Appendix B

Groundwater Quality Data

Table B.1A
Summary of Groundwater Sample Analyses, Round 14 (September 2001)
MCAS El Toro

Well Id	Sampling System	Date Sampled	VOCs w/MTBE CLP Method (OHM 04.2)	Gross Alpha/Beta US EPA Method 900	Metals (filtered) CLP Method (ILM 0.40)	Perchlorate US EPA Method 300 Modified	Alkalinity US EPA Method 310.1	Nitrate- Nitrite US EPA Method 353.2	TDS US EPA Method 160.1	Chloride US EPA Method 300	Sulfate US EPA Method 300	QC Samples
SITE 1												
01-MW201	bladder pump	25-Sep-01	1			1						
SITE 2												
02_DGMW59	bladder pump	25-Sep-01	1	1	1							
02_DGMW60	bladder pump	25-Sep-01	1	1	1							
02_DGMW61	bladder pump	25-Sep-01	1	1	1							
02NEW11	bladder pump	25-Sep-01	1	1	1							
02NEW15	bladder pump	25-Sep-01	1	1	1							Duplicate
02NEW16	bladder pump	25-Sep-01	1	1	1		1	1	1	1	1	
02NEW2	bladder pump	25-Sep-01	1	1	1							
02NEW8A	bladder pump	25-Sep-01	1	1	1							
SITE 3												
03_DGMW64A	None	17-Sep-01	1	1	1	1	1	1	1	1	1	
03_DGMW65XA	None	17-Sep-01	1	1	1	1	1	1	1	1	1	
03_UGMW26	bladder pump	20-Sep-01	1	1	1	1						
03_UGMW26A	None	20-Sep-01	1	1	1	1						
04_DBMW40	bladder pump	20-Sep-01	1	1	1	1						
04_DGMW66	bladder pump	20-Sep-01	1	1	1	1						Duplicate
04_DGMW66A	None	20-Sep-01	1	1	1	1						
04_UGMW63	bladder pump	20-Sep-01	1	1	1	1						
SITE 5												
05_DBMW41A	None	19-Sep-01	1	1	1	1						
05_DGMW67A	None	19-Sep-01	1	1	1	1	NS	NS	NS	1	1	
05_DGMW68A	None	20-Sep-01	1	1	1	1						
05_UGMW27A	None	24-Sep-01	1	1	1	1						Duplicate
05NEW1	bladder pump	19-Sep-01	1	1	1	1	1	1	1	1	1	
SITE 16												
16_MW_1	bladder pump	24-Sep-01	1									Duplicate
16_MW_2	bladder pump	Not Sampled	NS									
16_MW_3	bladder pump	24-Sep-01	1									
16_MW_5	None	20-Sep-01	1									
SITE 17												
17_DGMW82	bladder pump	20-Sep-01	1		1							
17NEW1	bladder pump	20-Sep-01	1		1		1	1	1	1	1	

Table B.1A
Summary of Groundwater Sample Analyses, Round 14 (September 2001)
MCAS El Toro

Well Id	Sampling System	Date Sampled	VOCs w/MTBE CLP Method (OHM 04.2)	Gross Alpha/Beta US EPA Method 900	Metals (filtered) CLP Method (ILM 0.40)	Perchlorate US EPA Method 300 Modified	Alkalinity US EPA Method 310.1	Nitrate- Nitrite US EPA Method 353.2	TDS US EPA Method 160.1	Chloride US EPA Method 300	Sulfate US EPA Method 300	QC Samples
SITE 18												
18_BGMP10C	Westbay System	13-Sep-01	1									
18_BGMP10D	Westbay System	13-Sep-01	1									FB/ER
18_BGMP10E	Westbay System	13-Sep-01	1									
18_BGMP10F	Westbay System	13-Sep-01	1									
18_BGMW04A	bladder pump	19-Sep-01	1									
18_DW350	bladder pump	21-Sep-01	1									
18_DW450	bladder pump	21-Sep-01	1									Duplicate
18_DW540	bladder pump	21-Sep-01	1									
18_MCAS01-5	Westbay System	24-Sep-01	1									
18_MCAS02-5	Westbay System	12-Sep-01	1									Duplicate
18_MCAS04	None	24-Sep-01	1									
18_MCAS06	None	24-Sep-01	1									ER
18_MCAS07-4	Westbay System	24-Sep-01	1									
18_MCAS08	None	21-Sep-01	1									
18_MCAS09	None	18-Sep-01	1									
18_MCAS10	None	21-Sep-01	1									
SITE 24												
07_DBMW100A	None	18-Sep-01	1									
07_DBMW43	bladder pump	18-Sep-01	1									
07_DBMW43A	None	17-Sep-01	1									
08_DGMW74	bladder pump	18-Sep-01	1									
08_UGMW29	bladder pump	18-Sep-01	1									
08_UGMW29A	None	18-Sep-01	1									
09_DBMW45	bladder pump	17-Sep-01	1									
09_DGMW75	bladder pump	17-Sep-01	1									
12_DBMW48A	None	14-Sep-01	1									
13_DGMW78	bladder pump	21-Sep-01	1									Duplicate
15_DBMW51	bladder pump	21-Sep-01	1									
18_BGMP08E	Westbay System	13-Sep-01	1									
18_BGMPO6E	Westbay System	Not Sampled	NS									
18_BGMW04B	bladder pump	19-Sep-01	1									
18_BGMW05C	bladder pump	19-Sep-01	1									
18_BGMW05D	bladder pump	19-Sep-01	1									
18_BGMW101A	bladder pump	19-Sep-01	1									

Table B.1A
Summary of Groundwater Sample Analyses, Round 14 (September 2001)
MCAS El Toro

Well Id	Sampling System	Date Sampled	VOCs w/MTBE CLP Method (OHM 04.2)	Gross Alpha/Beta US EPA Method 900	Metals (filtered) CLP Method (ILM 0.40)	Perchlorate US EPA Method 300 Modified	Alkalinity US EPA Method 310.1	Nitrate- Nitrite US EPA Method 353.2	TDS US EPA Method 160.1	Chloride US EPA Method 300	Sulfate US EPA Method 300	QC Samples
18_BGMW14	bladder pump	24-Sep-01	1									
18_BGMW16	bladder pump	24-Sep-01	1				1	1	1	1	1	
18_BGMW18A	None	17-Sep-01	1				1	1	1	1	1	
18_BGMW19D	bladder pump	24-Sep-01	1									Duplicate
18_DW135	bladder pump	21-Sep-01	1									
18_DW250	bladder pump	21-Sep-01	1									
18_MCAS01-3	Westbay System	24-Sep-01	1									
18_MCAS02-3	Westbay System	12-Sep-01	1									
18_MCAS03-2	Westbay System	11-Sep-01	1									
18_MCAS03-3	Westbay System	11-Sep-01	1									
18_MCAS07-2	Westbay System	24-Sep-01	1									
18_PS2	bladder pump	19-Sep-01	1									
18_PS3	None	25-Sep-01	1									
18_PS3A	None	18-Sep-01	1									
18_PS7	bladder pump	25-Sep-01	1									
21_UGMW37	None	14-Sep-01	1									
22_DBMW47	bladder pump	17-Sep-01	1									
24EX3OB1	bladder pump	18-Sep-01	1									
24EX5OB1	bladder pump	18-Sep-01	1									
24EX6OB2	bladder pump	18-Sep-01	1									
24NEW4	bladder pump	18-Sep-01	1									Duplicate
24NEW5	bladder pump	18-Sep-01	1									
24NEW6	bladder pump	19-Sep-01	1									
24NEW7	bladder pump	19-Sep-01	1									
24NEW8	bladder pump	18-Sep-01	1									
398MW-13	None	14-Sep-01	1									
		Totals:	85	21	23	14	7	7	7	7	8	12

Notes:
CA = California
CLP = Contract Laboratory Program
EQ = Equipment Rinsate
FB = Field Blank
MCAS = Marine Corps Air Station
NS = Not sampled during Round 14, but was scheduled for sampling.
QC = Quality Control
TDS = Total Dissolved Solids
US EPA = United States Environmental Protection Agency
VOCs = Volatile Organic Compounds

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
Site 1																		
01-DGMW57	83	27-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
01-DGMW58	77	6-Aug-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methyl Disulfide	11 JN
01MW101	77	6-Aug-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
01MW102	135	28-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
01MW201	57	28-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		25-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
Site 2																		
02_DGMW59	89	15-Dec-92	0.6	J	1	U	1	U	1	U	1	U	1	U	1	U		
		23-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		6-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		6-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		4-Nov-96	0.7	J	1	U	1	U	1	U	1	U	1	U	1	U		
		26-Mar-97	1	U	1	U	1	U	1	U	1	U	1	J	1	U	Bromodichloromethane	0.6 J
		26-Mar-97															Chlorodibromomethane	0.7 J
		26-Mar-97															Methylene Chloride	2
		3-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		28-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.4 J
		7-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		27-Jan-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		3-May-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		21-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		20-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		25-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1,4-Dichlorobenzene	0.4 J
																	Dichlorodifluoromethane	0.3 J

1 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
02_DGMW60	100	18-Nov-92	82	8	1 U	1 U	8	6	1 U	1,2-Dichloroethane	0.9 J
		23-Jun-93	61	6	1 U	1 U	5	5	1 U	1,1,2-Trichloroethane	2
		23-Jun-93								1,2-Dichloroethane	0.6 J
		15-Aug-95	91	4.6 J	0.5 U	0.5 U	8 J	5.6 J	1 U	1,2-Dichloroethane	0.8 J
		15-Aug-95								1,1,2 Trichloroethane	1.7 J
		28-Nov-95	81	4 J	6 U	2 U	1 U	5.1	1 U		
		6-Feb-96	98	4	1 U	1 U	1	6	1 U	1,1,2-Trichloroethane	2
		6-Feb-96	98	3	1 U	1 U	0.8 J	5	1 U	1,1,2-Trichloroethane	2
		4-Nov-96	203	7	1 U	1 U	20	17	1 U	1,1,2-Trichloroethane	6
		4-Nov-96								1,2-Dichloroethane	2
		26-Mar-97	150	5 J	10 U	10 U	10	10	10 U	1,1,2-Trichloroethane	5 J
		26-Mar-97								Chlorodibromomethane	5 J
		1-Jul-97	160	5	1 U	1 U	18	18	1 U	1,1,2-Trichloroethane	6
		1-Jul-97								1,2-Dichloroethane	2
		1-Jul-97								Bromomethane	0.7 J
		28-Oct-97	190	6	1 U	1 U	21	20	1 U	1,1,2-Trichloroethane	7
		28-Oct-97								1,2-Dichloroethane	2
		28-Oct-97	190	6			22	21	1 U	1,1,2-Trichloroethane	7
		28-Oct-97			1 U	1 U				1,2-Dichloroethane	2
		28-Oct-97								1,2-Dichloropropane	0.3 J
		12-Oct-98	130	4.2			16.3	16	1 U	1,1,2-Trichloroethane	6.2
		12-Oct-98								1,2-Dichloroethane	1.3 J
		25-Jan-99	130	4.6	1 U	1 U	16.2	18	1 U	1,1,2-Trichloroethane	5.9
		25-Jan-99								1,2-Dichloroethane	1.8
		3-May-99	130	4.4	1 U	1 U	15	16	1 U	1,1,2-Trichloroethane	5
		3-May-99								1,2-Dichloroethane	1.5
		3-May-99								1,2-Dichloropropane	0.2 J
		19-Jul-99	140	4.7	1 U	1 U	16.2	18	1 U	1,1,2-Trichloroethane	5.9
		19-Jul-99								1,2-Dichloroethane	2.1
		21-Jun-00	100	3	1 U	1 U	10	11	1 U	1,1,2-Trichloroethane	4
		21-Jun-00								1,2-Dichloroethane	1
		25-Sep-01	110	3	1 U	1 U	12	14	1 U	1,1,2-Trichloroethane	5
										1,2-Dichloroethane	2
02_DGMW61	100	14-Dec-92	1	2	1 U	1 U	1 U	1 U	1 U		
		22-Jun-93	2	4	1 U	1 U	1 U	1 U	1 U		
		16-Aug-95	1 U	13	1 U	1 U	1 U	1 U	1 U		
		29-Nov-95	1 U	19	1 U	1 U	1 U	1 U	1 U		
		8-Feb-96	1 U	14	1 U	1 U	1 U	1 U	1 U		
		4-Nov-96	1 U	20	1 U	1 U	1 U	1 U	1 U		
		26-Mar-97	0.8 J	12	1 U	1 U	1 U	1 U	1 U		
		2-Jul-97	1 U	10	1 U	1 U	1 U	1 U	1 U		
		28-Oct-97	0.9 J	11	1 U	1 U	1 U	1 U	1 U		
		8-Oct-98	1 U	5.2	1 U	1 U	1 U	1 U	1 U		
		25-Jan-99	0.5 J	6.2	1 U	1 U	1 U	1 U	1 U		
		27-Apr-99	0.5 J	6	1 U	1 U	1 U	1 U	1 U		
		19-Jul-99	1 U	6	1 U	1 U	1 U	1 U	1 U		
		21-Jun-00	1 U	3	1 U	1 U	1 U	1 U	1 U		
		25-Sep-01	1 U	3	1 U	1 U	1 U	1 U	1 U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected		
			5		5		0.5		6		6		100		1			Result	
02NEW2	95	21-Dec-95	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		26-Nov-96	1		1	U	1	U	1	U	1	U	1	U	1	U			
		26-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		3-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		27-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.4	J
		8-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		27-Jan-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		4-May-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		20-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		20-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		25-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
02NEW8A	104	27-Dec-95	1	U	16		1	U	1	U	1	U	1	U	1	U			
		7-Nov-96	1	U	19		1	U	1	U	1	U	1	U	1	U			
		25-Mar-97	1	U	11		1	U	1	U	1	U	1	U	1	U			
		2-Jul-97	1	U	12		1	U	1	U	1	U	1	U	1	U			
		27-Oct-97	0.6	J	12		1	U	1	U	1	U	1	U	1	U			
		14-Oct-98	1	U	14		1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane	0.6	J
		14-Oct-98	1	U	13		1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane	0.6	J
		28-Jan-99	1	U	13		1	U	1	U	1	U	1	U	1	U			
		27-Apr-99	1	U	9.3		1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane	0.4	J
		20-Jul-99	1	U	14		1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane	1.1	
		21-Jun-00	1	U	7		1	U	1	U	1	U	1	U	1	U			
		25-Sep-01	0.5	J	5		1	U	1	U	1	U	0.8	J	1	U			
02NEW11	65	21-Dec-95	1	U	2		1	U	1	U	1	U	1	U	1	U			
		12-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		25-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		8-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		23-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		14-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		21-Jan-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		26-Apr-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		15-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		22-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		25-Sep-01	1	U	1	U	1	U	1	U	1	U	4		1	U	Bromodichloromethane	5	J
																	Bromoform	0.7	J
																	Chlorodibromomethane	4	J
02NEW15	65	12-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		1-Feb-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		26-Apr-99	1	U	1	U	1	U	1	U	0.4		1	U	1	U	1,2 Dichlorobenzene	3.5	
		26-Apr-99					1	U	1	U							Chlorobenzene	0.6	
		26-Apr-99					1	U	1	U							Dichlorodifluoromethane	0.5	
		19-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		22-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		25-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U			

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
02NEW16	65	8-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		26-Jan-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		4-May-99	1	U	0.3	J	1	U	1	U	1	U	1	U	1	U		
		21-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		25-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
02_UGMW25	75	12-Sep-92	0.9	J	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		7-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		17-Aug-95	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		28-Nov-95	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		12-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		26-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		8-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		23-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		7-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Toluene	0.8 J
		1-Feb-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		26-Apr-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		15-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
Site 3																		
03_DGMW64	285	15-Jan-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		6-Feb-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		26-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		12-Nov-96	1	U	1	U	1	U	1	U	1	U	1		1	U		
		12-Nov-96	1	U	1	U	1	U	1	U	1	U	1		1	U		
		4-Mar-97	1	U	1	U	1	U	1	U	1	U	0.8	J	1	U	Methylene Chloride	3
		30-Jun-97	1	U	1	U	1	U	1	U	1	U	0.9	J	1	U		
		16-Oct-97	1	U	1	U	1	U	1	U	1	U	0.8	J	1	U		
		13-Oct-98	1	U	1	U	1	U	1	U	1	U	0.7	J	1	U		
		2-Feb-99	1	U	1	U	1	U	1	U	1	U	0.8	J	1	U		
		6-May-99	1	U	1	U	1	U	1	U	1	U	0.9	J	1	U		
		26-Jul-99	1	U	1	U	1	U	1	U	1	U	1.3		1	U		
03_DGMW64A	250	15-Feb-01	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	0.8	J	10	UJ	Bromodichloromethane	0.4 J
		17-Sep-01	1	U	1	U	1	U	1	UJ	1	UJ	1		1	U	Bromodichloromethane	0.6 J
03_DGMW65X	270	18-Jan-93	1	U	1	U	1	U	1	U	1	U	1		1	U		
		7-Jul-93	1	U	1	U	1	U	1	U	1	U	1		1	U		
		26-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		11-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		4-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		30-Jun-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		15-Oct-97	1	U	1	U	1	U	1	U	1	U	0.5	J	1	U		
		13-Oct-98	1	U	1	U	1	U	1	U	1	U	0.8	J	1	U		
		29-Jan-99	1	U	1	U	1	U	1	U	1	U	0.9	J	1	U		
		7-May-99	1	U	1	U	1	U	1	U	1	U	0.7	J	1	U		
		26-Jul-99	1	U	1	U	1	U	1	U	1	U	0.9	J	1	U		
		19-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
03_DGMW65XA	235	15-Feb-01	10	U	10	U	10	U	10	U	10	U	10	U	10	U	Freon-113	4 J
		17-Sep-01	1	U	1	U	1	U	0.3	J	1	UJ	1	U	1	U	Freon-113	12
03_UGMW26	270	10-Jan-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		23-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		27-Feb-96	0.3	J	0.6	J	1	U	1	U	1	U	1	U	1	U		
		14-Nov-96	1		2		1	U	1	U	1	U	1	U	1	U		
		14-Nov-96	1		2		1	U	1	U	1	U	1	U	1	U		
		6-Mar-97	1	J	2		1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		1-Jul-97	0.8	J	1		1	U	1	U	1	U	1	U	1	U		
		17-Oct-97	0.9	J	2		1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.6 J
		13-Oct-98	0.9	J	1.1		1	U	1	U	1	U	1	U	1	U		
		3-Feb-99	1	J	1.3		1	U	1	U	1	U	1	U	1	U		
		5-May-99	1		1.4		1	U	1	U	1	U	1	U	1	U		
		22-Jul-99	1.2		1.4		1	U	1	U	1	U	1	U	1	U		
		19-Jun-00	0.8	J	1		1	U	1	U	1	U	1	U	1	U		
		20-Sep-01	1		1		1	U	1	U	1	U	1	U	1	U		
03_UGMW26A	235	28-Feb-01	0.3	J	0.6	J	10	U	10	U	10	U	0.5	J	10	U		
		20-Sep-01	1	U	1	U	1	U	1	U	1	U	0.4	J	1	U		
04_DBMW40	260	12-Mar-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2-Hexanone	7
		24-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	4			
		12-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	40			
		5-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		30-Jun-97	1	U	1	U	1	U	1	U	1	U	1	U	14			
		16-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	2			
		15-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Toluene	0.8 J
		4-Feb-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		5-May-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		26-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U	4-Methyl-2Pentanone	2 J
		20-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U		

5 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected		
			5		5		0.5		6		6		100		1			Result	
04_DGMW66	290	14-Jan-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		24-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		26-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		12-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	0.7	J			
		4-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		1-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		15-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		16-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Toluene	0.8	J
		4-Feb-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		11-May-99	1	U	1	U	1	U	1	U	1	U	0.4	J	1	U	Silane	1.1	JN
		23-Jul-99	1	U	1	U	1	U	1	U	1	U	0.5	J	1	U			
		20-Sep-01	1	U	1	U	1	U	1	UJ	1	UJ	1	U	1	U			
04_DGMW66A	230	20-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	150		Cyclohexane	0.9	J
																	Isopropylbenzene	0.6	J
																	Xylenes	3	
04_UGMW63	275	24-Nov-92	1	U	1	U	1	U	1	U	1	U	1	U	3		Methylene Chloride	2	
		25-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	4		Methylene Chloride	0.6	J
		30-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	3				
		14-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	7				
		14-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	7				
		15-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Toluene	0.8	J
		4-Feb-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		5-May-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Butane	1.5	JN
		26-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	0.9	J	Unknown C8H18	5.3	J
		26-Jul-99															Unknown Substituted Alkane	2.1	J
		26-Jul-99															Unknown Substituted Alkane	2.5	J
		26-Jul-99															Unknown Substituted Alkane	3.4	J
		19-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	0.9	J			
		20-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U			

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
Site 5																		
05_DBMW41	222	16-Nov-92	1	U	0.8	J	1	U	1	U	1	U	1	U	1	U		
		20-Oct-93	1	U	0.7	J	1	U	1	U	1	U	1	U	1	U		
		5-Dec-95	1	U	0.8	J	1	U	1	U	1	U	1	U	1	U		
		5-Dec-95	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		7-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		13-Nov-96	1	U	0.8	J	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	2
		13-Mar-97	1	U	0.6	J	1	U	1	U	1	U	1	U	1	U		
		8-Jul-97	1	U	0.6	J	1	U	1	U	1	U	1	U	1	U		
		21-Oct-97	1	U	0.5	J	1	U	1	U	1	U	1	U	1	U		
		16-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		3-Feb-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		10-May-99	1	U	0.2	J	1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane	0.3 J
		22-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane	0.6 J
		19-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
05_DBMW41A	185	16-Feb-01	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
		19-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
05_DGMW67	227	30-Nov-92	1	U	1	U	1	U	1	U	1	U	1	U	0.3	J		
		6-Mar-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		6-Dec-95	1	U	0.8	J	1	U	1	U	1	U	1	U	1	U		
		9-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		13-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	2
		14-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		20-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Jan-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		10-May-99	1	U	0.4	J	1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane	0.3 J
		22-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane	0.8 J
		20-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
05_DGMW67A	190	16-Feb-01	10	U	0.3	J	10	U	10	U	10	U	10	U	10	U		
		19-Sep-01	0.3	J	1	U	1	U	1	U	1	U	1	U	1	U		
05_DGMW68	210	17-Dec-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.5 J
		29-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		9-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		27-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		15-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		5-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		1-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		17-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		2-Feb-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		13-May-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Silane	1.5
		22-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		20-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		

7 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L													
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected		
			5		5		0.5		6		6		100		1			Result	
05NEW1	203	28-Dec-95	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		13-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1	
		13-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		9-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		9-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		21-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		19-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		2-Feb-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		14-May-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		23-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		19-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		19-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
05_UGMW27	238	12-Mar-92	0.6	J	0.9	J	1	U	1	U	1	U	1	U	1	U			
		6-Mar-93	0.6	J	0.8	J	1	U	1	U	1	U	1	U	1	U			
		17-Aug-95	2	J	0.6	J	1	U	1	U	1	U	1	U	1	J	Chlorobenzene	1	J
		17-Aug-95					1	U	1	U							Toluene	2	J
		8-Dec-95	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		29-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		13-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		13-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1	
		9-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		9-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
		21-Oct-97	1	U	0.5	J	1	U	1	U	1	U	1	U	1	U			
		21-Oct-97	1	U	0.6	J	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.3	J
		20-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane	0.9	J
		22-Jan-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane		
		10-May-99	1	U	0.3	U	1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane		
		21-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Dichlorodifluoromethane		
05_UGMW27A	190	27-Feb-01	10	U	0.3	J	10	U	10	U	10	U	10	U	10	U	Carbon disulfide	0.5	J
		27-Feb-01															1,2-Dichloropropane	5	J
		24-Sep-01	1	U	1	U	1	U	1	U	1	U	1		1	U	Bromodichloromethane	0.4	J
		24-Sep-01																	
Site 16																			
16_MW1	180	24-Sep-01	380		1	U	1	U	1	U	0.4	J	16		0.4	J	1,1-Dichloroethane	2	
		24-Sep-01															Freon-113	26	J
16_MW3	183	24-Sep-01	0.5	J	1	U	1	U	1	U	1	U	1	U	1	U	Freon-113	3	
		24-Sep-01																	
16_MW5	190	20-Sep-01	63		1	U	1	U	1	U	1	U	0.5	J	1	U	Freon-113	22	

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
Site 17																		
17_DGMW82	255	6-Mar-93	1	U	1	U	1	U	1	U	1	U	5		1	U	Methylene Chloride	0.9 J
		2-Aug-93	1	U	1	U	1	U	1	U	1	U	7		1	U	Methylene Chloride	1 J
		6-Dec-95	1	U	1	U	1	U	1	U	1	U	0.9	J	1	U		
		9-Feb-96	1	U	1	U	1	U	1	U	1	U	0.8	J	1	U		
		20-Nov-96	1	U	1	U	1	U	1	U	1	U	0.8	J	1	U		
		1-Apr-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		9-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		29-Jan-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Apr-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		20-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Freon-113	0.6 J
17_NEW1	226	12-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		20-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		24-Mar-97	0.6	J	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Jun-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Ethylbenzene	1
		23-Oct-97	1		1	U	1	U	1	U	1	U	1	U	1	U		
		9-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Jan-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Apr-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		20-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Freon-113	0.6 J
17_NEW2	123	3-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		20-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		24-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Jun-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		23-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.4 J
		9-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		29-Jan-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Apr-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
Site 18																		
18_GMP06A	455	10-Aug-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Chloromethane	0.9 J
		14-Aug-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	2
		14-Aug-92															Chloromethane	2 J
		8-Dec-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		7-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		8-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		10-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 GMP06	390	10-Jul-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Chloromethane	20
		13-Aug-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		8-Nov-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Chloromethane	2
		7-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		8-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		10-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		15-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
18 GMP06C	305	10-Jul-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Chloromethane	3
		17-Aug-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		8-Sep-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Chloromethane	5
		7-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		8-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		10-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
18 GMP10C	762	7-Jan-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		23-Jan-93	1	U	1	U	1	U	1	U	1	U	1	U	2	U		
		23-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		20-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Styrene	0.7 I
		30-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	0.6 I
		30-Oct-98															Styrene	0.9 I
		20-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	1.4
		20-Jul-99															Styrene	1.4
		13-Sep-01	1	U	1	U	1	U	1	UJ	1	UJ	1	U	1	U	Carbon Disulfide	1
		13-Sep-01															Styrene	1 I
18 GMP10D	573	22-Jan-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		28-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		23-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		20-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		20-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Acetone	1.2 I
		20-Jul-99															Carbon Disulfide	0.98 I
		20-Jul-99															Styrene	0.6 I
		21-Feb-01	10	U	10	U	10	U	10	U	10	U	0.3	I	10	U	Carbon Disulfide	6 I
		21-Feb-01															Ethylbenzene	2 I
		21-Feb-01															Styrene	11
		21-Feb-01															Toluene	6 I
		21-Feb-01															Vinyl Chloride	8 I
		21-Feb-01															Xylenes (total)	0.7 I
		13-Sep-01	1	U	1	U	1	U	1	UJ	1	UJ	1	U	1	U	Styrene	0.9 I
		13-Sep-01															Vinyl Chloride	0.4 I

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 GMP10E	449	21-Jan-93	1	U	1	U	1	U	1	U	1	U	1	U	2	I	Acetone	2
		7-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		29-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		24-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		24-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	0.5 I
		30-Oct-98															Styrene	0.6 I
		20-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Styrene	0.73 I
		21-Feb-01	10	U	10	U	10	U	10	U	10	U	10	U	10	U	Carbon Disulfide	0.8 I
		13-Sep-01	1	U	1	U	1	U	1	UI	1	UI	1	U	1	U	Styrene	0.7
18 GMP10F	228	20-Jan-93	1	U	1	U	1	U	1	U	1	U	1	U	2	I		
		25-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		24-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		24-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	0.7 I
		30-Oct-98															Ethylbenzene	0.33 I
		30-Oct-98															Styrene	2.3
		30-Oct-98															Toluene	1.2
		30-Oct-98															Vinyl Chloride	0.5
		30-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	1.1
		30-Oct-98															Styrene	2.7
		30-Oct-98															Vinyl Chloride	
		20-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Acetone	2.3 I
		21-Feb-01	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
		13-Sep-01	1	U	1	U	1	U	1	UI	1	UI	1	U	1	U		
18 BGMW04A	306	6-Sep-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Sep-92	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	1
		16-Jul-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		28-Jan-96	1		1	U	1	U	1	U	1	U	1	U	1	U		
		11-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		17-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	7
		17-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	6
		6-Nov-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		2-Aug-99	1	U	1	U	1	U	1	U	1	U	1	U	1			
		12-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U		

11 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18_DW350	350	15-Jul-88	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U			
		22-Sep-88	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U			
		20-Jan-89	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U			
		15-Jun-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		1-Nov-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		29-Jan-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Toluene	13
		29-Jan-96								Methylene Chloride	1
		6-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		6-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		27-Oct-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		30-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Jun-00	13	1 U	14	1 U	1 U	1 U	1 U		
		14-Feb-01	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
		21-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
18_DW450	450	15-Jul-88	0.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		22-Sep-88	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.3			
		20-Jan-89	0.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		30-Jun-93	1 J	1 U	1 U	1 U	1 U	1 U	1 U		
		1-Dec-93	2	1 U	1 U	1 U	1 U	1 U	1 U		
		29-Jan-96	4	1	1 U	1 U	1 U	1 U	1 U	Toluene	4
		5-Nov-96	5	2	1 U	1 U	1 U	1 U	1 U		
		6-Mar-97	4	2	1 U	1 U	0.8 J	0.5 U	1 U		
		27-Oct-98	3.5	1.4	1 U	1 U	0.6 J	1 U	1 U		
		30-Jul-99	2	1	1 U	1 U	1 U	1 U	1 U		
		14-Jun-00	0.8 J	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Feb-01	1 J	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
		21-Sep-01	1	0.4 J	1 U	1 U	1 U	1 U	1 U	Dichlorodifluoromethane	0.4 J
18_DW540	540	15-Jul-88	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		22-Sep-88	0.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		21-Jan-89	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		7-Jan-93	2	1 U	1 U	1 U	1 U	1 U	1 U		
		13-Jan-93	2	1 U	1 U	1 U	1 U	1 U	1 U		
		30-Jan-96	4	1	1 U	1 U	1 U	1 U	1 U		
		6-Nov-96	3	1	1 U	1 U	1 U	1 U	1 U		
		6-Mar-97	3	2	1 U	1 U	1 U	1 U	1 U		
		27-Oct-98	2.6	0.6 J	1 U	1 U	1 U	1 U	1 U		
		3-Jul-99	1.9	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Jun-00	1	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Feb-01	2 J	0.5 J	10 U	10 U	10 U	1 J	10 U		
		21-Sep-01	1	1 U	1 U	1 U	1 U	1 U	1 U	Carbon Disulfide	0.3 J

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18_MCAS01-4	280	4-Jan-89	4.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I			1,1,1-Trichloroethane	0.5 I
		7-Feb-89	5.2		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		1-Apr-89	4.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I			1,1,1-Trichloroethane	0.5 I
		5-May-89	8.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		2-Jul-89	5.2		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		19-Oct-89	3.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-Jan-90	0.7		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		8-Feb-90	4.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-May-90	2.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Aug-90	4.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		1-Dec-90	0.7		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		21-Mar-91	2		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Jul-91	4.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		20-Oct-91	3.9		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		19-May-92	4.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		22-Sep-92	4		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		22-Sep-92	4		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-Apr-93	6.1		0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		24-Nov-93	2		1	U	1	U	1	U	1	U	1	U	1	U		
		29-Nov-93	3		1	U	1	U	1	U	1	U	1	U	1	U		
		27-Jul-94	6.8			ND		ND		ND		ND		ND		ND		
		12-Jun-95	8.3			ND		ND		ND		ND		ND		ND		
		13-Jan-96	5.7			ND		ND		ND		ND		ND		ND		
		18-Jan-96	6		1	U	1	U	1	U	1	U	1	U	1	U		
		5-Sep-96	6.9			ND		ND		ND		ND		ND		ND		
		18-Nov-96	8		1	U	1	U	1	U	1	U	1	U	1	U		
		19-Mar-97	6		1	U	1	U	1	U	1	U	1	U	1	U		
		2-Jul-97	4		1	U	1	U	1	U	1	U	1	U	1	U		
		22-Oct-97	5		1	U	1	U	1	U	1	U	1	U	1	U		
		14-Oct-98	5.9		1	U	1	U	1	U	1	U	1	U	1	U		
		14-Jul-99	5		1	U	1	U	1	U	1	U	1	U	1	U		
		14-Jul-99	6.6		1	U	1	U	1	U	1	U	1	U	1	U		

13 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 MCAS01-5	340	4-Jan-89	34.6		0.5	U	0.5	U	0.5	U	0.5	I	0.5	I				
		6-Feb-89	39.1		0.5	U	0.5	U	0.5	U	0.5	I	0.5					
		1-Apr-89	34.6		0.5	U	0.5	U	0.5	U	0.5	I	0.5	I				
		5-May-89	47.5		0.5	U	0.5	U	0.5	U	0.5	I	0.5	I				
		2-Jun-89	39.1		0.5	U	0.5	U	0.5	U	0.5	I	0.5					
		19-Oct-89	17.7		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-Jan-90	32.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		8-Feb-90	36.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-May-90	33.4		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		2-Aug-90	36.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		1-Dec-90	32.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		21-Mar-91	19.7		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Jul-91	29		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		20-Oct-91	48.2		0.5	I	0.5	I	0.5	I	0.5	U	0.5					
		19-May-92	24.2		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		22-Sep-92	24.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		12-Apr-93	36.1		0.5	U	0.5	U	0.5	U			0.4		0.5	U		
		30-Nov-93	22		1	U	1	U	1	U	1	U	1	U	1	U	2- utanone	1 I
		30-Nov-93															2-Hexanone	2 I
		27-Jul-94	44.1			ND		ND		ND		ND		TR		ND		
		12-Jun-95	37.3			ND		ND		ND		ND		ND		ND		
		13-Jan-96	25			ND		ND		ND		ND		ND		ND		
		18-Jan-96	23		1	U	1	U	1	U	1	U	1	U	1	U		
		5-Sep-96	24.5			ND		ND		ND		ND		Trace		ND		
		18-Nov-96	28		1	U	1	U	1	U	1	U	1	U	1	U		
		19-Mar-97	22		1	U	1	U	1	U	1	U	1	U	1	U		
		1-Jul-97	20		1	U	1	U	1	U	1	U	1	U	1	U		
		22-Oct-97	21		1	U	1	U	1	U	1	U	1	U	1	U	Acetone	1 I
		22-Oct-97															Methylene Chloride	0.4 I
		14-Oct-98	20		1	U	1	U	1	U	1	U	1	U	1	U	Acetone	0.7
		14-Oct-98	21		1	U	1	U	1	U	1	U	1	U	1	U		
		14-Jul-99	14		1	U	1	U	1	U	1	U	1	U	1	U		I
		20-Feb-01	11		10	U	10	U	10	U	10	U	10	U	10	U		
		24-Sep-01	8		1	U	1	U	1	U	1	U	1	U	1	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L																	
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected			
			5		5		0.5		6		6		100		1				Result	
18_MCAS01-6	460	4-Jan-89	45.1		0.5	U	0.5	U	0.5	U	1.4		0.5	I						
		6-Feb-89	51.9		0.5	U	0.5	U	0.5	U	1.8		0.5	I						
		1-Apr-89	45.1		0.5	U	0.5	U	0.5	U	1.4		0.5	I						
		5-May-89	46.1		0.5	U	0.5	U	0.5	U	1.9		0.5	U						
		2-Jun-89	51.9		0.5	U	0.5	U	0.5	U	1.8		0.5	I						
		19-Oct-89	30		0.5	U	0.5	U	0.5	U	1.4		0.5	U						
		8-Feb-90	38		0.5	U	0.5	U	0.5	U	3.3		0.5	U						
		14-May-90	8.3		0.5	U	0.5	U	0.5	U	1.3		0.5	U						
		2-Aug-90	38		0.5	U	0.5	U	0.5	U	3.3		0.5	U						
		19-Mar-91	6.4		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U						
		17-Jul-91	18.4		0.5	U	0.5	U	0.5	U	2.5		0.5	U						
		20-Oct-91	33		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U						
		19-May-92	26.3		0.5	U	0.5	U	0.5	U	2.6		0.5	U						
		22-Sep-92	23.9		0.5	U	0.5	U	0.5	U	2.7		0.5	U						
		12-Apr-93	44.3		0.5	U	0.5	U	0.5	U	3.5		0.5	U	0.5	U				
		16-Dec-93	34		1	U	1	U	1	U	4		1	U	1	U				
		27-Jul-94	41.3			ND		ND		ND	4.3			ND		ND				
		12-Jun-95	39.6			ND		ND		ND	4.7			ND		ND				
		13-Jan-96	28.9			ND		ND		ND	2.6			ND		ND				
		18-Jan-96	25		1	U	1	U	1	U	1	U	1	U	1	U				
		5-Sep-96	27.5			ND		ND		ND	4.7			ND		ND				
		15-Nov-96	30		1	U	1	U	1	U	4		1	U	1	U				
		19-Mar-97	24		1	U	1	U	1	U	3		1	U	1	U				
		22-Oct-97	24		1	U	1	U	1	U	4		1	U	1	U	Acetone		0.8	I
		22-Oct-97															Methylene Chloride		0.5	I
		14-Oct-98	22		1	U	1	U	1	U	4.2		1	U	1	U	Acetone		1.3	I
		14-Jul-99	17		1	U	1	U	1	U	3.8		1	U	1	U				

15 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18_MCAS01-7	550	4-Jan-89	0.5	I	0.5	U	0.5	U	0.5	U	0.5	U	0.7				Chlorobenzene	0.5 I
		6-Feb-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5				Chlorobenzene	0.5 I
		1-Apr-89	0.5	I	0.5	U	0.5	U	0.5	U	0.5	U	0.7				Chlorobenzene	0.5 I
		5-May-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	I			Chlorobenzene	0.5 I
		2-Jun-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5				Chlorobenzene	0.5 I
		19-Oct-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.5
		12-Jan-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	1.6
		8-Feb-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.5 I
		14-May-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.5 I
		2-Aug-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.5 I
		1-Dec-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	1.6
		19-Mar-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	1
		17-Jul-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	1.1
		20-Oct-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.6
		19-May-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.5 I
		18-Sep-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.5
		12-Jan-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	0.5 I
		12-Apr-93	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		27-Jul-94		ND		ND		ND		ND		ND		ND		ND		
		12-Jun-95		ND		ND		ND		ND		ND		ND		ND		
		13-Jan-96		ND		ND		ND		ND		ND		ND		ND		
		17-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		5-Sep-96		ND		ND		ND		ND		ND		ND		ND		
		15-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		14-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	1.1
		14-Oct-98															Ethylbenzene	0.57
		14-Oct-98															Methyl Tert- utyl Ether	2.9
		14-Oct-98															Toluene	2.5 I
		14-Oct-98															Total Xylenes	0.95
		14-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 MCAS02-4	380	27-Dec-88	34.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		16-Feb-89	28.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		5-Mar-89	32.2		0.5	I	0.5	U	0.5	U	0.5	U	0.5	I				
		3-May-89	32.2		0.5	I	0.5	U	0.5	U	0.5	U	0.5	I				
		17-Oct-89	37.2		0.5	I	0.5	U	0.5	U	0.5	U	0.5	I				
		13-Mar-90	25.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		18-May-90	3.3			Trace		ND		ND		ND		ND		ND		
		5-Apr-91	11.1		0.5	U	0.5	U	0.5	U	0.5	U	1.4					
		4-May-91	11.1		0.5	U	0.5	U	0.5	U	0.5	U	1.4					
		9-Jul-91	19.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Sep-91	19.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		19-Oct-91	26.6		0.5	I	0.5	U	0.5	U	0.5	U	0.5	I				
		27-Feb-92	12.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		17-Feb-93	15.3		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		2-Jun-93	24.4		0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		11-Nov-93	10		1	U	1	U	1	U	1	U	1	U	1	U		
		6-Jul-94	19.2			ND		ND		ND		ND		ND		ND		
		28-Jun-95	12.5			ND		ND		ND		ND		ND		ND		
		9-Dec-95	14.4			ND		ND		ND		ND		ND		ND		
		29-Jan-96	12		1	U	1	U	1	U	1	U	1	U	1	U		
		8-Sep-96	15.2			ND		ND		ND		ND		ND		ND		
		12-Nov-96	16		1	U	1	U	1	U	1	U	1	U	1	U		
		13-Mar-97	12		1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.5 I
		9-Apr-97	12.3			ND		ND		ND		ND		ND		ND		
		2-Jul-97	10		1	U	1	U	1	U	1	U	1	U	1	U		
		9-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2-Hexanone	8 I
		17-Oct-97	12		1	U	1	U	1	U	1	U	1	U	1	U		
		9-Oct-98	13		1	U	1	U	1	U	1	U	1	U	1	U		
		13-Jul-99	12		1	U	1	U	1	U	1	U	1	U	1	U		

17 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L																	
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected			
			5		5		0.5		6		6		100		1				Result	
18 MCAS02-5	430	27-Dec-88	38.9		0.5	U	0.5	U	0.5	U	0.6		0.5	U						
		8-Feb-89	37		0.5	U	0.5	U	0.5	U	0.5		0.5	U						
		5-Mar-89	33.9		0.5	U	0.5	U	0.5	U	0.5	I	0.5	U						
		3-May-89	33.9		0.5	U	0.5	U	0.5	U	0.5	I	0.5	U						
		2-Aug-89	37		0.5	U	0.5	U	0.5	U	0.5		0.5	U						
		10-Oct-89	51.9		0.5	U	0.5	U	0.5	U	0.5		0.5	U						
		13-Mar-90	28.7		0.5	U	0.5	U	0.5	U	0.5	I	0.5	U						
		18-May-90	22.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U						
		5-Apr-91	6.1			ND		ND		ND		ND		TR		ND				
		9-Jul-91	20.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U						
		7-Sep-91	20.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U						
		16-Nov-91	30.9		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U						
		27-Feb-92	21.8		0.5	U	0.5	U	0.5	U	0.5	I	0.5	U						
		17-Sep-92	20		0.5	U	0.5	U	0.5	U	0.5	I	0.5	U						
		17-Feb-93	26.9		0.5	U	0.5	U	0.5	U			0.5	U	0.5	U				
		2-Jun-93	32.2		0.5	U	0.5	U	0.5	U			0.5	U	0.5	U				
		11-Dec-93	21		1	U	1	U	1	U	1	U	1	U	1	U				
		6-Jul-94	30.9			ND		ND		ND		ND		ND		ND				
		28-Jun-95	22.9			ND		ND		ND		ND		ND		ND				
		9-Dec-95	23.2			ND		ND		ND		ND		ND		ND				
		29-Jan-96	21		1	U	1	U	1	U	1	U	1	U	1	U				
		8-Sep-96	26.6			ND		ND		ND		ND		ND		ND				
		12-Nov-96	24		1	U	1	U	1	U	1	U	1	U	1	U				
		12-Mar-97	16		1	U	1	U	1	U	1	U	1	U	1	U				
		9-Apr-97	22.9			ND		ND		ND		ND		ND		ND				
		2-Jul-97	16		1	U	1	U	1	U	1	U	1	U	1	U	romomethane		3	I
		9-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2-Hexanone		8	I
		17-Oct-97	16		1	U	1	U	1	U	1	U	1	U	1	U				
		9-Oct-98	16		1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide		0.6	I
		13-Jul-99	13		1	U	1	U	1	U	1	U	1	U	1	U				
		20-Feb-01	9	I	10	U	10	U	10	U	10	U	10	U	10	U				
		12-Sep-01	9	I	1	U	1	U	1	UI	1	UI	1	U	1	U				

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 MCAS02-6	500	27-Dec-88	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		8-Feb-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Mar-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		3-May-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Aug-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		10-Oct-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		13-Mar-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.5 J
		18-May-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.8
		5-Apr-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		4-May-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		9-Jul-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Sep-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		19-Oct-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		27-Feb-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Sep-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Feb-93	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		2-Jun-93	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		15-Nov-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		6-Jul-94		ND		ND		ND		ND		ND		ND		ND		
		28-Jun-95		ND		ND		ND		ND		ND		ND		ND		
		9-Dec-95		ND		ND		ND		ND		ND		ND		ND		
		29-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		8-Sep-96		ND		ND		ND		ND		ND		ND		ND		
		12-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		12-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		9-Apr-97		ND		ND		ND		ND		ND		ND		TR		
		17-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		9-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Toluene	0.8 J
		13-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 MCAS04	238	23-Oct-89	3.1		0.5	U	0.5	U	0.5	U	0.5	U	5.8					
		11-Jan-90	4		0.5	I	0.5	I	0.5	I	0.5	U	0.5	U				
		23-Feb-90	3.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Jun-90	3.4		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		6-Jul-90	3.4		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		1-Nov-90	4		0.5	I	0.5	I	0.5	I	0.5	U	0.5	U				
		2-Feb-91	3.3		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Feb-92	2.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-Feb-92	3.2		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-May-92	2.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		10-Jul-92	2.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Oct-92	2.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Dec-92	3.2		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		8-Apr-93	3		1	U	1	U	1	U	1	U	1	U	1	U		
		7-May-93	4		0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		9-Feb-96	2		1	U	1	U	1	U	1	U	1	U	1	U		
		16-Feb-96	2.7			TR		ND		ND		ND		ND		ND		
		27-Aug-96	2.6			ND		ND		ND		ND		ND		ND		
		19-Nov-96	11		1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1 I
		12-Feb-97	2			ND		ND		ND		ND		ND		ND		
		13-Mar-97	2		1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.6 I
		14-Jul-97	1		1	U	1	U	1	U	1	U	1	U	1	U		
		29-Oct-97	2		1	U	1	U	1	U	1	U	1	U	1	U		
		26-Oct-98	2.1		1	U	1	U	1	U	1	U	1	U	1	U		
		26-Oct-98	2.2		1	U	1	U	1	U	1	U	1	U	1	U		
		5-Aug-99	1.5		1	U	1	U	1	U	1	U	1	U	1	U		
		27-Feb-01	1	I	10	U	10	U	10	U	10	U	10	U	10	U		
		24-Sep-01	1		1	U	1	U	1	U	1	U	1	U	1	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18 MCAS06	222	28-Oct-89	2.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 I		Chlorobenzene	0.5 I
		11-Jan-90	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		9-Mar-90	1.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		11-Jul-90	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		3-Sep-90	1.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		1-Nov-90	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		7-Nov-90	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		23-May-91	2.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		12-Jan-92	3.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		31-Jul-92	3.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		1-Dec-92	3.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		15-Apr-93	0.5	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U		
		16-Jun-93	2.8	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Dec-95	2.6	ND	ND	ND	ND	ND	ND		
		6-Feb-96	2	1 U	1 U	1 U	1 U	1 U	1 U		
		30-Jun-96	2.7	ND	ND	ND	ND	ND	ND		
		19-Nov-96	6	1 U	1 U	1 U	1 U	1 U	1 U		
		8-Jan-97	2.7	ND	ND	ND	ND	ND	ND		
		25-Mar-97	3	1 U	1 U	1 U	1 U	1 U	1 U		
		15-Jul-97	2	1 U	1 U	1 U	1 U	1 U	1 U		
		31-Oct-97	3	0.3 I	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	0.4 I
		28-Oct-98	2.6	1 U	1 U	1 U	1 U	1 U	1 U		
		6-Aug-99	0.66 I	1 U	1 U	1 U	1 U	1 U	1 U		
		21-Jun-00	1	1 U	1 U	1 U	1 U	1 U	1 U		
		26-Feb-01	1 I	10 U	10 U	10 U	10 U	10 U	10 U		
		24-Sep-01	1	1 U	1 U	1 U	1 U	1 U	1 U		
18 MCAS07-3	359	17-Oct-88	20	0.5 U	0.5 U	0.5 U	0.5 I	0.5 U		1,2-Dichloroethane	0.5 I
		30-Nov-88	24.8	0.5 U	0.5 U	0.5 U	0.5	0.5 U		1,2-Dichloroethane	0.5 I
		20-Jan-89	19.8	0.5 U	0.5 U	0.5 U	0.5 I	0.5 U		1,2-Dichloroethane	0.5
		5-Apr-89	13.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		4-May-89	13.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		8-Feb-90	30.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		2-Aug-90	30.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		1,2-Dichloroethane	0.5
		17-Nov-90	61	0.5 I	0.5 I	0.5 I	0.5 I	0.5 U		1,2-Dichloroethane	0.5
		22-Mar-91	32.2	0.5 U	0.5 U	0.5 U	0.5 U	0.6		1,2-Dichloroethane	1
		26-Jul-91	17.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		1,2-Dichloroethane	0.5 I
		23-Oct-91	53.4	0.5 U	0.5 U	0.5 U	0.6	0.5		1,2-Dichloroethane	0.5
		12-May-92	43.6	0.5 U	0.5 U	0.5 U	0.6	0.5 U		1,2-Dichloroethane	0.5
		20-Oct-92	22.7	0.5 U	0.5 U	0.5 U	0.5 I	0.5 U		1,2-Dichloroethane	0.5 I
		5-Dec-92	43.6	0.5 U	0.5 U	0.5 U	0.6	0.5 U		1,2-Dichloroethane	0.5
		17-Mar-93	33.9	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U		
		16-Jun-93	41.8	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U		
		22-Oct-93	25	1 U	1 U	1 U	1 U	1 U	1 U		
		22-Dec-95	38.1	ND	ND	ND	Trace	Trace	ND		
		9-Feb-96	40	1 U	1 U	1 U	1 U	1 U	1 U		
		25-Jul-96	40.4	ND	ND	ND	Trace	ND	ND		
		20-Nov-96	45	1 U	1 U	1 U	0.5 I	1 U	1 U		
		26-Mar-97	47	2 U	2 U	2 U	2 U	2 U	2 U	Methylene Chloride	6
		10-Jul-97	36	1 U	1 U	1 U	1 U	1 U	1 U		
		16-Oct-97	40	1 U	1 U	1 U	0.5 I	1 U	1 U	1,2-Dichloroethane	0.4 I
		29-Oct-98	41	1 U	1 U	1 U	1 U	1 U	1 U		
		15-Jul-99	30	1 U	1 U	1 U	1 U	1 U	1 U	Acetone	5.4 I

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18 MCAS07-4	449	17-Oct-88	19.4	0.5 U	0.5 U	0.5 U	4.1	0.5 U			
		30-Nov-88	19.7	0.5 U	0.5 U	0.5 U	4.2	0.5 U			
		19-Jan-89	23.6	0.5 U	0.5 U	0.5 U	4.1	0.5 U			
		5-Apr-89	24.8	0.5 U	0.5 U	0.5 U	5.3	0.5 U			
		4-May-89	26.5	0.5 U	0.5 U	0.5 U	5.3	0.5 U			
		17-Nov-90	36	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		22-Mar-91	23.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 I			
		26-Jul-91	29.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		23-Oct-91	40.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		12-May-92	46.1	0.5 U	0.5 U	0.5 U	7.9	0.5 U			
		20-Oct-92	25	0.5 U	0.5 U	0.5 U	5.4	0.5 U			
		5-Dec-92	46.1	0.5 U	0.5 U	0.5 U	7.9	0.5 U			
		17-Mar-93	33.8	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U		
		16-Jun-93	43.2	0.5 U	0.5 U	0.5 U	8.8	0.5 U	0.5 U		
		25-Oct-93	29	1 U	1 U	1 U	1 U	1 U	1 U		
		22-Dec-95	47.8	ND	ND	ND	8.3	ND	ND		
		8-Feb-96	36	1 U	1 U	1 U	9	1 U	1 U		
		25-Jul-96	50.9	ND	ND	ND	10.2	ND	ND		
		20-Nov-96	33	1 U	1 U	1 U	8	1 U	1 U		
		1-Feb-97	32.6	ND	ND	ND	8.2	ND	ND		
		26-Mar-97	47	2 U	2 U	2 U	9	2 U	2 U	Methylene Chloride	3
		10-Jul-97	35	1 U	1 U	1 U	7	1 U	1 U		
		16-Oct-97	40	1 U	1 U	1 U	9	1 U	1 U		
		28-Oct-98	47	1 U	1 U	1 U	8.7	1 U	1 U		
		15-Jul-99	32	1 U	1 U	1 U	8.6	1 U	1 U		
		20-Feb-01	10 U	10 U	10 U	10 U	10 U	0.5 I	10 U	Carbon disulfide	0.6 I
		20-Feb-01								Toluene	0.4 I
		20-Feb-01								Vinyl Chloride	0.9 I
		20-Feb-01								Methyl-tertiary-butyl-ether	0.8 I
		24-Sep-01	15	1 U	1 U	1 U	5	1 U	1 U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18_MCAS07-5	519	17-Oct-88	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		30-Nov-88	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			1,1,1-Trichloroethane	0.5 I
		18-Jan-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Apr-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		4-May-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		8-Feb-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Aug-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Nov-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		22-Mar-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		26-Jul-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		23-Oct-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-May-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		20-Oct-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Dec-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Mar-93	1.3		0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		16-Jun-93	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		26-Oct-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Dec-95		ND		ND		ND		ND		ND		ND		ND		
		8-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		25-Jul-96		ND		ND		ND		ND		ND		ND		ND		
		11-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		1-Feb-97		ND		ND		ND		ND		ND		ND		ND		
		26-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		10-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		28-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		15-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Acetone	4.2 I

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18_MCAS07-6	809	17-Oct-88	0.5	U	0.6		0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.6
		30-Nov-88	0.5	U	0.7		0.5	U	0.5	U	0.5	U	0.5	U			1,1,1-Trichloroethane	0.6
		19-Jan-89	0.5	U	0.5	I	0.5	U	0.5	U	0.5	U	0.5	U			Chlorobenzene	0.7
		5-Apr-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		4-May-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		8-Feb-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Aug-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Nov-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		22-Mar-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		26-Jul-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		23-Oct-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-May-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		20-Oct-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Dec-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Mar-93	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		16-Jun-93	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		28-Oct-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Dec-95		ND		ND		ND		ND		ND		ND		ND		
		8-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		25-Jul-96		ND		ND		ND		ND		ND		ND		ND		
		11-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		1-Feb-97		ND		ND		ND		ND		ND		ND		ND		
		26-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	2
		27-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		15-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
18_MCAS07-7	919	17-Oct-88	0.5	U	0.8		0.5	U	0.5	U	0.5	U	0.5	U				
		30-Nov-88	0.5	U	0.8		0.5	U	0.5	U	0.5	U	0.5	U			1,1,1-Trichloroethane	0.5 I
		19-Jan-89	0.5	U	0.5	I	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Apr-89	0.5	U	0.6		0.5	U	0.5	U	0.5	U	0.5	U				
		4-May-89	0.5	U	0.6		0.5	U	0.5	U	0.5	U	0.5	U				
		8-Feb-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Aug-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		16-Nov-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		25-Mar-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		25-Mar-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		26-Jul-91	0.5	I	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		23-Oct-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-May-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		22-Sep-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Dec-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Mar-93	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		16-Jun-93	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		29-Oct-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Dec-95		ND		ND		ND		ND		ND		ND		ND		
		8-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		25-Jul-96		ND		ND		ND		ND		ND		ND		ND		
		11-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		1-Feb-97		ND		ND		ND		ND		ND		ND		ND		
		26-Mar-97	1		1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1 I
		27-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		15-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 MCAS08	410	11-Mar-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	3					
		3-Nov-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	3					
		6-Feb-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		12-Feb-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Jun-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	I				
		2-Dec-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		11-May-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		22-May-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Nov-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-Jan-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		10-Jul-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Oct-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		1-Dec-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		23-Apr-93	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		23-Apr-93	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		8-May-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Oct-95		ND		ND		ND		ND		ND		ND		ND		
		1-Feb-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		12-Apr-96		ND		ND		ND		ND		ND		ND		ND		
		8-Nov-96		ND		ND		ND		ND		ND		ND		ND		
		20-Nov-96	1		1	U	1	U	1	U	1	U	1	U	1	U		
		26-Mar-97	0.8	I	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		14-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		29-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.4 I
		27-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Acetone	0.8 I
		4-Aug-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		21-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Feb-01	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
		21-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Carbon Disulfide	1

25 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18_MCAS09	445	27-Oct-89	0.5 I	0.5 U	0.5 U	0.5 U	0.5 U	1.8		Chlorobenzene	0.5 I
		12-Feb-90	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		13-Jul-90	1.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		17-Nov-90	1.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		2-Dec-90	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		18-Mar-91	1.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		12-Jul-91	1.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		7-Dec-91	1.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		12-Feb-92	1.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		6-May-92	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		5-Jun-92	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		23-Aug-92	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		2-Dec-92	1.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		20-Apr-93	2.5	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U		
		11-May-93	2	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Dec-95	1.1	ND	ND	ND	ND	ND	ND		
		16-Jan-96	1	1 U	1 U	1 U	1 U	1 U	1 U		
		30-Jun-96	0.5	ND	ND	ND	ND	ND	ND		
		19-Nov-96	3	1 U	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	2
		8-Jan-97	1	ND	ND	ND	ND	ND	ND		
		26-Mar-97	1	1 U	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	1
		14-Jul-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		29-Oct-97	0.5 I	1 U	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	0.8 I
		6-Aug-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		20-Jun-00	2 U	2 U	2 U	2 U	2 U	2 U	2 U		
		14-Feb-01	0.5 I	10 U	10 U	10 U	10 U	10 U	10 U		
		18-Sep-01	0.4 I	1 U	1 U	1 U	1 U	1 U	1 U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18_MCAS10	375	11-Jul-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	9.7					
		7-Nov-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	9.7					
		31-Jan-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		20-Jul-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		18-Nov-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		3-Feb-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Mar-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-Jul-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Dec-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-Feb-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		8-May-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Aug-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		27-Aug-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Dec-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		11-Apr-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		23-Apr-93	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		29-Nov-94		ND		ND		ND		ND		ND		ND		ND		
		6-Jul-95		ND		ND		ND		ND		ND		ND		ND		
		19-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		24-Jan-96		ND		ND		ND		ND		ND		ND		ND		
		14-Jul-96		ND		ND		ND		ND		ND		ND		ND		
		19-Nov-96	3		1	U	1	U	1	U	1	U	1	U	1	U		
		19-Jan-97		ND		ND		ND		ND		ND		ND		ND		
		18-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		18-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		14-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		29-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	0.6	J		
		22-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		5-Aug-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		26-Feb-01	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
		21-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
Site 24																		
07_DBMW43	190	12-Jan-92	1	U	1	U	0.3	J	1	U	1	U	1	U	1	U		
		29-Jun-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		19-Feb-96	3		1	U	1	U	1	U	1	U	1	U	1	U		
		21-Nov-96	4		1	U	1	U	1	U	1	U	1	U	1	U		
		7-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		3-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Oct-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.3 J
		2-Nov-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		30-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Acetone	1.4 J
		30-Jul-99															Carbon Disulfide	1.1 J
		15-Jun-00	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		18-Sep-01	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methyl Acetate	0.5 J

27 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
07_DBMW43A	141	13-Feb-01	9 J	10 U	1 J	10 U	10 U	10 U	10 U	Freon-113	4 J
		17-Sep-01	31	1 U	2	0.6 J	1 U	0.6 J	1 U	Freon-113	7
07_DBMW100	171	8-Dec-92	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U		
		4-Jun-93	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U		
		31-Jan-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		20-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		10-Jul-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		22-Oct-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	0.3 J
		26-Oct-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		27-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Carbon Disulfide	0.64 J
		15-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
07_DBMW100A	132	13-Feb-01	10 U	10 U	10 U	10 U	10 U	0.4 J	10 U		
		18-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
08_DGMW74	130	16-Nov-92	100	8	6	5	1 U	6	1 U	Chloromethane	0.9 J
		20-Jul-93	100	6	5	3	1 U	7	1 U	Chloromethane	3
		14-Feb-96	47	1	2	0.9 J	1 U	5	1 U	Toluene	5
		13-Nov-96	103	1	2	1	1	6	1 U		
		19-Mar-97	81	3 U	3 U	3 U	3 U	4	3 U		
		19-Mar-97	74	3 U	3 U	3 U	3 U	4	3 U		
		7-Jul-97	79	0.8 J	1	1 U	0.7 J	4	1 U		
		27-Oct-97	63	2	0.9 J	0.9 U	2	4	1 U	1,2-Dichloroethane	2
		28-Oct-98	73	0.6 J	0.7 J	1 U	1 U	3.6	1 U		
		28-Jul-99	83	0.61	0.97 J	1 U	1.6	4.5	1 U	Acetone	2.5 J
		15-Jun-00	140	1	1	0.6 J	2	4 J	1 U	1,1,2-Trichloroethane	1
		15-Jun-00								Bromodichloromethane	1
		15-Jun-00	130	0.8 J	1 J	0.6 J	1 J	3 J	1 U	1,1,2-Trichloroethane	0.9 J
		13-Feb-01	130	1 J	1 J	0.5 J	2 J	4 J	0.9 J	Carbon Disulfide	3 J
		13-Feb-01								1,1,2-Trichloroethane	3 J
		13-Feb-01								Freon-113	0.9 J
		22-Feb-01	130	1 J	1 J	0.8 J	2 J	4 J	10 U	1,1,2-Trichloroethane	3 J
		22-Feb-01								Freon-113	1 J
		18-Sep-01	110	1 J	1	0.6 J	2	4	1 U	1,1,2-Trichloroethane	2
		18-Sep-01								Freon-113	1

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
08_UGMW29	135	12-Aug-92	20	1 U	1 U	1 U	1 U	0.8 J	1 U	Toluene	0.7 J
		12-Aug-92								Xylenes	1 J
		7-Sep-93	12	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Feb-96	8	1 U	1 U	1 U	1 U	1 U	1 U	Toluene	16
		25-Nov-96	17	1 U	1 U	1 U	1 U	0.7 J	1 U		
		12-Mar-97	5	1 U	1 U	1 U	1 U	1 U	1 U		
		7-Jul-97	7	1 U	1 U	1 U	1 U	1 U	1 U		
		24-Oct-97	5	1 U	1 U	1 U	1 U	1 U	1 U	Freon-113	0.4 J
		4-Nov-98	13	1 U	0.3 J	1 U	1 U	0.5 J	1 U		
		28-Jul-99	18	1 U	1 U	1 U	1 U	0.67 J	1 U	Carbon Disulfide	0.7 J
		16-Jun-00	14	1 U	1 U	1 U	1 U	0.5 J	1 U		
		18-Sep-01	16	1 U	1 U	1 U	1 U	0.6 J	1 U		
08_UGMW29A	130	13-Feb-01	39	10 U	10 U	10 U	10 U	2 J	10 U		
		18-Sep-01	46	1 U	1 U	1 U	1 U	2	1 U		
09_DBMW45	157	20-Jul-92	1000	5	3	2	1 U	2	1 U		
		12-Oct-92	1800	7	6	1 U	1 U	2	1 U	Freon-113	70 J
		12-Oct-92	2000	8	7	4	1	3	1 U	1,2-Dichloroethane	0.5 J
		13-Jul-93	1700	5	5	1 U	1 U	2	1 U	Freon-113	30 J
		20-Nov-95	250	3 J	3 J			10		Toluene	8
		15-Feb-96	679	4	3	3	1 U	2 U	1 U	Toluene	8
		18-Nov-96	604	6	4	4	0.9 J	2	1 U	1,1,2,2-Tetrachloroethane	0.8 J
		18-Nov-96								Freon-113	20
		18-Nov-96								1,2-Dichloroethane	1
		18-Nov-96								Bromodichloromethane	0.9 J
		18-Nov-96								Chlorobenzene	2 J
		18-Nov-96								Chlorodibromomethane	0.9 J
		18-Nov-96								Methylene Chloride	2
		24-Mar-97	1450	5	3	7	1 U	2	1 U	Freon-113	5 J
		8-Jul-97	1400	5	4	7	1	2	1 U	Freon-113	7 J
		8-Jul-97	1500	5	4	1 U	1	2	1 U	Freon-113	7 J
		22-Oct-97	1800	6	4	8	0.6 J	2	1 U	Acetone	160 J
		22-Oct-97	1800	6	4	8	0.6 J	2	1 U	Freon-113	7 J
		22-Oct-97								Methylene Chloride	47 J
		21-Oct-98	1300	3.1	1.1	36 J	1 U	1.3	1 U	1,1-Dichloroethane	0.6 J
		3-Aug-99	870	1.8	1.8 J	31 J	1 U	0.9 J	1 U	1,1-Dichloroethane	0.67 J
		13-Jun-00	730	1 U	1 U	28	1 U	1 U	1 U	Bromodichloromethane	7 J
		16-Feb-01	580	0.8 J	1 J	13 J	10 U	0.6 J	10 U	1,1-Dichloroethane	0.3 J
		16-Feb-01								Freon-113	2 J
		17-Sep-01	360	0.9 J	1	14 J	1 U	0.6 J	1 U	Freon-113	3 J

29 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
09_DGMW75	154	12-Jan-92	270	8	3	0.5 J	1 U	0.9 J	1 J	Chloromethane	0.6 J
		7-Dec-93	280	5	2	1 U	1 U	0.9 J	1 U		
		14-Feb-96	293	2	1	1 U	1 U	1	1 U		
		4-Dec-96	468	9	3	3	1 U	2	1 U	Freon-113	12
		25-Mar-97	483	20 U	20 U	20 U	20 U	20 U	20 U	Methylene Chloride	210
		8-Jul-97	450	5	2	1 U	1	2	1 U	Freon-113	6 J
		8-Jul-97	430	5	2	1 U	1	2	1 U	Freon-113	6 J
		23-Oct-97	390	5	3	3	1	2	1 U	Freon-113	7 J
		23-Oct-97	480	25 U	25 U	25 U	25 U	25 U	25 U		
		22-Oct-98	850	7	1.8 J	5	1 U	2.8	1 U		
		27-Jul-99	840	7.1	3.2	4	0.51 J	3.4	1 U	Acetone	16 J
		12-Jun-00	940	25 U	25 U	25 U	25 U	25 U	25 U		
		12-Feb-01	780	5 J	3 J	7 J	0.4 J	3 J	10 U	Bromodichloromethane	5 J
		12-Feb-01								Freon-113	15
		20-Feb-01	760	5 J	2 J	9 J	0.4 J	4 J	10 U	Freon-113	18
		17-Sep-01	780	5	2	11 J	0.4 J	4	1 U	Freon-113	23 J
12_DBMW48A	104	15-Feb-01	2 J	21	10 U	10 U	10 U	0.5 J	10 U	Freon-113	210
		14-Sep-01	5	30	1 U	1 U	1 U	0.6 J	1 U	Methyl Acetate	13
		14-Sep-01								Freon-113	380 J
13_DGMW78	167	23-Nov-92	1 U	1 U	1 U	1 U	1 U	1 U	110	Ethylbenzene	2
		23-Nov-92								Xylenes	26
		16-Jun-93	1 U	1 U	1 U	1 U	1 U	1 U	12	Ethylbenzene	8
		16-Jun-93								Xylenes	9
		1-Feb-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		19-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1,2-Dichloroethane	1
		19-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1	1,2-Dichloroethane	2
		9-Jul-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2-Hexanone	8 J
		21-Oct-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1,2-Dichloroethane	9 J
		21-Oct-97								Methylene Chloride	4 J
		5-Nov-98	1 U	1 U	1 U	1 U	1 U	1 U	1	1,2-Dichloroethane	2
		28-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Carbon Disulfide	0.71 J
		28-Jul-99								Unknown C8H18	15 J
		28-Jul-99								Unknown C8H18	3.3 J
		28-Jul-99								Unk.Substituted Alkane	2.8 J
		15-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		13-Feb-01	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
		21-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Carbon Disulfide	0.7 J

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
15_DBMW51	165	12-Apr-92	1 U	1 U	1 U	1 U	1 U	1 U	120	Xylenes	36
		10-Aug-93	1 U	1 U	1 U	1 U	1 U	1 U	63	2-Hexanone	5
		10-Aug-93									
		13-Aug-93	1 U	1 U	1 U	1 U	1 U	1 U	150	Xylenes	30
		13-Aug-93								Chloromethane	1 J
		13-Aug-93									
		6-Feb-96	1 U	1 U	1 U	1 U	1 U	1 U	3	1,1,1-Trichloroethane	1
		6-Feb-96								Xylenes	3
		4-Dec-96	39	6	1 U	1 U	1 U	1	12	1,1,1-Trichloroethane	2
		4-Dec-96								Bromodichloromethane	0.7 J
		4-Dec-96								Bromomethane	1.5 J
		25-Mar-97	8	0.5 J	1 U	1 U	1 U	0.9 J	5	Bromodichloromethane	0.7 J
		25-Mar-97								Chlorodibromomethane	0.6 J
		2-Jul-97	1 U	1 U	1 U	1 U	1 U	1 U	2	Bromomethane	10
		2-Jul-97								Chloromethane	1 J
		2-Jul-97	1 U	1 U	1 U	1 U	1 U	1 U	2	Bromomethane	10
		2-Jul-97								Chloromethane	4 J
		2-Jul-97								Methylene Chloride	11
		28-Oct-97	4 J	1 U	1 U	1 U	1 U	1 U	2	Xylenes	1
		28-Oct-97	4 J	1 U	1 U	1 U	1 U	1 U	2	Xylenes	1
		28-Oct-97									
		6-Nov-98	14	1 U	1 U	1 U	1 U	1 U	3.3		
		29-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Carbon disulfide	0.63 J
		29-Jul-99								Unknown C8H18	6.4 J
		29-Jul-99								Unknown C8H18	5.5 J
		29-Jul-99								Unk. Substituted Alkane	2.8 J
		14-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		13-Feb-01	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
		21-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
18 GMP06D	178	10-Jun-92	1 U	1 U	1 U	1 U	1 U	1	1 U	romodichloromethane	1
		10-Jun-92								Chlorodibromomethane	1
		8-Jun-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Chloromethane	5
		7-Feb-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		8-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		10-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		19-Oct-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		16-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18 GMP06E	115	10-Jan-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Chloromethane	0.6 J
		8-Feb-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		7-Feb-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		8-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		10-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		20-Oct-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		16-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		22-Feb-01	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
18 GMP08E	73	24-Aug-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U	romodichloromethane	0.6 J
										Chlorodibromomethane	0.6 J
		15-Jan-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U	romodichloromethane	2
										Chlorodibromomethane	2
		8-Nov-96	1 U	1 U	1 U	1 U	1 U	3	1 U	romodichloromethane	1
		10-Mar-97	1 U	1 U	1 U	1 U	1 U	3	1 U	romodichloromethane	0.6 J
		13-Sep-01	1 U	1 U	1 U	1 UJ	1 UJ	1	1 U		
18_BGMW03C	242	23-Jul-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	1 J
		17-Dec-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Toluene	0.8 J
		15-Jul-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		12-Feb-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Toluene	10
		7-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		21-Mar-97	0.5 J	1 U	1 U	1 U	1 U	1 U	1 U		
		8-Jul-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		17-Oct-97	0.5 J	1 U	1 U	1 U	1 U	1 U	1 U		
		2-Nov-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		2-Aug-99	0.77 J	1 U	1 U	1 U	1 U	1 U	1 U		
18_BGMW03E	164	17-Dec-92	370	1	1	1 U	1 U	0.6 J	1 U	Freon-113	10 J
		15-Jul-93	210	0.8 J	0.8 J	1 U	1 U	0.6 J	1 U		
		5-Feb-96	139	1 U	1 U	1 U	1 U	1 U	1 U		
		21-Nov-96	196	1	0.7 J	1	1 U	1 U	1 U	Freon-113	5 J
		18-Mar-97	123	5 U	5 U	5 U	5 U	5 U	5 U		
		18-Mar-97	122	5 U	5 U	5 U	5 U	5 U	5 U		
		8-Jul-97	330	10 U	10 U	10 U	10 U	10 U	10 U		
		22-Oct-97	83	0.4 J	1 U	0.5 J	1 U	1 U	1 U	1,1-Dichloroethene	0.5 J
		22-Oct-97								Freon-113	1 J
		22-Oct-97								4-Methyl-2-Pentanone	0.4 J
		22-Oct-97								Methylene Chloride	0.5 J
		22-Oct-97								1,1-Dichloroethene	0.5 J
		22-Oct-97								Freon-113	1 J
		22-Oct-97								4-Methyl-2-Pentanone	0.4 J
		22-Oct-97								Methylene Chloride	1
		2-Nov-98	110	1 U	1 U	1 U	1 U	1 U	1 U		
		2-Aug-99	130	1 U	1 U	1 U	1 U	1 U	1 U	Carbon disulfide	0.96 J
		2-Aug-99	110	1 U	1 U	1 U	1 U	1 U	1 U	Carbon disulfide	0.85 J

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18_BGMW04B	210	15-Jun-92	5	5	1 U	1 U	1	1 U	1 U		
		29-Sep-92	14	11	1 U	1 U	2	0.5 J	1 U	Chloromethane	2 J
		13-Jul-93	8	6	1 U	1 U	1 U	1 U	1 U		
		19-Jan-96	4	3	1 U	1 U	1 U	1 U	1 U		
		19-Jan-96	4	4	1 U	1 U	1 U	1 U	1 U		
		14-Nov-96	6	5	1 U	1 U	0.6 J	1 U	1 U	1,1,2,2-Tetrachloroethane	1 J
		14-Nov-96								Chlorobenzene	0.6 J
		14-Nov-96								Chlorodibromomethane	0.7 J
		18-Mar-97	4	4	1 U	1 U	0.5 J	1 U	1 U		
		18-Mar-97	4	4	1 U	1 U	1 U	1 U	1 U		
		9-Jul-97	4	4	1 U	1 U	1 U	1 U	1 U		
		20-Oct-97	6	6	1 U	1 U	0.7 J	1 U	1 U	Toluene	0.4 J
		6-Nov-98	2.8	2.2	1 U	1 U	0.4 J	1 U	1 U		
		6-Nov-98	2.8	2.3	1 U	1 U	0.3 J	1 U	1 U		
		2-Aug-99	1 U	3.4	1 U	1 U	0.53 J	1 U	1 U		
		12-Jun-00	2	2	1 U	1 U	1 U	1 U	1 U		
		20-Jun-00	2	2	1 U	1 U	1 U	1 U	1 U		
		19-Sep-01	3	2	1 U	1 U	1 U	1 U	1 U		
18_BGMW05C	245	16-Jul-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Acetone	3
		11-Oct-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Chloromethane	0.8 J
		7-Sep-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		29-Feb-96	1	1 U	1 U	1 U	1 U	1 U	1 U	Toluene	2
		7-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	5
		19-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		28-Oct-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		2-Aug-99	1	1 U	1 U	1 U	1 U	1 U	1 U		
		19-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		13-Feb-01	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
		19-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 J
18_BGMW05D	133	11-Mar-92	39	30	1 U	1 U	3	0.6 J	1 U	1,1,2-Trichloroethane	0.5 J
		11-Mar-92								2-Butanone	1 J
		7-Dec-93	56	25	1 U	1 U	5	0.9 J	1 U	1,1,2-Trichloroethane	0.9 J
		19-Feb-96	14	9	1 U	1 U	1 U	1 U	1 U	Toluene	3
		4-Dec-96	23	19	1 U	1 U	1	0.5 J	1 U	Methylene Chloride	1
		19-Mar-97	15	11	1 U	1 U	0.8 J	1 U	1 U		
		7-Jul-97	20	12	1 U	1 U	0.8 J	1 U	1 U		
		27-Oct-97	13	12	1 U	1 U	1	0.4 J	1 U	1,2-Dichloroethane	2
		27-Oct-97								Methylene Chloride	0.4 JB
		23-Oct-98	9.1	13	1 U	1 U	0.3 J	1 U	1 U		
		2-Aug-99	4.8	8.4	1 U	1 U	0.3 J	1 U	1 U	Carbon Disulfide	0.56 J
		19-Jun-00	2	3	1 U	1 U	1 U	1 U	1 U		
		13-Feb-01	2 J	3 J	10 U	10 U	10 U	10 U	10 U		
		22-Feb-01	2 J	3 J	10 U	10 U	10 U	10 U	10 U		
		19-Sep-01	1	2	1 U	1 U	1 U	1 U	1 U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18_BGMW14	115	18-Jun-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Carbon Disulfide	0.5 J
		18-Jun-92								Methylene Chloride	0.6 J
		20-Oct-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		19-Oct-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Chloromethane	0.8 J
		16-Feb-96	6	1 U	1 U	1 U	1 U	1 U	1 U	Toluene	3
		15-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		15-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		18-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		18-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		2-Nov-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		30-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		10-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
18_BGMW16	263	23-Oct-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		19-Jul-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		19-Jan-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		18-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		15-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		24-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
18_BGMW18	180	11-Oct-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1,2 Dichloropropane	4
		16-Jul-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1,2 Dichloropropane	2
		5-Feb-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		9-Jan-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	1
		15-Jun-00	2 U	2 U	2 U	2 U	2 U	2 U	2 U		
18_BGMW18A	148	27-Feb-01	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
		17-Sep-01	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	Freon-113	0.3 J
18_GMW19D	170	25-Sep-92	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Jun-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		16-Feb-96	6	1 U	1 U	1 U	1 U	1 U	1 U		
		4-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		10-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		26-Oct-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		29-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Acetone	6.8 J
		15-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		11-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
18_BGMW101	130	13-Nov-92	29	1 U	1 U	1 U	1 U	1 U	1 U	Chloromethane	2
		19-Jul-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		29-Jan-96	15	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Nov-96	21	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Nov-96	20	1 U	1 U	1 U	1 U	1 U	1 U		
		18-Mar-97	15	1 U	1 U	1 U	1 U	1 U	1 U		
		18-Mar-97	16	1 U	1 U	1 U	1 U	1 U	1 U		
		9-Jul-97	16	1 U	1 U	1 U	1 U	1 U	1 U		
		20-Oct-97	19	1 U	1 U	1 U	0.4 J	1 U	1 U		
		23-Oct-98	19	1 U	1 U	1 U	0.5 J	1 U	1 U		
		27-Jul-99	21	1 U	1 U	1 U	0.76 J	1 U	1 U		
		13-Jun-00	38 J	1 U	1 U	1 U	2	1 U	1 U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18_BGMW101A	98	23-Feb-01	25	10 U	10 U	10 U	1 J	10 U	10 U		
		19-Sep-01	33	1 U	1 U	1 U	2	1 U	1 U		
18_DW135	135	15-Jul-88	5	0.5 U	56		0.5 U	11			
		22-Sep-88	7	0.5 U	61		0.5 U	14			
		20-Jan-89	3.4	0.5 U	45		0.5 U	11			
		22-Dec-92	0.6 J	1 U	17	1 U	1 U	3	1 U		
		19-Feb-96	12	1 U	10	1 U	1 U	1	1 U	Toluene	9
		5-Nov-96	18	1 U	19	1 U	1 U	2	1 U	Methylene Chloride	1 J
		7-Mar-97	23	1 U	13	1 U	1 U	0.9 J	1 U		
		7-Jul-97	27	1 U	15	1 U	1 U	1	1 U		
		24-Oct-97	30	1 U	15	0.6 J	1 U	1	1 U		
		23-Oct-98	76	1 U	19 J	1.1	1 U	1.1	1 U		
		27-Jul-99	44	1 U	21	0.83 J	1 U	1.2	1 U		
		27-Jul-99	42	1 U	20	0.74 J	1 U	1.2	1 U		
		13-Jun-00	14	1 U	14	1 U	1 U	1	1 U		
		14-Feb-01	7 J	10 UJ	16 J	10 UJ	10 UJ	1 J	10 UJ		
		23-Feb-01	9 J	10 U	21 J	10 U	10 U	2 J	10 U		
		21-Sep-01	7	1 U	28	1 U	1 U	2	1 U		
18_DW250		15-Jul-88	0.5 U	0.5 U	8		0.5 U	0.5 U			
		22-Sep-88	0.5 U	0.5 U	15		0.5 U	0.5 U			
		20-Jan-89	0.5 U	0.5 U	3.1		0.5 U	0.5 U			
		21-Dec-92	1 U	1 U	7	1 U	1 U	1 U	1 U		
		7-Jun-93	1	1 U	5	1 U	1 U	1 J	1 U		
		31-Jan-96	1 U	1 U	2	1 U	1 U	1 U	1 U	Toluene	9
		5-Nov-96	1 U	1 U	11	1 U	1 U	1 U	1 U	Methylene Chloride	1
		7-Mar-97	1 U	1 U	1	1 U	1 U	1 U	1 U		
		27-Oct-98	1 U	1 U	1.3 J	1 U	1 U	1 U	1 U		
		30-Jul-99	1 U	1 U	12	1 U	1 U	1 U	1 U		
		13-Jun-00	1 U	1 U	8	1 U	1 U	1 U	1 U		
		14-Feb-01	10 U	10 U	1 J	10 U	10 U	10 U	10 U		
		21-Sep-01	1 U	1 U	5	1 U	1 U	1 U	1 U		

35 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18 MCAS01-2	160	4-Jan-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		1,1,1-Trichloroethane	0.5 J
		6-Feb-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		1-Apr-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		1,1,1-Trichloroethane	0.5 J
		5-May-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		2-Jun-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		19-Oct-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		12-Jan-90	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		8-Feb-90	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		17-May-90	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		2-Aug-90	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		1-Dec-90	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		21-Mar-91	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		17-Jul-91	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		20-Oct-91	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		19-May-92	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		22-Sep-92	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		12-Apr-93	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		24-Nov-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		27-Jul-94	ND	ND	ND	ND	ND	ND	ND		
		12-Jun-95	ND	ND	ND	ND	ND	ND	ND		
		13-Jan-96	ND	ND	ND	ND	ND	ND	ND		
		24-Jan-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		5-Sep-96	ND	ND	ND	ND	ND	ND	ND		
		18-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		19-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Oct-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2- utanone	1.3 J
		14-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Acetone	4.6 J

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 MCAS01-3	220	4-Jan-89	1.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			1,1,1-Trichloroethane	0.5 I
		6-Feb-89	1.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		1-Apr-89	1.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			1,1,1-Trichloroethane	0.5 I
		5-May-89	1.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Jun-89	1.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		19-Oct-89	1.3		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-Jan-90	1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		8-Feb-90	1.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-May-90	0.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Aug-90	1.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		1-Dec-90	1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		21-Mar-91	0.9		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Jul-91	1.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		20-Oct-91	2.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		19-May-92	3.4		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		22-Sep-92	2.3		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		22-Sep-92	2.3		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		12-Apr-93	2.7		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		27-Jul-94	3.6			ND		ND		ND		ND		ND		ND		
		12-Jun-95	3.1			ND		ND		ND		ND		ND		ND		
		13-Jan-96	2.6			ND		ND		ND		ND		ND		ND		
		18-Jan-96	2		1	U	1	U	1	U	1	U	1	U	1	U		
		5-Sep-96	3.4			ND		ND		ND		ND		ND		ND		
		18-Nov-96	3		1	U	1	U	1	U	1	U	1	U	1	U		
		19-Mar-97	3		1	U	1	U	1	U	1	U	1	U	1	U		
		2-Jul-97	2		1	U	1	U	1	U	1	U	1	U	1	U		
		22-Oct-97	3		1	U	1	U	1	U	1	U	1	U	1	U	Acetone	0.8 I
		22-Oct-97															Methylene Chloride	0.6 I
		14-Oct-98	2.7		1	U	1	U	1	U	1	U	1	U	1	U		
		14-Jul-99	1.9		1	U	1	U	1	U	1	U	1	U	1	U		
		20-Feb-01	0.7	I	10	U	10	U	10	U	10	U	10	U	10	U	Vinyl Choride	1 I
																	Methyl-tertiary-butyl-ether	0.6 I
		24-Sep-01	1		1	U	1	U	1	U	1	U	1	U	1	U		

37 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18_MCAS02-1	50	27-Dec-88	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		7-Feb-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		5-Mar-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		3-May-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		2-Jul-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		17-Oct-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		12-Jan-90	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		13-Mar-90	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		18-May-90	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		1-Dec-90	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		5-Apr-91	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 I	0.5		
		4-May-91	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 I			
		9-Jul-91	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		7-Sep-91	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		19-Oct-91	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		22-Apr-92	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		17-Sep-92	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
		17-Feb-93	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U		
		2-Jun-93	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U		
		11-Sep-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		6-Jul-94	ND	ND	ND	ND	ND	ND	ND		
		28-Jun-95	ND	ND	ND	ND	ND	ND	ND		
		9-Dec-95	ND	ND	ND	ND	ND	ND	ND		
		30-Jan-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		8-Sep-96	ND	ND	ND	ND	ND	ND	ND		
		12-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		13-Mar-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		9-Apr-97	ND	ND	ND	ND	ND	ND	ND		
		13-Oct-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		13-Jul-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 MCAS02-2	140	27-Dec-88	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Feb-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Mar-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		3-May-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		2-Jul-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Oct-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		13-Mar-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		18-May-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		11-Oct-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		10-Nov-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Apr-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5		0.5			
		4-May-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5					
		9-Jul-91	0.5	I	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Sep-91	0.5	I	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		19-Oct-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		22-Apr-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Sep-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Feb-93	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		2-Jun-93	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		11-Sep-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		6-Jul-94		ND		ND		ND		ND		ND		ND		ND		
		28-Jun-95		ND		ND		ND		ND		ND		ND		ND		
		9-Dec-95		ND		ND		ND		ND		ND		ND		ND		
		30-Jan-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		8-Sep-96		ND		ND		ND		ND		ND		ND		ND		
		12-Nov-96	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		13-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		9-Apr-97		ND		ND		ND		ND		ND		ND		ND		
		13-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Methyl Tert- utyl Ether	1.9
		13-Oct-98															Toluene	1.7
		13-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18 MCAS02-3	210	27-Dec-88	1.4		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Feb-89	1.8		0.5	I	0.5	I	0.5	I	0.5	U	0.5	U				
		5-Mar-89	2		0.5	I	0.5	I	0.5	I	0.5	U	0.5	U				
		3-May-89	2		0.5	I	0.5	I	0.5	I	0.5	U	0.5	U				
		2-Jul-89	1.8		0.5	I	0.5	I	0.5	I	0.5	U	0.5	U				
		17-Oct-89	3		0.5	I	0.5	I	0.5	I	0.5	U	0.5	U				
		13-Mar-90	2.2		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		18-May-90	1.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		18-May-90	1.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		5-Apr-91	3.3		0.5	I	0.5	I	0.5	I	0.5	U	0.6					
		4-May-91	3.3		0.5	I	0.5	I	0.5	I	0.5	U	0.6					
		9-Jul-91	2.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		7-Sep-91	2.1		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		19-Oct-91	2.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		27-Feb-92	3		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Sep-92	2.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Sep-92	2.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		17-Feb-93	3.9		0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		2-Jun-93	3		0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		20-Nov-93	2		1	U	1	U	1	U	1	U	1	U	1	U		
		6-Jul-94	2.5			ND		ND		ND		ND		ND		ND		
		28-Jun-95	3.3			ND		ND		ND		ND		ND		ND		
		9-Dec-95	2.3			ND		ND		ND		ND		ND		ND		
		30-Jan-96	4		1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	3
		8-Sep-96	3			ND		ND		ND		ND		ND		ND		
		12-Nov-96	3		1	U	1	U	1	U	1	U	1	U	1	U		
		13-Mar-97	2		1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	1
		9-Apr-97	2.5			ND		ND		ND		ND		ND		ND		
		2-Jul-97	2		1	U	1	U	1	U	1	U	1	U	1	U		
		9-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2-Hexanone	8 I
		17-Oct-97	2		1	U	1	U	1	U	1	U	1	U	1	U		
		12-Oct-98	2.6		1	U	1	U	1	U	1	U	1	U	1	U	Acetone	13 I
		13-Jul-99	2		1	U	1	U	1	U	1	U	1	U	1	U		
		20-Feb-01	1	I	10	U	10	U	10	U	10	U	10	U	10	U		
		12-Sep-01	2		1	U	1	U	1	UI	1	UI	1	U	1	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18_MCAS03-1	95	30-Jul-99	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2.8					
		6-Dec-88	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2.8					
		30-Jan-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2.1					
		13-Apr-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2.1					
		10-Oct-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.6					
		9-Feb-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.1					
		13-Mar-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8					
		17-May-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5					
		2-Sep-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.1					
		11-Sep-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7					
		9-Nov-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7					
		4-Apr-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.2					
		18-Jul-91	0.5	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	J				
		18-Oct-91	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	J				
		19-May-92	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U				
		15-Sep-92	0.5	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	J				
		15-Sep-92	0.5	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	J				
		6-Feb-93	0.5		0.5	U	0.5	U	0.5	U			0.5		0.5	U		
		10-Jun-93	0.5		0.5	U	0.5	U	0.5	U			0.5		0.5	U		
		6-Oct-93	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U		
		22-Nov-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Jun-94		Trace		ND		ND		ND		ND		ND		ND		
		20-Dec-95	1			ND		ND		ND		ND		Trace		ND		
		6-Feb-96	2		1	U	1	U	1	U	1	U	1	U	1	U		
		15-Jun-96	1.4			ND		ND		ND		ND	0.6			ND		
		6-Nov-96	5		1	U	1	U	1	U	1	U	1	U	1	U		
		12-Mar-97	5		1	U	1	U	1	U	1	U	1	U	1	U		
		4-Apr-97	4			ND		ND		ND		ND		ND		ND		
		1-Jul-97	3		1	U	1	U	1	U	1	U	1	U	1	U		
		14-Oct-97	5		1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	2
		7-Oct-98	17		1	U	1	U	1	U	0.7	J	1	U	1	U	2-Hexanone	1.3
		13-Jul-99	19		1	U	1	U	1	U	0.89	J	1	U	1	U		

41 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18_MCAS03-2	170	12-Jun-88	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7		0.5	U		
		6-Dec-88	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7		0.5	U		
		30-Jan-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	J	0.5	U		
		13-Apr-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	J	0.5	U		
		10-Oct-89	4.6		0.5	U	0.5	U	0.5	U	0.5	U	1		0.5	U		
		9-Feb-90	14.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5		0.5	U		
		13-Mar-90	18.1		0.5	J	0.5	U	0.5	U	0.5	U	0.5	J	0.5	U		
		17-May-90	7.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	J	0.5	U		
		2-Sep-90	14.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5		0.5	U		
		11-Sep-90	15.7		0.7		0.5	U	0.5	U	0.5	U	0.7		0.5	U		
		9-Nov-90	15.7		0.7		0.5	U	0.5	U	0.5	U	0.7		0.5	U		
		4-Apr-91	23.4		1.1		0.5	U	0.5	U	0.5	U	2.7		0.5	U		
		18-Jul-91	20.6		1		0.5	U	0.5	U	0.5	U	0.5	J	0.5	U		
		18-Oct-91	49.3		2.2		0.5	U	0.5	U	0.5	U	1.2		0.5	U		
		14-May-92	42.2		1.6		0.5	U	0.5	U	1.3		0.5	J	0.5	U		
		15-Sep-92	23.7		0.7		0.5	U	0.5	U	0.8		0.6		0.5	U		
		6-Feb-93	41.1		1.4		0.5	U	0.5	U	1.6		0.6		0.5	U		
		10-Jun-93	41.1		1.4		0.5	U	0.5	U			0.6		0.5	U		
		2-Jun-93	44.7		1.6		0.5	U	0.5	U			0.6		0.5	U		
		10-Jun-93	52.4		1.8		0.5	U	0.5	U			0.6		0.5	U		
		19-Nov-93	52.4		1.8		1	U	1	U	1	U	1	U	1	U		
		16-Jun-94	30.7			ND		ND		ND		ND		Trace		ND		
		20-Dec-95	76		1.8			ND		ND	0.8			Trace		ND		
		6-Feb-96	33		1		1	U	1	U	1	U	1	U	1	U		
		15-Jun-96	84.6		1.8			ND		ND	1.1			Trace		ND		
		6-Nov-96	115		2		1	U	1	U	4		1	U	1	U		
		11-Mar-97	107		5	U	5	U	5	U	4	J	5	U	5	U		
		4-Apr-97	64		1.5			ND		ND	5.7		0.8			ND		
		1-Jul-97	88		1		1	U	1	U	4		1	U	1	U	Vinyl Chloride	7 J
		14-Oct-97	71		0.6	J	1	U	1	U	4	J	0.3	J	1	U	Methylene Chloride	1
		14-Oct-97	72		0.6	J	1	U	1	U	4	J	1	U	1	U		
		8-Oct-98	130		0.9	J	1	U	1	U	7		0.5	J	1	U	Toluene	1.4
		13-Jul-99	140		0.78		1	U	1	U	8.5		1	U	1	U		
		13-Jul-99	140		0.94		1	U	1	U	9.2		1	U	1	U		
		22-Feb-01	110		50	U	50	U	50	U	5	J	50	U	50	U		
		11-Sep-01	140		5	U	5	U	5	UJ	9		5	U	5	U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L															
			TCE		PCE		CCl_4		1,1-DCE		1,2-DCE (Total)		Chloroform		Benzene		Other Compounds Detected	
			5		5		0.5		6		6		100		1			Result
18_MCAS03-3	230	12-Jun-88	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		6-Dec-88	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		30-Jan-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		13-Apr-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		10-Sep-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		9-Oct-89	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		9-Feb-90	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
		13-Mar-90	0.5	U	0.5	U	0.3		0.5	U	0.5	U	0.5	U	0.5	U		
		17-May-90	0.5	U	0.5	U	0.4		0.5	U	0.5	U	0.5	U	0.5	U		
		2-Sep-90	0.5	U	0.5	U	1	J	1	U	0.5	U	0.5	U	0.5	U		
		11-Sep-90	0.5	U	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U		
		9-Nov-90	0.5	U	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U		
		4-Apr-91	0.5	U	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U		
		18-Jul-91	0.5	U	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U		
		18-Oct-91	0.5	U	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U		
		14-May-92	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U		
		15-Sep-92	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U		
		6-Feb-93	0.5	U	0.5	U	1	U	1	U	1	U	0.5	U	0.5	U		
		2-Jun-93	0.5	U	0.5	U	1	U	1	U	1	U	0.5	U	0.5	U		
		10-Jun-93	0.5	U	0.5	U	1	U	1	U	1	U	0.5	U	0.5	U		
		6-Oct-93	0.5	U	0.5	U	1	U	1	U	1	U	0.5	U	0.5	U		
		19-Nov-93	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		16-Jun-94		ND		ND	1	U	1	U		ND		ND		ND		
		20-Dec-95		ND		Trace	1	U	1	U		ND		ND		ND		
		6-Feb-96	1	U	1	U	1	U	0.6	J	1	U	1	U	1	U		
		15-Jun-96		ND		Trace		ND		ND		ND		ND		ND		
		6-Nov-96	1	U	1	U	0.5	U			1	U	1	U	1	U		
		11-Mar-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		4-Apr-97		ND		Trace	1	U	1	U		ND		ND		ND		
		1-Jul-97	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		14-Oct-97	0.3	J	1	U	1	U	1	U	1	U	1	U	1	U	Methylene Chloride	0.4 J
		8-Oct-98	1	U	1	U	1	U	1	U	1	U	1	U	1	U	Acetone	1.7 J
		8-Oct-98					1	U	1	U							Carbon Disulfide	17
		12-Jul-99	1	U	1	U	1	U	1	U	1	U	1	U	1	U		
		22-Feb-01	10	U	10	U	10	U	10	U	10	U	10	U	10	U		
		11-Sep-01	0.4	J	0.4	J	1	U	1	UJ	1	UJ	1	U	1	U		

43 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
18 MCAS07-2	199	17-Oct-88	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		30-Nov-88	2.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		20-Jan-89	3.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		5-Apr-89	2.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		4-May-89	2.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		8-Feb-90	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		2-Aug-90	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		17-Nov-90	0.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		22-Mar-91	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		26-Jul-91	0.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		23-Oct-91	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		12-May-92	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		20-Oct-92	1.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		5-Dec-92	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		17-Mar-93	1.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		16-Jun-93	1.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		21-Oct-93	1	1 U	1 U	1 U	1 U	1 U	1 U		
		22-Dec-95	1.8	ND	ND	ND	ND	ND	ND		
		9-Feb-96	1	1 U	1 U	1 U	1 U	1 U	1 U		
		25-Jul-96	0.7	ND	ND	ND	ND	ND	ND		
		20-Nov-96	1	1 U	1 U	1 U	1 U	1 U	1 U		
		1-Feb-97	1.4	ND	ND	ND	ND	ND	ND		
		26-Mar-97	1	1 U	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	2
		29-Oct-98	1.9	1 U	1 U	1 U	1 U	1 U	1 U		
		15-Jul-99	0.63 I	1 U	1 U	1 U	1 U	1 U	1 U		
		20-Feb-01	1 I	10 U	10 U	10 U	10 U	10 U	10 U		
		24-Sep-01	0.6 I	1 U	1 U	1 U	1 U	1 U	1 U		
18 PS2	133	16-Dec-88	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
		22-Jan-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2	0.5 U		
		15-Dec-92	0.9 I	1 U	1 U	1 U	1 U	1 U	1 U		
		7-Dec-93	2	1 U	1 U	1 U	1 U	0.7 I	1 U		
		18-Jan-96	4	1 U	1 U	1 U	1 U	1 U	1 U		
		25-Nov-96	12	1 U	1 U	1 U	0.7 I	1	1 U		
		25-Mar-97	15	0.5 I	1 U	1 U	1 U	1	1 U		
		4-Jul-97	13	1 U	1 U	1 U	0.7 I	1	1 U		
		24-Oct-97	18	1 U	1 U	1 U	0.8 I	2	1 U	romodichloromethane	0.4 I
		13-Jun-00	17	1	1 U	1 U	1	3	1 U		
		16-Feb-01	17	10 U	10 U	10 U	1 I	3 I	10 U		
		19-Sep-01	21	1 U	1 U	0.3 I	1	2	1 U		
18 PS3	122	13-Dec-88	33	24	0.5 U		0.5 U	0.5 U			
		23-Jan-89	64	81	0.4		0.5 U	12		1,1,2-Trichloroethane	0.9 I
		12-Oct-92	56	58	1 U	0.4 I	2	2	1 U	Chloromethane	0.8 I
		6-Jul-93	79	30	1 U	1 U	1 U	2	1 U	1,1,2-Trichloroethane	2
		22-Feb-96	11	9	1 U	1 U	1 U	1 U	1 U	romodichloromethane	2
		8-Jan-97	9	17	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	2
		14-Mar-97	7	12	1 U	1 U	0.7 I	3	1 U		
		25-Sep-01	3	3	1 U	1 U	1 U	1 U	1 U		
18 PS3A	105	18-Sep-01	10	7	1 U	1 U	0.3 I	0.3 I	1 U		
18 PS7	126	23-Jan-89	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1	0.5 U		
		16-Dec-92	1 U	1 U	0.5 U	0.5 U	1 U	1 U	0.5 U		
		7-Feb-93	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		22-Jan-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		8-Nov-96	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Mar-97	0.6 I	1 U	1 U	1 U	1 U	1 U	1 U	Methylene Chloride	1
		16-Jun-00	28	5	1 U	1 U	1 U	1 U	1 U		
		25-Sep-01	41	7	1 U	1 U	1 U	0.5 I	1 U	Freon-113	0.7 I

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
21_UGMW37	130	13-Nov-92	11	7	1 U	1 U	1 U	1	1 U		
		7-Jul-93	11	4	1 U	1 U	1 U	0.8 J	1 U		
		12-Feb-96	12	4	1 U	1 U	1 U	1 U	1 U		
		11-Nov-96	25	13	1 U	1 U	2	1	1 U	Methylene Chloride	1
		25-Mar-97	25	11	1 U	1 U	2	1	1 U		
		9-Jul-97	19	11	1 U	1 U	1	1 J	1 U		
		9-Jul-97	18	10	1 U	1 U	0.8 J	1 J	1 U		
		27-Oct-97	21	9	1 U	1 U	1	1 J	1 U	Methylene Chloride	0.7 J
		21-Jun-00	23	5	1 U	2	0.8 J	1	1 U		
		21-Jun-00	21	5	1 U	1	0.7 J	1	1 U		
		13-Feb-01	25	5 J	10 U	2 J	0.7 J	2 J	10 U	1,1,2-Trichloroethane	0.5 J
		14-Sep-01	27	4	0.4 J	4 J	1 UJ	2	1 U		
22_DBMW47	156	29-Sep-92	1000	7	5	1 U	1 U	3	1 U		
		13-Jul-93	1200	4	5	2	1 U	2	1 U		
		15-Feb-96	467	2	3	1	1 U	2	1 U		
		2-Dec-96	990	5	3	3	1 U	2	1 U	Freon-113	15
		24-Mar-97	733	3	3	3	1 U	2	1 U	Freon-113	7 J
		8-Jul-97	760	10 U	10 U	10 U	10 U	10 U	10 U	Freon-113	100
		8-Jul-97	730	10 U	10 U	10 U	10 U	10 U	10 U	Freon-113	100
		23-Oct-97	540	3	3	3	3	1 U	1 U	Freon-113	8 J
		23-Oct-97	770	25 U	25 U	25 U	25 U	25 U	25 U		
		4-Nov-98	450	1.2	1.6	1.5	1 U	0.8 J	1 U		
		4-Nov-98	450	1.2	1.6	1.5	1 U	0.8 J	1 U		
		3-Aug-99	450	1.5	1.8	1.6	1 U	0.95	1 U		
		14-Jun-00	370	1 U	1 U	1 U	1 U	1 U	1 U		
		13-Feb-01	130	20 U	20 U	20 U	20 U	20 U	20 U	Freon-113	1 J
		20-Feb-01	130	0.3 J	0.5 J	0.5 J	10 UJ	10 UJ	10 UJ	Freon-113	2 J
		17-Sep-01	150 J	0.4 J	0.7 J	0.3 J	1 UJ	0.3 J	1 UJ	Carbon Disulfide	0.6 J
		17-Sep-01								Freon-113	3 J
24EX3OB1	150	8-Aug-97	408	1 U	1 U	1 U	1 U	1 U	1 U		
		3-Nov-98	450	0.4 J	2.8	1 U	1 U	0.4 J	1 U		
		4-Aug-99	320	1 U	0.65 J	1 U	1 U	0.55 J	1 U		
		15-Jun-00	310	1 U	2	1 U	1 U	1 U	1 U	Bromodichloromethane	2
		12-Feb-01	280	50 U	2 J	50 U	50 U	50 U	50 U		
		20-Feb-01	340 J	10 U	2 J	10 U	10 U	0.5 J	10 U		
		18-Sep-01	310	1 U	2	1 U	0.3 J	0.4 J	1 U		
24EX3OB2	150	11-Aug-97	189	0.5 J	0.6 J	1 U	1 U	1 U	1 U		
		3-Nov-98	130	1 U	1	1 U	1 U	1 J	1 U		
		4-Aug-99	130	1 U	1.8	1 U	1 U	1 U	1 U		
24EX3OB3	175	11-Aug-97	4.5	1 U	1 U	1 U	1 U	1 U	1 U		
		3-Nov-98	1 U	1 U	1 U	1 U	1 U	1 J	1 U		
		4-Aug-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U		

45 of 48

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
24EX4OB2	150.7	31-Oct-97	376	1 U	4.1	1 U	1 U	1 J	1 U		
		4-Nov-98	490	0.4 J	3.4	1 U	1 U	1 J	1 U		
		4-Aug-99	290	1 U	2.3	1 U	1 U	0.54	1 U		
24EX5OB1	150	14-Nov-97	510	1 U	1 U	1 U	1 U	1 U	1 U		
		30-Dec-97	669	1.7	2.3	1 U	1 U	1.2	1 U		
		4-Nov-98	260	0.5 J	0.9 J	0.4 J	1 U	0.4 J	1 U		
		4-Aug-99	360	1.3	1.4	0.89 J	1 U	1	1 U		
		15-Jun-00	210	0.8 J	0.7 J	1 U	1 U	0.6 J	1 U	Bromodichloromethane	2
		16-Feb-01	140	0.6 J	0.6 J	10 U	10 U	0.5 J	10 U	Freon-113	7 J
		18-Sep-01	120	0.4 J	0.4 J	1 U	1 U	0.3 J	1 U	Freon-113	6
24EX5OB2	150	18-Nov-97	676	3.6	2.7	1 U	0.6 J	1.4	1 U	Bromodichloromethane	5.2
		5-Jan-98	921	1 U	1 U	1 U	1 U	1	1 U	Trichlorofloromethane	3.4
		4-Nov-98	610	1 J	1.4	0.7 J	1 U	0.8 J	1 U		
		4-Aug-99	400	1.9	1.8	1.3	1 U	1.4	1 U		
24EX6		20-May-99	1000	5.9	2.6	1 U	1 U	1.2	1 U		
		28-Jul-99	400	1.9	2.9	1 U	1 U	1.3	1 U		
24EX6OB1	151	31-Dec-97	607	1.2	1 U	1 U	1 U	1 U	1 U	Trichlorofloromethane	1.1
		5-Nov-98	490	0.4 J	0.4 J	1 U	1 U	0.3 J	1 U		
		5-Aug-99	710	1 U	0.65 J	1 U	1 U	0.54 J	1 U		
24EX6OB2	150.7	6-Jan-98	542	1 U	1 U	1 U	1 U	1 U	1 U	Trichlorofloromethane	3.6
		5-Nov-98	250	1.7	0.7 J	1 U	1 U	1 U	1 U		
		5-Aug-99	670	1.5	0.8 J	1 U	1 U	1 U	1 U		
		15-Jun-00	1009	0.8 J	0.6 J	1 U	1 U	1 U	1 U	Bromodichloromethane	4
		12-Feb-01	590 J	0.7 J	0.7 J	10 UJ	10 UJ	0.5 J	10 UJ	2-Butanone	3 J
		20-Feb-01	680	0.7 J	0.8 J	0.4 J	10 U	0.6 J	10 U	Carbon disulfide	0.7 J
		18-Sep-01	760	0.6 J	0.7 J	0.3 J	1 U	0.6 J	1 U		
24EX6OB3	223	24-Nov-97	1 U	1 U	1 U	1 U	1 U	0.4 J	1 U		
		5-Nov-98	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U		
		5-Aug-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Chloromethane	5.5

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
24NEW1	245	30-Oct-95	1 U	1 U	1 U	1 U	1 U	3	0.4 J	Acetone	5
		30-Oct-95								Toluene	0.8 J
		30-Oct-95								Xylenes	0.3 J
		30-Oct-95								Bromodichloromethane	2
		30-Oct-95								Bromoform	0.5 J
		30-Oct-95								Dibromochloromethane	2
		2-Nov-95	1 U	1 U	1 U	1 U	1 U	0.4 J	1 U	Toluene	2
		2-Nov-95								Ethylbenzene	0.6 J
		2-Nov-95								Xylenes	3
		2-Nov-95								Dibromochloromethane	0.4 J
		2-Dec-96	102	2	1 U	1 U	1 U	1 U	1 U		
		24-Mar-97	155	0.8 J	1 U	1 U	1 U	1 U	1 U		
		10-Jul-97	290	1	1 U	1 U	1 U	0.8 J	1 U		
		23-Oct-97	170	0.9 J	1 U	1 U	1 U	0.5 J	1 U	Freon-113	0.8 J
		23-Oct-97								Methylene Chloride	6
		23-Oct-97	170	10 U	10 U	10 U	10 U	10 U	10 U		
		2-Nov-98	1.5	1 U	1 U	1 U	1 U	1 U	1 U		
		3-Aug-99	87	1 U	1 U	1 U	1 U	1 U	1 U		
		3-Aug-99	87	1 U	1 U	1 U	1 U	1 U	1 U		
24NEW4	148	26-Oct-95	1000	1 U	1 U	1 U	1 U	1 U	1 U		
		2-Nov-95	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		3-Dec-96	1110	2	2	1	1 U	1	1 U	Freon-113	4.3 J
		21-Mar-97	677	20 U	20 U	20 U	20 U	20 U	20 U	Methylene Chloride	30
		8-Jul-97	640	10 U	10 U	10 U	10 U	10 U	10 U		
		8-Jul-97	650	10 U	10 U	10 U	10 U	10 U	10 U		
		23-Oct-97	390	0.5 J	1	0.5 J	1 U	0.8 J	1 U		
		23-Oct-97	580	25 U	25	25 U	25 U	25 U	25 U		
		23-Oct-97	420	0.6 J	1	0.6 J	1 U	0.9 J	1 U		
		23-Oct-97	620	25 U	25 U	25 U	25 U	25 U	25 U		
		22-Oct-98	250	1 U	0.9 J	1 U	1 U	1 U	1 U		
		27-Jul-99	82	1 U	1 U	1 U	1 U	1 U	1 U	Freon-113	3.7 J
		14-Jun-00	25 J	1 U	1 U	1 U	1 U	1 U	1 U		
		12-Feb-01	23	10 U	10 U	10 U	10 U	10 U	10 U	Freon-113	0.9 J
		12-Feb-01								2-Butanone	0.4 J
		20-Feb-01	25 J	10 U	10 U	10 U	10 U	10 U	10 U	Freon-113	1 J
		18-Sep-01	16	1 U	1 U	1 U	1 U	1 U	1 U	1,1,2-Trichlorotrifluoroethane	1
24NEW5	250	21-Nov-95	1 U	1 U	1 U	1 U	1 U	1 U	1 U	Acetone	4 J
		21-Nov-95								Bromodichloromethane	2
		21-Nov-95								Bromoform	3
		21-Nov-95								Dibromochloromethane	2
		2-Dec-96	0.7 J	2	1 U	1 U	1 U	1 U	1 U		
		24-Mar-97	7	1 U	1 U	1 U	1 U	1 U	1 U		
		8-Jul-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		20-Oct-97	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		3-Nov-98	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		3-Aug-99	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		13-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		18-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U		

Table B.1B
Detected Volatile Organic Compounds in Groundwater
MCAS El Toro

Station ID	Base Screen (ft. bgs)	Sample Date	Primary VOCs Detected and Regulatory Standards Concentrations in ug/L								
			TCE	PCE	CCl_4	1,1-DCE	1,2-DCE (Total)	Chloroform	Benzene	Other Compounds Detected	
			5	5	0.5	6	6	100	1		Result
24NEW6	185	25-Oct-95	30 J	11 J	1 U	1 U	3	1 J	1 U	Acetone	9 J
		2-Dec-96	29	13	1 U	1 U	3	1	1 U		
		19-Mar-97	23	7	1 U	1 U	2	1	1 U		
		10-Jul-97	46	18	1 U	1 U	4	1	1 U		
		27-Oct-97	46	16	1 U	1 U	5	1	1 U	1,1,2-Trichloroethane	0.5 J
		27-Oct-97								1,2-Dichloroethane	0.3 J
		28-Oct-98	27	7.2	1 U	1 U	3	1 J	1 U		
		6-Aug-99	31	6.6	1 U	1 U	3.1	1.1	1 U		
		16-Jun-00	21	5	1 U	1 U	2	0.8 J	1 U		
		13-Feb-01	22	5 J	10 U	10 U	2 J	0.8 J	10 U	1,1,2-Trichloroethane	0.4 J
		22-Feb-01	23	6 J	10 U	10 U	2 J	0.9 J	10 U	Carbon disulfide	0.8 J
		19-Sep-01	20	5	1 U	1 U	2	0.8 J	1 U		
24NEW7	158	31-Oct-95	27	1 U	0.6 J	1	1 U	0.7 J	1 U	Acetone	7 J
		31-Oct-95								1,1,1-Trichloroethene	1
		31-Oct-95								1,1,2,2-Tetrachloroethane	1
		31-Oct-95								1,1,2-Dichloroethane	1
		3-Dec-96	33	1	0.9 J	4	1 U	0.9 J	1 U		
		12-Mar-97	17	1 U	1 U	2	1 U	0.5 J	1 U	Methylene Chloride	2
		2-Jul-97	9	1 U	0.8 J	1	1 U	0.5 J	1 U		
		2-Jul-97	9	1 U	0.8 J	1	1 U	0.5 J	1 U		
		20-Oct-97	19	1 U	1 U	3	1 U	0.6 J	1 U		
		21-Oct-98	12	1 U	1.9 J	0.8 J	1 U	0.6 J	1 U		
		30-Jul-99	5.2	1 U	1.5	1 U	1 U	1 U	1 U		
		13-Jun-00	3	1 U	1	1 U	1 U	1 U	1 U		
		19-Sep-01	2	1 U	0.7 J	1 U	1 U	1 U	1 U	Freon-113	0.3 J
24NEW8	162	1-Nov-95	1 U	1 U	0.5 J	1 U	1 U	1 U	1 U		
		3-Dec-96	4	1	2	1 U	1 U	0.7 J	1 U		
		12-Mar-97	1	1 U	1	1 U	1 U	1 U	1 U		
		2-Jul-97	1 U	1 U	1	1 U	1 U	1 U	1 U		
		20-Oct-97	2	1 U	1 U	1 U	1 U	0.3 J	1 U		
		21-Oct-98	1 U	1 U	1.3 J	1 U	1 U	1 J	1 U		
		30-Jul-99	1 U	1 U	0.52	1 U	1 U	1 U	1 U	Carbon Disulfide	1.5
		14-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		18-Sep-01	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1,2-Dichloropropane	6
398MW-13	243	21-Jun-00	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
		14-Feb-01	10 U	10 U	10 U	10 U	10 U	10 U	10 U	Toluene	0.4 J
		14-Feb-01								Freon-113	0.4 J
		14-Sep-01	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	Freon-113	0.4 J

Notes:

Data in this table is compiled from technical documents provided by other CLEAN II contractors and from measurements taken by CDM Federal Programs during Rounds 12 through 14.

1) BOLD results exceed regulatory standard.

2) Bold Well Station ID indicates the well was sampled during Round 14.

3) 'Table lists results for primary volatile organic compounds (VOCs) detected in groundwater. All concentrations in micrograms per liter (mg/L)

4) 'Data qualifiers: U = not detected above the listed detection limit; J = estimated concentration

5) 'VOC abbreviations and regulatory standards (listed at top of results columns):

'Trichloroethene (TCE), federal maximum contaminant level (MCL) 5.0 mg/L

'Tetrachloroethene (PCE), federal MCL 5.0 mg/L, Carbon Tetrachloride (CCL4) state MCL 0.5 mg/L

'1,2-Dichloroethene (1,2-DCE) total, results include cis-1,2-DCE and (state MCL 6.0 ug/L) and trans-1,2-DCE

Chloroform state MCL 100 mg/L, Benzene, State MCL 1.0 mg/L

Table B.1C
Results of Radionuclides Analysis
MCAS El Toro

Sample ID	Date	Total Gross Alpha			Total Gross Beta		
		Activity (pCi/L)	Error	MDA (pCi/L)	Activity (pCi/L)	Error	MDA (pCi/L)
		MCL = 15			MCL = 50		
02_DGMW59	15-Dec-92	**16.3**	-	-	14.1	-	-
	23-Jun-93	21.6	-	-	15.8	-	-
	16-Aug-95	4.8	-	-	7.90J	-	-
	7-Feb-96	9.01	-	-	-0.97	-	-
	7-Feb-96	10.16	-	-	0.26	-	-
	4-Nov-96	12.51	-	-	2.93	-	-
	26-Mar-97	5.7	-	-	2.06	-	-
	3-Jul-97	**16.98**	-	-	8.36	-	-
	27-Oct-97	11.47	-	-	5.34	-	-
	7-Oct-98	13J	3.1	4	4.5J	2	3.2
	24-Sep-01	10.5	5.9	7.9	8.2	5.7	9.1
02_DGMW60	18-Nov-92	**20.9**	-	-	10.8	-	-
	23-Jun-93	**24**	-	-	30.2	-	-
	15-Aug-95	**20.6**	-	-	13.00J	-	-
	28-Nov-95	**26**	-	-	14.8	-	-
	7-Feb-96	**22.93**	-	-	-1.69	-	-
	7-Feb-96	**16.71**	-	-	0.33	-	-
	4-Nov-96	**32.16**	-	-	13.58	-	-
	26-Mar-97	**36.16**	-	-	17.65	-	-
	1-Jul-97	**36.82**	-	-	19.05	-	-
	28-Oct-97	**30.41**	-	-	14.69	-	-
	28-Oct-97	**31.27**	-	-	5.43	-	-
	12-Oct-98	**42.6J**	5.8	4.4	29.1J	3.8	3.4
	25-Jan-99	**46.8J**	0.8	2.7	29.5	0.6	2.9
	3-May-99	**60.5J**	0.2	2.6	30.5J	0.6	2.6
	22-Jul-99	**53.5J**	0.7	3.6	27.1J	0.5	3.1
	27-Apr-99	**32.1J**	-	1.8	15.2J	-	1.9
	19-Jul-99	**26.7J**	-	3.4	14.4J	0.2	2.5
	21-Jun-00	**67 J**	16		23 J	11	
	24-Sep-01	**15.5**	5.9	5.8	19.8	6.5	9.3
02_DGMW61	14-Dec-92	6.5	-	-	8.9	-	-
	22-Jan-93	9.2	-	-	10.5	-	-
	16-Aug-95	10.20J	-	-	6.30J	-	-
	29-Nov-95	14.3	-	-	9.4	-	-
	7-Feb-96	**23.91**	-	-	6.35	-	-
	4-Nov-96	**18.24**	-	-	5.41	-	-
	26-Mar-97	**17.91**	-	-	9.35	-	-
	2-Jul-97	**18.46**	-	-	6.76	-	-
	28-Oct-97	**19.06**	-	-	5.43	-	-
	8-Oct-98	**27.3J**	3.9	3.3	13.9J	2.2	2.6
	25-Jan-99	**24.3J**	0.3	2	15.5J	0.3	2.5
	27-Apr-99	**32.1J**	-	1.8	15.2J	-	1.9
	19-Jul-99	**26.7J**	-	3.4	14.4J	0.2	2.5
	21-Jun-00	**32 J**	11		12 J	8	
	24-Sep-01	**31**	7.3	4.3	11.1	5	7.7
02NEW2	21-Dec-95	9.90U	-	-	6.20U	-	-
	26-Nov-96	**28.29**	-	-	3.4	-	-
	26-Mar-97	13.44	-	-	11.7	-	-
	3-Jul-97	**15.34**	-	-	10.35	-	-
	27-Oct-97	13.7	-	-	4.31	-	-
	8-Oct-98	14J	0.5	3.2	9.1J	2	2.7
	27-Jan-99	**15.4J**	0.2	2.4	8.5J	0.8	2.5
	4-May-99	**20.1J**	0.1	2.4	8.3J	0.7	2.3
	20-Jul-99	**18.1J**	0.9	2.4	9.7J	0.6	2
	20-Jun-00	7.4 UJ	7.1		6.4 UJ	6.8	
	24-Sep-01	**18**	5.3	4.7	9.9	4.1	6.3

Table B.1C
Results of Radionuclides Analysis
MCAS El Toro

Sample ID	Date	Total Gross Alpha			Total Gross Beta		
		Activity (pCi/L)	Error	MDA (pCi/L)	Activity (pCi/L)	Error	MDA (pCi/L)
		MCL = 15			MCL = 50		
02NEW8A	27-Dec-95	**16.3**	-	-	6.3	-	-
	7-Nov-96	**24.2**	-	-	5.77	-	-
	25-Mar-97	**27.29**	-	-	5.71	-	-
	8-Jul-97	**17.57**	-	-	11.62	-	-
	27-Oct-97	**15.34**	-	-	13.22	-	-
	14-Oct-98	**22.1J**	3.2	2.7	14.8J	2	2.1
	14-Oct-98	**24.6J**	3.3	2.2	15.3J	2.1	2.2
	27-Jan-99	**25.8J**	0.2	1.7	14.4J	0.9	1.8
	27-Apr-99	**26.1J**	0.5	2.3	17.5J	0.2	1.8
	20-Jul-99	**26.3J**	0.8	3.1	4.8J	0.2	2.5
	21-Jun-00	**36 J**	9.9		8.1 UJ	7	
	24-Sep-01	**24.7**	5.9	4.3	11.5	3.7	5.3
02NEW11	21-Dec-95	6.60U	-	-	5.30U	-	-
	7-Nov-96	6.92	-	-	1.39	-	-
	25-Mar-97	7.78	-	-	2.84	-	-
	8-Jul-97	6.14	-	-	5.87	-	-
	23-Oct-97	6.55	-	-	6.53	-	-
	14-Oct-98	7.1J	2.2	3.2	7.2J	1.8	2.7
	21-Jan-99	7.7J	0.6	1.7	6.4J	0.5	2.1
	26-Apr-99	6.9J	0.9	2.4	5.6J	0.4	2
	15-Jul-99	9.6J	0.9	2.2	7.2J	0.3	1.6
	22-Jun-00	17 J	9.1		1.3 UJ	7.1	
	22-Jun-00	9.7 UJ	7.7		8.8 UJ	6.5	
	24-Sep-01	10.9	3.9	3.8	9.6	3.2	4.6
02NEW15	12-Oct-98	**20J**	3.8	4.3	9.5J	2.4	3.6
	1-Feb-99	**20.4J**	0.5	3.4	10.5J	0.3	3.3
	26-Apr-99	**14.1J**	0.1	3.7	7.6J	0.1	3.2
	19-Jul-99	**23.8J**	0.1	3.9	7.7J	0.1	3.1
	22-Jun-00	13 J	10		-6.6 UJ	10	
	24-Sep-01	9.7 J	5	6.4	6.7 UJ	4.6	7.4
	24-Sep-01	**15.7 J**	6	6.7	8.4 J	4.9	7.7
02NEW16	8-Oct-98	**17.2J**	3	3.3	10.3J	2	2.7
	24-Sep-01	**15.8**	5	4.9	10.1	3.5	5.1
03_DGMW64	15-Jan-93	14.3	-	-	13.1	-	-
	2-Jun-93	13.3	-	-	16.6	-	-
	26-Feb-96	11.14	-	-	2.97	-	-
	12-Nov-96	13.33	-	-	7.29	-	-
	12-Nov-96	13.33	-	-	7.27	-	-
	4-Mar-97	**16.6**	-	-	7.08	-	-
	30-Jun-97	**19.99**	-	-	7.11	-	-
	16-Oct-97	**20.18**	-	-	10.85	-	-
	13-Oct-98	14.1J	3.3	4.2	13.8J	2.6	3.3
03_DGMW64A	19-Sep-01	**28.2**	8.4	7.2	10.7	5.1	7.8
03_DGMW65X	18-Jan-93	8.6	-	-	8.8	-	-
	7-Jul-97	14.5	-	-	13.2	-	-
	26-Feb-96	**15.56**	-	-	9.79	-	-
	11-Nov-96	14	-	-	2.19	-	-
	4-Mar-97	**16.38**	-	-	6.93	-	-
	30-Jun-97	14.13	-	-	26.66	-	-
	15-Oct-97	**15.26**	-	-	13.88	-	-
	13-Oct-98	13J	2.8	3.3	11.8J	2.4	3.2
	29-Jan-99	**16.1J**	0.8	2.7	10.9J	-	2.5
	6-May-99	**20.5J**	0.4	3.1	10.9J	-	2.6
	26-Jul-99	**19.2J**	0.7	4.1	11.7J	0.3	3.1
	19-Jun-00	**19 J**	11	-	8.1 UJ	10	-
	19-Jun-00	**18 J**	10	-	7.2 UJ	11	-
03_DGMW65XA	19-Sep-01	**26.5**	9	10	7.6	4	6.2

