Previous

Table 8-1: SUMMARY OF GENERAL CHEMISTRY ANALYSES
MCAS El Toro Groundwater Monitoring Program

			GENERAL CHEMISTRY PARAMETERS AND REGULATORY STANDARDS All Results in Milligrams per Liter (mg/L)						
Station ID	Base Screen Depth (Ft BGS)	Sample Date	TDS	Chloride	Sulfate	Nitrate/ Nitrite-N	Alkalinity (as $CaCO_3$)	Bicarbonate (as $CaCO_3$)	Carbonate (as $CaCO_3$)
			500	250.0	250.0	10.0			
18_MCAS10	375	31-Jan-90	828	99.0	245.0	10.2		186	
		20-Jul-90	864	119.0	233.0	10.6		224	
		3-Feb-91	914	123.0	264.0	11.1		242	
		7-Dec-91	892	126.0	264.0	12.0		205	
		8-May-92	848	120.0	277.0	13.2		205	
		4-Nov-93	1,140	125.0	2,200.0	2.8	1 <	1 <	
		29-Nov-94	852	113.0	252.0	1.7		261	
		19-Jan-96	770	87.0	179.0	1.8	257	314	2 U
		24-Jan-96	764	84.7	189.0	0.7		315	
		19-Nov-96	907	145.0	272.0	3.1	250	9	2 U
		19-Jan-97	794	90.2	216.0	1.5		308	
		18-Mar-97	833	99.4	195.0	2.0	251	251	2 U
		18-Mar-97	832	98.0	193.0	1.9	253	253	2 U
		15-Jul-97	842	118.0	217.0	0.1 U	252	252	2 U
18_PS1	122	22-Jan-89	1,950	691.0	480.0	132.8		159	
		2-Jul-93	1,770	358.0	438.0	27.8	80	80	
		19-Jan-96	1,930	389.0	428.0	39.0	197	241	2 U
		25-Nov-96	1,840	315.0	425.0	36.3	261	261	2 U
		17-Mar-97	1,710	339.0	393.0	33.5	217	217	2 U
		17-Mar-97	1,730	335.0	386.0	35.7	217	217	2 U
18_PS2	133	22-Jan-89	3,500	840.0	1,430.0	309.9		115	
		15-Dec-92	2,550	417.0	1,010.0	37.8	256	256	
		12-Jul-93	2,280	317.0	811.0	27.2	296	296	
		18-Jan-96	1,580	180.0	508.0	16.0	386	471	2 U
		25-Nov-96	1,580	173.0	558.0	19.4	362	362	2 U
		25-Mar-97	1,630	181.0	496.0	20.1	343	343	2 U
		7-Jul-97	1,680	206.0	513.0	17.9	329	329	2 U
18_PS3	122	23-Jan-89	840	234.0	119.0	62.0		259	
		10-Dec-92	893	187.0	109.0	12.4	280	280	
		7-Jun-93	859	171.0	113.0	13.2	266	266	
		22-Feb-96	825	182.0	123.0	7.8	195	238	2 U
		8-Jan-97	763	200.0	125.0	8.2	187	187	2 U
		14-Mar-97	779	153.0	111.0	7.3	195	195	2 U
		11-Jul-97	774	180.0	116.0	6.7	205	205	2 U
18_PS4	118	22-Jan-89	1,050	339.0	76.0	57.5		285	
		11-Dec-92	1,130	325.0	86.2	11.8	182	182	
		7-Jun-93	1,220	326.0	95.2	13.5	226	226	
		21-Feb-96	1,130	323.0	126.0	9.0	208	254	2 U
		5-Dec-96	1,060	294.0	297.0	7.1	222	222	2 U
		5-Dec-96	1,030	289.0	297.0	7.0	216	216	2 U
		14-Mar-97	919	199.0	127.0	7.3	217	217	2 U
18_PS5	126	23-Jan-89	1,300	314.0	309.0	194.8		194	
		16-Dec-92	1,390	220.0	318.0	5.3	219	219	
		8-Jun-93	1,200	191.0	290.0	41.5	230	230	
		22-Jan-96	1,310	179.0	266.0	51.0	225	275	2 U
		11-Nov-96	1,110	143.0	221.0	37.0	250	250	2 U
		17-Mar-97	964	118.0	165.0	60.1	275	275	2 U
		17-Mar-97	942	106.0	162.0	53.4	275	275	2 U
		11-Jul-97	993	142.0	195.0	27.4	254	254	2 U

Table 8-1: SUMMARY OF GENERAL CHEMISTRY ANALYSES
MCAS El Toro Groundwater Monitoring Program

			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_PS6	150	23-Jan-89	1,250	342.0	334.0	106.2		189	
		15-Dec-92	1,630	370.0	458.0	27.6	158	158	
		15-Dec-92		371.0	460.0	28.2	160	160	
		26-Jan-96	1,260	240.0	315.0	29.0	214	262	2 U
		25-Nov-96	1,160	240.0	340.0	23.2	224	224	2 U
		25-Nov-96	1,230	196.0	325.0	23.3	222	222	2 U
		25-Mar-97	1,200	216.0	301.0	24.0	210	210	2 U
		1-Jul-97	1,160	186.0	250.0	17.2	227	227	2 U
18_PS7	126	23-Jan-89	510	55.0	86.0	41.6		294	
		16-Dec-92	766	79.3	116.0	24.9	266	266	
		2-Jul-93	832	52.4	84.3	17.2	294	294	
		22-Jan-96	826	104.0	115.0	34.0	253	309	2 U
		8-Nov-96	969	148.0	165.0	40.0	246	246	2 U
		14-Mar-97	896	108.0	126.0	28.7	249	249	2 U
18_PS8	145	23-Jan-89	910	242.0	165.0	75.3		180	
		14-Dec-92	877	211.0	107.0	14.3	250	250	
		6-Jul-93	836	174.0	100.0	11.4	263	263	
		26-Jan-96	842	200.0	107.0	17.0	244	298	2 U
		25-Nov-96	848	221.0	103.0	16.4	229	229	2 U
		20-Mar-97	882	263.0	124.0	12.2	191	191	2 U
18_RW1	470	11-Sep-89	850	170.0	211.0	19.7		199	
		14-Dec-92	823	168.0	212.0	3.2	208	208	
		15-Dec-92	829	168.0	212.0	3.2	214	214	
		8-Jul-93	878	162.0	204.0	3.1	210	210	
		23-Jan-96	833	173.0	190.0	3.8	207	252	2 U
		8-Nov-96	849	163.0	193.0	4.7	218	218	2 U
		17-Mar-97	846	148.0	167.0	5.0	208	208	2 U
		17-Mar-97	841	154.0	172.0	4.3	208	208	2 U
18_RW2	310	11-Sep-89	870	149.0	117.0	48.7		178	
		22-Dec-92	866	125.0	123.0	13.3	192	192	
		13-Jul-93	704	120.0	112.0	12.6	185	185	
		24-Jan-96	729	113.0	110.0	12.0	187	228	2 U
		8-Nov-96	891	132.0	132.0	17.0	185	185	2 U
		14-Mar-97	731	117.0	115.0	16.0	185	185	2 U
18_RW3	390	11-Sep-89	790	180.0	144.0	39.0		164	
		4-Jun-93	1,160	292.0	350.0	46.2	316	316	
		25-Jan-96	818	195.0	137.0	12.0	163	199	2 U
18_RW4	85	11-Sep-89	1,650	328.0	375.0	132.8		368	
		7-Jun-93	792	195.0	144.0	7.0	164	164	
		26-Jan-96	1,570	257.0	367.0	43.0	271	331	2 U
19_DBMW54	181	18-Dec-92	763	142.0	185.0	12.2	130	130	
		22-Jun-93	781	142.0	180.0	11.8	144	144	
		19-Feb-96	742	126.0	163.0	12.0	152	186	2 U
		3-Dec-96	771	129.0	172.0	10.8	160	160	2 U
		11-Mar-97	737	111.0	149.0	10.1	167	167	2 U
19_DGMW85	183	16-Dec-92	794	172.0	193.0	12.7	136	136	
		16-Dec-92	823		195.0	12.8	138	138	
		10-Jun-93	948	186.0	201.0	14.3	154	154	
		19-Feb-96	922	157.0	186.0	12.0	180	220	2 U
		3-Dec-96	947	174.0	268.0	12.3	155	155	2 U
		11-Mar-97	998	137.0	186.0	10.9	335	335	2 U

Table 8-1: SUMMARY OF GENERAL CHEMISTRY ANALYSES
MCAS El Toro Groundwater Monitoring Program

			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 $CaCO_3$)
19_DGMW86	198	17-Dec-92	729	114.0	156.0	11.9	242	242	
		11-Jun-93	980	164.0	213.0	11.6	193	193	
		27-Feb-96	911	167.0	193.0	12.0	178	217	2 U
		27-Feb-96	920	191.0	222.0	15.0	208	254	2 U
		3-Dec-96	990	203.0	313.0	11.8	177	177	2 U
		3-Dec-96	949	207.0	313.0	11.7	177	177	2 U
		11-Mar-97	955	161.0	209.0	11.5	176	176	2 U
19_UGMW35	185	8-Dec-92	650	118.0	148.0	9.4	134	134	
		15-Jul-93	789	126.0	156.0	9.8	148	148	
		8-Feb-96	742	132.0	159.0	13.0	157	191	2 U
		8-Feb-96	706	135.0	159.0	12.0	154	188	2 U
		21-Nov-96 *	717	133.0	157.0	11.1	155	155	2 U
		18-Mar-97 *	751	115.0	145.0	10.7	157	157	2 U
		18-Mar-97 *	757	115.0	143.0	10.6	155	155	2 U
20_DBMW55	227	9-Dec-92	1,900	309.0	854.0	15.4	152	152	
		17-Jun-93	2,030	332.0	698.0	22.3	136	136	
		27-Feb-96	1,810	332.0	511.0	23.0	124	152	2 U
		14-Nov-96	1,690	146.0	834.0	11.9	91	91	2 U
		5-Mar-97	1,890	341.0	546.0	24.1	140	140	2 U
20_DGMW88	225	4-Nov-92	1,260	176.0	523.0	9.4	190	190	
		17-Jun-93	1,410	173.0	537.0	14.2	186	186	
		1-Feb-96	1,970	301.0	709.0	17.0	142	173	2 U
		1-Feb-96	1,930	306.0	718.0	15.0	142	173	2 U
		25-Nov-96 *	1,200	175.0	422.0	13.9	211	211	2 U
		25-Nov-96 *	1,150	155.0	422.0	13.9	213	213	2 U
		20-Mar-97 *	1,780	338.0	680.0	19.5	135	135	2 U
20_UGMW36	223	28-Oct-92	1,780	336.0	559.0	19.4	132	132	
		18-Jun-93	2,040	376.0	598.0	26.1	138	138	
		5-Feb-96	2,120	401.0	681.0	28.0	131	160	2 U
		14-Nov-96	1,950	360.0	702.0	25.8	129	129	2 U
		27-Mar-97	1,810	446.0	686.0	25.7	131	131	2 U
21_DBMW56	132	18-Nov-92	1,060	188.0	228.0	22.0	200	200	
		18-Nov-92	1,080		230.0	22.7	202	202	
		24-Jun-93	1,160	175.0	211.0	24.6	201	201	
		15-Feb-96	798	152.0	152.0	28.0	204	249	2 U
		13-Nov-96	785	140.0	131.0	24.0	216	216	2 U
		25-Mar-97	817	151.0	127.0	23.3	208	208	2 U
21_DGMW90	135	20-Nov-92	1,120	487.0	588.0	23.5	190	190	
		10-Jun-93	1,020	166.0	199.0	25.8	207	207	
		2-Feb-96	876	155.0	174.0	26.0	193	235	2 U
		25-Nov-96 *	882	156.0	186.0	24.1	209	209	2 U
		20-Mar-97 *	896	163.0	168.0	26.2	202	202	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	987	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

Table 8-1: SUMMARY OF GENERAL CHEMISTRY ANALYSES
MCAS El Toro Groundwater Monitoring Program

			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 $CaCO_3$)
22_DBMW47	156	29-Sep-92	1,130	228.0	263.0	18.7	190	190	
		13-Jul-93	1,160	225.0	227.0	17.3	180	180	
		15-Feb-96	1,180	231.0	169.0	17.0	191	233	2 U
		2-Dec-96	1,010	219.0	160.0	16.5	192	192	2 U
		24-Mar-97	987	220.0	157.0	16.4	187	187	2 U
		8-Jul-97	1,070	250.0	156.0	15.3	192	192	2 U
		8-Jul-97	1,060	242.0	146.0	14.7	201	201	2 U
24_NEW1	245	30-Oct-95	807			3.7	180	180	
		2-Dec-96	865	150.0	186.0	9.2	170	170	2 U
		24-Mar-97	869	147.0	173.0	9.6	170	170	2 U
		10-Jul-97	1,010	189.0	206.0	10.0 U	174	174	2 U
24_NEW4	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
24_NEW5	250	21-Nov-95				5.6	172	172	
		2-Dec-96	745	148.0	128.0	7.1	168	168	2 U
		24-Mar-97	699	138.0	124.0	7.4	163	163	2 U
		8-Jul-97	669	148.0	123.0	6.7	170	170	2 U
24_NEW6	185	25-Oct-95				13.6	172	172	
		2-Dec-96	673	120.0	95.8	13.6	168	168	2 U
		19-Mar-97	647	148.0	81.7	12.8	172	172	2 U
		10-Jul-97	677	140.0	131.0	12.2	177	177	2 U
24_NEW7	158	31-Oct-95				19.7	188	188	
		3-Dec-96	1,590	300.0	510.0	22.0	179	179	2 U
		19-Mar-97	1,590	271.0	445.0	18.0	178	178	2 U
		2-Jul-97	1,540	316.0	533.0	20.3	185	185	2 U
		2-Jul-97	1,530	327.0	555.0	22.6	183	183	2 U
24_NEW8	162	1-Nov-95	1,260			21.1	176	176	
		3-Dec-96	1,160	278.0	290.0	16.5	164	164	2 U
		19-Mar-97	1,140	243.0	242.0	16.9	157	157	2 U
		2-Jul-97	1,160	320.0	320.0	19.7	159	159	2 U

EXPLANATION

1) The 1996 and 1997 sample results listed in this table are as reported in the APCL laboratory analytical reports, (Appendix E, Groundwater Monitoring Reports).

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) = Result exceeds regulatory standard

4) Qualifying Flags: U = Concentration is below instrument detection limit (not detected)

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Table 8-2: RESULTS OF TREATABILITY PARAMETERS ANALYSES
MCAS El Toro Groundwater Monitoring Program

Station ID	Sample Date	Ammonia mg/L	Chemical Oxygen Demand mg/L	Color units	Phosphorus mg/L	Silica (dissolved) mg/L	Total Suspended Solids mg/L	Total Organic Carbon mg/L	Turbidity NTU	Radon pCi/L	Strontium pCi/L
02_DGMW59	16-Aug-95	0.20 U	12	--	0.10 UJ	--	3	3.1	1.0	--	--
	30-Nov-95	0.20	9	--	0.10 U	--	4 J	4.3 J	3.9 J	--	--
	6-Feb-96	0.20 U	27	1	0.16	34	75	3.7	-10.0	144	-0.034
	6-Feb-96	0.20 U	24	2	0.19	32	48	4.6	--	151	-0.058
	4-Nov-96	--	20 U	1 U	1.00 U	26	4 U	5.0	0.9	203	-0.125
	26-Mar-97	0.20 U	20 U	1 U	0.10 U	23	4 U	4.0	32.1	218	-0.061
02_DGMW60	15-Aug-95	0.30	5 U	--	0.10 UJ	--	1	2.8	5.7	--	--
	28-Nov-95	0.30 J	7	--	0.10 UJ	--	1	3.3 J	0.2 J	--	--
	6-Feb-96	0.20 U	12 J	1	0.01	32	24	3.0	-10.0	189	0.102
	6-Feb-96	0.20 U	15 J	1	0.04	31	24	2.0	--	211	-0.103
	4-Nov-96	--	20 U	1 U	1.00 U	26	4 U	1.0	0.4	411	-0.271
	26-Mar-97	0.20 U	20 U	1 U	<1.00	26	4 U	9.0	0.3	407	-0.094
02_DGMW61	16-Aug-95	0.30	8	--	0.10 UJ	--	5	1.5	0.5	--	--
	29-Nov-95	0.90 J	5 U	--	0.10 J	--	1	1.5 J	0.1	--	--
	8-Feb-96	0.20 U	20 U	1 U	5.20	26	4 U	1.0	-10.0	715	-0.193
	4-Nov-96	--	20 U	1 U	1.00 U	28	4 U	3.0	0.0	145	-0.062
	26-Mar-97	0.20 U	20 U	1 U	<0.5	27	4 U	4.0	1.0	210	-0.200
02_UGMW25	17-Aug-95	0.03	26	--	0.10 UJ	--	7	7.7	3.0	--	--
	28-Nov-95	0.03 J	17	--	0.10 U	--	1 U	5.0	0.4	--	--
	7-Feb-96	--	30	1	0.01 U	32	4 U	4.0	-10.0	450	-0.085
	12-Nov-96	--	20	1 U	0.10 U	34	4 U	4.0	0.6	--	--
	26-Mar-97	0.20 U	20 U	1 U	<0.5	36	4 U	5.0	22.5	424	-0.009
02_NEW1	26-Dec-95	0.33	5.0	--	0.10	--	0.5	1.6	0.7	--	--
	4-Nov-96	--	20 U	1	1.00 U	26	4 U	1.0	5.2	112	-0.071
	26-Mar-97	0.30	20 U	1 U	0.10 U	25	4 U	5.0	0.0	161	-0.240
02_NEW2	21-Dec-95	0.07	14.0	--	0.10	--	0.8	2.3	0.4	112	--
	26-Nov-96	0.20 U	20 U	1 U	1.00 U	33	4 U	2.0	4.7	702	-0.005
	26-Mar-97	0.20	20 U	1 U	<0.5	45	4 U	5.0	1.0	808	-0.054

Table 8-2: RESULTS OF TREATABILITY PARAMETERS ANALYSES
MCAS El Toro Groundwater Monitoring Program

Station ID	Sample Date	Ammonia mg/L	Chemical Oxygen Demand mg/L	Color units	Phosphorus mg/L	Silica (dissolved) mg/L	Total Suspended Solids mg/L	Total Organic Carbon mg/L	Turbidity NTU	Radon pCi/L	Strontium pCi/L
02_NEW3	28-Dec-95	0.03	31.0	--	0.10	--	3,990	3.2	51.0	--	--
	7-Nov-96	--	20 U	1	0.10 U	45	49	2.0	172.7	341	-0.024
	24-Mar-97	0.20 U	20 U	1	<0.5	49	42	6.0	176.7	350	-0.110
02_NEW6	27-Dec-95	0.02	5.0	--	0.10	--	31.5	1.9	11.4	--	--
	7-Nov-96	--	20 U	1 U	0.10 U	47	4 U	3.0	15.1	239	-0.113
	24-Mar-97	0.20 U	20 U	1 U	<0.5	51	4 U	6.0	8.3	268	-0.026
02_NEW7	27-Dec-95	0.02	5.0	--	0.10	--	1.2	2.1	0.3	--	--
	8-Jan-97	0.20 U	20 U	1 U	0.10 U	44	12	5.0	0.7	355	0.048
	20-Mar-97	0.20 U	20 U	1 U	<0.5	46	4 U	3.0	8.8	402	-0.064
02_NEW8A	27-Dec-95	0.02	5.0	--	0.10	--	1.6	1.4	0.4	--	--
	7-Nov-96	--	20 U	1 U	0.10 U	43	4 U	1.0	3.5	601	-0.058
	25-Mar-97	0.20 U	20 U	1	<0.5	44	4 U	4.0	1.3	831	-0.100
02_NEW11	21-Dec-95	0.03	11.0	--	0.10	--	1	1.9	0.8	--	--
	27-Nov-96	0.20 U	20 U	1	0.10 U	43	14	1.0	29.5	324	-0.120
	25-Mar-97	0.20 U	20 U	1	<0.5	26	7	4.0	25.6	318	-0.056
02_NEW12	28-Dec-95	0.02	9.0	--	0.10	--	5.1	0.9	7.9	--	--
	7-Nov-96	--	20 U	1	0.10 U	60	4 U	1.0	52.4	215	-0.019
	25-Mar-97	0.20 U	20 U	1	<0.5	56	5	4.0	37.1	226	0.087
03_DBMW39	30-Jan-96	0.20 U	20 U	1	0.07	68	31	1.0	-10.0	657	-0.184
	12-Nov-96	0.20 U	20 U	1	0.10 U	56	22	1.0 U	73.7	760	-0.069
	17-Mar-97	0.20 U	20 U	1	<0.5	66	12	1.0 U	38.3	612	0.035
	17-Mar-97	0.20 U	20 U	1	<0.5	75	9	1.0 U	38.3	787	-0.120
03_DGMW64	26-Feb-96	0.20 U	20 U	1	0.18	46	93	1.0 U	30.0	724	-0.129
	12-Nov-96	0.20 U	20 U	1	0.10 U	49	55	1.0 U	78.5	602	0.033
	12-Nov-96	0.20 U	26	1	<0.4	49	26	1.0 U	79.0	826	-0.154
	4-Mar-97	0.20 U	20 U	1	<0.2	50	16	3.0	218.7	574	-0.025

Table 8-2: RESULTS OF TREATABILITY PARAMETERS ANALYSES
MCAS El Toro Groundwater Monitoring Program

Station ID	Sample Date	Ammonia mg/L	Chemical Oxygen Demand mg/L	Color units	Phosphorus mg/L	Silica (dissolved) mg/L	Total Suspended Solids mg/L	Total Organic Carbon mg/L	Turbidity NTU	Radon pCi/L	Strontium pCi/L
03_DGMW65X	26-Feb-96	0.20 U	20 U	2	0.22	52	63	1.0	30.0	553	-0.114
	11-Nov-96	--	20 U	1	0.10 U	48	4 U	2.0	22.7	639	-0.038
	4-Mar-97	--	20 U	1 U	<0.5	51	4 U	3.0	7.6	656	-0.016
03_UGMW26	7-Feb-96	0.20 U	20 U	2	0.15	61	132	1.0 U	74.0	356	-0.044
	14-Nov-96	0.20 U	20 U	1 U	0.10 U	69	4 U	1.0 U	1.1	530	-0.131
	14-Nov-96	0.20 U	20 U	1 U	0.10 U	66	4 U	1.0 U	1.0	558	0.079
	6-Mar-97	0.20 U	20 U	1 U	<1	58	4 U	2.0	76.0	499	0.026
04_DBMW40	26-Feb-96	0.20 U	20 U	1	0.31	55	1,050	1.0 U	149.0	330	0.008
	12-Nov-96	--	20 U	1	0.10 U	50	4 U	2.0	0.0	836	-0.201
	5-Mar-97	0.07 J	20 U	1 U	<0.5	50	4 U	3.0	184.0	542	0.009
04_DGMW66	26-Feb-96	0.20 U	20 U	1	0.23	53	158	1.0 U	38.0	401	0.001
	12-Nov-96	--	20 U	1 U	0.10 U	51	4 U	2.0	0.9	551	-0.073
	4-Mar-97	0.20 U	8.7 J	1 U	<0.5	54	4 U	3.0	69.9	427	-0.180
04_UGMW63	30-Jan-96	0.20 U	20 U	1	0.01 U	50	4 U	1.0	187.0	613	-0.046
	14-Nov-96	0.20 U	20 U	1 U	0.10 U	59	4 U	1.0 U	2.0	724	0.020
	14-Nov-96	0.20 U	20 U	1 U	0.10 U	67	4 U	1.0 U	2.0	798	-0.182
05_DBMW41	5-Dec-95	0.02 U	5	--	0.10 U	--	3 J	1.8	1.6 J	325	--
	7-Feb-96	--	20 U	1 U	0.05	48	4 U	1.0 U	0.0	305	-0.027
	13-Nov-96	0.20 U	20 U	1 U	0.10 U	49	4 U	2.0	3.4	325	0.018
	14-Mar-97	0.30	46	1 U	<0.5	53	4 U	5.0	4.3	351	-0.100
05_DGMW67	6-Dec-95	0.02	8	--	0.10 U	--	1 J	2.4	0.2 J	270	--
	7-Feb-96	0.20 U	20 U	1 U	0.08	47	4 U	267.0	-10.0	198	-0.076
	13-Nov-96	0.20 U	20	1 U	0.10 U	49	4 U	1.0 U	14.6	270	-0.108
	14-Mar-97	0.20 U	44	1 U	<0.5	52	4 U	1.0 U	8.1	263	-0.075

Table 8-2: RESULTS OF TREATABILITY PARAMETERS ANALYSES
MCAS El Toro Groundwater Monitoring Program

Station ID	Sample Date	Ammonia mg/L	Chemical Oxygen Demand mg/L	Color units	Phosphorus mg/L	Silica (dissolved) mg/L	Total Suspended Solids mg/L	Total Organic Carbon mg/L	Turbidity NTU	Radon pCi/L	Strontium pCi/L
05_DGMW68	9-Jan-96	0.02 U	5 U	--	0.10 U	--	3	1.4	2.8	571	-0.194
	7-Feb-96	0.20 U	20 U	1	0.12	53	39	1.0 U	49.0	525	-0.005
	15-Nov-96	0.20 U	20 U	1 U	0.10 U	56	4 U	1.0 U	1.1	571	-0.194
	5-Mar-97	0.07 J	20 U	1 U	<0.5	48	5	5.0	3.0	561	-0.095
05_UGMW27	17-Aug-95	0.03	8	--	0.10 UJ	--	1	1.3	0.4	--	--
	8-Dec-95	0.03	5 U	--	0.10 R	--	1	1.5	0.1 J	--	--
	29-Jan-96	0.20 U	20 U	1 U	0.02	40	4 U	2.0	5.0	451	-0.129
	13-Nov-96	0.20 U	20 U	1 U	0.10 U	38	4 U	1.0	1.0	490	-0.136
	13-Mar-97	0.20 U	20 U	1 U	<2	52	4 U	4.0	0.0	480	-0.069
05_NEW01	28-Dec-95	0.02 U	8	--	0.10 U	--	20	1.0	9.6	441	--
	13-Nov-96	0.20	20 U	1	0.10 U	55	9	1.0 U	81.2	441	-0.141
	13-Mar-97	0.20 U	100	2	<0.5	58	21	4.0	93.8	400	0.050
07_DGMW72	21-Nov-96	0.20 U	20 U	1 U	0.10 U	56	6	1.0 U	3.1	464	-0.151
	20-Mar-97	0.20	20 U	1	<0.5	64	6	1.0 U	23.0	467	-0.160
07_DGMW91	7-Feb-96	0.20 U	20 U	1 U	16.00	60	4 U	1.0	0.0	375	-0.005
	21-Nov-96	0.20 U	20 U	1 U	0.10 U	54	4 U	1.0 U	3.9	378	-0.114
	24-Mar-97	0.20 U	20 U	1 U	<0.5	64	4 U	4.0	50.9	362	0.070
08_DGMW73	7-Feb-96	0.20 U	20 U	1	0.02	53	4 U	2.0	0.0	392	-0.002
	2-Dec-96	0.20 U	20 U	1 U	0.10 U	49	4 U	1.0	27.6	297	-0.046
	2-Dec-96	0.20 U	20 U	1 U	0.10 U	51	4 U	1.0	28.0	230	-0.026
	20-Mar-97	0.20 U	23	1 U	<0.5	54	4 U	4.0	13.3	384	-0.058
08_DGMW74	7-Feb-96	0.20 U	20 U	1	0.04	41	4 U	1.0 U	1.0	218	-0.075
	13-Nov-96	0.20 U	20 U	1 U	--	55	5	1.0 U	23.0	318	-0.022
	19-Mar-97	0.20 U	29	1 U	<0.5	53	4 U	4.0	38.1	219	0.035
	19-Mar-97	0.20 U	55	1 U	<0.5	56	4 U	2.0	38.1	303	-0.170
	7-Jul-97	0.20 U	20 U	1 U	<10	47	4 U	3.6	27.8	176	<0.32

Table 8-2: RESULTS OF TREATABILITY PARAMETERS ANALYSES
MCAS El Toro Groundwater Monitoring Program

Station ID	Sample Date	Ammonia mg/L	Chemical Oxygen Demand mg/L	Color units	Phosphorus mg/L	Silica (dissolved) mg/L	Total Suspended Solids mg/L	Total Organic Carbon mg/L	Turbidity NTU	Radon pCi/L	Strontium pCi/L
09_DBMW45	20-Nov-95	--	10	--	--	--	--	--	--	387	--
	18-Nov-96	0.20 U	20 U	1	0.10 U	54	4 U	4.0	29.7	387	-0.077
	24-Mar-97	0.20 U	20 U	1	<0.5	60	10	7.0	39.3	385	0.079
09_DGMW75	4-Dec-96	0.20 U	20 U	1	0.10 U	54	9	3.0 U	77.2	162	-0.087
	25-Mar-97	0.20 U	20 U	1	<1	46	10	4.0	908.7	549	-0.200
10_DGMW77	7-Feb-96	0.20 U	20 U	1	0.04	53	30	1.0 U	-10.0	362	0.410
	9-Dec-96	0.20 U	20 U	1	0.10 U	54	14	1.0	22.7	390	-0.100
	24-Mar-97	0.20 U	20 U	1 U	<0.5	63	5	4.0	17.0	376	-0.140
12_DBMW48	13-Nov-96	0.20 U	20 U	1	0.10 U	51	6	1.0 U	25.6	285	-0.026
	17-Mar-97	0.20 U	49	1	<2	65	14	1.0 U	24.7	284	-0.038
	17-Mar-97	0.20 U	61	1 U	<2	61	12	1.0 U	24.7	275	-0.071
12_UGMW31	13-Nov-96	0.20 U	20 U	1 U	0.10 U	56	4 U	1.0 U	41.2	410	0.033
	25-Mar-97	0.20 U	20 U	1 U	<1	49	7	4.0	32.1	405	-0.086
13_DBMW49	7-Feb-96	0.20 U	33	1 U	0.01	55	4	1.0 U	38.0	302	0.006
	7-Feb-96	0.20 U	24	1 U	0.02	52	5	3.0	--	266	-0.374
	19-Nov-96	0.20 U	20 U	1 U	0.10 U	52	4 U	2.0	0.1	325	0.023
	19-Nov-96	0.20 U	20 U	1 U	0.10 U	52	4 U	1.0	0.0	339	-0.086
	19-Mar-97	0.20 U	44	1 U	<0.5	49	4 U	3.0	5.4	343	0.004
13_DGMW78	1-Feb-96	0.20 U	20 U	1 U	0.01 U	51	11	3.0	9.0	172	-0.143
	19-Nov-96	0.20 U	20	1 U	0.10 U	49	4 U	7.0	0.6	309	-0.176
	19-Mar-97	0.20 U	35	1 U	<0.5	48	4 U	6.0	1.6	414	-0.170
13_UGMW32	7-Feb-96	0.20 U	20 U	1	0.03	49	13	3.0	0.0	387	-0.102
	10-Mar-97	0.20 U	20 U	1 U	<0.5	43	4 U	3.0	0.0	486	-0.086

Table 8-2: RESULTS OF TREATABILITY PARAMETERS ANALYSES
MCAS El Toro Groundwater Monitoring Program

Station ID	Sample Date	Ammonia mg/L	Chemical Oxygen Demand mg/L	Color units	Phosphorus mg/L	Silica (dissolved) mg/L	Total Suspended Solids mg/L	Total Organic Carbon mg/L	Turbidity NTU	Radon pCi/L	Strontium pCi/L
14_DBMW50	7-Feb-96	0.20 U	20 U	1	0.04	49	14	1.0	-10.0	332	-0.126
	7-Feb-96	0.20 U	20 U	1	0.05	49	12	1.0	7.0	337	0.079
	19-Nov-96	0.20 U	20 U	1	0.10 U	49	4 U	1.0	6.5	401	-0.021
	17-Mar-97	0.20 U	26	1	<2	53	11	3.0	17.9	379	0.009
	17-Mar-97	0.20 U	32	1	<2	55	12	3.0	17.9	416	-0.063
14_DGMW79	7-Feb-96	0.20 U	20 U	1	0.02	50	15	761.0	-10.0	414	0.017
	19-Nov-96	0.20 U	20 U	1 U	0.10 U	52	4 U	1.0 U	0.0	497	-0.090
	17-Mar-97	0.20 U	46	1 U	<1	56	4 U	4.0	3.6	562	-0.220
	17-Mar-97	0.20 U	20 U	1 U	<1	52	4 U	3.0	3.6	589	-0.062
15_DBMW51	7-Feb-96	0.20	66	1	0.06	52	6	1.0	0.0	210	0.021
	9-Dec-96	0.20 U	43	1 U	0.10 U	44	13	4.0	0.0	305	0.058
	25-Mar-97	0.20 U	35	1 U	<0.5	42	4 U	6.0	41.2	200	-0.150
16_DBMW52	25-Nov-96	0.20 U	20	1 U	0.10 U	43	4 U	2.0	0.0	279	-0.040
	19-Mar-97	0.20 U	23	1 U	<1	49	4 U	3.0	8.5	373	-0.210
16_DGMW81	7-Feb-96	0.20	20 U	1 U	0.03	54	6	1.0 U	8.0	404	0.367
	8-Jan-97	0.20 U	20 U	1 U	0.10 U	54	4 U	5.0	5.7	312	--
	5-Mar-97	--	20 U	1 U	<0.5	52	4 U	3.0	54.3	378	-0.100
17_DGMW82	6-Dec-95	0.02	19	--	0.10	--	6 J	2.3	6.4 J	515	--
	7-Feb-96	0.20	20 U	1	25.00	47	14	--	-10.0	303	0.055
	20-Nov-96	0.20 U	20 U	1 U	0.10 U	47	4 U	2.0	27.3	515	-0.092
	1-Apr-97	0.20 U	20 U	1 U	0.10 U	56	4 U	5.0	36.2	1,619	-0.085
17_NEW01	12-Jan-96	0.05	5	--	0.10	--	16	1.4	15.0	--	--
17_NEW02	3-Jan-96	0.02	250	--	0.10	--	2	1.3	0.4	--	--

Table 8-2: RESULTS OF TREATABILITY PARAMETERS ANALYSES
MCAS El Toro Groundwater Monitoring Program

Station ID	Sample Date	Ammonia mg/L	Chemical Oxygen Demand mg/L	Color units	Phosphorus mg/L	Silica (dissolved) mg/L	Total Suspended Solids mg/L	Total Organic Carbon mg/L	Turbidity NTU	Radon pCi/L	Strontium pCi/L
18_BGMW03E	2-Nov-96	0.20	20 U	1	0.10 U	46	13	1.0 U	125.1	375	-0.024
	18-Mar-97	0.20 U	20 U	2	<0.5	58	14	2.0	94.4	371	-0.022
	18-Mar-97	0.20 U	20 U	2	<0.5	56	12	2.0	94.4	427	-0.150
	8-Jul-97	0.20 U	20 U	2	<2.5	50	24	2.7	381.3	363	<0.33
18_BGMW04B	9-Jul-97	0.20 U	20 U	1 U	0.10 U	52	6	2.8	31.0	380	<0.18
18_BGMW05D	7-Jul-97	0.20 U	20 U	1	<5	59	19	3.4	41.3	297	<0.32
18_DW135	7-Feb-96	0.20 U	20 U	1 U	0.02	49	4	1.0	39.0	461	-0.113
	5-Nov-96	0.20 U	20 U	1	0.10 U	47	89	2.0	77.0	585	-0.183
	7-Mar-97	0.20 U	20 U	1	0.10 U	41	21	3.0	132.6	517	-0.100
	7-Jul-97	0.20 U	20 U	1	<10	51	43	3.2	127.0	319	<0.30
18_PS2	7-Jul-97	0.20 U	20 U	1 U	<5	47	4	4.4	543.2	114	<0.37
18_PS3	11-Jul-97	0.20 U	20 U	1	<5	55	35	2.8	561.3	217	<0.30
18_PS5	11-Jul-97	0.20 U	20 U	1 U	<4	56	7	2.0	9.4	293	<0.29
18_PS6	1-Jul-97	0.80	20 U	1	0.10 U	57	165	2.0	301.5	170	<0.32
19_DBMW54	7-Feb-96	0.30	20 U	1	0.09	56	40	1.0	56.0	799	-0.138
	3-Dec-96	0.20 U	20 U	1	0.10 U	63	15	1.0 U	191.8	844	0.017
	11-Mar-97	0.20 U	20 U	1 U	<0.5	63	4 U	2.0	11.7	491	-0.410
19_DGMW85	7-Feb-96	0.20 U	20 U	1	0.07	56	27	2.0	68.0	323	0.012
	3-Dec-96	0.20 U	20	2	0.10 U	57	82	1.0 U	--	317	-0.154
	11-Mar-97	0.20 U	20 U	1 U	<0.5	45	4 U	5.0	295.0	528	-0.120
19_UGMW35	8-Feb-96	0.20 U	20 U	1	0.03	59	8	3.0	0.0	409	-0.134
	8-Feb-96	0.20 U	20 U	1 U	0.13	59	5	1.0	0.0	435	-0.216
	21-Nov-96	0.20	20 U	1	0.10 U	53	40	1.0 U	165.7	342	0.055
	18-Mar-95	0.20 U	20 U	1	<0.5	55	8	2.0	65.5	346	-0.120
	18-Mar-97	0.20 U	20 U	1	<0.5	70	10	2.0	65.5	338	-0.230

Table 8-2: RESULTS OF TREATABILITY PARAMETERS ANALYSES
MCAS El Toro Groundwater Monitoring Program

Station ID	Sample Date	Ammonia mg/L	Chemical Oxygen Demand mg/L	Color units	Phosphorus mg/L	Silica (dissolved) mg/L	Total Suspended Solids mg/L	Total Organic Carbon mg/L	Turbidity NTU	Radon pCi/L	Strontium pCi/L
20_DBMW55	27-Feb-96	0.20 U	20 U	1	0.10	37	70	1.0	14.0	218	--
	14-Nov-96	0.20 U	20 U	1	0.10 U	27	52	3.0	189.7	218	-0.102
	5-Mar-97	0.10 J	20 U	1	<1	45	111	2.0	566.0	509	0.670
22_DBMW47	7-Feb-96	0.20 U	20 U	1 U	0.01	55	9	1.0 U	2.0	481	0.071
	2-Dec-96	0.20 U	20 U	1 U	0.10 U	58	4 U	1.0 U	15.0	428	-0.055
	24-Mar-97	0.20 U	20 U	1 U	<0.5	59	4 U	4.0	6.9	507	-0.019
24_NEW01	2-Nov-95	0.03	11	--	--	61	--	0.8	--		--
	2-Dec-96	0.20 U	20 U	1 U	0.10 U	54	4 U	1.0 U	38.7	467	-0.059
	24-Mar-97	0.20 U	20 U	1 U	<0.5	55	4 U	4.0	74.4	472	-0.270
	10-Jul-97	0.20 U	20 U	1 U	<5	58	4 U	2.0	620.5	331	<0.32
24_NEW04	26-Oct-95	0.02	5 U	--	--	61	--	2.5	--	--	--
	3-Dec-96	0.20 U	26	2	0.10 U	58	146	1.0 U	729.4	370	-0.127
	21-Mar-97	0.20 U	20 U	1	<0.5	57	193	5.0	490.2	419	-0.028
	8-Jul-97	0.20 U	20 U	1 U	<5	56	18	2.8	181.0	204	<0.32
	8-Jul-97	0.20 U	20 U	1 U	<5	53	4 U	2.6	181.4	396	<0.31
24_NEW05	21-Nov-95	0.02 U	14	--	--	--	--	1.8	--	--	--
	2-Dec-96	0.20 U	20 U	1	0.10 U	52	4 U	1.0 U	19.2	410	-0.022
	24-Mar-97	0.20 U	20 U	1 U	<0.5	65	7	1.0	23.6	436	-0.065
	8-Jul-97	0.20 U	20 U	1 U	<.5	52	4 U	2.7	293.3	199	<0.32
24_NEW06	25-Oct-95	0.06	5 U	--	--	66	--	0.8	--	--	--
	2-Dec-96	0.20 U	20 U	1	0.10 U	48	4	1.0 U	87.6	352	-0.033
	19-Mar-97	0.20 U	20 U	1	<0.5	61	4 U	2.0	48.3	366	-0.200
	19-Mar-97	--	--	--	--	--	--	--	--	397	-0.072
	10-Jul-97	0.20 U	20 U	1 U	<2.5	60	4 U	2.2	27.8	267	<0.30

Table 8-2: RESULTS OF TREATABILITY PARAMETERS ANALYSES
MCAS El Toro Groundwater Monitoring Program

Station ID	Sample Date	Ammonia mg/L	Chemical Oxygen Demand mg/L	Color units	Phosphorus mg/L	Silica (dissolved) mg/L	Total Suspended Solids mg/L	Total Organic Carbon mg/L	Turbidity NTU	Radon pCi/L	Strontium pCi/L
24_NEW07	31-Oct-95	0.05	15	--	--	55	--	1.0	--	--	--
	3-Dec-96	0.20 U	20	2	0.10 U	57	389	1.0 U	487.7	288	-0.013
	12-Mar-97	0.20 U	35	2	<2.5	45	142	2.0	410.0	344	-0.110
	2-Jul-97	0.30	20 U	2	<10	48	40	1.0	670.6	110	<0.30
	2-Jul-97	0.45	20 U	1	<10	55	19	2.0	670.6	134	<0.30
24_NEW08	1-Nov-95	0.03	21	--	--	57	--	1.1	--	--	--
	3-Dec-96	0.20 U	20 U	1	0.10 U	49	22	1.0 U	317.1	358	-0.061
	12-Mar-97	0.20 U	41	1	<1.0	56	4 U	1.0	49.8	451	-0.076
	2-Jul-97	0.30	20 U	1	<10	54	4 U	1.0	131.6	101	<0.33

EXPLANATION:

mg/L = milligrams per liter
NTU = nephelometric turbidity unit (turbidity field measurement)
pCi/L = picoCurie per liter (refer to laboratory reports for complete results)
(--) = well not sampled for parameter or data not available or reported
Qualifying codes: U = below instrument detection limit, J = estimated value

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Table 8-3: RESULTS OF GROSS ALPHA, GROSS BETA, AND SELECTED RADIONUCLIDE ANALYSES
MCAS El Toro Groundwater Monitoring Program

			Particle Activity and Selected Radionuclides (all units pCi/L)					
Station ID	Base Screen Depth (Ft BGS)	Sample Date	Gross Alpha	Gross Beta	Radium 226	Radium 228	Strontium 89/90	Cesium 134
01_DGMW57	83	10-Dec-92	5.80	12.20	--	--	--	--
		14-Jun-93	4.50	6.60	--	--	--	--
		7-Feb-96	3.93	1.99	--	--	--	--
		20-Nov-96	5.06	2.56	--	--	--	--
		25-Mar-97	4.21	5.16	--	--	--	--
01_DGMW58	77	14-Dec-92	5.90	8.00	--	--	--	--
		14-Jun-93	7.50	8.60	--	--	--	--
		28-Feb-96	6.06	5.15	--	--	--	--
		18-Nov-96	5.81	-1.54	--	--	--	--
		13-Mar-97	5.44	4.28	--	--	--	--
01 _MW101	148	20-Nov-96	2.90	11.90	--	--	--	--
		13-Mar-97	3.28	12.56	--	--	--	--
		11-Jul-97	3.28	4.59	<1.2	<0.85	<0.34	<17.1
		11-Jul-97	3.13	5.96	<1.1	<0.86	<0.32	<17.3
01_MW102	135	20-Nov-96	0.97	13.70	--	--	--	--
		13-Mar-97	2.31	5.82	--	--	--	--
		9-Jul-97	1.23	6.58	2.8	<0.85	<0.17	<4.38
01_MW201	57	18-Nov-96	0.89	0.86	--	--	--	--
		13-Mar-97	1.86	4.72	--	--	--	--
		9-Jul-97	2.53	5.11	2.5	<0.85	<0.19	<15.6
02_DGMW59	89	15-Dec-92	16.30	14.10	--	--	--	--
		23-Jun-93	21.60	15.80	--	--	--	--
		16-Aug-95	4.80 J	7.90 J	--	--	--	--
		30-Nov-95	11.70	7.50	--	--	--	--
		7-Feb-96	9.01	-0.97	--	--	--	--
		7-Feb-96	10.16	0.26	--	--	--	--
		4-Nov-96	12.51	2.93	--	--	--	--
		26-Mar-97	5.70	2.06	--	--	--	--
		3-Jul-97	16.98	8.36	<1.3	<0.96	<0.32	<14
02_DGMW60	100	18-Nov-92	20.90	10.80	--	--	--	--
		23-Jun-93	24.00	30.20	--	--	--	--
		15-Aug-95	20.60 J	13.00 J	--	--	--	--
		28-Nov-95	26.00	14.80	--	--	--	--
		7-Feb-96	22.93	-1.69	--	--	--	--
		7-Feb-96	16.71	0.33	--	--	--	--
		4-Nov-96	32.16	13.58	--	--	--	--
		26-Mar-97	36.82	17.65	--	--	--	--
		1-Jul-97	30.41	19.05	1.67	<0.92	<0.32	<15

Table 8-3: RESULTS OF GROSS ALPHA, GROSS BETA, AND SELECTED RADIONUCLIDE ANALYSES
MCAS El Toro Groundwater Monitoring Program

			Particle Activity and Selected Radionuclides (all units pCi/L)					
Station ID	Base Screen Depth (Ft BGS)	Sample Date	Gross Alpha	Gross Beta	Radium 226	Radium 228	Strontium 89/90	Cesium 134
02_DGMW61	100	14-Dec-92	6.50	8.90	--	--	--	--
		22-Jun-93	9.20	10.50	--	--	--	--
		16-Aug-95	10.20 J	6.30 J	--	--	--	--
		29-Nov-95	14.30	9.40	--	--	--	--
		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	1.8	<0.97	<0.34	<20
02_NEW1	135	26-Dec-95	0.00 U	4.30	--	--	--	--
		4-Nov-96	0.89	3.18	--	--	--	--
		26-Mar-97	1.38	3.35	--	--	--	--
		1-Jul-97	1.97	6.02	<1.3	<0.87	<0.33	<16
02_NEW2	95	21-Dec-95	9.90 U	6.20 U	--	--	--	--
		26-Nov-96	28.29	3.40	--	--	--	--
		26-Mar-97	13.44	11.70	--	--	--	--
		3-Jul-97	15.34	10.35	1.5	<0.87	<0.35	<18
02_NEW3	225	28-Dec-95	13.70	3.80 U	--	--	--	--
		7-Nov-96	10.05	6.97	--	--	--	--
		24-Mar-97	7.37	7.67	--	--	--	--
		2-Jul-97	15.34	12.76	4.6	<0.83	<0.35	<16
02_NEW6	225	27-Dec-95	17.40	2.40 U	--	--	--	--
		7-Nov-96	16.53	6.84	--	--	--	--
		24-Mar-97	9.01	6.10	--	--	--	--
		2-Jul-97	13.55	6.70	1.5	<0.89	<0.32	<20
02_NEW7	143	27-Dec-95	14.90	6.20	--	--	--	--
		8-Jan-97	14.82	0.38	--	--	--	--
		20-Mar-97	5.66	7.73	--	--	--	--
		11-Jul-97	14.59	6.90	2.1	<0.86	<0.29	<19.3
02_NEW8A	104	27-Dec-95	16.30	6.30	--	--	--	--
		7-Nov-96	24.20	5.77	--	--	--	--
		25-Mar-97	27.29	5.71	--	--	--	--
		2-Jul-97	17.57	11.62	1.0	<0.84	<0.33	<7.8
02_NEW11	65	21-Dec-95	6.60 U	5.30 U	--	--	--	--
		27-Nov-96	6.92	1.39	--	--	--	--
		25-Mar-97	7.78	2.84	--	--	--	--
		8-Jul-97	6.14	5.87	1.5	<0.86	<0.34	<7.8

Table 8-3: RESULTS OF GROSS ALPHA, GROSS BETA, AND SELECTED RADIONUCLIDE ANALYSES
MCAS El Toro Groundwater Monitoring Program

			Particle Activity and Selected Radionuclides (all units pCi/L)					
Station ID	Base Screen Depth (Ft BGS)	Sample Date	Gross Alpha	Gross Beta	Radium 226	Radium 228	Strontium 89/90	Cesium 134
02_NEW12	249	28-Dec-95	7.80 U	6.70	--	--	--	--
		7-Nov-96	9.83	5.52	--	--	--	--
		25-Mar-97	15.08	6.52	--	--	--	--
		30-Jun-97	14.89	4.05	<1.1	<0.90	<0.36	<15
02_UGMW25	75	9-Dec-92	7.80	5.20	--	--	--	--
		22-Jun-93	0.70	3.70	--	--	--	--
		17-Aug-95	19.40 J	2.00 UJ	--	--	--	--
		17-Aug-95	5.00 UJ	2.20 UJ	--	--	--	--
		28-Nov-95	11.90	4.50 U	--	--	--	--
		7-Feb-96	12.94	1.35	--	--	--	--
		12-Nov-96	10.35	-0.68	--	--	--	--
		26-Mar-97	5.10	4.22	--	--	--	--
		2-Jul-97	17.30	5.57	1.5	<0.83	<0.32	<8.1
03_DBMW39	270	9-Oct-92	15.9	10.30	--	--	--	--
		21-Jun-93	11.50	11.70	--	--	--	--
		21-Jun-93	12.30	15.00	--	--	--	--
		30-Jan-96	14.74	4.03	--	--	--	--
		12-Nov-96	15.34	5.41	--	--	--	--
		17-Mar-97	18.84	10.56	--	--	--	--
		17-Mar-97	21.52	11.09	--	--	--	--
		8-Jul-97	11.35	10.06	1.4	<0.86	<0.32	<17
03_DGMW64	285	15-Jan-93	14.30	13.10	--	--	--	--
		2-Jun-93	13.30	16.60	--	--	--	--
		26-Feb-96	11.14	2.97	--	--	--	--
		12-Nov-96	13.33	7.29	--	--	--	--
		12-Nov-96	13.33	7.27	--	--	--	--
		4-Mar-97	16.60	7.08	--	--	--	--
		30-Jun-97	19.99	7.11	1.1	<0.84	<0.33	<18
03_DGMW65X	270	18-Jan-93	8.60	8.80	--	--	--	--
		7-Jul-93	14.50	13.20	--	--	--	--
		26-Feb-96	15.56	9.79	--	--	--	--
		11-Nov-96	14.00	2.19	--	--	--	--
		4-Mar-97	16.38	6.93	--	--	--	--
		30-Jun-97	14.13	28.66	<1.1	1.1	<0.33	<7.9

Table 8-3: RESULTS OF GROSS ALPHA, GROSS BETA, AND SELECTED RADIONUCLIDE ANALYSES
MCAS El Toro Groundwater Monitoring Program

			Particle Activity and Selected Radionuclides (all units pCi/L)					
Station ID	Base Screen Depth (Ft BGS)	Sample Date	Gross Alpha	Gross Beta	Radium 226	Radium 228	Strontium 89/90	Cesium 134
03_UGMW26	270	1-Oct-92	14.20	10.90	--	--	--	--
		23-Jun-93	14.50	10.70	--	--	--	--
		7-Feb-96	3.77	15.80	--	--	--	--
		14-Nov-96	13.30	1.23	--	--	--	--
		14-Nov-96	14.37	2.22	--	--	--	--
		6-Mar-97	14.52	0.39	--	--	--	--
		1-Jul-97	9.34	4.57	<1.3	<0.91	<0.32	<6.2
04_DBMW40	260	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	1.1	<0.92	<0.32	<13
04_DGMW66	290	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	<1.4	<0.83	<0.24	<7.1
04_UGMW63	275	24-Nov-92	--	11.30	--	--	--	--
		30-Jan-96	14.41	4.44	--	--	--	--
		14-Nov-96	22.86	3.06	--	--	--	--
		14-Nov-96	21.89	2.67	--	--	--	--
05_DBMW41	222	16-Nov-92	9.00	5.90	--	--	--	--
		16-Nov-92	9.40	6.30	--	--	--	--
		5-Dec-95	27.00	18.60	--	--	--	--
		7-Feb-96	26.37	9.30	--	--	--	--
		13-Nov-96	29.04	5.68	--	--	--	--
		13-Mar-97	21.00	4.00	--	--	--	--
		8-Jul-97	23.56	15.82	3.8	<0.88	<0.33	<13
05_DGMW67	227	30-Nov-92	15.00	7.70	--	--	--	--
		30-Nov-92	24.90	53.00	--	--	--	--
		3-Jun-93	16.70	19.00	--	--	--	--
		6-Dec-95	23.20	9.60	--	--	--	--
		7-Feb-96	22.11	6.07	--	--	--	--
		13-Nov-96	19.58	1.35	--	--	--	--
		14-Mar-97	24.60	4.14	--	--	--	--

Table 8-3: RESULTS OF GROSS ALPHA, GROSS BETA, AND SELECTED RADIONUCLIDE ANALYSES
MCAS El Toro Groundwater Monitoring Program

			Particle Activity and Selected Radionuclides (all units pCi/L)					
Station ID	Base Screen Depth (Ft BGS)	Sample Date	Gross Alpha	Gross Beta	Radium 226	Radium 228	Strontium 89/90	Cesium 134
05_DGMW68	210	17-Dec-92	7.00	13.60	--	--	--	--
		25-Jun-93	10.80	12.40	--	--	--	--
		9-Jan-96	11.60	10.90	--	--	--	--
		15-Nov-96	20.40	3.75	--	--	--	--
		5-Mar-97	19.21	8.28	--	--	--	--
		1-Jul-97	19.69	7.62	<0.98	<0.81	<0.31	<18
05_NEW1	203	28-Dec-95	3.40	3.80	--	--	--	--
		13-Nov-96	10.05	3.50	--	--	--	--
		13-Mar-97	8.34	9.02	--	--	--	--
		9-Jul-97	4.88	7.68	2.8	1.6	<0.20	<11.8
		9-Jul-97	8.75	14.45	4.0	1.5	<0.21	<17.1
05_UGMW27	238	3-Jun-93	9.30	14.10	--	--	--	--
		17-Aug-95	13.30	5.10	--	--	--	--
		8-Dec-95	12.40	8.20	--	--	--	--
		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	1.8	<1.0	<0.18	<6.35
		9-Jul-97	17.42	7.36	2.5	<0.87	<0.18	11.2
07_DGMW71	155	15-Dec-92	6.30	11.70	--	--	--	--
09_DBMW45	157	10-Dec-92	8.30	9.90	--	--	--	--
		10-Dec-92	9.60	11.20	--	--	--	--
17_DGMW82	255	6-Dec-95	6.60	4.20	--	--	--	--
		9-Feb-96	4.59	5.03	--	--	--	--
		20-Nov-96	9.60	5.97	--	--	--	--
		1-Apr-97	8.34	1.04	--	--	--	--
17_NEW1	226	12-Jan-96	3.80	1.40	--	--	--	--
		20-Nov-96	6.03	1.67	--	--	--	--
17_NEW2	123	3-Jan-96	4.70	7.00	--	--	--	--
		20-Nov-96	3.28	2.16	--	--	--	--

Table 8-3: RESULTS OF GROSS ALPHA, GROSS BETA, AND SELECTED RADIONUCLIDE ANALYSES
MCAS El Toro Groundwater Monitoring Program

			Particle Activity and Selected Radionuclides (all units pCi/L)					
Station ID	Base Screen Depth (Ft BGS)	Sample Date	Gross Alpha	Gross Beta	Radium 226	Radium 228	Strontium 89/90	Cesium 134
19_DGMW85	183	16-Dec-92	0.80	5.80	--	--	--	--
		16-Dec-92	12.80	15.90	--	--	--	--
22_DBMW47	156	29-Sep-92	9.00	5.80	--	--	--	--

EXPLANATION

pCi/L = picoCurie per liter; BGS = below ground surface

-- = not analyzed, not sampled, or not reported

Maximum contaminant levels (MCL) for parameters listed:

Gross Alpha	15 pCi/L
Gross Beta	50 pCi/L
Strontium-90	8 pCi/L
Radium-226 and Radium-228 combined	5 pCi/L

= Result exceeds regulatory standard (MCL)

9.0 QUALITY ASSURANCE/QUALITY CONTROL

The groundwater sampling and analyses activities for the July 1997 sampling round were performed according to guidance and quality assurance/quality control (A/QC) procedures described in the amended *Final Sampling and Analysis Plan* (SAP) and amended *Final Quality Assurance Project Plan* (QAPP) prepared for the MCAS El Toro GWMP (CDM Federal, 1996d). 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 A/QC procedures described in the SAP and QAPP. This section summarizes the performance of the field and analytical procedures, data quality assessment, and data validation activities.

9.1 DEVIATIONS FROM SAMPLING, ANALYSIS AND QUALITY ASSURANCE PROJECT PLANS

During the Round 6 sampling activity, field QC samples were collected according to procedures and frequencies described in the project QAPP, with the exception of source water blanks. However, source water blanks were prepared and analyzed during the prior three sampling rounds. The available source water sample results (CDM Federal 1996b, 1997a, 1997b) are considered sufficient to assess the quality of the tap water used for sampling equipment decontamination during the current sampling round.

As discussed in Section 9.3.1, supplemental sampling of the three Site 1 monitoring wells (01 MW101, 01 MW102, 01 MW201) was conducted during Round 6 using a modification to the sampling procedures described in the project SAP. Past sampling of Site 1 monitoring wells has shown the Site 1 wells to be very low-recharge wells which typically go dry during purging even at low discharge rates. The practical and acceptable procedure for a sampling low-recharge well is to purge the well dry and collect the sample after the well has recovered. To facilitate sampling, a disposable Teflon bailer was used for the September 1997 sampling of Site 1 wells rather than the non-dedicated sampling pump system.

9.2 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

During the July 1997 sampling round, groundwater samples were collected from a total of 77 GWMP monitoring wells and ports and analyzed for the parameters described in Section 2.2. VOCs and general chemistry parameters samples were collected from all 77 wells which were sampled. Dissolved metals and treatability parameter samples were collected from selected monitoring wells (Table 2-1). During field sampling, the following A/QC samples were collected and analyzed: 13 field duplicate samples, four equipment rinsate blank samples, and three air contamination blank samples. In addition, a total of 21 trip blank samples were analyzed during the sampling round. The results of these samples are summarized below.

Field Duplicate Samples. During this sampling round, field duplicate samples were collected at ten monitoring wells and analyzed for the parameters listed in Table 2-1. Field duplicate analyses 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 the Data Validation Report (Appendix D).

Equipment Rinsate Blank Samples. Four equipment rinsates were collected during this sampling round and analyzed for VOCs and general chemistry parameters. VOCs were detected in two of the four rinsate blanks. The detected VOCs were acetone, benzene, chlorobenzene, ethyl benzene, methylene chloride, tetrachloroethane (PCE), toluene, and xylenes. Chloride and sulfate were detected in one of the four rinsate blanks analyzed. Refer to the laboratory reports in Appendix E for complete results.

Air Contamination Blank Samples. Three air contamination (AC) blank samples were collected during sampling in airfield traffic areas and analyzed for VOCs and general chemistry parameters. Only methylene chloride was detected in one of the three AC blanks. No other VOCs were detected in the AC blank samples analyzed. It is very likely that this compound was detected due to the laboratory contamination.

Trip Blank Samples. Trip blanks were provided by the subcontract laboratory, APCL, and were included with each sample shipment for VOC analysis. No VOCs were detected in any of the trip blank samples analyzed.

9.3 DATA QUALITY ASSESSMENT

9.3.1 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, 1995 and 1996d). The laboratory hard-copy analysis 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 data review confirmed that analytical requirements were achieved.

The groundwater analytical results and data qualification flags presented in the results tables in this monitoring report are as reported by the subcontract analytical laboratory (APCL analytical reports in Appendix E). Qualifiers assigned from data validation for selected samples are discussed in Section 9.3.2 and presented in Appendix D (Data Validation Report).

The water level and field parameter measurements collected during Round 6 were reviewed and verified from field sampling records and compared to the field data collected during the prior sampling rounds. Section 9.3.3 provides discussion of field parameter data.

During QC review of the laboratory reports, several VOC detections were reported for the groundwater samples collected from Site 1 (EOD Range) monitoring wells. The primary and duplicate samples from Well 01 MW101 contained PCE (maximum 19 μg/L) and TCE (2 μg/L). The sample collected from Well 01 MW201 contained PCE (13 μg/L). Sampling/ chain-of-custody records and laboratory data packages were reviewed to confirm proper sample labeling and to validate the July 1997 results. Since PCE has not been previously

detected in Site 1 groundwater samples and TCE was detected during Round 4 in samples collected from wells 01 MW101 and 01 MW102, confirmation sampling was conducted in September 1997 of the Site 1 wells to verify the July 1997 sampling results.

On September 10-12, 1997, CDM Federal and their support contractor resampled wells 01 MW101, 01 MW102, and 01 MW201 for VOC analyses. To provide an independent check on sampling method, a Teflon disposable bailer was used to collect the new samples rather than the temporary purge and sampling pump system.

A comparison of VOC results for the three Site 1 monitoring wells is summarized below.

Well No. (Sample Date)	TCE	PCE	CCl_4	Other VOCs Detected
01 MW101 (11-Jul-97)	2.0	19.0	2.0	None
01 MW101 (11-Jul-97 Dupl.)	2.0	16.0	2.0	None
01 MW101 (12-Sep-97)	ND	0.4J	ND	None
01 MW101 (12-Sep-97 Dupl.)	ND	0.5J	ND	None
01 MW102 (9-Jul-97)	ND	ND	ND	1,2-DCP (4.0)
01 MW102 (12-Sep-97)	ND	ND	ND	None
01 MW102 (12-Sep-97 Dupl.)	ND	ND	ND	None
01 MW201 (9-Jul-97)	ND	13.0	1.0	None
01 MW201 (12-Sep-97)	ND	ND	ND	Benzene (1.0J)
01 MW201 (12-Sep-97 Dupl.)	ND	ND	ND	Benzene (0.4J)

Note: All results in μg/L, ND=not detected, J=estimated value,
1,2-DCP=1,2-dichloropropane

Based on the review of field sampling records and the sampling results for Site 1 wells, the VOCs detected in the July 1997 samples may have been introduced via the non-dedicated

sampling pump/tubing system. Accordingly, the retest samples collected with disposable bailers appear to be representative of groundwater at the sampling locations. During Round 7 sampling (October 1997), disposable bailers will be used following well purging to collect groundwater samples. Equipment rinsate blank samples will be prepared for the pump system used for purging and the bailers to document field QC during the sampling of Site 1 wells.

9.3.2 Laboratory Data Validation

The subcontract laboratory, APCL, prepared Level D analytical data packages for all groundwater sample analyses performed. According to the requirements described in the Navy's SOW and the project Quality Assurance Project Plan (QAPP) (CDM Federal, 1995 and 1996a), ten percent (10%) of the analytical results were validated. The data validation was performed following the Naval Facilities Engineering Service Center (NFESC) Interim Guidance Document *Navy Installation Restoration Laboratory Quality Assurance Guide* (NFESC, 1996). The data validation guidelines were supplemented by the USEPA guidance document for data validation entitled *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (USEPA, 1994b) and *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (USEPA, 1994a), where applicable.

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

The results of the Round 6 data validation are presented in Data Validation Reports (DVRs) included as Appendix D of this report. The DVRs consist of three separate reports for the

individual SDGs representing the analyses of VOCs, general chemistry and treatability parameters, and dissolved metals. No data in the selected SDGs were rejected.

For the selected sample results reviewed, the project goals for precision, accuracy, representativeness, completeness, and comparability, as defined in the QAPP, were checked (CDM Federal, 1995 and 1996d). Except as noted below, the data validation review 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.

Volatile Organic Compound Analysis: A total of 20 samples including 14 primary groundwater samples and six QC samples in one SDG were reviewed. Because of deficiencies associated with continuing laboratory calibration, several non-detected results for acetone, bromomethane, 2-butanone, carbon disulfide, and 2-hexanone were qualified as estimated (UJ). Because of blank contamination, two positively identified benzene results and three positively identified methylene chloride results were qualified as non-detect (U). Several other results were also qualified as estimated (J) because they were identified at concentrations lower than the Contract Required Quantitation Limit (CRQL). Tentatively identified compound results were qualified as estimated (NJ).

General Chemistry and Treatability Parameters: A total of 17 sample results including 14 primary groundwater sample results and three QC sample results in one SDG were validated. All QC results were within the required control limits, therefore, no data qualification was necessary.

Metals: A total of six sample results including four primary groundwater sample results and two QC sample results in one SDG were validated. Because of blank contamination, positively

identified analytes, such as antimony, cobalt, copper, iron, and selenium in a several samples were qualified as non-detected (U).

9.3.3 Field Parameter Measurements

As noted in Section 2.2, turbidity and dissolved oxygen filed measurements collected during groundwater sampling were occasionally beyond the expected range for these parameters. Turbidity readings in excess of 200 NTU are considered anomalous and most likely result from entrained air bubbles or debris effects. Dissolved oxygen readings above 10.0 mg/L are notably above the theoretical maximum saturation values for groundwater (typically 8.7 to 9.5 mg/L assuming representative temperature range).

Anomalous dissolved oxygen readings measured in groundwater at MCAS El Toro have been reported by other field sampling contractors (Clean II Site 24 Investigation). Although the cause(s) for anomalously high dissolved oxygen results are not known, off-gassing from groundwater depressurization during sampling or other geochemical conditions may contribute to the elevated readings.

A listing of field parameters for the current and prior sampling rounds is provided in Table C-1 (Appendix C). Turbidity, dissolved oxygen, and redox measurements which are beyond the expected range are flagged in this summary table. For the 77 wells sampled during Round 6, dissolved oxygen readings beyond the expected range were measured at 9 sampling locations. Anomalous turbidity readings were recorded at 12 of the sampling locations. In reviewing Table C-1, it is evident that the majority of the elevated dissolved oxygen readings are associated with samples obtained under pressure from the Westbay sampling ports.

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10.0 STATUS OF MONITORING PROGRAM

10.1 RESULTS SUMMARY

During the period June through August 1997, water level measurements and groundwater sampling of 77 selected monitoring wells in the MCAS El Toro GWMP were completed to document current groundwater quality and groundwater flow conditions. The results of the current monitoring round are summarized as follows:

- Water levels in monitoring wells completed in the shallow groundwater unit have generally increased, in the range of 0.5 to 1.0 feet, from the water levels measured in these wells in March 1997. Groundwater elevations for wells completed in the principal aquifer have generally decreased, in the range of 4 to 12 feet, from elevations measured in March 1997. The current water level measurements confirm similar hydraulic gradient and groundwater flow conditions observed in 1993-94 and 1996.

- The current sampling results for VOC analyses confirm the concentrations and general distribution of VOCs in the VOC source area and the regional VOC plume. The concentrations of TCE, PCE, and CCl_4 in the shallow groundwater unit in the on-Station VOC source area are comparable to results from recent 1996-97 sampling rounds.

- Groundwater sampling at the Magazine Road Landfill (Site 2) confirms the presence of a secondary VOC (TCE-PCE) plume, which was identified in prior 1993-94 sampling rounds.

- Elevated levels of gross alpha particle activity have been confirmed in several monitoring wells at Site 2 and Site 5. Additional testing during Round 6 for four selected radioisotopes (radium-226, radium-228, strontium-89, cesium-134) has not shown elevated levels of these parameters.

- General chemistry analytical data were collected for the 77 monitoring wells sampled. The results are consistent with the inorganic water quality data collected during prior sampling. Selected wells were additionally sampled for dissolved metals to further characterize inorganic water quality conditions at MCAS El Toro.

10.2 UPCOMING MONITORING ACTIVITIES

The final groundwater sampling activity under the current delivery order will be Round 7. The sampling activity will include bi-monthly water level measurements from the GWMP monitoring network and groundwater sampling at 80 selected monitoring wells/ports. The scope of analyses and the wells/ports to be sampled will be the same as Round 6. As confirmed by the Navy, the three wells which were not sampled due to inoperative pumps will be replaced by three additional selected monitoring wells/ports for the Round 7 sampling schedule.

The sampling results and a summary of monitoring activities for Round 7 sampling will be presented in a Groundwater Monitoring Report, following the format of the current monitoring report. Upon completion of the upcoming monitoring round, the evaluation and analysis of the groundwater quality and water level data collected during the GWMP sampling rounds will be presented in a Final Groundwater Monitoring Report.

11.0 REFERENCES

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APPENDIX A

SUMMARY INFORMATION FOR GROUNDWATER MONITORING PROGRAM

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Table A-1: SUMMARY OF WELL COMPLETION AND PUMP INSTALLATION
MCAS El Toro Groundwater Monitoring Program

	Well Completion						Pump Installation (July 1997)		
Station ID	Well Elevation (ft MSL)	Well Completion Type	Total Depth of Well (ft BGS)	Casing Diameter (inch)	Screen Interval Depth (ft BGS)	Depth to Water (ft TOC)	Pump Type	Pump Depth (ft TOC)	Remarks
01_DGMW57	631.17	WT	88	4	63 - 83	52.1	2"	81	
01_DGMW58	622.74	WT	82	4	57 - 77	44.2	none	--	pump removed 2/96
01MW101	750.82	WT	153	4	118 - 148	64.7	none	--	
01MW102	758.13	WT	140	4	95 - 135	107.6	none	--	
01MW201	665.99	WT	62	4	27 - 57	40.0	none	--	
02_DGMW59	506.91	WT	94	4	69 - 89	50.5	2"	85	
02_DGMW60	499.28	WT	105	4	80 - 100	63.3	2"	98	
02_DGMW61	514.85	WT	105	4	80 - 100	42.2	2"	98	
02_UGMW25	546.36	WT	80	4	55 - 75	34.5	2"	72	
02NEW1	500.53	WT	140	4	115 - 135	66.3	2"	115	
02NEW2	494.68	WT	100	4	75 - 95	65.6	2"	95	
02NEW3	462.46	WT	230	5	185 - 225	187.2	2"	224	
02NEW6	458.83	WT	230	5	185 - 225	187.3	2"	224	
02NEW7	479.12	WT	148	5	103 - 143	121.7	none	142	pump removed 12/96
02NEW8A	512.88	WT	109	4	84 - 104	45.1	2"	--	
02NEW11	533.85	WT	70	4	45 - 65	25.8	2"	66	
02NEW12	484.94	WT	254	5	209 - 249	211.3	2"	248	
03_DBMW39	419.66	WT	275	5	230 - 270	225.9	4"-HH	265	
03_DGMW64	418.28	WT	290	5	245 - 285	227.5	none	--	pump removed 1/96
03_DGMW65X	411.90	WT	275	5	230 - 270	221.5	none	--	pump removed 1/96
03_UGMW26	420.05	WT	275	5	230 - 270	215.9	none	--	pump removed 1/96
04_DBMW40	400.04	WT	265	4	220 - 260	207.3	none	--	pump removed 1/96
04_DGMW66	401.10	WT	295	5	250 - 290	208.1	none	--	pump removed 1/96
04_UGMW63	404.11	WT	280	5	235 - 275	208.7	4"-HH	262	
05_DBMW41	424.77	WT	227	4	182 - 222	159.6	2"	221	
05_DGMW67	428.56	WT	232	5	177 - 227	163.2	2"	220	inoperative pump 7/97
05_DGMW68	416.95	WT	215	5	190 - 210	164.3	none	--	pump removed 1/96
05_UGMW27	437.86	WT	243	5	198 - 238	166.6	4"	231	
05NEW1	407.77	WT	208	5	163 - 203	162.2	2"	202	
06_DGMW69	324.33	WT	195	4	150 - 190	131.4	none	187	pump removed 12/96
06_UGMW28	334.90	WT	185	4	140 - 180	136.2	none	--	pump removed 2/96
07_DBMW43	292.56	WT	195	4	150 - 190	112.8	none	--	pump removed 2/96
07_DGMW70	293.44	WT	170	4	125 - 165	120.9	none	--	pump removed 2/96
07_DBMW71	283.66	WT	160	4	115 - 155	108.2	none	--	pump removed 2/96
07_DGMW72	276.85	WT	155	4	110 - 150	100.6	none	--	pump removed 2/96
07_DGMW91	273.39	WT	155	4	110 - 150	101.9	none	--	pump removed 2/96
07_DBMW100	286.44	WT	176	4	131 - 171	103.4	4"	168	

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Station ID	Well Elevation (ft MSL)	Well Completion Type	Total Depth of Well (ft BGS)	Casing Diameter (inch)	Screen Interval Depth (ft BGS)	Depth to Water (ft TOC)	Pump Type	Pump Depth (ft TOC)	Remarks
08_DGMW73	263.77	WT	135	4	90 - 130	83.0	none	--	pump removed 2/96
08_DGMW74	264.75	WT	135	4	90 - 130	84.6	none	--	pump removed 2/96
08_UGMW29	271.94	WT	140	4	95 - 135	85.8	none	--	pump removed 2/96
09_DBMW45	280.00	WT	162	4	117 - 157	118.0	none	--	pump removed 1/96
09_DGMW75	271.00	WT	159	4	114 - 154	111.7	none	--	pump removed 2/96
10_DGMW77	271.40	WT	175	4	130 - 170	104.0	none	--	pump removed 2/96
12_DBMW48	247.81	WT	140	4	95 - 135	89.7	none	--	pump removed 2/96
12_UGMW31	255.82	WT	150	4	105 - 145	95.5	none	--	pump removed 2/96
13_DBMW49	280.63	WT	187	4	142 - 182	129.0	2"	175	
13_DGMW78	276.14	WT	172	4	127 - 167	125.0	2"	168	
13_UGMW32	285.22	WT	189	4	144 - 184	133.5	2"	181	
14_DBMW50	270.80	WT	165	4	120 - 160	119.3	2"	150	
14_DGMW79	268.74	WT	163	4	118 - 158	117.6	2"	150	
15_DBMW51	269.26	WT	170	4	125 - 165	119.2	none	162	pump removed 12/96
16_DBMW52	332.00	WT	227	4	182 - 222	169.7	2"	220	
16_DGMW81	323.00	WT	221	4	176 - 216	165.5	none	--	pump removed 12/96
16_UGMW33	337.00	WT	225	4	180 - 220	171.7	2"	219	
17_DGMW82	442.12	WT	260	5	235 - 255	183.6	4"	260	inoperative pump 7/97
17NEW1	431.93	WT	231	5	186 - 226	181.9	2"	225	
17NEW2	551.36	WT	128	4	83 - 123	88.0	2"	121	
18_BGMP06A	175.41	MP	495	4	445 - 455	NM	none	--	multiple port well
18_BGMP06B	175.41	MP			380 - 390	NM			
18_BGMP06C	175.41	MP			295 - 305	NM			
18_BGMP06D	175.41	MP			168 - 178	NM			
18_BGMP06E	175.41	MP,WT			105 - 115	NM			
18_BGMP08A	195.70	MP	488	4	439 - 449	NM	none	--	multiple port well
18_BGMP08C	195.70	MP			297 - 307	NM			
18_BGMP08D	195.70	MP			126 - 136	NM			
18_BGMP08E	195.70	MP,WT			61 - 71	NM			
					0				
18_BGMP09A	235.43	MP	503	4	453 - 463	NM	none	--	multiple port well
18_BGMP09B	235.43	MP			374 - 384	NM			
18_BGMP09C	235.43	MP			268 - 278	NM			

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Station ID	Well Elevation (ft MSL)	Well Completion Type	Total Depth of Well (ft BGS)	Casing Diameter (inch)	Screen Interval Depth (ft BGS)	Depth to Water (ft TOC)	Pump Type	Pump Depth (ft TOC)	Remarks
18_BGMP09D	235.43	MP			222 - 232	NM			
18_BGMP09E	235.43	MP			133 - 143	NM			
18_BGMP09F	235.43	MP,WT			59 - 69	NM			
18_BGMP10A	58.24	MP	1,052	4	1001 - 1011	NM	none	--	multiple port well
18_BGMP10B	58.24	MP			887 - 897	NM			
18_BGMP10C	58.24	MP			752 - 762	NM			
18_BGMP10D	58.24	MP			563 - 573	NM			
18_BGMP10E	58.24	MP			429 - 439	NM			
18_BGMP10F	58.24	MP,WT			218 - 299	NM			
18_BGMW01A	393.41	CL	491	5	466 - 486	209.8	4"-HH	465	
18_BGMW01B	393.83	CL	421	5	396 - 416	199.9	4"-HH	395	
18_BGMW01C	393.25	CL	355	5	330 - 350	200.0	4"-HH	329	
18_BGMW01D	393.15	CL	267	5	242 - 262	201.3	4"	231	
18_BGMW01E	392.09	CL,WT	230	4	205 - 225	202.1	none	224	pump removed 12/96
18_BGMW02A	391.81	CL	487	5	462 - 482	158.9	4"-HH	461	
18_BGMW02C	391.75	CL	383	5	358 - 378	160.3	4"-HH	357	
18_BGMW02D	391.45	CL	319	5	294 - 314	161.5	4"-HH	293	
18_BGMW02E	391.72	CL,WT	238	5	198 - 233	163.1	none	--	pump removed 12/96
18_BGMW03A	279.25	CL	395	5	370 - 390	116.9	none	--	pump removed 2/96
18_BGMW03B	279.28	CL	305	5	280 - 300	110.0	none	--	pump removed 1/96
18_BGMW03C	279.41	CL	247	5	222 - 242	106.4	none	--	pump removed 1/96
18_BGMW03E	279.16	CL,WT	169	4	124 - 164	106.0	2"	160	
18_BGMW04A	243.36	CL	311	5	286 - 306	99.3	none	--	pump removed 2/96
18_BGMW04B	243.58	CL	215	4	190 - 210	88.6	4"	189	
18_BGMW05A	269.45	CL	487	5	462 - 482	84.9	none	--	pump removed 12/96
18_BGMW05B	270.41	CL	346	5	321 - 341	84.5	none	--	pump removed 2/96
18_BGMW05C	269.39	CL	250	5	225 - 245	81.3	none	--	pump removed 2/96
18_BGMW05D	270.42	CL,WT	138	6	83 - 133	81.3	none	--	pump removed 2/96
18_BGMW05E	269.41	CL,WT	135	2	80 - 130	79.9	none	--	not sampled (piezom.)
18_BGMW07	180.11	WT	70	4	25 - 65	21.9	2"	60	
18_BGMW12	304.44	WT	210	4	165 - 205	154.9	2"	200	
18_BGMW14	268.67	WT	120	4	75 - 115	69.6	none	--	pump removed 2/96
18_BGMW15	319.59	WT	220	4	175 - 215	164.0	2"	214	
18_BGMW16	376.67	WT	268	5	223 - 263	215.2	none	--	pump removed in 1996
18_BGMW17	375.68	WT	260	5	215 - 255	137.5	4"	231	
18_BGMW18	276.49	WT	185	4	140 - 180	128.9	none	--	pump removed 12/96

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18_BGMW19A	232.61	CL	473	5	448 - 468	113.4	none	--	pump removed 2/96
18_BGMW19B	232.69	CL	425	5	400 - 420	113.0	none	--	pump removed 2/96
18_BGMW19C	232.79	CL	282	5	257 - 277	99.1	none	--	pump removed 2/96
18_BGMW19D	232.54	CL	175	5	150 - 170	90.3	none	--	pump removed 2/96
18_BGMW19E	232.91	CL,WT	143	4	98 - 138	90.9	2"	137	
18_BGMW22	426.36	WT	292	5	247 - 287	230.5	4"	285	
18_BGMW23	190.22	WT	109	4	64 - 104	29.2	none	--	pump removed 2/96
18_BGMW24	618.13	WT	76	4	51 - 71	39.0	2"	63	
18_BGMW101	232.80	WT	135	4	90 - 130	80.0	4"	126	
18_DW135	268.90	CL,WT	135	4	115 - 135	116.6	none	--	pump removed 2/96
18_DW250	268.82	CL	254	4	215 - 250	121.1	none	--	
18_DW350	269.11	CL	350	4	310 - 350	137.3	none	--	
18_DW450	269.12	CL	454	4	420 - 460	134.3	none	--	
18_DW540	269.53	CL	541	4	490 - 540	131.3	none	--	
18_MCAS01-1	140.13	MP	591	4	60 - 70	NM	none	--	multiple port well
18_MCAS01-2	140.13	MP			150 - 160	NM			
18_MCAS01-3	140.13	MP			210 - 220	NM			
18_MCAS01-4	140.13	MP			270 - 280	NM			
18_MCAS01-5	140.13	MP			330 - 340	NM			
18_MCAS01-6	140.13	MP			450 - 460	NM			
18_MCAS01-7	140.13	MP			540 - 550	NM			
18_MCAS02-1	160.60	MP	660	4	40 - 50	NM	none	--	multiple port well
18_MCAS02-2	160.60	MP			130 - 140	NM			
18_MCAS02-3	160.60	MP			200 - 210	NM			
18_MCAS02-4	160.60	MP			370 - 380	NM			
18_MCAS02-5	160.60	MP			420 - 430	NM			
18_MCAS02-6	160.60	MP			490 - 500	NM			
18_MCAS02-7	160.60	MP			550 - 560	NM			
18_MCAS02-8	160.60	MP			620 - 630	NM			
18_MCAS03-1	216.22	MP	540	4	85 - 95	NM	none	--	multiple port well
18_MCAS03-2	216.22	MP			160 - 170	NM			
18_MCAS03-3	216.22	MP			220 - 230	NM			
18_MCAS03-4	216.22	MP			340 - 350	NM			
18_MCAS03-5	216.22	MP			420 - 430	NM			
18_MCAS03-6	216.22	MP			490 - 500	NM			
18_MCAS04	141.46	SH	275	4	181 - 238	27.3	none	--	
18_MCAS05A	159.97	SH	140	4	120 - 130	31.0	none	--	
18_MCAS06	114.85	SH	285	4	167 - 222	23.8	none	--	

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18_MCAS07-1	101.19	MP	1,152	4	90 - 100	NM	none	--	multiple port well
18_MCAS07-2	101.19	MP			190 - 200	NM			
18_MCAS07-3	101.19	MP			350 - 360	NM			
18_MCAS07-4	101.19	MP			440 - 450	NM			
18_MCAS07-5	101.19	MP			510 - 520	NM			
18_MCAS07-6	101.19	MP			800 - 810	NM			
18_MCAS07-7	101.19	MP			910 - 920	NM			
18_MCAS07-8	101.19	MP			980 - 990	NM			
18_MCAS07-9	101.19	MP			1100 - 1110	NM			
18_MCAS08	86.72	DP	435	4	392 - 410	103.7	none	--	
18_MCAS09	77.50	DP	450	4	372 - 445	42.7	none	--	
18_MCAS10	102.10	DP	389	4	355 - 375	53.4	none	--	
18_PS1	247.99	SH	122	4	102 - 122	86.0	none	--	
18_PS2	246.73	SH	133	4	103 - 133	98.7	none	--	
18_PS3	266.47	SH	122	4	102 - 122	83.6	none	--	pump removed 2/96
18_PS4	264.53	SH	119	4	98 - 118	76.0	none	--	pump removed 2/96
18_PS5	255.14	SH	127	4	106 - 126	87.2	none	--	
18_PS6	269.09	SH	151	4	130 - 150	110.6	none	--	
18_PS7	260.00	SH	127	4	106 - 126	86.5	none	--	
18_PS8	282.84	SH	146	4	125 - 145	102.5	none	--	
18_RW1	247.99	DP	504	5	430 - 470	96.0	none	--	
18_RW2	265.69	DP	475	5	270 - 310		none	--	well lid could not be opened
19_DBMW54	332.59	WT	186	4	141 - 181	140.0	none	--	pump removed 2/96
19_DGMW85	328.57	WT	188	4	143 - 183	138.8	none	--	pump removed 2/96
19_DGMW86	332.87	WT	203	4	158 - 198	147.9	none	--	pump removed 2/96
19_UGMW35	343.66	WT	190	4	148 - 185	147.7	2"	181	
20_DBMW55	331.56	WT	232	4	187 - 227	178.2	none	--	pump removed 2/96
20_DGMW88	331.65	WT	230	4	185 - 225	179.6	2"	223	
20_UGMW36	338.71	WT	228	4	183 - 223	184.5	none	--	pump removed in 1996
21_DBMW56	256.06	WT	137	4	92 - 132	89.0	none	--	pump removed 2/96
21_DGMW90	255.35	WT	140	4	95 - 135	89.2	2"	125	
21_UGMW37	257.87	WT	135	4	89 - 130	90.1	none	--	pump removed 2/96
22_DBMW47	277.83	WT	161	4	116 - 156	113.3	none	--	pump removed 2/96

Table A-1: SUMMARY OF WELL COMPLETION AND PUMP INSTALLATION
MCAS El Toro Groundwater Monitoring Program

	Well Completion						Pump Installation (July 1997)		
Station ID	Well Elevation (ft MSL)	Well Completion Type	Total Depth of Well (ft BGS)	Casing Diameter (inch)	Screen Interval Depth (ft BGS)	Depth to Water (ft TOC)	Pump Type	Pump Depth (ft TOC)	Remarks
24NEW1	281.10	SH	250	5	225 - 245	122.3	none	--	
24NEW4	281.80	WT	154	4	108 - 148	109.1	none	--	
24NEW5	279.20	SH	255	5	230 - 250	118.9	none	--	
24NEW6	265.60	SH	190	5	165 - 185	83.1	none	--	
24NEW7	285.10	WT	164	4	118 - 158	121.3	none	--	
24NEW8	291.50	WT	168	4	122 - 162	124.7	none	--	

EXPLANATION

1) Table modified from Table 2-2, Final GMP (Jacobs, 1995); updated with pump inspection/removal information (Bechtel, 1996).

2) Well elevations are surveyed elevations of top of casing (TOC) or sounding tube, as reported in Phase I RI and Phase II RI documents.

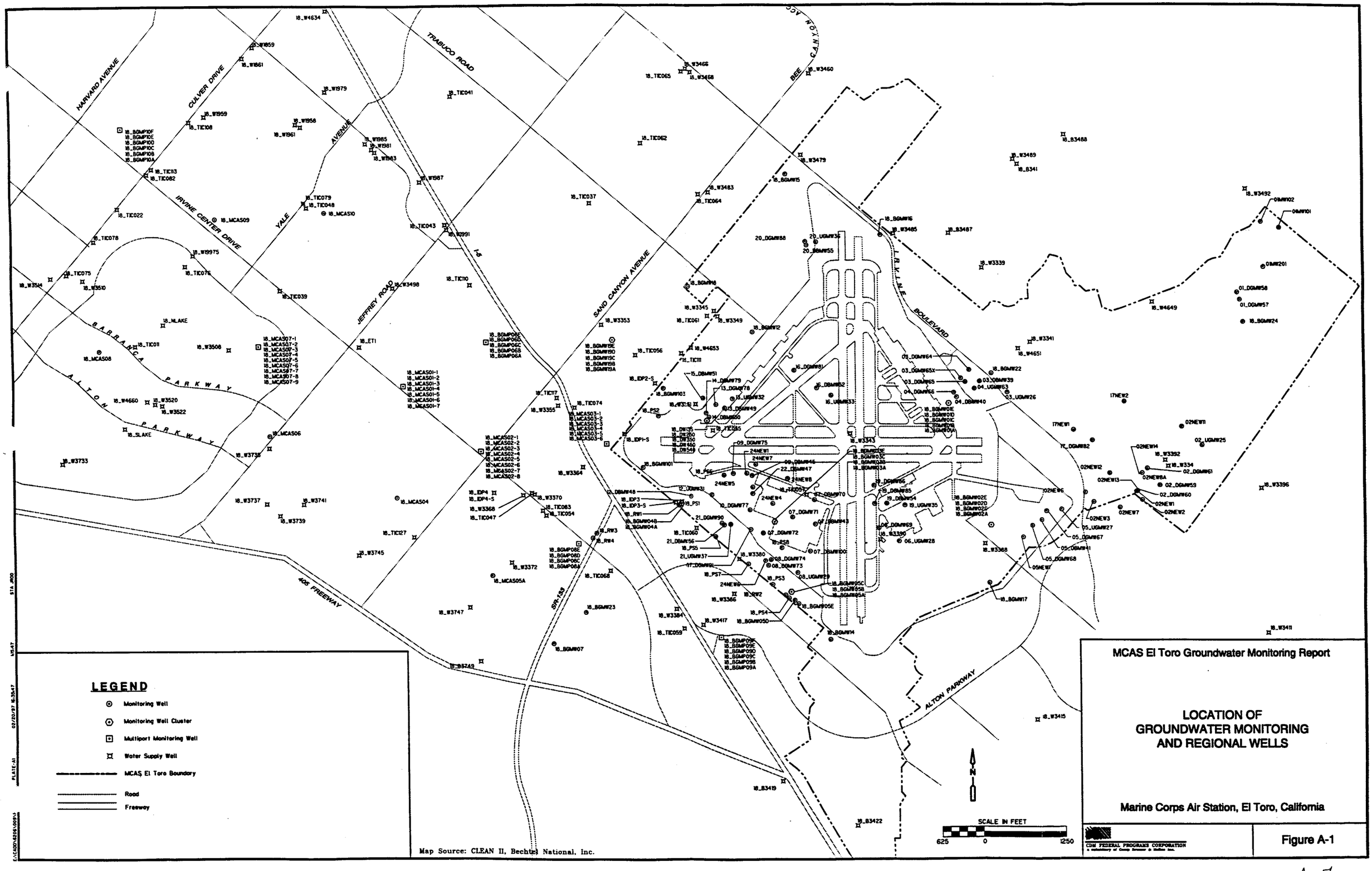
3) Well completion types:
WT = water table monitoring well or port, CL = part of well cluster, MP = multiple-port monitoring well,
SH = well completed below water table and above top of intermediate horizon, DP = well completed below intermediate horizon

4) Static water levels measured in June 1997 (or August 1997); depths in feet below TOC (measure point), rounded-off to 0.1 foot. Depth to water not measured (NM) in MP wells; see Table B-1 for groundwater elevations.

5) Dedicate pumps, installed and functioning as of July 1997:
2" = Grundfos Redi-Flo2 pump, 4" = Grundfos Model 10E-11 (3/4 hp) pump, 4"-HH = Grundfos Model 5S07-18 (3/4 hp) pump

6) As of December 1996, all dedicated packers originally installed in conventional wells have been removed.

7) GWMP wells 18_RW3 and 18_RW4 were abandoned in March 1996 and have not been replaced.



Map Source: CLEAN II, Bechtel National, Inc.

APPENDIX B

WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS

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Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
01_DGMW57	WT	63 - 83	631.04	12-Jan-96	48.12	582.92	
			631.04	7-Feb-96	48.32	582.72	-0.20
			631.04	28-Feb-96	48.65	582.39	-0.33
			631.04	27-Mar-96	48.39	582.65	0.26
			631.04	30-Oct-96	50.50	580.54	-2.11
			631.04	26-Nov-96	50.82	580.22	-0.32
			631.04	27-Dec-96	51.15	579.89	-0.33
			631.04	23-Jan-97	51.18	579.86	-0.03
			631.04	27-Mar-97	53.12	577.92	-1.94
			631.04	27-Jun-97	52.12	578.92	1.00
01_DGMW58	WT	57 - 77	621.94	12-Jan-96	40.44	581.50	
			621.94	28-Feb-96	40.88	581.06	-0.44
			621.94	27-Mar-96	40.58	581.36	0.30
			621.94	30-Oct-96	42.48	579.46	-1.90
			621.94	26-Nov-96	42.48	579.46	0.00
			621.94	27-Dec-96	42.50	579.44	-0.02
			621.94	23-Jan-97	43.22	578.72	-0.72
			621.94	28-Feb-97	42.91	579.03	0.31
			621.94	27-Mar-97	43.12	578.82	-0.21
			621.94	27-Jun-97	44.18	577.76	-1.06
01_MW101	WT	118 - 148	750.82	30-Oct-96	64.54	686.28	
			750.82	26-Nov-96	76.90	673.92	-12.36
			750.82	27-Dec-96	75.80	675.02	1.10
			750.82	23-Jan-97	64.86	685.96	10.94
			750.82	28-Feb-97	64.80	686.02	0.06
			750.82	27-Mar-97	64.90	685.92	-0.04
			750.82	27-Jun-97	64.66	686.16	0.14
01_MW102	WT	95 - 135	758.13	30-Oct-96	107.92	650.21	
			758.13	26-Nov-96	108.84	649.29	-0.92
			758.13	27-Dec-96	109.10	649.03	-0.26
			758.13	23-Jan-97	107.80	650.33	1.30
			758.13	27-Mar-97	107.50	650.63	0.30
			758.13	27-Jun-97	107.55	650.58	-0.05
01_MW201	WT	27 - 57	665.99	30-Oct-96	40.05	625.94	
			665.99	26-Nov-96	40.32	625.67	-0.27
			665.99	27-Dec-96	47.10	618.89	-6.78
			665.99	23-Jan-97	40.56	625.43	6.54
			665.99	27-Mar-97	39.89	626.10	0.67
			665.99	27-Jun-97	40.00	625.99	-0.11
02_DGMW59	WT	69 - 89	506.91	12-Jan-96	50.95	455.96	
			506.91	6-Feb-96	51.22	455.69	-0.27
			506.91	28-Feb-96	48.75	458.16	2.47
			506.91	27-Mar-96	48.66	458.25	0.09
			506.91	30-Oct-96	53.28	453.63	-4.62
			506.91	26-Nov-96	51.58	455.33	1.70
			506.91	26-Dec-96	48.46	458.45	3.12
			506.91	23-Jan-97	44.96	461.95	3.50
			506.91	28-Feb-97	43.10	463.81	1.86
			506.91	27-Mar-97	46.20	460.71	-3.10
			506.91	27-Jun-97	50.50	456.41	-4.30
			506.91	11-Aug-97	51.96	454.95	-1.46

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
02_DGMW60	WT	80 - 100	499.28	12-Jan-96	63.74	435.54	
			499.28	6-Feb-96	63.32	435.96	0.42
			499.28	28-Feb-96	56.27	443.01	7.05
			499.28	27-Mar-96	60.22	439.06	-3.95
			499.28	30-Oct-96	65.26	434.02	-5.04
			499.28	26-Nov-96	56.96	442.32	8.30
			499.28	26-Dec-96	59.88	439.40	-2.92
			499.28	23-Jan-97	55.82	443.46	4.06
			499.28	26-Feb-97	57.86	441.42	-2.04
			499.28	27-Mar-97	59.46	439.82	-1.60
			499.28	27-Jun-97	63.29	435.99	-3.83
			499.28	11-Aug-97	64.54	434.74	-1.25
02_DGMW61	WT	80 - 100	514.85	12-Jan-96	41.59	473.26	
			514.85	8-Feb-96	41.78	473.07	-0.19
			514.85	28-Feb-96	40.15	474.70	1.63
			514.85	27-Mar-96	39.70	475.15	0.45
			514.85	30-Oct-96	44.02	470.83	-4.32
			514.85	26-Nov-96	43.24	471.61	0.78
			514.85	26-Dec-96	40.60	474.25	2.64
			514.85	23-Jan-97	37.66	477.19	2.94
			514.85	26-Feb-97	36.04	478.81	1.62
			514.85	27-Mar-97	38.02	476.83	-1.98
			514.85	27-Jun-97	42.16	472.69	-4.14
			514.85	11-Aug-97	43.34	471.51	-1.18
02_NEW01	WT	115 - 135	500.53	30-Oct-96	68.58	431.95	
			500.53	26-Nov-96	63.00	437.53	5.58
			500.53	26-Dec-96	64.01	436.52	-1.01
			500.53	23-Jan-97	60.22	440.31	3.79
			500.53	26-Feb-97	61.08	439.45	-0.86
			500.53	27-Mar-97	62.56	437.97	-1.48
			500.53	27-Jun-97	66.34	434.19	-3.78
			500.53	11-Aug-97	67.60	432.93	-1.26
02_NEW02	WT	75 - 95	494.68	30-Oct-96	65.83	428.85	
			494.68	26-Nov-96	66.88	427.80	-1.05
			494.68	26-Dec-96	64.58	430.10	2.30
			494.68	23-Jan-97	61.78	432.90	2.80
			494.68	28-Feb-97	60.00	434.68	1.78
			494.68	27-Mar-97	61.98	432.70	-1.98
			494.68	27-Jun-97	65.57	429.11	-3.59
			494.68	11-Aug-97	66.58	428.10	-1.01
02_NEW03	WT	185 - 225	462.46	30-Oct-96	189.29	273.17	
			462.46	26-Nov-96	189.14	273.32	0.15
			462.46	26-Dec-96	189.16	273.30	-0.02
			462.46	23-Jan-97	188.96	273.50	0.20
			462.46	26-Feb-97	187.56	274.90	1.40
			462.46	27-Mar-97	186.88	275.58	0.68
			462.46	27-Jun-97	187.16	275.30	-0.28
			462.46	11-Aug-97	187.20	275.26	-0.04
02_NEW06	WT	185 - 225	458.83	30-Oct-96	189.32	269.51	
			458.83	26-Nov-96	189.16	269.67	0.16
			458.83	26-Dec-96	189.14	269.69	0.02
			458.83	23-Jan-97	188.94	269.89	0.20
			458.83	26-Feb-97	187.74	271.09	1.20
			458.83	27-Mar-97	187.28	271.55	0.46
			458.83	27-Jun-97	187.26	271.57	0.02
			458.83	11-Aug-97	187.26	271.57	0.00

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
02_NEW07	WT	103 - 143	479.12	30-Oct-96	125.60	353.52	
			479.12	26-Nov-96	125.26	353.86	0.34
			479.12	23-Jan-97	116.74	362.38	8.52
			479.12	26-Feb-97	114.91	364.21	1.83
			479.12	27-Mar-97	125.10	354.02	-10.19
			479.12	27-Jun-97	121.68	357.44	3.42
			479.12	11-Aug-97	122.66	356.46	-0.98
02_NEW08A	WT	84 - 104	512.88	30-Oct-96	47.22	465.66	
			512.88	26-Nov-96	46.96	465.92	0.26
			512.88	26-Dec-96	45.03	467.85	1.93
			512.88	23-Jan-97	42.65	470.23	2.38
			512.88	26-Feb-97	40.78	472.10	1.87
			512.88	27-Mar-97	41.78	471.10	-1.00
			512.88	27-Jun-97	45.12	467.76	-3.34
			512.88	11-Aug-97	48.14	464.74	-3.02
02_NEW11	WT	45 - 65	533.85	30-Oct-96	27.34	506.51	
			533.85	26-Nov-96	27.92	505.93	-0.58
			533.85	27-Dec-96	26.75	507.10	1.17
			533.85	23-Jan-97	26.00	507.85	0.75
			533.85	26-Feb-97	23.78	510.07	2.22
			533.85	27-Mar-97	23.62	510.23	0.16
			533.85	27-Jun-97	25.78	508.07	-2.16
			533.85	11-Aug-97	27.16	506.69	-1.38
02_NEW12	WT	209 - 249	484.94	30-Oct-96	213.18	271.76	
			484.94	26-Nov-96	212.96	271.98	0.22
			484.94	26-Dec-96	212.94	272.00	0.02
			484.94	23-Jan-97	212.86	272.08	0.08
			484.94	26-Feb-97	211.66	273.28	1.20
			484.94	27-Jun-97	211.26	273.68	0.40
			484.94	11-Aug-97	211.07	273.87	0.19
02_UGMW25	WT	55 - 75	546.36	12-Jan-96	30.89	515.47	
			546.36	7-Feb-96	30.72	515.64	0.17
			546.36	28-Feb-96	29.60	516.76	1.12
			546.36	27-Mar-96	29.25	517.11	0.35
			546.36	30-Oct-96	36.32	510.04	-7.07
			546.36	26-Nov-96	36.40	509.96	-0.08
			546.36	26-Dec-96	35.52	510.84	0.88
			546.36	23-Jan-97	33.80	512.56	1.72
			546.36	26-Feb-97	31.62	514.74	2.18
			546.36	27-Mar-97	31.64	514.72	-0.02
			546.36	27-Jun-97	34.50	511.86	-2.86
			546.36	11-Aug-97	36.08	510.28	-1.58
03_DBMW39	WT	230 - 270	419.66	11-Jan-96	229.39	190.27	
			419.66	30-Jan-96	229.02	190.64	0.37
			419.66	28-Feb-96	228.47	191.19	0.55
			419.66	27-Mar-96	227.80	191.86	0.67
			419.66	31-Oct-96	227.27	192.39	0.53
			419.66	26-Nov-96	228.98	190.68	-1.71
			419.66	26-Dec-96	226.00	193.66	2.98
			419.66	24-Jan-97	225.70	193.96	0.30
			419.66	26-Feb-97	224.46	195.20	1.24
			419.66	27-Mar-97	224.96	194.70	-0.50
			419.66	26-Jun-97	225.85	193.81	-0.89
			419.66	11-Aug-97	225.74	193.92	0.11

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
03_DGMW64	WT	245 - 285	418.28	11-Jan-96	231.49	186.79	
			418.28	26-Feb-96	230.46	187.82	1.03
			418.28	27-Mar-96	229.85	188.43	0.61
			418.28	31-Oct-96	229.35	188.93	0.50
			418.28	26-Nov-96	230.25	188.03	-0.90
			418.28	27-Dec-96	229.10	189.18	1.15
			418.28	24-Jan-97	228.13	190.15	0.97
			418.28	26-Feb-97	226.76	191.52	1.37
			418.28	27-Mar-97	227.00	191.28	-0.24
			418.28	26-Jun-97	227.50	190.78	-0.50
			418.28	11-Aug-97	227.96	190.32	-0.46
03_DGMW65X	WT	230 - 270	411.90	11-Jan-96	223.57	188.33	
			411.90	26-Feb-96	222.70	189.20	0.87
			411.90	27-Mar-96	222.12	189.78	0.58
			411.90	31-Oct-96	221.58	190.32	0.54
			411.90	26-Nov-96	221.24	190.66	0.34
			411.90	26-Dec-96	220.71	191.19	0.53
			411.90	24-Jan-97	220.44	191.46	0.27
			411.90	26-Feb-97	219.10	192.80	1.34
			411.90	27-Mar-97	219.26	192.64	-0.16
			411.90	26-Jun-97	221.50	190.40	-2.24
			411.90	11-Aug-97	220.20	191.70	1.30
03_UGMW26	WT	230 - 270	420.05	11-Jan-96	220.49	199.56	
			420.05	26-Feb-96	219.68	200.37	0.81
			420.05	27-Feb-96	219.68	200.37	0.00
			420.05	27-Mar-96	219.11	200.94	0.57
			420.05	31-Oct-96	217.40	202.65	1.71
			420.05	26-Nov-96	217.24	202.81	0.16
			420.05	26-Dec-96	216.76	203.29	0.48
			420.05	23-Jan-97	216.44	203.61	0.32
			420.05	26-Feb-97	215.40	204.65	1.04
			420.05	27-Mar-97	215.54	204.51	-0.14
			420.05	26-Jun-97	215.90	204.15	-0.36
			420.05	11-Aug-97	215.66	204.39	0.24
04_DBMW40	WT	220 - 260	400.04	11-Jan-96	212.07	187.97	
			400.04	26-Feb-96	211.14	188.90	0.93
			400.04	27-Mar-96	210.66	189.38	0.48
			400.04	31-Oct-96	210.11	189.93	0.55
			400.04	26-Nov-96	209.58	190.46	0.53
			400.04	26-Dec-96	209.08	190.96	0.50
			400.04	24-Jan-97	208.92	191.12	0.16
			400.04	27-Feb-97	208.95	191.09	-0.03
			400.04	27-Mar-97	208.12	191.92	0.83
			400.04	26-Jun-97	207.25	192.79	0.87
			400.04	11-Aug-97	208.90	191.14	-1.65
04_DGMW66	WT	250 - 290	401.10	11-Jan-96	212.93	188.17	
			401.10	26-Feb-96	211.91	189.19	1.02
			401.10	27-Mar-96	211.42	189.68	0.49
			401.10	31-Oct-96	211.64	189.46	-0.22
			401.10	26-Nov-96	210.76	190.34	0.88
			401.10	26-Dec-96	210.12	190.98	0.64
			401.10	24-Jan-97	209.82	191.28	0.30
			401.10	27-Feb-97	210.25	190.85	-0.43
			401.10	27-Mar-97	209.26	191.84	0.99
			401.10	26-Jun-97	208.10	193.00	1.16
			401.10	11-Aug-97	210.26	190.84	-2.16

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
04_UGMW63	WT	235 - 275	404.11	11-Jan-96	212.50	191.61	
			404.11	30-Jan-96	212.31	191.80	0.19
			404.11	28-Feb-96	211.72	192.39	0.59
			404.11	27-Mar-96	211.22	192.89	0.50
			404.11	31-Oct-96	210.14	193.97	1.08
			404.11	26-Nov-96	209.82	194.29	0.32
			404.11	26-Dec-96	209.30	194.81	0.52
			404.11	24-Jan-97	209.16	194.95	0.14
			404.11	26-Feb-97	207.80	196.31	1.36
			404.11	27-Mar-97	207.80	196.31	0.00
			404.11	26-Jun-97	208.67	195.44	-0.87
			404.11	11-Aug-97	208.64	195.47	0.03
05_DBMW41	WT	182 - 222	425.00	12-Jan-96	163.12	261.88	
			425.00	7-Feb-96	162.82	262.18	0.30
			425.00	28-Feb-96	162.82	262.18	0.00
			425.00	27-Mar-96	162.45	262.55	0.37
			425.00	31-Oct-96	161.60	263.40	0.85
			425.00	26-Nov-96	161.16	263.84	0.44
			425.00	26-Dec-96	161.12	263.88	0.04
			425.00	24-Jan-97	161.16	263.84	-0.04
			425.00	27-Feb-97	159.81	265.19	1.35
			425.00	27-Mar-97	159.86	265.14	-0.05
			425.00	26-Jun-97	159.56	265.44	0.30
			425.00	11-Aug-97	159.72	265.28	-0.16
05_DGMW67	WT	187 - 227	429.00	12-Jan-96	166.52	262.48	
			429.00	9-Feb-96	166.26	262.74	0.26
			429.00	27-Feb-96	166.19	262.81	0.07
			429.00	27-Mar-96	165.85	263.15	0.34
			429.00	31-Oct-96	165.34	263.66	0.51
			429.00	26-Nov-96	164.80	264.20	0.54
			429.00	26-Dec-96	164.68	264.32	0.12
			429.00	24-Jan-97	164.66	264.34	0.02
			429.00	27-Feb-97	163.20	265.80	1.46
			429.00	27-Mar-97	163.28	265.72	-0.08
			429.00	26-Jun-97	163.20	265.80	0.08
			429.00	11-Aug-97	163.30	265.70	-0.10
05_DGMW68	WT	190 - 210	417.00	12-Jan-96	168.71	248.29	
			417.00	26-Feb-96	168.11	248.89	0.60
			417.00	27-Feb-96	168.11	248.89	0.00
			417.00	27-Mar-96	167.79	249.21	0.32
			417.00	31-Oct-96	166.28	250.72	1.51
			417.00	26-Nov-96	165.68	251.32	0.60
			417.00	26-Dec-96	165.52	251.48	0.16
			417.00	24-Jan-97	161.51	255.49	4.01
			417.00	27-Feb-97	165.40	251.60	-3.89
			417.00	27-Mar-97	164.82	252.18	0.58
			417.00	26-Jun-97	164.34	252.66	0.48
			417.00	11-Aug-97	164.22	252.78	0.12
05_NEW01	WT	163 - 203	407.77	31-Oct-96	164.04	243.73	
			407.77	26-Nov-96	163.36	244.41	0.68
			407.77	26-Dec-96	162.98	244.79	0.38
			407.77	27-Feb-97	162.05	245.72	0.93
			407.77	27-Mar-97	162.41	245.36	-0.36
			407.77	26-Jun-97	162.23	245.54	0.18
			407.77	11-Aug-97	161.96	245.81	0.27

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
05_UGMW27	WT	198 - 238	438.00	11-Jan-96	169.84	268.16	
			438.00	29-Jan-96	169.72	268.28	0.12
			438.00	28-Feb-96	169.70	268.30	0.02
			438.00	27-Mar-96	169.32	268.68	0.38
			438.00	31-Oct-96	168.92	269.08	0.40
			438.00	26-Nov-96	168.40	269.60	0.52
			438.00	26-Dec-96	168.34	269.66	0.06
			438.00	23-Jan-97	168.26	269.74	0.08
			438.00	27-Feb-97	166.85	271.15	1.41
			438.00	27-Mar-97	166.62	271.38	0.23
			438.00	26-Jun-97	166.64	271.36	-0.02
			438.00	11-Aug-97	166.98	271.02	-0.34
06_DGMW69	WT	150 - 190	324.33	12-Jan-96	134.00	190.33	
			324.33	2-Feb-96	133.77	190.56	0.23
			324.33	27-Feb-96	133.50	190.83	0.27
			324.33	27-Mar-96	133.20	191.13	0.30
			324.33	31-Oct-96	133.06	191.27	0.14
			324.33	26-Nov-96	132.56	191.77	0.50
			324.33	27-Dec-96	133.10	191.23	-0.54
			324.33	24-Jan-97	131.80	192.53	1.30
			324.33	27-Feb-97	131.14	193.19	0.66
			324.33	27-Mar-97	131.90	192.43	-0.76
			324.33	26-Jun-97	131.44	192.89	0.46
			324.33	12-Aug-97	131.26	193.07	0.18
06_UGMW28	WT	140 - 180	334.90	12-Jan-96	139.36	195.54	
			334.90	16-Feb-96	138.91	195.99	0.45
			334.90	28-Feb-96	138.85	196.05	0.06
			334.90	27-Mar-96	138.51	196.39	0.34
			334.90	31-Oct-96	137.50	197.40	1.01
			334.90	26-Nov-96	137.04	197.86	0.46
			334.90	26-Dec-96	137.32	197.58	-0.28
			334.90	23-Jan-97	136.78	198.12	0.54
			334.90	26-Feb-97	136.52	198.38	0.26
			334.90	27-Mar-97	136.90	198.00	-0.38
			334.90	26-Jun-97	136.20	198.70	0.70
			334.90	11-Aug-97	136.04	198.86	0.16
07_DBMW100	WT	131 - 171	286.44	11-Jan-96	104.60	181.84	
			286.44	31-Jan-96	104.58	181.86	0.02
			286.44	27-Feb-96	104.52	181.92	0.06
			286.44	31-Oct-96	104.28	182.16	0.24
			286.44	26-Nov-96	103.60	182.84	0.68
			286.44	27-Dec-96	102.90	183.54	0.70
			286.44	26-Feb-97	103.36	183.08	-0.46
			286.44	27-Mar-97	102.63	183.81	0.73
			286.44	26-Jun-97	103.36	183.08	-0.73
			286.44	12-Aug-97	103.26	183.18	0.10
07_DBMW43	WT	150 - 190	292.56	12-Jan-96	113.01	179.55	
			292.56	19-Feb-96	112.55	180.01	0.46
			292.56	27-Feb-96	111.41	181.15	1.14
			292.56	27-Mar-96	112.42	180.14	-1.01
			292.56	31-Oct-96	113.95	178.61	-1.53
			292.56	26-Nov-96	113.02	179.54	0.93
			292.56	26-Dec-96	112.60	179.96	0.42
			292.56	23-Jan-97	111.96	180.60	0.64
			292.56	26-Feb-97	111.40	181.16	0.56
			292.56	27-Mar-97	112.08	180.48	-0.68
			292.56	26-Jun-97	112.84	179.72	-0.76
			292.56	12-Aug-97	112.96	179.60	-0.12

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
07_DBMW70	WT	125 - 165	293.44	12-Jan-96	122.38	171.06	
			293.44	13-Feb-96	122.04	171.40	0.34
			293.44	27-Feb-96	121.84	171.60	0.20
			293.44	27-Mar-96	121.60	171.84	0.24
			293.44	31-Oct-96	121.90	171.54	-0.30
			293.44	26-Nov-96	121.40	172.04	0.50
			293.44	26-Dec-96	121.46	171.98	-0.06
			293.44	23-Jan-97	120.92	172.52	0.54
			293.44	26-Feb-97	120.64	172.80	0.28
			293.44	27-Mar-97	120.44	173.00	0.20
			293.44	26-Jun-97	120.86	172.58	-0.42
			293.44	12-Aug-97	120.92	172.52	-0.06
07_DGMW71	WT	115 - 155	283.66	12-Jan-96	109.60	174.06	
			283.66	13-Feb-96	109.21	174.45	0.39
			283.66	27-Feb-96	109.02	174.64	0.19
			283.66	27-Mar-96	108.80	174.86	0.22
			283.66	31-Oct-96	109.08	174.58	-0.28
			283.66	26-Nov-96	108.56	175.10	0.52
			283.66	26-Dec-96	108.66	175.00	-0.10
			283.66	23-Jan-97	108.14	175.52	0.52
			283.66	26-Feb-97	107.84	175.82	0.30
			283.66	27-Mar-97	107.84	175.82	0.00
			283.66	26-Jun-97	108.20	175.46	-0.36
			283.66	12-Aug-97	108.30	175.36	-0.10
07_DGMW72	WT	110 - 150	276.85	11-Jan-96	102.94	173.91	
			276.85	13-Feb-96	102.70	174.15	0.24
			276.85	27-Feb-96	102.53	174.32	0.17
			276.85	27-Mar-96	102.19	174.66	0.34
			276.85	30-Oct-96	102.12	174.73	0.07
			276.85	26-Nov-96	101.95	174.90	0.17
			276.85	26-Dec-96	102.04	174.81	-0.09
			276.85	23-Jan-97	101.64	175.21	0.40
			276.85	26-Feb-97	101.34	175.51	0.30
			276.85	27-Mar-97	101.35	175.50	-0.01
			276.85	26-Jun-97	100.55	176.30	0.80
			276.85	12-Aug-97	101.66	175.19	-1.11
07_DGMW91	WT	110 - 150	273.39	11-Jan-96	102.92	170.47	
			273.39	8-Feb-96	102.90	170.49	0.02
			273.39	27-Feb-96	102.92	170.47	-0.02
			273.39	27-Mar-96	102.45	170.94	0.47
			273.39	30-Oct-96	102.48	170.91	-0.03
			273.39	26-Nov-96	102.28	171.11	0.20
			273.39	27-Dec-96	102.85	170.54	-0.57
			273.39	23-Jan-97	101.97	171.42	0.88
			273.39	26-Feb-97	101.79	171.60	0.18
			273.39	27-Mar-97	101.64	171.75	0.15
			273.39	26-Jun-97	101.86	171.53	-0.22
			273.39	12-Aug-97	102.02	171.37	-0.16
08_DGMW73	WT	90 - 130	263.77	11-Jan-96	84.40	179.37	
			263.77	14-Feb-96	83.72	180.05	0.68
			263.77	27-Feb-96	83.74	180.03	-0.02
			263.77	27-Mar-96	83.54	180.23	0.20
			263.77	30-Oct-96	83.56	180.21	-0.02
			263.77	26-Nov-96	83.39	180.38	0.17
			263.77	26-Dec-96	83.50	180.27	-0.11
			263.77	23-Jan-97	83.17	180.60	0.33
			263.77	26-Feb-97	82.98	180.79	0.19
			263.77	27-Mar-97	82.80	180.97	0.18
			263.77	26-Jun-97	82.96	180.81	-0.16
			263.77	11-Aug-97	83.08	180.69	-0.12

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
08_DGMW74	WT	90 - 130	264.75	14-Feb-96	84.99	179.76	
			266.70	27-Feb-96	85.08	181.62	1.86
			266.70	27-Mar-96	85.24	181.46	-0.16
			266.70	30-Oct-96	85.23	181.47	0.01
			266.70	26-Nov-96	85.04	181.66	0.19
			266.70	26-Dec-96	85.15	181.55	-0.11
			266.70	23-Jan-97	84.80	181.90	0.35
			266.70	26-Feb-97	84.60	182.10	0.20
			266.70	27-Mar-97	84.46	182.24	0.14
			266.70	26-Jun-97	84.60	182.10	-0.14
			266.70	11-Aug-97	84.73	181.97	-0.13
08_UGMW29	WT	95 - 135	271.94	12-Jan-96	87.00	184.94	
			271.94	14-Feb-96	86.75	185.19	0.25
			271.94	27-Feb-96	86.70	185.24	0.05
			271.94	27-Mar-96	86.50	185.44	0.20
			271.94	30-Oct-96	86.46	185.48	0.04
			271.94	26-Nov-96	86.29	185.65	0.17
			271.94	27-Dec-96	86.10	185.84	0.19
			271.94	23-Jan-97	86.02	185.92	0.08
			271.94	26-Feb-97	85.84	186.10	0.18
			271.94	27-Mar-97	85.70	186.24	0.14
			271.94	26-Jun-97	85.82	186.12	-0.12
			271.94	11-Aug-97	85.89	186.05	-0.07
09_DBMW45	WT	117 - 157	280.00	11-Jan-96	118.70	161.30	
			280.00	15-Feb-96	118.44	161.56	0.26
			280.00	27-Feb-96	118.35	161.65	0.09
			280.00	27-Mar-96	118.02	161.98	0.33
			280.00	30-Oct-96	118.64	161.36	-0.62
			280.00	26-Nov-96	118.12	161.88	0.52
			280.00	26-Dec-96	118.07	161.93	0.05
			280.00	23-Jan-97	117.50	162.50	0.57
			280.00	27-Feb-97	116.81	163.19	0.69
			280.00	27-Mar-97	117.24	162.76	-0.43
			280.00	26-Jun-97	118.00	162.00	-0.76
			280.00	11-Aug-97	118.06	161.94	-0.06
09_DGMW75	WT	114 - 154	271.00	11-Jan-96	112.68	158.32	
			271.00	14-Feb-96	112.20	158.80	0.48
			271.00	27-Feb-96	112.21	158.79	-0.01
			271.00	27-Mar-96	111.90	159.10	0.31
			271.00	1-Nov-96	112.47	158.53	-0.57
			271.00	26-Nov-96	111.93	159.07	0.54
			271.00	26-Dec-96	111.93	159.07	0.00
			271.00	27-Feb-97	110.82	160.18	1.11
			271.00	27-Mar-97	111.21	159.79	-0.39
			271.00	26-Jun-97	111.74	159.26	-0.53
			271.00	11-Aug-97	111.83	159.17	-0.09
10_DGMW77	WT	130 - 170	271.40	11-Jan-96	104.60	166.80	
			271.40	14-Feb-96	104.78	166.62	-0.18
			271.40	27-Feb-96	104.75	166.65	0.03
			271.40	27-Mar-96	104.34	167.06	0.41
			271.40	30-Oct-96	104.68	166.72	-0.34
			271.40	26-Nov-96	104.25	167.15	0.43
			271.40	26-Dec-96	104.30	167.10	-0.05
			271.40	23-Jan-97	103.82	167.58	0.48
			271.40	26-Feb-97	103.45	167.95	0.37
			271.40	27-Mar-97	103.60	167.80	-0.15
			271.40	26-Jun-97	103.98	167.42	-0.38
			271.40	12-Aug-97	104.14	167.26	-0.16

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
12_DBMW48	WT	95 - 135	247.81	11-Jan-96	90.86	156.95	
			247.81	16-Feb-96	90.49	157.32	0.37
			247.81	27-Feb-96	90.43	157.38	0.06
			247.81	27-Mar-96	90.11	157.70	0.32
			247.81	30-Oct-96	90.16	157.65	-0.05
			247.81	26-Nov-96	90.00	157.81	0.16
			247.81	26-Dec-96	90.08	157.73	-0.08
			247.81	23-Jan-97	89.68	158.13	0.40
			247.81	26-Feb-97	89.36	158.45	0.32
			247.81	27-Mar-97	90.10	157.71	-0.74
			247.81	26-Jun-97	89.65	158.16	0.45
			247.81	11-Aug-97	89.86	157.95	-0.21
12_UGMW31	WT	105 - 145	255.82	11-Jan-96	96.74	159.08	
			255.82	14-Feb-96	96.26	159.56	0.48
			255.82	27-Feb-96	96.28	159.54	-0.02
			255.82	27-Mar-96	96.02	159.80	0.26
			255.82	30-Oct-96	96.10	159.72	-0.08
			255.82	26-Nov-96	95.89	159.93	0.21
			255.82	26-Dec-96	95.94	159.88	-0.05
			255.82	23-Jan-97	95.54	160.28	0.40
			255.82	27-Feb-97	95.02	160.80	0.52
			255.82	27-Mar-97	95.26	160.56	-0.24
			255.82	26-Jun-97	95.54	160.28	-0.28
			255.82	12-Aug-97	95.75	160.07	-0.21
13_DBMW49	WT	142 - 182	280.63	11-Jan-96	129.04	151.59	
			280.63	6-Feb-96	128.73	151.90	0.31
			280.63	27-Feb-96	128.41	152.22	0.32
			280.63	27-Mar-96	128.22	152.41	0.19
			280.63	31-Oct-96	129.47	151.16	-1.25
			280.63	26-Nov-96	128.68	151.95	0.79
			280.63	26-Dec-96	128.38	152.25	0.30
			280.63	24-Jan-97	127.54	153.09	0.84
			280.63	27-Feb-97	126.94	153.69	0.60
			280.63	27-Mar-97	127.88	152.75	-0.94
			280.63	26-Jun-97	128.97	151.66	-1.09
			280.63	11-Aug-97	129.26	151.37	-0.29
13_DGMW78	WT	127 - 167	276.14	11-Jan-96	126.30	149.84	
			276.14	1-Feb-96	125.90	150.24	0.40
			276.14	27-Feb-96	125.50	150.64	0.40
			276.14	27-Mar-96	125.36	150.78	0.14
			276.14	31-Oct-96	125.48	150.66	-0.12
			276.14	26-Nov-96	125.34	150.80	0.14
			276.14	26-Dec-96	125.40	150.74	-0.06
			276.14	24-Jan-97	125.02	151.12	0.38
			276.14	27-Feb-97	124.63	151.51	0.39
			276.14	27-Mar-97	124.10	152.04	0.53
			276.14	26-Jun-97	125.04	151.10	-0.94
			276.14	11-Aug-97	125.34	150.80	-0.30
13_UGMW32	WT	144 - 184	285.22	11-Jan-96	134.52	150.70	
			285.22	5-Feb-96	134.47	150.75	0.05
			285.22	27-Feb-96	133.81	151.41	0.66
			285.22	27-Mar-96	133.62	151.60	0.19
			285.22	31-Oct-96	134.20	151.02	-0.58
			285.22	26-Nov-96	133.45	151.77	0.75
			285.22	26-Dec-96	133.58	151.64	-0.13
			285.22	24-Jan-97	132.84	152.38	0.74
			285.22	27-Feb-97	132.44	152.78	0.40
			285.22	27-Mar-97	132.64	152.58	-0.20
			285.22	26-Jun-97	133.48	151.74	-0.84
			285.22	11-Aug-97	133.74	151.48	-0.26

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
14_DBMW50	WT	120 - 160	270.80	11-Jan-96	120.20	150.60	
			270.80	5-Feb-96	120.04	150.76	0.16
			270.80	27-Feb-96	119.57	151.23	0.47
			270.80	27-Mar-96	119.32	151.48	0.25
			270.80	31-Oct-96	119.72	151.08	-0.40
			270.80	26-Nov-96	119.60	151.20	0.12
			270.80	26-Dec-96	117.92	152.88	1.68
			270.80	24-Jan-97	117.85	152.95	0.07
			270.80	27-Feb-97	118.70	152.10	-0.85
			270.80	27-Mar-97	118.30	152.50	0.40
			270.80	26-Jun-97	119.30	151.50	-1.00
			270.80	11-Aug-97	119.42	151.38	-0.12
14_DGMW79	WT	118 - 158	268.74	11-Jan-96	118.75	149.99	
			268.74	5-Feb-96	118.33	150.41	0.42
			268.74	28-Feb-96	118.17	150.57	0.16
			268.74	27-Mar-96	117.68	151.06	0.49
			268.74	31-Oct-96	118.32	150.42	-0.64
			268.74	26-Nov-96	118.10	150.64	0.22
			268.74	26-Dec-96	117.92	150.82	0.18
			268.74	24-Jan-97	117.50	151.24	0.42
			268.74	27-Feb-97	117.14	151.60	0.36
			268.74	27-Mar-97	117.10	151.64	0.04
			268.74	26-Jun-97	117.64	151.10	-0.54
			268.74	11-Aug-97	118.02	150.72	-0.38
15_DBMW51	WT	125 - 165	269.26	11-Jan-96	120.45	148.81	
			269.26	6-Feb-96	119.88	149.38	0.57
			269.26	28-Feb-96	119.86	149.40	0.02
			269.26	27-Mar-96	119.41	149.85	0.45
			269.26	31-Oct-96	119.94	149.32	-0.53
			269.26	26-Nov-96	119.66	149.60	0.28
			269.26	26-Dec-96	119.65	149.61	0.01
			269.26	24-Jan-97	119.28	149.98	0.37
			269.26	27-Feb-97	118.54	150.72	0.74
			269.26	27-Mar-97	118.65	150.61	-0.11
			269.26	26-Jun-97	119.20	150.06	-0.55
			269.26	11-Aug-97	125.50	143.76	-6.30
16_DBMW52	WT	182 - 222	332.00	12-Jan-96	170.90	161.10	
			332.00	7-Feb-96	170.30	161.70	0.60
			332.00	27-Feb-96	169.74	162.26	0.56
			332.00	27-Mar-96	169.48	162.52	0.26
			332.00	31-Oct-96	170.96	161.04	-1.48
			332.00	26-Nov-96	170.18	161.82	0.78
			332.00	26-Dec-96	169.70	162.30	0.48
			332.00	24-Jan-97	169.00	163.00	0.70
			332.00	27-Feb-97	168.08	163.92	0.92
			332.00	27-Mar-97	170.00	162.00	-1.92
			332.00	26-Jun-97	169.66	162.34	0.34
			332.00	12-Aug-97	169.58	162.42	0.08

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
16_DGMW81	WT	176 - 216	323.00	12-Jan-96	165.85	157.15	
			323.00	8-Feb-96	165.38	157.62	0.47
			323.00	27-Feb-96	165.07	157.93	0.31
			323.00	27-Mar-96	164.65	158.35	0.42
			323.00	31-Oct-96	167.33	155.67	-2.68
			323.00	26-Nov-96	165.96	157.04	1.37
			323.00	26-Dec-96	165.12	157.88	0.84
			323.00	24-Jan-97	164.18	158.82	0.94
			323.00	27-Feb-97	163.08	159.92	1.10
			323.00	27-Mar-97	164.95	158.05	-1.87
			323.00	26-Jun-97	165.53	157.47	-0.58
			323.00	12-Aug-97	164.68	158.32	0.85
16_UGMW33	WT	180 - 220	337.00	12-Jan-96	173.03	163.97	
			337.00	7-Feb-96	172.35	164.65	0.68
			337.00	27-Feb-96	172.15	164.85	0.20
			337.00	27-Mar-96	171.71	165.29	0.44
			337.00	31-Oct-96	173.10	163.90	-1.39
			337.00	26-Nov-96	172.32	164.68	0.78
			337.00	26-Dec-96	171.50	165.50	0.82
			337.00	24-Jan-97	171.28	165.72	0.22
			337.00	27-Feb-97	170.35	166.65	0.93
			337.00	27-Mar-97	171.40	165.60	-1.05
			337.00	26-Jun-97	171.68	165.32	-0.28
			337.00	12-Aug-97	171.74	165.26	-0.06
17_DGMW82	WT	235 - 255	442.12	12-Jan-96	189.55	252.57	
			442.12	9-Feb-96	192.04	250.08	-2.49
			442.12	28-Feb-96	192.04	250.08	0.00
			442.12	31-Oct-96	185.60	256.52	6.44
			442.12	26-Nov-96	185.50	256.62	0.10
			442.12	26-Dec-96	185.22	256.90	0.28
			442.12	24-Jan-97	184.43	257.69	0.79
			442.12	12-Aug-97	183.64	258.48	0.79
17_NEW01	WT	186 - 226	431.93	31-Oct-96	183.88	248.05	
			431.93	26-Nov-96	183.60	248.33	0.28
			431.93	26-Dec-96	183.22	248.71	0.38
			431.93	24-Jan-97	183.75	248.18	-0.53
			431.93	27-Feb-97	181.98	249.95	1.77
			431.93	27-Mar-97	182.10	249.83	-0.12
			431.93	27-Jun-97	181.90	250.03	0.20
			431.93	12-Aug-97	181.04	250.89	0.86
17_NEW02	WT	83 - 123	551.36	31-Oct-96	87.95	463.41	
			551.36	26-Nov-96	88.01	463.35	-0.06
			551.36	26-Dec-96	87.88	463.48	0.13
			551.36	24-Jan-97	88.56	462.80	-0.68
			551.36	27-Feb-97	87.53	463.83	1.03
			551.36	27-Mar-97	87.72	463.64	-0.19
			551.36	12-Aug-97	88.00	463.36	-0.28
18_BGMP06A	MP	445 - 455	175.41	7-Feb-96	NA	127.57	
			175.41	27-Feb-96	NA	128.48	0.91
			175.41	27-Mar-96	NA	128.56	0.08
			175.41	1-Nov-96	NA	99.35	-29.21
			175.41	26-Nov-96	NA	114.41	15.06
			175.41	26-Dec-96	NA	121.94	7.53
			175.41	23-Jan-97	NA	127.68	5.74
			175.41	27-Feb-97	NA	127.99	0.31
			175.41	27-Mar-97	NA	113.15	-14.84
			175.41	26-Jun-97	NA	101.41	-11.74
			175.41	12-Aug-97	NA	100.24	-1.17

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMP06B	MP	380 - 390	175.41	7-Feb-96	NA	108.99	
			175.41	27-Feb-96	NA	110.95	1.96
			175.41	27-Mar-96	NA	109.09	-1.86
			175.41	1-Nov-96	NA	69.58	-39.51
			175.41	26-Nov-96	NA	91.16	21.58
			175.41	26-Dec-96	NA	100.96	9.80
			175.41	23-Jan-97	NA	109.61	8.65
			175.41	27-Feb-97	NA	107.99	-1.62
			175.41	27-Mar-97	NA	87.57	-20.42
			175.41	26-Jun-97	NA	71.02	-16.55
			175.41	12-Aug-97	NA	69.45	-1.57
18_BGMP06C	MP	295 - 305	175.41	7-Feb-96	NA	121.94	
			175.41	27-Feb-96	NA	122.41	0.47
			175.41	27-Mar-96	NA	122.81	0.40
			175.41	1-Nov-96	NA	99.18	-23.63
			175.41	26-Nov-96	NA	110.49	11.31
			175.41	26-Dec-96	NA	117.17	6.68
			175.41	23-Jan-97	NA	121.48	4.31
			175.41	27-Feb-97	NA	122.15	0.67
			175.41	27-Mar-97	NA	111.49	-10.66
			175.41	26-Jun-97	NA	101.18	-10.31
			175.41	12-Aug-97	NA	100.38	-0.80
18_BGMP06D	MP	168 - 178	175.41	7-Feb-96	NA	129.72	
			175.41	27-Feb-96	NA	129.84	0.12
			175.41	27-Mar-96	NA	129.84	0.00
			175.41	1-Nov-96	NA	127.04	-2.80
			175.41	26-Nov-96	NA	127.42	0.38
			175.41	26-Dec-96	NA	128.85	1.43
			175.41	23-Jan-97	NA	129.68	0.83
			175.41	27-Feb-97	NA	130.29	0.61
			175.41	27-Mar-97	NA	129.55	-0.74
			175.41	26-Jun-97	NA	127.99	-1.56
			175.41	12-Aug-97	NA	127.67	-0.32
18_BGMP06E	MP - WT	105 - 115	175.41	7-Feb-96	NA	126.02	
			175.41	27-Feb-96	NA	126.16	0.14
			175.41	27-Mar-96	NA	126.25	0.09
			175.41	1-Nov-96	NA	125.33	-0.92
			175.41	26-Nov-96	NA	124.79	-0.54
			175.41	26-Dec-96	NA	125.47	0.68
			175.41	23-Jan-97	NA	125.89	0.42
			175.41	27-Feb-97	NA	129.36	3.47
			175.41	27-Mar-97	NA	126.11	-3.25
			175.41	26-Jun-97	NA	125.54	-0.57
			175.41	12-Aug-97	NA	125.45	-0.09
18_BGMP08A	MP	439 - 449	195.70	11-Jan-96	NA	148.06	
			195.70	27-Mar-96	NA	150.61	2.55
			195.70	7-Nov-96	NA	133.62	-16.99
			195.70	26-Dec-96	NA	146.20	12.58
			195.70	27-Feb-97	NA	150.98	4.78
			195.70	27-Mar-97	NA	142.80	-8.18
			195.70	27-Jun-97	NA	135.23	-7.57
			195.70	12-Aug-97	NA	134.37	-0.86

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMP08C	MP	297 - 307	195.70	11-Jan-96	NA	152.35	
			195.70	27-Feb-96	NA	151.43	-0.92
			195.70	27-Mar-96	NA	151.86	0.43
			195.70	7-Nov-96	NA	138.89	-12.97
			195.70	26-Dec-96	NA	148.92	10.03
			195.70	27-Feb-97	NA	152.48	3.56
			195.70	27-Mar-97	NA	144.89	-7.59
			195.70	27-Jun-97	NA	138.88	-6.01
			195.70	12-Aug-97	NA	138.18	-0.70
18_BGMP08D	MP	126 - 136	195.70	11-Jan-96	NA	154.74	
			195.70	27-Feb-96	NA	154.83	0.09
			195.70	27-Mar-96	NA	155.16	0.33
			195.70	7-Nov-96	NA	152.45	-2.71
			195.70	26-Dec-96	NA	154.98	2.53
			195.70	27-Feb-97	NA	156.32	1.34
			195.70	27-Mar-97	NA	155.41	-0.91
			195.70	27-Jun-97	NA	154.18	-1.23
			195.70	12-Aug-97	NA	153.99	-0.19
18_BGMP08E	MP - WT	61 - 71	195.70	11-Jan-96	NA	151.81	
			195.70	27-Feb-96	NA	151.92	0.11
			195.70	7-Nov-96	NA	150.76	-1.16
			195.70	26-Dec-96	NA	152.39	1.63
			195.70	27-Feb-97	NA	153.26	0.87
			195.70	27-Mar-97	NA	153.19	-0.07
			195.70	27-Jun-97	NA	152.62	-0.57
			195.70	12-Aug-97	NA	152.39	-0.23
18_BGMP09A	MP	453 - 463	235.43	11-Jan-96	NA	185.86	
			235.43	28-Feb-96	NA	186.51	0.65
			235.43	27-Mar-96	NA	186.78	0.27
			235.43	31-Oct-96	NA	182.27	-4.51
			235.43	25-Nov-96	NA	177.91	-4.36
			235.43	26-Dec-96	NA	185.98	8.07
			235.43	23-Jan-97	NA	186.96	0.98
			235.43	27-Feb-97	NA	187.29	0.33
			235.43	27-Mar-97	NA	185.98	-1.31
			235.43	27-Jun-97	NA	183.87	-2.11
			235.43	12-Aug-97	NA	183.67	-0.20
18_BGMP09B	MP	375 - 385	235.43	11-Jan-96	NA	186.93	
			235.43	28-Feb-96	NA	187.59	0.66
			235.43	27-Mar-96	NA	188.12	0.53
			235.43	31-Oct-96	NA	183.24	-4.88
			235.43	25-Nov-96	NA	185.36	2.12
			235.43	26-Dec-96	NA	187.38	2.02
			235.43	23-Jan-97	NA	188.47	1.09
			235.43	27-Feb-97	NA	188.86	0.39
			235.43	27-Mar-97	NA	186.89	-1.97
			235.43	27-Jun-97	NA	184.88	-2.01
			235.43	12-Aug-97	NA	184.66	-0.22
18_BGMP09C	MP	268 - 278	235.43	11-Jan-96	NA	213.78	
			235.43	28-Feb-96	NA	235.90	22.12
			235.43	27-Mar-96	NA	189.91	-45.99
			235.43	31-Oct-96	NA	186.11	-3.80
			235.43	25-Nov-96	NA	187.88	1.77
			235.43	26-Dec-96	NA	189.40	1.52
			235.43	23-Jan-97	NA	190.27	0.87
			235.43	27-Mar-97	NA	188.99	-1.28
			235.43	27-Jun-97	NA	187.44	-1.55
			235.43	12-Aug-97	NA	187.19	-0.25

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMP09D	MP	222 - 232	235.43	11-Jan-96	NA	233.63	
			235.43	28-Feb-96	NA	188.81	-44.82
			235.43	27-Mar-96	NA	189.12	0.31
			235.43	31-Oct-96	NA	186.67	-2.45
			235.43	25-Nov-96	NA	187.39	0.72
			235.43	26-Dec-96	NA	188.88	1.49
			235.43	23-Jan-97	NA	189.34	0.46
			235.43	27-Feb-97	NA	189.95	0.61
			235.43	27-Mar-97	NA	188.93	-1.02
			235.43	27-Jun-97	NA	187.89	-1.04
			235.43	12-Aug-97	NA	187.77	-0.12
18_BGMP09E	MP	133 - 143	235.43	11-Jan-96	NA	196.48	
			235.43	28-Feb-96	NA	187.00	-9.48
			235.43	27-Mar-96	NA	187.40	0.40
			235.43	31-Oct-96	NA	186.18	-1.22
			235.43	25-Nov-96	NA	186.32	0.14
			235.43	26-Dec-96	NA	187.05	0.73
			235.43	23-Jan-97	NA	187.47	0.42
			235.43	27-Feb-97	NA	187.96	0.49
			235.43	27-Mar-97	NA	187.73	-0.23
			235.43	27-Jun-97	NA	187.20	-0.53
			235.43	12-Aug-97	NA	187.11	-0.09
18_BGMP09F	MP - WT	59 - 69	235.43	11-Jan-96	NA	185.91	
			235.43	28-Feb-96	NA	185.52	-0.39
			235.43	27-Mar-96	NA	186.00	0.48
			235.43	31-Oct-96	NA	185.43	-0.57
			235.43	25-Nov-96	NA	185.33	-0.10
			235.43	26-Dec-96	NA	185.61	0.28
			235.43	23-Jan-97	NA	189.65	4.04
			235.43	27-Feb-97	NA	189.97	0.32
			235.43	27-Mar-97	NA	190.02	0.05
			235.43	27-Jun-97	NA	189.51	-0.51
			235.43	12-Aug-97	NA	179.50	-10.01
18_BGMP10A	MP	1001 - 1011	58.24	19-Jan-96	NA	34.45	
			58.24	27-Mar-96	NA	40.50	6.05
			58.24	1-Nov-96	NA	-18.91	-59.41
			58.24	25-Nov-96	NA	5.82	24.73
			58.24	26-Dec-96	NA	25.27	19.45
			58.24	23-Jan-97	NA	45.78	20.51
			58.24	27-Feb-97	NA	36.39	-9.39
			58.24	27-Mar-97	NA	2.89	-33.50
			58.24	27-Jun-97	NA	-31.31	-34.20
			58.24	12-Aug-97	NA	-36.72	-5.41
18_BGMP10B	MP	886 - 896	58.24	19-Jan-96	NA	37.66	
			58.24	27-Mar-96	NA	118.86	81.20
			58.24	1-Nov-96	NA	-16.16	-135.02
			58.24	25-Nov-96	NA	11.65	27.81
			58.24	26-Dec-96	NA	30.33	18.68
			58.24	23-Jan-97	NA	50.83	20.50
			58.24	27-Feb-97	NA	35.94	-14.89
			58.24	27-Mar-97	NA	-3.38	-39.32
			58.24	27-Jun-97	NA	-35.77	-32.39
			58.24	12-Aug-97	NA	-40.67	-4.90

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMP10C	MP	752 - 762	58.24	19-Jan-96	NA	41.86	
			58.24	27-Mar-96	NA	34.89	-6.97
			58.24	1-Nov-96	NA	-9.54	-44.43
			58.24	25-Nov-96	NA	19.37	28.91
			58.24	26-Dec-96	NA	36.36	16.99
			58.24	23-Jan-97	NA	56.73	20.37
			58.24	27-Feb-97	NA	33.13	-23.60
			58.24	27-Mar-97	NA	-11.02	-44.15
			58.24	27-Jun-97	NA	-42.21	-31.19
			58.24	12-Aug-97	NA	-45.78	-3.57
18_BGMP10D	MP	563 - 573	58.24	19-Jan-96	NA	40.94	
			58.24	27-Mar-96	NA	37.40	-3.54
			58.24	1-Nov-96	NA	-8.82	-46.22
			58.24	25-Nov-96	NA	20.65	29.47
			58.24	26-Dec-96	NA	36.86	16.21
			58.24	23-Jan-97	NA	56.06	19.20
			58.24	27-Feb-97	NA	33.62	-22.44
			58.24	27-Mar-97	NA	2.01	-31.61
			58.24	27-Jun-97	NA	-28.33	-30.34
			58.24	12-Aug-97	NA	-31.47	-3.14
18_BGMP10E	MP	429 - 449	58.24	19-Jan-96	NA	55.65	
			58.24	27-Mar-96	NA	60.15	4.50
			58.24	1-Nov-96	NA	11.52	-48.63
			58.24	25-Nov-96	NA	31.89	20.37
			58.24	26-Dec-96	NA	47.93	16.04
			58.24	23-Jan-97	NA	61.28	13.35
			58.24	27-Feb-97	NA	57.47	-3.81
			58.24	27-Mar-97	NA	40.29	-17.18
			58.24	27-Jun-97	NA	47.24	6.95
			58.24	12-Aug-97	NA	8.61	-38.63
18_BGMP10F	MP	218 - 228	58.24	19-Jan-96	NA	70.10	
			58.24	27-Mar-96	NA	72.90	2.80
			58.24	1-Nov-96	NA	58.63	-14.27
			58.24	25-Nov-96	NA	61.75	3.12
			58.24	26-Dec-96	NA	67.55	5.80
			58.24	23-Jan-97	NA	72.08	4.53
			58.24	27-Feb-97	NA	71.97	-0.11
			58.24	27-Mar-97	NA	68.82	-3.15
			58.24	27-Jun-97	NA	46.27	-22.55
			58.24	12-Aug-97	NA	60.15	13.88
18_BGMW01A	CL	466 - 486	393.41	11-Jan-96	223.28	170.13	
			393.41	26-Jan-96	217.78	175.63	5.50
			393.41	27-Feb-96	233.97	159.44	-16.19
			393.41	27-Mar-96	221.56	171.85	12.41
			393.41	31-Oct-96	206.70	186.71	14.86
			393.41	26-Nov-96	204.50	188.91	2.20
			393.41	26-Dec-96	219.25	174.16	-14.75
			393.41	24-Jan-97	213.21	180.20	6.04
			393.41	26-Feb-97	209.48	183.93	3.73
			393.41	27-Mar-97	251.00	142.41	-41.52
			393.41	26-Jun-97	209.80	183.61	41.20
			393.41	11-Aug-97	208.76	184.65	1.04

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMW01B	CL	396 - 416	393.83	11-Jan-96	204.11	189.72	
			393.83	23-Jan-96	204.08	189.75	0.03
			393.83	27-Feb-96	203.06	190.77	1.02
			393.83	27-Mar-96	202.89	190.94	0.17
			393.83	31-Oct-96	203.08	190.75	-0.19
			393.83	26-Nov-96	202.06	191.77	1.02
			393.83	26-Dec-96	201.40	192.43	0.66
			393.83	24-Jan-97	200.84	192.99	0.56
			393.83	26-Feb-97	199.66	194.17	1.18
			393.83	27-Mar-97	201.38	192.45	-1.72
			393.83	26-Jun-97	199.90	193.93	1.48
			393.83	11-Aug-97	201.75	192.08	-1.85
18_BGMW01C	CL	330 - 350	393.25	11-Jan-96	203.39	189.86	
			393.25	23-Jan-96	203.34	189.91	0.05
			393.25	27-Feb-96	202.38	190.87	0.96
			393.25	27-Mar-96	202.26	190.99	0.12
			393.25	31-Oct-96	202.38	190.87	-0.12
			393.25	26-Nov-96	201.40	191.85	0.98
			393.25	26-Dec-96	200.60	192.65	0.80
			393.25	24-Jan-97	200.18	193.07	0.42
			393.25	26-Feb-97	199.02	194.23	1.16
			393.25	27-Mar-97	200.58	192.67	-1.56
			393.25	26-Jun-97	200.00	193.25	0.58
			393.25	11-Aug-97	200.96	192.29	-0.96
18_BGMW01D	CL	242 - 262	393.15	11-Jan-96	205.70	187.45	
			393.15	23-Jan-96	205.79	187.36	-0.09
			393.15	27-Feb-96	204.75	188.40	1.04
			393.15	27-Mar-96	204.54	188.61	0.21
			393.15	31-Oct-96	204.17	188.98	0.37
			393.15	26-Nov-96	203.56	189.59	0.61
			393.15	26-Dec-96	202.94	190.21	0.62
			393.15	24-Jan-97	202.53	190.62	0.41
			393.15	26-Feb-97	201.41	191.74	1.12
			393.15	27-Mar-97	202.32	190.83	-0.91
			393.15	26-Jun-97	201.25	191.90	1.07
			393.15	11-Aug-97	202.90	190.25	-1.65
18_BGMW01E	CL - WT	205 - 225	392.09	11-Jan-96	205.97	186.12	
			392.09	27-Feb-96	205.20	186.89	0.77
			392.09	27-Mar-96	205.01	187.08	0.19
			392.09	31-Oct-96	203.46	188.63	1.55
			392.09	26-Nov-96	203.20	188.89	0.26
			392.09	26-Dec-96	202.96	189.13	0.24
			392.09	24-Jan-97	202.60	189.49	0.36
			392.09	26-Feb-97	201.66	190.43	0.94
			392.09	27-Mar-97	202.10	189.99	-0.44
			392.09	26-Jun-97	202.10	189.99	0.00
			392.09	11-Aug-97	202.16	189.93	-0.06
18_BGMW02A	CL	462 - 482	391.81	12-Jan-96	164.41	227.40	
			391.81	18-Jan-96	164.04	227.77	0.37
			391.81	27-Feb-96	163.38	228.43	0.66
			391.81	27-Mar-96	163.30	228.51	0.08
			391.81	31-Oct-96	161.69	230.12	1.61
			391.81	26-Nov-96	163.60	228.21	-1.91
			391.81	26-Dec-96	160.86	230.95	2.74
			391.81	24-Jan-97	160.66	231.15	0.20
			391.81	27-Feb-97	159.90	231.91	0.76
			391.81	27-Mar-97	161.08	230.73	-1.18
			391.81	26-Jun-97	158.90	232.91	2.18
			391.81	11-Aug-97	159.90	231.91	-1.00

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMW02C	CL	358 - 378	391.75	12-Jan-96	165.06	226.69	
			391.75	18-Jan-96	164.62	227.13	0.44
			391.75	27-Feb-96	164.30	227.45	0.32
			391.75	27-Mar-96	163.94	227.81	0.36
			391.75	31-Oct-96	162.45	229.30	1.49
			391.75	26-Nov-96	162.00	229.75	0.45
			391.75	26-Dec-96	161.48	230.27	0.52
			391.75	24-Jan-97	161.62	230.13	-0.14
			391.75	27-Feb-97	160.59	231.16	1.03
			391.75	27-Mar-97	161.06	230.69	-0.47
			391.75	26-Jun-97	160.25	231.50	0.81
			391.75	11-Aug-97	160.40	231.35	-0.15
18_BGMW02D	CL	294 - 314	391.45	12-Jan-96	166.42	225.03	
			391.45	17-Jan-96	166.10	225.35	0.32
			391.45	27-Feb-96	165.78	225.67	0.32
			391.45	27-Mar-96	165.48	225.97	0.30
			391.45	31-Oct-96	164.06	227.39	1.42
			391.45	26-Nov-96	163.30	228.15	0.76
			391.45	26-Dec-96	163.00	228.45	0.30
			391.45	24-Jan-97	162.88	228.57	0.12
			391.45	27-Feb-97	161.92	229.53	0.96
			391.45	27-Mar-97	162.34	229.11	-0.42
			391.45	26-Jun-97	161.45	230.00	0.89
			391.45	11-Aug-97	161.90	229.55	-0.45
18_BGMW02E	CL - WT	198 - 233	391.72	12-Jan-96	169.88	221.84	
			391.72	1-Feb-96	169.10	222.62	0.78
			391.72	27-Feb-96	169.05	222.67	0.05
			391.72	27-Mar-96	168.56	223.16	0.49
			391.72	31-Oct-96	166.22	225.50	2.34
			391.72	27-Nov-96	165.50	226.22	0.72
			391.72	26-Dec-96	165.18	226.54	0.32
			391.72	24-Jan-97	164.92	226.80	0.26
			391.72	27-Feb-97	163.86	227.86	1.06
			391.72	27-Mar-97	164.38	227.34	-0.52
			391.72	26-Jun-97	163.05	228.67	1.33
			391.72	11-Aug-97	163.64	228.08	-0.59
18_BGMW03A	CL	370 - 390	279.25	12-Jan-96	103.00	176.25	
			279.25	27-Feb-96	107.63	171.62	-4.63
			279.25	29-Feb-96	107.59	171.66	0.04
			279.25	27-Mar-96	107.22	172.03	0.37
			279.25	30-Oct-96	118.52	160.73	-11.30
			279.25	26-Nov-96	112.30	166.95	6.22
			279.25	26-Dec-96	109.52	169.73	2.78
			279.25	23-Jan-97	107.40	171.85	2.12
			279.25	26-Feb-97	106.57	172.68	0.83
			279.25	27-Mar-97	113.40	165.85	-6.83
			279.25	26-Jun-97	116.94	162.31	-3.54
			279.25	12-Aug-97	106.60	172.65	10.34
18_BGMW03B	CL	280 - 300	279.28	12-Jan-96	105.26	174.02	
			279.28	27-Feb-96	104.22	175.06	1.04
			279.28	29-Feb-96	104.25	175.03	-0.03
			279.28	27-Mar-96	103.90	175.38	0.35
			279.28	30-Oct-96	111.00	168.28	-7.10
			279.28	26-Nov-96	107.02	172.26	3.98
			279.28	26-Dec-96	105.26	174.02	1.76
			279.28	23-Jan-97	103.80	175.48	1.46
			279.28	26-Feb-97	103.10	176.18	0.70
			279.28	27-Mar-97	107.68	171.60	-4.58
			279.28	26-Jun-97	110.00	169.28	-2.32
			279.28	12-Aug-97	110.20	169.08	-0.20

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMW03C	CL	222 - 242	279.41	12-Jan-96	104.26	175.15	
			279.41	12-Feb-96	103.51	175.90	0.75
			279.41	27-Feb-96	103.45	175.96	0.06
			279.41	27-Mar-96	103.08	176.33	0.37
			279.41	30-Oct-96	107.17	172.24	-4.09
			279.41	26-Nov-96	107.70	171.71	-0.53
			279.41	26-Dec-96	103.88	175.53	3.82
			279.41	23-Jan-97	102.80	176.61	1.08
			279.41	26-Feb-97	102.32	177.09	0.48
			279.41	27-Mar-97	104.80	174.61	-2.48
			279.41	26-Jun-97	106.40	173.01	-1.60
			279.41	12-Aug-97	117.35	162.06	-10.95
18_BGMW03E	CL - WT	124 - 164	279.16	12-Jan-96	107.22	171.94	
			279.16	5-Feb-96	107.09	172.07	0.13
			279.16	27-Feb-96	106.98	172.18	0.11
			279.16	27-Mar-96	106.62	172.54	0.36
			279.16	30-Oct-96	106.54	172.62	0.08
			279.16	26-Nov-96	106.32	172.84	0.22
			279.16	26-Dec-96	106.16	173.00	0.16
			279.16	23-Jan-97	105.95	173.21	0.21
			279.16	26-Feb-97	105.40	173.76	0.55
			279.16	27-Mar-97	105.70	173.46	-0.30
			279.16	26-Jun-97	106.04	173.12	-0.34
			279.16	12-Aug-97	105.95	173.21	0.09
18_BGMW04A	CL	286 - 306	243.36	11-Jan-96	85.37	157.99	
			243.36	27-Feb-96	84.01	159.35	1.36
			243.36	28-Feb-96	83.97	159.39	0.04
			243.36	27-Mar-96	83.65	159.71	0.32
			243.36	31-Oct-96	100.84	142.52	-17.19
			243.36	26-Nov-96	93.28	150.08	7.56
			243.36	26-Dec-96	86.54	156.82	6.74
			243.36	23-Jan-97	84.26	159.10	2.28
			243.36	26-Feb-97	83.34	160.02	0.92
			243.36	27-Mar-97	95.58	147.78	-12.24
			243.36	26-Jun-97	99.34	144.02	-3.76
			243.36	11-Aug-97	99.76	143.60	-0.42
18_BGMW04B	CL	190 - 210	243.58	11-Jan-96	81.65	161.93	
			243.58	19-Jan-96	81.70	161.88	-0.05
			243.58	27-Feb-96	80.72	162.86	0.98
			243.58	27-Mar-96	80.36	163.22	0.36
			243.58	31-Oct-96	89.96	153.62	-9.60
			243.58	26-Nov-96	84.90	158.68	5.06
			243.58	26-Dec-96	82.66	160.92	2.24
			243.58	23-Jan-97	80.84	162.74	1.82
			243.58	26-Feb-97	80.20	163.38	0.64
			243.58	27-Mar-97	85.56	158.02	-5.36
			243.58	26-Jun-97	88.58	155.00	-3.02
			243.58	11-Aug-97	89.12	154.46	-0.54

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMW05A	CL	462 - 482	269.45	12-Jan-96	81.91	187.54	
			269.45	26-Jan-96	84.98	184.47	-3.07
			269.45	27-Feb-96	85.22	184.23	-0.24
			269.45	27-Mar-96	84.13	185.32	1.09
			269.45	30-Oct-96	85.97	183.48	-1.84
			269.45	26-Nov-96	87.68	181.77	-1.71
			269.45	26-Dec-96	84.86	184.59	2.82
			269.45	23-Jan-97	88.11	181.34	-3.25
			269.45	26-Feb-97	84.05	185.40	4.06
			269.45	27-Mar-97	84.90	184.55	-0.85
			269.45	26-Jun-97	84.93	184.52	-0.03
			269.45	11-Aug-97	85.20	184.25	-0.27
18_BGMW05B	CL	321 - 341	270.41	12-Jan-96	82.51	187.90	
			270.41	27-Feb-96	81.50	188.91	1.01
			270.41	29-Feb-96	81.38	189.03	0.12
			270.41	27-Mar-96	81.15	189.26	0.23
			270.41	30-Oct-96	85.43	184.98	-4.28
			270.41	26-Nov-96	82.87	187.54	2.56
			270.41	26-Dec-96	82.05	188.36	0.82
			270.41	23-Jan-97	81.03	189.38	1.02
			270.41	26-Feb-97	79.56	190.85	1.47
			270.41	27-Mar-97	82.88	187.53	-3.32
			270.41	26-Jun-97	84.50	185.91	-1.62
			270.41	11-Aug-97	84.78	185.63	-0.28
18_BGMW05C	CL	225 - 245	269.39	12-Jan-96	80.64	188.75	
			269.39	25-Jan-96	80.52	188.87	0.12
			269.39	27-Feb-96	80.20	189.19	0.32
			269.39	29-Feb-96	80.16	189.23	0.04
			269.39	27-Mar-96	79.93	189.46	0.23
			269.39	30-Oct-96	81.93	187.46	-2.00
			269.39	26-Nov-96	80.66	188.73	1.27
			269.39	26-Dec-96	80.28	189.11	0.38
			269.39	23-Jan-97	79.68	189.71	0.60
			269.39	26-Feb-97	79.26	190.13	0.42
			269.39	27-Mar-97	80.36	189.03	-1.10
			269.39	26-Jun-97	81.32	188.07	-0.96
			269.39	11-Aug-97	79.50	189.89	1.82
18_BGMW05D	CL - WT	83 - 133	270.42	12-Jan-96	82.21	188.21	
			270.42	19-Feb-96	81.78	188.64	0.43
			270.42	27-Feb-96	81.87	188.55	-0.09
			270.42	27-Mar-96	81.63	188.79	0.24
			270.42	30-Oct-96	81.80	188.62	-0.17
			270.42	26-Nov-96	81.60	188.82	0.20
			270.42	26-Dec-96	81.71	188.71	-0.11
			270.42	23-Jan-97	81.40	189.02	0.31
			270.42	26-Feb-97	81.20	189.22	0.20
			270.42	27-Mar-97	82.09	188.33	-0.89
			270.42	26-Jun-97	81.30	189.12	0.79
			270.42	11-Aug-97	81.45	188.97	-0.15
18_BGMW05E	CL - WT	80-130	269.41	31-Oct-96	80.55	188.86	
			269.41	26-Nov-96	80.12	189.29	0.43
			269.41	23-Jan-97	79.84	189.57	0.28
			269.41	27-Mar-97	78.60	190.81	1.24
			269.41	26-Jun-97	79.86	189.55	-1.26
			269.41	11-Aug-97	70.86	198.55	9.00

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MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMW07	WT	25 - 65	180.11	12-Jan-96	21.73	158.38	
			180.11	9-Feb-96	21.68	158.43	0.05
			180.11	28-Feb-96	21.49	158.62	0.19
			180.11	27-Mar-96	21.54	158.57	-0.05
			180.11	31-Oct-96	22.34	157.77	-0.80
			180.11	27-Nov-96	22.20	157.91	0.14
			180.11	26-Dec-96	21.76	158.35	0.44
			180.11	26-Feb-97	21.46	158.65	0.30
			180.11	27-Mar-97	21.42	158.69	0.04
			180.11	27-Jun-97	21.90	158.21	-0.48
			180.11	11-Aug-97	22.24	157.87	-0.34
18_BGMW101	WT	90 - 130	232.80	12-Jan-96	80.86	151.94	
			232.80	29-Jan-96	80.78	152.02	0.08
			232.80	27-Feb-96	80.46	152.34	0.32
			232.80	27-Mar-96	80.21	152.59	0.25
			232.80	31-Oct-96	80.52	152.28	-0.31
			232.80	26-Nov-96	80.20	152.60	0.32
			232.80	26-Dec-96	80.22	152.58	-0.02
			232.80	23-Jan-97	80.08	152.72	0.14
			232.80	27-Feb-97	79.30	153.50	0.78
			232.80	27-Mar-97	79.46	153.34	-0.16
			232.80	26-Jun-97	80.04	152.76	-0.58
			232.80	11-Aug-97	80.25	152.55	-0.21
18_BGMW12	WT	165 - 205	304.44	11-Jan-96	155.51	148.93	
			304.44	2-Feb-96	155.27	149.17	0.24
			304.44	28-Feb-96	154.71	149.73	0.56
			304.44	27-Mar-96	154.30	150.14	0.41
			304.44	31-Oct-96	154.96	149.48	-0.66
			304.44	26-Nov-96	154.44	150.00	0.52
			304.44	26-Dec-96	154.10	150.34	0.34
			304.44	24-Jan-97	153.75	150.69	0.35
			304.44	27-Feb-97	153.00	151.44	0.75
			304.44	27-Mar-97	152.90	151.54	0.10
			304.44	26-Jun-97	154.90	149.54	-2.00
			304.44	11-Aug-97	154.14	150.30	0.76
18_BGMW14	WT	75 - 115	268.67	12-Jan-96	70.40	198.27	
			268.67	16-Feb-96	69.95	198.72	0.45
			268.67	28-Feb-96	69.82	198.85	0.13
			268.67	27-Mar-96	69.70	198.97	0.12
			268.67	31-Oct-96	70.06	198.61	-0.36
			268.67	27-Nov-96	69.32	199.35	0.74
			268.67	26-Dec-96	69.66	199.01	-0.34
			268.67	26-Feb-97	69.33	199.34	0.33
			268.67	27-Mar-97	68.85	199.82	0.48
			268.67	27-Jun-97	69.58	199.09	-0.73
			268.67	11-Aug-97	69.76	198.91	-0.18
18_BGMW15	WT	175 - 215	319.59	11-Jan-96	166.13	153.46	
			319.59	2-Feb-96	165.79	153.80	0.34
			319.59	5-Feb-96	205.49	114.10	-39.70
			319.59	28-Feb-96	165.30	154.29	40.19
			319.59	27-Mar-96	169.79	149.80	-4.49
			319.59	31-Oct-96	165.05	154.54	4.74
			319.59	26-Nov-96	165.04	154.55	0.01
			319.59	26-Dec-96	164.66	154.93	0.38
			319.59	24-Jan-97	164.14	155.45	0.52
			319.59	27-Feb-97	163.58	156.01	0.56
			319.59	27-Mar-97	163.42	156.17	0.16
			319.59	26-Jun-97	163.95	155.64	-0.53
			319.59	11-Aug-97	163.94	155.65	0.01

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMW16	WT	223 - 263	376.67	11-Jan-96	217.68	158.99	
			376.67	19-Jan-96	217.68	158.99	0.00
			376.67	28-Feb-96	217.04	159.63	0.64
			376.67	27-Mar-96	216.58	160.09	0.46
			376.67	31-Oct-96	215.84	160.83	0.74
			376.67	26-Nov-96	215.78	160.89	0.06
			376.67	26-Dec-96	215.46	161.21	0.32
			376.67	24-Jan-97	215.35	161.32	0.11
			376.67	27-Feb-97	214.09	162.58	1.26
			376.67	26-Jun-97	215.20	161.47	-1.11
			376.67	11-Aug-97	215.50	161.17	-0.30
18_BGMW17	WT	215 - 255	375.68	11-Jan-96	140.31	235.37	
			375.68	29-Jan-96	140.08	235.60	0.23
			375.68	28-Feb-96	139.89	235.79	0.19
			375.68	27-Mar-96	139.64	236.04	0.25
			375.68	31-Oct-96	138.05	237.63	1.59
			375.68	27-Nov-96	138.08	237.60	-0.03
			375.68	26-Dec-96	137.80	237.88	0.28
			375.68	23-Jan-97	137.84	237.84	-0.04
			375.68	26-Feb-97	137.66	238.02	0.18
			375.68	27-Mar-97	137.62	238.06	0.04
			375.68	26-Jun-97	137.54	238.14	0.08
			375.68	11-Aug-97	137.32	238.36	0.22
18_BGMW18	WT	140 - 180	276.49	5-Feb-96	131.41	145.08	
			276.49	27-Feb-96	130.97	145.52	0.44
			276.49	27-Mar-96	130.58	145.91	0.39
			276.49	31-Oct-96	130.90	145.59	-0.32
			276.49	26-Nov-96	130.72	145.77	0.18
			276.49	26-Dec-96	130.50	145.99	0.22
			276.49	24-Jan-97	130.00	146.49	0.50
			276.49	27-Feb-97	129.28	147.21	0.72
			276.49	27-Mar-97	129.04	147.45	0.24
			276.49	26-Jun-97	128.90	147.59	0.14
			276.49	11-Aug-97	130.32	146.17	-1.42
18_BGMW19A	CL	448 - 468	232.61	12-Jan-96	93.32	139.29	
			232.61	27-Feb-96	90.51	142.10	2.81
			232.61	1-Mar-96	90.32	142.29	0.19
			232.61	27-Mar-96	90.10	142.51	0.22
			232.61	31-Oct-96	115.98	116.63	-25.88
			232.61	27-Nov-96	104.24	128.37	11.74
			232.61	26-Dec-96	95.84	136.77	8.40
			232.61	24-Jan-97	91.52	141.09	4.32
			232.61	26-Feb-97	90.49	142.12	1.03
			232.61	27-Mar-97	103.25	129.36	-12.76
			232.61	26-Jun-97	113.40	119.21	-10.15
			232.61	11-Aug-97	114.38	118.23	-0.98
18_BGMW19B	CL	400 - 420	232.69	12-Jan-96	94.61	138.08	
			232.69	27-Feb-96	92.03	140.66	2.58
			232.69	1-Mar-96	91.90	140.79	0.13
			232.69	27-Mar-96	91.70	140.99	0.20
			232.69	31-Oct-96	114.94	117.75	-23.24
			232.69	27-Nov-96	104.06	128.63	10.88
			232.69	26-Dec-96	97.14	135.55	6.92
			232.69	24-Jan-97	92.94	139.75	4.20
			232.69	26-Feb-97	92.11	140.58	0.83
			232.69	27-Mar-97	104.65	128.04	-12.54
			232.69	26-Jun-97	113.00	119.69	-8.35
			232.69	11-Aug-97	113.50	119.19	-0.50

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMW19C	CL	257 - 277	232.79	12-Jan-96	92.45	140.34	
			232.79	27-Feb-96	90.65	142.14	1.80
			232.79	29-Feb-96	90.57	142.22	0.08
			232.79	27-Mar-96	90.18	142.61	0.39
			232.79	31-Oct-96	100.40	132.39	-10.22
			232.79	27-Nov-96	95.79	137.00	4.61
			232.79	26-Dec-96	93.18	139.61	2.61
			232.79	24-Jan-97	91.15	141.64	2.03
			232.79	26-Feb-97	90.30	142.49	0.85
			232.79	27-Mar-97	96.20	136.59	-5.90
			232.79	26-Jun-97	99.10	133.69	-2.90
			232.79	11-Aug-97	98.85	133.94	0.25
18_BGMW19D	CL	150 - 170	232.54	12-Jan-96	91.49	141.05	
			232.54	16-Feb-96	90.85	141.69	0.64
			232.54	27-Feb-96	90.77	141.77	0.08
			232.54	27-Mar-96	90.50	142.04	0.27
			232.54	31-Oct-96	91.63	140.91	-1.13
			232.54	27-Nov-96	91.40	141.14	0.23
			232.54	26-Dec-96	91.15	141.39	0.25
			232.54	24-Jan-97	90.79	141.75	0.36
			232.54	26-Feb-97	90.18	142.36	0.61
			232.54	27-Mar-97	90.80	141.74	-0.62
			232.54	26-Jun-97	90.25	142.29	0.55
			232.54	11-Aug-97	90.46	142.08	-0.21
18_BGMW19E	CL - WT	98 - 138	232.91	12-Jan-96	91.67	141.24	
			232.91	6-Feb-96	91.47	141.44	0.20
			232.91	27-Feb-96	91.22	141.69	0.25
			232.91	27-Mar-96	90.98	141.93	0.24
			232.91	31-Oct-96	92.91	140.00	-1.93
			232.91	27-Nov-96	91.74	141.17	1.17
			232.91	26-Dec-96	91.60	141.31	0.14
			232.91	24-Jan-97	91.22	141.69	0.38
			232.91	26-Feb-97	90.70	142.21	0.52
			232.91	27-Mar-97	90.34	142.57	0.36
			232.91	11-Aug-97	90.85	142.06	-0.51
18_BGMW22	WT	247 - 287	426.36	11-Jan-96	234.83	191.53	
			426.36	22-Jan-96	234.70	191.66	0.13
			426.36	27-Feb-96	232.89	193.47	1.81
			426.36	27-Mar-96	233.40	192.96	-0.51
			426.36	31-Oct-96	232.36	194.00	1.04
			426.36	26-Nov-96	232.07	194.29	0.29
			426.36	26-Dec-96	231.58	194.78	0.49
			426.36	23-Jan-97	231.12	195.24	0.46
			426.36	26-Feb-97	229.91	196.45	1.21
			426.36	27-Mar-97	230.10	196.26	-0.19
			426.36	26-Jun-97	230.50	195.86	-0.40
			426.36	11-Aug-97	230.80	195.56	-0.30
18_BGMW23	WT	64 - 104	190.22	12-Jan-96	28.87	161.35	
			190.22	19-Feb-96	28.55	161.67	0.32
			190.22	28-Feb-96	28.52	161.70	0.03
			190.22	27-Mar-96	28.20	162.02	0.32
			190.22	31-Oct-96	29.80	160.42	-1.60
			190.22	27-Nov-96	29.54	160.68	0.26
			190.22	26-Dec-96	29.18	161.04	0.36
			190.22	26-Jan-97	29.56	160.66	-0.38
			190.22	26-Feb-97	28.26	161.96	1.30
			190.22	27-Mar-97	28.36	161.86	-0.10
			190.22	27-Jun-97	29.16	161.06	-0.80
			190.22	11-Aug-97	29.35	160.87	-0.19

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_BGMW24	WT	51 - 71	618.13	12-Jan-96	34.40	583.73	
			618.13	7-Feb-96	34.38	583.75	0.02
			618.13	28-Feb-96	33.92	584.21	0.46
			618.13	27-Mar-96	33.82	584.31	0.10
			618.13	30-Oct-96	37.12	581.01	-3.30
			618.13	26-Nov-96	37.08	581.05	0.04
			618.13	27-Dec-96	36.85	581.28	0.23
			618.13	23-Jan-97	36.18	581.95	0.67
			618.13	27-Mar-97	37.40	580.73	-1.22
			618.13	26-Jun-97	39.02	579.11	-1.62
			618.13	11-Aug-97	39.16	578.97	-0.14
18_DW135	CL - WT	115 - 135	268.90	12-Jan-96	117.69	151.21	
			268.90	19-Feb-96	117.06	151.84	0.63
			268.90	26-Feb-96	116.99	151.91	0.07
			268.90	27-Mar-96	116.61	152.29	0.38
			268.90	31-Oct-96	117.12	151.78	-0.51
			268.90	26-Nov-96	117.00	151.90	0.12
			268.90	26-Dec-96	117.00	151.90	0.00
			268.90	26-Jan-97	118.40	150.50	-1.40
			268.90	27-Feb-97	116.04	152.86	2.36
			268.90	27-Mar-97	115.88	153.02	0.16
			268.90	26-Jun-97	116.64	152.26	-0.76
			268.90	11-Aug-97	116.80	152.10	-0.16
18_DW250	CL	215 - 250	268.82	11-Jan-96	116.41	152.41	
			268.82	31-Jan-96	115.65	153.17	0.76
			268.82	26-Feb-96	115.36	153.46	0.29
			268.82	27-Mar-96	114.90	153.92	0.46
			268.82	31-Oct-96	122.12	146.70	-7.22
			268.82	26-Nov-96	118.28	150.54	3.84
			268.82	26-Dec-96	116.55	152.27	1.73
			268.82	26-Jan-97	115.70	153.12	0.85
			268.82	27-Feb-97	114.25	154.57	1.45
			268.82	27-Mar-97	119.08	149.74	-4.83
			268.82	26-Jun-97	121.14	147.68	-2.06
			268.82	11-Aug-97	121.44	147.38	-0.30
18_DW350	CL	310 - 350	269.11	12-Jan-96	115.40	153.71	
			269.11	29-Jan-96	114.78	154.33	0.62
			269.11	26-Feb-96	113.93	155.18	0.85
			269.11	27-Mar-96	113.50	155.61	0.43
			269.11	31-Oct-96	141.90	127.21	-28.40
			269.11	26-Nov-96	131.29	137.82	10.61
			269.11	26-Dec-96	116.68	152.43	14.61
			269.11	26-Jan-97	114.80	154.31	1.88
			269.11	27-Feb-97	113.23	155.88	1.57
			269.11	27-Mar-97	133.40	135.71	-20.17
			269.11	26-Jun-97	137.25	131.86	-3.85
			269.11	11-Aug-97	137.66	131.45	-0.41
18_DW450	CL	420 - 450	269.12	11-Jan-96	114.81	154.31	
			269.12	29-Jan-96	113.81	155.31	1.00
			269.12	26-Feb-96	112.88	156.24	0.93
			269.12	27-Mar-96	112.37	156.75	0.51
			269.12	31-Oct-96	136.54	132.58	-24.17
			269.12	26-Nov-96	127.10	142.02	9.44
			269.12	26-Dec-96	116.46	152.66	10.64
			269.12	26-Jan-97	113.52	155.60	2.94
			269.12	27-Feb-97	112.18	156.94	1.34
			269.12	27-Mar-97	129.00	140.12	-16.82
			269.12	26-Jun-97	134.30	134.82	-5.30
			269.12	11-Aug-97	135.14	133.98	-0.84

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_DW540	CL	490 - 540	269.53	11-Jan-96	115.26	154.27	
			269.53	30-Jan-96	114.16	155.37	1.10
			269.53	26-Feb-96	113.21	156.32	0.95
			269.53	27-Mar-96	112.71	156.82	0.50
			269.53	31-Oct-96	133.60	135.93	-20.89
			269.53	26-Nov-96	124.17	145.36	9.43
			269.53	26-Dec-96	116.98	152.55	7.19
			269.53	26-Jan-97	113.63	155.90	3.35
			269.53	27-Feb-97	112.54	156.99	1.09
			269.53	27-Mar-97	125.78	143.75	-13.24
			269.53	26-Jun-97	131.30	138.23	-5.52
			269.53	11-Aug-97	132.10	137.43	-0.80
18_MCAS01-1	MP - WT	60 - 70	140.13	12-Jan-96	NA	117.39	
			140.13	27-Feb-96	NA	117.23	-0.16
			140.13	27-Mar-96	NA	118.29	1.06
			140.13	31-Oct-96	NA	116.05	-2.24
			140.13	25-Nov-96	NA	115.82	-0.23
			140.13	26-Dec-96	NA	116.28	0.46
			140.13	23-Jan-97	NA	116.60	0.32
			140.13	27-Feb-97	NA	113.25	-3.35
			140.13	27-Mar-97	NA	113.18	-0.07
			140.13	26-Jun-97	NA	112.50	-0.68
			140.13	12-Aug-97	NA	112.16	-0.34
18_MCAS01-2	MP	150 - 160	140.13	12-Jan-96	NA	109.86	
			140.13	27-Feb-96	NA	108.24	-1.62
			140.13	27-Mar-96	NA	111.30	3.06
			140.13	31-Oct-96	NA	109.24	-2.06
			140.13	25-Nov-96	NA	106.59	-2.65
			140.13	26-Dec-96	NA	111.28	4.69
			140.13	23-Jan-97	NA	112.22	0.94
			140.13	27-Feb-97	NA	113.01	0.79
			140.13	27-Mar-97	NA	112.39	-0.62
			140.13	26-Jun-97	NA	111.15	-1.24
			140.13	12-Aug-97	NA	110.74	-0.41
18_MCAS01-3	MP	210 - 220	140.13	12-Jan-96	NA	109.29	
			140.13	27-Feb-96	NA	108.94	-0.35
			140.13	27-Mar-96	NA	111.33	2.39
			140.13	31-Oct-96	NA	95.25	-16.08
			140.13	25-Nov-96	NA	101.14	5.89
			140.13	26-Dec-96	NA	109.03	7.89
			140.13	23-Jan-97	NA	112.26	3.23
			140.13	27-Feb-97	NA	112.71	0.45
			140.13	27-Mar-97	NA	103.77	-8.94
			140.13	26-Jun-97	NA	97.61	-6.16
			140.13	12-Aug-97	NA	96.83	-0.78
18_MCAS01-4	MP	270 - 280	140.13	12-Jan-96	NA	101.33	
			140.13	27-Feb-96	NA	105.74	4.41
			140.13	27-Mar-96	NA	104.72	-1.02
			140.13	31-Oct-96	NA	60.91	-43.81
			140.13	25-Nov-96	NA	87.46	26.55
			140.13	26-Dec-96	NA	97.87	10.41
			140.13	23-Jan-97	NA	105.95	8.08
			140.13	27-Feb-97	NA	104.89	-1.06
			140.13	27-Mar-97	NA	79.71	-25.18
			140.13	26-Jun-97	NA	63.65	-16.06
			140.13	12-Aug-97	NA	62.17	-1.48

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_MCAS01-5	MP	330 - 340	140.13	12-Jan-96	NA	101.49	
			140.13	27-Feb-96	NA	106.31	4.82
			140.13	27-Mar-96	NA	105.54	-0.77
			140.13	31-Oct-96	NA	60.27	-45.27
			140.13	25-Nov-96	NA	87.90	27.63
			140.13	26-Dec-96	NA	98.41	10.51
			140.13	23-Jan-97	NA	106.53	8.12
			140.13	27-Feb-97	NA	105.75	-0.78
			140.13	27-Mar-97	NA	89.92	-15.83
			140.13	26-Jun-97	NA	62.77	-27.15
			140.13	12-Aug-97	NA	61.29	-1.48
18_MCAS01-6	MP	450 - 460	140.13	12-Jan-96	NA	100.75	
			140.13	27-Feb-96	NA	106.19	5.44
			140.13	27-Mar-96	NA	104.64	-1.55
			140.13	31-Oct-96	NA	54.30	-50.34
			140.13	25-Nov-96	NA	86.36	32.06
			140.13	26-Dec-96	NA	97.56	11.20
			140.13	23-Jan-97	NA	106.62	9.06
			140.13	27-Feb-97	NA	105.22	-1.40
			140.13	27-Mar-97	NA	88.84	-16.38
			140.13	26-Jun-97	NA	56.63	-32.21
			140.13	12-Aug-97	NA	54.74	-1.89
18_MCAS01-7	MP	540 - 550	140.13	12-Jan-96	NA	94.72	
			140.13	27-Feb-96	NA	100.27	5.55
			140.13	27-Mar-96	NA	101.83	1.56
			140.13	31-Oct-96	NA	59.90	-41.93
			140.13	25-Nov-96	NA	74.58	14.68
			140.13	26-Dec-96	NA	86.58	12.00
			140.13	23-Jan-97	NA	94.52	7.94
			140.13	27-Feb-97	NA	98.49	3.97
			140.13	27-Mar-97	NA	97.64	-0.85
			140.13	26-Jun-97	NA	66.94	-30.70
			140.13	12-Aug-97	NA	63.90	-3.04
18_MCAS02-1	MP - WT	40 - 50	160.60	12-Jan-96	NA	129.72	
			160.60	27-Feb-96	NA	130.00	0.28
			160.60	27-Mar-96	NA	129.88	-0.12
			160.60	31-Oct-96	NA	127.67	-2.21
			160.60	25-Nov-96	NA	127.87	0.20
			160.60	26-Dec-96	NA	128.22	0.35
			160.60	23-Jan-97	NA	128.73	0.51
			160.60	27-Feb-97	NA	129.51	0.78
			160.60	27-Mar-97	NA	129.58	0.07
			160.60	26-Jun-97	NA	128.54	-1.04
			160.60	12-Aug-97	NA	127.94	-0.60
18_MCAS02-2	MP	130 - 140	160.60	12-Jan-96	NA	123.87	
			160.60	27-Feb-96	NA	121.35	-2.52
			160.60	27-Mar-96	NA	122.01	0.66
			160.60	31-Oct-96	NA	120.72	-1.29
			160.60	25-Nov-96	NA	121.31	0.59
			160.60	26-Dec-96	NA	122.57	1.26
			160.60	23-Jan-97	NA	123.32	0.75
			160.60	27-Feb-97	NA	124.19	0.87
			160.60	27-Mar-97	NA	123.78	-0.41
			160.60	26-Jun-97	NA	122.37	-1.41
			160.60	12-Aug-97	NA	121.67	-0.70

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18_MCAS02-3	MP	200 - 210	160.60	12-Jan-96	NA	120.52	
			160.60	27-Feb-96	NA	120.51	-0.01
			160.60	27-Mar-96	NA	120.97	0.46
			160.60	31-Oct-96	NA	110.94	-10.03
			160.60	25-Nov-96	NA	115.81	4.87
			160.60	26-Dec-96	NA	118.71	2.90
			160.60	23-Jan-97	NA	120.66	1.95
			160.60	27-Feb-97	NA	121.18	0.52
			160.60	27-Mar-97	NA	116.80	-4.38
			160.60	26-Jun-97	NA	112.77	-4.03
			160.60	12-Aug-97	NA	112.05	-0.72
18_MCAS02-4	MP	370 - 380	160.60	12-Jan-96	NA	117.92	
			160.60	27-Feb-96	NA	119.30	1.38
			160.60	27-Mar-96	NA	123.51	4.21
			160.60	31-Oct-96	NA	84.58	-38.93
			160.60	25-Nov-96	NA	104.39	19.81
			160.60	26-Dec-96	NA	112.98	8.59
			160.60	27-Feb-97	NA	119.11	6.13
			160.60	27-Mar-97	NA	99.89	-19.22
			160.60	26-Jun-97	NA	85.82	-14.07
			160.60	12-Aug-97	NA	85.45	-0.37
18_MCAS02-5	MP	420 - 430	160.60	12-Jan-96	NA	119.14	
			160.60	27-Feb-96	NA	120.82	1.68
			160.60	27-Mar-96	NA	121.04	0.22
			160.60	31-Oct-96	NA	87.02	-34.02
			160.60	25-Nov-96	NA	106.06	19.04
			160.60	26-Dec-96	NA	114.48	8.42
			160.60	23-Jan-97	NA	120.96	6.48
			160.60	27-Feb-97	NA	120.83	-0.13
			160.60	27-Mar-97	NA	102.63	-18.20
			160.60	26-Jun-97	NA	89.15	-13.48
			160.60	12-Aug-97	NA	87.87	-1.28
18_MCAS02-6	MP	490 - 500	160.60	12-Jan-96	NA	112.63	
			160.60	27-Feb-96	NA	116.17	3.54
			160.60	27-Mar-96	NA	117.59	1.42
			160.60	31-Oct-96	NA	93.13	-24.46
			160.60	25-Nov-96	NA	96.03	2.90
			160.60	26-Dec-96	NA	103.52	7.49
			160.60	23-Jan-97	NA	108.96	5.44
			160.60	27-Feb-97	NA	114.02	5.06
			160.60	27-Mar-97	NA	113.61	-0.41
			160.60	26-Jun-97	NA	100.95	-12.66
			160.60	12-Aug-97	NA	97.33	-3.62
18_MCAS02-7	MP	550 - 560	160.60	12-Jan-96	NA	113.45	
			160.60	27-Feb-96	NA	116.64	3.19
			160.60	27-Mar-96	NA	118.09	1.45
			160.60	31-Oct-96	NA	94.19	-23.90
			160.60	25-Nov-96	NA	97.26	3.07
			160.60	26-Dec-96	NA	104.34	7.08
			160.60	23-Jan-97	NA	109.73	5.39
			160.60	27-Feb-97	NA	114.75	5.02
			160.60	27-Mar-97	NA	114.50	-0.25
			160.60	26-Jun-97	NA	101.60	-12.90
			160.60	12-Aug-97	NA	98.15	-3.45

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_MCAS02-8	MP	620 - 630	160.60	12-Jan-96	NA	110.71	
			160.60	27-Feb-96	NA	113.93	3.22
			160.60	27-Mar-96	NA	115.97	2.04
			160.60	31-Oct-96	NA	93.39	-22.58
			160.60	25-Nov-96	NA	95.81	2.42
			160.60	26-Dec-96	NA	102.33	6.52
			160.60	23-Jan-97	NA	107.32	4.99
			160.60	27-Feb-97	NA	112.44	5.12
			160.60	27-Mar-97	NA	113.40	0.96
			160.60	26-Jun-97	NA	101.24	-12.16
			160.60	12-Aug-97	NA	97.34	-3.90
18_MCAS03-1	MP - WT	85 - 95	216.22	12-Jan-96	NA	144.54	
			216.22	27-Feb-96	NA	144.54	0.00
			216.22	27-Mar-96	NA	145.42	0.88
			216.22	1-Nov-96	NA	143.19	-2.23
			216.22	25-Nov-96	NA	140.98	-2.21
			216.22	26-Dec-96	NA	141.28	0.30
			216.22	23-Jan-97	NA	141.69	0.41
			216.22	27-Feb-97	NA	142.82	1.13
			216.22	27-Mar-97	NA	142.73	-0.09
			216.22	26-Jun-97	NA	148.32	5.59
			216.22	12-Aug-97	NA	142.03	-6.29
18_MCAS03-2	MP	160 - 170	216.22	12-Jan-96	NA	141.74	
			216.22	27-Feb-96	NA	142.00	0.26
			216.22	27-Mar-96	NA	142.52	0.52
			216.22	1-Nov-96	NA	141.97	-0.55
			216.22	25-Nov-96	NA	141.76	-0.21
			216.22	26-Dec-96	NA	142.11	0.35
			216.22	23-Jan-97	NA	142.05	-0.06
			216.22	27-Feb-97	NA	143.92	1.87
			216.22	27-Mar-97	NA	143.66	-0.26
			216.22	26-Jun-97	NA	142.76	-0.90
			216.22	12-Aug-97	NA	142.52	-0.24
18_MCAS03-3	MP	220 - 230	216.22	12-Jan-96	NA	143.28	
			216.22	27-Feb-96	NA	144.12	0.84
			216.22	27-Mar-96	NA	144.62	0.50
			216.22	1-Nov-96	NA	135.34	-9.28
			216.22	25-Nov-96	NA	140.05	4.71
			216.22	26-Dec-96	NA	141.98	1.93
			216.22	23-Jan-97	NA	144.06	2.08
			216.22	27-Feb-97	NA	145.15	1.09
			216.22	27-Mar-97	NA	140.99	-4.16
			216.22	26-Jun-97	NA	137.57	-3.42
			216.22	12-Aug-97	NA	137.26	-0.31
18_MCAS03-4	MP	340 - 350	216.22	12-Jan-96	NA	141.24	
			216.22	27-Feb-96	NA	143.11	1.87
			216.22	27-Mar-96	NA	143.57	0.46
			216.22	1-Nov-96	NA	121.52	-22.05
			216.22	25-Nov-96	NA	134.51	12.99
			216.22	26-Dec-96	NA	138.84	4.33
			216.22	23-Jan-97	NA	142.23	3.39
			216.22	27-Feb-97	NA	143.94	1.71
			216.22	27-Mar-97	NA	129.98	-13.96
			216.22	26-Jun-97	NA	123.41	-6.57
			216.22	12-Aug-97	NA	122.66	-0.75

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_MCAS03-5	MP	420 - 430	216.22	12-Jan-96	NA	140.11	
			216.22	27-Feb-96	NA	142.47	2.36
			216.22	27-Mar-96	NA	142.86	0.39
			216.22	1-Nov-96	NA	119.50	-23.36
			216.22	25-Nov-96	NA	132.50	13.00
			216.22	26-Dec-96	NA	137.50	5.00
			216.22	23-Jan-97	NA	141.71	4.21
			216.22	27-Feb-97	NA	143.10	1.39
			216.22	27-Mar-97	NA	129.74	-13.36
			216.22	26-Jun-97	NA	121.97	-7.77
			216.22	12-Aug-97	NA	120.84	-1.13
18_MCAS03-6	MP	490 - 500	216.22	12-Jan-96	NA	141.82	
			216.22	27-Feb-96	NA	143.83	2.01
			216.22	27-Mar-96	NA	144.45	0.62
			216.22	1-Nov-96	NA	122.39	-22.06
			216.22	25-Nov-96	NA	134.31	11.92
			216.22	26-Dec-96	NA	139.19	4.88
			216.22	23-Jan-97	NA	142.74	3.55
			216.22	27-Feb-97	NA	144.71	1.97
			216.22	27-Mar-97	NA	132.72	-11.99
			216.22	26-Jun-97	NA	125.30	-7.42
			216.22	12-Aug-97	NA	124.34	-0.96
18_MCAS04	SH	181 - 238	141.46	9-Feb-96	22.48	118.98	
			141.46	28-Feb-96	22.24	119.22	0.24
			141.46	27-Mar-96	22.02	119.44	0.22
			141.46	1-Nov-96	28.32	113.14	-6.30
			141.46	27-Nov-96	25.56	115.90	2.76
			141.46	26-Dec-96	24.06	117.40	1.50
			141.46	26-Jan-97	25.00	116.46	-0.94
			141.46	26-Feb-97	22.38	119.08	2.62
			141.46	27-Mar-97	24.70	116.76	-2.32
			141.46	26-Jun-97	27.25	114.21	-2.55
			141.46	11-Aug-97	27.54	113.92	-0.29
18_MCAS05A	SH	120 - 130	159.97	27-Nov-96	31.15	128.82	
			159.97	27-Dec-96	30.55	129.42	0.60
			159.97	26-Jan-97	29.86	130.11	0.69
			159.97	26-Feb-97	30.09	129.88	-0.23
			159.97	27-Mar-97	31.00	128.97	-0.91
			159.97	11-Aug-97	31.04	128.93	-0.04
18_MCAS06	SH	167 - 222	114.85	12-Jan-96	14.08	100.77	
			114.85	16-Jan-96	14.32	100.53	-0.24
			114.85	28-Feb-96	14.00	100.85	0.32
			114.85	27-Mar-96	14.10	100.75	-0.10
			114.85	1-Nov-96	24.63	90.22	-10.53
			114.85	27-Nov-96	19.20	95.65	5.43
			114.85	26-Dec-96	20.10	94.75	-0.90
			114.85	26-Jan-97	16.11	98.74	3.99
			114.85	26-Feb-97	13.54	101.31	2.57
			114.85	27-Mar-97	17.83	97.02	-4.29
			114.85	26-Jun-97	23.80	91.05	-5.97
			114.85	11-Aug-97	23.89	90.96	-0.09

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_MCAS07-1	MP - WT	90 - 100	101.19	12-Jan-96	NA	88.54	
			101.19	28-Feb-96	NA	89.02	0.48
			101.19	27-Mar-96	NA	89.37	0.35
			101.19	1-Nov-96	NA	86.71	-2.66
			101.19	26-Nov-96	NA	87.45	0.74
			101.19	26-Dec-96	NA	88.10	0.65
			101.19	23-Jan-97	NA	87.86	-0.24
			101.19	27-Feb-97	NA	88.09	0.23
			101.19	27-Mar-97	NA	87.68	-0.41
			101.19	12-Aug-97	NA	86.68	-1.00
18_MCAS07-2	MP	190 - 200	101.19	12-Jan-96	NA	94.71	
			101.19	28-Feb-96	NA	96.79	2.08
			101.19	27-Mar-96	NA	95.57	-1.22
			101.19	1-Nov-96	NA	75.46	-20.11
			101.19	26-Nov-96	NA	86.07	10.61
			101.19	26-Dec-96	NA	91.82	5.75
			101.19	23-Jan-97	NA	96.03	4.21
			101.19	27-Feb-97	NA	96.08	0.05
			101.19	27-Mar-97	NA	87.34	-8.74
			101.19	2-Jul-97	NA	78.58	-8.76
			101.19	12-Aug-97	NA	77.86	-0.72
18_MCAS07-3	MP	350 - 360	101.19	12-Jan-96	NA	67.84	
			101.19	28-Feb-96	NA	76.17	8.33
			101.19	27-Mar-96	NA	65.88	-10.29
			101.19	1-Nov-96	NA	11.21	-54.67
			101.19	26-Nov-96	NA	46.84	35.63
			101.19	26-Dec-96	NA	61.25	14.41
			101.19	23-Jan-97	NA	76.01	14.76
			101.19	27-Feb-97	NA	67.75	-8.26
			101.19	27-Mar-97	NA	34.36	-33.39
			101.19	2-Jul-97	NA	6.42	-27.94
			101.19	12-Aug-97	NA	4.56	-1.86
18_MCAS07-4	MP	440 - 450	101.19	12-Jan-96	NA	58.75	
			101.19	28-Feb-96	NA	69.82	11.07
			101.19	27-Mar-96	NA	52.71	-17.11
			101.19	1-Nov-96	NA	-3.04	-55.75
			101.19	26-Nov-96	NA	36.20	39.24
			101.19	26-Dec-96	NA	50.02	13.82
			101.19	23-Jan-97	NA	68.76	18.74
			101.19	27-Feb-97	NA	56.40	-12.36
			101.19	27-Mar-97	NA	15.60	-40.80
			101.19	2-Jul-97	NA	-18.30	-33.90
			101.19	12-Aug-97	NA	-20.26	-1.96
18_MCAS07-5	MP	510 - 520	101.19	12-Jan-96	NA	63.67	
			101.19	28-Feb-96	NA	73.86	10.19
			101.19	27-Mar-96	NA	61.14	-12.72
			101.19	1-Nov-96	NA	-0.71	-61.85
			101.19	26-Nov-96	NA	40.82	41.53
			101.19	26-Dec-96	NA	54.66	13.84
			101.19	23-Jan-97	NA	72.56	17.90
			101.19	27-Feb-97	NA	64.29	-8.27
			101.19	27-Mar-97	NA	21.97	-42.32
			101.19	2-Jul-97	NA	-9.78	-31.75
			101.19	12-Aug-97	NA	-11.79	-2.01

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_MCAS07-6	MP	800 - 810	101.19	12-Jan-96	NA	52.01	
			101.19	28-Feb-96	NA	40.69	-11.32
			101.19	27-Mar-96	NA	48.65	7.96
			101.19	1-Nov-96	NA	45.15	-3.50
			101.19	26-Nov-96	NA	46.45	1.30
			101.19	26-Dec-96	NA	47.71	1.26
			101.19	23-Jan-97	NA	48.85	1.14
			101.19	27-Feb-97	NA	50.84	1.99
			101.19	27-Mar-97	NA	51.60	0.76
			101.19	2-Jul-97	NA	49.53	-2.07
			101.19	12-Aug-97	NA	47.64	-1.89
18_MCAS07-7	MP	910 - 920	101.19	12-Jan-96	NA	50.25	
			101.19	28-Feb-96	NA	39.69	-10.56
			101.19	27-Mar-96	NA	44.91	5.22
			101.19	1-Nov-96	NA	44.85	-0.06
			101.19	26-Nov-96	NA	46.16	1.31
			101.19	26-Dec-96	NA	47.27	1.11
			101.19	23-Jan-97	NA	48.22	0.95
			101.19	27-Feb-97	NA	50.42	2.20
			101.19	27-Mar-97	NA	50.55	0.13
			101.19	2-Jul-97	NA	49.25	-1.30
			101.19	12-Aug-97	NA	47.37	-1.88
18_MCAS07-8	MP	980 - 990	101.19	12-Jan-96	NA	51.25	
			101.19	28-Feb-96	NA	91.63	40.38
			101.19	27-Mar-96	NA	72.90	-18.73
			101.19	1-Nov-96	NA	48.81	-24.09
			101.19	26-Nov-96	NA	50.85	2.04
			101.19	26-Dec-96	NA	51.12	0.27
			101.19	23-Jan-97	NA	51.37	0.25
			101.19	27-Feb-97	NA	51.74	0.37
			101.19	27-Mar-97	NA	50.85	-0.89
			101.19	2-Jul-97	NA	51.23	0.38
			101.19	12-Aug-97	NA	50.50	-0.73
18_MCAS07-9	MP	1100 - 1110	101.19	28-Feb-96	NA	45.30	
			101.19	27-Mar-96	NA	57.51	12.21
			101.19	1-Nov-96	NA	48.92	-8.59
			101.19	26-Nov-96	NA	50.83	1.91
			101.19	26-Dec-96	NA	51.63	0.80
			101.19	23-Jan-97	NA	52.02	0.39
			101.19	27-Feb-97	NA	52.45	0.43
			101.19	27-Mar-97	NA	50.82	-1.63
			101.19	2-Jul-97	NA	52.05	1.23
			101.19	12-Aug-97	NA	51.30	-0.75
18_MCAS08	DP	392 - 410	86.72	1-Feb-96	58.01	28.71	
			86.72	28-Feb-96	54.08	32.64	3.93
			86.72	27-Mar-96	54.00	32.72	0.08
			86.72	1-Nov-96	105.75	-19.03	-51.75
			86.72	27-Nov-96	93.05	-6.33	12.70
			86.72	27-Dec-96	94.25	-7.53	-1.20
			86.72	26-Jan-97	59.10	27.62	35.15
			86.72	27-Mar-97	92.75	-6.03	-33.65
			86.72	26-Jun-97	103.70	-16.98	-10.95
			86.72	11-Aug-97	127.60	-40.88	-23.90

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_MCAS09	DP	372 - 445	77.50	12-Jan-96	4.89	72.61	
			77.50	16-Jan-96	6.63	70.87	-1.74
			77.50	27-Mar-96	6.63	70.87	0.00
			77.50	27-Nov-96	25.42	52.08	-18.79
			77.50	26-Dec-96	26.10	51.40	-0.68
			77.50	26-Jan-97	23.90	53.60	2.20
			77.50	26-Feb-97	3.80	73.70	20.10
			77.50	27-Mar-97	25.00	52.50	-21.20
			77.50	26-Jun-97	42.65	34.85	-17.65
			77.50	11-Aug-97	55.65	21.85	-13.00
18_MCAS10	DP	355 - 375	102.10	11-Jan-96	16.06	86.04	
			102.10	19-Jan-96	18.47	83.63	-2.41
			102.10	27-Mar-96	16.12	85.98	2.35
			102.10	1-Nov-96	56.65	45.45	-40.53
			102.10	27-Nov-96	38.68	63.42	17.97
			102.10	27-Dec-96	39.20	62.90	-0.52
			102.10	26-Jan-97	38.85	63.25	0.35
			102.10	26-Feb-97	18.09	84.01	20.76
			102.10	27-Mar-97	37.90	64.20	-19.81
			102.10	26-Jun-97	53.40	48.70	-15.50
			102.10	11-Aug-97	64.70	37.40	-11.30
18_PS1	SH	102 - 122	247.99	11-Jan-96	86.98	161.01	
			247.99	19-Jan-96	86.90	161.09	0.08
			247.99	26-Feb-96	86.65	161.34	0.25
			247.99	27-Mar-96	86.41	161.58	0.24
			247.99	31-Oct-96	86.61	161.38	-0.20
			247.99	26-Nov-96	86.36	161.63	0.25
			247.99	26-Dec-96	86.42	161.57	-0.06
			247.99	23-Jan-97	86.12	161.87	0.30
			247.99	27-Mar-97	85.68	162.31	0.44
			247.99	26-Jun-97	86.02	161.97	-0.34
			247.99	11-Aug-97	86.25	161.74	-0.23
18_PS2	SH	103 - 133	246.73	11-Jan-96	99.50	147.23	
			246.73	18-Jan-96	99.42	147.31	0.08
			246.73	26-Feb-96	98.96	147.77	0.46
			246.73	27-Mar-96	98.62	148.11	0.34
			246.73	31-Oct-96	99.18	147.55	-0.56
			246.73	27-Nov-96	99.08	147.65	0.10
			246.73	26-Dec-96	99.04	147.69	0.04
			246.73	23-Jan-97	98.58	148.15	0.46
			246.73	27-Feb-97	97.91	148.82	0.67
			246.73	27-Mar-97	89.10	157.63	8.81
			246.73	26-Jun-97	98.68	148.05	-9.58
			246.73	11-Aug-97	98.86	147.87	-0.18
18_PS3	SH	102 - 122	266.47	11-Jan-96	87.30	179.17	
			266.47	22-Feb-96	84.10	182.37	3.20
			266.47	28-Feb-96	84.06	182.41	0.04
			266.47	27-Mar-96	83.84	182.63	0.22
			266.47	26-Feb-97	83.30	183.17	0.54
			266.47	27-Jun-97	83.56	182.91	-0.26
			266.47	12-Aug-97	83.66	182.81	-0.10

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_PS4	SH	98 - 118	264.53	12-Jan-96	79.85	184.68	
			264.53	21-Feb-96	76.50	188.03	3.35
			264.53	28-Feb-96	76.45	188.08	0.05
			264.53	27-Mar-96	76.25	188.28	0.20
			264.53	31-Oct-96	77.26	187.27	-1.01
			264.53	27-Nov-96	77.75	186.78	-0.49
			264.53	26-Dec-96	76.40	188.13	1.35
			264.53	24-Jan-97	76.13	188.40	0.27
			264.53	26-Feb-97	75.84	188.69	0.29
			264.53	27-Mar-97	75.70	188.83	0.14
			264.53	27-Jun-97	75.96	188.57	-0.26
			264.53	12-Aug-97	76.08	188.45	-0.12
18_PS5	SH	106 - 126	255.14	12-Jan-96	88.01	167.13	
			255.14	22-Jan-96	88.11	167.03	-0.10
			255.14	28-Feb-96	87.90	167.24	0.21
			255.14	27-Mar-96	87.62	167.52	0.28
			255.14	31-Oct-96	87.89	167.25	-0.27
			255.14	27-Nov-96	88.25	166.89	-0.36
			255.14	26-Dec-96	87.76	167.38	0.49
			255.14	24-Jan-97	87.43	167.71	0.33
			255.14	26-Feb-97	86.90	168.24	0.53
			255.14	27-Mar-97	86.93	168.21	-0.03
			255.14	27-Jun-97	87.22	167.92	-0.29
			255.14	12-Aug-97	87.65	167.49	-0.43
18_PS6	SH	130 - 150	269.09	11-Jan-96	111.45	157.64	
			269.09	26-Jan-96	111.34	157.75	0.11
			269.09	26-Feb-96	110.97	158.12	0.37
			269.09	27-Mar-96	110.70	158.39	0.27
			269.09	1-Nov-96	112.52	156.57	-1.82
			269.09	27-Nov-96	110.80	158.29	1.72
			269.09	26-Dec-96	110.82	158.27	-0.02
			269.09	24-Jan-97	110.31	158.78	0.51
			269.09	27-Feb-97	109.83	159.26	0.48
			269.09	27-Mar-97	110.07	159.02	-0.24
			269.09	26-Jun-97	110.60	158.49	-0.53
			269.09	11-Aug-97	110.70	158.39	-0.10
18_PS7	SH	106 - 126	260.00	11-Jan-96	88.10	171.90	
			260.00	22-Jan-96	87.28	172.72	0.82
			260.00	28-Feb-96	87.06	172.94	0.22
			260.00	27-Mar-96	86.85	173.15	0.21
			260.00	31-Oct-96	87.11	172.89	-0.26
			260.00	27-Nov-96	87.75	172.25	-0.64
			260.00	26-Dec-96	86.98	173.02	0.77
			260.00	24-Jan-97	86.66	173.34	0.32
			260.00	26-Feb-97	86.38	173.62	0.28
			260.00	27-Mar-97	86.22	173.78	0.16
			260.00	27-Jun-97	86.50	173.50	-0.28
			260.00	12-Aug-97	86.60	173.40	-0.10
18_PS8	SH	125 - 145	282.84	11-Jan-96	103.82	179.02	
			282.84	26-Jan-96	103.18	179.66	0.64
			282.84	26-Feb-96	103.42	179.42	-0.24
			282.84	27-Mar-96	103.57	179.27	-0.15
			282.84	1-Nov-96	105.10	177.74	-1.53
			282.84	27-Nov-96	103.04	179.80	2.06
			282.84	26-Dec-96	103.15	179.69	-0.11
			282.84	24-Jan-97	102.80	180.04	0.35
			282.84	26-Feb-97	102.66	180.18	0.14
			282.84	27-Mar-97	102.36	180.48	0.30
			282.84	26-Jun-97	102.52	180.32	-0.16
			282.84	12-Aug-97	102.59	180.25	-0.07

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
18_RW1	DP	430 - 470	247.99	12-Jan-96	85.85	162.14	
			247.99	23-Jan-96	85.66	162.33	0.19
			247.99	28-Feb-96	83.39	164.60	2.27
			247.99	27-Mar-96	82.95	165.04	0.44
			247.99	31-Oct-96	98.05	149.94	-15.10
			247.99	27-Nov-96	98.65	149.34	-0.60
			247.99	26-Dec-96	86.42	161.57	12.23
			247.99	24-Jan-97	83.72	164.27	2.70
			247.99	26-Feb-97	82.73	165.26	0.99
			247.99	27-Mar-97	91.39	156.60	-8.66
			247.99	27-Jun-97	95.96	152.03	-4.57
18_RW2	DP	270 - 310	265.69	11-Jan-96	76.08	189.61	
			265.69	24-Jan-96	76.07	189.62	0.01
			265.69	28-Feb-96	75.79	189.90	0.28
			265.69	27-Mar-96	75.50	190.19	0.29
			265.69	31-Oct-96	78.72	186.97	-3.22
			265.69	27-Nov-96	78.90	186.79	-0.18
			265.69	26-Dec-96	76.42	189.27	2.48
			265.69	24-Jan-97	75.42	190.27	1.00
			265.69	26-Feb-97	74.92	190.77	0.50
18_RW3	DP	370 - 390	265.69	11-Jan-96	50.22	215.47	
			265.69	25-Jan-96	50.04	215.65	0.18
			265.69	28-Feb-96	48.70	216.99	1.34
18_RW4	SH	65 - 85	265.69	11-Jan-96	48.13	217.56	0.57
			265.69	26-Jan-96	48.12	217.57	0.01
			265.69	28-Feb-96	47.90	217.79	0.22
19_DBMW54	WT	141 - 181	332.59	12-Jan-96	142.66	189.93	
			332.59	19-Feb-96	141.85	190.74	0.81
			332.59	27-Feb-96	141.85	190.74	0.00
			332.59	27-Mar-96	141.52	191.07	0.33
			332.59	31-Oct-96	141.56	191.03	-0.04
			332.59	26-Nov-96	140.98	191.61	0.58
			332.59	27-Dec-96	141.20	191.39	-0.22
			332.59	24-Jan-97	140.27	192.32	0.93
			332.59	27-Feb-97	139.42	193.17	0.85
			332.59	27-Mar-97	140.30	192.29	-0.88
			332.59	26-Jun-97	140.00	192.59	0.30
			332.59	12-Aug-97	139.80	192.79	0.20
19_DGMW85	WT	143 - 183	328.57	12-Jan-96	141.30	187.27	
			328.57	19-Feb-96	140.54	188.03	0.76
			328.57	27-Feb-96	140.60	187.97	-0.06
			328.57	27-Mar-96	140.87	187.70	-0.27
			328.57	31-Oct-96	140.46	188.11	0.41
			328.57	26-Nov-96	139.80	188.77	0.66
			328.57	27-Dec-96	140.00	188.57	-0.20
			328.57	24-Jan-97	139.16	189.41	0.84
			328.57	27-Feb-97	138.39	190.18	0.77
			328.57	27-Mar-97	138.40	190.17	-0.01
			328.57	26-Jun-97	138.82	189.75	-0.42
			328.57	12-Aug-97	138.55	190.02	0.27

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
19_DGMW86	WT	158 - 198	332.87	12-Jan-96	150.34	182.53	
			332.87	12-Feb-96	149.94	182.93	0.40
			332.87	27-Mar-96	149.47	183.40	0.47
			332.87	31-Oct-96	149.46	183.41	0.01
			332.87	26-Nov-96	148.88	183.99	0.58
			332.87	27-Dec-96	149.15	183.72	-0.27
			332.87	24-Jan-97	148.12	184.75	1.03
			332.87	27-Feb-97	147.31	185.56	0.81
			332.87	27-Mar-97	148.15	184.72	-0.84
			332.87	26-Jun-97	147.94	184.93	0.21
			332.87	12-Aug-97	147.76	185.11	0.18
19_UGMW35	WT	148 - 185	343.66	12-Jan-96	150.62	193.04	
			343.66	8-Feb-96	150.29	193.37	0.33
			343.66	27-Feb-96	149.97	193.69	0.32
			343.66	27-Mar-96	149.65	194.01	0.32
			343.66	31-Oct-96	149.26	194.40	0.39
			343.66	26-Nov-96	148.94	194.72	0.32
			343.66	27-Dec-96	149.50	194.16	-0.56
			343.66	24-Jan-97	147.84	195.82	1.66
			343.66	27-Feb-97	147.29	196.37	0.55
			343.66	27-Mar-97	148.20	195.46	-0.91
			343.66	26-Jun-97	147.69	195.97	0.51
			343.66	11-Aug-97	142.42	201.24	5.27
20_DBMW55	WT	187 - 227	331.56	11-Jan-96	180.53	151.03	
			331.56	27-Feb-96	179.62	151.94	0.91
			331.56	28-Feb-96	179.92	151.64	-0.30
			331.56	27-Mar-96	179.34	152.22	0.58
			331.56	31-Oct-96	179.30	152.26	0.04
			331.56	26-Nov-96	179.14	152.42	0.16
			331.56	26-Dec-96	178.58	152.98	0.56
			331.56	24-Jan-97	178.42	153.14	0.16
			331.56	27-Feb-97	178.40	153.16	0.02
			331.56	27-Mar-97	177.60	153.96	0.80
			331.56	26-Jun-97	178.23	153.33	-0.63
			331.56	11-Aug-97	178.47	153.09	-0.24
20_DGMW88	WT	185 - 225	331.65	11-Jan-96	181.59	150.06	
			331.65	1-Feb-96	181.38	150.27	0.21
			331.65	28-Feb-96	181.10	150.55	0.28
			331.65	27-Mar-96	180.55	151.10	0.55
			331.65	31-Oct-96	180.54	151.11	0.01
			331.65	26-Nov-96	180.26	151.39	0.28
			331.65	26-Dec-96	179.82	151.83	0.44
			331.65	24-Jan-97	179.32	152.33	0.50
			331.65	28-Feb-97	178.88	152.77	0.44
			331.65	27-Mar-97	179.12	152.53	-0.24
			331.65	26-Jun-97	179.58	152.07	-0.46
			331.65	11-Aug-97	179.68	151.97	-0.10
20_UGMW36	WT	183 - 223	338.71	11-Jan-96	187.07	151.64	
			338.71	5-Feb-96	187.08	151.63	-0.01
			338.71	28-Feb-96	186.58	152.13	0.50
			338.71	27-Mar-96	186.03	152.68	0.55
			338.71	31-Oct-96	185.50	153.21	0.53
			338.71	26-Nov-96	185.31	153.40	0.19
			338.71	26-Dec-96	184.94	153.77	0.37
			338.71	24-Jan-97	184.88	153.83	0.06
			338.71	27-Feb-97	183.60	155.11	1.28
			338.71	27-Mar-97	183.94	154.77	-0.34
			338.71	26-Jun-97	184.54	154.17	-0.60
			338.71	11-Aug-97	184.72	153.99	-0.18

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
21_DBMW56	WT	92 - 132	256.06	11-Jan-96	90.07	165.99	
			256.06	15-Feb-96	89.84	166.22	0.23
			256.06	27-Feb-96	89.84	166.22	0.00
			256.06	27-Mar-96	89.60	166.46	0.24
			256.06	30-Oct-96	89.58	166.48	0.02
			256.06	26-Nov-96	89.44	166.62	0.14
			256.06	26-Dec-96	89.53	166.53	-0.09
			256.06	26-Feb-97	88.95	167.11	0.58
			256.06	27-Mar-97	88.85	167.21	0.10
			256.06	26-Jun-97	89.04	167.02	-0.19
			256.06	11-Aug-97	89.19	166.87	-0.15
21_DGMW90	WT	95 - 135	255.35	11-Jan-96	90.08	165.27	
			255.35	2-Feb-96	90.16	165.19	-0.08
			255.35	27-Feb-96	90.08	165.27	0.08
			255.35	27-Mar-96	89.78	165.57	0.30
			255.35	30-Oct-96	89.68	165.67	0.10
			255.35	26-Nov-96	89.78	165.57	-0.10
			255.35	26-Dec-96	89.64	165.71	0.14
			255.35	23-Jan-97	89.40	165.95	0.24
			255.35	26-Feb-97	88.88	166.47	0.52
			255.35	27-Mar-97	88.84	166.51	0.04
			255.35	26-Jun-97	89.20	166.15	-0.36
			255.35	11-Aug-97	89.34	166.01	-0.14
21_UGMW37	WT	89 - 130	257.87	11-Jan-96	91.28	166.59	
			257.87	12-Feb-96	90.93	166.94	0.35
			257.87	27-Feb-96	89.95	167.92	0.98
			257.87	27-Mar-96	90.68	167.19	-0.73
			257.87	30-Oct-96	90.68	167.19	0.00
			257.87	26-Nov-96	90.50	167.37	0.18
			257.87	26-Dec-96	90.60	167.27	-0.10
			257.87	23-Jan-97	90.24	167.63	0.36
			257.87	26-Feb-97	90.00	167.87	0.24
			257.87	25-Mar-97	89.94	167.93	0.06
			257.87	26-Jun-97	90.10	167.77	-0.16
			257.87	11-Aug-97	90.25	167.62	-0.15
22_DBMW47	WT	116 - 156	277.83	11-Jan-96	114.43	163.40	
			277.83	15-Feb-96	113.95	163.88	0.48
			277.83	28-Feb-96	114.01	163.82	-0.06
			277.83	27-Mar-96	113.66	164.17	0.35
			277.83	30-Oct-96	113.93	163.90	-0.27
			277.83	26-Nov-96	113.57	164.26	0.36
			277.83	26-Dec-96	113.58	164.25	-0.01
			277.83	23-Jan-97	113.08	164.75	0.50
			277.83	27-Feb-97	112.45	165.38	0.63
			277.83	27-Mar-97	112.70	165.13	-0.25
			277.83	26-Jun-97	113.30	164.53	-0.60
			277.83	11-Aug-97	113.36	164.47	-0.06
24_NEW01	SH	225 - 245	281.10	31-Oct-96	123.51	157.59	
			281.10	26-Nov-96	118.78	162.32	4.73
			281.10	26-Dec-96	116.70	164.40	2.08
			281.10	23-Jan-97	115.26	165.84	1.44
			281.10	27-Feb-97	114.18	166.92	1.08
			281.10	27-Mar-97	120.28	160.82	-6.10
			281.10	26-Jun-97	122.25	158.85	-1.97
			281.10	12-Aug-97	122.44	158.66	-0.19

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
MCAS El Toro Groundwater Monitoring Program

STATION ID	WELL TYPE	SCREEN INTERVAL (feet BGS)	TOP OF CASING (feet MSL)	MEASUREMENT DATE	DEPTH TO WATER (feet TOC)	WATER LEVEL ELEVATION (feet MSL)	CHANGE FROM PRIOR (+ or - feet)
24_NEW04	WT	108 - 148	281.80	26-Nov-96	109.75	172.05	
			281.80	26-Dec-96	109.50	172.30	0.25
			281.80	23-Jan-97	109.03	172.77	0.47
			281.80	26-Feb-97	108.86	172.94	0.17
			281.80	27-Mar-97	108.94	172.86	-0.08
			281.80	26-Jun-97	109.05	172.75	-0.11
			281.80	12-Aug-97	109.00	172.80	0.05
24_NEW05	SH	230 - 250	279.20	31-Oct-96	120.39	158.81	
			279.20	26-Nov-96	115.29	163.91	5.10
			279.20	26-Dec-96	112.34	166.86	2.95
			279.20	23-Jan-97	110.74	168.46	1.60
			279.20	27-Feb-97	109.62	169.58	1.12
			279.20	27-Mar-97	116.80	162.40	-7.18
			279.20	26-Jun-97	118.93	160.27	-2.13
			279.20	11-Aug-97	119.18	160.02	-0.25
24_NEW06	SH	165 - 185	265.60	26-Nov-96	83.05	182.55	
			265.60	26-Dec-96	82.63	182.97	0.42
			265.60	23-Jan-97	82.02	183.58	0.61
			265.60	26-Feb-97	81.60	184.00	0.42
			265.60	27-Mar-97	82.43	183.17	-0.83
			265.60	26-Jun-97	83.14	182.46	-0.71
			265.60	11-Aug-97	83.33	182.27	-0.19
24_NEW07	WT	118 - 158	285.10	31-Oct-96	122.30	162.80	
			285.10	27-Nov-96	121.60	163.50	0.70
			285.10	26-Dec-96	121.38	163.72	0.22
			285.10	23-Jan-97	120.76	164.34	0.62
			285.10	27-Feb-97	120.33	164.77	0.43
			285.10	27-Mar-97	120.52	164.58	-0.19
			285.10	26-Jun-97	121.34	163.76	-0.82
			285.10	12-Aug-97	121.44	163.66	-0.10
24_NEW08	WT	122 - 162	291.50	31-Oct-96	125.68	165.82	
			291.50	27-Nov-96	125.10	166.40	0.58
			291.50	26-Dec-96	124.92	166.58	0.18
			291.50	23-Jan-97	124.30	167.20	0.62
			291.50	27-Feb-97	123.90	167.60	0.40
			291.50	27-Mar-97	124.90	166.60	-0.60
			291.50	26-Jun-97	124.72	166.78	-0.82
			291.50	12-Aug-97	124.78	166.72	0.12

EXPLANATION

1. WT = water table monitoring well/port, CL = well in monitoring well cluster, MP = multiple port monitoring well, SH = well completed below water table and above top of intermediate horizon, DP = well completed in deep production aquifer.

2. BGS = below ground surface, MSL = mean sea level, TOC = top of well casing, NA = not available or applicable.

APPENDIX C

GROUNDWATER SAMPLING FIELD PARAMETERS

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Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
01_DGMW57	7-Feb-96	22.1	7.15	799	-10 a	9.96	235.0
	20-Nov-96	22.6	7.19	980	0.5	0.28	-457.4
	25-Mar-97	22.7	7.12	918	1.3	0.31	-43.6
01_DGMW58	18-Nov-96	21.1	7.19	843	1.0	8.69	50.9
	13-Mar-97	20.7	7.26	639	0.2	8.02	64.3
01_MW101	18-Nov-96	24.4	8.23	768	129	--	26.8
	13-Mar-97	22.1	8.02	1,076	8.9	1.95	124.3
	11-Jul-97	25.5	7.67	730	749 a	3.99	121.9
01_MW102	20-Nov-96	21.9	7.21	1,159	1.4	4.20	-5.7
	13-Mar-97	26.7	7.14	1,451	239 a	5.16	102.2
	9-Jul-97	25.6	7.05	1,150	112	5.83	77.8
01_MW201	18-Nov-96	24.2	7.13	1,008	48	5.63	-27.3
	13-Mar-97	22.7	7.42	1,075	52	6.99	69.6
	9-Jul-97	25.5	7.23	880	134	6.73	39.5
02_DGMW59	6-Feb-96	20.8	7.18	1,410	-10 a	11.90 b	245.0
	4-Nov-96	20.9	7.14	1,500	0.1	0.00	72.8
	26-Mar-97	17.6	7.11	1,174	32	2.72	-8.5
	3-Jul-97	22.0	6.96	1,960	2.1	1.43	450.3 c
02_DGMW60	6-Feb-96	22.4	6.86	1,540	-10 a	9.11	260.0
	4-Nov-96	23.7	6.90	1,630	0.4	0.30	68.8
	26-Mar-97	23.1	6.84	1,928	0.3	0.57	-9.5
	1-Jul-97	23.4	6.24	1,700	0.0	0.85	156.0
02_DGMW61	8-Feb-96	22.4	6.99	1,020	-10 a	10.58 b	250.0
	4-Nov-96	22.8	7.09	1,060	0	2.99	75.1
	26-Mar-97	22.2	7.01	1,267	1.0	3.50	2.5
	2-Jul-97	22.8	7.15	1,130	0.4	3.43	95.7
02_NEW01	4-Nov-96	23.7	7.57	740	5.2	0.45	-116.5
	26-Mar-97	22.9	7.45	870	0	0.18	-49.2
	1-Jul-97	23.5	7.37	790	3.9	2.20	39.1
02_NEW02	26-Nov-96	22.7	7.23	1,400	4.7	6.14	95.6
	26-Mar-97	21.9	6.91	1,584	1.0	4.78	11.8
	3-Jul-97	21.8	6.96	1,280	1.8	5.79	359.7
02_NEW03	8-Nov-96	22.3	6.88	1,430	173	3.78	36.2
	24-Mar-97	22.8	6.95	1,548	177	3.91	10.1
	2-Jul-97	22.9	7.05	1,320	16.1	3.57	-15.6
02_NEW06	7-Nov-96	22.2	7.03	1,320	15.1	4.91	11.1
	24-Mar-97	22.4	7.01	1,560	8.3	4.70	21.3
	2-Jul-97	22.7	7.62	1,400	9.6	4.53	45.2
02_NEW07	8-Jan-97	22.1	7.05	970	0.7	5.62	101.1
	20-Mar-97	24.6	6.98	1,149	8.8	6.69	116.3
	11-Jul-97	27.1	6.96	1,540	186	4.61	114.6
02_NEW08A	7-Nov-96	23.1	7.07	1,020	3.5	4.08	66.2
	25-Mar-97	23.0	6.77	1,142	1.3	5.40	4.5
	2-Jul-97	23.9	7.18	1,020	0.7	4.67	44.8

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
02_NEW11	12-Nov-96	22.3	6.98	1,120	43	7.64	72.4
	25-Mar-97	21.5	7.17	1,138	26	8.67	20.1
	8-Jul-97	21.7	6.73	1,230	227 a	7.68	237.2
02_NEW12	7-Nov-96	25.4	7.23	1,120	53	3.13	34.1
	25-Mar-97	25.2	7.09	1,478	37	5.53	22.8
	30-Jun-97	25.3	6.92	1,170	20	6.37	94.4
02_NEW13	5-Dec-96	22.3	7.26	2,014	7.9	--	134.6
02_NEW14	5-Dec-96	22.3	7.26	1,274	20	--	140.7
	26-Mar-97	22.5	6.90	1,142	12.1	5.40	79.9
02_UGMW25	7-Feb-96	18.0	7.16	2,200	-10 a	14.96 b	240.0
	12-Nov-96	19.4	6.95	1,930	0.6	3.07	58.3
	26-Mar-97	19.4	7.17	1,306	22	5.05	13.6
	2-Jul-97	19.8	7.41	1,320	0.6	4.46	44.6
03_DBMW39	30-Jan-96	24.8	7.21	1,220	-10 a	7.42	125.0
	12-Nov-96	25.9	7.17	1,380	74	5.34	42.1
	17-Mar-97	26.1	7.10	2,246	38	5.75	-37.2
	8-Jul-97	26.1	7.08	1,640	92	5.09	30.8
03_DGMW64	26-Feb-96	21.3	7.77	1,870	30	7.00	--
	12-Nov-96	26.4	7.23	1,430	15.2	6.37	39.9
	4-Mar-97	26.0	7.30	1,562	219 a	5.55	17.4
	30-Jun-97	26.9	7.32	1,210	13.9	8.05	26.0
03_DGMW65X	26-Feb-96	21.0	7.67	1,790	30	6.63	--
	11-Nov-96	25.0	7.26	1,299	23	7.06	78.3
	4-Mar-97	25.0	7.31	1,452	7.6	7.45	50.9
	30-Jun-97	25.5	7.20	1,120	178	7.51	16.1
03_UGMW26	27-Feb-96	21.7	7.22	1,020	74	6.52	--
	14-Nov-96	24.4	7.20	1,600	1.1	8.56	70.8
	6-Mar-97	25.3	7.19	1,528	7.6	11.34 b	54.9
	1-Jul-97	25.3	7.19	1,090	466 a	7.32	78.3
04_DBMW40	26-Feb-96	21.4	7.44	1,950	149	6.42	--
	12-Nov-96	25.5	6.84	1,643	0	2.41	72.4
	5-Mar-97	25.2	7.11	1,664	18.4	4.79	47.3
	30-Jun-97	25.3	6.88	1,350	7.9	0.96	28.8
04_DGMW66	26-Feb-96	21.0	7.52	1,630	38	6.17	--
	12-Nov-96	25.6	7.13	1,186	0.9	7.92	102.3
	4-Mar-97	24.2	7.17	1,329	70	6.29	86.4
	1-Jul-97	25.7	7.19	970	270 a	7.46	119.2
04_UGMW63	30-Jan-96	24.0	7.07	1,330	187	6.60	190.0
	14-Nov-96	25.0	7.03	1,910	2	0.83	57.3
05_DBMW41	7-Feb-96	22.6	6.83	1,310	0	6.91	250.0
	13-Nov-96	23.2	7.20	1,410	3.4	7.77	107.8
	13-Mar-97	22.8	7.09	2,200	4.3	8.71	-13.5 c
	8-Jul-97	23.0	6.55	1,750	14.1	6.91	321.4

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
05_DGMW67	9-Feb-96	20.9	7.03	1,400	-10 a	7.49	245.0
	13-Nov-96	22.7	7.20	1,480	14.6	4.63	45.4
	13-Mar-97	22.4	6.95	2,478	8.1	4.25	-28.7
05_DGMW68	27-Feb-96	20.9	7.16	1,260	49	7.98	--
	15-Nov-96	22.9	7.06	1,919	1.1	8.41	58.9
	5-Mar-97	23.3	6.70	1,747	3.0	7.40	70.3
	1-Jul-97	24.0	6.96	1,440	--	7.02	120.6
05_NEW01	13-Nov-96	25.1	6.91	1,330	82	6.86	78.8
	13-Mar-97	24.6	6.84	1,996	84	7.90	-19.0 c
	9-Jul-97	24.8	6.52	1,610	81	8.78	271.1
05_UGMW27	29-Jan-96	22.0	7.25	1,280	5	9.78	95.0
	13-Nov-96	22.7	7.37	1,380	1	6.02	68.6
	13-Mar-97	22.9	7.15	2,188	0	6.65	-35.8
	9-Jul-97	22.9	7.22	1,760	2.7	7.53	193.7
06_DGMW69	2-Feb-96	24.0	6.60	1,440	4	6.18	205.0
	12-Mar-97	24.2	6.89	2,380	14.1	10.48 b	88.5
06_UGMW28	16-Feb-96	25.9	6.79	2,030	9	7.33	160.0
	4-Dec-96	23.6	6.90	3,382	199 a	7.32	122.5
	12-Mar-97	23.8	6.73	4,205	41	7.24	119.6
07_DBMW100	31-Jan-96	23.4	6.76	1,070	-10 a	6.82	230.0
	14-Nov-96	23.8	6.89	1,670	10.7	8.64	104.8
	20-Mar-97	24.8	6.50	1,255	5.2	9.70	-7.9 c
	10-Jul-97	24.4	6.80	1,680	4.0	11.59 b	155.4
07_DBMW43	19-Feb-96	24.8	7.01	897	67	7.09	220.0
	21-Nov-96	21.6	7.55	1,329	2.5	1.79	121.1
	7-Mar-97	25.1	6.89	1,464	356 a	6.13	86.5
	3-Jul-97	27.2	6.95	1,580	174	7.03	56.8
07_DBMW70	13-Feb-96	24.1	6.73	1,480	0	7.89	245.0
	21-Nov-96	23.3	6.95	1,884	2.3	7.87	146.1
	20-Mar-97	26.5	6.80	1,651	130	8.23	100.0
07_DGMW71	13-Feb-96	24.5	6.69	1,350	0	9.37	235.0
	21-Nov-96	23.1	6.87	1,699	3	6.90	116.7
	20-Mar-97	24.9	6.67	1,536	27	8.38	89.8
07_DGMW72	13-Feb-96	24.5	6.64	1,290	0	8.17	220.0
	21-Nov-96	23.4	6.90	1,614	3.1	7.04	104.3
	20-Mar-97	24.5	6.65	1,438	23	8.70	85.6
07_DGMW91	8-Feb-96	23.9	6.63	1,300	0	7.10	200.0
	21-Nov-96	22.8	6.90	1,600	3.9	5.09	62.5
	24-Mar-97	22.6	6.84	1,530	51	8.97	81.0
	9-Jul-97	25.4	6.79	1,760	31	11.19 b	72.2
08_DGMW73	14-Feb-96	23.3	6.79	1,620	0	8.06	--
	2-Dec-96	23.2	7.16	2,050	28	5.05	49.1
	20-Mar-97	23.7	6.92	1,802	13.3	4.64	19.3

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
08_DGMW74	14-Feb-96	23.9	6.96	1,280	1	8.26	235.0
	13-Nov-96	23.9	7.19	1,380	23	6.70	63.5
	19-Mar-97	24.1	6.96	2,664	38	5.82	46.1
	7-Jul-97	25.9	7.08	1,620	28	6.36	55.7
08_UGMW29	14-Feb-96	23.4	6.89	1,300	8	8.11	--
	25-Nov-96	24.0	7.12	1,715	197 a	22.30 b	240.0
	12-Mar-97	24.5	6.81	2,018	50	8.16	91.4
	7-Jul-97	26.9	6.85	1,630	32	4.99	58.0
09_DBMW45	15-Feb-96	23.5	6.39	1,490	241 a	7.11	--
	18-Nov-96	23.5	6.86	2,125	30	8.01	71.9
	24-Mar-97	24.0	6.78	1,787	40	8.50	78.3
	8-Jul-97	24.6	6.76	1,950	744 a	8.09	84.2
09_DGMW75	14-Feb-96	25.2	6.93	1,780	52	8.62	140.0
	4-Dec-96	23.7	6.81	2,363	77	7.01	112.6
	25-Mar-97	23.2	6.70	2,132	409 a	8.12	70.7
	8-Jul-97	25.1	6.75	2,330	8.1	8.47	72.9
10_DGMW77	14-Feb-96	25.5	6.94	1,410	-10 a	7.77	185.0
	4-Dec-96	24.6	6.97	1,899	23	7.91	122.5
	24-Mar-97	24.3	6.77	1,670	17	10.12 b	101.2
	10-Jul-97	25.7	6.80	1,990	29	16.07 b	84.3
12_DBMW48	16-Feb-96	23.2	6.68	2,120	0	7.34	255.0
	13-Nov-96	23.9	6.92	2,118	26	8.12	72.4
	17-Feb-97	22.9	6.92	3,511	25	11.19 b	50.1
12_UGMW31	14-Feb-96	25.3	6.90	1,350	-10 a	7.60	235.0
	13-Nov-96	23.9	6.91	1,469	41	8.46	119.8
	25-Mar-97	23.6	6.75	1,610	32	9.32	109.2
13_DBMW49	6-Feb-96	24.1	6.72	2,400	38	7.06	250.0
	19-Nov-96	25.2	7.04	3,280	0.1	0.07	84.9
	19-Mar-97	25.3	6.56	2,712	5.4	0.21	-59.1
13_DGMW78	1-Feb-96	23.9	6.50	2,550	9	6.98	--
	19-Nov-96	25.1	6.89	3,830	0.6	0.26	82.9
	19-Mar-97	25.4	6.48	3,132	1.6	0.33	-64.6
	9-Jul-97	25.3	6.47	3,230	3.9	1.97	262.4 c
13_UGMW32	5-Feb-96	24.8	6.67	1,630	0	11.98 b	240.0
	10-Mar-97	25.5	6.73	2,472	0	0.58	-4.3
14_DBMW50	5-Feb-96	24.0	6.79	2,410	-10 a	8.28	240.0
	19-Nov-96	24.8	6.97	3,180	6.5	0.90	82.1
	17-Mar-97	25.0	6.78	4,167	17.9	1.17	-46.6
	9-Jul-97	25.2	6.73	3,240	4.8	0.71	25.0
14_DGMW79	5-Feb-96	24.2	6.71	2,680	-10 a	9.20	250.0
	19-Nov-96	25.0	6.96	3,640	0.02	0.00	57.3
	17-Mar-97	24.7	6.76	4,807	3.6	0.45	-50.3
	9-Jul-97	24.9	6.56	3,540	7.6	1.05	136.9

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
15_DBMW51	6-Feb-96	24.9	6.56	4,750	0	7.32	255.0
	4-Dec-96	24.4	6.88	4,985	10.9	2.82	149.1
	25-Mar-97	25.5	6.69	5,800	41	0.64	127.1
	7/297	28.7	6.72	3,660	13	1.72	40.8
16_DBMW52	7-Feb-96	25.9	7.20	1,850	0	7.81	--
	25-Nov-96	25.5	7.38	2,040	23	5.73	89.7
	19-Mar-97	25.3	7.42	1,859	8.5	4.05	-32.9
	11-Jul-97	25.4	7.25	2,210	6.7	6.72	143.7
16_DGMW81	8-Feb-96	24.7	6.81	2,150	8	6.75	--
	8-Jan-97	24.9	7.11	2,180	5.7	10.16 b	93.1
	5-Mar-97	25.4	6.96	2,641	54	8.92	62.4
	2-Jul-97	25.2	7.06	2,160	156	7.76	25.1
16_UGMW33	7-Feb-96	24.5	6.93	867	1	7.07	240.0
	25-Nov-96	25.0	7.25	1,050	1.5	5.58	94.9
	19-Mar-97	24.7	7.07	982	11.9	6.65	-25.8
	10-Jul-97	25.0	6.91	1,210	0.7	10.59 b	212.1
17_DGMW82	9-Feb-96	24.8	7.23	1,110	-10 a	10.79 b	--
	20-Nov-96	25.9	6.94	1,490	27	1.79	-301.0
	1-Apr-97	25.5	7.13	1,345	36	2.16	110.7
17_NEW01	20-Nov-96	25.7	7.09	960	41	6.18	-237.0 c
	24-Mar-97	25.6	7.26	847	17.5	4.27	4.0
	30-Jun-97	25.8	6.98	780	28	6.85	265.6
17_NEW02	20-Nov-96	24.0	7.38	900	4.3	0.23	-493.2
	24-Mar-97	23.8	7.48	806	3.2	0.23	-29.7
	30-Jun-97	23.9	7.29	760	3.6	0.68	186.4
18_BGMP06A	7-Feb-96	22.2	7.84	792	-9 a	8.04	220.0
	8-Nov-96	22.7	7.17	912	10.9	8.36	-30.0
	10-Mar-97	24.1	7.57	1,300	16.6	0.48	79.0
18_BGMP06B	7-Feb-96	22.7	7.70	920	-10 a	9.51	240.0
	8-Nov-96	23.1	7.23	561	9.5	8.14	-31.3 c
	10-Mar-97	24.6	7.73	1,356	1.7	0.52	59.3
18_BGMP06C	7-Feb-96	22.9	8.02	787	-10 a	10.08 b	55.0
	8-Nov-96	23.3	7.60	957	7.3	6.98	-32.0 c
	10-Mar-97	23.6	8.00	1,218	4.2	0.84	-168.4
18_BGMP06D	7-Feb-96	23.3	7.47	1,740	-10 a	10.57 b	195.0
	8-Nov-96	23.1	7.12	2,005	2.1	6.19	-34.4 c
	10-Mar-97	23.4	7.53	2,680	1	-1.21 b	49.3
18_BGMP06E	7-Feb-96	22.9	7.32	2,170	-10 a	10.40 b	200.0
	8-Nov-96	23.4	6.97	2,531	1.1	7.08	-186.7 c
	10-Mar-97	21.8	7.52	2,887	2.2	-1.43 b	83.0
18_BGMP08A	15-Jan-96	20.6	7.14	2,080	10	10.16 b	145.0
	7-Nov-96	21.1	7.59	1,154	198 a	6.67	-196.0 c
	6-Mar-97	21.7	7.54	2,031	1.0	6.84	135.0

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
18_BGMP08C	16-Jan-96	20.3	7.14	1,110	18	8.89	90.0
	7-Nov-96	22.0	7.51	1,191	43	10.47 b	-220.8 c
	7-Mar-97	19.9	7.65	500	1.9	7.40	108.3
18_BGMP08D	16-Jan-96	20.1	7.45	1,120	10	9.07	90.0
	7-Nov-96	21.2	7.32	1,279	184	5.92	-226.5 c
	7-Mar-97	19.8	7.37	1,558	1.9	9.30	83.6
18_BGMP08E	17-Jan-96	19.5	7.32	1,400	10	7.04	235.0
	7-Nov-96	21.4	7.46	1,515	183	4.88	-233.1 c
	7-Mar-97	19.8	7.47	1,287	1.5	5.12	74.9
18_BGMP09A	31-Jan-96	18.2	--	3,860	0	--	15.0
	13-Nov-96	23.4	8.46	4,181	0.5	11.07 b	-265.0 c
	18-Mar-97	22.2	8.64	4,092	0.7	8.48	-141.3 c
18_BGMP09B	31-Jan-96	19.6	--	1,930	-10 a	--	250.0
	13-Nov-96	24.0	7.57	1,233	5.3	13.56 b	-247.3 c
	18-Mar-97	22.2	7.92	3,882	1.3	8.66	11.9
18_BGMP09C	1-Feb-96	20.1	7.09	1,120	-5 a	8.51	240.0
	13-Nov-96	22.6	8.08	1,116	0.3	11.27 b	-248.6 c
	18-Mar-97	22.1	8.33	2,194	0.7	10.10 b	11.6
18_BGMP09D	2-Feb-96	20.2	7.32	1,120	2	8.31	265.0
	13-Nov-96	22.1	7.77	705	1	11.03 b	-249.1 c
	18-Mar-97	21.9	7.71	2,496	0.5	9.36	30.3
18_BGMP09E	2-Feb-96	20.1	7.31	1,480	1	8.75	295.0
	13-Nov-96	21.6	7.32	851	0.9	14.35 b	-220.8 c
	18-Mar-97	21.7	7.59	3,038	0.1	9.42	37.3
18_BGMP09F	2-Feb-96	19.3	7.99	1,680	3	9.28	265.0
	13-Nov-96	21.4	7.62	877	0.6	8.01	-257.2 c
	18-Mar-97	22.6	7.81	3,364	0.2	7.67	63.1
18_BGMP10A	19-Jan-96	18.5	8.57	960	0	9.46	-40.0
	19-Nov-96	20.3	9.16	1,097	0.7	15.66 b	-365.7 c
	20-Mar-97	23.2	8.98	975	7.4	8.86	-166.5 c
18_BGMP10B	23-Jan-96	18.5	7.53	804	8	8.88	-35.0
	19-Nov-96	20.5	7.48	1,102	2.2	13.25 b	-324.1 c
	20-Mar-97	23.0	7.19	964	6.4	8.90	-59.7 c
18_BGMP10C	23-Jan-96	18.1	8.30	549	8	8.82	-40.0
	19-Nov-96	20.3	8.81	707	3.1	10.95 b	-359.6 c
	20-Mar-97	22.9	8.83	661	0.7	7.02	-169.0 c
18_BGMP10D	23-Jan-96	16.7	7.20	639	0	8.87	5.0
	19-Nov-96	20.4	8.26	796	2.2	13.15 b	-361.3 c
	20-Mar-97	22.4	7.92	745	0.7	6.76	-100.1 c
18_BGMP10E	24-Jan-96	18.3	7.38	727	3	10.72 b	10.0
	19-Nov-96	20.7	7.34	1,119	2.6	12.49 b	-353.3 c
	24-Mar-97	21.3	7.23	952	1.3	8.21	5.2

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
18_BGMP10F	24-Jan-96	20.7	7.87	1,630	3	12.61 b	205.0
	19-Nov-96	19.2	7.35	2,130	.1	11.80 b	-335.0 c
	24-Mar-97	20.4	7.53	1,897	3.7	8.97	48.0
18_BGMW01A	26-Jan-96	23.7	7.04	1,920	10	8.78	--
	8-Nov-96	26.0	7.05	2,240	0	0.00	-225.9
	14-Mar-97	26.3	6.80	2,967	0	0.20	-112.2
18_BGMW01B	24-Jan-96	26.5	7.36	1,080	109	9.01	215.0
	6-Nov-96	26.9	7.31	1,230	5.6	2.15	-45.6
	11-Mar-97	26.9	7.17	1,613	0	2.74	-22.8
18_BGMW01C	23-Jan-96	25.2	7.16	1,050	10	6.73	175.0
	5-Nov-96	26.1	7.17	1,090	1.3	6.84	31.5
	11-Mar-97	25.9	7.11	1,637	6.5	6.21	-23.0
18_BGMW01D	23-Jan-96	25.0	7.01	1,280	10	8.33	230.0
	27-Nov-96	25.6	7.15	1,700	2.5	--	71.7
	10-Mar-97	26.2	6.41	1,841	11.2	1.33	-9.5
18_BGMW01E	5-Feb-96	24.8	6.79	1,200	1	11.33 b	210.0
	1-Nov-96	25.5	7.05	1,290	0.9	0.00	58.8
	27-Mar-97	17.8	7.10	1,671	8.4	5.37	54.8
18_BGMW02A	19-Jan-96	25.5	7.43	920	5	8.16	--
	19-Nov-96	26.1	7.67	1,170	1.5	0.00	-185.2
	13-Mar-97	25.6	7.50	1,390	0	0.30	-83.9
18_BGMW02C	18-Jan-96	25.4	7.27	890	10	6.02	315.0
	5-Nov-96	25.5	7.35	991	6.4	2.09	31.3
	11-Mar-97	26.7	7.19	1,339	9.0	2.01	-19.5
18_BGMW02D	17-Jan-96	24.6	7.27	934	10	5.17	305.0
	6-Nov-96	25.2	7.31	1,070	10.1	2.26	28.9
	13-Mar-97	26.1	7.14	1,597	8.1	1.88	-51.6
18_BGMW02E	1-Feb-96	23.6	6.86	1,160	-10 a	6.79	155.0
	1-Nov-96	23.5	6.96	1,160	24	8.34	74.7
	27-Mar-97	24.4	6.85	1,487	54	14.72 b	68.5
18_BGMW03A	29-Feb-96	25.3	7.16	941	0	7.90	--
	7-Nov-96	25.8	7.07	1,072	11.2	8.22	55.3
	21-Mar-97	25.9	7.00	1,168	2.9	8.58	77.3
18_BGMW03B	29-Feb-96	25.0	7.00	872	0	7.98	--
	7-Nov-96	24.9	7.02	870	197 a	8.73	42.5
	21-Mar-97	24.9	7.01	1,051	4.4	7.71	106.7
18_BGMW03C	12-Feb-96	24.2	6.69	900	0	8.79	245.0
	6-Nov-96	24.2	7.11	913	10.4	9.50	33.0
	21-Mar-97	24.2	6.98	1,067	14.3	9.23	110.2
	8-Jul-97	25.4	6.96	1,220	10.8	10.57 b	90.9
18_BGMW03E	5-Feb-96	25.1	7.01	1,300	-10 a	8.87	240.0
	21-Nov-96	24.7	6.95	1,470	125	4.50	101.7
	18-Mar-97	25.1	6.67	2,601	94	4.61	-24.3
	8-Jul-97	25.1	6.83	1,600	381 a	5.47	244.1

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
18_BGMW04A	28-Feb-96	23.5	6.67	959	0	6.87	--
	11-Nov-96	25.6	6.86	1,072	19.2	6.02	84.0
	17-Mar-97	24.6	6.85	1,742	4.4	4.46	68.5
18_BGMW04B	19-Jan-96	23.0	7.00	1,400	144	9.51	195.0
	14-Nov-96	23.3	6.66	1,790	37	9.20	125.2
	18-Mar-97	23.3	6.98	2,510	33	9.17	-12.4 c
	9-Jul-97	24.0	6.95	1,670	31	9.42	177.8
18_BGMW05A	26-Jan-96	26.1	7.37	3,700	9	7.48	--
	9-Jan-97	26.0	7.57	5,840	5.3	0.17	-148.8
	26-Mar-97	25.2	7.27	6,020	4.2	-6.68 b	-99.2
18_BGMW05B	29-Feb-96	25.2	6.20	1,080	0	8.06	--
	7-Nov-96	25.7	7.00	1,153	1.5	7.51	42.2
	19-Mar-97	25.9	6.69	2,168	0.4	6.96	60.6
18_BGMW05C	29-Feb-96	24.8	7.05	1,100	0	8.35	--
	7-Nov-96	24.5	7.09	1,137	6.5	8.28	71.1
	19-Mar-97	24.7	7.10	2,219	3.1	8.27	69.3
18_BGMW05D	19-Feb-96	22.9	6.51	1,480	41	8.23	150.0
	4-Dec-96	22.8	6.89	1,775	26	5.80	88.9
	19-Mar-97	23.1	6.73	2,769	11.3	5.81	55.6
	7-Jul-97	24.3	6.73	1,650	41	6.06	60.3
18_BGMW07	9-Feb-96	20.4	6.67	2,020	-10 a	8.37	240.0
	24-Mar-97	20.9	6.66	1,729	19.2	0.93	21.0
18_BGMW101	29-Jan-96	23.0	6.96	2,150	84	8.92	105.0
	14-Nov-96	22.9	6.83	2,940	26	7.84	99.2
	18-Mar-97	23.7	6.87	4,189	31	7.97	-25.6 c
	9-Jul-97	24.0	6.90	2,720	19.1	7.86	86.4
18_BGMW12	2-Feb-96	25.1	6.82	2,370	4	6.25	10.0
	25-Nov-96	26.0	7.32	2,600	32	0.09	31.9
	20-Mar-97	25.9	7.21	2,638	44	0.62	-49.0
18_BGMW14	16-Feb-96	22.5	6.41	1,720	0	9.64	160.0
	15-Nov-96	21.8	6.62	2,250	60	6.14	54.4
	18-Mar-97	21.9	6.58	3,122	180	2.95	46.8
18_BGMW15	2-Feb-96	23.8	6.91	2,480	5	6.91	245.0
	8-Nov-96	24.7	6.95	3,120	1.9	5.12	37.3
	19-Mar-97	24.4	7.04	3,088	0.4	2.40	-23.7
18_BGMW16	19-Jan-96	24.7	7.03	1,500	68	7.62	80.0
	14-Nov-96	23.7	7.16	2,249	13.1	8.18	110.3
	26-Mar-97	25.0	7.03	1,952	2.4	8.49	85.0
18_BGMW17	29-Jan-96	22.8	7.13	1,250	122	8.44	90.0
	8-Nov-96	24.4	6.76	1,380	19	6.59	-37.6
	14-Mar-97	23.8	7.09	2,172	10.0	6.95	-23.2
18_BGMW18	5-Feb-96	23.6	6.91	1,470	2	11.15 b	245.0
	9-Jan-97	23.8	7.23	1,580	6.6	7.69	79.0

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
18_BGMW19A	1-Mar-96	26.1	6.84	1,130	0	7.65	--
	4-Nov-96	26.6	6.96	1,284	9.5	4.72	179.0
	10-Mar-97	27.4	7.03	1,653	5.8	3.00	116.9
18_BGMW19B	11-Mar-96	25.4	7.10	1,060	0	7.99	--
	4-Nov-96	25.7	7.15	1,105	4.9	5.84	135.2
	10-Mar-97	26.1	7.08	1,440	6.9	5.20	113.6
18_BGMW19C	29-Feb-96	23.8	6.91	1,850	0	8.82	--
	5-Nov-96	29.4	7.01	1,952	8.9	5.45	-89.8
	10-Mar-97	26.7	6.95	2,793	3.0	6.80	152.8
18_BGMW19D	16-Feb-96	25.0	6.93	2,410	-7 a	8.39	205.0
	4-Nov-96	22.3	7.04	2,730	19.5	7.69	170.4
	10-Mar-97	23.5	6.90	3,792	4	9.00	154.5
18_BGMW19E	6-Feb-96	22.8	6.74	2,270	0	7.70	255.0
	20-Nov-96	22.9	6.82	3,020	12.1	5.50	125.0
18_BGMW22	22-Jan-96	23.7	7.34	1,270	10	5.82	160.0
	14-Nov-96	24.5	7.36	1,850	8.1	--	72.2
	20-Mar-97	25.3	7.01	1,457	9.6	7.96	-14.9
18_BGMW23	19-Feb-96	21.4	6.66	1,220	39	8.79	215.0
	5-Dec-96	21.4	7.13	1,771	120	8.54	142.7
	18-Mar-97	21.6	6.79	2,628	65	5.28	108.7
18_BGMW24	7-Feb-96	21.7	7.27	1,000	1	11.69 b	240.0
	26-Nov-96	21.7	7.53	1,420	9.2	5.59	92.7
	25-Mar-97	21.3	7.18	1,357	12	5.83	-1.1
18_DW135	19-Feb-96	24.1	6.62	2,870	39	7.52	250.0
	5-Nov-96	24.5	6.88	3,052	77	5.63	-154.1 c
	7-Mar-97	24.2	6.94	3,858	133	6.70	110.2
	7-Jul-97	25.9	6.90	3,380	127	6.31	110.5
18_DW250	31-Jan-96	23.1	6.90	1,050	0	7.39	75.0
	5-Nov-96	24.4	7.11	1,091	21	8.18	-96.8 c
	7-Mar-97	24.6	6.98	1,435	110	7.22	88.9
18_DW350	29-Jan-96	25.3	7.01	980	36	7.44	125.0
	6-Nov-96	26.0	7.23	972	405 a	3.99	-90.6
	6-Mar-97	25.3	7.17	1,374	39	4.09	-51.5
18_DW450	29-Jan-96	24.8	6.99	1,030	0	8.09	145.0
	5-Nov-96	25.6	7.17	1,156	14.9	5.14	-173.9
	6-Mar-97	25.6	7.09	1,441	290 a	4.45	-55.7
18_DW540	30-Jan-96	24.9	6.91	1,050	21	6.47	--
	6-Nov-96	26.8	7.25	1,080	97	4.32	-31.0
	6-Mar-97	26.8	6.94	1,387	111	4.13	-28.3
18_MCAS01-1	24-Jan-96	19.2	7.57	2,060	2	11.57 b	230.0
	18-Nov-96	19.9	7.04	2,890	0.6	9.61	-243.2 c
	19-Mar-97	21.8	7.09	2,459	3.4	6.75	57.5

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
18_MCAS01-2	24-Jan-96	18.2	7.26	3,010	2	8.20	245.0
	18-Nov-96	20.6	6.95	4,275	10.7	15.69 b	-186.3 c
	19-Mar-97	22.3	6.98	3,452	10.4	9.57	80.3
18_MCAS01-3	18-Jan-96	20.8	7.31	2,220	10	11.28 b	165.0
	18-Nov-96	20.5	6.87	1,916	3.7	12.43 b	-206.3 c
	19-Mar-97	22.2	7.16	2,135	6.7	9.08	75.2
	2-Jul-97	21.4	7.09	2,220	7.0	9.09	223.6
18_MCAS01-4	18-Jan-96	18.4	7.46	1,780	0	9.08	165.0
	18-Nov-96	20.9	7.20	1,102	3.4	12.02 b	-191.4 c
	19-Mar-97	22.7	7.48	1,735	0.0	10.66 b	52.3
	2-Jul-97	20.8	7.34	1,830	1.7	8.51	223.1
18_MCAS01-5	18-Jan-96	20.2	7.60	1,350	1	8.55	160.0
	18-Nov-96	20.5	7.64	1,653	3.4	11.69 b	-178.3 c
	19-Mar-97	22.8	7.69	1,354	0.0	9.87	37.0
	1-Jul-97	22.6	7.75	1,320	2.8	8.37	189.1
18_MCAS01-6	18-Jan-96	19.2	7.01	1,250	1	8.65	160.0
	15-Nov-96	20.2	6.62	1,505	1.5	11.62 b	-266.3 c
	19-Mar-97	22.4	6.75	1,275	9.3	9.44	23.2
18_MCAS01-7	17-Jan-96	18.9	6.25	1,010	13	9.63	-35.0
	15-Nov-96	21.0	5.85	1,509	0.8	16.17 b	-276.5 c
	19-Mar-97	21.8	5.49	1,060	7.0	7.82	-4.6
18_MCAS02-1	30-Jan-96	18.2	7.09	3,520	72	--	270.0
	12-Nov-96	20.9	7.33	1,834	66	5.22	-209.3 c
	13-Mar-97	21.1	7.36	2,636	0.5	5.91	132.6
18_MCAS02-2	30-Jan-96	19.5	6.92	3,600	2	--	260.0
	12-Nov-96	21.1	7.08	1,802	11.4	5.99	-202.6 c
	13-Mar-97	20.7	7.35	3,362	1.6	8.08	111.4
18_MCAS02-3	30-Jan-96	19.4	6.87	1,660	1	8.51	205.0
	12-Nov-96	21.2	7.42	1,632	1.8	6.58	-207.8 c
	13-Mar-97	21.1	7.71	2,625	0.3	7.63	118.2
	2-Jul-97	24.4	7.61	1,780	1.0	8.69	176.9
18_MCAS02-4	29-Jan-96	19.8	7.60	1,700	180	8.28	245.0
	12-Nov-96	21.7	7.03	1,478	2.2	7.18	-179.3 c
	13-Mar-97	20.0	7.48	2,382	2.0	9.87	119.6
	2-Jul-97	24.7	7.32	1,580	0.9	10.96 b	187.3
18_MCAS02-5	29-Jan-96	18.6	7.67	1,580	-7 a	8.73	260.0
	12-Nov-96	22.3	7.27	1,190	3.8	5.30	-173.3 c
	12-Mar-97	20.0	7.46	2,121	3.3	7.95	89.6
	2-Jul-97	23.7	7.44	1,510	1.7	8.83	205.3
18_MCAS02-6	29-Jan-96	19.3	7.70	2,420	-6 a	8.43	255.0
	12-Nov-96	20.8	7.21	2,195	2.1	8.26	-192.5 c
	12-Mar-97	20.7	7.32	3,262	3.8	7.07	11.5
18_MCAS02-7	29-Jan-96	19.5	7.09	3,050	0	8.50	65.0
	12-Nov-96	22.4	6.57	2,676	1.6	5.73	-182.7 c
	12-Mar-97	20.3	6.87	4,153	0.4	7.49	10.2

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
18_MCAS02-8	29-Jan-96	19.2	6.36	2,510	25	8.51	100.0
	12-Nov-96	22.1	5.98	2,135	13	6.63	-153.7 c
	12-Mar-97	20.8	5.96	3,337	13.7	6.94	47.3
18_MCAS03-1	6-Feb-96	19.8	7.62	2,350	14	8.28	145.0
	6-Nov-96	20.2	6.97	2,346	199 a	4.91	-198.4 c
	12-Mar-97	20.8	7.40	1,944	0.4	6.57	138.6
	1-Jul-97	23.8	7.25	1,270	2.8	6.10	187.8
18_MCAS03-2	6-Feb-96	21.0	7.08	1,910	12	8.31	120.0
	6-Nov-96	22.0	6.69	2,030	258 a	6.94	-192.0 c
	11-Mar-97	21.6	7.02	2,904	73	6.23	104.5
	1-Jul-97	24.0	7.16	2,160	24	7.61	166.1
18_MCAS03-3	6-Feb-96	22.0	7.36	1,170	0	9.00	230.0
	6-Nov-96	22.5	7.26	1,322	206 a	9.10	-191.5 c
	11-Mar-97	22.6	7.40	1,957	2.6	5.59	120.0
	1-Jul-97	23.9	7.32	1,410	2.4	8.50	132.7
18_MCAS03-4	6-Feb-96	21.1	7.63	1,020	9	9.86	195.0
	6-Nov-96	24.6	7.31	1,095	213 a	9.64	-30.4 c
	11-Mar-97	23.1	7.31	1,531	33	5.75	115.2
18_MCAS03-5	6-Feb-96	21.3	7.63	817	4	8.22	230.0
	6-Nov-96	22.4	7.44	953	196 a	7.08	-19.6 c
	11-Mar-97	22.1	7.53	1,392	0.0	8.07	116.2
18_MCAS03-6	6-Feb-96	21.3	5.73	1,030	-10 a	7.53	80.0
	6-Nov-96	21.9	5.77	1,097	3.9	9.37	-18.7 c
	11-Mar-97	22.4	5.89	1,614	3.2	6.88	44.0
18_MCAS04	9-Feb-96	20.6	6.62	1,380	0	7.88	60.0
	19-Nov-96	20.2	6.80	1,940	3.7	4.57	-8.2
	13-Mar-97	20.7	6.85	2,252	650 a	-1.87 b	16.0
	14-Jul-97	21.5	6.69	1,960	--	1.91	72.6
18_MCAS05A	31-Jan-96	21.4	7.01	1,140	0	9.61	-35.0
	26-Nov-96	21.6	7.35	1,345	4.6	2.88	-111.2
	18-Mar-97	22.2	7.14	2,111	169	1.23	-77.4
18_MCAS06	16-Jan-96	21.9	7.14	1,100	10	8.26	--
	19-Nov-96	22.0	6.95	1,595	4.3	1.95	-46.0
	25-Mar-97	22.5	6.80	1,355	26	0.54	-17.0
	15-Jul-97	22.9	6.91	1,640	43	1.22	-19.6
18_MCAS07-1	9-Feb-96	20.0	7.17	2,930	31	9.10	285.0
	20-Nov-96	20.5	7.27	3,860	0.5	8.53	93.8
	26-Mar-97	19.9	6.97	3,467	1.0	10.16 b	117.7
18_MCAS07-2	9-Feb-96	20.2	7.22	1,130	-10 a	8.67	285.0
	20-Nov-96	21.8	7.44	1,300	0.5	7.94	73.8
	26-Mar-97	21.2	7.17	739	4.4	10.74 b	91.5
18_MCAS07-3	9-Feb-96	20.4	7.47	1,110	-10 a	8.05	280.0
	20-Nov-96	22.2	7.20	1,105	0.5	7.88	86.2
	26-Mar-97	21.1	7.56	1,292	9.2	12.04 b	81.7
	10-Jul-97	24.4	7.16	1,600	3.0	8.79	215.6

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
18_MCAS07-4	8-Feb-96	23.1	7.63	1,090	-10 a	10.00 b	280.0
	20-Nov-96	22.6	7.23	1,369	0.5	6.75	38.1
	26-Mar-97	22.5	7.23	1,236	1.5	7.99	26.4
	10-Jul-97	23.4	7.33	1,510	1.5	8.78	192.4
18_MCAS07-5	8-Feb-96	23.7	7.01	2,490	-10 a	9.96	240.0
	11-Nov-96	22.7	6.53	2,778	0.3	5.68	-218.6 c
	26-Mar-97	22.4	7.41	3,627	8.8	10.38 b	130.1
	10-Jul-97	23.0	6.59	3,990	1.3	8.85	176.7
18_MCAS07-6	8-Feb-96	23.6	7.26	2,600	-10 a	10.28 b	245.0
	11-Nov-96	23.1	6.73	2,948	0.1	5.27	-208.5
	26-Mar-97	22.7	7.00	1,556	7.2	9.28	117.4
18_MCAS07-7	8-Feb-96	24.1	7.23	2,130	6	10.27 b	250.0
	11-Nov-96	23.1	6.65	2,985	0.5	4.73	-202.4
	26-Mar-97	23.1	6.77	3,230	6.5	8.98	103.6
18_MCAS07-8	8-Feb-96	22.3	7.05	2,630	-10 a	8.31	160.0
	11-Nov-96	23.0	6.40	3,194	0.4	6.74	-203.8 c
	26-Mar-97	22.1	6.42	2,557	2.1	8.89	77.0
18_MCAS07-9	25-Jan-96	18.9	6.39	2,870	1	8.34	165.0
	11-Nov-96	22.7	6.29	2,855	0.2	5.60	-202.8
	26-Mar-97	20.2	7.81	666	1.3	8.83	49.7
18_MCAS08	1-Feb-96	24.4	7.48	1,670	0	7.65	10.0
	20-Nov-96	24.2	8.07	2,169	0.4	-0.01	-255.4
	26-Mar-97	25.3	7.88	2,042	28	-0.60	-223.2
	14-Jul-97	27.3	7.91	2,240	714 a	0.28	-234.4
18_MCAS09	16-Jan-96	23.7	7.28	720	10	9.85	50.0
	19-Nov-96	24.5	7.21	1,207	7	0.69	-106.4
	26-Mar-97	25.2	7.07	965	285 a	-0.69	82.4
	14-Jul-97	26.0	7.09	1,100	33	0.13	-97.4
18_MCAS10	19-Jan-96	23.7	7.23	1,260	<10	8.32	40.0
	19-Nov-96	23.7	7.17	1,890	6.4	0.72	-110.5
	18-Mar-97	25.4	7.03	2,478	11.0	0.05	-80.9
	15-Jul-97	25.5	7.08	1,690	23	0.18	-100.9
18_PS1	19-Jan-96	22.3	7.19	2,620	<10	7.36	150.0
	25-Nov-96	23.8	6.62	3,020	64	18.07 b	290.0
	17-Mar-97	23.6	6.88	4,167	18.3	9.85	91.5
18_PS2	18-Jan-96	23.2	7.08	2,130	<10	6.44	215.0
	25-Nov-96	24.1	6.79	2,759	28	29.50 b	260.0
	25-Mar-97	24.3	6.89	2,506	330 a	7.79	115.6
	7-Jul-97	25.9	6.96	2,630	543 a	9.46	104.2
18_PS3	22-Feb-96	22.8	6.73	1,180	28	8.43	225.0
	8-Jan-97	23.1	6.98	1,169	86	8.27	93.7
	14-Mar-97	22.1	7.01	1,934	233 a	10.99 b	136.5
	11-Jul-97	24.7	6.83	1,630	261 a	7.40	126.8

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
18_PS4	21-Feb-96	22.5	6.62	1,620	29	8.68	250.0
	15-Dec-96	22.1	6.97	1,950	10.7	7.67	177.2
	14-Mar-97	23.7	6.80	2,281	28	8.29	80.1
18_PS5	22-Jan-96	22.4	8.41	1,670	<10	10.18 b	215.0
	11-Nov-96	22.5	6.91	1,672	18.9	8.85	101.9
	17-Mar-97	22.5	6.97	2,490	86	8.20	112.8
	11-Jul-97	23.9	6.80	2,070	9.4	9.15	125.5
18_PS6	26-Jan-96	23.8	6.65	1,780	0	6.28	260.0
	25-Nov-96	24.3	6.84	2,282	59	12.39 b	240.0
	25-Mar-97	23.2	6.96	1,963	30	7.36	102.9
	1-Jul-97	25.0	7.01	1,460	302 a	6.66	150.6
18_PS7	22-Jan-96	22.6	8.82	1,130	-4 a	10.15 b	245.0
	8-Nov-96	24.5	7.12	1,474	8.2	8.47	32.1
	14-Mar-97	22.4	7.20	2,105	9.2	12.62 b	119.4
18_PS8	26-Jan-96	23.7	6.62	1,330	2	6.13	260.0
	25-Nov-96	22.7	6.76	1,702	16.1	29.35 b	230.0
	20-Mar-97	24.5	6.76	1,519	58	8.06	109.0
18_RW1	23-Jan-96	24.1	7.94	1,270	-10 a	3.72	100.0
	8-Nov-96	25.5	7.12	1,374	203 a	3.22	-34.2
	17-Mar-97	25.5	7.13	2,297	95	4.39	-39.0
18_RW2	24-Jan-96	23.7	7.24	1,040	4	4.56	115.0
	8-Nov-96	25.2	7.14	1,122	188	5.96	2.1
	14-Mar-97	25.0	7.16	1,791	50	11.67 b	5.5
18_RW3	25-Jan-96	22.7	7.19	1,250	13	7.45	50.0
18_RW4	26-Jan-96	21.3	6.57	2,170	1	7.32	260.0
19_DBMW54	19-Feb-96	25.5	6.90	1,010	56	7.30	220.0
	3-Dec-96	24.6	7.04	1,440	192	7.67	82.6
	11-Mar-97	25.0	6.85	1,577	11.7	8.99	104.0
19_DGMW85	19-Feb-96	25.5	6.93	1,150	68	7.45	175.0
	3-Dec-96	24.7	7.14	1,588	-795 a	6.77	91.9
	11-Mar-97	25.4	6.88	1,910	295 a	4.80	101.0
19_DGMW86	27-Feb-96	21.1	7.40	1,250	560 a	7.67	--
	3-Dec-96	21.0	7.33	1,730	163	5.83	53.1
	11-Mar-97	26.4	7.29	2,036	212 a	8.90	120.0
19_UGMW35	8-Feb-96	24.0	6.54	1,030	0	6.47	150.0
	21-Nov-96	24.7	6.65	1,030	166	6.44	81.5
	18-Mar-97	25.0	6.40	2,101	66	6.94	-24.5
20_DBMW55	27-Feb-96	22.0	6.93	2,120	14	7.58	--
	14-Nov-96	23.9	4.53	2,931	190	2.27	60.2
	5-Mar-97	26.2	7.05	3,167	566 a	6.22	47.3
20_DGMW88	1-Feb-96	24.9	6.90	2,280	183	7.06	155.0
	25-Nov-96	25.8	7.34	1,950	135	1.21	31.4
	20-Mar-97	25.7	6.78	2,652	174	5.90	-13.4

Table C-1: FIELD PARAMETERS MEASURED DURING GROUNDWATER SAMPLING
MCAS El Toro Groundwater Monitoring Program

Station I.D.	Measurement Date	Temperature (° Celsius)	pH	Conductivity (umhos/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox (mv)
20_UGMW36	5-Feb-96	25.5	6.81	2,610	4	10.38 b	140.0
	14-Nov-96	24.6	7.23	3,502	17.5	6.34	54.5
	27-Mar-97	26.2	7.09	3,250	41	8.58	60.2
21_DBMW56	15-Feb-96	23.2	6.43	1,290	0	9.27	195.0
	13-Nov-96	23.6	6.92	1,271	1.4	8.88	76.7
	25-Mar-97	23.2	6.73	1,473	310 a	10.57 b	81.6
21_DGMW90	2-Feb-96	22.7	6.96	1,350	-10 a	7.85	130.0
	26-Nov-96	23.6	6.97	1,730	89	5.96	64.9
	20-Mar-97	23.8	6.69	1,502	140	8.36	-9.9 c
21_UGMW37	12-Feb-96	23.3	6.66	1,410	0	7.38	130.0
	11-Nov-96	25.0	7.01	1,540	474 a	6.97	51.8
	25-Mar-97	23.8	6.81	1,620	237 a	9.79	37.9
	9-Jul-97	25.7	6.92	1,860	41	8.65	50.0
22_DBMW47	15-Feb-96	25.9	6.88	1,400	2	7.89	215.0
	2-Dec-96	23.7	7.01	1,805	15	8.00	125.9
	24-Mar-97	23.0	6.84	1,626	6.9	10.50 b	100.6
	8-Jul-97	27.4	6.85	1,830	8.4	7.60	78.8
24_NEW01	2-Dec-96	24.8	7.02	1,442	39	6.55	106.5
	24-Mar-97	24.1	7.07	1,288	74	7.97	108.1
	10-Jul-97	25.2	6.83	1,860	621 a	18.87 b	92.9
24_NEW04	3-Dec-96	23.9	7.03	1,726	729 a	7.21	56.7
	21-Mar-97	23.9	6.86	1,498	490 a	8.36	82.4
	8-Jul-97	25.0	6.90	1,700	181	8.90	70.4
24_NEW05	2-Dec-96	24.7	7.13	1,350	19.2	7.81	132.8
	24-Mar-97	24.5	6.92	1,209	24	9.14	114.1
	8-Jul-97	25.4	6.91	1,360	293 a	9.43	93.2
24_NEW06	2-Dec-96	23.9	7.38	1,258	88	4.06	135.6
	19-Mar-97	26.5	6.98	2,002	48	4.78	98.5
	10-Jul-97	25.8	6.89	1,390	28	15.31 b	97.0
24_NEW07	3-Dec-96	23.6	6.75	2,686	488 a	5.27	71.0
	12-Mar-97	23.8	6.59	3,158	410 a	5.00	67.5
	2-Jul-97	24.5	6.58	2,020	671 a	5.00	29.7
24_NEW08	3-Dec-96	24.6	6.94	2,285	317 a	7.04	88.9
	12-Mar-97	23.7	6.89	2,533	50	9.24	85.1
	2-Jul-97	25.3	6.80	1,770	132	7.84	45.9

EXPLANATION

1. Abbreviations:
   umhos/cm = micromhos per centimeter, NTU = nephelometric turditity unit, mg/L = milligrams per liter, mv = millivolts
   (--) = data not measured or available

2. Jan-Feb 1996 field parameters were collected with a Horiba U-10 Water Quality Checker.
   Nov-Dec 1996, March 1997, and July 1997 field parameters were collected with a YSI 6000 Environmental Monitoring System.

3. Field parameters listed are final readings measured prior to sampling; see Appendix F for purging and sampling information.
   Electrical conductivity and dissolved oxygen corrected to 25°C; turbidity readings above 20 NTU rounded off to whole unit

4. Field measurement qualifers:
   (a) denotes turbidity measurement beyond expected range.
   (b) denotes dissolved oxygen measurement beyond expected range.
   (c) denotes redox measurement inconsistent with expected correlation with dissolved oxygen reading.

APPENDIX D

DATA VALIDATION REPORT, JULY 1997 SAMPLING ROUND

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APPENDIX D

DATA VALIDATION REPORT

JULY 1997 GROUNDWATER SAMPLING ROUND

Marine Corps Air Station, El Toro, California

During the July 1997 groundwater sampling round at Marine Corps Air Station, El Toro, California, a total of 77 groundwater monitoring wells were sampled for analyses of volatile organic compounds (VOCs) and general chemistry parameters. Selected wells were also sampled for dissolved metals and treatability parameters. In addition, quality control (QC) samples, i.e., field duplicates (FD), rinsate blanks (RB), trip blanks (TB), air contamination blanks (ACB), and matrix spike/matrix spike duplicate (MS/MSD) samples, were also collected. The analyses were performed by Applied P&Ch Laboratory (APCL) located in Chino, California.

According to the delivery order requirement described in the Navy's SOW and the Quality Assurance Project Plan (QAPP) (CDM Federal, 1995, and 1996a), 10 percent (%) of the analytical results were validated. This Data Validation Report (DVR) consists of three individual reports for each analysis performed in selected sample delivery groups (SDGs).

The following individual DVR/SDGs were prepared:

- Report No. 1, twenty VOC samples in SDG 973105,
- Report No. 2, seventeen general chemistry and treatability parameters samples in SDG 973105, and
- Report No. 3, six dissolved metals samples in SDG 973184.

The selection of SDGs followed the following criteria: (1) to confirm new detects or anomolous results; (2) to include field QC results, such as FD, RB, etc., as much as possible; and, (3) to select SDGs which are representative over the duration of the sampling round. The data validation was performed following the Naval Facilities Engineering Service Center (NFESC) Interim Guidance Document "Navy Installation Restoration Laboratory Quality Assurance Guide" dated February 1996 (NFESC, 1996). The data validation guidelines were supplemented by the USEPA guidance document for data validation "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," (USEPA, 1994b) and "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," both dated February 1994 (USEPA, 1994a), where applicable.

Data qualifiers resulted from data validation process are noted in Analytical Data Sheets (Form-1) that are submitted by the laboratory and are included as attachments to each respective DVR. All data are considered usable for the intended purpose taking into account the following qualifiers: "J" (estimated value), "N" (presumptive evidence for the presence of the material), "U" (non-detected), or "JN" (presumptive evidence for the presence of the material at an estimated value). "J" qualified data should be used with caution. The data qualifiers assigned are discussed in the individual DVRs.

Report No. 1
JULY 1997 EL TORO
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS: Volatile Organic Compounds
By CLP SOW OLM03.0

SAMPLE DELIVERY GROUP: 973105

SAMPLE NUMBERS:

02UGMW25-004	02DGMW61-004	02NEW6-004
02NEW8A-004	02NEW3-004	16DGMW81-004
24NEW7-004	24NEW8-004	15DBMW51-004
18MCAS01-3-004	18MCAS01-4-004	18MCAS02-3-004
18MCAS02-4-004	18MCAS02-5-004	

24NEW7-304 (Duplicate of 24NEW7-004)
15DBMW51-304 (Duplicate of 15DBMW51-004)
16DGMW81-904 (Air contamination blank)
TB7-3-97DP/AM (Trip blank)
TB7-3-97ND/AM (Trip blank)
TB7-3-97WB (Trip blank)

This VOC DVR is for 20 aqueous samples listed above. The data qualifiers assigned and their specific concentrations are noted in Analytical Data Sheets (Form-1) submitted by the laboratory which are included in this DVR as Attachment 1. The results of the data validation are summarized below.

1. SAMPLE PRESERVATION AND TEMPERATURE

All samples were preserved according to the required protocol. The sample coolers arrived at the laboratory at temperatures between 4 and 5 degrees centigrade (°C), which met the criteria. No action was required.

2. HOLDING TIME

The samples were analyzed within the required holding time. No action was required.

3. GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) INSTRUMENT PERFORMANCE CHECK

A GC/MS instrument performance check was conducted and all criteria were met. No action was required.

4. INITIAL CALIBRATION

The percent relative standard deviation (%RSD) of relative response factors (RRFs) within the initial calibration are required to be less than or equal to 30%. All RRFs are required to be greater than or equal to 0.05. The initial calibration for this SDG met the requirement. Therefore, no action was required.

5. CONTINUING CALIBRATION

The percent difference (%D) of RRFs between initial and continuing calibration is required to be less than or equal to 25%, and the RRF must be greater than or equal to 0.05. The %D within the following continuing calibrations exceeded the QC limit (Table 1-1).

Table 1-1
Samples with Continuing Calibration Deficiencies

Date (Time)	Analyte (%D)	Associated Non-detected Sample
7/12/97 (03:04)	Bromomethane (25.2) Acetone (35.3)	02DGMW61-004 02NEW3-004 02NEW8A-004 02UGMW25-004 02NEW6-004
7/11/97 (16:57)	Acetone (41.7) Carbon disulfide (29.1)	15DBMW51-004 15DBMW51-304 16DGMW81-004 16DGMW81-904 18MCAS01-3-004 18MCAS01-4-004 18MCAS02-3-004 18MCAS02-4-004 18MCAS02-5-004

Date (Time)	Analyte (%D)	Associated Non-detected Sample
7/14/97 (11:05)	Acetone (52.4) 2-Butanone (27.5) 2-Hexanone (29.9)	24NEW7-004 24NEW7-304 24NEW8-004 TB7-3-97-DP/AM TB7-3-97ND/AM TB7-3-97WB

Because the analytes listed in Table 1-1 were not detected in any associated samples, non-detected results of these analytes in the associated samples were qualified as estimated (UJ).

6. BLANK CONTAMINATION

A) Method Blank

Five method blanks were analyzed along with the samples in this SDG. None of the target analytes were detected in any of the method blanks. Therefore, no action was required.

B) Trip Blank

Three trip blank samples were included in this SDG. No target compounds were detected in this sample. Therefore, no action was taken.

C) Other Blanks

A total of four rinsate blanks (RB) and three air contamination blanks (ACB) were collected during this sampling round. Several target analytes were detected in these blanks. The highest concentration of these contaminants are summarized in Table 1-2. Based on the ten-times-rule for methylene chloride and acetone, and five-times-rule for other contaminants, the action levels are listed in Table 1-2. Sample results that were less than the action levels were considered to be affected and were qualified as non-detect (U). The affected samples are listed in Table 1-2.

Table 1-2
ACB/RB Contamination and Their Affected Samples

Contaminant	Highest Concentration (ug/L)	Action Level (ug/L)	Affected Sample
Methylene chloride	3	30	15DBMW51-304 16DGMW81-004 16DGMW81-904
Acetone	3	30	None
Benzene	0.9	4.5	15DBMW51-004 15DBMW51-304
Chlorobenzene	0.7	3.5	None
Ethylbenzene	0.6	3	None
Tetrachloroethene	0.9	4.5	None
Toluene	1	5	None
Xylenes	2	10	None

7. SYSTEM MONITORING COMPOUNDS (SMC)

SMCs were added to all samples and quality control (QC) samples. All criteria were met. Therefore, no action was required.

8. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)

The data for the three MS/MSD samples in this SDG were reviewed. Results for two MS/MSD analyses met the required control limits. The %R results for sample 02DGMW60-004 MS/MSD analyses exceeded the control limits. The out of control analytes are listed in Table 1-3. However, since these analytes in the LCS were within QC limits, no action is required based on the MS/MSD results alone.

Table 1-3
MS/MSD Out of QC Control Results

Analyte	MS Recovery (%)	MS Control Limit (%)	RPD (%)	RPD Control Limit (%)
Toluene	75	76 - 125	11	13
Trichloroethene	52/66	71 - 120	24	14
Benzene	13	76 - 127	13	11

9. LABORATORY CONTROL SAMPLES

Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) analyses were performed and the results were within the required control limits. Therefore, no action was required.

10. INTERNAL STANDARDS

Internal standards were added to all samples and QC samples. All criteria were met and no action was required.

11. FIELD DUPLICATES

Two pairs of field duplicate samples were included in this SDG, 15DBMW51-004/15DBMW51-304 and 24NEW7-004/24NEW7-304. RPD results between field duplicate results were within the control limits. Therefore, no action was required.

12. COMPOUND IDENTIFICATION AND QUANTITATION

Criteria for compound identification and quantitation were all met. Therefore, no action was required.

13. TENTATIVELY IDENTIFIED COMPOUND (TIC)

Several TICs were detected. Results of all TICs were qualified as tentatively identified and their associated numerical value were estimated (NJ). Results of TICs and their qualifiers are presented in Attachment 1.

14. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Criteria for system performance were all met. Therefore, no action was required.

Several analytes were identified at concentrations lower than the Contract Required Quantitation Limit (CRQL). These results had been qualified as estimated (J) in Form-1 (see Attachment 1).

Overall, the VOC data generated in this SDG were usable for the intended purposes with the consideration of data qualifiers assigned.

ATTACHMENT 1

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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:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-1	Received Date:	07/03/97
Sample ID:	**02DGMW61-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: Q
Anal. Method:	CLP-VOC	Prep. Date:	07/12/97	Anal. Date:	07/12/97
Batch No:	97G3099	Prep. No:	–	Anal. Time:	06:27
Data File Name:	3105-01	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	UJ
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	10	
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	96
2	1,2-Dichloroethane-d4	17060-07-0	76-114	104
3	Toluene-d8	2037-26-5	88-110	103

35521

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	96
2	Chlorobenzene-d5	3114-55-4	50-200	95
3	1,4-Difluorobenzene	540-36-3	50-200	98
# of out-of-control				0

Not Detected (N.D.) 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

35521

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-2	Received Date:	07/03/97
Sample ID:	**02NEW3-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: Q
Anal. Method:	CLP-VOC	Prep. Date:	07/12/97	Anal. Date:	07/12/97
Batch No:	97G3099	Prep. No:	–	Anal. Time:	07:01
Data File Name:	3105-02	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	UJ
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	104
2	1,2-Dichloroethane-d4	17060-07-0	76-114	112
3	Toluene-d8	2037-26-5	88-110	110

35523

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	94
2	Chlorobenzene-d5	3114-55-4	50-200	91
3	1,4-Difluorobenzene	540-36-3	50-200	94
# of out-of-control				0

Not Detected (N.D.) 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

3552

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-3	Received Date:	07/03/97
Sample ID:	**02NEW6-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: Q
Anal. Method:	CLP-VOC	Prep. Date:	07/12/97	Anal. Date:	07/12/97
Batch No:	97G3099	Prep. No:	–	Anal. Time:	09:17
Data File Name:	3105-03	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	UJ
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

TIC (Tentative Identified Components)			RT (min)		
1	Unknown	µg/L	21.02	11	J

Surrogates	Control Limit, %	Surro. Rec.%

35525

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	93
2	1,2-Dichloroethane-d4	17060-07-0	76-114	107
3	Toluene-d8	2037-26-5	88-110	104
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	88
2	Chlorobenzene-d5	3114-55-4	50-200	82
3	1,4-Difluorobenzene	540-36-3	50-200	86
# of out-of-control				0

Not Detected (N.D.) 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

35526

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-4	Received Date:	07/03/97
Sample ID:	**02NEW8A-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: Q
Anal. Method:	CLP-VOC	Prep. Date:	07/12/97	Anal. Date:	07/12/97
Batch No:	97G3099	Prep. No:	–	Anal. Time:	08:09
Data File Name:	3105-04	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	UJ
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	12	
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	103
2	1,2-Dichloroethane-d4	17060-07-0	76-114	113
3	Toluene-d8	2037-26-5	88-110	109

35527

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	90
2	Chlorobenzene-d5	3114-55-4	50-200	89
3	1,4-Difluorobenzene	540-36-3	50-200	94
# of out-of-control				0

Not Detected (N.D.) 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

35528

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-5	Received Date:	07/03/97
Sample ID:	**02UGMW25-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: Q
Anal. Method:	CLP-VOC	Prep. Date:	07/12/97	Anal. Date:	07/12/97
Batch No:	97G3099	Prep. No:	–	Anal. Time:	08:43
Data File Name:	3105-05	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	UJ
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	99
2	1,2-Dichloroethane-d4	17060-07-0	76-114	111
3	Toluene-d8	2037-26-5	88-110	105

35529

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	87
2	Chlorobenzene-d5	3114-55-4	50-200	85
3	1,4-Difluorobenzene	540-36-3	50-200	90
# of out-of-control				0

Not Detected (N.D.) 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

35530

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-6	Received Date:	07/03/97
Sample ID:	**15DBMW51-004**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/11/97	Anal. Date:	07/11/97
Batch No:	97G3110	Prep. No:	-	Anal. Time:	18:04
Data File Name:	3105-06A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<10	UJ
2	Benzene	71-43-2	µg/L	1	2	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	10	10	
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	1	J
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	92
2	1,2-Dichloroethane-d4	17060-07-0	76-114	102
3	Toluene-d8	2037-26-5	88-110	101

35531

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	100
2	Chlorobenzene-d5	3114-55-4	50-200	95
3	1,4-Difluorobenzene	540-36-3	50-200	98
# of out-of-control				0

Not Detected (N.D.) 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

3553

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-7	Received Date:	07/03/97
Sample ID:	**15DBMW51-304**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/11/97	Anal. Date:	07/11/97
Batch No:	97G3110	Prep. No:	-	Anal. Time:	18:38
Data File Name:	3105-07A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<10	U J (ms)
2	Benzene	71-43-2	µg/L	1	2	U (ms)
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	10	11	
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	U J (ms)
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	4	J
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U (ms)
24	Methylene chloride	75-09-2	µg/L	1	2	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	92
2	1,2-Dichloroethane-d4	17060-07-0	76-114	108
3	Toluene-d8	2037-26-5	88-110	100

35533

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	93
2	Chlorobenzene-d5	3114-55-4	50-200	96
3	1,4-Difluorobenzene	540-36-3	50-200	101
# of out-of-control				0

Not Detected (N.D.) 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

35534

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-8	Received Date:	07/03/97
Sample ID:	**16DGMW81-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/11/97	Anal. Date:	07/11/97
Batch No:	97G3110	Prep. No:	–	Anal. Time:	19:11
Data File Name:	3105-08A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	2	J
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	94
2	1,2-Dichloroethane-d4	17060-07-0	76-114	103
3	Toluene-d8	2037-26-5	88-110	102

35535

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	99
2	Chlorobenzene-d5	3114-55-4	50-200	93
3	1,4-Difluorobenzene	540-36-3	50-200	96
# of out-of-control				0

Not Detected (N.D.) 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

35536

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-9	Received Date:	07/03/97
Sample ID:	**16DGMW81-904**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/11/97	Anal. Date:	07/11/97
Batch No:	97G3110	Prep. No:	-	Anal. Time:	19:46
Data File Name:	3105-09A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

TIC (Tentative Identified Components)				RT (min)		
1	Propane, 2-methoxy-2-methyl-	1634-04-4	µg/L	7.98	22	JN

Surrogates	Control Limit, %	Surro. Rec.%

35537

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	89
2	1,2-Dichloroethane-d4	17060-07-0	76-114	100
3	Toluene-d8	2037-26-5	88-110	99
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	98
2	Chlorobenzene-d5	3114-55-4	50-200	96
3	1,4-Difluorobenzene	540-36-3	50-200	100
# of out-of-control				0

Not Detected (N.D.) 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

3553

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-10	Received Date:	07/03/97
Sample ID:	**18MCAS01-3-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/11/97	Anal. Date:	07/11/97
Batch No:	97G3110	Prep. No:	–	Anal. Time:	20:19
Data File Name:	3105-10A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<10	UJ (mj)
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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	UJ (mj)
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	2	
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	93
2	1,2-Dichloroethane-d4	17060-07-0	76-114	101
3	Toluene-d8	2037-26-5	88-110	101

35539

Surrogates			Control Limit, %	Surro. Rec.%
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	100
2	Chlorobenzene-d5	3114-55-4	50-200	94
3	1,4-Difluorobenzene	540-36-3	50-200	98
# of out-of-control				0

Not Detected (N.D.) 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

35540

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-11	Received Date:	07/03/97
Sample ID:	**18MCAS01-4-004**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/11/97	Anal. Date:	07/11/97
Batch No:	97G3110	Prep. No:	-	Anal. Time:	20:53
Data File Name:	3105-11A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	< 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	10	< 10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	< 10	U
7	Carbon disulfide	75-15-0	µg/L	10	< 10	UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	< 1	U
9	Chlorobenzene	108-90-7	µg/L	10	< 10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	< 1	U
11	Chloroethane	75-00-3	µg/L	10	< 10	U
12	Chloroform	67-66-3	µg/L	1	< 1	U
13	Chloromethane	74-87-3	µg/L	10	< 10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	< 1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	< 1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	< 1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	< 1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	< 1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	< 10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	< 10	U
21	Ethylbenzene	100-41-4	µg/L	1	< 1	U
22	2-Hexanone	591-78-6	µg/L	10	< 10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	< 10	U
24	Methylene chloride	75-09-2	µg/L	1	< 1	U
25	Styrene	100-42-5	µg/L	10	< 10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	< 10	U
27	Tetrachloroethene	127-18-4	µg/L	1	< 1	U
28	Toluene	108-88-3	µg/L	1	< 1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	< 1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	< 1	U
31	Trichloroethene	79-01-6	µg/L	1	4	
32	Vinyl chloride	75-01-4	µg/L	1	< 1	U
33	Xylenes (total)	1330-20-7	µg/L	1	< 1	U
34	Freon-113	76-13-1	µg/L	10	< 10	U

TIC (Tentative Identified Components)				RT (min)		
1	Cyclotetrasiloxane,octamethyl-	556-67-2	µg/L	21.49	7	JN

Surrogates	Control Limit, %	Surro. Rec.%

35541

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	90
2	1,2-Dichloroethane-d4	17060-07-0	76-114	99
3	Toluene-d8	2037-26-5	88-110	101
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	100
2	Chlorobenzene-d5	3114-55-4	50-200	93
3	1,4-Difluorobenzene	540-36-3	50-200	99
# of out-of-control				0

Not Detected (N.D.) 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

3554

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-12	Received Date:	07/03/97
Sample ID:	**18MCAS02-3-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/11/97	Anal. Date:	07/11/97
Batch No:	97G3110	Prep. No:	–	Anal. Time:	21:27
Data File Name:	3105-12A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	2	
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	92
2	1,2-Dichloroethane-d4	17060-07-0	76-114	99
3	Toluene-d8	2037-26-5	88-110	100

35543

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	103
2	Chlorobenzene-d5	3114-55-4	50-200	93
3	1,4-Difluorobenzene	540-36-3	50-200	100
# of out-of-control				0

Not Detected (N.D.) 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

3554

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-13	Received Date:	07/03/97
Sample ID:	**18MCAS02-4-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/11/97	Anal. Date:	07/11/97
Batch No:	97G3110	Prep. No:	–	Anal. Time:	22:01
Data File Name:	3105-13A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<10	UJ (ing)
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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	UJ (ing)
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	10	
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	92
2	1,2-Dichloroethane-d4	17060-07-0	76-114	101
3	Toluene-d8	2037-26-5	88-110	99

35545

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	97
2	Chlorobenzene-d5	3114-55-4	50-200	92
3	1,4-Difluorobenzene	540-36-3	50-200	95
# of out-of-control				0

Not Detected (N.D.) 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

35546

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-14	Received Date:	07/03/97
Sample ID:	**18MCAS02-5-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/11/97	Anal. Date:	07/11/97
Batch No:	97G3110	Prep. No:	–	Anal. Time:	22:34
Data File Name:	3105-14A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	3	J
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	U
7	Carbon disulfide	75-15-0	µg/L	10	<10	UJ
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	U
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	16	
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	95
2	1,2-Dichloroethane-d4	17060-07-0	76-114	104
3	Toluene-d8	2037-26-5	88-110	106

35547

Surrogates			Control Limit, %	Surro. Rec.%
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	99
2	Chlorobenzene-d5	3114-55-4	50-200	89
3	1,4-Difluorobenzene	540-36-3	50-200	95
# of out-of-control				0

Not Detected (N.D.) 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

3554

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-15	Received Date:	07/03/97
Sample ID:	**24NEW7-004**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/14/97	Anal. Date:	07/14/97
Batch No:	97G3166	Prep. No:	–	Anal. Time:	12:12
Data File Name:	3105-15A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	UJ
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	0.8	J
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	0.5	J
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	1	
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	UJ
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	9	
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	92
2	1,2-Dichloroethane-d4	17060-07-0	76-114	95
3	Toluene-d8	2037-26-5	88-110	102

35549

Surrogates		Control Limit, %	Surro. Rec.%
# of out-of-control			0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	97
2	Chlorobenzene-d5	3114-55-4	50-200	91
3	1,4-Difluorobenzene	540-36-3	50-200	95
# of out-of-control				0

Not Detected (N.D.) 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

35550

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-16	Received Date:	07/03/97
Sample ID:	**24NEW7-304**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/14/97	Anal. Date:	07/14/97
Batch No:	97G3166	Prep. No:	-	Anal. Time:	12:46
Data File Name:	3105-16A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	UJ
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	0.6	J
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	0.5	J
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	1	
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	UJ
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	9	
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

				RT (min)		
TIC (Tentative Identified Components)						
1	Cyclotrisiloxane, hexamethyl-	541-05-9	µg/L	16.66	10	JN

Surrogates	Control Limit, %	Surro. Rec.%

35551

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	87
2	1,2-Dichloroethane-d4	17060-07-0	76-114	94
3	Toluene-d8	2037-26-5	88-110	98
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	97
2	Chlorobenzene-d5	3114-55-4	50-200	93
3	1,4-Difluorobenzene	540-36-3	50-200	95
# of out-of-control				0

Not Detected (N.D.) 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

35552

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/02/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-17	Received Date:	07/03/97
Sample ID:	**24NEW8-004**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/14/97	Anal. Date:	07/14/97
Batch No:	97G3166	Prep. No:	-	Anal. Time:	13:20
Data File Name:	3105-17A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	UJ
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	1	
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	UJ
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	91
2	1,2-Dichloroethane-d4	17060-07-0	76-114	97
3	Toluene-d8	2037-26-5	88-110	104

35553

Surrogates			Control Limit, %	Surro. Rec.%
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	92
2	Chlorobenzene-d5	3114-55-4	50-200	87
3	1,4-Difluorobenzene	540-36-3	50-200	90
# of out-of-control				0

Not Detected (N.D.) 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:	6210-005	Collection Date:	07/03/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-18	Received Date:	07/03/97
Sample ID:	**TB 7-3-97 DP/AM**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/14/97	Anal. Date:	07/14/97
Batch No:	97G3166	Prep. No:	–	Anal. Time:	13:53
Data File Name:	3105-18A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	UJ
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	UJ
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

TIC (Tentative Identified Components)				RT (min)		
1	Unknown		µg/L	24.64	10	J
2	Cyclotrisiloxane, hexamethyl-	541-05-9	µg/L	16.66	13	JN

35555

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	90
2	1,2-Dichloroethane-d4	17060-07-0	76-114	97
3	Toluene-d8	2037-26-5	88-110	102
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	93
2	Chlorobenzene-d5	3114-55-4	50-200	88
3	1,4-Difluorobenzene	540-36-3	50-200	90
# of out-of-control				0

Not Detected (N.D.) 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:	6210-005	Collection Date:	07/03/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-19	Received Date:	07/03/97
Sample ID:	**TB 7-3-97 ND/AM**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/14/97	Anal. Date:	07/14/97
Batch No:	97G3166	Prep. No:	–	Anal. Time:	14:27
Data File Name:	3105-19A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	UJ
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	UJ
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

TIC (Tentative Identified Components)			RT (min)		
1	Unknown	µg/L	21.48	9	J

Surrogates	Control Limit, %	Surro. Rec.%

35557

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	95
2	1,2-Dichloroethane-d4	17060-07-0	76-114	102
3	Toluene-d8	2037-26-5	88-110	110
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	89
2	Chlorobenzene-d5	3114-55-4	50-200	83
3	1,4-Difluorobenzene	540-36-3	50-200	85
# of out-of-control				0

Not Detected (N.D.) 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

3555

Applied P & Ch Laboratory

VOLATILE ORGANICS ANALYSIS DATA SHEET for Method CLP-VOC

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/03/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973105	Collected by:	Matt
		Lab Sample ID:	97-3105-20	Received Date:	07/03/97
Sample ID:	**TB 7-3-97 WB**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	CLP-VOC	Prep. Date:	07/14/97	Anal. Date:	07/14/97
Batch No:	97G3166	Prep. No:	–	Anal. Time:	15:00
Data File Name:	3105-20A	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) N	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	Acetone	67-64-1	µg/L	10	<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	10	<10	U
6	2-Butanone (MEK)	78-93-3	µg/L	10	<10	UJ
7	Carbon disulfide	75-15-0	µg/L	10	<10	U
8	Carbon tetrachloride	56-23-5	µg/L	1	<1	U
9	Chlorobenzene	108-90-7	µg/L	10	<10	U
10	Chlorodibromomethane	124-48-1	µg/L	1	<1	U
11	Chloroethane	75-00-3	µg/L	10	<10	U
12	Chloroform	67-66-3	µg/L	1	<1	U
13	Chloromethane	74-87-3	µg/L	10	<10	U
14	1,1-Dichloroethane	75-34-3	µg/L	1	<1	U
15	1,2-Dichloroethane	107-06-2	µg/L	1	<1	U
16	1,2-Dichloroethene (Total)	540-59-0	µg/L	1	<1	U
17	1,1-Dichloroethene	75-35-4	µg/L	1	<1	U
18	1,2-Dichloropropane	78-87-5	µg/L	1	<1	U
19	cis-1,3-Dichloropropene	10061-01-5	µg/L	10	<10	U
20	trans-1,3-Dichloropropene	10061-02-6	µg/L	10	<10	U
21	Ethylbenzene	100-41-4	µg/L	1	<1	U
22	2-Hexanone	591-78-6	µg/L	10	<10	UJ
23	4-Methyl-2-pentanone (MIBK)	108-10-1	µg/L	10	<10	U
24	Methylene chloride	75-09-2	µg/L	1	<1	U
25	Styrene	100-42-5	µg/L	10	<10	U
26	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	10	<10	U
27	Tetrachloroethene	127-18-4	µg/L	1	<1	U
28	Toluene	108-88-3	µg/L	1	<1	U
29	1,1,1-Trichloroethane	71-55-6	µg/L	1	<1	U
30	1,1,2-Trichloroethane	79-00-5	µg/L	1	<1	U
31	Trichloroethene	79-01-6	µg/L	1	<1	U
32	Vinyl chloride	75-01-4	µg/L	1	<1	U
33	Xylenes (total)	1330-20-7	µg/L	1	<1	U
34	Freon-113	76-13-1	µg/L	10	<10	U

TIC (Tentative Identified Components)			RT (min)		
1	Unknown	µg/L	21.48	9	J

Surrogates	Control Limit, %	Surro. Rec.%

35559

Surrogates			Control Limit, %	Surro. Rec.%
1	4-Bromo-fluorobenzene (BFB)	460-00-4	86-115	97
2	1,2-Dichloroethane-d4	17060-07-0	76-114	102
3	Toluene-d8	2037-26-5	88-110	110
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	Bromochloromethane	74-97-5	50-200	87
2	Chlorobenzene-d5	3114-55-4	50-200	81
3	1,4-Difluorobenzene	540-36-3	50-200	84
# of out-of-control				0

Not Detected (N.D.) 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

3556

Report No. 2
JULY 1997 EL TORO
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD	Alkalinity/EPA Method 310.1 Bicarbonate and Carbonate/Standard Method 2320B Chloride, Phosphorus, Sulfate, and Nitrate/Nitrite as Nitrogen/EPA Method 300.0 Total Organic Carbon (TOC)/EPA Method 415.1 Chemical Oxygen Demand (COD)/EPA Method 410.4 Color/Method 110.2 Dissolved Silica/Method 370.1 Total Suspended Solids (TSS)/EPA Method 160.2 Total Dissolved Solids (TDS)/EPA Method 160.1 Total Organic Carbon (TOC)/EPA Method 415.1 Ammonia as Nitrogen/EPA Method 350.2
SAMPLE DELIVERY GROUP	973105
SAMPLE NUMBERS	02DGMW61-004 02NEW3-004 02NEW6-004 02NEW8A-004 02UGMW25-004 15DBMW51-004 16DGMW81-004 18MCAS01-3-004 18MCAS01-4-004 18MCAS02-3-004 18MCAS02-4-004 18MCAS02-5-004 24NEW7-004 24NEW8-004 24NEW7-304 (Duplicate of 24NEW7-004) 15DBMW51-304 (Duplicate of 15DBMW51-004) 16DGMW81-904 (Air contamination blank)

This general chemistry and treatability parameters DVR is for 17 aqueous samples listed above. The data qualifiers assigned and their specific concentrations are noted in Analytical Data Sheets (Form-1) submitted by the laboratory which are included in this DVR as Attachment 2. The results of the data validation are summarized below.

1. SAMPLE TEMPERATURE

The sample coolers were received at the laboratory at temperatures between 4 and 5 degrees Centigrade (°C), which met the criteria. Therefore, no action was required.

2. HOLDING TIME

All samples were analyzed within the required holding times. Therefore, no action was required.

3. LCS/LCSD

The LCS/LCSD analyses were performed and results were within the acceptable control limits for all analyses. Therefore, no action was required.

4. BLANKS

Chloride and sulfate were detected in one rinsate, 03DGMW65X, at 1.1 and 1.0 milligrams per liter (mg/L), respectively. No action was taken since sample results for both chloride and sulfate were much greater than the action levels based on five-times-rule.

5. CALIBRATION VERIFICATION

Criteria for calibration verification were all met. Therefore, no action was required.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were performed and results were within the required QC control limits. Therefore, no action was required.

7. FIELD DUPLICATE

Two pairs of field duplicates, 15DBMW51-004/15DBMW51-304 and 24NEW7-004/24NEW7-304, were included in this SDG. RPD results between field duplicate results were below the 20% QC

control limit for all analytes, except TSS (71%), TOC (100%), color (100%), and ammonia (40%). No action was required based on the RPD for field duplicates alone.

8. OVERALL ASSESSMENT

Overall, the general chemistry and treatability parameters data generated in this SDG were usable for the intended purposes.

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ATTACHMENT 2

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Applied P & Ch Laboratory

Wet Analysis Results for Method 310.1

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	310.1
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Alkalinity
CAS No: 10-09-3

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-1	02DGMW61-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	302	
97-3105-2	02NEW3-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	291	
97-3105-3	02NEW6-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	309	
97-3105-4	02NEW8A-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	285	
97-3105-5	02UGMW25-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	205	
97-3105-6	15DBMW51-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	614	
97-3105-7	15DBMW51-304	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	612	
97-3105-8	16DGMW81-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	194	
97-3105-9	16DGMW81-904	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-10	18MCAS01-3-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	227	
97-3105-11	18MCAS01-4-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	245	
97-3105-12	18MCAS02-3-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	207	
97-3105-13	18MCAS02-4-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	209	
97-3105-14	18MCAS02-5-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	229	
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	185	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	183	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	159	
97W3893-MB-01		Water	07/03/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35975

Applied P & Ch Laboratory

Wet Analysis Results for Method SM2320B

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	SM2320B
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Bicarbonate
CAS No: 71-52-3

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-1	02DGMW61-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	302	
97-3105-2	02NEW3-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	291	
97-3105-3	02NEW6-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	309	
97-3105-4	02NEW8A-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	285	
97-3105-5	02UGMW25-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	205	
97-3105-6	15DBMW51-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	614	
97-3105-7	15DBMW51-304	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	612	
97-3105-8	16DGMW81-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	194	
97-3105-9	16DGMW81-904	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-10	18MCAS01-3-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	227	
97-3105-11	18MCAS01-4-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	245	
97-3105-12	18MCAS02-3-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	207	
97-3105-13	18MCAS02-4-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	209	
97-3105-14	18MCAS02-5-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	229	
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	185	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	183	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	159	
97W3893-MB-01		Water	07/03/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35976

Applied P & Ch Laboratory

Wet Analysis Results for Method SM2320B

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	SM2320B
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Carbonate
CAS No: 497-19-8

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-1	02DGMW61-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-2	02NEW3-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-3	02NEW6-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-4	02NEW8A-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-5	02UGMW25-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-6	15DBMW51-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-7	15DBMW51-304	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-8	16DGMW81-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-9	16DGMW81-904	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-10	18MCAS01-3-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-11	18MCAS01-4-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-12	18MCAS02-3-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-13	18MCAS02-4-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-14	18MCAS02-5-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U
97W3893-MB-01		Water	07/03/97	07/03/97	07/03/97	97W3893	mg-$CaCO_3$/L	2	<2	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35977

Applied P & Ch Laboratory

Wet Analysis Results for Method 300.0

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	300.0
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Chloride
CAS No: 16887-00-6

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-1	02DGMW61-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	4	53	
97-3105-2	02NEW3-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	5	97	
97-3105-3	02NEW6-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	5	108	
97-3105-4	02NEW8A-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	2	62.6	
97-3105-5	02UGMW25-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	10	140	
97-3105-6	15DBMW51-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	20	340	
97-3105-7	15DBMW51-304	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	20	360	
97-3105-8	16DGMW81-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	10	273	
97-3105-9	16DGMW81-904	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	0.2	<0.2	U
97-3105-10	18MCAS01-3-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	20	401	
97-3105-11	18MCAS01-4-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	10	227	
97-3105-12	18MCAS02-3-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	10	227	
97-3105-13	18MCAS02-4-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	10	200	
97-3105-14	18MCAS02-5-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	10	200	
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	20	320	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	20	330	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	20	320	
97W3895-MB-01		Water	07/03/97	07/03/97	07/03/97	97W3895	mg/L	0.2	<0.2	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35978

Applied P & Ch Laboratory

Wet Analysis Results for Method 300.0

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	300.0
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Nitrate/Nitrite
CAS No: 7440-44-0

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-1	02DGMW61-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	2	7.9	
97-3105-2	02NEW3-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	2.5	7.9	
97-3105-3	02NEW6-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	2.5	8.9	
97-3105-4	02NEW8A-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	1	9.6	
97-3105-5	02UGMW25-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	5	12	
97-3105-6	15DBMW51-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	10	< 10	U
97-3105-7	15DBMW51-304	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	10	< 10	U
97-3105-8	16DGMW81-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	5	15	
97-3105-9	16DGMW81-904	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	0.1	< 0.1	U
97-3105-10	18MCAS01-3-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	10	23	
97-3105-11	18MCAS01-4-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	5	18	
97-3105-12	18MCAS02-3-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	5	22	
97-3105-13	18MCAS02-4-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	5	15	
97-3105-14	18MCAS02-5-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	5	7	
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	10	20	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	10	23	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	10	20	
97W3895-MB-01		Water	07/03/97	07/03/97	07/03/97	97W3895	mg/L	0.1	< 0.1	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35979

Applied P & Ch Laboratory

Wet Analysis Results for Method 160.1

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	160.1
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Solids, Total Dissolved (TDS)
CAS No: 10-33-3

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-1	02DGMW61-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	745	
97-3105-2	02NEW3-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	898	
97-3105-3	02NEW6-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	1000	
97-3105-4	02NEW8A-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	570	
97-3105-5	02UGMW25-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	980	
97-3105-6	15DBMW51-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	2560	
97-3105-7	15DBMW51-304	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	2640	
97-3105-8	16DGMW81-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	1800	
97-3105-9	16DGMW81-904	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	<10	U
97-3105-10	18MCAS01-3-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	1530	
97-3105-11	18MCAS01-4-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	1210	
97-3105-12	18MCAS02-3-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	1170	
97-3105-13	18MCAS02-4-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	1030	
97-3105-14	18MCAS02-5-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	872	
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	1540	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	1530	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/03/97	97W3891	mg/L	10	1160	
97W3891-MB-01		Water	07/03/97	07/03/97	07/03/97	97W3891	mg/L	10	<10	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35980

Applied P & Ch Laboratory

Wet Analysis Results for Method 300.0

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	300.0
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Sulfate
CAS No: 14808-79-8

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-1	02DGMW61-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	10	231	
97-3105-2	02NEW3-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	13	250	
97-3105-3	02NEW6-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	13	266	
97-3105-4	02NEW8A-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	5	160	
97-3105-5	02UGMW25-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	25	290	
97-3105-6	15DBMW51-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	50	870	
97-3105-7	15DBMW51-304	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	50	910	
97-3105-8	16DGMW81-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	25	662	
97-3105-9	16DGMW81-904	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	0.5	<0.5	U
97-3105-10	18MCAS01-3-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	50	480	
97-3105-11	18MCAS01-4-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	25	310	
97-3105-12	18MCAS02-3-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	25	270	
97-3105-13	18MCAS02-4-004	Water	07/02/97	07/03/97	07/03/97	97W3895	mg/L	25	210	
97-3105-14	18MCAS02-5-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	25	190	
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	50	530	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	50	550	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	50	320	
97W3895-MB-01		Water	07/03/97	07/03/97	07/03/97	97W3895	mg/L	0.5	<0.5	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35981

Applied P & Ch Laboratory

Wet Analysis Results for Method 350.2

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	350.2
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Ammonia (NH_4^+-N)
CAS No: 7664-41-7

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/07/97	97W3935	mg/L	0.2	0.3	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/07/97	97W3935	mg/L	0.2	0.45	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/07/97	97W3935	mg/L	0.2	0.3	
97W3935-MB-01		Water	07/07/97	07/07/97	07/07/97	97W3935	mg/L	0.2	< 0.2	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35982

Applied P & Ch Laboratory

Wet Analysis Results for Method 410.1

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	410.1
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Chemical Oxygen Demand (COD)
CAS No: 10-27-5

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/14/97	97W4073	mg-O_2/L	20	<20	U
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/14/97	97W4073	mg-O_2/L	20	<20	U
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/14/97	97W4073	mg-O_2/L	20	<20	U
97W4073-MB-01		Water	07/14/97	07/14/97	07/14/97	97W4073	mg-O_2/L	20	<20	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35983

Applied P & Ch Laboratory

Wet Analysis Results for Method 110.2

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	110.2
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Color
CAS No: 10-83-3

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/03/97	97W3894	Color Unit	1	2.0	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/03/97	97W3894	Color Unit	1	1	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/03/97	97W3894	Color Unit	1	1	

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35984

Applied P & Ch Laboratory

Wet Analysis Results for Method 300.0

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	300.0
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Phosphorus, Orthophosphate
CAS No: 9999-37

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	10	<10	U
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	10	<10	U
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/04/97	97W3895	mg/L	10	<10	U
97W3895-MB-01		Water	07/03/97	07/03/97	07/03/97	97W3895	mg/L	0.1	<0.1	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35985

Applied P & Ch Laboratory

Wet Analysis Results for Method 370.1

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	370.1
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Silica (SiO_2) dissolved
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/11/97	97W4046	mg/L	1	48.3	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/11/97	97W4046	mg/L	1	54.6	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/11/97	97W4046	mg/L	1	53.7	
97W4046-MB-01		Water	07/11/97	07/11/97	07/11/97	97W4046	mg/L	1	<1	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35986

Applied P & Ch Laboratory

Wet Analysis Results for Method 160.2

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	160.2
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Solids, Total Suspended (TSS)
CAS No: 10-32-2

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/03/97	97W3890	mg/L	4	40	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/03/97	97W3890	mg/L	4	19	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/03/97	97W3890	mg/L	4	<4	U
97W3890-MB-01		Water	07/03/97	07/03/97	07/03/97	97W3890	mg/L	4	<4	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35987

Applied P & Ch Laboratory

Wet Analysis Results for Method 415.1

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Anal. Method	415.1
Project ID:	MCAS El Toro GWM Round 6	Service ID:	973105	Collected by:	Matt

Component Name: Carbon, Total Organic (TOC)
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
97-3105-15	24NEW7-004	Water	07/02/97	07/03/97	07/08/97	97W3983	mg/L	1	1	
97-3105-16	24NEW7-304	Water	07/02/97	07/03/97	07/08/97	97W3983	mg/L	1	2	
97-3105-17	24NEW8-004	Water	07/02/97	07/03/97	07/08/97	97W3983	mg/L	1	1	
97W3983-MB-01		Water	07/08/97	07/08/97	07/08/97	97W3983	mg/L	1	<1	U

Not Detected (N.D.) is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

35988

Report No. 3
JULY 1997 EL TORO
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD Dissolved Metals/CLP SOW ILM03.0

SAMPLE DELIVERY GROUP 973184

SAMPLE NUMBERS 01MW102-004 01MW201-004 05NEW1-004
05NEW1-304 (Duplicate of 05NEW1-004)
05UGMW27-004 05UGMW27-304 (Duplicate of 05UGMW27-004)

This dissolved metals DVR is for 6 aqueous samples listed above. The data qualifiers assigned and their specific concentrations are noted in Analytical Data Sheets (Form-1) submitted by the laboratory which are included in this DVR as Attachment 3. The results of the data validation are summarized below.

1. HOLDING TIME AND SAMPLE PRESERVATION

The samples were analyzed within prescribed holding times. Therefore, no action was required.

2. INSTRUMENT CALIBRATION AND CALIBRATION VERIFICATION

The criteria for initial calibration verification (ICV) and continuing calibration verification (CCV) were met. Therefore, no action was required.

3. BLANK CONTAMINATION

There were no field blank or RB analyses included in this SDG. Laboratory blanks, including initial and continuing calibration blanks, preparation blank and method blanks, were contaminated with several analytes. The highest concentration found in the laboratory blanks are presented in Table 3-1. The action levels listed in Table 3-1 are five times (5x) the concentrations that were found in the laboratory blanks. Sample concentrations that were less than the action levels for the affected analytes were qualified as non-detect (U). The affected samples are listed in Table 3-1.

Table 3-1
Maximum Concentrations Detected In Blanks (ug/L)

Analyte	Blank Concentration	Action Level	Affected Sample
Antimony	1.4	7.0	05NEW1-304
Cadmium	0.4	2.0	None
Calcium	33.8	169	None
Cobalt	2.6	13	01MW102-004 05NEW1-004 05NEW1-304
Copper	4.2	21	01MW201-004
Iron	12.2	61	01MW201-004 05NEW1-004 05NEW1-304 05UGMW27-004
Magnesium	16.5	82.5	None
Potassium	79.2	396	None
Selenium	3.9	19.5	01MW201-004 05NEW1-004 05NEW1-304 05UGMW27-004 05UGMW27-304
Sodium	391	1955	None

4. INDUCTIVELY COUPLED PLASMA (ICP) INTERFERENCE CHECK SAMPLE

All recoveries in the ICP Interference Check Sample were between 80% and 120% which met the criteria. Therefore, no action was required.

5. LABORATORY CONTROL SAMPLES

The laboratory control samples were analyzed at the required frequencies and were within the required criteria. Therefore, no action was required.

6. LABORATORY DUPLICATE SAMPLE ANALYSIS

The RPD results for laboratory duplicate samples are required to be less than 20%. The following analytes exceeded the QC control limit: aluminum (23.2%), antimony (45.5%), chromium (64.6%), iron (23.0%), selenium (28.4%). However, no action was required as the duplicate sample results were less than five times the CRDL.

7. FIELD DUPLICATES

There were two pairs of field duplicates in this SDG. RPDs between field duplicate results were within the 20% control limit except for arsenic (73%) and zinc (85%) for samples 05UGMW27-004/05UGMW27-304. However, no action was required since the field duplicate sample results were less than five times the CRDL.

8. GRAPHITE FURNACE ATOMIC ABSORPTION QC

Correlation coefficients were within the control limits and spike recoveries met the 85% to 115% criterion. Therefore, no action was required.

9. INDUCTIVELY COUPLED PLASMA SERIAL DILUTION

ICP serial dilution analyses were performed. The %D between serial dilution results were required to be less than 10%. The %D for the following analytes exceeded the QC control limit: cobalt (16.1%), copper (20%), iron (51.8%), manganese (3.7%), and potassium (16.8%). However, no action was required since concentrations for these analytes in the original serial dilution sample were less than fifty times the IDL.

10. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Requirements for system performance were all met. Therefore, no action was required.

Some analytes were detected at concentrations less than the reporting limits and were qualified as estimated (J). These sample results and their associated data qualifiers are noted in Attachment 3.

Overall, the dissolved metals results within this SDG are usable for the intended purposes with the consideration of data qualifiers assigned.

ATTACHMENT 3

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Applied P & Ch Laboratory

Metal Analysis Results

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/09/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973184	Collected by:	Matt
		Lab Sample ID:	97-3184-1	Received Date:	07/10/97
Sample ID:	01MW102-004	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample				

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
Aluminum	7429-90-5	µg/L	200	35.9	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Antimony	7440-36-0	µg/L	60	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Arsenic	7440-38-2	µg/L	10	< 1.4	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Barium	7440-39-3	µg/L	200	8.8	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Beryllium	7440-41-7	µg/L	5	< 0.22	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cadmium	7440-43-9	µg/L	5	< 0.28	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Calcium	7440-70-2	µg/L	5000	107000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Chromium	7440-47-3	µg/L	10	3.5	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cobalt	7440-48-4	µg/L	50	4.1	UJ ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Copper	7440-50-8	µg/L	25	26.0		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Iron	7439-89-6	µg/L	100	66.5	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Lead	7439-92-1	µg/L	5	< 0.79	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Magnesium	7439-95-4	µg/L	5000	6150		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Manganese	7439-96-5	µg/L	15	61.4		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Mercury	7439-97-6	µg/L	0.2	< 0.11	U	CV		97M2059D	07/15/97	07/15/97	1	CLP-M
Nickel	7440-02-0	µg/L	40	843		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Potassium	7440-09-7	µg/L	5000	3400	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Selenium	7782-49-2	µg/L	5	< 2.0	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Silver	7440-22-4	µg/L	10	< 0.74	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Sodium	7440-23-5	µg/L	5000	77400		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Thallium	7440-28-0	µg/L	10	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Vanadium	7440-62-2	µg/L	50	3.0	~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Zinc	7440-66-6	µg/L	20	194		P		97M2055M	07/14/97	07/15/97	1	CLP-M

Not Detected (N.D.) is shown as IDL moisture-corrected if applicable

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL; B - Less than RL (PQL, EQL or CRDL), but greater than IDL.

Q Qualifier: N - Spike recovery out of control; * - Duplicate analysis out of control; W - Post digestion spike for GFAA out of control; E - Serial dilution difference out of control

M Qualifier: P - ICP A - FLAA F - GFAA CV - Cold Vapor

34101

Applied P & Ch Laboratory

Metal Analysis Results

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/09/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973184	Collected by:	Matt
		Lab Sample ID:	97-3184-2	Received Date:	07/10/97
Sample ID:	01MW201-004	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample				

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
Aluminum	7429-90-5	µg/L	200	23.8	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Antimony	7440-36-0	µg/L	60	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Arsenic	7440-38-2	µg/L	10	1.5	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Barium	7440-39-3	µg/L	200	8.9	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Beryllium	7440-41-7	µg/L	5	< 0.22	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cadmium	7440-43-9	µg/L	5	< 0.28	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Calcium	7440-70-2	µg/L	5000	99200		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Chromium	7440-47-3	µg/L	10	4.2	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cobalt	7440-48-4	µg/L	50	< 0.66	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Copper	7440-50-8	µg/L	25	7.4	UJ ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Iron	7439-89-6	µg/L	100	17.5	UJ ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Lead	7439-92-1	µg/L	5	< 0.79	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Magnesium	7439-95-4	µg/L	5000	3950	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Manganese	7439-96-5	µg/L	15	12.7	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Mercury	7439-97-6	µg/L	0.2	< 0.11	U	CV		97M2059D	07/15/97	07/15/97	1	CLP-M
Nickel	7440-02-0	µg/L	40	224		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Potassium	7440-09-7	µg/L	5000	2440	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Selenium	7782-49-2	µg/L	5	~~4.6~~ SICT	UJ ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Silver	7440-22-4	µg/L	10	< 0.74	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Sodium	7440-23-5	µg/L	5000	50100		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Thallium	7440-28-0	µg/L	10	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Vanadium	7440-62-2	µg/L	50	4.3	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Zinc	7440-66-6	µg/L	20	17.0	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M

Not Detected (N.D.) is shown as IDL moisture-corrected if applicable

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL B - Less than RL (PQL, EQL or CRDL), but greater than IDL.

Q Qualifier: N - Spike recovery out of control * - Duplicate analysis out of control

W - Post digestion spike for GFAA out of control E - Serial dilution difference out of control

M Qualifier: P - ICP A - FLAA F - GFAA CV - Cold Vapor

34102

Applied P & Ch Laboratory

Metal Analysis Results

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/09/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973184	Collected by:	Matt
		Lab Sample ID:	97-3184-3	Received Date:	07/10/97
Sample ID:	05NEW1-004	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample				

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
Aluminum	7429-90-5	µg/L	200	< 11.9	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Antimony	7440-36-0	µg/L	60	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Arsenic	7440-38-2	µg/L	10	< 1.4	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Barium	7440-39-3	µg/L	200	121	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Beryllium	7440-41-7	µg/L	5	< 0.22	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cadmium	7440-43-9	µg/L	5	< 0.28	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Calcium	7440-70-2	µg/L	5000	119000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Chromium	7440-47-3	µg/L	10	7.0	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cobalt	7440-48-4	µg/L	50	3.7	U ~~J B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Copper	7440-50-8	µg/L	25	< 1.8	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Iron	7439-89-6	µg/L	100	25.7	U ~~J B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Lead	7439-92-1	µg/L	5	< 0.79	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Magnesium	7439-95-4	µg/L	5000	34200		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Manganese	7439-96-5	µg/L	15	83.9		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Mercury	7439-97-6	µg/L	0.2	< 0.11	U	CV		97M2059D	07/15/97	07/15/97	1	CLP-M
Nickel	7440-02-0	µg/L	40	562		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Potassium	7440-09-7	µg/L	5000	3310	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Selenium	7782-49-2	µg/L	5	11.0	U ~~B J~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Silver	7440-22-4	µg/L	10	< 0.74	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Sodium	7440-23-5	µg/L	5000	102000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Thallium	7440-28-0	µg/L	10	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Vanadium	7440-62-2	µg/L	50	7.1	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Zinc	7440-66-6	µg/L	20	16.3	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M

Not Detected (N.D.) is shown as IDL moisture-corrected if applicable

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL B - Less than RL (PQL, EQL or CRDL), but greater than IDL.

Q Qualifier: N - Spike recovery out of control * - Duplicate analysis out of control

W - Post digestion spike for GFAA out of control E - Serial dilution difference out of control

M Qualifier: P - ICP A - FLAA F - GFAA CV - Cold Vapor

34103

Applied P & Ch Laboratory

Metal Analysis Results

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/09/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973184	Collected by:	Matt
		Lab Sample ID:	97-3184-4	Received Date:	07/10/97
Sample ID:	05NEW1-304	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample				

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
Aluminum	7429-90-5	µg/L	200	18.8	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Antimony	7440-36-0	µg/L	60	2.4	UJ ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Arsenic	7440-38-2	µg/L	10	< 1.4	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Barium	7440-39-3	µg/L	200	125	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Beryllium	7440-41-7	µg/L	5	< 0.22	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cadmium	7440-43-9	µg/L	5	< 0.28	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Calcium	7440-70-2	µg/L	5000	123000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Chromium	7440-47-3	µg/L	10	7.1	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cobalt	7440-48-4	µg/L	50	3.9	UJ ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Copper	7440-50-8	µg/L	25	< 1.8	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Iron	7439-89-6	µg/L	100	27.4	UJ ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Lead	7439-92-1	µg/L	5	< 0.79	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Magnesium	7439-95-4	µg/L	5000	35000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Manganese	7439-96-5	µg/L	15	87.6		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Mercury	7439-97-6	µg/L	0.2	< 0.11	U	CV		97M2059D	07/15/97	07/15/97	1	CLP-M
Nickel	7440-02-0	µg/L	40	586		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Potassium	7440-09-7	µg/L	5000	3360	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Selenium	7782-49-2	µg/L	5	12.4	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Silver	7440-22-4	µg/L	10	< 0.74	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Sodium	7440-23-5	µg/L	5000	107000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Thallium	7440-28-0	µg/L	10	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Vanadium	7440-62-2	µg/L	50	7.4	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Zinc	7440-66-6	µg/L	20	14.7	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M

Not Detected (N.D.) is shown as IDL moisture-corrected if applicable

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL B - Less than RL (PQL, EQL or CRDL), but greater than IDL.

Q Qualifier: N - Spike recovery out of control " - Duplicate analysis out of control

W - Post digestion spike for GFAA out of control E - Serial dilution difference out of control

M Qualifier: P - ICP A - FLAA F - GFAA CV - Cold Vapor

34105

Applied P & Ch Laboratory

Metal Analysis Results

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/09/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973184	Collected by:	Matt
		Lab Sample ID:	97-3184-5	Received Date:	07/10/97
Sample ID:	05UGMW27-004	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample				

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
Aluminum	7429-90-5	µg/L	200	< 11.9	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Antimony	7440-36-0	µg/L	60	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Arsenic	7440-38-2	µg/L	10	4.3	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Barium	7440-39-3	µg/L	200	51.9	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Beryllium	7440-41-7	µg/L	5	< 0.22	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cadmium	7440-43-9	µg/L	5	< 0.28	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Calcium	7440-70-2	µg/L	5000	127000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Chromium	7440-47-3	µg/L	10	1.5	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cobalt	7440-48-4	µg/L	50	< 0.66	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Copper	7440-50-8	µg/L	25	< 1.8	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Iron	7439-89-6	µg/L	100	11.5	UJ ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Lead	7439-92-1	µg/L	5	< 0.79	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Magnesium	7439-95-4	µg/L	5000	35000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Manganese	7439-96-5	µg/L	15	< 1.0	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Mercury	7439-97-6	µg/L	0.2	< 0.11	U	CV		97M2059D	07/15/97	07/15/97	1	CLP-M
Nickel	7440-02-0	µg/L	40	3.8	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Potassium	7440-09-7	µg/L	5000	2120	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Selenium	7782-49-2	µg/L	5	7.5	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Silver	7440-22-4	µg/L	10	< 0.74	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Sodium	7440-23-5	µg/L	5000	121000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Thallium	7440-28-0	µg/L	10	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Vanadium	7440-62-2	µg/L	50	11.4	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Zinc	7440-66-6	µg/L	20	28.9		P		97M2055M	07/14/97	07/15/97	1	CLP-M

Not Detected (N.D.) is shown as IDL moisture-corrected if applicable

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL B - Less than RL (PQL, EQL or CRDL), but greater than IDL.

Q Qualifier: N - Spike recovery out of control * - Duplicate analysis out of control

W - Post digestion spike for GFAA out of control E - Serial dilution difference out of control

M Qualifier: P - ICP A - FLAA F - GFAA CV - Cold Vapor

34106

Applied P & Ch Laboratory

Metal Analysis Results

Client Name:	CDM Federal Programs Corp.	Project No:	6210-005	Collection Date:	07/09/97
Project ID:	MCAS El Toro GWM Round 6	SDG Number:	973184	Collected by:	Matt
		Lab Sample ID:	97-3184-6	Received Date:	07/10/97
Sample ID:	05UGMW27-304	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample				

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
Aluminum	7429-90-5	µg/L	200	< 11.9	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Antimony	7440-36-0	µg/L	60	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Arsenic	7440-38-2	µg/L	10	2.0	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Barium	7440-39-3	µg/L	200	55.2	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Beryllium	7440-41-7	µg/L	5	< 0.22	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cadmium	7440-43-9	µg/L	5	< 0.28	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Calcium	7440-70-2	µg/L	5000	135000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Chromium	7440-47-3	µg/L	10	1.1	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Cobalt	7440-48-4	µg/L	50	< 0.66	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Copper	7440-50-8	µg/L	25	< 1.8	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Iron	7439-89-6	µg/L	100	11.8	U J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Lead	7439-92-1	µg/L	5	< 0.79	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Magnesium	7439-95-4	µg/L	5000	37300		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Manganese	7439-96-5	µg/L	15	< 1.0	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Mercury	7439-97-6	µg/L	0.2	< 0.11	U	CV		97M2059D	07/15/97	07/15/97	1	CLP-M
Nickel	7440-02-0	µg/L	40	2.4	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Potassium	7440-09-7	µg/L	5000	2280	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Selenium	7782-49-2	µg/L	5	7.5	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Silver	7440-22-4	µg/L	10	< 0.74	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Sodium	7440-23-5	µg/L	5000	128000		P		97M2055M	07/14/97	07/15/97	1	CLP-M
Thallium	7440-28-0	µg/L	10	< 1.3	U	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Vanadium	7440-62-2	µg/L	50	12.1	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M
Zinc	7440-66-6	µg/L	20	11.6	J ~~B~~	P		97M2055M	07/14/97	07/15/97	1	CLP-M

Not Detected (N.D.) is shown as IDL moisture-corrected if applicable

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL B - Less than RL (PQL, EQL or CRDL), but greater than IDL.

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W - Post digestion spike for GFAA out of control E - Serial dilution difference out of control

M Qualifier: P - ICP A - FLAA F - GFAA CV - Cold Vapor

34107

APPENDIX E

LABORATORY ANALYSES REPORTS
JULY 1997
SAMPLING ROUND

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TABLE E-1
INDEX OF LABORATORY ANALYTICAL REPORTS
July 1997 Sampling Round -- MCAS El Toro Groundwater Monitoring Program

LABORATORY REPORT		WET SAMPLE ANALYSES		FIELD QC ANALYSES		LAB QC ANALYSES	
Report No.	Report Date	Well/Station No.	Analyses	Field QC Sample (Sample ID)	Analyses	Sample ID	Analysis
97-3059	7/16/97	02NEW12	V, M, GC			Trip Blank	V
			A, B, RN 97-3143 (Truesdail)				
		03DGMW64	V, M, GC				
			A, B, RN 97-3143 (Truesdail)				
		03DGMW65X	V, M, GC	Rinsate (504)	V, GC		
			A, B, RN 97-3143 (Truesdail)				
		04DBMW40	V, M, GC				
			A, B, RN 97-3143 (Truesdail)				
		17NEW1	V, GC				
		17NEW2	V, GC				
97-3086	7/17/97	02DGMW60	V, M, GC			(3) Trip Blank	V
			A, B, RN 97-3143 (Truesdail)				
		02NEW1	V, M, GC				
			A, B, RN 97-3143 (Truesdail)				
		03UGMW26	V, M, GC				
			A, B, RN 97-3143 (Truesdail)				
		05DGMW68	V, M, GC				
			A, B, RN 97-3143 (Truesdail)				
		18MCAS01-5	V, GC				
		18MCAS03-1	V, GC				
		18MCAS03-2	V, GC				
		18MCAS03-3	V, GC	Rinsate (504)	V, GC		
		18PS6	V, GC, T				
			R, S 97-3143 (Truesdail)				
		04DGMW66	V, M, GC				
			A, B, RN 97-4136 (Truesdail)				
97-3105	7/17/97	02DGMW61	V, M, GC			(3) Trip Blank	V
			A, B, RN 97-3229 (Truesdail)				
		02NEW3	V, M, GC				
			A, B, RN 97-3229 (Truesdail)				
		02NEW6	V, M, GC				
			A, B, RN 97-3229 (Truesdail)				
		02NEW8A	V, M, GC				
			A, B, RN 97-3229 (Truesdail)				
		02UGMW25	V, M, GC				
			A, B, RN 97-3229 (Truesdail)				
		15DBMW51	V, GC	Duplicate (304)	V, GC		
		16DGMW81	V, GC	AC Blank (904)	V, GC		
		18MCAS01-3	V, GC				
		18MCAS01-4	V, GC				
		18MCAS02-3	V, GC				
		18MCAS02-4	V, GC				
		18MCAS02-5	V, GC				
		24NEW7	V, GC, T	Duplicate (304)	V, GC, T		
			R, S 97-3229 (Truesdail)		R, S 97-3229 (Truesdail)		
		24NEW8	V, GC, T				
			R, S 97-3229 (Truesdail)				
97-3118	7/17/97	02DGMW59	V, M, GC			(2) Trip Blank	V
			A, B, RN 97-3229 (Truesdail)				
		02NEW2	V, M, GC				
			A, B, RN 97-3229 (Truesdail)				
		07DBMW43	V, GC				
97-3153	8/4/97	08DGMW74	V, GC, T			Trip Blank	V
			R, S 97-4136 (Truesdail)				
		08UGMW29	V, GC				
		18BGMW05D	V, GC, T				
			R, S 97-4136 (Truesdail)				

TABLE E-1
INDEX OF LABORATORY ANALYTICAL REPORTS
July 1997 Sampling Round -- MCAS El Toro Groundwater Monitoring Program

LABORATORY REPORT		WET SAMPLE ANALYSES		FIELD QC ANALYSES		LAB QC ANALYSES	
Report No.	Report Date	Well/Station No.	Analyses	Field QC Sample (Sample ID)	Analyses	Sample ID	Analysis
		18DW135	V, GC, T				
			R, S 97-4136 (Truesdail)				
		18PS2	V, GC, T				
			R, S 97-4136 (Truesdail)				
97-3165	7/22/97	02NEW11	V, M, GC			(2) Trip Blank	V
			A, B, RN 97-3229 (Truesdail)				
		03DBMW39	V, M, GC				
			A, B, RN 97-3229 (Truesdail)				
		05DBMW41	V, M, GC				
			A, B, RN 97-3229 (Truesdail)				
		09DBMW45	V, GC	Duplicate (304)	V, GC		
		09DGMW75	V, GC	Duplicate (304)	V, GC		
		18BGMW03C	V, GC				
		18BGMW03E	V, GC, T				
			S 97-3229 (Truesdail)	18BGMW03E-004R	R 97-3319 (Truesdail)		
		22DBMW47	V, GC	Duplicate (304)	V, GC		
				Rinsate (504)	V, GC		
		24NEW4	V, GC, T	Duplicate (304)	V, GC, T		
			R, S 97-3229 (Truesdail)		R, S 97-3229 (Truesdail)		
		24NEW5	V, GC, T				
			R, S 97-3229 (Truesdail)				
97-3184	8/4/97	01MW102	V, M, GC			(2) Trip Blank	V
			A, B, RN 97-3229 (Truesdail)				
		01MW201	V, M, GC				
			A, B, RN 97-3229 (Truesdail)				
		05NEW1	V, M, GC	Duplicate (304)	V, M, GC		
			A, B, RN 97-3229 (Truesdail)		A, B, RN 97-3229 (Truesdail)		
		05UGMW27	V, M, GC	Duplicate (304)	V, M, GC		
			A, B, RN 97-3229 (Truesdail)		A, B, RN 97-3229 (Truesdail)		
		07DGMW91	V, GC				
		13DGMW78	V, GC				
		14DBMW50	V, GC				
		14DGMW79	V, GC				
		18BGMW04B	V, GC, T				
			R, S 97-3229 (Truesdail)				
		18BGMW101	V, GC				
		21UGMW37	V, GC	Duplicate (304)	V, GC		
97-3204	8/4/97	07DBMW100	V, GC			(3) Trip Blank	V
		10DGMW77	V, GC				
		16DBMW52		AC Blank (904)	V, GC		
		16UGMW33	V, GC	AC Blank (904)	V, GC		
		18MCAS07-3	V, GC				
		18MCAS07-4	V, GC				
		18MCAS07-5	V, GC				
		24NEW1	V, GC, T				
			R, S 97-3229 (Truesdail)				
		24NEW6	V, GC, T				
			R, S 97-3229 (Truesdail)				
97-3205	7/23/97	01MW101	V, M, GC	Duplicate (304)	V, M, GC	(2) Trip Blank	V
			A, B, RN 97-3319 (Truesdail)		A, B, RN 97-3319 (Truesdail)		
				Rinsate (504)	V, GC		
		02NEW7	V, M, GC				
			A, B, RN 97-3319 (Truesdail)				
		16DBMW52	V, GC				
		18PS3	V, GC, T				
			R, S 97-3319 (Truesdail)				
		18PS5	V, GC, T				
			R, S 97-3319 (Truesdail)				

TABLE E-1
INDEX OF LABORATORY ANALYTICAL REPORTS
July 1997 Sampling Round -- MCAS El Toro Groundwater Monitoring Program

LABORATORY REPORT		WET SAMPLE ANALYSES		FIELD QC ANALYSES		LAB QC ANALYSES	
Report No.	Report Date	Well/Station No.	Analyses	Field QC Sample (Sample ID)	Analyses	Sample ID	Analysis
97-3241	8/4/97	18MCAS04	V, GC			Trip Blank	V
		18MCAS06	V, GC				
		18MCAS08	V, GC				
		18MCAS09	V, GC				
		18MCAS10	V, GC				
97-3944	9/19/97	01MW101-004R	V	Duplicate (304R)	V	Trip Blank	V
		01MW102-004R	V	Duplicate (304R)	V		
		01MW201-004R	V	Duplicate (304R)	V		

EXPLANATION

LAB ANALYSIS ABBREVIATION:

A = Gross Alpha (Standard Method SM 7110C)
B = Gross Beta (900.0 method)
GC = General Chemistry
M = Metals (CLP method)
R = Radon (913.0 method)
RN = Radionuclides (includes Radium-226, Radium-228, Strontium-89, and Cesium 134)
S = Strontium-90 (905.0 method)
T = Treatability Parameters (includes TOC, COD, Phosphate, TSS, Color, Silica)
V = Volatiles (CLP method)

FIELD QC SAMPLE ABBREVIATION:

AC Blank = Air Contamination Blank
-004R = Wells from which VOCs or Radon were resampled for analytical verifications

Truesdail Laboratory Results are provided at the end of Appendix E

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APCL LABORATORY ANALYSES REPORTS
JULY 1997
SAMPLING ROUND

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Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973059
Collected by: Marc Smith
Collected on: 06/30-07/01/

Received: 07/01/97
Extracted: N/A
Tested: 07/01-10/97
Reported: 07/16/97

Sample Description: Water from MCAS El Toro
Project Description: 6210-005 MCAS El Toro GWM Round

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW12-004 97-03059-1	03DGMW64-004 97-03059-2	03DGMW65X-004 97-03059-3	03DGMW65X-504 97-03059-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	265	302	307	N.D.
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	265	302	307	N.D.
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	124	157	148	1.1
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	6.23	4.39	9.05	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	845	883	746	N.D.
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	169	182	94.7	1.0
CLP: VOC by GC/MS							
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	0.9J	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	2	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	2	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 04DBMW40-004 97-03059-5	17NEW1-004 97-03059-6	17NEW2-004 97-03059-7	TB 7-1-97 97-03059-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	549	207	177	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	549	207	177	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	161	86.2	110	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	14.0	4.25	< 2.5	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	966	472	401	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	72.3	36.0	37.4	-
CLP: VOC by GC/MS							
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	14	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	9J	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	1	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	3	7	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 02NEW12-004 97-03059-1	03DGMW64-004 97-03059-2	03DGMW65X-004 97-03059-3	04DBMW40-004 97-03059-5
CLP Metals (Full CLP 23 metals)							
Aluminum	CLP-Metal	μg/L	200	47.0J	26.7J	34.5J	30.6J
Antimony	CLP-Metal	μg/L	60.0	N.D.	3.7J	3.6J	3.6J
Arsenic	CLP-Metal	μg/L	10.0	11.2	N.D.	N.D.	2.2J
Barium	CLP-Metal	μg/L	200	49.6J	33.7J	47.9J	82.1J
Beryllium	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5.0	0.49J	0.48J	N.D.	0.53J
Calcium	CLP-Metal	μg/L	5000	151,000	63,400	64,000	93,000
Chromium	CLP-Metal	μg/L	10.0	2.0J	2.1J	10.1	N.D.
Cobalt	CLP-Metal	μg/L	50.0	0.89J	N.D.	8.8J	N.D.
Copper	CLP-Metal	μg/L	25.0	5.2J	4.6J	N.D.	N.D.
Iron	CLP-Metal	μg/L	100	57.3J	68.6J	242	36.5J
Lead	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.	N.D.
Magnesium	CLP-Metal	μg/L	5000	27,700	37,100	34,900	65,100
Manganese	CLP-Metal	μg/L	15.0	33.2	15.6	111	55.2
Mercury	CLP-Metal	μg/L	0.20	N.D.	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40.0	509	469	1,160	9.5J
Potassium	CLP-Metal	μg/L	5000	3,020J	5,060	3,950J	5,930
Selenium	CLP-Metal	μg/L	5.0	8.8	11.8	17.1	12.1
Silver	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	102,000	183,000	150,000	170,000
Thallium	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50.0	33.1J	12.2J	10.3J	25.5J
Zinc	CLP-Metal	μg/L	20.0	12.8J	115	19.2J	20.2

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.

J: Reported between PQL and MDL.

(a) Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

Non-Dedicated Pump Team

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005 [redacted]

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Brian [illegible] Matt Brook

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOC (CLP)	METALS - FILTERED (CLP)	GENERAL CHEM *	PHOSPHATE, TDS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
B.T	03DGMW65X-004	6/3/97	1100		✓	water	4	2	1	1							
MB	03DGMW64-004	6/3/97	1410		✓	water	4	2	1	1							
B.T	03DGMW65X-504	6/3/97	0900		✓	water	3	2		1							
MB	04DBMW40-004	6/3/97	1610		✓	water	4	2	1	1							

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russell	7/1/97 0900				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Denise Valencia	7/1/97 9:00 am				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER/ 1 COOLERS (909) 590-1828				* GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-Carb., Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field File

[redacted]

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSEL

Dedicated Pump

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005 [redacted]

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Marc P. Smith

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOC (CLP)	METALS-FILTERED (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SULFATE	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
MPS	17NEW1-004	6/30/97	1645		✓	water	3	2		1							
MPS	17NEW2-004	6/30/97	1450		✓	water	3	2		1							
MPS	02NEW12-004	6/30/97	1710		✓	water	4	2	1	1							

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russel	7/1/97 0900				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	7/1/97 900				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-Carb., Alkalinity and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino, CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973086
Collected by: Marc
Collected on: 07/01-02/97

Received: 07/02/97
Extracted: N/A
Tested: 07/02-14/97
Reported: 07/17/97

Sample Description: Water
Project Description: 6210-005 MCAS El Toro GWM Round

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02DGMW60-004 97-03086-1	02NEW1-004 97-03086-2	03UGMW26-004 97-03086-3	05DGMW68-004 97-03086-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	479	201	267	320
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	479	201	267	320
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	119	52.2	119	127
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	17.3	<1.25	17.0	9.40
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,040	486	801	987
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	191	116	131	280
CLP: VOC by GC/MS							
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	0.7J	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	18	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	2	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	18	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	5	N.D.	1	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	6	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	160	N.D.	0.8J	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS01-5-004 97-03086-5	18MCAS03-1-004 97-03086-6	18MCAS03-2-004 97-03086-7	18MCAS03-3-004 97-03086-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	229	300	179	166
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	229	300	179	166
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	169	223	377	269
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	8.80	19.5	18.1	20.3
Solids, Total Dissolved (TDS)	160.1	mg/L	10	894	2,000	1,570	926
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	194	802	399	104
CLP: VOC by GC/MS							
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	4	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	1	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	20	3	88	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	0.7J	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
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Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS03-3-504 97-03086-9	18PS6-004 97-03086-10	TB 7-2-97-DP 97-03086-11
Alkalinity	310.1	mg-$CaCO_3$/L	2	N.D.	227	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	227	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	N.D.	186	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	N.D.	17.2	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	N.D.	1,160	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	N.D.	250	-
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	3J	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	0.9J	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	0.9J	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	0.7J	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	1	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	0.6J	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	0.9J	10	N.D.
Toluene	CLP-VOC	µg/L	1	1	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	33	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	2	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result TB 7-2-97-ND 97-03086-12	TB 7-2-97-WB 97-03086-13	04DGMW66-004 97-03086-14
Alkalinity	310.1	mg-$CaCO_3$/L	2	-	-	254
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	-	-	254
Carbonate	SM2320B	mg-$CaCO_3$/L	2	-	-	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	-	-	149
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	-	-	10.1
Solids, Total Dissolved (TDS)	160.1	mg/L	10	-	-	771
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	-	-	105
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result 18PS6-004 97-03086-10
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	0.80
Chemical Oxygen Demand (COD)	410.1	mg-O_2/L	20	N.D.
Color	110.2	Color Unit	1	1
Phosphorus, Orthophosphate	300.0	mg/L	0.1	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	56.8
Solids, Total Suspended (TSS)	160.2	mg/L	4	165
Carbon, Total Organic (TOC)	415.1	mg/L	1	2.0

Component Analyzed	Method	Unit	CRDL	Analysis Result 02DGMW60-004 97-03086-1	02NEW1-004 97-03086-2
CLP Metals (Full CLP 23 metals)					
Aluminum	CLP-Metal	µg/L	200	40.6J	48.2J
Antimony	CLP-Metal	µg/L	60.0	2.8J	3.9J
Arsenic	CLP-Metal	µg/L	10.0	N.D.	N.D.
Barium	CLP-Metal	µg/L	200	76.4J	7.5J
Beryllium	CLP-Metal	µg/L	5.0	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5.0	N.D.	0.33J
Calcium	CLP-Metal	µg/L	5000	98,700	47,900
Chromium	CLP-Metal	µg/L	10.0	0.91J	1.8J
Cobalt	CLP-Metal	µg/L	50.0	N.D.	N.D.
Copper	CLP-Metal	µg/L	25.0	3.7J	2.3J
Iron	CLP-Metal	µg/L	100	34.4J	44.9J
Lead	CLP-Metal	µg/L	5.0	N.D.	N.D.
Magnesium	CLP-Metal	µg/L	5000	93,900	34,900
Manganese	CLP-Metal	µg/L	15.0	2.6J	33.1
Mercury	CLP-Metal	µg/L	0.20	N.D.	N.D.
Nickel	CLP-Metal	µg/L	40.0	6.1J	4.3J
Potassium	CLP-Metal	µg/L	5000	10,500	4,710J
Selenium	CLP-Metal	µg/L	5.0	14.9	N.D.
Silver	CLP-Metal	µg/L	10.0	N.D.	N.D.
Sodium	CLP-Metal	µg/L	5000	132,000	69,700
Thallium	CLP-Metal	µg/L	10.0	N.D.	N.D.
Vanadium	CLP-Metal	µg/L	50.0	7.6J	N.D.
Zinc	CLP-Metal	µg/L	20.0	12.3J	14.9J

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 03UGMW26-004 97-03086-3	05DGMW68-004 97-03086-4	04DGMW66-004 97-03086-14
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	μg/L	200	73.4J	78.5J	53.1J
Antimony	CLP-Metal	μg/L	60.0	4.2J	3.9J	2.1J
Arsenic	CLP-Metal	μg/L	10.0	3.4J	N.D.	3.1J
Barium	CLP-Metal	μg/L	200	122J	33.9J	64.9J
Beryllium	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5.0	0.65J	0.62J	0.67J
Calcium	CLP-Metal	μg/L	5000	83,500	157,000	108,000
Chromium	CLP-Metal	μg/L	10.0	7.2J	2.1J	5.9J
Cobalt	CLP-Metal	μg/L	50.0	N.D.	N.D.	1.4J
Copper	CLP-Metal	μg/L	25.0	5.1J	3.4J	5.7J
Iron	CLP-Metal	μg/L	100	96.7J	62.5J	86.2J
Lead	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Magnesium	CLP-Metal	μg/L	5000	36,600	45,000	36,400
Manganese	CLP-Metal	μg/L	15.0	9.9J	4.0J	4.9J
Mercury	CLP-Metal	μg/L	0.20	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40.0	94.2	65.7	152
Potassium	CLP-Metal	μg/L	5000	3,610J	4,620J	4,180J
Selenium	CLP-Metal	μg/L	5.0	10.9	8.6	20.7
Silver	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	134,000	141,000	132,000
Thallium	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50.0	34.5J	13.8J	23.2J
Zinc	CLP-Metal	μg/L	20.0	16.4J	15.5J	10.9J

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
(a) Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

NON-DEDICATED PUMP TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Matt Brool

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM*	PHOSPHATE, TSS, COLOR, SIUCA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
MB	18P56-004	7/1/97	1700		✓	Water	6	2		1	1	1	1				
MB	03UGMW26-004	7/1/97	1322		✓	Water	4	2	1	1							
MB	05DGMW68-004	7/1/97	1105		✓	Water	4	2	1	1							
	TB.7.2.97 ND	7/2/97	0720		✓	Water	1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[signature]	7/2/97 0855				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[signature] APCL	7/2/97 0855				
Airbill No. APCL COURIER/ 1 CODLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES.

FIELD TEAM LEADER: PAT RUSSELL

DEDICATED P(TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature)

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS - (CLP)	GENERAL CHEM *	PHOSPHATE, TDS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)					REMARKS	PRESERVATIVE USED
02DGMW60_004	7/1/97	1500		✓	H2O			2	1	1									
02NEWI-004	7/1/97	1550		✓	H2O			2	1	1									
TB 7-2-97-DP																			

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
	7/2/97 0855				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
	7/2/97 0855				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

- SAMPLES FOR METALS HAVE PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

WESTBAY TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Marc P. Smith

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	METALS (FILTERED) - CLP	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-NITROGEN	TOC (415.1)			REMARKS	PRESERVATIVE USED
PS	18MCA501.5.004	7/1/97	1600		✓	H_2O		3	2		1							
PS	18MCA503.1.004	7/1/97	1230		✓	H_2O		3	2		1							
PS	18MCA503.2.004	7/1/97	1125		✓	H_2O		3	2		1							
PS	18MCA503.3.004	7/1/97	1010		✓	H_2O		3	2		1							
PS	18MCA503.3.504	7/1/97	0845		✓	H_2O		3	2		1							
	TB 7-2-97-WB																	

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[signature]	7/2/97 0855				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[signature]	7/2/97 0855				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
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APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973105
Collected by: Matt
Collected on: 07/02-03/97

Received: 07/03/97
Extracted: N/A
Tested: 07/03-14/97
Reported: 07/17/97

Sample Description: Water
Project Description: 6210-005 MCAS El Toro GWM Round

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02DGMW61-004 97-03105-1	02NEW3-004 97-03105-2	02NEW6-004 97-03105-3
Alkalinity	310.1	mg-$CaCO_3$/L	2	302	291	309
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	302	291	309
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	52.6	97.3	108
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	7.90	7.87	8.90
Solids, Total Dissolved (TDS)	160.1	mg/L	10	745	898	1,000
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	231	252	266
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	10	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW8A-004 97-03105-4	02UGMW25-004 97-03105-5	15DBMW51-004 97-03105-6
Alkalinity	310.1	mg-$CaCO_3$/L	2	285	205	614
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	285	205	614
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	62.6	136	338
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	9.60	12.2	< 10
Solids, Total Dissolved (TDS)	160.1	mg/L	10	570	980	2,560
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	160	287	874
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	2
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	10
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	1J
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	12	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 15DBMW51-304 97-03105-7	16DGMW81-004 97-03105-8	16DGMW81-904 97-03105-9
Alkalinity	310.1	mg-$CaCO_3$/L	2	612	194	N.D.
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	612	194	N.D.
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	360	273	N.D.
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	< 10	15.4	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	2,640	1,800	N.D.
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	910	662	N.D.
CLP: VOC by GC/MS						
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	2	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	11	2J	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	4J	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	2	1	1
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS01-3-004 97-03105-10	18MCAS01-4-004 97-03105-11	18MCAS02-3-004 97-03105-12
Alkalinity	310.1	mg-$CaCO_3$/L	2	227	245	207
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	227	245	207
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	401	227	227
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	23.0	17.9	21.7
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,530	1,210	1,170
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	477	305	270
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	2	4	2
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS02-4-004 97-03105-13	18MCAS02-5-004 97-03105-14	24NEW7-004 97-03105-15
Alkalinity	310.1	mg-$CaCO_3$/L	2	209	229	185
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	209	229	185
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	196	198	316
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	15.3	7.20	20.3
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,030	872	1,540
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	211	187	533
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	3J	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	0.8J
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	0.5J
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	1
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	10	16	9
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 24NEW7-304 97-03105-16	24NEW8-004 97-03105-17	TB 7-3-97 DP/AM 97-03105-18
Alkalinity	310.1	mg-$CaCO_3$/L	2	183	159	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	183	159	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	327	320	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	22.6	19.7	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,530	1,160	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	555	320	-
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	0.6J	1	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	0.5J	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	1	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	9	N.D.	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result TB 7-3-97 ND/AM 97-03105-19	TB 7-3-97 WB 97-03105-20
CLP: VOC by GC/MS					
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.

Component Analyzed	Method	Unit	PQL	Analysis Result 24NEW7-004 97-03105-15	24NEW7-304 97-03105-16	24NEW8-004 97-03105-17
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	0.3	0.45	0.3
Chemical Oxygen Demand (COD)	410.1	mg-O_2/L	20	N.D.	N.D.	N.D.
Color	110.2	Color Unit	1	2.0	1	1
Phosphorus, Orthophosphate	300.0	mg/L	0.1	< 10	< 10	< 10
Silica (SiO_2) dissolved	370.1	mg/L	1	48.3	54.6	53.7
Solids, Total Suspended (TSS)	160.2	mg/L	4	40	19	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	1	2	1

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 02DGMW61-004 97-03105-1	02NEW3-004 97-03105-2
CLP Metals (Full CLP 23 metals)					
Aluminum	CLP-Metal	µg/L	200	14.8J	59.6J
Antimony	CLP-Metal	µg/L	60.0	3.2J	2.5J
Arsenic	CLP-Metal	µg/L	10.0	N.D.	N.D.
Barium	CLP-Metal	µg/L	200	45.0J	68.2J
Beryllium	CLP-Metal	µg/L	5.0	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5.0	0.36J	0.55J
Calcium	CLP-Metal	µg/L	5000	143,000	151,000
Chromium	CLP-Metal	µg/L	10.0	3.4J	1.4J
Cobalt	CLP-Metal	µg/L	50.0	N.D.	1.3J
Copper	CLP-Metal	µg/L	25.0	3.0J	4.4J
Iron	CLP-Metal	µg/L	100	26.3J	89.9J
Lead	CLP-Metal	µg/L	5.0	N.D.	N.D.
Magnesium	CLP-Metal	µg/L	5000	31,600	39,900
Manganese	CLP-Metal	µg/L	15.0	8.0J	5.0J
Mercury	CLP-Metal	µg/L	0.20	N.D.	N.D.
Nickel	CLP-Metal	µg/L	40.0	1.8J	23.4J
Potassium	CLP-Metal	µg/L	5000	4,510J	2,240J
Selenium	CLP-Metal	µg/L	5.0	37.1	9.6
Silver	CLP-Metal	µg/L	10.0	N.D.	N.D.
Sodium	CLP-Metal	µg/L	5000	69,900	87,100
Thallium	CLP-Metal	µg/L	10.0	N.D.	N.D.
Vanadium	CLP-Metal	µg/L	50.0	N.D.	10.5J
Zinc	CLP-Metal	µg/L	20.0	13.6J	18.6J

Component Analyzed	Method	Unit	CRDL	Analysis Result 02NEW6-004 97-03105-3	02NEW8A-004 97-03105-4	02UGMW25-004 97-03105-5
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	µg/L	200	70.9J	38.6J	34.8J
Antimony	CLP-Metal	µg/L	60.0	2.3J	5.2J	5.0J
Arsenic	CLP-Metal	µg/L	10.0	N.D.	2.8J	4.1J
Barium	CLP-Metal	µg/L	200	49.2J	40.0J	69.4J
Beryllium	CLP-Metal	µg/L	5.0	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5.0	0.50J	0.66J	0.69J
Calcium	CLP-Metal	µg/L	5000	158,000	127,000	162,000
Chromium	CLP-Metal	µg/L	10.0	4.0J	2.0J	1.6J

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 02NEW6-004 97-03105-3	02NEW8A-004 97-03105-4	02UGMW25-004 97-03105-5
Cobalt	CLP-Metal	μg/L	50.0	N.D.	N.D.	4.5J
Copper	CLP-Metal	μg/L	25.0	5.5J	2.7J	2.7J
Iron	CLP-Metal	μg/L	100	93.7J	48.3J	43.3J
Lead	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Magnesium	CLP-Metal	μg/L	5000	42,500	24,000	35,300
Manganese	CLP-Metal	μg/L	15.0	3.7J	7.1J	1.5J
Mercury	CLP-Metal	μg/L	0.20	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40.0	11.5J	24.7J	5.4J
Potassium	CLP-Metal	μg/L	5000	2,420J	1,720J	1,710J
Selenium	CLP-Metal	μg/L	5.0	9.9	16.6	2.8J
Silver	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	93,200	55,900	105,000
Thallium	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50.0	7.9J	3.9J	14.2J
Zinc	CLP-Metal	μg/L	20.0	23.1	12.7J	13.6J

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.

J: Reported between PQL and MDL.

(a) Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

DEDICATED PUMP TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature)

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
02UGMW25-004	7/2/97	1700		✓	H_2O		4	2	1	1							
02DGMW61-004	7/2/97	1605		✓	H_2O		4	2	1	1							
02NEW6-004	7/2/97	1335		✓	H_2O		4	2	1	1							
02NEW8A-004	7/2/97	1525		✓	H_2O		4	2	1	1							
02NEW3-004	7/2/97	1430		✓	H_2O		4	2	1	1							
TB.7-3.97DP/AM	7/3/97	0800		✓	H_2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Marc P. Smith	7/3/97 0925				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	7/3/97 0930				
Airbill No. APCL COURIER/ 2 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD.
NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

WESTBAY TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Marc P. Smith

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM*	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
18MCAS01-3-004	7/2/97	0900		✓	H2O		3	2		1							
18MCAS01-4-004	7/2/97	0815		✓	H2O		3	2		1							
18MCAS02-3-004	7/2/97	1225		✓	H2O		3	2		1							
18MCAS02-4-004	7/2/97	1140		✓	H2O		3	2		1							
18MCAS02-5-004	7/2/97	1030		✓	H2O		3	2		1							
TB.7.3.97WB	7/2/97	0800		✓	H2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Marc P. Smith	7/3/97 0925				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	7/3/97 0930				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

NON-DEDICATED PUMP TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Matt Broz

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
WB	16DGMW81-004	7/2/97	0910		✓	H_2O		3	2		1							
WB	24NEW7-004	7/2/97	1045		✓	H_2O		6	2		1	1	1	1				
WB	24NEW7-304	7/2/97	1100		✓	H_2O		6	2		1	1	1	1				
WB	24NEW8-004	7/2/97	1210		✓	H_2O		6	2		1	1	1	1				
WB	15DBMW51-004	7/2/97	1633		✓	H_2O		3	2		1							
WB	15DBMW51-304	7/2/97	1640		✓	H_2O		3	2		1							
	TB-7-3-97ND/AM	7/3/97	0800		✓	H_2O		1	1									
	16DGMW81-904	7/2/97	0920		✓	H_2O		3	2		1							

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Marc P. Smith	7/3/97 0955				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	7/3/97 1000				
Airbill No. APCL COURIER/ 2 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory
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APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973118
Collected by:
Collected on: 07/03/97

Received: 07/03/97
Extracted: N/A
Tested: 07/03-15/97
Reported: 07/17/97

Sample Description: Water
Project Description: 6210-005 MCAS El Toro GWM Round

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02DGMW59-004 97-03118-1	02NEW2-004 97-03118-2	07DBMW43-004 97-03118-3
Alkalinity	310.1	mg-$CaCO_3$/L	2	236	258	104
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	236	258	104
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	236	93.3	325
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	21.9	8.20	16.2
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,470	948	1,330
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	449	245	199
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	μg/L	200	28.6J	15.5J	-
Antimony	CLP-Metal	μg/L	60.0	N.D.	N.D.	-
Arsenic	CLP-Metal	μg/L	10.0	2.3J	2.3J	-
Barium	CLP-Metal	μg/L	200	119J	75.0J	-
Beryllium	CLP-Metal	μg/L	5.0	N.D.	N.D.	-
Cadmium	CLP-Metal	μg/L	5.0	0.78J	0.41J	-
Calcium	CLP-Metal	μg/L	5000	224,000	140,000	-
Chromium	CLP-Metal	μg/L	10.0	1.1J	1.8J	-
Cobalt	CLP-Metal	μg/L	50.0	N.D.	N.D.	-
Copper	CLP-Metal	μg/L	25.0	4.6J	2.1J	-
Iron	CLP-Metal	μg/L	100	6.2J	6.9J	-
Lead	CLP-Metal	μg/L	5.0	N.D.	N.D.	-
Magnesium	CLP-Metal	μg/L	5000	51,500	37,100	-
Manganese	CLP-Metal	μg/L	15.0	10.9J	N.D.	-
Mercury	CLP-Metal	μg/L	0.20	N.D.	N.D.	-
Nickel	CLP-Metal	μg/L	40.0	14.8J	8.1J	-
Potassium	CLP-Metal	μg/L	5000	2,430J	1,800J	-
Selenium	CLP-Metal	μg/L	5.0	4.0J	12.2	-
Silver	CLP-Metal	μg/L	10.0	N.D.	N.D.	-
Sodium	CLP-Metal	μg/L	5000	125,000	87,700	-
Thallium	CLP-Metal	μg/L	10.0	N.D.	N.D.	-
Vanadium	CLP-Metal	μg/L	50.0	9.9J	14.0J	-
Zinc	CLP-Metal	μg/L	20.0	16.4J	10.2J	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 02DGMW59-004 97-03118-1	Analysis Result 02NEW2-004 97-03118-2
CLP: VOC by GC/MS					
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 07DBMW43-004 97-03118-3	TB 7-3-97 DP/PM 97-03118-4	TB 7-3-97 ND/PM 97-03118-5
CLP: VOC by GC/MS						
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
[a] Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

NON-DEDICATED PUMP TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005 [redacted]

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Matt Boel

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	METALS - FILTERED (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (4 IQ.) AMMONIA-N	TOC (4 IS.)			REMARKS	PRESERVATIVE USED
07DBMW43.004	7/3/97	1258		✓	H2O		3	2		1							
TB-7-3-97-ND/PM	7/3/97	1330		✓	H2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Brian Bi	7/3/97 1335				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Melissa Stinson	7/4/97 1335				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-Carb., Alkalinity and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

DEDICATED - PUMP TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature)

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
02NEW2-004	7/3/97	1135		✓	H2O	4	2	1	1							
02DGMW59.004	7/3/97	1035		✓	H2O	4	2	1	1							
TB. 7-3-97-DP/PM	7/3/97	1330		✓	H2O	1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Brian [illegible]	7/3/97 1335				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Melissa Stinson	7/4/97 1335				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973153
Collected by: Matt
Collected on: 07/07-08/97

Received: 07/08/97
Extracted: N/A
Tested: 07/08-15/97
Reported: 08/04/97

Sample Description: Water
Project Description: 6210-005 MCAS El Toro GWM Round

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 08DGMW74-004 97-03153-1	08UGMW29-004 97-03153-2	18BGMW05D-004 97-03153-3
Alkalinity	310.1	mg-$CaCO_3$/L	2	258	161	227
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	258	161	227
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	268	289	235
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	17.0	13.3	6.50
Solids, Total Dissolved (TDS)	160.1	mg/L	10	912	977	1,020
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	84.0	53.6	120
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	1	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	4	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	0.7J	N.D.	0.8J
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	0.8J	N.D.	12
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	79	7	20
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18DW135-004 97-03153-4	18PS2-004 97-03153-5	TB 7/8-97-ND 97-03153-6
Alkalinity	310.1	mg-$CaCO_3$/L	2	174	329	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	174	329	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	385	206	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	23.8	17.9	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,750	1,680	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	862	513	-
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	15	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	1	1	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	0.7J	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	27	13	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result			
				08DGMW74-004 97-03153-1	18BGMW05D-004 97-03153-3	18DW135-004 97-03153-4	18PS2-004 97-03153-5
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.1	mg-O_2/L	20	N.D.	N.D.	N.D.	N.D.
Color	110.2	Color Unit	1	N.D.	1	1	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	<10	<5	<10	<5
Silica (SiO_2) dissolved	370.1	mg/L	1	46.8	59.3	50.6	46.8
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	19	43	4
Carbon, Total Organic (TOC)	415.1	mg/L	1	3.6	3.4	3.2	4.4

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.

J: Reported between PQL and MDL.

(a) Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

NON-DEDICATED T(

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Matt Brooks

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
MB	18BGMW05D-004	7/7/97	1421		✓	H2O		6	2		1	1	1	1				
MB	08UGMW29-004	7/7/97	1229		✓	H2O		3	2		1							
MB	18PS2-004	7/7/97	1023		✓	H2O		6	2		1	1	1	1				
MB	18DW135-004	7/7/97	0908		✓	H2O		6	2		1	1	1	1				
MB	08DGMW74-004	7/7/97	1615		✓	H2O		6	2		1	1	1	1				
	TB-7/8-97-ND	7/8/97	0710		✓	H2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russell	7/8/97 0850				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Lorraine Valin	7/8/97 0850				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER/ 1 COOLERS (909) 590-1828				* GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino, CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973165
Collected by: Matt
Collected on: 07/08-09/97

Received: 07/09/97
Extracted: N/A
Tested: 07/09-14/97
Reported: 07/22/97

Sample Description: Water
Project Description: 6210-005 MCAS El Toro GWM Round (

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW11-004 97-03165-1	03DBMW39-004 97-03165-2	05DBMW41-004 97-03165-3	09DBMW45-004 97-03165-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	242	419	331	183
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	242	419	331	183
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	81.6	160	114	270
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	4.60	6.90	9.90	15.1
Solids, Total Dissolved (TDS)	160.1	mg/L	10	691	790	983	1,150
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	147	40.3	223	284
CLP: VOC by GC/MS							
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	4
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	2
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	7
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	5
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	1,400
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	7J

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 09DBMW45-304 97-03165-5	09DGMW75-004 97-03165-6	09DGMW75-304 97-03165-7	18BGMW03C-004 97-03165-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	185	190	190	161
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	185	190	190	161
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	301	340	288	131
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	15.5	23.6	23.4	8.70
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,120	1,220	1,160	624
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	220	343	306	106
CLP: VOC by GC/MS							
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	4	2	2	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	2	2	2	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	7	2	2	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	5	5	5	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	1,500	450	430	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	7J	6J	6J	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW03E-004 97-03165-9	22DBMW47-004 97-03165-10	22DBMW47-304 97-03165-11
Alkalinity	310.1	mg-$CaCO_3$/L	2	143	192	201
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	143	192	201
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	271	250	242
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	11.4	15.3	14.7
Solids, Total Dissolved (TDS)	160.1	mg/L	10	851	1,070	1,060
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	92.6	156	146
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	< 100	< 100	< 100
Benzene	CLP-VOC	µg/L	1	< 10	< 10	< 10
Bromodichloromethane	CLP-VOC	µg/L	1	< 10	< 10	< 10
Bromoform	CLP-VOC	µg/L	1	< 10	< 10	< 10
Bromomethane	CLP-VOC	µg/L	10	< 100	< 100	< 100
2-Butanone (MEK)	CLP-VOC	µg/L	10	< 100	< 100	< 100
Carbon disulfide	CLP-VOC	µg/L	10	< 100	< 100	< 100
Carbon tetrachloride	CLP-VOC	µg/L	1	< 10	< 10	< 10
Chlorobenzene	CLP-VOC	µg/L	10	< 100	< 100	< 100
Chlorodibromomethane	CLP-VOC	µg/L	1	< 10	< 10	< 10
Chloroethane	CLP-VOC	µg/L	10	< 100	< 100	< 100
Chloroform	CLP-VOC	µg/L	1	< 10	< 10	< 10
Chloromethane	CLP-VOC	µg/L	10	< 100	< 100	< 100
1,1-Dichloroethane	CLP-VOC	µg/L	1	< 10	< 10	< 10
1,2-Dichloroethane	CLP-VOC	µg/L	1	< 10	< 10	< 10
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	< 10	< 10	< 10
1,1-Dichloroethene	CLP-VOC	µg/L	1	< 10	< 10	< 10
1,2-Dichloropropane	CLP-VOC	µg/L	1	< 10	< 10	< 10
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	< 100	< 100	< 100
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	< 100	< 100	< 100
Ethylbenzene	CLP-VOC	µg/L	1	< 10	< 10	< 10
2-Hexanone	CLP-VOC	µg/L	10	< 100	< 100	< 100
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	< 100	< 100	< 100
Methylene chloride	CLP-VOC	µg/L	1	< 10	< 10	< 10
Styrene	CLP-VOC	µg/L	10	< 100	< 100	< 100
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	< 100	< 100	< 100
Tetrachloroethene	CLP-VOC	µg/L	1	< 10	< 10	< 10
Toluene	CLP-VOC	µg/L	1	< 10	< 10	< 10
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	< 10	< 10	< 10
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	< 10	< 10	< 10
Trichloroethene	CLP-VOC	µg/L	1	330	760	730
Vinyl chloride	CLP-VOC	µg/L	1	< 10	< 10	< 10
Xylenes (total)	CLP-VOC	µg/L	1	< 10	< 10	< 10
Freon-113 [a]	CLP-VOC	µg/L	10	< 100	< 100	< 100

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 22DBMW47-504 97-03165-12	24NEW4-004 97-03165-13	24NEW4-304 97-03165-14
Alkalinity	310.1	mg-$CaCO_3$/L	2	N.D.	194	196
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	194	196
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	N.D.	248	254
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	N.D.	11.7	12.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	N.D.	954	869
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	N.D.	100	102
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	< 100	< 100
Benzene	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Bromoform	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Bromomethane	CLP-VOC	µg/L	10	N.D.	< 100	< 100
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	< 100	< 100
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	< 100	< 100
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	< 100	< 100
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Chloroethane	CLP-VOC	µg/L	10	N.D.	< 100	< 100
Chloroform	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Chloromethane	CLP-VOC	µg/L	10	N.D.	< 100	< 100
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	< 10	< 10
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	< 10	< 10
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	< 10	< 10
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	< 10	< 10
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	< 10	< 10
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	< 100	< 100
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	< 100	< 100
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	< 10	< 10
2-Hexanone	CLP-VOC	µg/L	10	N.D.	< 100	< 100
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	< 100	< 100
Methylene chloride	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Styrene	CLP-VOC	µg/L	10	N.D.	< 100	< 100
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	< 100	< 100
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Toluene	CLP-VOC	µg/L	1	N.D.	< 10	< 10
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	< 10	< 10
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Trichloroethene	CLP-VOC	µg/L	1	N.D.	640	650
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	< 10	< 10
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	< 100	< 100

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 24NEW5-004 97-03165-15	TB 7-9-97-DP 97-03165-16	TB 7-9-97-ND 97-03165-17
Alkalinity	310.1	mg-$CaCO_3$/L	2	170	-	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	170	-	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	-	-
Chloride Cl^- by IC	300.0	mg/L	0.2	148	-	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	6.70	-	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	689	-	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	123	-	-
CLP: VOC by GC/MS						
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result 18BGMW03E-004 97-03165-9	24NEW4-004 97-03165-13	24NEW4-304 97-03165-14	24NEW5-004 97-03165-15
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.1	mg-O_2/L	20	N.D.	N.D.	N.D.	N.D.
Color	110.2	Color Unit	1	2.0	N.D.	N.D.	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	<2.5	<5	<5	<5
Silica (SiO_2) dissolved	370.1	mg/L	1	50.3	55.7	52.8	51.6
Solids, Total Suspended (TSS)	160.2	mg/L	4	24	18	N.D.	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	2.7	2.8	2.6	2.7

Component Analyzed	Method	Unit	CRDL	Analysis Result 02NEW11-004 97-03165-1	03DBMW39-004 97-03165-2	05DBMW41-004 97-03165-3
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	μg/L	200	52.2J	37.3J	N.D.
Antimony	CLP-Metal	μg/L	60.0	3.8J	3.1J	4.2J
Arsenic	CLP-Metal	μg/L	10.0	3.3J	3.3J	N.D.
Barium	CLP-Metal	μg/L	200	72.5J	165J	58.5J
Beryllium	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5.0	0.56J	N.D.	0.85J
Calcium	CLP-Metal	μg/L	5000	98,200	67,300	121,000
Chromium	CLP-Metal	μg/L	10.0	3.8J	2.9J	1.7J
Cobalt	CLP-Metal	μg/L	50.0	0.99J	N.D.	N.D.
Copper	CLP-Metal	μg/L	25.0	4.3J	3.4J	2.7J
Iron	CLP-Metal	μg/L	100	59.0J	83.6J	25.3J
Lead	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Magnesium	CLP-Metal	μg/L	5000	27,000	38,100	34,400
Manganese	CLP-Metal	μg/L	15.0	38.2	22.5	2.5J
Mercury	CLP-Metal	μg/L	0.20	0.20	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40.0	272	577	17.0J
Potassium	CLP-Metal	μg/L	5000	2,870J	3,900J	3,200J
Selenium	CLP-Metal	μg/L	5.0	7.6	7.6	8.6
Silver	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	83,500	175,000	133,000
Thallium	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50.0	11.8J	30.1J	10.2J
Zinc	CLP-Metal	μg/L	20.0	61.7	24.5	10.9J

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
(a) Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

DEDICATED TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Marc P. Smith

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
03DBMW39-004	7/8/97	1100		✓	H_2O		4	2	1	1							
18BGMW03E-004	7/8/97	1310		✓	H_2O		6	2		1	1	1	1				
02NEW11-004	7/8/97	1515		✓	H_2O		4	2	1	1							
05DBMW41-004	7/8/97	1730		✓	H_2O		4	2	1	1							
TB.7.9.97.DP	7/9/97	0730		✓	H_2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Marc P. Smith	7/9/97 0850				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	7/9/97 0850				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER/ 2 COOLERS (909) 590-1828				* GEN. CHEM includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

[redacted] - SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/ PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

NON-DEDICATED TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005 [redacted]

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Matt Brool

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	METALS - FILTERED (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SULFA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
VB	09DGMW75-004	7/8/97	0911		✓	H2O		3	2		1							
VB	09DGMW75-304	7/8/97	0920		✓	H2O		3	2		1							
VB	24NEW4-004	7/8/97	1043		✓	H2O		6	2		1	1	1	1				
VB	24NEW4-304	7/8/97	1053		✓	H2O		6	2		1	1	1	1				
VB	18BGMW03C-004	7/8/97	1230		✓	H2O		3	2		1							
VB	22DBMW47-504	7/8/97	1320		✓	H2O		3	2		1							
VB	22DBMW47-004	7/8/97	1433		✓	H2O		3	2		1							
VB	22DBMW47-304	7/8/97	1443		✓	H2O		3	2		1							
VB	09DBMW45-004	7/8/97	1728		✓	H2O		3	2		1							
VB	09DBMW45-304	7/8/97	1733		✓	H2O		3	2		1							
VB	24NEW5-004	7/8/97	1620		✓	H2O		6	2		1	1	1	1				
	TB.7.9.97.ND	7/9/97	0730		✓	H2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Brian [illegible]	7/9/97 0850				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	7/9/97 0850				
Airbill No. APCL COURIER/ 2 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory*** GEN.CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-Carb., Alkalinity and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973184
Collected by: Matt
Collected on: 07/09-10/97

Received: 07/10/97
Extracted: N/A
Tested: 07/10-22/97
Reported: 08/04/97

Sample Description: Water from MCAS El Toro
Project Description: 6210-005 GWM Round 6

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 01MW102-004 97-03184-1	01MW201-004 97-03184-2	05NEW1-004 97-03184-3	05NEW1-304 97-03184-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	236	177	256	256
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	236	177	256	256
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	138	42.0	112	108
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	<4	11.7	9.90	9.80
Solids, Total Dissolved (TDS)	160.1	mg/L	10	600	463	911	918
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	<20	76.9	206	209
CLP: VOC by GC/MS							
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	1	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	4	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	13	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05UGMW27-004 97-03184-5	05UGMW27-304 97-03184-6	07DGMW91-004 97-03184-7	13DGMW78-004 97-03184-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	296	296	227	333
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	296	296	227	333
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	107	111	231	278
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	6.90	8.00	12.1	17.3
Solids, Total Dissolved (TDS)	160.1	mg/L	10	909	915	1,040	2,060
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	255	261	103	620
CLP: VOC by GC/MS							
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.	2	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.	3	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.	0.7J	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	8J
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	8	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	75	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
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Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 14DBMW50-004 97-03184-9	14DGMW79-004 97-03184-10	18BGMW04B-004 97-03184-11	18BGMW101-004 97-03184-12
Alkalinity	310.1	mg-$CaCO_3$/L	2	271	289	154	265
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	271	289	154	265
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	341	342	242	302
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	21.9	18.6	15.2	20.3
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,800	2,090	976	1,460
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	657	798	86.2	331
CLP: VOC by GC/MS							
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	9	3	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	5	9	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	4	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	4	16
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.

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Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 21UGMW37-004 97-03184-13	21UGMW37-304 97-03184-14	TB 7-10-97-DP 97-03184-15	TB 7-10-97-ND 97-03184-16
Alkalinity	310.1	mg-$CaCO_3$/L	2	229	234	-	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	229	234	-	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-	-
Chloride Cl^- by IC	300.0	mg/L	0.2	204	202	-	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	15.4	15.1	-	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	909	954	-	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	162	172	-	-
CLP: VOC by GC/MS							
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	1J	1J	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	1	0.8J	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	11	10	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	19	18	N.D.	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result 18BGMW04B-004 97-03184-11
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.
Chemical Oxygen Demand (COD)	410.1	mg-O_2/L	20	N.D.
Color	110.2	Color Unit	1	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	51.7
Solids, Total Suspended (TSS)	160.2	mg/L	4	6
Carbon, Total Organic (TOC)	415.1	mg/L	1	2.8

Component Analyzed	Method	Unit	CRDL	Analysis Result 01MW102-004 97-03184-1	01MW201-004 97-03184-2	05NEW1-004 97-03184-3
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	μg/L	200	35.9J	23.8J	14.2J
Antimony	CLP-Metal	μg/L	60.0	1.7J	N.D.	N.D.
Arsenic	CLP-Metal	μg/L	10.0	N.D.	1.5J	N.D.
Barium	CLP-Metal	μg/L	200	8.8J	8.9J	121J
Beryllium	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Calcium	CLP-Metal	μg/L	5000	107,000	99,200	119,000
Chromium	CLP-Metal	μg/L	10.0	3.5J	4.2J	7.0J
Cobalt	CLP-Metal	μg/L	50.0	4.1J	0.89J	3.7J
Copper	CLP-Metal	μg/L	25.0	26.0	7.4J	N.D.
Iron	CLP-Metal	μg/L	100	66.5J	17.5J	25.7J
Lead	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Magnesium	CLP-Metal	μg/L	5000	6,150	3,950J	34,200
Manganese	CLP-Metal	μg/L	15.0	61.4	12.7J	83.9
Mercury	CLP-Metal	μg/L	0.20	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40.0	843	224	562
Potassium	CLP-Metal	μg/L	5000	3,400J	2,440J	3,310J
Selenium	CLP-Metal	μg/L	5.0	N.D.	4.6J	11.0
Silver	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	77,400	50,100	102,000
Thallium	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50.0	3.0J	4.3J	7.1J
Zinc	CLP-Metal	μg/L	20.0	194	17.0J	16.3J

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 05NEW1-304 97-03184-4	05UGMW27-004 97-03184-5	05UGMW27-304 97-03184-6
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	μg/L	200	18.8J	15.7J	12.0J
Antimony	CLP-Metal	μg/L	60.0	2.4J	N.D.	N.D.
Arsenic	CLP-Metal	μg/L	10.0	N.D.	4.3J	2.0J
Barium	CLP-Metal	μg/L	200	125J	51.9J	55.2J
Beryllium	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5.0	N.D.	0.34J	0.37J
Calcium	CLP-Metal	μg/L	5000	123,000	127,000	135,000
Chromium	CLP-Metal	μg/L	10.0	7.1J	1.5J	1.1J
Cobalt	CLP-Metal	μg/L	50.0	3.9J	N.D.	N.D.
Copper	CLP-Metal	μg/L	25.0	2.0J	N.D.	N.D.
Iron	CLP-Metal	μg/L	100	27.4J	11.5J	11.8J
Lead	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Magnesium	CLP-Metal	μg/L	5000	35,000	35,000	37,300
Manganese	CLP-Metal	μg/L	15.0	87.6	N.D.	N.D.
Mercury	CLP-Metal	μg/L	0.20	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40.0	586	3.8J	2.4J
Potassium	CLP-Metal	μg/L	5000	3,360J	2,120J	2,280J
Selenium	CLP-Metal	μg/L	5.0	12.4	7.5	7.5
Silver	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	107,000	121,000	128,000
Thallium	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50.0	7.4J	11.4J	12.1J
Zinc	CLP-Metal	μg/L	20.0	14.7J	28.9	11.6J

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
(a) Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER; PAT RUSSELL

DEDICATED TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Mara P. Smith

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SULF	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
05NEW1-004	7/9/97	0915		✓	H_2O		4	2	1	1							
05NEW1-304	7/9/97	0920		✓	H_2O		4	2	1	1							
05UGMW27-004	7/9/97	1100		✓	H_2O		4	2	1	1							
05UGMW27-304	7/9/97	1110		✓	H_2O		4	2	1	1							
13DGMW78-004	7/9/97	1245		✓	H_2O		3	2		1							
14DGMW79-004	7/9/97	1320		✓	H_2O		3	2		1							
14DBMW50-004	7/9/97	1405		✓	H_2O		3	2		1							
18BGMW101-004	7/9/97	1450		✓	H_2O		3	2		1							
18BGMW048-004	7/9/97	1630		✓	H_2O		6	2		1	1	1	1				
TB-7-10-97-DP	7/10/97			✓	H_2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[signature]	7/10/97 0845				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[signature]	7/10/97 0845				
Airbill No. APCL COURIER/ 2 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * Gen. Chem. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD.
NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

NON-DEDICATED 1M

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Matt Brool

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
MB	01MW102-004	7/9/97	1303		✓	H2O		4	2	1	1							
MB	01MW201-004	7/9/97	1222		✓	H2O		4	2	1	1							
MB	21UGMW37-004	7/9/97	1630		✓	H2O		3	2		1							
MB	07DGMW91-004	7/9/97	1532		✓	H2O		3	2		1							
MB	21UGMW37-304	7/9/97	1640		✓	H2O		3	2		1							
	TB-7-10-97-ND	7/9/97	0720		✓	H2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[signature]	7/10/97 0845				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[signature]	7/10/97 0845				
Airbill No. APCL COURIER/ 2 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
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APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973204
Collected by: Matt
Collected on: 07/10-11/97

Received: 07/11/97
Extracted: N/A
Tested: 07/11-22/97
Reported: 08/04/97

Sample Description: Water from MCAS El Toro
Project Description: 6210-005 GWM Round 6

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 07DBMW100-004 97-03204-1	10DGMW77-004 97-03204-2	16DBMW52-904 97-03204-3
Alkalinity	310.1	mg-$CaCO_3$/L	2	143	181	N.D.
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	143	181	N.D.
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	249	242	N.D.
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	9.50	14.1	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	930	1,080	N.D.
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	95.5	153	N.D.
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	1	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	2	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	100	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 16UGMW33-004 97-03204-4	16UGMW33-904 97-03204-5	18MCAS07-3-004 97-03204-6
Alkalinity	310.1	mg-$CaCO_3$/L	2	293	N.D.	207
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	293	N.D.	207
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	6.00	N.D.	158
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	7.60	N.D.	5.70
Solids, Total Dissolved (TDS)	160.1	mg/L	10	611	N.D.	797
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	141	N.D.	150
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	36
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS07-4-004 97-03204-7	18MCAS07-5-004 97-03204-8	24NEW1-004 97-03204-9
Alkalinity	310.1	mg-$CaCO_3$/L	2	207	377	174
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	207	377	174
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	130	490	189
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	<5	<10	<10
Solids, Total Dissolved (TDS)	160.1	mg/L	10	737	2,170	1,010
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	130	598	206
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	0.8J
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	7	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	1
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	35	N.D.	290
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	1J

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 24NEW6-004 97-03204-10	TB 7-11-97-DP/AM 97-03204-11
Alkalinity	310.1	mg-$CaCO_3$/L	2	177	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	177	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	140	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	12.2	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	677	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	131	-
CLP: VOC by GC/MS					
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	1	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	4	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	18	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	40	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result TB 7-11-97-ND/AM 97-03204-12	TB 7-11-97-WB 97-03204-13
CLP: VOC by GC/MS					
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result 24NEW1-004 97-03204-9	Analysis Result 24NEW6-004 97-03204-10
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.1	mg-O_2/L	20	N.D.	N.D.
Color	110.2	Color Unit	1	N.D.	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	< 5	< 2.5
Silica (SiO_2) dissolved	370.1	mg/L	1	57.5	59.8
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	2.0	2.2

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.

J: Reported between PQL and MDL.

(a) Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

WESTBAY TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Marc P. Smith

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SUCA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
18MCAS07-5-004	7/10/97	0915		✓	H_2O		3	2		1							
18MCAS07-4-004	7/10/97	1015		✓	H_2O		3	2		1							
18MCAS07-3-004	7/10/97	1100		✓	H_2O		3	2		1							
TB-7-11-97-WB	7/11/97	0715		✓	H_2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[signature]	7/11/97 0950				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[signature]	7/11/97 0850				
Airbill No. APCL COURIER/ 2 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/ 'SERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

NON - DEDICATED T(1

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Matt Brool

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TIN, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
NB	24NEW1-004	7/10/97	1300		✓	H2O		6	2		1	1	1	1				
NB	10DGMW77-004	7/10/97	1428		✓	H2O		3	2		1							
NB	24NEW6-004	7/10/97	1120		✓	H2O		6	2		1	1	1	1				
	TB-7-11-97-ND/AM	7/11/97	0715		✓	H2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russell	7/11/97 0850				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Catherine Vale	7/11/97 0850				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER/ 2 COOLERS (909) 590-1828				* GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES.

FIELD TEAM LEADER: PAT RUSSELL

DEDICATED TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Marc P. Smith

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
16UGMW33-004	7/10/97	1440		✓	H2O		3	2		1							
16UGMW33-904	7/10/97	1450		✓	H2O		3	2		1							
16DBMW52-904	7/10/97	1500		✓	H2O		3	2		1							
07DBMW100-004	7/10/97	1615		✓	H2O		3	2		1							
TB-7-11-97-DP/AM	7/11/97	0715		✓	H2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[signature]	7/11/97 0850				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[signature]	7/11/97 0850				
Airbill No. APCL COURIER/ 2 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973205
Collected by: Marc
Collected on: 07/11/97

Received: 07/11/97
Extracted: N/A
Tested: 07/11-22/97
Reported: 07/23/97

Sample Description: Water
Project Description: 6210-005 MCAS El Toro Round 6

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 01MW101-004 97-03205-1	01MW101-304 97-03205-2	01MW101-504 97-03205-3
Alkalinity	310.1	mg-$CaCO_3$/L	2	137	135	N.D.
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	137	135	N.D.
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	64.5	76.5	N.D.
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	<2	<2	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	303	310	N.D.
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	14.5	17.6	N.D.
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	2	2	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	3
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	19	16	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	2	2	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW7-004 97-03205-4	16DBMW52-004 97-03205-5	18PS3-004 97-03205-6
Alkalinity	310.1	mg-$CaCO_3$/L	2	269	152	205
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	269	152	205
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	89.6	109	180
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	8.94	18.6	6.65
Solids, Total Dissolved (TDS)	160.1	mg/L	10	852	1,010	774
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	223	408	116
CLP: VOC by GC/MS						
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	3	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	12
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	8	N.D.	7
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	4J	N.D.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18PS5-004 97-03205-7	TB 7-11-97-DP/P.M 97-03205-8	TB 7-11-97-ND/P.M 97-03205-9
Alkalinity	310.1	mg-$CaCO_3$/L	2	254	-	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	254	-	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	-	-
Chloride Cl^- by IC	300.0	mg/L	0.2	142	-	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	27.4	-	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	993	-	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	195	-	-
CLP: VOC by GC/MS						
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	4	N.D.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result 18PS3-004 97-03205-6	18PS5-004 97-03205-7
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.1	mg-O_2/L	20	N.D.	N.D.
Color	110.2	Color Unit	1	1	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	<5	<4
Silica (SiO_2) dissolved	370.1	mg/L	1	55.3	55.8
Solids, Total Suspended (TSS)	160.2	mg/L	4	35	7
Carbon, Total Organic (TOC)	415.1	mg/L	1	2.8	2

Component Analyzed	Method	Unit	CRDL	Analysis Result 01MW101-004 97-03205-1	01MW101-304 97-03205-2	02NEW7-004 97-03205-4
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	μg/L	200	15.9J	27.3J	16.9J
Antimony	CLP-Metal	μg/L	60.0	2.3J	N.D.	N.D.
Arsenic	CLP-Metal	μg/L	10.0	N.D.	N.D.	3.2J
Barium	CLP-Metal	μg/L	200	12.3J	11.2J	77.2J
Beryllium	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5.0	0.29J	N.D.	0.45J
Calcium	CLP-Metal	μg/L	5000	38,900	37,000	131,000
Chromium	CLP-Metal	μg/L	10.0	2.5J	1.6J	1.8J
Cobalt	CLP-Metal	μg/L	50.0	N.D.	N.D.	N.D.
Copper	CLP-Metal	μg/L	25.0	3.4J	3.3J	10.9J
Iron	CLP-Metal	μg/L	100	19.7J	7.4J	N.D.
Lead	CLP-Metal	μg/L	5.0	N.D.	N.D.	N.D.
Magnesium	CLP-Metal	μg/L	5000	9,930	9,380	34,300
Manganese	CLP-Metal	μg/L	15.0	15.3	13.4J	N.D.
Mercury	CLP-Metal	μg/L	0.20	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40.0	60.8	58.3	3.4J
Potassium	CLP-Metal	μg/L	5000	5,660	5,350	1,450J
Selenium	CLP-Metal	μg/L	5.0	N.D.	3.9J	14.2
Silver	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	56,000	52,400	74,000
Thallium	CLP-Metal	μg/L	10.0	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50.0	2.2J	2.2J	13.1J
Zinc	CLP-Metal	μg/L	20.0	18.8J	10.8J	19.4J

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
(a) Additional analysis requested on 07/28/97.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/ PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

NON-DEDICATED EAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature) Matt Brook

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, SALOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
WB	01MW101-304	7/11/97	0800		✓	H2O		3	2		1							
WB	01MW101-004	7/11/97	0900		✓	H2O		4	2	1	1							
WB	01MW101-304	7/11/97	0905		✓	H2O		4	2	1	1							
WB	02NEW7-004	7/11/97	1014		✓	H2O		4	2	1	1							
WB	18PS3-004	7/11/97	1133		✓	H2O		6	2		1	1	1	1				
WB	18PS5-004	7/11/97	1217		✓	H2O		6	2		1	1	1	1				
	TB.7-11-97.ND/P.M	7/11/97	1300		✓	H2O		1	1									

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russell	7/11/97 1322				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	7/11/97 1322				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

DEDICATED TEAM

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: *(Signature)* Marc P. Smith

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, STYCA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
16DBMW52-004	7/11/97	1110		✓	H2O		3	2		1							
TB-7-11-97-DP/P.M	7/11/97	1300		✓	H2O		1	1									

Relinquished by: *(Signature)*	Date / Time	Relinquished by: *(Signature)*	Date / Time	Relinquished by: *(Signature)*	Date / Time
[signature]	7/11/97 1322				
Received by: *(Signature)*	**Date / Time**	**Received by: *(Signature)***	**Date / Time**	**Received by: *(Signature)***	**Date / Time**
[signature]	7/11/97 1322				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: *(Signature)***	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
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APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973241
Collected by: Matt
Collected on: 07/14-15/97

Received: 07/15/97
Extracted: N/A
Tested: 07/15-22/97
Reported: 08/04/97

Sample Description: Water from MCAS El Toro
Project Description: 6210-005 GWM Round 6

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS04-004 97-03241-1	18MCAS06-004 97-03241-2	18MCAS08-004 97-03241-3
Alkalinity	310.1	mg-$CaCO_3$/L	2	221	199	205
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	221	199	205
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	211	155	442
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	9.86	5.85	<10
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,040	816	939
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	276	164	<50
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	1	2	N.D.
Vinyl chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS09-004 97-03241-4	18MCAS10-004 97-03241-5	TB-7-15-97-ND 97-03241-6
Alkalinity	310.1	mg-$CaCO_3$/L	2	243	252	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	243	252	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	62.0	118	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	<2.5	<2.5	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	589	842	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	121	217	-
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS09-004 97-03241-4	18MCAS10-004 97-03241-5	TB-7-15-97-ND 97-03241-6
Vinyl chloride	CLP-VOC	$\mu g/L$	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	$\mu g/L$	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	$\mu g/L$	10	N.D.	N.D.	N.D.

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.

J: Reported between PQL and MDL.

[a] Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSELL

Non-dedicated

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.:	PROJECT NAME:
6210-005	MCAS EL TORO GWM ROUND 6

SAMPLERS: *(Signature)* Matt Brook

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1) AMMONIA-N	TOC (415.1)			REMARKS	PRESERVATIVE USED
B	18MCAS06-004	7/15/97	0902		✓	H_2O		3	2		1							
NB	18MCAS08-004	7/14/97	1320		✓	H_2O		3	2		1							
NB	18MCAS 04-004	7/14/97	1024		✓	H_2O		3	2		1							
NB	18MCAS 09-004	7/14/97	1627		✓	H_2O		3	2		1							
NB	18MCAS 10-004	7/15/97	1141		✓	H_2O		3	2		1							
	TB-7-15-97-ND	7/15/97	1210		✓	H_2O		1	1									

Relinquished by: *(Signature)*	Date / Time	Relinquished by: *(Signature)*	Date / Time	Relinquished by: *(Signature)*	Date / Time
Matt Brook	7/15/97 1233				
Received by: *(Signature)*	**Date / Time**	**Received by: *(Signature)***	**Date / Time**	**Received by: *(Signature)***	**Date / Time**
[illegible signature]	7/15/97 1233				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: *(Signature)***	**Date / Time**	**Laboratory *** GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973944
Collected by:
Collected on: 09/12/97

Received: 09/12/97
Extracted: N/A
Tested: 09/18/97
Reported: 09/19/97

Sample Description: Water
Project Description: 6210-005 MCAS El Toro GWM Round

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL	Analysis Result 01MW101-004R 97-03944-1	01MW101-304R 97-03944-2	01MW102-004R 97-03944-3
CLP: VOC by GC/MS						
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	0.4J	0.5J	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 01MW102-304R 97-03944-4	Analysis Result 01MW201-004R 97-03944-5
CLP: VOC by GC/MS					
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	N.D.	1J
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 01MW201-304R 97-03944-6	Analysis Result TB-9-11-97 97-03944-7
CLP: VOC by GC/MS					
Acetone	CLP-VOC	μg/L	10	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	0.4J	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
1,2-Dichloropropane	CLP-VOC	μg/L	1	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	N.D.
Tetrachloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.
Vinyl chloride	CLP-VOC	μg/L	1	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	N.D.

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
[a] Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED/PRESERVED IN THE FIELD. NO ADDITIONAL FILTRATION REQUIRED.
- NFESC QC LEVEL D FOR ALL SAMPLES. FIELD TEAM LEADER: PAT RUSSEL

3041

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWM ROUND 6

SAMPLERS: (Signature)

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOC (CLP)	FILTERED METALS (CLP)	GENERAL CHEM *	PHOSPHATE, TSS, COLOR, SILICA	COD (410.1)	AMMONIA-N	TOC (415.1)	REMARKS	PRESERVATIVE USED
3T	01MW201-004R	9/12/97	0800		X	Water	2	2								
3T	01MW201-304R	9/12/97	0810		X	Water	2	2								
3T	01MW102-004R	9/12/97	0840		X	Water	2	2								
3T	01MW102-304R	9/12/97	0845		X	Water	2	2								
3T	01MW101-004R	9/12/97	0915		X	Water	2	2								
3T	01MW101-304R	9/12/97	0925		X	Water	2	2								
3T	TB-9-11-97	9/12/97	1040		X	Water	1	1								

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
	9/12/97 1400				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
	9/12/97 1400				
Airbill No. APCL COURIER/ 1 COOLERS (909) 590-1828		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** * GEN. CHEM. includes Nitrate/Nitrite-N, Chloride, Sulfate, Carbonate, Bi-carbonate, Alkalinity, and TDS.	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

TRUESDAIL LABORATORY ANALYSES REPORTS
JULY 1997
SAMPLING ROUND

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Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-973143
Collected by:
Collected on: 06/30-07/01/

Received: 07/07/97
Extracted: N/A
Tested: 07/02-08/04/97
Reported: 09/29/97

Sample Description: Water
Project Description: 6210-005 MCAS El Toro GWM Round

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result 02DGMW60-004 97-03143-1	02NEW1-004 97-03143-2	02NEW12-004 97-03143-3
Gross Alpha	SM7110C	pCi/L		30.41 ±4.31	1.97 ±1.51	14.89 ±3.03
Gross Beta	900.0	pCi/L		19.05 ±3.96	6.02 ±4.86	4.05 ±1.87
Radium-226	903.1	pCi/L		1.67 ±0.67	< 1.3	< 1.1
Radium-228	904.0	pCi/L		< 0.92	< 0.87	< 0.90
Strontium-89/90	905.0	pCi/L		< 0.32	< 0.33	< 0.36
Cesium-134	901.1	pCi/L		< 15	< 16	< 15

Component Analyzed	Method	Unit	PQL	Analysis Result 03DGMW64-004 97-03143-4	03DGMW65X-004 97-03143-5	03UGMW26-004 97-03143-6
Gross Alpha	SM7110C	pCi/L		19.99 ±3.47	14.13 ±3.86	9.34 ± ±2.55
Gross Beta	900.0	pCi/L		7.11 ±2.11	28.66 ±3.11	4.57 ±1.93
Radium-226	903.1	pCi/L		1.1 ±0.74	< 1.1	< 1.3
Radium-228	904.0	pCi/L		< 0.84	1.1 ±0.27	< 0.91
Strontium-89/90	905.0	pCi/L		< 0.33	< 0.33	< 0.32
Cesium-134	901.1	pCi/L		< 18	< 7.9	< 6.2

Component Analyzed	Method	Unit	PQL	Analysis Result 04DBMW40-004 97-03143-7	05DGMW68-004 97-03143-8
Gross Alpha	SM7110C	pCi/L		28.18 ±4.09	19.69 ±3.52
Gross Beta	900.0	pCi/L		9.72 ±2.21	7.62 ±2.10
Radium-226	903.1	pCi/L		1.1 ±0.75	< 0.98
Radium-228	904.0	pCi/L		< 0.92	< 0.81
Strontium-89/90	905.0	pCi/L		< 0.32	< 0.31
Cesium-134	901.1	pCi/L		< 13	< 18

Applied P & Ch Laboratory
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Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result 18PS6-004 97-03143-9
Radon	913.0	pCi/L		170 ±14
Strontium-89/90	905.0	pCi/L		< 0.32

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

FIELD TEAM LEADER: PAT RUSSELL

Dedicated pump team

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: TICAS EL TORO GW ROUND 6

SAMPLERS: (Signature)

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	GROSS α/β (900)	RADON (901)	STRONTIUM-90 (905)	RADIUM-226 (903.1)	RADIUM-228 (904)	STRONTIUM-89 (905)	CESIUM-137 (901.1)		REMARKS	PRESERVATIVE USED
DZDGMW 60-004	7/1/97	1500		✓	water		5	1			1	1	1	1			
DZ NEW 1-004	7/1/97	1550		✓	water		5	1			1	1	1	1			

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Airbill No. TRUESDAIL COURIER/ 2 COOLERS		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** TRUESDAIL LAB TUSTIN, CA 92780 (714) 730-6239	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

FIELD TEAM LEADER: PAT RUSSELL [redacted]

Dedicated Pump Team

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GW ROUND 5

SAMPLERS: (Signature)

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	GROSS α/β (900)	RADON (913)	STRONTIUM-90 (905)	RADIUM-226 (903.1)	RADIUM-228 (904)	STRONTIUM-89 (905)	CESIUM-137 (901.1)		REMARKS	PRESERVATIVE USED
02NGW12-004	1/8/97	1710		✓	water		5	1			1	1	1	1			

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[signature]	7/1/97 0945				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[signature]	7/1/97 1215				
Airbill No. TRUESDAIL COURIER/ 1 COOLERS		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** TRUESDAIL LAB TUSTIN, CA 92780 (714) 730-6239	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

FIELD TEAM LEADER: PAT RUSSELL

Non-Contaminated Pump Test

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6210-005

PROJECT NAME: MCAS EL TORO GWA ROUND 6

SAMPLERS: (Signature) Matt Bwol

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	GROSS α/β (900)	RADON (913)	STRONTIUM-90 (905)	RADIUM-226 (903.1)	RADIUM-228 (904)	STRONTIUM-89 (905)	CESIUM-137 (901.1)		REMARKS	PRESERVATIVE USED
3.T	03DBMW65X-004	1/30/97	1100		✓	water		5	1	0	0	1	1	1	1			
MB	03DBMW64-004	1/31/97	1410		✓	water		5	1	0	0	1	1	1	1			
MB	~~03DBMW65X-004~~	~~1/30/97~~	~~0900~~		~~✓~~	~~wat~~												
MB	04DBMW40-004	1/31/97	1610		✓	water		5	1	0	0	1	1	1	1			

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russell	7/1/97 0945				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Virgie Burke	7/1/97 1345				
Airbill No. TRUESDAIL COURIER/ 1 COOLERS		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** TRUESDAIL LAB. TUSTIN, CA 92780 (714) 730-6239	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

FIELD TEAM LEADER: PAT RUSSELL

Non-dedicated pump team

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 5210-005

PROJECT NAME: [illegible] EL TORO GW ROUND 6

SAMPLERS: (Signature) Matt Bloom

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	GROSS α/β (900)	RADON (913)	STRONTIUM-90 (905)	RADIUM-226 (903.1)	RADIUM-228 (904)	STRONTIUM-89 (905)	CESIUM-137 (901.1)		REMARKS	PRESERVATIVE USED
B	18PS6-004	7/1/97	[illegible]		✓	water	2		1	1							
B	03UGMW26-004	7/1/97	1322		✓	water	5	1			1	1	1	1			
B	05DGMW68-004	7/1/97	1105		✓	water	5	1			1	1	1	1			
	04DGMW66-004	7/1/97	0840		✓	water	5	1			1	1	1	1			

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[illegible]	7/1/97 [illegible]				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	[illegible]				
Airbill No. TRUESDAIL COURIER/ 2 COOLERS		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory** TRUESDAIL LAB TUSTIN, CA 92780 (714) 730-6239	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

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Applied P & Ch Laboratory
13760 Magnolia Ave. Chino, CA 91710
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APCL Analytical Report

Submitted to:
CDM Federal Programs Corp.
Attention: Pat Russell
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-974136
Collected by: Matt
Collected on: 07/07-08/01/

Received: 07/08/97
Extracted: N/A
Tested: 07/08-08/04/97
Reported: 09/29/97

Sample Description: Water from MCAS El Toro
Project Description: 6210-005 GWM Round 6

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result 04DGMW66-004 97-04136-1
Gross Alpha	SM7110C	pCi/L		8.75 ±3.92
Gross Beta	900.0	pCi/L		6.88 ±4.44
Radium-226	903.1	pCi/L		< 1.4
Radium-228	904.0	pCi/L		< 0.83
Strontium-89/90	905.0	pCi/L		< 0.24
Cesium-134	901.1	pCi/L		< 7.1

Component Analyzed	Method	Unit	PQL	Analysis Result 08DGMW74-004 97-04136-2	18BGMW05D-004 97-04136-3
Radon	913.0	pCi/L		176 ±19	297 ±25
Strontium-89/90	905.0	pCi/L		< 0.32	< 0.32

Component Analyzed	Method	Unit	PQL	Analysis Result 18DW135-004 97-04136-4	18PS2-004 97-04136-5
Radon	913.0	pCi/L		319 ±19	114 ±13
Strontium-89/90	905.0	pCi/L		< 0.30	< 0.37

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
All analyses subcontracted to Truesdail.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory