	0.113	0	(0.539)	0.823	0.000
	TCE	9	4.50	2.07	4.29	0.69	0.58	6.08	5.48	217	(1.10)	(0.34)	3.25
MW-64	cis-1,2-DCE	5	0.194	0.014	0.000	0.006	0.172	0.207	0.199	0	(1.167)	1.010	0.000
	TCE	5	0.359	0.023	0.001	0.010	0.336	0.392	0.353	1	0.711	(0.983)	0.000
MW-75	1,1-DCE	5	1.83	0.30	0.09	0.14	1.53	2.27	1.83	17	0.57	(0.74)	0.12
	Chloroform	2	0.19	0.02	0.00	0.02	0.17	0.21	0.19	0	*	*	0.00
	cis-1,2-DCE	5	15.6	0.3	0.1	0.2	15.3	16.2	15.6	1224	1.5	3.0	0.2
	trans-1,2-DCE	5	0.249	0.008	0.000	0.004	0.240	0.258	0.250	0	(0.071)	(2.464)	0.000
	TCE	5	259.2	19.5	381.7	8.7	239.0	280.0	258.0	337450	0.1	(3.0)	252.9
	Vinyl chloride	5	8.22	0.45	0.20	0.20	7.81	8.75	7.99	339	0.54	(3.08)	0.26

MSSD = Mean of the Squared Successive Differences
SE Mean = Standard error of the mean
St Dev = Standard deviation

APPENDIX B

2Q99 GWMP ANALYTICAL DATA

Acronyms for Appendix B tables:

DL	=	detection limit
EPA	=	Environmental Protection Agency
ft bgs	=	feet below ground surface
J	=	estimated value
J+	=	estimated biased high
MW	=	Monitoring Well
NS	=	normal sample
QA	=	Quality Assurance
QESS	=	Quanterra Environmental Services
<QL	=	less than Quantitation Limit
RAS	=	Radian Analytical Services
U	=	rejected value
µg/L	=	micrograms per liter

Table B.1. 2Q99 GWMP Analytical Results for Diffusion Sampling Wells

Well Number	Sample Number	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL
MW-136	MW-136-NS	*cis*-1,2-Dichloroethene	0.686	µg/L	<QL	J	0.0407
MW-136	MW-136-NS	1,1-Dichloroethane	1.84	µg/L			0.0588
MW-136	MW-136-NS	1,1-Dichloroethene	0.209	µg/L	<QL	J	0.0819
MW-136	MW-136-NS	Trichloroethene	12.8	µg/L			0.0499
MW-148	MW-148-NS	*cis*-1,2-Dichloroethene	4.06	µg/L			0.0595
MW-148	MW-148-NS	Trichloroethene	10.7	µg/L			0.0929
MW-154	MW-154-NS	*cis*-1,2-Dichloroethene	0.557	µg/L	<QL	J	0.0595
MW-154	MW-154-NS	Acetone	17.9	µg/L			1.43
MW-154	MW-154-NS	Chloroform	0.4	µg/L	<QL	J	0.0424
MW-154	MW-154-NS	Trichloroethene	7.03	µg/L			0.0929
MW-155	MW-155-NS	1,4-Dichlorobenzene	0.0893	µg/L	<QL	J	0.0651
MW-155	MW-155-NS	1,2-Dichloroethane	0.226	µg/L	<QL	J	0.0408
MW-155	MW-155-NS	*cis*-1,2-Dichloroethene	8.65	µg/L			0.0407
MW-155	MW-155-NS	*trans*-1,2-Dichloroethene	0.152	µg/L	<QL	J	0.0422
MW-155	MW-155-NS	Chloroform	0.684	µg/L	<QL	J	0.06
MW-155	MW-155-NS	1,1-Dichloroethane	0.348	µg/L	<QL	J	0.0588
MW-155	MW-155-NS	1,1-Dichloroethene	1.15	µg/L			0.0819
MW-155	MW-155-NS	Trichloroethene	15	µg/L			0.0499
MW-156	MW-156-NS	1,2-Dichloroethane	0.639	µg/L	<QL	J	0.0349
MW-156	MW-156-NS	*cis*-1,2-Dichloroethene	19.2	µg/L			0.0595
MW-156	MW-156-NS	Chloroform	0.779	µg/L	<QL	J	0.0424
MW-156	MW-156-NS	1,1-Dichloroethane	0.836	µg/L	<QL	J	0.0736
MW-156	MW-156-NS	1,1-Dichloroethene	1.16	µg/L			0.102
MW-156	MW-156-NS	Trichloroethene	66.5	µg/L			0.0929
MW-159	MW-159-NS	Tetrachloroethene	3.02	µg/L			0.114
MW-159	MW-159-NS	*cis*-1,2-Dichloroethene	20	µg/L			0.0595
MW-159	MW-159-NS	Chloroform	1.16	µg/L			0.0424
MW-159	MW-159-NS	Methylene Chloride	0.36	µg/L		U	0.0776
MW-159	MW-159-NS	Trichloroethene	89.6	µg/L			0.929
MW-166	MW-166-NS	*cis*-1,2-Dichloroethene	3.61	µg/L			0.0595
MW-166	MW-166-NS	Benzene	0.0835	µg/L	<QL	J	0.0759
MW-166	MW-166-NS	Trichloroethene	10.4	µg/L			0.0929
MW-201	MW-201-NS	*cis*-1,2-Dichloroethene	0.481	µg/L	<QL	J	0.0407
MW-201	MW-201-NS	Chloroform	0.0989	µg/L	<QL	J	0.06
MW-201	MW-201-NS	Trichloroethene	9.39	µg/L			0.0499
MW-206	MW-206-NS	*cis*-1,2-Dichloroethene	1.46	µg/L			0.0595
MW-206	MW-206-NS	Chloroform	0.202	µg/L	<QL	J	0.0424
MW-206	MW-206-NS	1,1-Dichloroethane	4.1	µg/L			0.0736
MW-206	MW-206-NS	Trichloroethene	2.84	µg/L			0.0929
MW-214	MW-214-NS	Tetrachloroethene	0.556	µg/L	<QL	J	0.0591
MW-214	MW-214-NS	*cis*-1,2-Dichloroethene	11	µg/L			0.0407
MW-214	MW-214-NS	*trans*-1,2-Dichloroethene	0.351	µg/L	<QL	J	0.0422
MW-214	MW-214-NS	Carbon Tetrachloride	0.172	µg/L	<QL	J	0.0778
MW-214	MW-214-NS	Chloroform	0.385	µg/L	<QL	J	0.06
MW-214	MW-214-NS	1,1-Dichloroethane	20.8	µg/L			0.0588
MW-214	MW-214-NS	1,1-Dichloroethene	1.1	µg/L			0.0819
MW-214	MW-214-NS	Freon 113	0.783	µg/L	<QL	J	0.0599
MW-214	MW-214-NS	Trichloroethene	12.2	µg/L			0.0499
MW-216	MW-216-NS	1,2-Dichloroethane	0.305	µg/L	<QL	J	0.0349

Table B.1. 2Q99 GWMP Analytical Results for Diffusion Sampling Wells (continued)

Well Number	Sample Number	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL
MW-216	MW-216-NS	*cis*-1,2-Dichloroethene	12	µg/L			0.0595
MW-216	MW-216-NS	Chloroform	0.197	µg/L	<QL	J	0.0424
MW-216	MW-216-NS	1,1-Dichloroethene	0.16	µg/L	<QL	J	0.102
MW-216	MW-216-NS	Trichloroethene	31.3	µg/L			0.0929
MW-218	MW-218-NS	*cis*-1,2-Dichloroethene	0.693	µg/L	<QL	J	0.0595
MW-218	MW-218-NS	Trichloroethene	1.35	µg/L			0.0929
MW-235	MW-235-NS	Tetrachloroethene	23.5	µg/L			0.114
MW-235	MW-235-NS	*cis*-1,2-Dichloroethene	1.01	µg/L			0.0595
MW-235	MW-235-NS	Carbon Tetrachloride	2.31	µg/L			0.0962
MW-235	MW-235-NS	Chloroform	0.618	µg/L	<QL	J	0.0424
MW-235	MW-235-NS	1,1-Dichloroethene	0.248	µg/L	<QL	J	0.102
MW-235	MW-235-NS	Freon 113	1.95	µg/L			0.112
MW-235	MW-235-NS	Trichloroethene	60.6	µg/L			0.0929
MW-270	MW-270-NS	1,2-Dichloroethane	1.53	µg/L			0.0349
MW-270	MW-270-NS	Tetrachloroethene	8.9	µg/L			0.114
MW-270	MW-270-NS	*cis*-1,2-Dichloroethene	4.84	µg/L			0.0595
MW-270	MW-270-NS	Chloroform	0.619	µg/L	<QL	J	0.0424
MW-270	MW-270-NS	1,1-Dichloroethene	0.127	µg/L	<QL	J	0.102
MW-270	MW-270-NS	Freon 113	1.14	µg/L			0.112
MW-270	MW-270-NS	Trichloroethene	158	µg/L			0.929
MW-271	MW-271-NS	Tetrachloroethene	0.772	µg/L	<QL	J	0.114
MW-271	MW-271-NS	*cis*-1,2-Dichloroethene	0.856	µg/L	<QL	J	0.0595
MW-271	MW-271-NS	Chloroform	2.38	µg/L			0.0424
MW-271	MW-271-NS	Freon 113	1.64	µg/L			0.112
MW-271	MW-271-NS	Trichloroethene	68.4	µg/L			0.0929
MW-282	MW-282-NS	Tetrachloroethene	0.158	µg/L	<QL	J	0.0591
MW-282	MW-282-NS	Carbon Tetrachloride	2.71	µg/L			0.0778
MW-282	MW-282-NS	Chloroform	0.762	µg/L	<QL	J	0.06
MW-282	MW-282-NS	Freon 113	28.7	µg/L			0.0599
MW-282	MW-282-NS	Trichloroethene	2.73	µg/L			0.0499
MW-286	MW-286-NS	1,2-Dichloroethane	0.333	µg/L	<QL	J	0.0349
MW-286	MW-286-NS	Tetrachloroethene	1.56	µg/L			0.114
MW-286	MW-286-NS	*cis*-1,2-Dichloroethene	6.44	µg/L			0.0595
MW-286	MW-286-NS	Chloroform	0.815	µg/L	<QL	J	0.0424
MW-286	MW-286-NS	1,1-Dichloroethane	12.5	µg/L			0.0736
MW-286	MW-286-NS	1,1-Dichloroethene	0.575	µg/L	<QL	J+	0.102
MW-286	MW-286-NS	Freon 113	0.153	µg/L	<QL	J	0.112
MW-286	MW-286-NS	Trichloroethene	7.52	µg/L			0.0929
MW-287	MW-287-NS	Tetrachloroethene	12.6	µg/L			0.114
MW-287	MW-287-NS	*cis*-1,2-Dichloroethene	0.288	µg/L	<QL	J	0.0595
MW-287	MW-287-NS	Chloroform	0.141	µg/L	<QL	J	0.0424
MW-287	MW-287-NS	1,1-Dichloroethene	1.25	µg/L			0.102
MW-287	MW-287-NS	Freon 113	20.2	µg/L			0.112
MW-287	MW-287-NS	Trichloroethene	61.2	µg/L			0.0929
MW-288	MW-288-NS	Tetrachloroethene	26.6	µg/L			0.114
MW-288	MW-288-NS	*cis*-1,2-Dichloroethene	0.888	µg/L	<QL	J	0.0595
MW-288	MW-288-NS	Chloroform	0.331	µg/L	<QL	J	0.0424
MW-288	MW-288-NS	1,1-Dichloroethane	0.495	µg/L	<QL	J	0.0736
MW-288	MW-288-NS	1,1-Dichloroethene	2.52	µg/L			0.102

Table B.1. 2Q99 GWMP Analytical Results for Diffusion Sampling Wells (continued)

Well Number	Sample Number	Analyte	Result	Units	Data Flags	EPA QA Flags	Lab DL
MW-288	MW-288-NS	Freon 113	37.9	µg/L			0.112
MW-288	MW-288-NS	Trichloroethene	163	µg/L			0.929
MW-314	MW-314-NS	*cis*-1,2-Dichloroethene	1.27	µg/L			0.0407
MW-314	MW-314-NS	Chloroform	0.152	µg/L	<QL	J	0.06
MW-314	MW-314-NS	Trichloroethene	6.53	µg/L			0.0499
MW-325	MW-325-NS	1,1-Dichloroethene	0.204	µg/L	<QL	J	0.102
MW-325	MW-325-NS	Freon 113	0.25	µg/L	<QL	J	0.112
MW-325	MW-325-NS	Trichloroethene	36.7	µg/L			0.0929
MW-326	MW-326-NS	*cis*-1,2-Dichloroethene	0.443	µg/L	<QL	J	0.0595
MW-326	MW-326-NS	1,1-Dichloroethane	1.38	µg/L			0.0736
MW-326	MW-326-NS	1,1-Dichloroethene	0.609	µg/L	<QL	J	0.102
MW-326	MW-326-NS	Trichloroethene	5.45	µg/L			0.0929
MW-343	MW-343-NS	*cis*-1,2-Dichloroethene	0.0704	µg/L	<QL	J	0.0595
MW-343	MW-343-NS	Carbon Tetrachloride	1.64	µg/L			0.0962
MW-343	MW-343-NS	Chloroform	0.152	µg/L	<QL	J	0.0424
MW-343	MW-343-NS	Trichloroethene	1.26	µg/L			0.0929
MW-362	MW-362-NS	Freon 113	0.231	µg/L	<QL	J	0.112
MW-362	MW-362-NS	Trichloroethene	0.766	µg/L	<QL	J	0.0929
MW-364	MW-364-NS	Tetrachloroethene	15.1	µg/L			0.0591
MW-364	MW-364-NS	*cis*-1,2-Dichloroethene	1.14	µg/L			0.0407
MW-364	MW-364-NS	Carbon Tetrachloride	3.57	µg/L			0.0778
MW-364	MW-364-NS	Chloroform	0.624	µg/L	<QL	J	0.06
MW-364	MW-364-NS	1,1-Dichloroethene	0.526	µg/L	<QL	J+	0.0819
MW-364	MW-364-NS	Freon 113	8.91	µg/L			0.0599
MW-364	MW-364-NS	1,1,2-Trichloroethane	0.175	µg/L	<QL	J	0.0576
MW-364	MW-364-NS	Trichloroethene	151	µg/L			0.0998
MW-366	MW-366-NS	Tetrachloroethene	0.776	µg/L	<QL	J	0.114
MW-366	MW-366-NS	*cis*-1,2-Dichloroethene	0.189	µg/L	<QL	J	0.0595
MW-366	MW-366-NS	Carbon Tetrachloride	1.38	µg/L			0.0962
MW-366	MW-366-NS	Chloroform	0.482	µg/L	<QL	J	0.0424
MW-366	MW-366-NS	Freon 113	3.76	µg/L			0.112
MW-366	MW-366-NS	1,1,2-Trichloroethane	0.664	µg/L	<QL	J	0.0392
MW-366	MW-366-NS	Trichloroethene	2.35	µg/L			0.0929
MW-381	MW-381-NS	1,2-Dichloroethane	0.446	µg/L	<QL	J	0.0408
MW-381	MW-381-NS	Tetrachloroethene	1.61	µg/L			0.0591
MW-381	MW-381-NS	*cis*-1,2-Dichloroethene	0.207	µg/L	<QL	J	0.0407
MW-381	MW-381-NS	Carbon Tetrachloride	11.9	µg/L			0.0778
MW-381	MW-381-NS	Chloroform	8.38	µg/L			0.06
MW-381	MW-381-NS	Methylene Chloride	0.223	µg/L		U	0.0607
MW-381	MW-381-NS	Trichloroethene	27.4	µg/L			0.0499
MW-382	MW-382-NS	Carbon Tetrachloride	0.478	µg/L	<QL	J	0.0962
MW-382	MW-382-NS	Trichloroethene	5.6	µg/L			0.0929
MW-64	MW-64-NS	*cis*-1,2-Dichloroethene	0.208	µg/L	<QL	J	0.0595
MW-64	MW-64-NS	Trichloroethene	3.22	µg/L			0.0929
MW-75	MW-75-NS	*cis*-1,2-Dichloroethene	13.1	µg/L			0.0595
MW-75	MW-75-NS	*trans*-1,2-Dichloroethene	0.21	µg/L	<QL	J	0.138
MW-75	MW-75-NS	Chloroform	0.924	µg/L	<QL	J	0.0424
MW-75	MW-75-NS	Vinyl Chloride	1.71	µg/L			0.0889
MW-75	MW-75-NS	1,1-Dichloroethene	1.06	µg/L			0.102
MW-75	MW-75-NS	Trichloroethene	481	µg/L			0.929

APPENDIX C

QUALITY ASSURANCE/QUALITY CONTROL ASSESSMENT

Interoffice Correspondence
TRW S&ITG

Subject	Date	From
Review of Diffusion Sampling Data	2/19/2000	Timothy Chapman
To	**cc:**	
David Rennie		

As requested, a routine evaluation was conducted of the Radian International quality assurance (QA) and quality control (QC) for the diffusion sampling project. During the initial stages of this check several apparent anomalies were discovered. These included:

- Radian Analytical Services reporting method detection limit (MDL) and reporting limit (RL) as the same values;
- Quanterra Incorporated no reporting MDL;
- Quanterra Incorporated RLs higher than project requirements; and
- Radian International Diffusion Data (QA) Summary showing 18 field duplicate samples

The Radian International "Diffusion Data Summary" is attached to this report.

Based on this initial review of the data summaries, the laboratory (*i.e.,* raw) analytical data reports were obtained for this project. A complete review of the data packages was performed according to the requirements of the project Quality Assurance Project Plan (QAPjP) and Basewide Remedial Investigation/Feasibility Study Quality Assurance Project Plan (QAPP). In addition, ten percent of the electronic data were compared to the laboratory analytical reports.

The attached data summary accurately presents the data that were qualified during the QA/QC review process. All data produced from the diffusion sampling are valid according the requirements of the QAPP and QAPjP. The following is a summary of the QA/QC results for this effort:

- All samples results were useable (*i.e.,* 100% completeness). This meets the completeness requirement for this project;
- A total of 522 results were qualified as estimated and assigned a "J" flag because they were detected between the laboratory practical quantitation limit (PQL) and method detection limit (MDL);
- Of the 12,978 analytical results, 210 were qualified as estimated or non-detect because one or more QA objectives were not met;
- A total of 173 analytical results for acetone were qualified as non-detect and assigned the QA flag "U" due to analytical equipment contamination;
- A total of 25 analytical results for methylene chloride were qualified as non-detect and assigned the QA flag "U" due to analytical equipment contamination;
- The Relative Percent Difference (RPD) pairs for 2 analyses exceed project criterion and the associated data qualified as estimated and assigned a "J" flag;
- For 23 RPD pairs one laboratory reported a concentration while the other laboratory reported the result as not detected. All positive data were qualified as estimated with a "J" flag;
- All laboratory analyses met the accuracy requirements of the QAPjP (*i.e.,* percent recoveries for matrix spike/matrix spike duplicates and laboratory control samples were within the established limits); and

- The sampling data meet the criteria for comparability and representativeness set forth in the QAPjP.

Accuracy is determined from the formula:

$$\%R = \frac{C_i - C_o}{C_t} \times 100$$

where: %R = percent recovery
C_i = measured concentration of spiked sample aliquot
C_o = measured concentration of unspiked sample aliquot
C_t = actual concentration of spike added

During the 100% data review, data from laboratory control samples and matrix spike/matrix spike duplicate pairs were compared to requirements of the QAPjP and QAPP. The percent recovery for ll laboratory control samples and matrix spike/matrix spike duplicate pairs were verified as being within the acceptable range for the specific compound analyzed. In that, all data meet the accuracy requirements of the QAPjP.

Completeness was calculated for the data using the formula:

$$\%\ Completeness = {}^{VDP}\!/_{TDP} \times 100$$

where: VDP = number of valid data points
TDP = number of total samples obtained

Following the 100% review of the data, completeness was calculated as 100%. In that, all data were found to be suitable for their intended use. This exceeds the project completeness requirement of 95% included within the QAPjP.

Comparability refers to the confidence with which one data set can be compared to another. Comparability is essential for the evaluation of technology performance compared to that of similar technologies. Comparable data was generated during this project by following standard SW-846 and U.S. EPA protocols for all laboratory analyses, and by following manufacturers' instructions for all field meters and measurement devices. A review of the field log books and field QA inspections indicate that data meets the project requirements for this qualitative quality indicator and is considered comparable to other data sets.

Representativeness is a measure of the degree to which data accurately and precisely represent the conditions of the parameter represented by the data. Collected samples must be representative of the matrix characteristics and contamination concentrations of the aquifer. Representativeness is affected by errors introduced through the sampling process, field contamination, preservation, handling, sample preparation, and analysis. Representativeness was ensured through the following practices:

- using the necessary number of samples, sample locations, and sampling procedures that depicted, as accurately and precisely as possible, the matrix and conditions measured;
- utilizing SOPs and protocols for storage, preservation, and transport that preserved the representativeness of the collected samples;
- documenting that protocols have been followed and that samples were properly identified to maintain integrity and traceability; and
- using standard, well-documented analytical procedures that ensured consistent, representative data.

While none of the above practices can be quantified as a measure of representativeness, QC samples were collected to indicate factors that may affect representativeness. The QC samples to be used for this purpose include:

- field duplicates to indicate variations caused by sampling techniques;
- equipment blanks to indicate contamination caused by incomplete decontamination;
- trip blanks to indicate contamination of samples during transport; and
- field blanks to indicate contamination introduced through ambient conditions.

Results of the field duplicates are discussed in the following paragraphs. Equipment blanks, trip blanks, and field blanks are discussed in subsequent sections. Overall, the project data were determined to meet the representativeness criteria of the QAPjP.

A total of 19 duplicate samples were analyzed for VOCs by SW8260B at a second analytical laboratory (Quanterra, West Sacramento, California). Relative percent difference between the diffusion sampler results and the collection duplicates was calculated using the following formula:

$$RPD = \left(\frac{(C_1 - C_2)}{(C_1 + C_2)/2} \right) \times 100\%$$

where: RPD = relative percent difference
C_1 = the larger of the two observed values
C_2 = the smaller of two observed values

Except as noted below, all primary and secondary laboratory RPD samples met project RPD criteria. The analysis of RPD values shows that there is good intercomparability between laboratories, thus the primary laboratory analysis results are appropriate for use. Samples from MW-156E had an RPD of 38% for 1,1-DCE. This is within the 50% maximum accepted RPD for samples analyzed by differing laboratories and is due to laboratory dilution performed on the sample analyzed by the secondary laboratory. Similarly, *cis*-1,2-DCE results from MW-366E had an RPD of 49.6%. *Cis*-1,2-DCE samples from MW-64-B had an RPD of 130.7%. Both samples had reported concentrations less than the laboratories PQL and were flagged as estimated. The RPD for TCE in samples from MW-64B was calculated at 101.5%. The secondary laboratory report TCE at concentrations above the PQL, while the primary laboratory reported values of less than PQL. *Cis*-1,2-DCE and TCE samples from MW-64-B were flagged as estimated due to the high RPDs. In 23 other instances, RPD values were not calculated as one laboratory reported values near the MDL while the other laboratory reported concentrations as non-detect. In these cases, a UJ flag was added to all non-detect values.

Equipment blanks were obtained for off-site analysis. One equipment blank, MW-235-EB, reported 1,1-DCE concentrations of 9.97 µg/L. After a careful review of the laboratory data from the sample, the laboratory data from surrounding samples, and field log books it was determined that the source of contaminants was not due to field equipment or as a result of laboratory preparation or analytical carryover. As the source of the water for the equipment blank was an unused diffusion sampler, the probable cause of the contamination was improper storage of the diffusion sampler in the field. Improper sample labeling in the field was discounted as this sample had dissimilar contaminant profiles from those included within that days sampling. Because of this, no flags were assigned to the corresponding data set.

Trip blank samples were prepared in the field and included with each shipment to an analytical laboratory. Acetone was detected in 3 trip blanks and chloroform in one trip blank. All acetone and chloroform results were flagged as J due to field contamination.

An ambient field blank sample was taken and analyzed during the diffusion sampling effort. No contaminants were reported in the sample and, therefore, no data flags were applied.

The PQL for all primary laboratory samples met the project requirements as specified in the WIP and QAPP. The secondary laboratory did not meet the PQL for all compounds due to required dilutions. This did not adversely effect the quality of the data or impact the use of the data for its stated purpose.

A field audit was performed during the 2Q99 field effort. Results of the field audit are included in 2Q99 GWMP report (Radian International, 1999). No significant problems were identified during the audit.

During the data validation and assessment, the following deviations from project requirements and standard practices were noted:

- The primary laboratory did reported the MDL and PQL as the same value although the PQL was typically two to five times greater than the MDL. The McClellan AFB subcontractor that performed the sampling applied the appropriate PQL to the laboratory data following receipt in its local offices and the applied PQL was not included within the data deliverable. This project had a specific requirement that the laboratory report both the MDL and PQL for each compound for each analysis;
- The secondary laboratory did not always report the MDL (*i.e.,* only reported the PQL) for the analysis as dictated by project requirements. Therefore, it was not always possible to verify the accuracy of the data flags assigned by the laboratory;
- The data summary incorrectly stated the number of field duplicate samples; and
- The evaluation of the source of equipment blank contamination was not fully evaluated and documented in the project summary or the 2Q99 GWMP report.

While these discrepancies require corrective action, none are indicative of a systemic quality assurance problem and do not adversely effect the quality of the project data. Radian International staff should be made aware of these findings and implement proper corrective actions for future GWMP events.

DIFFUSION DATA SUMMARY

A total of 188 diffusion bag samples and 18 diffusion bag split samples were collected from 30 monitoring wells during the 2Q99 groundwater sampling event. All samples were analyzed for VOCs by Method SW8260B. The 188 normal samples were analyzed at the Radian Laboratory in Austin, Texas, and the 18 split samples were analyzed at the Quanterra Laboratory in West Sacramento, California.

The quality control (QC) data for these samples were evaluated according to the quality assurance (QA) objectives in the *Basewide Remedial Investigation/Feasibility Summary Quality Assurance Project Plan* (RI/FS QAPP) for McClellan AFB (Radian International, 1997b). No sample results were rejected. Any limitations on data use are indicated by qualifier flags. The following items summarize data quality for Method SW8260B:

- One hundred percent (100%) of the data produced are usable. The completeness objective was met for the diffusion sampling event in 2Q99.

- Two hundred ten (210) out of 12,978 results (<2%) were qualified as estimated or not-detected values because one or more QA objectives were not met.

- One hundred seventy-three (173) acetone results were qualified as not detected and flagged "U" to indicate that the result was caused by equipment contamination, and was not present in the well sample.

- Twenty-five (25) methylene chloride results were qualified as not detected and flagged "U" to indicate that the reported result was caused by laboratory contamination, and was not present in the well sample.

- One split sample pair had relative percent differences (RPD) for cis-1,2-dichloroethene and trichloroethene that exceeded the project criterion of 50% for split samples. These four results were flagged "J" as estimated. Four split sample pairs had target analytes detected in only one sample of the pair. The four positive results were flagged "J" as estimated and the four associated "ND" results were flagged "UJ" to indicate the sample quantitation limit is estimated.

- A total of 522 results were "J" flagged as estimated because results were less than the quantitation limit (QL) but greater than the method detection limit (MDL). These results are not included in the qualified data table because there are no specific data quality concerns about them.

Table L-1 summarizes qualified data for the diffusion sampling effort. Table L-2 provides a master log of data for all diffusion samples collected during the 2Q99 sampling effort.

Table L-1. Summary of Qualified Data, Diffusion Sampling, Second Quarter 1999

Sample Number	Laboratory	Analyte	Qualification	Reason
MW-64A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-64B-NS	QESS	Acetone	U	Detected in Equipment Blank
		Trichloroethene	J	RPD between split samples did not meet criteria
		cis-1,2-Dichloroethene	J	RPD between split samples did not meet criteria
MW-64B-NS	RAS	Acetone	U	Detected in Equipment Blank
		Trichloroethene	J	RPD between split samples did not meet criteria
		cis-1,2-Dichloroethene	J	RPD between split samples did not meet criteria
MW-64C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-64E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-75A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-75B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-75C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-75D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-75E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-136B-NS	QESS	Acetone	U	Detected in Equipment Blank
		Naphthalene	J	RPD between split samples did not meet criteria
MW-136B-NS	RAS	Acetone	U	Detected in Equipment Blank
		Naphthalene	UJ	RPD between split samples did not meet criteria
MW-136D-NS	QESS	Acetone	U	Detected in Equipment Blank
		Naphthalene	J	RPD between split samples did not meet criteria
MW-136D-NS	RAS	Acetone	U	Detected in Equipment Blank
		Naphthalene	UJ	RPD between split samples did not meet criteria
MW-136H-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-148B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-155A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-155B-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-155C-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-155D-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-155D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-155E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-156A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-156B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-156C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-156D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-156E-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-156E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-159A-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank

Table L-1. (Continued)				
Sample Number	Laboratory	Analyte	Qualification	Reason
MW-159B-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-159C-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-159D-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-159E-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-166D-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-166D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-201A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-201B-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-201B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-201C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-201D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-201E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-206A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-206B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-206C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-206D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-206E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-206F-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-206G-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-206H-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-206I-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-214A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-214B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-214C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-214D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-216B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-216D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-216E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-218A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-218B-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-218B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-218C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-218D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-218E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-235A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-235B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-235C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-235D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-235-EB	RAS	Acetone	U	Detected in Equipment Blank
MW-235E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-270C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-270D-NS	RAS	Acetone	U	Detected in Equipment Blank

Table L-1. (Continued)				
Sample Number	Laboratory	Analyte	Qualification	Reason
MW-270E-NS	QESS	Acetone	U	Detected in Equipment Blank
		Bromodichloro-methane	J	RPD between split samples did not meet criteria
MW-270E-NS	RAS	Acetone	U	Detected in Equipment Blank
		Bromodichloro-methane	UJ	RPD between split samples did not meet criteria
MW-271A-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-271A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-271B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-271C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-271D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-271E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-271F-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-271G-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-282A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-282B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-282C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-282D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-282E-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-282F-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-282G-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-286A-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-286A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-286B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-286C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-286D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-286E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-286F-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-286G-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-286H-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-286I-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-286I-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-288A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-288B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-288C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-288F-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-288G-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-288H-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-288I-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-314A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-314B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-314C-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-314C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-314D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-314E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-325A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-325B-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-325B-NS	RAS	Acetone	U	Detected in Equipment Blank

Table L-1. (Continued)				
Sample Number	Laboratory	Analyte	Qualification	Reason
MW-325C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-325D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-325E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-325F-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-325G-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-325H-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-325I-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-326A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-326B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-326C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-326D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-326E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-343A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-343B-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-343B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-343C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-343D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-343E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-362A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-362C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-364A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-364B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-364C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366E-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-366E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366F-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366G-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366H-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366I-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366J-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-366K-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-381A-NS	QESS	Acetone	U	Detected in Equipment Blank
		Chloromethane	J	RPD between split samples did not meet criteria
MW-381A-NS	RAS	Acetone	U	Detected in Equipment Blank
	RAS	Chloromethane	UJ	RPD between split samples did not meet criteria
	RAS	Methylene Chloride	U	Detected in Method Blank
MW-381B-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-381B-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-381C-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank

Table L-1. (Continued)				
Sample Number	Laboratory	Analyte	Qualification	Reason
MW-381D-NS	RAS	Methylene Chloride	U	Detected in Method Blank
MW-381E-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-381F-NS	RAS	Acetone	U	Detected in Method Blank
		Methylene Chloride	U	Detected in Method Blank
MW-381G-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-381H-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-381I-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-381J-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-381K-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-381L-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-381M-NS	RAS	Acetone	U	Detected in Equipment Blank
		Methylene Chloride	U	Detected in Method Blank
MW-382A-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-382B-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-382C-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-382D-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-382E-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-382F-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-382G-NS	QESS	Acetone	U	Detected in Equipment Blank
MW-382G-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-382H-NS	RAS	Acetone	U	Detected in Equipment Blank
MW-382I-NS	RAS	Acetone	U	Detected in Equipment Blank
TB052899	QESS	Acetone	U	Detected in Method Blank
TB060399	QESS	Acetone	U	Detected in Method Blank
TB060499	QESS	Acetone	U	Detected in Method Blank

Table L-2. Master Log of Wells Sampled, Diffusion Sampling Event
Second Quarter 1999, McClellan Air Force Base

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
MW-64	SW8260B	NS1	5/28/1999	6/8/1999	MW-64A-NS	166.00	RAS	Acetone	12		1.43	ug/L	U	
					MW-64A-NS	166.00	RAS	Trichloroethene	0.372	<QL	0.0929	ug/L	J	5 CA_MCL
					MW-64A-NS	166.00	RAS	cis-1,2-Dichloroethene	0.189	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-64B-NS	167.50	RAS	1,1-Dichloroethene	0.203	<QL	0.102	ug/L	J	6 CA_MCL
					MW-64B-NS	167.50	QESS	Acetone	3.7	J,B	10	ug/L	U	
					MW-64B-NS	167.50	RAS	Acetone	19.9		1.43	ug/L	U	
					MW-64B-NS	167.50	QESS	Trichloroethene	1.2		1	ug/L	J	5 CA_MCL
					MW-64B-NS	167.50	RAS	Trichloroethene	0.392	<QL	0.0929	ug/L	J	5 CA_MCL
					MW-64B-NS	167.50	RAS	cis-1,2-Dichloroethene	0.201	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-64B-NS	167.50	QESS	cis-1,2-Dichloroethene	0.96	<QL,J	1	ug/L	J,J	6 CA_MCL
					MW-64C-NS	169.00	RAS	Acetone	3.95		1.43	ug/L	U	
					MW-64C-NS	169.00	RAS	Trichloroethene	0.353	<QL	0.0929	ug/L	J	5 CA_MCL
					MW-64C-NS	169.00	RAS	cis-1,2-Dichloroethene	0.207	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-64D-NS	170.50	RAS	1,1-Dichloroethene	0.112	<QL	0.102	ug/L	J	6 CA_MCL
					MW-64D-NS	170.50	RAS	Trichloroethene	0.336	<QL	0.0929	ug/L	J	5 CA_MCL
					MW-64D-NS	170.50	RAS	cis-1,2-Dichloroethene	0.172	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-64E-NS	172.00	RAS	Acetone	3.6		1.43	ug/L	U	
					MW-64E-NS	172.00	RAS	Trichloroethene	0.341	<QL	0.0929	ug/L	J	5 CA_MCL
					MW-64E-NS	172.00	RAS	cis-1,2-Dichloroethene	0.199	<QL	0.0595	ug/L	J	6 CA_MCL
MW-75	SW8260B	NS1	6/4/1999	6/14/1999	MW-75A-NS	117.00	RAS	1,1-Dichloroethene	2.27		0.148	ug/L		6 CA_MCL
					MW-75A-NS	117.00	RAS	Acetone	4.52		0.834	ug/L	U	
					MW-75A-NS	117.00	RAS	Trichloroethene	241		3.22	ug/L		5 CA_MCL
					MW-75A-NS	117.00	RAS	Vinyl chloride	7.99		0.136	ug/L		0.500 CA_MCL
					MW-75A-NS	117.00	RAS	cis-1,2-Dichloroethene	16.2		0.106	ug/L		6 CA_MCL
					MW-75A-NS	117.00	RAS	trans-1,2-Dichloroethene	0.24	<QL	0.15	ug/L	J	10 CA_MCL
					MW-75B-NS	118.50	RAS	1,1-Dichloroethene	1.97		0.148	ug/L		6 CA_MCL
					MW-75B-NS	118.50	RAS	Acetone	8.54		0.834	ug/L	U	
					MW-75B-NS	118.50	RAS	Vinyl chloride	8.66		0.136	ug/L		0.500 CA_MCL
					MW-75B-NS	118.50	RAS	cis-1,2-Dichloroethene	15.6		0.106	ug/L		6 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-75B-NS	118.50	RAS	trans-1,2-Dichloroethene	0.25	<QL	0.15	ug/L	J	10 CA_MCL
					MW-75C-NS	120.00	RAS	1,1-Dichloroethene	1.53		0.148	ug/L		6 CA_MCL
					MW-75C-NS	120.00	RAS	Acetone	10.3		0.834	ug/L	U	
					MW-75C-NS	120.00	RAS	Chloroform	0.17	<QL	0.158	ug/L	J	100 CA_MCL
					MW-75C-NS	120.00	RAS	Vinyl chloride	7.89		0.136	ug/L		0.500 CA_MCL
					MW-75C-NS	120.00	RAS	cis-1,2-Dichloroethene	15.3		0.106	ug/L		6 CA_MCL
					MW-75C-NS	120.00	RAS	trans-1,2-Dichloroethene	0.241	<QL	0.15	ug/L	J	10 CA_MCL
					MW-75D-NS	121.50	RAS	1,1-Dichloroethene	1.57		0.148	ug/L		6 CA_MCL
					MW-75D-NS	121.50	RAS	Acetone	5.72		0.834	ug/L	U	
					MW-75D-NS	121.50	RAS	Chloroform	0.205	<QL	0.158	ug/L	J	100 CA_MCL
					MW-75D-NS	121.50	RAS	Vinyl chloride	7.81		0.136	ug/L		0.500 CA_MCL
					MW-75D-NS	121.50	RAS	cis-1,2-Dichloroethene	15.5		0.106	ug/L		6 CA_MCL
					MW-75D-NS	121.50	RAS	trans-1,2-Dichloroethene	0.254	<QL	0.15	ug/L	J	10 CA_MCL
					MW-75E-NS	123.00	RAS	1,1-Dichloroethene	1.83		0.148	ug/L		6 CA_MCL
					MW-75E-NS	123.00	RAS	Acetone	8.24		0.834	ug/L	U	
					MW-75E-NS	123.00	RAS	Vinyl chloride	8.75		0.136	ug/L		0.500 CA_MCL
					MW-75E-NS	123.00	RAS	cis-1,2-Dichloroethene	15.6		0.106	ug/L		6 CA_MCL
					MW-75E-NS	123.00	RAS	trans-1,2-Dichloroethene	0.258	<QL	0.15	ug/L	J	10 CA_MCL
MW-136	SW8260B	NS1	6/1/1999	6/9/1999	MW-136A-NS	231.50	RAS	1,1-Dichloroethane	1.79		0.0588	ug/L		5 CA_MCL
					MW-136A-NS	231.50	RAS	1,1-Dichloroethene	0.277	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-136A-NS	231.50	RAS	Trichloroethene	9.94		0.0499	ug/L		5 CA_MCL
					MW-136A-NS	231.50	RAS	cis-1,2-Dichloroethene	0.599	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-136B-NS	233.00	QESS	1,1-Dichloroethane	1.5		1	ug/L		5 CA_MCL
					MW-136B-NS	233.00	RAS	1,1-Dichloroethane	1.74		0.0588	ug/L		5 CA_MCL
					MW-136B-NS	233.00	RAS	1,1-Dichloroethene	0.226	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-136B-NS	233.00	QESS	Acetone	5	J,B	10	ug/L	U	
					MW-136B-NS	233.00	RAS	Acetone	7.2		1.04	ug/L	U	
					MW-136B-NS	233.00	RAS	Chloroform	0.0845	<QL	0.06	ug/L	J	100 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-136B-NS	233.00	RAS	Toluene	0.114	<QL	0.0645	ug/L	J	150 CA_MCL
					MW-136B-NS	233.00	QESS	Trichloroethene	8.6		1	ug/L		5 CA_MCL
					MW-136B-NS	233.00	RAS	Trichloroethene	9.75		0.0499	ug/L		5 CA_MCL
					MW-136B-NS	233.00	RAS	cis-1,2-Dichloroethene	0.622	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-136C-NS	234.50	RAS	1,1-Dichloroethane	1.77		0.0588	ug/L		5 CA_MCL
					MW-136C-NS	234.50	RAS	1,1-Dichloroethene	0.25	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-136C-NS	234.50	RAS	Chloroform	0.0951	<QL	0.06	ug/L	J	100 CA_MCL
					MW-136C-NS	234.50	RAS	Trichloroethene	10		0.0499	ug/L		5 CA_MCL
					MW-136C-NS	234.50	RAS	cis-1,2-Dichloroethene	0.572	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-136D-NS	236.00	QESS	1,1-Dichloroethane	1.5		1	ug/L		5 CA_MCL
					MW-136D-NS	236.00	RAS	1,1-Dichloroethane	1.73		0.0588	ug/L		5 CA_MCL
					MW-136D-NS	236.00	RAS	1,1-Dichloroethene	0.229	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-136D-NS	236.00	QESS	Acetone	3.9	J,B	10	ug/L	U	
					MW-136D-NS	236.00	RAS	Acetone	5.28		1.04	ug/L	U	
					MW-136D-NS	236.00	QESS	Trichloroethene	8.4		1	ug/L		5 CA_MCL
					MW-136D-NS	236.00	RAS	Trichloroethene	9.49		0.0499	ug/L		5 CA_MCL
					MW-136D-NS	236.00	QESS	cis-1,2-Dichloroethene	0.58	<QL,J	1	ug/L	,J	6 CA_MCL
					MW-136D-NS	236.00	RAS	cis-1,2-Dichloroethene	0.608	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-136E-NS	237.50	RAS	1,1-Dichloroethane	1.72		0.0588	ug/L		5 CA_MCL
					MW-136E-NS	237.50	RAS	1,1-Dichloroethene	0.26	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-136E-NS	237.50	RAS	Chloroform	0.0923	<QL	0.06	ug/L	J	100 CA_MCL
					MW-136E-NS	237.50	RAS	Trichloroethene	9.97		0.0499	ug/L		5 CA_MCL
					MW-136E-NS	237.50	RAS	cis-1,2-Dichloroethene	0.58	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-136F-NS	239.00	RAS	1,1-Dichloroethane	1.74		0.0588	ug/L		5 CA_MCL
					MW-136F-NS	239.00	RAS	1,1-Dichloroethene	0.256	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-136F-NS	239.00	RAS	Chloroform	0.0964	<QL	0.06	ug/L	J	100 CA_MCL
					MW-136F-NS	239.00	RAS	Trichloroethene	9.76		0.0499	ug/L		5 CA_MCL
					MW-136F-NS	239.00	RAS	cis-1,2-Dichloroethene	0.581	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-136G-NS	240.50	RAS	1,1-Dichloroethane	1.78		0.0588	ug/L		5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-136G-NS	240.50	RAS	1,1-Dichloroethene	0.241	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-136G-NS	240.50	RAS	Chloroform	0.0976	<QL	0.06	ug/L	J	100 CA_MCL
					MW-136G-NS	240.50	RAS	Trichloroethene	10.1		0.0499	ug/L		5 CA_MCL
					MW-136G-NS	240.50	RAS	cis-1,2-Dichloroethene	0.606	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-136H-NS	242.00	RAS	1,1-Dichloroethane	1.76		0.0588	ug/L		5 CA_MCL
					MW-136H-NS	242.00	RAS	1,1-Dichloroethene	0.252	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-136H-NS	242.00	RAS	Acetone	2.61		1.04	ug/L	U	
					MW-136H-NS	242.00	RAS	Chloroform	0.0948	<QL	0.06	ug/L	J	100 CA_MCL
					MW-136H-NS	242.00	RAS	Toluene	0.11	<QL	0.0645	ug/L	J	150 CA_MCL
					MW-136H-NS	242.00	RAS	Trichloroethene	9.55		0.0499	ug/L		5 CA_MCL
					MW-136H-NS	242.00	RAS	cis-1,2-Dichloroethene	0.572	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-136I-NS	243.50	RAS	1,1-Dichloroethane	1.79		0.0588	ug/L		5 CA_MCL
					MW-136I-NS	243.50	RAS	1,1-Dichloroethene	0.26	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-136I-NS	243.50	RAS	Chloroform	0.0982	<QL	0.06	ug/L	J	100 CA_MCL
					MW-136I-NS	243.50	RAS	Trichloroethene	9.91		0.0499	ug/L		5 CA_MCL
					MW-136I-NS	243.50	RAS	cis-1,2-Dichloroethene	0.63	<QL	0.0407	ug/L	J	6 CA_MCL
MW-148	SW8260B	NS1	6/2/1999	6/12/1999	MW-148A-NS	290.00	RAS	Trichloroethene	13.5		0.0929	ug/L		5 CA_MCL
					MW-148A-NS	290.00	RAS	cis-1,2-Dichloroethene	4.94		0.0595	ug/L		6 CA_MCL
					MW-148B-NS	291.50	RAS	Acetone	2.1		1.43	ug/L	U	
					MW-148B-NS	291.50	RAS	Trichloroethene	13.4		0.0929	ug/L		5 CA_MCL
					MW-148B-NS	291.50	RAS	cis-1,2-Dichloroethene	5.01		0.0595	ug/L		6 CA_MCL
					MW-148C-NS	293.00	RAS	Trichloroethene	12.8		0.0929	ug/L		5 CA_MCL
					MW-148C-NS	293.00	RAS	cis-1,2-Dichloroethene	4.84		0.0595	ug/L		6 CA_MCL
					MW-148D-NS	294.50	RAS	Trichloroethene	24.6		0.0929	ug/L		5 CA_MCL
					MW-148D-NS	294.50	RAS	cis-1,2-Dichloroethene	9.09		0.0595	ug/L		6 CA_MCL
					MW-148E-NS	296.00	RAS	Trichloroethene	18.9		0.0929	ug/L		5 CA_MCL
					MW-148E-NS	296.00	RAS	cis-1,2-Dichloroethene	6.95		0.0595	ug/L		6 CA_MCL
MW-154	SW8260B	NS1	6/2/1999	6/12/1999	MW-154A-NS	258.70	RAS	Carbon Tetrachloride	0.646	<QL	0.0962	ug/L	J	0.500 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-154A-NS	258.70	RAS	Chloroform	0.806	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-154A-NS	258.70	RAS	Trichloroethene	20		0.0929	ug/L		5 CA_MCL
					MW-154A-NS	258.70	RAS	cis-1,2-Dichloroethene	1.57		0.0595	ug/L		6 CA_MCL
					MW-154B-NS	260.20	RAS	Carbon Tetrachloride	0.936	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-154B-NS	260.20	RAS	Chloroform	1.27		0.0424	ug/L		100 CA_MCL
					MW-154B-NS	260.20	RAS	Trichloroethene	31.5		0.0929	ug/L		5 CA_MCL
					MW-154B-NS	260.20	RAS	cis-1,2-Dichloroethene	2.53		0.0595	ug/L		6 CA_MCL
					MW-154C-NS	261.70	RAS	Carbon Tetrachloride	0.717	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-154C-NS	261.70	RAS	Chloroform	0.895	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-154C-NS	261.70	RAS	Trichloroethene	22.1		0.0929	ug/L		5 CA_MCL
					MW-154C-NS	261.70	RAS	cis-1,2-Dichloroethene	1.79		0.0595	ug/L		6 CA_MCL
					MW-154D-NS	263.20	RAS	Carbon Tetrachloride	0.736	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-154D-NS	263.20	RAS	Chloroform	0.927	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-154D-NS	263.20	RAS	Trichloroethene	22.9		0.0929	ug/L		5 CA_MCL
					MW-154D-NS	263.20	RAS	cis-1,2-Dichloroethene	1.85		0.0595	ug/L		6 CA_MCL
					MW-154E-NS	264.70	RAS	Carbon Tetrachloride	0.641	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-154E-NS	264.70	RAS	Chloroform	0.804	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-154E-NS	264.70	RAS	Trichloroethene	20.4		0.0929	ug/L		5 CA_MCL
					MW-154E-NS	264.70	RAS	cis-1,2-Dichloroethene	1.64		0.0595	ug/L		6 CA_MCL
MW-155	SW8260B	NS1	6/1/1999	6/10/1999	MW-155A-NS	117.50	RAS	1,1-Dichloroethane	0.271	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-155A-NS	117.50	RAS	1,1-Dichloroethene	0.834	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-155A-NS	117.50	RAS	1,2-Dichloroethane	0.194	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-155A-NS	117.50	RAS	Acetone	2.65		1.04	ug/L	U	
					MW-155A-NS	117.50	RAS	Chloroform	0.642	<QL	0.06	ug/L	J	100 CA_MCL
					MW-155A-NS	117.50	RAS	Toluene	0.253	<QL	0.0645	ug/L	J	150 CA_MCL
					MW-155A-NS	117.50	RAS	Trichloroethene	10.1		0.0499	ug/L		5 CA_MCL
					MW-155A-NS	117.50	RAS	cis-1,2-Dichloroethene	7.93		0.0407	ug/L		6 CA_MCL
					MW-155A-NS	117.50	RAS	trans-1,2-Dichloroethene	0.0854	<QL	0.0422	ug/L	J	10 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-155B-NS	119.00	RAS	1,1-Dichloroethane	0.349	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-155B-NS	119.00	RAS	1,1-Dichloroethene	1.28		0.0819	ug/L		6 CA_MCL
					MW-155B-NS	119.00	RAS	1,2-Dichloroethane	0.229	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-155B-NS	119.00	RAS	Acetone	3.72		1.04	ug/L	U	
					MW-155B-NS	119.00	RAS	Chloroform	0.638	<QL	0.06	ug/L	J	100 CA_MCL
					MW-155B-NS	119.00	RAS	Methylene chloride	0.102		0.0607	ug/L	U	5 CA_MCL
					MW-155B-NS	119.00	RAS	Toluene	0.263	<QL	0.0645	ug/L	J	150 CA_MCL
					MW-155B-NS	119.00	RAS	Trichloroethene	12		0.0499	ug/L		5 CA_MCL
					MW-155B-NS	119.00	RAS	cis-1,2-Dichloroethene	9.14		0.0407	ug/L		6 CA_MCL
					MW-155B-NS	119.00	RAS	trans-1,2-Dichloroethene	0.123	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-155C-NS	120.50	RAS	1,1-Dichloroethane	0.514	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-155C-NS	120.50	RAS	1,1-Dichloroethene	1.74		0.0819	ug/L		6 CA_MCL
					MW-155C-NS	120.50	RAS	1,2-Dichloroethane	0.249	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-155C-NS	120.50	RAS	Acetone	3.09		1.04	ug/L	U	
					MW-155C-NS	120.50	RAS	Chloroform	0.671	<QL	0.06	ug/L	J	100 CA_MCL
					MW-155C-NS	120.50	RAS	Methylene chloride	0.0777		0.0607	ug/L	U	5 CA_MCL
					MW-155C-NS	120.50	RAS	Toluene	0.222	<QL	0.0645	ug/L	J	150 CA_MCL
					MW-155C-NS	120.50	RAS	Trichloroethene	15.7		0.0499	ug/L		5 CA_MCL
					MW-155C-NS	120.50	RAS	cis-1,2-Dichloroethene	10.1		0.0407	ug/L		6 CA_MCL
					MW-155C-NS	120.50	RAS	trans-1,2-Dichloroethene	0.119	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-155D-NS	122.00	RAS	1,1-Dichloroethane	0.486	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-155D-NS	122.00	QESS	1,1-Dichloroethene	1.6		1	ug/L		6 CA_MCL
					MW-155D-NS	122.00	RAS	1,1-Dichloroethene	1.54		0.0819	ug/L		6 CA_MCL
					MW-155D-NS	122.00	QESS	1,2-Dichloroethane	0.26	<QL,J	1	ug/L	,J	0.500 CA_MCL
					MW-155D-NS	122.00	RAS	1,2-Dichloroethane	0.26	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-155D-NS	122.00	QESS	Acetone	5.8	J,B	10	ug/L	U	
					MW-155D-NS	122.00	RAS	Acetone	8.77		1.04	ug/L	U	
					MW-155D-NS	122.00	RAS	Chloroform	0.661	<QL	0.06	ug/L	J	100 CA_MCL
					MW-155D-NS	122.00	RAS	Tetrachloroethene	0.104	<QL	0.0591	ug/L	J	5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-155D-NS	122.00	RAS	Toluene	0.203	<QL	0.0645	ug/L	J	150 CA_MCL
					MW-155D-NS	122.00	RAS	Trichloroethene	12.5		0.0499	ug/L		5 CA_MCL
					MW-155D-NS	122.00	QESS	Trichloroethene	11		1	ug/L		5 CA_MCL
					MW-155D-NS	122.00	QESS	cis-1,2-Dichloroethene	9.7		1	ug/L		6 CA_MCL
					MW-155D-NS	122.00	RAS	cis-1,2-Dichloroethene	9.87		0.0407	ug/L		6 CA_MCL
					MW-155D-NS	122.00	RAS	trans-1,2-Dichloroethene	0.0966	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-155E-NS	123.50	RAS	1,1-Dichloroethane	0.771	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-155E-NS	123.50	RAS	1,1-Dichloroethene	2.94		0.0819	ug/L		6 CA_MCL
					MW-155E-NS	123.50	RAS	1,2-Dichloroethane	0.324	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-155E-NS	123.50	RAS	Acetone	4.51		1.04	ug/L	U	
					MW-155E-NS	123.50	RAS	Chloroform	0.85	<QL	0.06	ug/L	J	100 CA_MCL
					MW-155E-NS	123.50	RAS	Trichloroethene	30.5		0.0499	ug/L		5 CA_MCL
					MW-155E-NS	123.50	RAS	cis-1,2-Dichloroethene	13.5		0.0407	ug/L		6 CA_MCL
					MW-155E-NS	123.50	RAS	trans-1,2-Dichloroethene	0.236	<QL	0.0422	ug/L	J	10 CA_MCL
MW-156	SW8260B	NS1	6/3/1999	6/14/1999	MW-156A-NS	177.50	RAS	1,1,2-Trichloroethane	0.133	<QL	0.0576	ug/L	J	5 CA_MCL
					MW-156A-NS	177.50	RAS	1,1-Dichloroethane	1.52		0.0588	ug/L		5 CA_MCL
					MW-156A-NS	177.50	RAS	1,1-Dichloroethene	2.48		0.0819	ug/L		6 CA_MCL
					MW-156A-NS	177.50	RAS	1,2-Dichloroethane	0.772	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-156A-NS	177.50	RAS	Acetone	3.95		1.04	ug/L	U	
					MW-156A-NS	177.50	RAS	Benzene	0.0682	<QL	0.0469	ug/L	J	1 CA_MCL
					MW-156A-NS	177.50	RAS	Chloroform	1.01		0.06	ug/L		100 CA_MCL
					MW-156A-NS	177.50	RAS	Trichloroethene	72.3		0.0499	ug/L		5 CA_MCL
					MW-156A-NS	177.50	RAS	cis-1,2-Dichloroethene	23.4		0.0407	ug/L		6 CA_MCL
					MW-156A-NS	177.50	RAS	trans-1,2-Dichloroethene	0.396	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-156B-NS	179.00	RAS	1,1,2-Trichloroethane	0.116	<QL	0.0576	ug/L	J	5 CA_MCL
					MW-156B-NS	179.00	RAS	1,1-Dichloroethane	1.47		0.0588	ug/L		5 CA_MCL
					MW-156B-NS	179.00	RAS	1,1-Dichloroethene	2.37		0.0819	ug/L		6 CA_MCL
					MW-156B-NS	179.00	RAS	1,2-Dichloroethane	0.734	<QL	0.0408	ug/L	J	0.500 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-156B-NS	179.00	RAS	Acetone	3.69		1.04	ug/L	U	
					MW-156B-NS	179.00	RAS	Chloroform	0.978	<QL	0.06	ug/L	J	100 CA_MCL
					MW-156B-NS	179.00	RAS	Trichloroethene	73.2		0.0499	ug/L		5 CA_MCL
					MW-156B-NS	179.00	RAS	cis-1,2-Dichloroethene	23		0.0407	ug/L		6 CA_MCL
					MW-156B-NS	179.00	RAS	trans-1,2-Dichloroethene	0.377	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-156C-NS	180.50	RAS	1,1,2-Trichloroethane	0.095	<QL	0.0576	ug/L	J	5 CA_MCL
					MW-156C-NS	180.50	RAS	1,1-Dichloroethane	1.46		0.0588	ug/L		5 CA_MCL
					MW-156C-NS	180.50	RAS	1,1-Dichloroethene	2.47		0.0819	ug/L		6 CA_MCL
					MW-156C-NS	180.50	RAS	1,2-Dichloroethane	0.748	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-156C-NS	180.50	RAS	Acetone	3.26		1.04	ug/L	U	
					MW-156C-NS	180.50	RAS	Chloroform	0.97	<QL	0.06	ug/L	J	100 CA_MCL
					MW-156C-NS	180.50	RAS	Trichloroethene	73		0.0499	ug/L		5 CA_MCL
					MW-156C-NS	180.50	RAS	cis-1,2-Dichloroethene	23.4		0.0407	ug/L		6 CA_MCL
					MW-156C-NS	180.50	RAS	trans-1,2-Dichloroethene	0.409	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-156D-NS	182.00	RAS	1,1,2-Trichloroethane	0.0987	<QL	0.0576	ug/L	J	5 CA_MCL
					MW-156D-NS	182.00	RAS	1,1-Dichloroethane	1.47		0.0588	ug/L		5 CA_MCL
					MW-156D-NS	182.00	RAS	1,1-Dichloroethene	2.36		0.0819	ug/L		6 CA_MCL
					MW-156D-NS	182.00	RAS	1,2-Dichloroethane	0.692	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-156D-NS	182.00	RAS	Acetone	3.92		1.04	ug/L	U	
					MW-156D-NS	182.00	RAS	Chloroform	0.97	<QL	0.06	ug/L	J	100 CA_MCL
					MW-156D-NS	182.00	RAS	Trichloroethene	72.8		0.0499	ug/L		5 CA_MCL
					MW-156D-NS	182.00	RAS	cis-1,2-Dichloroethene	22.8		0.0407	ug/L		6 CA_MCL
					MW-156D-NS	182.00	RAS	trans-1,2-Dichloroethene	0.312	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-156E-NS	183.50	RAS	1,1-Dichloroethane	1.44		0.0588	ug/L		5 CA_MCL
					MW-156E-NS	183.50	RAS	1,1-Dichloroethene	2.3		0.0819	ug/L		6 CA_MCL
					MW-156E-NS	183.50	QESS	1,1-Dichloroethene	2.1		2	ug/L		6 CA_MCL
					MW-156E-NS	183.50	QESS	1,2-Dichloroethane	0.67	J	2	ug/L		0.500 CA_MCL
					MW-156E-NS	183.50	RAS	1,2-Dichloroethane	0.762	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-156E-NS	183.50	QESS	Acetone	8.2	J,B	20	ug/L	U	

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-156E-NS	183.50	RAS	Acetone	8.92		1.04	ug/L	U	
					MW-156E-NS	183.50	RAS	Chloroform	0.979	<QL	0.06	ug/L	J	100 CA_MCL
					MW-156E-NS	183.50	RAS	Trichloroethene	71.2		0.0499	ug/L		5 CA_MCL
					MW-156E-NS	183.50	QESS	Trichloroethene	64		2	ug/L		5 CA_MCL
					MW-156E-NS	183.50	RAS	cis-1,2-Dichloroethene	22.5		0.0407	ug/L		6 CA_MCL
					MW-156E-NS	183.50	QESS	cis-1,2-Dichloroethene	20		2	ug/L		6 CA_MCL
					MW-156E-NS	183.50	RAS	trans-1,2-Dichloroethene	0.36	<QL	0.0422	ug/L	J	10 CA_MCL
MW-159	SW8260B	NS1	6/3/1999	6/15/1999	MW-159A-NS	109.00	RAS	Acetone	7.27		1.43	ug/L	U	
					MW-159A-NS	109.00	RAS	Chloroform	1.02		0.0424	ug/L		100 CA_MCL
					MW-159A-NS	109.00	RAS	Methylene chloride	0.33		0.0776	ug/L	U	5 CA_MCL
					MW-159A-NS	109.00	RAS	Tetrachloroethene	1.25		0.114	ug/L		5 CA_MCL
					MW-159A-NS	109.00	RAS	Trichloroethene	85.5		0.0929	ug/L		5 CA_MCL
					MW-159A-NS	109.00	RAS	cis-1,2-Dichloroethene	17.9		0.0595	ug/L		6 CA_MCL
					MW-159B-NS	110.50	RAS	Acetone	5.2		1.43	ug/L	U	
					MW-159B-NS	110.50	RAS	Chloroform	1.05		0.0424	ug/L		100 CA_MCL
					MW-159B-NS	110.50	RAS	Methylene chloride	0.316		0.0776	ug/L	U	5 CA_MCL
					MW-159B-NS	110.50	RAS	Tetrachloroethene	1.41		0.114	ug/L		5 CA_MCL
					MW-159B-NS	110.50	RAS	Trichloroethene	86		0.0929	ug/L		5 CA_MCL
					MW-159B-NS	110.50	RAS	cis-1,2-Dichloroethene	18		0.0595	ug/L		6 CA_MCL
					MW-159C-NS	112.00	RAS	Acetone	5.45		1.43	ug/L	U	
					MW-159C-NS	112.00	RAS	Chloroform	1.01		0.0424	ug/L		100 CA_MCL
					MW-159C-NS	112.00	RAS	Methylene chloride	0.322		0.0776	ug/L	U	5 CA_MCL
					MW-159C-NS	112.00	RAS	Tetrachloroethene	1.37		0.114	ug/L		5 CA_MCL
					MW-159C-NS	112.00	RAS	Trichloroethene	85.5		0.0929	ug/L		5 CA_MCL
					MW-159C-NS	112.00	RAS	cis-1,2-Dichloroethene	18.3		0.0595	ug/L		6 CA_MCL
					MW-159D-NS	113.50	RAS	Acetone	9.73		1.43	ug/L	U	
					MW-159D-NS	113.50	RAS	Chloroform	1.04		0.0424	ug/L		100 CA_MCL
					MW-159D-NS	113.50	RAS	Methylene chloride	0.332		0.0776	ug/L	U	5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-159D-NS	113.50	RAS	Tetrachloroethene	1.58		0.114	ug/L		5 CA_MCL
					MW-159D-NS	113.50	RAS	Trichloroethene	89.8		0.0929	ug/L		5 CA_MCL
					MW-159D-NS	113.50	RAS	cis-1,2-Dichloroethene	18.2		0.0595	ug/L		6 CA_MCL
					MW-159E-NS	115.00	RAS	Acetone	10.7		1.43	ug/L	U	
					MW-159E-NS	115.00	RAS	Chloroform	1.02		0.0424	ug/L		100 CA_MCL
					MW-159E-NS	115.00	RAS	Methylene chloride	0.296		0.0776	ug/L	U	5 CA_MCL
					MW-159E-NS	115.00	RAS	Tetrachloroethene	1.3		0.114	ug/L		5 CA_MCL
					MW-159E-NS	115.00	RAS	Trichloroethene	80.4		0.0929	ug/L		5 CA_MCL
					MW-159E-NS	115.00	RAS	cis-1,2-Dichloroethene	17.1		0.0595	ug/L		6 CA_MCL
MW-166	SW8260B	NS1	6/2/1999	6/11/1999	MW-166A-NS	239.00	RAS	1,1-Dichloroethane	0.394	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-166A-NS	239.00	RAS	1,1-Dichloroethene	0.297	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-166A-NS	239.00	RAS	1,2-Dichloroethane	0.4	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-166A-NS	239.00	RAS	Chloroform	0.342	<QL	0.06	ug/L	J	100 CA_MCL
					MW-166A-NS	239.00	RAS	Trichloroethene	43		0.0499	ug/L		5 CA_MCL
					MW-166A-NS	239.00	RAS	cis-1,2-Dichloroethene	16		0.0407	ug/L		6 CA_MCL
					MW-166A-NS	239.00	RAS	trans-1,2-Dichloroethene	0.213	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-166B-NS	240.50	RAS	1,1-Dichloroethane	0.413	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-166B-NS	240.50	RAS	1,1-Dichloroethene	0.298	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-166B-NS	240.50	RAS	1,2-Dichloroethane	0.434	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-166B-NS	240.50	RAS	Chloroform	0.384	<QL	0.06	ug/L	J	100 CA_MCL
					MW-166B-NS	240.50	RAS	Trichloroethene	46.1		0.0499	ug/L		5 CA_MCL
					MW-166B-NS	240.50	RAS	cis-1,2-Dichloroethene	17.2		0.0407	ug/L		6 CA_MCL
					MW-166B-NS	240.50	RAS	trans-1,2-Dichloroethene	0.289	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-166D-NS	243.50	QESS	1,1-Dichloroethane	0.32	<QL,J	2	ug/L	,J	5 CA_MCL
					MW-166D-NS	243.50	RAS	1,1-Dichloroethane	0.414	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-166D-NS	243.50	RAS	1,1-Dichloroethene	0.331	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-166D-NS	243.50	RAS	1,2-Dichloroethane	0.473	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-166D-NS	243.50	QESS	Acetone	6.2	J,B	20	ug/L	U	
					MW-166D-NS	243.50	RAS	Acetone	8.26		1.04	ug/L	U	

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-166D-NS	243.50	RAS	Chloroform	0.365	<QL	0.06	ug/L	J	100 CA_MCL
					MW-166D-NS	243.50	QESS	Trichloroethene	41		2	ug/L		5 CA_MCL
					MW-166D-NS	243.50	RAS	Trichloroethene	43.9		0.0499	ug/L		5 CA_MCL
					MW-166D-NS	243.50	RAS	cis-1,2-Dichloroethene	17.2		0.0407	ug/L		6 CA_MCL
					MW-166D-NS	243.50	RAS	trans-1,2-Dichloroethene	0.304	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-166E-NS	245.00	RAS	1,1-Dichloroethane	0.447	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-166E-NS	245.00	RAS	1,1-Dichloroethene	0.331	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-166E-NS	245.00	RAS	1,2-Dichloroethane	0.423	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-166E-NS	245.00	RAS	Chloroform	0.368	<QL	0.06	ug/L	J	100 CA_MCL
					MW-166E-NS	245.00	RAS	Trichloroethene	44.6		0.0499	ug/L		5 CA_MCL
					MW-166E-NS	245.00	RAS	cis-1,2-Dichloroethene	17.3		0.0407	ug/L		6 CA_MCL
					MW-166E-NS	245.00	RAS	trans-1,2-Dichloroethene	0.34	<QL	0.0422	ug/L	J	10 CA_MCL
MW-201	SW8260B	NS1	6/1/1999	6/10/1999	MW-201A-NS	160.00	RAS	1,4-Dichlorobenzene	0.0819	<QL	0.0651	ug/L	J	5 CA_MCL
					MW-201A-NS	160.00	RAS	Acetone	7.25		1.04	ug/L	U	
					MW-201A-NS	160.00	RAS	Chloroform	0.0996	<QL	0.06	ug/L	J	100 CA_MCL
					MW-201A-NS	160.00	RAS	Trichloroethene	10.1		0.0499	ug/L		5 CA_MCL
					MW-201A-NS	160.00	RAS	cis-1,2-Dichloroethene	0.503	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-201B-NS	161.50	RAS	Acetone	27		1.04	ug/L	U	
					MW-201B-NS	161.50	QESS	Acetone	18	B	10	ug/L	U	
					MW-201B-NS	161.50	RAS	Chloroform	0.0885	<QL	0.06	ug/L	J	100 CA_MCL
					MW-201B-NS	161.50	QESS	Trichloroethene	9.1		1	ug/L		5 CA_MCL
					MW-201B-NS	161.50	RAS	Trichloroethene	10.2		0.0499	ug/L		5 CA_MCL
					MW-201B-NS	161.50	RAS	cis-1,2-Dichloroethene	0.532	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-201B-NS	161.50	QESS	cis-1,2-Dichloroethene	0.51	<QL,J	1	ug/L	,J	6 CA_MCL
					MW-201C-NS	163.00	RAS	Acetone	7.17		1.04	ug/L	U	
					MW-201C-NS	163.00	RAS	Chloroform	0.109	<QL	0.06	ug/L	J	100 CA_MCL
					MW-201C-NS	163.00	RAS	Trichloroethene	9.7		0.0499	ug/L		5 CA_MCL
					MW-201C-NS	163.00	RAS	cis-1,2-Dichloroethene	0.48	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-201D-NS	164.50	RAS	Acetone	7.92		1.04	ug/L	U	

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-201D-NS	164.50	RAS	Chloroform	0.0994	<QL	0.06	ug/L	J	100 CA_MCL
					MW-201D-NS	164.50	RAS	Trichloroethene	9.81		0.0499	ug/L		5 CA_MCL
					MW-201D-NS	164.50	RAS	cis-1,2-Dichloroethene	0.478	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-201E-NS	166.00	RAS	Acetone	3.73		1.04	ug/L	U	
					MW-201E-NS	166.00	RAS	Trichloroethene	9.38		0.0499	ug/L		5 CA_MCL
					MW-201E-NS	166.00	RAS	cis-1,2-Dichloroethene	0.497	<QL	0.0407	ug/L	J	6 CA_MCL
MW-206	SW8260B	NS1	5/28/1999	6/8/1999	MW-206A-NS	99.10	RAS	1,1-Dichloroethane	1.65		0.0736	ug/L		5 CA_MCL
					MW-206A-NS	99.10	RAS	Acetone	17.4		1.43	ug/L	U	
					MW-206A-NS	99.10	RAS	Chloroform	0.116	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-206A-NS	99.10	RAS	Trichloroethene	1.65		0.0929	ug/L		5 CA_MCL
					MW-206A-NS	99.10	RAS	cis-1,2-Dichloroethene	0.565	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-206B-NS	100.60	RAS	1,1-Dichloroethane	3.38		0.0736	ug/L		5 CA_MCL
					MW-206B-NS	100.60	RAS	Acetone	17.1		1.43	ug/L	U	
					MW-206B-NS	100.60	RAS	Chloroform	0.269	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-206B-NS	100.60	RAS	Trichloroethene	3.35		0.0929	ug/L		5 CA_MCL
					MW-206B-NS	100.60	RAS	cis-1,2-Dichloroethene	1.17		0.0595	ug/L		6 CA_MCL
					MW-206C-NS	102.10	RAS	1,1-Dichloroethane	4.06		0.0736	ug/L		5 CA_MCL
					MW-206C-NS	102.10	RAS	Acetone	6.96		1.43	ug/L	U	
					MW-206C-NS	102.10	RAS	Chloroform	0.32	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-206C-NS	102.10	RAS	Trichloroethene	3.78		0.0929	ug/L		5 CA_MCL
					MW-206C-NS	102.10	RAS	cis-1,2-Dichloroethene	1.5		0.0595	ug/L		6 CA_MCL
					MW-206D-NS	103.60	RAS	1,1-Dichloroethane	4.23		0.0736	ug/L		5 CA_MCL
					MW-206D-NS	103.60	RAS	Acetone	6.88		1.43	ug/L	U	
					MW-206D-NS	103.60	RAS	Chloroform	0.313	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-206D-NS	103.60	RAS	Trichloroethene	3.9		0.0929	ug/L		5 CA_MCL
					MW-206D-NS	103.60	RAS	cis-1,2-Dichloroethene	1.58		0.0595	ug/L		6 CA_MCL
					MW-206E-NS	105.10	RAS	1,1-Dichloroethane	4.15		0.0736	ug/L		5 CA_MCL
					MW-206E-NS	105.10	RAS	Acetone	7.28		1.43	ug/L	U	

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-206E-NS	105.10	RAS	Chloroform	0.298	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-206E-NS	105.10	RAS	Trichloroethene	3.71		0.0929	ug/L		5 CA_MCL
					MW-206E-NS	105.10	RAS	cis-1,2-Dichloroethene	1.6		0.0595	ug/L		6 CA_MCL
					MW-206F-NS	106.60	RAS	1,1-Dichloroethane	4.1		0.0736	ug/L		5 CA_MCL
					MW-206F-NS	106.60	RAS	Acetone	11.6		1.43	ug/L	U	
					MW-206F-NS	106.60	RAS	Chloroform	0.269	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-206F-NS	106.60	RAS	Trichloroethene	3.6		0.0929	ug/L		5 CA_MCL
					MW-206F-NS	106.60	RAS	cis-1,2-Dichloroethene	1.54		0.0595	ug/L		6 CA_MCL
					MW-206G-NS	108.10	RAS	1,1-Dichloroethane	4.23		0.0736	ug/L		5 CA_MCL
					MW-206G-NS	108.10	RAS	Acetone	12.8		1.43	ug/L	U	
					MW-206G-NS	108.10	RAS	Chloroform	0.304	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-206G-NS	108.10	RAS	Trichloroethene	3.65		0.0929	ug/L		5 CA_MCL
					MW-206G-NS	108.10	RAS	cis-1,2-Dichloroethene	1.59		0.0595	ug/L		6 CA_MCL
					MW-206H-NS	109.60	RAS	1,1-Dichloroethane	4.11		0.0736	ug/L		5 CA_MCL
					MW-206H-NS	109.60	RAS	Acetone	17		1.43	ug/L	U	
					MW-206H-NS	109.60	RAS	Chloroform	0.294	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-206H-NS	109.60	RAS	Trichloroethene	3.52		0.0929	ug/L		5 CA_MCL
					MW-206H-NS	109.60	RAS	cis-1,2-Dichloroethene	1.5		0.0595	ug/L		6 CA_MCL
					MW-206I-NS	111.10	RAS	1,1-Dichloroethane	4.35		0.0736	ug/L		5 CA_MCL
					MW-206I-NS	111.10	RAS	Acetone	9.13		1.43	ug/L	U	
					MW-206I-NS	111.10	RAS	Chloroform	0.308	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-206I-NS	111.10	RAS	Trichloroethene	3.73		0.0929	ug/L		5 CA_MCL
					MW-206I-NS	111.10	RAS	cis-1,2-Dichloroethene	1.63		0.0595	ug/L		6 CA_MCL
					MW-214A-NS	105.90	RAS	1,1-Dichloroethane	21.5		0.0588	ug/L		5 CA_MCL
					MW-214A-NS	105.90	RAS	1,1-Dichloroethene	1.2		0.0819	ug/L		6 CA_MCL
					MW-214A-NS	105.90	RAS	1,2-Dichloroethane	0.119	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-214A-NS	105.90	RAS	Acetone	7.81		1.04	ug/L	U	
					MW-214A-NS	105.90	RAS	Carbon Tetrachloride	0.165	<QL	0.0778	ug/L	J	0.500 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-214A-NS	105.90	RAS	Chloroform	0.372	<QL	0.06	ug/L	J	100 CA_MCL
MW-214	SW8260B	NS1	6/1/1999	6/10/1999	MW-214A-NS	105.90	RAS	Freon 113	0.79	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-214A-NS	105.90	RAS	Tetrachloroethene	0.49	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-214A-NS	105.90	RAS	Trichloroethene	12.1		0.0499	ug/L		5 CA_MCL
					MW-214A-NS	105.90	RAS	cis-1,2-Dichloroethene	12.3		0.0407	ug/L		6 CA_MCL
					MW-214A-NS	105.90	RAS	trans-1,2-Dichloroethene	0.188	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-214B-NS	107.40	RAS	1,1-Dichloroethane	21.6		0.0588	ug/L		5 CA_MCL
					MW-214B-NS	107.40	RAS	1,1-Dichloroethene	1.2		0.0819	ug/L		6 CA_MCL
					MW-214B-NS	107.40	RAS	Acetone	3.11		1.04	ug/L	U	
					MW-214B-NS	107.40	RAS	Carbon Tetrachloride	0.144	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-214B-NS	107.40	RAS	Chloroform	0.369	<QL	0.06	ug/L	J	100 CA_MCL
					MW-214B-NS	107.40	RAS	Freon 113	0.756	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-214B-NS	107.40	RAS	Tetrachloroethene	0.416	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-214B-NS	107.40	RAS	Trichloroethene	12		0.0499	ug/L		5 CA_MCL
					MW-214B-NS	107.40	RAS	cis-1,2-Dichloroethene	12.3		0.0407	ug/L		6 CA_MCL
					MW-214B-NS	107.40	RAS	trans-1,2-Dichloroethene	0.221	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-214C-NS	108.90	RAS	1,1-Dichloroethane	21.6		0.0588	ug/L		5 CA_MCL
					MW-214C-NS	108.90	RAS	1,1-Dichloroethene	1.23		0.0819	ug/L		6 CA_MCL
					MW-214C-NS	108.90	RAS	Acetone	3.56		1.04	ug/L	U	
					MW-214C-NS	108.90	RAS	Carbon Tetrachloride	0.165	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-214C-NS	108.90	RAS	Chloroform	0.375	<QL	0.06	ug/L	J	100 CA_MCL
					MW-214C-NS	108.90	RAS	Freon 113	0.714	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-214C-NS	108.90	RAS	Tetrachloroethene	0.4	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-214C-NS	108.90	RAS	Trichloroethene	11.9		0.0499	ug/L		5 CA_MCL
					MW-214C-NS	108.90	RAS	cis-1,2-Dichloroethene	12.2		0.0407	ug/L		6 CA_MCL
					MW-214C-NS	108.90	RAS	trans-1,2-Dichloroethene	0.229	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-214D-NS	110.40	RAS	1,1-Dichloroethane	21.6		0.0588	ug/L		5 CA_MCL
					MW-214D-NS	110.40	RAS	1,1-Dichloroethene	1.21		0.0819	ug/L		6 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-214D-NS	110.40	RAS	Acetone	2.99		1.04	ug/L	U	
					MW-214D-NS	110.40	RAS	Carbon Tetrachloride	0.163	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-214D-NS	110.40	RAS	Chloroform	0.382	<QL	0.06	ug/L	J	100 CA_MCL
					MW-214D-NS	110.40	RAS	Freon 113	0.747	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-214D-NS	110.40	RAS	Tetrachloroethene	0.473	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-214D-NS	110.40	RAS	Trichloroethene	12.1		0.0499	ug/L		5 CA_MCL
					MW-214D-NS	110.40	RAS	cis-1,2-Dichloroethene	12.5		0.0407	ug/L		6 CA_MCL
					MW-214D-NS	110.40	RAS	trans-1,2-Dichloroethene	0.203	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-214E-NS	111.90	RAS	1,1-Dichloroethane	21.5		0.0588	ug/L		5 CA_MCL
					MW-214E-NS	111.90	RAS	1,1-Dichloroethene	1.21		0.0819	ug/L		6 CA_MCL
					MW-214E-NS	111.90	RAS	Carbon Tetrachloride	0.175	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-214E-NS	111.90	RAS	Chloroform	0.37	<QL	0.06	ug/L	J	100 CA_MCL
					MW-214E-NS	111.90	RAS	Freon 113	0.789	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-214E-NS	111.90	RAS	Tetrachloroethene	0.49	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-214E-NS	111.90	RAS	Trichloroethene	12.4		0.0499	ug/L		5 CA_MCL
					MW-214E-NS	111.90	RAS	cis-1,2-Dichloroethene	12.6		0.0407	ug/L		6 CA_MCL
					MW-214E-NS	111.90	RAS	trans-1,2-Dichloroethene	0.2	<QL	0.0422	ug/L	J	10 CA_MCL
MW-216	SW8260B	NS1	6/3/1999	6/14/1999	MW-216A-NS	232.20	RAS	1,1-Dichloroethane	0.342	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-216A-NS	232.20	RAS	1,1-Dichloroethene	0.243	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-216A-NS	232.20	RAS	1,2-Dichloroethane	0.468	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-216A-NS	232.20	RAS	Chloroform	0.277	<QL	0.06	ug/L	J	100 CA_MCL
					MW-216A-NS	232.20	RAS	Trichloroethene	37.8		0.0499	ug/L		5 CA_MCL
					MW-216A-NS	232.20	RAS	cis-1,2-Dichloroethene	16.7		0.0407	ug/L		6 CA_MCL
					MW-216A-NS	232.20	RAS	trans-1,2-Dichloroethene	0.312	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-216B-NS	233.70	RAS	1,1-Dichloroethane	0.327	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-216B-NS	233.70	RAS	1,1-Dichloroethene	0.247	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-216B-NS	233.70	RAS	1,2-Dichloroethane	0.442	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-216B-NS	233.70	RAS	Acetone	3.74		1.04	ug/L	U	

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-216B-NS	233.70	RAS	Chloroform	0.292	<QL	0.06	ug/L	J	100 CA_MCL
					MW-216B-NS	233.70	RAS	Trichloroethene	36.7		0.0499	ug/L		5 CA_MCL
					MW-216B-NS	233.70	RAS	cis-1,2-Dichloroethene	16.5		0.0407	ug/L		6 CA_MCL
					MW-216B-NS	233.70	RAS	trans-1,2-Dichloroethene	0.186	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-216C-NS	235.20	RAS	1,1-Dichloroethane	0.373	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-216C-NS	235.20	RAS	1,1-Dichloroethene	0.274	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-216C-NS	235.20	RAS	1,2-Dichloroethane	0.445	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-216C-NS	235.20	RAS	Chloroform	0.277	<QL	0.06	ug/L	J	100 CA_MCL
					MW-216C-NS	235.20	RAS	Trichloroethene	38.2		0.0499	ug/L		5 CA_MCL
					MW-216C-NS	235.20	RAS	cis-1,2-Dichloroethene	17.1		0.0407	ug/L		6 CA_MCL
					MW-216C-NS	235.20	RAS	trans-1,2-Dichloroethene	0.243	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-216D-NS	236.70	RAS	1,1-Dichloroethane	0.376	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-216D-NS	236.70	RAS	1,1-Dichloroethene	0.281	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-216D-NS	236.70	RAS	1,2-Dichloroethane	0.491	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-216D-NS	236.70	RAS	Acetone	2.88		1.04	ug/L	U	
					MW-216D-NS	236.70	RAS	Chloroform	0.317	<QL	0.06	ug/L	J	100 CA_MCL
					MW-216D-NS	236.70	RAS	Trichloroethene	43.2		0.0499	ug/L		5 CA_MCL
					MW-216D-NS	236.70	RAS	cis-1,2-Dichloroethene	19.8		0.0407	ug/L		6 CA_MCL
					MW-216D-NS	236.70	RAS	trans-1,2-Dichloroethene	0.308	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-216E-NS	238.20	RAS	1,1-Dichloroethane	0.407	<QL	0.0588	ug/L	J	5 CA_MCL
					MW-216E-NS	238.20	RAS	1,1-Dichloroethene	0.313	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-216E-NS	238.20	RAS	1,2-Dichloroethane	0.541	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-216E-NS	238.20	RAS	Acetone	3.68		1.04	ug/L	U	
					MW-216E-NS	238.20	RAS	Chloroform	0.347	<QL	0.06	ug/L	J	100 CA_MCL
					MW-216E-NS	238.20	RAS	Trichloroethene	46.9		0.0499	ug/L		5 CA_MCL
					MW-216E-NS	238.20	RAS	cis-1,2-Dichloroethene	21.5		0.0407	ug/L		6 CA_MCL
					MW-216E-NS	238.20	RAS	trans-1,2-Dichloroethene	0.442	<QL	0.0422	ug/L	J	10 CA_MCL
MW-218	SW8260B	NS1	5/27/1999	6/8/1999	MW-218A-NS	178.00	RAS	Acetone	5.97		1.43	ug/L	U	

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-218A-NS	178.00	RAS	Trichloroethene	1.44		0.0929	ug/L		5 CA_MCL
					MW-218A-NS	178.00	RAS	cis-1,2-Dichloroethene	1.03		0.0595	ug/L		6 CA_MCL
					MW-218B-NS	179.50	QESS	Acetone	4.4	J,B	10	ug/L	U	
					MW-218B-NS	179.50	RAS	Acetone	6.63		1.43	ug/L	U	
					MW-218B-NS	179.50	RAS	Chloroform	0.092	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-218B-NS	179.50	RAS	Tetrachloroethene	0.177	<QL	0.114	ug/L	J	5 CA_MCL
					MW-218B-NS	179.50	RAS	Trichloroethene	1.47		0.0929	ug/L		5 CA_MCL
					MW-218B-NS	179.50	QESS	Trichloroethene	1.2		1	ug/L		5 CA_MCL
					MW-218B-NS	179.50	RAS	cis-1,2-Dichloroethene	1.05		0.0595	ug/L		6 CA_MCL
					MW-218B-NS	179.50	QESS	cis-1,2-Dichloroethene	0.97	<QL,J	1	ug/L	,J	6 CA_MCL
					MW-218C-NS	181.00	RAS	Acetone	6.9		1.43	ug/L	U	
					MW-218C-NS	181.00	RAS	Trichloroethene	1.53		0.0929	ug/L		5 CA_MCL
					MW-218C-NS	181.00	RAS	cis-1,2-Dichloroethene	1.08		0.0595	ug/L		6 CA_MCL
					MW-218D-NS	182.50	RAS	Acetone	6.92		1.43	ug/L	U	
					MW-218D-NS	182.50	RAS	Trichloroethene	1.43		0.0929	ug/L		5 CA_MCL
					MW-218D-NS	182.50	RAS	cis-1,2-Dichloroethene	0.986	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-218E-NS	184.00	RAS	Acetone	4.18		1.43	ug/L	U	
					MW-218E-NS	184.00	RAS	Trichloroethene	1.33		0.0929	ug/L		5 CA_MCL
					MW-218E-NS	184.00	RAS	cis-1,2-Dichloroethene	0.986	<QL	0.0595	ug/L	J	6 CA_MCL
MW-235	SW8260B	EB1	6/4/1999	6/14/1999	MW-235-EB		RAS	1,1-Dichloroethene	9.97		0.0819	ug/L		6 CA_MCL
					MW-235-EB		RAS	Acetone	5.82		1.04	ug/L	U	
					MW-235-EB		RAS	Toluene	0.154	<QL	0.0645	ug/L	J	150 CA_MCL
		NS1	6/4/1999	6/14/1999	MW-235A-NS	108.00	RAS	1,1-Dichloroethene	0.186	<QL	0.148	ug/L	J	6 CA_MCL
					MW-235A-NS	108.00	RAS	Acetone	11.7		0.834	ug/L	U	
					MW-235A-NS	108.00	RAS	Carbon Tetrachloride	1.64		0.137	ug/L		0.500 CA_MCL
					MW-235A-NS	108.00	RAS	Chloroform	0.513	<QL	0.158	ug/L	J	100 CA_MCL
					MW-235A-NS	108.00	RAS	Freon 113	1.46		0.169	ug/L		1200 CA_MCL
					MW-235A-NS	108.00	RAS	Tetrachloroethene	14.4		0.142	ug/L		5 CA_MCL
					MW-235A-NS	108.00	RAS	Trichloroethene	55.7		0.161	ug/L		5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-235A-NS	108.00	RAS	cis-1,2-Dichloroethene	0.845	<QL	0.106	ug/L	J	6 CA_MCL
					MW-235B-NS	109.50	RAS	1,1-Dichloroethene	0.23	<QL	0.148	ug/L	J	6 CA_MCL
					MW-235B-NS	109.50	RAS	Acetone	11.5		0.834	ug/L	U	
					MW-235B-NS	109.50	RAS	Carbon Tetrachloride	1.47		0.137	ug/L		0.500 CA_MCL
					MW-235B-NS	109.50	RAS	Chloroform	0.55	<QL	0.158	ug/L	J	100 CA_MCL
					MW-235B-NS	109.50	RAS	Freon 113	1.32		0.169	ug/L		1200 CA_MCL
					MW-235B-NS	109.50	RAS	Tetrachloroethene	13.4		0.142	ug/L		5 CA_MCL
					MW-235B-NS	109.50	RAS	Trichloroethene	57.2		0.161	ug/L		5 CA_MCL
					MW-235B-NS	109.50	RAS	cis-1,2-Dichloroethene	0.852	<QL	0.106	ug/L	J	6 CA_MCL
					MW-235C-NS	111.00	RAS	1,1-Dichloroethene	0.197	<QL	0.148	ug/L	J	6 CA_MCL
					MW-235C-NS	111.00	RAS	Acetone	12.9		0.834	ug/L	U	
					MW-235C-NS	111.00	RAS	Carbon Tetrachloride	1.41		0.137	ug/L		0.500 CA_MCL
					MW-235C-NS	111.00	RAS	Chloroform	0.53	<QL	0.158	ug/L	J	100 CA_MCL
					MW-235C-NS	111.00	RAS	Freon 113	1.28		0.169	ug/L		1200 CA_MCL
					MW-235C-NS	111.00	RAS	Tetrachloroethene	13.5		0.142	ug/L		5 CA_MCL
					MW-235C-NS	111.00	RAS	Trichloroethene	66.3		0.161	ug/L		5 CA_MCL
					MW-235C-NS	111.00	RAS	cis-1,2-Dichloroethene	0.935	<QL	0.106	ug/L	J	6 CA_MCL
					MW-235D-NS	112.50	RAS	Acetone	5.01		1.04	ug/L	U	
					MW-235D-NS	112.50	RAS	Carbon Tetrachloride	0.14	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-235D-NS	112.50	RAS	Chloroform	0.112	<QL	0.06	ug/L	J	100 CA_MCL
					MW-235D-NS	112.50	RAS	Freon 113	0.18	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-235D-NS	112.50	RAS	Tetrachloroethene	3.34		0.0591	ug/L		5 CA_MCL
					MW-235D-NS	112.50	RAS	Trichloroethene	23.4		0.0499	ug/L		5 CA_MCL
					MW-235D-NS	112.50	RAS	cis-1,2-Dichloroethene	0.351	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-235E-NS	114.00	RAS	Acetone	4.01		1.04	ug/L	U	
					MW-235E-NS	114.00	RAS	Chloroform	0.13	<QL	0.06	ug/L	J	100 CA_MCL
					MW-235E-NS	114.00	RAS	Freon 113	0.118	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-235E-NS	114.00	RAS	Tetrachloroethene	5.66		0.0591	ug/L		5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-235E-NS	114.00	RAS	Trichloroethene	63		0.0499	ug/L		5 CA_MCL
					MW-235E-NS	114.00	RAS	cis-1,2-Dichloroethene	0.835	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-270A-NS	109.30	RAS	1,1-Dichloroethene	0.21	<QL	0.102	ug/L	J	6 CA_MCL
					MW-270A-NS	109.30	RAS	1,2-Dichloroethane	0.416	<QL	0.0349	ug/L	J	0.500 CA_MCL
					MW-270A-NS	109.30	RAS	Chloroform	0.533	<QL	0.0424	ug/L	J	100 CA_MCL
MW-270	SW8260B	NS1	6/3/1999	6/15/1999	MW-270A-NS	109.30	RAS	Freon 113	1.1		0.112	ug/L		1200 CA_MCL
					MW-270A-NS	109.30	RAS	Tetrachloroethene	8.25		0.114	ug/L		5 CA_MCL
					MW-270A-NS	109.30	RAS	Trichloroethene	170		0.464	ug/L		5 CA_MCL
					MW-270A-NS	109.30	RAS	cis-1,2-Dichloroethene	4.49		0.0595	ug/L		6 CA_MCL
					MW-270B-NS	110.80	RAS	1,1-Dichloroethene	0.23	<QL	0.148	ug/L	J	6 CA_MCL
					MW-270B-NS	110.80	RAS	1,2-Dichloroethane	0.436	<QL	0.123	ug/L	J	0.500 CA_MCL
					MW-270B-NS	110.80	RAS	Chloroform	0.449	<QL	0.158	ug/L	J	100 CA_MCL
					MW-270B-NS	110.80	RAS	Freon 113	0.817	<QL	0.169	ug/L	J	1200 CA_MCL
					MW-270B-NS	110.80	RAS	Tetrachloroethene	5.97		0.142	ug/L		5 CA_MCL
					MW-270B-NS	110.80	RAS	Trichloroethene	180		1.61	ug/L		5 CA_MCL
					MW-270B-NS	110.80	RAS	cis-1,2-Dichloroethene	3.8		0.106	ug/L		6 CA_MCL
					MW-270C-NS	112.30	RAS	1,1-Dichloroethene	0.234	<QL	0.148	ug/L	J	6 CA_MCL
					MW-270C-NS	112.30	RAS	1,2-Dichloroethane	0.419	<QL	0.123	ug/L	J	0.500 CA_MCL
					MW-270C-NS	112.30	RAS	Acetone	3.83		0.834	ug/L	U	
					MW-270C-NS	112.30	RAS	Chloroform	0.499	<QL	0.158	ug/L	J	100 CA_MCL
					MW-270C-NS	112.30	RAS	Freon 113	0.817	<QL	0.169	ug/L	J	1200 CA_MCL
					MW-270C-NS	112.30	RAS	Tetrachloroethene	6.14		0.142	ug/L		5 CA_MCL
					MW-270C-NS	112.30	RAS	Trichloroethene	178		1.61	ug/L		5 CA_MCL
					MW-270C-NS	112.30	RAS	cis-1,2-Dichloroethene	4.37		0.106	ug/L		6 CA_MCL
					MW-270D-NS	113.80	RAS	1,1-Dichloroethene	0.233	<QL	0.148	ug/L	J	6 CA_MCL
					MW-270D-NS	113.80	RAS	1,2-Dichloroethane	0.395	<QL	0.123	ug/L	J	0.500 CA_MCL
					MW-270D-NS	113.80	RAS	Acetone	3.4		0.834	ug/L	U	
					MW-270D-NS	113.80	RAS	Chloroform	0.492	<QL	0.158	ug/L	J	100 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-270D-NS	113.80	RAS	Freon 113	0.806	<QL	0.169	ug/L	J	1200 CA_MCL
					MW-270D-NS	113.80	RAS	Tetrachloroethene	6.23		0.142	ug/L		5 CA_MCL
					MW-270D-NS	113.80	RAS	Trichloroethene	179		1.61	ug/L		5 CA_MCL
					MW-270D-NS	113.80	RAS	cis-1,2-Dichloroethene	3.99		0.106	ug/L		6 CA_MCL
					MW-270E-NS	115.30	RAS	1,1-Dichloroethene	0.219	<QL	0.148	ug/L	J	6 CA_MCL
					MW-270E-NS	115.30	RAS	1,2-Dichloroethane	0.416	<QL	0.123	ug/L	J	0.500 CA_MCL
					MW-270E-NS	115.30	QESS	Acetone	25	J,B	100	ug/L	U	
					MW-270E-NS	115.30	RAS	Acetone	6.81		0.834	ug/L	U	
					MW-270E-NS	115.30	RAS	Chloroform	0.456	<QL	0.158	ug/L	J	100 CA_MCL
					MW-270E-NS	115.30	RAS	Freon 113	0.656	<QL	0.169	ug/L	J	1200 CA_MCL
					MW-270E-NS	115.30	QESS	Tetrachloroethene	4.8	J	10	ug/L		5 CA_MCL
					MW-270E-NS	115.30	RAS	Tetrachloroethene	4.47		0.142	ug/L		5 CA_MCL
					MW-270E-NS	115.30	QESS	Trichloroethene	170		10	ug/L		5 CA_MCL
					MW-270E-NS	115.30	RAS	Trichloroethene	174		1.61	ug/L		5 CA_MCL
					MW-270E-NS	115.30	QESS	cis-1,2-Dichloroethene	4.5	J	10	ug/L		6 CA_MCL
					MW-270E-NS	115.30	RAS	cis-1,2-Dichloroethene	3.97		0.106	ug/L		6 CA_MCL
					MW-271A-NS	113.00	RAS	1,1-Dichloroethene	0.868	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-271A-NS	113.00	QESS	Acetone	9.2	J,B	10	ug/L	U	
					MW-271A-NS	113.00	RAS	Acetone	14.4		1.04	ug/L	U	
					MW-271A-NS	113.00	RAS	Chloroform	3.07		0.06	ug/L		100 CA_MCL
					MW-271A-NS	113.00	QESS	Chloroform	2.6		1	ug/L		100 CA_MCL
MW-271	SW8260B	NS1	6/2/1999	6/12/1999	MW-271A-NS	113.00	RAS	Freon 113	1.02		0.0599	ug/L		1200 CA_MCL
					MW-271A-NS	113.00	RAS	Tetrachloroethene	0.135	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-271A-NS	113.00	QESS	Trichloroethene	34		1	ug/L		5 CA_MCL
					MW-271A-NS	113.00	RAS	Trichloroethene	35.4		0.0499	ug/L		5 CA_MCL
					MW-271A-NS	113.00	QESS	cis-1,2-Dichloroethene	0.47	<QL,J	1	ug/L	,J	6 CA_MCL
					MW-271A-NS	113.00	RAS	cis-1,2-Dichloroethene	0.555	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-271B-NS	114.50	RAS	1,1-Dichloroethene	0.305	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-271B-NS	114.50	RAS	Acetone	10.6		1.04	ug/L	U	

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-271B-NS	114.50	RAS	Carbon Tetrachloride	0.181	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-271B-NS	114.50	RAS	Chloroform	1.95		0.06	ug/L		100 CA_MCL
					MW-271B-NS	114.50	RAS	Freon 113	1.57		0.0599	ug/L		1200 CA_MCL
					MW-271B-NS	114.50	RAS	Tetrachloroethene	0.361	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-271B-NS	114.50	RAS	Trichloroethene	61		0.0499	ug/L		5 CA_MCL
					MW-271B-NS	114.50	RAS	cis-1,2-Dichloroethene	1.25		0.0407	ug/L		6 CA_MCL
					MW-271C-NS	116.00	RAS	1,1-Dichloroethene	0.476	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-271C-NS	116.00	RAS	Acetone	9.66		1.04	ug/L	U	
					MW-271C-NS	116.00	RAS	Carbon Tetrachloride	0.156	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-271C-NS	116.00	RAS	Chloroform	2.03		0.06	ug/L		100 CA_MCL
					MW-271C-NS	116.00	RAS	Freon 113	1.32		0.0599	ug/L		1200 CA_MCL
					MW-271C-NS	116.00	RAS	Tetrachloroethene	0.284	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-271C-NS	116.00	RAS	Trichloroethene	55.6		0.0499	ug/L		5 CA_MCL
					MW-271C-NS	116.00	RAS	cis-1,2-Dichloroethene	1.15		0.0407	ug/L		6 CA_MCL
					MW-271D-NS	117.50	RAS	1,1-Dichloroethene	0.278	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-271D-NS	117.50	RAS	Acetone	12.1		1.04	ug/L	U	
					MW-271D-NS	117.50	RAS	Carbon Tetrachloride	0.18	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-271D-NS	117.50	RAS	Chloroform	1.92		0.06	ug/L		100 CA_MCL
					MW-271D-NS	117.50	RAS	Freon 113	1.61		0.0599	ug/L		1200 CA_MCL
					MW-271D-NS	117.50	RAS	Tetrachloroethene	0.347	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-271D-NS	117.50	RAS	Trichloroethene	60.1		0.0499	ug/L		5 CA_MCL
					MW-271D-NS	117.50	RAS	cis-1,2-Dichloroethene	1.21		0.0407	ug/L		6 CA_MCL
					MW-271E-NS	119.00	RAS	1,1-Dichloroethene	0.264	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-271E-NS	119.00	RAS	Acetone	8.25		1.04	ug/L	U	
					MW-271E-NS	119.00	RAS	Carbon Tetrachloride	0.157	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-271E-NS	119.00	RAS	Chloroform	1.93		0.06	ug/L		100 CA_MCL
					MW-271E-NS	119.00	RAS	Freon 113	1.46		0.0599	ug/L		1200 CA_MCL
					MW-271E-NS	119.00	RAS	Tetrachloroethene	0.346	<QL	0.0591	ug/L	J	5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-271E-NS	119.00	RAS	Trichloroethene	59.3		0.0499	ug/L		5 CA_MCL
					MW-271E-NS	119.00	RAS	cis-1,2-Dichloroethene	1.23		0.0407	ug/L		6 CA_MCL
					MW-271F-NS	120.50	RAS	1,1-Dichloroethene	0.269	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-271F-NS	120.50	RAS	Acetone	11.1		1.04	ug/L	U	
					MW-271F-NS	120.50	RAS	Carbon Tetrachloride	0.15	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-271F-NS	120.50	RAS	Chloroform	1.89		0.06	ug/L		100 CA_MCL
					MW-271F-NS	120.50	RAS	Freon 113	1.44		0.0599	ug/L		1200 CA_MCL
					MW-271F-NS	120.50	RAS	Tetrachloroethene	0.353	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-271F-NS	120.50	RAS	Trichloroethene	58.8		0.0499	ug/L		5 CA_MCL
					MW-271F-NS	120.50	RAS	cis-1,2-Dichloroethene	1.19		0.0407	ug/L		6 CA_MCL
					MW-271G-NS	122.00	RAS	1,1-Dichloroethene	0.246	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-271G-NS	122.00	RAS	Acetone	11.5		1.04	ug/L	U	
					MW-271G-NS	122.00	RAS	Carbon Tetrachloride	0.162	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-271G-NS	122.00	RAS	Chloroform	1.83		0.06	ug/L		100 CA_MCL
					MW-271G-NS	122.00	RAS	Freon 113	1.63		0.0599	ug/L		1200 CA_MCL
					MW-271G-NS	122.00	RAS	Tetrachloroethene	0.428	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-271G-NS	122.00	RAS	Trichloroethene	57.5		0.0499	ug/L		5 CA_MCL
					MW-271G-NS	122.00	RAS	cis-1,2-Dichloroethene	1.19		0.0407	ug/L		6 CA_MCL
					MW-282A-NS	104.50	RAS	Acetone	10.2		1.04	ug/L	U	
					MW-282A-NS	104.50	RAS	Carbon Tetrachloride	0.939	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-282A-NS	104.50	RAS	Chloroform	0.289	<QL	0.06	ug/L	J	100 CA_MCL
MW-282	SW8260B	NS1	6/1/1999	6/10/1999	MW-282A-NS	104.50	RAS	Freon 113	19.2		0.0599	ug/L		1200 CA_MCL
					MW-282A-NS	104.50	RAS	Trichloroethene	0.876	<QL	0.0499	ug/L	J	5 CA_MCL
					MW-282B-NS	106.00	RAS	Acetone	9.91		1.04	ug/L	U	
					MW-282B-NS	106.00	RAS	Carbon Tetrachloride	0.998	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-282B-NS	106.00	RAS	Chloroform	0.276	<QL	0.06	ug/L	J	100 CA_MCL
					MW-282B-NS	106.00	RAS	Freon 113	17.1		0.0599	ug/L		1200 CA_MCL
					MW-282B-NS	106.00	RAS	Trichloroethene	0.888	<QL	0.0499	ug/L	J	5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-282C-NS	107.50	RAS	Acetone	6.52		1.04	ug/L	U	
					MW-282C-NS	107.50	RAS	Carbon Tetrachloride	1.16		0.0778	ug/L		0.500 CA_MCL
					MW-282C-NS	107.50	RAS	Chloroform	0.32	<QL	0.06	ug/L	J	100 CA_MCL
					MW-282C-NS	107.50	RAS	Freon 113	15.5		0.0599	ug/L		1200 CA_MCL
					MW-282C-NS	107.50	RAS	Trichloroethene	1.06		0.0499	ug/L		5 CA_MCL
					MW-282D-NS	109.00	RAS	Acetone	11.6		1.04	ug/L	U	
					MW-282D-NS	109.00	RAS	Carbon Tetrachloride	1.48		0.0778	ug/L		0.500 CA_MCL
					MW-282D-NS	109.00	RAS	Chloroform	0.419	<QL	0.06	ug/L	J	100 CA_MCL
					MW-282D-NS	109.00	RAS	Freon 113	13		0.0599	ug/L		1200 CA_MCL
					MW-282D-NS	109.00	RAS	Trichloroethene	1.43		0.0499	ug/L		5 CA_MCL
					MW-282E-NS	110.50	RAS	Acetone	11.5		1.04	ug/L	U	
					MW-282E-NS	110.50	RAS	Bromodichloromethane	0.164	<QL	0.0619	ug/L	J	100 CA_MCL
					MW-282E-NS	110.50	RAS	Carbon Tetrachloride	3.51		0.0778	ug/L		0.500 CA_MCL
					MW-282E-NS	110.50	RAS	Chloroform	0.993	<QL	0.06	ug/L	J	100 CA_MCL
					MW-282E-NS	110.50	RAS	Freon 113	16.9		0.0599	ug/L		1200 CA_MCL
					MW-282E-NS	110.50	RAS	Methylene chloride	0.118		0.0607	ug/L	U	5 CA_MCL
					MW-282E-NS	110.50	RAS	Trichloroethene	3.47		0.0499	ug/L		5 CA_MCL
					MW-282F-NS	112.00	RAS	Acetone	7.85		1.04	ug/L	U	
					MW-282F-NS	112.00	RAS	Carbon Tetrachloride	3.39		0.0778	ug/L		0.500 CA_MCL
					MW-282F-NS	112.00	RAS	Chloroform	0.973	<QL	0.06	ug/L	J	100 CA_MCL
					MW-282F-NS	112.00	RAS	Freon 113	15.2		0.0599	ug/L		1200 CA_MCL
					MW-282F-NS	112.00	RAS	Trichloroethene	3.21		0.0499	ug/L		5 CA_MCL
					MW-282G-NS	113.50	RAS	Acetone	6.6		1.04	ug/L	U	
					MW-282G-NS	113.50	RAS	Carbon Tetrachloride	3.64		0.0778	ug/L		0.500 CA_MCL
					MW-282G-NS	113.50	RAS	Chloroform	0.976	<QL	0.06	ug/L	J	100 CA_MCL
					MW-282G-NS	113.50	RAS	Freon 113	16.5		0.0599	ug/L		1200 CA_MCL
					MW-282G-NS	113.50	RAS	Trichloroethene	3.21		0.0499	ug/L		5 CA_MCL
					MW-286A-NS	104.70	QESS	1,1-Dichloroethane	13		1	ug/L		5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-286A-NS	104.70	RAS	1,1-Dichloroethane	15.6		0.0588	ug/L		5 CA_MCL
					MW-286A-NS	104.70	RAS	1,1-Dichloroethene	0.527	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-286A-NS	104.70	RAS	1,2-Dichloroethane	0.339	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-286A-NS	104.70	RAS	Acetone	29.2		1.04	ug/L	U	
					MW-286A-NS	104.70	QESS	Acetone	16	B	10	ug/L	U	
					MW-286A-NS	104.70	RAS	Chloroform	0.8	<QL	0.06	ug/L	J	100 CA_MCL
MW-286	SW8260B	NS1	6/1/1999	6/8/1999	MW-286A-NS	104.70	RAS	Freon 113	0.106	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-286A-NS	104.70	RAS	Tetrachloroethene	0.379	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-286A-NS	104.70	QESS	Tetrachloroethene	0.42	<QL,J	1	ug/L	,J	5 CA_MCL
					MW-286A-NS	104.70	QESS	Trichloroethene	5.6		1	ug/L		5 CA_MCL
					MW-286A-NS	104.70	RAS	Trichloroethene	6.39		0.0499	ug/L		5 CA_MCL
					MW-286A-NS	104.70	QESS	cis-1,2-Dichloroethene	6.2		1	ug/L		6 CA_MCL
					MW-286A-NS	104.70	RAS	cis-1,2-Dichloroethene	6.46		0.0407	ug/L		6 CA_MCL
					MW-286A-NS	104.70	RAS	trans-1,2-Dichloroethene	0.0826	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-286B-NS	106.20	RAS	1,1-Dichloroethane	16.3		0.0588	ug/L		5 CA_MCL
					MW-286B-NS	106.20	RAS	1,1-Dichloroethene	0.535	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-286B-NS	106.20	RAS	1,2-Dichloroethane	0.372	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-286B-NS	106.20	RAS	Acetone	3.69		1.04	ug/L	U	
					MW-286B-NS	106.20	RAS	Chloroform	0.874	<QL	0.06	ug/L	J	100 CA_MCL
					MW-286B-NS	106.20	RAS	Freon 113	0.158	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-286B-NS	106.20	RAS	Tetrachloroethene	0.821	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-286B-NS	106.20	RAS	Trichloroethene	7.44		0.0499	ug/L		5 CA_MCL
					MW-286B-NS	106.20	RAS	cis-1,2-Dichloroethene	7.12		0.0407	ug/L		6 CA_MCL
					MW-286B-NS	106.20	RAS	trans-1,2-Dichloroethene	0.103	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-286C-NS	107.70	RAS	1,1-Dichloroethane	16.1		0.0588	ug/L		5 CA_MCL
					MW-286C-NS	107.70	RAS	1,1-Dichloroethene	0.547	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-286C-NS	107.70	RAS	1,2-Dichloroethane	0.375	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-286C-NS	107.70	RAS	Acetone	8.60		1.04	ug/L	U	
					MW-286C-NS	107.70	RAS	Chloroform	0.900	<QL	0.06	ug/L	J	100 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-286C-NS	107.70	RAS	Freon 113	0.133	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-286C-NS	107.70	RAS	Tetrachloroethene	0.787	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-286C-NS	107.70	RAS	Trichloroethene	7.53		0.0499	ug/L		5 CA_MCL
					MW-286C-NS	107.70	RAS	cis-1,2-Dichloroethene	7.19		0.0407	ug/L		6 CA_MCL
					MW-286C-NS	107.70	RAS	trans-1,2-Dichloroethene	0.141	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-286D-NS	109.20	RAS	1,1-Dichloroethane	16.5		0.0588	ug/L		5 CA_MCL
					MW-286D-NS	109.20	RAS	1,1-Dichloroethene	0.577	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-286D-NS	109.20	RAS	1,2-Dichloroethane	0.389	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-286D-NS	109.20	RAS	Acetone	3.87		1.04	ug/L	U	
					MW-286D-NS	109.20	RAS	Chloroform	0.899	<QL	0.06	ug/L	J	100 CA_MCL
					MW-286D-NS	109.20	RAS	Freon 113	0.158	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-286D-NS	109.20	RAS	Tetrachloroethene	0.894	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-286D-NS	109.20	RAS	Trichloroethene	7.86		0.0499	ug/L		5 CA_MCL
					MW-286D-NS	109.20	RAS	cis-1,2-Dichloroethene	7.57		0.0407	ug/L		6 CA_MCL
					MW-286D-NS	109.20	RAS	trans-1,2-Dichloroethene	0.104	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-286E-NS	110.70	RAS	1,1-Dichloroethane	16.7		0.0588	ug/L		5 CA_MCL
					MW-286E-NS	110.70	RAS	1,1-Dichloroethene	0.61	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-286E-NS	110.70	RAS	1,2-Dichloroethane	0.39	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-286E-NS	110.70	RAS	Acetone	8.03		1.04	ug/L	U	
					MW-286E-NS	110.70	RAS	Chloroform	0.954	<QL	0.06	ug/L	J	100 CA_MCL
					MW-286E-NS	110.70	RAS	Freon 113	0.165	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-286E-NS	110.70	RAS	Tetrachloroethene	0.898	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-286E-NS	110.70	RAS	Trichloroethene	7.88		0.0499	ug/L		5 CA_MCL
					MW-286E-NS	110.70	RAS	cis-1,2-Dichloroethene	7.78		0.0407	ug/L		6 CA_MCL
					MW-286E-NS	110.70	RAS	trans-1,2-Dichloroethene	0.144	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-286F-NS	112.20	RAS	1,1-Dichloroethane	16.9		0.0588	ug/L		5 CA_MCL
					MW-286F-NS	112.20	RAS	1,1-Dichloroethene	0.604	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-286F-NS	112.20	RAS	1,2-Dichloroethane	0.399	<QL	0.0408	ug/L	J	0.500 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-286F-NS	112.20	RAS	Acetone	4.24		1.04	ug/L	U	
					MW-286F-NS	112.20	RAS	Chloroform	0.951	<QL	0.06	ug/L	J	100 CA_MCL
					MW-286F-NS	112.20	RAS	Freon 113	0.162	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-286F-NS	112.20	RAS	Tetrachloroethene	1		0.0591	ug/L		5 CA_MCL
					MW-286F-NS	112.20	RAS	Trichloroethene	8.14		0.0499	ug/L		5 CA_MCL
					MW-286F-NS	112.20	RAS	cis-1,2-Dichloroethene	7.8		0.0407	ug/L		6 CA_MCL
					MW-286F-NS	112.20	RAS	trans-1,2-Dichloroethene	0.123	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-286G-NS	113.70	RAS	1,1-Dichloroethane	16.9		0.0588	ug/L		5 CA_MCL
					MW-286G-NS	113.70	RAS	1,1-Dichloroethene	0.593	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-286G-NS	113.70	RAS	1,2-Dichloroethane	0.417	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-286G-NS	113.70	RAS	Acetone	3.54		1.04	ug/L	U	
					MW-286G-NS	113.70	RAS	Chloroform	0.964	<QL	0.06	ug/L	J	100 CA_MCL
					MW-286G-NS	113.70	RAS	Freon 113	0.132	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-286G-NS	113.70	RAS	Tetrachloroethene	0.994	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-286G-NS	113.70	RAS	Trichloroethene	8.18		0.0499	ug/L		5 CA_MCL
					MW-286G-NS	113.70	RAS	cis-1,2-Dichloroethene	7.93		0.0407	ug/L		6 CA_MCL
					MW-286G-NS	113.70	RAS	trans-1,2-Dichloroethene	0.125	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-286H-NS	115.20	RAS	1,1-Dichloroethane	17.2		0.0588	ug/L		5 CA_MCL
					MW-286H-NS	115.20	RAS	1,1-Dichloroethene	0.628	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-286H-NS	115.20	RAS	1,2-Dichloroethane	0.41	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-286H-NS	115.20	RAS	Acetone	4.57		1.04	ug/L	U	
					MW-286H-NS	115.20	RAS	Chloroform	0.989	<QL	0.06	ug/L	J	100 CA_MCL
					MW-286H-NS	115.20	RAS	Freon 113	0.147	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-286H-NS	115.20	RAS	Tetrachloroethene	0.978	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-286H-NS	115.20	RAS	Trichloroethene	8.46		0.0499	ug/L		5 CA_MCL
					MW-286H-NS	115.20	RAS	cis-1,2-Dichloroethene	8.05		0.0407	ug/L		6 CA_MCL
					MW-286H-NS	115.20	RAS	trans-1,2-Dichloroethene	0.127	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-286I-NS	116.70	QESS	1,1-Dichloroethane	15		1	ug/L		5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-286I-NS	116.70	RAS	1,1-Dichloroethane	16.5		0.0588	ug/L		5 CA_MCL
					MW-286I-NS	116.70	RAS	1,1-Dichloroethene	0.576	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-286I-NS	116.70	RAS	1,2-Dichloroethane	0.406	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-286I-NS	116.70	QESS	Acetone	15	B	10	ug/L	U	
					MW-286I-NS	116.70	RAS	Acetone	28.7		1.04	ug/L	U	
					MW-286I-NS	116.70	RAS	Chloroform	0.967	<QL	0.06	ug/L	J	100 CA_MCL
					MW-286I-NS	116.70	RAS	Freon 113	0.116	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-286I-NS	116.70	RAS	Tetrachloroethene	0.702	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-286I-NS	116.70	QESS	Tetrachloroethene	0.77	<QL,J	1	ug/L	,J	5 CA_MCL
					MW-286I-NS	116.70	QESS	Trichloroethene	6.9		1	ug/L		5 CA_MCL
					MW-286I-NS	116.70	RAS	Trichloroethene	7.74		0.0499	ug/L		5 CA_MCL
					MW-286I-NS	116.70	RAS	cis-1,2-Dichloroethene	7.63		0.0407	ug/L		6 CA_MCL
					MW-286I-NS	116.70	QESS	cis-1,2-Dichloroethene	7.6		1	ug/L		6 CA_MCL
					MW-286I-NS	116.70	RAS	trans-1,2-Dichloroethene	0.0983	<QL	0.0422	ug/L	J	10 CA_MCL
					MW-287A-NS	117.50	RAS	1,1-Dichloroethane	0.586	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-287A-NS	117.50	RAS	1,1-Dichloroethene	2.96		0.102	ug/L		6 CA_MCL
					MW-287A-NS	117.50	RAS	Carbon Tetrachloride	0.265	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-287A-NS	117.50	RAS	Chloroform	0.338	<QL	0.0424	ug/L	J	100 CA_MCL
MW-287	SW8260B	NS1	6/3/1999	6/15/1999	MW-287A-NS	117.50	RAS	Freon 113	43.4		0.112	ug/L		1200 CA_MCL
					MW-287A-NS	117.50	RAS	Tetrachloroethene	23.1		0.114	ug/L		5 CA_MCL
					MW-287A-NS	117.50	RAS	Trichloroethene	144		0.464	ug/L		5 CA_MCL
					MW-287A-NS	117.50	RAS	cis-1,2-Dichloroethene	0.456	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-287B-NS	119.00	RAS	1,1-Dichloroethane	0.602	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-287B-NS	119.00	RAS	1,1-Dichloroethene	3.27		0.102	ug/L		6 CA_MCL
					MW-287B-NS	119.00	RAS	Carbon Tetrachloride	0.348	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-287B-NS	119.00	RAS	Chloroform	0.363	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-287B-NS	119.00	RAS	Freon 113	48.3		0.112	ug/L		1200 CA_MCL
					MW-287B-NS	119.00	RAS	Tetrachloroethene	27.9		0.114	ug/L		5 CA_MCL
					MW-287B-NS	119.00	RAS	Trichloroethene	148		0.464	ug/L		5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-287B-NS	119.00	RAS	cis-1,2-Dichloroethene	0.548	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-287C-NS	120.50	RAS	1,1-Dichloroethane	0.564	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-287C-NS	120.50	RAS	1,1-Dichloroethene	2.8		0.102	ug/L		6 CA_MCL
					MW-287C-NS	120.50	RAS	Carbon Tetrachloride	0.293	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-287C-NS	120.50	RAS	Chloroform	0.362	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-287C-NS	120.50	RAS	Freon 113	42		0.112	ug/L		1200 CA_MCL
					MW-287C-NS	120.50	RAS	Tetrachloroethene	21.7		0.114	ug/L		5 CA_MCL
					MW-287C-NS	120.50	RAS	Trichloroethene	135		0.464	ug/L		5 CA_MCL
					MW-287C-NS	120.50	RAS	cis-1,2-Dichloroethene	0.51	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-287D-NS	122.00	RAS	1,1-Dichloroethane	0.539	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-287D-NS	122.00	RAS	1,1-Dichloroethene	2.94		0.102	ug/L		6 CA_MCL
					MW-287D-NS	122.00	RAS	Carbon Tetrachloride	0.302	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-287D-NS	122.00	RAS	Chloroform	0.335	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-287D-NS	122.00	RAS	Freon 113	48		0.112	ug/L		1200 CA_MCL
					MW-287D-NS	122.00	RAS	Tetrachloroethene	21.1		0.114	ug/L		5 CA_MCL
					MW-287D-NS	122.00	RAS	Trichloroethene	147		0.464	ug/L		5 CA_MCL
					MW-287D-NS	122.00	RAS	cis-1,2-Dichloroethene	0.566	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-287E-NS	123.50	RAS	1,1-Dichloroethane	0.475	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-287E-NS	123.50	RAS	1,1-Dichloroethene	3.15		0.102	ug/L		6 CA_MCL
					MW-287E-NS	123.50	RAS	Carbon Tetrachloride	0.307	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-287E-NS	123.50	RAS	Chloroform	0.341	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-287E-NS	123.50	RAS	Freon 113	55.5		0.112	ug/L		1200 CA_MCL
					MW-287E-NS	123.50	RAS	Tetrachloroethene	19.4		0.114	ug/L		5 CA_MCL
					MW-287E-NS	123.50	RAS	Trichloroethene	162		0.464	ug/L		5 CA_MCL
					MW-287E-NS	123.50	RAS	cis-1,2-Dichloroethene	0.581	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-288A-NS	107.70	RAS	1,1-Dichloroethane	0.504	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-288A-NS	107.70	RAS	1,1-Dichloroethene	2.4		0.102	ug/L		6 CA_MCL
					MW-288A-NS	107.70	RAS	Acetone	3.11		1.43	ug/L	U	

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-288A-NS	107.70	RAS	Chloroform	0.301	<QL	0.0424	ug/L	J	100 CA_MCL
MW-288	SW8260B	NS1	6/3/1999	6/14/1999	MW-288A-NS	107.70	RAS	Freon 113	35.6		0.112	ug/L		1200 CA_MCL
					MW-288A-NS	107.70	RAS	Tetrachloroethene	20.1		0.114	ug/L		5 CA_MCL
					MW-288A-NS	107.70	RAS	Trichloroethene	164		0.464	ug/L		5 CA_MCL
					MW-288A-NS	107.70	RAS	cis-1,2-Dichloroethene	0.828	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-288B-NS	109.20	RAS	1,1-Dichloroethane	0.509	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-288B-NS	109.20	RAS	1,1-Dichloroethene	2.44		0.102	ug/L		6 CA_MCL
					MW-288B-NS	109.20	RAS	Acetone	2.74		1.43	ug/L	U	
					MW-288B-NS	109.20	RAS	Chloroform	0.31	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-288B-NS	109.20	RAS	Freon 113	38.9		0.112	ug/L		1200 CA_MCL
					MW-288B-NS	109.20	RAS	Tetrachloroethene	24.6		0.114	ug/L		5 CA_MCL
					MW-288B-NS	109.20	RAS	Trichloroethene	167		0.464	ug/L		5 CA_MCL
					MW-288B-NS	109.20	RAS	cis-1,2-Dichloroethene	0.852	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-288C-NS	110.70	RAS	1,1-Dichloroethane	0.533	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-288C-NS	110.70	RAS	1,1-Dichloroethene	2.57		0.102	ug/L		6 CA_MCL
					MW-288C-NS	110.70	RAS	Acetone	2.62		1.43	ug/L	U	
					MW-288C-NS	110.70	RAS	Chloroform	0.31	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-288C-NS	110.70	RAS	Freon 113	39.2		0.112	ug/L		1200 CA_MCL
					MW-288C-NS	110.70	RAS	Tetrachloroethene	25		0.114	ug/L		5 CA_MCL
					MW-288C-NS	110.70	RAS	Trichloroethene	173		0.464	ug/L		5 CA_MCL
					MW-288C-NS	110.70	RAS	cis-1,2-Dichloroethene	0.845	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-288D-NS	112.20	RAS	1,1-Dichloroethane	0.522	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-288D-NS	112.20	RAS	1,1-Dichloroethene	2.41		0.102	ug/L		6 CA_MCL
					MW-288D-NS	112.20	RAS	Chloroform	0.305	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-288D-NS	112.20	RAS	Freon 113	38.7		0.112	ug/L		1200 CA_MCL
					MW-288D-NS	112.20	RAS	Tetrachloroethene	25.4		0.114	ug/L		5 CA_MCL
					MW-288D-NS	112.20	RAS	Trichloroethene	168		0.464	ug/L		5 CA_MCL
					MW-288D-NS	112.20	RAS	cis-1,2-Dichloroethene	0.804	<QL	0.0595	ug/L	J	6 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-288E-NS	113.70	RAS	1,1-Dichloroethane	0.568	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-288E-NS	113.70	RAS	1,1-Dichloroethene	2.71		0.102	ug/L		6 CA_MCL
					MW-288E-NS	113.70	RAS	Chloroform	0.317	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-288E-NS	113.70	RAS	Freon 113	43.6		0.112	ug/L		1200 CA_MCL
					MW-288E-NS	113.70	RAS	Tetrachloroethene	28.8		0.114	ug/L		5 CA_MCL
					MW-288E-NS	113.70	RAS	Trichloroethene	188		0.464	ug/L		5 CA_MCL
					MW-288E-NS	113.70	RAS	cis-1,2-Dichloroethene	0.932	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-288F-NS	115.20	RAS	1,1-Dichloroethane	0.54	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-288F-NS	115.20	RAS	1,1-Dichloroethene	2.65		0.102	ug/L		6 CA_MCL
					MW-288F-NS	115.20	RAS	Acetone	8.61		1.43	ug/L	U	
					MW-288F-NS	115.20	RAS	Chloroform	0.319	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-288F-NS	115.20	RAS	Freon 113	41.6		0.112	ug/L		1200 CA_MCL
					MW-288F-NS	115.20	RAS	Tetrachloroethene	27.1		0.114	ug/L		5 CA_MCL
					MW-288F-NS	115.20	RAS	Trichloroethene	174		0.464	ug/L		5 CA_MCL
					MW-288F-NS	115.20	RAS	cis-1,2-Dichloroethene	0.878	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-288G-NS	116.70	RAS	1,1-Dichloroethane	0.326	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-288G-NS	116.70	RAS	1,1-Dichloroethene	1.44		0.102	ug/L		6 CA_MCL
					MW-288G-NS	116.70	RAS	Acetone	2.96		1.43	ug/L	U	
					MW-288G-NS	116.70	RAS	Chloroform	0.252	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-288G-NS	116.70	RAS	Freon 113	25		0.112	ug/L		1200 CA_MCL
					MW-288G-NS	116.70	RAS	Tetrachloroethene	17.5		0.114	ug/L		5 CA_MCL
					MW-288G-NS	116.70	RAS	Trichloroethene	111		0.464	ug/L		5 CA_MCL
					MW-288G-NS	116.70	RAS	cis-1,2-Dichloroethene	0.658	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-288H-NS	118.20	RAS	1,1-Dichloroethane	0.458	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-288H-NS	118.20	RAS	1,1-Dichloroethene	2.31		0.102	ug/L		6 CA_MCL
					MW-288H-NS	118.20	RAS	Acetone	10.9		1.43	ug/L	U	
					MW-288H-NS	118.20	RAS	Chloroform	0.301	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-288H-NS	118.20	RAS	Freon 113	37.9		0.112	ug/L		1200 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-288H-NS	118.20	RAS	Tetrachloroethene	23.5		0.114	ug/L		5 CA_MCL
					MW-288H-NS	118.20	RAS	Trichloroethene	156		0.464	ug/L		5 CA_MCL
					MW-288H-NS	118.20	RAS	cis-1,2-Dichloroethene	0.807	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-288I-NS	119.70	RAS	1,1-Dichloroethane	0.706	<QL	0.0736	ug/L	J	5 CA_MCL
					MW-288I-NS	119.70	RAS	1,1-Dichloroethene	3.43		0.102	ug/L		6 CA_MCL
					MW-288I-NS	119.70	RAS	Acetone	10.4		1.43	ug/L	U	
					MW-288I-NS	119.70	RAS	Chloroform	0.324	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-288I-NS	119.70	RAS	Freon 113	50.8		0.112	ug/L		1200 CA_MCL
					MW-288I-NS	119.70	RAS	Tetrachloroethene	26.8		0.114	ug/L		5 CA_MCL
					MW-288I-NS	119.70	RAS	Trichloroethene	206		0.464	ug/L		5 CA_MCL
					MW-288I-NS	119.70	RAS	cis-1,2-Dichloroethene	0.986	<QL	0.0595	ug/L	J	6 CA_MCL
MW-314	SW8260B	NS1	6/1/1999	6/10/1999	MW-314A-NS	157.00	RAS	Acetone	9.84		1.04	ug/L	U	
					MW-314A-NS	157.00	RAS	Chloroform	0.136	<QL	0.06	ug/L	J	100 CA_MCL
					MW-314A-NS	157.00	RAS	Trichloroethene	6.39		0.0499	ug/L		5 CA_MCL
					MW-314A-NS	157.00	RAS	cis-1,2-Dichloroethene	1.22		0.0407	ug/L		6 CA_MCL
					MW-314B-NS	158.50	RAS	Acetone	11.6		1.04	ug/L	U	
					MW-314B-NS	158.50	RAS	Chloroform	0.143	<QL	0.06	ug/L	J	100 CA_MCL
					MW-314B-NS	158.50	RAS	Trichloroethene	6.44		0.0499	ug/L		5 CA_MCL
					MW-314B-NS	158.50	RAS	cis-1,2-Dichloroethene	1.2		0.0407	ug/L		6 CA_MCL
					MW-314C-NS	160.00	RAS	1,1-Dichloroethene	0.122	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-314C-NS	160.00	RAS	Acetone	34.3		1.04	ug/L	U	
					MW-314C-NS	160.00	QESS	Acetone	20	B	10	ug/L	U	
					MW-314C-NS	160.00	RAS	Chloroform	0.134	<QL	0.06	ug/L	J	100 CA_MCL
					MW-314C-NS	160.00	QESS	Trichloroethene	5.6		1	ug/L		5 CA_MCL
					MW-314C-NS	160.00	RAS	Trichloroethene	6.25		0.0499	ug/L		5 CA_MCL
					MW-314C-NS	160.00	QESS	cis-1,2-Dichloroethene	1.1		1	ug/L		6 CA_MCL
					MW-314C-NS	160.00	RAS	cis-1,2-Dichloroethene	1.22		0.0407	ug/L		6 CA_MCL
					MW-314D-NS	161.50	RAS	1,1-Dichloroethene	0.0879	<QL	0.0819	ug/L	J	6 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-314D-NS	161.50	RAS	1,4-Dichlorobenzene	0.0681	<QL	0.0651	ug/L	J	5 CA_MCL
					MW-314D-NS	161.50	RAS	Acetone	8.64		1.04	ug/L	U	
					MW-314D-NS	161.50	RAS	Chloroform	0.154	<QL	0.06	ug/L	J	100 CA_MCL
					MW-314D-NS	161.50	RAS	Trichloroethene	6.1		0.0499	ug/L		5 CA_MCL
					MW-314D-NS	161.50	RAS	cis-1,2-Dichloroethene	1.28		0.0407	ug/L		6 CA_MCL
					MW-314E-NS	163.00	RAS	Acetone	10.3		1.04	ug/L	U	
					MW-314E-NS	163.00	RAS	Chloroform	0.145	<QL	0.06	ug/L	J	100 CA_MCL
					MW-314E-NS	163.00	RAS	Trichloroethene	6.04		0.0499	ug/L		5 CA_MCL
					MW-314E-NS	163.00	RAS	cis-1,2-Dichloroethene	1.18		0.0407	ug/L		6 CA_MCL
					MW-325A-NS	103.22	RAS	1,1-Dichloroethene	0.197	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-325A-NS	103.22	RAS	Acetone	8.41		1.04	ug/L	U	
MW-325	SW8260B	NS1	6/2/1999	6/12/1999	MW-325A-NS	103.22	RAS	Freon 113	0.194	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-325A-NS	103.22	RAS	Trichloroethene	27.4		0.0499	ug/L		5 CA_MCL
					MW-325B-NS	104.72	RAS	1,1-Dichloroethene	0.215	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-325B-NS	104.72	RAS	Acetone	22.6		1.04	ug/L	U	
					MW-325B-NS	104.72	QESS	Acetone	11	B	10	ug/L	U	
					MW-325B-NS	104.72	RAS	Freon 113	0.181	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-325B-NS	104.72	QESS	Trichloroethene	23		1	ug/L		5 CA_MCL
					MW-325B-NS	104.72	RAS	Trichloroethene	26.3		0.0499	ug/L		5 CA_MCL
					MW-325B-NS	104.72	RAS	cis-1,2-Dichloroethene	0.056	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-325C-NS	106.22	RAS	1,1-Dichloroethene	0.181	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-325C-NS	106.22	RAS	Acetone	9.25		1.04	ug/L	U	
					MW-325C-NS	106.22	RAS	Freon 113	0.183	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-325C-NS	106.22	RAS	Trichloroethene	28.6		0.0499	ug/L		5 CA_MCL
					MW-325C-NS	106.22	RAS	cis-1,2-Dichloroethene	0.0563	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-325D-NS	107.72	RAS	1,1-Dichloroethene	0.189	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-325D-NS	107.72	RAS	Acetone	10.4		1.04	ug/L	U	
					MW-325D-NS	107.72	RAS	Freon 113	0.225	<QL	0.0599	ug/L	J	1200 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-325D-NS	107.72	RAS	Trichloroethene	29.1		0.0499	ug/L		5 CA_MCL
					MW-325D-NS	107.72	RAS	cis-1,2-Dichloroethene	0.059	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-325E-NS	109.22	RAS	1,1-Dichloroethene	0.155	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-325E-NS	109.22	RAS	Acetone	8.57		1.04	ug/L	U	
					MW-325E-NS	109.22	RAS	Freon 113	0.206	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-325E-NS	109.22	RAS	Trichloroethene	28.4		0.0499	ug/L		5 CA_MCL
					MW-325F-NS	110.72	RAS	1,1-Dichloroethene	0.185	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-325F-NS	110.72	RAS	Acetone	9.46		1.04	ug/L	U	
					MW-325F-NS	110.72	RAS	Freon 113	0.193	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-325F-NS	110.72	RAS	Trichloroethene	29.2		0.0499	ug/L		5 CA_MCL
					MW-325F-NS	110.72	RAS	cis-1,2-Dichloroethene	0.0557	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-325G-NS	112.22	RAS	1,1-Dichloroethene	0.184	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-325G-NS	112.22	RAS	Acetone	11.2		1.04	ug/L	U	
					MW-325G-NS	112.22	RAS	Freon 113	0.203	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-325G-NS	112.22	RAS	Trichloroethene	29.6		0.0499	ug/L		5 CA_MCL
					MW-325G-NS	112.22	RAS	cis-1,2-Dichloroethene	0.059	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-325H-NS	113.72	RAS	1,1-Dichloroethene	0.188	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-325H-NS	113.72	RAS	Acetone	12.1		1.04	ug/L	U	
					MW-325H-NS	113.72	RAS	Freon 113	0.212	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-325H-NS	113.72	RAS	Trichloroethene	29		0.0499	ug/L		5 CA_MCL
					MW-325I-NS	115.22	RAS	1,1-Dichloroethene	0.188	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-325I-NS	115.22	RAS	Acetone	9.15		1.04	ug/L	U	
					MW-325I-NS	115.22	RAS	Freon 113	0.193	<QL	0.0599	ug/L	J	1200 CA_MCL
					MW-325I-NS	115.22	RAS	Trichloroethene	28.1		0.0499	ug/L		5 CA_MCL
MW-326	SW8260B	NS1	6/2/1999	6/12/1999	MW-326A-NS	180.00	RAS	1,1-Dichloroethane	1.65		0.0736	ug/L		5 CA_MCL
					MW-326A-NS	180.00	RAS	1,1-Dichloroethene	0.612	<QL	0.102	ug/L	J	6 CA_MCL
					MW-326A-NS	180.00	RAS	Acetone	4.58		1.43	ug/L	U	
					MW-326A-NS	180.00	RAS	Chloroform	0.123	<QL	0.0424	ug/L	J	100 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-326A-NS	180.00	RAS	Trichloroethene	7.86		0.0929	ug/L		5 CA_MCL
					MW-326A-NS	180.00	RAS	cis-1,2-Dichloroethene	0.418	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-326B-NS	181.50	RAS	1,1-Dichloroethane	1.74		0.0736	ug/L		5 CA_MCL
					MW-326B-NS	181.50	RAS	1,1-Dichloroethene	0.595	<QL	0.102	ug/L	J	6 CA_MCL
					MW-326B-NS	181.50	RAS	Acetone	2.60		1.43	ug/L	U	
					MW-326B-NS	181.50	RAS	Chloroform	0.151	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-326B-NS	181.50	RAS	Trichloroethene	8.28		0.0929	ug/L		5 CA_MCL
					MW-326B-NS	181.50	RAS	cis-1,2-Dichloroethene	0.401	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-326C-NS	183.00	RAS	1,1-Dichloroethane	1.66		0.0736	ug/L		5 CA_MCL
					MW-326C-NS	183.00	RAS	1,1-Dichloroethene	0.568	<QL	0.102	ug/L	J	6 CA_MCL
					MW-326C-NS	183.00	RAS	Acetone	10.1		1.43	ug/L	U	
					MW-326C-NS	183.00	RAS	Chloroform	0.142	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-326C-NS	183.00	RAS	Trichloroethene	7.95		0.0929	ug/L		5 CA_MCL
					MW-326C-NS	183.00	RAS	cis-1,2-Dichloroethene	0.391	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-326D-NS	184.50	RAS	1,1-Dichloroethane	1.64		0.0736	ug/L		5 CA_MCL
					MW-326D-NS	184.50	RAS	1,1-Dichloroethene	0.556	<QL	0.102	ug/L	J	6 CA_MCL
					MW-326D-NS	184.50	RAS	Acetone	3.04		1.43	ug/L	U	
					MW-326D-NS	184.50	RAS	Chloroform	0.139	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-326D-NS	184.50	RAS	Trichloroethene	8.23		0.0929	ug/L		5 CA_MCL
					MW-326D-NS	184.50	RAS	cis-1,2-Dichloroethene	0.393	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-326E-NS	186.00	RAS	1,1-Dichloroethane	2.31		0.0588	ug/L		5 CA_MCL
					MW-326E-NS	186.00	RAS	1,1-Dichloroethene	0.641	<QL	0.0819	ug/L	J	6 CA_MCL
					MW-326E-NS	186.00	RAS	Acetone	4.24		1.04	ug/L	U	
					MW-326E-NS	186.00	RAS	Chloroform	0.182	<QL	0.06	ug/L	J	100 CA_MCL
					MW-326E-NS	186.00	RAS	Trichloroethene	8.64		0.0499	ug/L		5 CA_MCL
					MW-326E-NS	186.00	RAS	cis-1,2-Dichloroethene	0.485	<QL	0.0407	ug/L	J	6 CA_MCL
MW-343	SW8260B	NS1	5/28/1999	6/8/1999	MW-343A-NS	162.00	RAS	Acetone	9.86		1.43	ug/L	U	
					MW-343A-NS	162.00	RAS	Carbon Tetrachloride	1.97		0.0962	ug/L		0.500 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-343A-NS	162.00	RAS	Chloroform	0.184	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-343A-NS	162.00	RAS	Trichloroethene	1.47		0.0929	ug/L		5 CA_MCL
					MW-343A-NS	162.00	RAS	cis-1,2-Dichloroethene	0.11	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-343B-NS	163.50	QESS	Acetone	8.5	J	10	ug/L	U	
					MW-343B-NS	163.50	RAS	Acetone	12.6		1.43	ug/L	U	
					MW-343B-NS	163.50	QESS	Carbon Tetrachloride	1.4		1	ug/L		0.500 CA_MCL
					MW-343B-NS	163.50	RAS	Carbon Tetrachloride	1.8		0.0962	ug/L		0.500 CA_MCL
					MW-343B-NS	163.50	RAS	Chloroform	0.198	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-343B-NS	163.50	RAS	Trichloroethene	1.46		0.0929	ug/L		5 CA_MCL
					MW-343B-NS	163.50	QESS	Trichloroethene	1.1		1	ug/L		5 CA_MCL
					MW-343B-NS	163.50	RAS	cis-1,2-Dichloroethene	0.122	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-343B-NS	163.50	QESS	cis-1,2-Dichloroethene	0.11	<QL,J	1	ug/L	,J	6 CA_MCL
					MW-343C-NS	165.00	RAS	Acetone	9.11		1.43	ug/L	U	
					MW-343C-NS	165.00	RAS	Carbon Tetrachloride	1.91		0.0962	ug/L		0.500 CA_MCL
					MW-343C-NS	165.00	RAS	Chloroform	0.17	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-343C-NS	165.00	RAS	Trichloroethene	1.43		0.0929	ug/L		5 CA_MCL
					MW-343C-NS	165.00	RAS	cis-1,2-Dichloroethene	0.103	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-343D-NS	166.50	RAS	Acetone	13.4		1.43	ug/L	U	
					MW-343D-NS	166.50	RAS	Carbon Tetrachloride	2.03		0.0962	ug/L		0.500 CA_MCL
					MW-343D-NS	166.50	RAS	Chloroform	0.175	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-343D-NS	166.50	RAS	Trichloroethene	1.53		0.0929	ug/L		5 CA_MCL
					MW-343D-NS	166.50	RAS	cis-1,2-Dichloroethene	0.124	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-343E-NS	168.00	RAS	Acetone	12.1		1.43	ug/L	U	
					MW-343E-NS	168.00	RAS	Carbon Tetrachloride	2.05		0.0962	ug/L		0.500 CA_MCL
					MW-343E-NS	168.00	RAS	Chloroform	0.192	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-343E-NS	168.00	RAS	Trichloroethene	1.56		0.0929	ug/L		5 CA_MCL
					MW-343E-NS	168.00	RAS	cis-1,2-Dichloroethene	0.118	<QL	0.0595	ug/L	J	6 CA_MCL
MW-362	SW8260B	NS1	5/27/1999	6/8/1999	MW-362A-NS	104.40	RAS	Acetone	7.27		1.43	ug/L	U	
					MW-362A-NS	104.40	RAS	Toluene	0.215	<QL	0.0766	ug/L	J	150 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-362A-NS	104.40	RAS	Trichloroethene	0.374	<QL	0.0929	ug/L	J	5 CA_MCL
					MW-362B-NS	105.90	RAS	Freon 113	0.136	<QL	0.112	ug/L	J	1200 CA_MCL
					MW-362B-NS	105.90	RAS	Toluene	0.242	<QL	0.0766	ug/L	J	150 CA_MCL
					MW-362B-NS	105.90	RAS	Trichloroethene	0.355	<QL	0.0929	ug/L	J	5 CA_MCL
					MW-362C-NS	107.40	RAS	Acetone	6.28		1.43	ug/L	U	
					MW-362C-NS	107.40	RAS	Freon 113	0.169	<QL	0.112	ug/L	J	1200 CA_MCL
					MW-362C-NS	107.40	RAS	Tetrachloroethene	0.163	<QL	0.114	ug/L	J	5 CA_MCL
					MW-362C-NS	107.40	RAS	Trichloroethene	0.356	<QL	0.0929	ug/L	J	5 CA_MCL
					MW-364A-NS	123.50	RAS	1,1-Dichloroethene	0.226	<QL	0.148	ug/L	J	6 CA_MCL
					MW-364A-NS	123.50	RAS	Acetone	21.6		0.834	ug/L	U	
					MW-364A-NS	123.50	RAS	Carbon Tetrachloride	1.08		0.137	ug/L		0.500 CA_MCL
					MW-364A-NS	123.50	RAS	Chloroform	0.436	<QL	0.158	ug/L	J	100 CA_MCL
MW-364	SW8260B	NS1	6/2/1999	6/14/1999	MW-364A-NS	123.50	RAS	Freon 113	3.6		0.169	ug/L		1200 CA_MCL
					MW-364A-NS	123.50	RAS	Tetrachloroethene	3.02		0.142	ug/L		5 CA_MCL
					MW-364A-NS	123.50	RAS	Trichloroethene	104		0.322	ug/L		5 CA_MCL
					MW-364A-NS	123.50	RAS	cis-1,2-Dichloroethene	1.02		0.106	ug/L		6 CA_MCL
					MW-364B-NS	125.00	RAS	1,1-Dichloroethene	0.243	<QL	0.148	ug/L	J	6 CA_MCL
					MW-364B-NS	125.00	RAS	Acetone	11.8		0.834	ug/L	U	
					MW-364B-NS	125.00	RAS	Carbon Tetrachloride	1.06		0.137	ug/L		0.500 CA_MCL
					MW-364B-NS	125.00	RAS	Chloroform	0.405	<QL	0.158	ug/L	J	100 CA_MCL
					MW-364B-NS	125.00	RAS	Freon 113	3.66		0.169	ug/L		1200 CA_MCL
					MW-364B-NS	125.00	RAS	Tetrachloroethene	3.08		0.142	ug/L		5 CA_MCL
					MW-364B-NS	125.00	RAS	Trichloroethene	114		0.322	ug/L		5 CA_MCL
					MW-364B-NS	125.00	RAS	cis-1,2-Dichloroethene	1.1		0.106	ug/L		6 CA_MCL
					MW-364C-NS	126.50	RAS	1,1-Dichloroethene	0.254	<QL	0.148	ug/L	J	6 CA_MCL
					MW-364C-NS	126.50	RAS	Acetone	11.2		0.834	ug/L	U	
					MW-364C-NS	126.50	RAS	Carbon Tetrachloride	1.15		0.137	ug/L		0.500 CA_MCL
					MW-364C-NS	126.50	RAS	Chloroform	0.412	<QL	0.158	ug/L	J	100 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-364C-NS	126.50	RAS	Freon 113	4.08		0.169	ug/L		1200 CA_MCL
					MW-364C-NS	126.50	RAS	Tetrachloroethene	3.76		0.142	ug/L		5 CA_MCL
					MW-364C-NS	126.50	RAS	Trichloroethene	121		0.322	ug/L		5 CA_MCL
					MW-364C-NS	126.50	RAS	cis-1,2-Dichloroethene	1.18		0.106	ug/L		6 CA_MCL
MW-366	SW8260B	NS1	6/4/1999	6/16/1999	MW-366A-NS	107.10	RAS	1,1,2-Trichloroethane	0.575	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366A-NS	107.10	RAS	Acetone	5.4		1.43	ug/L	U	
					MW-366A-NS	107.10	RAS	Carbon Tetrachloride	1.35		0.0962	ug/L		0.500 CA_MCL
					MW-366A-NS	107.10	RAS	Chloroform	0.416	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366A-NS	107.10	RAS	Freon 113	3.09		0.112	ug/L		1200 CA_MCL
					MW-366A-NS	107.10	RAS	Tetrachloroethene	0.531	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366A-NS	107.10	RAS	Trichloroethene	1.94		0.0929	ug/L		5 CA_MCL
					MW-366A-NS	107.10	RAS	cis-1,2-Dichloroethene	0.144	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-366B-NS	108.60	RAS	1,1,2-Trichloroethane	0.637	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366B-NS	108.60	RAS	Acetone	8.85		1.43	ug/L	U	
					MW-366B-NS	108.60	RAS	Carbon Tetrachloride	1.39		0.0962	ug/L		0.500 CA_MCL
					MW-366B-NS	108.60	RAS	Chloroform	0.416	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366B-NS	108.60	RAS	Freon 113	3.07		0.112	ug/L		1200 CA_MCL
					MW-366B-NS	108.60	RAS	Tetrachloroethene	0.582	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366B-NS	108.60	RAS	Trichloroethene	1.97		0.0929	ug/L		5 CA_MCL
					MW-366B-NS	108.60	RAS	cis-1,2-Dichloroethene	0.157	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-366C-NS	110.10	RAS	1,1,2-Trichloroethane	0.701	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366C-NS	110.10	RAS	Acetone	5.08		1.43	ug/L	U	
					MW-366C-NS	110.10	RAS	Carbon Tetrachloride	1.41		0.0962	ug/L		0.500 CA_MCL
					MW-366C-NS	110.10	RAS	Chloroform	0.424	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366C-NS	110.10	RAS	Freon 113	3.04		0.112	ug/L		1200 CA_MCL
					MW-366C-NS	110.10	RAS	Tetrachloroethene	0.524	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366C-NS	110.10	RAS	Trichloroethene	1.94		0.0929	ug/L		5 CA_MCL
					MW-366C-NS	110.10	RAS	cis-1,2-Dichloroethene	0.140	<QL	0.0595	ug/L	J	6 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-366D-NS	111.60	RAS	1,1,2-Trichloroethane	0.665	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366D-NS	111.60	RAS	Acetone	8.34		1.43	ug/L	U	
					MW-366D-NS	111.60	RAS	Carbon Tetrachloride	1.36		0.0962	ug/L		0.500 CA_MCL
					MW-366D-NS	111.60	RAS	Chloroform	0.415	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366D-NS	111.60	RAS	Freon 113	3.05		0.112	ug/L		1200 CA_MCL
					MW-366D-NS	111.60	RAS	Tetrachloroethene	0.472	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366D-NS	111.60	RAS	Trichloroethene	1.9		0.0929	ug/L		5 CA_MCL
					MW-366D-NS	111.60	RAS	cis-1,2-Dichloroethene	0.121	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-366E-NS	113.10	RAS	1,1,2-Trichloroethane	0.653	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366E-NS	113.10	RAS	Acetone	7.79		1.43	ug/L	U	
					MW-366E-NS	113.10	QESS	Acetone	6.5	J,B	10	ug/L	U	
					MW-366E-NS	113.10	QESS	Carbon Tetrachloride	1.2		1	ug/L		0.500 CA_MCL
					MW-366E-NS	113.10	RAS	Carbon Tetrachloride	1.26		0.0962	ug/L		0.500 CA_MCL
					MW-366E-NS	113.10	RAS	Chloroform	0.418	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366E-NS	113.10	RAS	Freon 113	2.64		0.112	ug/L		1200 CA_MCL
					MW-366E-NS	113.10	QESS	Freon 113	2.7		1	ug/L		1200 CA_MCL
					MW-366E-NS	113.10	RAS	Tetrachloroethene	0.372	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366E-NS	113.10	QESS	Trichloroethene	1.8		1	ug/L		5 CA_MCL
					MW-366E-NS	113.10	RAS	Trichloroethene	1.85		0.0929	ug/L		5 CA_MCL
					MW-366E-NS	113.10	RAS	cis-1,2-Dichloroethene	0.0904	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-366E-NS	113.10	QESS	cis-1,2-Dichloroethene	0.15	<QL,J	1	ug/L	,J	6 CA_MCL
					MW-366F-NS	114.60	RAS	1,1,2-Trichloroethane	0.602	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366F-NS	114.60	RAS	Acetone	13.5		1.43	ug/L	U	
					MW-366F-NS	114.60	RAS	Carbon Tetrachloride	1.37		0.0962	ug/L		0.500 CA_MCL
					MW-366F-NS	114.60	RAS	Chloroform	0.423	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366F-NS	114.60	RAS	Freon 113	2.82		0.112	ug/L		1200 CA_MCL
					MW-366F-NS	114.60	RAS	Tetrachloroethene	0.427	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366F-NS	114.60	RAS	Trichloroethene	1.89		0.0929	ug/L		5 CA_MCL
					MW-366F-NS	114.60	RAS	cis-1,2-Dichloroethene	0.138	<QL	0.0595	ug/L	J	6 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-366G-NS	116.10	RAS	1,1,2-Trichloroethane	0.669	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366G-NS	116.10	RAS	Acetone	4.95		1.43	ug/L	U	
					MW-366G-NS	116.10	RAS	Carbon Tetrachloride	1.34		0.0962	ug/L		0.500 CA_MCL
					MW-366G-NS	116.10	RAS	Chloroform	0.412	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366G-NS	116.10	RAS	Freon 113	2.74		0.112	ug/L		1200 CA_MCL
					MW-366G-NS	116.10	RAS	Tetrachloroethene	0.388	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366G-NS	116.10	RAS	Trichloroethene	1.86		0.0929	ug/L		5 CA_MCL
					MW-366G-NS	116.10	RAS	cis-1,2-Dichloroethene	0.125	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-366H-NS	117.60	RAS	1,1,2-Trichloroethane	0.683	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366H-NS	117.60	RAS	Acetone	12.5		1.43	ug/L	U	
					MW-366H-NS	117.60	RAS	Carbon Tetrachloride	1.19		0.0962	ug/L		0.500 CA_MCL
					MW-366H-NS	117.60	RAS	Chloroform	0.423	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366H-NS	117.60	RAS	Freon 113	2.49		0.112	ug/L		1200 CA_MCL
					MW-366H-NS	117.60	RAS	Tetrachloroethene	0.29	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366H-NS	117.60	RAS	Trichloroethene	1.86		0.0929	ug/L		5 CA_MCL
					MW-366H-NS	117.60	RAS	cis-1,2-Dichloroethene	0.126	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-366I-NS	119.10	RAS	1,1,2-Trichloroethane	0.72	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366I-NS	119.10	RAS	Acetone	10.4		1.43	ug/L	U	
					MW-366I-NS	119.10	RAS	Carbon Tetrachloride	1.12		0.0962	ug/L		0.500 CA_MCL
					MW-366I-NS	119.10	RAS	Chloroform	0.404	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366I-NS	119.10	RAS	Freon 113	2.18		0.112	ug/L		1200 CA_MCL
					MW-366I-NS	119.10	RAS	Tetrachloroethene	0.225	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366I-NS	119.10	RAS	Trichloroethene	1.64		0.0929	ug/L		5 CA_MCL
					MW-366I-NS	119.10	RAS	cis-1,2-Dichloroethene	0.0777	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-366J-NS	120.60	RAS	1,1,2-Trichloroethane	0.691	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366J-NS	120.60	RAS	Acetone	10.5		1.43	ug/L	U	
					MW-366J-NS	120.60	RAS	Carbon Tetrachloride	1.06		0.0962	ug/L		0.500 CA_MCL
					MW-366J-NS	120.60	RAS	Chloroform	0.408	<QL	0.0424	ug/L	J	100 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-366J-NS	120.60	RAS	Freon 113	2.02		0.112	ug/L		1200 CA_MCL
					MW-366J-NS	120.60	RAS	Tetrachloroethene	0.184	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366J-NS	120.60	RAS	Trichloroethene	1.59		0.0929	ug/L		5 CA_MCL
					MW-366J-NS	120.60	RAS	cis-1,2-Dichloroethene	0.127	<QL	0.0595	ug/L	J	6 CA_MCL
					MW-366K-NS	122.10	RAS	1,1,2-Trichloroethane	0.609	<QL	0.0392	ug/L	J	5 CA_MCL
					MW-366K-NS	122.10	RAS	1,1-Dichloroethene	0.205	<QL	0.102	ug/L	J	6 CA_MCL
					MW-366K-NS	122.10	RAS	Acetone	9.73		1.43	ug/L	U	
					MW-366K-NS	122.10	RAS	Carbon Tetrachloride	0.829	<QL	0.0962	ug/L	J	0.500 CA_MCL
					MW-366K-NS	122.10	RAS	Chloroform	0.42	<QL	0.0424	ug/L	J	100 CA_MCL
					MW-366K-NS	122.10	RAS	Freon 113	1.73		0.112	ug/L		1200 CA_MCL
					MW-366K-NS	122.10	RAS	Tetrachloroethene	0.188	<QL	0.114	ug/L	J	5 CA_MCL
					MW-366K-NS	122.10	RAS	Trichloroethene	1.38		0.0929	ug/L		5 CA_MCL
					MW-366K-NS	122.10	RAS	cis-1,2-Dichloroethene	0.112	<QL	0.0595	ug/L	J	6 CA_MCL
MW-381	SW8260B	NS1	6/1/1999	6/8/1999	MW-381A-NS	110.70	RAS	Acetone	6.27		1.04	ug/L	U	
					MW-381A-NS	110.70	QESS	Acetone	5.6	J,B	10	ug/L	U	
					MW-381A-NS	110.70	QESS	Carbon Tetrachloride	7.3		1	ug/L		0.500 CA_MCL
					MW-381A-NS	110.70	RAS	Carbon Tetrachloride	7.2		0.0778	ug/L		0.500 CA_MCL
					MW-381A-NS	110.70	RAS	Chloroform	3.32		0.06	ug/L		100 CA_MCL
					MW-381A-NS	110.70	QESS	Chloroform	3		1	ug/L		100 CA_MCL
					MW-381A-NS	110.70	RAS	Methylene chloride	0.0902		0.0607	ug/L	U	5 CA_MCL
					MW-381A-NS	110.70	RAS	Tetrachloroethene	0.464	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-381A-NS	110.70	QESS	Tetrachloroethene	0.54	<QL,J	1	ug/L	,J	5 CA_MCL
					MW-381A-NS	110.70	RAS	Trichloroethene	13.9		0.0499	ug/L		5 CA_MCL
					MW-381A-NS	110.70	QESS	Trichloroethene	13		1	ug/L		5 CA_MCL
					MW-381A-NS	110.70	RAS	cis-1,2-Dichloroethene	0.0579	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381B-NS	112.20	RAS	1,2-Dichloroethane	0.168	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381B-NS	112.20	RAS	Acetone	9.24		1.04	ug/L	U	
					MW-381B-NS	112.20	QESS	Acetone	4.6	J,B	10	ug/L	U	
					MW-381B-NS	112.20	QESS	Carbon Tetrachloride	8.50		1	ug/L		0.500 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-381B-NS	112.20	RAS	Carbon Tetrachloride	8.57		0.0778	ug/L		0.500 CA_MCL
					MW-381B-NS	112.20	QESS	Chloroform	3.1		1	ug/L		100 CA_MCL
					MW-381B-NS	112.20	RAS	Chloroform	3.64		0.06	ug/L		100 CA_MCL
					MW-381B-NS	112.20	RAS	Methylene chloride	0.108		0.0607	ug/L	U	5 CA_MCL
					MW-381B-NS	112.20	RAS	Tetrachloroethene	0.595	<QL	0.0591	ug/L	J	5 CA_MCL
					MW-381B-NS	112.20	QESS	Tetrachloroethene	0.67	<QL,J	1	ug/L	,J	5 CA_MCL
					MW-381B-NS	112.20	QESS	Trichloroethene	15		1	ug/L		5 CA_MCL
					MW-381B-NS	112.20	RAS	Trichloroethene	16.5		0.0499	ug/L		5 CA_MCL
					MW-381B-NS	112.20	RAS	cis-1,2-Dichloroethene	0.0695	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381C-NS	113.70	RAS	Acetone	11.6		1.04	ug/L	U	
					MW-381C-NS	113.70	RAS	Carbon Tetrachloride	10.3		0.0778	ug/L		0.500 CA_MCL
					MW-381C-NS	113.70	RAS	Chloroform	3.64		0.06	ug/L		100 CA_MCL
					MW-381C-NS	113.70	RAS	Methylene chloride	0.103		0.0607	ug/L	U	5 CA_MCL
					MW-381C-NS	113.70	RAS	Tetrachloroethene	1.04		0.0591	ug/L		5 CA_MCL
					MW-381C-NS	113.70	RAS	Trichloroethene	18.3		0.0499	ug/L		5 CA_MCL
					MW-381C-NS	113.70	RAS	cis-1,2-Dichloroethene	0.0699	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381D-NS	115.20	RAS	1,2-Dichloroethane	0.23	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381D-NS	115.20	RAS	Carbon Tetrachloride	11.1		0.0778	ug/L		0.500 CA_MCL
					MW-381D-NS	115.20	RAS	Chloroform	5.02		0.06	ug/L		100 CA_MCL
					MW-381D-NS	115.20	RAS	Methylene chloride	0.158		0.0607	ug/L	U	5 CA_MCL
					MW-381D-NS	115.20	RAS	Tetrachloroethene	1.36		0.0591	ug/L		5 CA_MCL
					MW-381D-NS	115.20	RAS	Trichloroethene	23.1		0.0499	ug/L		5 CA_MCL
					MW-381D-NS	115.20	RAS	cis-1,2-Dichloroethene	0.112	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381E-NS	116.70	RAS	1,2-Dichloroethane	0.38	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381E-NS	116.70	RAS	Acetone	4.68		1.04	ug/L	U	
					MW-381E-NS	116.70	RAS	Carbon Tetrachloride	10.2		0.0778	ug/L		0.500 CA_MCL
					MW-381E-NS	116.70	RAS	Chloroform	7.49		0.06	ug/L		100 CA_MCL
					MW-381E-NS	116.70	RAS	Methylene chloride	0.215		0.0607	ug/L	U	5 CA_MCL
					MW-381E-NS	116.70	RAS	Tetrachloroethene	1.11		0.0591	ug/L		5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-381E-NS	116.70	RAS	Trichloroethene	22.7		0.0499	ug/L		5 CA_MCL
					MW-381E-NS	116.70	RAS	cis-1,2-Dichloroethene	0.157	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381F-NS	118.20	RAS	1,2-Dichloroethane	0.316	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381F-NS	118.20	RAS	Acetone	10.6		1.04	ug/L	U	
					MW-381F-NS	118.20	RAS	Carbon Tetrachloride	11.8		0.0778	ug/L		0.500 CA_MCL
					MW-381F-NS	118.20	RAS	Chloroform	7.13		0.06	ug/L		100 CA_MCL
					MW-381F-NS	118.20	RAS	Methylene chloride	0.192		0.0607	ug/L	U	5 CA_MCL
					MW-381F-NS	118.20	RAS	Tetrachloroethene	1.41		0.0591	ug/L		5 CA_MCL
					MW-381F-NS	118.20	RAS	Trichloroethene	26.4		0.0499	ug/L		5 CA_MCL
					MW-381F-NS	118.20	RAS	cis-1,2-Dichloroethene	0.162	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381G-NS	119.70	RAS	1,2-Dichloroethane	0.362	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381G-NS	119.70	RAS	Acetone	9.55		1.04	ug/L	U	
					MW-381G-NS	119.70	RAS	Carbon Tetrachloride	11.3		0.0778	ug/L		0.500 CA_MCL
					MW-381G-NS	119.70	RAS	Chloroform	7.27		0.06	ug/L		100 CA_MCL
					MW-381G-NS	119.70	RAS	Methylene chloride	0.197		0.0607	ug/L	U	5 CA_MCL
					MW-381G-NS	119.70	RAS	Tetrachloroethene	1.3		0.0591	ug/L		5 CA_MCL
					MW-381G-NS	119.70	RAS	Trichloroethene	25.9		0.0499	ug/L		5 CA_MCL
					MW-381G-NS	119.70	RAS	cis-1,2-Dichloroethene	0.171	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381H-NS	121.20	RAS	1,2-Dichloroethane	0.448	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381H-NS	121.20	RAS	Acetone	8.92		1.04	ug/L	U	
					MW-381H-NS	121.20	RAS	Carbon Tetrachloride	11.7		0.0778	ug/L		0.500 CA_MCL
					MW-381H-NS	121.20	RAS	Chloroform	8.87		0.06	ug/L		100 CA_MCL
					MW-381H-NS	121.20	RAS	Methylene chloride	0.249		0.0607	ug/L	U	5 CA_MCL
					MW-381H-NS	121.20	RAS	Tetrachloroethene	1.42		0.0591	ug/L		5 CA_MCL
					MW-381H-NS	121.20	RAS	Trichloroethene	28.1		0.0499	ug/L		5 CA_MCL
					MW-381H-NS	121.20	RAS	cis-1,2-Dichloroethene	0.196	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381I-NS	122.70	RAS	1,2-Dichloroethane	0.444	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381I-NS	122.70	RAS	Acetone	10.2		1.04	ug/L	U	

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-381I-NS	122.70	RAS	Carbon Tetrachloride	11.5		0.0778	ug/L		0.500 CA_MCL
					MW-381I-NS	122.70	RAS	Chloroform	8.37		0.06	ug/L		100 CA_MCL
					MW-381I-NS	122.70	RAS	Methylene chloride	0.234		0.0607	ug/L	U	5 CA_MCL
					MW-381I-NS	122.70	RAS	Tetrachloroethene	1.36		0.0591	ug/L		5 CA_MCL
					MW-381I-NS	122.70	RAS	Trichloroethene	26.9		0.0499	ug/L		5 CA_MCL
					MW-381I-NS	122.70	RAS	cis-1,2-Dichloroethene	0.197	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381J-NS	124.20	RAS	1,2-Dichloroethane	0.429	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381J-NS	124.20	RAS	Acetone	15.1		1.04	ug/L	U	
					MW-381J-NS	124.20	RAS	Carbon Tetrachloride	11		0.0778	ug/L		0.500 CA_MCL
					MW-381J-NS	124.20	RAS	Chloroform	7.91		0.06	ug/L		100 CA_MCL
					MW-381J-NS	124.20	RAS	Methylene chloride	0.218		0.0607	ug/L	U	5 CA_MCL
					MW-381J-NS	124.20	RAS	Tetrachloroethene	1.31		0.0591	ug/L		5 CA_MCL
					MW-381J-NS	124.20	RAS	Trichloroethene	25.6		0.0499	ug/L		5 CA_MCL
					MW-381J-NS	124.20	RAS	cis-1,2-Dichloroethene	0.186	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381K-NS	125.70	RAS	1,2-Dichloroethane	0.413	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381K-NS	125.70	RAS	Acetone	10.5		1.04	ug/L	U	
					MW-381K-NS	125.70	RAS	Carbon Tetrachloride	11.1		0.0778	ug/L		0.500 CA_MCL
					MW-381K-NS	125.70	RAS	Chloroform	7.93		0.06	ug/L		100 CA_MCL
					MW-381K-NS	125.70	RAS	Methylene chloride	0.22		0.0607	ug/L	U	5 CA_MCL
					MW-381K-NS	125.70	RAS	Tetrachloroethene	1.31		0.0591	ug/L		5 CA_MCL
					MW-381K-NS	125.70	RAS	Trichloroethene	26		0.0499	ug/L		5 CA_MCL
					MW-381K-NS	125.70	RAS	cis-1,2-Dichloroethene	0.181	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381L-NS	127.20	RAS	1,2-Dichloroethane	0.411	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381L-NS	127.20	RAS	Acetone	10		1.04	ug/L	U	
					MW-381L-NS	127.20	RAS	Carbon Tetrachloride	11.7		0.0778	ug/L		0.500 CA_MCL
					MW-381L-NS	127.20	RAS	Chloroform	8.25		0.06	ug/L		100 CA_MCL
					MW-381L-NS	127.20	RAS	Methylene chloride	0.224		0.0607	ug/L	U	5 CA_MCL
					MW-381L-NS	127.20	RAS	Tetrachloroethene	1.34		0.0591	ug/L		5 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-381L-NS	127.20	RAS	Trichloroethene	26.9		0.0499	ug/L		5 CA_MCL
					MW-381L-NS	127.20	RAS	cis-1,2-Dichloroethene	0.199	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-381M-NS	128.70	RAS	1,2-Dichloroethane	0.427	<QL	0.0408	ug/L	J	0.500 CA_MCL
					MW-381M-NS	128.70	RAS	Acetone	9.73		1.04	ug/L	U	
					MW-381M-NS	128.70	RAS	Carbon Tetrachloride	11.8		0.0778	ug/L		0.500 CA_MCL
					MW-381M-NS	128.70	RAS	Chloroform	8.32		0.06	ug/L		100 CA_MCL
					MW-381M-NS	128.70	RAS	Methylene chloride	0.206		0.0607	ug/L	U	5 CA_MCL
					MW-381M-NS	128.70	RAS	Tetrachloroethene	1.24		0.0591	ug/L		5 CA_MCL
					MW-381M-NS	128.70	RAS	Trichloroethene	27.1		0.0499	ug/L		5 CA_MCL
					MW-381M-NS	128.70	RAS	cis-1,2-Dichloroethene	0.186	<QL	0.0407	ug/L	J	6 CA_MCL
MW-382	SW8260B	NS1	5/28/1999	6/8/1999	MW-382A-NS	112.70	RAS	Acetone	12.9		1.43	ug/L	U	
					MW-382A-NS	112.70	RAS	Trichloroethene	0.581	<QL	0.0929	ug/L	J	5 CA_MCL
					MW-382B-NS	114.20	RAS	Acetone	10.3		1.04	ug/L	U	
					MW-382B-NS	114.20	RAS	Carbon Tetrachloride	0.285	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-382B-NS	114.20	RAS	Trichloroethene	2.56		0.0499	ug/L		5 CA_MCL
					MW-382C-NS	115.70	RAS	Acetone	13.3		1.04	ug/L	U	
					MW-382C-NS	115.70	RAS	Carbon Tetrachloride	0.286	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-382C-NS	115.70	RAS	Trichloroethene	2.42		0.0499	ug/L		5 CA_MCL
					MW-382D-NS	117.20	RAS	Acetone	14.9		1.04	ug/L	U	
					MW-382D-NS	117.20	RAS	Carbon Tetrachloride	0.46	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-382D-NS	117.20	RAS	Chloroform	0.108	<QL	0.06	ug/L	J	100 CA_MCL
					MW-382D-NS	117.20	RAS	Trichloroethene	5.48		0.0499	ug/L		5 CA_MCL
					MW-382E-NS	118.70	RAS	Acetone	7.44		1.04	ug/L	U	
					MW-382E-NS	118.70	RAS	Carbon Tetrachloride	0.48	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-382E-NS	118.70	RAS	Chloroform	0.121	<QL	0.06	ug/L	J	100 CA_MCL
					MW-382E-NS	118.70	RAS	Trichloroethene	6.06		0.0499	ug/L		5 CA_MCL
					MW-382F-NS	120.20	RAS	Acetone	13.8		1.04	ug/L	U	
					MW-382F-NS	120.20	RAS	Carbon Tetrachloride	0.518	<QL	0.0778	ug/L	J	0.500 CA_MCL

Table L-2. (Continued)

Well	Method	Sample Type	Date Sampled	Date Analyzed	Sample Number	Sample Depth	Lab ID	Analyte	Result	Lab Flag	Method Detection Limit	Units	Qualified Flags	Action Level
					MW-382F-NS	120.20	RAS	Chloroform	0.114	<QL	0.06	ug/L	J	100 CA_MCL
					MW-382F-NS	120.20	RAS	Trichloroethene	6.08		0.0499	ug/L		5 CA_MCL
					MW-382F-NS	120.20	RAS	cis-1,2-Dichloroethene	0.0528	<QL	0.0407	ug/L	J	6 CA_MCL
					MW-382G-NS	121.70	QESS	Acetone	15		10	ug/L	U	
					MW-382G-NS	121.70	RAS	Acetone	22.8		1.04	ug/L	U	
					MW-382G-NS	121.70	RAS	Carbon Tetrachloride	0.48	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-382G-NS	121.70	QESS	Carbon Tetrachloride	0.44	<QL,J	1	ug/L	,J	0.500 CA_MCL
					MW-382G-NS	121.70	RAS	Chloroform	0.115	<QL	0.06	ug/L	J	100 CA_MCL
					MW-382G-NS	121.70	RAS	Trichloroethene	5.96		0.0499	ug/L		5 CA_MCL
					MW-382G-NS	121.70	QESS	Trichloroethene	5		1	ug/L		5 CA_MCL
					MW-382H-NS	123.20	RAS	Acetone	17.4		1.04	ug/L	U	
					MW-382H-NS	123.20	RAS	Carbon Tetrachloride	0.46	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-382H-NS	123.20	RAS	Chloroform	0.1	<QL	0.06	ug/L	J	100 CA_MCL
					MW-382H-NS	123.20	RAS	Trichloroethene	5.47		0.0499	ug/L		5 CA_MCL
					MW-382I-NS	124.70	RAS	Acetone	10.7		1.04	ug/L	U	
					MW-382I-NS	124.70	RAS	Carbon Tetrachloride	0.49	<QL	0.0778	ug/L	J	0.500 CA_MCL
					MW-382I-NS	124.70	RAS	Chloroform	0.111	<QL	0.06	ug/L	J	100 CA_MCL
					MW-382I-NS	124.70	RAS	Trichloroethene	5.89		0.0499	ug/L		5 CA_MCL

Sample Type

AB = Ambient Blank
EB = Equipment Blank
FD = Field Duplicate
NS = Normal Sample
TB = Trip Blank

APPENDIX D

RELATIVE PERCENT DIFFERENCE EVALUATION

Table D.1. RPD Calculations for Diffusion Sampler Split Samples

Sample Number	Analyte	QESS	RAS	Units	RPD
MW-136D-NS	1,1-Dichloroethane	1.5	1.73	ug/L	14.2%
MW-136B-NS	1,1-Dichloroethane	1.5	1.74	ug/L	14.8%
MW-286A-NS	1,1-Dichloroethane	13	15.6	ug/L	18.2%
MW-286I-NS	1,1-Dichloroethane	15	16.5	ug/L	9.5%
MW-155D-NS	1,1-Dichloroethene	1.6	1.54	ug/L	3.8%
MW-156E-NS	1,1-Dichloroethene	2.1	2.3	ug/L	9.1%
MW-366E-NS	Carbon Tetrachloride	1.2	1.26	ug/L	4.9%
MW-343B-NS	Carbon Tetrachloride	1.4	1.8	ug/L	25.0%
MW-381A-NS	Carbon Tetrachloride	7.3	7.2	ug/L	1.4%
MW-381B-NS	Carbon Tetrachloride	8.5	8.57	ug/L	0.8%
MW-271A-NS	Chloroform	2.6	3.07	ug/L	16.6%
MW-381A-NS	Chloroform	3	3.32	ug/L	10.1%
MW-381B-NS	Chloroform	3.1	3.64	ug/L	16.0%
MW-314C-NS	*cis*-1,2-Dichloroethene	1.1	1.22	ug/L	10.3%
MW-270E-NS	*cis*-1,2-Dichloroethene	4.5	3.97	ug/L	12.5%
MW-286A-NS	*cis*-1,2-Dichloroethene	6.2	6.46	ug/L	4.1%
MW-286I-NS	*cis*-1,2-Dichloroethene	7.6	7.63	ug/L	0.4%
MW-155D-NS	*cis*-1,2-Dichloroethene	9.7	9.87	ug/L	1.7%
MW-166D-NS	*cis*-1,2-Dichloroethene	16	17.2	ug/L	7.2%
MW-156E-NS	*cis*-1,2-Dichloroethene	20	22.5	ug/L	11.8%
MW-270E-NS	Tetrachloroethene	4.8	4.47	ug/L	7.1%
MW-343B-NS	Trichloroethene	1.1	1.46	ug/L	28.1%
MW-218B-NS	Trichloroethene	1.2	1.47	ug/L	20.2%
MW-366E-NS	Trichloroethene	1.8	1.85	ug/L	2.7%
MW-382G-NS	Trichloroethene	5	5.96	ug/L	17.5%
MW-314C-NS	Trichloroethene	5.6	6.25	ug/L	11.0%
MW-286A-NS	Trichloroethene	5.6	6.39	ug/L	13.2%
MW-286I-NS	Trichloroethene	6.9	7.74	ug/L	11.5%
MW-136D-NS	Trichloroethene	8.4	9.49	ug/L	12.2%
MW-136B-NS	Trichloroethene	8.6	9.75	ug/L	12.5%
MW-201B-NS	Trichloroethene	9.1	10.2	ug/L	11.4%
MW-155D-NS	Trichloroethene	11	12.5	ug/L	12.8%
MW-381A-NS	Trichloroethene	13	13.9	ug/L	6.7%
MW-381B-NS	Trichloroethene	15	16.5	ug/L	9.5%
MW-325B-NS	Trichloroethene	23	26.3	ug/L	13.4%
MW-271A-NS	Trichloroethene	34	35.4	ug/L	4.0%
MW-166D-NS	Trichloroethene	41	43.9	ug/L	6.8%
MW-156E-NS	Trichloroethene	64	71.2	ug/L	10.7%
MW-270E-NS	Trichloroethene	170	174	ug/L	2.3%

MW = monitoring well
QESS = Quanterra Environmental Services
RPD = relative percent difference
NS = normal sample
RAS = Radian Analytical Services
ug/L = micrograms per liter

Table D.2. Relative Percent Difference frequency of passing

		Relative Percent Difference						
Analyte	Count	<5%	<10%	<15%	<20%	<25%	<30%	Mean
1,1-Dichloroethane	4	0	1	3	4	4	4	14.2%
1,1-Dichloroethene	2	1	2	2	2	2	2	6.5%
Carbon Tetrachloride	4	3	3	3	3	3	4	8.0%
Chloroform	3	0	0	1	3	3	3	14.2%
cis-1,2-Dichloroethene	7	3	4	7	7	7	7	6.9%
Tetrachloroethene	1	0	1	1	1	1	1	7.1%
Trichloroethene	18	3	6	15	16	17	18	11.5%
Totals	39	10	17	32	36	37	39	10.4%
Percent "passing"		26%	44%	82%	92%	95%	100%	

Notes: When all concentration less than 5 ug/L are removed, 96% of the pairs "pass" the RPD comparison at 15%.
Therefore, ± 15% should be used as an acceptable level of analytical/sampling variability between data sets.

APPENDIX E

WELL PROFILES

Well Number: **MW-136**
Monitoring Zone: B
Total Depth (ft bgs): UNK
Screen Interval (ft bgs): 230-245
# of Diffusion Samplers: 9 Water Level (ft bgs): 99.8

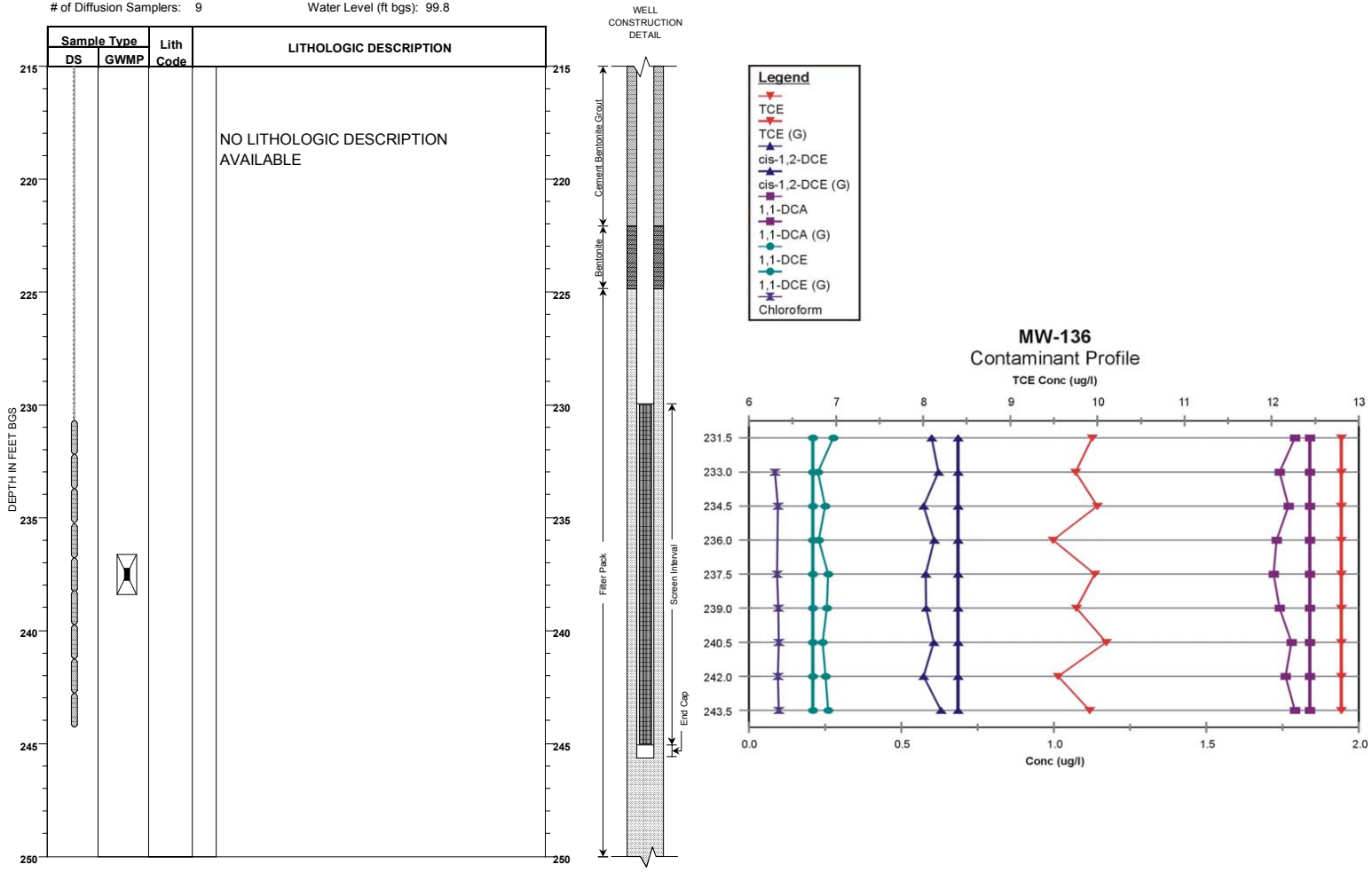


Figure E.1. MW-136 Lithologic Log and Well Contamination Profile

Well Number: **MW-148**
Monitoring Zone: ICD
Total Depth (ft bgs): 298.42
Screen Interval (ft bgs): 288-298
# of Diffusion Samplers: 5 Water Level (ft bgs): 106.55

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDSL	SAND (SM), SILTY, FINE TO COARSE GRAINED, DARK YELLOW-BROWN (10YR 4/4).
		STCL	CLAY (CL), SILTY, INTERBEDDED WITH FINE TO COARSE GRAINED SAND (SW), YELLOW-BROWN (10YR 5/4).
		SDSL	SAND (SW), FINE TO COARSE GRAINED, WITH SANDY SILT (ML), INTERBEDS, YELLOWISH BROWN (10YR 5/4).
		SD	SAND (SP), FINE GRAINED, YELLOW-BROWN (10YR 5/4), INDURATED, SATURATED.
		STCL	SILT (ML), SANDY (FINE GRAINED), INTERBEDDED WITH CLAY (CL), WITH SOME FINE PEBBLE GRAVEL, DARK YELLOW-BROWN (10YR 4/4), SATURATED.
		SD	SAND (SW), FINE TO COARSE GRAINED, YELLOWISH BROWN (10YR 5/4), SATURATED.
		SDGR	SAND (SP), COARSE GRAINED, WITH ABUNDANT FINE TO MEDIUM PEBBLE GRAVEL (GW), WITH SOME SILTY SAND INTERBEDS, DARK YELLOW-BROWN (10YR 4/4), SATURATED.
		STCL	SILT (ML), VERY CLAYEY, SOME FINE GRAINED SAND, BROWN

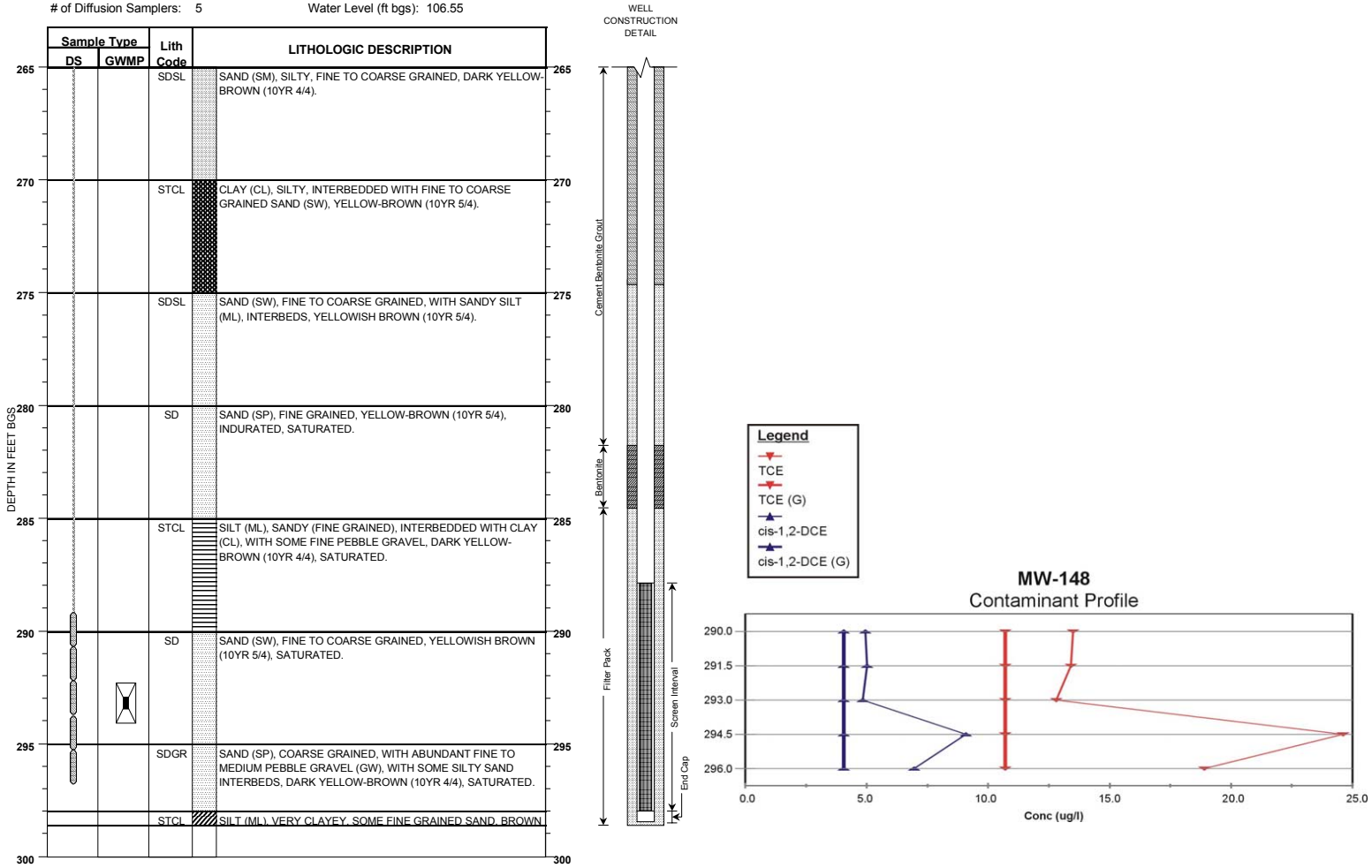
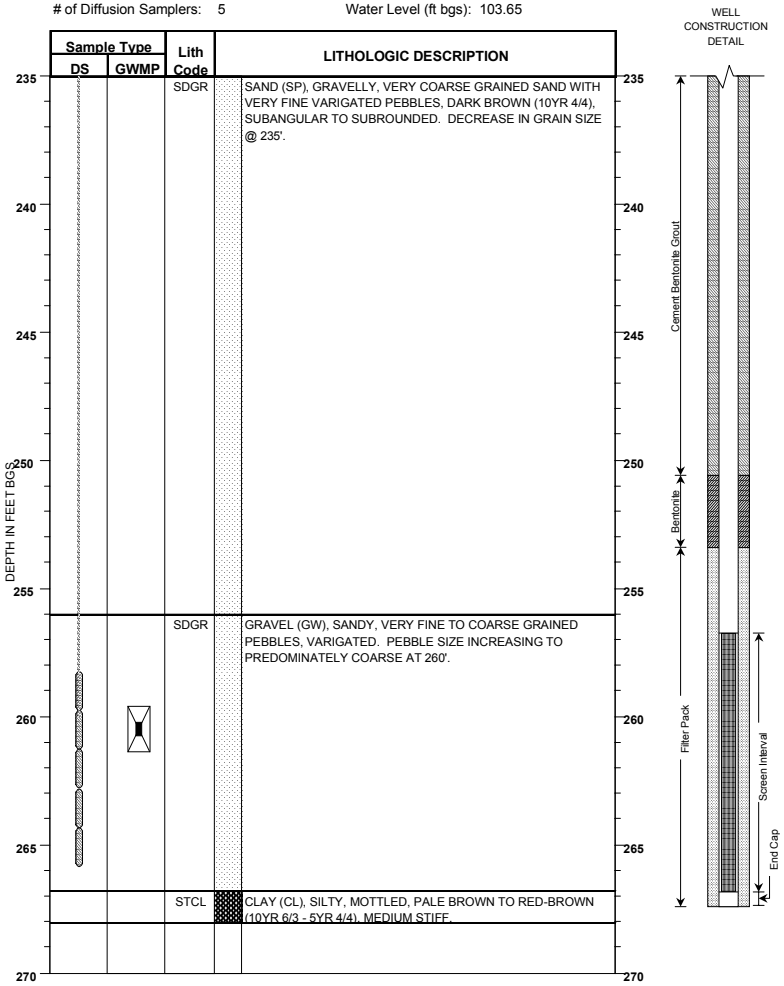


Figure E.2. MW-148 Lithologic Log and Well Contamination Profile

Well Number: **MW-154**
Monitoring Zone: C
Total Depth (ft bgs): 267.5
Screen Interval (ft bgs): 257-267
# of Diffusion Samplers: 5 Water Level (ft bgs): 103.65

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDGR	SAND (SP), GRAVELLY, VERY COARSE GRAINED SAND WITH VERY FINE VARIGATED PEBBLES, DARK BROWN (10YR 4/4), SUBANGULAR TO SUBROUNDED. DECREASE IN GRAIN SIZE @ 235'.
		SDGR	GRAVEL (GW), SANDY, VERY FINE TO COARSE GRAINED PEBBLES, VARIGATED. PEBBLE SIZE INCREASING TO PREDOMINATELY COARSE AT 260'.
		STCL	CLAY (CL), SILTY, MOTTLED, PALE BROWN TO RED-BROWN (10YR 6/3 - 5YR 4/4), MEDIUM STIFF.



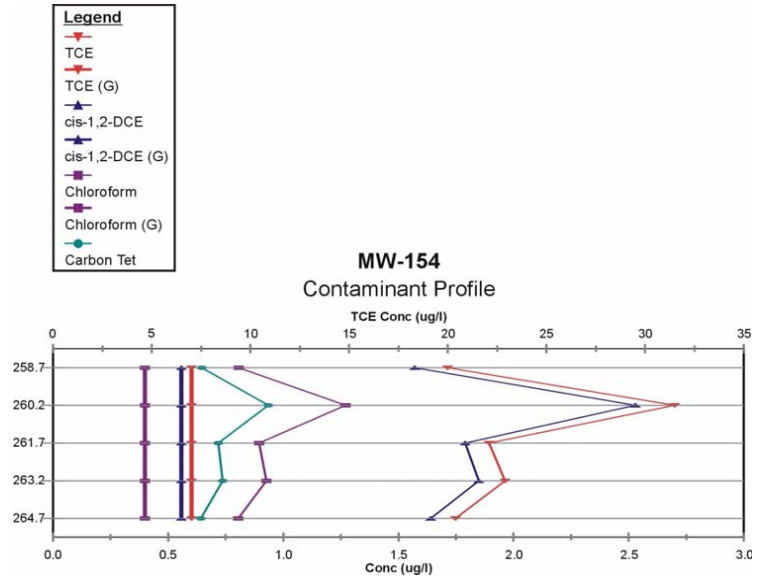


Figure E.3. MW-154 Lithologic Log and Well Contamination Profile

Well Number: **MW-155**
Monitoring Zone: A
Total Depth (ft bgs): 125.5
Screen Interval (ft bgs): 115.5-125.5
# of Diffusion Samplers: 5 Water Level (ft bgs): 107.25

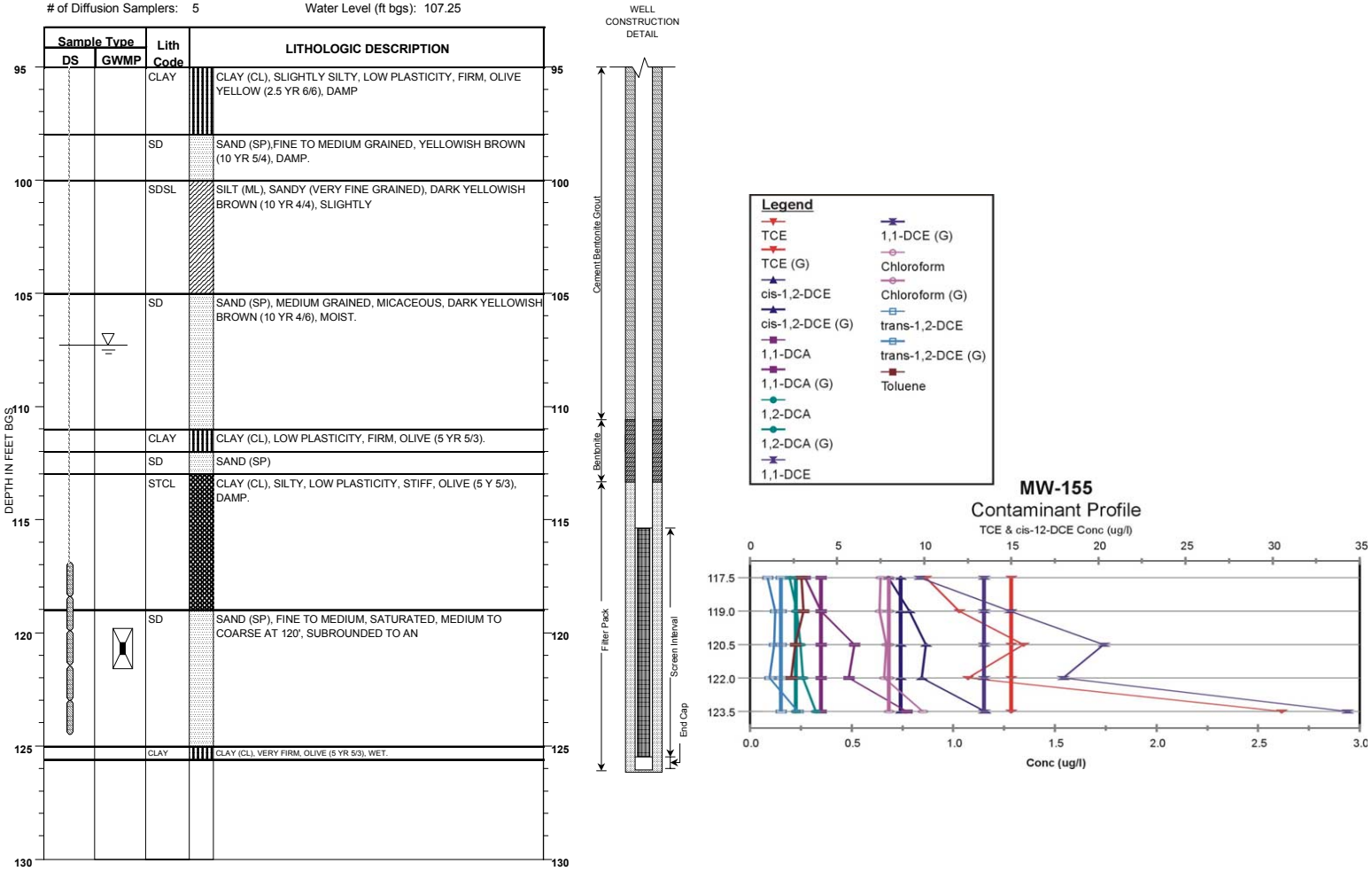


Figure E.4. MW-155 Lithologic Log and Well Contamination Profile

Well Number: **MW-156**
Monitoring Zone: B
Total Depth (ft bgs): 185.5
Screen Interval (ft bgs): 175.5-185.5
# of Diffusion Samplers: 5 Water Level (ft bgs): 107.22

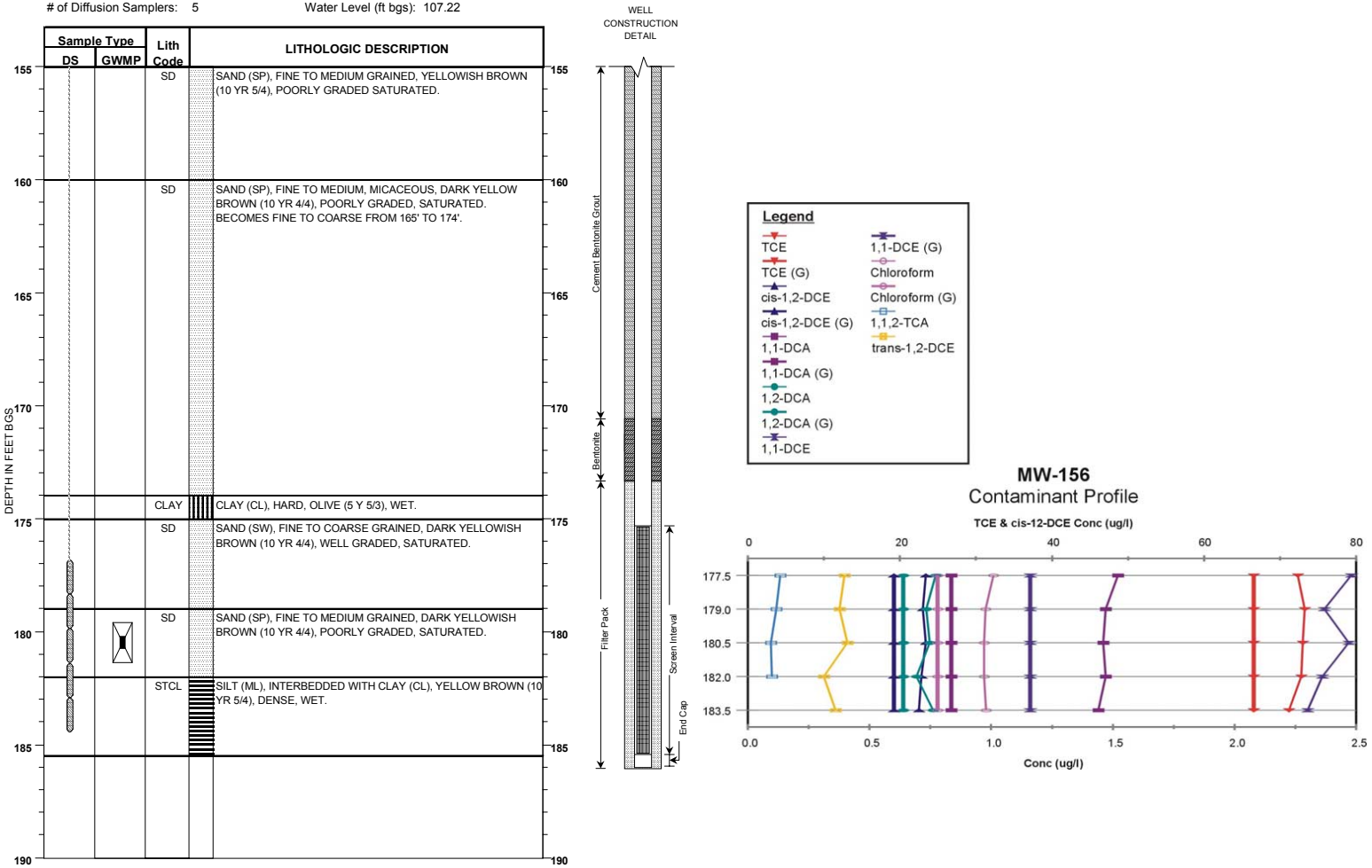
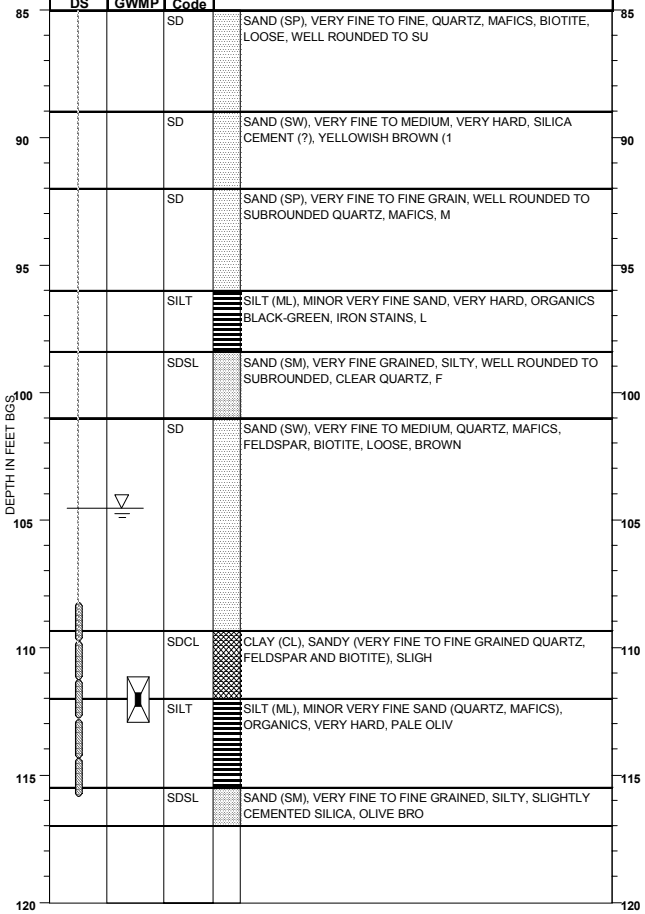
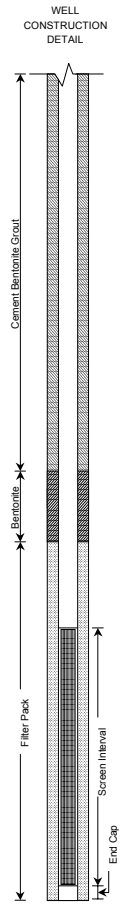


Figure E.5. MW-156 Lithologic Log and Well Contamination Profile

Well Number: **MW-159**
Monitoring Zone: A
Total Depth (ft bgs): 117
Screen Interval (ft bgs): 107-117
# of Diffusion Samplers: 5 Water Level (ft bgs): 104.55

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SD	SAND (SP), VERY FINE TO FINE, QUARTZ, MAFICS, BIOTITE, LOOSE, WELL ROUNDED TO SU
		SD	SAND (SW), VERY FINE TO MEDIUM, VERY HARD, SILICA CEMENT (?), YELLOWISH BROWN (1
		SD	SAND (SP), VERY FINE TO FINE GRAIN, WELL ROUNDED TO SUBROUNDED QUARTZ, MAFICS, M
		SILT	SILT (ML), MINOR VERY FINE SAND, VERY HARD, ORGANICS BLACK-GREEN, IRON STAINS, L
		SDSL	SAND (SM), VERY FINE GRAINED, SILTY, WELL ROUNDED TO SUBROUNDED, CLEAR QUARTZ, F
		SD	SAND (SW), VERY FINE TO MEDIUM, QUARTZ, MAFICS, FELDSPAR, BIOTITE, LOOSE, BROWN
		SDCL	CLAY (CL), SANDY (VERY FINE TO FINE GRAINED QUARTZ, FELDSPAR AND BIOTITE), SLIGH
		SILT	SILT (ML), MINOR VERY FINE SAND (QUARTZ, MAFICS), ORGANICS, VERY HARD, PALE OLIV
		SDSL	SAND (SM), VERY FINE TO FINE GRAINED, SILTY, SLIGHTLY CEMENTED SILICA, OLIVE BRO





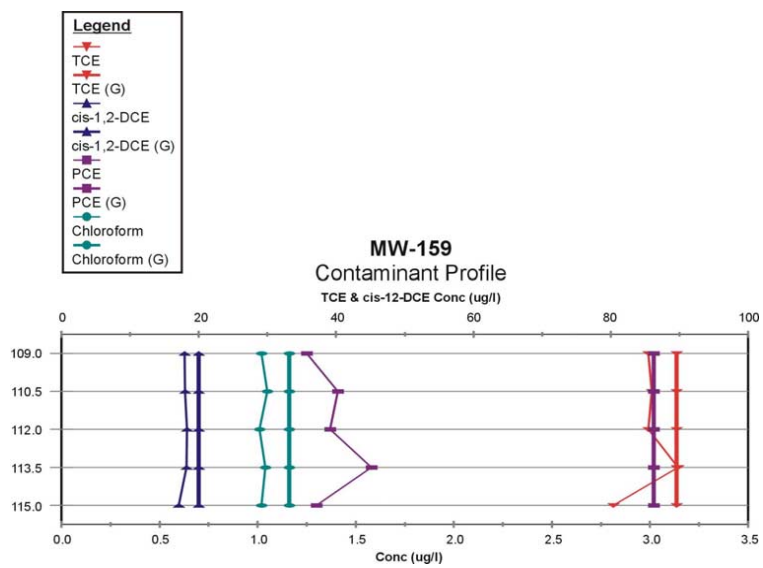
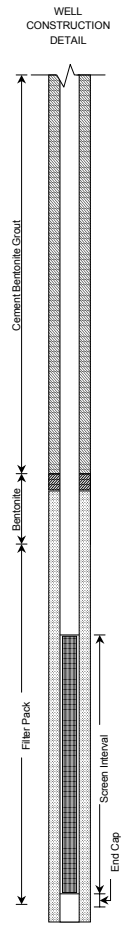


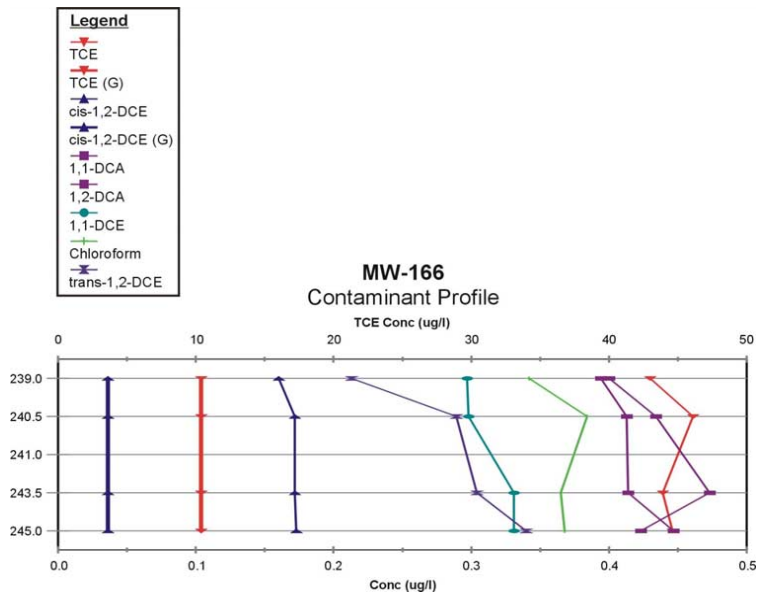
Figure E.6. MW-159 Lithologic Log and Well Contamination Profile

Well Number: **MW-166**
Monitoring Zone: C
Total Depth (ft bgs): 248
Screen Interval (ft bgs): 237-247
# of Diffusion Samplers: 5 Water Level (ft bgs): 103.7

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		STCL	CLAYEY SILT 10YR 7/6 AND 5/6, DENSE, HARD, BUT EASILY FRIABLE, (SM).
		SDCL	SILTY CLAYEY SAND 10YR 6/4, VERY FINE TO MEDIUM, MAY BE LOOSE-NO LUMPS COMING THROUGH.
		SDSL	SILTY SAND 10YR 5/3, VERY FINE TO MEDIUM, PREDOMINANTLY FINE GRAINED, MANY SUBANGULAR BLACK MAFICS, MICACEOUS, LOOSE WITH SILTY CLAY LENSES, HARD, (SM).
		SD	SAND 10YR 5/4, FINE TO MEDIUM, WITH MINOR SILT, WELL GRADED WITHIN SAND RANGE, LOOSE, VERY MICACEOUS, (SW).
		SDSL	SILTY SAND 10YR 5/4, FINE TO MEDIUM, (SM). WELL GRADED WITHIN SAND RANGE, LOOSE, VERY MICACEOUS, INTERBEDDED WITH SILTY CLAY 10YR 6/3. VERY HARD, THIN LENSES, (CL).
		SLCL	CLAYEY SILT 10YR 6/3, AND 10YR 4/4, SOFT TO VERY HARD, THIN INTERBEDS, (ML).
		SDSL	SILTY SAND 10YR 4/3 MATRIX COLOR, VERY FINE TO MEDIUM, PREDOMINANTLY FINE GRAINED SUBANGULAR, CLEAR AND FROSTED QUARTZ, DARK MAFICS, FELDSPAR, VERY MICACEOUS, LOOSE, SOME LARGE GRAINS GREEN SAND, (SM).
		SD	SAND 10YR 4/2, FINE TO COARSE, WELL GRADED, CLEAR AND FROSTED AND ROSE QUARTZ, FELDSPAR, REDDISH SANDSTONE, BLACK MAFICS, VERY MICACEOUS, MINOR SILT, LOOSE TO SLIGHTLY COMPACT, ANGULAR TO SUBROUNDED, (SW).
		SDGR	GRAVELLY SAND 10YR 4/3 MATRIX COLOR, FINE TO VERY COARSE, GRAVEL TO APPROXIMATELY 4MM, PREDOMINANTLY SUBROUNDED, MINOR SUBANGULAR, QUARTZ, FELDSPAR, MAFICS, MINOR GREEN AND REDDISH GRAINS, VERY LOOSE, WELL GRADED, (SW).
		SD	SAND 10YR 4/2, FINE TO MEDIUM, APPROXIMATELY 65% QUARTZ, 25% DARK MAFICS, LOOSE, MICACEOUS, (SP).
		SDSL	CLAYEY SANDY SILT 10YR 4/4 AND 6/3, SAND IS FINE TO VERY COARSE, DENSE TO HARD, (ML).
		SDCL	SILTY SANDY CLAY 10YR 5/4, VERY FINE TO MEDIUM SAND, SOFT TO STIFF, POSSIBLE SANDY INTERBEDS, THIN MICACEOUS, (SL)

DEPTH IN FEET BGS: 215, 220, 225, 230, 235, 240, 245, 250





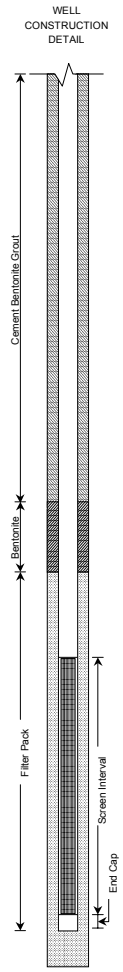
* Middle Sampler (241.0 ft bgs) was broken when retrieved from well.

Figure E.7. MW-166 Lithologic Log and Well Contamination Profile

Well Number: **MW-201**
Monitoring Zone: B
Total Depth (ft bgs): 170
Screen Interval (ft bgs): 158-168
# of Diffusion Samplers: 5 Water Level (ft bgs): 103.91

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDSL	SILTY SAND LIGHT OLIVE BROWN, FINE TO MEDIUM, COARSE AND VERY COARSE GRAINS, TRACE MAFICS, WELL GRADED, SATURATED, (SW).
		SDSL	SILTY SAND LIGHT OLIVE BROWN, FINE TO MEDIUM, SOME COARSE AND VERY COARSE GRAINS, TRACE MAFICS, WELL GRADED, SATURATED, (SW).
		GVL	GRAVELLY SILT LIGHT OLIVE BROWN, MEDIUM TO SMALL GRAVEL, FINE TO VERY COARSE SAND AND SILT MATRIX, TRACE MAFICS, WELL GRADED, SATURATED.
		SDSL	SILTY SAND DARK BROWN, VERY FINE TO FINE, FE02 CEMENTATION, MODERATELY WELL GRADED, VERY DENSE, SATURATED, (SM).
		SDSL	SANDY SILT DARK BROWN, MEDIUM TO FINE, TRACE MAFICS, NON-PLASTIC, VERY SOFT, SATURATED, (ML).
		SDSL	SILTY SAND DARK BROWN, FINE TO MEDIUM, SUBSTANTIAL SILT AGGREGATES WITH FE02 STAINING, WELL GRADED, DENSE, SATURATED, (SM).
		SD	SILTY SAND DARK YELLOWISH BROWN, FINE SAND, SUBSTANTIAL AMOUNT OF FINELY LAMINATED SILT AGGREGATES, ROOT HAIRS AND FE02 STAINING ALONG LAMINATIONS, DENSE, SATURATED, (SM).
		SD	SILTY SAND DARK YELLOWISH BROWN, FINE SAND, APPROXIMATELY 40% FINELY LAMINATED SILT AGGREGATES, ROOT HAIRS AND FEO2 STAINING ALONG LAMINATIONS, DENSE, SATURATED. (SW).
		SDSL	SILTY SAND FINE SAND, LAMINATED SILT AGGREGATES, DENSE, (SM).

DEPTH IN FEET BGS: 135, 140, 145, 150, 155, 160, 165, 170



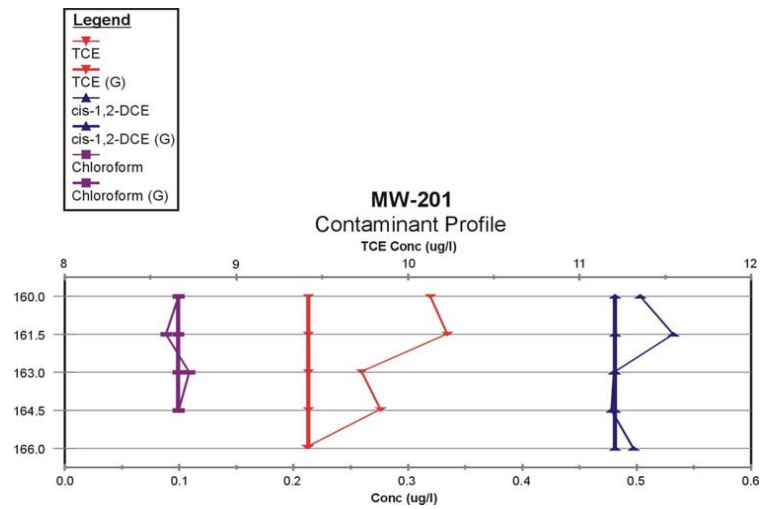
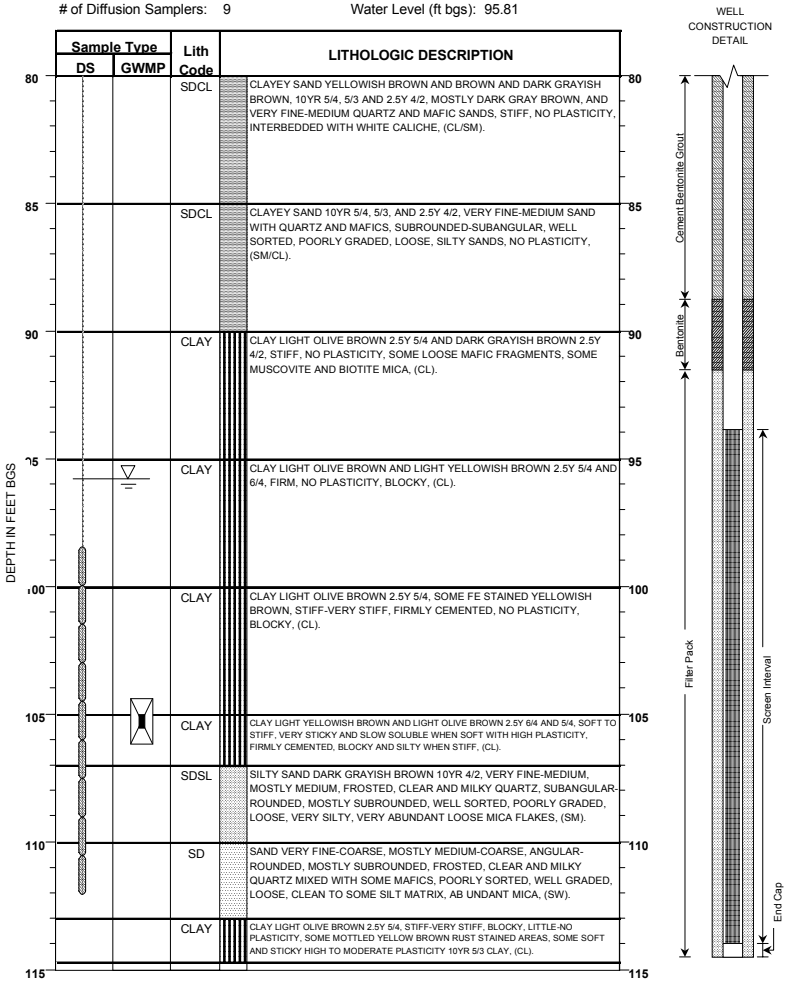


Figure E.8. MW-201 Lithologic Log and Well Contamination Profile

Well Number: **MW-206**
Monitoring Zone: A
Total Depth (ft bgs): 114
Screen Interval (ft bgs): 94-114
# of Diffusion Samplers: 9 Water Level (ft bgs): 95.81

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDCL	CLAYEY SAND YELLOWISH BROWN AND BROWN AND DARK GRAYISH BROWN, 10YR 5/4, 5/3 AND 2.5Y 4/2, MOSTLY DARK GRAY BROWN, AND VERY FINE-MEDIUM QUARTZ AND MAFIC SANDS, STIFF, NO PLASTICITY, INTERBEDDED WITH WHITE CALICHE, (CL/SM).
		SDCL	CLAYEY SAND 10YR 5/4, 5/3, AND 2.5Y 4/2, VERY FINE-MEDIUM SAND WITH QUARTZ AND MAFICS, SUBROUNDED-SUBANGULAR, WELL SORTED, POORLY GRADED, LOOSE, SILTY SANDS, NO PLASTICITY, (SM/CL).
		CLAY	CLAY LIGHT OLIVE BROWN 2.5Y 5/4 AND DARK GRAYISH BROWN 2.5Y 4/2, STIFF, NO PLASTICITY, SOME LOOSE MAFIC FRAGMENTS, SOME MUSCOVITE AND BIOTITE MICA, (CL).
		CLAY	CLAY LIGHT OLIVE BROWN AND LIGHT YELLOWISH BROWN 2.5Y 5/4 AND 6/4, FIRM, NO PLASTICITY, BLOCKY, (CL).
		CLAY	CLAY LIGHT OLIVE BROWN 2.5Y 5/4, SOME FE STAINED YELLOWISH BROWN, STIFF-VERY STIFF, FIRMLY CEMENTED, NO PLASTICITY, BLOCKY, (CL).
		CLAY	CLAY LIGHT YELLOWISH BROWN AND LIGHT OLIVE BROWN 2.5Y 6/4 AND 5/4, SOFT TO STIFF, VERY STICKY AND SLOW SOLUBLE WHEN SOFT WITH HIGH PLASTICITY, FIRMLY CEMENTED, BLOCKY AND SILTY WHEN STIFF, (CL).
		SDSL	SILTY SAND DARK GRAYISH BROWN 10YR 4/2, VERY FINE-MEDIUM, MOSTLY MEDIUM, FROSTED, CLEAR AND MILKY QUARTZ, SUBANGULAR-ROUNDED, MOSTLY SUBROUNDED, WELL SORTED, POORLY GRADED, LOOSE, VERY SILTY, VERY ABUNDANT LOOSE MICA FLAKES, (SM).
		SD	SAND VERY FINE-COARSE, MOSTLY MEDIUM-COARSE, ANGULAR-ROUNDED, MOSTLY SUBROUNDED, FROSTED, CLEAR AND MILKY QUARTZ MIXED WITH SOME MAFICS, POORLY SORTED, WELL GRADED, LOOSE, CLEAN TO SOME SILT MATRIX, AB UNDANT MICA, (SW).
		CLAY	CLAY LIGHT OLIVE BROWN 2.5Y 5/4, STIFF-VERY STIFF, BLOCKY, LITTLE-NO PLASTICITY, SOME MOTTLED YELLOW BROWN RUST STAINED AREAS, SOME SOFT AND STICKY HIGH TO MODERATE PLASTICITY 10YR 5/3 CLAY, (CL).



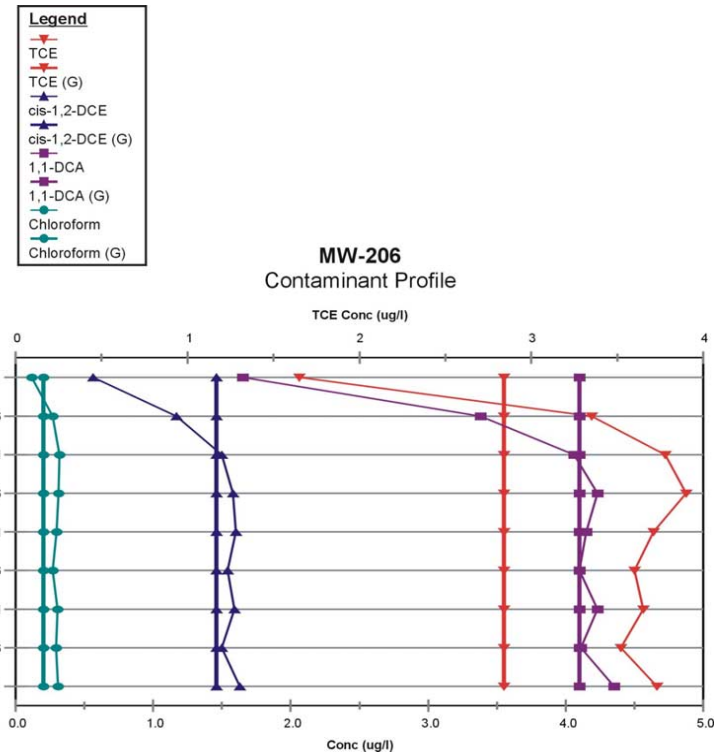


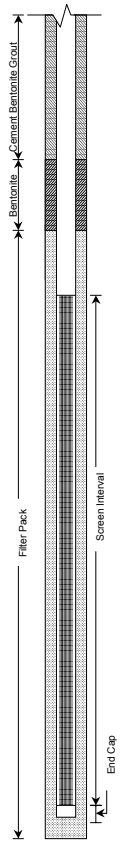
Figure E.9. MW-206 Lithologic Log and Well Contamination Profile

Well Number: **MW-214**
Monitoring Zone: A
Total Depth (ft bgs): 117.5
Screen Interval (ft bgs): 96-116
# of Diffusion Samplers: 5 Water Level (ft bgs): 100.77

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDSL	SILTY SAND 5Y 5/3, FINE SAND, WELL GRADED SILT (35-40%), SOME (15-20%) MAFICS, (SM).
		SILT	SILT 5Y 4/2, SLIGHTLY PLASTIC, SOME ROOT HAIR TRACES WITH SLIGHT FE02 STAINING, VERY STIFF, MOIST, (ML).
		SDSL	SANDY SILT 5Y 5/3, SLIGHTLY PLASTIC, FINE TO VERY FINE SAND (40-45%), SOME (15%) MAFICS, FEW ROOT HAIR TRACES, MEDIUM STIFF, MOIST, (ML).
		SD	SAND 5Y 5/6, FINE SAND, POORLY GRADED, SUBSTANTIAL (25-30%) SILT, SOME (15%) MAFICS, SLIGHTLY MICACEOUS, MEDIUM DENSE, SATURATED, (SP).
		SD	SAND 5Y 5/3, FINE SAND, WELL GRADED, TRACE SILT, SOME (15-20%) MAFICS, SLIGHTLY MICACEOUS, SOME SILT AND SILTY CLAY AGGREGATES, MEDIUM, DENSE, SATURATED, (SW).
		SDSL	SANDY SILT 5Y 5/4, SLIGHTLY PLASTIC, FINE TO VERY FINE SAND (35-40%), SOME (15%) MAFICS, SOME AGGREGATES WITH FE02 STAINING ALONG ROOT HAIR TRACES, MEDIUM STIFF TO STIFF, SATURATED, (ML).
		SILT	SILT 5Y 5/3, SLIGHTLY PLASTIC, SOME FINE SAND (15-20%), SOME ROOT HAIR TRACES WITH ORGANIC STAINING STIFF, SATURATED, (ML).
		SILT	SILT 5Y 5/3, SLIGHTLY PLASTIC, SOME (25%) FINE TO VERY FINE SAND, TRACE MAFICS, STIFF, SATURATED, (ML).
		SILT	SILT 5Y 6/3, SLIGHTLY PLASTIC, SOME (20%) FINE SAND, SOME ROOT HAIR TRACES WITH ORGANIC STAINING, STIFF, SATURATED, (ML).
		SILT	SILT 5Y 6/3, SLIGHTLY PLASTIC, SOME (20-25%) FINE SAND, SOME ROOT HAIR TRACES, A FEW WITH ORGANIC STAINING, A FEW WITHOUT, MEDIUM STIFF TO STIFF, SATURATED, (ML).

DEPTH IN FEET BGS: 85, 90, 95, 100, 105, 110, 115, 120

WELL CONSTRUCTION DETAIL



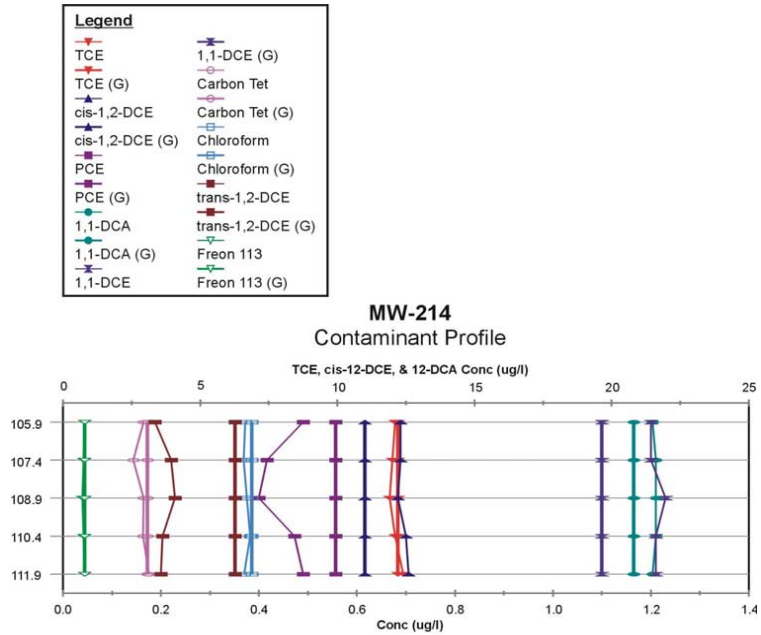
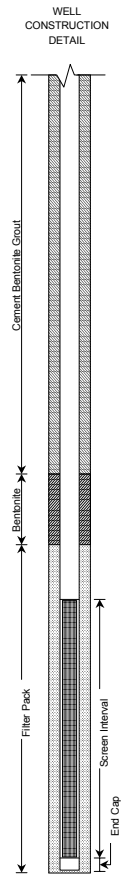


Figure E.10. MW-214 Lithologic Log and Well Contamination Profile

Well Number: **MW-216**
Monitoring Zone: C
Total Depth (ft bgs): 240.5
Screen Interval (ft bgs): 230.5-240.5
# of Diffusion Samplers: 5 Water Level (ft bgs): 100.54

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SD	SAND 2.5Y 6/4, FINE TO MEDIUM SAND, WELL GRADED, SOME (15%) SILT, SOME (15-20%) MAFICS, SLIGHTLY MICACEOUS, SLIGHT FE02 STAINING, LOOSE, SATURATED, (SW).
		SD	SAND 10YR 5/3, FINE SAND, MODERATELY WELL GRADED, SOME SILT (15%), SOME (15%) MAFICS, MODERATELY MICACEOUS, SLIGHT FE02 STAINING, LOOSE, SATURATED, (SW/SP).
		SD	SAND 10YR 5/3, MEDIUM TO FINE SAND, WELL GRADED, SOME (15%) SILT, SOME (15-20%) MAFICS, VERY SLIGHTLY MICACEOUS, SLIGHT FE02 STAINING, LOOSE, SATURATED, (SW).
		SD	SAND 2.5Y 4/4, FINE SAND, WELL GRADED, SOME (20%) SILT, SOME (15-20%) MAFICS, SLIGHTLY MICACEOUS, MEDIUM DENSE, SATURATED, (SW).
		SD	SAND 5Y 4/4, FINE TO MEDIUM SAND, WELL GRADED, SOME (15%) SILT, SOME (15%) MAFICS, TRACE CALICHE, SLIGHT FE02 STAINING, MEDIUM DENSE, SATURATED, (SW).
		SD	SAND 5Y 4/4, MEDIUM SAND, WELL GRADED, TRACE COARSE SAND, SOME (15%) SILT, SOME (20-25%) MAFICS, VERY SLIGHTLY MICACEOUS, TRACE CALICHE, MEDIUM DENSE, SATURATED, (SW).
		SDSL	SILTY SAND 5Y 4/3, FINE SAND, WELL GRADED, SOME (15%) MEDIUM SAND, SILT (40-45%), MAFICS (15%), SLIGHTLY MICACEOUS, SOME SILT AGGREGATES WITH FE02 STAINING, MEDIUM DENSE TO DENSE, SATURATED, (SM).
		SILT	SILT 7.5YR 3/4, SLIGHT PLASTICITY, TRACE VERY FINE SAND, TRACE MAFICS, VERY SLIGHTLY MICACEOUS, STRONGLY FE02 CEMENTED, SOME BLACK ORGANIC (?) MATERIAL, VERY STIFF TO HARD, SATURATED, (ML).

DEPTH IN FEET BGS: 210, 215, 220, 225, 230, 235, 240, 245



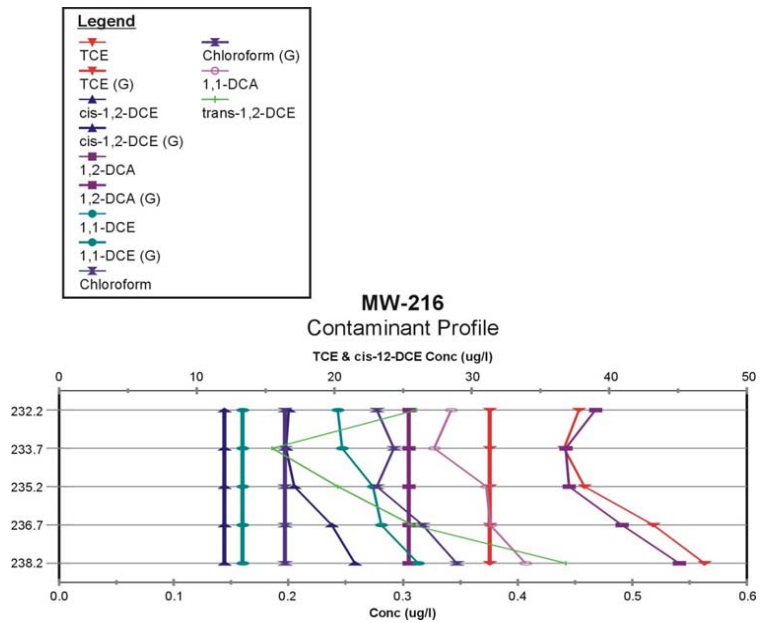
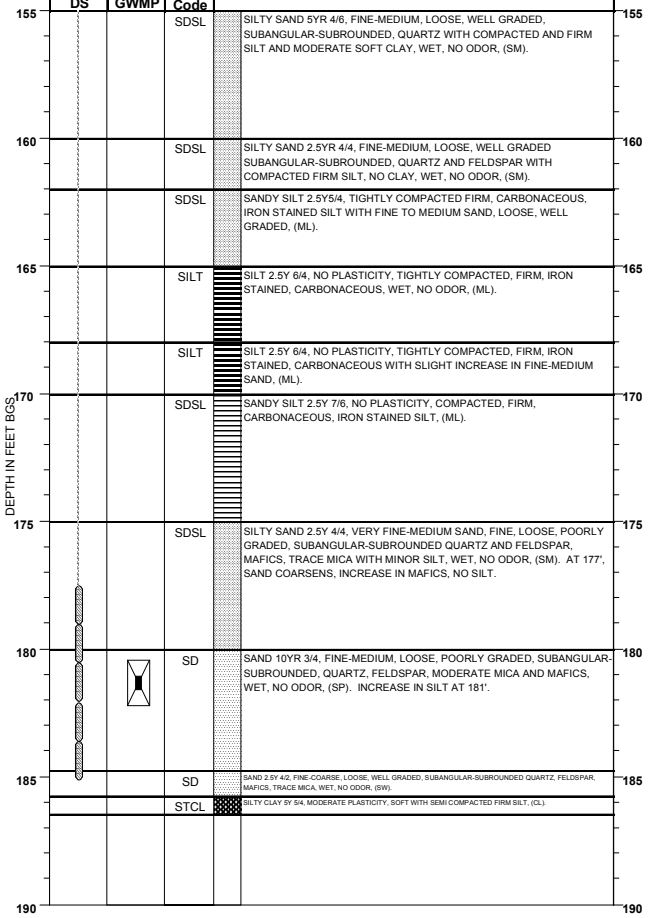
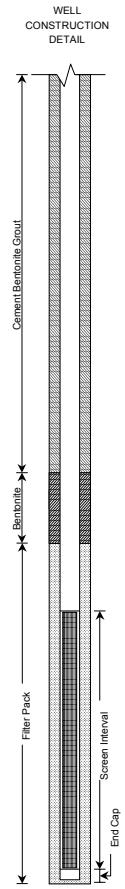


Figure E.11. MW-216 Lithologic Log and Well Contamination Profile

Well Number: **MW-218**
Monitoring Zone: B
Total Depth (ft bgs): 186
Screen Interval (ft bgs): 176-186
# of Diffusion Samplers: 5 Water Level (ft bgs): 104.52

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDSL	SILTY SAND 5YR 4/6, FINE-MEDIUM, LOOSE, WELL GRADED, SUBANGULAR-SUBROUNDED, QUARTZ WITH COMPACTED AND FIRM SILT AND MODERATE SOFT CLAY, WET, NO ODOR, (SM).
		SDSL	SILTY SAND 2.5YR 4/4, FINE-MEDIUM, LOOSE, WELL GRADED SUBANGULAR-SUBROUNDED, QUARTZ AND FELDSPAR WITH COMPACTED FIRM SILT, NO CLAY, WET, NO ODOR, (SM).
		SDSL	SANDY SILT 2.5Y5/4, TIGHTLY COMPACTED FIRM, CARBONACEOUS, IRON STAINED SILT WITH FINE TO MEDIUM SAND, LOOSE, WELL GRADED, (ML).
		SILT	SILT 2.5Y 6/4, NO PLASTICITY, TIGHTLY COMPACTED, FIRM, IRON STAINED, CARBONACEOUS, WET, NO ODOR, (ML).
		SILT	SILT 2.5Y 6/4, NO PLASTICITY, TIGHTLY COMPACTED, FIRM, IRON STAINED, CARBONACEOUS WITH SLIGHT INCREASE IN FINE-MEDIUM SAND, (ML).
		SDSL	SANDY SILT 2.5Y 7/6, NO PLASTICITY, COMPACTED, FIRM, CARBONACEOUS, IRON STAINED SILT, (ML).
		SDSL	SILTY SAND 2.5Y 4/4, VERY FINE-MEDIUM SAND, FINE, LOOSE, POORLY GRADED, SUBANGULAR-SUBROUNDED QUARTZ AND FELDSPAR, MAFICS, TRACE MICA WITH MINOR SILT, WET, NO ODOR, (SM). AT 177', SAND COARSENS, INCREASE IN MAFICS, NO SILT.
		SD	SAND 10YR 3/4, FINE-MEDIUM, LOOSE, POORLY GRADED, SUBANGULAR-SUBROUNDED, QUARTZ, FELDSPAR, MODERATE MICA AND MAFICS, WET, NO ODOR, (SP). INCREASE IN SILT AT 181'.
		SD	SAND 2.5Y 4/2, FINE-COARSE, LOOSE, WELL GRADED, SUBANGULAR-SUBROUNDED QUARTZ, FELDSPAR, MAFICS, TRACE MICA, WET, NO ODOR, (SW).
		STCL	SILTY CLAY 5Y 5/4, MODERATE PLASTICITY, SOFT WITH SEMI COMPACTED FIRM SILT, (CL).





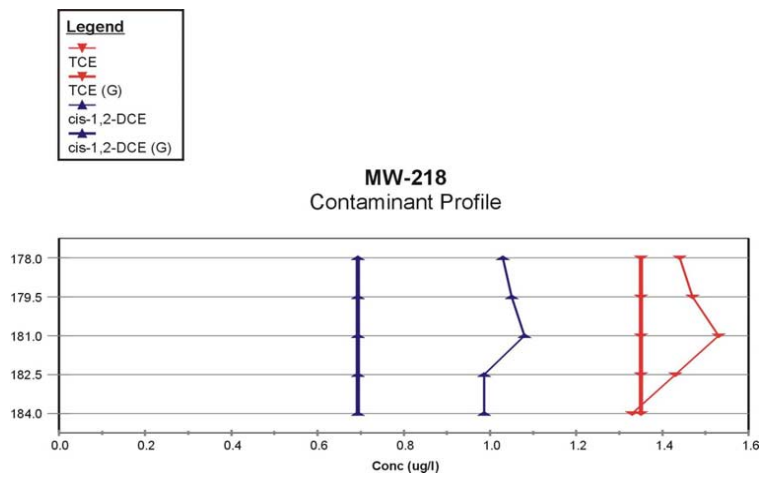


Figure E.12. MW-218 Lithologic Log and Well Contamination Profile

Well Number: **MW-235**
Monitoring Zone: A
Total Depth (ft bgs): UNK
Screen Interval (ft bgs): 106-116
# of Diffusion Samplers: 5 Water Level (ft bgs): 105.23

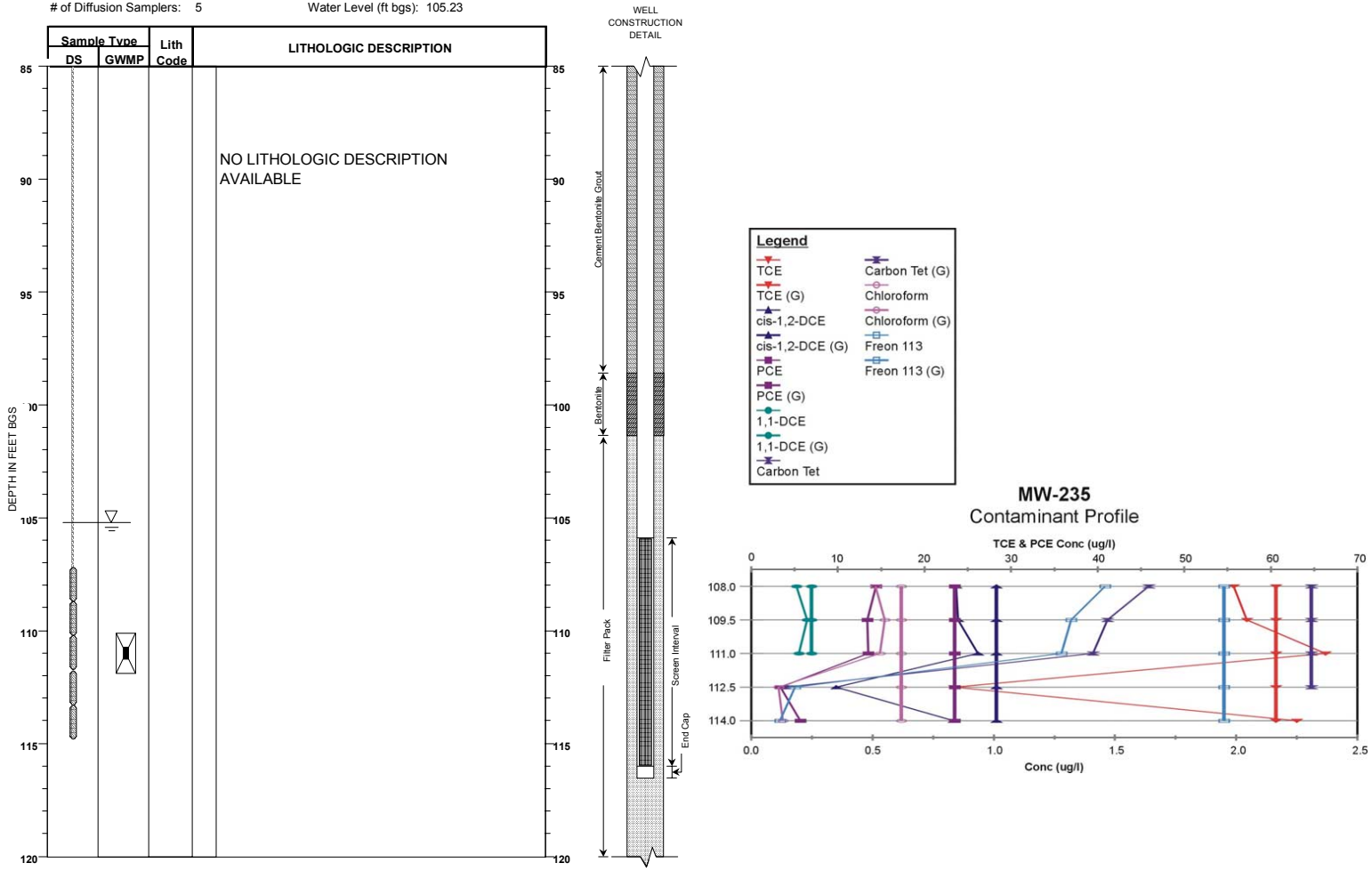
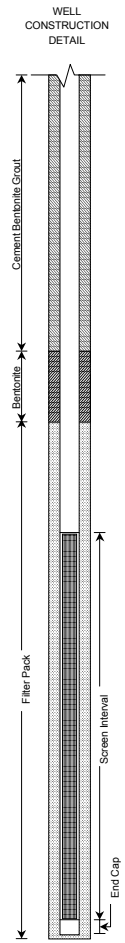


Figure E.13. MW-235 Lithologic Log and Well Contamination Profile

Well Number: **MW-270**
Monitoring Zone: A
Total Depth (ft bgs): 118
Screen Interval (ft bgs): 103-118
# of Diffusion Samplers: 5 Water Level (ft bgs): 105.51

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SD	SAND GRAYISH BROWN (2.5 Y 5/2), MINOR SILT; VERY FINE TO FINE GRAINED; SUBROUNDE
		NDPS	NO RECOVERY NOT SAMPLED.
		SILT	SILT GRAYISH BROWN (2.5 Y 5/2), 1-3% ORGANICS, MINOR EVAPORITE COATED SURFACES,
		SDSL	SANDY SILT OLIVE BROWN (2.5 Y 4/3), NO ORGANICS; SAND IS VERY FINE GRAINED; DAMP
		SDSL	SILTY SAND OLIVE BROWN (2.5 Y 4/3); VERY FINE GRAINED; SUBROUNDED; 90% QUARTZ, 1
		SDSL	SANDY SILT OLIVE BROWN (2.5 Y 4/3), 1-3% ORGANICS, DRY, (ML).
		SDSL	SILTY SAND VERY DARK GRAY BROWN (2.5 Y 3/2); FINE GRAINED; POORLY GRADED, SUBROU
		SILT	SILT LIGHT OLIVE BROWN (2.5 Y 5/3), 1-3% ORGANICS, MINOR IRON STAINED ROOTBORES
		SD	SAND OLIVE BROWN (2.5 Y 4/3), MINOR SILT; FINE GRAINED; POORLY GRADED, SUBROUNDE
		SD	SAND VERY DARK GRAY BROWN (2.5 Y 3/2); FINE GRAINED; POORLY GRADED, SUBANGULAR;

DEPTH IN FEET BGS: 85, 90, 95, 100, 105, 110, 115, 120



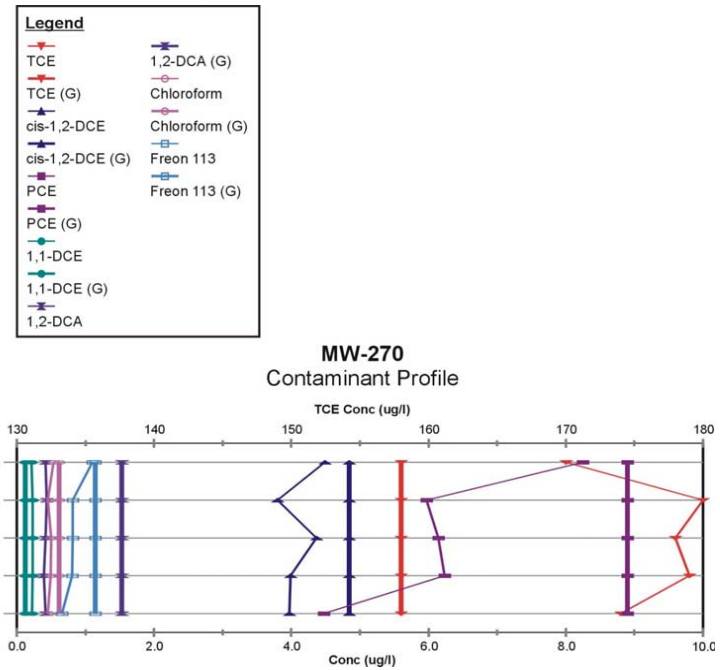
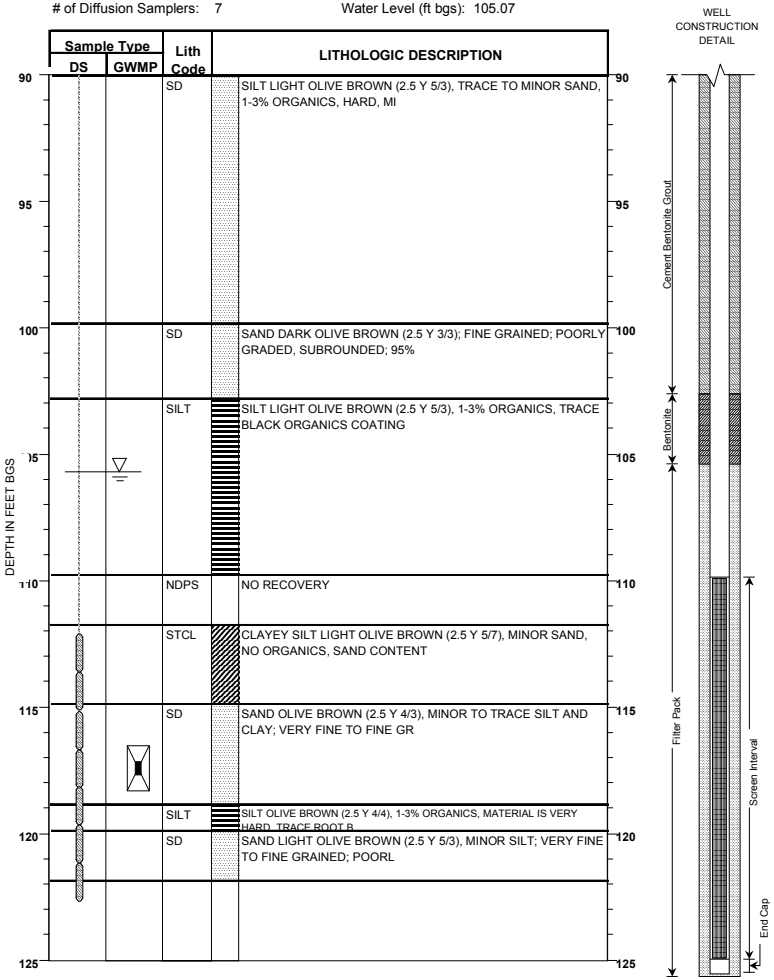


Figure E.14. MW-270 Lithologic Log and Well Contamination Profile

Well Number: **MW-271**
Monitoring Zone: A
Total Depth (ft bgs): 125
Screen Interval (ft bgs): 110-125
# of Diffusion Samplers: 7 Water Level (ft bgs): 105.07

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SD	SILT LIGHT OLIVE BROWN (2.5 Y 5/3), TRACE TO MINOR SAND, 1-3% ORGANICS, HARD, MI
		SD	SAND DARK OLIVE BROWN (2.5 Y 3/3); FINE GRAINED; POORLY GRADED, SUBROUNDED; 95%
		SILT	SILT LIGHT OLIVE BROWN (2.5 Y 5/3), 1-3% ORGANICS, TRACE BLACK ORGANICS COATING
		NDPS	NO RECOVERY
		STCL	CLAYEY SILT LIGHT OLIVE BROWN (2.5 Y 5/7), MINOR SAND, NO ORGANICS, SAND CONTENT
		SD	SAND OLIVE BROWN (2.5 Y 4/3), MINOR TO TRACE SILT AND CLAY; VERY FINE TO FINE GR
		SILT	SILT OLIVE BROWN (2.5 Y 4/4), 1-3% ORGANICS, MATERIAL IS VERY HARD, TRACE ROOT B
		SD	SAND LIGHT OLIVE BROWN (2.5 Y 5/3), MINOR SILT; VERY FINE TO FINE GRAINED; POORL



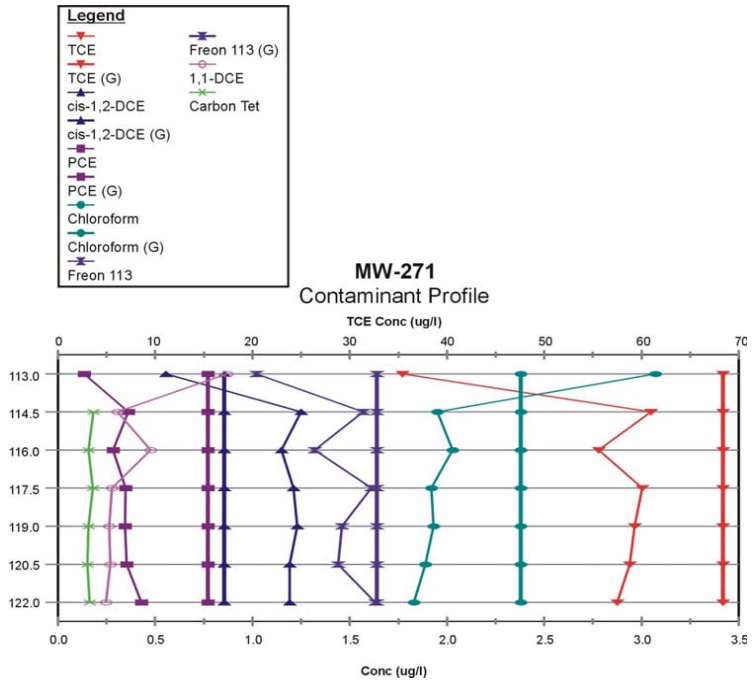
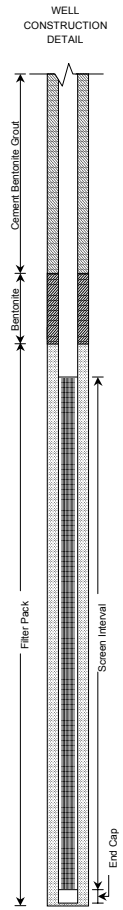


Figure E.15. MW-271 Lithologic Log and Well Contamination Profile

Well Number: **MW-282**
Monitoring Zone: A
Total Depth (ft bgs): 117
Screen Interval (ft bgs): 97-117
# of Diffusion Samplers: 7 Water Level (ft bgs): 99.7

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		STCL	CLAYEY SILT LIGHT OLIVE BROWN (2.5 Y 5/30, TRACE SAND; VERY FINE TO MEDIUM GRAIN
		SD	SAND DARK OLIVE BROWN (2.5 Y 3/3); VERY FINE TO FINE GRAINED; POORLY GRADED, SUB
		NDPS	NO RECOVERY
		SDSL	SILTY SAND BROWN (10 YR), TRACE CLAY; VERY FINE TO MEDIUM GRAINED; POORLY GRADED
		STCL	SILTY CLAY LIGHT OLIVE BROWN (2.5 Y 5/3), SECONDARY POROSITY, MINOR IRON STAININ
		STCL	SILTY CLAY BROWN (10 YR 4/3), TRACE SAND; FINE GRAINED; NO SECONDARY POROSITY, M
		SD	SAND TRACE SILT; VERY FINE TO FINE GRAINED; POORLY GRADED, NO SECONDARY POROSITY

DEPTH IN FEET BGS: 85, 90, 95, 100, 105, 110, 115, 120



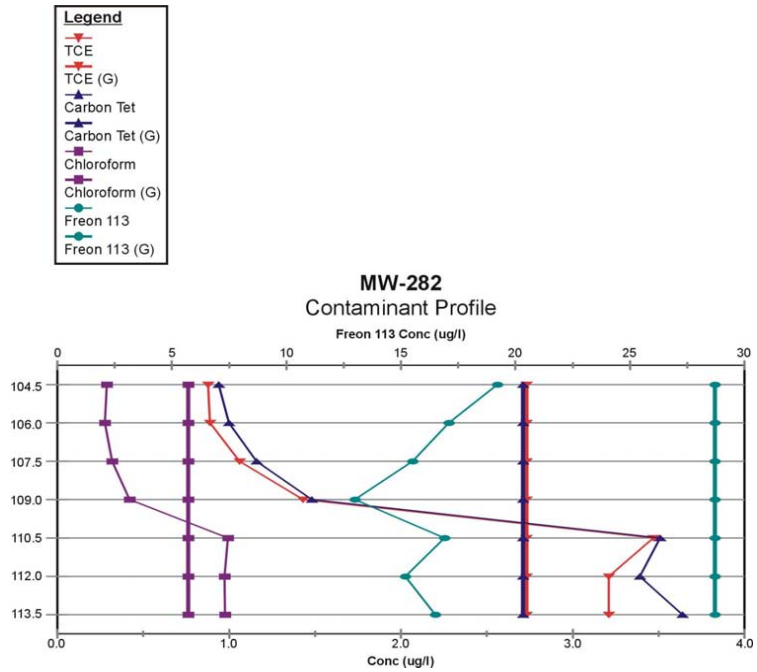
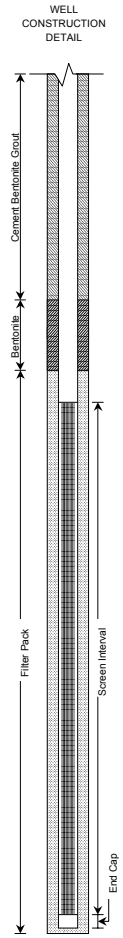


Figure E.16. MW-282 Lithologic Log and Well Contamination Profile

Well Number: **MW-286**
Monitoring Zone: A
Total Depth (ft bgs): 118
Screen Interval (ft bgs): 98-118
# of Diffusion Samplers: 9 Water Level (ft bgs): 102.92

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SILT	SILT LIGHT OLIVE BROWN (2.5 Y 5/3), NO SECONDARY POROSITY, TRACE BLACK STAINING,
		SDSL	SILTY SAND OLIVE BROWN (2.5 Y 4/3); FINE GRAINED; POORLY GRADED, SUBROUNDED; 80%
		SILT	SILT LIGHT OLIVE BROWN (2.5 Y 5/3), NO SECONDARY POROSITY, TRACE BLACK STAINED M
		SD	SAND VERY DARK GRAY BROWN (2.5 Y 3/2), MINOR SILT; FINE GRAINED; POORLY GRADED,
		SD	SAND VERY DARK GRAY BROWN (2.5 Y 3/2), TRACE SILT; FINE TO VERY COARSE GRAINED;
		NDPS	NO RECOVERY
		SD	SAND VERY DARK GRAY BROWN (2.5 Y 3/2), TRACE SILT; FINE TO VERY COARSE GRAINED;
		NDPS	NO RECOVERY
		SILT	SILT LIGHT OLIVE BROWN (2.5 Y 5/2), NO SECONDARY POROSITY, LOOSE, SATURATED SILT

DEPTH IN FEET BGS: 85, 90, 95, 100, 105, 110, 115, 120



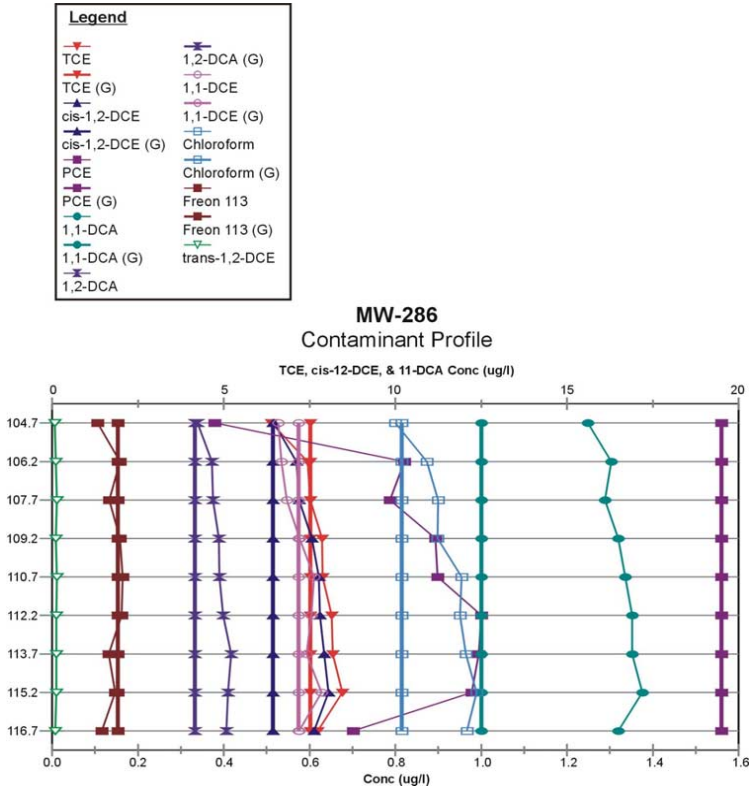
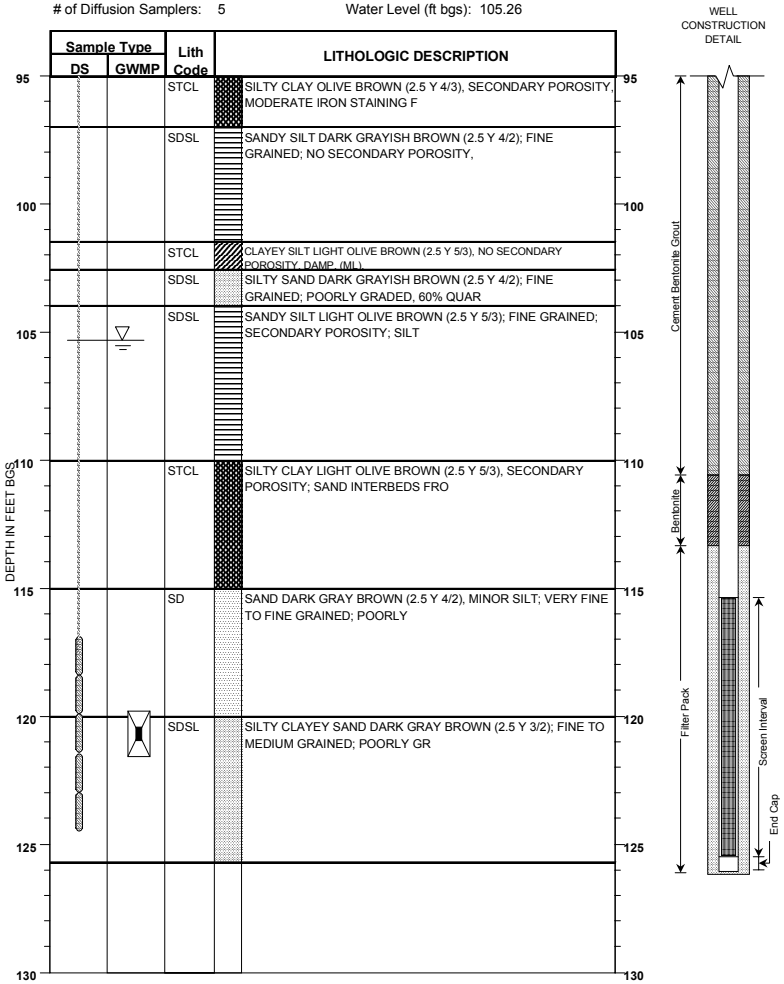


Figure E.17. MW-286 Lithologic Log and Well Contamination Profile

Well Number: **MW-287**
Monitoring Zone: A
Total Depth (ft bgs): 125.5
Screen Interval (ft bgs): 115.5-125.5
# of Diffusion Samplers: 5 Water Level (ft bgs): 105.26



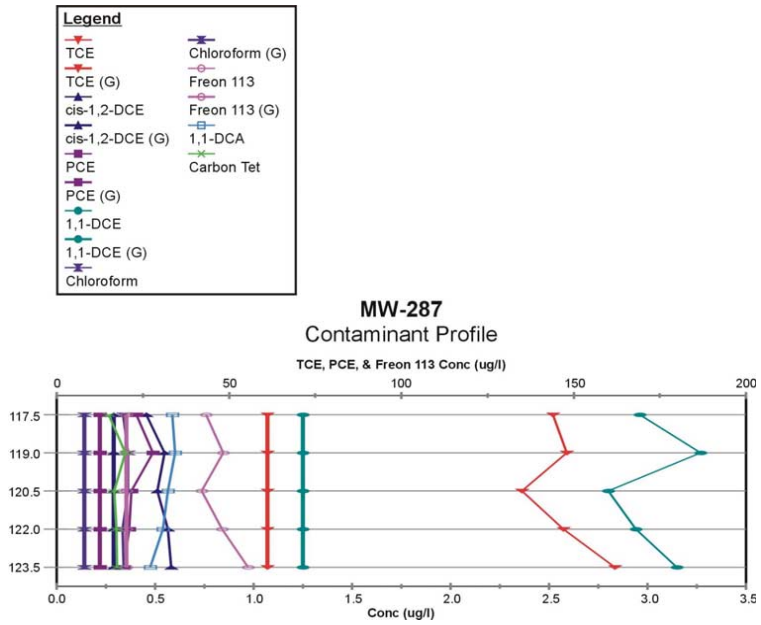
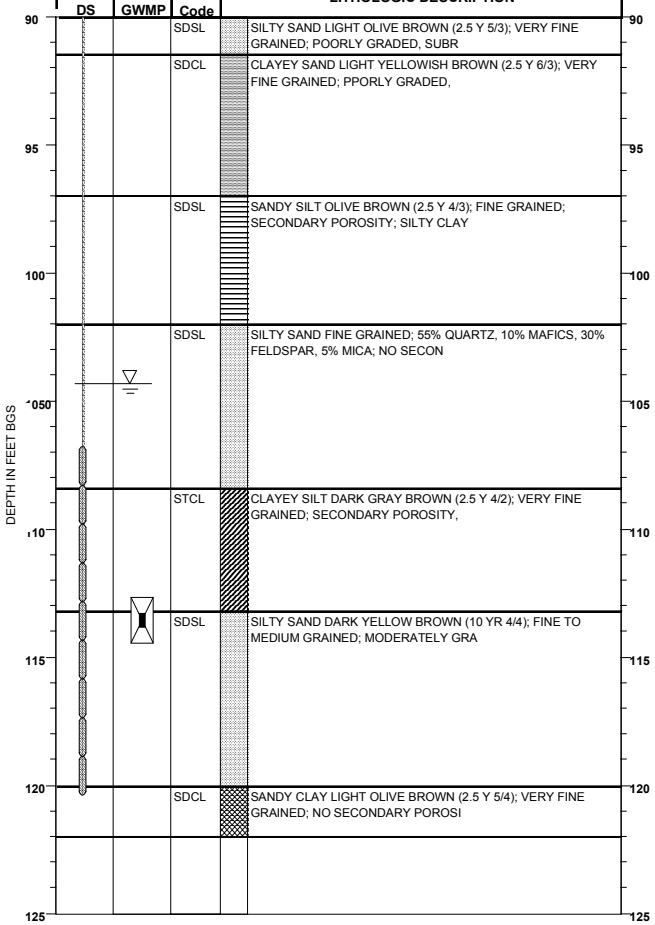
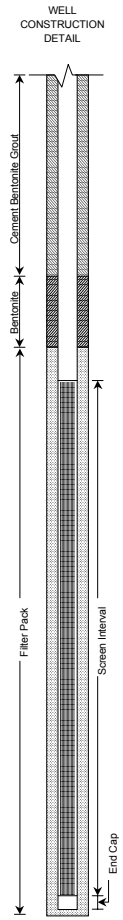


Figure E.18. MW-287 Lithologic Log and Well Contamination Profile

Well Number: **MW-288**
Monitoring Zone: A
Total Depth (ft bgs): 122
Screen Interval (ft bgs): 102-122
# of Diffusion Samplers: 9 Water Level (ft bgs): 104.4

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDSL	SILTY SAND LIGHT OLIVE BROWN (2.5 Y 5/3); VERY FINE GRAINED; POORLY GRADED, SUBR
		SDCL	CLAYEY SAND LIGHT YELLOWISH BROWN (2.5 Y 6/3); VERY FINE GRAINED; PPORLY GRADED,
		SDSL	SANDY SILT OLIVE BROWN (2.5 Y 4/3); FINE GRAINED; SECONDARY POROSITY; SILTY CLAY
		SDSL	SILTY SAND FINE GRAINED; 55% QUARTZ, 10% MAFICS, 30% FELDSPAR, 5% MICA; NO SECON
		STCL	CLAYEY SILT DARK GRAY BROWN (2.5 Y 4/2); VERY FINE GRAINED; SECONDARY POROSITY,
		SDSL	SILTY SAND DARK YELLOW BROWN (10 YR 4/4); FINE TO MEDIUM GRAINED; MODERATELY GRA
		SDCL	SANDY CLAY LIGHT OLIVE BROWN (2.5 Y 5/4); VERY FINE GRAINED; NO SECONDARY POROSI





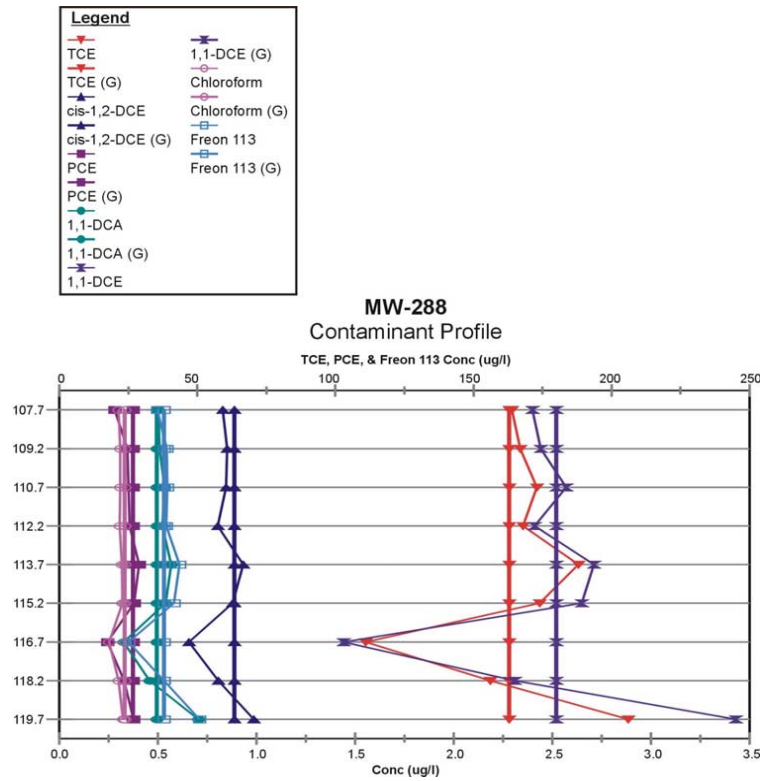


Figure E.19. MW-288 Lithologic Log and Well Contamination Profile

Well Number: **MW-314**
Monitoring Zone: B
Total Depth (ft bgs): 170.5
Screen Interval (ft bgs): 155-165
# of Diffusion Samplers: 5 Water Level (ft bgs): 100.65

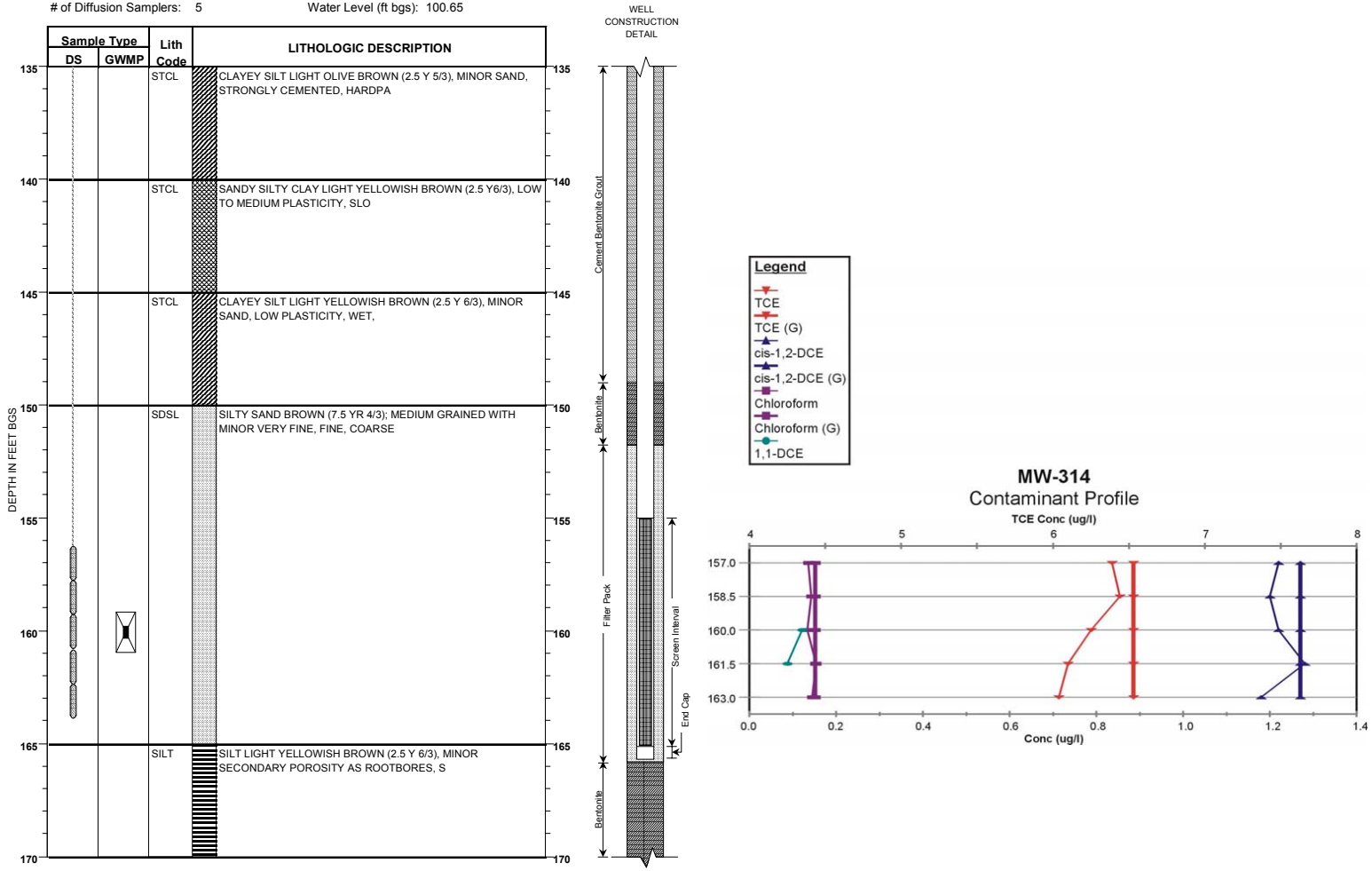
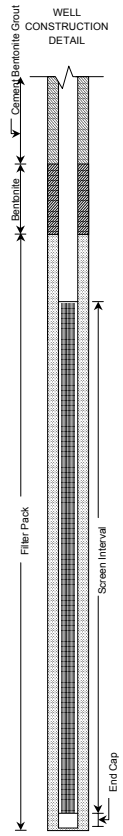


Figure E.20. MW-314 Lithologic Log and Well Contamination Profile

Well Number: **MW-325**
Monitoring Zone: A
Total Depth (ft bgs): 121
Screen Interval (ft bgs): 99-119
# of Diffusion Samplers: 9 Water Level (ft bgs): 98.7

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
85	92.5	SILT	SILT OLIVE BROWN (2.5 Y 4/2), TRACE SAND, MINOR TO TRACE SECONDARY POROSITY AS B
92.5	95	SDSL	SILTY SAND DARK GRAYISH BROWN (2.5 Y 4/2), TRACE CLAY; VERY FINE AND FINE GRAINE
95	100	SD	SAND DARK OLIVE BROWN (2.5 Y 3/3), MINOR SILT AND TRACE GRAVEL; VERY FINE TO VER
100	107	SD	SAND DARK GRAYISH BROWN (2.5 Y 4/2); VERY FINE AND FINE GRAINED; POORLY GRADED,
107	115	SILT	SILT LIGHT OLIVE BROWN (2.5 Y 3/3), MINOR CLAY AND TRACE SAND, SAND CONTENT INCR
115	117.5	SDSL	SILTY SAND DARK GRAYISH BROWN (2.5 Y 4/2); FINE TO COARSE GRAINED; MODERATELY TO
117.5	121	SILT	SILT LIGHT OLIVE BROWN (2.5 Y 5/3), TRACE SAND AND CLAY, MINOR IRON STAINING, SA

DEPTH IN FEET BGS



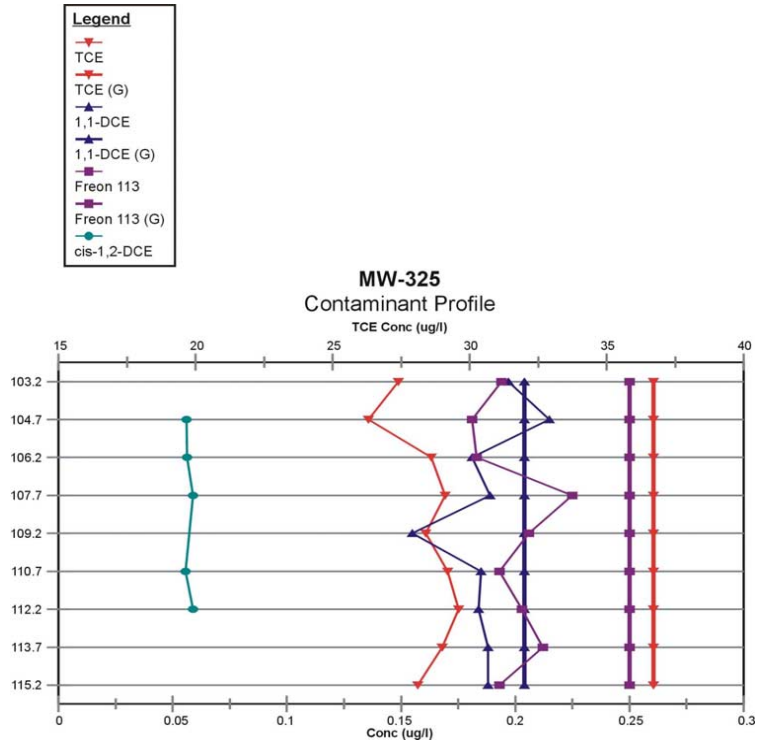


Figure E.21. MW-325 Lithologic Log and Well Contamination Profile

Well Number: **MW-326**
Monitoring Zone: B
Total Depth (ft bgs): 221
Screen Interval (ft bgs): 178-188
# of Diffusion Samplers: 5 Water Level (ft bgs): 100.82

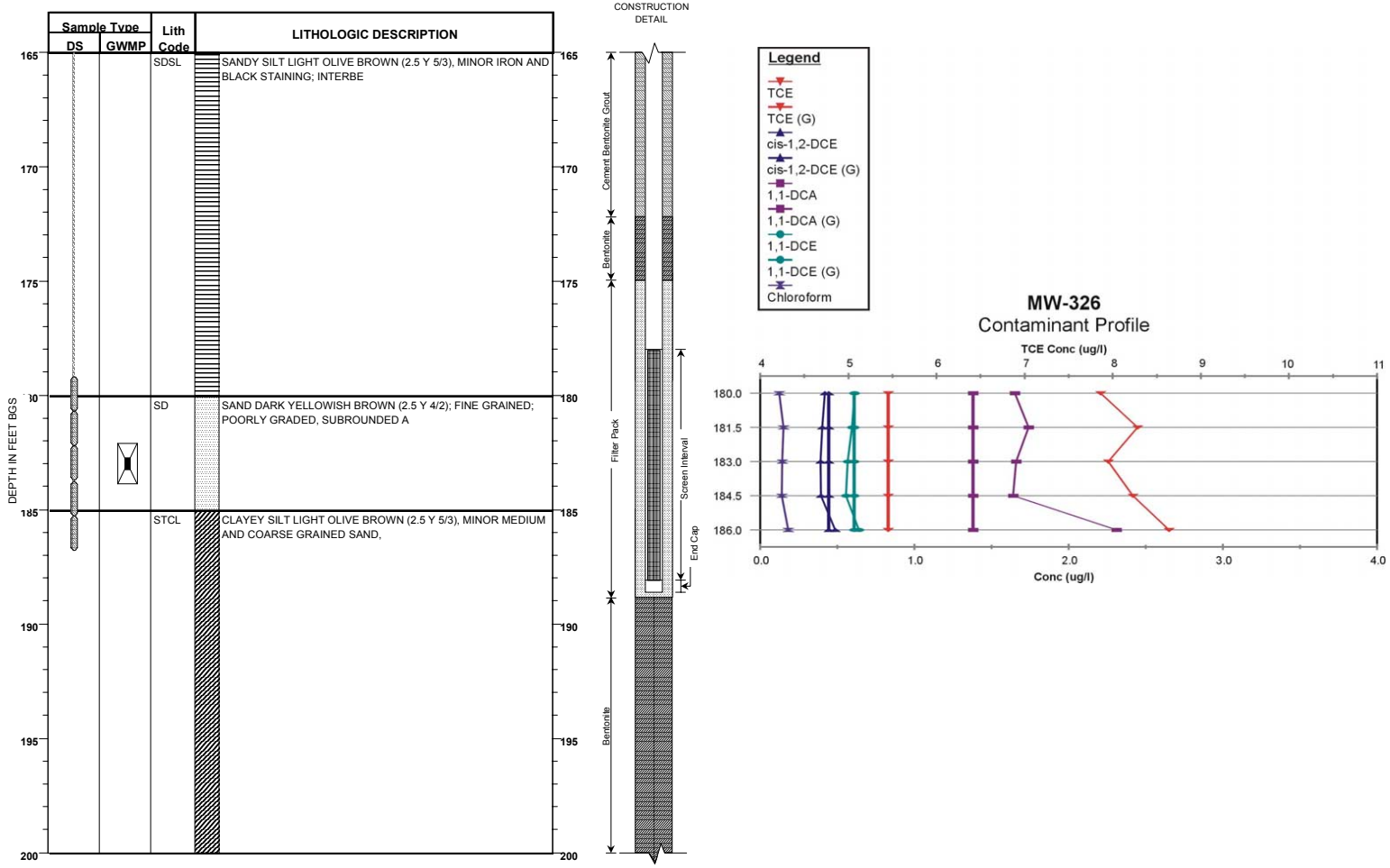
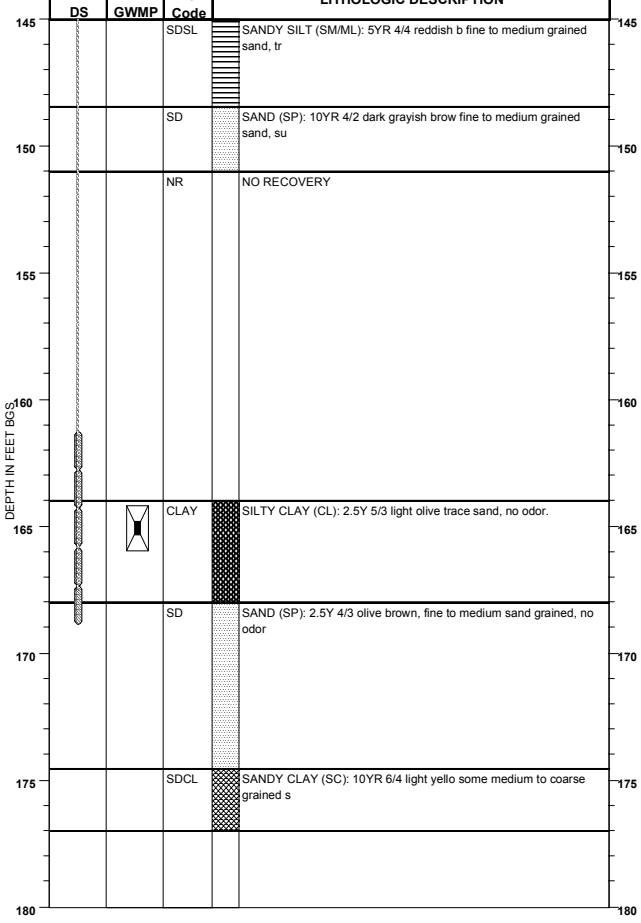
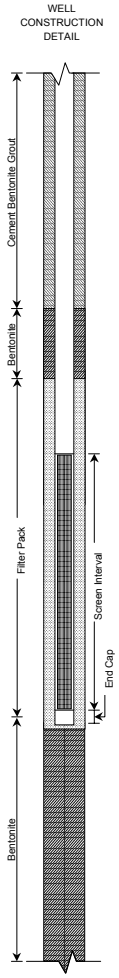


Figure E.22. MW-326 Lithologic Log and Well Contamination Profile

Well Number: **MW-343**
Monitoring Zone: B
Total Depth (ft bgs): 177
Screen Interval (ft bgs): 160-170
# of Diffusion Samplers: 5 Water Level (ft bgs): 106.98

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDSL	SANDY SILT (SM/ML): 5YR 4/4 reddish b fine to medium grained sand, tr
		SD	SAND (SP): 10YR 4/2 dark grayish brow fine to medium grained sand, su
		NR	NO RECOVERY
		CLAY	SILTY CLAY (CL): 2.5Y 5/3 light olive trace sand, no odor.
		SD	SAND (SP): 2.5Y 4/3 olive brown, fine to medium sand grained, no odor
		SDCL	SANDY CLAY (SC): 10YR 6/4 light yello some medium to coarse grained s





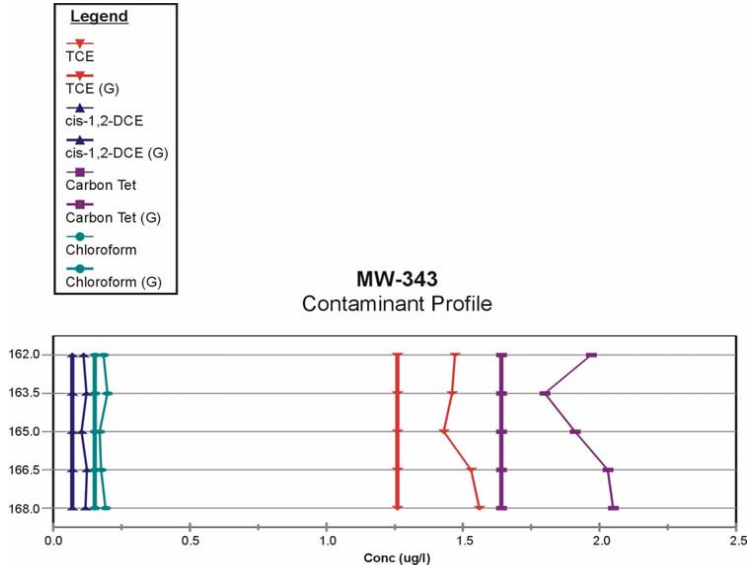
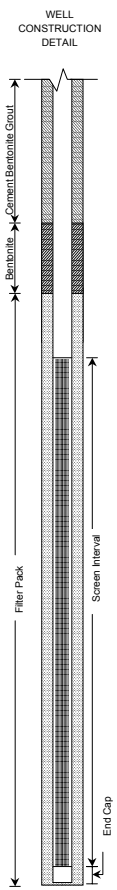


Figure E.23. MW-343 Lithologic Log and Well Contamination Profile

Well Number: **MW-362**
Monitoring Zone: A
Total Depth (ft bgs): 111
Screen Interval (ft bgs): 91-111
# of Diffusion Samplers: 3 Water Level (ft bgs): 102.19

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SP	SAND OLIVE (5 Y 5/3), POORLY GRADED; SUBANGULAR; 70% QUARTZ, 15% MAFICS, 15% MICA, DRY, (SP).
		ML	SILT PALE OLIVE (5 Y 6/3), SOFT, DRY, (ML).
		NR	NO RECOVERY
		ML	SANDY SILT PALE OLIVE (5 Y 6/3), MODERATELY CEMENTED, 70% SILT, 30% VERY FINE SAND, DRY, (ML).
		NR	NO RECOVERY
		SP	SAND PALE OLIVE (5 Y 6/3), 40% VERY FINE GRAINED; 60% FINE GRAINED; POORLY GRADED; SUBANGULAR; 70% QUARTZ, 15% MAFICS, 5% FELDSPAR, 10% MICA, SOFT, DRY, (SP).
		SM	SILTY SAND PALE OLIVE (5 Y 6/3), VERY FINE GRAINED; 30-40% SILT; 60-70% SAND, DRY, (SM).
		NR	NO RECOVERY
		SM	SILTY SAND LIGHT OLIVE BROWN (2.5 Y 5/3), 40% VERY FINE GRAINED; 60% FINE GRAINED; SUBANGULAR; 65% QUARTZ, 15% MAFICS, 5% FELDSPAR, 15% MICA, MOIST, (SM).
		SP	SAND LIGHT YELLOWISH BROWN (2.5 Y 6/3), FINE GRAINED; POORLY GRADED; SUBANGULAR; 70% QUARTZ, 15% MAFICS, 5% FELDSPAR, 10% MICA, MOIST TO WET BELOW 98.2'; 20% SILT @ 98.0'-99.0', DAMP, (SP).
		ML	SILT LIGHT YELLOWISH BROWN (2.5 Y 6/3), STREAKS OF IRON STAINING; MODERATELY CEMENTED; HARDPAN, DRY, (ML).
		SM	SILTY SAND PALE OLIVE (5 Y 6/3), VERY FINE GRAINED, SUBANGULAR; 70% QUARTZ, 20% MAFICS, 10% MICA, SECONDARY POROSITY, 60-70% SAND; 30-40% SILT, SATURATED, (SM).
		SP	SAND BROWN (10 YR 5/3), VERY FINE GRAINED; POORLY GRADED; SUBANGULAR; 70% QUARTZ, 20% MAFICS,
		NR	NO RECOVERY
		SM	SILTY SAND LIGHT OLIVE BROWN (2.5 Y 5/3), VERY FINE GRAINED; SUBROUNDED; 70% QUARTZ, 15% MAFICS, 15% MICA, 50-70% SAND; 30-50% SILT, SATURATED, (SM).
			NO RECOVERY

DEPTH IN FEET BGS: 80, 85, 90, 95, 100, 105, 110, 115



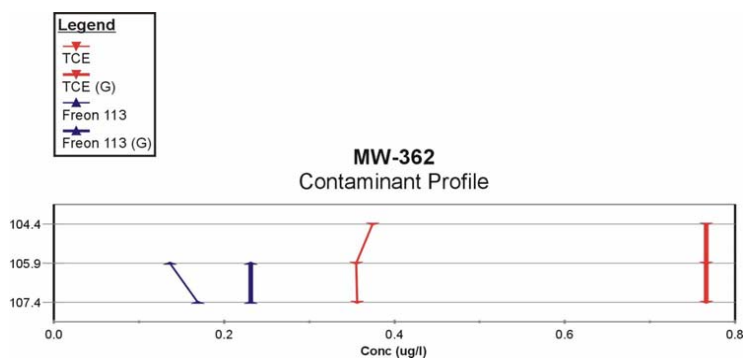
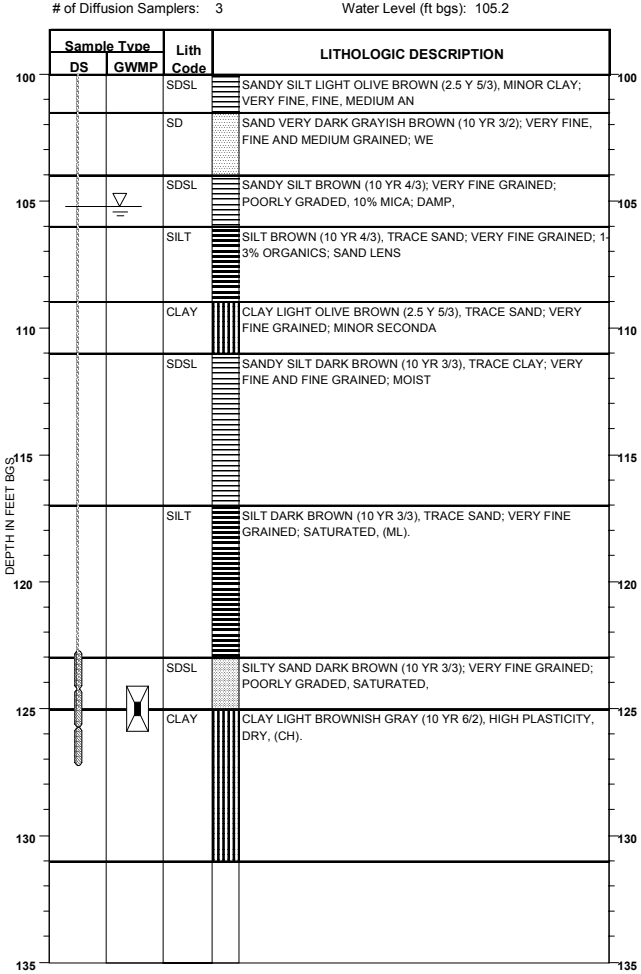
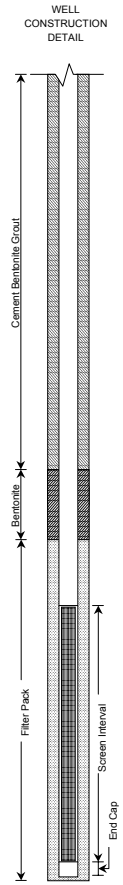


Figure E.24. MW-362 Lithologic Log and Well Contamination Profile

Well Number: **MW-364**
Monitoring Zone: A
Total Depth (ft bgs): 131
Screen Interval (ft bgs): 121-131
# of Diffusion Samplers: 3 Water Level (ft bgs): 105.2

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDSL	SANDY SILT LIGHT OLIVE BROWN (2.5 Y 5/3), MINOR CLAY; VERY FINE, FINE, MEDIUM AN
		SD	SAND VERY DARK GRAYISH BROWN (10 YR 3/2); VERY FINE, FINE AND MEDIUM GRAINED; WE
		SDSL	SANDY SILT BROWN (10 YR 4/3); VERY FINE GRAINED; POORLY GRADED, 10% MICA; DAMP,
		SILT	SILT BROWN (10 YR 4/3), TRACE SAND; VERY FINE GRAINED; 1-3% ORGANICS; SAND LENS
		CLAY	CLAY LIGHT OLIVE BROWN (2.5 Y 5/3), TRACE SAND; VERY FINE GRAINED; MINOR SECONDA
		SDSL	SANDY SILT DARK BROWN (10 YR 3/3), TRACE CLAY; VERY FINE AND FINE GRAINED; MOIST
		SILT	SILT DARK BROWN (10 YR 3/3), TRACE SAND; VERY FINE GRAINED; SATURATED, (ML).
		SDSL	SILTY SAND DARK BROWN (10 YR 3/3); VERY FINE GRAINED; POORLY GRADED, SATURATED,
		CLAY	CLAY LIGHT BROWNISH GRAY (10 YR 6/2), HIGH PLASTICITY, DRY, (CH).





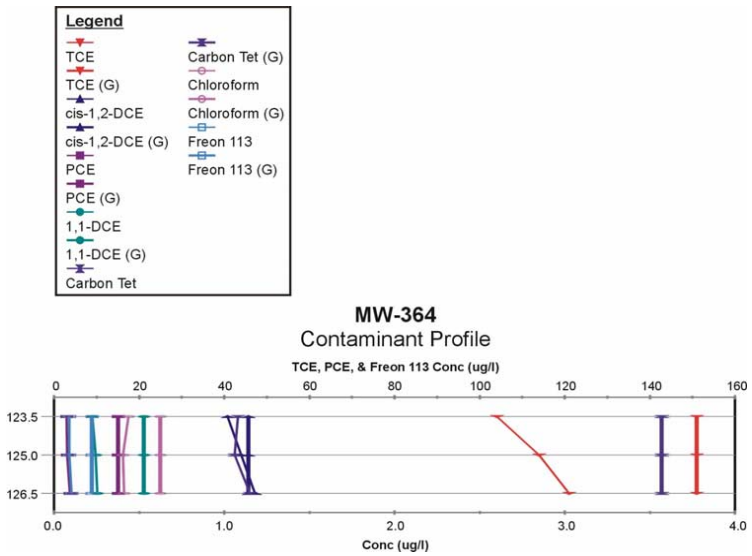
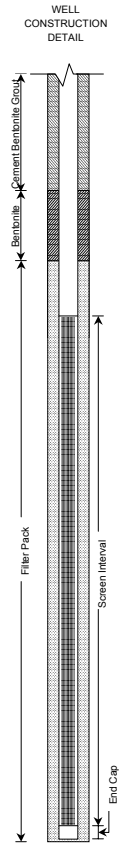


Figure E.25. MW-364 Lithologic Log and Well Contamination Profile

Well Number: **MW-366**
Monitoring Zone: A
Total Depth (ft bgs): 126
Screen Interval (ft bgs): 104.5-124.5
# of Diffusion Samplers: 11 Water Level (ft bgs): 104.8

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SDSL	SANDY SILT OLIVE BROWN (2.5 Y 4/3), TRACE CLAY; VERY FINE, FINE AND MEDIUM GRAIN
		SD	SAND DARK GRAYISH BROWN (10 YR 4/2); VERY FINE, FINE AND MEDIUM GRAINED; MODERAT
		SDSL	SANDY SILT DARK GRAYISH BROWN (10 YR 4/2); VERY FINE AND FINE GRAINED; POORLY GR
		CLAY	CLAY LIGHT OLIVE BROWN (2.5 Y 5/4), TRACE SAND; SAND LENS FROM 106.5'-107.5'; CO
		SDSL	SANDY SILT BROWN (10 YR 4/3); VERY FINE GRAINED; VERY HARD SILT LENS 1/2" THICK
		SDSL	SILTY SAND BROWN (10 YR 4/3); VERY FINE, FINE AND MEDIUM GRAINED; MODERATELY GRA
		SILT	SILT BROWN (10 YR 4/3), MINOR SAND AND TRACE CLAY; VERY FINE GRAINED; MINOR YELL
		SD	SAND BROWN (10 YR 4/3), TRACE SILT; VERY FINE AND FINE GRAINED; POORLY GRADED, S
		CLAY	CLAY LIGHT OLIVE BROWN (2.5 Y 5/4), HIGH PLASTICITY, DAMP, (CH).

DEPTH IN FEET BGS: 95, 100, 105, 110, 115, 120, 125, 130



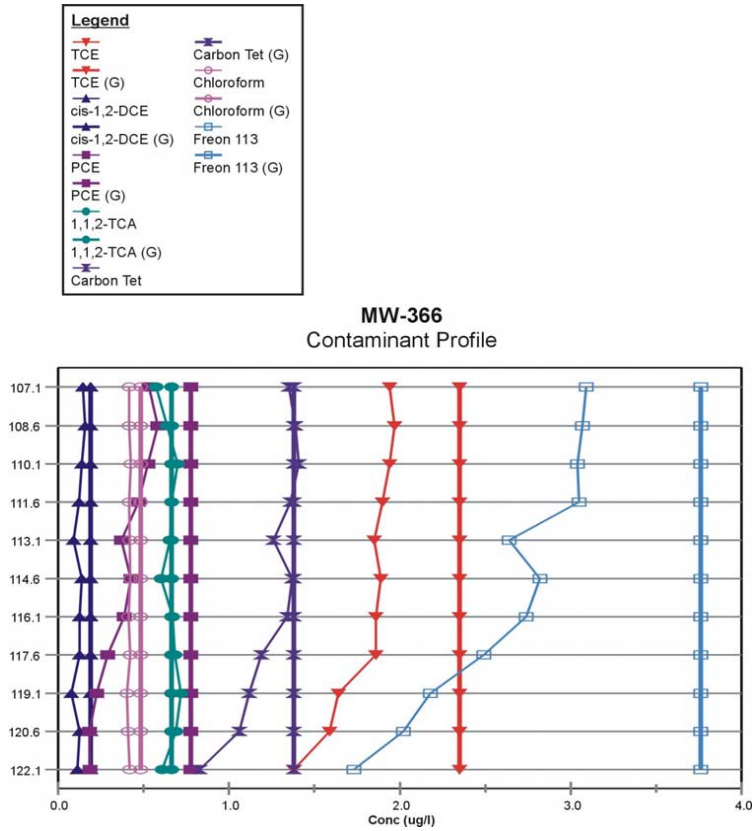
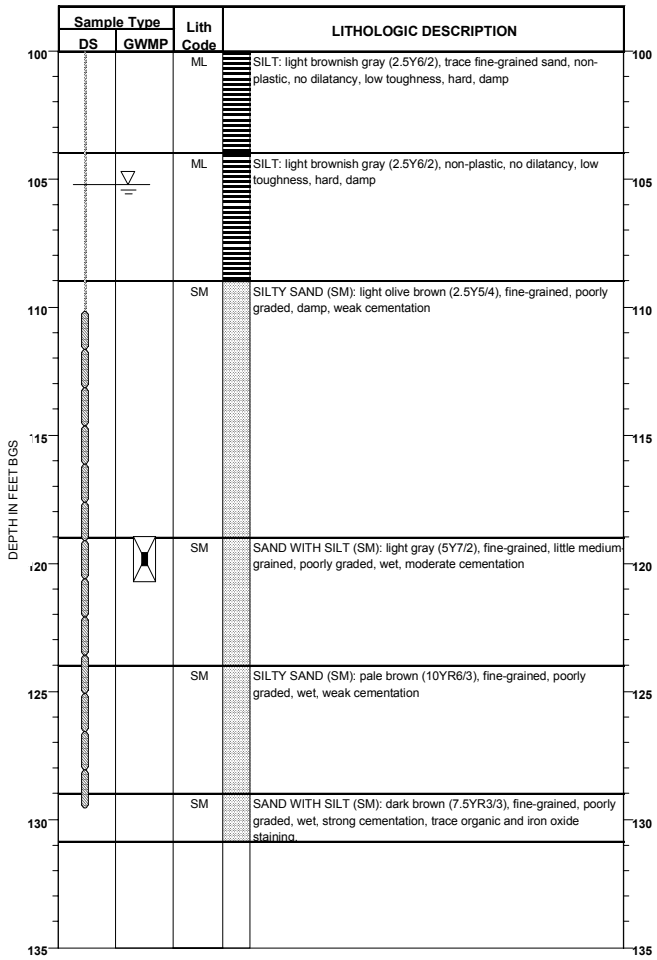
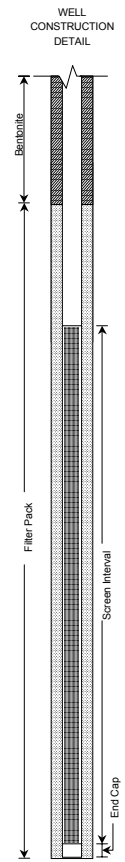


Figure E.26. MW-366 Lithologic Log and Well Contamination Profile

Well Number: **MW-381**
Monitoring Zone: A
Total Depth (ft bgs): 130.5
Screen Interval (ft bgs): 109.8-129.8
# of Diffusion Samplers: 13 Water Level (ft bgs): 105.15





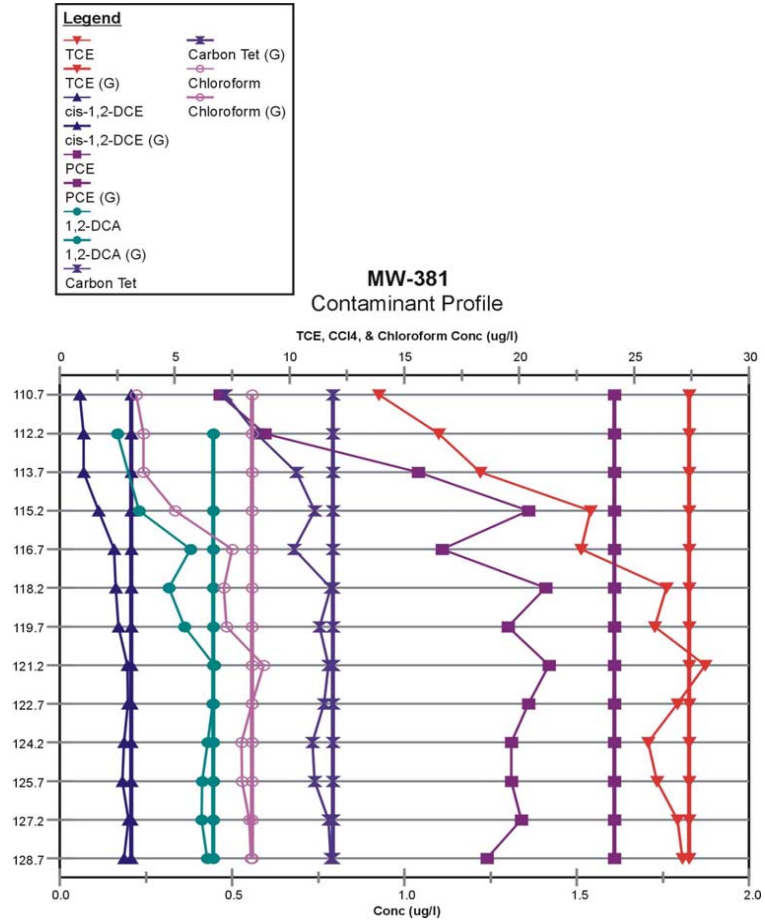
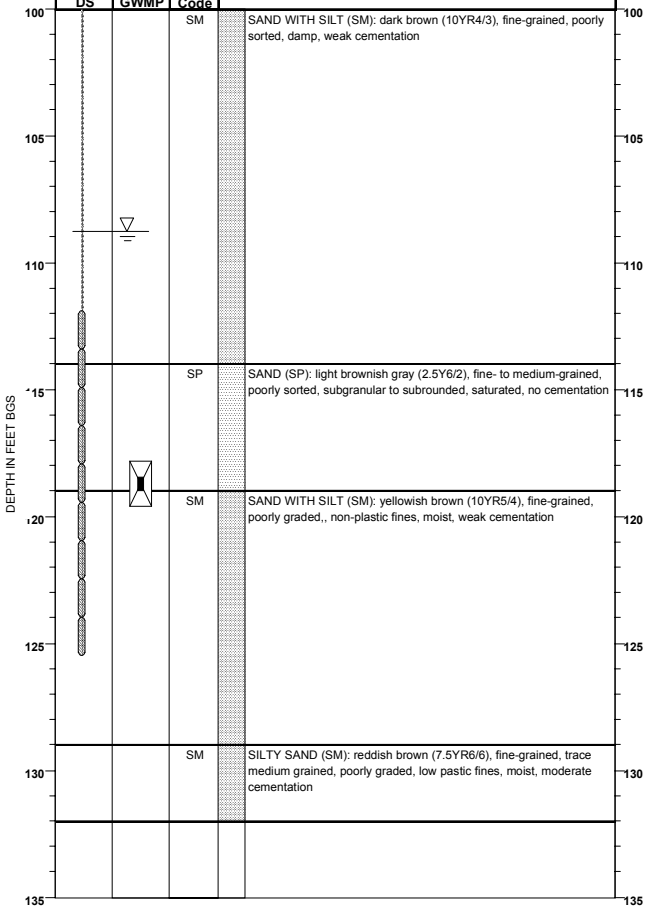
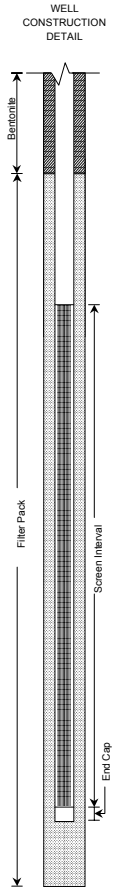


Figure E.27. MW-381 Lithologic Log and Well Contamination Profile

Well Number: **MW-382**
Monitoring Zone: A
Total Depth (ft bgs): 132
Screen Interval (ft bgs): 109.2-128.8
# of Diffusion Samplers: 9 Water Level (ft bgs): 108.73

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
		SM	SAND WITH SILT (SM): dark brown (10YR4/3), fine-grained, poorly sorted, damp, weak cementation
		SP	SAND (SP): light brownish gray (2.5Y6/2), fine- to medium-grained, poorly sorted, subgranular to subrounded, saturated, no cementation
		SM	SAND WITH SILT (SM): yellowish brown (10YR5/4), fine-grained, poorly graded,, non-plastic fines, moist, weak cementation
		SM	SILTY SAND (SM): reddish brown (7.5YR6/6), fine-grained, trace medium grained, poorly graded, low pastic fines, moist, moderate cementation





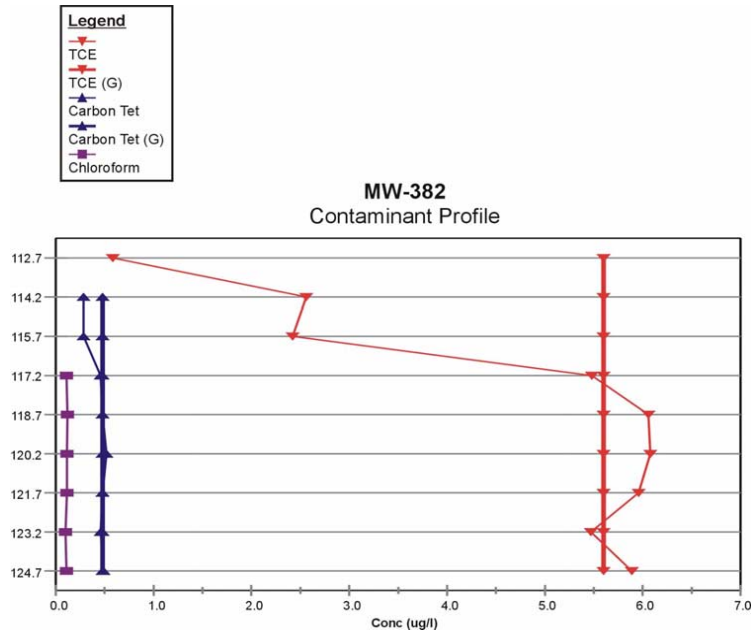
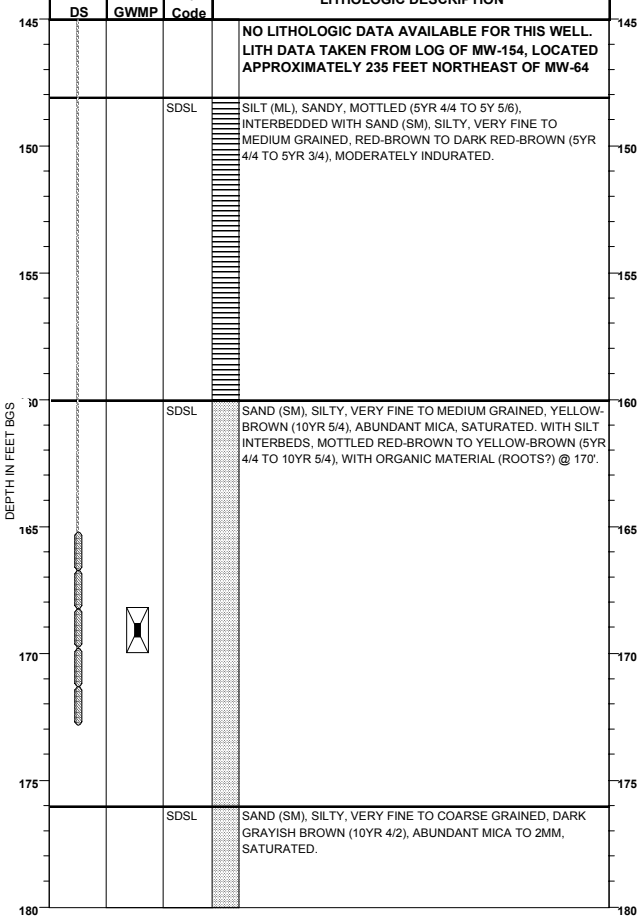
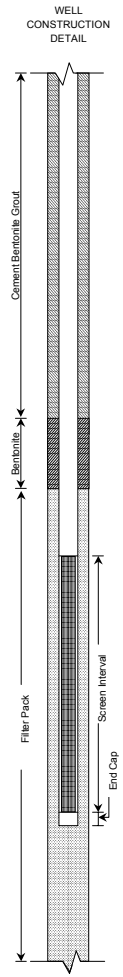


Figure E.28. MW-382 Lithologic Log and Well Contamination Profile

Well Number: **MW-64**
Monitoring Zone: B
Total Depth (ft bgs): UNK
Screen Interval (ft bgs): 164-174
# of Diffusion Samplers: 5 Water Level (ft bgs): 105.23

Sample Type DS	Sample Type GWMP	Lith Code	LITHOLOGIC DESCRIPTION
			NO LITHOLOGIC DATA AVAILABLE FOR THIS WELL. LITH DATA TAKEN FROM LOG OF MW-154, LOCATED APPROXIMATELY 235 FEET NORTHEAST OF MW-64
		SDSL	SILT (ML), SANDY, MOTTLED (5YR 4/4 TO 5Y 5/6), INTERBEDDED WITH SAND (SM), SILTY, VERY FINE TO MEDIUM GRAINED, RED-BROWN TO DARK RED-BROWN (5YR 4/4 TO 5YR 3/4), MODERATELY INDURATED.
		SDSL	SAND (SM), SILTY, VERY FINE TO MEDIUM GRAINED, YELLOW-BROWN (10YR 5/4), ABUNDANT MICA, SATURATED. WITH SILT INTERBEDS, MOTTLED RED-BROWN TO YELLOW-BROWN (5YR 4/4 TO 10YR 5/4), WITH ORGANIC MATERIAL (ROOTS?) @ 170'.
		SDSL	SAND (SM), SILTY, VERY FINE TO COARSE GRAINED, DARK GRAYISH BROWN (10YR 4/2), ABUNDANT MICA TO 2MM, SATURATED.





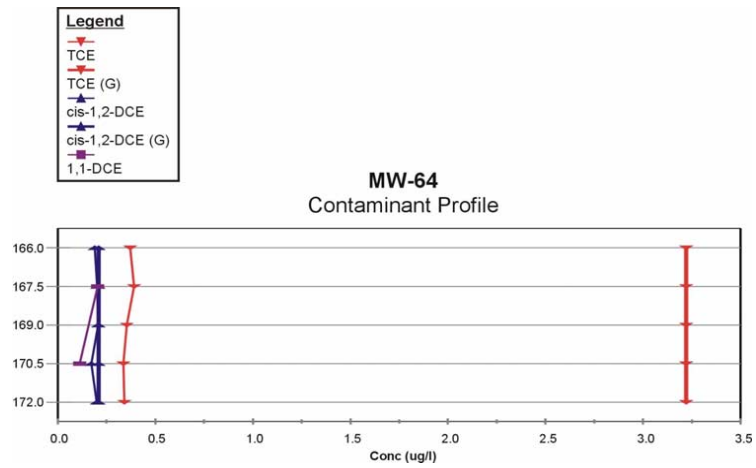


Figure E.29. MW-64 Lithologic Log and Well Contamination Profile

Well Number: **MW-75**
Monitoring Zone: A
Total Depth (ft bgs): UNK
Screen Interval (ft bgs): 115-125
# of Diffusion Samplers: 5 Water Level (ft bgs): 105.23

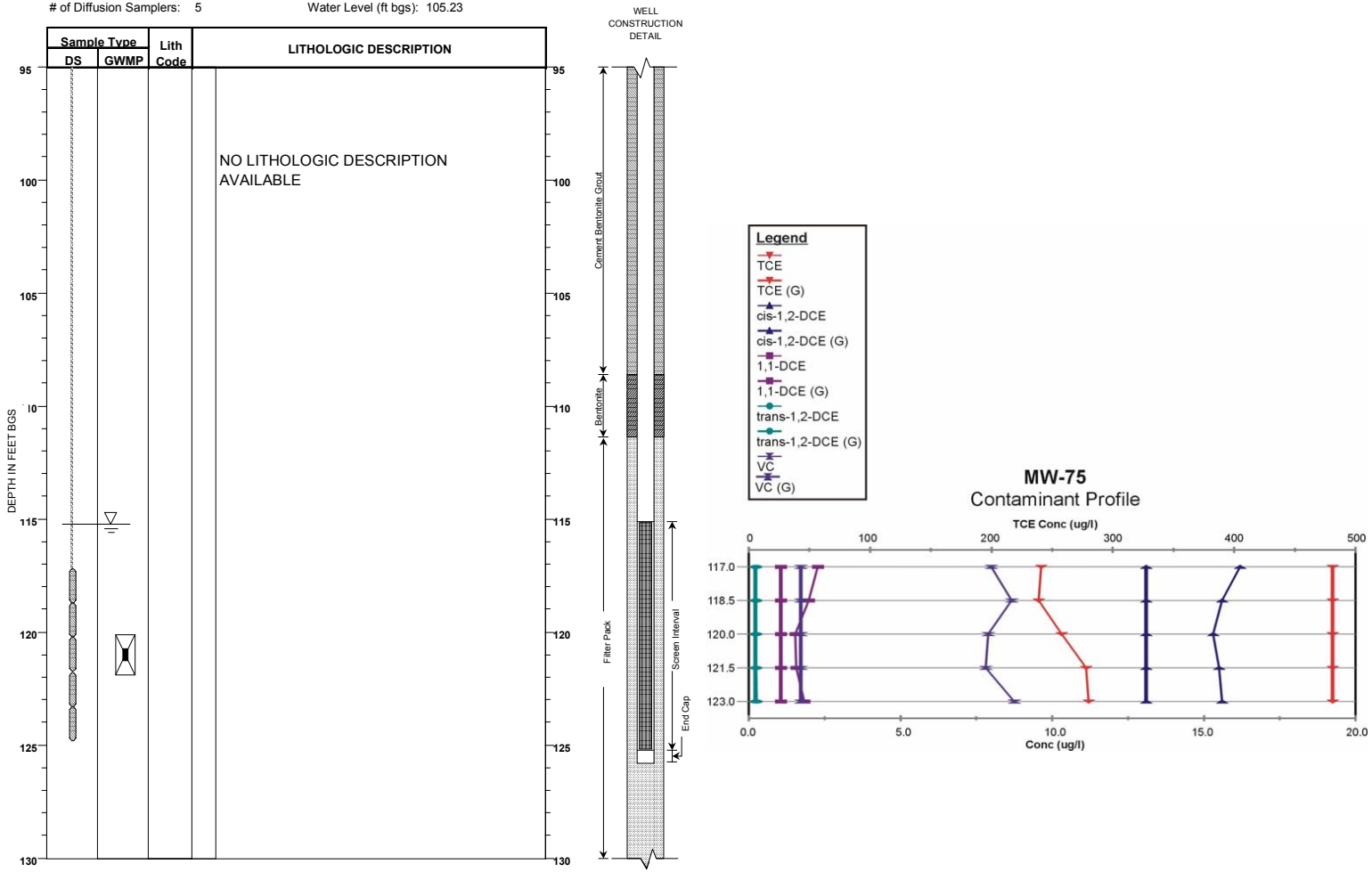


Figure E.30. MW-75 Lithologic Log and Well Contamination Profile

Table E.1. Dixon's Extreme Value Test - Identify wells w/distinct vertical contamination profiles

Well Number	Analyte	Count	C-critical	Case 1: X_1 potential outlier		Case 2: X_n is potential outlier		True Outlier?
				C-test	X_1 outlier?	C-test	X_n outlier?	
MW-136	1,1-DCA	9	0.512	0.1429	No	0.0000	No	
	1,1-DCE	9	0.512	0.0882	No	0.3542	No	
	Chloroform	7	0.507	0.5693	**Yes**	0.0438	No	No
	cis-1,2-DCE	9	0.512	0.0000	No	0.1379	No	
	TCE	9	0.512	0.1176	No	0.1818	No	
MW-148[1]	*cis*-1,2-DCE	5	0.642	0.0474	No	0.9194	**Yes**	**Yes**
	TCE	5	0.642	0.0984	No	0.8852	**Yes**	**Yes**
MW-154	Carbon tet	5	0.642	0.0169	No	0.6780	**Yes**	No
	Chloroform	5	0.642	0.0043	No	0.7361	**Yes**	No
	cis-1,2-DCE	5	0.642	0.0729	No	0.7083	**Yes**	**Yes**
	TCE	5	0.642	0.0348	No	0.7478	**Yes**	**Yes**
MW-155	1,1-DCA	5	0.642	0.1560	No	0.5140	No	
	1,1-DCE	5	0.642	0.2118	No	0.5698	No	
	1,2-DCA	5	0.642	0.2692	No	0.4923	No	
	Chloroform	5	0.642	0.0189	No	0.8443	**Yes**	No
	cis-1,2-DCE	5	0.642	0.2172	No	0.6104	No	
	TCE	5	0.642	0.0931	No	0.7255	**Yes**	**Yes**
	Toluene	4	0.765	0.3167	No	0.1667	No	
	trans-1,2-DCE	5	0.642	0.0744	No	0.7503	**Yes**	No
MW-156	1,1,2-TCA	4	0.765	0.0974	No	0.4474	No	
	1,1-DCA	5	0.642	0.2500	No	0.6250	No	
	1,1-DCE	5	0.642	0.3333	No	0.0556	No	
	1,2-DCA	5	0.642	0.5250	No	0.1250	No	
	Chloroform	5	0.642	0.0000	No	0.7750	**Yes**	No
	cis-1,2-DCE	5	0.642	0.3333	No	0.0000	No	
	TCE	5	0.642	0.5500	No	0.1000	No	
	trans-1,2-DCE	5	0.642	0.4948	No	0.1340	No	
MW-159	Chloroform	5	0.642	0.2500	No	0.2500	No	
	cis-1,2-DCE	5	0.642	0.6667	**Yes**	0.0833	No	No
	PCE	5	0.642	0.1515	No	0.5152	No	
	TCE	5	0.642	0.5426	No	0.4043	No	
MW-166	1,1-DCA	4	0.765	0.3585	No	0.6226	No	
	1,1-DCE	4	0.765	0.0294	No	0.0000	No	
	1,2-DCA	4	0.765	0.3151	No	0.5342	No	
	Chloroform	4	0.765	0.5476	No	0.3810	No	
	cis-1,2-DCE	4	0.765	0.9231	**Yes**	0.0769	No	No
	TCE	4	0.765	0.2903	No	0.4839	No	
	trans-1,2-DCE	4	0.765	0.5984	No	0.2835	No	
MW-201	Chloroform	4	0.765	0.5317	No	0.4585	No	
	cis-1,2-DCE	5	0.642	0.0370	No	0.5370	No	
	TCE	5	0.642	0.3902	No	0.1220	No	

Table E.1. Dixon's Extreme Value Test (continued)

Well Number	Analyte	Count	C-critical	Case 1: X_1 potential outlier		Case 2: X_n is potential outlier		True Outlier?
				C-test	X_1 outlier?	C-test	X_n outlier?	
MW-206	1,1-DCA	9	0.512	0.6705	**Yes**	0.1237	No	**Yes**
	Chloroform	9	0.512	0.7766	**Yes**	0.1373	No	No
	cis-1,2-DCE	9	0.512	0.5845	**Yes**	0.0652	No	**Yes**
	TCE	9	0.512	0.7981	**Yes**	0.2182	No	**Yes**
MW-214	1,1-DCA	5	0.642	0.0000	No	0.0000	No	
	1,1-DCE	5	0.642	0.0000	No	0.6667	**Yes**	No
	Carbon tet	5	0.642	0.6129	No	0.3226	No	
	Chloroform	5	0.642	0.0769	No	0.5385	No	
	cis-1,2-DCE	5	0.642	0.2500	No	0.2500	No	
	Freon 113	5	0.642	0.4342	No	0.0132	No	
	PCE	5	0.642	0.1778	No	0.0000	No	
	TCE	5	0.642	0.2000	No	0.6000	No	
	trans-1,2-DCE	5	0.642	0.2927	No	0.1951	No	
MW-216	1,1-DCA	5	0.642	0.1875	No	0.3875	No	
	1,1-DCE	5	0.642	0.0571	No	0.4571	No	
	1,2-DCA	5	0.642	0.0303	No	0.5051	No	
	Chloroform	5	0.642	0.0000	No	0.4286	No	
	cis-1,2-DCE	5	0.642	0.0400	No	0.3400	No	
	TCE	5	0.642	0.1078	No	0.3627	No	
	trans-1,2-DCE	5	0.642	0.2227	No	0.5078	No	
MW-218	*cis*-1,2-DCE	5	0.642	0.0000	No	0.3191	No	
	TCE	5	0.642	0.5000	No	0.3000	No	
MW-235	1,1-DCE	4	0.765	0.2500	No	0.7500	No	
	Carbon tet	4	0.765	0.8467	**Yes**	0.1133	No	**Yes**
	Chloroform	5	0.642	0.0411	No	0.0457	No	
	cis-1,2-DCE	5	0.642	0.8288	**Yes**	0.1421	No	**Yes**
	Freon 113	5	0.642	0.0462	No	0.1043	No	
	PCE	5	0.642	0.2098	No	0.0814	No	
	TCE	5	0.642	0.7529	**Yes**	0.0769	No	**Yes**
MW-270	1,1-DCE	5	0.642	0.3750	No	0.0417	No	
	1,2-DCA	5	0.642	0.5122	No	0.4146	No	
	Chloroform	5	0.642	0.0833	No	0.4048	No	
	cis-1,2-DCE	5	0.642	0.2464	No	0.1739	No	
	Freon 113	5	0.642	0.3378	No	0.6374	No	
	PCE	5	0.642	0.3968	No	0.5344	No	
	TCE	5	0.642	0.4000	No	0.1000	No	
MW-271	1,1-DCE	7	0.507	0.0289	No	0.6302	**Yes**	**Yes**
	Carbon tet	7	0.507	0.0036	No	0.9815	**Yes**	No
	Chloroform	7	0.507	0.0484	No	0.8387	**Yes**	**Yes**
	cis-1,2-DCE	7	0.507	0.8561	**Yes**	0.0288	No	**Yes**
	Freon 113	7	0.507	0.4918	No	0.0328	No	

Table E.1. Dixon's Extreme Value Test (continued)

Well Number	Analyte	Count	C-critical	Case 1: X_1 potential outlier C-test	Case 1: X_1 potential outlier X_1 outlier?	Case 2: X_n is potential outlier C-test	Case 2: X_n is potential outlier X_n outlier?	True Outlier?
MW-271	PCE	7	0.507	0.5085	**Yes**	0.2287	No	**Yes**
(cont.)	TCE	7	0.507	0.7891	**Yes**	0.0352	No	**Yes**
MW-282	Carbon tet	7	0.507	0.0218	No	0.0481	No	
	Chloroform	7	0.507	0.0181	No	0.0237	No	
	Freon 113	7	0.507	0.3548	No	0.3387	No	
	TCE	7	0.507	0.0046	No	0.1002	No	
MW-286	1,1-DCA	9	0.512	0.3846	No	0.2727	No	
	1,1-DCE	9	0.512	0.0964	No	0.1935	No	
	1,2-DCA	9	0.512	0.4648	No	0.1556	No	
	Chloroform	9	0.512	0.4431	No	0.1913	No	
	cis-1,2-DCE	9	0.512	0.4490	No	0.1290	No	
	Freon 113	9	0.512	0.1786	No	0.0612	No	
	PCE	9	0.512	0.5252	**Yes**	0.0201	No	No
	TCE	9	0.512	0.5866	**Yes**	0.2745	No	No
	trans-1,2-DCE	9	0.512	0.2688	No	0.0656	No	
MW-287	1,1-DCA	5	0.642	0.5039	No	0.1260	No	
	1,1-DCE	5	0.642	0.2979	No	0.2553	No	
	Carbon tet	5	0.642	0.3373	No	0.4940	No	
	Chloroform	5	0.642	0.1071	No	0.0357	No	
	cis-1,2-DCE	5	0.642	0.4320	No	0.1200	No	
	Freon 113	5	0.642	0.1037	No	0.5333	No	
	PCE	5	0.642	0.2000	No	0.5647	No	
	TCE	5	0.642	0.3333	No	0.5185	No	
MW-288	1,1-DCA	9	0.512	0.5455	**Yes**	0.5565	**Yes**	No
	1,1-DCE	9	0.512	0.6850	**Yes**	0.6429	**Yes**	**Yes**
	Chloroform	9	0.512	0.7313	**Yes**	0.2174	No	No
	cis-1,2-DCE	9	0.512	0.5328	**Yes**	0.2967	No	No
	Freon 113	9	0.512	0.5699	**Yes**	0.4737	No	**Yes**
	PCE	9	0.512	0.2708	No	0.1954	No	
	TCE	9	0.512	0.5844	**Yes**	0.3600	No	**Yes**
MW-314	Chloroform	5	0.642	0.1000	No	0.4500	No	
	cis-1,2-DCE	5	0.642	0.2000	No	0.6000	No	
	TCE	5	0.642	0.1500	No	0.1250	No	
MW-325	1,1-DCE	9	0.512	0.6190	**Yes**	0.5294	**Yes**	No
	cis-1,2-DCE	5	0.642	0.0909	No	0.0000	No	
	Freon 113	9	0.512	0.0645	No	0.3095	No	
	TCE	9	0.512	0.3793	No	0.1818	No	
MW-326	1,1-DCA	5	0.642	0.0149	No	0.8507	**Yes**	No
	1,1-DCE	5	0.642	0.1412	No	0.3412	No	
	Chloroform	5	0.642	0.2712	No	0.5254	No	
	cis-1,2-DCE	5	0.642	0.0213	No	0.7128	**Yes**	No

Table E.1. Dixon's Extreme Value Test (continued)

Well Number	Analyte	Count	C-critical	Case 1: X_1 potential outlier		Case 2: X_n is potential outlier		True Outlier?
				C-test	X_1 outlier?	C-test	X_n outlier?	
MW-326	*cis*-1,2-DCE	5	0.642	0.0213	No	0.7128	**Yes**	No
	TCE	5	0.642	0.1154	No	0.4615	No	
MW-343	Carbon tet	5	0.642	0.4400	No	0.0800	No	
	Chloroform	5	0.642	0.1786	No	0.2143	No	
	cis-1,2-DCE	5	0.642	0.3333	No	0.0952	No	
	TCE	5	0.642	0.2308	No	0.2308	No	
MW-362	TCE	3	0.941	0.0526	No	0.9474	**Yes**	No
MW-364	1,1-DCE	3	0.941	0.6071	No	0.3929	No	
	Carbon tet	3	0.941	0.2222	No	0.7778	No	
	Chloroform	3	0.941	0.2258	No	0.7742	No	
	cis-1,2-DCE	3	0.941	0.5000	No	0.5000	No	
	Freon 113	3	0.941	0.1250	No	0.8750	No	
	PCE	3	0.941	0.0811	No	0.9189	No	
	TCE	3	0.941	0.5882	No	0.4118	No	
MW-366	1,1,2-TCA	11	0.576	0.3148	No	0.2458	No	
	Carbon tet	11	0.576	0.5480	No	0.1143	No	
	Chloroform	11	0.576	0.5000	No	0.0625	No	
	cis-1,2-DCE	11	0.576	0.5688	No	0.2553	No	
	Freon 113	11	0.576	0.3435	No	0.0374	No	
	PCE	11	0.576	0.1424	No	0.1472	No	
	TCE	11	0.576	0.5000	No	0.0789	No	
MW-381	1,2-DCA	11	0.576	0.5714	No	0.0872	No	
	Carbon tet	13	0.521	0.7317	**Yes**	0.0310	No	**Yes**
	Chloroform	13	0.521	0.0697	No	0.1052	No	
	cis-1,2-DCE	13	0.521	0.0975	No	0.0232	No	
	PCE	13	0.521	0.6809	**Yes**	0.0727	No	**Yes**
	TCE	13	0.521	0.3636	No	0.1034	No	
MW-382[2]	Carbon tet	8	0.554	0.0049	No	0.1207	No	
	Chloroform	6	0.56	0.3810	No	0.2857	No	
	TCE	9	0.512	0.6085	**Yes**	0.0036	No	**Yes**
MW-64	*cis*-1,2-DCE	5	0.642	0.4857	No	0.1714	No	
	TCE	5	0.642	0.0893	No	0.3571	No	
MW-75	1,1-DCE	5	0.642	0.0541	No	0.4054	No	
	cis-1,2-DCE	5	0.642	0.2222	No	0.6667	**Yes**	No
	TCE	5	0.642	0.0488	No	0.0488	No	
	trans-1,2-DCE	5	0.642	0.0556	No	0.2222	No	
	Vinyl chloride	5	0.642	0.0851	No	0.0957	No	

[1] Lowest outlier values for cis-1,2-DCE and TCE in MW-148 were evaluated.

[2] TCE results in MW-382 were log-normally distributed.

APPENDIX F

STATISTICAL EVALUATIONS

Table F.1. Approximate t-Test of Means: Diffusion Sampler Data Set to GWMP

		Diffusion Sampler Data			2Q99 GWMP Data		α = 5%			DS
Well No	Analyte	Mean (ug/l)	StDev (ug/l)	# Samplers	GWMP (ug/l)	Lab DL	$t_{calc'd}$	$t_{\alpha,\nu}$	H_0: μ_{DS} - $\mu_{GWMP} \leq 15\%$	Statistically Equalivalent?
MW-136	1,1-DCA	1.76	0.03	9	1.84	0.0588	(22.045)	1.860	Accept	**Equal**
	1,1-DCE	0.250	0.016	9	0.209	0.0819	1.798	1.860	Accept	**Equal**
	cis-1,2-DCE	0.597	0.022	9	0.686	0.0407	(1.940)	1.860	Accept	**Equal**
	TCE	9.8	0.2	9	12.8	0.0499	15.166	1.860	REJECT	LOWER
MW-148	*cis*-1,2-DCE	6.17	1.85	5	4.06	0.0595	1.805	2.132	Accept	**Equal**
	TCE	16.6	5.1	5	10.7	0.0929	1.905	2.132	Accept	**Equal**
MW-154	Chloroform	0.9	0.2	5	0.4	0.0424	5.587	2.132	REJECT	HIGHER
	cis-1,2-DCE	1.88	0.38	5	0.557	0.0595	7.222	2.132	REJECT	HIGHER
	TCE	23.4	4.7	5	7.03	0.0929	7.287	2.132	REJECT	HIGHER
MW-155	1,1-DCA	0.478	0.192	5	0.348	0.0588	0.908	2.132	Accept	**Equal**
	1,1-DCE	1.67	0.79	5	1.15	0.0819	0.977	2.132	Accept	**Equal**
	1,2-DCA	0.251	0.048	5	0.226	0.0408	(0.416)	2.132	Accept	**Equal**
	Chloroform	0.692	0.089	5	0.684	0.06	(2.374)	2.132	Accept	**Equal**
	cis-1,2-DCE	10.11	2.08	5	8.65	0.0407	0.173	2.132	Accept	**Equal**
	trans-1,2-DCE	0.132	0.060	5	0.152	0.0422	(0.104)	2.132	Accept	**Equal**
	TCE	16.2	8.3	5	15	0.0499	(0.295)	2.132	Accept	**Equal**
MW-156	1,1-DCA	1.472	0.030	5	0.836	0.0736	38.703	2.132	REJECT	HIGHER
	1,1-DCE	2.40	0.08	5	1.16	0.102	30.840	2.132	REJECT	HIGHER
	1,2-DCA	0.742	0.031	5	0.639	0.0349	0.512	2.132	Accept	**Equal**
	Chloroform	0.981	0.017	5	0.779	0.0424	11.539	2.132	REJECT	HIGHER
	cis-1,2-DCE	23.0	0.4	5	19.2	0.0595	5.391	2.132	REJECT	HIGHER
	TCE	72.5	0.8	5	66.5	0.0929	(11.110)	2.132	Accept	**Equal**
MW-159	Chloroform	1.03	0.02	5	1.16	0.0424	(5.727)	2.132	Accept	**Equal**
	cis-1,2-DCE	17.9	0.5	5	20	0.0595	(4.243)	2.132	Accept	**Equal**
	PCE	1.38	0.13	5	3.02	0.114	20.897	2.132	REJECT	LOWER
	TCE	85.4	3.3	5	89.6	0.929	(6.205)	2.132	Accept	**Equal**
MW-166	*cis*-1,2-DCE	16.93	0.62	4	3.61	0.0595	41.305	2.353	REJECT	HIGHER
	TCE	44.4	1.3	4	10.4	0.0929	49.568	2.353	REJECT	HIGHER
MW-201	Chloroform	0.0990	0.0084	4	0.0989	0.06	(3.508)	2.353	Accept	**Equal**
	cis-1,2-DCE	0.498	0.022	5	0.481	0.0407	(5.657)	2.132	Accept	**Equal**
	TCE	9.84	0.33	5	9.39	0.0499	(6.556)	2.132	Accept	**Equal**
MW-206	1,1-DCA	3.8	0.9	9	4.1	0.0736	(1.130)	1.860	Accept	**Equal**
	Chloroform	0.277	0.063	9	0.202	0.0424	2.132	1.860	REJECT	HIGHER
	cis-1,2-DCE	1.41	0.34	9	1.46	0.0595	(1.453)	1.860	Accept	**Equal**
	TCE	3.43	0.69	9	2.84	0.0929	0.725	1.860	Accept	**Equal**
MW-214	Freon 113	0.759	0.032	5	0.783	0.112	(6.571)	2.132	Accept	**Equal**
	1,1-DCA	21.6	0.1	5	20.8	0.0588	(96.298)	2.132	Accept	**Equal**
	1,1-DCE	1.2	0.0	5	1.1	0.0819	(10.081)	2.132	Accept	**Equal**
	Carbon tet	0.162	0.011	5	0.172	0.0778	(3.127)	2.132	Accept	**Equal**
	Chloroform	0.374	0.005	5	0.385	0.06	(20.103)	2.132	Accept	**Equal**
	cis-1,2-DCE	12.4	0.2	5	11	0.0407	(3.675)	2.132	Accept	**Equal**
	PCE	0.454	0.043	5	0.556	0.0591	0.972	2.132	Accept	**Equal**
	trans-1,2-DCE	0.208	0.017	5	0.351	0.0422	12.170	2.132	REJECT	LOWER
	TCE	12.1	0.2	5	12.2	0.0499	(20.676)	2.132	Accept	**Equal**
MW-216	1,1-DCE	0.27	0.03	5	0.16	0.102	6.929	2.132	REJECT	HIGHER
	1,2-DCA	0.477	0.041	5	0.305	0.0349	6.936	2.132	REJECT	HIGHER
	Chloroform	0.302	0.030	5	0.197	0.0424	5.624	2.132	REJECT	HIGHER
	cis-1,2-DCE	18.3	2.2	5	12	0.0595	4.551	2.132	REJECT	HIGHER
	TCE	40.6	4.3	5	31.3	0.0929	2.353	2.132	REJECT	HIGHER
MW-218	*cis*-1,2-DCE	1.026	0.041	5	0.693	0.0595	12.523	2.132	REJECT	HIGHER
	TCE	1.44	0.07	5	1.35	0.0929	(3.455)	2.132	Accept	**Equal**

Table F.1. Approximate t-Test of Means: Diffusion Sampler Data Set to GWMP (continued)

		Diffusion Sampler Data			2Q99 GWMP Data		α = 5%			DS
Well No	Analyte	Mean (ug/l)	StDev (ug/l)	# Samplers	GWMP (ug/l)	Lab DL	$t_{calc'd}$	$t_{\alpha,\nu}$	H_0: μ_{DS} - $\mu_{GWMP} \leq 15\%$	Statistically Equalivalent?
MW-235	Freon 113	0.87	0.66	5	1.95	0.112	2.648	2.132	REJECT	LOWER
	1,1-DCE	0.204	0.023	3	0.248	0.102	0.489	2.920	Accept	**Equal**
	Carbon tet	1.17	0.69	4	2.31	0.0962	2.314	2.353	Accept	**Equal**
	Chloroform	0.367	0.225	5	0.618	0.0424	1.573	2.132	Accept	**Equal**
	cis-1,2-DCE	0.76	0.23	5	1.01	0.0595	0.903	2.132	Accept	**Equal**
	PCE	10.1	5.2	5	23.5	0.114	4.300	2.132	REJECT	LOWER
	TCE	53.1	17.2	5	60.6	0.0929	(0.210)	2.132	Accept	**Equal**
MW-270	Freon 113	0.84	0.16	5	1.14	0.112	1.806	2.132	Accept	**Equal**
	1,1-DCE	0.225	0.010	5	0.127	0.102	16.975	2.132	REJECT	HIGHER
	1,2-DCA	0.42	0.01	5	1.53	0.0349	135.466	2.132	REJECT	LOWER
	Chloroform	0.486	0.034	5	0.619	0.0424	2.625	2.132	REJECT	LOWER
	cis-1,2-DCE	4.12	0.29	5	4.84	0.0595	(0.077)	2.132	Accept	**Equal**
	PCE	6.2	1.3	5	8.9	0.114	2.247	2.132	REJECT	LOWER
	TCE	176.2	4.1	5	158	0.929	(2.965)	2.132	Accept	**Equal**
MW-271	Freon 113	1.44	0.21	7	1.64	0.112	(0.521)	1.943	Accept	**Equal**
	Chloroform	2.09	0.44	7	2.38	0.0424	(0.400)	1.943	Accept	**Equal**
	cis-1,2-DCE	1.111	0.247	7	0.856	0.0595	1.356	1.943	Accept	**Equal**
	PCE	0.322	0.093	7	0.772	0.114	9.559	1.943	REJECT	LOWER
	TCE	55.4	9.0	7	68.4	0.0929	0.811	1.943	Accept	**Equal**
MW-282	Freon 113	16.2	1.9	7	28.7	0.0599	11.292	1.943	REJECT	LOWER
	Carbon tet	2.16	1.28	7	2.71	0.0778	0.297	1.943	Accept	**Equal**
	Chloroform	0.607	0.353	7	0.762	0.06	0.305	1.943	Accept	**Equal**
	TCE	2.02	1.21	7	2.73	0.0499	0.654	1.943	Accept	**Equal**
MW-286	Freon 113	0.142	0.021	9	0.153	0.112	(1.683)	1.860	Accept	**Equal**
	1,1-DCA	16.5	0.5	9	12.5	0.0736	13.374	1.860	REJECT	HIGHER
	1,1-DCE	0.577	0.035	9	0.575	0.102	(7.201)	1.860	Accept	**Equal**
	1,2-DCA	0.389	0.024	9	0.333	0.0349	0.756	1.860	Accept	**Equal**
	Chloroform	0.922	0.060	9	0.815	0.0424	(0.769)	1.860	Accept	**Equal**
	cis-1,2-DCE	7.50	0.50	9	6.44	0.0595	0.582	1.860	Accept	**Equal**
	PCE	0.83	0.20	9	1.56	0.114	7.615	1.860	REJECT	LOWER
	TCE	7.74	0.60	9	7.52	0.0929	(4.574)	1.860	Accept	**Equal**
MW-287	Freon 113	47.4	5.3	5	20.2	0.112	10.234	2.132	REJECT	HIGHER
	1,1-DCE	3.02	0.19	5	1.25	0.102	19.114	2.132	REJECT	HIGHER
	Chloroform	0.348	0.014	5	0.141	0.0424	30.557	2.132	REJECT	HIGHER
	cis-1,2-DCE	0.532	0.050	5	0.288	0.0595	8.944	2.132	REJECT	HIGHER
	PCE	22.6	3.2	5	12.6	0.114	5.649	2.132	REJECT	HIGHER
	TCE	147.2	9.7	5	61.2	0.0929	17.652	2.132	REJECT	HIGHER
MW-288	Freon 113	39.0	6.9	9	37.9	0.112	(1.992)	1.860	Accept	**Equal**
	1,1-DCA	0.518	0.100	9	0.495	0.0736	(1.544)	1.860	Accept	**Equal**
	1,1-DCE	2.48	0.51	9	2.52	0.102	(1.995)	1.860	Accept	**Equal**
	Chloroform	0.304	0.021	9	0.331	0.0424	(3.205)	1.860	Accept	**Equal**
	cis-1,2-DCE	0.843	0.092	9	0.888	0.0595	(2.892)	1.860	Accept	**Equal**
	PCE	24.3	3.5	9	26.6	0.114	(1.439)	1.860	Accept	**Equal**
	TCE	167.4	25.8	9	163	0.929	(2.329)	1.860	Accept	**Equal**
MW-314	Chloroform	0.142	0.008	5	0.152	0.06	(3.578)	2.132	Accept	**Equal**
	cis-1,2-DCE	1.22	0.04	5	1.27	0.0407	(8.400)	2.132	Accept	**Equal**
	TCE	6.24	0.17	5	6.53	0.0499	(8.876)	2.132	Accept	**Equal**
MW-325	Freon 113	0.20	0.01	9	0.25	0.112	2.872	1.860	REJECT	LOWER
	1,1-DCE	0.187	0.016	9	0.204	0.102	(2.599)	1.860	Accept	**Equal**
	TCE	28.4	1.0	9	36.7	0.0929	8.117	1.860	REJECT	LOWER
MW-326	1,1-DCA	1.80	0.29	5	1.38	0.0736	1.655	2.132	Accept	**Equal**
	1,1-DCE	0.594	0.034	5	0.609	0.102	(5.007)	2.132	Accept	**Equal**

Table F.1. Approximate t-Test of Means: Diffusion Sampler Data Set to GWMP (continued)

		Diffusion Sampler Data			2Q99 GWMP Data		α = 5%			
Well No	Analyte	Mean (ug/l)	StDev (ug/l)	# Samplers	GWMP (ug/l)	Lab DL	$t_{calc'd}$	$t_{\alpha,\nu}$	H_0: μ_{DS} - $\mu_{GWMP} \leq 15\%$	DS Statistically Equalivalent?
MW-326	*cis*-1,2-DCE	0.418	0.039	5	0.443	0.0595	(2.364)	2.132	Accept	**Equal**
	TCE	8.19	0.31	5	5.45	0.0929	13.985	2.132	REJECT	HIGHER
MW-343	Carbon tet	1.95	0.10	5	1.64	0.0962	1.460	2.132	Accept	**Equal**
	Chloroform	0.184	0.012	5	0.152	0.0424	1.773	2.132	Accept	**Equal**
	cis-1,2-DCE	0.1150	0.0088	5	0.0704	0.0595	8.650	2.132	REJECT	HIGHER
	TCE	1.49	0.05	5	1.26	0.0929	1.717	2.132	Accept	**Equal**
MW-362	Freon 113	0.153	0.023	2	0.231	0.112	2.631	6.314	Accept	**Equal**
	TCE	0.362	0.011	3	0.766	0.0929	46.798	2.920	REJECT	LOWER
MW-364	1,1-DCE	0.241	0.014	3	0.526	0.0819	25.317	2.920	REJECT	LOWER
	Carbon tet	1.10	0.05	3	3.57	0.0778	70.948	2.920	REJECT	LOWER
	Chloroform	0.418	0.016	3	0.624	0.06	11.944	2.920	REJECT	LOWER
	cis-1,2-DCE	1.10	0.08	3	1.14	0.0407	(2.836)	2.920	Accept	**Equal**
	PCE	3.3	0.4	3	15.1	0.0591	40.238	2.920	REJECT	LOWER
	TCE	113.0	8.5	3	151	0.0998	3.112	2.920	REJECT	LOWER
MW-366	1,1,2-TCA	0.655	0.045	11	0.664	0.0392	(6.663)	1.812	Accept	**Equal**
	Freon 113	2.63	0.47	11	3.76	0.112	4.036	1.812	REJECT	LOWER
	Carbon tet	1.24	0.18	11	1.38	0.0962	(1.310)	1.812	Accept	**Equal**
	Chloroform	0.416	0.006	11	0.482	0.0424	(3.265)	1.812	Accept	**Equal**
	cis-1,2-DCE	0.123	0.023	11	0.189	0.0595	5.382	1.812	REJECT	LOWER
	PCE	0.380	0.142	11	0.776	0.114	6.517	1.812	REJECT	LOWER
	TCE	1.80	0.18	11	2.35	0.0929	3.507	1.812	REJECT	LOWER
MW-381	1,2-DCA	0.366	0.092	11	0.446	0.0408	0.471	1.812	Accept	**Equal**
	Carbon tet	10.7	1.4	13	11.9	0.0778	(1.557)	1.782	Accept	**Equal**
	Chloroform	6.71	2.03	13	8.38	0.06	0.741	1.782	Accept	**Equal**
	cis-1,2-DCE	0.150	0.053	13	0.207	0.0407	1.765	1.782	Accept	**Equal**
	PCE	1.17	0.31	13	1.61	0.0591	2.284	1.782	REJECT	LOWER
	TCE	23.6	4.6	13	27.4	0.0499	(0.281)	1.782	Accept	**Equal**
MW-382	Carbon tet	0.432	0.093	8	0.478	0.0962	(0.786)	1.895	Accept	**Equal**
	TCE	4.5	2.1	9	5.6	0.0929	0.376	1.860	Accept	**Equal**
MW-64	*cis*-1,2-DCE	0.194	0.014	5	0.208	0.0595	(2.807)	2.132	Accept	**Equal**
	TCE	0.36	0.02	5	3.22	0.0929	229.197	2.132	REJECT	LOWER
MW-75	1,1-DCE	1.83	0.30	5	1.06	0.102	4.518	2.132	REJECT	HIGHER
	Chloroform	0.188	0.025	2	0.924	0.0424	34.205	6.314	REJECT	LOWER
	cis-1,2-DCE	15.6	0.3	5	13.1	0.0595	3.824	2.132	REJECT	HIGHER
	trans-1,2-DCE	0.25	0.01	5	0.21	0.138	2.123	2.132	Accept	**Equal**
	TCE	259.2	19.5	5	481	0.929	17.128	2.132	REJECT	LOWER
	Vinyl chloride	8.22	0.45	5	1.71	0.0889	31.185	2.132	REJECT	HIGHER

	Count of Equivalent Subtotals			
Analyte	DS Lower	Equal	DS Higher	Grand Total
1,1,2-TCA		1		1
1,1-DCA		6	2	8
1,1-DCE	1	8	5	14
1,2-DCA	1	4	1	6
Carbon tet	1	7		8
Chloroform	3	13	5	21
cis-1,2-DCE	1	17	8	26
Freon 113	4	6	1	11
PCE	8	2	1	11
TCE	7	18	5	30
trans-1,2-DCE	1	2		3
Vinyl chloride			1	1
Grand Total	27	84	29	140
Percentage	19%	60%	21%	

Table F.2. Paired t-Test of Differences: Diffusion Sampler Mean vs. GWMP

	ln(1,1-DCA)		*ln(1,1-DCE)*		ln(1,2-DCA)		ln(Carbon Tet)		ln(Chloroform)	
Statistic	DS	GWMP	DS	GWMP	DS	GWMP	DS	GWMP	DS	GWMP
Mean	0.920	0.746	(0.410)	(0.611)	(0.874)	(0.767)	(0.124)	0.488	(0.723)	(0.688)
Variance	2.017	2.179	1.145	0.865	0.126	0.466	1.915	1.648	0.904	1.068
Observations	8	8	14	14	6	6	8	8	21	21
Pearson Correlation	0.989		0.914		0.427		0.724		0.875	
Hypothesized Mean Difference	0		0		0		0		0	
df	7		13		5		7		20	
Alpha	0.05		0.05		0.05		0.05		0.05	
t Stat	2.243		1.715		(0.421)		(1.739)		(0.315)	
P(T≤t) two-tail	0.060		0.110		0.691		0.126		0.756	
t Critical two-tail	2.365		2.160		2.571		2.365		2.086	
Null Hypothesis:	Accept		Accept		Accept		Accept		Accept	
Conclusion:	DS = GWMP		DS = GWMP		DS = GWMP		DS = GWMP		DS = GWMP	

Table F.2. Paired t-Test of Differences: Diffusion Sampler Mean vs. GWMP (continued)

	ln(*cis*-1,2-DCE)		ln(Freon 113)		ln(PCE)		ln(TCE)		*trans*-12-DCE	
Statistic	DS	GWMP	DS	GWMP	DS	GWMP	DS	GWMP	DS	GWMP
Mean	0.578	0.407	0.508	0.695	0.833	1.345	2.694	2.705	0.196	0.238
Variance	2.899	2.582	4.423	3.832	2.525	2.151	3.236	2.706	0.004	0.010
Observations	26	26	11	11	11	11	30	30	3	3
Pearson Correlation	0.966		0.981		0.939		0.939		0.442	
Hypothesized Mean Difference	0		0		0		0		0	
Df	25		10		10		29		2	
Alpha	0.05		0.05		0.05		0.05		0.05	
t Stat	1.974		(1.468)		(3.100)		(0.095)		(0.771)	
P(T≤t) two-tail	0.060		0.173		0.011		0.925		0.521	
t Critical two-tail	2.060		2.228		2.228		2.045		4.303	
Null Hypothesis:	Accept		Accept		Accept		Accept		Accept	
Conclusion:	DS = GWMP		DS = GWMP		DS = GWMP		DS = GWMP		DS = GWMP	

Table F.3. A-Zone Wells Wilcoxon Signed-Rank Test

Analyte	η_1 (µg/L)	η_2 (µg/L)	n	n for test	Wilcoxon Statistic	P-value	Estimated Median	Null Hypothesis	DS Compared to GWMP
TCE	23.25	27.40	124	124	2723.5	0.004	(1.30)	Reject	Lower
PCE	1.30	1.61	77	77	438	0.000	(0.72)	Reject	Lower
cis-1,2-DCE	1.16	1.01	96	96	2679	0.2	0.08	Accept	**Equal**
1,2-DCA	0.3925	0.4600	30	30	175.5	0.245	(0.03)	Accept	**Equal**
1,1-DCA	4.11	4.10	37	36	573	0.000	0.42	Reject	Higher
1,1-DCE	0.7310	0.8175	58	58	1197.5	0.008	0.07	Reject	Higher
Carbon tet	1.34	2.31	51	51	158.5	0.000	(0.44)	Reject	Lower
Chloroform	0.442	0.624	100	100	0	0.000	(1.34)	Reject	Lower
Freon 113	1.46	1.95	77	76	726	0.000	(0.33)	Reject	Lower
trans-1,2-DCE	0.221	0.210	15	15	33	0.132	(0.04)	Accept	**Equal**

η_1 = diffusion sampler median concentration
η_1 = GWMP median concentration

Table F.4. B-Zone Wells Wilcoxon Signed-Rank Test

Analyte	η_1 (µg/L)	η_2 (µg/L)	n	n for test	Wilcoxon Statistic	P-value	Estimated Median	Null Hypothesis	DS Compared to GWMP
TCE	8.09	6.53	44	44	489	0.949	(0.01)	Accept	**Equal**
cis-1,2-DCE	0.576	0.686	44	44	535.5	0.641	0.01	Accept	**Equal**
1,1-DCA	1.73	1.38	19	19	145	0.046	0.26	Reject	Higher
1,1-DCE	0.556	0.609	19	19	167.5	0.004	0.05	Reject	Higher
Chloroform	0.170	0.152	19	19	156.5	0.014	0.03	Reject	Higher

η_1 = diffusion sampler median concentration
η_1 = GWMP median concentration

Table F.5. C/D-Zone Wells Wilcoxon Signed-Rank Test

Analyte	η_1 (µg/L)	η_2 (µg/L)	n	n for test	Wilcoxon Statistic	P-value	Estimated Median	Null Hypothesis	DS Compared to GWMP
TCE	31.5	10.7	19	19	190	0.000	14.25	Reject	Higher
cis-1,2-DCE	9.09	4.06	19	19	190	0.000	4.89	Reject	Higher
Chloroform	0.5755	0.2985	10	10	55	0.006	0.30	Reject	Higher

η_1 = diffusion sampler median concentration
η_1 = GWMP median concentration

Table F.6. High Permeability Soils Wilcoxon Signed-Rank Test

Analyte	η_1 (µg/L)	η_2 (µg/L)	n	n for test	Wilcoxon Statistic	P-value	Estimated Median	Null Hypothesis	DS Compared to GWMP
TCE	20.20	10.55	110	110	3665	0.068	1.2	Accept	**Equal**
PCE	1.36	1.61	41	41	231.5	0.010	(0.4995)	Reject	Lower
cis-1,2-DCE	1.08	0.856	93	93	3114	0.000	0.2115	Reject	Higher
1,2-DCA	0.416	0.446	30	30	208.5	0.629	(0.018)	Accept	**Equal**
1,1-DCA	1.495	0.836	22	22	241	0.000	0.2935	Reject	Higher
1,1-DCE	0.562	0.609	40	40	629	0.003	0.1482	Reject	Higher
Carbon tet	2.05	3.57	27	27	30.5	0.000	(0.5)	Reject	Lower
Chloroform	0.456	0.482	71	71	1093.5	0.292	(0.021)	Accept	**Equal**
Freon 113	1.62	1.64	34	33	230.5	0.376	(0.052)	Accept	**Equal**

η_1 = diffusion sampler median concentration
η_1 = GWMP median concentration

Table F.7. Low Permeability Soils Wilcoxon Signed-Rank Test

Analyte	η_1 (µg/L)	η_2 (µg/L)	n	n for test	Wilcoxon Statistic	P-value	Estimated Median	Null Hypothesis	DS Compared to GWMP
TCE	8.55	7.52	54	54	551.5	0.101	(0.54)	Accept	**Equal**
PCE	0.524	0.776	29	29	0	0	(0.6145)	Reject	Lower
cis-1,2-DCE	1.50	1.46	43	43	562	0.285	0.1389	Accept	**Equal**
1,2-DCA	0.408	0.333	8	8	34	0.03	0.064	Reject	Higher
1,1-DCA	4.10	4.10	23	22	210	0.007	0.419	Reject	Higher
1,1-DCE	0.834	0.100	23	23	182	0.186	0.03125	Accept	**Equal**
Carbon tet	1.19	1.38	23	23	96.5	0.212	(0.08025)	Accept	**Equal**
Chloroform	0.416	0.482	47	47	505	0.536	(0.0195)	Accept	**Equal**
Freon 113	1.87	3.76	36	36	79.5	0	(0.6673)	Reject	Lower

η_1 = diffusion sampler median concentration
η_1 = GWMP median concentration

Table F.8. Approximate t-Test of Means: Middle Diffusion Sampler to GWMP Data Set

		Diffusion Sampler Data			Middle Diff Sampler		α = 5%			DS
Well No	Analyte	Mean (ug/l)	StDev (ug/l)	# Samplers	Conc (ug/l)	Lab DL	$t_{calc'd}$	$t_{\alpha,\nu}$	H_0: μ_{DS} - $\mu_{GWMP} \leq 15\%$	Statistically Equalivalent?
MW-136	1,1-DCA	1.76	0.03	9	1.72	0.0588	(25.000)	1.860	Accept	**Equal**
	1,1-DCE	0.250	0.016	9	0.260	0.0819	(5.404)	1.860	Accept	**Equal**
	Chloroform	0.0940	0.0047	7	0.0923	0.0424	(6.837)	1.943	Accept	**Equal**
	cis-1,2-DCE	0.597	0.022	9	0.580	0.0407	(9.767)	1.860	Accept	**Equal**
	TCE	9.83	0.21	9	9.97	0.0499	(19.579)	1.860	Accept	**Equal**
MW-148	*cis*-1,2-DCE	6.17	1.85	5	4.84	0.0595	0.723	2.132	Accept	**Equal**
	TCE	16.6	5.1	5	12.8	0.0929	0.844	2.132	Accept	**Equal**
MW-154	Carbon tet	0.735	0.120	5	0.717	0.0962	(1.670)	2.132	Accept	**Equal**
	Chloroform	0.940	0.192	5	0.895	0.0424	(1.039)	2.132	Accept	**Equal**
	cis-1,2-DCE	1.88	0.38	5	1.79	0.0595	(1.067)	2.132	Accept	**Equal**
	TCE	23.4	4.7	5	22.1	0.0929	(0.970)	2.132	Accept	**Equal**
MW-155	1,1-DCA	0.478	0.192	5	0.514	0.0588	(0.480)	2.132	Accept	**Equal**
	1,1-DCE	1.67	0.79	5	1.74	0.0819	(0.533)	2.132	Accept	**Equal**
	1,2-DCA	0.251	0.048	5	0.249	0.0408	(1.654)	2.132	Accept	**Equal**
	Chloroform	0.692	0.089	5	0.671	0.0424	(1.999)	2.132	Accept	**Equal**
	cis-1,2-DCE	10.1	2.1	5	10.1	0.0407	(1.623)	2.132	Accept	**Equal**
	Toluene	0.235	0.028	4	0.222	0.0645	(1.466)	2.353	Accept	**Equal**
	trans-1,2-DCE	0.132	0.060	5	0.119	0.0422	(0.180)	2.132	Accept	**Equal**
	TCE	16.2	8.3	5	15.7	0.0499	(0.513)	2.132	Accept	**Equal**
MW-156	1,1,2-TCA	0.111	0.018	4	0.095	0.0392	0.200	2.353	Accept	**Equal**
	1,1-DCA	1.47	0.03	5	1.46	0.0736	(15.690)	2.132	Accept	**Equal**
	1,1-DCE	2.40	0.08	5	2.47	0.102	(8.610)	2.132	Accept	**Equal**
	1,2-DCA	0.742	0.031	5	0.748	0.0349	(7.611)	2.132	Accept	**Equal**
	Chloroform	0.98	0.02	5	0.97	0.0424	(18.227)	2.132	Accept	**Equal**
	cis-1,2-DCE	23.0	0.4	5	23.4	0.0595	(17.950)	2.132	Accept	**Equal**
	trans-1,2-DCE	0.371	0.038	5	0.409	0.0422	(1.381)	2.132	Accept	**Equal**
	TCE	72.5	0.8	5	73	0.0929	(29.209)	2.132	Accept	**Equal**
MW-159	Chloroform	1.03	0.02	5	1.01	0.0424	(18.202)	2.132	Accept	**Equal**
	cis-1,2-DCE	17.9	0.5	5	18.3	0.0595	(11.055)	2.132	Accept	**Equal**
	PCE	1.38	0.13	5	1.37	0.114	(3.412)	2.132	Accept	**Equal**
	TCE	85.4	3.3	5	85.5	0.929	(8.535)	2.132	Accept	**Equal**
MW-166	1,1-DCA	0.417	0.022	4	0.414	0.0736	(5.373)	2.353	Accept	**Equal**
	1,1-DCE	0.314	0.019	4	0.331	0.102	(3.383)	2.353	Accept	**Equal**
	1,2-DCA	0.433	0.031	4	0.473	0.0349	(2.030)	2.353	Accept	**Equal**
	Chloroform	0.365	0.017	4	0.365	0.0424	(6.329)	2.353	Accept	**Equal**
	cis-1,2-DCE	16.9	0.6	4	17.2	0.0595	(7.454)	2.353	Accept	**Equal**
	trans-1,2-DCE	0.286	0.054	4	0.304	0.0422	(1.032)	2.353	Accept	**Equal**
	TCE	44.4	1.3	4	46.1	0.0929	(7.969)	2.353	Accept	**Equal**
MW-201	Chloroform	0.099	0.008	4	0.109	0.06	(1.512)	2.353	Accept	**Equal**
	cis-1,2-DCE	0.50	0.02	5	0.48	0.0407	(5.539)	2.132	Accept	**Equal**
	TCE	9.8	0.3	5	9.7	0.0499	(8.989)	2.132	Accept	**Equal**

Table F.8. Approximate t-Test of Means: Middle Diffusion Sampler to GWMP Data Set (continued)

		Diffusion Sampler Data			Middle Diff Sampler		α = 5%			DS
Well No	Analyte	Mean (ug/l)	StDev (ug/l)	# Samplers	Conc (ug/l)	Lab DL	$t_{calc'd}$	$t_{\alpha,\nu}$	H_0: μ_{DS} - $\mu_{GWMP} \leq 15\%$	Statistically Equalivalent?
MW-206	1,1-DCA	3.81	0.85	9	4.15	0.0736	(0.981)	1.860	Accept	**Equal**
	Chloroform	0.277	0.063	9	0.298	0.0424	(1.130)	1.860	Accept	**Equal**
	cis-1,2-DCE	1.4	0.3	9	1.6	0.0595	(0.418)	1.860	Accept	**Equal**
	TCE	3.43	0.69	9	3.71	0.0929	(1.217)	1.860	Accept	**Equal**
MW-214	Freon 113	0.759	0.032	5	0.714	0.112	(4.367)	2.132	Accept	**Equal**
	1,1-DCA	21.6	0.1	5	21.6	0.0588	(130.573)	2.132	Accept	**Equal**
	1,1-DCE	1.21	0.01	5	1.23	0.0819	(30.150)	2.132	Accept	**Equal**
	Carbon tet	0.162	0.011	5	0.165	0.0778	(4.304)	2.132	Accept	**Equal**
	Chloroform	0.374	0.005	5	0.375	0.06	(23.758)	2.132	Accept	**Equal**
	cis-1,2-DCE	12.4	0.2	5	12.2	0.0407	(22.456)	2.132	Accept	**Equal**
	PCE	0.5	0.0	5	0.4	0.0591	(0.313)	2.132	Accept	**Equal**
	trans-1,2-DCE	0.208	0.017	5	0.229	0.0422	(1.798)	2.132	Accept	**Equal**
	TCE	12.10	0.19	5	11.9	0.0499	(18.943)	2.132	Accept	**Equal**
MW-216	1,1-DCA	0.365	0.031	5	0.373	0.0736	(3.426)	2.132	Accept	**Equal**
	1,1-DCE	0.272	0.028	5	0.274	0.102	(3.079)	2.132	Accept	**Equal**
	1,2-DCA	0.477	0.041	5	0.445	0.0349	(1.909)	2.132	Accept	**Equal**
	Chloroform	0.302	0.030	5	0.277	0.0424	(1.234)	2.132	Accept	**Equal**
	cis-1,2-DCE	18.3	2.2	5	17.1	0.0595	(1.354)	2.132	Accept	**Equal**
	trans-1,2-DCE	0.298	0.096	5	0.243	0.0422	0.433	2.132	Accept	**Equal**
	TCE	40.6	4.3	5	38.2	0.0929	(1.737)	2.132	Accept	**Equal**
MW-218	*cis*-1,2-DCE	1.03	0.04	5	1.08	0.0595	(5.905)	2.132	Accept	**Equal**
	TCE	1.44	0.07	5	1.53	0.0929	(4.285)	2.132	Accept	**Equal**
MW-235	Freon 113	0.87	0.66	5	1.28	0.112	0.728	2.132	Accept	**Equal**
	1,1-DCE	0.204	0.023	4	0.197	0.102	(1.940)	2.353	Accept	**Equal**
	Carbon tet	1.17	0.69	4	1.41	0.0962	0.097	2.353	Accept	**Equal**
	Chloroform	0.37	0.23	5	0.53	0.0424	0.830	2.132	Accept	**Equal**
	cis-1,2-DCE	0.764	0.234	5	0.935	0.0595	0.294	2.132	Accept	**Equal**
	PCE	10.1	5.2	5	13.5	0.114	0.614	2.132	Accept	**Equal**
	TCE	53.1	17.2	5	66.3	0.0929	0.422	2.132	Accept	**Equal**
MW-270	Freon 113	0.839	0.161	5	0.817	0.112	(1.397)	2.132	Accept	**Equal**
	1,1-DCE	0.225	0.010	5	0.234	0.102	(5.612)	2.132	Accept	**Equal**
	1,2-DCA	0.416	0.015	5	0.419	0.0349	(9.166)	2.132	Accept	**Equal**
	Chloroform	0.486	0.034	5	0.499	0.0424	(4.044)	2.132	Accept	**Equal**
	cis-1,2-DCE	4.12	0.29	5	4.37	0.0595	(3.136)	2.132	Accept	**Equal**
	PCE	6.21	1.35	5	6.14	0.114	(1.410)	2.132	Accept	**Equal**
	TCE	176.2	4.1	5	178	0.929	(13.425)	2.132	Accept	**Equal**
MW-271	Freon 113	1.44	0.21	7	1.61	0.112	(0.837)	1.943	Accept	**Equal**
	1,1-DCE	0.387	0.226	7	0.278	0.102	0.788	1.943	Accept	**Equal**
	Carbon tet	0.16	0.01	6	0.18	0.0962	(2.057)	2.015	Accept	**Equal**
	Chloroform	2.09	0.44	7	1.92	0.0424	(0.720)	1.943	Accept	**Equal**
	cis-1,2-DCE	1.11	0.25	7	1.21	0.0595	(0.883)	1.943	Accept	**Equal**
	PCE	0.322	0.093	7	0.347	0.114	(0.774)	1.943	Accept	**Equal**
	TCE	55.4	9.0	7	60.1	0.0929	(1.266)	1.943	Accept	**Equal**

Table F.8. Approximate t-Test of Means: Middle Diffusion Sampler to GWMP Data Set (continued)

		Diffusion Sampler Data			Middle Diff Sampler		α = 5%			DS
Well No	Analyte	Mean (ug/l)	StDev (ug/l)	# Samplers	Conc (ug/l)	Lab DL	$t_{calc'd}$	$t_{\alpha,\nu}$	H_0: μ_{DS} - $\mu_{GWMP} \leq 15\%$	Statistically Equalivalent?
MW-282	Freon 113	16.2	1.9	7	13	0.0599	1.722	1.943	Accept	**Equal**
	Carbon tet	2.16	1.28	7	1.48	0.0778	0.947	1.943	Accept	**Equal**
	Chloroform	0.607	0.353	7	0.419	0.06	0.938	1.943	Accept	**Equal**
	TCE	2.02	1.21	7	1.43	0.0499	0.823	1.943	Accept	**Equal**
MW-286	Freon 113	0.142	0.021	9	0.165	0.112	(0.246)	1.860	Accept	**Equal**
	1,1-DCA	16.5	0.5	9	16.7	0.0736	(14.495)	1.860	Accept	**Equal**
	1,1-DCE	0.58	0.04	9	0.61	0.102	(5.000)	1.860	Accept	**Equal**
MW-286	1,2-DCA	0.39	0.02	9	0.39	0.0349	(7.188)	1.860	Accept	**Equal**
	Chloroform	0.922	0.060	9	0.954	0.0424	(5.602)	1.860	Accept	**Equal**
	cis-1,2-DCE	7.50	0.50	9	7.78	0.0595	(5.341)	1.860	Accept	**Equal**
	PCE	0.828	0.196	9	0.898	0.114	(0.989)	1.860	Accept	**Equal**
	trans-1,2-DCE	0.116	0.021	9	0.144	0.0422	0.932	1.860	Accept	**Equal**
	TCE	7.74	0.60	9	7.88	0.0929	(5.206)	1.860	Accept	**Equal**
MW-287	Freon 113	47.4	5.3	5	42	0.112	(0.364)	2.132	Accept	**Equal**
	1,1-DCA	0.553	0.050	5	0.564	0.0736	(3.311)	2.132	Accept	**Equal**
	1,1-DCE	3.02	0.19	5	2.8	0.102	(2.361)	2.132	Accept	**Equal**
	Carbon tet	0.303	0.030	5	0.293	0.0962	(2.539)	2.132	Accept	**Equal**
	Chloroform	0.348	0.014	5	0.362	0.0424	(6.626)	2.132	Accept	**Equal**
	cis-1,2-DCE	0.53	0.05	5	0.51	0.0595	(2.428)	2.132	Accept	**Equal**
	PCE	22.640	3.226	5	21.7	0.114	(1.605)	2.132	Accept	**Equal**
	TCE	147.2	9.7	5	135	0.0929	(1.850)	2.132	Accept	**Equal**
MW-288	Freon 113	39.0	6.9	9	43.6	0.112	(0.863)	1.860	Accept	**Equal**
	1,1-DCA	0.518	0.100	9	0.568	0.0736	(1.060)	1.860	Accept	**Equal**
	1,1-DCE	2.48	0.51	9	2.71	0.102	(1.053)	1.860	Accept	**Equal**
	Chloroform	0.304	0.021	9	0.317	0.0424	(4.889)	1.860	Accept	**Equal**
	cis-1,2-DCE	0.843	0.092	9	0.932	0.0595	(1.666)	1.860	Accept	**Equal**
	PCE	24.3	3.5	9	28.8	0.114	0.143	1.860	Accept	**Equal**
	TCE	167.4	25.8	9	188	0.929	(0.890)	1.860	Accept	**Equal**
MW-314	Chloroform	0.142	0.008	5	0.134	0.06	(3.382)	2.132	Accept	**Equal**
	cis-1,2-DCE	1.22	0.04	5	1.22	0.0407	(10.941)	2.132	Accept	**Equal**
	TCE	6.24	0.17	5	6.25	0.0499	(11.923)	2.132	Accept	**Equal**
MW-325	Freon 113	0.199	0.014	9	0.206	0.112	(5.085)	1.860	Accept	**Equal**
	1,1-DCE	0.187	0.016	9	0.155	0.102	1.672	1.860	Accept	**Equal**
	cis-1,2-DCE	0.057	0.002	5	0.059	0.0595	(9.010)	2.132	Accept	**Equal**
	TCE	28.4	1.0	9	28.4	0.0929	(12.389)	1.860	Accept	**Equal**
MW-326	1,1-DCA	1.80	0.29	5	1.66	0.0736	(0.847)	2.132	Accept	**Equal**
	1,1-DCE	0.594	0.034	5	0.568	0.102	(3.882)	2.132	Accept	**Equal**
	Chloroform	0.147	0.022	5	0.142	0.06	(1.672)	2.132	Accept	**Equal**
	cis-1,2-DCE	0.418	0.039	5	0.391	0.0595	(1.805)	2.132	Accept	**Equal**
	TCE	8.19	0.31	5	7.95	0.0929	(6.907)	2.132	Accept	**Equal**
MW-343	Carbon tet	1.95	0.10	5	1.91	0.0962	(5.408)	2.132	Accept	**Equal**
	Chloroform	0.18	0.01	5	0.17	0.0424	(2.217)	2.132	Accept	**Equal**
	cis-1,2-DCE	0.115	0.009	5	0.103	0.0595	(0.877)	2.132	Accept	**Equal**
	TCE	1.49	0.05	5	1.43	0.0929	(6.470)	2.132	Accept	**Equal**

Table F.8. Approximate t-Test of Means: Middle Diffusion Sampler to GWMP Data Set (continued)

		Diffusion Sampler Data			Middle Diff Sampler		α = 5%			DS
Well No	Analyte	Mean (ug/l)	StDev (ug/l)	# Samplers	Conc (ug/l)	Lab DL	$t_{calc'd}$	$t_{\alpha,\nu}$	H_0: μ_{DS} - $\mu_{GWMP} \leq 15\%$	Statistically Equalivalent?
MW-362	Freon 113	0.153	0.023	2	0.136	0.112	(0.206)	6.314	Accept	**Equal**
	Toluene	0.228	0.019	2	0.242	0.0645	(1.651)	6.314	Accept	**Equal**
	TCE	0.362	0.011	3	0.355	0.0929	(7.487)	2.920	Accept	**Equal**
MW-364	Freon 113	3.78	0.26	3	3.66	0.112	(2.841)	2.920	Accept	**Equal**
	1,1-DCE	0.241	0.014	3	0.243	0.0819	(4.232)	2.920	Accept	**Equal**
	Carbon tet	1.10	0.05	3	1.06	0.0778	(4.467)	2.920	Accept	**Equal**
	Chloroform	0.418	0.016	3	0.405	0.06	(5.074)	2.920	Accept	**Equal**
	cis-1,2-DCE	1.1	0.1	3	1.1	0.0407	(3.572)	2.920	Accept	**Equal**
	PCE	3.29	0.41	3	3.08	0.0591	(1.075)	2.920	Accept	**Equal**
MW-364	TCE	113.0	8.5	3	104	0.0998	(1.338)	2.920	Accept	**Equal**
MW-366	1,1,2-TCA	0.655	0.045	11	0.602	0.0392	(2.743)	1.812	Accept	**Equal**
	Freon 113	2.63	0.47	11	2.82	0.112	(1.612)	1.812	Accept	**Equal**
	Carbon tet	1.24	0.18	11	1.37	0.0962	(1.466)	1.812	Accept	**Equal**
	Chloroform	0.416	0.006	11	0.423	0.0424	(29.254)	1.812	Accept	**Equal**
	cis-1,2-DCE	0.123	0.023	11	0.138	0.0595	(0.815)	1.812	Accept	**Equal**
	PCE	0.380	0.142	11	0.427	0.114	(0.397)	1.812	Accept	**Equal**
	TCE	1.80	0.18	11	1.89	0.0929	(3.507)	1.812	Accept	**Equal**
MW-381	1,2-DCA	0.366	0.092	11	0.362	0.0408	(1.807)	1.812	Accept	**Equal**
	Carbon tet	10.7	1.4	13	11.3	0.0778	(2.884)	1.782	Accept	**Equal**
	Chloroform	6.71	2.03	13	7.27	0.06	(0.932)	1.782	Accept	**Equal**
	cis-1,2-DCE	0.150	0.053	13	0.171	0.0407	(0.316)	1.782	Accept	**Equal**
	PCE	1.2	0.3	13	1.3	0.0591	(0.810)	1.782	Accept	**Equal**
	TCE	23.6	4.6	13	25.9	0.0499	(1.286)	1.782	Accept	**Equal**
MW-382	Carbon tet	0.43	0.09	8	0.48	0.0962	(0.734)	1.895	Accept	**Equal**
	Chloroform	0.112	0.007	6	0.121	0.06	(3.157)	2.015	Accept	**Equal**
	TCE	4.50	2.07	9	6.06	0.0929	0.943	1.860	Accept	**Equal**
MW-64	*cis*-1,2-DCE	0.194	0.014	5	0.207	0.0595	(2.946)	2.132	Accept	**Equal**
	TCE	0.359	0.023	5	0.353	0.0929	(4.525)	2.132	Accept	**Equal**
MW-75	1,1-DCE	1.83	0.30	5	1.53	0.102	0.547	2.132	Accept	**Equal**
	Chloroform	0.19	0.02	2	0.17	0.0424	(0.429)	6.314	Accept	**Equal**
	cis-1,2-DCE	15.6	0.3	5	15.3	0.0595	(13.003)	2.132	Accept	**Equal**
	trans-1,2-DCE	0.249	0.008	5	0.241	0.138	(7.968)	2.132	Accept	**Equal**
	TCE	259.2	19.5	5	258	0.929	(4.292)	2.132	Accept	**Equal**
	Vinyl chloride	8.22	0.45	5	7.89	0.0889	(4.256)	2.132	Accept	**Equal**

Count of:	Equal	162
	LOWER	0
	HIGHER	0
	Total	162

Table F.9. Middle Diffusion Sampler-Profile Data Pairs vs. 2Q99 GWMP Results

Well Number	Analyte	Midpoint (ug/l)	GWMP (ug/l)	Lab DL	Delta (ug/l) [DS-GWMP]	RPD
MW-136	1,1-DCA	1.72	1.84	0.0588	(0.12)	7%
	1,1-DCE	0.260	0.209	0.0819	0.051	22%
	Chloroform	0.0923	*ND*	0.0424	*No match*	*No match*
	cis-1,2-DCE	0.580	0.686	0.0407	(0.106)	17%
	TCE	9.97	12.8	0.0499	(2.83)	25%
MW-148	*cis*-1,2-DCE	4.84	4.06	0.0595	0.78	18%
	TCE	12.8	10.7	0.0929	2.1	18%
MW-154	Carbon tet	0.717	*ND*	0.0962	*No match*	*No match*
	Chloroform	0.895	0.4	0.0424	0.495	76%
	cis-1,2-DCE	1.79	0.557	0.0595	1.23	105%
	TCE	22.1	7.03	0.0929	15.1	103%
MW-155	1,1-DCA	0.514	0.348	0.0588	0.166	39%
	1,1-DCE	1.74	1.15	0.0819	0.59	41%
	1,2-DCA	0.249	0.226	0.0408	0.023	10%
	Chloroform	0.671	0.684	0.0424	(0.013)	2%
	cis-1,2-DCE	10.1	8.65	0.0407	1.5	15%
	Toluene	0.222	*ND*	0.0645	*No match*	*No match*
	trans-1,2-DCE	0.119	0.152	0.0422	(0.033)	24%
	TCE	15.7	15	0.0499	0.7	5%
MW-156	1,1,2-TCA	0.095	*ND*	0.0392	*No match*	*No match*
	1,1-DCA	1.46	0.836	0.0736	0.62	54%
	1,1-DCE	2.47	1.16	0.102	1.31	72%
	1,2-DCA	0.748	0.639	0.0349	0.109	16%
	Chloroform	0.97	0.779	0.0424	0.19	22%
	cis-1,2-DCE	23.4	19.2	0.0595	4.2	20%
	trans-1,2-DCE	0.409	*ND*	0.0422	*No match*	*No match*
	TCE	73	66.5	0.0929	6.5	9%
MW-159	Chloroform	1.01	1.16	0.0424	(0.15)	14%
	cis-1,2-DCE	18.3	20	0.0595	(1.7)	9%
	PCE	1.37	3.02	0.114	(1.65)	75%
	TCE	85.5	89.6	0.929	(4.1)	5%
MW-166	1,1-DCA	0.414	*ND*	0.0736	*No match*	*No match*
	1,1-DCE	0.331	*ND*	0.102	*No match*	*No match*
	1,2-DCA	0.473	*ND*	0.0349	*No match*	*No match*
	Chloroform	0.365	*ND*	0.0424	*No match*	*No match*
	cis-1,2-DCE	17.2	3.61	0.0595	13.6	131%
	trans-1,2-DCE	0.304	*ND*	0.0422	*No match*	*No match*
	TCE	46.1	10.4	0.0929	35.7	126%
MW-201	Chloroform	0.109	0.0989	0.06	0.010	10%
	cis-1,2-DCE	0.48	0.481	0.0407	(0.001)	0%
	TCE	9.70	9.39	0.0499	0.31	3%
MW-206	1,1-DCA	4.15	4.1	0.0736	0.05	1%
	Chloroform	0.298	0.202	0.0424	0.096	38%
	cis-1,2-DCE	1.6	1.46	0.0595	0.14	9%
	TCE	3.71	2.84	0.0929	0.87	27%
MW-214	Freon 113	0.714	0.783	0.112	(0.069)	9%
	1,1-DCA	21.6	20.8	0.0588	0.8	4%
	1,1-DCE	1.23	1.1	0.0819	0.13	11%
	Carbon tet	0.165	0.172	0.0778	(0.007)	4%
	Chloroform	0.375	0.385	0.06	(0.010)	3%

Table F.9. Middle Diffusion Sampler-Profile Data Pairs vs. 2Q99 GWMP Results (continued)

Well Number	Analyte	Midpoint (ug/l)	GWMP (ug/l)	Lab DL	Delta (ug/l) [DS-GWMP]	RPD
MW-214 (cont.)	*cis*-1,2-DCE	12.2	11	0.0407	1.2	10%
	PCE	0.4	0.556	0.0591	(0.2)	33%
	trans-1,2-DCE	0.229	0.351	0.0422	(0.122)	42%
	TCE	11.9	12.2	0.0499	(0.3)	2%
MW-216	1,1-DCA	0.373	*ND*	0.0736	*No match*	*No match*
	1,1-DCE	0.274	0.16	0.102	0.114	53%
	1,2-DCA	0.445	0.305	0.0349	0.140	37%
	Chloroform	0.277	0.197	0.0424	0.080	34%
	cis-1,2-DCE	17.1	12	0.0595	5.1	35%
	trans-1,2-DCE	0.243	*ND*	0.0422	*No match*	*No match*
	TCE	38.2	31.3	0.0929	6.9	20%
MW-218	*cis*-1,2-DCE	1.08	0.693	0.0595	0.39	44%
	TCE	1.53	1.35	0.0929	0.18	13%
MW-235	Freon 113	1.28	1.95	0.112	(0.67)	41%
	1,1-DCE	0.197	0.248	0.102	(0.051)	23%
	Carbon tet	1.41	2.31	0.0962	(0.90)	48%
	Chloroform	0.53	0.618	0.0424	(0.088)	15%
	cis-1,2-DCE	0.935	1.01	0.0595	(0.075)	8%
	PCE	13.5	23.5	0.114	(10.0)	54%
	TCE	66.3	60.6	0.0929	5.7	9%
MW-270	Freon 113	0.817	1.14	0.112	(0.323)	33%
	1,1-DCE	0.234	0.127	0.102	0.107	59%
	1,2-DCA	0.419	1.53	0.0349	(1.111)	114%
	Chloroform	0.499	0.619	0.0424	(0.120)	21%
	cis-1,2-DCE	4.37	4.84	0.0595	(0.47)	10%
	PCE	6.14	8.9	0.114	(2.76)	37%
	TCE	178	158	0.929	20	12%
MW-271	Freon 113	1.61	1.64	0.112	(0.03)	2%
	1,1-DCE	0.278	*ND*	0.102	*No match*	*No match*
	Carbon tet	0.18	*ND*	0.0962	*No match*	*No match*
	Chloroform	1.92	2.38	0.0424	(0.46)	21%
	cis-1,2-DCE	1.21	0.856	0.0595	0.35	34%
	PCE	0.347	0.772	0.114	(0.425)	76%
	TCE	60.1	68.4	0.0929	(8.3)	13%
MW-282	Freon 113	13	28.7	0.0599	(15.7)	75%
	Carbon tet	1.48	2.71	0.0778	(1.23)	59%
	Chloroform	0.419	0.762	0.06	(0.343)	58%
	TCE	1.43	2.73	0.0499	(1.30)	63%
MW-286	Freon 113	0.165	0.153	0.112	0.012	8%
	1,1-DCA	16.7	12.5	0.0736	4.2	29%
	1,1-DCE	0.61	0.575	0.102	0.035	6%
	1,2-DCA	0.39	0.333	0.0349	0.057	16%
	Chloroform	0.954	0.815	0.0424	0.139	16%
	cis-1,2-DCE	7.78	6.44	0.0595	1.34	19%
	PCE	0.898	1.56	0.114	(0.662)	54%
	trans-1,2-DCE	0.144	*ND*	0.0422	*No match*	*No match*
	TCE	7.88	7.52	0.0929	0.36	5%

Table F.9. Middle Diffusion Sampler-Profile Data Pairs vs. 2Q99 GWMP Results (continued)

Well Number	Analyte	Midpoint (ug/l)	GWMP (ug/l)	Lab DL	Delta (ug/l) [DS-GWMP]	RPD
MW-287	Freon 113	42	20.2	0.112	21.8	70%
	1,1-DCA	0.564	*ND*	0.0736	*No match*	*No match*
	1,1-DCE	2.8	1.25	0.102	1.55	77%
	Carbon tet	0.293	*ND*	0.0962	*No match*	*No match*
	Chloroform	0.362	0.141	0.0424	0.221	88%
	cis-1,2-DCE	0.51	0.288	0.0595	0.222	56%
	PCE	21.7	12.6	0.114	9.1	53%
	TCE	135	61.2	0.0929	73.8	75%
MW-288	Freon 113	43.6	37.9	0.112	5.7	14%
	1,1-DCA	0.568	0.495	0.0736	0.073	14%
	1,1-DCE	2.71	2.52	0.102	0.19	7%
	Chloroform	0.317	0.331	0.0424	(0.014)	4%
	cis-1,2-DCE	0.932	0.888	0.0595	0.044	5%
	PCE	28.8	26.6	0.114	2.2	8%
	TCE	188	163	0.929	25	14%
MW-314	Chloroform	0.134	0.152	0.06	(0.018)	13%
	cis-1,2-DCE	1.22	1.27	0.0407	(0.05)	4%
	TCE	6.25	6.53	0.0499	(0.28)	4%
MW-325	Freon 113	0.206	0.25	0.112	(0.044)	19%
	1,1-DCE	0.155	0.204	0.102	(0.049)	27%
	cis-1,2-DCE	0.059	*ND*	0.0595	*No match*	*No match*
	TCE	28.4	36.7	0.0929	(8.3)	25%
MW-326	1,1-DCA	1.66	1.38	0.0736	0.28	18%
	1,1-DCE	0.568	0.609	0.102	(0.041)	7%
	Chloroform	0.142	*ND*	0.06	*No match*	*No match*
	cis-1,2-DCE	0.391	0.443	0.0595	(0.052)	12%
	TCE	7.95	5.45	0.0929	2.50	37%
MW-343	Carbon tet	1.91	1.64	0.0962	0.27	15%
	Chloroform	0.17	0.152	0.0424	0.018	11%
	cis-1,2-DCE	0.103	0.0704	0.0595	0.0326	38%
	TCE	1.43	1.26	0.0929	0.17	13%
MW-362	Freon 113	0.136	0.231	0.112	(0.095)	52%
	Toluene	0.242	*ND*	0.0645	*No match*	*No match*
	TCE	0.355	0.766	0.0929	(0.411)	73%
MW-364	Freon 113	3.66	*ND*	0.112	*No match*	*No match*
	1,1-DCE	0.243	0.526	0.0819	(0.283)	74%
	Carbon tet	1.06	3.57	0.0778	(2.51)	108%
	Chloroform	0.405	0.624	0.06	(0.219)	43%
	cis-1,2-DCE	1.1	1.14	0.0407	(0.04)	4%
	PCE	3.08	15.1	0.0591	(12.0)	132%
	TCE	104	151	0.0998	(47)	37%
MW-366	1,1,2-TCA	0.602	0.664	0.0392	(0.062)	10%
	Freon 113	2.82	3.76	0.112	(0.94)	29%
	Carbon tet	1.37	1.38	0.0962	(0.01)	1%
	Chloroform	0.423	0.482	0.0424	(0.059)	13%
	cis-1,2-DCE	0.138	0.189	0.0595	(0.051)	31%
	PCE	0.427	0.776	0.114	(0.349)	58%
	TCE	1.89	2.35	0.0929	(0.46)	22%

Table F.9. Middle Diffusion Sampler-Profile Data Pairs vs. 2Q99 GWMP Results (continued)

Well Number	Analyte	Midpoint (ug/l)	GWMP (ug/l)	Lab DL	Delta (ug/l) [DS-GWMP]	RPD
MW-381	1,2-DCA	0.362	0.446	0.0408	(0.084)	21%
	Carbon tet	11.3	11.9	0.0778	(0.6)	5%
	Chloroform	7.27	8.38	0.06	(1.11)	14%
	cis-1,2-DCE	0.171	0.207	0.0407	(0.036)	19%
	PCE	1.3	1.61	0.0591	(0.3)	21%
	TCE	25.9	27.4	0.0499	(1.5)	6%
MW-382	Carbon tet	0.48	0.478	0.0962	0.00	0%
	Chloroform	0.121	*ND*	0.06	*No match*	*No match*
	TCE	6.06	5.6	0.0929	0.46	8%
MW-64	*cis*-1,2-DCE	0.207	0.208	0.0595	(0.001)	0%
	TCE	0.353	3.22	0.0929	(2.87)	160%
MW-75	1,1-DCE	1.53	1.06	0.102	0.47	36%
	Chloroform	0.17	0.924	0.0424	(0.754)	138%
	cis-1,2-DCE	15.3	13.1	0.0595	2.2	15%
	trans-1,2-DCE	0.241	0.21	0.138	0.031	14%
	TCE	258	481	0.929	(223)	60%
	Vinyl chloride	7.89	1.71	0.0889	6.18	129%

Table F.10. Paired t-Test of Differences: Middle Diffusion Sampler vs. GWMP

	ln(1,1-DCA)		*ln(1,1-DCE)*		ln(1,2-DCA)		ln(Carbon Tet)		ln(Chloroform)	
Statistic	DS	GWMP	DS	GWMP	DS	GWMP	DS	GWMP	DS	GWMP
Mean	0.938	0.746	(0.424)	(0.611)	(0.886)	(0.767)	0.206	0.488	(0.729)	(0.688)
Variance	1.973	2.179	1.166	0.865	0.127	0.466	1.446	1.648	0.911	1.068
Observations	8	8	14	14	6	6		88	21	21
Pearson Correlation	0.991		0.915		0.464		0.934		0.865	
Hypothesized Mean Difference	0		0		0		0		0	
df	7		13		5		7		20	
Alpha	0.05		0.05		0.05		0.05		0.05	
t Stat	2.593		1.587		(0.481)		(1.739)		(0.362)	
P(T≤t) two-tail	0.036		0.136		0.651		0.126		0.722	
t Critical two-tail	2.365		2.160		2.571		2.365		2.086	
Null Hypothesis:	REJECT		Accept		Accept		Accept		Accept	
Conclusion:	DS > GWMP		DS = GWMP		DS = GWMP		DS = GWMP		DS = GWMP	

Table F.10. Paired t-Test of Differences: Middle Diffusion Sampler vs. GWMP (continued)

	ln(cis-1,2-DCE)		ln(Freon 113)		ln(PCE)		ln(TCE)		trans-12-DCE	
Statistic	DS	GWMP	DS	GWMP	DS	GWMP	DS	GWMP	DS	GWMP
Mean	0.592	0.407	0.538	0.695	0.875	1.345	2.695	2.705	0.196	0.238
Variance	2.836	2.582	4.286	3.832	2.654	2.151	3.284	2.706	0.005	0.010
Observations	26	26	11	11	11	11	30	30	3	3
Pearson Correlation	0.970		0.982		0.944		0.940		0.661	
Hypothesized Mean Difference	0		0		0		0		0	
Df	25		10		10		29		2	
Alpha	0.05		0.05		0.05		0.05		0.05	
t Stat	2.290		(1.290)		(2.889)		(0.087)		(0.932)	
P(T≤t) two-tail	0.031		0.226		0.016		0.931		0.450	
t Critical two-tail	2.060		2.228		2.228		2.045		4.303	
Null Hypothesis:	REJECT		Accept		Accept		Accept		Accept	
Conclusion:	DS > GWMP		DS = GWMP		DS = GWMP		DS = GWMP		DS = GWMP	

APPENDIX G

COST ESTIMATE

Costs for Diffusion Sampling

Cost Element	Units					Unit Cost		Subtotal
			Capital expenditures					
Weights	1 per well		125 well/event	4 event/yr	$	10	each	$ 5,000
Other materials	1 per well		125 well/event	4 event/yr	$	8	each	$ 4,000
						Total Capital Costs		**$ 9,000**
			One-time Costs					
Sampler Location								
Labor	1 hr/well	1 person/well	500 well/site		$	65	per hour	$ 32,500
						Total One-time Costs		**$ 32,500**
			Recurring Costs					
Sampler installation								
Labor	0.33 hr/well	2 person/well	125 well/event	4 event/yr	$	45	per hour	$ 14,850
Transportation	5 day/event			4 event/yr	$	62	per day	$ 1,240
Samplers	5 per sampler	125 well/event		4 event/yr	$	5	per sampler	$ 12,500
Misc. materials	1 per sampler	125 well/event		4 event/yr	$	2	per sampler	$ 920
Sampler recovery								
Labor	0.33 hr/well	2 person/well	125 well/event	4 event/yr	$	45	per hour	$ 14,850
Transportation	5 day/event			4 event/yr	$	62	per day	$ 1,240
Materials	1 sampler/well		125 well/event	4 event/yr	$	7	per sampler	$ 3,680
Materials	1 per event			4 event/yr	$	92	per event	$ 368
Waste Disposal	0.0013 gal/well	125 well/event		4 event/yr	$	7	per gal	4.55
Demobilization	8 hr/event			4 event/yr	$	45	per hour	$ 1,440
VOC analysis								
Laboratory	1 analysis/sample	1 sampler/well	125 well/event	4 event/yr	$	85	each	$ 42,500
Field Dulicates	0.05 per sampler	1 sampler/well	125 well/event	4 event/yr	$	85	each	$ 2,125
Ambient Blank	1 per week		1 week/even	4 event/yr	$	85	each	$ 340
Equipment Blank	1 per week		1 week/even	4 event/yr	$	85	each	$ 340
Trip Blank	1 per shipment	1 shipment/day	5 day/event	4 event/yr	$	85	each	$ 1,700
						Total Recurring Costs		**$ 98,098**

Capital Costs

Other Materials									
Rope	$	6	per well	(average of 150 ft of rope per well)					
Tie-off assy for well head	$	2	per well						

Recurring Costs

Transportation									
Vehicle rental	$	45.00	per day	$	8.06	tax	$ 53.06		(based on weekly rental rate)
Fuel		5	gal/day	$	1.79	per gallon	$ 8.95		(fuel cost for mobilization not included)
							$ 62.01	**per day**	
Samplers									
Polyethelyene tubing		2	feet per sampler	$	0.25	per ft	$ 0.50		
Deionized water		0.4	liter/sampler	$	2	per liter	$ 0.70		
Heat Sealer	$	20	per batch		125	samplers/batch	$ 0.16		
Labor		0.08	hr/sampler	$	45	per hour	$ 3.60		
							$ 4.96	**per sampler**	
Misc. Materials for Installation									
tie straps		4	per well	$	0.01	each	$ 0.04		
Flex guard tubinng		2	ft/well	$	0.90	per ft	$ 1.80		
							$ 1.84	**per sampler**	
Materials for Recovery									
VOA vial	$	132	per case		72	per case	4 per sampler	$ 7.33	
paper towel	$	1.50	per roll		0.02	roll per sample		$ 0.03	
								$ 7.36	**per sample**
Alconox	$	14.25	per event				$ 14.25		
Hexane	$	8.75	per event				$ 8.75		
Ice	$	14.00	per event				$ 14.00		
PPE	$	10.00	per day		5	day/event	$ 50.00		
Tape		$2	per event				$ 2.00		
Bucket	$	2.97	per event				$ 2.97		
							$ 91.97	**per event**	

Basis of Estimate for Diffusion Sampling

The amount of labor and consumables used for this estimate is based upon those observed in the 2Q99 technology demonstration. All costs are in fiscal year 2000 dollars.

Labor rates used are average technician costs based upon McClellan AFB support contracts. VOC analytical costs are average costs experienced by McClellan AFB for EPA SW-846 Method 8260B analyses. Waste disposal costs are based upon McClellan AFB costs for disposal of non-RCRA-hazardous groundwater.

A one-time cost has been added to account for the time necessary to evaluate each wells lithologic and historic contaminant information to determine optimal placement in the well interval.

Material costs are based on a minimum of 2 unit costs obtained from standard industrial suppliers. The current vendors catalogs consulted for determining average costs include Fisher Supply, Lab Safety Supply, DoAll Industrial Supply, and Grainger. Costs for miscellaneous standard items were based on February 2000 consumer retail prices from Home Depot, KMart, and Target of Sacramento, California.

This cost estimate assumes that diffusion samplers are produced locally and not purchased from a vendor. The assumption that 2 feet of polyethylene tubing will be required for each 1.5 foot sampler is conservative and is meant to account for sampler breakage during construction, installation, and retrieval. The costs for heat sealer are based on an estimated amortized cost of ownership for 2 heat sealers with an expected useful life of 3 years.

Costs for miscellaneous materials are based upon estimated average usage during sampling activities. 4 bags of ice per shipment are assumed to be used based on shipping one cooler per day of sampling.

Sample shipping costs have been discounted for this estimate. This was done because the location of the laboratory is variable. Based on the assumptions used in this estimate, it would be expected that shipping cost for the diffusion sampling would be one-fourth those of conventional or micropurge sampling.

Costs for Conventional Sampling

Cost Element	Units					Unit Cost		Subtotal
				Capital expenditures				
Submersible Pumps	3 each					$ 950	each	$ 2,850
pH/ORP cells	2 each					$ 750	each	$ 1,500
Sampling trailer	1 each					$ 7,500	each	$ 7,500
						Total Capital Costs		**$ 11,850**
				Recurring Costs				
Sampling								
Mobilization	8 hr/event							
Equipment Service/Repair	1 per event				4 event/yr	$ 300	per event	$ 1,200
Labor	2.5 hr/well	2 person/well	125 well/event		4 event/yr	$ 45	per hour	$ 112,500
Transportation	20 day/event				4 event/yr	$ 55	per day	$ 4,400
Materials	1 per well		125 well/event		4 event/yr	$ 182	per sample	$ 91,000
Materials	1 per event				4 event/yr	$ 472	per event	$ 1,887
Waste Disposal	*50 gal/well*		*125 well/event*		*4 event/yr*	*$ 7*	*per gal*	*$ 175,000*
Demobilization	8 hr/event				4 event/yr	$ 45	per hour	$ 1,440
VOC analysis								
Laboratory	1 analysis/sample	1 sampler/well	125 well/event		4 event/yr	$ 85	each	$ 42,500
Field Dulicates	0.05 per sampler	1 sampler/well	125 well/event		4 event/yr	$ 85	each	$ 2,125
Ambient Blank	1 per week		4 week/event		4 event/yr	$ 85	each	$ 1,360
Equipment Blank	1 per week		4 week/event		4 event/yr	$ 85	each	$ 1,360
Trip Blank	1 per shipment	1 shipment/day	20 day/event		4 event/yr	$ 85	each	$ 6,800
						Total Recurring Costs		**$ 441,572**

Sampling Trailer includes generator and 250 gallon groundwater collection tank
Waste Disposal Costs assuming offsite disposal

Recurring Costs

Transportation

Vehicle rental	$	850	per month	$ 152	tax		$	50	(based on monthly rental rate)
Fuel		3	gal/day	$1.79	per gallon		$	5.37	(fuel cost for mobilization not included)
							$	**55**	**per day**

Materials for Sampling

VOA vial	$	132	per case	72	per case	4	per sample	$	7.33	
paper towel	$	1.50	per roll	0.05	roll per sample			$	0.08	
tubing	$	1.25	per foot	140	ft/well			$	175.00	
								$	**182.41**	**per sample**

Alconox	$	14.25	per week	4	wk/event			$	57	
Hexane	$	12.30	per week	4	wk/event			$	49	
Ice	$	3.60	per day	20	day/event			$	72	
Fuel for generator		2.00	gal/day	20	day/event	$1.79	per gallon	$	72	
Tape	$	4	per week	4	wk/event			$	16	
PPE	$	10	per day	20	day/event			$	200	
Bucket	$	5.94	per event					$	6	
								$	**472**	per event

Basis of Estimate for Conventional Sampling

The amount of labor and consumables used for this estimate is based upon those observed in the McClellan GWMP events. All costs are in fiscal year 2000 dollars.

Labor rates used are average technician costs based upon McClellan AFB support contracts. VOC analytical costs are average costs experienced by McClellan AFB for EPA SW-846 Method 8260B analyses. Waste disposal costs are based upon McClellan AFB costs for disposal of non-RCRA-hazardous groundwater.

Material costs are based on a minimum of 2 unit costs obtained from standard industrial suppliers. The current vendors catalogs consulted for determining average costs include Fisher Supply, Lab Safety Supply, DoAll Industrial Supply, and Grainger. Costs for miscellaneous standard items were based on February 2000 consumer retail prices from Home Depot, KMart, and Target of Sacramento, California.

This cost estimate assumes that disposable tubing is used for all sampling locations per McClellan SOP. The average length of tubing is based upon the well sampled in 2Q99 and should be closely evaluated by others for applicability to their programs.

This cost estimate assumes that a dedicated sampling trailer consisting of a mounted tank and generator is purchased for sampling. This is a standard configuration used by many environmental services firms. Rental costs for contractor-owned equipment were not used in the estimate due to the economy of purchase for a large sampling program like that at McClellan AFB. This should be evaluated closely by others using this estimate.

The recurring equipment service and repair is based upon manufacturers' recommended calibration and maintenance for submersible pumps and flow through cells. This also accounts for standard calibration solutions for pH, conductance, etc. Maintenance of the dedicated sampling trailer is also included within this recurring costs. This should be evaluated closely by others using this estimate.

Costs for miscellaneous materials are based upon estimated average usage during sampling activities. 4 bags of ice per shipment are assumed to be used based on shipping one cooler per day of sampling.

Sample shipping costs have been discounted for this estimate. This was done because the location of the laboratory is variable. Based on the assumptions used in this estimate, it would be expected that shipping cost for the conventional sampling would be up to four times as great for conventional sampling. This should be evaluated closely by others using this estimate as the assumption for shipping samples each day is not necessarily appropriate for all sites.

Costs for Micropurging

Cost Element	Units					Unit Cost		Subtotal
			Capital expenditures					
Bladder Pumps	3 each					$ 1,175	each	$ 3,525
pH/ORP cells	2 each					$ 750	each	$ 1,500
Sampling trailer	1 each					$ 7,500	each	$ 7,500
						Total Capital Costs		**$ 12,525**
			One-time Costs					
Sampler Location								
Labor	1 hr/well	1 person/well	500 well/site			$ 65	per hour	$ 32,500
						Total One-time Costs		**$ 32,500**
			Recurring Costs					
Sampling								
Mobilization	8 hr/event							
Equipment Service/Repair	1 per event			4	event/yr	$ 825	per event	$ 3,300
Labor	3 hr/well	2 person/well	125 well/event	4	event/yr	$ 45	per hour	$ 135,000
Transportation	20 day/event			4	event/yr	$ 55	per day	$ 4,400
Materials	1 per well		125 well/event	4	event/yr	$ 182	per sample	$ 91,000
Materials	1 per event			4	event/yr	$ 472	per event	$ 1,887
Waste Disposal	*25 gal/well*		*125 well/event*	*4*	*event/yr*	*$ 7*	*per gal*	*$ 87,500*
Demobilization	8 hr/event			4	event/yr	$ 45	per hour	$ 1,440
VOC analysis								
Laboratory	1 analysis/sample	1 sampler/well	125 well/event	4	event/yr	$ 85	each	$ 42,500
Field Dulicates	0.05 per sampler	1 sampler/well	125 well/event	4	event/yr	$ 85	each	$ 2,125
Ambient Blank	1 per week		4 week/event	4	event/yr	$ 85	each	$ 1,360
Equipment Blank	1 per week		4 week/event	4	event/yr	$ 85	each	$ 1,360
Trip Blank	1 per shipment	1 shipment/day	20 day/event	4	event/yr	$ 85	each	$ 6,800
						Total Recurring Costs		**$ 378,672**

Sampling Trailer includes generator and 250 gallon groundwater collection tank
Waste Disposal Costs assuming offsite disposal

Recurring Costs

Transportation

Vehicle rental	$ 850	per month	$ 152	tax		$ 50		(based on monthly rental rate)
Fuel	3	gal/day	$1.79	per gallon		$ 5.37		(fuel cost for mobilization not included)
						$ 55	**per day**	

Materials for Sampling

VOA vial	$ 132	per case	72	per case	4	per sample	$ 7.33	
paper towel	$ 1.50	per roll	0.05	roll per sample			$ 0.08	
tubing	$ 1.25	per foot	140	ft/well			$ 175.00	
							$ 182.41	**per sample**
Alconox	$ 14.25	per week	4	wk/event			$ 57	
Hexane	$ 12.30	per week	4	wk/event			$ 49	
Ice	$ 3.60	per day	20	day/event			$ 72	
Fuel for generator	2.00	gal/day	20	day/event	$1.79	per gallon	$ 72	
Tape	$ 4	per week	4	wk/event			$ 16	
PPE	$ 10	per day	20	day/event			$ 200	
Bucket	$ 5.94	per event					$ 6	
							$ 472	per event

Basis of Estimate for Micropurge Sampling

The amount of labor and consumables used for this estimate is based upon those observed in the McClellan Natural Attenuation sampling event in 1998. All costs for this estimate are in fiscal year 2000 dollars.

Labor rates used are average technician costs based upon McClellan AFB support contracts. VOC analytical costs are average costs experienced by McClellan AFB for EPA SW-846 Method 8260B analyses. Waste disposal costs are based upon McClellan AFB costs for disposal of non-RCRA-hazardous groundwater.

A one-time cost has been added to account for the time necessary to evaluate each wells lithologic and historic contaminant information to determine optimal placement of the micropurge pump inlet within in the well interval.

Material costs are based on a minimum of 2 unit costs obtained from standard industrial suppliers. The current vendors catalogs consulted for determining average costs include Fisher Supply, Lab Safety Supply, DoAll Industrial Supply, and Grainger. Costs for miscellaneous standard items were based on February 2000 consumer retail prices from Home Depot, KMart, and Target of Sacramento, California.

This cost estimate assumes that disposable tubing is used for all sampling locations per McClellan SOP. The average length of tubing is based upon the well sampled in 2Q99 and should be closely evaluated by others for applicability to their programs.

This cost estimate assumes that a dedicated sampling trailer consisting of a mounted tank and generator is purchased for sampling. This is a standard configuration used by many environmental services firms. Rental costs for contractor-owned equipment were not used in the estimate due to the economy of purchase for a large sampling program like that at McClellan AFB. This should be evaluated closely by others using this estimate.

Although standard practice would be to outfit each well with a dedicated micropurge sampler, this cost estimate assumes that micropurge pumps are not dedicated for use in each well. This assumption was made due to the high capital cost (*e.g.,* over $1,000,000) for this type of infrastructure investment for a large site such as McClellan AFB. For smaller sites, it may be prudent to evaluate the cost of dedicated sampling equipment when making economic decisions on sampling methods.

The recurring equipment service and repair is based upon manufacturers' recommended calibration and maintenance for micropurge bladder pumps and flow through cells. This also accounts for standard calibration solutions for pH, conductance, etc. Maintenance of the dedicated sampling trailer is also included within this recurring cost. This should be evaluated closely by others using this estimate.

Costs for miscellaneous materials are based upon estimated average usage during sampling activities. 4 bags of ice per shipment are assumed to be used based on shipping one cooler per day of sampling.

Sample shipping costs have been discounted for this estimate. This was done because the location of the laboratory is variable. Based on the assumptions used in this estimate, it would be expected that shipping cost for the conventional sampling would be up to four times as great for conventional sampling. This should be evaluated closely by others using this estimate as the assumption for shipping samples each day is not necessarily appropriate for all sites.

APPENDIX H

STANDARD OPERATING PROCEDURES
FOR
DIFFUSION SAMPLING

DRAFT

SOP McAFB 060
DIFFUSION SAMPLER ASSEMBLY

1.0 PURPOSE

The purpose of this standard operating procedure (SOP) is to describe in detail the equipment and procedures required to construct the passive diffusion membrane sampler devices to be used in the field investigation. This SOP describes the assembly of the diffusion samplers in two sizes. The standard 1.5-inch diameter diffusion samplers are designed to provide more than enough water for one volatile organic compound (VOC) sample, typically four 40 milliliter (mL) volatile organic analysis (VOA) vials. The oversized 2-inch diameter samplers are designed to provide more than enough water for collection of two water samples (one normal sample and one duplicate quality control sample, equivalent to eight 40 mL VOA vials).

2.0 EQUIPMENT

1) Standard 1.5-inch diameter diffusion samplers:
   - 2-inch diameter, 4-mil, "lay-flat" polyethylene tubing;
   - 1- or 1½-inch "flex-guard" low-density-polyethylene-mesh tubing (available from M-Line, Inc., 330-225-8559, RED, part number CN147N);
   - Graduated glass cylinder, 1 ½-inch diameter, 12-inch height;
   - Deionized water; and
   - Heat sealer.

2) Oversized 2-inch diameter diffusion samplers:
   - 3-inch diameter "lay-flat" polyethylene tubing, 4 mil;
   - 2 or 2½-inch "flex-guard" low-density-polyethylene-mesh tubing (available from M-Line, Inc., 330-225-8559, WHITE, part number CN149N);
   - Deionized water; and
   - Heat sealer.

3.0 PROCEDURES

Procedures for assembling diffusion samplers for instrumentation in 4-inch diameter groundwater monitoring wells are detailed below.

3.1 STANDARD (RED) 1.5-INCH DIAMETER DIFFUSION SAMPLER ASSEMBLY

1) Cut an 18-inch length of 2-inch diameter lay-flat polyethylene tubing.
2) Heat-seal one end. The heat sealer should be adjusted to provide a uniform seal without melting through the polyethylene.
3) Add retail-store grade deionized water to a height of about 15 inches.
4) Tap the filled tubing several times to release trapped air bubbles.
5) Remove any remaining air bubbles by squeezing a small amount of water (about 1 or 2 inches) from the tubing. Keep open end pressed closed.

6) Position the lay-flat tubing across the sealing element of the heat-sealer such that no folds or wrinkles are present. Heat-seal the open end. The total length of the "water bag" should be about 12 to 13 inches. Check the bag for leaks. If the bag leaks, discard it and construct a new bag.
7) Cut a 20-inch length of 1 or 1½-inch diameter (RED), low-density-polyethylene-mesh tubing.
8) Slide entire length of mesh tubing onto outside of 250-ml graduated cylinder.
9) Slide water bag inside graduated cylinder.
10) Slowly remove water bag, while sliding mesh tubing off of graduated cylinder and onto water bag. Once removed, mesh tubing should enclose the "water bag" with about 2 inches of overhang on each end. This assemblage is the diffusion sampler.
11) The assembled diffusion sampler should contain about 280 to 300 mL of deionized water. The ends of the outer mesh tubing may be folded to provide additional strength when attached to down-hole line (see SOP 2).

3.2 OVERSIZED (WHITE) 2-INCH DIAMETER DIFFUSION SAMPLER ASSEMBLY

1) Cut an 18-inch length of 3-inch diameter lay-flat polyethylene tubing.
2) Heat-seal one end. The heat sealer should be adjusted to provide a uniform seal without melting through the polyethylene.
3) Cut a 20-inch length of 2 or 2½-inch diameter (WHITE), low-density-polyethylene-mesh tubing.
4) Slide lay-flat tubing inside mesh tubing before filling.
5) Add retail-store grade deionized water to a height of about 15 inches.
6) Tap the filled tubing several times to release trapped air bubbles.
7) Remove any remaining air bubbles by squeezing a small amount of water (about 1 or 2 inches) from the tubing. Keep open end pressed closed.
8) Position the lay-flat tubing across the sealing element of the heat-sealer such that no folds or wrinkles are present. Heat-seal the open end. The total length of the "water bag" should be about 12 to 13 inches. Check the bag for leaks. If the bag leaks, discard it and construct a new bag.
9) Once the lay-flat tubing is heat-sealed, the mesh tubing should enclose the "water bag" with about 2 inches of overhang on each end. This assemblage is the diffusion sampler.
10) The assembled diffusion sampler should contain about 500 to 530 mL of deionized water. The ends of the outer mesh tubing may be folded to provide additional strength when attached to down-hole line (see SOP 2).

DRAFT

SOP McAFB-061
DIFFUSION SAMPLER WELL INSTRUMENTATION

1.0 PURPOSE

The purpose of this standard operating procedure (SOP) is to describe in detail the equipment and procedures required to instrument groundwater monitoring wells with passive diffusion membrane sampler devices to be used in the field investigation. Wells will be instrumented with sampling devices assembled in accordance with SOP McAFB-060.

2.0 EQUIPMENT

- Stainless-steel weights: These weights are reusable, but must be decontaminated in accordance with SOP No. McAFB-013 before first use or before using in a different well.
- Nylon cable ties, to attach diffusion sampler to weighted rope.
- Rope (recommended rope is 90 pound-test, 3/16 inch braided polyester).

3.0 PROCEDURES

Two procedures for instrumentation of groundwater monitoring wells with diffusion samplers are detailed below. The first procedure describes instrumentation of longer-screened wells, *i.e.,* screen lengths greater than 3 feet (ft), with multiple samplers. The second procedure describes instrumentation of wells with a single sampler. The sampler string (*i.e.,* weighted rope and diffusion samplers) should be constructed on a clean material such as plastic to avoid contaminating the samplers with chemicals or dirt.

3.1 INSTRUMENTATION OF MULTIPLE SAMPLERS IN MONITORING WELLS

Wells that have screen lengths longer than 3-ft can be instrumented with multiple diffusion samplers. This section shall be used if directed to install multiple samplers in the well.

1) Measure the water elevation in the monitoring well. This will be used to determine how much of the well screen is in the saturated zone (*i.e.*, saturated well-screen length).

2) Measure the well depth and compare the measured depth with the depth to the bottom of the well screen recorded in the well-construction data. This will provide information on whether sediment has accumulated in the bottom of the well or whether there is a blank section of pipe (sump) below the well screen.

3) Calculate the saturated well-screen length.

    a) If the water level (Step #1) is above the top of the well screen, then the saturated well-screen length calculated as follows:

Equation 1. $L_{SAT} = D_{SE} - D_{SB}$

where,
L_{SAT} = Saturated well-screen length (ft)
D_{SE} = Depth to bottom of well screen or top of sediment (ft bgs)
D_{SB} = Depth to top of well screen (ft bgs)

b) If the water level (Step #3) is lower than the top of the well screen (e.g., the well screen is partially exposed to the vadose zone), then the saturated well-screen length calculated as follows:

Equation 2. $L_{SAT} = D_{SE} - WL$

where,
L_{SAT} = Saturated well-screen length (ft)
D_{SE} = Depth to bottom of well screen or top of sediment (ft bgs)
WL = Water level in the well (ft bgs)

If the saturated screen interval is less than 3 ft then use the procedures outlined in Section 3.2.

4) To determine the maximum number of samplers to be installed by subtracting 3 ft from saturated screened interval length. Next divide the resulting interval by 1.5-ft. Round this number down to the next whole number. This is maximum number of diffusion samplers that can be installed.

5) Determine the number and intervals of the diffusion samplers. The number of samplers shall not be greater than the maximum calculated in step 2 above.

6) Tie knot at the bottom of the rope for attachment of stainless steel weight. Calculate the distance from the bottom of the well, or top of the sediment in the well, up to the point where the lowest diffusion sampler is to be placed.

7) Tie knots spaced at a distance of 1.5 ft from each other centered upon the lowermost interval where a sampler is to be installed.

8) Move up the rope placing knots spaced at a distance of 1.5 ft from each other centered upon the interval where a sampler is to be installed until the appropriate number of knots have been tied.

9) Record in the field logbook the depths at which each sampler is to be installed. The samplers will be labeled “A’, “B”, “C”, etc. from shallowest to deepest in accordance with the sample identification (ID) scheme. Sample ID numbers include the well number (MW-###), “A”, “B”, “C”, etc. for depth (“A” being shallowest sampler), and either “-NS” for normal sample or “-FD” for field duplicate. For example, the third (from the top) sampler installed in MW-287 will be labeled **MW-287C-NS**.

10) Tie a stainless-steel weight to the end of the rope. This weight should rest on the bottom of the well or on the sediment in the well when installed.

11) Immediately prior to placing the rope and weight down the well, the diffusion samplers should be attached to the knots. They are attached by using the following procedure:

    a) Insert cable ties through the knots in the rope.
    b) At each end of the diffusion sampler, weave the ends of the cable ties through the flex-guard mesh surrounding the sampler and tighten the cable ties.

c) Thus, each end of the diffusion sampler will be attached to a knot in the rope by means of a cable tie. The cable ties should be positioned through the flex-guard mesh in a way that prevents the polyethylene diffusion bag from sliding out of the mesh.
d) Samples that will be collected in duplicate for quality control purposes will be instrumented with the oversized (WHITE) samplers containing sufficient amount of water to provide replication for quality control.

12) Trim the excess from the cable tie before placing the sampler down the well.

13) Lower the weight and rope down the well until the weight rests on the bottom. The diffusion samplers should now be positioned at the expected depth.

14) Secure the assembly in this position. A suggested method is to attach the rope to a hook on the inside of the well cap. Reattach well cap.

15) Allow well system to remain undisturbed as the diffusion samplers equilibrate. Equilibration time is the summation of the time required by the diffusion sampler to equilibrate with ambient water and the time required for the well to recover from the disturbance caused by sampler installation. Laboratory tests imply that the samplers equilibrate within approximately 3 to 4 days. Typically, the samplers will remain undisturbed in the wells, for a period of at least 14 days.

3.2 INSTRUMENTATION OF MONITORING WELLS WITH A SINGLE DIFFUSION SAMPLER

Wells will typically be instrumented with only one diffusion sampler placed near the vertical midpoint of the saturated well screen interval adjacent to a coarse grained layer. The weighted end of the rope will rest on the bottom of the well or top of well sediment.

1) Measure the water elevation in the monitoring well. This will be used to determine how much of the well screen is in the saturated zone (*i.e.*, saturated well-screen length).

2) Measure the well depth and compare the measured depth with the depth to the bottom of the well screen recorded in the well-construction data. This will provide information on whether sediment has accumulated in the bottom of the well or whether there is a blank section of pipe (sump) below the well screen.

3) Calculate the saturated well-screen length (L_{SAT}).

   a) If the water level (Step #1) is above the top of the well screen, then calculate L_{SAT} using Equation 1 in Section 3.1 of this SOP.
   b) If the water level (Step #1) is lower than the top of the well screen (*i.e.*, the well screen is partially exposed to the vadose zone), then calculate L_{SAT} using Equation 2 in Section 3.1 of this SOP.

4) Calculate the distance from the bottom of the well screen, or top of the sediment in the well, up to the point where the midpoint of diffusion sampler should be placed ($DIST_{MID}$) using Equation 3.

Equation 3. $$DIST_{MID} = L_{SAT}/2$$

where, $DIST_{MID}$ = Distance from midpoint of middle sampler to bottom of well screen, or top of sediment (ft)
L_{SAT} = Saturated well-screen length (ft)

5) Consult the well construction log to find the coarse-grained (*i.e.,* sand or gravel) layer nearest the midpoint of the saturated inverval. The middle of this coarse-grained layer will be the location of the diffusion sampler ($DIST_{SAMPLER}$), *i.e.*, where the center of the diffusion sampler will be located.

6) Measure this distance ($DIST_{SAMPLER}$) from the end of the rope and mark the point. Tie one knot 0.75 ft below this point. Tie a second knot 0.75 ft above this point. These knots will be used to attach the diffusion sampler to the rope (Step #7).

7) Tie a stainless-steel weight to the end of the rope. This weight should rest on the bottom of the well or on the sediment in the well when installed.

8) Immediately prior to placing the rope and weight down the well, the diffusion sampler should be attached to the knots. It is attached using the following procedure:

   a) Insert cable ties through the knots in the rope.
   b) At each end of the diffusion sampler, weave the ends of the cable ties through the flex-guard mesh surrounding the sampler and tighten the cable ties.
   c) Thus, each end of the diffusion sampler will be attached to a knot in the rope by means of a cable tie. The cable ties should be positioned through the flex-guard mesh in a way that prevents the polyethylene diffusion bag from sliding out of the mesh.
   d) If samples will be collected in duplicate for quality control purposes this well will be instrumented with the oversized (WHITE) samplers containing sufficient amount of water to provide replication for quality control.

9) Trim the excess from the cable tie before placing the sampler down the well.

10) Lower the weight and rope down the well until the weight rests on the bottom. The diffusion sampler should now be positioned at the expected depth.

11) Secure the assembly in this position. A suggested method is to attach the rope to a hook on the inside of the well cap. Reattach well cap.

12) Allow well system to remain undisturbed as the diffusion samplers equilibrate. Equilibration time is the summation of the time required by the diffusion sampler to equilibrate with ambient water and the time required for the well to recover from the disturbance caused by sampler installation. Laboratory tests imply that the samplers equilibrate within approximately 3 to 4 days. Typically, the samplers will remain undisturbed in the wells for a period of at least 14 days.

DRAFT

SOP MCAFB-062
DIFFUSION SAMPLER RECOVERY

1.0 PURPOSE

The purpose of this standard operating procedure (SOP) is to describe in detail the procedures required to recover and sample the diffusion samplers after the equilibration period. Procedures for sample collection and handling are detailed in Section 4.2.6 of SOP No. McAFB-013 of the *Basewide RI/FS QAPP* (Radian International, 1997).

2.0 EQUIPMENT

- 40 milliliter (mL) volatile organic analysis (VOA) vials with labels
- 1 Normal hydrochloric acid or approved preservative
- Scissors
- Coolers for sample storage
- Ice or equivalent
- Chain-of-custody forms

3.0 PROCEDURES

The water from the diffusion sampler should be transferred to VOA vials and capped. Laboratory testing suggests that little change in the VOC concentrations in samples collected from diffusion samplers over the first hour after recovery. However, the water should be transferred from the diffusion samplers to the sample bottles as quickly as practical but no longer than 30 minutes following removal from the well. Procedures for recovery and sampling of diffusion are detailed below.

1) Remove, by pulling to the surface, the weighted rope diffusion sampler(s) from the well. Record the time when the sampler string is recovered. The diffusion samplers should not be exposed to heat or agitated.

2) For the wells instrumented with only one sampler (THE WATER NEEDS TO BE TRANSFERRED FROM THE DIFFUSION SAMPLERS TO THE VOA VIALS AS QUICKLY AS POSSIBLE):

   a) Cut the cable ties to removed the diffusion sampler from the rope. Examine the physical surface of the diffusion sampler membrane for evidence of any type of film, such as algae, oil, etc., that may affect the performance of the diffusion membrane. Record observations in the sampler's field log book.

b) Sampling equipment, especially scissors used to cut open the diffusion samplers, shall be decontaminated in accordance with SOP No. McAFB-013 (Radian International, 1997a) before sampling each diffusion bag.

c) The diffusion sampler shall be cut open with a "clean" pair of scissors, and the water transferred (by GENTLY pouring) into four 40-mL VOA vials. The samples shall be collected with zero headspace, preserved with hydrochloric acid or equivalent, and stored at 4°C in accordance with SOP No. McAFB-013 of the *Basewide RI/FS QAPP* (Radian International, 1997a).

d) For quality control samples collected in duplicate (WHITE samplers), two sets (four vials per set) of VOA vials shall be filled from the same diffusion bag.

e) All samples should be documented in accordance with SOP No. McAFB-013 of the *Basewide RI/FS QAPP* (Radian International, 1997a).

f) Excess water from the diffusion samplers will be contained approved storage tanks (or equivalent storage equipment) designated for use by the GWMP sampling team. This water shall be disposed of as directed by McClellan AFB Field Team Staff. Used diffusion samplers can be contained in drums or plastic bags with the personal protective equipment (PPE) for the sampling.

3) For the wells instrumented with multiple samplers (THE WATER NEEDS TO BE TRANSFERRED FROM THE DIFFUSION SAMPLERS TO THE VOA VIALS AS QUICKLY AS POSSIBLE):

a) The sampler assembly shall drawn to the top of the well. The uppermost diffusion bag should be removed from the assembly and sampled first. The remainder of the assembly shall be secured to the top of the well and allowed to hang inside the well, near the wellhead. Cross-contamination by other sources and exposure to excessive heated are prevented by pulling only one sampler from the well at a time.

b) Cut the cable ties to removed the upper-most diffusion sampler from the rope. Examine the physical surface of the diffusion sampler membrane for evidence of any type of film, such as algae, oil, etc., that may affect the performance of the diffusion membrane. Record observations in the sampler's field log book.

c) Sampling equipment, especially scissors used to cut open the diffusion samplers, shall be decontaminated in accordance with SOP No. McAFB-013 (Radian International, 1997a) before sampling each diffusion bag.

d) The diffusion sampler shall be cut open with a "clean" pair of scissors, and the water transferred (by GENTLY pouring) into four 40-mL VOA vials. The samples shall be collected with zero headspace, preserved with hydrochloric acid or equivalent, and stored at 4°C in accordance with SOP No. McAFB-013 of the *Basewide RI/FS QAPP* (Radian International, 1997a).

i) The samples shall be labeled with the well number and the relative depth.

ii) For example, a typical bottle label might be "MW-###DSA-NS, where “DS” = diffusion sampler, depth = “A” for the shallowest sample, and “NS” = normal sample to differentiate it from a field duplicate. The relative depths are identified as A, B, C, D, etc., with A being the shallowest and increasing depth identified by increasing alphabetical identifier as noted in the well instrumentation log.

iii) For quality control samples collected in duplicate (WHITE samplers), two sets (four vials per set) of VOA vials shall be filled from the same diffusion bag.

e) Excess water from the diffusion samplers will be contained approved storage tanks (or equivalent storage equipment) designated for use by the GWMP sampling team. This water shall be disposed of as directed by McClellan AFB Field Team Staff. Used diffusion samplers can be contained in drums or plastic bags with the PPE for the sampling.

f) Remove the next sampler from the well as outlined in Steps “a” and “b” above and again secure the assembly inside the well. This shall continue until samples from the deepest bag are transferred to VOA vials.

g) All samples should be documented in accordance with SOP No. McAFB-013 of the *Basewide RI/FS QAPP* (Radian International, 1997).

APPENDIX I

RESPONSE TO COMMENTS
ON DRAFT TAAR AND DRAFT FINAL TAAR

Table I-1: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	U.S. EPA Region IX COMMENTS: (Mohamed Nur – Tech Law)	McClellan AFB RESPONSE
General	Based on the results of the demonstration and associated cost analysis, the TAAR concludes that the diffusion sampling technique has the potential to dramatically reduce the costs associated with long-term monitoring of VOCs in groundwater and that the data from the diffusion sampling and from the conventional purge-and-sample approaches have shown a close correlation. Based on the review of the TAAR, TechLaw generally agrees with these conclusions, however, since the data generated from groundwater sampling will be used for various regulatory and administrative decisions, we recommend that a full-scale application of this sampling technique be implemented simultaneously with that of the conventional sampling at least for one quarter of the McClellan groundwater monitoring program. In addition, the recommendations provided in Section 1.5 of the TAAR should be strictly followed before selecting this technique for a full-scale site wide use. TechLaw believes that there are no major concerns to approving the diffusion membrane sampling technique for monitoring VOCs in groundwater. Replacement pages addressing the comments provided herein could be provided without a major revision to the report.	The initial pilot testing recommended in the first bullets of Sections 1.5 and 8.1 is consistent with the reviewer's recommendation that the two sampling methods be conducted simultaneously for one sampling quarter. The text has been revised in these sections to clarify that the pilot testing should consist of one quarter of side-by-side sampling that follows the recommendations for diffusion sampler implementation included in the TAAR.
General	The Technology Application Analysis Report (TAAR) raises a concern over the optimal placement of the diffusion membrane samplers, but, based on the results of the field demonstration, concludes that one sampler placed near the mid-point of the saturated well screen interval and adjacent to a coarse-grained formation will likely yield results representative of the contamination in a well. The TAAR also recommends that diffusion samplers should only be used at sites where the groundwater gradients are sufficient to allow water to pass through the monitoring well screens without purging. However, the cost of conducting assessments for these activities (i.e., determining the optimal placement and number of samplers, and verifying that the water within a well screen is not stagnant) are not included in the cost analysis. Some of these activities, such as determining the groundwater gradients may be recurring costs as it is likely that due to the groundwater extraction systems on site and other natural causes (e.g., the geologic and hydrology properties of the aquifer formation at the McClellan site vary over short distances and the aquifers are laterally and vertically interconnected), the horizontal and vertical gradients may be variable with time and distance. Thus, collection of static water level elevations on a continuing basis may need to be conducted to determine if	The reviewer is correct in concluding that static groundwater elevations should be recorded on a regular basis. The McClellan GWMP collects this data as part of each quarterly sampling event. This data is used for capture zone analysis of the groundwater extraction systems included in each quarterly report. Since this requirement is necessary regardless of the sampling protocol employed, these costs were not included in this cost analysis. The initial well assessment to determine optimal diffusion sampler placement would typically consist of using existing geologic logs and well construction details to identify sampler placement in accordance with the recommendations included in the TAAR. These costs were incorporated as a one-time cost for

Table I-1: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	U.S. EPA Region IX COMMENTS: (Mohamed Nur – Tech Law)	McClellan AFB RESPONSE
	horizontal and vertical flow gradients have changed since initial site characterization and/or last round of groundwater sampling, which in turn could necessitate modification of the diffusion sampler monitoring program including the candidate wells and depths at which the samplers will be placed. Please revise the TAAR to discuss the efforts needed, including cost to determine the issues identified above and provide the criteria that will be used to determine whether a well exhibits sufficient gradient.	the diffusion samplers. One of the recommendations for well selection criteria is that the gradients be sufficient to allow water in the well casing to exchange with the formation water without purging the well. A cursory review of remedial investigation and quarterly hydrogeologic (*i.e.,* groundwater gradients, velocities, and directions) were used to qualitatively evaluate the site conditions using professional judgement. This study did not include a field evaluation of individual monitoring well hydraulics such as borehole flowmetering. An in-depth study of well hydraulics would be necessary to quantitatively determine the minimum gradient requirements. This was not within the scope of this study.
Section 4.2.1.1, Diffusion Sampler Installation.	Table 4.1 and Figure E.1 indicate that MW-136 is completed in monitoring zone B. However, the well construction diagram in Figure E.1 indicates that screen interval for this well is between approximately 231 and 244.5 feet below ground surface (bgs), which, as shown on the cross-section provided in Figure 3.3, does not appear to be completed in Zone B monitoring, but rather in Zone C monitoring. Please clarify this discrepancy.	The reviewer is correct, MW-136 is a C-zone monitoring well. This discrepancy was corrected throughout the document.
Section 4.4.1, Monitoring Well Selection.	The second paragraph of Section 4.4.1 indicates that 13 of the 30 selected wells have long screen lengths. However, only 10 are identified in Table 4.2. Please correct this discrepancy.	13 study wells have well-screen lengths longer than 10 feet. 12 of these 13 wells had saturated lengths greater than 10 (MW-362 has a 20-ft screen, but only 8.8 feet was saturated). For discussion purposes, wells are considered "long-screened" if more than 10 feet of the well screen was below the water table during the sampling event. Table 4.2 was taken from the project work plan where only 10 of these 13 wells were expected to

Table I-1: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	U.S. EPA Region IX COMMENTS: (Mohamed Nur – Tech Law)	McClellan AFB RESPONSE
		have more than 10 feet of screen below the water table. Since water levels were higher than expected during the sampling event, MW-214 and MW-270 unexpectedly had more than 10 feet of screen below the water table. Footnote "b" has been added to these wells in Table 4.2.
Section 7.3, Results of Cost Analysis.	The diffusion sampling cost summary does not provide costs that appear to be relevant to this sampling technique. It also underestimates some of the cost items and does not provide the basis for some of the estimates. For example, the diffusion sampling technique is applicable only when sampling for VOCs. The report should briefly address whether analyses for inorganic analytes is required under the GWMP for certain wells at McClellan AFB. If the well must be purged to sample for inorganic constituents, then the additional cost of sampling for VOCs is negligible. If this is the case, the need to sample these wells utilizing conventional purging and sampling techniques would need to be addressed in the cost analysis.	Section 7 has been extensively revised to provide a complete listing of costs and associated back-up data. The McClellan AFB GWMP does not routinely sample for non-volatile or semi-volatile compounds. The report has been revised (Sections 7 and 9) to clearly note that cost savings may not be realized for programs where non-volatile and semi-volatile compounds are routinely sampled.
Section 5.1.4, Well Contamination Profiles.	The figures referenced in column four of Table 5.2 contain a discrepancy. The correct references should be the figures provided in Appendix E. Please correct this discrepancy, which also occurs in footnote "a" to the table.	The references in the table will be corrected.
Section 5.1.4, Well Contamination Profiles.	The second paragraph of this section states that Dixon's Extreme Value Test indicated that seven of the 30 monitoring wells exhibited an apparent difference in VOC concentrations along the length of the well screen. However, concentration profiles provided in Appendix E indicate that MW-148, MW-216, MW-270, MW-282, MW-366 and MW-382 also show what appears to be distinct profiles for some of the constituents. Most of these wells are also identified in Table 5.3 as having distinct concentration profile. Although this observation is not based on statistics, these wells appear to be in the category of those wells identified as exhibiting significant decrease or increase of concentrations of some of the contaminants with depth.	The six wells were reevaluated. The apparent gradients in MWs-216, 270, 282, and 366 are a function of the selected scales used in the Appendix E figures and are not statistically significant. Dixon's test was rerun on MW-148 to assess the two highest concentrations. This revealed that both data points were outliers and the differences were statistically significant. The TCE results in MW-382 were determined to be log-normally distributed, thus Dixon's Test was rerun on the log-transformed data. This test indicated the top samplers were outliers and significantly

Table I-1: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	U.S. EPA Region IX COMMENTS: (Mohamed Nur – Tech Law)	McClellan AFB RESPONSE
		lower than the rest of the data set. Based on these results, MW-148 and MW-382 have been added to the list of well exhibiting distinct contamination profiles along their respective well screen intervals.
Section 9.1, Cost and Performance.	One of the reasons the diffusion membrane sampling is touted as a potential to dramatically reduce the cost associated with long-term monitoring of VOCs in groundwater is, according to the TAAR, the lack for need of purchasing expensive equipment that must be continually maintained or replaced. This potential dramatic reduction in cost of equipment purchase is not reflected in the cost summary provided in Tables 7.1 and 7.2. Please revise the TAAR to identify the expensive equipment referenced here and include their cost in Table 7.2.	The cost section (Section 7) has been extensively revised to provide a complete listing of costs and associated back-up data. The equipment costs have been expanded to clarify the specific "high" cost items needed for conventional sampling.

Table I-2: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	U.S. EPA Region IX COMMENTS: (Herb Levine)	McClellan AFB RESPONSE
General	The first is regarding monitoring 1,2-DCA. The diffusion samplers might not be reliable for the low levels which are found at McClellan. The original research on these samples showed that they are most reliable for concentrations above the reported hotspots (50 ppb).	1,2-DCA was reported at low levels (maximum of 1.53 µg/L) is 6 of the 30 study wells. The diffusion sampler results for 1,2-DCA were statistically equivalent to the GWMP data in 5 of the 6 wells at concentrations less than 1.0 µg/L. Only diffusion samplers in MW-270 reported 1,2-DCA concentrations statistically less than the GWMP results. In this well the average diffusion sampler concentration was 0.42 µg/L compared to 1.53 µg/L in the GWMP sample. While the number of 1,2-DCA hits in this study, 6, is relatively small, the data suggest the diffusion sampler results are comparable to conventional sampling results even at low concentrations.
General	The second comment is regarding using drilling logs to place the bag within a well. I agree that the bags should be placed within the flow zone, though I am not convinced that the drilling logs will show this. My suggestion is to develop a profile for each well and then determine the appropriate location(s) for monitoring.	Based on the results from 28 of the study wells (lithologic logs could not be found for 2 wells), VOC concentrations in diffusion samplers located adjacent to high permeability zones (*i.e.* sands and gravels), were typically equal to or greater than the GWMP results. A discussion of this statistical comparison has been included in Section 5 along with new statistical evaluations on depth and concentration range effects.

Table I-3: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	U.S. EPA Region IX COMMENTS: (Joe Eidelberg – EPA QAO)	McClellan AFB RESPONSE
Section 4.4.6, Quality Assurance Sampling	Although the report discusses precision and completeness, it does not address accuracy in the results. The report does not discuss analysis of any matrix spike/matrix spike duplicate (MS/MSD) samples, laboratory control samples (LCS), or performance evaluation (PE) samples. It is recommended that in future studies all data quality indicators (DQIs) be discussed.	Section 4.4.6 has been revised to include discussions on the accuracy of the data. The independent data evaluation report has been added to Appendix C.
Section 4.4.6	Section 4.4.6 states that a cursory evaluation of the data summary and validation conducted by the McClellan AFB contractor revealed anomalies, therefore, an additional comprehensive independent data review and validation was conducted in preparing this report. The report should identify the party which performed the independent data validation. Further, the report should clarify whether the raw data was used for verification and should also indicate the percent of data subjected to full validation using the raw data.	Section 4.4.6 has been clarified to state that TRW completed a review and assessment of the data received from Radian International. TRW performed a 100% review of the raw analytical data. This and other specific elements of the review have been included in the Section 4.4.6 discussion. The report of this evaluation has been included in Appendix C.
Section 4.4.6.7	Section 4.4.6.7 states that the primary laboratory did not report the method detection limit (MDL) and practical quantitation limits (PQL) as the same value. It is recommended that clarification be provided the PQL is usually two to five times higher than the MDL.	Section 4.4.6 has been clarified as requested and the observation regarding MDL and RL reporting and has been revised to better state the finding.
Section 5.1.2, Derivation of Acceptable Level of Variability in Analytical Data; Tables D-1, RPD Calculations for Diffusion Sampler Split Samples; D-2, Relative Percent difference Frequency of Passing	The split samples data for the diffusion sampling generated by two different laboratories indicate a high correlation. However, the following inconsistencies were noted in the report for which clarification should be provided. Section 5.1.2 states that 19 split samples were collected and sent to asecond laboratory for confirmation purposes, while Section 4.4.4, Groundwater Sample Analyses, indicates collection of 18 split samples.	Sections 4 and 5 have been revised to correct the typographical error and consistently present the number of split samples taken.
Section 5.1.2	Section 5.1.2 states that from these split samples, 40 sample/analyte matches between the normal and split sample data sets were identified. However, Table D-2 indicates 39 counts and not 40 for comparison.	Section 5.1.2 has been revised to correct the typographical error and show 39 sample/analyte matches.

Table I-3: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	U.S. EPA Region IX COMMENTS: (Joe Eidelberg – EPA QAO)	McClellan AFB RESPONSE
Section 5.1.3, Unmatched Analytes in Diffusion Samplers; Table 5.1, Unmatched VOCs Reported in Diffusion Samplers Only	Section 5.1.3 indicates that there were 140 instances where the same contaminants were reported in samples from both data sets; diffusion sampler and routine purge-and-collect samples. This indicates a significant correlation between the two sampling methodologies. However, Section 5.1.3 also states that in nearly half of the study wells, analytical results from diffusion samplers indicated the presence of at least one, and often several, contaminants that were not reported in routine purge-and-collect samples. Table 5.1 summarizes these unmatched results, which lists concentration range below the action levels and will not affect regulatory decisions. These results suggest possible inferior performance for routine purge-and-collect sampling methodology for VOC samples, especially for low molecular weight compounds. It is recommended that further discussion addressing this possibility be provided.	Numerous research papers have been published that suggest the standard purge-and-sample protocol inherently introduces a number of biases into VOC sampling results. Biases are introduced during the placement of the sampling equipment into the well, agitation/aeration of the sample during pumping, etc. that may lead to VOC losses during the sampling process. In addition, mass averaging (*i.e.,* dilution) of the sample may also occur which could mask low-level contamination. These are just a few examples of potential biases inherent to the standard sampling procedures. The discussion in Section 5.1.3 has been referenced to Section 4.1 which provides an expanded discussion on the principles and limitations of the two sampling procedures.
Section 5.1.7, Comparison of Middle Diffusion Sampler Concentration to GWMP Data	Section 5.1.7 compares the data between middle diffusion samplers and corresponding purge-and-collect samples using "test of means", "comparison of relative percent difference (RPD) values", and "test of differences". The results are mixed as summarized below. The "test of mean" results (Section 5.1.7.1) indicate that the VOC concentrations in the middle diffusion samplers passed the one-sided t-tests and the report concludes that the VOC concentration in the middle diffusion samplers were representative of the entire well screen interval. The "comparison of RPD values" (Section 5.1.7.2) indicates that 70% of the data pairs had a RPD value less than 15% and 84% of the data had an RPD value less than 30% and/or a concentration difference less than 1.0 microgram per liter (ug/L). However, Section 5.1.7.3 indicates that the two-sided paired t-tests on the results from the middle diffusion samplers were not equivalent to the corresponding groundwater monitoring program (GWMP) results for 1,1-DCA, cis-1,2-DCE, and PCE. One-sided t-tests concluded that 1,1-DCA and cis-1,2-DCE concentrations were statistically higher in the middle diffusion samplers, while the PCE concentrations were	The test of means results are somewhat misleading in that they indicate the middle diffusion sampler is representative of the average VOC concentrations in the well. But when considering the concentration spikes, typically associated with coarse-grained materials, the test of means effectively averaged out these extreme values; thus masking the true nature of the contamination. This becomes apparent when evaluating paired t-test results which indicate 1,1-DCA, cis-1,2-DCE, and PCE are not equivalent in both the middle diffusion sampler and GWMP samples. Thus, supporting the conclusion that one diffusion sampler blindly placed at the midpoint of the saturated well screen interval may not provide the most representative

Table I-3: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	U.S. EPA Region IX COMMENTS: (Joe Eidelberg – EPA QAO)	McClellan AFB RESPONSE
	statistically lower. The report attributes these discrepancies to several possibilities including analytical variation, incomplete equilibrium times, and vertical and lateral mass averaging during well purging.	sample from the well. New statistical evaluations and discussion on geologic, depth, and concentration range effects have been added to Section 5 that support the conclusion that optimal diffusion sampler placement is a function of several variables.

Table I-4: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	RWQCB COMMENTS: (James Taylor)	McClellan AFB RESPONSE
General	The Report is informative and well prepared, however, passive diffusion sampling is not an appropriate sampling method for non-volatile organic compounds (non-VOCs, i.e., inorganics, petroleum, PNAs, etc.) The Report does not address how monitoring for these constituents will be accomplished. While monitoring for non-VOCs may be necessary for only a few areas at McClellan, other methods of sampling that result in cost savings (i.e., low flow sampling) should be evaluated at sites where sampling for non-VOCs may be necessary. Traditional or low flow sampling techniques will be necessary when non-VOC sampling is required.	The McClellan AFB GWMP does not routinely sample for non-volatile or semi-volatile compounds. Several sections of the report have been revised to clearly note that cost savings may not be realized for programs where non-volatile and semi-volatile compounds are routinely sampled. The report has also been clarified to state that traditional sampling would be used for sampling semi-volatile and non-volatile compounds as part of the GWMP.
Section 1.3, page 1-2, first bullet summary:	This first summary does not appear correct or is difficult to follow. It addresses 7 of 30 samples that exhibited an apparent difference in VOC concentrations with depth. The 4 of 13 long-screened wells and 6 of 18 shallow wells does not add up to the 7 referenced wells and the total does not add up to 30 wells. Please clarify or correct this discrepancy.	As discussed in response to TechLaw comment on Section 5.1.2, MW-148 and MW-382 have been added to the list of wells exhibiting vertical contaminant gradients. Seven other wells (MWs-154, 155, 206, 235, 271, 288, and 381) also exhibited significant differences in concentrations with depth. Five of the wells had long screen lengths. As with most long-screened wells on-base, these 5 were also screened in the shallow A-zone. Thus, 5 of the 7 shallow wells were also classified as long-screened. The text will be revised to clarify this.
Figures 3.4 through 3.7, pages 3-9 through 3-12:	These figures should include a symbol for monitoring wells in the legend, and an explanation that the wells shown on the map are the wells that were identified and evaluated for the passive diffusion sampling study. In addition, Figures 3.5 through 3.7, are titled "MCL and Hot Spot Target Areas." Since these maps do not have hot spots identified on them, a more appropriate title would be simply, *MCL Target Areas*.	Symbols for monitoring wells included in the study will be added to the Legends. The titles will be revised to represent MCL Target Areas.
Section 4.1.2, page 4-5, Disadvantages and Limitations, first bullet:	See General Comment 1.	Please see response to Comment 1

Table I-4: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	RWQCB COMMENTS: (James Taylor)	McClellan AFB RESPONSE
Section 4.4.3, page 4-10:	This paragraph states that a Grundfos® submersible pump was used to collect groundwater samples from all monitoring wells. Using a Grundfos® pump to purge monitoring wells is standard practice, however, VOCs can be lost using this type of pump for collection of VOC samples. Submersible pumps generate heat and can cause aeration during sampling. Please revise this section to include the method used to collect groundwater samples after purging (i.e., bailer), or add a reference to the document containing the standard operating procedures used for sampling VOCs in groundwater (i.e., McClellan SOPs). If VOC samples were collected using the submersible, then the data used in this study may be invalid.	The conventional samples were collected as part of the 2Q99 GWMP sampling event by the McClellan GWMP contractor in accordance with SOP No. McAFB-013 in the Basewide RI/FS QAPP. The explicit reference to this SOP will be included in this paragraph.
Section 5.1.2, page 5-2, last paragraph, second sentence:	This sentence states that, *"A total of 19 split samplers were collected during the study and sent to a second analytical laboratory for confirmation purposes."* Section 4.4.6.1, page 4-12, first sentence, states that a total of 18 duplicate samples were analyzed at a second analytical laboratory. Please correct this discrepancy.	This inconsistency has been corrected in the document.
Section 5.1.6.1.1, page 5-7, second paragraph, last sentence:	The previous sentence that states that analyte concentrations in the diffusion samplers, determined to be higher or lower than the GWMP data, differed by less than 1.0 µg/L. The referenced sentence states that, *"This difference is typically considered negligible for most regulator purposes."* We do not support this statement. McClellan AFB has VOC contaminants that have MCLs and/or Water Quality Objectives that are less than 1.0 µg/L (i.e., carbon tetrachloride, and 1,2-DCA at 0.5 µg/L, and background for VOCs is non-detect). Therefore, we are concerned with any sampling results for constituents that are detectable, even at low levels. Since this statement is not necessary to validate the conclusions or recommendations of the Report, it should be deleted.	The statement has been deleted.
Table 5.3, page 5.8, MW-282(A):	The conclusions column for this monitoring well states that Freon 113 is not regulated. This is incorrect. Freon 113 has a California Primary MCL of 1200 µg/L. In addition, the Board regulates any constituent that may impact background groundwater/surface water quality. Please delete this statement.	The statement "which is not regulated" has been deleted.

Table I-5: RESPONSE TO COMMENTS

Responses Incorporated into the *Draft Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	DTSC COMMENTS: (Bill Kilgore)	McClellan AFB RESPONSE
General	Characterization of ground water contamination at very discrete intervals is useful in identifying where the contamination is flowing in the aquifer. One drawback to discrete characterization is the increased potential, if used incorrectly, to miss detecting contamination because the sampling device was not close enough to the zone of contamination.	This is a valid concern when using a discrete interval sampler. There were only a few cases where a specific analytes were reported near the MDL (*i.e.,* several orders of magnitude less than action levels) in most, but not all diffusion samplers; supporting the conclusion that the contaminants were present, though not necessarily at the same concentrations, throughout the entire well screen length. Thus, the main concern is detecting the zone of highest contamination. The report provides recommendations on how to optimally locate the sampler depth in a well.
General	It would be useful for the report to present something like a systems approach view of the movement of contaminants and ground water. All inflows minus all outflows. The system consisting of the volume of the environment that the sampler is thought to represent. It would be interesting to see factors displayed such as vertical diffusion velocity, horizontal diffusion velocity, horizontal ground water flow velocity, vertical ground water flow velocity, diffusion rate into and out of the sampler.	A detailed study of the well hydraulics would be necessary to collect monitoring well-specific data such as horizontal and vertical velocities to develop the systems analysis suggested. The collection of this data was beyond the scope of this study.
Section 7	It is appropriate that some of the cost savings can be used to better characterize the nature and extent of contamination. The use of this type of sampler may better be viewed as an opportunity to both increase knowledge of the distribution of contaminants and to reduce purge water costs. In the cost analysis you assume one diffusion sample per well. We estimate that adding one additional sample per well would increase the total cost by approximately $50,000. This would increase the total cost to about $140,000. This is still considerably below the cost you quote for conventional sampling.	We agree that cost savings can be realized while using multiple samplers within wells. It is the intent of the base to use a single diffusion sampler as part of the routine groundwater monitoring program. The SOPs for the use of diffusion sampling are suitable for multiple samplers and this configuration can be used when information on vertical contaminant gradients is desired.

Table I-6: RESPONSE TO COMMENTS

Responses Incorporated into the *Final Diffusion Sampler Technology Application Analysis Report*

TAAR REFERENCE:	Regulatory COMMENTS:	McClellan AFB RESPONSE
	No Comments on the Draft Final TAAR were received from the regulatory agencies.	Several minor editorial changes were incorporated into the final TAAR.