Table B.1C
Results of Radionuclides Analysis
MCAS El Toro

Sample ID	Date	Total Gross Alpha			Total Gross Beta		
		Activity (pCi/L)	Error	MDA (pCi/L)	Activity (pCi/L)	Error	MDA (pCi/L)
		MCL = 15			MCL = 50		
03_UGMW26	1-Oct-92	14.2	-	-	10.9	-	-
	23-Jan-93	14.5	-	-	10.7	-	-
	7-Feb-96	3.77	-	-	15.8	-	-
	14-Nov-96	13.3	-	-	1.23	-	-
	14-Nov-96	14.37	-	-	2.22	-	-
	6-Mar-97	14.52	-	-	0.39	-	-
	1-Jul-97	9.34	-	-	4.57	-	-
	17-Oct-97	**22.11**	-	-	5.77	-	-
	13-Oct-98	12.6J	2.7	3.3	9.8J	2	2.7
	3-Feb-99	14.2J	0.4	2.3	9J	0.7	2.3
	5-May-99	13.1J	0.2	1.9	9.6J	0.5	1.7
	22-Jul-99	**15.5J**	0.7	2.5	7.2J	0.7	2.5
	19-Jun-00	**18 J**	9.7		4.7 UJ	8.1	
	20-Sep-01	**15.5**	6.7	7.8	9.9	4.8	7.4
03_UGMW26A	20-Sep-01	**31.9**	9	7.4	15.4	5.1	7.3
04_DBMW40	26-Feb-96	**15.23**	-	-	10.21	-	-
	12-Nov-96	**25.98**	-	-	6.55	-	-
	5-Mar-97	10.42	-	-	8.16	-	-
	30-Jun-97	**28.18**	-	-	9.72	-	-
	16-Oct-97	**19.43**	-	-	15.06	-	-
	15-Oct-98	**21.6J**	3.5	3.3	14.5J	2.6	3.3
	4-Feb-99	**17.8J**	-	2.6	12.7J	0.2	2.7
	7-May-99	**17.8J**	0.2	3	10J	-	2.8
	26-Jul-99	**23.6J**	0.7	3.3	10.4J	0.2	3.1
	19-Jun-00	**34 J**	13		7.6 UJ	11	
	19-Sep-01	9.7	5.6	7.5	9	3.9	5.9
04_UGMW63	24-Nov-92	NA	NA	NA	11.3	-	-
	30-Jan-96	14.41	-	-	4.44	-	-
	14-Nov-96	**22.86**	-	-	3.06	-	-
	14-Nov-96	**21.89**	-	-	2.67	-	-
	15-Oct-98	13.4J	2.5	2.8	10.2J	1.9	2.5
	4-Feb-99	13.6J	0.3	2	10.2J	-	2.5
	5-May-99	**18.2J**	0.8	1.9	12.8J	0.9	2.2
	26-Jul-99	**19.3J**	0.3	3.3	13.3J	0.2	2.7
	19-Jun-00	**19 UJ**	12	-	7.1 UJ	8.2	-
	19-Sep-01	**27**	10	11	17.3	6.8	10
04_DGMW66	26-Feb-96	2.78	-	-	9.33	-	-
	12-Nov-96	7.45	-	-	1.36	-	-
	4-Mar-97	7.52	-	-	2.73	-	-
	1-Jul-97	8.75	-	-	6.88	-	-
	15-Oct-97	8.71	-	-	4.87	-	-
	16-Oct-98	5.9J	1.6	2	4.3J	1.7	2.7
	19-Sep-01	8.4 UJ	5.9	8.5	8.6 J	4.6	7.2
	19-Sep-01	10.4 J	6.6	9.2	27.7 J	6.7	8.7
04_DGMW66A	19-Sep-01	72	19	15	38	11	14
05_DBMW41	16-Nov-92	9	-	-	5.9	-	-
	16-Nov-92	9.4	-	-	6.3	-	-
	5-Dec-95	**27**	-	-	18.6	-	-
	7-Feb-96	**26.37**	-	-	9.3	-	-
	13-Nov-96	**29.04**	-	-	5.68	-	-
	13-Mar-97	**21**	-	-	4	-	-
	8-Jul-97	**23.56**	-	-	15.82	-	-
	21-Oct-97	**23.45**	-	-	5.74	-	-
	16-Oct-98	**26.5J**	4	3.6	14.4J	2.6	3.4
	3-Feb-99	**24.2J**	0.4	2.2	12.6J	0.9	2.6
	10-May-99	**23.2J**	0.4	2.3	10.4J	0.8	2.3
	22-Jul-99	**23.8J**	0.4	2.6	11.7J	0.1	2.8
	19-Jun-00	11 UJ	11		9.6 UJ	8.2	

Table B.1C
Results of Radionuclides Analysis
MCAS El Toro

Sample ID	Date	Total Gross Alpha			Total Gross Beta		
		Activity (pCi/L)	Error	MDA (pCi/L)	Activity (pCi/L)	Error	MDA (pCi/L)
		MCL = 15			MCL = 50		
05_DBMW41A	19-Sep-01	**26.7**	8.6	8.4	10.8	5.1	7.9
05_DGMW67	30-Nov-92	**15**	-	-	7.7	-	-
	30-Nov-92	**24.9**	-	-	53	-	-
	3-Jun-93	**16.7**	-	-	19	-	-
	6-Dec-95	**23.2**	-	-	9.6	-	-
	7-Feb-96	**22.11**	-	-	6.07	-	-
	13-Nov-96	**19.58**	-	-	1.35	-	-
	14-Mar-97	**24.6**	-	-	4.14	-	-
	20-Oct-98	**15.1J**	3.1	3.7	10.9J	2.4	3.4
	22-Jan-99	**16.2J**	0.7	2.3	10.5J	-	2.7
	10-May-99	**16.6J**	0.8	2.5	7.2J	0.7	2.4
	21-Jul-99	**15.7J**	0.2	3.7	9.9J	0.9	2.6
	20-Jun-00	14 J	9.2		2.4 UJ	8.3	
05_DGMW67A	19-Sep-01	14	6.1	6.7	8.5	5	7.9
05_DGMW68	17-Dec-92	7	-	-	13.6	-	-
	25-Jun-93	10.8	-	-	12.4	-	-
	9-Jan-96	11.6	-	-	10.9	-	-
	15-Nov-96	**20.4**	-	-	3.75	-	-
	5-Mar-97	**19.21**	-	-	8.28	-	-
	1-Jul-97	**19.69**	-	-	7.62	-	-
	17-Oct-97	13.63	-	-	0.36	-	-
	19-Oct-98	3.7J	2	3.2	5.9J	1.7	2.6
	2-Feb-99	7.9J	0.7	1.8	4.8J	0.6	2.4
	13-May-99	6.9J	0.9	2.4	5.1J	0.5	2.3
	22-Jul-99	5.8J	0.8	2.4	6.3J	0.5	2.1
	20-Jun-00	14 J	8		8.6 UJ	6.9	
05_DGMW68A	20-Sep-01	15.9	6.7	7.8	11.1	4.3	6.4
05_UGMW27	3-Jun-93	9.3	-	-	14.1	-	-
	17-Aug-95	13.3	-	-	5.1	-	-
	8-Dec-95	12.4	-	-	8.2	-	-
	29-Jan-96	**15.89**	-	-	2.55	-	-
	13-Nov-96	14.67	-	-	2.21	-	-
	13-Mar-97	**18.17**	-	-	7.91	-	-
	9-Jul-97	14.41	-	-	6.16	-	-
	9-Jul-97	**17.42**	-	-	7.36	-	-
	21-Oct-97	**18.39**	-	-	2.74	-	-
	21-Oct-97	**18.39**	-	-	3.52	-	-
	20-Oct-98	11.7J	2.7	3.3	10.7J	2.3	3.3
05_UGMW27A	24-Sep-01	12.3	5.3	6.4	9.8	4.4	6.8
	24-Sep-01	11.3	4.8	5.5	10	4.6	7.1
05NEW1	28-Dec-95	3.4	-	-	3.8	-	-
	13-Nov-96	10.05	-	-	3.5	-	-
	13-Mar-97	8.34	-	-	9.02	-	-
	9-Jul-97	4.88	-	-	7.68	-	-
	9-Jul-97	8.75	-	-	14.45	-	-
	21-Oct-97	6.92	-	-	3.82	-	-
	19-Oct-98	11.7J	2.3	2.5	9.7J	1.9	2.6
	2-Feb-99	11.1J	0.3	2.4	11.3J	0.1	2.8
	14-May-99	14.7J	2.3	2.3	9.5J	0.8	2.4
	23-Jul-99	12.2J	0.9	3.5	9.1J	0.1	3
	19-Jun-00	**18 J**	10		7.7 UJ	9.6	
	19-Sep-01	12.3	4.7	4.6	12.4	3.5	4.7
08DGMW74	19-Jun-00	**15 J**	9.9	-	2.6 UJ	7.8	-
	19-Jun-00	-3.3 UJ	9.1	-	4.9 UJ	7.8	-

Table B.1C
Results of Radionuclides Analysis
MCAS El Toro

Sample ID	Date	Total Gross Alpha			Total Gross Beta		
		Activity (pCi/L)	Error	MDA (pCi/L)	Activity (pCi/L)	Error	MDA (pCi/L)
		MCL = 15			MCL = 50		
09DBMW45	13-Jun-00	23 J	14	-	13 UJ	13	-
17NEW1	22-Jun-00	3 UJ	6.1	-	9.2 J	5.1	-
21UGNW37	21-Jun-00	2.3 UJ	12	-	3.2 UJ	9.4	-
	21-Jun-00	13 UJ	11	-	2.3 UJ	12	-
22DBMW47	14-Jun-00	-5.2 UJ	37	-	14 UJ	46	-
24NEW4	14-Jun-00	15 J	11	-	-2 UJ	11	-

Notes:

1) Historical results are presented only for monitoring wells sampled during Rounds 12 and 14.
2) Dash indicates this value was not available.
3) Abbreviations:
J =estimated value, MCAS = Marine Corps Air Station, MDA = minimum detectable activity, NA = not analyzed, pCi/L = picoCuries per liter, U = not detected, UJ = analyte not detected, detection limit estimated
MCL = mean sea level
4) Bold result = Result exceeds regulatory standard
5) Final Technical Memorandum, *Phase II Evaluation of Radionuclides in Groundwater at Former Landfill Sites and EOD Range, Marine Corps Air Station El Toro*, prepared by Earth Tech, Inc., dated December 2001 concluded that radionuclides detected in groundwater are naturally occurring.

Table B.1D
Metals Analyses
MCAS El Toro

TARGET ANALYTE LIST METALS AND REGULATORY STANDARDS — All Results in Micrograms per Liter (ug/L)

Station ID	Base Screen Depth (Ft BGS)	Sample Date - Type	Aluminum 50.0	Antimony 6.0	Arsenic 50.0	Barium 1000.0	Calcium	Chromium 50.0	Copper 1000.0	Iron 300.0	Lead 15.0	Magnesium	Manganese 50.0	Nickel 100.0	Potassium	Selenium 50.0	Silver 50.0	Sodium	Vanadium	Zinc 5000.0
02_DGMW59	89	15-Dec-92 F	672.0	12.1 U	1.8 B	49.9 B	128,000	3.7 U	2.5 B	895.0	0.6 U	34,100	239.0	10.2 B	4,360 B	1.9 BW	2.2 B	95,500	8.3 B	34.4
		23-Jun-93 F	7.8 B	9.7 B	0.7 B	65.6 B	93,200	2.9 U	0.8 B	41.4 B	0.4 U	80,400	63.0	183.0	8,200	15.0 N	1.2 U	126,000	5.9 B	5.1 B
		16-Aug-95 F	12.2 U	2.4 U	2.2 B	110.0 B	189,900	1.3 U	4.5 B	26.6 J	1.7 U	47,400	367.0 J	15.5 B	2,800 B	4.9 B	1.5 U	104,000	6.4 B	10.8 B
		30-Nov-95 F	26.0 U	2.2 U	3.3 B	80.6 B	161,000	0.9 J	4.8 B	54.5 J	1.5 U	38,800	50.9 J	11.7 J	2,400 B	11.2 J	0.8 U	105,000	7.8 B	10.6 J
		6-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	162,000	10.0 U	25.0 U	100.0 U	3.0 U	42,000	15.0	40.0 U	2,250 J	20.0	10.0 U	111,000	50 U	20.0 U
		6-Feb-96 UF	420.0	60.0 U	10.0 U	200.0 U	165,000	21.0	30.0	1200.0	3.0 U	41,000	64.0	40.0 U	2,290 J	20.0	10.0 U	109,000	50.0 U	20.0 U
		6-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	162,000	10.0 U	25.0 U	100.0 U	3.0 U	42,000	43.0	40.0 U	2,290 J	18.0	10.0 U	111,000	50 U	20.0 U
		6-Feb-96 UF	460.0	60.0 U	10.0 U	200.0 U	163,000	21.0	25.0 U	880.0	3.0 U	42,000	56.0	40.0 U	2,310 J	17.0	10.0 U	111,000	50 U	20.0 U
		4-Nov-96 * F	40.7 B	60.0 U	2.8 B	103.0 B	180,000	2.1 B	5.6 B	30.3 B	5.0 U	43,100	84.9	16.5 B	2,180 B	3.5 B	10.0 U	102,000	8.3 B	11.8 B
		26-Mar-97 * F	200.0 U	60.0 U	4.5 B	46.3 B	112,000	1.1 B	5.0 B	7.5 B	5.0 U	26,100	2.1 B	16.8 B	1,520 B	4.6 B	10.0 U	61,700	8.5 B	6.3 B
		25-Sep-01 * F	56.3 U	4.9 U	3.1 B	106.0 B	172,000	17.8	4.4 U	130.0	0.8 U	41,300	67.4	17.4 B	2,110 B	1.7 U	0.3 U	105,000	11.1 B	22.3
02_DGMW60	100	18-Nov-92 F	31.0 U	12.1 U	0.7 U	59.8 B	72,400	3.7 U	4.1 B	57.1 B	0.6 U	64,000	24.1	7.7 U	7,740	8.0 BN	2.1 U	129,000	7.0 B	6.6 B
		23-Jun-93 F	20.2 B	12.1 B	1.6 B	36.7 B	118,000	2.9 U	1.9 B	31.8 B	0.4 U	29,500	42.2	31.3 B	4,390 B	3.3 BSN	1.2 U	77,400	6.9 B	8.0 B
		15-Aug-95 F	12.1 U	2.4 U	2.1 U	77.1 B	98,800	1.3 U	1.5 B	24.1 UJ	1.7 U	96,500	4.6 J	8.0 B	10,700	13.3	1.5 U	126,000	7.7 B	1.2 B
		28-Nov-95 F	12.1 U	2.2 U	3.0 U	69.4 B	98,500	0.7 B	0.7 U	18.5 U	1.5 U	94,900	1.6 B	5.3 B	10,600	15.2	0.8 U	131,000	7.1 B	1.5 U
		6-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	106,000	10.0 U	25.0 U	100.0 U	3.0 U	89,000	15.0 U	40.0 U	8,090	6.0	10.0 U	124,000	50 U	20.0 U
		6-Feb-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	111,000	23.0	25.0 U	500.0	3.0 U	82,000	46.0	43.0	7,350	10.0	10.0 U	120,000	50 U	20.0 U
		6-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	109,000	10.0 U	25.0 U	100.0 U	15.0	91,000	17.0	40.0 U	8,540	9.0	10.0 U	127,000	50 U	20.0 U
		6-Feb-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	117,000	10.0 U	25.0 U	123.0	6.0	84,000	86.0	43.0	7,700	12.0	10.0 U	126,000	50 U	20.0 U
		4-Nov-96 * F	45.3 B	60.0 U	2.0 B	79.7 B	93,700	4.1 B	3.6 B	24.7 B	5.0 U	87,900	3.1 B	40.0 U	8,880	9.8	10.0 U	121,000	4.9 B	7.2 B
		26-Mar-97 * F	16.0 B	60.0 U	10.0 U	73.3 B	93,700	2.4 B	8.2 B	58.7 B	5.0 U	87,600	2.4 B	4.9 B	10,000	11.8	10.0 U	120,000	7.3 B	6.9 B
		1-Jul-97 * F	40.6 B	2.8 B	1.4 U	76.4 B	98,700	0.9 B	3.7 B	34.4 B	0.8 U	93,900	2.6 B	6.1 B	10,500	14.9	0.7 U	132,000	7.6 B	12.3 B
		28-Oct-97 F	15.8 U	1.6 U	2.1 U	71.6 B	98,900	0.3 U	2.8 B	4.2 U	1.0 U	88,500	1.5 B	5.8 B	10,000 E	12.1	0.7 U	126,000	7.4 B	6.5 B
		28-Oct-97 * F	17.6 B	1.6 U	2.1 U	72.3 B	101,000	0.3 U	3.8 B	11.3 B	1.0 U	88,300	1.7 B	5.3 B	10,100 E	13.4	0.7 U	128,000	7.5 B	6.4 B
		21-Jun-00 * F	20.8 U	2.2 B	2.0 B	71.7 B	93,000	1.2 J	1.5 U	2.5 U	0.7 U	89,400	1.3 U	0.9 UJ	10,400 J	15.1	0.3 U	121,000	7.4 B	3.3 B
		25-Sep-01 * F	30.7 U	2.2 U	1.5 U	69.4 B	93,400	2.4 B	1.6 U	57.2 U	0.8 U	83,600	5.7 B	6.1 B	9,900	13.8	0.3 U	114,000	7.6 B	10.1 B
02_DGMW61	100	14-Dec-92 F	31.0 U	12.1 U	0.7 B	40.3 BE	94,800 E	3.7 U	0.9 U	4.1 B	0.6 U	22,600 E	115.0	7.7 U	4,390 B	4.4 B	2.1 U	57,900 E	4.8 B	2.2 U
		22-Jun-93 F	12.3 B	9.0 U	0.6 B	32.4 BE	99,800	2.9 U	0.7 U	71.1 B	0.4 U	22,800	90.0	7.1 U	3,710 B	10.5 N*	1.2 U	57,800	1.7 U	3.2 B
		16-Aug-95 F	12.2 U	2.4 U	2.1 U	42.3 B	124,000	1.3 U	1.1 U	24.2 UJ	1.7 U	28,900	62.9 J	1.6 U	4,730 B	53.1	1.5 U	65,300	1.3 B	1.3 B
		29-Nov-95 F	22.6 U	2.2 U	3.3 U	39.8 B	138,000	0.6 B	0.7 U	21.6 B	1.5 U	30,100	20.2	1.0 B	4,300 B	95.5	0.8 U	67,400	1.1 U	2.9 U
		8-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	130,000	10.0 U	25.0 U	100.0 U	3.0 U	30,000	15.0 U	40.0 U	3,510 J	57.0	10.0 U	60,000	50 U	20.0 U
		8-Feb-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	129,000	10.0 U	25.0 U	100.0 U	3.0 U	30,000	15.0 U	40.0 U	3,570 J	46.0	10.0 U	61,000	50 U	20.0 U
		4-Nov-96 * F	53.2 B	60.0 U	3.2 B	49.5 B	131,000	4.1 B	3.4 B	100.0 U	5.0 U	28,900	3.0 B	40.0 U	3,870 B	34.3	10.0 U	61,600	50 U	8.6 B
		26-Mar-97 * F	20.7 B	60.0 U	1.8 B	39.5 B	120,000	2.2 B	8.3 B	100.0 U	5.0 U	27,100	2.1 B	1.7 B	3,980 B	36.8	10.0 U	59,300	50 U	6.1 B
		2-Jul-97 * F	14.8 B	3.2 B	1.4 U	45.0 B	143,000	3.4 B	3.0 B	26.3 B	0.8 U	31,600	8.0 B	1.8 B	4,510 B	37.1	0.7 U	69,900	1 U	13.6 B
		28-Oct-97 * F	15.8 U	1.6 U	2.1 U	44.2 B	150,000	2.5 B	3.2 B	4.2 U	1.0 U	30,600	0.6 B	2.1 B	4,590 BE	39.0	0.7 U	70,500	1.0 B	6.9 B
		25-Sep-01 * F	38.2 U	5.0 U	1.5 U	40.9 B	125,000	5.5 B	2.0 U	63.4 U	0.8 U	27,700	4.9 B	33.3 B	4,180 B	44.8	0.3 U	67,200	0.86 B	12.1 B

Table B.1D
Metals Analyses
MCAS El Toro

TARGET ANALYTE LIST METALS AND REGULATORY STANDARDS — All Results in Micrograms per Liter (ug/L)

Station ID	Base Screen Depth (Ft BGS)	Sample Date - Type		Aluminum 50.0	Antimony 6.0	Arsenic 50.0	Barium 1000.0	Calcium	Chromium 50.0	Copper 1000.0	Iron 300.0	Lead 15.0	Magnesium	Manganese 50.0	Nickel 100.0	Potassium	Selenium 50.0	Silver 50.0	Sodium	Vanadium	Zinc 5000.0
02NEW2	95	21-Dec-95	F	11.3 U	2.5 U	3.4 B	77.8 B	169,000	1.7 B	2.7 B	30.3 B	1.6 U	45,700	14.2 B	6.5 B	2,270 B	7.8	0.7 U	89,200	14.3 B	3.5 B
		26-Nov-96	* F	27.4 B	60.0 U	3.5 B	67.1 B	123,000	1.7 B	3.8 B	50.5 B	1.5 B	33,600	6.8 B	12.9 B	1,730 B	5.9	10.0 U	76,400	13.8 B	12.9 B
		26-Mar-97	* F	35.8 B	60.0 U	3.2 B	78.6 B	138,000	1.3 B	9.8 B	24.2 B	5.0 U	37,500	3.0 B	8.4 B	1,900 B	8.9	10.0 U	82,900	12.9 B	10.0 B
		3-Jul-97	* F	15.5 B	1.3 U	2.3 B	75.0 B	140,000	1.8 B	2.1 B	6.9 B	0.8 U	37,100	1.0 U	8.1 B	1,800 B	12.2	0.7 U	87,700	14 B	10.2 B
		28-Oct-97	* F	33.4 U	1.5 B	4.1 B	71.7 B	131,000	2.3 B	5.7 B	14.0 U	1.2 B	34,500	2.8 B	8.7 B	1,800 B	13.4	0.7 U	81,600	14.7 B	1.7 B
		20-Jun-00	* F	22.6 U	3.2 B	5.0 B	66.0 B	115,000	1.3 J	1.5 U	2.5 U	0.7 U	31,600	1.7 U	1.8 UJ	1,700 J	18.8	0.3 U	76,300	14.5 B	5.3 B
		25-Sep-01	* F	35.7 U	6.5 U	3.6 B	69.3 B	126,000	1.8 B	1.6 U	51.2 U	0.8 U	32,600	4.8 B	1.4 UJ	1,760 B	21.2	0.3 U	75,400	15.1 B	8.2 U
02NEW8A	104	27-Dec-95	F	11.3 U	2.5 U	2.8 U	17.1 B	139,000	2.1 B	1.4 B	24.8 B	1.6 U	24,000	14.0 B	6.5 B	1,990 B	16.4	0.7 U	57,800	5.1 B	6.5 B
		7-Nov-96	* F	25.8 B	60.0 U	2.1 B	49.3 B	131,000	3.2 B	3.3 B	5.9 B	1.1 B	24,100	5.8 B	22.7 B	1,830 B	19.0	10.0 U	57,500	4.3 B	6.2 B
		25-Mar-97	* F	7.8 B	60.0 U	3.7 B	41.9 B	131,000	2.4 B	6.1 B	8.1 B	1.5 B	23,300	2.4 B	6.3 B	1,600 B	17.2	10.0 U	52,100	3.9 B	8.6 B
		2-Jul-97	* F	38.6 B	5.2 B	2.8 B	40.0 B	127,000	2.0 B	2.7 B	48.3 B	0.8 U	24,000	7.1 B	24.7 B	1,720 B	16.6	0.7 U	55,900	3.9 B	12.7 B
		28-Oct-97	* F	33.4 U	1.5 B	2.8 B	35.7 B	124,000	1.5 B	2.0 B	14.0 U	1.3 B	24,000	3.6 B	86.0 B	2,320 BE	14.5 U	0.7 U	55,900	3.2 B	2.7 B
		25-Sep-01	* F	88.6 B	5.5 U	3.6 B	43.7 B	136,000	2.8 B	3.1 U	76.4 B	0.8 U	29,400	5.1 B	0.2 B	1,820 B	23.8	0.3 U	57,300	4.2 B	9.6 U
02NEW11	65	21-Dec-95	F	11.8 B	2.5 U	2.8 U	91.4 B	163,000	2.3 B	1.6 B	55.5 B	1.6 U	48,200	43.4	98.2	3,500 B	7.2	0.7 U	101,000	11.3 B	4.5 B
		12-Nov-96	* F	45.1 B	60.0 U	4.8 B	82.8 B	107,000	3.9 B	2.9 B	45.7 B	1.2 B	29,800	21.8	153.0	2,380 B	5.0 U	10.0 U	82,000	10.6 B	13.1 B
		25-Mar-97	* F	11.6 B	60.0 U	4.2 B	68.6 B	93,700	0.9 B	5.2 B	15.7 B	5.0 U	25,400	19.2	150.0	2,340 B	5.6	10.0 U	75,200	11.5 B	5.2 B
		8-Jul-97	* F	52.2 B	3.8 B	3.3 B	72.5 B	98,200	3.8 B	4.3 B	59.0 B	0.8 U	27,000	38.2	272.0	2,870 B	7.6	0.7 U	83,500	11.8 B	61.7
		22-Jun-00	* F	198.0 J	2.0 J	4.7 B	292.0 J	99,800	1.2 J	1.5 U	271.0 J	0.7 U	30,300 J	13.4 B	191.0 J	2,570 J	15.6	0.3 U	76,200	12.2 B	7.9 J
		22-Jun-00	* F	28.5 UJ	1.4 U	3.9 B	84.3 J	98,800	0.8 J	1.5 U	20.6 UJ	0.7 U	29,900 J	12.8 J	187.0	2,560 J	15.3	0.3 U	75,600	11.5 B	10.2 J
		25-Sep-01	* F	319.0	3.9 u	3.3 B	80.2 B	95,900	4.7 B	12.8 U	78.8 B	2.6 B	27,200	23.1	221.0	2,270 B	10.2	0.3 U	68,800	11.7 B	19.7 B
02NEW15	70	22-Jun-00	* F	26.0 U	3.7 B	7.9 B	56.6 B	158,000	1.0 J	1.5 U	12.1 U	0.7 U	42,800	75.9	7.8 UJ	1,870 J	2.3 B	0.3 U	114,000	11.1 B	7.5 B
		25-Sep-01	* F	33.9 UJ	1.5 UJ	4.4 B	55.8 B	161,000	15.9 J	1.9 UJ	104.0 J	0.8 U	41,400	50.8	15.9 J	1,730 B	1.7 U	0.3 U	105,000	11.6 B	11.8 J
		25-Sep-01	* F	107.0 J	5.0 UJ	4.6 B	55.0 B	167,000	1.8 J	1.6 UJ	23.9 UJ	0.8 U	42,900	59.1	11.0 J	1,930 B	1.7 U	0.3 U	110,000	12.1 B	9.6 UJ
02NEW16	65	25-Sep-01	* F	81.0 U	4.3 U	3.1 B	107.0 B	127,000	7.0 B	3.5 U	98.4 B	0.8 U	33,700	5.3 B	4.5 B	957 B	14.0	0.3 U	68,600	17.3 B	23.6
03_DGMW64A	250	17-Sep-01	F	27.3 U	4.5 U	10.0 U	28.5 J	62,300	33.9 J	7.4 U	270 J	1.1 J	41,600	46.2	631	5,610 J	13.8	10.0 U	195,000	11.1 J	31.2
03_DGMW65X	270	18-Jan-93	F	47.5 B	12.1 U	2.6 B	46.4 B	51,700	3.7 U	4.3 B	4.1 B	0.6 U	27,300	238.0	166.0	3,850 B	14.7 SN	2.1 U	168,000	13.8 B	3.3 B
		7-Jul-93	F	7.8 B	11.7 B	0.7 B	34.7 B	48,000	4.4 B	1.2 B	31.1 B	0.4 U	24,400	189.0	1140.0	3,550 B	8.1 SN	1.2 U	174,000	8.2 B	1.6 B
		26-Feb-96	F	450.0	60.0 U	11.0	200.0 U	73,000	190.0	25.0 U	5370.0	7.0	38,000	55.0	760.0	4,280 J	5.0 U	10.0 U	188,000	50 U	71.0
		26-Feb-96	UF	203.0	60.0 U	10.0 U	200.0 U	76,000	150.0	29.0	3940.0	5.0	37,000	190.0	620.0	4,130 J	5.0 U	10.0 U	170,000	50 U	44.0
		11-Nov-96	F	34.6 B	60.0 U	4.3 B	60.4 B	65,800	6.9 B	4.3 B	26.0 B	1.3 B	37,400	12.0 B	567.0	3,470 B	17.4	10.0 U	155,000	18.9 B	21.2
		4-Mar-97	F	18.0 B	60.0 U	2.7 B	52.3 B	63,600	6.4 B	3.7 B	32.5 B	5.0 U	36,100	6.1 B	532.0	4,080 B	18.2	10.0 U	164,000	22.5 B	14.0 B
		30-Jun-97	F	34.5 B	3.6 B	1.4 U	47.9 B	64,000	10.1	1.8 U	242.0	0.8 U	34,900	111.0	1160.0	3,950 B	17.1	0.7 U	150,000	10.3 B	19.2 B
		15-Oct-98		200.0 U	2.0 B	2.5 B	52.3 B	67,500	7.3 B	5.5 B	46.0 B	0.8 B	38,900	13.6 B	711.0	3,740 B	16.8	5.0 U	150,000	17.4 B	24.2
		19-Jun-00	* F	7.9 UJ	1.4 U	2.4 B	54.0 B	68,100	2.7 J	1.5 U	22.6 UJ	0.7 U	33,300	19.7	948.0 J	4,140 J	10.7	0.3 U	178,000	18.4 U	7.8 J
		19-Jun-00	* F	34.1 UJ	2.7 J	2.2 B	53.3 B	67,100	4.0 J	2.8 UJ	39.6 UJ	0.7 U	32,900	21.4	944.0 J	4,100 J	9.8	0.3 U	175,000	18.2 B	28.6 J

Table B.1D
Metals Analyses
MCAS El Toro

TARGET ANALYTE LIST METALS AND REGULATORY STANDARDS — All Results in Micrograms per Liter (ug/L)

Station ID	Base Screen Depth (Ft BGS)	Sample Date - Type	Aluminum 50.0	Antimony 6.0	Arsenic 50.0	Barium 1000.0	Calcium	Chromium 50.0	Copper 1000.0	Iron 300.0	Lead 15.0	Magnesium	Manganese 50.0	Nickel 100.0	Potassium	Selenium 50.0	Silver 50.0	Sodium	Vanadium	Zinc 5000.0
03_DGMW65XA	235	17-Sep-01 F	24.4 U	5.1 U	6.0 J	62.6 J	43,000	6.5 J	11.3 U	76.9 J	1.8 J	32,600	13.8 J	134	2,970 J	15.4	10.0 U	194,000	43 J	22.0
03_UGMW26	270	1-Oct-92 F	31.0 U	12.1 U	6.0 B	120.0 B	64,500	5.6 B	2.7 B	5.1 B	0.6 U	30,900	20.0	28.5 B	2,110 B	13.3 S	2.1 U	133,000	29.7 B	5.5 B
		23-Jun-93 F	22.6 B	12.0 B	5.0 B	132.0 B	76,500	4.3 B	0.7 U	35.9 B	0.4 U	34,000	5.7 B	57.4	2,860 B	12.7 SN	1.2 U	121,000	33.5 B	3.7 B
		27-Feb-96 F	200.0 U	60.0 U	12.0	200.0 U	78,000	110.0	25.0 U	1300.0	3.0 U	36,000	17.0	62.0	3,340 J	5.0 U	10.0 U	126,000	50 U	23.0
		27-Feb-96 UF	200.0 U	60.0 U	11.0	200.0 U	81,000	110.0	25.0 U	1300.0	3.0 U	37,000	32.0	66.0	3,420 J	5.0 U	10.0 U	13,000	50 U	28.0
		14-Nov-96 F	200.0 U	60.0 U	5.2 B	129.0 B	79,800	4.7 B	25.0 U	33.7 B	1.1 B	33,000	6.5 B	62.3	3,060 B	5.1	10.0 U	127,000	33 B	7.4 B
		19-Nov-96 F	200.0 U	60.0 U	6.8 B	130.0 B	81,800	4.6 B	1.8 B	27.0 B	1.1 B	32,400	5.7 B	58.1	2,990 B	5.5	10.0 U	126,000	33.3 B	7.8 B
		6-Mar-97 F	11.2 B	60.0 U	4.5 B	106.0 B	68,700	11.9	2.4 B	132.0	5.0 U	30,200	7.8 B	55.6	2,780 B	11.4	10.0 U	110,000	28.1 B	11.5 B
		1-Jul-97 F	73.4 B	4.2 B	3.4 B	122.0 B	83,500	7.2 B	5.1 B	96.7 B	0.8 U	36,600	9.9 B	94.2	3,610 B	10.9	0.7 U	134,000	34.5 B	16.4 B
		17-Oct-98 F	41.5 B	1.4 U	4.8 B	117.0 B	77,300	7.1 B	7.0 B	41.3 B	0.7 U	35,300	9.3 B	81.1	3,180 B	8.2	0.7 U	124,000	32.8 B	25.7 B
		19-Jun-00 * F	59.8 U	2.5 B	4.7 B	110.0 B	77,900	7.0 J	12.0 B	33.2 U	1.6 B	34,000	19.3	251.0 J	3,420 J	7.9	0.3 U	126,000	28.7 B	20.1
		20-Sep-01 * F	30.9 U	5.1 U	6.7 J	110.0 J	79,500	4.6 J	25.0 U	29.6 U	1.1 U	33,500	21.5	215	3,210 J	7.6 U	10.0 U	128,000	30.2 J	12.8 U
03_UGMW26A	235	20-Sep-01 F	39.5 U	6.6 U	6.0 U	121 J	60,300	7.6 J	3.5 U	85.0 J	2.9 U	33,900	24.7	320	3,230 J	9.9	10.0 U	184,000	37.4 J	41.3
04_DBMW40	260	3-Dec-92 F	69.0 B	12.1 U	2.7 BW	57.6 B	78,500	3.7 U	0.9 U	34.1 B	0.6 U	50,900	11.7 B	39.4 B	4,110 B	13.6 BN*	2.1 U	181,000	20.1 B	2.2 U
		24-Jun-93 F	8.0 B	12.8 B	1.9 B	52.5 BE	80,900	2.9 U	1.6 B	51.7 B	0.4 U	46,500	33.5	55.9	3,980 B	20.2 B	1.2 U	184,000	22.9 B	1.5 B
		26-Feb-96 F	1300.0	60.0 U	10.0 U	200.0 U	83,000	81.0	25.0 U	3600.0	8.0	41,000	120.0	86.0	4,940 J	10.0	10.0 U	189,000	51	210.0
		26-Feb-96 UF	900.0	60.0 U	10.0 U	200.0 U	82,000	50.0	25.0 U	2000.0	8.0	40,000	110.0	79.0	4,700 J	9.0	10.0 U	186,000	50 U	210.0
		12-Nov-96 F	34.9 B	60.0 U	3.5 B	89.7 B	92,300	1.9 B	1.9 B	100.0 U	5.0 U	63,500	64.8	5.0 B	4,960 B	5.0	10.0 U	157,000	22.8 B	21.7
		5-Mar-97 F	200.0 U	60.0 U	3.7 B	50.3 B	66,300	2.0 B	6.7 B	23.2 B	5.0 U	36,000	5.8 B	26.4 B	4,200 B	20.1	10.0 U	153,000	28.6 B	8.9 B
		30-Jun-97 F	30.6 B	3.6 B	2.2 B	82.1 B	93,000	0.5 U	1.8 U	36.5 B	0.8 U	65,100	55.2	9.5 B	5,930	12.1	0.7 U	170,000	25.5 B	20.2
		16-Oct-97 F	33.4 U	1.4 U	3.3 B	78.9 B	81,400	2.0 B	5.3 B	14.0 U	0.8 U	56,700	37.7	9.6 B	5,220	10.5	0.7 U	168,000	27.8 B	11.0 B
		19-Jun-00 * F	21.1 B	1.8 U	2.0 B	53.7 B	81,700	2.3 J	1.8 U	30.3 U	0.7 U	46,900	24.3	355.0 J	4,710	11.8	0.3 U	180,000	19.5 B	7.1 B
		20-Sep-01 * F	19.8 U	60.0 U	2.3 U	40.4 J	69,700	3.4 J	2.4 U	29.8 U	1.9 U	30,800	19.5	342	3,670 J	12.4	10.0 U	169,000	21.9 J	13.1 U
04_UGMW63	275	24-Nov-92 F	31.3 B	14.7 B	0.9 B	76.8 BE	134,000	3.7 U	0.9 U	142.0	0.6 U	67,200	337.0	17.1 B	3,140 B	8.2 BN	2.1 U	77,400	20.1 B	8.3 B
		25-Jun-93 F	10.5 B	22.0 B	2.4 B	96.5 BE	142,000	2.9 U	1.0 B	8.2 U	0.4 U	70,600	359.0	7.1 U	3,380 B	12.2 B	1.2 U	78,600	23.5 B	4.0 B
		30-Jan-96 F	200.0 U	60.0 U	10.0 U	200.0 U	129,000	10.0 U	25.0 U	100.0 U	5.0	58,000	42.0	950.0	2,810 J	26.0	10.0 U	88,000	50 U	21.0
		30-Jan-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	124,000	18.0	25.0 U	310.0	3.0 U	55,000	37.0	930.0	2,590 J	21.0	10.0 U	82,000	50 U	22.0
		14-Nov-96 * F	200.0 U	60.0 U	4.1 B	85.7 B	130,000	10.0 U	25.0 U	100.0 U	2.3 B	59,100	543.0	82.9	3,140 B	7.3	1.3 B	76,400	20.4 B	11.0 B
		19-Nov-96 * F	33.1 B	60.0 U	3.7 B	86.1 B	129,000	10.0 U	1.8 B	28.4 B	2.2 B	58,500	531.0	80.1	3,110 B	7.3	10.0 U	75,900	20.1 B	11.3 B
		19-Jun-00 * F	17.0 U	2.4 B	3.0 B	83.3 B	131,000	1.5 J	1.5 U	2.5 U	0.7 U	66,500	723.0	29.1 J	3,620 J	9.6	0.3 U	97,700	16.7 B	3.0 B
		20-Sep-01 * F	25.7 U	6.4 U	3.0 U	91.1 J	143,000	1.3 J	25.0 U	4.3 J	1.2 J	70,600	839	29.5 J	3,780 J	12.2	10.0 U	107,000	16.4 J	7.3 J

Table B.1D
Metals Analyses
MCAS El Toro

TARGET ANALYTE LIST METALS AND REGULATORY STANDARDS --- All Results in Micrograms per Liter (ug/L)

Station ID	Base Screen Depth (Ft BGS)	Sample Date - Type	Aluminum 50.0	Antimony 6.0	Arsenic 50.0	Barium 1000.0	Calcium	Chromium 50.0	Copper 1000.0	Iron 300.0	Lead 15.0	Magnesium	Manganese 50.0	Nickel 100.0	Potassium	Selenium 50.0	Silver 50.0	Sodium	Vanadium	Zinc 5000.0
04_DGMW66	290	20-Nov-92 F	31.0 U	12.1 U	2.8 B	41.1 BE	82,500	3.7 U	0.9 U	36.5 B	0.6 U	30,600	16.8	107.0	2,830 B	14.0 BN	2.1 U	112,000	21.2 B	4.2 B
		24-Jun-93 F	8.0 B	9.0 U	3.1 BW	43.6 BE	87,200	2.9 U	0.7 U	20.6 B	0.4 U	31,200	4.8 B	136.0	2,780 B	17.4 B	1.2 U	108,000	18.6 B	2.2 B
		26-Feb-96 F	620.0	60.0 U	10.0 U	200.0 U	95,000	547.0	25.0 U	3980.0	5.0	33,000	24.0	110.0	3,600 J	5.0 U	10.0 U	104,000	50 U	62.0
		26-Feb-96 UF	410.0	60.0 U	10.0 U	200.0 U	96,000	370.0	28.0	3940.0	6.0	33,000	53.0	130.0	3,580 J	5.0 U	10.0 U	105,000	50 U	100.0
		12-Nov-96 F	61.7 B	60.0 U	6.4 B	66.1 B	94,400	6.7 B	4.8 B	33.7 B	2.4 B	31,900	4.7 B	121.0	3,140 B	13.8	10.0 U	107,000	20.6 B	11.6 B
		4-Mar-97 F	200.0 U	60.0 U	3.6 B	52.7 B	92,800	4.2 B	5.0 B	17.4 B	5.0 U	30,400	3.3 B	107.0	3,360 B	16.4	10.0 U	103,000	18.7 B	6.8 B
		1-Jul-97 F	53.1 B	2.1 B	3.1 B	64.9 B	108,000	5.9 B	5.7 B	86.2 B	0.8 U	36,400	4.9 B	152.0	4,180 B	20.7	0.7 U	132,000	23.2 B	10.9 B
		15-Oct-98 F	200.0 U	60.0 U	3.7 B	51.2 B	89,500	6.0 B	3.4 B	100.0 U	0.9 B	29,900	3.3 B	106.0	3,100 B	14.2	10.0 U	99,300	18.1 B	12.8 B
		20-Sep-01 * F	26.6 U	6.2 U	5.9 U	61.9 J	103,000	5.1 J	2.3 U	24.8 U	3.0 U	34,000	6.7 J	69.8	3,500 J	16.4	10.0 U	106,000	18.5 J	13.1 U
04_DGMW66A	230	20-Sep-01 F	25.7 U	8.2 U	1.8 J	113 J	94,500	1.7 J	5.2 U	29.3 J	3.0 U	69,200	375.5	29.8 J	6,820 J	5.0 U	10.0 U	199,00	19.9 J	17.9 J
05_DBMW41	222	16-Nov-92 F	31.0 U	12.1 U	1.4 B	22.6 B	99,200	3.7 U	0.9 U	14.1 B	0.6 U	29,100	6.5 B	16.0 B	2,830 B	6.4 BN	2.1 U	99,100	10.5 B	2.4 B
		16-Nov-92 F	31.0 U	12.1 U	1.4 B	22.5 B	98,900	3.7 U	0.9 U	17.8 B	0.6 U	28,900	6.5 B	13.3 B	2,850 B	8.2 BN	2.1 U	96,900	12.2 B	2.4 B
		20-Oct-93 F	23.5 B*	18.8 B	1.9 B	47.6 B	110,000	2.8 U	4.5 B	12.8 B	0.5 U	32,000	15.0 U	17.8 B	2,610 B	8.2 B	1.8 U	124,000	11.8 B	2.0 B*
		5-Dec-95 F	16.0 U	2.2 U	2.4 B	54.8 B	123,000	3.5 J	1.9 B	46.3 J	1.5 U	35,400	1.9 J	14.5 J	3,150 B	5.5 J	0.8 U	154,000	11.8 B	1.7 UJ
		7-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	112,000	10.0 U	25.0 U	100.0 U	3.0 U	33,000	15.0 U	40.0 U	2,200 J	6.0	10.0 U	143,000	50 U	20.0 U
		7-Feb-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	110,000	10.0 U	25.0 U	100.0 U	3.0 U	33,000	15.0 U	40.0 U	2,140 J	6.0	10.0 U	143,000	50 U	20.0 U
		13-Nov-96 * F	200.0 U	60.0 U	4.2 B	66.0 B	123,000	2.7 B	3.0 B	100.0 U	1.0 B	33,200	1.8 B	16.5 B	3,170 B	4.8 B	10.0 U	141,000	11.2 B	5.8 B
		13-Mar-97 F	200.0 U	60.0 U	2.8 B	61.4 B	121,000	2.8 B	5.5 B	16.4 B	5.0 U	34,100	2.8 B	10.3 B	3,720 B	5.5	10.0 U	142,000	10.6 B	14.9 B
		8-Jul-97 * F	11.9 U	4.2 B	1.4 U	58.5 B	121,000	1.7 B	2.7 B	25.3 B	0.8 U	34,400	2.5 B	17.0 B	3,200 B	8.6	0.7 U	133,000	10.2 B	10.9 B
		22-Oct-97 * F	200.0 U	1.8 B	2.4 B	63.7 B	126,000	2.0 B	4.5 B	100.0 U	0.8 U	37,000	1.3 B	12.1 B	3,110 B	6.6	10.0 U	137,000	10.4 B	3.3 B
		19-Jun-00 * F	11.3 U	1.7 B	2.5 B	65.8 B	124,000	1.3 J	1.5 U	2.5 U	0.7 U	36,000	1.3 U	2.9 J	2,980 B	7.0	0.3 U	121,000	9.6 B	2.2 B
05_DBMW41A	185	19-Sep-01 F	24.8 U	5.5 U	3.0 U	65.7 J	129,000	2.6 J	2.4 U	9.1 U	2.0 U	35,900	3.5 J	6.2 J	2,860 J	6.3 U	10.0 U	111,000	10.1 J	17.0 U
05_DGMW67	227	30-Nov-92 F	38.9 B	12.1 U	2.6 B	68.5 B	128,000	3.7 U	0.9 U	2.3 U	0.6 U	36,100	1.5 B	7.7 U	1,960 B	6.4	2.1 U	127,000	13.2 B	2.2 U
		30-Nov-92 F	50.7 B	12.1 U	2.3 B	69.6 B	131,000	3.7 U	0.9 U	2.3 U	0.6 U	36,700	2.3 B	7.7 U	2,090 B	6.3	2.1 U	128,000	14.0 B	2.2 U
		3-Jun-93 F	30.4 B	18.6 B	4.4 BWN	62.2 B	128,000	2.9 U	2.1 B	13.6 B	0.4 U	35,400	1.6 B	13.0 B	2,400 B	8.7 B	1.8 B	117,000	14.6 B	2.7 B
		6-Dec-95 F	9.9 U	2.2 U	2.2 B	71.4 B	156,000	0.6 J	0.7 U	18.5 UJ	1.5 U	43,400	0.5 J	4.7 J	2,290 B	3.7 UJ	0.8 U	116,000	10.0 B	1.7 UJ
		9-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	118,000	10.0 U	25.0 U	100.0 U	3.0 U	43,000	15.0 U	40.0 U	J	5.0 U	10.0 U	116,000	50 U	20.0 U
		9-Feb-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	150,000	10.0 U	25.0 U	100.0 U	3.0 U	44,000	15.0 U	40.0 U	1,960 J	5.0 U	10.0 U	116,000	50 U	20.0 U
		13-Nov-96 * F	244.0	3.1 B	4.4 B	86.4 B	160,000	1.2 B	25.0 U	69.5 B	1.6 B	42,400	4.9 B	21.4 B	2,500 B	2.9 B	10.0 U	115,000	9.5 B	6.3 B
		14-Mar-97 F	200.0 U	60.0 U	2.7 B	66.8 B	145,000	2.6 B	3.5 B	19.8 B	5.0 U	39,000	5.1 B	18.7 B	2,700 B	4.4 B	10.0 U	110,000	8.2 B	7.9 B
		20-Jun-00 * F	22.3 U	1.6 B	3.4 B	64.8 B	141,000	1.4 J	1.5 U	7.9 U	0.7 U	40,100	1.4 U	4.2 UJ	2,530 J	6.8	0.3 U	107,000	9.5 B	7.9 B
05_DBMW67A	190	19-Sep-01 F	28.7 U	3.8 U	2.8 U	49.1 J	132,000	11.2	2.6 U	41.7 U	1.8 U	38,400	4.8 J	12.4 J	3,210 J	7.5 U	10.0 U	114,000	11.7 J	15.1 U

Table B.1D
Metals Analyses
MCAS El Toro

TARGET ANALYTE LIST METALS AND REGULATORY STANDARDS — All Results in Micrograms per Liter (ug/L)

Station ID	Base Screen Depth (Ft BGS)	Sample Date - Type	Aluminum 50.0	Antimony 6.0	Arsenic 50.0	Barium 1000.0	Calcium	Chromium 50.0	Copper 1000.0	Iron 300.0	Lead 15.0	Magnesium	Manganese 50.0	Nickel 100.0	Potassium	Selenium 50.0	Silver 50.0	Sodium	Vanadium	Zinc 5000.0
05_DGMW68	210	17-Dec-92 F	31.0 U	20.8 B	1.6 B	29.2 B	116,000	3.7 U	1.2 B	17.7 B	0.6 U	33,700	20.6	29.2 B	3,350 B	8.5 S	2.5 B	122,000	13.6 B	2.2 U
		25-Jun-93 F	12.0 B	18.1 B	1.1 B	31.2 BE	122,000	3.0 B	0.7 U	33.4 B	0.4 U	35,800	5.1 B	138.0	3,400 B	9.4 B	1.2 U	120,000	12.5 B	2.6 B
		9-Jan-96 F	15.2 B	2.5 U	2.8 U	24.7 B	118,000	2.7 B	1.0 U	40.7 U	1.6 U	35,100	9.2 B	86.8	3,220 B	9.8 U	0.7 U	114,000	9.6 B	73.5
		27-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	136,000	40.0	25.0 U	210.0	3.0 U	42,000	15.0 U	110.0	4,010 J	5.0 U	10.0 U	125,000	50 U	19.0 J
		27-Feb-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	137,000	263.0	25.0 U	2630.0	3.0 U	42,000	37.0	130.0	4,050 J	5.0 U	10.0 U	126,000	50 U	45.0
		15-Nov-96 F	12.6 B	60.0 U	10.0 U	30.4 B	140,000	2.5 B	3.0 B	29.0 B	1.8 B	36,500	3.0 B	68.6	3,650 B	5.2	10.0 U	119,000	11.6 B	5.1 B
		5-Mar-97 F	6.7 B	60.0 U	2.9 B	28.9 B	135,000	1.6 B	3.6 B	17.3 B	5.0 U	38,200	1.8 B	54.5	3,840 B	6.4	10.0 U	119,000	11.3 B	12.7 B
		1-Jul-97 F	78.5 B	3.9 B	1.4 U	33.9 B	157,000	2.1 B	3.4 B	62.5 B	0.8 U	45,000	4.0 B	65.7	4,620 B	8.6	0.7 U	141,000	13.8 B	15.5 B
		17-Oct-98 F	33.4 U	1.4 U	1.8 B	30.0 B	133,000	2.6 B	4.5 B	14.0 U	0.8 U	39,900	2.2 B	63.6	3,660 B	5.3	0.7 U	120,000	11.7 B	12.2 B
		20-Jun-00 * F	33.5 U	1.4 U	1.6 B	29.0 B	107,000	5.1 J	1.5 U	19.3 U	0.7 U	33,600	8.8 B	253.0	3,460 B	9.4	0.3 U	84,400	11.1 B	6.0 B
05_DGMW68A	186	20-Sep-01 F	28.3 U	6.2 U	3.5 U	25.3 B	130,000	1.9 B	2.3 U	9.0 U	2.2 U	36,300	3.7 B	6.5 U	3,340 J	5.7 U	0.3 U	117,000	11.7 B	37.7
05NEW1	203	28-Dec-95 F	11.3 U	2.5 U	2.8 U	91.2 B	108,000	7.0 B	1.8 B	145.0	1.6 U	31,400	66.1	201.0	3,740 B	9.8	0.7 U	102,000	9.8 B	5.0 U
		13-Nov-96 * F	28.5 B	60.0 U	2.4 B	136.0 B	126,000	4.8 B	2.6 B	39.7 B	0.7 B	33,500	73.6	444.0	3,600 B	6.4	10.0 U	103,000	9.4 B	6.7 B
		13-Mar-97 * F	200.0 U	60.0 U	10.0 U	109.0 B	106,000	9.3 B	13.1 B	60.6 B	5.0 U	29,500	67.5	414.0	3,600 B	8.8	10.0 U	95,400	6.4 B	7.4 B
		9-Jul-97 *	14.2 B	1.3 U	1.4 U	121.0 B	119,000	7.0 B	1.8 U	25.7 B	0.8 U	34,200	83.9	562.0	3,310 B	11.0	0.7 U	102,000	7.1 B	16.3 B
		9-Jul-97 *	18.8 B	2.4 B	1.4 U	125.0 B	123,000	7.1 B	2.0 B	27.4 B	0.8 U	35,000	87.6	586.0	3,360 B	12.4	0.7 U	107,000	7.4 B	14.7 B
		22-Oct-97 * F	33.4 U	1.4 U	1.2 U	124.0 B	118,000	8.8 B	4.5 B	14.0 U	1.4 B	34,900	107.0	693.0	3,520 B	7.8	0.7 U	103,000	5.8 B	6.2 B
		19-Jun-00 * F	109.0 B	2.1 B	1.0 B	134.0 B	128,000	8.2 J	4.4 U	123.0 U	0.7 U	37,400	59.2	501.0	3,950 B	8.6	0.3 U	113,000	8.0 B	9.1 B
		19-Sep-01 * F	37.5 U	6.0 U	2.4 U	130 J	130,000	9.6 J	25.0 U	47.3 U	1.3 U	36,600	40.3	383	3,860 J	7.5 U	10.0 U	111,000	8.9 J	9.6 U
05-UGMW27A	190	24-Sep-01 F	51.6 J	4.8 J	2.1 J	87.6 J	116,000	2.8 J	4.4 J	50.1 J	3.0 U	31,900	7.0 J	3.9 J	2,500 J	7.7	10.0 U	118,000	11.7 J	30.2
08_DGMW74	130	16-Nov-92 F	31.0 U	12.1 U	1.9 B	64.6 B	95,700	3.7 U	1.4 B	38.2 B	0.6 U	26,000	24.8	138.0	2,060 B	3.8 BN	2.1 U	138,000	22.9 B	23.0
		20-Jul-93 F	15.4 B	15.1 B	2.7 B	71.0 B	99,800	2.9 U	1.1 B	46.8 B	0.4 U	26,300	6.2 B	130.0	2,260 B	4.6 B	1.2 U	145,000	22.6 B	1.8 B
		14-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	102,000	10.0 U	25.0 U	100.0 U	3.0 U	28,000	15.0 U	76.0	2,460 J	5.0 U	10.0 U	193,000	50 U	20.0 U
		14-Feb-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	96,000	38.0	25.0 U	470.0	3.0 U	27,000	15.0 U	76.0	2,340 J	5.0 U	10.0 U	185,000	50 U	20.0 U
		13-Nov-96 F	27.2 B	60.0 U	2.1 B	93.1 B	82,300	5.9 B	6.3 B	32.5 B	1.9 B	22,100	21.6	78.6	2,390 B	2.9 B	10.0 U	156,000	25.5 B	35.8
		18-Mar-97 F	200.0 U	60.0 U	3.2 B	91.8 B	94,700	4.7 B	6.8 B	36.7 B	1.5 B	24,000	5.8 B	77.1	2,870 B	6.4	10.0 U	155,000	23.6 B	5.0 B
		18-Mar-97 UF	200.0 U	60.0 U	2.7 B	87.2 B	93,300	4.5 B	5.3 B	21.8 B	5.0 U	23,100	5.2 B	73.6	2,730 B	5.0 B	10.0 U	146,000	22.4 B	4.5 B
		16-Jun-00 * F	15.4 U	1.4 U	3.2 B	93.2 B	91,700	7.0 J	2.7 U	56.8 UJ	0.7 U	25,100	9.3 B	181.0 J	2,690 J	5.7 J	0.3 U	169,000	23 B	4.0 B
		16-Jun-00 * F	15.6 U	2.3 J	3.7 B	91.0 B	90,200	6.3 J	2.5 U	33.3 UJ	0.7 U	24,600	9.2 B	176.0 J	2,660 J	4.5 J	0.3 U	166,000	22.5 B	4.9 B
09_DBMW45	157	10-Dec-92 F	33.1 B	12.1 U	0.7 U	25.5 B	173,000	3.7 U	0.9 U	5.9 B	0.6 U	45,000	4.3 B	22.2 B	2,320 B	20.2 B	2.1 U	72,800	15.7 B	3.5 B
		10-Dec-92 F	31.0 U	12.2 U	0.7 U	24.9 B	169,000	3.7 U	0.9 U	2.3 U	0.6 U	43,700	4.9 B	18.4 B	2,300 B	22.0 B	2.1 U	70,100	17.0 B	2.2 U
		13-Jul-93 F	14.3 B	11.5 B	1.8 B	24.6 B	173,000	2.9 U	2.9 B	11.3 B	0.4 U	46,200	2.4 B	17.0 B	2,300 B	19.6 BN	1.2 U	75,700	16.8 B	2.9 B
		20-Nov-95 F	37.6 U	2.2 U	2.1 U	24.8 B	179,000	6.2 B	1.4 B	179.0 J	3.3	47,400	6.6 B	26.8 B	2,580 B	22.4	0.8 U	78,200 J	14.9 B	7.4 B
		15-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	196,000	10.0 U	25.0 U	100.0 U	3.0 U	56,000	15.0 U	40.0 U	3,180 J	14.0	10.0 U	82,000	50 U	20.0 U
		15-Feb-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	206,000	26.0	25.0 U	230.0	3.0 U	58,000	15.0 U	44.0	3,400 J	15.0	10.0 U	88,000	50 U	20.0 U
		24-Mar-97 UF	13.5 B	60.0 U	10.0 U	30.4 B	169,000	6.1 B	2.9 B	38.3 B	5.0 U	42,600	4.6 B	44.7	2,640 B	21.2	10.0 U	72,100	13.4 B	6.1 B
		13-Jun-00 F	35.3 B	1.6 B	1.0 U	28.3 B	167,000	6.0 B	2.2 U	154.0	0.7 U	45,400	40.9	419.0	2,870 B	25.0	0.5 B	95,500	8.2 B	10.2 B

Table B.1D
Metals Analyses
MCAS El Toro

TARGET ANALYTE LIST METALS AND REGULATORY STANDARDS — All Results in Micrograms per Liter (ug/L)

Station ID	Base Screen Depth (Ft BGS)	Sample Date - Type	Aluminum 50.0	Antimony 6.0	Arsenic 50.0	Barium 1000.0	Calcium	Chromium 50.0	Copper 1000.0	Iron 300.0	Lead 15.0	Magnesium	Manganese 50.0	Nickel 100.0	Potassium	Selenium 50.0	Silver 50.0	Sodium	Vanadium	Zinc 5000.0
17_DGMW82	255	8-Feb-93 F	40.5 B	12.1 U	5.6 B	30.8 BE		3.7 U	3.8 B	2.3 U	0.6 U	32,400	51.3	7.7 U	5,830		2.1 U	124,000	31.4	31.4
		3-Jun-93 F	21.8 B	9.0 U	6.1 BWN	26.4 B	91,200	2.9 U	0.7 U	9.0 B	0.4 U	32,600	115.0	7.1 U	5,710	7.0 U	1.2 U	139,000	3.7 B	3.7 B
		3-Jun-93 F	13.6 B	9.0 U	5.7 BN	25.8 B	92,400	2.9 U	0.7 U	8.2 U	0.4 U	33,200	126.0	10.1 B	5,830	7.0 U	1.2 U	135,000	3.5 B	3.5 B
		6-Dec-95 F	14.1 U	2.2 U	5.0 B	23.4 B	74,400	0.9 J	0.7 U	89.8 J	1.5 U	25,100	16.4 J	14.5 J	4,780 B	3.7 U	0.8 U	146,000	7.3 UJ	7.3 UJ
		9-Feb-96 F	200.0 U	60.0 U	10.0 U	200.0 U	72,000	10.0 U	25.0 U	100.0 U	3.0 U	26,000	18.0	40.0 U	4,310 J	5.0 U	10.0 U	151,000	40.0	40.0
		9-Feb-96 UF	200.0 U	60.0 U	10.0 U	200.0 U	77,000	38.0	29.0	4370.0	29.0	28,000	15.0 U	51.0	4,450 J	5.0 U	10.0 U	149,000	120.0	120.0
		20-Nov-96 F	10.2 B	60.0 U	3.4 B	26.0 B	74,300	10.0 U	25.0 U	100.0 U	5.0 U	25,100	2.5 B	33.4 B	5,000	5.0 U	10.0 U	138,000	22.5	22.5
		1-Apr-97 F	200.0 U	60.0 U	9.8 B	35.1 B	70,900	10.0 U	7.8 B	38.2 B	5.0 U	23,100	3.6 B	28.4 B	4,920 B	4.8 B	10.0 U	136,000	32.8	32.8
		20-Sep-01 * F	39.5 U	5.4 U	2.1 U	36.3 J	77,100	8.8 J	2.0 U	158	1.5 U	25,700	21.6	845	4,450 J	8.0 U	10.0 U	135,000	6.3 J	37.8
17NEW1	226	12-Jan-96 F	11.7 B	2.5 U	6.7 B	39.0 B	81,400	2.8 B	1.0 U	41.9 B	1.6 U	23,500	87.7	197.0	2,870 B	15.1	0.7 U	46,200	17.5 B	4.6 B
		20-Nov-96 * F	10.5 B	2.6 B	3.7 B	107.0 B	74,300	2.4 B	4.4 B	100.0 U	1.2 B	20,800	39.1	1220.0	1,960 B	5.0 U	10.0 U	43,000	12.3 B	11.3 B
		24-Mar-97 * F	10.7 B	60.0 U	2.3 B	117.0 B	71,300	4.1 B	2.4 B	30.9 B	5.0 U	19,200	36.6	1140.0	2,160 B	9.4	10.0 U	38,900	11.4 B	13.2 B
		22-Jun-00 * F	30.9 U	2.7 B	2.7 B	83.7 B	63,000	3.8 J	1.5 U	59.2 U	0.7 U	19,600	13.9 B	917.0	3,920 B	5.1	0.3 U	54,800	6.6 B	14.1 B
		20-Sep-01 * F	32.2 U	7.7 U	3.4 J	192 J	119,000	6.9 J	25.0 U	53.0 U	1.4 U	31,900	27.0	761	3,140 J	6.6 U	10.0 U	73,600	13.4 J	15.7 U

Notes:

1) Historical Results are presented only for monitoring wells sampled during Rounds 12 and 14.

2) This table lists the results in micrograms per liter (ug/L) for Target Analyte List (TAL) metals. Trace metals beryllium, cobalt, mercury, and thallium were not detected in 2001 samples; refer to the laboratory analytical reports for results.

3) Sample type: F = filtered sample, UF = unfiltered sample, NA = sample type not available
Askerisk (*) next to sample date denotes sample collected using low-flow purging procedure.

4) Abbreviations: MCAS = Marine Corps Air Station; Data Qualification Flags: J = The associated value is an estimated quantity.
U = The material was analyzed for, but was not detected above the level of the associated value.
B = Reported value is less than the contract required detection limit, but greater than the instrument detection limit (IDL).
Data qualifiers for pre-1996 analytical results are presented herein as reported by previous contractors without accompanying explanation.

5) Regulatory standards in ug/L are listed at the top of each individual metal column.
Metals with Federal Maximum Contaminant Level (MCL): antimony, arsenic, beryllium, cadmium, mercury, nickel, selenium, and thallium.
Metals with Federal Secondary MCL: aluminum, copper, iron, manganese, and zinc.
Metals with State MCL: barium, chromium, and silver.
USEPA Action Level for lead.

5) **BOLD Result** = Result exceeds regulatory standard
Bold Station ID = Well Sampled during Round 14

Table B.1E
General Chemistry Analyses
MCAS El Toro

			GENERAL CHEMISTRY PARAMETERS AND REGULATORY STANDARDS All Results in Milligrams per Liter (mg/L)						
Station ID	Base Screen Depth (Ft BGS)	Sample Date	TDS 500	Chloride 250.0	Sulfate 250.0	Nitrate/ Nitrite-N 10.0	Alkalinity (as $CaCO_3$)	Bicarbonate (as $CaCO_3$)	Carbonate (as $CaCO_3$)
02NEW16	65	24-Sep-01	820	59.0	179.0	10.5	278	278	2 U
03_DGMW64A	250	24-Sep-01	926	122	186.0	5.8	350	350	2 U
03_DGMW65X	270	18-Jan-93	750	145.0	91.6	8.0	288	288	
		7-Jul-93	731	148.0	91.0	4.7	297	297	
		26-Feb-96	794	138.0	85.0	9.5	333	407	2 U
		11-Nov-96	792	146.0	85.0	13.0	323	323	2 U
		4-Mar-97	758	114.0	68.5	9.2	346	346	2 U
		30-Jun-97	746	148.0	94.7	9.1	307	307	2 U
		15-Oct-97	762	139.0	94.6	9.3	329	329	2 U
		19-Jun-00	845	190.0	94.0	5.0	331	331	2 U
		19-Jun-00	836	180.0	89.0	5.8	333	333	2 U
03_DGMW65XA	235	19-Sep-01	780	81.1	99.2	7.2	421	421	2 U
05_DBMW67A	190	19-Sep-01	NA	93.5	237	NA	NA	NA	NA
05NEW1	203	28-Dec-95	789	99.1	200.0	11.1	248	248	4 U
		13-Nov-96	878	99.0	219.0	12.0	252	252	2 U
		13-Mar-97	850	88.7	196.0	11.1	251	251	2 U
		9-Jul-97	911	112.0	206.0	9.9	256	256	2 U
		9-Jul-97	918	108.0	209.0	9.8	256	256	2 U
		21-Oct-97	928	103.0	212.0	8.2	256	256	2 U
		19-Jun-00	906	115.0	250.0	6.9	260	260	2 U
		19-Sep-01	883	93.3	212	13.0	276	276	2 U
17NEW1	226	3-Jan-96	526	114.0	46.1	1.1	244	244	
		20-Nov-96	450	90.4	47.4	4.8	192	192	2 U
		24-Mar-97	492	80.2	35.7	4.8	200	200	2 U
		30-Jun-97	472	86.2	36.0	4.3	207	207	2 U
		23-Oct-97	506	98.9	40.2	4.6	200	200	2 U
		22-Jun-00	473	77.0	22.0	5.0	206	206	2 U
		20-Sep-01	1,500	110	117	16.8	223	223	2 U
18_BGMW05D	133	3-Nov-92	675	125.0	137.0	9.4	142	142	
		12-Jul-93	1,080	126.0	325.0	9.9	253	253	
		19-Feb-96	982	281.0	140.0	7.2	202	246	2 U
		4-Dec-96	928	256.0	279.0	7.5	229	229	2 U
		19-Mar-97	925	215.0	122.0	6.8	228	228	2 U
		8-Jul-97	1,020	235.0	120.0	6.5	227	227	2 U
		27-Oct-97	940	204.0	130.0	5.3	224	224	2 U
		19-Jun-00	748	170.0	110.0	8.1	220	220	3 U
18_BGMW16	263	23-Oct-92	988	97.4	356.0	NA	204	211	NA
		23-Oct-92	1,010	99.9	368.0	NA	211	249	NA
		19-Jul-93	944	73.5	289.0	12.3	227	227	NA
		19-Jan-96	1,030	96.0	327.0	25.0	223	223	2 U
		14-Nov-96	1,240	125.0	460.0	24.0	205	205	2 U
		26-Mar-97	1,220	112.0	395.0	24.6	200	200	2 U
		20-Oct-98	NA	140.0 J	570.0 J	25.0 J	200	200	2 U
		24-Sep-01	1,180	106	409	19.3	225	225	2 U

Table B.1E
General Chemistry Analyses
MCAS El Toro

			GENERAL CHEMISTRY PARAMETERS AND REGULATORY STANDARDS All Results in Milligrams per Liter (mg/L)						
Station ID	Base Screen Depth (Ft BGS)	Sample Date	TDS 500	Chloride 250.0	Sulfate 250.0	Nitrate/ Nitrite-N 10.0	Alkalinity (as $CaCO_3$)	Bicarbonate (as $CaCO_3$)	Carbonate (as $CaCO_3$)
18_BGMW18A	148	17-Sep-01	1,170	241	212	18.6	290	290	2 U
18_DW135	135	20-Jan-89	1,750	349.0	770.0	119.5		194	
		22-Dec-92	2,100	400.0	727.0	26.6	187	187	
		22-Dec-92	2,120	409.0	739.0	26.7	188	188	
		19-Feb-96	2,350	416.0	1,000.0	27.0	165	201	2 U
		5-Nov-96	2,330	404.0	1,040.0	28.0	170	170	2 U
		7-Mar-97	2,200	327.0	789.0	25.3	172	172	2 U
		7-Jul-97	1,750	385.0	862.0	23.8	174	174	2 U
		24-Oct-97	2,180	386.0	868.0	20.9	173	173	2 U
		13-Jun-00	1,690	310.0	700.0	12.7	167	2 U	2 U
		13-Jun-00	1,810	310.0	720.0	12.6	185	2 U	2 U
21_UGMW37	130	13-Nov-92	964	180.0	191.0	19.3	212	212	
		7-Jul-93	907	173.0	188.0	17.5	465	465	
		12-Feb-96	1,010	194.0	192.0	18.0	225	275	2 U
		11-Nov-96	967	212.0	175.0	19.0	222	222	2 U
		25-Mar-97	920	179.0	150.0	19.0	223	223	2 U
		9-Jul-97	909	204.0	162.0	15.4	229	229	2 U
		9-Jul-97	954	202.0	172.0	15.1	234	234	2 U
		27-Oct-97	1,030	210.0	171.0	13.3	213	213	2 U
		21-Jun-00	967	201.0	160.0	9.7	251	251	2 U
		21-Jun-00	969	190.0	150.0	9.9	255	255	2 U
24NEW4	148	26-Oct-95				13.2	192	192	
		3-Dec-96	939	252.0	179.0	13.5	170	170	2 U
		21-Mar-97	857	210.0	97.2	12.1	197	197	2 U
		8-Jul-97	954	248.0	100.0	11.7	194	194	2 U
		8-Jul-97	869	254.0	102.0	12.0	196	196	2 U
		23-Oct-97	961	240.0	103.0	10.2	191	191	2 U
		23-Oct-97	1,070	242.0	103.0	10.0	189	189	2 U
		14-Jun-00	949	269.0	110.0	6.8	186	186	2 U

Notes:

1) Historical results are presented only for monitoring wells sampled during Rounds 12 and 14.

2) Regulatory Standards for Parameters listed:
Nitrate/Nitrite-N - 10 mg/L Federal maximum contaminant level (MCL)
TDS (Total Dissolved Solids) - 500 mg/L Federal Secondary MCL
Chloride - 250 mg/L Federal Secondary MCL
Sulfate - 250 mg/L Federal Secondary MCL

3) **Bold results** = Result exceeds regulatory standard
Bold Station ID = Well Sampled during Round 14

4) Abbreviations: MCAS = Marine Corps Air Station, U = Concentration is below instrument detection limit (not detected)

Table B.1F
Perchlorate Analysis
MCAS El Toro

Well ID	Date	Perchlorate (mg/L)
01_MW201-114	25-Sep-01	**310**
02NEW8A	27-Apr-99	11
	20-Jul-99	9
	20-Jun-00	8.2
02NEW11	26-Apr-99	4U
	15-Jul-99	4UJ
	22-Jun-00	4U
	22-Jun-00	4U
03_DGMW64A	17-Sep-01	8U
03_DGMW65XA	17-Sep-01	8U
03_UGMW26	20-Sep-01	8U
03_UGMW26A	20-Sep-01	8U
04_DBMW40	5-May-99	1J
	26-Jul-99	4
	19-Jun-00	4U
	20-Sep-01	1.9J
04_DGMW66	20-Sep-01	3.8J
04_DGMW66A	20-Sep-01	8U
04_UGMW63	5-May-99	6
	26-Jul-99	5
	19-Jun-00	4U
	20-Sep-01	8U
05NEW1	19-Sep-01	8U
05_DBMW41A	19-Sep-01	8U
05_DGMW67A	19-Sep-01	8U
05_DGMW68A	19-Sep-01	8U
05_UGMW27A	24-Sep-01	8U

Notes:
1) Historical results are presented only for monitoring wells sampled during Round 14.

2) Abbreviations:
MCAS = Marine Corps Air Station
UJ = nondetect, with estimated detection limit
U = undetected
J = estimated value
mg/L = micrograms per liter

3) Bold Well ID indicates well sampled during Round 14.
Bold result indicates result exceeds the California Department of Health Services provisional action level of 18 mg/L for Perchlorate

Figure B.2A

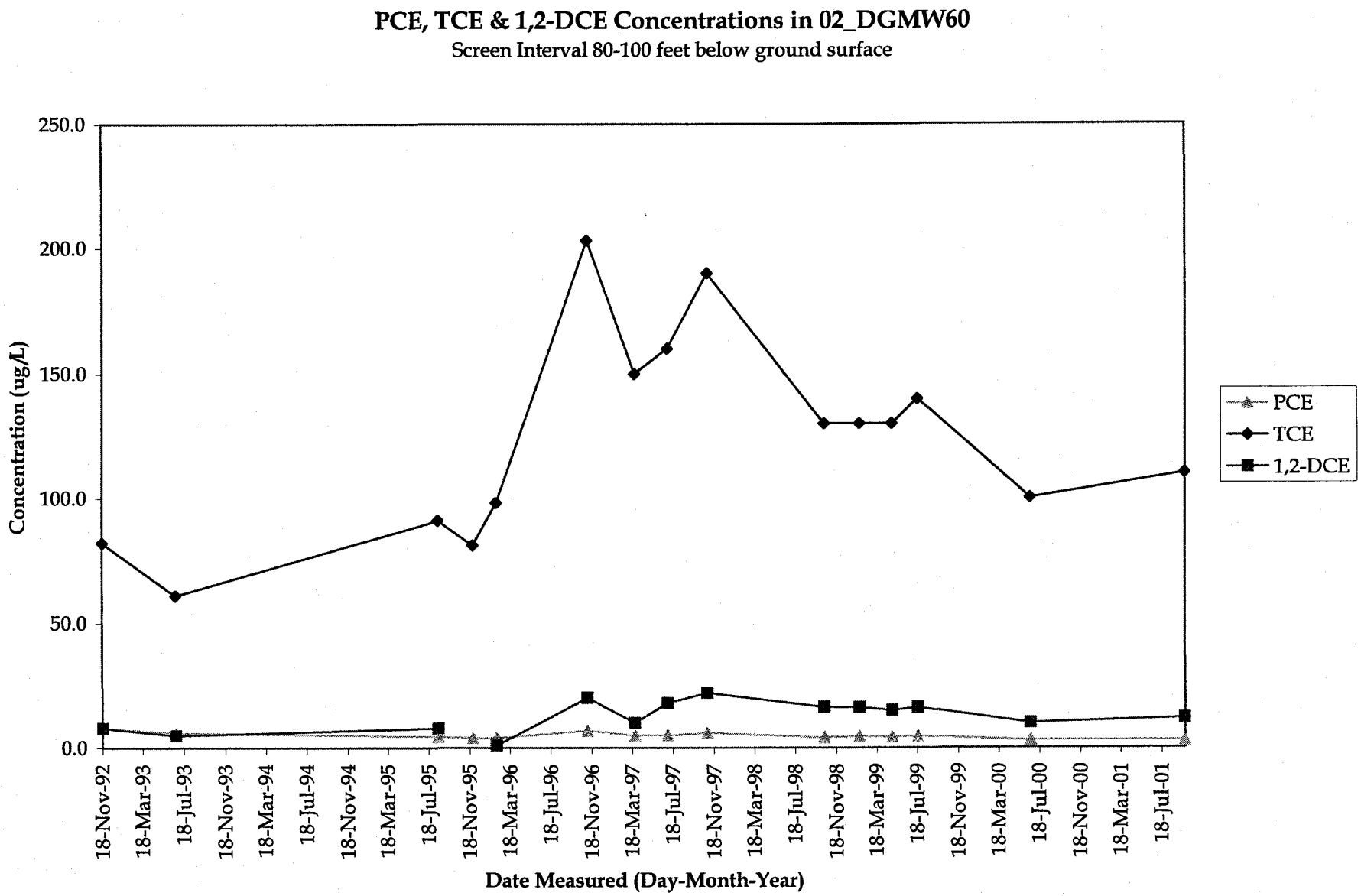

PCE, TCE & 1,2-DCE Concentrations in 02_DGMW60
Screen Interval 80-100 feet below ground surface
Concentration (ug/L)
250.0
200.0
150.0
100.0
50.0
0.0
18-Nov-92
18-Mar-93
18-Jul-93
18-Nov-93
18-Mar-94
18-Jul-94
18-Nov-94
18-Mar-95
18-Jul-95
18-Nov-95
18-Mar-96
18-Jul-96
18-Nov-96
18-Mar-97
18-Jul-97
18-Nov-97
18-Mar-98
18-Jul-98
18-Nov-98
18-Mar-99
18-Jul-99
18-Nov-99
18-Mar-00
18-Jul-00
18-Nov-00
18-Mar-01
18-Jul-01
Date Measured (Day-Month-Year)
PCE
TCE
1,2-DCE

Figure B.2B

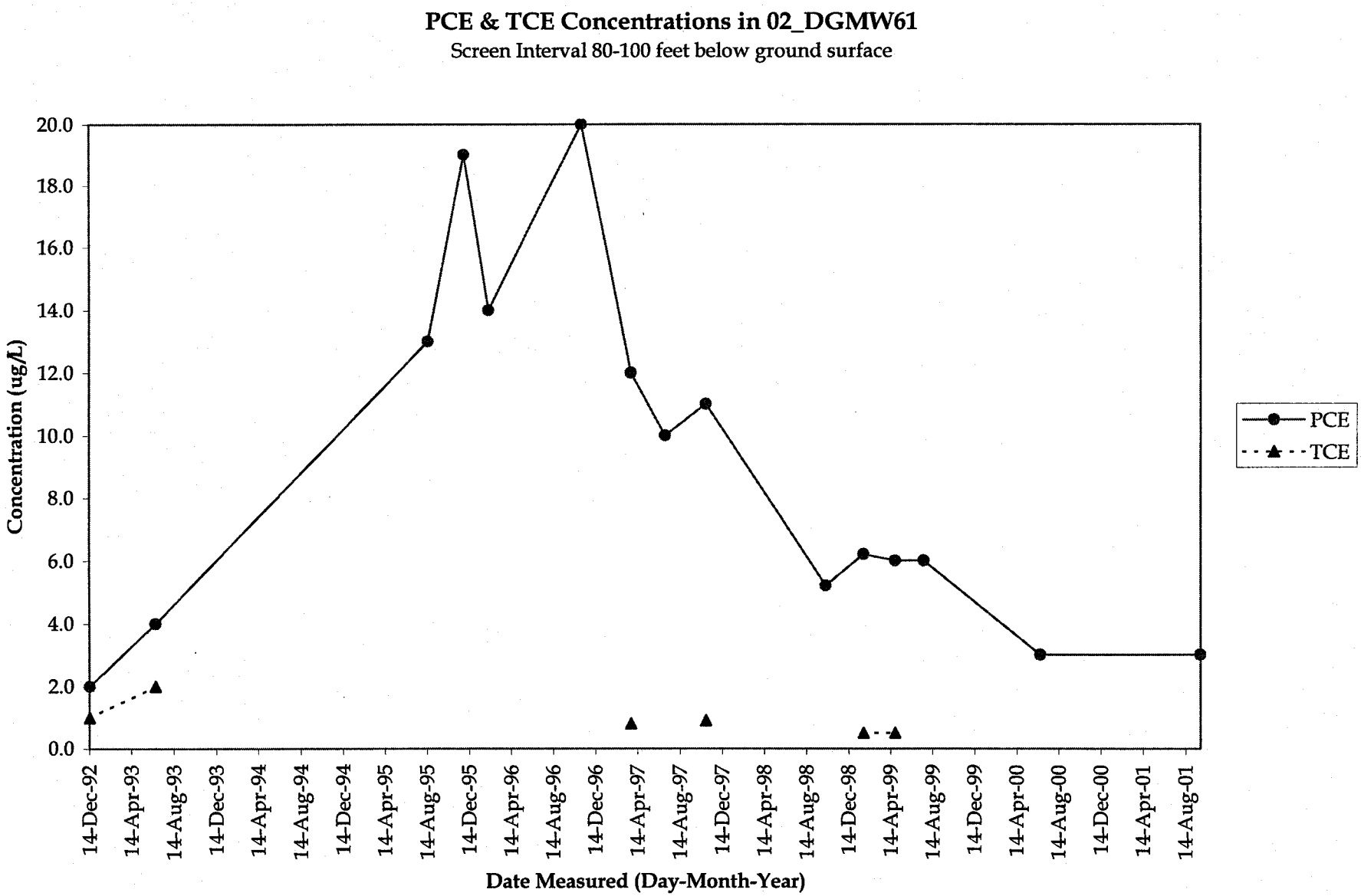

PCE & TCE Concentrations in 02_DGMW61
Screen Interval 80-100 feet below ground surface
Concentration (ug/L)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
14-Dec-92
14-Apr-93
14-Aug-93
14-Dec-93
14-Apr-94
14-Aug-94
14-Dec-94
14-Apr-95
14-Aug-95
14-Dec-95
14-Apr-96
14-Aug-96
14-Dec-96
14-Apr-97
14-Aug-97
14-Dec-97
14-Apr-98
14-Aug-98
14-Dec-98
14-Apr-99
14-Aug-99
14-Dec-99
14-Apr-00
14-Aug-00
14-Dec-00
14-Apr-01
14-Aug-01
Date Measured (Day-Month-Year)
PCE
TCE

Figure B.2C

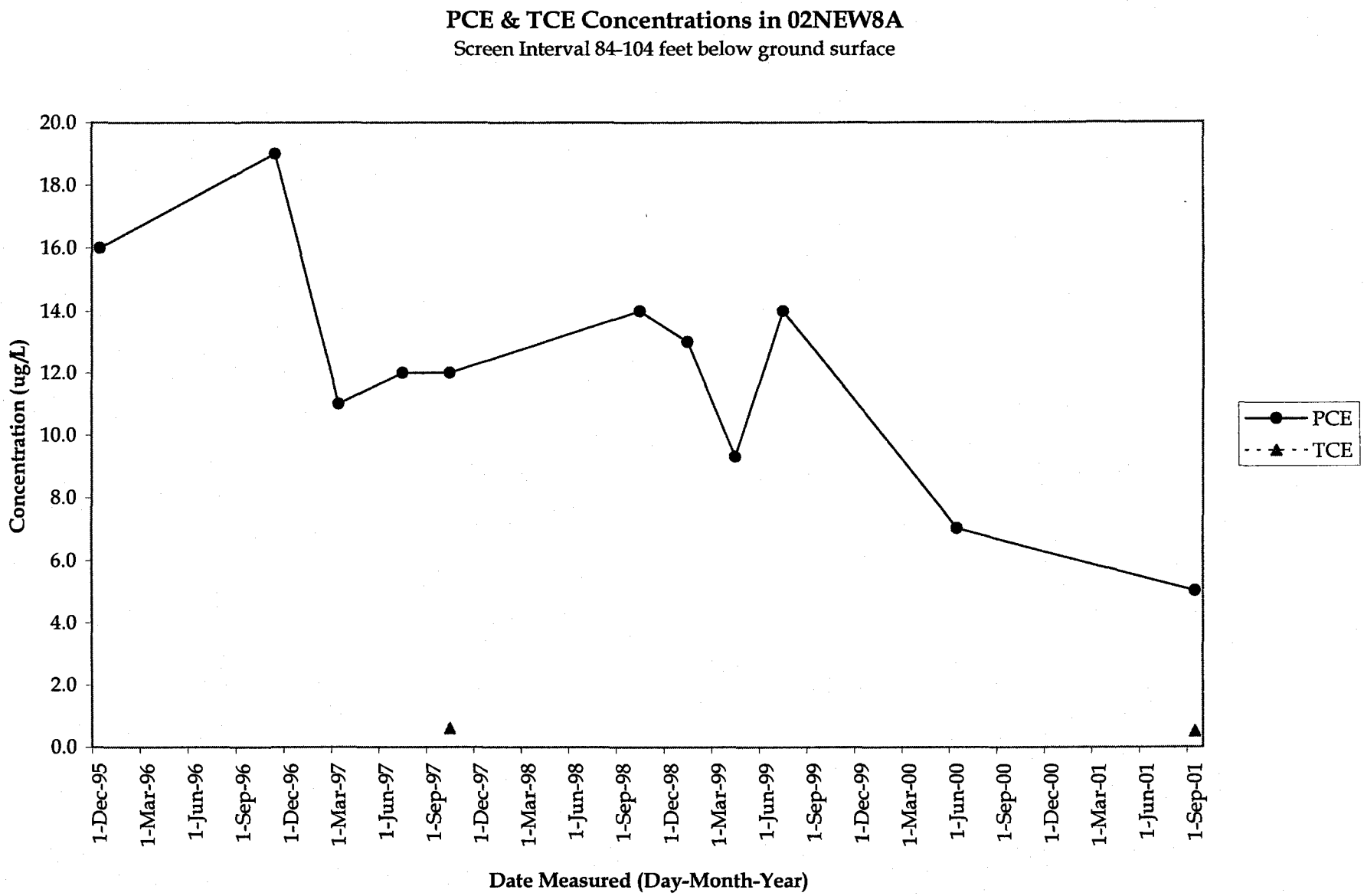

PCE & TCE Concentrations in 02NEW8A
Screen Interval 84-104 feet below ground surface
Concentration (ug/L)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1-Dec-95
1-Mar-96
1-Jun-96
1-Sep-96
1-Dec-96
1-Mar-97
1-Jun-97
1-Sep-97
1-Dec-97
1-Mar-98
1-Jun-98
1-Sep-98
1-Dec-98
1-Mar-99
1-Jun-99
1-Sep-99
1-Dec-99
1-Mar-00
1-Jun-00
1-Sep-00
1-Dec-00
1-Mar-01
1-Jun-01
1-Sep-01
Date Measured (Day-Month-Year)
PCE
TCE

Figure B.2D

B.2D

TCE & 1,2-DCE Concentrations in 08_DGMW74

Screen Interval 90-130 feet below ground surface

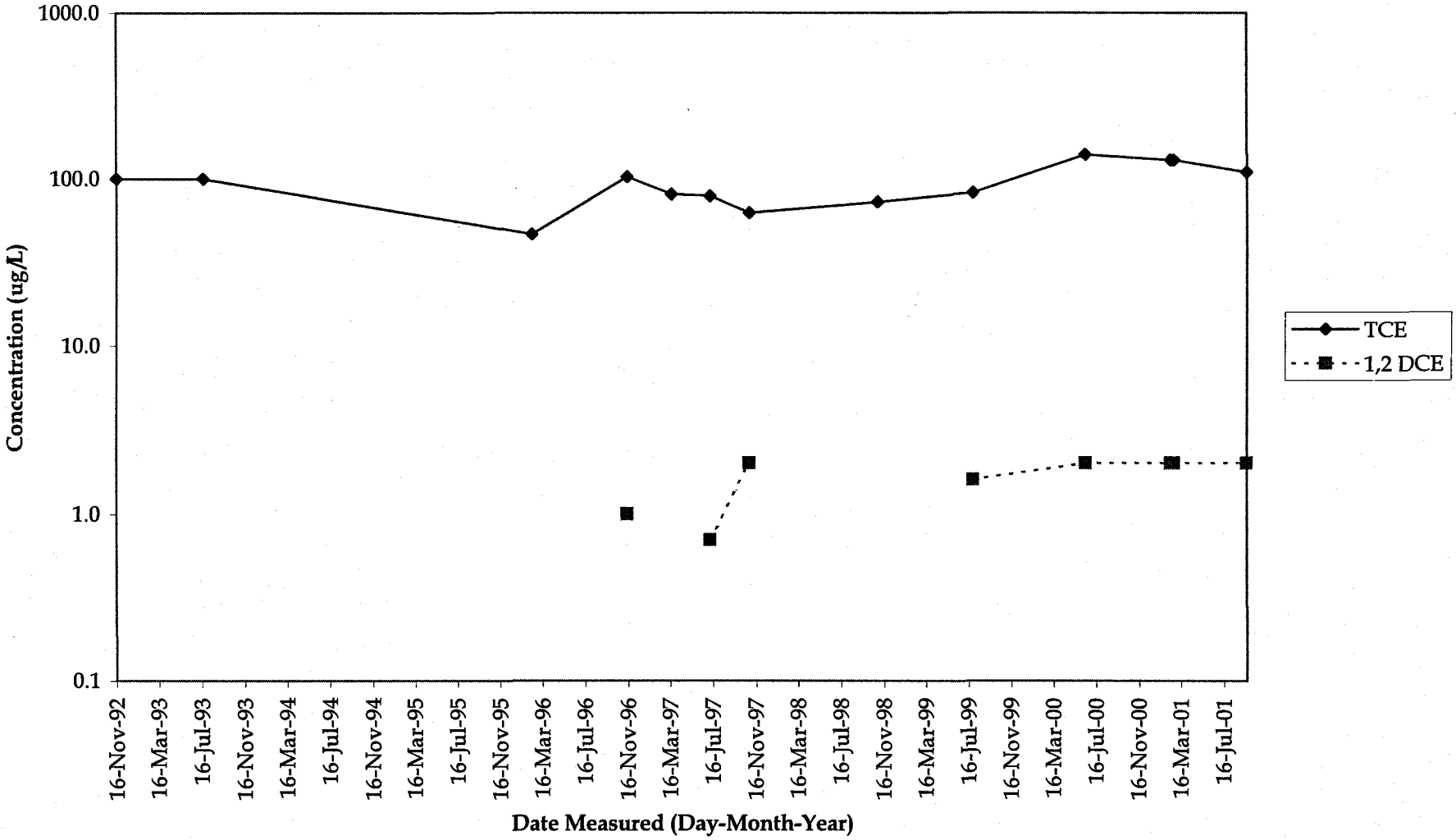


Figure B.2E

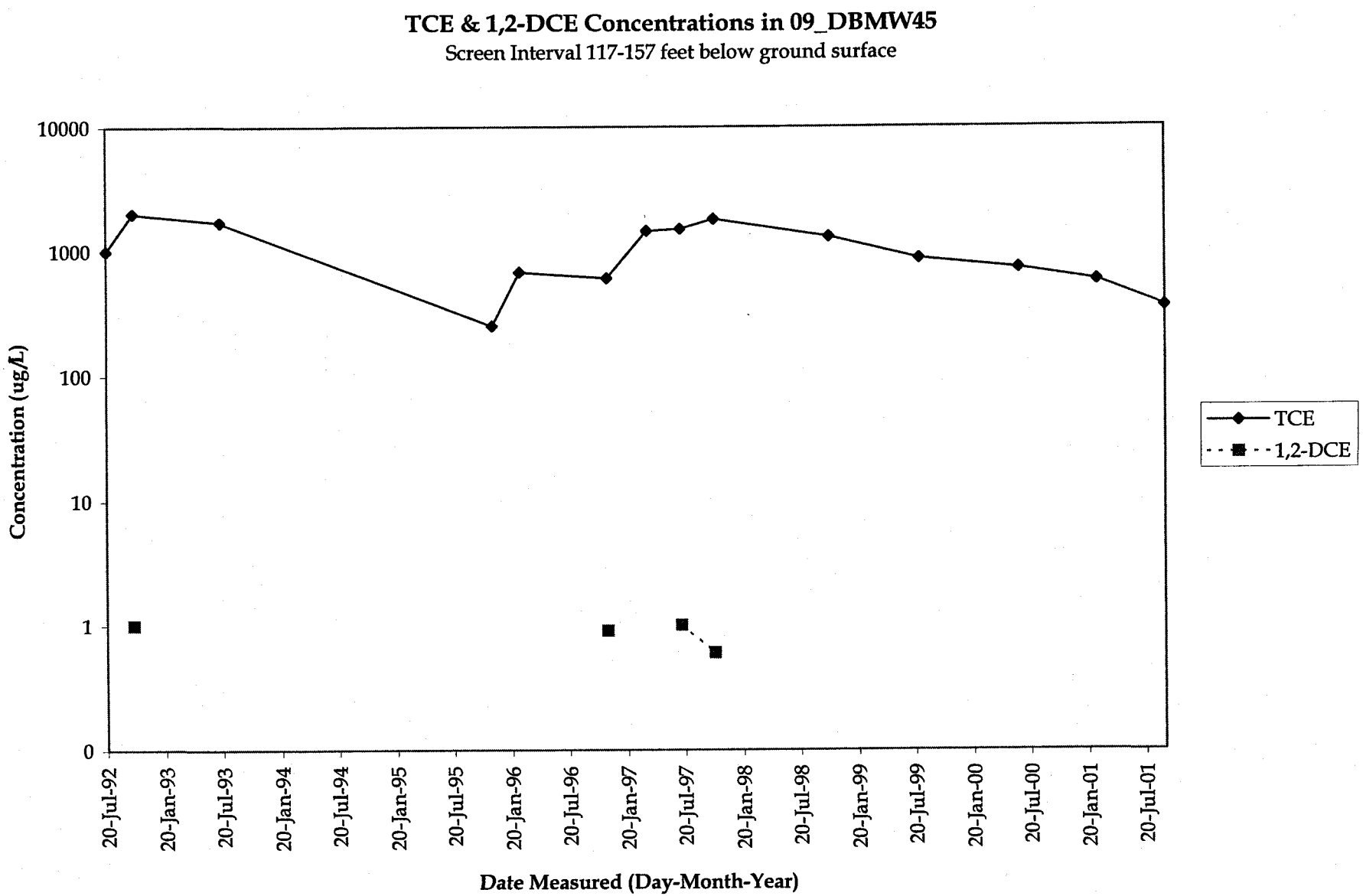

TCE & 1,2-DCE Concentrations in 09_DBMW45
Screen Interval 117-157 feet below ground surface
10000
1000
100
10
1
0
Concentration (ug/L)
20-Jul-92
20-Jan-93
20-Jul-93
20-Jan-94
20-Jul-94
20-Jan-95
20-Jul-95
20-Jan-96
20-Jul-96
20-Jan-97
20-Jul-97
20-Jan-98
20-Jul-98
20-Jan-99
20-Jul-99
20-Jan-00
20-Jul-00
20-Jan-01
20-Jul-01
Date Measured (Day-Month-Year)
TCE
1,2-DCE

Figure B.2F

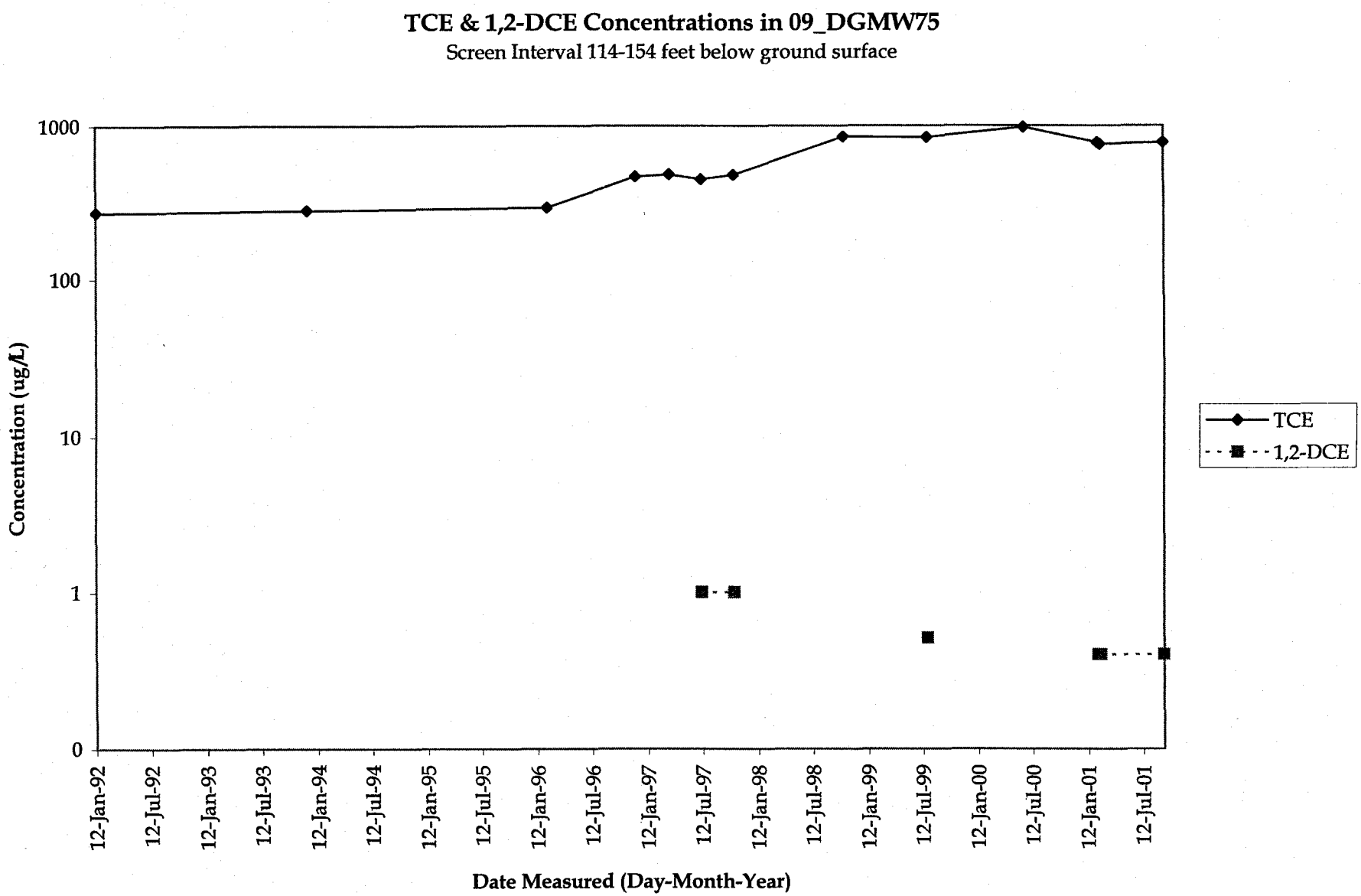

TCE & 1,2-DCE Concentrations in 09_DGMW75
Screen Interval 114-154 feet below ground surface
Concentration (ug/L)
1000
100
10
1
0
12-Jan-92
12-Jul-92
12-Jan-93
12-Jul-93
12-Jan-94
12-Jul-94
12-Jan-95
12-Jul-95
12-Jan-96
12-Jul-96
12-Jan-97
12-Jul-97
12-Jan-98
12-Jul-98
12-Jan-99
12-Jul-99
12-Jan-00
12-Jul-00
12-Jan-01
12-Jul-01
Date Measured (Day-Month-Year)
TCE
1,2-DCE

Figure B.2G

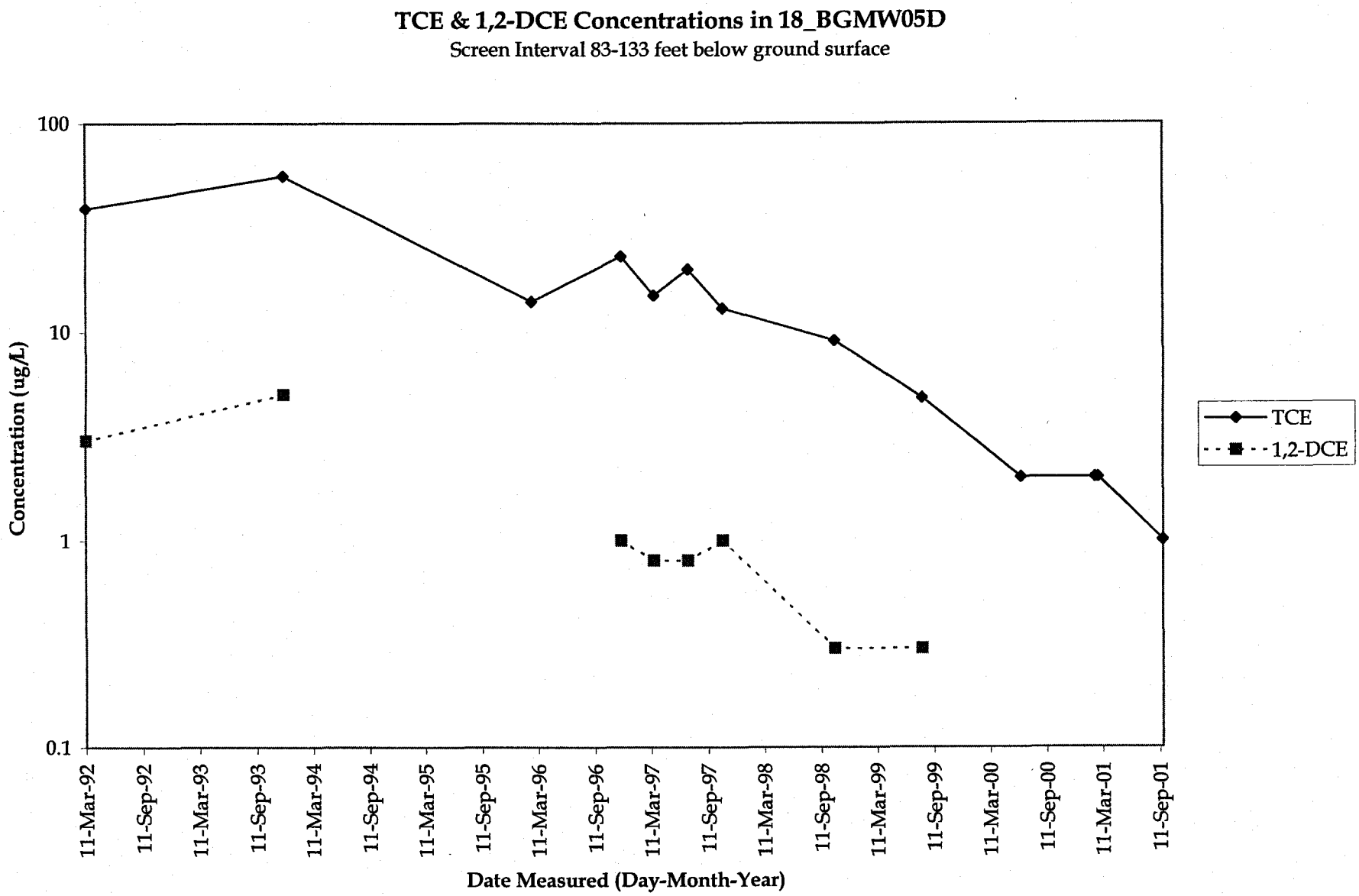

TCE & 1,2-DCE Concentrations in 18_BGMW05D
Screen Interval 83-133 feet below ground surface
100
10
1
0.1
Concentration (ug/L)
11-Mar-92
11-Sep-92
11-Mar-93
11-Sep-93
11-Mar-94
11-Sep-94
11-Mar-95
11-Sep-95
11-Mar-96
11-Sep-96
11-Mar-97
11-Sep-97
11-Mar-98
11-Sep-98
11-Mar-99
11-Sep-99
11-Mar-00
11-Sep-00
11-Mar-01
11-Sep-01
Date Measured (Day-Month-Year)
TCE
1,2-DCE

Figure B.2H

B.2H

TCE & 1,2-DCE Concentrations in 18_DW135, 18_DW250, 18_DW350, 18_DW450, and 18_DW540

Screen Intervals 115-135, 215-250, 310-350, 420-450, and 590-540 feet below ground surface, respectively

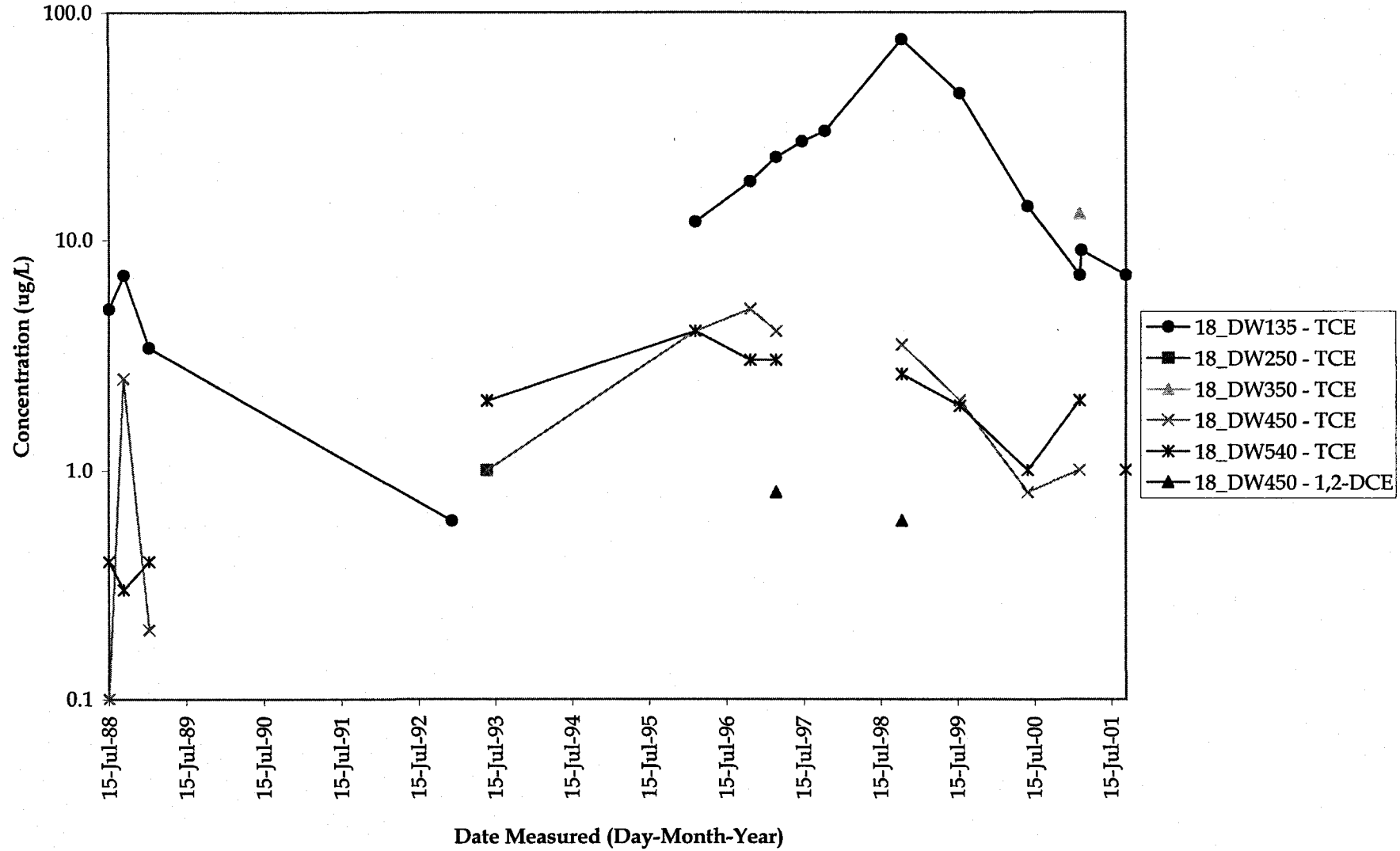


Figure B.2I

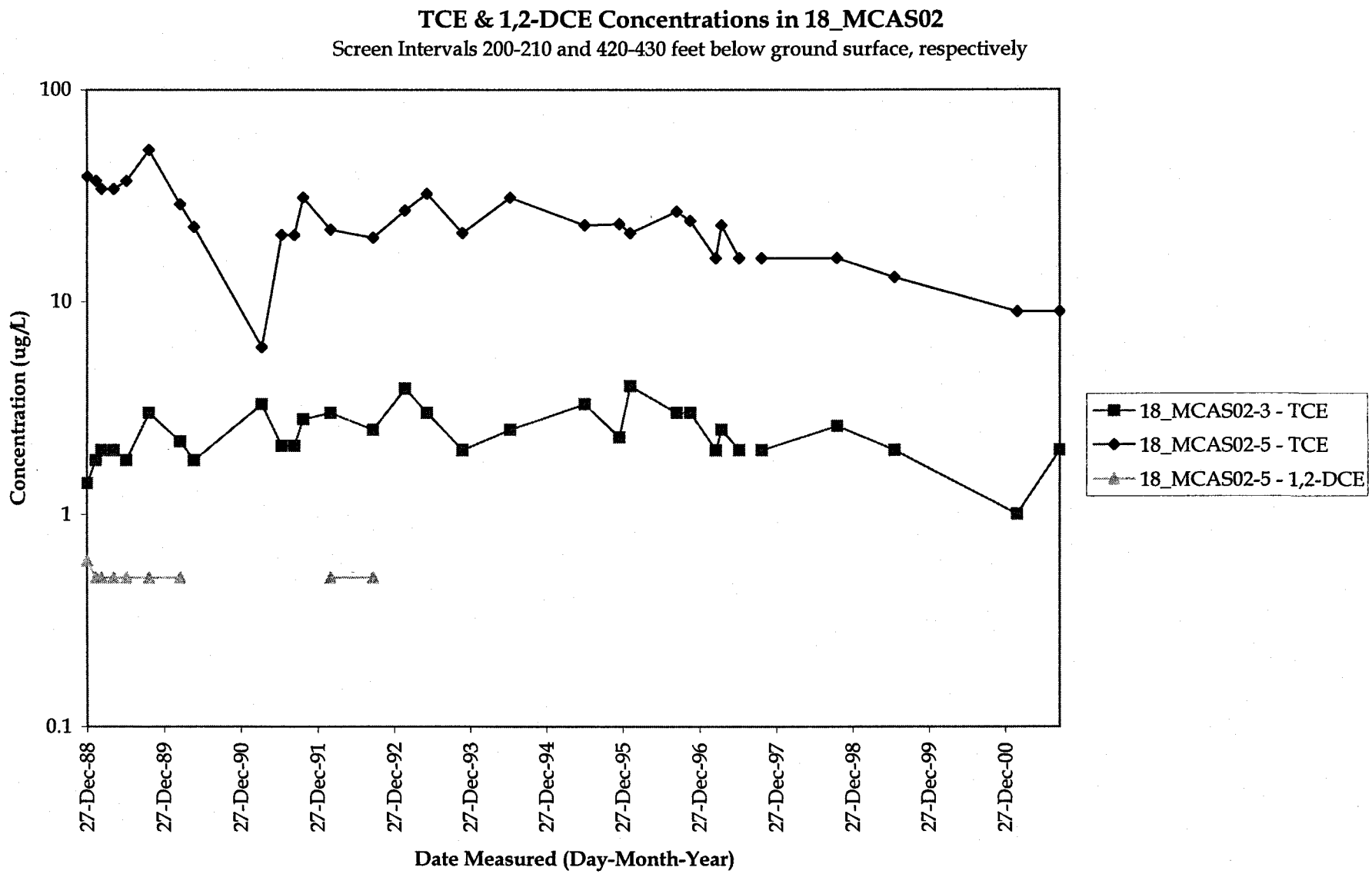

TCE & 1,2-DCE Concentrations in 18_MCAS02
Screen Intervals 200-210 and 420-430 feet below ground surface, respectively
100
10
1
0.1
Concentration (ug/L)
27-Dec-88
27-Dec-89
27-Dec-90
27-Dec-91
27-Dec-92
27-Dec-93
27-Dec-94
27-Dec-95
27-Dec-96
27-Dec-97
27-Dec-98
27-Dec-99
27-Dec-00
Date Measured (Day-Month-Year)
18_MCAS02-3 - TCE
18_MCAS02-5 - TCE
18_MCAS02-5 - 1,2-DCE

Figure B.2J

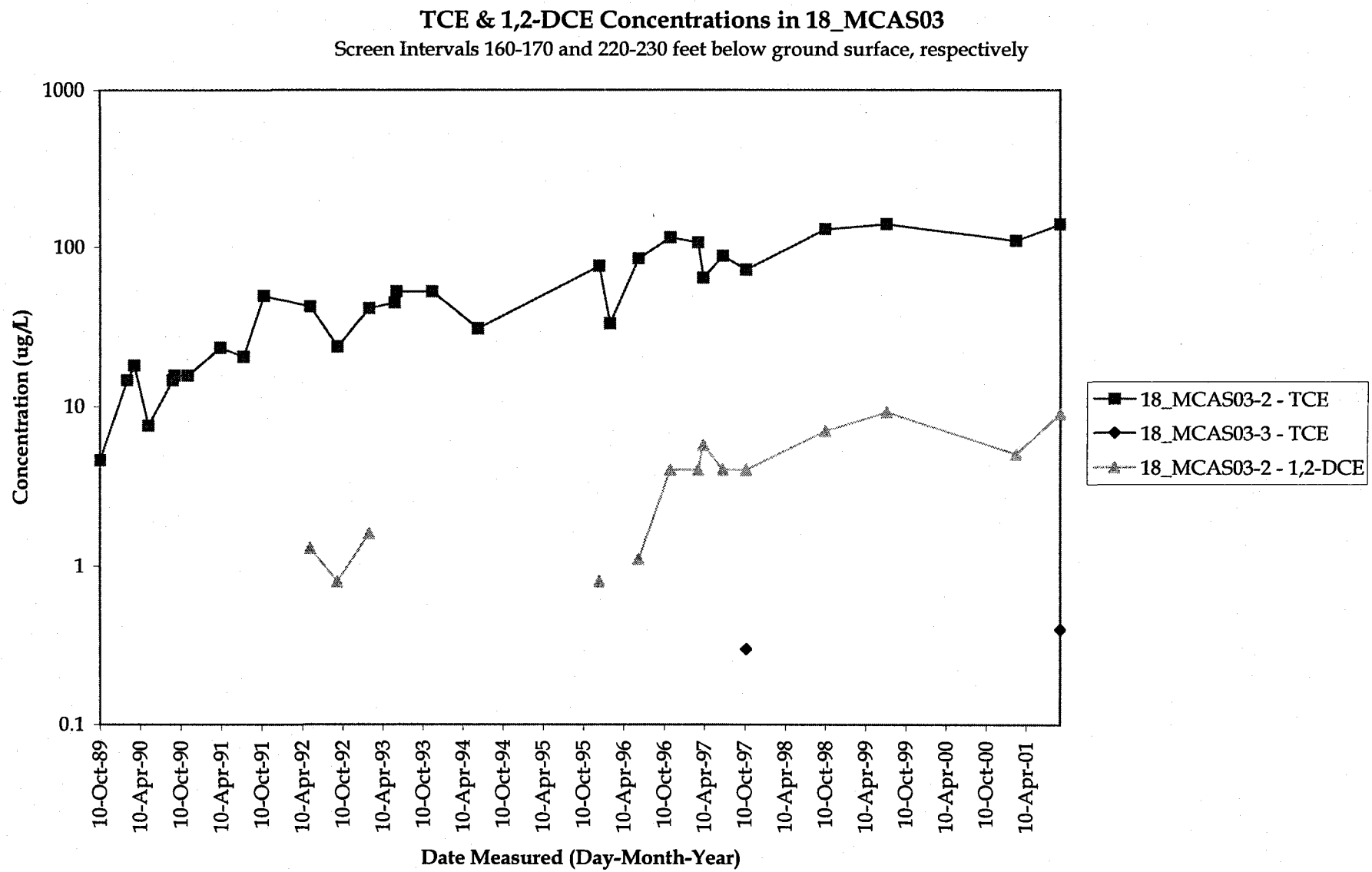

TCE & 1,2-DCE Concentrations in 18_MCAS03
Screen Intervals 160-170 and 220-230 feet below ground surface, respectively
Concentration (ug/L)
1000
100
10
1
0.1
10-Oct-89
10-Apr-90
10-Oct-90
10-Apr-91
10-Oct-91
10-Apr-92
10-Oct-92
10-Apr-93
10-Oct-93
10-Apr-94
10-Oct-94
10-Apr-95
10-Oct-95
10-Apr-96
10-Oct-96
10-Apr-97
10-Oct-97
10-Apr-98
10-Oct-98
10-Apr-99
10-Oct-99
10-Apr-00
10-Oct-00
10-Apr-01
Date Measured (Day-Month-Year)
18_MCAS03-2 - TCE
18_MCAS03-3 - TCE
18_MCAS03-2 - 1,2-DCE

Figure B.2K

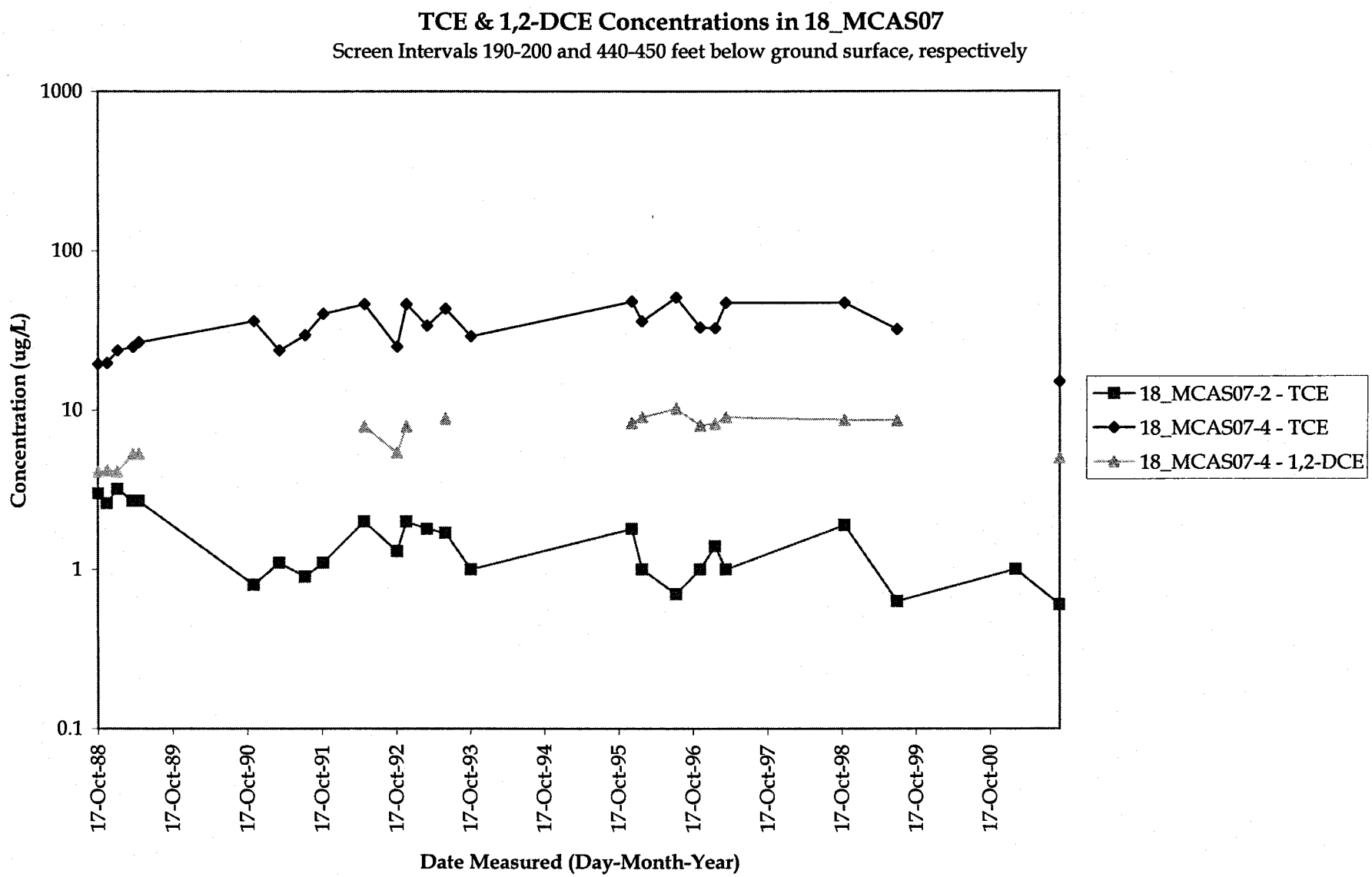

TCE & 1,2-DCE Concentrations in 18_MCAS07
Screen Intervals 190-200 and 440-450 feet below ground surface, respectively
1000
100
10
1
0.1
Concentration (ug/L)
17-Oct-88
17-Oct-89
17-Oct-90
17-Oct-91
17-Oct-92
17-Oct-93
17-Oct-94
17-Oct-95
17-Oct-96
17-Oct-97
17-Oct-98
17-Oct-99
17-Oct-00
Date Measured (Day-Month-Year)
18_MCAS07-2 - TCE
18_MCAS07-4 - TCE
18_MCAS07-4 - 1,2-DCE

Figure B.2L

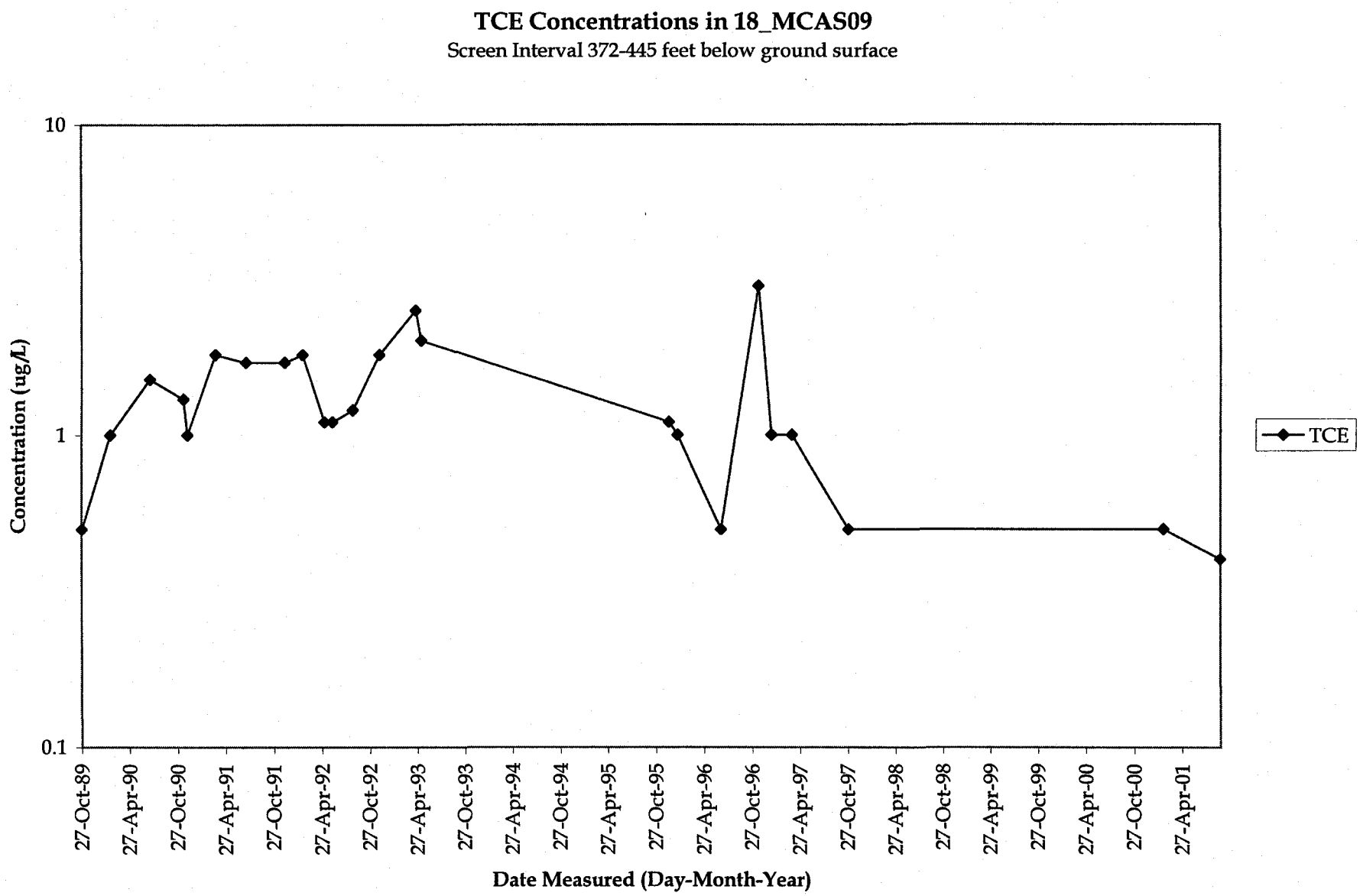

TCE Concentrations in 18_MCAS09
Screen Interval 372-445 feet below ground surface
10
1
0.1
Concentration (ug/L)
27-Oct-89
27-Apr-90
27-Oct-90
27-Apr-91
27-Oct-91
27-Apr-92
27-Oct-92
27-Apr-93
27-Oct-93
27-Apr-94
27-Oct-94
27-Apr-95
27-Oct-95
27-Apr-96
27-Oct-96
27-Apr-97
27-Oct-97
27-Apr-98
27-Oct-98
27-Apr-99
27-Oct-99
27-Apr-00
27-Oct-00
27-Apr-01
Date Measured (Day-Month-Year)
TCE

Figure B.2M

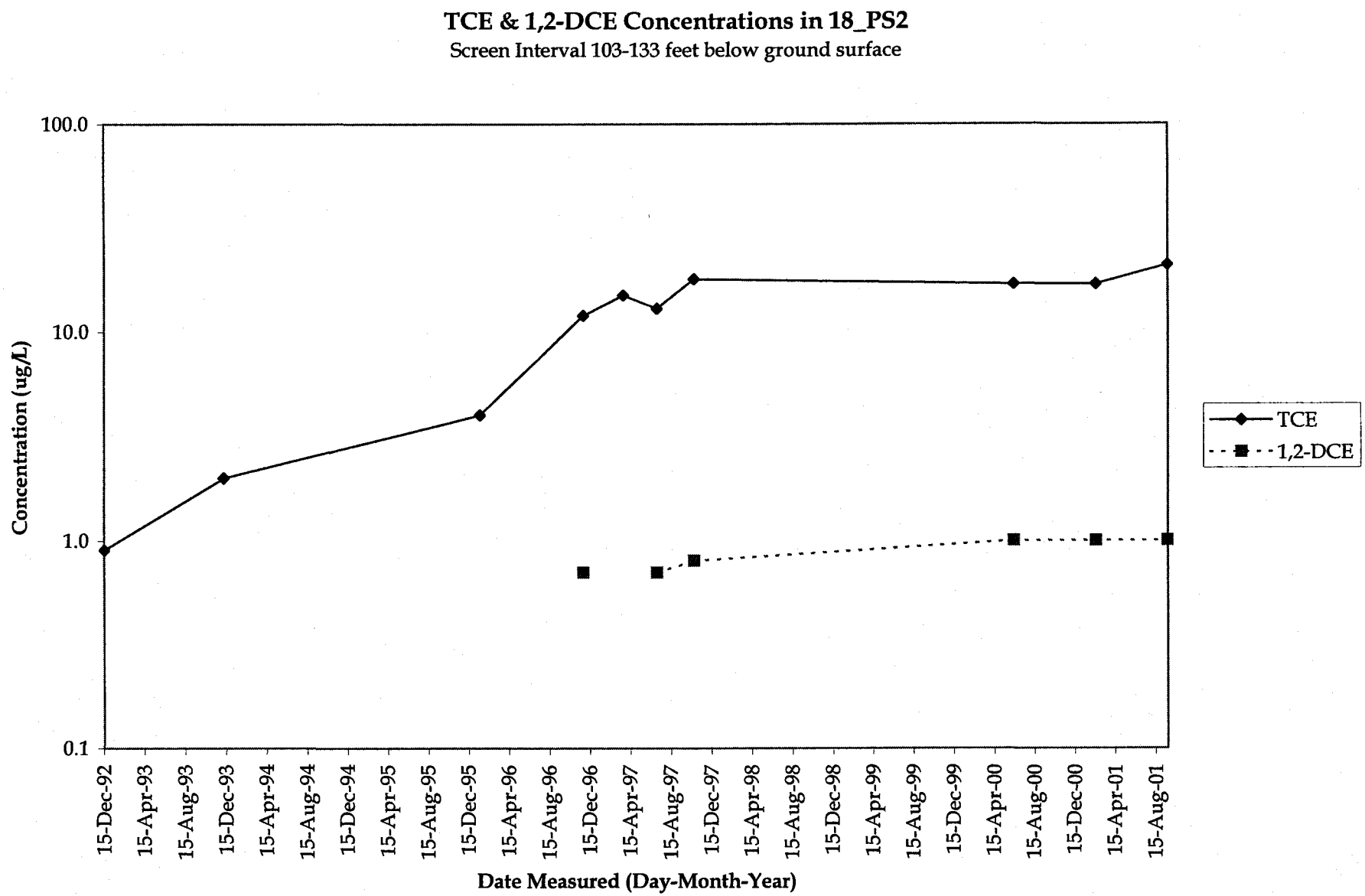

TCE & 1,2-DCE Concentrations in 18_PS2
Screen Interval 103-133 feet below ground surface
100.0
10.0
1.0
0.1
Concentration (ug/L)
15-Dec-92
15-Apr-93
15-Aug-93
15-Dec-93
15-Apr-94
15-Aug-94
15-Dec-94
15-Apr-95
15-Aug-95
15-Dec-95
15-Apr-96
15-Aug-96
15-Dec-96
15-Apr-97
15-Aug-97
15-Dec-97
15-Apr-98
15-Aug-98
15-Dec-98
15-Apr-99
15-Aug-99
15-Dec-99
15-Apr-00
15-Aug-00
15-Dec-00
15-Apr-01
15-Aug-01
Date Measured (Day-Month-Year)
TCE
1,2-DCE

Figure B.2N

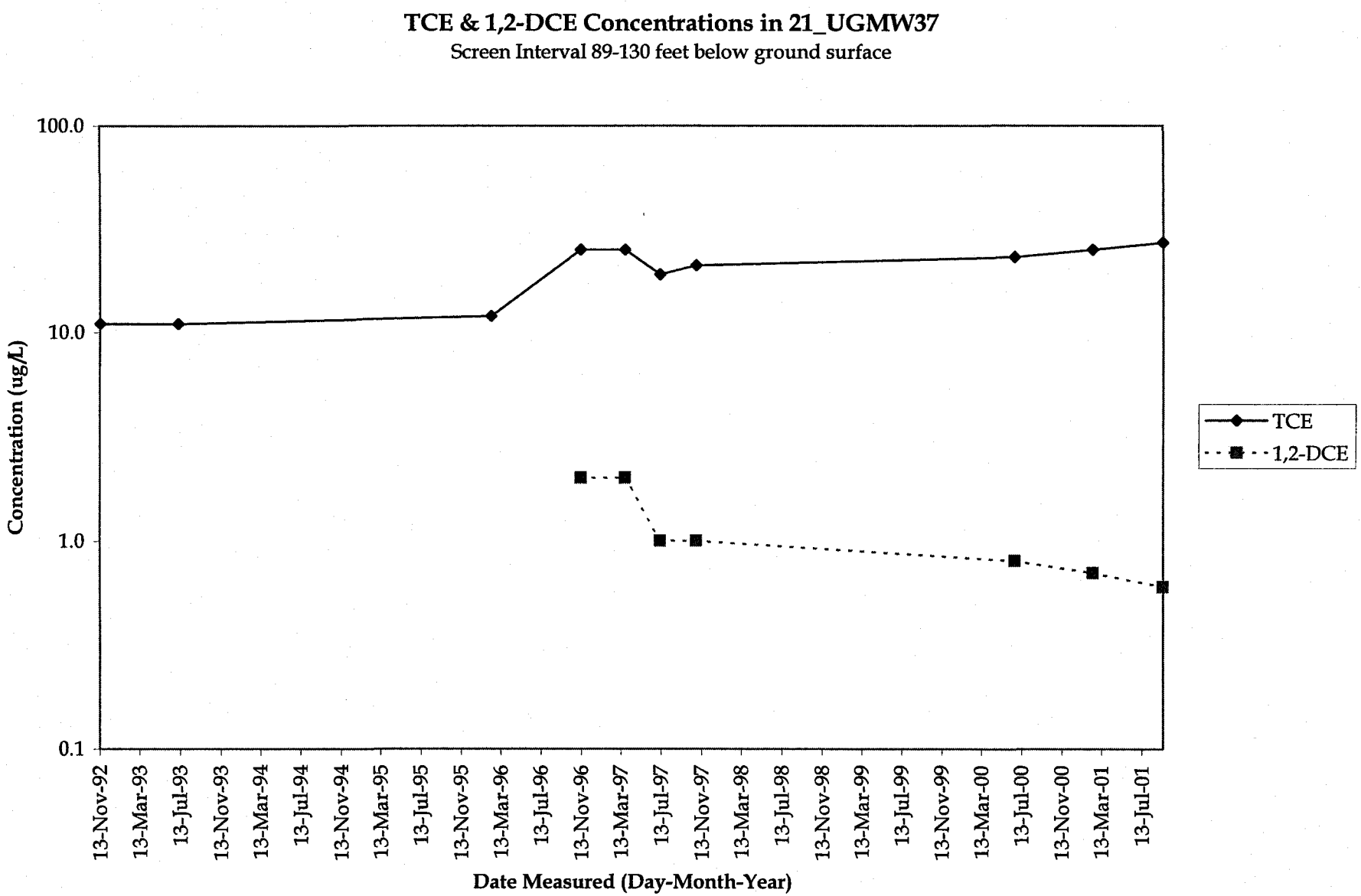

TCE & 1,2-DCE Concentrations in 21_UGMW37
Screen Interval 89-130 feet below ground surface
100.0
10.0
1.0
0.1
Concentration (ug/L)
13-Nov-92
13-Mar-93
13-Jul-93
13-Nov-93
13-Mar-94
13-Jul-94
13-Nov-94
13-Mar-95
13-Jul-95
13-Nov-95
13-Mar-96
13-Jul-96
13-Nov-96
13-Mar-97
13-Jul-97
13-Nov-97
13-Mar-98
13-Jul-98
13-Nov-98
13-Mar-99
13-Jul-99
13-Nov-99
13-Mar-00
13-Jul-00
13-Nov-00
13-Mar-01
13-Jul-01
Date Measured (Day-Month-Year)
TCE
1,2-DCE

Figure B.2O

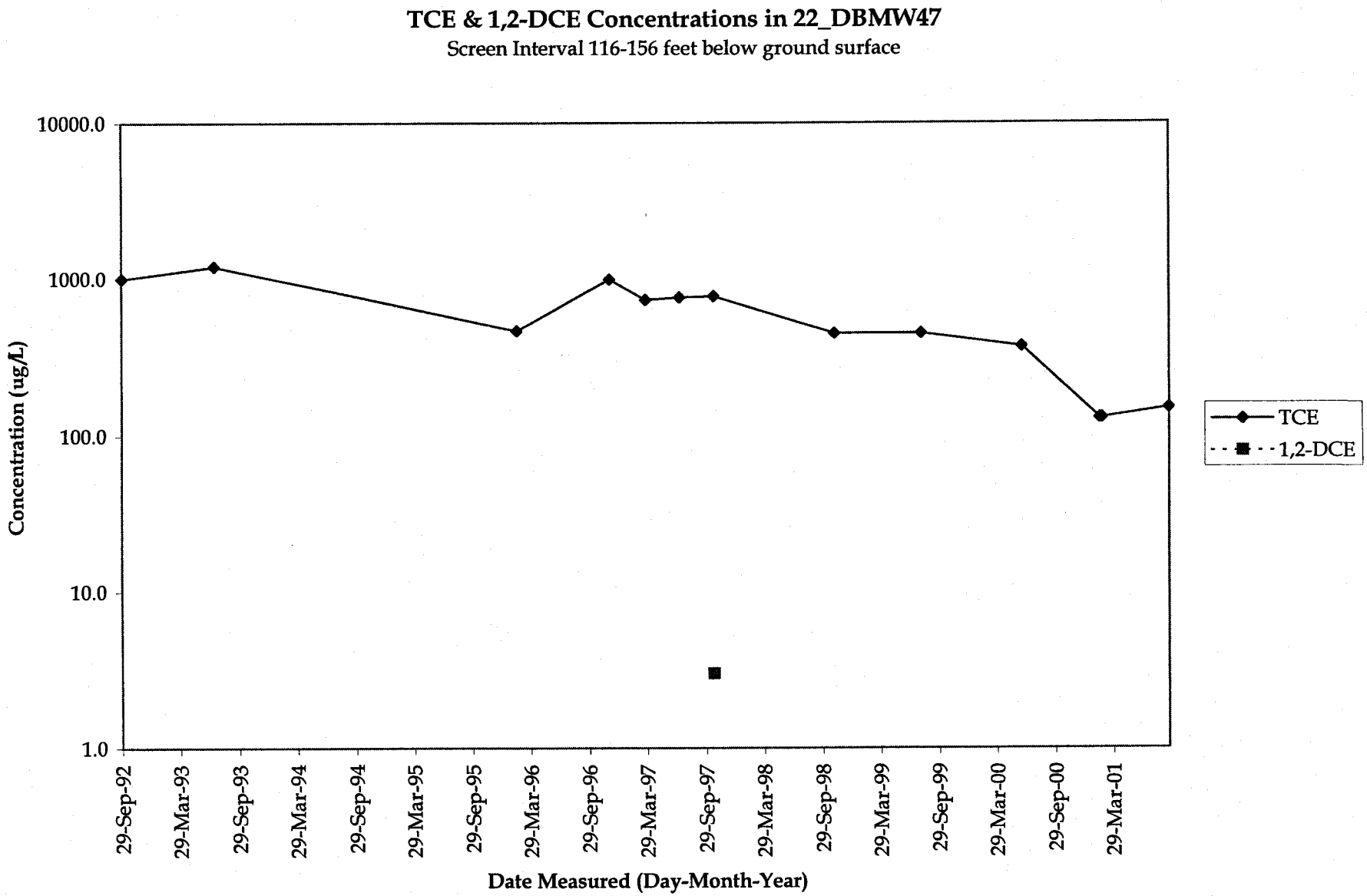

TCE & 1,2-DCE Concentrations in 22_DBMW47
Screen Interval 116-156 feet below ground surface
10000.0
1000.0
100.0
10.0
1.0
Concentration (ug/L)
29-Sep-92
29-Mar-93
29-Sep-93
29-Mar-94
29-Sep-94
29-Mar-95
29-Sep-95
29-Mar-96
29-Sep-96
29-Mar-97
29-Sep-97
29-Mar-98
29-Sep-98
29-Mar-99
29-Sep-99
29-Mar-00
29-Sep-00
29-Mar-01
Date Measured (Day-Month-Year)
TCE
1,2-DCE

Figure B.2P

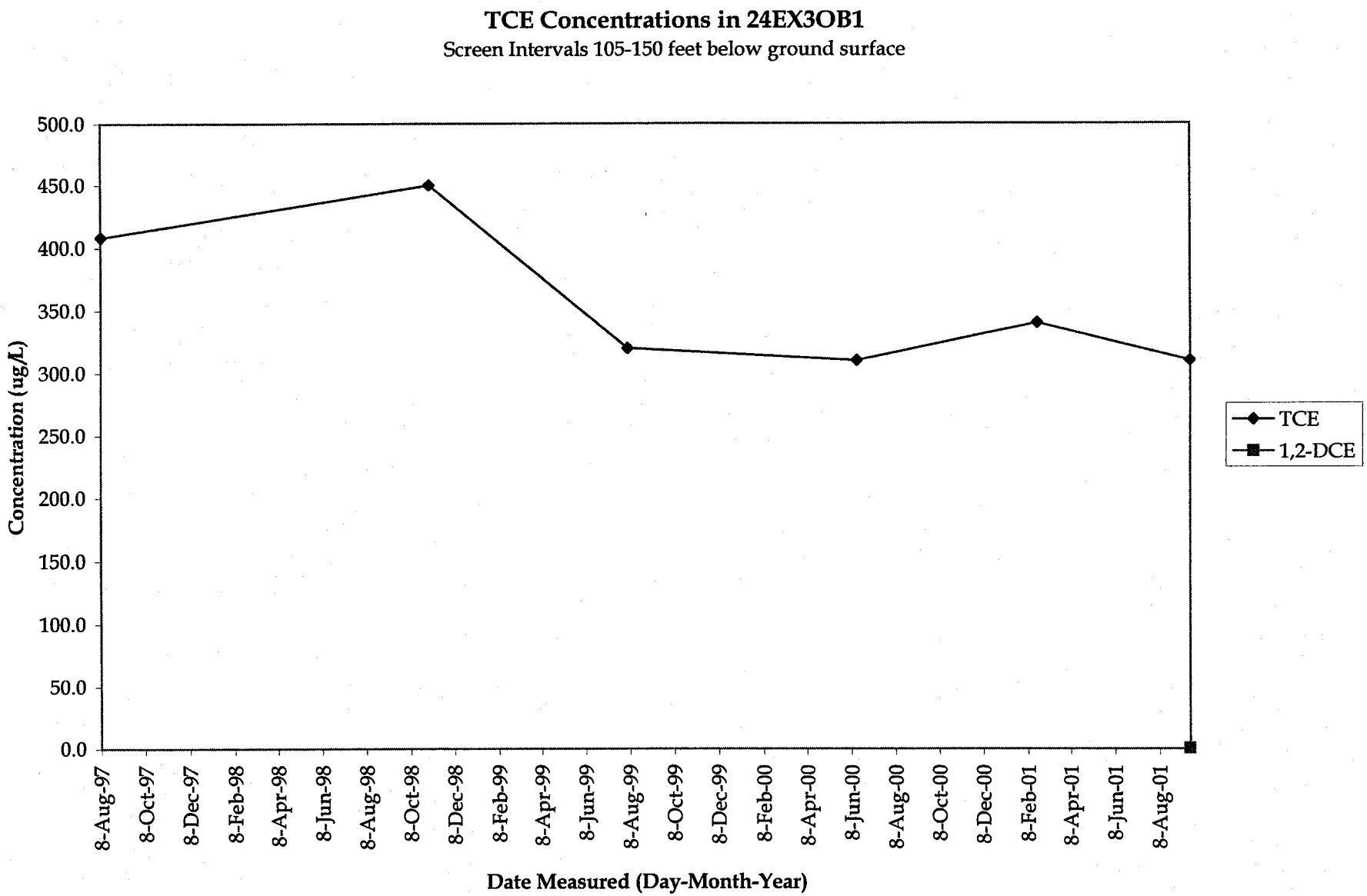

TCE Concentrations in 24EX3OB1
Screen Intervals 105-150 feet below ground surface
Concentration (ug/L)
500.0
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
8-Aug-97
8-Oct-97
8-Dec-97
8-Feb-98
8-Apr-98
8-Jun-98
8-Aug-98
8-Oct-98
8-Dec-98
8-Feb-99
8-Apr-99
8-Jun-99
8-Aug-99
8-Oct-99
8-Dec-99
8-Feb-00
8-Apr-00
8-Jun-00
8-Aug-00
8-Oct-00
8-Dec-00
8-Feb-01
8-Apr-01
8-Jun-01
8-Aug-01
Date Measured (Day-Month-Year)
TCE
1,2-DCE

Figure B.2Q

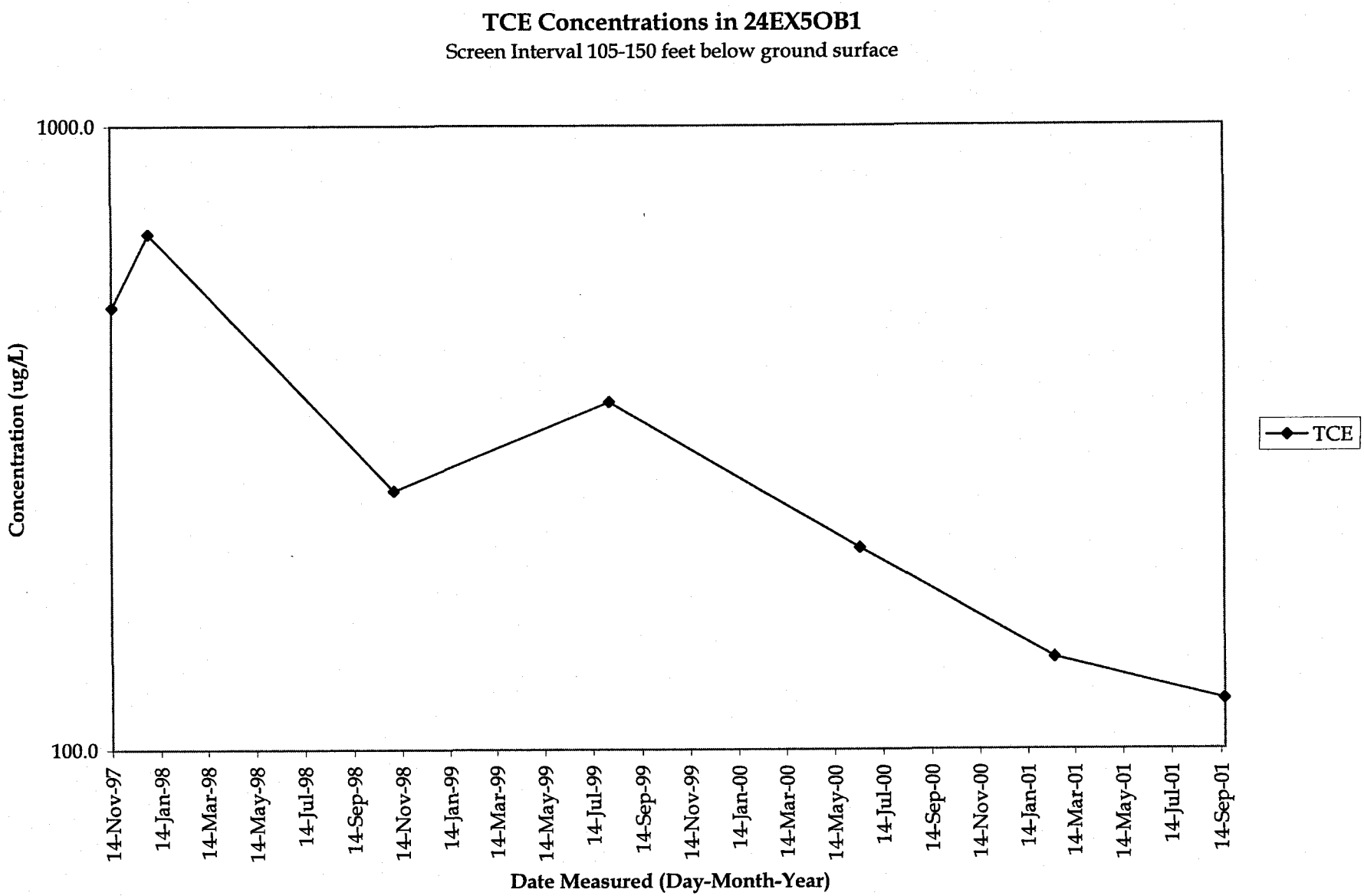

TCE Concentrations in 24EX5OB1
Screen Interval 105-150 feet below ground surface
1000.0
100.0
Concentration (ug/L)
TCE
14-Nov-97
14-Jan-98
14-Mar-98
14-May-98
14-Jul-98
14-Sep-98
14-Nov-98
14-Jan-99
14-Mar-99
14-May-99
14-Jul-99
14-Sep-99
14-Nov-99
14-Jan-00
14-Mar-00
14-May-00
14-Jul-00
14-Sep-00
14-Nov-00
14-Jan-01
14-Mar-01
14-May-01
14-Jul-01
14-Sep-01
Date Measured (Day-Month-Year)

Figure B.2R

B.2R

TCE Concentrations in 24EX6OB2

Screen Interval 106-151 feet below ground surface

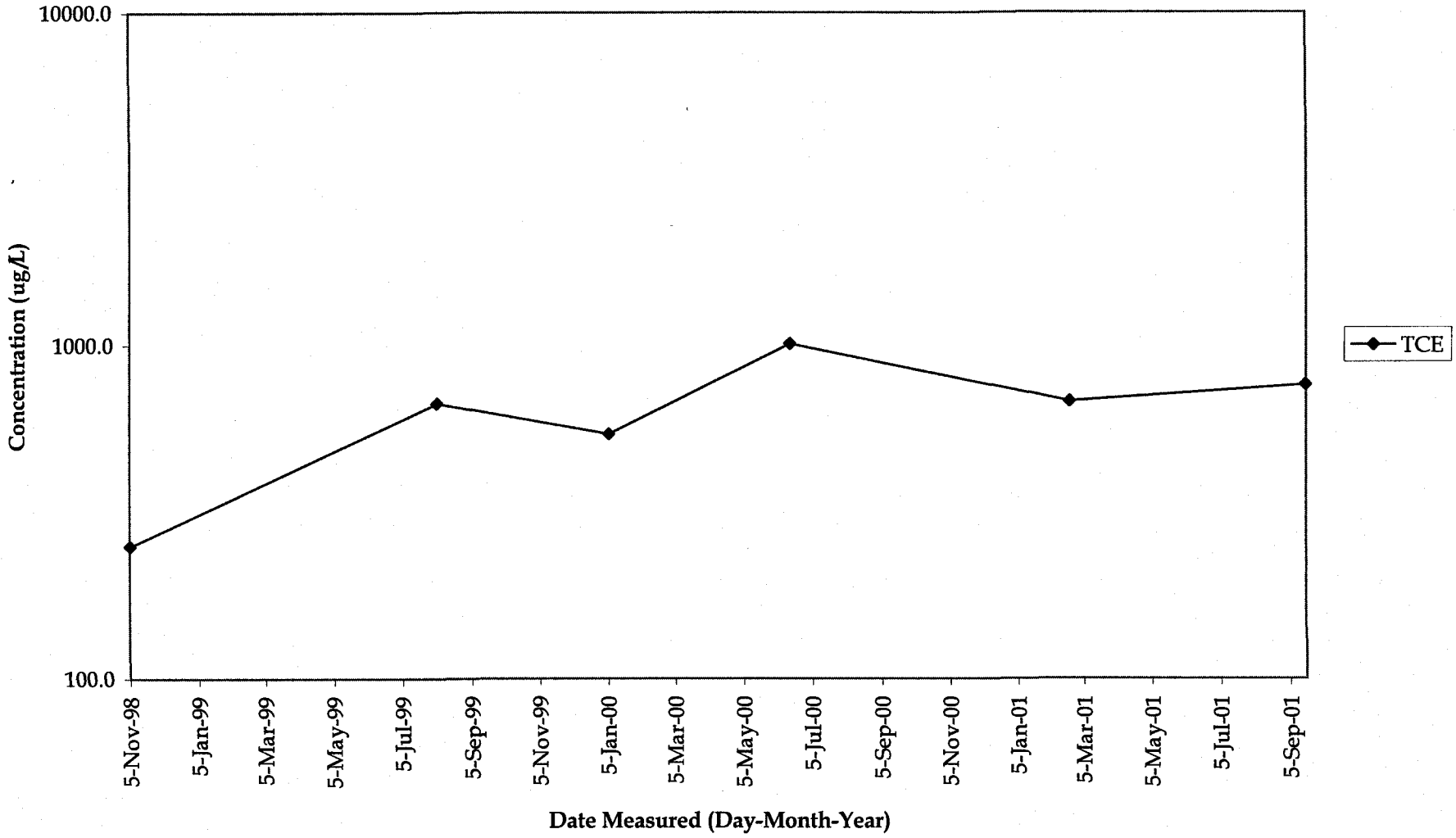


Figure B.2S

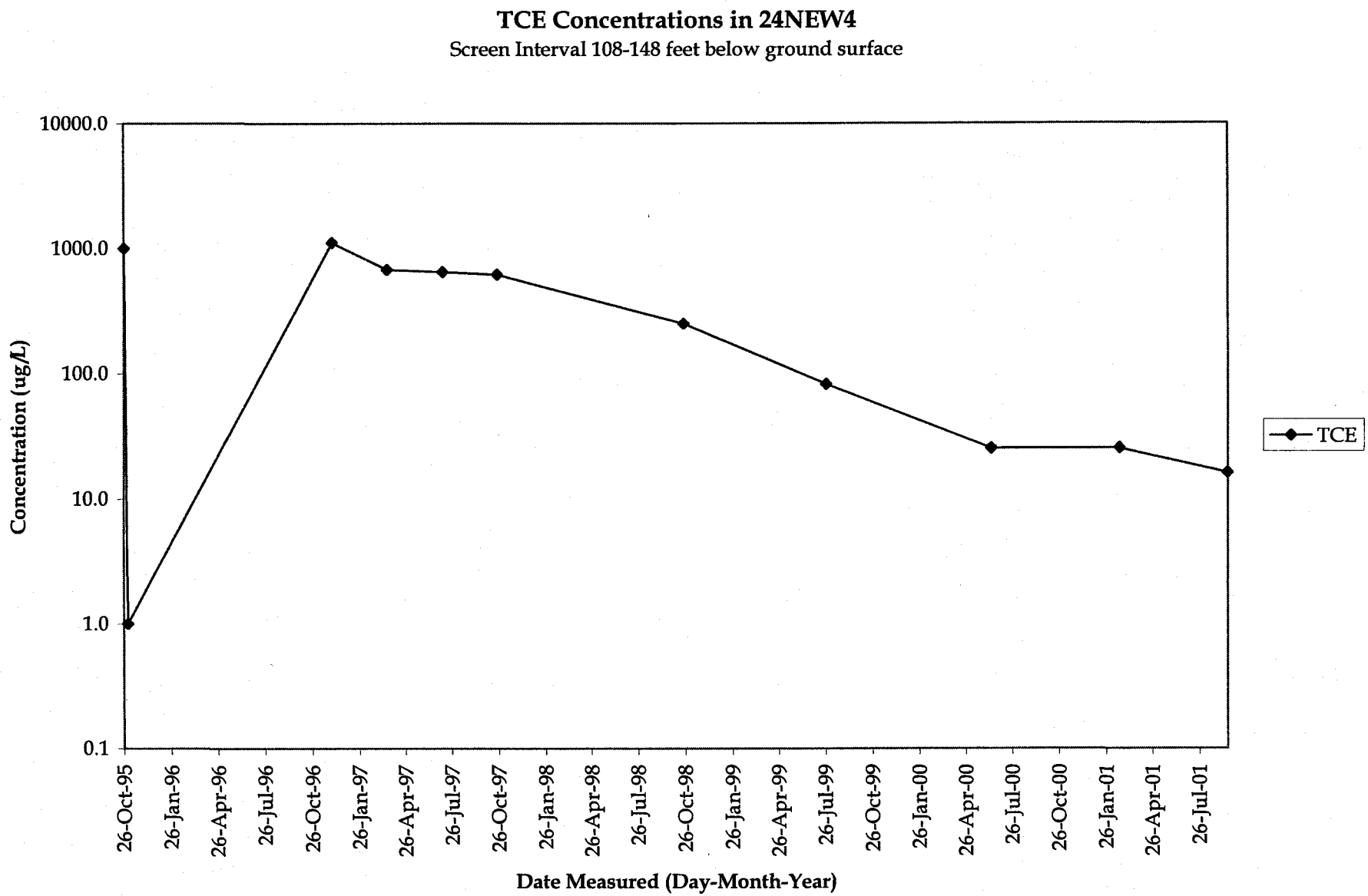
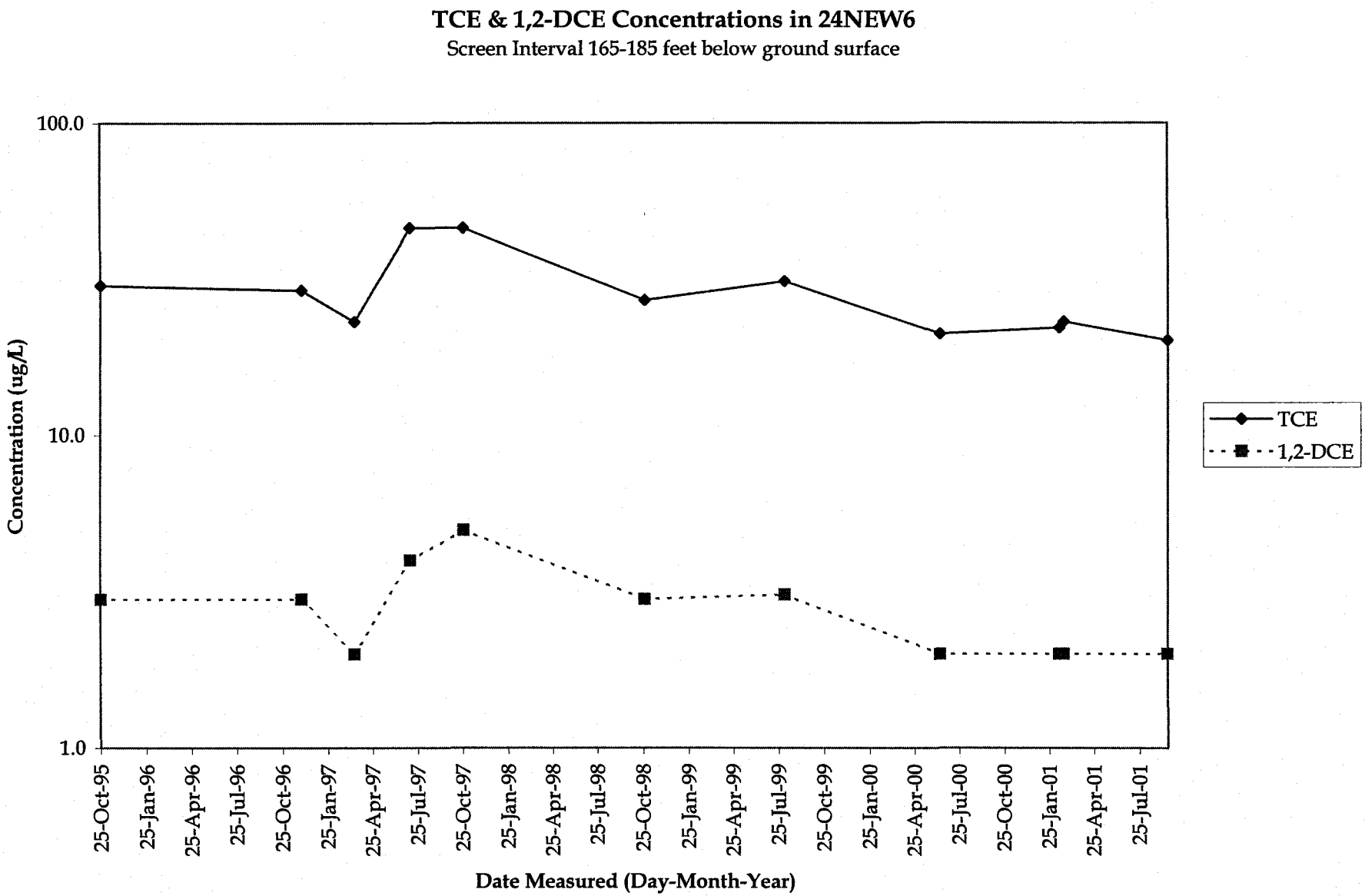
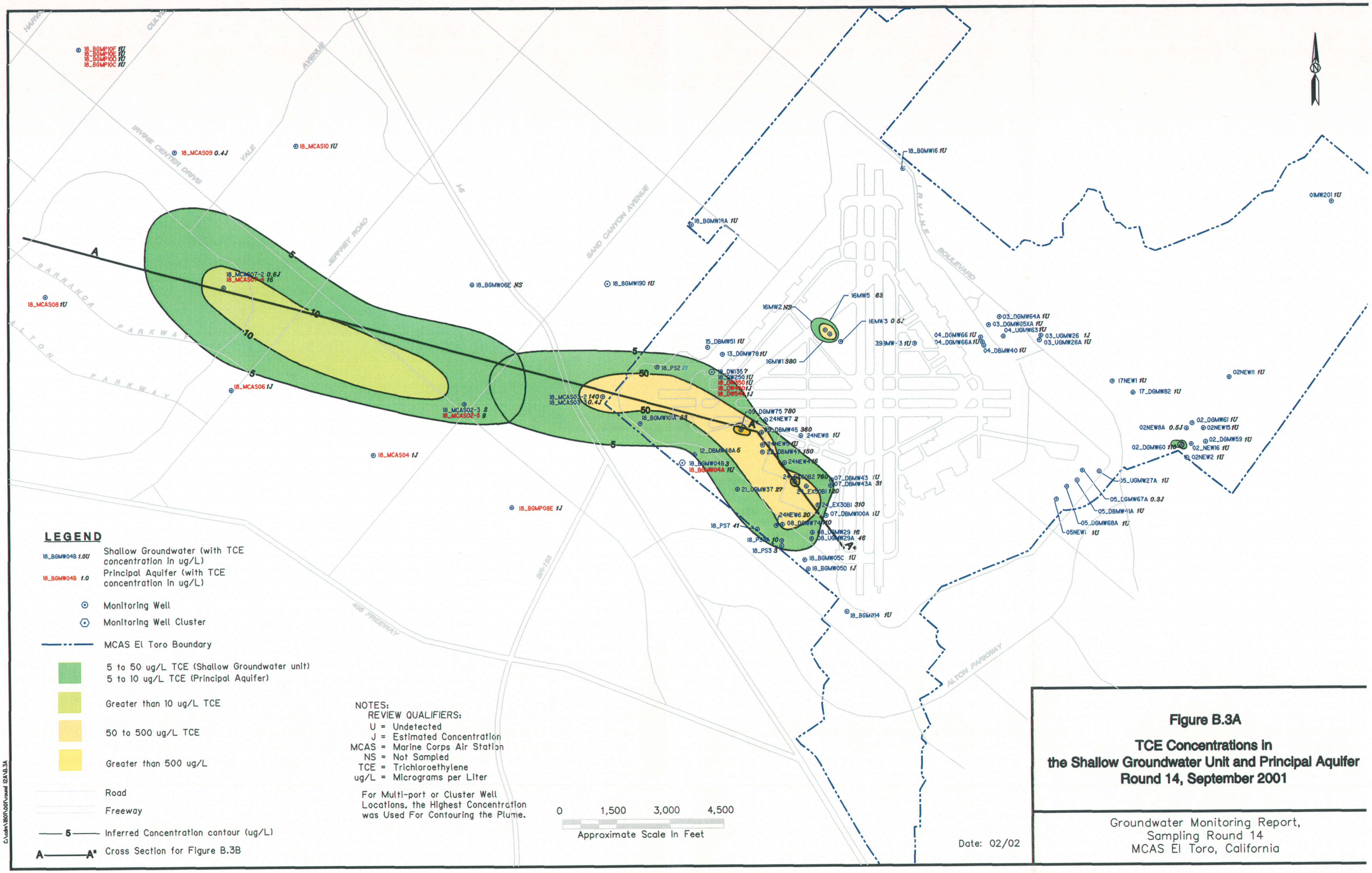

TCE Concentrations in 24NEW4
Screen Interval 108-148 feet below ground surface
10000.0
1000.0
100.0
10.0
1.0
0.1
Concentration (ug/L)
26-Oct-95
26-Jan-96
26-Apr-96
26-Jul-96
26-Oct-96
26-Jan-97
26-Apr-97
26-Jul-97
26-Oct-97
26-Jan-98
26-Apr-98
26-Jul-98
26-Oct-98
26-Jan-99
26-Apr-99
26-Jul-99
26-Oct-99
26-Jan-00
26-Apr-00
26-Jul-00
26-Oct-00
26-Jan-01
26-Apr-01
26-Jul-01
Date Measured (Day-Month-Year)
TCE

Figure B.2T


TCE & 1,2-DCE Concentrations in 24NEW6
Screen Interval 165-185 feet below ground surface
100.0
10.0
1.0
Concentration (ug/L)
25-Oct-95
25-Jan-96
25-Apr-96
25-Jul-96
25-Oct-96
25-Jan-97
25-Apr-97
25-Jul-97
25-Oct-97
25-Jan-98
25-Apr-98
25-Jul-98
25-Oct-98
25-Jan-99
25-Apr-99
25-Jul-99
25-Oct-99
25-Jan-00
25-Apr-00
25-Jul-00
25-Oct-00
25-Jan-01
25-Apr-01
25-Jul-01
Date Measured (Day-Month-Year)
TCE
1,2-DCE



LEGEND

18_BGMW04B 1.0U — Shallow Groundwater (with TCE concentration in ug/L)

18_BGMW04B 1.0 — Principal Aquifer (with TCE concentration in ug/L)

Monitoring Well

Monitoring Well Cluster

MCAS El Toro Boundary

5 to 50 ug/L TCE (Shallow Groundwater unit)
5 to 10 ug/L TCE (Principal Aquifer)

Greater than 10 ug/L TCE

50 to 500 ug/L TCE

Greater than 500 ug/L

Road

Freeway

—— 5 —— Inferred Concentration contour (ug/L)

A——A' Cross Section for Figure B.3B

NOTES:
REVIEW QUALIFIERS:
U = Undetected
J = Estimated Concentration
MCAS = Marine Corps Air Station
NS = Not Sampled
TCE = Trichloroethylene
ug/L = Micrograms per Liter

For Multi-port or Cluster Well Locations, the Highest Concentration was Used For Contouring the Plume.

0 1,500 3,000 4,500
Approximate Scale In Feet

Date: 02/02

Figure B.3A

TCE Concentrations in the Shallow Groundwater Unit and Principal Aquifer Round 14, September 2001

Groundwater Monitoring Report,
Sampling Round 14
MCAS El Toro, California

C:\cdm\1801\00\round 12A\B.3A

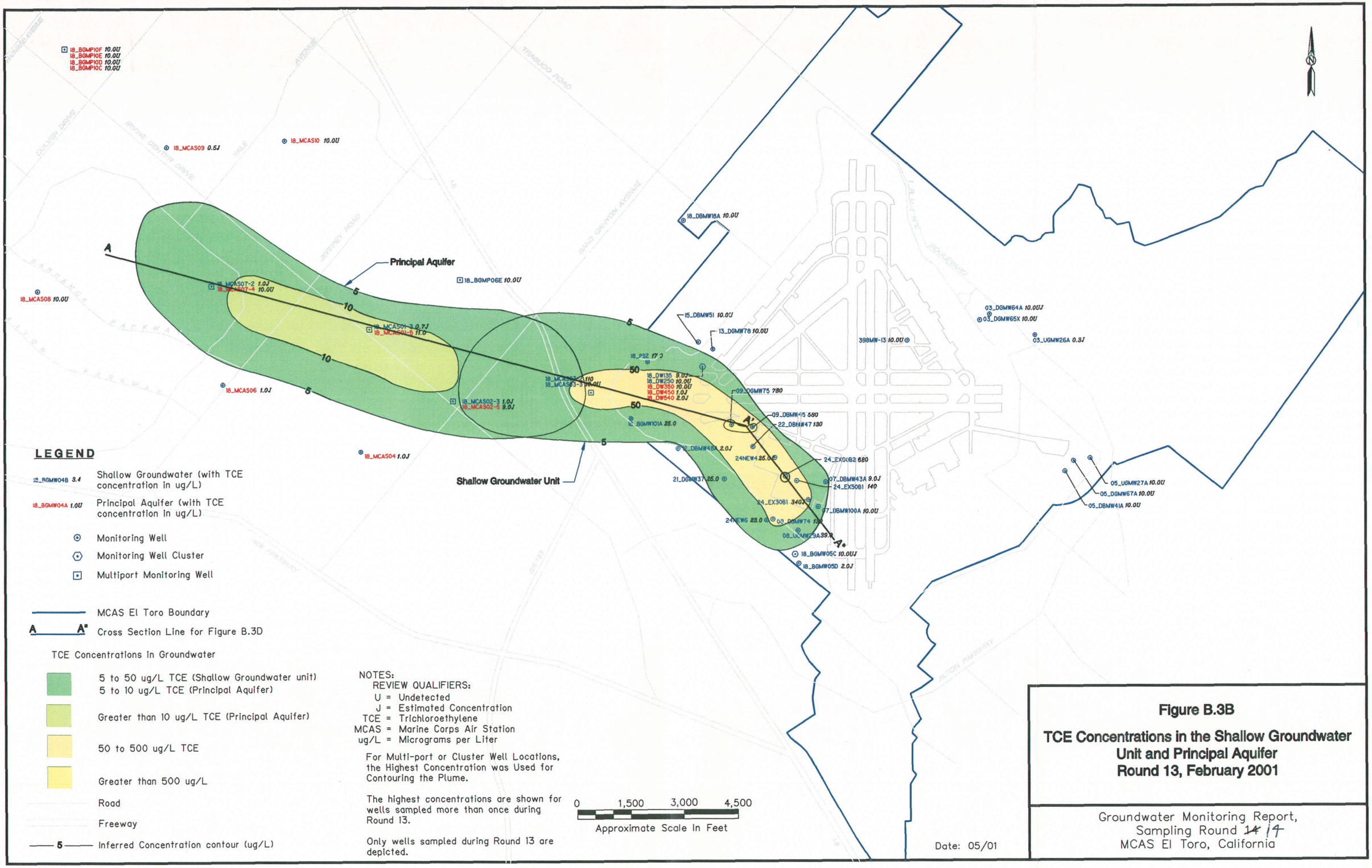
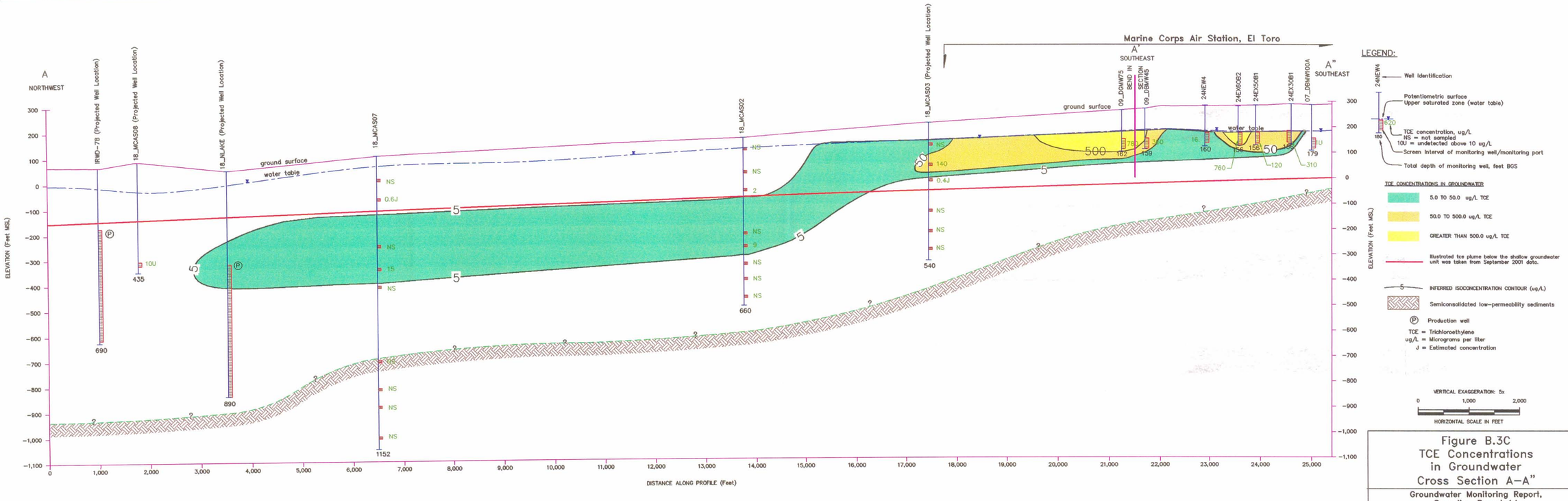


Figure B.3B

TCE Concentrations in the Shallow Groundwater Unit and Principal Aquifer Round 13, February 2001

Groundwater Monitoring Report,
Sampling Round ~~14~~ 14
MCAS El Toro, California



Line of Section shown on Figure B.3A

Date: 05/01

Figure B.3C
TCE Concentrations
in Groundwater
Cross Section A–A"

Groundwater Monitoring Report,
Sampling Round 14
MCAS El Toro, California

CDM Federal Programs Corporation

DATE: 06/01
FILE NO.: FIG_B.3E
DO NO.: 1801–001

Appendix C

Field Parameters Summary

Table C-1
Field Parameter Measurements, Round 14, September 2001
MCAS EL Toro

Well ID	Date	Temp (°C)	pH	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbitity (NTU)
SITE 1							
01_MW201	09/25/01	23.9	7.36	687	6.92	198	7.32
SITE 2							
02_DGMW59	09/25/01	20.4	7.14	1554	0.92	157	7.61
02_DGMW60	09/25/01	23.8	7.08	1544	1.05	142	8.9
02_DGMW61	09/25/01	26.3	7.05	1096	3.71	179	16.2
02NEW11	09/25/01	21.9	6.01	992	4.51	238	29.4
02NEW15	09/25/01	22.3	7.27	1516	2.68	159	8.4
02NEW16	09/25/01	23.4	7.22	1161	5.21	161	8.99
02NEW2	09/25/01	21.2	6.07	1163	3.59	211	7.18
02NEW8A	09/25/01	24.2	7.12	1115	2.99	186	17.4
SITE 3							
03_DGMW64A	09/17/01	25.3	5.16	1500	5.22	-12	23
03_DGMW65XA	09/17/01	25.4	5.01	1370	3.78	-6	17
03_UGMW26	09/20/01	25.7	7.23	1262	6.51	189	12.2
03_UGMW26A	09/20/01	24.8	5.17	1530	5.64	-11	90
04_DBMW40	09/20/01	25.9	7.37	1344	2.71	169	24.1
04_DGMW66	09/20/01	24.9	7.28	1254	7.29	173	15.8
04_DGMW66A	09/20/01	25.7	5.04	1860	1.14	-26	850
04_UGMW63	09/20/01	27.5	7.10	1682	3.04	174	55.1
SITE 5							
05_DBMW41A	09/19/01	22.7	5.02	897	3.82	-18	7.2
05_DGMW67A	09/19/01	22.8	5.04	927	4.53	-20	170
05_DGMW68A	09/20/01	23.6	5.04	1.37	3.92	-14	6.4
05_UGMW27A	09/24/01	22.9	5.25	909	4.69	-14	19
05NEW1	09/19/01	26.1	7.04	1354	6.75	144	144
SITE16							
16_MW_1	09/24/01	28.8	6.86	2281	2.01	167	18.9
16_MW_3	09/24/01	26.7	7.33	1675	5.61	144	40.0
16_MW_5	09/20/01	25.2	5.09	1770	4.27	-10	20
SITE17							
17_DGMW82	09/20/01	25.7	7.38	1166	2.86	161	61.1
17NEW1	09/20/01	24.3	7.29	1118	4.99	159	96.1

Table C-1 (continued)
Field Parameter Measurements, Round 14, September 2001
MCAS EL Toro

Well ID	Date	Temp (°C)	pH	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbitity (NTU)
SITE 18							
18_BGMP10C	09/13/01	25.2	7.4	664	12.52	-189	2.41
18_BGMP10D	09/13/01	25.5	7.9	765	9.71	-212	4.79
18_BGMP10E	09/13/01	26.9	8.1	866	10.81	-216	2.46
18_BGMP10F	09/13/01	27.3	7.4	1770	6.92	44	1.76
18_BGMW04A	09/19/01	25.0	7.01	1069	6.01	186	33.4
18_DW350	09/21/01	25.5	7.29	1023	4.53	150	18.2
18_DW450	09/21/01	25.0	7.65	1061	3.54	88	18.6
18_DW540	09/21/01	24.7	8.6	767	1.20	31	11.11
18_MCAS01-5	09/24/01	21.2	7.50	1290	9.44	136	2.11
18_MCAS02-5	09/12/01	25.9	7.6	1510	10.81	144	1.9
18_MCAS04	09/24/01	22.9	5.1	1860	2.70	-17	14
18_MCAS06	09/24/01	23.0	5.09	892	1.15	-15	3.0
18_MCAS07-4	09/24/01	27.0	6.5	1100	10.25	127	2.46
18_MCAS08	09/21/01	25.4	5.51	1920	0.93	-104	6.8
18_MCAS09	09/18/01	25.3	5.18	631	0.95	-41	0.9
18_MCAS10	09/21/01	25.5	5.17	860	0.98	-20	4.5
SITE24							
07_DBMW100A	09/18/01	24.9	4.97	1.41	5.54	78	25
07_DBMW43	09/18/01	23.7	7.07	1555	4.9	199	88.5
07_DBMW43A	09/17/01	26.7	5.43	1.560	3.23	-19	13
08_DGMW74	09/18/01	24.07	7.23	1556	5.64	114	207
08_UGMW29	09/18/01	26.5	7.26	1.437	1.78	142	111
08_UGMW29A	09/18/01	25.4	5.09	2.49	2.63	-27	40
09_DBMW45	09/17/01	24.7	6.76	1686	7.79	199	521
09_DGMW75	09/17/01	25.7	5.27	2529	6.92	221	6.99
12_DBMW48A	09/14/01	26.5	5.05	2590	4.83	-2	260
13_DGMW78	09/21/01	26.2	7.15	2277	3.11	149	9.45
15_DBMW51	09/21/01	25.4	5.14	2403	3.27	274	7.01
18_BGMP08E	09/13/01	27.7	1.7	2770	6.48	-93	4.35
18_BGMW04B	09/19/01	24.5	7.06	1204	8.80	183	54.6
18_BGMW05C	09/19/01	24.9	7.28	1264	6.49	158	29.4
18_BGMW05D	09/19/01	23.7	6.87	1271	6.02	159	24.9
18_BGMW101A	09/19/01	24.6	7.27	1734	4.97	182	58.2
18_BGMW14	09/24/01	24.3	6.1	1338	6.61	163	360

Table C-1 (continued)
Field Parameter Measurements, Round 14, September 2001
MCAS EL Toro

Well ID	Date	Temp (°C)	pH	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbitity (NTU)
18_BGMW16	09/24/01	26.1	7.19	1702	5.94	159	9.89
18_BGMW18A	09/17/01	25.4	5.18	4340	5.13	-17	120
18_BGMW19D	09/24/01	28.6	5.98	2552	6.09	218	15.4
18_DW135	09/21/01	22.6	7.04	2720	7.29	267	13.4
18_DW250	09/21/01	23.0	7.89	1039	3.27	227	26.4
18_MCAS01-3	09/24/01	25.3	7.40	1700	9.63	148	4.90
18_MCAS02-3	09/12/01	24.8	7.6	1880	8.46	143	2.18
18_MCAS03-2	09/11/01	23.3	6.8	1520	9.18	179	28.8
18_MCAS03-3	09/11/01	24.0	6.6	2110	7.92	192	10.1
18_MCAS07-2	09/24/01	25.9	6.9	1020	8.06	106	1.68
18_PS2	09/19/01	23.5	7.09	2901	7.1	175	48.1
18_PS3	09/25/01	23.8	5.14	1480	4.88	-3	3.1
18_PS3A	09/18/01	24.3	5.06	1680	4.01	-15	260
18_PS7	09/25/01	23.0	5.78	1486	7.35	252	8.01
21_UGMW37	09/14/01	24.7	5.26	1620	5.36	-22	110
22_DBMW47	09/17/01	27.1	6.04	1399	7.64	247	60.1
24EX3OB1	09/18/01	24.2	6.58	1379	6.41	180	7.98
24EX5OB1	09/18/01	25.1	7.08	1398	5.86	149	128.1
24EX6OB2	09/18/01	26.1	7.06	1406	5.21	171	36.2
24NEW4	09/18/01	25.1	7.04	1486	7.01	120	9.92
24NEW5	09/18/01	26.6	7.24	1073	6.87	171	34.2
24NEW6	09/19/01	23.9	7.68	1088	5.88	204	24.2
24NEW7	09/19/01	22.1	6.93	2003	5.59	293	78.4
24NEW8	09/18/01	27.1	6.59	1663	6.42	158	68.2
398MW-13	09/11/01	26.2	5.45	1280	2.63	-38	2.5

Notes:

The dissolved oxygen measurements greater than about 9 mg/L (approximate saturation concentration) are probably not valid and may indicate a sensor malfunction.

During Round 13, ORP measurements were not taken at wells with dedicated bladder pumps; a sensor was not included on the QED equipment supplied by the vendor.

°C	=	degrees centigrade	µS/cm	=	microsiemens per centimeter
mg/L	=	milligrams per liter	mV	=	millivolts
NTU	=	nephelometric turbidity units	NM	=	not measured.
MCAS	=	Marine Corps Air Station	ORP	=	oxidation-reduction potential

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GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 01-MW201
PROJECT NAME: MCAS El Toro	SAMPLE ID: 01-MW201-114
DATE: 9-25-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 10:30

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 42 | Purge Rate: 100 ml/min | Minimum Purge Volume: 12 minutes

Total Volume Removed: 1600 ml | Pressure: 32 | Refill: 17 | Discharge: 3

Initial Groundwater Level: 0.014

Final Groundwater Level: .011 Clear

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1033	300	24.42	6.28	.7094	7.17	28	—	SWL .009
1036	900	23.98	7.35	.6841	7.04	201	7.63	SWL .011 Clear
1039	1200	23.89	7.36	.6815	6.99	199	7.11	SWL .011 Clear
1042	1500	23.97	7.36	.6808	6.92	198	7.32	SWL .011 Clear
1043	SAMPLE							

Total Volume Purged: 1600 | Total Time: 16 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 3

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 02-DGMW59
PROJECT NAME: MCAS El Toro	SAMPLE ID: 02-DGMW59-114
DATE: 9-25-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 17:25

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 79 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1120 (12 min)

Total Volume Removed: 1900 mL | Pressure: 40 | Refill: 17.5 | Discharge: 1500 (12 min)

Initial Groundwater Level: 5.70

Final Groundwater Level: 5.61

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
17:30	500	21.55	7.16	1.543	2.16	160	—	SWL 5.66
17:35	1000	20.52	7.15	1.557	1.09	158	16.1	SWL 5.64
17:37	1200	20.49	7.14	1.556	1.01	157	9.25	SWL 5.63
17:40	1500	20.41	7.14	1.555	0.99	157	8.01	SWL 5.63
17:43	1800	20.38	7.14	1.554	0.92	157	7.61	SWL 5.61
17:44	sample time							

Total Volume Purged: 1900 | Total Time: 9 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ~~( )~~
Perchlorate ( ) General chemistry ~~( )~~ Gross Alpha/Beta (X)

Total number of bottles: 4

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 02-DGMW60
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 02-DGMW60-114
DATE: 9-25-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 16:27

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 90 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1230 (13 min)

Total Volume Removed: 1600 mL | Pressure: 46 | Refill: 17.9 | Discharge: 2.1

Initial Groundwater Level: 10.45

Final Groundwater Level: 10.41

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1630	300	27.57	7.27	1.295	4.27	165	—	SWL 10.45
1633	600	25.00	7.11	1.498	2.18	179	—	SWL 10.41
1636	900	24.21	7.08	1.543	1.10	143	11.6	SWL 10.39
1639	1200	23.99	7.08	1.542	1.09	142	9.9	SWL 10.40
RC 1641	1500	23.87	7.08	1.544	1.05	142	8.9	SWL 10.40
1648	1600	Sample time						SWL 10.41

Total Volume Purged: 1600 mL | Total Time: 16 minutes

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 4

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 02-DGMW61
PROJECT NAME: MCAS El Toro	SAMPLE ID: 02-DGMW61-114
DATE: 9-25-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1600

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 90 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1230 (13)

Total Volume Removed: 2000 | Pressure: 40 | Refill: 18 | Discharge: 2

Initial Groundwater Level: 7.16

Final Groundwater Level: 7.02

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1605	500	26.77	7.04	1.077	4.17	180	—	SWL 7.03 Clear
1610	1000	26.56	7.06	1.090	3.85	180	20.0	SWL 7.03 Clear
1613	1300	26.30	7.04	1.098	3.50	179	19.8	SWL 7.02 Clear
1616	1600	26.32	7.05	1.097	3.61	179	18.1	SWL 7.02 Clear
1619	1900	26.27	7.05	1.096	3.71	179	16.2	SWL 7.02 Clear
1620	2000	SAMPLE						

Total Volume Purged: 2000 mL | Total Time: 20 minutes

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 4

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 02NEW2
PROJECT NAME: MCAS El Toro	SAMPLE ID: 02NEW2-114
DATE: 9-25-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1657

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 85	Purge Rate: 100 mL/min	Minimum Purge Volume: 1180 (12)
Total Volume Removed:	Pressure: 42 Refill: 17.5	Discharge: 2.5

Initial Groundwater Level: 8.77

Final Groundwater Level: 8.77

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1700	300	21.99	7.01	1.159	4.21	169	—	8.73 SWL
1703	600	21.83	6.23	1.162	3.89	201	8.54	8.72 SWL
1706	900	21.82	6.08	1.163	3.71	210	7.29	8.72 SWL
1709	1200	21.77	6.01	1.163	3.68	211	7.01	8.72 SWL
1712	1500	21.76	6.01	1.163	3.59	211	7.18	8.72 SWL
1713	SAMPLE TIME							

Total Volume Purged:	Total Time:

Laboratory Analysis: VOCs (X) Metals Filtered ~~( )~~
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ~~( )~~

Total number of bottles:

Comments:

QC Sample Collected? Yes ( ) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 02-NEW8A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 02-NEW8A-114
DATE: 9-25-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 15:05

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 94 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1260 (13min)

Total Volume Removed: 1400 mL | Pressure: 44 | Refill: 17.4 | Discharge: 2.6

Initial Groundwater Level: 8.56

Final Groundwater Level: 8.30 clear

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1510	500	24.38	7.15	1.117	3.10	187	8.45	SWL 8.31 clear
1513	800	24.26	7.13	1.116	2.85	186	14.3	SWL 8.30 clear
1516	1100	24.18	7.12	1.116	2.95	186	15.1	SWL 8.30 clear
1519	1300	24.19	7.12	1.115	2.99	186	17.4	SWL 8.30 clear
1520	1400	SAMPLE TIME						

Total Volume Purged: 1400 | Total Time: 14 minutes

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 4

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 02-NEW11
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 02-NEW11-114
DATE: 9-25-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 15:27

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 50 | Purge Rate: 100 mL/min | Minimum Purge Volume: 840 (9min)

Total Volume Removed: | Pressure: 32 | Refill: 18 | Discharge: 2

Initial Groundwater Level: 3.05

Final Groundwater Level: 3.01

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1530	300	22.05	6.61	1.001	4.89	220	41.3	SWL 3.01 Clear
1533	600	21.73	6.09	.9924	4.56	236	36.1	SWL 3.02 Clear
1536	900	21.89	6.01	.9922	4.49	237	28.1	SWL 3.02 Clear
1539	1200	21.94	6.01	.9917	4.51	238	29.4	SWL 3.01 Clear
1540	1300	SAMPLE TIME						

Total Volume Purged: | Total Time:

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles:

Comments:

QC Sample Collected? Yes ( ) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 02-NEW15
PROJECT NAME: MCAS El Toro	SAMPLE ID: 02-NEW15-114/-31L
DATE: 9-25-01	SAMPLED BY:
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1120

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 50 ft | Purge Rate: 100 mL/min | Minimum Purge Volume: 840 (g)

Total Volume Removed: 1600 mL | Pressure: 18.5 | Refill: 1.5 | Discharge: -

Initial Groundwater Level: 3.92 — 39 powered pressure

Final Groundwater Level: 3.69 — to 25 + get 100 mL/min

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1123	300	21.78	7.20	1.5016	3.44	175	—	Sub 2.99
1126	600	21.67	7.25	1.515	2.34	163	11.1	Clear 3.71
1129	900	22.24	7.26	1.515	2.54	160	9.4	Clear 3.69
1132	1200	22.30	7.27	1.516	2.68	159	8.4	Clear 3.69
1133	SAMPLE TIME							
1136	Duplicate							

Total Volume Purged: 1600 | Total Time: 16 minutes

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 4 + 4 = 8

Comments:

QC Sample Collected? Yes (X) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 62NEW16
PROJECT NAME: MCAS El Toro	SAMPLE ID: 62NEW16-114
DATE: 9-25-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 12:20

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 5 | Purge Rate: 100 ml/min | Minimum Purge Volume: 800 ml/min

Total Volume Removed: 1500 ml | Pressure: 32 | Refill: 15.5 | Discharge: 15

Initial Groundwater Level: 0.70

Final Groundwater Level: 0.53 SWL

Actual Time	Volume Purged ml	Temperature °C	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1225	500	23.55	7.23	1.157	5.66	166	—	SWL 0.52
1228	800	23.46	7.23	1.160	5.09	161	10.28	SWL 0.53
1231	1100	23.45	7.22	1.161	5.21	161	9.15	SWL 0.53
1234	1400	23.44	7.22	1.161	5.21	161	8.99	SWL 0.53
1235	1500	SAMPLE TIME					—	SWL 0.53

Total Volume Purged: 1500 | Total Time: 15 minutes

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate ( ) General chemistry (X) Gross Alpha/Beta (X)

Total number of bottles: 6

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 03-DGMW64A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 03_DGMW64A-114
DATE: 9/17/01	SAMPLED BY: DAVE LANGE
EQUIPMENT DECONTAMINATED: (YES)	PURGE START TIME: 1130

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" ( ) 5" (X) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 136

Well Total Depth	Original DTW		4"=0.66 / (5"=0.93) / 6"=1.5	Casing Volume		Purge Volume
255	- 218.96	= 36.04	x .93	= 33.51	X 3 casg vol.	= 100.55

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1132	8	26.10	5.19	1.64	6.28	-15	210	cloudy
1135	20	24.95	5.08	1.57	4.69	-12	290	CLOUDY
1137	28	25.10	5.09	1.56	4.71	-12		
1140	40	25.22	5.11	1.54	4.81	-12	95	clear
1143	48	25.20	5.12	1.54	4.86	-12		
1145	56	25.21	5.13	1.53	4.91	-12	60	clear
1148	68	25.27	5.14	1.52	4.75	-12	40	clear
1150	76	25.29	5.15	1.52	4.78	-12		
1153	88	25.27	5.15	1.51	4.93	-12	26	clear
1157	100	25.26	5.16	1.50	5.22	-12	23	"
1158	started sampling							
1206	Finished sampling							

Average Purge Rate: 4 gal/min Total Time: 36 min

Laboratory Analysis: VOCs (X) Metals Filtered (X) Nitrite(ate) (X)
Perchlorate (X) General chemistry (X) Gross Alpha/Beta (X)

Total number of bottles: 7

Comments: WL Final: 218.96

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 03-DGMW65XA
PROJECT NAME: MCAS El Toro	SAMPLE ID: 03-DGMW65XA-114
DATE: 9/17/01	SAMPLED BY: Dave Lange
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0951

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" ( ) 5" (X) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 121

Well Total Depth — Original DTW — 4" = 0.66, 5" = 0.93, 6" = 1.5 — Casing Volume — Purge Volume

248 - 212.44 = 235.56 x 0.93 = 33.07 X 3 casg vol. = 99.21

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0954	12	24.47	4.68	1.27	3.67	-4		
0956	20	24.66	4.75	1.27	3.35	-5	160	Cloudy
0959	32	25.10	4.83	1.29	3.20	-5		
1001	40	25.19	4.87	1.31	3.24	-5	80	clear
1004	52	25.26	4.91	1.32	3.30	-6		
1006	60	25.30	4.93	1.34	3.39	-6	50	clear
1009	72	25.33	4.96	1.35	3.53	-6		
1011	80	25.34	4.97	1.35	3.62	-6	28	clear
1014	92	25.38	4.99	1.36	3.71	-6	19	clear
1016	100	25.38	5.01	1.37	3.78	-6	17	
1020	116	Took Samples						
1025	121	END SAMPLING						

Average Purge Rate: 4 gal/min Total Time: ~~25 min~~. 34 MIN

Laboratory Analysis: VOCs (X) 2 Metals Filtered (X)
Perchlorate (X) & General chemistry (X) Gross Alpha/Beta (X)

Total number of bottles: 7

Comments: end water level 212.51

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 03-UGMW26
PROJECT NAME: MCAS El Toro	SAMPLE ID: 03-UGMW26-114
DATE: 9-20-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 14:07

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 250 | Purge Rate: 100 mL/min | Minimum Purge Volume: 2750 (28 min)

Total Volume Removed: 3500 mL | Pressure: 114 | Refill: 17 | Discharge: 13

Initial Groundwater Level: 19.36 | changed: 40 | 20

Final Groundwater Level: 19.25

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
14:15	800	26.43	7.30	1.289	6.08	198	—	SWL 19.24
14:20	1300	25.69	7.25	1.270	5.60	197	20.8	SWL 19.26 Clear
14:25	1800	25.63	7.25	1.269	6.30	194	19.6	SWL 19.23 Clear
14:30	2300	25.70	7.24	1.270	6.54	193	13.6	SWL 19.23 Clear
14:35	2800	25.67	7.23	1.268	6.38	192	14.3	SWL 19.25 Clear
14:38	3100	25.71	7.22	1.266	6.42	191	18.1	SWL 19.25 Clear
14:41	3400	25.68	7.23	1.262	6.51	189	12.2	SWL 19.25 Clear
14:42	SAMPLE TIME							

Total Volume Purged: 3500 mL | Total Time: 35 minutes

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 5

Comments: Changed refill discharge to get 100 ml/min

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 03UGMW26A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 03UGMW26A - 114
DATE: 9/20/01	SAMPLED BY: Dave Lange
EQUIPMENT DECONTAMINATED: (YES)	PURGE START TIME: 1536

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" ( ) 5" (X) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 132 gal.

Well Total Depth — Original DTW — ~~4"=0.66~~ 5"=0.93 ~~6"=1.5~~ Casing Volume — Purge Volume

240 - 207.40 = 32.60 x .93 = 30.32 X 3 casg vol. = 90.9

Initial Groundwater Level:	Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1539	12	24.65	5.16	0.928	8.07	-16	350	very cloudy
1541	20	24.75	5.12	0.970	6.18	-14		
1543	28	24.80	5.13	0.977	5.81	-13	300	"
1545	36	24.82	5.13	1.48	5.67	-12		
1547	44	24.81	5.14	1.51	5.57	-12	180	cloudy
1549	52	24.83	5.12	1.52	5.70	-12		
1551	60	24.82	5.15	1.51	5.75	-12	110	Cloudy
1553	68	24.80	5.16	1.55	5.72	-12		
1556	80	24.83	5.16	1.54	5.50	-12	70	less cloudy
1559	92	24.81	5.17	1.53	5.64	-11	90	cloudy
1600		took samples						
1609	132	end	11					

92
40
132

Average Purge Rate: 4 gal/min	Total Time:

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 5

Comments: Final Depth = 207.27

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 04-DBMW40
PROJECT NAME: MCAS El Toro	SAMPLE ID: 04-DBMW40-114
DATE: 9/20/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1130

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 237 | Purge Rate: 100 mL/min | Minimum Purge Volume: 2650 (27 N)

Total Volume Removed: 3200 mL | Pressure: 114 | Refill: 16.9 | Discharge: 13.1

Initial Groundwater Level: 23.19

Final Groundwater Level: 23.02

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1140	1000	26.42	7.54	1.301	6.13	178	—	SWL 23.09 Clear
1150	2000	25.64	7.38	1.344	4.21	178	13.8	SWL 23.02 Clear
1155	2500	25.74	7.37	1.347	2.46	176	18.4	SWL 23.01 Clear
1158	2800	25.88	7.37	1.345	2.65	170	19.8	SWL 23.02 Clear
1201	3100	25.89	7.37	1.344	2.71	169	24.1	SWL 23.02 Clear
1202	3200	Sample Time						

Total Volume Purged: 3200 | Total Time: 32 minutes

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 5

Comments:

QC Sample Collected? Yes ( ) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 04_DGMW66
PROJECT NAME: MCAS El Toro	SAMPLE ID: 04-DGMW66-114/-314
DATE: 9/20/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1005

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 267	Purge Rate: 100 mL/min	Minimum Purge Volume: 3790 (38min)

Total Volume Removed: 5000 mL	Pressure: 116	Refill: 15	Discharge: 15	
Initial Groundwater Level: 22.86	adj 8	40	20	
Final Groundwater Level: 22.75				

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1015	1000	22.54	7.16	2.161	5.82	357	—	SWL 22.74 clear
1025	2000	23.16	7.21	1.282	7.27	300	14.7	SWL 22.75 clear
1035	3000	23.52	7.23	1.253	7.80	255	18.9	SWL 22.74 clear
1040	3500	23.82	7.26	1.255	7.34	202	17.6	SWL 22.74 clear
1043	3800	24.67	7.29	1.255	7.31	176	16.4	SWL 22.74 clear
1046	4100	24.80	7.29	1.257	7.29	175	16.1	SWL 22.75 clear
1049	4400	24.86	7.28	1.254	7.29	173	15.8	SWL 22.75 clear
1050	4500	SAMPLE 04-DGMW-114						
1055	5000	Dup Sample 04-DGMW-314						

Total Volume Purged: 5000 mL	Total Time: 50 min

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 10 total

Comments: increased refill 40 + discharg 20 to get 100 mL/min

QC Sample Collected? Yes (X) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 04-DGMW66A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 04-DGMW66A-114
DATE: 9/20/01	SAMPLED BY: David Lange
EQUIPMENT DECONTAMINATED: (YES)	PURGE START TIME: 0942

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" ( ) 5" (X) 6" ( )

Initial Meter Reading: —	Final Meter Reading: —	Total Volume Removed: 152 gal

Well Total Depth	Original DTW	4"=0.66 / 5"=0.93 / 6"=1.5	Casing Volume	Purge Volume
235 -	200.47 =	34.53 x	0.93 = 32.11	X 3 casg vol. = 96.33

Initial Groundwater Level:	Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0945	12	24.18	4.75	1.70	1.47	-19	50	Part cloudy
0948	24	24.90	4.87	1.76	1.25	-23		
0950	32	25.04	4.91	1.78	1.21	-24	95	Cloudy
0953	44	25.16	4.95	1.81	1.19	-25		
0955	52	25.24	4.97	1.83	1.22	-25		
0958	64	25.27	4.98	1.83	1.18	-25	error	
1000	72	25.30	4.99	1.84	1.16	-26		
1003	84	25.33	5.01	1.83	1.15	-26	error	Cloudy
1005	92	25.69	5.03	1.86	1.13	-26		
1008	104	25.66	5.04	1.86	1.14	-26	850	Cloudy
1010	Started sampling							
1020	END sampling							

Average Purge Rate: 4 gal/min Total Time: 35 min

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 5

Comments:

17
4
48
104
152

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 04_UGMW63
PROJECT NAME: MCAS El Toro	SAMPLE ID: 04_UGMW63-114
DATE: 9-20-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 12:25

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: GED

Pump Intake Depth: 252 | Purge Rate: 100 mL/min | Minimum Purge Volume: 290 (28)

Total Volume Removed: 3500 mL | Pressure: 116 | Refill: 17 | Discharge: 13

Initial Groundwater Level: 22.73 *adj | 43 | 17

Final Groundwater Level: 22.64

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
12:35	1000	29.41	7.43	1.365	3.63	171	—	SWL 22.60 clear
12:45	2000	27.82	7.16	1.649	4.04	169	260	*cloudy 22.61 SWL
1250	2500	27.37	7.11	1.670	3.09	171	68.8	Clear 22.65 SWL
1253	2800	27.48	7.11	1.675	3.14	173	62.1	Clear 22.64 SWL
1256	3100	27.58	7.10	1.680	3.09	174	58.4	Clear 22.64 SWL
1259	3400	27.54	7.10	1.682	3.04	174	55.1	Clear 22.64 SWL
1300	3500	SAMPLE		TIME				

Total Volume Purged: 3500 mL | Total Time: 3500

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 5

Comments: *adjusted refill/discharge to get 100 mL/min w/ less draw down

QC Sample Collected? Yes ( ) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 05_DBMW41A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 05_DBMW41A-114
DATE: 9/19/01	SAMPLED BY: DAVE LANGE
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1240

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 110

Well Total Depth — Original DTW — 4" = 0.66, 5" = 0.93, 6" = 1.5 — Casing Volume — Purge Volume

190 - 157.15 = 32.85 x 0.66 = 21.68 X 3 casg vol. = 65.04

Initial Groundwater Level:	Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1243	9	23.76	5.16	0.949	7.68	-23	26	Clear
1245	15	22.50	5.00	0.893	5.02	-20		
1247	21	22.60	4.99	0.896	4.36	-18	27	"
1249	27	22.70	5.00	0.897	4.03	-18		
1251	33	22.72	5.01	0.898	3.98	-18	25	"
1253	39	22.71	5.02	0.897	3.99	-18		
1255	45	22.73	5.01	0.897	4.27	-18	9.7	"
1257	51	22.72	5.01	0.898	4.02	-18		
1300	60	22.72	5.01	0.899	3.89	-17	7.2	"
1302	66	22.73	5.02	0.897	3.82	-18		
1304	took samples							
1310	end samples							

Average Purge Rate: 3 gal/min Total Time: 27 min

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 5

Comments: Final depth = 157.19

QC Sample Collected? Yes ( ) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 05_DBMW67A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 05_DBMW67A-114
DATE: 9-19-01	SAMPLED BY: DAVE LANGE
EQUIPMENT DECONTAMINATED: (YES)	PURGE START TIME: 1422

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed:

Well Total Depth — Original DTW — (4" = 0.66, 5" = 0.93, 6" = 1.5) Casing Volume — Purge Volume

195 - 160.53 = 34.47 x 0.66 = 22.75 X 3 casg vol. = 68.25

Initial Groundwater Level:	Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1425	9	24.52	5.18	0.95	7.81	-26	20	Clear
1427	15	22.76	5.05	0.911	5.63	-23		
1429	21	22.82	5.03	0.914	5.07	-20	110	Cloudy
1431	27	22.80	5.03	0.919	~~5.03~~ 4.89	-20		
1434	33	22.76	5.03	0.923	4.71	-20	85	"
1436	39	22.72	5.03	0.925	4.68	-20		
1438	45	22.73	5.03	0.926	4.73	-19	110	"
1440	51	22.76	5.03	0.926	4.63	-20		
1442	60	22.77	5.04	0.927	4.54	-20		
1446	69	22.76	5.04	0.927	4.53	-20	170	"
1448		took Samples						
1456		Ended Sampling						

Average Purge Rate: 3 gal/min Total Time: 31 MIN

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 5

Comments: Final Depth = 160.80

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

DGL

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 05DGMW68A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 05DGMW68A - 114
DATE: 9-20-01	SAMPLED BY: David Lange
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1228

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 99

Well Total Depth — Original DTW — 4"=0.66, 5"=0.93, 6"=1.5 — Casing Volume — Purge Volume

192 - 160.85 = 31.15 x 0.66 = 20.56 X 3 casg vol. = 61.68

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1231	9	28.47	5.28	1.54	5.55	-19	22	Part cloudy
1233	15	23.45	5.04	1.37	4.81	-18		
1235	21	23.48	5.01	1.36	4.24	-16	17	"
1237	27	23.45	5.02	1.36	4.12	-15		
1239	33	23.49	5.02	1.37	4.08	-15	5.1	clear
1241	39	23.50	5.02	1.37	4.12	-15		
1243	45	23.54	5.03	1.37	3.97	-15	5.5	"
1245	51	23.55	5.03	1.37	3.96	-15		
1247	57	23.56	5.03	1.37	3.92	-15		
1249	63	23.59	5.04	1.37	3.92	-14	6.4	"
1250	took Samples							
1300	End Sampling							

Average Purge Rate: 3 gal/min Total Time: 29 min

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 5

Comments: Final Depth = 160.92

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 05UGMW-27A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 05UGMW27A-114
DATE: 9-24-01	SAMPLED BY: Dave Lange
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 15:45

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 117 gal.

Well Total Depth — Original DTW — 4"=0.66 5"=0.93 6"=1.5 Casing Volume — Purge Volume

200 - 163.63 = 36.37 x = 24.0 X 3 casg vol. = 72

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1552	21	23.23	5.20	0.903	6.77	-16	48	Little Cloudy
1555	30	23.13	5.21	0.881	5.40	-15		
1558	39	23.09	5.22	0.883	5.18	-15	34	"
1600	45	23.07	5.23	0.903	4.88	-14		
1603	54	23.02	5.24	0.906	4.82	-14	27	"
1606	63	22.96	5.25	0.907	4.69	-14		
1608	69	22.98	5.24	0.909	4.71	-14	19	Clear
1610	75	22.94	5.25	0.909	4.69	-14		
1611		fill Samples						
1624		END Sampling						

14
3
42
75
117.

Average Purge Rate: 3 gal/min Total Time:

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate (X) General chemistry ( ) Gross Alpha/Beta (X)

Total number of bottles: 10

Comments: Final Depth = 163.83

QC Sample Collected? Yes (X) No ( ) If YES, then type of sample and sample ID: 05UGMW27A-314

1. VOC's (2 bottles)
2. Metals
3. Perchlorate
4. Gross A/B

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 05NEW01
PROJECT NAME: MCAS El Toro	SAMPLE ID: 05NEW01
DATE: 9/19/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1255

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT:

Pump Intake Depth: 183	Purge Rate: 100 ml/min		Minimum Purge Volume: 2110 (20min)
Total Volume Removed: 2500mL	Pressure: ~~13.3~~ 8.9	Refill: ~~16.7~~ 13.3	Discharge: 6.7
Initial Groundwater Level: 21.77	adj: 80	80.0	10.0
Final Groundwater Level: 21.60			

Actual Time	Volume Purged mL	Temperature °C	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1300	500	24.83	7.03	1.353	7.05	172	—	SWL 21.65
1305	1000	24.96	7.06	1.354	7.00	168	127	SWL 21.64
1310	1500	25.48	6.90	1.356	6.88	157	119	SWL 21.67
1313	1800	25.92	7.01	1.356	6.70	149	155	SWL 21.60
1316	2100	26.01	7.04	1.355	6.70	146	147	SWL 21.60
1319	2400	26.05	7.04	1.354	6.75	144	144	SWL 21.60
1320	SAMPLE TIME							

Total Volume Purged: 2500mL Total Time: 25 minutes

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 7

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 16-MW1
PROJECT NAME: MCAS El Toro	SAMPLE ID: 16-MW1-114/-314
DATE: 9/24/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 16:30

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 166.5 | Purge Rate: 100 ml/min | Minimum Purge Volume: 1985 (20)

Total Volume Removed: 2200 mL | Pressure: 73 | Refill: 15 | Discharge: 15

Initial Groundwater Level: 8.58 | 21 | 9

Final Groundwater Level: 8.47 clear

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
16:35	500mL	28.62	6.86	2.255	4.02	173	=	SWL 8.49 clear
16:40	1000	28.22	6.86	2.280	2.18	168	13.7	SWL 8.48 clear
16:43	1300	28.50	6.86	2.282	2.08	167	15.4	SWL 8.48 clear
16:46	1600	28.61	6.85	2.283	1.99	167	16.1	SWL 8.47 clear
16:49	1900	28.81	6.86	2.281	2.01	167	18.9	SWL 8.47 clear
16:50	SAMPLE TIME							
16:52	Duplicate Sample time							

Total Volume Purged: 2200 | Total Time: 22 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 4

Comments:

QC Sample Collected? Yes (X) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 16-MW3
PROJECT NAME: MCAS El Toro	SAMPLE ID: 16-MW3-114
DATE: 9-24-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 15:45

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 172.5 | Purge Rate: 100 ml/min | Minimum Purge Volume: 2042 (2 minutes)

Total Volume Removed: 2200 mL | Pressure: 105 | Refill: 15 | Discharge: 15

Initial Groundwater Level: 9.04 | adj: 8 | 47 | 13

Final Groundwater Level: 8.98

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1550	500	32.13	7.38	1.706	5.29	150	—	SWL 8.98
1555	1000	26.82	7.34	1.6888	6.106	134	30.7	SWL 8.99
1558	1300	26.20	7.35	1.681	5.54	139	36.4	SWL 8.98
1601	1600	26.66	7.32	1.678	5.54	143	39.1	SWL 8.98 Clear
1604	1900	26.71	7.34	1.676	5.54	143	41.1	SWL 8.98 Clear
1607	2100	26.74	7.33	1.675	5.61	144	40.0	SWL 8.98 Clear
1608	SAMPLE TIME							

Total Volume Purged: 2200 mL | Total Time: 22 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles:

Comments: to 8 ft less drawdown adj to 47 of Bolish

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 16MW5
PROJECT NAME: MCAS El Toro	SAMPLE ID: 16MW5-114
DATE: 9-20-01	SAMPLED BY: Dave Lange
EQUIPMENT DECONTAMINATED: (YES	PURGE START TIME: 1040

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 87 gal

Well Total Depth — Original DTW — (4"=0.66, 5"=0.93, 6"=1.5) Casing Volume — Purge Volume

190 - 156.4 = 33.60 x 0.66 = 22.18 X 3 casg vol. = 66.54

Initial Groundwater Level: | Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1044	12	24.24	4.83	0.929	3.89	-7	70	cloudy
1046	18	24.71	4.92	0.939	3.84	-8		
1048	24	24.80	4.96	0.945	3.84	-9	60	"
1050	30	24.90	5.00	0.99	3.94	-9		
1052	36	~~25.6~~ 24.94	5.01	1.53	4.02	-10	17	clear
1054	42	24.97	5.03	1.60	4.10	-10		
1056	48	25.01	5.05	1.64	4.11	-10	20	"
1058	54	25.01	5.06	1.70	4.19	-10		
1100	60	25.07	5.07	1.72	4.20	-10	20	"
1103	69	25.17	5.09	1.77	4.27	-10		
1105		took samples						
1109		END sampling						

69
18
87

Average Purge Rate: 3 gal/min | Total Time: 25 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Final Depth = 156.21

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 17-DGMW82
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 17-DGMW82-114
DATE: 9/26/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 15:55

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 245 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1350 (14 min) RC 9-20

Total Volume Removed: 2000 mL | Pressure: 115 | Refill: ~~20~~ 18 | Discharge: 12

Initial Groundwater Level: 24.73

Final Groundwater Level: 24.45

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1600	500 mL	26.80	7.40	1.165	5.21	163	—	SWL 24.49 clear
1605	1000	26.03	7.40	1.165	3.26	163	99.3	SWL 24.46 clear
1608	1300	25.78	7.39	1.165	2.91	162	78.6	SWL 24.46 clear
1611	1600	25.73	7.39	1.166	2.89	162	68.1	SWL 24.46 Clea
1614	1900	25.69	7.39	1.166	2.86	161	61.1	SWL 24.45 Clea
1615	Sample. HNO							

Total Volume Purged: 2000 mL | Total Time: 20 min

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 3

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 17NEW1
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 17NEW1-114
DATE: 9/20/01	SAMPLED BY: RClifford
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 15:07

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: (GED)

Pump Intake Depth: 20.6c | Purge Rate: 100 mL/min | Minimum Purge Volume: 2330 (24)

Total Volume Removed: ~~2560~~ 2800 | Pressure: 102 | Refill: ~~20~~ 20 | Discharge: 16

Initial Groundwater Level: 20.90

Final Groundwater Level: 20.66

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1515	800mL	24.70	8.04	.6375	7.25	171	—	SWL 20.62
1520	1300	24.14	7.46	.7007	6.44	180	62.5	SWL 20.66 clear
1525	1800	24.19	7.31	.8774	5.63	179	81.9	SWL 20.65 clear
1530	2100	24.22	7.29	1.0016	5.43	171	93.1	SWL 20.66 clear
1533	2400	24.31	7.29	1.119	5.29	169	98.6	SWL 20.66 clear
1536	2700	24.33	7.29	1.118	4.99	159	96.1	SWL 20.66 clear
1537	Sample TIME							

Total Volume Purged: 2800 | Total Time: 28 min.

Laboratory Analysis: VOCs (X) Metals Filtered (X)
Perchlorate ( ) General chemistry (X) Gross Alpha/Beta ( )

Total number of bottles: 5

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

Westbay Instruments Inc.

Groundwater Sampling
Field Data Sheet

Project: 18BGMP08
Monitoring Well No: 18BGMP08
Sampling Zone No(s): E

Date: 9-13-01
Start Time: 1345
End Time: 1440
Technicians: MB

Initial 43.72 41.23

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sample Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	locate port (✓) arm out (✓) land probe (✓)	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP	
E	1	✓	✓	✓	✓	✓	✓	✓	27.33	✓	27.60	✓	27.46	✓	✓	27.28	1425 sample

Additional Comments: (pH, Turbidity, S.C., etc.)

pH 7.7 SC 2.77 DO 6.48 temp 27.67 orp = -93 turb 4.75

Westbay Instruments Inc.

Groundwater Sampling
Field Data Sheet

Project: MCAS El Toro GW Monitoring Rd 14
Monitoring Well No: 18 BG MP08
Sampling Zone No(s): C, D, E, + F

Date: 9/13/01
Start Time: 0930
End Time: 1240
Technicians: MB

Initial water = 7.75 F = 5.61 E = 4.56 D = 3.75 C = 2.42

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sample Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	locate port (✓) arm out (✓) land probe (✓)	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP	
C	1	✓	✓	✓	✓	✓	✓	✓	340.62	✓	301.72	✓	301.71	✓	✓	341.76	1025 Sample
														Field blank			1043 Sample
									258.70		224.75			ER			1046 Sample
D	1	✓	✓	✓	✓	✓	✓	✓	~~261.94~~	✓	~~373.04~~	✓	224.75	✓	✓	258.94	1116 Sample
									199.85								
E	1	✓	✓	✓	✓	✓	✓	✓	~~202.07~~	✓	182.94	✓	182.87	✓	✓	199.79	1152 Sample
F	1	✓	✓	✓	✓	✓	✓	✓	108.34	✓	113.84	✓	113.82	✓	✓	108.41	1214

Additional Comments: (pH, Turbidity, S.C., etc.)

F	pH	7.4	turb	1.76	SC	1.77	DO	6.92	Orp	44	temp	27.29
E	pH	8.1	turb	2.46	SC	0.866	DO	10.81	orp	-216	temp	26.94
D	pH	7.9	turb	4.79	SC	0.765	DO	9.71	orp	-212	temp	25.47
C	pH	7.4	turb	2.41	SC	0.664	DO	12.52	orp	-189	temp	25.23

Westbay Instruments Inc.

Groundwater Sampling

Field Data Sheet

Project: MCAS El Toro GW Monitoring Rel 14
Monitoring Well No: 18MCAS01
Sampling Zone No(s): 3 & 5

Date: 9/24/01
Start Time: 1530
End Time: 1635
Technicians: MB

GW = 52.07 5 = 48.55 3 = 49.26

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sample Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	locate port (✓) arm out (✓) land probe (✓)	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP	
5	1	✓	✓	✓	✓	✓	✓	✓	138.64	✓	129.64	✓	125.66	✓	✓	138.66	1355
3	1	✓	✓	✓	✓	✓	✓	✓	86.37	✓	89.88	✓	87.89	✓	✓	86.39	1618

Additional Comments: (pH, Turbidity, S.C., etc.)

5. pH = 7.5 SC = 1.29 DO = 9.44 temp = 21.21 orp = 136 turb = 2.11

3 pH = 7.4 SC = 1.70 DO = 9.63 temp = 25.31 orp = 148 turb = 4.97

Westbay Instruments Inc.

Page 1 of ___

Groundwater Sampling
Field Data Sheet

Project: MCAS El Toro GW Monitoring Rd 14
Monitoring Well No: 18MCAS03
Sampling Zone No(s): 3 + 5

Date: 9/12/01
Start Time: ___
End Time: ___
Technicians: MB

Water Level initial: 128.22 5 = 121.81 3 = 122.76

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sample Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	locate port (✓) arm out (✓) land probe (✓)	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP	
5	1	✓	✓	✓	✓	✓	✓	✓	124HD	✓	149.32	✓	149.21	✓	✓	124.46	Temp 0945 9.1 Temp 0947 9.3
										MB	~~84.00~~	✓					
3	1	✓	✓	✓	✓	✓	✓	✓	50.49	✓	84.00	✓	83.87	✓	✓	50.51	1020 bubbles

Additional Comments: (pH, Turbidity, S.C., etc.)

5= pH 7.6 turb 1.9 SC. 1.51 DO 10.81 ORP 144 temp 25.41

3 pH 7.6 turb 2.18 SC 1.88 DO 8.46 ORP 143 temp 24.79

Westbay Instruments Inc.

Groundwater Sampling
Field Data Sheet

Project: MCAS El Toro
Monitoring Well No: 19MCAS03
Sampling Zone No(s): 2 + 3

Date: 9-11-01
Start Time: 0945
End Time:
Technicians: MB, DC

initial water 69.32 Zone 3 67.99 Zone 68.75

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sample Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	locate port (✓) arm out (✓) land probe (✓)	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP	
3	1	✓	✓	✓	✓	✓	✓	✓	83.08	✓	80.87	✓	80.87 ~~80.85~~	✓	✓	82.86	10.75
																	11.0
2	1	✓	✓	✓	✓	✓	✓	✓	56.86	✓	56.64	✓	56.64	✓	✓	56.88	

Additional Comments: (pH, Turbidity, S.C., etc.)

Zone 3 { Turbidity: 10.06 S.C 1.52 DO. 9.18 Temp 23.99 ORP 192
pH 6.6

Zone 2 pH=6.8 Cond. 2.11 DO 7.92 Temp 23.33 ORP 179 Turb=28.8

Westbay Instruments Inc.

Groundwater Sampling
Field Data Sheet

Project: MCASBITBO GW Monitoring Rd 4
Monitoring Well No: 18MCAS07
Sampling Zone No(s): 4 & 2

Date: 9/24/01
Start Time: 1340
End Time: 1505
Technicians: LMB

GW 147.31 4 = 143.75 2 = 145

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sample Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	locate port (✓) arm out (✓) land probe (✓)	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP	
4	1	✓	✓	✓	✓	✓	✓	✓	143.93	✓	158.49	✓	158.47	✓	✓	143.85	1423
2	1	✓	✓	✓	✓	✓	✓	✓	35.23	✓	89.04	✓	89.05	✓	✓	35.22	1445

Additional Comments: (pH, Turbidity, S.C., etc.)

4 = pH = 6.5 cond = 1.10 temp = 27.00 orp = 127 turb = 2.46 DO = 10.25

2 = pH = 6.9 cond = 1.02 temp = 25.92 orp = 106 turb = 1.68 DO = 8.06

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18_BGMW04A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18_BGMW04A-114
DATE: 9/19/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1410

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 296 | Purge Rate: 100mL/min | Minimum Purge Volume: 3179 (32 min)

Total Volume Removed: 3600mL | Pressure: 138 | Refill: 13 | Discharge: 17

Initial Groundwater Level: 12.42 change: 130 35 25

Final Groundwater Level: 12.21

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1420	1000	28.25	7.20	1.285	6.22	174	—	SWL 12.24
1425	1500	25.37	7.06	1.087	5.68	180	23.1	SWL 12.21
1430	2000	25.35	7.03	1.079	6.39	183	17.8	SWL 12.20
1435	2500	25.25	7.02	1.065	5.49	188	26.1	SWL 12.19
1439	2900	25.09	7.02	1.066	6.04	189	24.6	SWL 12.20
1442	3200	25.04	7.01	1.067	6.08	187	35.4	SWL 12.21
1445	3500	24.98	7.01	1.069	6.01	186	33.4	SWL 12.21
1446	Sample time							

Total Volume Purged: 3600mL | Total Time: 36 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Changed settings to get 100 ml/min w/less draw down of water level

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18-B6MW04B
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-B6MW04-114
DATE: 9/19/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 14:55

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 200	Purge Rate: 100 mL/min	Minimum Purge Volume: 2267

Total Volume Removed: | Pressure: 100 | Refill: 13 | Discharge: 7

Initial Groundwater Level: 19.16 adj: 100 19.5 10.5

Final Groundwater Level: 18.97

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1500	500mL	27.08	7.09	1.105	6.05	183	—	SWL 18.91
1505	1000mL	25.70	7.08	1.203	7.38	186	27.6	SWL 18.99
1510	1500mL	24.62	7.06	1.214	8.31	190	34.2	SWL 18.96
1515	2000mL	24.53	7.06	1.207	8.89	185	36.4	SWL 18.97
1518	2300mL	24.55	7.06	1.203	8.79	184	52.1	SWL 18.97
1521	2600mL	24.49	7.06	1.204	8.80	183	54.6	SWL 18.97
1522	Sample time							

Total Volume Purged: | Total Time:

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles:

Comments: adjusted pressure/refill/discharge to get 100 mL/min, w/no drawdown

QC Sample Collected? Yes ( ) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18_BGMW05C
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18_BGMW05C-114
DATE: 9/19/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1105

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 235 | Purge Rate: 100 mL/min | Minimum Purge Volume: 2590 (26 min)

Total Volume Removed: 3000 mL | Pressure: 110 | Refill: 19 | Discharge: 11

Initial Groundwater Level: 20.89 | adj. refill: 18 | discharge: 12

Final Groundwater Level: 20.76

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1110	500	24.14	6.89	1.285	5.25	156	—	SWL 20.86
1115	1000	24.46	6.96	1.271	5.45	154	—	SWL 20.79
1120	1500	25.24	7.33	1.205	6.28	140	23.1	SWL 20.79 clear
1125	2000	24.98	7.31	1.255	6.75	146	27.4	SWL 20.78 clear
1128	2300	24.95	7.29	1.264	6.52	155	22.1	SWL 20.76 clear
1131	2600	24.93	7.29	1.267	6.55	156	24.3	SWL 20.76 clear
1134	2900	24.91	7.28	1.264	6.49	158	29.4	SWL 20.76 clear
1135	SAMPLE TIME							

Total Volume Purged: 3000 | Total Time: 30 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: adj. refill discharge to get 100 ml/min

QC Sample Collected? Yes ( ) No (✓) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 18-BGMW05D
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 18-BGMW05D-114
DATE: 9/19/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 1035

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 113	Purge Rate: 100mL/min	Minimum Purge Volume: 1431 (15min)

Total Volume Removed: 2000 mL | Pressure: 55 | Refill: 17 | Discharge: 3

Initial Groundwater Level: 21.07

Final Groundwater Level: 21.06

Actual Time	Volume Purged mL	Temperature °C	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1040	500	24.13	7.05	1.167	3.89	210	—	SWL 21.06 clear
1045	1000	23.86	6.84	1.267	5.92	215	25.1	SWL 21.06 clear
1048	1300	23.69	6.87	1.273	6.16	173	24.8	SWL 21.06 clear
1051	1600	23.66	6.87	1.274	6.08	169	23.9	SWL 21.05 clear
1054	1900	23.65	6.87	1.271	6.02	159	24.9	SWL 21.06 clear
1055	SAMPLE TIME							

Total Volume Purged: 2000 | Total Time: 20 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18-BGMW101A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-BGMW101A-114
DATE: 9/19/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1550

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT:

Pump Intake Depth: 86.5 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1195

Total Volume Removed: 1600 mL | Pressure: 48 | Refill: 17.5 | Discharge: 20.5

Initial Groundwater Level: 18.53

Final Groundwater Level: 18.46

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1555	500	25.13	7.42	1.620	6.37	176	—	SWL 18.48 clear
1559	900	24.69	7.31	1.695	5.60	178	66.1	SWL 18.46 clear
1602	1200	24.66	7.28	1.731	4.99	185	53.6	SWL 18.46 clear
1605	1500	24.64	7.27	1.734	4.97	182	58.2	SWL 18.46 clear
1606	SAMPLE TIME							

Total Volume Purged: 1600 mL | Total Time: 16 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 18-BGMW16
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 18-BGMW16-114
DATE: 9-24-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 14:45

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: ~~420~~ 243 ft | Purge Rate: 100 ml/min | Minimum Purge Volume: 2675 (27 min)

Total Volume Removed: 3000 ml | Pressure: 110 | Refill: 15 | Discharge: 15

Initial Groundwater Level: 23.97

Final Groundwater Level: 23.90

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
14:55	1000	25.86	7.32	1.556	6.68	161	—	23.90 sul clear
15:05	2000	26.02	7.16	1.662	6.30	163	18.8	23.91 sul clear
15:08	2300	26.06	7.19	1.697	5.95	159	13.7	23.90 sul clear
15:11	2600	26.11	7.17	1.698	5.8	159	9.91	23.90 sul clear
15:14	2900	26.13	7.19	1.702	5.94	159	9.89	23.90 sul clear
15:15	SAMPLE TIME							

Total Volume Purged: 3000 ml | Total Time: 30 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry (X) Gross Alpha/Beta ( )

Total number of bottles: 4

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18-BGMW_18A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-BGMW_18A-114
DATE: 9/17/01	SAMPLED BY: DAVE LANGE
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1415

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading: —	Final Meter Reading: —	Total Volume Removed: 52 gal

Well Total Depth — Original DTW — 4" =0.66 / ~~5" =0.93~~ / 6" =1.5 Casing Volume — Purge Volume

154 - 123.7 = 30.3 x = 19.998 X 3 casg vol. = 60.0 gal

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1417	6	25.11	5.19	1.93	2.5	-20	140	Little cloudy
1419	12	24.43	5.14	1.91	2.08	-19		
1421	18	24.71	5.15	1.92	1.99	-18	360	cloudy
1423	24	24.86	5.14	1.96	2.70	-17		
1425	30	25.09	5.15	1.95	3.3	-17		
1427	36	25.43	5.18	4.34	5.13	-17	120	Partial cloud.
~~1429~~	~~42~~							
~~1431~~	~~48~~	WAITED	FOR	WELL TO	Recover			
~~1433~~	~~54~~							
~~1435~~	~~60~~							
1459		took Samples @ < 1 gal/min						
1515		Sampler Complete.						

A 1 gal/min

6/129

Average Purge Rate: 3 gal/min Total Time:

Laboratory Analysis: VOCs (X) Metals Filtered ( ) Nitrite (ATB) (X)
Perchlorate ( ) General chemistry (X) Gross Alpha/Beta ( )

Total number of bottles: 4

Comments: 7th-10th Sample were taken at a rate of 1 g/min (changed from 3 gal min. Determined we had reached Sample water, waited for well to recover then took samples.* Final Depth 136.2

*Well Recovered to 134.78.

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18-BGMW19D
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-BGMW19D-114 / -314
DATE: 9/24/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 13:08

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: (34)

Pump Intake Depth: 160 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1887 (19)

Total Volume Removed: 2700 | Pressure: 80 | Refill: 14 | Discharge: 6

Initial Groundwater Level: 21.52

Final Groundwater Level: 21.51

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1315	700mL	29.51	7.27	2.105	5.94	147	—	SWL 21.52
1320	1200mL	29.55	7.18	2.684	5.36	168	8.63	SWL 21.51 clear
1323	1700mL	28.60	6.00	2.593	5.98	208	11.31	SWL 21.51 clear
1326	2000mL	28.61	5.99	2.559	6.08	215	14.1	SWL 21.51 clear
1329	2300mL	28.60	5.98	2.552	6.09	218	15.4	SWL 21.51 clear
1330	SAMPLE							
1332	Duplicate							

Total Volume Purged: 2700 | Total Time: 27 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 4

Comments:

QC Sample Collected? Yes (X) No ( ) If YES, then type of sample and sample ID: 18-BGMW19D-314

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18MCAS04
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18MCAS04-114
DATE: 9-24-01	SAMPLED BY: Dave Lange
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1220

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 525 gal.

Well Total Depth — Original DTW — 4"=0.66, 5"=0.93, 6"=1.5 — Casing Volume — Purge Volume

275 - 28.41 = 246.60 x 0.66 = 162.75 X 3 casg vol. = 488.2

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1230	50	21.82	5.32	0.996	4.41	-38		
1240	100	22.24	5.51	1.57	1.43	-46	50	Partially cloudy
1250	150	22.57	5.13	1.80	1.58	-25		
1300	200	22.73	5.10	1.83	2.29	-22	24	"
1310	250	22.75	5.09	1.85	2.60	-21		
1320	300	23.02	5.10	1.87	2.63	-20	14	clear
1330	350	23.14	5.10	1.87	2.66	-20		
1340	400	23.23	5.11	1.88	2.69	-19		
1350	450	22.98	5.10	1.87	2.71	-18	9.6	"
1400	500	22.90	5.10	1.86	2.70	-17	14	"
1401		took samples						
1405	525	end sampling						

Average Purge Rate: 5 gal/min Total Time: 1 hr. 35 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: FD= 28.84

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18MCAS06
PROJECT NAME: MCAS El Toro	SAMPLE ID: MCAS06-114
DATE: 9/24/01	SAMPLED BY: Dave Lange
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: ~~09~~ 0902

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 545 gal.

Well Total Depth	Original DTW		4" =0.66 5" =0.93 6" =1.5	Casing Volume		Purge Volume
286	- 24.1	= 261.90	x .66	= 172.85	X 3 casg vol.	= 518.56

Initial Groundwater Level:	Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0907	25	21.60	4.67	0.70	1.51	-6	6.3	Clear
0917	75	22.37	5.0	0.83	1.09	-17		
0927	125	22.60	4.96	0.88	1.24	-13	4.6	"
0937	175	22.64	5.01	0.88	1.21	-14		
0947	225	22.74	5.03	0.88	1.18	-14	4.0	"
0957	275	22.78	5.05	0.88	1.16	-14		
1007	325	22.84	5.06	0.88	1.17	-14	4.4	"
1020	390	22.92	5.07	0.891	1.14	-15		
1033	455	22.98	5.07	0.892	1.16	-15	3.0	"
1046	520	23.02	5.09	0.892	1.15	-15		
1047		took Samples						
1051	545	end sample						

Average Purge Rate: 5gal/min	Total Time: 1 hr. 44min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles:

Comments: 0845 took equipment Rinsate Sample
FD- 24.38

QC Sample Collected? Yes (X) No ( ) If YES, then type of sample and sample ID: 18MCAS06-514 @ 0845

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 18MCAS03
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 18MCAS03_-114
DATE: 9/21/01	SAMPLED BY: Dave Lange
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0819

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (✓) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 690 g

Well Total Depth — Original DTW — 4" = 0.66 gals Casing Volume — 5" = 0.93 — 6" = 1.5 — Purge Volume

435 - 138.28 = 296.72 x .66 = 202.44 X 3 casg vol. = 607.3

Initial Groundwater Level:	Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0824	50 gal	23.12	5.0	1.80	1.34	-19	14	Clear
0830	110	23.86	5.24	1.84	1.06	-44		
0836	170	24.42	5.29	1.85	1.03	-54	3.3	"
0842	230	24.63	5.38	1.89	1.01	-52		
0848	290	24.93	5.43	1.91	0.99	-55	11	
0854	350	24.98	5.45	1.91	0.99	-59		
0900	410	25.19	5.47	1.92	0.96	-65	6.9	"
0906	470	25.29	5.49	1.92	0.96	-73		
0912	530	25.28	5.49	1.92	0.95	-82	10	"
0920	610	25.41	5.51	1.92	0.93	-104	6.8	
0922		Took Samples						
0928	690	END	Sampling					

Average Purge Rate: 10 gal/min — Total Time:

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Final Depth = 132.09

QC Sample Collected? Yes ( ) No (✓) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 18-MCAS09-
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 18_MCAS09-114
DATE: 9/18/07	SAMPLED BY: DAVE LANCE
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 1500

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 842

Well Total Depth — Original DTW — (4"=0.66, 5"=0.93, 6"=1.5) Casing Volume — Purge Volume

450 - 48.29 = 401.71 x 0.66 = 265.13 X 3 casg vol. = 795.39

Initial Groundwater Level: | Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1508	48	22.95	5.44	0.378	2.42	-45	7	Clear
1521	126	23.67	5.63	0.371	1.22	-52		
~~1537~~	~~204~~							
1541	246	24.53	5.71	0.370	1.06	-57	1.4	Clear
1601	360	24.93	5.23	0.623	1.02	-44		
1621	480	25.09	5.23	0.632	0.98	-43	3.3	"
1641	600	25.19	5.23	0.633	0.95	-43		
1701	720	25.27	5.21	0.635	1.63	-40	0.9	Clear
1714	800	25.32	5.13	0.631	0.95	-41		
1719	took Samples							
1721	Finished sampling							

Average Purge Rate: 6 gal/min | Total Time: 2 hrs 13 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18MCAS10
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18MCAS10-114
DATE: 9-21-01	SAMPLED BY: Dave Lange
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1214

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 714 g

Well Total Depth	Original DTW	4"=0.66 5"=0.93 6"=1.5 Casing Volume	Purge Volume
389 -	56.98 =	332.02 x =	219.13 X 3 casg vol. = 657.40

Initial Groundwater Level:	Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1219	30	22.43	5.30	0.499	2.55	-18	9.9	clear
1230	96	23.73	5.42	0.519	1.17	-30		
1241	162	24.27	5.10	0.977	1.07	-21	12	"
1252	228	24.71	5.13	0.914	1.03	-20		
1303	294	24.91	5.13	0.895	1.01	-20	13	
1314	360	25.12	5.15	0.876	1.01	-20		
1325	426	25.24	5.15	0.87	1.01	-20	7.6	"
1336	492	25.35	5.16	0.86	1.01	-20		
1349	570	25.39	5.16	0.86	1.00	-20	4.5	"
1405	666	25.45	5.17	0.86	0.98	-20		
1407		took	samples					
1413		finished	sampling					

666
48
714
5
16
16
78

Average Purge Rate: 6 gallons Total Time: 2 hr. 3 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Final depth 74.4

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 07-DBMW43
PROJECT NAME: MCAS El Toro	SAMPLE ID: 07-DBMW 43-114
DATE: 9/18/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 850

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT:

Pump Intake Depth: 170 | Purge Rate: 100 ml/min | Minimum Purge Volume: 1972 (20 min)

Total Volume Removed: 2500 ML | Pressure: 80 | Refill: 17 | Discharge: 3

Initial Groundwater Level: 21.29 | change 85 | 13.5 | 6.5

Final Groundwater Level: 20.91

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
855	500	20.67	7.33	0.100	6.30	222	—	Clear
900	1000	22.11	7.31	1.423	4.63	216	—	SWL 20.99 clear
905	1500	23.61	7.23	1.530	5.29	211	75.1	SWL 20.89 clear
908	1800	23.78	7.10	1.543	4.84	206	15	SWL 20.91 clear
911	2100	23.74	7.08	1.550	4.90	200	108	SWL 20.89 clear
914	2400	23.70	7.07	1.555	4.90	199	88.5	SWL 20.91 clear
915	Sample time							

Total Volume Purged: 2500 | Total Time: 25 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Changed pressure setting after first 5 minutes

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 07DBMW43A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 07DBMW43A-114
DATE: 9/17/01	SAMPLED BY: DAVE LANGE
EQUIPMENT DECONTAMINATED: (YES)	PURGE START TIME: 1600

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading: —	Final Meter Reading: —	Total Volume Removed: 105 gal

Well Total Depth — Original DTW — (4"=0.66) 5"=0.93 6"=1.5 Casing Volume — Purge Volume

146 - 107.1 = 38.9 x 0.66 = 25.67 X 3 casg vol. = 77.02

Initial Groundwater Level: — Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1605	15	24.54	5.28	0.833	6.48	-17	450	Cloudy
1608	24	24.71	5.29	0.842	5.18	-16		
1611	33	25.35	5.32	0.893	4.60	-16	160	Partial cloudy
1614	42	25.99	5.35	0.920	4.37	-17		
1616	48	26.36	5.38	0.935	4.17	-18	60	Partially Cloudy
1618	52	26.46	5.39	0.949	4.02	-18		
1620	58	26.58	5.41	0.956	3.83	-19	40	Part Clear
1623	67	26.63	5.42	0.974	3.63	-19		
1625	72	26.65	5.43	0.98	3.45	-19	20	Clear
1628	81	26.65	5.43	1.56	3.23	-19	13	Clear
1630	took	Samples.						
1636	End	Sampling						

Average Purge Rate: 3 gl/min — Total Time: 31 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 07_DBMW100A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 07_DBMW100A-114
DATE: 9/18/01	SAMPLED BY: DAVID LANGE
EQUIPMENT DECONTAMINATED: (YES)	PURGE START TIME: 1046

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading: —	Final Meter Reading: —	Total Volume Removed: 111 gal.

Well Total Depth	Original DTW		4"=0.66 / 5"=0.93 / 6"=1.5 Casing Volume		Purge Volume
138	- 97.59	= 40.41	x 0.66	= 26.67	X 3 casg vol. = 80.01

Initial Groundwater Level:	Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1051	15	24.23	4.97	0.935	6.34	-20	220	Partly cloudy
1053	21	24.70	4.97	0.940	5.42	-19		
1056	30	24.75	4.96	1.41	5.76	-19	40	Partly Clear
1058	36	24.80	4.97	1.41	5.67	-19		
1101	45	24.82	4.97	1.41	5.63	-19	21	clear
1103	51	24.86	4.97	1.41	5.56	-19	19	clear
1106	60	24.87	4.97	1.40	5.57	-19		
1108	66	24.86	4.97	1.40	5.51	-18	28	"
1111	75	24.88	4.97	1.41	5.53	-18	25	"
1113	81	24.91	4.97	1.41	5.54	-18	25	"
1115		took Samples						
1123	111	Stop SAMPLE						

Average Purge Rate: 3 gal/min	Total Time: 32 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Final Depth 97.64

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 08-U6MW29
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 08-U6MW29-114
DATE: 9/18/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 1535

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 115 | Purge Rate: 100 ml/min | Minimum Purge Volume: 1450 (15 min)

Total Volume Removed: 2000 | Pressure: 60 | Refill: 17 | Discharge: 3

Initial Groundwater Level: 22.42

Final Groundwater Level: 22.23

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1540	500	28.63	7.05	1.189	4.91	199	—	SWL 22.31 clear
1545	1000	27.07	7.16	1.414	2.66	182	130	SWL 22.21 clear
1548	1300	26.70	7.22	1.432	2.19	170	120	SWL 22.24 clear
1551	1600	26.60	7.24	1.438	1.79	143	105	SWL 22.23 clear
1554	1900	26.49	7.26	1.437	1.78	142	111	SWL 22.23 clear
1555	Sample time							

Total Volume Purged: 2000 | Total Time: 20 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: OS_UGMW29A
PROJECT NAME: MCAS El Toro	SAMPLE ID: OS_UGMW29A-114
DATE: 9/18/01	SAMPLED BY: DAVE LANGE
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1240

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading: —	Final Meter Reading: —	Total Volume Removed: 38 gal

Well Total Depth	Original DTW		4"=0.66 5"=0.93 6"=1.5	Casing Volume		Purge Volume
115	- 81.22	= 33.78	x	= 22.30	X 3 casg vol.	= 66.9

Initial Groundwater Level: —	Final Groundwater Level: 93.12

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1243	9	25.35	5.09	2.55	4.33	-30		
1245	15	25.47	5.08	2.60	3.15	-28	110	PARTIALLY CLOUDY
1247	21	25.47	5.09	2.56	2.87	-28		
1249	27	25.39	5.09	2.49	2.63	-27	40	Clear
1252	STOPPED		~~5.12~~	~~0.003~~	PUMPING (DRY)			
1326	Resumed Pumping after waiting for well to recharge							
	Pumping at 1 gal/min							
1337	Took Samples							

Average Purge Rate: 3 gl/min	Total Time: 54 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: well ran dry after 53 ~~sample~~ reading. allowed for recharge and then purged a few gallons to make sure we had formation water, collected sample. Final Depth = 93.12

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 08_DGMW74
PROJECT NAME: MCAS El Toro	SAMPLE ID: 08-DGMW74-114 ~~314~~
DATE: 9/18/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1610

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT:

Pump Intake Depth: 110	Purge Rate: 100 mL/min	Minimum Purge Volume: 1412 (15min)

Total Volume Removed: 1900 | Pressure: 50 | Refill: 16.4 | Discharge: 3.6

Initial Groundwater Level: 21.49

Final Groundwater Level: 21.29

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1615	500	24.19	7.26	1.571	5.74	104	—	SWL 21.32 Cloudy ~~Clear~~
1620	1000	24.09	7.25	1.563	5.87	111	321	Cloudy 21.29
1623	1300	24.08	7.24	1.557	5.69	113	226	Cloudy 21.29
1626	1600	24.08	7.25	1.559	5.62	114	215	Cloudy 21.29
1628	1800	24.07	7.23	1.556	5.64	114	207	Cloudy 21.29
1629	SAMPLE TIME: 08_DGMW74-114							
~~1630~~	~~SAMPLE TIME: 08_DGMW74-314~~							no bottles for duplicate. will do duplicate tomorrow

Total Volume Purged: 1900 | Total Time: 19 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

RC 9-18

Total number of bottles: ~~4~~ 2

Comments: No bottles for dup. will do another tomorrow
RC 9-18

QC Sample Collected? ~~Yes ( )~~ No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 09-DEMW45
PROJECT NAME: MCAS El Toro	SAMPLE ID: 09-DEMW45
DATE: 9/17/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 14:40

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: GED

Pump Intake Depth: 137 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1668/17 minutes

Total Volume Removed: 2200 mL | Pressure: 62 | Refill: 15 | Discharge: 15

Initial Groundwater Level: 22.16

Final Groundwater Level: 22.03

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1448	800mL	27.32	6.88	1.996	7.99	145	90.6	Clear Sur 21.99
1451	1000mL	24.06	6.86	1.697	7.82	151	98.4	Clear Sur 22.01
1454	1500mL	23.97	5.58	1.696	8.34	228	680	Cloudy Sur 22.02
1457	1900mL	24.76	6.81	1.688	7.95	151	538	Cloudy Sur 22.03
1500	2000mL	24.65	6.76	1.686	7.79	199	521	Cloudy Sur 22.02
1502	Sample time							

Total Volume Purged: 2200 mL | Total Time: 22 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Water became Cloudy after 2nd reading

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 09_DGMW75
PROJECT NAME: MCAS El Toro	SAMPLE ID: 09_DGMW75-114
DATE: 9/17/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 13:35

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT:

Pump Intake Depth: 134 | Purge Rate: 100mL/min | Minimum Purge Volume: 1650/17 minutes

Total Volume Removed: 2100mL | Pressure: 55 | Refill: 14.9 | Discharge: 5.1

Initial Groundwater Level: 21.97

Final Groundwater Level: 21.83

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1335	200mL	26.61	5.74	2.791	7.54	223	7.91	clear SWL 21.89
1340	700mL	25.18	5.35	2.593	7.47	221	6.85	Clear 21.88
1345	1200mL	26.19	5.28	2.560	7.15	221	6.92	Clear 21.86
1348	1500mL	25.63	5.26	2.521	6.92	219	7.48	Clear 21.85
1351	1800mL	25.72	5.26	2.531	6.99	220	6.92	Clear 21.83
1354	2100mL	25.68	5.21	2.529	6.92	221	6.99	clear 21.83
1355	SAMPLE TAKEN							

Total Volume Purged: 2100mL | Total Time: 20 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 12_DBMW48A
PROJECT NAME: MCAS El Toro	SAMPLE ID: 12_DBMW48A-114
DATE: 9/14/01	SAMPLED BY: Matt Brookshire, Dave Lange
EQUIPMENT DECONTAMINATED: (YES)	PURGE START TIME: 0934

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (✓) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading: 92.85	Total Volume Removed: 0~~[illegible]~~84

Well Total Depth — Original DTW — (4"=0.66) 5"=0.93 6"=1.5 Casing Volume — Purge Volume

110 - 85.72 = 24.28 x = 16.0 X 3 casg vol. = 48.1

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0940	18	24.83	4.8	2.60	5.82	-11		Sediment in Water
0942	24	24.80	4.86	2.58	3.21	-11		
0944	30	24.83	4.9	2.57	2.69	-10	450	
0946	36	24.86	4.92	2.57	2.53	-10		
0948	42	24.86	4.93	2.57	2.42	-10		
0950	48	24.90	4.98	2.60	4.75	-5	550	
0952	54	25.39	4.99	2.61	4.95	-3	500	CLOUDY
0954	60	25.80	5.02	2.53	5.08	-3		
0955	63	26.08	5.02	2.53	5.09	-2		
0959	75	26.45	5.05	2.59	4.83	-2	260	cloudy
1001	Collected Sample							
1003	84 Stopped Purging							

Average Purge Rate: 3 gal/min Total Time: 23 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Pump Set AT 100'
Final Depth of Water 92.85

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 13-DGMW78
PROJECT NAME: MCAS El Toro	SAMPLE ID: 13-DGMW78-114/-314
DATE: 9-21-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 12:40

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 172 | Purge Rate: 100 ml/min | Minimum Purge Volume: 1650 (17 min)

Total Volume Removed: 2000 ml | Pressure: 60 | Refill: 15 | Discharge: 5

Initial Groundwater Level: 22.19

Final Groundwater Level: 22.05

Actual Time	Volume Purged ML	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1245	500	25.19	7.20	2.390	3.15	122	—	SWL 22.06
1250	1000	25.58	7.19	2.341	3.06	129	10.75	SWL 22.06 Clear
1253	1300	25.93	7.19	2.277	3.07	133	9.25	SWL 22.05 clear
1256	1600	26.08	7.15	2.277	3.10	150	8.15	SWL 22.05 clear
1259	1900	26.10	7.15	2.277	3.11	149	9.45	SWL 22.05 clear
1300	SAMPLE TIME							
1302	DUPLICATE TIME							

Total Volume Purged: 2200 | Total Time: 22 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 4

Comments:

QC Sample Collected? Yes (X) No ( ) If YES, then type of sample and sample ID: 13-DGMW78-314

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 15_DBMW51
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 15-DBMW51-114
DATE: 9-21-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 1320

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: GED

Pump Intake Depth: 145 | Purge Rate: 100 mL/MIN | Minimum Purge Volume: 1755 (18 min)

Total Volume Removed: 2200 | Pressure: 70 | Refill: 15 | Discharge: 5

Initial Groundwater Level: 23.73

Final Groundwater Level: 23.55

Actual Time	Volume Purged mL	Temperature °C	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1325	500	26.40	5.48	2.511	5.71	230	—	23.50 SWL clear
1330	1000	25.48	5.27	2.543	4.74	256	15.0	SWL 23.55 clear
1333	1300	25.42	5.21	2.503	3.50	263	7.66	SWL 23.55 clear
1336	1600	25.34	5.16	2.412	3.29	269	8.10	SWL 23.58 clear
1339	1900	25.35	5.14	2.401	3.30	272	7.91	SWL 23.56 clear
1342	2100	25.36	5.14	2.403	3.27	274	7.01	SWL 23.55 clear
1343	SAMPLE TIME							

Total Volume Purged: 2200 mL | Total Time: 22 minutes.

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18BGMW14
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-BGMW14-114
DATE: 9-24-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1400

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 95 | Purge Rate: 100 ml/min | Minimum Purge Volume: 1269 (13 min)

Total Volume Removed: 1800 mL | Pressure: 50 | Refill: 18 | Discharge: 2

Initial Groundwater Level: 20.06

Final Groundwater Level: 19.99

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1405	500	27.37	6.96	1.695	6.64	167	—	SWL 20.01 Clear
1408	800	24.64	6.73	1.353	7.20	169	184	cloudy SWL 20.00
1411	1100	24.44	6.72	1.348	6.82	166	370	Cloudy SWL 19
1414	1400	24.30	6.70	1.339	6.79	165	314	Cloudy SWL 19.99
1417	1700	24.27	6.70	1.338	6.61	163	360	Clear SWL 19.99
1418	SAMPLE TIME							

Total Volume Purged: 1800 ml | Total Time: 18 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18_DW135
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18DW135-114
DATE: 9-21-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0812

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 125 | Purge Rate: 100 ml/min | Minimum Purge Volume: 1550 (16 min)

Total Volume Removed: 2000 ml | Pressure: 60 | Refill: 16 | Discharge: 4

Initial Groundwater Level: 21.77

Final Groundwater Level: 21.58

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0820	700 ml	22.09	7.07	2.767	7.54	297	—	SWL 21.61
0823	1000 ml	22.46	7.04	2.716	7.48	276	27.2	SWL 21.59
0826	1300 ml	22.51	7.04	2.716	7.35	271	21.1	SWL 21.59
0829	1600 ml	22.59	7.04	2.719	7.29	269	10.9	SWL 21.58
0831	1900 ml	22.61	7.04	2.720	7.29	267	13.4	SWL 21.58
0832	2000 ml	SAMPLE	TIME					

Total Volume Purged: 2000 ml | Total Time: 20 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18-DW250
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-DW250-114
DATE: 9-21-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0835

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 233 | Purge Rate: 100 mL/min | Minimum Purge Volume: 2533 (2 min)

Total Volume Removed: 3000 mL | Pressure: 110 | Refill: 15 | Discharge: 15

Initial Groundwater Level: 17.76 Changed: 40 20

Final Groundwater Level: 17.62

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0845	1000	21.75	7.23	1.910	7.90	257	—	SWL 17.63
0855	2000	22.74	8.07	1.060	5.57	229	20.2	SWL 17.64
0858	2300	22.79	8.13	1.026	3.36	221	25.5	SWL 17.61
0901	2600	22.91	7.99	1.035	3.29	224	28.1	SWL 17.62
0904	2900	22.99	7.89	1.039	3.27	227	26.4	SWL 17.62
0905	SAMPLE TIME							

Total Volume Purged: 3000 mL | Total Time: 30 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles:

Comments: changed refill discharge to get 100 mL/min

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18-DW356
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-DW356-114
DATE: 9-21-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0915

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 330 | Purge Rate: 100mL/min | Minimum Purge Volume: 3530 (3 vol.)

Total Volume Removed: 4000mL | Pressure: 90 | Refill: 16.9 | Discharge: 3.1

Initial Groundwater Level: 5.20 changed: 16 14

Final Groundwater Level: 5.16

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0925	1000	23.90	7.50	1.054	2.91	210	21.5	SWL 5.16 clear
0935	2000	23.96	7.28	1.040	3.99	209	24.5	SWL 5.15 clear
0945	3000	24.21	7.27	1.025	4.56	169	20.2	SWL 5.16 clear
0948	3300	24.56	7.29	1.022	4.46	154	19.7	SWL 5.16 clear
0951	3600	24.54	7.29	1.023	4.53	150	18.2	SWL 5.16 clear
0954	3900							
0955	4000	SAMPLE	TIME					

Total Volume Purged: 4000mL | Total Time: 40 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Changed refill/discharge to get 100 mL/min

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18_DW450
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-DW450-114/314
DATE: 9-21-01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1005

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 435 ft | Purge Rate: 100 mL/min | Minimum Purge Volume: 4528 (4 lo min

Total Volume Removed: 5000 mL | Pressure: 95 | Refill: 10.1 | Discharge: 9.9

Initial Groundwater Level: 10.98 | adj: | 18 | 12

Final Groundwater Level: 10.80

Actual Time	Volume Purged mL	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1015	1000	24.58	8.28	.8602	2.04	108	—	SWL 10.82 clear
1025	2000	24.62	7.99	.9155	1.27	78	19.4	SWL 10.81 clear
1035	3000	24.84	7.67	1.045	2.83	85	22.5	SWL 10.79 clear
1045	4000	24.94	7.65	1.060	3.52	87	21.7	SWL 10.80 clear
1048	4300	24.94	7.65	1.060	3.53	88	24.1	SWL 10.80 clear
1051	4600	25.01	7.65	1.061	3.54	88	18.6	SWL 10.80 clear
1054	4900						19.1	SWL 10.80 clear
1055	5000	SAMPLE TIME 18-DW450-314						
1057	5200	SAMPLE TIME 18-DW450-114						
		2 ec		52 ec				

Total Volume Purged: 5200 mL | Total Time: 50 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 4

Comments: adj refill/discharge to get 100 mL/min

QC Sample Collected? Yes (X) No ( ) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18-DW540
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-DW540-114
DATE: 9/21/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 11:05

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 515 | Purge Rate: 100 ml/min | Minimum Purge Volume: 5288 (53 min)

Total Volume Removed: | Pressure: 95 | Refill: 15 | Discharge: 15

Initial Groundwater Level: 13.21

Final Groundwater Level: 13.04

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
11:20	1500	24.59	8.71	.8220	3.12	-25	11.3	SWL 13.01 clear
11 35	3000	24.39	8.82	.7824	3.31	-9	9.60	SWL 13.06 clear
11 45	4000	24.50	8.59	.7680	1.92	29	10.01	SWL 13.05 clear
1152 ~~11 50~~	4700	24.55	8.59	.7672	1.20	32	8.41	SWL 13.04 clear
RC 1155 ~~12 00~~	5000	24.58	8.59	.7671	1.19	31	9.06	SWL 13.04 clear
1158	5300	24.56	8.59	.7670	1.19	31	10.01	SWL 13.04 clear
1201	5600	24.56	8.60	.7669	1.20	31	11.11	SWL 13.04 clear
1202	5700	SAMPLE TIME						

Total Volume Purged: 5700 | Total Time: 57 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18-PS2
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-PS2-114
DATE: 9/19/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1622

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 118 | Purge Rate: 100 mL/min | Minimum Purge Volume: 15 l (16 min)

Total Volume Removed: 2100 mL | Pressure: 60 | Refill: 16.8 | Discharge: 3.2

Initial Groundwater Level: 23.08 adj: 70

Final Groundwater Level: 22.90 ⓒ

RC 9-19

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1630	800	24.86	7.22	2.080	4.94	168	—	SWL 22.99
1633	1100	24.41	7.15	2.589	6.09	170	43.2	SWL 22.98
1636	1400	23.60	7.11	2.893	7.01	174	54.3	SWL 22.93 clear
1639	1700	23.49	7.09	2.901	7.10	175	48.1	SWL 22.90 clear
1642	2000						48.8	SWL 22.90 clear
1643	2100	take	sample					

Total Volume Purged: 2100 mL | Total Time: 21 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: increased pressure to get 100 mL/min

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18PS3
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18PS3-114
DATE: 9/25/01	SAMPLED BY: Dave Lange
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0838

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 117 gal.

Well Total Depth — Original DTW — 4" =0.66, 5" =0.93, 6" =1.5 — Casing Volume — Purge Volume

122 - 79.13 = 42.87 x .66 = 28.30 X 3 casg vol. = 84.88

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0842	9	23.35	4.68	1.48	5.28	0	7.9	Clear
0845	18	23.53	4.88	1.47	4.66	-1		
0848	27	23.62	4.99	1.47	4.76	-1	5.9	clear
0851	36	23.65	5.02	1.47	4.70	-2		
0854	45	23.73	5.06	1.47	4.79	-2	3.6	"
0857	54	23.74	5.09	1.47	4.92	-3		
0900	63	23.74	5.10	1.47	4.57	-3	5.4	"
0903	72	23.81	5.12	1.47	4.49	-3		
0906	81	23.81	5.13	1.48	4.73	-3	3.1	"
0909	90	23.83	5.14	1.48	4.88	-3		
0910		take	samples					
0918	117	end	sampling					

Average Purge Rate: 3 gal/min Total Time:

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Final Depth = 79.46

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 18_PS3A
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 18_PS3A_114
DATE: 9/18/01	SAMPLED BY: David Lange
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 0913

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 114 g

Well Total Depth	Original DTW		4" =0.66 5" =0.93 6" =1.5	Casing Volume		Purge Volume
122	- 75.46	= 46.54	x	= 29.71	X 3 casg vol.	= 89.13

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0917	12	22.43	4.75	1.73	3.99	-5		
0920	21	23.96	4.91	1.72	3.11	-11		
0923	30	24.00	4.96	1.70	3.44	-13	1000	Very cloudy
0926	39	24.04	4.98	1.70	3.61	-13	600	Cloudy
0929	48	24.09	5.01	1.70	3.74	-14	360	Partial Cloudy
0932	57	24.14	5.02	1.70	3.84	-14		
0935	66	24.14	5.04	1.67	3.88	-14	330	Partial cloudy
0938	75	24.17	5.05	1.71	3.91	-15		
0941	84	24.21	5.05	1.66	3.97	-15	300	Partially cloudy
0944	93	24.30	5.06	1.68	4.61	-15	260	"
0946		Took Samples						
0951	114	Finished Sampling						

Average Purge Rate: 3 gal/min	Total Time: 44 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

Final Date 9-18-01

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 18-PS7
PROJECT NAME: MCAS El Toro	SAMPLE ID: 18-PS7-114
DATE: 9/25/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0830

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 110 | Purge Rate: 100 ml/min | Minimum Purge Volume: 1402 (14 min)

Total Volume Removed: 2000 | Pressure: 51 | Refill: 18 | Discharge: 2

Initial Groundwater Level: 18.48

Final Groundwater Level: 18.36

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0835	500	23.23	6.07	1.678	8.03	23	—	SWL 18.40
0840	1000	23.00	5.99	1.504	7.33	256	12.1	SWL 18.40 Clear
0843	1300	23.03	5.83	1.491	7.29	254	8.66	SWL 18.36 Clear
0846	1600	23.01	5.78	1.489	7.38	252	7.91	SWL 18.37 Clear
0849	1900	23.01	5.78	1.486	7.35	252	8.01	SWL 18.36 Clear
0850	SAMPLE TIME							

Total Volume Purged: 2000 | Total Time: 20 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 21-UGMW037
PROJECT NAME: MCAS El Toro	SAMPLE ID: 21-UGMW037-114
DATE: 9/14/01	SAMPLED BY: DL, RG
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1057

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 104 g

Well Total Depth — Original DTW — 4" = 0.66, 5" = 0.93, 6" = 1.5 — Casing Volume — Purge Volume

135 84.79 - 84.79 = 50.21 x .66 = 33.14 X 3 casg vol. = 99.42

Initial Groundwater Level: Final Groundwater Level:

	Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
	1059	8	27.51	5.27	1.64	6.31	-15		Red coloration Heavy
	1101	16	24.60	5.10	1.58	4.87	-11		turbidity
20	1105	PAUSED PURGING DUE TO WELL(D) EQUIPMENT FAILURE							
	1107		24.72	5.15	1.63	4.69	-9	950	Began Purging
8	1109	PAUSED AGAIN DUE TO WD Equipment Failure							Begin Purging 1110
12	1113		25.09	5.16	1.62	4.72	-6	750	
	1114	PAUSE PUMP FAILURE							
4	1115								Resume
44g	1116	PAUSE, PUMP FAILURE				Replaced Pump			
	1145	Resume Pumping			water level 84.69				
	1147		24.72	5.25	1.69	5.78	-24	550	Cloudy
	1150		24.87	5.23	1.69	5.47	-22	550	Cloudy

Average Purge Rate: 4 Total Time: 101

4 +60g 104

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Error on turbidity reading Heavily turbid (Red coloration

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 21_UGMW37
PROJECT NAME: MCAS El Toro	SAMPLE ID: 21-UGMW37-114
DATE: 9/14/01	SAMPLED BY: DL, RC
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1057

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (X) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 104g

Well Total Depth — Original DTW — 4" =0.66 / 5" =0.93 / 6" =1.5 — Casing Volume — Purge Volume

135 - 84.79 = 50.21 x = 33.14 X 3 casg vol. = 99.42

Initial Groundwater Level:	Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1153		24.83	5.24	1.69	5.39	-22		cloudy
1155		24.77	5.24	1.67	5.38	-22	330	
1157		24.72	5.25	1.64	5.35	-22	500	CLOUDY
1200		24.67	5.26	1.62	5.36	-22	110	
1203		SAMPLED						

Average Purge Rate: 4 | Total Time: 101 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: **1801-001 Round 14**	SAMPLE LOCATION: 22-DBMW47
PROJECT NAME: **MCAS El Toro**	SAMPLE ID: 22-DBMW47-114
DATE: 9/17/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: **YES**	PURGE START TIME: 1522

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 129.25 | Purge Rate: 100mL/min | Minimum Purge Volume: 1659/17min.

Total Volume Removed: 2200mL | Pressure: 70 | Refill: 17.3 | Discharge: 2.7

Initial Groundwater Level: 22.58

Final Groundwater Level: 22.46

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1525	300	27.40	6.80	1.714	7.83	176	—	adj. P. to 75
1530	800	28.31	6.88	1.652	7.43	172	223	22.47=SWL clear
1535	1300	28.56	6.9	1.467	7.44	246	185	SWL=22.49 clear
1538	1600	27.59	5.56	1.416	7.48	254	79.8	SWL=22.49 clear
1541	1900	27.09	6.61	1.393	7.69	248	65.2	SWL=22.47 clear
1544	2200	27.07	6.04	1.399	7.64	247	60.1	SWL=22.46 clear
1545	sample time							

Total Volume Purged: 2200mL | Total Time: 22 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 24_EX30B1
PROJECT NAME: MCAS El Toro	SAMPLE ID: 24_EX30B1-114
DATE: 9/18/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0955

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 127 | Purge Rate: | Minimum Purge Volume: 1564 (16min)

Total Volume Removed: 2200 | Pressure: 64 | Refill: 17.4 | Discharge: 2.6

Initial Groundwater Level: 22.16 up pressure to 70

Final Groundwater Level: 22.15

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1000	500mL	24.56	7.10	1.408	6.03	186	—	SWL 22.09 clear
1005	1000mL	24.44	7.02	1.389	6.05	187	13.3	SWL 22.14 clear
1010	1500mL	24.37	6.99	1.382	6.16	187	9.53	SWL 22.17 clear
1013	1800mL	24.24	6.44	1.381	6.32	185	7.75	SWL 22.15 clear
1016	2100mL	24.17	6.58	1.379	6.41	180	7.98	SWL 22.15 clear
1017	sample time							

Total Volume Purged: 2200 | Total Time: 22

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Changed pressure to 70 to get enough water

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 24-EX50B1
PROJECT NAME: MCAS El Toro	SAMPLE ID: 24-EX50B1-114
DATE: 09/18/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 10:35

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 127 | Purge Rate: 100mL/min | Minimum Purge Volume: 1564 (16min)

Total Volume Removed: 2000mL | Pressure: 60 | Refill: 16.5 | Discharge: 3.5

Initial Groundwater Level: 21.85

Final Groundwater Level: 21.65

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1040	500	26.09	7.05	1.335	5.73	158	—	SWL 9-18 21.77 clear
1045	1000	25.85	7.08	1.366	5.77	164	74.3	SWL 21.65 clear
1048	1300	25.53	7.08	1.387	6.08	157	103.0	SWL 21.83 clear
1051	1600	25.15	7.08	1.395	5.95	150	114.2	SWL 21.79 clear
1054	1900	25.11	7.08	1.398	5.86	149	128.1	SWL 21.65 clear
1055	sample time							

Total Volume Purged: 2000mL | Total Time: 20 min

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 24-EX60B2
PROJECT NAME: MCAS El Toro	SAMPLE ID: 24-EX60B2-114
DATE: 9/18/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1115

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT:

Pump Intake Depth: 128 | Purge Rate: 100 ml/min | Minimum Purge Volume: 1611 (17 min)

Total Volume Removed: 2500 | Pressure: 63 | Refill: 17 | Discharge: 3

Initial Groundwater Level: 22.26 upped pressure to 70

Final Groundwater Level: 22.12

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1120	500	26.39	7.09	1.402	5.34	170	80.1	SWL 22.12 clear
1125	1000	26.15	7.07	1.405	5.26	171	88.2	SWL 22.13 clear
1130	1500	26.07	7.06	1.409	5.20	171	58.3	SWL 22.13 clear
1133	1800	26.10	7.05	1.407	5.17	171	49.2	SWL 22.12 clear
1136	2100	26.08	7.06	1.407	5.21	171	42.1	SWL 22.12 clear
1139	2400	26.10	7.06	1.406	5.21	171	36.2	SWL 22.12 clear
1140	Sample time							

Total Volume Purged: 2500 mL | Total Time: 25

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: increased pressure to 70 to get enough water

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 24-NEW4
PROJECT NAME: MCAS El Toro	SAMPLE ID: 24NEW4-114 24NEW4431
DATE: 9/18/01	SAMPLED BY: RC
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1305

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 128 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1575 (16 min)

Total Volume Removed: 2100 | Pressure: 60 | Refill: 16.3 | Discharge: 3.7

Initial Groundwater Level: 22.72

Final Groundwater Level: 22.59

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1310	500mL	27.01	7.0	1.476	6.60	191	—	SWL 22.59 clear
1315	1000mL	25.36	7.04	1.502	7.03	131	17.4	SWL 22.54 clear
1318	1300mL	25.51	7.04	1.490	6.92	121	8.09	SWL 22.55 cl
1321	1600mL	25.74	7.05	1.474	7.07	120	8.59	SWL 22.57 clear
1324	1900mL	25.62	7.04	1.486	7.01	120	9.92	SWL 22.59 clear
1325	Sample time.							
1326	Sample time Dup.							

Total Volume Purged: 2100 mL | Total Time: 21 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 4

Comments:

QC Sample Collected? Yes (X) No ( ) If YES, then type of sample and sample ID: 24NEW4-314

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 24NEW5
PROJECT NAME: MCAS El Toro	SAMPLE ID: 24NEW5-114
DATE: 9/18/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1440

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT:

Pump Intake Depth: 128.5 | Purge Rate: 100 mL/min | Minimum Purge Volume: 2637 (27 mins)

Total Volume Removed: 3200 mL | Pressure: 110 | Refill: 19.3 | Discharge: 10.7

Initial Groundwater Level: 17.24

Final Groundwater Level: 17.07

Actual Time	Volume Purged mL	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1445	500	28.85	7.06	1.062	6.53	169	—	SWL 17.10
1450	1000	28.63	7.22	1.264	6.38	157	46.4	SWL 17.15 clear
1455	1500	27.55	7.25	1.139	6.45	156	53.2	SWL 17.07 clear
1500	2000	27.17	7.25	1.099	6.90	158	24.1	SWL 17.05 clear
1505	2500	26.71	7.24	1.077	6.91	162	28.2	SWL 17.07 clear
1508	2800	26.57	7.24	1.076	6.89	170	28.4	SWL 17.07 clear
1511	3100	26.58	7.24	1.073	6.87	171	34.2	SWL 17.07 clear
1512	SAMPLE TIME							

Total Volume Purged: 3200 mL | Total Time: 32 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: increased pressure to 115 to get water @ 100 mL/min.

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 24NEW6
PROJECT NAME: MCAS El Toro	SAMPLE ID: 24NEW6-114
DATE: 9/19/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0945

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT:

Pump Intake Depth: 175 | Purge Rate: 100 mL/min | Minimum Purge Volume: 2020 (21 min)

Total Volume Removed: 2500 | Pressure: 85 | Refill: 24 | Discharge: 6

Initial Groundwater Level: 21.15 95 increased pressure

Final Groundwater Level: 20.94

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0950	500	22.09	6.94	1.992	5.58	255	—	* SWL 21.02
0955	1000	22.02	7.03	1.803	5.63	230	114	Slight cloudy 21.0 SWL
1000	1500	23.80	7.58	1.184	6.28	205	43.5	Clear SWL 21.0
1003	1800	23.87	7.71	1.100	5.99	200	29.9	Clear SWL 21.01
1006	2100	23.89	7.69	1.099	5.89	202	21.6	Clear SWL 20.99
1009	2400	23.92	7.68	1.088	5.88	204	24.2	Clear SWL 20.94
1010	Sample time							

Total Volume Purged: 2500 | Total Time: 25

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: * increased pressure to 95 psi to get 100 mL/min

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 24NEW7
PROJECT NAME: MCAS El Toro	SAMPLE ID: 24NEW7-114
DATE: 9/19/01	SAMPLED BY: R. Clifford
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 0900

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 138 | Purge Rate: 100 ml/min | Minimum Purge Volume: 168 (17 minutes)

Total Volume Removed: 2000 ml | Pressure: 65 | Refill: 16.3 | Discharge: 3.7

Initial Groundwater Level: 21.99 adj. pressure to 70

Final Groundwater Level: 21.96

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
0905	500	22.17	6.87	2.995	5.78	351	—	21.96 SWL
0910	1000	21.96	6.90	2.476	5.95	328	109.1	slightly cloudy SWL 21.9
0913	1300	21.99	6.92	2.171	5.73	307	115.4	slightly cloudy SWL 21.96
0916	1600	22.03	6.92	2.076	5.69	299	88.5	clear SWL 21.96
0919	1900	22.08	6.93	2.003	5.59	293	78.4	clear SWL 21.96
0920	Sample time							

Total Volume Purged: 2000 ml | Total Time: 20 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: Increased pressure to get approp volume.

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 24-NEW8
PROJECT NAME: MCAS El Toro	SAMPLE ID: 24_NEW8-114
DATE: 9/18/01	SAMPLED BY: RC
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 13:55

PURGING METHOD: Dedicated Bladder Pump

SAMPLING EQUIPMENT: QED

Pump Intake Depth: 142 | Purge Rate: 100 mL/min | Minimum Purge Volume: 1706 (18 min)

Total Volume Removed: 2200 mL | Pressure: 65 | Refill: 16.4 | Discharge: 3.6

Initial Groundwater Level: 23.05 up pressure to 80

Final Groundwater Level: 22.94

Actual Time	Volume Purged (mL)	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1400	500	27.80	7.12	1.524	6.21	133	—	SWL 22.90 clear
1405	1000	28.31	7.00	1.641	6.15	162	50.4	SWL 22.95 clear
1410	1500	26.85	6.98	1.672	6.64	169	73.1	SWL 22.92 clear
1413	1800	27.06	7.00	1.665	6.47	159	65.4	SWL 22.92 clear
1416	2100	27.13	6.59	1.663	6.42	158	68.2	SWL 22.94 clear
1417	Sample TIME							

Total Volume Purged: 2200 mL | Total Time: 22 minutes

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments: increased pressure to 80 to get water

QC Sample Collected? Yes ( ) No (X) If YES, then type of sample and sample ID:

GROUNDWATER MONITORING WELL PURGING AND SAMPLING LOG

PROJECT NO.: 1801-001 Round 14	SAMPLE LOCATION: 398MW-13
PROJECT NAME: MCAS El Toro	SAMPLE ID: 398MW-13-114
DATE: 9/14/01	SAMPLED BY: DL, RC
EQUIPMENT DECONTAMINATED: YES	PURGE START TIME: 1336

PURGING METHOD: Submersible Pump

Well Casing Diameter 4" (✓) 5" ( ) 6" ( )

Initial Meter Reading:	Final Meter Reading:	Total Volume Removed: 155

Well Total Depth — Original DTW — 4" = 0.66, 5" = 0.93, 6" = 1.5 — Casing Volume — Purge Volume

243 - 185.5 = 57.5 x ~~37.95~~ = 37.95 X 3 casg vol. = 113.85

Initial Groundwater Level: Final Groundwater Level:

Actual Time	Volume Purged	Temperature	pH	Conductance (S/M)	Dissolved oxygen	ORP	Turbidity NTu	Description
1339	15	26.43	5.37	1.36	3.46	-39	8.2	clear
1342	30	26.18	5.38	1.35	3.12	-36		
1345	45	26.12	5.40	1.34	3.01	-37	7.9	clear
1348	60	26.19	5.41	1.32	2.80	-37		
1351	75	26.17	5.42	1.32	2.78	-37	4.4	clear
1354	90	26.19	5.43	1.31	2.73	-37		
1357	105	26.18	5.43	1.28	2.67	-37	4.1	clearer
1400	120	26.14	5.44	1.29	2.67	-37		
1403	135	26.16	5.44	1.28	2.65	-38	3.0	
1406	150	26.18	5.45	1.28	2.63	-38	2.5	clear
1407	155	TOOK	SAMPLES.					
								final WL 185.6

Average Purge Rate: 5g/MIN	Total Time: 31 MIN

Laboratory Analysis: VOCs (X) Metals Filtered ( )
Perchlorate ( ) General chemistry ( ) Gross Alpha/Beta ( )

Total number of bottles: 2

Comments:

QC Sample Collected? Yes ( ) No (✓) If YES, then type of sample and sample ID:

Appendix D

Physical Data

(No physical data was generated during Round 14)

Appendix E

Quality Assurance/Quality Control Summary

Appendix E
Quality Assurance /Quality Control Summary

The groundwater sampling and analyses activities for the February 2001 sampling round were performed according to guidance and quality assurance/quality control (QA/QC) procedures described in the amended *Final Sampling and Analysis Plan* (SAP) and the amended *Final Quality Assurance Project Plan* (QAPP) prepared for the MCAS El Toro *Groundwater Monitoring Planning Documents* (CDM Federal 1996b) and the *Work Plan Addendum for Groundwater Monitoring MCAS El Toro* (CDM Federal 2000c). The collection of field data was performed following the SAP and Standard Operating Procedures (SOPs) provided in the QAPP. The laboratory analyses were performed according to analytical methods, detection limits, and QA/QC procedures described in these documents. This section summarizes the performance of the field and analytical procedures, data quality assessment, and data validation activities.

During the September 2001 sampling round, groundwater samples were collected from a total of 85 monitoring wells. All samples were analyzed for volatile organic compounds (VOCs) and selected samples were analyzed for gross alpha/beta particle activity, dissolved metals, and general chemistry (or wet chemistry) parameters including perchlorate. During field sampling, the following QA/QC samples were collected and analyzed: nine field duplicate samples, two equipment rinsate blank samples, and one American Society for Testing and Materials (ASTM) Type II water blank sample. In addition, a total of eight trip blank samples were analyzed for VOCs during Round 14. Specific analyses performed for the QC samples and their results are summarized below. Refer to the laboratory reports and the data validation reports in Appendix F for complete results.

E.1 Deviations from Sampling and Analysis Plan and Quality Assurance Project Plan

Deviations occurred from the above referenced documents for the September 2001 monitoring round as follows:

- Well 16_MW2 was not sampled during Round 14 due to a damaged well cap including all of the micropurge connectors.
- Well 18_BGMP06E was inaccessible due to dense vegetation, which prohibited sampling equipment from reaching the well.
- Well 05_DBMW67A was scheduled to be sampled for General Chemistry parameters including alkalinity, bicarbonate, carbonate, chloride, nitrate-nitrite,

total dissolved solids, and sulfate. However, due to a field error the sample was only analyzed for chloride and sulfate.

E.2 Quality Control Procedures

Data verification, laboratory QC, and field QC samples used for this project are identified below.

E.2.1 Data Verification

Data collected were subjected to the data verification process. Data verification includes proof-reading and editing hard-copy data reports to assure that data correctly represent the analytical measurement. In general, verification identifies nontechnical errors in the data package that can be corrected (e.g., typographical errors). Data verification also includes verifying that the sample identifiers on laboratory reports (hard copy) match those on the chain-of-custody record.

E.2.2 Laboratory QC Samples

Laboratory QC samples are used to:

- Verify that procedures, such as sample handling, storage, and preparation, are not introducing variables into the sampling chain that could render the validity of samples questionable; and
- Assess data quality in terms of precision and accuracy.

Quality control samples are regularly prepared in the laboratory so that all phases of the sampling process are monitored. The types of laboratory QC samples prepared during the analysis of water samples from the field activities are discussed below.

E.2.2.1 Method Blanks

One method blank was analyzed per batch of samples (not greater than 20 samples). The method blank was processed following the same preparatory and analytical procedures as the field-collected samples. These QC samples were used to detect the presence and magnitude of contaminants or other anomalies resulting from the sample preparation and analytical procedures.

E.2.2.2 Matrix Spikes/Matrix Spike Duplicates

At a minimum, one matrix spike (MS)/matrix spike duplicate (MSD) pair was prepared and analyzed for every 20 samples for organic analyses. The MS/MSD samples were prepared by spiking a known amount of certain analytes of interest for each method into a sample of the matrix. The spiked samples were then carried through the same procedures as the unspiked field-collected samples. The percent recoveries of the spiked

compounds were used as an indication of the accuracy and appropriateness of the methods for the matrix. The precision of the methods was also assessed by calculating and evaluating the relative percent difference (RPD) between the results of the MS and MSD.

E.2.2.3 Surrogates

Surrogate compounds (artificial compounds with similar chemical properties and behavior to the compounds of interest) were added to each sample analyzed for applicable organic analytical methods. The percent recoveries of these spiked surrogate compounds were used to assess the accuracy of sample preparation and analysis procedures.

E.2.3 Field QC Samples

Field QC samples were collected to evaluate the ambient sampling conditions, the thoroughness of the decontamination procedures, and the reproducibility of the field sampling techniques.

Field Duplicate Samples. During this sampling round, field duplicate samples were collected at nine monitoring wells and analyzed for the same parameters as the field samples. Field duplicate results were reviewed as part of the data validation activity performed during this sampling round. The results of duplicate sample analyses for the data packages reviewed are discussed in Section E.3.2. For additional information on the duplicate samples, see the data validators' case narratives in Appendix F.

Equipment Rinsate Blank Samples. Two equipment rinsate blank samples were collected during this sampling round and analyzed for VOCs. Acetone, methylene chloride, methyl tertiary butyl ether (MTBE), and 2-butanone were detected in both of the samples and toluene was detected in one of the samples. All contaminant concentrations were detected at or below the reporting limit. Acetone, methylene chloride, and 2-butanone are common laboratory contaminants. All affected data points have been qualified accordingly. For additional information on the equipment rinsate blank, see the data validators' case narratives in Appendix F.

Trip Blank Samples. Trip blank samples were provided by the subcontract laboratory, Applied Physics and Chemistry Laboratory (APCL), and were included with each sample shipment for VOC analysis. A total of eight trip blanks were analyzed in this sampling round. Acetone and methylene chloride (both are common laboratory contaminants) were reported in all of the trip blanks during Round 14. All affected data points have been qualified accordingly. For additional information on the trip blanks, see the data validators' case narratives in Appendix F.

Source Water Blank. A source water blank sample was collected using ASTM Type II water (ASTM water). Methylene chloride, acetone, methyl acetate, MTBE, and toluene were detected in the sample. As stated previously, acetone and methylene chloride are common laboratory contaminants. All affected data points have been qualified accordingly. For additional information on the source water blank, see the data validators' case narratives in Appendix F.

E.3 Data Quality Assessment

E.3.1 General Data Review

The field and laboratory data collected during the current sampling round have been reviewed according to the criteria described in the QAPP (CDM Federal 1996b). The laboratory hard-copy analytical reports and case narratives were reviewed to verify correct sample designation, identification, and chain-of-custody records and to assure that analytical method, holding time, and detection limit requirements were met.

The water level and field parameter measurements collected during Round 14 were reviewed and verified from field sampling records and compared to the field data collected during the prior sampling rounds. Section 3.2.6 provides discussion of field parameter data.

E.3.2 Laboratory Data Validation

The subcontract laboratory, APCL, prepared Level D analytical data packages for all groundwater sample analyses performed. Laboratory Data Consultants performed an independent data validation. Data validation was performed following SWDIV's Environmental Work Instruction #1 (SWDIV 1999). The data validation guidelines were supplemented by the EPA guidance document for data validation entitled USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA 1994a) and USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (EPA 1994b) , where applicable.

The data validation effort included detailed review of laboratory data packages for selected sample delivery groups (SDGs) for each of the analytical parameters/methods performed. The objectives used to select the SDGs for validation included (1) to confirm and verify new constituent detection or anomalous results; (2) to target SDGs that include field QC sample results (e.g., field duplicates, equipment rinsates) as much as possible; and (3) to select individual SDGs that are representative of the full duration of the sampling round.

The results of the Round 14 data validation are presented in Data Validation Reports (DVRs) included as Appendix F of this report. The DVRs consist of eight separate reports for the individual SDGs representing the analyses of VOCs, four reports

representing gross alpha/beta analyses, five reports representing dissolved metals analyses, and six reports representing general chemistry analyses including perchlorate.

For the selected sample results reviewed, the project goals for precision, accuracy, representativeness, completeness, and comparability, as defined in the QAPP, were evaluated (CDM Federal 1996b). Except as noted below, the data validation indicates that the analytical data obtained during this sampling round are considered to be usable for the intended purposes of monitoring groundwater quality.

A summary of the data validation and qualifications identified in the DVRs are provided below.

E.3.2.1 Volatile Organic Compounds (CLP)

The following data validation was performed for VOCs:

- Acetone, 2-butanone, 4-methyl-2-pentanone, and 2-hexanone were identified as being above the percent relative standard deviation criteria for initial calibration for three SDGs. This qualified all detects for these analytes in the three SDGs as estimated "J" and non-detect estimated value "UJ" for all non-detects;

- The continuing calibration was outside of criteria for several analytes in seven of the eight SDGs. These include 4-methyl-2-pentanone (in five SDGs), 2-hexanone (in five SDGs), 1,2,2-trichloro-1,2,2-trifluoroethane (in four SDGs), methylene chloride (in three SDGs), carbon disulfide (in three SDGs), 1,1-dichloroethene (in three SDGs), 1,2,4-trichlorobenzene (in three SDGs), 1,2-dibromo-3-chloropropane (in three SDGs), trans-1,2-dichloroethene (in three SDGs), 1,4-dichlorobenzene (in two SDGs), methylhexane (in one SDG), cyclohexane (in one SDG), isopropylbenzene (in one SDG), and carbon tetrachloride (in one SDG). This qualified all related detects as estimated "J" and non-detect estimated value "UJ" for all non-detects;

- Acetone and methylene chloride were detected in the method blanks for all SDGs, as well as 2-butanone in one of the six SDGs, octamethyl-cyclotetrasiloxane in one SDG, and methyl-tertiary-butyl-ether (MTBE) in one SDG. These detects had their final concentrations modified and flagged as non-detect "U" as the detections were less than 5 times the method blank concentrations;

- Acetone and methylene chloride were detected in all trip blanks for all SDGs, as well as 2-butanone in two trip blanks, toluene in one trip blank and methyl acetate in one trip blank. These detects had their final

concentrations modified and flagged as non-detect "U" as the detections were less than 5 times the trip blank concentrations; and

- The precision results for field duplicate results were outside of criteria for acetone (in five SDGs), methylene chloride (in six SDGs), carbon disulfide (in one SDG) and dichlorodifluoromethane (in one SDG). Associated results were qualified as estimated.

E.3.2.2 Gross Alpha/Beta

No data were rejected. Field duplicates were collected in two SDGs (01-5894 and01-6031). The precision for field duplicates was outside criteria for samples in these two SDGs. Associated results were qualified as estimated "J".

E.3.2.3 Metals (filtered)

The following data validation was performed for metals:

- No data were rejected;
- Method blanks had contaminants in all SDGs, which flagged a number of detected analytes as non-detected;
- Serial dilutions were out of the criteria range for potassium in four of the five SDGs, which resulted in all associated detected analytes to be flagged as estimated "J"; and
- Duplicates were collected in two SDGs (01-5946 and 01-6029) and had RPDs outside criteria limits for many analytes. These analytes were all flagged as estimated "J" for detects and as non-detect estimated concentration "UJ" for all non-detects.

E.3.2.4 Wet Chemistry

Wet chemistry data included the following analyses: perchlorate, alkalinity, chloride, nitrate and nitrite, and sulfate. No data were rejected. No data was qualified.

E.3.3 Field Parameter Measurements

The groundwater field parameters collected at the 85 monitoring wells sampled during Round 14 are listed in Table C-1 (Appendix C). Overall, the field parameters collected are consistent with the expected range of values for groundwater conditions based on previous results at MCAS El Toro.

E.4 QC Evaluation of the Analytical Data

This section presents the results of the internal evaluation of both field and laboratory QC checks. Data quality is assessed against established data quality objectives. The evaluation of the validated data sets compared the objective versus the actual data results through the use of the precision, accuracy, representativeness, completeness, and comparability (PARCC) parameters. The data quality objectives were met for the Round 14.

Precision, accuracy, and completeness goals for the major chemical analyses that were performed on samples collected from the site were those specified in the U.S. EPA Contract Laboratory Program (CLP) SOW.

E.4.1 Precision and Accuracy

The procedures in this section are designed to assess QC data for blanks, duplicates, spikes, and surrogates. The review of these data provides information concerning the precision and accuracy measurements conducted by the laboratories and field procedures.

E.4.1.1 Laboratory Method Blanks

Acetone and methylene chloride (common laboratory contaminants) were reported in all the laboratory method blanks, 2-butanone was reported in two of the laboratory method blanks, and MTBE and octamethyl-cyclotetrasiloxane were reported in one of the laboratory method blanks for volatile organic analyses. All affected data points have been qualified accordingly during the data validation process.

E.4.1.2 Matrix Spikes/Matrix Spike Duplicates

In general, most MS/MSD results that were prepared and analyzed by the laboratory were within control limits.

E.4.1.3 Surrogates

Toluene and bromofluorobenzene were reported in many of the surrogates for volatile organic analyses. All affected data points have been qualified accordingly during the data validation process.

E.4.2 Representativeness

Representativeness is the reliability with which a measurement or measurement system reflects the true conditions under investigation (U.S. EPA 1989). Representativeness is influenced by the number and location of the sampling points, sampling timing and frequency of monitoring efforts, and the field and laboratory sampling procedures (U.S. EPA 1989).

The representativeness of data was enhanced by the use of established field and laboratory procedures and their consistent application. Samples that were collected are considered to be representative of the location of sample collection.

E.4.3 Completeness

The completeness of the data is described as a ratio of the amount of data expected from the field program versus the amount of valid data actually received. Valid data are considered to be those data that have not been rejected (were not R-qualified either from data validation or internal data review). Completeness can be expressed by the following equation:

$$C = \frac{\text{(number of valid results)}}{\text{total number of requested results}} \times 100$$

Based on the data validation and internal review, the completeness of the sample set submitted for analysis is 100 percent. This is within the completeness goals set for this project.

E.4.4 Comparability

Comparability evaluates whether the reported data is comparable with similar data reported by other organizations. The comparability of the laboratory results was found to be acceptable. All samples have been analyzed by the same laboratories, using the complete list of published methods specified in the field sampling plan. All units were consistent and appropriate for the matrix sampled.

Comparability also involves comparing data to previous rounds of sampling at the same locations. Overall, results from Round 14 indicate good comparability to previous rounds.

Appendix F

Data Validation Reports

Appendix F
Data Validation

This section includes data validation procedures for laboratory data generated from the groundwater sampling effort (Round 14) for groundwater monitoring at MCAS El Toro. The purpose of data validation is to assure that the data collected meet the data quality objectives (DQOs) and that the data are of sufficient quality for use for the project objectives.

Data validation was performed by an independent subcontractor (Laboratory Data Consultants, Inc.). One hundred percent of all data collected that was analyzed by a fixed-base analytical laboratory underwent data validation in accordance with Naval Facilities Engineering Service Center (NFESC). Data validation was performed following SWDIV's Environmental Work Instruction #1 (SWDIV 1999). Approximately ninety percent of the data sent for validation was subject to medium level validation criteria, and the remaining ten percent was subject to high level sampling and chemical analysis quality assurance requirements.

Data validation is a systematic process used to interpret, define, and document analytical data quality and assess whether the data quality is sufficient to support the intended use(s) of the data. Validation of a data package includes a reconstruction of sample preparation and analysis activities from the raw data and reconciliation of the raw data with the reduced results, identification of data anomalies, and qualification of data to identify data usability limitations.

The Round 14 data validation reports were reviewed and summarized by CDM Federal project personnel to assess data suitability and usability. The results of this internal review are summarized in Appendix E.

Analytical data were qualified based on data validation reviews. For chemical data, qualifiers were assigned in accordance with the applicable U.S. EPA National Functional Guidelines for Data Validation (U.S. EPA 1993-1994). Any data that were assigned an "R" (rejected) qualifier have been deemed " unusable" and as such were not used for any purpose including, but not limited to, data interpretation, tables, and figures. Data may be rejected for noncompliance of method requirements during the course of validation, or as a result of dilutions and reanalyses by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data. The intent of the latter classification is to guide data users in choosing the best analytical result when reanalyses and/or dilutions exist. A "J" qualifier indicates an estimated concentration, while a "U" qualifier indicates a result is considered undetected. Data with these qualifiers are considered usable. For Round 14 no data was rejected.

Table F-1
Index for Laboratory Data Validation Reports, Round 14 (September 2001)
MCAS El Toro

Sample Delivery Group (SDG) No.	Laboratory Data Consultants (LDC) Report No.	Sampling Date	Analytical Category (LDC Designation)	Analytical Category (CDM Federal Designation)
01-5806	7367A1	11-12-Sep-01	VOCs	VOCs
01-5822	7367B1	13-14-Sep-01	VOCs	VOCs
01-5890	7367C1	17-Sep-01	VOCs	VOCs
01-5895	7367D1	18-19-Sep-01	VOCs	VOCs
01-5946	7367E1	19-20-Sep-01	VOCs	VOCs
01-5966	7367F1	20-21-Sep-01	VOCs	VOCs
01--6015	7367G1	24-25-Sep-01	VOCs	VOCs
01-6029	7367H1	25-Sep-01	VOCs	VOCs
01-5889	7367I22	17-Sep-01	Gross Alpha/Beta	Gross Alpha/Beta
01-5894	7367J22	19-20-Sep-01	Gross Alpha/Beta	Gross Alpha/Beta
01-5959	7367K22	20-Sep-01	Gross Alpha/Beta	Gross Alpha/Beta
01-6031	7367L22	24-Sep-01	Gross Alpha/Beta	Gross Alpha/Beta
01-5890	7367C4	17-Sep-01	Metals	Metals (Filtered)
01-5895	7367D4	19-Sep-01	Metals	Metals (Filtered)
01-5946	7367E4	19-20-Sep-01	Metals	Metals (Filtered)
01-5966	7367F4	20-Sep-01	Metals	Metals (Filtered)
01-6029	7367H4	25-Sep-01	Metals	Metals (Filtered)
01-5890	7367C6	17-Sep-01	Wet Chemistry	General Chemistry
01-5895	7367D6	18-Sep-01	Wet Chemistry	General Chemistry
01-5946	7367E6	19-20-01	Wet Chemistry	General Chemistry
01-5966	7367F6	20-Sep-01	Wet Chemistry	General Chemistry
01-6015	7367G6	24-Sep-01	Wet Chemistry	General Chemistry
01-6029	7367H6	25-Sep-01	Wet Chemistry	General Chemistry

Notes:

MCAS = Marine Corps Air Station
CDM = Camp, Dresser & McKee
LDC = Laboratory Data Consultants
No. = Number
SDG = Sample Delivery Group
VOCs = Volatile Organic Compounds

MCAS El Toro GWM, Round 14
Data Validation Reports
LDC# 7367

Volatiles

LDC

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: MCAS El Toro GWM, Round 14

Collection Date: September 11 through September 12, 2001

LDC Report Date: November 8, 2001

Matrix: Water

Parameters: Volatiles

Validation Level: NFESC Level C & D

Laboratory: Applied P & Ch Laboratory

Sample Delivery Group (SDG): 01-5806

Sample Identification

9-11-01-1-914
18MCAS02-3-114
18MCAS02-5-114
18MCAS02-5-314**
18MCAS03-2-114
18MCAS03-3-114

**Indicates sample underwent NFESC Level D review

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Contract Laboratory Program Statement of Work (SOW) OLM03.1 for Volatiles.

This review follows USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

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

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

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

The following are definitions of the data qualifiers:

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

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

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

A Indicates the finding is based upon technical validation criteria.

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

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

I. Technical Holding Times

All technical holding time requirements were met.

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

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
5/11/01	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone	47.07 33.83 39.93 44.81	All samples in SDG 01-5806	J (all detects) UJ (all non-detects)	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/19/01	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene 4-Methyl-2-pentanone 2-Hexanone	26.4 27.7 38.8 30.2 28.2 44.6 64.2	9-11-01-1-914 18MCAS02-3-114 18MCAS02-5-114 01G4374-MB-01	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
9/20/01	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene Methylcyclohexane 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	27.3 36.7 43.8 33.7 30.2 26.7 57.4 77.4 40.4	18MCAS02-5-314** 18MCAS03-2-114 18MCAS03-3-114 01G4399-MB-01	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

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

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
01G4374-MB-01	9/19/01	Methylene chloride Acetone Unknown (2.43)	0.3 ug/L 1 ug/L 1 ug/L	9-11-01-1-914 18MCAS02-3-114 18MCAS02-5-114
01G4399-MB-01	9/20/01	Methylene chloride Acetone 2-Butanone Unknown (2.43)	0.5 ug/L 1 ug/L 0.4 ug/L 1 ug/L	18MCAS02-5-314** 18MCAS03-2-114 18MCAS03-3-114

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

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
9-11-01-1-914	Methylene chloride Acetone Unknown (2.43)	2 ug/L 2 ug/L 1 ug/L	5U ug/L 10U ug/L 1U ug/L
18MCAS02-3-114	Methylene chloride Acetone Unknown (2.41)	0.4 ug/L 1 ug/L 5 ug/L	5U ug/L 10U ug/L 5U ug/L
18MCAS02-5-114	Methylene chloride Acetone Unknown (2.41)	0.3 ug/L 3 ug/L 3 ug/L	5U ug/L 10U ug/L 3U ug/L

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
18MCAS02-5-314**	Methylene chloride Acetone	0.4 ug/L 4 ug/L	5U ug/L 10U ug/L
18MCAS03-2-114	Methylene chloride Acetone Unknown (2.43)	4 ug/L 12 ug/L 7 ug/L	25U ug/L 50U ug/L 7U ug/L
18MCAS03-3-114	Methylene chloride Acetone	0.4 ug/L 10 ug/L	5U ug/L 10U ug/L

Sample 9-11-01-1-914 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Sampling Date	Compound	Concentration	Associated Samples
9-11-01-1-914	9/11/01	Methylene chloride Acetone	2 ug/L 2 ug/L	18MCAS02-3-114 18MCAS02-5-114 18MCAS02-5-314** 18MCAS03-2-114 18MCAS03-3-114

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

Sample	Compound	Reported Concentration	Modified Final Concentration
18MCAS02-3-114	Methylene chloride Acetone	0.4 ug/L 1 ug/L	5U ug/L 10U ug/L
18MCAS02-5-114	Methylene chloride Acetone	0.3 ug/L 3 ug/L	5U ug/L 10U ug/L
18MCAS02-5-314**	Methylene chloride Acetone	0.4 ug/L 4 ug/L	5U ug/L 10U ug/L
18MCAS03-2-114	Methylene chloride Acetone	4 ug/L 12 ug/L	5U ug/L 10U ug/L
18MCAS03-3-114	Methylene chloride Acetone	0.4 ug/L 10 ug/L	5U ug/L 10U ug/L

VI. Surrogate Spikes

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

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
18MCAS02-5-114	Bromofluorobenzene	119 (86-115)	All TCL compounds	J (all detects)	P
01G4399-MB-01	Toluene-d8	86 (88-110)	All TCL compounds	J (all detects) UJ (all non-detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
18MCAS02-5-314** 18MCAS03-2-114 18MCAS03-3-114	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

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

XI. Target Compound Identifications

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

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

XIV. System Performance

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

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 18MCAS02-5-114 and 18MCAS02-5-314** were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
	18MCAS02-5-114	18MCAS02-5-314**			
Acetone	3	4	29 (≤20)	J (all detects)	A
Methylene chloride	0.3	0.4	29 (≤20)	J (all detects)	A
Trichloroethene	9	9	0 (≤20)	-	-

MCAS El Toro GWM, Round 14
Volatiles - Data Qualification Summary - SDG 01-5806

SDG	Sample	Compound	Flag	A or P	Reason
01-5806	9-11-01-1-914 18MCAS02-3-114 18MCAS02-5-114 18MCAS02-5-314** 18MCAS03-2-114 18MCAS03-3-114	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
01-5806	9-11-01-1-914 18MCAS02-3-114 18MCAS02-5-114	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene 4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
01-5806	18MCAS02-5-314** 18MCAS03-2-114 18MCAS03-3-114	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene Methylcyclohexane 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
01-5806	18MCAS02-5-114	All TCL compounds	J (all detects)	P	Surrogate spikes (%R)
01-5806	18MCAS02-5-314** 18MCAS03-2-114 18MCAS03-3-114	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
01-5806	18MCAS02-5-114 18MCAS02-5-314**	Acetone Methylene chloride	J (all detects) J (all detects)	A	Field duplicates (RPD)

MCAS El Toro GWM, Round 14
Volatiles - Laboratory Blank Data Qualification Summary - SDG 01-5806

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
01-5806	9-11-01-1-914	Methylene chloride Acetone Unknown (2.43)	5U ug/L 10U ug/L 1U ug/L	A
01-5806	18MCAS02-3-114	Methylene chloride Acetone Unknown (2.41)	5U ug/L 10U ug/L 5U ug/L	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
01-5806	18MCAS02-5-114	Methylene chloride Acetone Unknown (2.41)	5U ug/L 10U ug/L 3U ug/L	A
01-5806	18MCAS02-5-314**	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5806	18MCAS03-2-114	Methylene chloride Acetone Unknown (2.43)	25U ug/L 50U ug/L 7U ug/L	A
01-5806	18MCAS03-3-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A

MCAS El Toro GWM, Round 14
Volatiles - Field Blank Data Qualification Summary - SDG 01-5806

SDG	Sample	Compound	Modified Final Concentration	A or P
01-5806	18MCAS02-3-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5806	18MCAS02-5-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5806	18MCAS02-5-314**	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5806	18MCAS03-2-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5806	18MCAS03-3-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A

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VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/11/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015806	Collected by:	
		Lab Sample ID:	01-5806-1	Received Date:	09/13/2001
Sample ID:	**9-11-01-1-914**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/19/01	Anal. Date:	09/19/01
Batch No:	01G4374	Prep. No:	–	Anal. Time:	13:11
Data File Name:	5806-01	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 10UJ
2	Benzene	71-43-2	µg/L	1	<1	U
3	Bromodichloromethane	75-27-4	µg/L	1	<1	U
4	Bromoform	75-25-2	µg/L	1	<1	U
5	Bromomethane	74-83-9	µg/L	1	<1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	<1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	1	<1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	1	<1	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	1	<1	U
14	Cyclohexane	110-82-7	µg/L	1	<1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	<1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	<1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	<1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	<1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	<1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	<1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U UJ
24	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
25	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	<1	U
26	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	<1	U
27	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	<1	U
28	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	<1	U UJ
29	Ethylbenzene	100-41-4	µg/L	1	<1	U
30	2-Hexanone	591-78-6	µg/L	10	<10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	<1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	<1	U
34	Methylene chloride	75-09-2	µg/L	5	2	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	<5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	<1	U
37	Styrene	100-42-5	µg/L	1	<1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	<1	U
39	Tetrachloroethene	127-18-4	µg/L	1	<1	U

M11401

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U UJ
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.43	1	J U
2	Cyclotrisiloxane, hexamethyl-	541-05-9	µg/L	12.21	2	JN
3	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	33	JN
4	UNKNOWN		µg/L	16.55	3	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	110	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	115	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	100	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	99	
2	1,4-Difluorobenzene	540-36-3		50-200	99	
3	Chlorobenzene-d5	3114-55-4		50-200	132	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

11/14/01

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VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/12/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015806	Collected by:	
		Lab Sample ID:	01-5806-2	Received Date:	09/13/2001
Sample ID:	**18MCAS02-3-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/19/01	Anal. Date:	09/19/01
Batch No:	01G4374	Prep. No:	-	Anal. Time:	13:42
Data File Name:	5806-02	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 10UJ
2	Benzene	71-43-2	µg/L	1	<1	U
3	Bromodichloromethane	75-27-4	µg/L	1	<1	U
4	Bromoform	75-25-2	µg/L	1	<1	U
5	Bromomethane	74-83-9	µg/L	1	<1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	UUJ
7	Carbon disulfide	75-15-0	µg/L	1	<1	UUJ
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	1	<1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	1	<1	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	1	<1	U
14	Cyclohexane	110-82-7	µg/L	1	<1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	<1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	<1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	<1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	<1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	<1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	<1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	<1	UUJ
24	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
25	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	<1	U
26	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	<1	U
27	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	<1	U
28	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	<1	UUJ
29	Ethylbenzene	100-41-4	µg/L	1	<1	U
30	2-Hexanone	591-78-6	µg/L	10	<10	UUJ
31	Isopropylbenzene	98-82-8	µg/L	1	<1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	UUJ
33	Methylcyclohexane	108-87-2	µg/L	1	<1	U
34	Methylene chloride	75-09-2	µg/L	5	0.4	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	<5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	<1	U
37	Styrene	100-42-5	µg/L	1	<1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	<1	U
39	Tetrachloroethene	127-18-4	µg/L	1	<1	U

#.	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	2	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U UJ
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.41	5	J UJ
2	Silane, fluorotrimethyl-	420-56-4	µg/L	3.15	1	JN
3	UNKNOWN		µg/L	5.80	2	J
4	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	1	JN
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	105	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	114	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	103	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	86	
2	1,4-Difluorobenzene	540-36-3		50-200	90	
3	Chlorobenzene-d5	3114-55-4		50-200	109	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

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VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/12/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015806	Collected by:	
		Lab Sample ID:	01-5806-3	Received Date:	09/13/2001
Sample ID:	**18MCAS02-5-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/19/01	Anal. Date:	09/19/01
Batch No:	01G4374	Prep. No:	-	Anal. Time:	14:14
Data File Name:	5806-03	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	3	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
25	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
26	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
27	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
28	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.3	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	9	J
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.41	3	J
2	UNKNOWN		µg/L	3.15	2	J
3	UNKNOWN		µg/L	5.80	3	J
4	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	2	JN
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	109	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	119	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	105	
# of out-of-control					1	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	93	
2	1,4-Difluorobenzene	540-36-3		50-200	94	
3	Chlorobenzene-d5	3114-55-4		50-200	115	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/12/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015806	Collected by:	
		Lab Sample ID:	01-5806-4	Received Date:	09/13/2001
Sample ID:	**18MCAS02-5-314**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	13:35
Data File Name:	5806-04A	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	4	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
25	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
26	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
27	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
28	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U UJ
34	Methylene chloride	75-09-2	µg/L	5	0.4	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	9	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	14.67	2	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	91	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	97	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	95	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	98	
2	1,4-Difluorobenzene	540-36-3		50-200	101	
3	Chlorobenzene-d5	3114-55-4		50-200	117	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

004185

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/11/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015806	Collected by:	
		Lab Sample ID:	01-5806-5	Received Date:	09/13/2001
Sample ID:	**18MCAS03-2-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	14:07
Data File Name:	5806-05A	Sample Amount:	5 mL	Dilution Factor:	5
Methanol Vol.	-				
		Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	50	12	JB 50UJ
2	Benzene	71-43-2	µg/L	5	< 5	U
3	Bromodichloromethane	75-27-4	µg/L	5	< 5	U
4	Bromoform	75-25-2	µg/L	5	< 5	U
5	Bromomethane	74-83-9	µg/L	5	< 5	U
6	2-Butanone (MEK)	78-93-3	µg/L	50	< 50	U UJ
7	Carbon disulfide	75-15-0	µg/L	5	< 5	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	5	< 5	U
9	Chlorobenzene	108-90-7	µg/L	5	< 5	U
10	Chlorodibromomethane	124-48-1	µg/L	5	< 5	U
11	Chloroethane	75-00-3	µg/L	5	< 5	U
12	Chloroform	67-66-3	µg/L	5	< 5	U
13	Chloromethane	74-87-3	µg/L	5	< 5	U
14	Cyclohexane	110-82-7	µg/L	5	< 5	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	5	< 5	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	5	< 5	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	5	< 5	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	5	< 5	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	5	< 5	U
20	Dichlorodifluoromethane	75-71-8	µg/L	5	< 5	U
21	1,1-Dichloroethane	75-34-3	µg/L	5	< 5	U
22	1,2-Dichloroethane	107-06-2	µg/L	5	< 5	U
23	1,1-Dichloroethene	75-35-4	µg/L	5	< 5	U UJ
24	1,2-Dichloropropane	78-87-5	µg/L	5	< 5	U
25	cis-1,3-Dichloropropene	10061-01-5	µg/L	5	< 5	U
26	trans-1,3-Dichloropropene	10061-02-6	µg/L	5	< 5	U
27	Cis-1,2-Dichloroethene	156-59-2	µg/L	5	9	
28	Trans-1,2-Dichloroethene	156-60-5	µg/L	5	< 5	U UJ
29	Ethylbenzene	100-41-4	µg/L	5	< 5	U
30	2-Hexanone	591-78-6	µg/L	50	< 50	U UJ
31	Isopropylbenzene	98-82-8	µg/L	5	< 5	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	50	< 50	U UJ
33	Methylcyclohexane	108-87-2	µg/L	5	< 5	U UJ
34	Methylene chloride	75-09-2	µg/L	25	4	JB 25UJ
35	Methyl Acetate	79-20-9	µg/L	25	< 25	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	5	< 5	U
37	Styrene	100-42-5	µg/L	5	< 5	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	5	< 5	U
39	Tetrachloroethene	127-18-4	µg/L	5	< 5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	5	< 5	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	5	< 5	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	5	< 5	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	5	< 5	U
44	Trichloroethene	79-01-6	µg/L	5	140	
45	Trichlorofluoromethane	75-69-4	µg/L	5	< 5	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	5	< 5	U UJ
47	Vinyl chloride	75-01-4	µg/L	5	< 5	U
48	Xylenes (total)	1330-20-7	µg/L	5	< 5	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.43	7	J U
2	UNKNOWN		µg/L	5.82	7	J
3	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	8	JN
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	89	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	94	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	94	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	96	
2	1,4-Difluorobenzene	540-36-3		50-200	99	
3	Chlorobenzene-d5	3114-55-4		50-200	112	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

MMGL

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/11/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015806	Collected by:	
		Lab Sample ID:	01-5806-6	Received Date:	09/13/2001
Sample ID:	**18MCAS03-3-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	14:38
Data File Name:	5806-06A	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	10	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
25	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
26	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
27	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
28	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U UJ
34	Methylene chloride	75-09-2	µg/L	5	0.4	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	0.4	J

MHG

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	0.4	J
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	Silane, fluorotrimethyl-	420-56-4	µg/L	3.17	2	JN
2	UNKNOWN		µg/L	5.82	3	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	100	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	105	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	99	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	96	
2	1,4-Difluorobenzene	540-36-3		50-200	98	
3	Chlorobenzene-d5	3114-55-4		50-200	104	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: MCAS El Toro GWM, Round 14

Collection Date: September 13 through September 14, 2001

LDC Report Date: November 8, 2001

Matrix: Water

Parameters: Volatiles

Validation Level: NFESC Level C & D

Laboratory: Applied P & Ch Laboratory

Sample Delivery Group (SDG): 01-5822

Sample Identification

9-13-01-1-914
12_DBMW48-114**
18BGMP08E-114
18BGMP10C-114
18BGMP10D-114
18BGMP10D-512
18BGMP10D-712
18BGMP10E-114
18BGMP10F-114
21_UGMW37-114
398MW-13-114
9-13-01-1-914MS
9-13-01-1-914MSD

**Indicates sample underwent NFESC Level D review

Introduction

This data review covers 13 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Contract Laboratory Program Statement of Work (SOW) OLM03.1 for Volatiles.

This review follows USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

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

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

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

The following are definitions of the data qualifiers:

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

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

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

A Indicates the finding is based upon technical validation criteria.

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

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

I. Technical Holding Times

All technical holding time requirements were met.

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

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
5/11/01	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone	47.07 33.83 39.93 44.81	All samples in SDG 01-5822	J (all detects) UJ (all non-detects)	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/19/01	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene 4-Methyl-2-pentanone 2-Hexanone	26.4 27.7 38.8 30.2 28.2 44.6 64.2	9-13-01-1-914 12_DBMW48-114** 18BGMP08E-114 18BGMP10E-114 18BGMP10F-114 21_UGMW37-114 9-13-01-1-914MS 9-13-01-1-914MSD 01G4374-MB-01	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
9/20/01	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene Methylcyclohexane 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	27.3 36.7 43.8 33.7 30.2 26.7 57.4 77.4 40.4	18BGMP10C-114 18BGMP10D-114 18BGMP10D-512 18BGMP10D-712 398MW-13-114 01G4399-MB-01	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

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

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
01G4374-MB-01	9/19/01	Methylene chloride Acetone Unknown (2.43)	0.3 ug/L 1 ug/L 1 ug/L	9-13-01-1-914 12_DBMW48-114** 18BGMP08E-114 18BGMP10E-114 18BGMP10F-114 21_UGMW37-114
01G4399-MB-01	9/20/01	Methylene chloride Acetone *2-Butanone* Unknown (2.43)	0.5 ug/L 1 ug/L 0.4 ug/L 1 ug/L	18BGMP10C-114 18BGMP10D-114 18BGMP10D-512 18BGMP10D-712 398MW-13-114

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

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
9-13-01-1-914	Methylene chloride Acetone	2 ug/L 2 ug/L	5U ug/L 10U ug/L
12_DBMW48-114**	Acetone	2 ug/L	10U ug/L
18BGMP08E-114	Methylene chloride Acetone	0.5 ug/L 1 ug/L	5U ug/L 10U ug/L

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
18BGMP10E-114	Acetone Unknown (2.41)	2 ug/L 3 ug/L	10U ug/L 3U ug/L
18BGMP10F-114	Acetone	1 ug/L	10U ug/L
21_UGMW37-114	Acetone	1 ug/L	10U ug/L
18BGMP10C-114	Methylene chloride Acetone 2-Butanone	0.5 ug/L 5 ug/L 0.4 ug/L	5U ug/L 10U ug/L 10U ug/L
18BGMP10D-114	Methylene chloride Acetone Unknown (2.42)	0.5 ug/L 5 ug/L 3 ug/L	5U ug/L 10U ug/L 3U ug/L
18BGMP10D-512	Methylene chloride Acetone 2-Butanone	0.5 ug/L 3 ug/L 0.9 ug/L	5U ug/L 10U ug/L 10U ug/L
18BGMP10D-712	Methylene chloride Acetone	2 ug/L 4 ug/L	5U ug/L 10U ug/L
398MW-13-114	Methylene chloride Acetone 2-Butanone	1 ug/L 2 ug/L 0.6 ug/L	5U ug/L 10U ug/L 10U ug/L

Sample 9-13-01-1-914 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Sampling Date	Compound	Concentration	Associated Samples
9-13-01-1-914	9/13/01	Methylene chloride Acetone	2 ug/L 2 ug/L	12_DBMW48-114** 18BGMP08E-114 18BGMP10C-114 18BGMP10D-114 18BGMP10D-512 18BGMP10D-712 18BGMP10E-114 18BGMP10F-114 21_UGMW37-114 398MW-13-114

Sample 18BGMP10D-512 was identified as an equipment rinsate. No volatile contaminants were found in this blank with the following exceptions:

Equipment Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
18BGMP10D-512	9/13/01	Methylene chloride Acetone 2-Butanone Methyl-tert-butyl ether Toluene	0.5 ug/L 3 ug/L 0.9 1 ug/L 0.5 ug/L	12_DBMW48-114** 18BGMP08E-114 18BGMP10C-114 18BGMP10D-114 18BGMP10E-114 18BGMP10F-114 21_UGMW37-114 398MW-13-114

Sample 18BGMP10D-712 was identified as a field blank. No volatile contaminants were found in this blank with the following exceptions:

Field Blank ID	Sampling Date	Compound	Concentration	Associated Samples
18BGMP10D-712	9/13/01	Methylene chloride Acetone Methyl acetate Methyl-tert-butyl ether Toluene	2 ug/L 4 ug/L 0.4 ug/L 1 ug/L 0.5 ug/L	12_DBMW48-114** 18BGMP08E-114 18BGMP10C-114 18BGMP10D-114 18BGMP10E-114 18BGMP10F-114 21_UGMW37-114 398MW-13-114

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

Sample	Compound	Reported Concentration	Modified Final Concentration
12_DBMW48-114**	Acetone	2 ug/L	10U ug/L
18BGMP08E-114	Methylene chloride Acetone	0.5 ug/L 1 ug/L	5U ug/L 10U ug/L
18BGMP10C-114	Methylene chloride Acetone 2-Butanone	0.5 ug/L 5 ug/L 0.4 ug/L	5U ug/L 10U ug/L 10U ug/L
18BGMP10D-114	Methylene chloride Acetone Toluene	0.5 ug/L 5 ug/L 0.5 ug/L	5U ug/L 10U ug/L 1U ug/L
18BGMP10D-512	Methylene chloride Acetone	0.5 ug/L 3 ug/L	5U ug/L 10U ug/L

Sample	Compound	Reported Concentration	Modified Final Concentration
18BGMP10D-712	Methylene chloride Acetone	2 ug/L 4 ug/L	5U ug/L 10U ug/L
18BGMP10E-114	Acetone	2 ug/L	10U ug/L
18BGMP10F-114	Acetone	1 ug/L	10U ug/L
21_UGMW37-114	Acetone	1 ug/L	10U ug/L
398MW-13-114	Methylene chloride Acetone 2-Butanone Methyl acetate	1 ug/L 2 ug/L 0.6 ug/L 0.5 ug/L	5U ug/L 10U ug/L 10U ug/L 5U ug/L

VI. Surrogate Spikes

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

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
01G4399-MB-01	Toluene-d8	86 (88-110)	All TCL compounds	J (all detects) UJ (all non-detects)	P
398MW-13-114	Toluene-d8 Bromofluorobenzene	79 (88-110) 82 (86-115)	All TCL compounds	J (all detects) UJ (all non-detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
18BGMP10C-114 18BGMP10D-114 18BGMP10D-512 18BGMP10D-712 398MW-13-114	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

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

XI. Target Compound Identifications

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

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

XIV. System Performance

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

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

MCAS El Toro GWM, Round 14
Volatiles - Data Qualification Summary - SDG 01-5822

SDG	Sample	Compound	Flag	A or P	Reason
01-5822	9-13-01-1-914 12_DBMW48-114** 18BGMP08E-114 18BGMP10C-114 18BGMP10D-114 18BGMP10D-512 18BGMP10D-712 18BGMP10E-114 18BGMP10F-114 21_UGMW37-114 398MW-13-114	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
01-5822	9-13-01-1-914 12_DBMW48-114** 18BGMP08E-114 18BGMP10E-114 18BGMP10F-114 21_UGMW37-114	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene 4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
01-5822	18BGMP10C-114 18BGMP10D-114 18BGMP10D-512 18BGMP10D-712 398MW-13-114	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene Methylcyclohexane 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
01-5822	398MW-13-114	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate spikes (%R)
01-5822	18BGMP10C-114 18BGMP10D-114 18BGMP10D-512 18BGMP10D-712 398MW-13-114	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

MCAS El Toro GWM, Round 14
Volatiles - Laboratory Blank Data Qualification Summary - SDG 01-5822

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
01-5822	9-13-01-1-914	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5822	12_DBMW48-114**	Acetone	10U ug/L	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
01-5822	18BGMP08E-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5822	18BGMP10E-114	Acetone Unknown (2.41)	10U ug/L 3U ug/L	A
01-5822	18BGMP10F-114	Acetone	10U ug/L	A
01-5822	21_UGMW37-114	Acetone	10U ug/L	A
01-5822	18BGMP10C-114	Methylene chloride Acetone 2-Butanone	5U ug/L 10U ug/L 10U ug/L	A
01-5822	18BGMP10D-114	Methylene chloride Acetone Unknown (2.42)	5U ug/L 10U ug/L 3U ug/L	A
01-5822	18BGMP10D-512	Methylene chloride Acetone 2-Butanone	5U ug/L 10U ug/L 10U ug/L	A
01-5822	18BGMP10D-712	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5822	398MW-13-114	Methylene chloride Acetone 2-Butanone	5U ug/L 10U ug/L 10U ug/L	A

MCAS El Toro GWM, Round 14
Volatiles - Field Blank Data Qualification Summary - SDG 01-5822

SDG	Sample	Compound	Modified Final Concentration	A or P
01-5822	12_DBMW48-114**	Acetone	10U ug/L	A
01-5822	18BGMP08E-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5822	18BGMP10C-114	Methylene chloride Acetone 2-Butanone	5U ug/L 10U ug/L 10U ug/L	A
01-5822	18BGMP10D-114	Methylene chloride Acetone Toluene	5U ug/L 10U ug/L 1U ug/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
01-5822	18BGMP10D-512	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5822	18BGMP10D-712	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5822	18BGMP10E-114	Acetone	10U ug/L	A
01-5822	18BGMP10F-114	Acetone	10U ug/L	A
01-5822	21_UGMW37-114	Acetone	10U ug/L	A
01-5822	398MW-13-114	Methylene chloride Acetone 2-Butanone Methyl acetate	5U ug/L 10U ug/L 10U ug/L 5U ug/L	A

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VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/13/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-1	Received Date:	09/14/2001
Sample ID:	**9-13-01-1-914**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/19/01	Anal. Date:	09/19/01
Batch No:	01G4374	Prep. No:	-	Anal. Time:	16:21
Data File Name:	5822-01	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	2	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U UJ
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U

TIC (Tentative Identified Components): Not Found

Surrogates			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	99
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	110
3	1,2-Dichloroethane-d4	17060-07-0	76-114	93
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	100
2	1,4-Difluorobenzene	540-36-3	50-200	102
3	Chlorobenzene-d5	3114-55-4	50-200	117
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/14/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-2	Received Date:	09/14/2001
Sample ID:	**12_DBMW48-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/19/01	Anal. Date:	09/19/01
Batch No:	01G4374	Prep. No:	–	Anal. Time:	16:52
Data File Name:	5822-02	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 10 UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	0.6	J
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	< 5	U UJ
35	Methyl Acetate	79-20-9	µg/L	5	13	
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	30	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	5	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	380 [a]	
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U

TIC (Tentative Identified Components): Not Found

Surrogates			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	94
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	104
3	1,2-Dichloroethane-d4	17060-07-0	76-114	92
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	100
2	1,4-Difluorobenzene	540-36-3	50-200	102
3	Chlorobenzene-d5	3114-55-4	50-200	120
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] Analyzed with a dilution factor of 10.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/13/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	.01-5822-3	Received Date:	09/14/2001
Sample ID:	**18BGMP08E-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/19/01	Anal. Date:	09/19/01
Batch No:	01G4374	Prep. No:	–	Anal. Time:	17:24
Data File Name:	5822-03	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 104 J
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	1	
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.5	JB 54
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U UJ
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	3.17	1	J
2	UNKNOWN		µg/L	5.82	2	J
3	UNKNOWN		µg/L	14.67	9	J
4	UNKNOWN		µg/L	16.56	1	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	94	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	106	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	90	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	99	
2	1,4-Difluorobenzene	540-36-3		50-200	98	
3	Chlorobenzene-d5	3114-55-4		50-200	114	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/13/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-8	Received Date:	09/14/2001
Sample ID:	**18BGMP10E-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/19/01	Anal. Date:	09/19/01
Batch No:	01G4374	Prep. No:	–	Anal. Time:	20:01
Data File Name:	5822-08	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 10 UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	0.7	J J
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	< 5	U UJ
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	0.7	J
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U UJ
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.41	3	J U
2	Silane, fluorotrimethyl-	420-56-4	µg/L	3.17	2	JN
3	UNKNOWN		µg/L	5.82	2	J
4	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	4	JN
5	UNKNOWN		µg/L	16.56	2	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	101	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	115	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	97	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	96	
2	1,4-Difluorobenzene	540-36-3		50-200	92	
3	Chlorobenzene-d5	3114-55-4		50-200	108	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/13/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-9	Received Date:	09/14/2001
Sample ID:	**18BGMP10F-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/19/01	Anal. Date:	09/19/01
Batch No:	01G4374	Prep. No:	–	Anal. Time:	20:32
Data File Name:	5822-09	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	< 5	U UJ
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U UJ
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U

TIC (Tentative Identified Components): Not Found

Surrogates			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	101
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	113
3	1,2-Dichloroethane-d4	17060-07-0	76-114	95
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	101
2	1,4-Difluorobenzene	540-36-3	50-200	100
3	Chlorobenzene-d5	3114-55-4	50-200	113
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

M11401

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/14/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-10	Received Date:	09/14/2001
Sample ID:	**21_UGMW37-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/19/01	Anal. Date:	09/19/01
Batch No:	01G4374	Prep. No:	-	Anal. Time:	21:03
Data File Name:	5822-10	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	0.4	J
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	2	
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	4	J
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	0.6	J
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	< 5	U UJ
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	4	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	0.4	J
44	Trichloroethene	79-01-6	µg/L	1	27	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U UJ
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	3.15	3	J
2	UNKNOWN		µg/L	5.80	4	J
3	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	9	JN
4	Undecane, C_{11}	1120-21-4	µg/L	16.27	1	JN
5	UNKNOWN		µg/L	16.56	3	J
6	Dodecane, C_{12}	112-40-3	µg/L	17.36	2	JN
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	97	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	112	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	97	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	98	
2	1,4-Difluorobenzene	540-36-3		50-200	99	
3	Chlorobenzene-d5	3114-55-4		50-200	116	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/13/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-4	Received Date:	09/14/2001
Sample ID:	**18BGMP10C-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	15:41
Data File Name:	5822-04A	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	5	JB 10UJ
2	Benzene	71-43-2	µg/L	1	<1	U
3	Bromodichloromethane	75-27-4	µg/L	1	<1	U
4	Bromoform	75-25-2	µg/L	1	<1	U
5	Bromomethane	74-83-9	µg/L	1	<1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	0.4	JB 10UJ
7	Carbon disulfide	75-15-0	µg/L	1	1	J
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	1	<1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	1	<1	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	1	<1	U
14	Cyclohexane	110-82-7	µg/L	1	<1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	<1	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	1	<1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	<1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	<1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	<1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	<1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	<1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	<1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	<1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	<1	U
29	Ethylbenzene	100-41-4	µg/L	1	<1	U
30	2-Hexanone	591-78-6	µg/L	10	<10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	<1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	<1	U UJ
34	Methylene chloride	75-09-2	µg/L	5	0.5	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	<5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	<1	U
37	Styrene	100-42-5	µg/L	1	1	J
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	<1	U
39	Tetrachloroethene	127-18-4	µg/L	1	<1	U

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	5.80	2	J
2	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	2	JN
3	UNKNOWN		µg/L	16.55	1	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	97	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	102	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	99	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	94	
2	1,4-Difluorobenzene	540-36-3		50-200	95	
3	Chlorobenzene-d5	3114-55-4		50-200	104	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/13/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-5	Received Date:	09/14/2001
Sample ID:	**18BGMP10D-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	16:13
Data File Name:	5822-05A	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	5	JB 10UJ
2	Benzene	71-43-2	µg/L	1	<1	U
3	Bromodichloromethane	75-27-4	µg/L	1	<1	U
4	Bromoform	75-25-2	µg/L	1	<1	U
5	Bromomethane	74-83-9	µg/L	1	<1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	1	J
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	1	<1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	1	<1	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	1	<1	U
14	Cyclohexane	110-82-7	µg/L	1	<1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	<1	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	1	<1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	<1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	<1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	<1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	<1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	<1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	<1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	<1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	<1	U
29	Ethylbenzene	100-41-4	µg/L	1	<1	U
30	2-Hexanone	591-78-6	µg/L	10	<10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	<1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	<1	U UJ
34	Methylene chloride	75-09-2	µg/L	5	0.5	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	<5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	<1	U
37	Styrene	100-42-5	µg/L	1	0.9	J
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	<1	U
39	Tetrachloroethene	127-18-4	µg/L	1	<1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	0.5	J /U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U UJ
47	Vinyl chloride	75-01-4	µg/L	1	0.4	J
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.42	3	J U
2	Sulfur dioxide	7446-09-5	µg/L	2.51	1	JN
3	Silane, fluorotrimethyl-	420-56-4	µg/L	3.15	1	JN
4	UNKNOWN		µg/L	5.80	2	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	88	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	92	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	93	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	102	
2	1,4-Difluorobenzene	540-36-3		50-200	104	
3	Chlorobenzene-d5	3114-55-4		50-200	117	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

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Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/13/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-6	Received Date:	09/14/2001
Sample ID:	**18BGMP10D-512**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	16:45
Data File Name:	5822-06A	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	3	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	0.9	JB 10UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U UJ
34	Methylene chloride	75-09-2	µg/L	5	0.5	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	1	J
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

MH 4/9

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	0.5	J
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U UJ
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
	TIC (Tentative Identified Components)			RT (min)		
1	UNKNOWN		µg/L	5.80	2	J
2	Ethyl acetate	141-78-6	µg/L	7.42	2	JN
	Surrogates			Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	99	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	103	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	99	
	# of out-of-control				0	
	Internal Standard			Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	91	
2	1,4-Difluorobenzene	540-36-3		50-200	95	
3	Chlorobenzene-d5	3114-55-4		50-200	100	
	# of out-of-control				0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/13/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-7	Received Date:	09/14/2001
Sample ID:	**18BGMP10D-712**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	17:16
Data File Name:	5822-07A	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	4	JB 104J
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U UJ
34	Methylene chloride	75-09-2	µg/L	5	2	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	0.4	J
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	1	J
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	0.5	J
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U UJ
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	5.78	7	J
2	Ethyl acetate	141-78-6	µg/L	7.39	2	JN
3	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.66	6	JN
4	UNKNOWN		µg/L	16.54	2	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	92	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	97	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	96	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	90	
2	1,4-Difluorobenzene	540-36-3		50-200	91	
3	Chlorobenzene-d5	3114-55-4		50-200	102	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

MMQ1

B

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/14/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015822	Collected by:	
		Lab Sample ID:	01-5822-11	Received Date:	09/14/2001
Sample ID:	**398MW-13-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	17:48
Data File Name:	5822-11A	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U UJ
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	0.6	JB 10UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	1	JB 5UJ
35	Methyl Acetate	79-20-9	µg/L	5	0.5	J 5UJ
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U UJ
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	0.4	J
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	3.15	3	J
2	UNKNOWN		µg/L	5.78	3	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	79	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	82	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	94	
# of out-of-control					2	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	92	
2	1,4-Difluorobenzene	540-36-3		50-200	100	
3	Chlorobenzene-d5	3114-55-4		50-200	120	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: MCAS El Toro GWM, Round 14

Collection Date: September 17, 2001

LDC Report Date: November 8, 2001

Matrix: Water

Parameters: Volatiles

Validation Level: NFESC Level C & D

Laboratory: Applied P & Ch Laboratory

Sample Delivery Group (SDG): 01-5890

Sample Identification

03_DGMW64A-114
03_DGMW65XA-114**
07_DBMW43A-114
9-17-01-1-914
09_DBMW45-114
09_DGMW75-114**
18_BGMW-18A-114
22_DBMW47-114

**Indicates sample underwent NFESC Level D review

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Contract Laboratory Program Statement of Work (SOW) OLM03.1 for Volatiles.

This review follows USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

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

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

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

The following are definitions of the data qualifiers:

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

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

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

A Indicates the finding is based upon technical validation criteria.

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

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

I. Technical Holding Times

All technical holding time requirements were met.

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

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
5/11/01	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone	47.07 33.83 39.93 44.81	All samples in SDG 01-5890	J (all detects) UJ (all non-detects)	A

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/20/01	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene Methylcyclohexane 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	27.3 36.7 43.8 33.7 30.2 26.7 57.4 77.4 40.4	03_DGMW64A-114 03_DGMW65XA-114** 01G4399-MB-01	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
9/21/01	Chloromethane 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene Methylcyclohexane 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane Cyclohexane	26.0 37.0 48.2 35.5 32.4 32.6 45.8 63.8 29.4 30.2	07_DBMW43A-114 9-17-01-1-914 09_DBMW45-114 09_DGMW75-114** 18_BGMW-18A-114 22_DBMW47-114 01G4415-MB-01	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

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

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
01G4399-MB-01	9/20/01	Methylene chloride Acetone 2-Butanone Unknown (2.43)	0.5 ug/L 1 ug/L 0.4 ug/L 1 ug/L	03_DGMW64A-114 03_DGMW65XA-114**
01G4415-MB-01	9/21/01	Methylene chloride Acetone	0.7 ug/L 2 ug/L	07_DBMW43A-114 9-17-01-1-914 09_DBMW45-114 09_DGMW75-114** 18_BGMW-18A-114 22_DBMW47-114

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

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
03_DGMW64A-114	Methylene chloride Acetone	0.5 ug/L 1 ug/L	5U ug/L 10U ug/L
03_DGMW65XA-114**	Methylene chloride Acetone	0.9 ug/L 1 ug/L	5U ug/L 10U ug/L
07_DBMW43A-114	Methylene chloride Acetone	0.6 ug/L 1 ug/L	5U ug/L 10U ug/L

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
9-17-01-1-914	Methylene chloride Acetone	1 ug/L 2 ug/L	5U ug/L 10U ug/L
09_DBMW45-114	Methylene chloride Acetone	0.5 ug/L 1 ug/L	5U ug/L 10U ug/L
09_DGMW75-114**	Acetone	0.9 ug/L	10U ug/L
18_BGMW-18A-114	Methylene chloride Acetone	0.3 ug/L 1 ug/L	5U ug/L 10U ug/L
22_DBMW47-114	Methylene chloride Acetone	0.4 ug/L 1 ug/L	5U ug/L 10U ug/L

Sample 9-17-01-1-914 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Sampling Date	Compound	Concentration	Associated Samples
9-17-01-1-914	9/17/01	Methylene chloride Acetone	1 ug/L 2 ug/L	03_DGMW64A-114 03_DGMW65XA-114** 07_DBMW43A-114 09_DBMW45-114 09_DGMW75-114** 18_BGMW-18A-114 22_DBMW47-114

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

Sample	Compound	Reported Concentration	Modified Final Concentration
03_DGMW64A-114	Methylene chloride Acetone	0.5 ug/L 1 ug/L	5U ug/L 10U ug/L
03_DGMW65XA-114**	Methylene chloride Acetone	0.9 ug/L 1 ug/L	5U ug/L 10U ug/L
07_DBMW43A-114	Methylene chloride Acetone	0.6 ug/L 1 ug/L	5U ug/L 10U ug/L

Sample	Compound	Reported Concentration	Modified Final Concentration
09_DBMW45-114	Methylene chloride Acetone	0.5 ug/L 1 ug/L	5U ug/L 10U ug/L
09_DGMW75-114**	Acetone	0.9 ug/L	10U ug/L
18_BGMW-18A-114	Methylene chloride Acetone	0.3 ug/L 1 ug/L	5U ug/L 10U ug/L
22_DBMW47-114	Methylene chloride Acetone	0.4 ug/L 1 ug/L	5U ug/L 10U ug/L

VI. Surrogate Spikes

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

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
01G4399-MB-01	Toluene-d8	86 (88-110)	All TCL compounds	J (all detects) UJ (all non-detects)	P
22_DBMW47-114	Toluene-d8	86 (88-110)	All TCL compounds	J (all detects) UJ (all non-detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 01-5890	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

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

XI. Target Compound Identifications

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

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

XIV. System Performance

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

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

MCAS El Toro GWM, Round 14
Volatiles - Data Qualification Summary - SDG 01-5890

SDG	Sample	Compound	Flag	A or P	Reason
01-5890	03_DGMW64A-114 03_DGMW65XA-114** 07_DBMW43A-114 9-17-01-1-914 09_DBMW45-114 09_DGMW75-114** 18_BGMW-18A-114 22_DBMW47-114	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
01-5890	03_DGMW64A-114 03_DGMW65XA-114**	Methylene chloride 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene Methylcyclohexane 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
01-5890	07_DBMW43A-114 9-17-01-1-914 09_DBMW45-114 09_DGMW75-114** 18_BGMW-18A-114 22_DBMW47-114	Chloromethane 1,1,2-Trichloro-1,2,2-trifluoroethane Carbon disulfide 1,1-Dichloroethene trans-1,2-Dichloroethene Methylcyclohexane 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane Cyclohexane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
01-5890	22_DBMW47-114	All TCL compounds	J (all detects) UJ (all non-detects)	P	Surrogate spikes (%R)
01-5890	03_DGMW64A-114 03_DGMW65XA-114** 07_DBMW43A-114 9-17-01-1-914 09_DBMW45-114 09_DGMW75-114** 18_BGMW-18A-114 22_DBMW47-114	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

MCAS El Toro GWM, Round 14
Volatiles - Laboratory Blank Data Qualification Summary - SDG 01-5890

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
01-5890	03_DGMW64A-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
01-5890	03_DGMW65XA-114**	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	07_DBMW43A-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	9-17-01-1-914	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	09_DBMW45-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	09_DGMW75-114**	Acetone	10U ug/L	A
01-5890	18_BGMW-18A-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	22_DBMW47-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A

MCAS El Toro GWM, Round 14
Volatiles - Field Blank Data Qualification Summary - SDG 01-5890

SDG	Sample	Compound	Modified Final Concentration	A or P
01-5890	03_DGMW64A-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	03_DGMW65XA-114**	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	07_DBMW43A-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	09_DBMW45-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	09_DGMW75-114**	Acetone	10U ug/L	A
01-5890	18_BGMW-18A-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5890	22_DBMW47-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A

C

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/17/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015890	Collected by:	
		Lab Sample ID:	01-5890-8	Received Date:	09/18/2001
Sample ID:	22_DBMW47-114	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/21/01	Anal. Date:	09/21/01
Batch No:	01G4415	Prep. No:	-	Anal. Time:	21:44
Data File Name:	5890-08	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 10U
2	Benzene	71-43-2	µg/L	1	<1	U U
3	Bromodichloromethane	75-27-4	µg/L	1	<1	U
4	Bromoform	75-25-2	µg/L	1	<1	U
5	Bromomethane	74-83-9	µg/L	1	<1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	1	0.6	J J
8	Carbon tetrachloride	56-23-5	µg/L	1	0.7	J J
9	Chlorobenzene	108-90-7	µg/L	1	<1	U U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	1	<1	U
12	Chloroform	67-66-3	µg/L	1	0.3	J J
13	Chloromethane	74-87-3	µg/L	1	<1	U U
14	Cyclohexane	110-82-7	µg/L	1	<1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	<1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	<1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	<1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	<1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	<1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	<1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	0.3	J J
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	<1	U U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	<1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	<1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	<1	U
29	Ethylbenzene	100-41-4	µg/L	1	<1	U
30	2-Hexanone	591-78-6	µg/L	10	<10	U
31	Isopropylbenzene	98-82-8	µg/L	1	<1	U
32	Methyl Acetate	79-20-9	µg/L	5	<5	U
33	Methylcyclohexane	108-87-2	µg/L	1	<1	U
34	Methyl-t-butyl ether	1634-04-4	µg/L	1	<1	U
35	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
36	Methylene chloride	75-09-2	µg/L	5	0.4	JB 5U
37	Styrene	100-42-5	µg/L	1	<1	U U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	<1	U U
39	Tetrachloroethene	127-18-4	µg/L	1	0.4	J J

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	150 [a]	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	3	
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	Propene, hexafluoro-	116-15-4	µg/L	2.28	20	JN
2	Ethyl acetate	141-78-6	µg/L	7.42	4	JN
3	UNKNOWN		µg/L	14.67	2	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	86	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	94	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	95	
# of out-of-control					1	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	102	
2	1,4-Difluorobenzene	540-36-3		50-200	106	
3	Chlorobenzene-d5	3114-55-4		50-200	108	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] Analyzed with a dilution factor of 5.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

A11407

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/17/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015890	Collected by:	
		Lab Sample ID:	01-5890-7	Received Date:	09/18/2001
Sample ID:	**18_BGMW-18A-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/21/01	Anal. Date:	09/21/01
Batch No:	01G4415	Prep. No:	–	Anal. Time:	21:13
Data File Name:	5890-07	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U UJ
14	Cyclohexane	110-82-7	µg/L	1	< 1	U UJ
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	Methyl Acetate	79-20-9	µg/L	5	< 5	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U UJ
34	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
35	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
36	Methylene chloride	75-09-2	µg/L	5	0.3	JB 5U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	0.3	J J
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	5.82	2	J
2	UNKNOWN		µg/L	14.67	2	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	99	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	104	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	96	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	102	
2	1,4-Difluorobenzene	540-36-3		50-200	100	
3	Chlorobenzene-d5	3114-55-4		50-200	102	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

A11140

004728-A

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/17/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015890	Collected by:	
		Lab Sample ID:	01-5890-6	Received Date:	09/18/2001
Sample ID:	09_DGMW75-114	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/21/01	Anal. Date:	09/21/01
Batch No:	01G4415	Prep. No:	-	Anal. Time:	20:42
Data File Name:	5890-06	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	0.9	JB 10U J
2	Benzene	71-43-2	µg/L	1	<1	U
3	Bromodichloromethane	75-27-4	µg/L	1	<1	U
4	Bromoform	75-25-2	µg/L	1	<1	U
5	Bromomethane	74-83-9	µg/L	1	<1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	<1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	2	
9	Chlorobenzene	108-90-7	µg/L	1	<1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	1	<1	U
12	Chloroform	67-66-3	µg/L	1	4	
13	Chloromethane	74-87-3	µg/L	1	<1	U UJ
14	Cyclohexane	110-82-7	µg/L	1	<1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	<1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	<1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	<1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	<1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	<1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	<1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	11	J
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	0.4	J
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	<1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	<1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	<1	U
29	Ethylbenzene	100-41-4	µg/L	1	<1	U
30	2-Hexanone	591-78-6	µg/L	10	<10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	<1	U
32	Methyl Acetate	79-20-9	µg/L	5	<5	U
33	Methylcyclohexane	108-87-2	µg/L	1	<1	U UJ
34	Methyl-t-butyl ether	1634-04-4	µg/L	1	<1	U
35	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U UJ
36	Methylene chloride	75-09-2	µg/L	5	<5	U
37	Styrene	100-42-5	µg/L	1	<1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	<1	U
39	Tetrachloroethene	127-18-4	µg/L	1	5	

0047

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	780 [a]	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	23	J
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U

TIC (Tentative Identified Components): Not Found

Surrogates			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	91
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	98
3	1,2-Dichloroethane-d4	17060-07-0	76-114	96
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	101
2	1,4-Difluorobenzene	540-36-3	50-200	103
3	Chlorobenzene-d5	3114-55-4	50-200	104
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] Analyzed with a dilution factor of 10.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

004706

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/17/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015890	Collected by:	
		Lab Sample ID:	01-5890-5	Received Date:	09/18/2001
Sample ID:	09_DBMW45-114	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/21/01	Anal. Date:	09/21/01
Batch No:	01G4415	Prep. No:	-	Anal. Time:	20:10
Data File Name:	5890-05	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	1	
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	0.6	J
13	Chloromethane	74-87-3	µg/L	1	< 1	U UJ
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	14	J
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	Methyl Acetate	79-20-9	µg/L	5	< 5	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U UJ
34	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
35	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
36	Methylene chloride	75-09-2	µg/L	5	0.5	JB 5U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	0.9	J

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	360 [a]	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	3	J
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U

TIC (Tentative Identified Components): Not Found

Surrogates			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	103
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	108
3	1,2-Dichloroethane-d4	17060-07-0	76-114	98
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	100
2	1,4-Difluorobenzene	540-36-3	50-200	98
3	Chlorobenzene-d5	3114-55-4	50-200	95
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] Analyzed with a dilution factor of 10.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

11/14/01

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/17/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015890	Collected by:	
		Lab Sample ID:	01-5890-4	Received Date:	09/18/2001
Sample ID:	**9-17-01-1-914**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/21/01	Anal. Date:	09/21/01
Batch No:	01G4415	Prep. No:	-	Anal. Time:	19:38
Data File Name:	5890-04	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U UJ
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	Methyl Acetate	79-20-9	µg/L	5	< 5	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U UJ
34	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
35	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
36	Methylene chloride	75-09-2	µg/L	5	1	JB 5U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

004675

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U UJ
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	14.67	1	J
2	UNKNOWN		µg/L	15.53	2	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	96	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	103	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	98	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	99	
2	1,4-Difluorobenzene	540-36-3		50-200	99	
3	Chlorobenzene-d5	3114-55-4		50-200	104	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

N/1401

004676

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/17/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015890	Collected by:	
		Lab Sample ID:	01-5890-3	Received Date:	09/18/2001
Sample ID:	**07_DBMW43A-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/21/01	Anal. Date:	09/21/01
Batch No:	01G4415	Prep. No:	-	Anal. Time:	19:07
Data File Name:	5890-03	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 10U
2	Benzene	71-43-2	µg/L	1	<1	U
3	Bromodichloromethane	75-27-4	µg/L	1	<1	U
4	Bromoform	75-25-2	µg/L	1	<1	U
5	Bromomethane	74-83-9	µg/L	1	<1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	<1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	2	
9	Chlorobenzene	108-90-7	µg/L	1	<1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	1	<1	U
12	Chloroform	67-66-3	µg/L	1	0.6	J
13	Chloromethane	74-87-3	µg/L	1	<1	U UJ
14	Cyclohexane	110-82-7	µg/L	1	<1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	<1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	<1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	<1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	<1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	<1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	<1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	0.6	J J
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	<1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	<1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	<1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	<1	U
29	Ethylbenzene	100-41-4	µg/L	1	<1	U
30	2-Hexanone	591-78-6	µg/L	10	<10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	<1	U
32	Methyl Acetate	79-20-9	µg/L	5	<5	U
33	Methylcyclohexane	108-87-2	µg/L	1	<1	U UJ
34	Methyl-t-butyl ether	1634-04-4	µg/L	1	<1	U
35	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U UJ
36	Methylene chloride	75-09-2	µg/L	5	0.6	JB 5U
37	Styrene	100-42-5	µg/L	1	<1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	<1	U
39	Tetrachloroethene	127-18-4	µg/L	1	<1	U

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004661

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	31	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	7	J
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	5.82	1	J
2	UNKNOWN		µg/L	14.67	2	J
3	UNKNOWN		µg/L	15.53	1	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	104	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	110	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	101	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	97	
2	1,4-Difluorobenzene	540-36-3		50-200	97	
3	Chlorobenzene-d5	3114-55-4		50-200	95	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

W/14/01

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/17/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015890	Collected by:	
		Lab Sample ID:	01-5890-2	Received Date:	09/18/2001
Sample ID:	**03_DGMW65XA-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	21:28
Data File Name:	5890-02	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 104 J
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	0.3	J J
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	Methyl Acetate	79-20-9	µg/L	5	< 5	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U UJ
34	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
35	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
36	Methylene chloride	75-09-2	µg/L	5	0.9	JB 5UJ
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	12	J
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U

TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	5.78	4	J

Surrogates			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	97
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	102
3	1,2-Dichloroethane-d4	17060-07-0	76-114	100
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	89
2	1,4-Difluorobenzene	540-36-3	50-200	92
3	Chlorobenzene-d5	3114-55-4	50-200	102
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/17/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015890	Collected by:	
		Lab Sample ID:	01-5890-1	Received Date:	09/18/2001
Sample ID:	**03_DGMW64A-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/20/01	Anal. Date:	09/20/01
Batch No:	01G4399	Prep. No:	-	Anal. Time:	20:57
Data File Name:	5890-01	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	0.6	J
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U UJ
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	1	
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U UJ
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U UJ
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U UJ
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U UJ
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	Methyl Acetate	79-20-9	µg/L	5	< 5	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U UJ
34	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
35	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U UJ
36	Methylene chloride	75-09-2	µg/L	5	0.5	JB 5UJ
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U UJ
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	3.15	3	J
2	UNKNOWN		µg/L	5.78	3	J
3	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.65	2	JN
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	92	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	95	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	94	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	95	
2	1,4-Difluorobenzene	540-36-3		50-200	100	
3	Chlorobenzene-d5	3114-55-4		50-200	107	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: MCAS El Toro GWM, Round 14

Collection Date: September 18 through September 19, 2001

LDC Report Date: November 8, 2001

Matrix: Water

Parameters: Volatiles

Validation Level: NFESC Level C & D

Laboratory: Applied P & Ch Laboratory

Sample Delivery Group (SDG): 01-5895

Sample Identification

18_MCAS09-114
07_DBMW43-114
07DBMW100A-114
08UGMW29A-114
08_UGMW29-114
24NEW5-114
9-18-01-1-914
24NEW6-114
04DGMW66A-114**
08DGMW74-114
18_PS3-114
24EX30B1-114
24EX50B1-114
24EX60B2-114**
24NEW4-314
24NEW8-114
18_BGMW05D-114
18_BGMW05C-114
24NEW4-114
24NEW7-114
24NEW8-114MS
24NEW8-114MSD

**Indicates sample underwent NFESC Level D review

Introduction

This data review covers 22 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Contract Laboratory Program Statement of Work (SOW) OLM03.1 for Volatiles.

This review follows USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999); the following subsections correlate to the above guidelines.

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

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

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

The following are definitions of the data qualifiers:

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

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

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

A Indicates the finding is based upon technical validation criteria.

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

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

I. Technical Holding Times

All technical holding time requirements were met.

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

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/26/01	Isopropylbenzene	27.0	18_MCAS09-114 07_DBMW43-114	J (all detects) UJ (all non-detects)	A
	1,2,4-Trichlorobenzene	29.3	07DBMW100A-114 08UGMW29A-114 08_UGMW29-114 24NEW5-114 9-18-01-1-914 01G4471-MB-01	J (all detects) UJ (all non-detects)	

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

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

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
01G4471-MB-01	9/26/01	Methylene chloride Acetone Octamethyl-cyclotetrasiloxane (14.66) Unknown (2.43)	1 ug/L 3 ug/L 1 ug/L 1 ug/L	18_MCAS09-114 07_DBMW43-114 07DBMW100A-114 08UGMW29A-114 08_UGMW29-114 24NEW5-114 9-18-01-1-914
01G4481-MB-01	9/27/01	Methylene chloride Acetone Unknown (2.43)	0.5 ug/L 3 ug/L 1 ug/L	24NEW6-114 04DGMW66A-114** 08DGMW74-114 18_PS3-114 24EX30B1-114 24EX50B1-114 24EX60B2-114** 24NEW4-314 24NEW8-114 18_BGMW05D-114 18_BGMW05C-114 24NEW4-114 24NEW7-114

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

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
18_MCAS09-114	Methylene chloride Acetone	3 ug/L 3 ug/L	5U ug/L 10U ug/L
07_DBMW43-114	Methylene chloride Acetone Octamethyl-cyclotetrasiloxane (14.67) Unknown (2.41)	0.7 ug/L 4 ug/L 3 ug/L 3 ug/L	5U ug/L 10U ug/L 3U ug/L 3U ug/L
07DBMW100A-114	Methylene chloride Unknown (2.41)	6 ug/L 4 ug/L	6U ug/L 4U ug/L
08UGMW29A-114	Methylene chloride Acetone Octamethyl-cyclotetrasiloxane (14.65)	8 ug/L 3 ug/L 1 ug/L	8U ug/L 10U ug/L 1U ug/L
08_UGMW29-114	Methylene chloride Acetone	8 ug/L 3 ug/L	8U ug/L 10U ug/L
24NEW5-114	Methylene chloride Octamethyl-cyclotetrasiloxane (14.67) Unknown (2.41)	8 ug/L 3 ug/L 4 ug/L	8U ug/L 3U ug/L 4U ug/L

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
9-18-01-1-914	Methylene chloride Acetone Octamethyl-cyclotetrasiloxane (14.67)	9 ug/L 5 ug/L 1 ug/L	9U ug/L 10U ug/L 1U ug/L
24NEW6-114	Methylene chloride Acetone Unknown (2.41)	0.4 ug/L 2 ug/L 3 ug/L	5U ug/L 10U ug/L 3U ug/L
04DGMW66A-114**	Methylene chloride	0.5 ug/L	5U ug/L
08DGMW74-114	Methylene chloride Acetone Unknown (2.60)	0.4 ug/L 2 ug/L 5 ug/L	5U ug/L 10U ug/L 5 ug/L
18_PS3-114	Methylene chloride Acetone	0.4 ug/L 2 ug/L	5U ug/L 10U ug/L
24EX30B1-114	Methylene chloride Acetone	0.4 ug/L 3 ug/L	5U ug/L 10U ug/L
24EX50B1-114	Methylene chloride Acetone Unknown (2.41)	0.9 ug/L 3 ug/L 3 ug/L	5U ug/L 10U ug/L 3 ug/L
24EX60B2-114**	Methylene chloride Acetone	0.7 ug/L 2 ug/L	5U ug/L 10U ug/L
24NEW4-314	Methylene chloride Acetone Unknown (2.43)	0.7 ug/L 2 ug/L 4 ug/L	5U ug/L 10U ug/L 4U ug/L
24NEW8-114	Methylene chloride Acetone	0.8 ug/L 2 ug/L	5U ug/L 10U ug/L
18_BGMW05D-114	Acetone Unknown (2.41)	1 ug/L 4 ug/L	10U ug/L 4U ug/L
18_BGMW05C-114	Acetone	1 ug/L	10U ug/L
24NEW4-114	Acetone	1 ug/L	10U ug/L
24NEW7-114	Acetone	2 ug/L	10U ug/L

Sample 9-18-01-1-914 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Sampling Date	Compound	Concentration	Associated Samples
9-18-01-1-914	9/18/01	Methylene chloride Acetone	9 ug/L 5 ug/L	18_MCAS09-114 07_DBMW43-114 07DBMW100A-114 08UGMW29A-114 08_UGMW29-114 24NEW5-114 24NEW6-114 04DGMW66A-114** 08DGMW74-114 18_PS3-114 24EX30B1-114 24EX50B1-114 24EX60B2-114** 24NEW4-314 24NEW8-114 18_BGMW05D-114 18_BGMW05C-114 24NEW4-114 24NEW7-114

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

Sample	Compound	Reported Concentration	Modified Final Concentration
18_MCAS09-114	Methylene chloride Acetone	3 ug/L 3 ug/L	5U ug/L 10U ug/L
07_DBMW43-114	Methylene chloride Acetone	0.7 ug/L 4 ug/L	5U ug/L 10U ug/L
07DBMW100A-114	Methylene chloride	6 ug/L	6U ug/L
08UGMW29A-114	Methylene chloride Acetone	8 ug/L 3 ug/L	8U ug/L 10U ug/L
08_UGMW29-114	Methylene chloride Acetone	8 ug/L 3 ug/L	8U ug/L 10U ug/L
24NEW5-114	Methylene chloride	8 ug/L	8U ug/L
24NEW6-114	Methylene chloride Acetone	0.4 ug/L 2 ug/L	5U ug/L 10U ug/L
04DGMW66A-114**	Methylene chloride	0.5 ug/L	5U ug/L

Sample	Compound	Reported Concentration	Modified Final Concentration
08DGMW74-114	Methylene chloride Acetone	0.4 ug/L 2 ug/L	5U ug/L 10U ug/L
18_PS3-114	Methylene chloride Acetone	0.4 ug/L 2 ug/L	5U ug/L 10U ug/L
24EX30B1-114	Methylene chloride Acetone	0.4 ug/L 3 ug/L	5U ug/L 10U ug/L
24EX50B1-114	Methylene chloride Acetone	0.9 ug/L 3 ug/L	5U ug/L 10U ug/L
24EX60B2-114**	Methylene chloride Acetone	0.7 ug/L 2 ug/L	5U ug/L 10U ug/L
24NEW4-314	Methylene chloride Acetone	0.7 ug/L 2 ug/L	5U ug/L 10U ug/L
24NEW8-114	Methylene chloride Acetone	0.8 ug/L 2 ug/L	5U ug/L 10U ug/L
18_BGMW05D-114	Acetone	1 ug/L	10U ug/L
18_BGMW05C-114	Acetone	1 ug/L	10U ug/L
24NEW4-114	Acetone	1 ug/L	10U ug/L
24NEW7-114	Acetone	2 ug/L	10U ug/L

VI. Surrogate Spikes

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

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
18_MCAS09-114 07_DBMW43-114 07DBMW100A-114 08UGMW29A-114 08_UGMW29-114 24NEW5-114 9-18-01-1-914	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Although laboratory control samples were not required by the method, laboratory control samples were reported by the laboratory. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

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

XI. Target Compound Identifications

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

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

XIV. System Performance

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

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 24NEW4-314 and 24NEW4-114 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
	24NEW4-314	24NEW4-114			
Acetone	2	1	67 (≤20)	J (all detects)	A
Methylene chloride	.07	5U	200 (≤20)	J (all detects) UJ (all non-detects)	A
Trichloroethene	16	16	0 (≤20)	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	1	1	0 (≤20)	-	-

MCAS El Toro GWM, Round 14
Volatiles - Data Qualification Summary - SDG 01-5895

SDG	Sample	Compound	Flag	A or P	Reason
01-5895	18_MCAS09-114 07_DBMW43-114 07DBMW100A-114 08UGMW29A-114 08_UGMW29-114 24NEW5-114 9-18-01-1-914	Isopropylbenzene 1,2,4-Trichlorobenzene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
01-5895	18_MCAS09-114 07_DBMW43-114 07DBMW100A-114 08UGMW29A-114 08_UGMW29-114 24NEW5-114 9-18-01-1-914	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
01-5895	24NEW4-314 24NEW4-114	Acetone	J (all detects)	A	Field duplicates (RPD)
01-5895	24NEW4-314 24NEW4-114	Methylene chloride	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD)

MCAS El Toro GWM, Round 14
Volatiles - Laboratory Blank Data Qualification Summary - SDG 01-5895

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
01-5895	18_MCAS09-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	07_DBMW43-114	Methylene chloride Acetone Octamethyl-cyclotetrasiloxane (14.67) Unknown (2.41)	5U ug/L 10U ug/L 3U ug/L 3U ug/L	A
01-5895	07DBMW100A-114	Methylene chloride Unknown (2.41)	6U ug/L 4U ug/L	A
01-5895	08UGMW29A-114	Methylene chloride Acetone Octamethyl-cyclotetrasiloxane (14.65)	8U ug/L 10U ug/L 1U ug/L	A
01-5895	08_UGMW29-114	Methylene chloride Acetone	8U ug/L 10U ug/L	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
01-5895	24NEW5-114	Methylene chloride Octamethyl-cyclotetrasiloxane (14.67) Unknown (2.41)	8U ug/L 3U ug/L 4U ug/L	A
01-5895	9-18-01-1-914	Methylene chloride Acetone Octamethyl-cyclotetrasiloxane (14.67)	9U ug/L 10U ug/L 1U ug/L	A
01-5895	24NEW6-114	Methylene chloride Acetone Unknown (2.41)	5U ug/L 10U ug/L 3U ug/L	A
01-5895	04DGMW66A-114**	Methylene chloride	5U ug/L	A
01-5895	08DGMW74-114	Methylene chloride Acetone Unknown (2.60)	5U ug/L 10U ug/L 5 ug/L	A
01-5895	18_PS3-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	24EX30B1-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	24EX50B1-114	Methylene chloride Acetone Unknown (2.41)	5U ug/L 10U ug/L 3 ug/L	A
01-5895	24EX60B2-114**	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	24NEW4-314	Methylene chloride Acetone Unknown (2.43)	5U ug/L 10U ug/L 4U ug/L	A
01-5895	24NEW8-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	18_BGMW05D-114	Acetone Unknown (2.41)	10U ug/L 4U ug/L	A
01-5895	18_BGMW05C-114	Acetone	10U ug/L	A
01-5895	24NEW4-114	Acetone	10U ug/L	A
01-5895	24NEW7-114	Acetone	10U ug/L	A

MCAS El Toro GWM, Round 14
Volatiles - Field Blank Data Qualification Summary - SDG 01-5895

SDG	Sample	Compound	Modified Final Concentration	A or P
01-5895	18_MCAS09-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	07_DBMW43-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	07DBMW100A-114	Methylene chloride	6U ug/L	A
01-5895	08UGMW29A-114	Methylene chloride Acetone	8U ug/L 10U ug/L	A
01-5895	08_UGMW29-114	Methylene chloride Acetone	8U ug/L 10U ug/L	A
01-5895	24NEW5-114	Methylene chloride	8U ug/L	A
01-5895	24NEW6-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	04DGMW66A-114**	Methylene chloride	5U ug/L	A
01-5895	08DGMW74-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	18_PS3-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	24EX30B1-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	24EX50B1-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	24EX60B2-114**	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	24NEW4-314	Methylene chloride Acetone	5U ug/L 10U ug/L	A
01-5895	24NEW8-114	Methylene chloride Acetone	5U ug/L 10U ug/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
01-5895	18_BGMW05D-114	Acetone	10U ug/L	A
01-5895	18_BGMW05C-114	Acetone	10U ug/L	A
01-5895	24NEW4-114	Acetone	10U ug/L	A
01-5895	24NEW7-114	Acetone	10U ug/L	A

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-1	Received Date:	09/19/2001
Sample ID:	**18_MCAS09-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/26/01	Anal. Date:	09/26/01
Batch No:	01G4471	Prep. No:	-	Anal. Time:	22:05
Data File Name:	5895-01	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	3	JB 10U
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U UJ
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	3	JB 5U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	0.4	J
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U

TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	3.15	2	J
2	UNKNOWN		µg/L	5.80	3	J

Surrogates			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	98
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	108
3	1,2-Dichloroethane-d4	17060-07-0	76-114	101
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	106
2	1,4-Difluorobenzene	540-36-3	50-200	109
3	Chlorobenzene-d5	3114-55-4	50-200	115
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-2	Received Date:	09/19/2001
Sample ID:	07_DBMW43-114	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/26/01	Anal. Date:	09/26/01
Batch No:	01G4471	Prep. No:	–	Anal. Time:	22:37
Data File Name:	5895-02	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	4	JB 10U
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U UJ
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.7	JB 50U
35	Methyl Acetate	79-20-9	µg/L	5	0.5	J
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.26	20	J
2	UNKNOWN		µg/L	2.41	3	J
3	UNKNOWN		µg/L	5.80	2	J
4	UNKNOWN		µg/L	7.40	1	J
5	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	3	JN
6	UNKNOWN		µg/L	16.53	1	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	96	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	105	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	103	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	99	
2	1,4-Difluorobenzene	540-36-3		50-200	102	
3	Chlorobenzene-d5	3114-55-4		50-200	110	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-3	Received Date:	09/19/2001
Sample ID:	07_DBMW100A-114	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/26/01	Anal. Date:	09/26/01
Batch No:	01G4471	Prep. No:	–	Anal. Time:	23:09
Data File Name:	5895-03	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	< 10	U
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U UJ
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	6	B U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U UJ
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.41	4	J U
2	Silane, fluorotrimethyl-	420-56-4	µg/L	3.15	3	JN
3	UNKNOWN		µg/L	5.80	5	J
4	Ethyl acetate	141-78-6	µg/L	7.40	1	JN
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	93	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	101	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	102	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	109	
2	1,4-Difluorobenzene	540-36-3		50-200	112	
3	Chlorobenzene-d5	3114-55-4		50-200	121	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-4	Received Date:	09/19/2001
Sample ID:	**08-UGMW29A-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/26/01	Anal. Date:	09/26/01
Batch No:	01G4471	Prep. No:	-	Anal. Time:	23:40
Data File Name:	5895-04	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	3	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	2	
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U UJ
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	8	B U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39**	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U UJ
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	46	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	5.80	4	J
2	UNKNOWN		µg/L	14.65	1	J U
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	92	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	100	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	98	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	107	
2	1,4-Difluorobenzene	540-36-3		50-200	107	
3	Chlorobenzene-d5	3114-55-4		50-200	114	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

MWW

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-5	Received Date:	09/19/2001
Sample ID:	08_UGMW29-114	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4471	Prep. No:	-	Anal. Time:	00:11
Data File Name:	5895-05	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	3	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	0.6	J
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U UJ
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	8	B U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	UUJ
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	16	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	5.80	4	J
2	Ethyl acetate	141-78-6	µg/L	7.40	2	JN
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	100	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	109	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	103	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	105	
2	1,4-Difluorobenzene	540-36-3		50-200	107	
3	Chlorobenzene-d5	3114-55-4		50-200	112	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-6	Received Date:	09/19/2001
Sample ID:	**24NEW5-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4471	Prep. No:	–	Anal. Time:	00:42
Data File Name:	5895-06	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	< 10	U
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U W
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	8	B U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U UJ
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	<1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	Propene, hexafluoro-	116-15-4	µg/L	2.26	12	JN
2	UNKNOWN		µg/L	2.41	4	J U
3	UNKNOWN		µg/L	3.15	2	J
4	UNKNOWN		µg/L	5.80	4	J
5	Ethyl acetate	141-78-6	µg/L	7.40	2	JN
6	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	3	JN U
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	92	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	97	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	94	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	115	
2	1,4-Difluorobenzene	540-36-3		50-200	116	
3	Chlorobenzene-d5	3114-55-4		50-200	118	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-7	Received Date:	09/19/2001
Sample ID:	9-18-01-1-914	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4471	Prep. No:	–	Anal. Time:	01:14
Data File Name:	5895-07	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	5	JB 10U
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U W
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	9	B U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

005476

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U UJ
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	1	JN U
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	105	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	112	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	105	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	102	
2	1,4-Difluorobenzene	540-36-3		50-200	103	
3	Chlorobenzene-d5	3114-55-4		50-200	105	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

10/11/01

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/19/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-8	Received Date:	09/19/2001
Sample ID:	**24NEW6-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	-	Anal. Time:	13:37
Data File Name:	5895-08	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	0.8	J
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	2	
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.4	JB 54
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	5	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	20	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.26	17	J
2	UNKNOWN		µg/L	2.41	3	J U
3	Cyclotrisiloxane, hexamethyl-	541-05-9	µg/L	12.21	2	JN
4	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.65	6	JN
5	UNKNOWN		µg/L	16.54	3	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	97	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	104	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	88	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	111	
2	1,4-Difluorobenzene	540-36-3		50-200	109	
3	Chlorobenzene-d5	3114-55-4		50-200	112	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

N11401

DSU28-A

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/19/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-9	Received Date:	09/19/2001
Sample ID:	04_DGMW66A-114	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	–	Anal. Time:	14:09
Data File Name:	5895-09	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	< 10	U
2	Benzene	71-43-2	µg/L	1	150 [a]	
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	0.9	J
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	0.6	J
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.5	JB 54
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	3	
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.60	11	J
2	Butane	106-97-8	µg/L	2.96	30	JN
3	Butane, 2-methyl-	78-78-4	µg/L	3.82	34	JN
4	Butane, 2,3-dimethyl-	79-29-8	µg/L	5.80	79	JN
5	Pentane, 2,4-dimethyl-	108-08-7	µg/L	7.78	95	JN
6	UNKNOWN		µg/L	10.18	9	J
7	Hexane, 2,4-dimethyl-	589-43-5	µg/L	10.59	19	JN
8	UNKNOWN		µg/L	10.69	18	J
9	Pentane, 2,3,3-trimethyl-	560-21-4	µg/L	11.21	200	JN
10	Hexane, 2,2,5-trimethyl-	3522-94-9	µg/L	11.67	22	JN
11	2-Hexene, 2,5,5-trimethyl-	40467-04-7	µg/L	12.20	34	JN
12	Hexane, 2,3,5-trimethyl-	1069-53-0	µg/L	12.32	4	JN
13	UNKNOWN		µg/L	12.83	7	J
14	1,2,3-TRIMETHYLBENZENE	526-73-8	µg/L	14.99	4	JN
15	1,2,3-TRIMETHYLBENZENE	526-73-8	µg/L	15.37	5	JN
16	UNKNOWN		µg/L	15.87	29	J
17	UNKNOWN		µg/L	16.06	18	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	102	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	107	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	90	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	100	
2	1,4-Difluorobenzene	540-36-3		50-200	103	
3	Chlorobenzene-d5	3114-55-4		50-200	101	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] Analyzed with a dilution factor of 5.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

005455

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-10	Received Date:	09/19/2001
Sample ID:	08_DGMW74-114	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	–	Anal. Time:	14:38
Data File Name:	5895-10	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	1	
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	4	
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	0.6	J
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	2	
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.4	JB 54
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	1	J

MH401

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	2	
44	Trichloroethene	79-01-6	µg/L	1	110 [a]	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	1	
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.60	5	J U
2	2-Hexene, 2,5,5-trimethyl-	40467-04-7	µg/L	12.21	3	JN
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	90	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	94	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	83	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	108	
2	1,4-Difluorobenzene	540-36-3		50-200	110	
3	Chlorobenzene-d5	3114-55-4		50-200	113	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] Analyzed with a dilution factor of 2.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

M11401

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-11	Received Date:	09/19/2001
Sample ID:	18_PS3-114	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	–	Anal. Time:	15:09
Data File Name:	5895-11	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	0.3	J
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	0.3	J
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.4	JB 54
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	7	

MN40

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	10	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	Silane, fluorotrimethyl-	420-56-4	µg/L	3.15	1	JN
2	Ethane, 1,2-dichloro-1,1,2-trif	354-23-4	µg/L	3.95	1	JN
3	UNKNOWN		µg/L	5.80	3	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	102	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	104	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	86	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	106	
2	1,4-Difluorobenzene	540-36-3		50-200	107	
3	Chlorobenzene-d5	3114-55-4		50-200	106	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

M11401

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-12	Received Date:	09/19/2001
Sample ID:	**24EX30B1-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	-	Anal. Time:	15:41
Data File Name:	5895-12	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	3	JB 10U
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	2	
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	0.4	J
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.4	JB 5U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

11/14/01

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	310 [a]	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U

TIC (Tentative Identified Components): Not Found

Surrogates

			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	93
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	97
3	1,2-Dichloroethane-d4	17060-07-0	76-114	86
# of out-of-control				0

Internal Standard

			Control Limit. %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	108
2	1,4-Difluorobenzene	540-36-3	50-200	118
3	Chlorobenzene-d5	3114-55-4	50-200	115
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] Analyzed with a dilution factor of 10.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-13	Received Date:	09/19/2001
Sample ID:	**24EX50B1-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	-	Anal. Time:	16:13
Data File Name:	5895-13	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	3	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	0.4	J
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	0.3	J
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.9	JB 54
35	Methyl Acetate	79-20-9	µg/L	1	< 1	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	5	< 5	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	0.4	J

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	120 [a]	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	6	
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.41	3	J U
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	95	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	99	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	86	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	109	
2	1,4-Difluorobenzene	540-36-3		50-200	112	
3	Chlorobenzene-d5	3114-55-4		50-200	112	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] Analyzed with a dilution factor of 2.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

M11401

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-14	Received Date:	09/19/2001
Sample ID:	**24EX60B2-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	–	Anal. Time:	16:44
Data File Name:	5895-14	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	0.7	J
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	0.6	J
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	0.3	J
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.7	JB 54
35	Methyl Acetate	79-20-9	µg/L	1	< 1	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	5	< 5	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	0.6	J

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Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	760 [a]	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U

TIC (Tentative Identified Components): Not Found

Surrogates			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	94
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	98
3	1,2-Dichloroethane-d4	17060-07-0	76-114	87
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	106
2	1,4-Difluorobenzene	540-36-3	50-200	110
3	Chlorobenzene-d5	3114-55-4	50-200	109
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] Analyzed with a dilution factor of 10.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-15	Received Date:	09/19/2001
Sample ID:	**24NEW4-314**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	-	Anal. Time:	17:16
Data File Name:	5895-15	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 104 J
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	0.7	JB 54 J
35	Methyl Acetate	79-20-9	µg/L	1	< 1	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	5	< 5	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	16	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	1	
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.43	4	J U
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	95	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	100	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	89	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	105	
2	1,4-Difluorobenzene	540-36-3		50-200	111	
3	Chlorobenzene-d5	3114-55-4		50-200	112	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

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VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-16	Received Date:	09/19/2001
Sample ID:	**24NEW8-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	–	Anal. Time:	17:47
Data File Name:	5895-16	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 104
2	Benzene	71-43-2	µg/L	1	<1	U
3	Bromodichloromethane	75-27-4	µg/L	1	<1	U
4	Bromoform	75-25-2	µg/L	1	<1	U
5	Bromomethane	74-83-9	µg/L	1	<1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	1	<1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	1	<1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	1	<1	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	1	<1	U
14	Cyclohexane	110-82-7	µg/L	1	<1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	<1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	<1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	<1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	<1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	<1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	<1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	<1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	<1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	6	
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	<1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	<1	U
29	Ethylbenzene	100-41-4	µg/L	1	<1	U
30	2-Hexanone	591-78-6	µg/L	10	<10	U
31	Isopropylbenzene	98-82-8	µg/L	1	<1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
33	Methylcyclohexane	108-87-2	µg/L	1	<1	U
34	Methylene chloride	75-09-2	µg/L	5	0.8	JB 54
35	Methyl Acetate	79-20-9	µg/L	5	<5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	<1	U
37	Styrene	100-42-5	µg/L	1	<1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	<1	U
39	Tetrachloroethene	127-18-4	µg/L	1	<1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	5.83	1	J
2	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	4	JN
3	UNKNOWN		µg/L	16.55	1	J
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	89	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	98	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	86	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	112	
2	1,4-Difluorobenzene	540-36-3		50-200	112	
3	Chlorobenzene-d5	3114-55-4		50-200	120	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/19/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-17	Received Date:	09/19/2001
Sample ID:	**18_BGMW05D-114**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	-	Anal. Time:	18:19
Data File Name:	5895-17	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	< 5	U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	2	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	<1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	<1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
44	Trichloroethene	79-01-6	µg/L	1	1	
45	Trichlorofluoromethane	75-69-4	µg/L	1	<1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	<1	U
47	Vinyl chloride	75-01-4	µg/L	1	<1	U
48	Xylenes (total)	1330-20-7	µg/L	1	<1	U
TIC (Tentative Identified Components)				RT (min)		
1	UNKNOWN		µg/L	2.41	4	J U
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	95	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	101	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	90	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	110	
2	1,4-Difluorobenzene	540-36-3		50-200	110	
3	Chlorobenzene-d5	3114-55-4		50-200	113	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/19/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-18	Received Date:	09/19/2001
Sample ID:	18_BGMW05C-114	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	–	Anal. Time:	18:51
Data File Name:	5895-18	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	< 5	U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	< 1	U
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	< 1	U
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U

TIC (Tentative Identified Components): Not Found

Surrogates

			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	100
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	107
3	1,2-Dichloroethane-d4	17060-07-0	76-114	94
# of out-of-control				0

Internal Standard

			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	107
2	1,4-Difluorobenzene	540-36-3	50-200	111
3	Chlorobenzene-d5	3114-55-4	50-200	115
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

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J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/18/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-19	Received Date:	09/19/2001
Sample ID:	**24NEW4-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	–	Anal. Time:	19:22
Data File Name:	5895-19	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	1	JB 10UJ
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	< 5	U W
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	16	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	1	
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U

TIC (Tentative Identified Components): Not Found

Surrogates			Control Limit, %	Surro. Rec.%
1	Toluene-d8	2037-26-5	88-110	101
2	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	109
3	1,2-Dichloroethane-d4	17060-07-0	76-114	90
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	112
2	1,4-Difluorobenzene	540-36-3	50-200	110
3	Chlorobenzene-d5	3114-55-4	50-200	110
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

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E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

D

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	1801-001	Collection Date:	09/19/2001
Project ID:	MCAS El Toro Rd 14 GWM	SDG Number:	015895	Collected by:	
		Lab Sample ID:	01-5895-20	Received Date:	09/19/2001
Sample ID:	**24NEW7-114**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	CLP-VOC	Prep. Date:	09/27/01	Anal. Date:	09/27/01
Batch No:	01G4481	Prep. No:	–	Anal. Time:	19:54
Data File Name:	5895-20	Sample Amount:	25.0 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	2	JB 104
2	Benzene	71-43-2	µg/L	1	< 1	U
3	Bromodichloromethane	75-27-4	µg/L	1	< 1	U
4	Bromoform	75-25-2	µg/L	1	< 1	U
5	Bromomethane	74-83-9	µg/L	1	< 1	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	1	< 1	U
8	Carbon tetrachloride	56-23-5	µg/L	1	0.7	J
9	Chlorobenzene	108-90-7	µg/L	1	< 1	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	1	< 1	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	1	< 1	U
14	Cyclohexane	110-82-7	µg/L	1	< 1	U
15	1,2-Dibromo-3-Chloropropane	96-12-8	µg/L	1	< 1	U
16	1,2-Dibromoethane	106-93-4	µg/L	1	< 1	U
17	1,2-Dichlorobenzene	95-50-1	µg/L	1	< 1	U
18	1,3-Dichlorobenzene	541-73-1	µg/L	1	< 1	U
19	1,4-Dichlorobenzene	106-46-7	µg/L	1	< 1	U
20	Dichlorodifluoromethane	75-71-8	µg/L	1	< 1	U
21	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
22	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
23	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
24	Cis-1,2-Dichloroethene	156-59-2	µg/L	1	< 1	U
25	Trans-1,2-Dichloroethene	156-60-5	µg/L	1	< 1	U
26	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
27	cis-1,3-Dichloropropene	10061-01-5	µg/L	1	< 1	U
28	trans-1,3-Dichloropropene	10061-02-6	µg/L	1	< 1	U
29	Ethylbenzene	100-41-4	µg/L	1	< 1	U
30	2-Hexanone	591-78-6	µg/L	10	< 10	U
31	Isopropylbenzene	98-82-8	µg/L	1	< 1	U
32	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
33	Methylcyclohexane	108-87-2	µg/L	1	< 1	U
34	Methylene chloride	75-09-2	µg/L	5	< 5	U
35	Methyl Acetate	79-20-9	µg/L	5	< 5	U
36	Methyl-t-butyl ether	1634-04-4	µg/L	1	< 1	U
37	Styrene	100-42-5	µg/L	1	< 1	U
38	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	1	< 1	U
39	Tetrachloroethene	127-18-4	µg/L	1	< 1	U

M11401

Continued

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	Toluene	108-88-3	µg/L	1	< 1	U
41	1,2,4-Trichlorobenzene	120-82-1	µg/L	1	< 1	U
42	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
43	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
44	Trichloroethene	79-01-6	µg/L	1	2	
45	Trichlorofluoromethane	75-69-4	µg/L	1	< 1	U
46	1,1,2-Trichlorotrifluoroethane	76-13-1	µg/L	1	0.3	J
47	Vinyl chloride	75-01-4	µg/L	1	< 1	U
48	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
TIC (Tentative Identified Components)				RT (min)		
1	Propene, hexafluoro-	116-15-4	µg/L	2.28	25	JN
2	Cyclotetrasiloxane, octamethyl-	556-67-2	µg/L	14.67	1	JN
Surrogates				Control Limit, %	Surro. Rec.%	
1	Toluene-d8	2037-26-5		88-110	99	
2	4-Bromo-fluorobenzene (BFB)	460-00-4		86-115	111	
3	1,2-Dichloroethane-d4	17060-07-0		76-114	88	
# of out-of-control					0	
Internal Standard				Control Limit, %	IS Rec.%	
1	Bromochloromethane	74-97-5		50-200	113	
2	1,4-Difluorobenzene	540-36-3		50-200	108	
3	Chlorobenzene-d5	3114-55-4		50-200	110	
# of out-of-control					0	

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted