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_MCAS07-3	359	20-Jan-89	650	122.0	126.0	13.7		167	
		2-Aug-90	846	162.0	173.0	32.8		173	
		17-Nov-90	724	143.0	148.0	25.2		140	
		22-Mar-91	720	148.0	160.0	23.5		167	
		26-Jul-91	728	140.0	144.0	22.1		164	
		20-Oct-92	748	135.0	140.0	19.9		162	
		22-Oct-93	692	126.0	145.0	12.1	200	200	
		9-Feb-96	743	146.0	166.0	5.5 U	212	259	2 U
		20-Nov-96	737	160.0	171.0	4.8	211	211	2 U
18_MCAS07-4	449	19-Jan-89	670	137.0	132.0	0.4 U		161	
		2-Aug-90	1,210	261.0	347.0	0.4 U		186	
		17-Nov-90	832	171.0	210.0	0.4 U		165	
		22-Mar-91	760	163.0	195.0	0.4 U		173	
		26-Jul-91	736	153.0	166.0	0.4 U		176	
		20-Oct-92	702	139.0	146.0	0.4 <		160	
		25-Oct-93	679	126.0	146.0	0.1 U	202	202	
		8-Feb-96	779	147.0	161.0	0.1 U	214	262	2 U
		20-Nov-96	703	177.0	161.0	0.1 U	209	209	2 U
18_MCAS07-5	519	18-Jan-89	1,720	343.0	612.0	0.4		216	
		2-Aug-90	2,850	486.0	812.0	154.9		247	
		17-Nov-90	2,630	536.0	781.0	62.0 U		282	
		22-Mar-91	2,800	580.0	791.0	0.4 U		331	
		26-Jul-91	2,560	572.0	823.0	0.4 U		309	
		20-Oct-92	2,080	488.0	716.0	0.4 <		328	
		26-Oct-93	2,350	432.0	706.0	0.1 U	184	184	
		8-Feb-96	1,870	399.0	545.0	0.1 U	365	445	2 U
		11-Nov-96	2,030	416.0	562.0	0.1 U	373	373	2 U
18_MCAS07-6	809	19-Jan-89	2,030	416.0	668.0	0.4		320	
		2-Aug-90	2,670	494.0	784.0	128.4		278	
		17-Nov-90	2,490	528.0	759.0	12.8 U		235	
		22-Mar-91	2,400	579.0	791.0	0.4		226	
		26-Jul-91	2,460	543.0	821.0	4.0 <		210	
		28-Oct-93	1,870	409.0	637.0	0.1 U	167	167	
		8-Feb-96	1,990	447.0	706.0	0.1 U	279	340	2 U
		11-Nov-96	2,200	438.0	717.0	0.1 U	259	259	2 U
18_MCAS07-7	919	19-Jan-89	1,480	239.0	534.0	0.4		255	
		2-Aug-90	2,780	584.0	787.0	141.7		273	
		16-Nov-90	2,430	562.0	745.0	70.8		239	
		25-Mar-91	2,600	387.0	755.0	12.8 U		276	
		26-Jul-91	2,380	615.0	847.0	0.4 U		243	
		22-Sep-92	2,410	565.0	810.0	0.4 <		189	
		29-Oct-93	2,320	483.0	749.0	0.1 U	256	256	
		8-Feb-96	1,480	384.0	630.0	0.1 U	272	232	2 U
		11-Nov-96	2,250	438.0	759.0	0.1 U	265	265	2 U
18_MCAS07-8	989	19-Jan-89	2,070	443.0	671.0	0.4 U		298	
		2-Aug-90	2,620	562.0	927.0	0.4 U		150	
		16-Nov-90	2,380	483.0	805.0	0.4 U		166	
		25-Mar-91	2,200	391.0	583.0	0.4 U		230	
		25-Jul-91	2,150	385.0	710.0	0.4 U		253	
		22-Sep-92	1,930	439.0	614.0	0.4 <		274	
		1-Nov-93	1,430	548.0	5.0	0.1 U	264	264	
		8-Feb-96	2,320	506.0	858.0	0.1 U	210	256	2 U
		11-Nov-96	2,340	471.0	812.0	0.1 U	220	220	2 U

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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_MCAS07-9	1109	18-Jan-89	2,034	434.0	632.0	0.4		291	
		2-Aug-90	864	148.0	231.0	24.8		183	
		16-Nov-90	2,690	562.0	749.0	62.0		303	
		25-Mar-91	2,700	582.0	721.0	11.1 U		345	
		25-Jul-91	2,460	612.0	671.0	0.4 U		367	
		22-Sep-92	1,930	504.0	20.0	0.4 <		591	
		2-Nov-93	1,490	519.0	24.4	0.1 U	311	311	
		25-Jan-96	2,120	481.0	661.0	0.1	335	408	2 U
		11-Nov-96	1,960	394.0	586.0	0.1 U	360	360	2 U
18_MCAS08	410	6-Feb-90	860	399.0	0.5 U	0.4		165	
		2-Dec-90	842	423.0	0.5 U	0.4		154	
		22-May-91	860	394.0	0.5 U	0.4		159	
		5-Nov-91	846	381.0	0.1 U	0.4		172	
		10-Jul-92	892	419.0	0.5 U	0.4 <		156	
		5-Aug-93	895	413.0	0.3	0.1 U	194	194	
		1-Feb-96	925	437.0	0.5 U	0.1	191	233	2 U
		20-Nov-96	929	124.0	0.8 U	0.1 U	201	201	2 U
18_MCAS09	445	27-Oct-89	454	51.0	120.0	2.2		136	
		12-Feb-90	536	51.0	123.0	4.4		153	
		13-Jul-90	564	56.0	129.0	4.9		164	
		18-Mar-91	560	59.0	135.0	0.4		178	
		7-Dec-91	544	65.0	129.0	6.2		173	
		6-May-92	576	60.0	133.0	7.1		168	
		5-Nov-93	584	61.3	130.0	1.4	216	216	
		5-Nov-93		62.0		1.4	219	219	
		16-Jan-96	590	60.0	120.0	0.7	212	259	2 U
		19-Nov-96	607	58.7	137.0	0.7	222	222	2 U
18_MCAS10	375	31-Jan-90	826	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 <	
		19-Jan-96	770	87.0	179.0	1.8	257	314	2 U
		19-Nov-96	907	145.0	272.0	3.1	250	250	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	1,640	315.0	425.0	36.3	261	261	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	37.6	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
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
18_PS4	118	22-Jan-89	1,000	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

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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_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
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
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	632	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
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
18_RW1	470	11-Sep-89	850	170.0	211.0	13.7		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	875	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
18_RW2	310	11-Sep-89	870	149.0	117.0	48.7		178	
		22-Dec-92	666	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	691	132.0	132.0	17.0	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	819	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	10.6	160	160	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	848	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	847	174.0	288.0	12.3	155	155	2 U

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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
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
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	1,590	146.0	834.0	11.9	91	91	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_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
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	765	140.0	131.0	24.0	216	216	2 U
21_DGMW90	135	20-Nov-92	1,120	467.0	568.0	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
21_UGMW37	130	13-Nov-92	964	180.0	191.0	19.3	212	212	
		7-Jul-93	907	173.0	188.0	17.5	465	465	
		12-Feb-96	1,010	194.0	192.0	18.0	225	275	2 U
		11-Nov-96	967	212.0	175.0	19.0	222	222	2 U
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_NEW1	245	30-Oct-95	807			3.7	180	180	
		2-Dec-96	885	150.0	186.0	9.2	170	170	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
24_NEW5	250	21-Nov-95				5.6	172	172	
		2-Dec-96	745	148.0	128.0	7.1	168	168	2 U

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			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 $CaCO_3$)
24_NEW6	185	25-Oct-95				13.6	172	172	
		2-Dec-96	673	120.0	95.8	13.6	168	168	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
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

EXPLANATION

1) The November - December 1996 sample results listed in this table are as reported in the APCL laboratory analytical reports, (Appendix E, Groundwater Monitoring Report).
Refer to Appendix D of the Groundwater Monitoring Report for qualifications from data validation.

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)

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	0.2	U	12		NA		0.10	UJ	NA	3		3.1		1		NA	NA
	30-Nov-95	0.2		9		NA		0.10	U	NA	4	J	4.3	J	4	J	NA	NA
	6-Feb-96	0.2	U	27		1		0.16		34	75		3.7		-10		144	-0.0337
	6-Feb-96	0.2	U	24		2		0.19		32	48		4.6		NA		151	-0.0583
	4-Nov-96	NA		20	U	1	U	1.00	U	26	4	U	5.0		1		203	-0.125
02_DGMW60	15-Aug-95	0.3		5	U	NA		0.10	UJ	NA	1		2.8		6		NA	NA
	28-Nov-95	0.3	J	7		NA		0.10	UJ	NA	1		3.3	J	0	J	NA	NA
	6-Feb-96	0.2	U	12	J	1		0.01		32	24		3.0		-10		189	0.102
	6-Feb-96	0.2	U	15	J	1		0.04		31	24		2.0		NA		211	-0.103
	4-Nov-96	NA		20	U	1	U	1.00	U	26	4	U	1.0		0		411	-0.271
02_DGMW61	16-Aug-95	0.3		8		NA		0.10	UJ	NA	5		1.5		1		NA	NA
	29-Nov-95	0.9	J	5	U	NA		0.10	J	NA	1		1.5	J	0		NA	NA
	8-Feb-96	0.2	U	20	U	1	U	5.20		26	4	U	1.0		-10		715	-0.193
	4-Nov-96	NA		20	U	1	U	1.00	U	28	4	U	3.0		0		145	-0.062
02_UGMW25	17-Aug-95	0.0		26		NA		0.10	UJ	NA	7		7.7		3		NA	NA
	28-Nov-95	0.0	J	17		NA		0.10	U	NA	1	U	5.0		0		NA	NA
	7-Feb-96	NA		30		1		0.01	U	32	4	U	4.0		-10		450	-0.085
	12-Nov-96	NA		20		1	U	0.10	U	34	4	U	4.0		1		NA	NA
02_NEW1	26-Dec-95	0.3		5.0		NA		0.1		NA	0.5		1.6		0.7		NA	NA
	4-Nov-96	NA		20	U	1		1.00	U	26	4	U	1.0		5		112	-0.071
02_NEW2	21-Dec-95	0.1		14.0		NA		0.1		NA	0.8		2.3		0.4		112.0	NA
	26-Nov-96	0.2	U	20	U	1	U	1.00	U	33	4	U	2.0		5		702	-0.005
02_NEW3	28-Dec-95	0.0		31.0		NA		0.1		NA	3990.0		3.2		51.0		NA	NA
	7-Nov-96	NA		20	U	1		0.10	U	45	49		2.0		173		341	-0.024
02_NEW6	27-Dec-95	0.0		5.0		NA		0.1		NA	31.5		1.9		11.4		NA	NA
	7-Nov-96	NA		20	U	1	U	0.10	U	47	4	U	3.0		15		239	-0.113
02_NEW7	27-Dec-95	0.0		5.0		NA		0.1		NA	1.2		2.1		0.3		NA	NA
	8-Jan-97	0.2	U	20	U	1	U	0.10	U	44	12		5.0		1		355	0.048
02_NEW8A	27-Dec-95	0.0		5.0		NA		0.1		NA	1.6		1.4		0.4		NA	NA
	7-Nov-96	NA		20	U	1	U	0.10	U	43	4	U	1.0		4		601	-0.058

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_NEW11	21-Dec-95	0.0		11.0		NA		0.1		NA	1.0		1.9		0.8		NA	NA
	27-Nov-96	0.2	U	20	U	1		0.10	U	43	14		1.0		30		324	-0.120
02_NEW12	28-Dec-95	0.0		9.0		NA		0.1		NA	5.1		0.9		7.9		NA	NA
	7-Nov-96	NA		20	U	1		0.10	U	60	4	U	1.0		52		215	-0.019
03_DBMW39	30-Jan-96	0.2	U	20	U	1		0.07		68	31		1.0		-10		657	-0.184
	12-Nov-96	0.2	U	20	U	1		0.10	U	56	22		1.0	U	74		760	-0.069
03_DGMW64	26-Feb-96	0.2	U	20	U	1		0.18		46	93		1.0	U	30		724	-0.129
	12-Nov-96	0.2	U	20	U	1		0.10	U	49	55		1.0	U	79		602	0.033
	12-Nov-96	0.2	U	26		1		<0.4		49	26		1.0	U	79		826	-0.154
03_DGMW65X	26-Feb-96	0.2	U	20	U	2		0.22		52	63		1.0		30		553	-0.114
	11-Nov-96	NA		20	U	1		0.10	U	48	4	U	2.0		23		639	-0.038
03_UGMW26	7-Feb-96	0.2	U	20	U	2		0.15		61	132		1.0	U	74		356	-0.044
	14-Nov-96	0.2	U	20	U	1	U	0.10	U	69	4	U	1.0	U	1		530	-0.131
	14-Nov-96	0.2	U	20	U	1	U	0.10	U	66	4	U	1.0	U	1		558	0.079
04_DBMW40	26-Feb-96	0.2	U	20	U	1		0.31		55	1050		1.0	U	149		330	0.008
	12-Nov-96	NA		20	U	1		0.10	U	50	4	U	2.0		0		836	-0.201
04_DGMW66	26-Feb-96	0.2	U	20	U	1		0.23		53	158		1.0	U	38		401	0.001
	12-Nov-96	NA		20	U	1	U	0.10	U	51	4	U	2.0		1		551	-0.073
04_UGMW63	30-Jan-96	0.2	U	20	U	1		0.01	U	50	4	U	1.0		187		613	-0.0462
	14-Nov-96	0.2	U	20	U	1	U	0.10	U	59	4	U	1.0	U	2		724	0.020
	14-Nov-96	0.2	U	20	U	1	U	0.10	U	67	4	U	1.0	U	2		798	-0.182
05_DBMW41	5-Dec-95	0.02	U	5		NA		0.10	U	NA	3	J	1.8		2	J	325	NA
	7-Feb-96	NA		20	U	1	U	0.05		48	4	U	1.0	U	0		305	-0.027
	13-Nov-96	0.2	U	20	U	1	U	0.10	U	49	4	U	2.0		3		325	0.018
05_DGMW67	6-Dec-95	0.02		8		NA		0.10	U	NA	1	J	2.4		0	J	270.0	NA
	7-Feb-96	0.2	U	20	U	1	U	0.08		47	4	U	267.0		-10		198	-0.076
	13-Nov-96	0.2	U	20		1	U	0.10	U	49	4	U	1.0	U	15		270	-0.108
05_DGMW68	9-Jan-96	0.02	U	5	U	NA		0.10	U	NA	3		1.4		3		571.0	-0.194
	7-Feb-96	0.2	U	20	U	1		0.12		53	39		1.0	U	49		525	-0.005
	15-Nov-96	0.2	U	20	U	1	U	0.10	U	56	4	U	1.0	U	1		571	-0.194

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_UGMW27	17-Aug-95	0.03		8		NA		0.10	UJ	NA	1		1.3		0		NA	NA
	8-Dec-95	0.03		5	U	NA		0.10	R	NA	1		1.5		0	J	NA	NA
	29-Jan-96	0.2	U	20	U	1	U	0.02		40	4	U	2.0		5		451	-0.129
	13-Nov-96	0.2	U	20	U	1	U	0.10	U	38	4	U	1.0		1		490	-0.136
05_NEW1	28-Dec-95	0.02	U	8		NA		0.10	U	NA	20		1.0		10		441.0	NA
	13-Nov-96	0.2		20	U	1		0.10	U	55	9		1.0	U	81		441	-0.141
07_DGMW72	21-Nov-96	0.2	U	20	U	1	U	0.10	U	56	6		1.0	U	3		464	-0.151
07_DGMW91	7-Feb-96	0.2	U	20	U	1	U	16.00		60	4	U	1.0		0		375	-0.005
	21-Nov-96	0.2	U	20	U	1	U	0.10	U	54	4	U	1.0	U	4		378	-0.114
08_DGMW73	7-Feb-96	0.2	U	20	U	1		0.02		53	4	U	2.0		0		392	-0.002
	2-Dec-96	0.2	U	20	U	1	U	0.10	U	49	4	U	1.0		28		297	-0.046
	2-Dec-96	0.2	U	20	U	1	U	0.10	U	51	4	U	1.0		28		230	-0.026
08_DGMW74	7-Feb-96	0.2	U	20	U	1		0.04		41	4	U	1.0	U	1		218	-0.075
	13-Nov-96	0.2	U	20	U	1	U	NA		55	5		1.0	U	23		318	-0.022
09_DBMW45	20-Nov-95	NA		10		NA		NA		NA	NA		NA		NA		387.0	NA
	18-Nov-96	0.2	U	20	U	1		0.10	U	54	4	U	4.0		30		387	-0.077
09_DGMW75	4-Dec-96	0.2	U	20	U	1		0.10	U	54	9		3.0	U	77		162.0	-0.087
10_DGMW77	7-Feb-96	0.2	U	20	U	1		0.04		53	30		1.0	U	-10		362	0.410
	9-Dec-96	0.2	U	20	U	1		0.10	U	54	14		1.0		23		390	-0.100
12_DBMW48	13-Nov-96	0.2	U	20	U	1		0.10	U	51	6		1.0	U	26		285	-0.026
12_UGMW31	13-Nov-96	0.2	U	20	U	1	U	0.10	U	56	4	U	1.0	U	41		410	0.033
13_DBMW49	7-Feb-96	0.2	U	33		1	U	0.01		55	4		1.0	U	38		302	0.0061
	7-Feb-96	0.2	U	24		1	U	0.02		52	5		3.0		NA		266	-0.374
	19-Nov-96	0.2	U	20	U	1	U	0.10	U	52	4	U	2.0		0		325	0.023
	19-Nov-96	0.2	U	20	U	1	U	0.10	U	52	4	U	1.0		0		339	-0.086
13_DGMW78	1-Feb-96	0.2	U	20	U	1	U	0.01	U	51	11		3.0		9		172	-0.143
	19-Nov-96	0.2	U	20		1	U	0.10	U	49	4	U	7.0		1		309	-0.176
13_UGMW32	7-Feb-96	0.2	U	20	U	1		0.03		49	13		3.0		0		387	-0.102

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	0.2	U	20	U	1		0.04		49	14		1.0		-10		332	-0.126
	7-Feb-96	0.2	U	20	U	1		0.05		49	12		1.0		7		337	0.0788
	19-Nov-96	0.2	U	20	U	1		0.10	U	49	4	U	1.0		7		401	-0.021
14_DGMW79	7-Feb-96	0.2	U	20	U	1		0.02		50	15		761.0		-10		414	0.0173
	19-Nov-96	0.2	U	20	U	1	U	0.10	U	52	4	U	1.0	U	0		497	-0.090
15_DBMW51	7-Feb-96	0.2		66		1		0.06		52	6		1.0		0		210	0.0209
	9-Dec-96	0.2	U	43		1	U	0.10	U	44	13		4.0		0		305	0.058
16_DBMW52	25-Nov-96	0.2	U	20		1	U	0.10	U	43	4	U	2.0		0		279	-0.040
16_DGMW81	7-Feb-96	0.2		20	U	1	U	0.03		54	6		1.0	U	8		404	0.367
	8-Jan-97	0.2	U	20	U	1	U	0.10	U	54	4	U	5.0		6		312	NA
17_DGMW82	6-Dec-95	0.02		19		NA		0.10		NA	6	J	2.3		6	J	515	NA
	7-Feb-96	0.2		20	U	1		25.00		47	14		NA		-10		303	0.055
	20-Nov-96	0.2	U	20	U	1	U	0.10	U	47	4	U	2.0		27		515	-0.092
17_NEW1	12-Jan-96	0.05		5		NA		0.10		NA	16		1.4		15		NA	NA
17_NEW2	3-Jan-96	0.02		250		NA		0.10		NA	2		1.3		0		NA	NA
18_BGMW03E	2-Nov-96	0.2		20	U	1		0.10	U	46	13		1.0	U	125		375	-0.024
18_DW135	7-Feb-96	0.2	U	20	U	1	U	0.02		49	4		1.0		39		461	-0.113
	5-Nov-96	0.2	U	20	U	1		0.10	U	47	89		2.0		77		585	-0.183
19_DBMW54	7-Feb-96	0.3		20	U	1		0.09		56	40		1.0		56		799	-0.138
	3-Dec-96	0.2	U	20	U	1		0.10	U	63	15		1.0	U	192		844	0.0167
19_DGMW85	7-Feb-96	0.2	U	20	U	1		0.07		56	27		2.0		68		323	0.012
	3-Dec-96	0.2	U	20		2		0.10	U	57	82		1.0	U	-795		317	-0.154
19_UGMW35	7-Feb-96	0.2	U	20	U	1		0.03		59	8		3.0		0		409	-0.216
		0.2	U	20	U	1	U	0.13		59	5		1.0		166		435	-0.134
	21-Nov-96	0.2		20	U	1		0.10	U	53	40		1.0	U	166		342	0.055
20_DBMW55	27-Feb-96	0.2	U	20	U	1		0.10		37	70		1.0		14		218	NA
	14-Nov-96	0.2	U	20	U	1		0.10	U	27	52		3.0		190		218	-0.102

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
22_DBMW47	7-Feb-96	0.2	U	20	U	1	U	0.01		55	9		1.0	U	2	481	0.071
	2-Dec-96	0.2	U	20	U	1	U	0.10	U	58	4	U	1.0	U	15	428	-0.055
24_NEW1	2-Nov-95	0.03		11		NA		NA		61	NA		0.8		NA		NA
	2-Dec-96	0.2	U	20	U	1	U	0.10	U	54	4	U	1.0	U	39	467	-0.059
24_NEW4	26-Oct-95	0.02		5	U	NA		NA		61	NA		2.5		NA	NA	NA
	3-Dec-96	0.2	U	26		2		0.10	U	58	146		1.0	U	729	370	-0.127
24_NEW5	21-Nov-95	0.02	U	14		NA		NA		NA	NA		1.8		NA	NA	NA
	2-Dec-96	0.2	U	20	U	1		0.10	U	52	4	U	1.0	U	19	410	-0.022
24_NEW6	25-Oct-95	0.06		5	U	NA		NA		66	NA		0.8		NA	NA	NA
	2-Dec-96	0.2	U	20	U	1		0.10	U	48	4		1.0	U	88	352	-0.033
24_NEW7	31-Oct-95	0.05		15		NA		NA		55	NA		1.0		NA	NA	NA
	3-Dec-96	0.2	U	20		2		0.10	U	57	389		1.0	U	488	288	-0.013
24_NEW8	1-Nov-95	0.03		21		NA		NA		57	NA		1.1		NA	NA	NA
	3-Dec-96	0.2	U	20	U	1		0.10	U	49	22		1.0	U	317	358	-0.061

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)
NA = data not available, not applicable, not reported, or well not sampled for parameter
Qualifying codes: U = below instrument detection limit, J = estimated value

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

			Gross Alpha		Gross Beta	
Station ID	Screen Interval Depth (Ft BGS)	Sample Date	Federal MCL 15.0 pCi/L		Federal MCL 50.0 pCi/L	
01_DGMW57	63 - 83	10-Dec-92	5.80		12.20	
		14-Jun-93	4.50		6.60	
		07-Feb-96	3.93		1.99	
		20-Nov-96	5.06		2.56	
01_DGMW58	57 - 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	
01 _MW101	118 - 148	20-Nov-96	2.90		11.90	
01_MW102	95-135	20-Nov-96	0.97		13.70	
01_MW201	27 - 57	18-Nov-96	0.89		0.86	
02_DGMW59	69 - 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	
		07-Feb-96	9.01		-0.97	
		07-Feb-96	10.16		0.26	
		04-Nov-96	12.51		2.93	
02_DGMW60	80 - 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	
		07-Feb-96	22.93		-1.69	
		07-Feb-96	16.71		0.33	
		04-Nov-96	32.16		13.58	
02_DGMW61	80 - 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	
		07-Feb-96	23.91		6.35	
		04-Nov-96	18.24		5.41	
02_NEW1	115 - 135	26-Dec-95	0.00	U	4.30	
		04-Nov-96	0.89		3.18	

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

			Gross Alpha		Gross Beta	
Station ID	Screen Interval Depth (Ft BGS)	Sample Date	Federal MCL 15.0 pCi/L		Federal MCL 50.0 pCi/L	
02_NEW2	75 - 95	21-Dec-95	9.90	U	6.20	U
		26-Nov-96	28.29		3.40	
02_NEW3	185 - 225	28-Dec-95	13.70		3.80	U
		07-Nov-96	10.05		6.97	
02_NEW6	185 - 225	27-Dec-95	17.40		2.40	U
		07-Nov-96	16.53		6.84	
02_NEW7	103 - 143	27-Dec-95	14.90		6.20	
		08-Jan-97	14.82		0.38	
02_NEW8A	84 - 104	27-Dec-95	16.30		6.30	
		07-Nov-96	24.20		5.77	
02_NEW11	45 - 65	21-Dec-95	6.60	U	5.30	U
		27-Nov-96	6.92		1.39	
02_NEW12	209 - 249	28-Dec-95	7.80	U	6.70	
		07-Nov-96	9.83		5.52	
02_UGMW25	55 - 75	09-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
		07-Feb-96	12.94		1.35	
		12-Nov-96	10.35		-0.68	
03_DBMW39	230 - 270	09-Oct-92	15.90		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	
03_DGMW64	245 - 285	15-Jan-93	14.30		13.10	
		02-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	

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

			Gross Alpha		Gross Beta	
Station ID	Screen Interval Depth (Ft BGS)	Sample Date	Federal MCL 15.0 pCi/L		Federal MCL 50.0 pCi/L	
03_DGMW65X	230 - 270	18-Jan-93	8.60		8.80	
		07-Jul-93	14.50		13.20	
		26-Feb-96	15.56		9.79	
		11-Nov-96	14.00		2.19	
03_UGMW26	230 - 270	01-Oct-92	14.20		10.90	
		23-Jun-93	14.50		10.70	
		07-Feb-96	3.77		15.80	
		14-Nov-96	13.30		1.23	
		14-Nov-96	14.37		2.22	
04_DBMW40	220 - 260	26-Feb-96	15.23		10.21	
		12-Nov-96	25.98		6.55	
04_DGMW66	250 - 290	26-Feb-96	2.78		9.33	
		12-Nov-96	7.45		1.36	
04_UGMW63	235 - 275	24-Nov-92	NA		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	182 - 222	16-Nov-92	9.00		5.90	
		16-Nov-92	9.40		6.30	
		05-Dec-95	27.00		18.60	
		07-Feb-96	26.37		9.30	
		13-Nov-96	29.04		5.68	
05_DGMW67	187 - 227	30-Nov-92	15.00		7.70	
		30-Nov-92	24.90		53.00	
		03-Jun-93	16.70		19.00	
		06-Dec-95	23.20		9.60	
		07-Feb-96	22.11		6.07	
		13-Nov-96	19.58		1.35	
05_DGMW68	190 - 210	17-Dec-92	7.00		13.60	
		25-Jun-93	10.80		12.40	
		09-Jan-96	11.60		10.90	
		15-Nov-96	20.40		3.75	

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

			Gross Alpha		Gross Beta	
Station ID	Screen Interval Depth (Ft BGS)	Sample Date	Federal MCL 15.0 pCi/L		Federal MCL 50.0 pCi/L	
05_NEW1	163 - 203	28-Dec-95	3.40		3.80	
		13-Nov-96	10.05		3.50	
05_UGMW27	198 - 238	03-Jun-93	9.30		14.10	
		17-Aug-95	13.30		5.10	
		08-Dec-95	12.40		8.20	
		29-Jan-96	**15.89**		2.55	
		13-Nov-96	14.67		2.21	
07_DGMW71	115 - 155	15-Dec-92	6.30		11.70	
09_DBMW45	117-157	10-Dec-92	8.30		9.90	
		10-Dec-92	9.60		11.20	
17_DGMW82	235 - 255	06-Dec-95	6.60		4.20	
		09-Feb-96	4.59		5.03	
		20-Nov-96	9.60		5.97	
17_NEW1	186 - 226	12-Jan-96	3.80		1.40	
		20-Nov-96	6.03		1.67	
17_NEW2	83 - 123	03-Jan-96	4.70		7.00	
		20-Nov-96	3.28		2.16	
19_DGMW85	143 - 183	16-Dec-92	0.80		5.80	
		16-Dec-92	12.80		15.90	
22_DBMW47	116 - 156	29-Sep-92	9.00		5.80	

EXPLANATION
pCi/L = picoCurie per liter
MCL = maximum contaminant level
Qualification Flags: U = below instrument detection limit, J = estimated value, NA = not analyzed, not sampled, or not reported.
BGS = below ground surface, NA = data not available
= Result exceeds regulatory standard

9.0 QUALITY ASSURANCE/QUALITY CONTROL

The groundwater sampling and analyses activities for the November-December 1996 sampling round were performed according to guidance and quality assurance/quality control (QA/QC) procedures described in the amended *Final Sampling and Analysis Plan* (SAP) and 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 QA/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 FIELD AND LABORATORY AUDITS

On November 19, 1996, a quality assurance audit of the subcontract analytical laboratory (APCL) was performed by an approved CDM Federal QA auditor. Minor deficiencies in sample handling, analytical procedures, and reporting were identified and were discussed with the laboratory personnel and the CDM Federal project manager. The deficiencies were addressed and corrected by the laboratory supervisor and the audit records were included in the project files.

During the November-December 1996 sampling round, an internal quality assurance field audit of the sampling activities was conducted by CDM Federal QA staff on November 15, 1996. The audit identified minor deviations in sample preservation, handling, equipment decontamination, and documentation from the approved field work plans. These deficiencies were subsequently addressed and corrected by the field team. On January 7, 1997, the following results of the field audit were discussed with the Navy's RPMs:

- Field Measurements of Water Quality Parameters. Field measurements were not recorded in the field log book but refer to the well purging sheet and appropriate

document number where the field data sheet is stored. Field measurements for dissolved oxygen were recorded in percent saturation and not mg/L. This measurement was converted to mg/L for the monitoring report. The YSI 6000 was used to measure water quality field parameters. Because the YSI 6000 instrument can measure turbidity in the field, no other turbidity meter was used to record turbidity measurements.

- Activating and Deactivating Installed Packers. All packers contained in the monitoring wells at MCAS El Toro have been determined to be inoperative. No wells were sampled by use of packers.

- Use of a Portable Pump. In addition to a 2-inch Grundfos Redi-Flo2 or 4-inch portable pump, a 3-inch portable submersible well pump was used for groundwater purging and sampling of the wells without dedicated pumps.

- Purging. Field measurements were taken approximately 2-5 minutes apart depending on the duration of ten measurements during equal intervals of the total purge volume.

- Field Filtration of Groundwater Samples. Filtered samples were collected for CLP metals and chromium VI. No unfiltered samples of CLP metals and chromium VI were collected during Round 4 sampling.

9.2 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

During the November-December 1996 sampling round, groundwater samples were collected from a total of 178 GWMP monitoring wells and ports and analyzed for the parameters described in Section 2.2. The group of organic and inorganic analyses performed ranged from a minimum of two analyses per well to a maximum of nine analyses per well (Table 2-1). During field sampling, the following QA/QC samples were collected and analyzed: 16 field duplicate samples, 9 rinsate samples, 2 air contamination (AC) blank samples, and 3 field blank samples. In addition, a total of 26 trip blank samples were analyzed during the sampling round. The preliminary results of these samples are summarized below.

Field Duplicate Samples. Field duplicate analyses were reviewed as part of the data validation activity performed during this sampling round. The results of duplicate sample analyses are presented in the Data Validation Report (Appendix D).

Equipment Rinsate Samples. Nine equipment rinsates were collected during this round of sampling. VOCs were detected in six of the nine samples, which include bromodichloromethane, chlorodibromomethane, chloroform, methylene chloride, toluene, tetrachloroethene, trichloroethene, tetrachloroethane, and benzene. Di-n-butyl-phthalate was detected in two of the nine samples analyzed for SVOCs. The following metals were detected in one of the nine rinsate samples: aluminum, calcium, lead, potassium, and zinc. Refer to the laboratory reports in Appendix E (Volume II) for complete results.

Air Contamination Blank Samples. Three air contamination blank samples were collected during sampling in airfield traffic areas and analyzed for VOCs, SVOCs, metals, TPH-gasoline, and TPH-diesel. VOCs, which were detected in two of the samples, include toluene, methylene chloride, tetrachloroethene, and trichloroethene. The air contamination blank samples were collected at locations downwind from heavy air traffic activities. Therefore, the analytes detected in these blanks may have been associated with air traffic. Di-n-butyl-phthalate was the only SVOC detected in one of the three samples collected. TPH and metals were not detected in the air contamination blanks. Refer to the laboratory reports in Appendix E (Volume II) for complete results.

Field Blank Samples. Field blanks (also known as source water blanks [SWBs] for this groundwater sampling round) were collected and analyzed to monitor the quality of the on-site tap water used during the sampling activities. A total of three SWBs were prepared with on-site tap water and analyzed for VOCs, SVOCs, metals, herbicides, pesticides and PCBs, general chemistry parameters, TPH-gasoline, and TPH-diesel. No pesticides and PCBs, herbicides, TPH-gasoline, and TPH-diesel were detected in any of the SWBs. Target analytes for the other analyses were detected in SWBs. Only one SVOC, diethyl phthalate, was detected in one SWB. This compound is a common laboratory contaminant. The VOCs found in three SWBs were bromodichloromethane, bromoform, chlorodibromomethane, chloroform, methylene chloride, and chloroethane. General chemistry parameters detected in SWBs were COD, TOC, and dissolved silica. A number of metals were detected which include aluminum, barium, calcium,

copper, lead, magnesium, manganese, nickel, potassium, sodium, vanadium, and zinc. The VOCs, general chemistry parameters, and metals detected in SWBs are typical constituents for tap water. The concentrations of the SWB constituents were much higher than found in other field or laboratory QC blanks, confirming the quality of the on-site tap water. Refer to the laboratory reports in Appendix E (Volume II) for complete results.

Trip Blank Samples. Trip blanks were provided by the subcontract laboratory, APCL, to be included with each sample shipment for VOC analysis. VOCs were detected in several trip blanks analyzed during the sampling round. VOC concentrations were normally lower than in other field QC blanks. Refer to the laboratory reports in Appendix E (Volume II) for complete results.

During the current sampling round, additional quality control samples (VOC-spiked) were prepared by California DTSC and submitted with the MCAS El Toro groundwater samples to the subcontract laboratory for analysis. The DTSC quality control samples were submitted on November 15, 1996 (two VOC samples identified 18 BGMW14-802-1 and -802-2) and December 6, 1996 (two VOC samples identified 18 PS4-802 and 18 BGMW23-802). The results of the VOC analyses of these samples are provided in the APCL Analytical Reports 96-4467 and 96-4656 in Appendix E (Volume II).

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 groundwater analytical results and data qualification flags presented in this monitoring report are as reported by the subcontract analytical laboratory (APCL analytical reports in Appendix E, Volume II).

During QC review of the laboratory reports, the following quality control issues regarding sample identification and laboratory results reporting were noted.

- The initial VOC analysis laboratory report for sample 18 MCAS07-5-002 indicated detection of several VOCs which had not been previously detected at this sample location. The same report listed no detected VOCs in sample 21 UGMW37-002, which was collected from a monitoring well located in the VOC source area in which VOCs have been consistently detected during previous sampling. These samples were collected on the same day and submitted under the same chain-of-custody to the laboratory for analysis. Review of the prior VOC results for these wells confirmed that the sample identifications for these samples had been switched at the laboratory prior to analysis. The laboratory reviewed the sample tracking and analysis data and acknowledged that transposed sample identifications had occurred for these VOC samples. A corrected laboratory report was prepared and is included in Appendix E.

- For the groundwater samples collected at multiport wells 18 MCAS01, 18 MCAS02, 18 MCAS03, and 18 MCAS07, the port identifications were transposed during sample collection and labeling (i.e., deepest port was labeled 1-1, shallowest port was labeled 1-7). Review of sample times, depths, and sampling zone pressures listed on the well sampling logs confirmed the transposed sample identifications (see MCAS MP well sampling logs, Appendix F). The analytical results from all of the MCAS sampling ports have been confirmed and corrected for presentation in this report. Due to the volume of records affected, the laboratory analysis reports (Appendix E) and data packages generated by the laboratory have <u>not</u> been revised to correct the transposition of sampling port designations.

9.3.2 <u>Laboratory Data Validation</u>

The subcontract laboratory, APCL, prepared the Level D analytical data packages for all analyses and sample delivery groups (SDGs) performed during this sampling round. In accordance with the Navy's SOW and the project's groundwater monitoring QAPP, 10% of the analytical results were validated to meet the Naval Facilities Engineering Service Center (NFESC) Level D data validation criteria (CDM Federal, 1995). The data validation was performed following the NFESC Interim Guidance document entitled *Navy Installation Restoration Laboratory Quality Assurance Guide* (NFESC, 1996). The data validation

guidelines were supplemented by the following USEPA guidance documents for data validation: *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (USEPA, 1994a) and *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (USEPA, 1994b). Appendix D of this report contains the Data Validation Reports (DVR) for the analytical data packages reviewed.

For the selected sample results reviewed, the project specific goals as defined in the QAPP for precision, accuracy, representativeness, completeness, and comparability were met (CDM Federal, 1995 and 1996d). As discussed below, the analysis results for one VOC (2-hexanone) and two SVOCs (2,4-dinitrophenol and 4,6-dinitro-2-methylphenol) were the only data rejected. However, these compounds have not been confirmed as groundwater contaminants of concern during prior sampling at MCAS El Toro (Jacobs, 1995; CDM Federal, 1996b).

Based on the data validation results, the analytical data obtained during this sampling round are considered to be usable for the intended purposes of continued monitoring of groundwater quality. A summary of the data validation and qualifications identified in the DVR is provided below.

Volatile Organic Compound Analysis: A total of 21 VOC sample results reported in one of the laboratory's SDGs, including 15 groundwater sample results and six QC sample results, were reviewed. Due to initial calibration deficiencies, the 2-hexanone results in all samples in the reviewed data package were rejected (R). Non-detected 2-butanone in 14 samples and 4-methyl-2-pentanone in five samples were qualified as estimated (UJ) due to continuing calibration deficiencies. Based on blank contamination, the originally detected bromodichloromethane, chlorodibromomethane, chloroform, and methylene chloride in four samples were qualified as non-detected (U). In addition, the trichloroethene result in one sample was qualified as estimated (J) because its concentration exceeded the instrument calibration range. Other positively identified results, such as toluene in two samples, total

1,2-dichloroethene and chlorodibromomethane each in one sample, were qualified as estimated (J) because their concentrations were lower than the contract required quantitation limits (CRQL). Several tentatively identified compounds (TICs) were detected in most groundwater samples, some of which were qualified as non-detected (U) due to blank contamination and the others were qualified as tentatively identified and their results were estimated (NJ). No other qualifiers were assigned to the VOC results.

Semivolatile Organic Compound Analysis: A total of nine SVOC groundwater sample results were validated. Non-detected results of 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol in all of these samples were rejected (R) due to initial calibration deficiencies. Overall, the laboratory QC results were within the required control limits and did not require data qualifiers. The positive results of 2-methylnaphthalene in one sample and di-n-butylphthalate in four samples were qualified as estimated (J) because their concentrations were lower than the CRQL. Several tentatively identified compounds (TICs) were detected in most groundwater samples and were qualified as tentatively identified and their results were estimated (NJ).

Pesticides and Polychlorinated Biphenyls: A total of five sample results, including four groundwater sample results and one source water blank sample result, were validated. Because of initial calibration deficiencies, non-detected results of alpha-BHC, gamma-BHC, and delta-BHC were qualified as estimated (UJ). Other laboratory QC results were all within the required control limits. No additional data qualification was necessary.

Herbicides: A total of five herbicide results were validated. The laboratory QC results were all within the required control limits. No data qualification was necessary.

General Chemistry and Treatability Parameters: Two SDGs, including 25 general chemistry parameters results and 11 treatability parameters results, were validated. Three hexavalent chromium results were qualified as estimated (J/UJ) due to exceeding of the

holding time. Other laboratory QC results were all within the required control limits. No data qualification was necessary.

Total Petroleum Hydrocarbons (TPH): Three groundwater sample results for TPH-gasoline and TPH-diesel were validated. The laboratory QC results were all within the required control limits. No data qualification was necessary.

Metals: Six groundwater sample results for CLP metals were validated. Because of blank contamination, aluminum, antimony, beryllium, chromium, cobalt, copper, iron, and lead results in several samples were qualified as non-detected (U). Other laboratory QC results were all within the required control limits. Several sample results for arsenic, barium, magnesium, manganese, nickel, potassium, selenium, vanadium, and zinc were qualified as estimated because they were either detected at concentrations greater than the instrument calibration range or lower than the contract-required detection limits (CRDL). No other qualification was necessary.

10.0 STATUS OF MONITORING PROGRAM

10.1 RESULTS SUMMARY

During the period October through December 1996, groundwater monitoring and sampling of the network of 181 monitoring wells in the MCAS El Toro GWMP was 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 3 feet, from the water levels measured in these wells in January 1996. Groundwater elevations for wells completed in the principal aquifer have generally decreased, in the range of 3 to 10 feet, from elevations measured in January 1996. The current water level measurements confirm similar hydraulic gradient and groundwater flow conditions observed in 1993-94 and January 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 sampling results from January-February 1996. However, the current TCE results locally indicate minor increases in TCE concentrations in several of the downgradient, off-Station monitoring stations suggesting continuing migration of the regional VOC plume.

- Groundwater sampling at the Magazine Road Landfill (Site 2) has confirmed the presence of a secondary VOC (TCE-PCE) plume, which was identified in prior sampling rounds. TCE was also detected at low concentrations in certain wells at Site 1, Site 6, and Site 19.

- SVOCs were detected in groundwater samples collected in 13 of the 79 wells sampled during the current monitoring round. Overall, the concentrations, number of SVOCs detected, and monitoring locations where SVOCs were detected are comparable to prior SVOC sampling results.

- Pesticides and herbicides were not detected at or above the CRDL in any of the groundwater samples collected during the current sampling round (total 32 wells sampled for pesticides and 32 wells sampled for herbicides). The lack of

detection of pesticides and herbicides in the locations sampled is consistent with prior groundwater analyses from the January-February 1996 sampling round.

- General chemistry analytical data were collected for all wells in the monitoring network. The results are consistent with the inorganic water quality data collected during prior sampling. Selected wells were additionally sampled for dissolved metals and site-specific analyses (gross alpha, gross beta, and TPH) to further characterize water quality conditions.

- Selected monitoring wells in the VOC source area were screened during the current monitoring round for the presence of dense, non-aqueous phase liquid (DNAPL). No evidence of DNAPL was observed in the wells investigated.

10.2 UPCOMING MONITORING ACTIVITIES

According to the *Final Groundwater Monitoring Plan* and Navy's SOW, the next MCAS El Toro GWMP sampling round, identified as Round 5, will be a semiannual sampling event, scheduled to be conducted March-April 1997. During Round 5, groundwater levels will be measured monthly (three month period) and samples will be collected for all wells in the monitoring network and analyzed for VOCs, metals, and general chemistry parameters. In selected wells, samples will also be collected for SVOCs, pesticides, herbicides, TPH, gross alpha/gross beta, and treatability parameter analyses.

The Round 5 sampling results and a summary of monitoring activities will be presented in a Groundwater Monitoring Report, following the format of the Round 4 monitoring report. Upon completion of upcoming monitoring round(s), 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

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

	Well Completion						Pump Installation (December 1996)		
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	50.8	2"	81	
01_DGMW58	622.74	WT	82	4	57 - 77	42.9	none	--	pump removed 2/96
01MW101	750.82	WT	153	4	118 - 148	76.9	none	--	
01MW102	758.13	WT	140	4	95 - 135	108.8	none	--	
01MW201	665.99	WT	62	4	27 - 57	40.3	none	--	
02_DGMW59	506.91	WT	94	4	69 - 89	51.6	2"	85	
02_DGMW60	499.28	WT	105	4	80 - 100	57.0	2"	98	
02_DGMW61	514.85	WT	105	4	80 - 100	43.2	2"	98	
02_UGMW25	546.36	WT	80	4	55 - 75	36.4	2"	72	
02NEW1	500.53	WT	140	4	115 - 135	63.0	2"	115	
02NEW2	494.68	WT	100	4	75 - 95	66.9	2"	95	
02NEW3	462.46	WT	230	5	185 - 225	189.1	2"	224	
02NEW6	458.83	WT	230	5	185 - 225	189.2	2"	224	
02NEW7	479.12	WT	148	5	103 - 143	125.3	2"	142	
02NEW8A	512.88	WT	109	4	84 - 104	47.0	none	--	pump removed 12/96
02NEW11	533.85	WT	70	4	45 - 65	27.9	2"	66	
02NEW12	484.94	WT	254	5	209 - 249	213.0	2"	248	
03_DBMW39	419.66	WT	275	5	230 - 270	228.5	4"-HH	265	
03_DGMW64	418.28	WT	290	5	245 - 285	230.5	none	--	pump removed 1/96
03_DGMW65X	411.90	WT	275	5	230 - 270	222.7	none	--	pump removed 1/96
03_UGMW26	420.05	WT	275	5	230 - 270	219.7	none	--	pump removed 1/96
04_DBMW40	400.04	WT	265	4	220 - 260	211.1	none	--	pump removed 1/96
04_DGMW66	401.10	WT	295	5	250 - 290	211.9	none	--	pump removed 1/96
04_UGMW63	404.11	WT	280	5	235 - 275	211.7	4"-HH	262	
05_DBMW41	424.77	WT	227	4	182 - 222	162.8	2"	221	
05_DGMW67	428.56	WT	232	5	177 - 227	166.2	4"	220	
05_DGMW68	416.95	WT	215	5	190 - 210	168.1	none	--	pump removed 1/96
05_UGMW27	437.86	WT	243	5	198 - 238	169.7	4"	231	
05NEW1	407.77	WT	208	5	163 - 203	167.8	2"	202	
06_DGMW69	324.33	WT	195	4	150 - 190	133.5	2"	187	inoperative pump 12/96
06_UGMW28	334.90	WT	185	4	140 - 180	138.9	none	--	pump removed 2/96
07_DBMW43	292.56	WT	195	4	150 - 190	111.4	none	--	pump removed 2/96
07_DGMW70	293.44	WT	170	4	125 - 165	121.8	none	--	pump removed 2/96
07_DBMW71	283.66	WT	160	4	115 - 155	109.0	none	--	pump removed 2/96
07_DGMW72	276.85	WT	155	4	110 - 150	102.5	none	--	pump removed 2/96
07_DGMW91	273.39	WT	155	4	110 - 150	102.9	none	--	pump removed 2/96
07_DBMW100	286.44	WT	176	4	131 - 171	104.5	4"	168	

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

	Well Completion						Pump Installation (December 1996)		
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	83.7	none	--	pump removed 2/96
08_DGMW74	264.75	WT	135	4	90 - 130	85.1	none	--	pump removed 2/96
08_UGMW29	271.94	WT	140	4	95 - 135	86.7	none	--	pump removed 2/96
09_DBMW45	280.00	WT	162	4	117 - 157	118.4	none	--	pump removed 1/96
09_DGMW75	271.00	WT	159	4	114 - 154	112.2	none	--	pump removed 2/96
10_DGMW77	271.40	WT	175	4	130 - 170	104.8	none	--	pump removed 2/96
12_DBMW48	247.81	WT	140	4	95 - 135	90.4	none	--	pump removed 2/96
12_UGMW31	255.82	WT	150	4	105 - 145	96.3	none	--	pump removed 2/96
13_DBMW49	280.63	WT	187	4	142 - 182	128.4	2"	175	
13_DGMW78	276.14	WT	172	4	127 - 167	125.5	2"	168	
13_UGMW32	285.22	WT	189	4	144 - 184	133.8	NA	NA	inoperative pump 12/96
14_DBMW50	270.80	WT	165	4	120 - 160	119.6	2"	150	
14_DGMW79	268.74	WT	163	4	118 - 158	118.2	2"	150	
15_DBMW51	269.26	WT	170	4	125 - 165	119.9	2"	162	
16_DBMW52	332.00	WT	227	4	182 - 222	169.7	2"	220	
16_DGMW81	323.00	WT	221	4	176 - 216	165.1	none	--	pump removed 12/96
16_UGMW33	337.00	WT	225	4	180 - 220	172.2	2"	219	
17_DGMW82	442.12	WT	260	5	235 - 255	192.0	2"	260	
17NEW1	431.93	WT	231	5	186 - 226	189.6	2"	225	
17NEW2	551.36	WT	128	4	83 - 123	88.5	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			
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			

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

	Well Completion						Pump Installation (December 1996)		
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	234.0	4"-HH	465	
18_BGMW01B	393.83	CL	421	5	396 - 416	203.1	4"-HH	395	
18_BGMW01C	393.25	CL	355	5	330 - 350	202.4	4"-HH	329	
18_BGMW01D	393.15	CL	267	5	242 - 262	204.8	4"	231	
18_BGMW01E	392.09	CL,WT	230	4	205 - 225	205.2	2"	224	
18_BGMW02A	391.81	CL	487	5	462 - 482	163.4	4"-HH	461	
18_BGMW02C	391.75	CL	383	5	358 - 378	164.3	4"-HH	357	
18_BGMW02D	391.45	CL	319	5	294 - 314	165.8	4"-HH	293	
18_BGMW02E	391.72	CL,WT	238	5	198 - 233	169.1	2'	200	
18_BGMW03A	279.25	CL	395	5	370 - 390	107.6	none	--	pump removed 2/96
18_BGMW03B	279.28	CL	305	5	280 - 300	104.2	none	--	pump removed 1/96
18_BGMW03C	279.41	CL	247	5	222 - 242	103.5	none	--	pump removed 1/96
18_BGMW03E	279.16	CL,WT	169	4	124 - 164	107.0	2"	160	
18_BGMW04A	243.36	CL	311	5	286 - 306	84.0	none	--	pump removed 2/96
18_BGMW04B	243.58	CL	215	4	190 - 210	80.7	4"	189	
18_BGMW05A	269.45	CL	487	5	462 - 482	85.2	none	--	pump removed 12/96
18_BGMW05B	270.41	CL	346	5	321 - 341	81.5	none	--	pump removed 2/96
18_BGMW05C	269.39	CL	250	5	225 - 245	80.2	none	--	pump removed 2/96
18_BGMW05D	270.42	CL,WT	138	6	83 - 133	81.9	none	--	pump removed 2/96
18_BGMW05E	269.41	CL,WT	135	2	80 - 130	81.9	none	--	not sampled (piezom.)
18_BGMW07	180.11	WT	70	4	25 - 65	21.5	2"	60	
18_BGMW12	304.44	WT	210	4	165 - 205	154.7	2"	200	
18_BGMW14	268.67	WT	120	4	75 - 115	69.8	none	--	pump removed 2/96
18_BGMW15	319.59	WT	220	4	175 - 215	165.3	2"	214	
18_BGMW16	376.67	WT	268	5	223 - 263	217.0	none	--	pump removed in 1996
18_BGMW17	375.68	WT	260	5	215 - 255	139.9	4"	231	
18_BGMW18	276.49	WT	185	4	140 - 180	131.0	none	--	pump removed 12/96

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

	Well Completion						Pump Installation (December 1996)		
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_BGMW19A	232.61	CL	473	5	448 - 468	90.5	none	--	pump removed 2/96
18_BGMW19B	232.69	CL	425	5	400 - 420	92.0	none	--	pump removed 2/96
18_BGMW19C	232.79	CL	282	5	257 - 277	90.7	none	--	pump removed 2/96
18_BGMW19D	232.54	CL	175	5	150 - 170	90.8	none	--	pump removed 2/96
18_BGMW19E	232.91	CL,WT	143	4	98 - 138	91.2	2"	137	
18_BGMW22	426.36	WT	292	5	247 - 287	232.9	4"	285	
18_BGMW23	190.22	WT	109	4	64 - 104	28.5	none	--	pump removed 2/96
18_BGMW24	618.13	WT	76	4	51 - 71	33.9	2"	63	
18_BGMW101	232.80	WT	135	4	90 - 130	80.5	4"	126	
18_DW135	268.90	CL,WT	135	4	115 - 135	117.0	none	--	pump removed 2/96
18_DW250	268.82	CL	254	4	215 - 250	115.4	none	--	
18_DW350	269.11	CL	350	4	310 - 350	113.9	none	--	
18_DW450	269.12	CL	454	4	420 - 460	112.9	none	--	
18_DW540	269.53	CL	541	4	490 - 540	113.2	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	22.2	none	--	
18_MCAS05A	159.97	SH	140	4	120 - 130	30.0	none	--	
18_MCAS06	114.85	SH	285	4	167 - 222	14.0	none	--	

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

	Well Completion						Pump Installation (December 1996)		
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_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	54.1	none	--	
18_MCAS09	77.50	DP	450	4	372 - 445	6.6	none	--	
18_MCAS10	102.10	DP	389	4	355 - 375	16.1	none	--	
18_PS1	247.99	SH	122	4	102 - 122	86.7	none	--	
18_PS2	246.73	SH	133	4	103 - 133	99.0	none	--	
18_PS3	266.47	SH	122	4	102 - 122	84.1	none	--	pump removed 2/96
18_PS4	264.53	SH	119	4	98 - 118	76.5	none	--	pump removed 2/96
18_PS5	255.14	SH	127	4	106 - 126	87.9	none	--	
18_PS6	269.09	SH	151	4	130 - 150	111.0	none	--	
18_PS7	260.00	SH	127	4	106 - 126	87.1	none	--	
18_PS8	282.84	SH	146	4	125 - 145	103.4	none	--	
18_RW1	247.99	DP	504	5	430 - 470	83.4	none	--	
18_RW2	265.69	DP	475	5	270 - 310	75.8	none	--	
19_DBMW54	332.59	WT	186	4	141 - 181	141.9	none	--	pump removed 2/96
19_DGMW85	328.57	WT	188	4	143 - 183	140.6	none	--	pump removed 2/96
19_DGMW86	332.87	WT	203	4	158 - 198	149.9	none	--	pump removed 2/96
19_UGMW35	343.66	WT	190	4	148 - 185	150.0	2"	181	
20_DBMW55	331.56	WT	232	4	187 - 227	179.9	none	--	pump removed 2/96
20_DGMW88	331.65	WT	230	4	185 - 225	181.1	2"	223	
20_UGMW36	338.71	WT	228	4	183 - 223	186.6	none	--	pump removed in 1996
21_DBMW56	256.06	WT	137	4	92 - 132	89.8	none	--	pump removed 2/96
21_DGMW90	255.35	WT	140	4	95 - 135	90.1	2"	125	
21_UGMW37	257.87	WT	135	4	89 - 130	90.0	none	--	pump removed 2/96
22_DBMW47	277.83	WT	161	4	116 - 156	114.0	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 (December 1996)		
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	124.8	none	--	
24NEW4	281.80	WT	154	4	108 - 148	117.9	none	--	
24NEW5	279.20	SH	255	5	230 - 250	122.3	none	--	
24NEW6	265.60	SH	190	5	165 - 185	86.6	none	--	
24NEW7	285.10	WT	164	4	118 - 158	128.2	none	--	
24NEW8	291.50	WT	168	4	122 - 162	126.6	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.

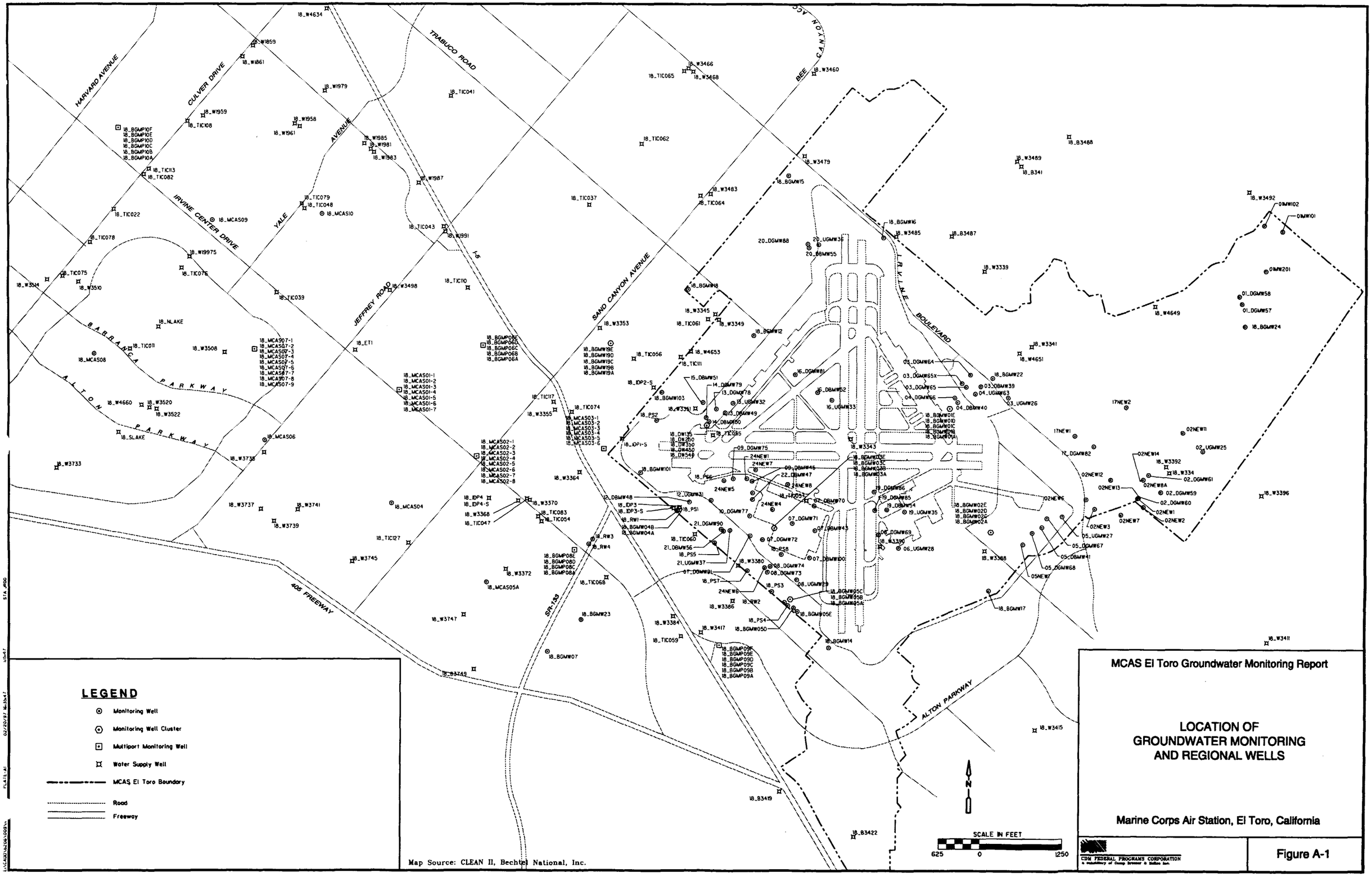
3) Well completion types:
WT = water table monitoring well or port, CL = part of well cluster, MP = multiple-port monitoring well,
SH = well completed below water table and above top of intermediate horizon, DP = well completed below intermediate horizon

4) Static water levels measured Nov. 1996 (or Dec. 1996); 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 December 1996:
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.


HARVARD AVENUE
CULVER DRIVE
IRVINE CENTER DRIVE
YALE AVENUE
JEFFREY ROAD
TRABUCO ROAD
SAND CANYON AVENUE
BEE CANYON ACCESS
I-5
BARRANCA PARKWAY
ALTON PARKWAY
405 FREEWAY
SR-133
TRVINE BOULEVARD
LEGEND
Monitoring Well
Monitoring Well Cluster
Multiport Monitoring Well
Water Supply Well
MCAS El Toro Boundary
Road
Freeway
SCALE IN FEET
625
0
1250
N
Map Source: CLEAN II, Bechtel National, Inc.
MCAS El Toro Groundwater Monitoring Report
LOCATION OF GROUNDWATER MONITORING AND REGIONAL WELLS
Marine Corps Air Station, El Toro, California
CDM FEDERAL PROGRAMS CORPORATION
Figure A-1

APPENDIX B

WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS

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 ELEVATION (+ or - feet)
01_DGMW57	WT	63 - 83	631.17	12-Jan-96	48.12	583.05	
			631.17	7-Feb-96	48.32	582.85	-0.20
			631.17	28-Feb-96	48.65	582.52	-0.33
			631.17	27-Mar-96	48.39	582.78	0.26
			631.17	30-Oct-96	50.50	580.67	-2.11
			631.17	26-Nov-96	50.82	580.35	-0.32
			631.17	27-Dec-96	51.15	580.02	-0.33
01_DGMW58	WT	57 - 77	621.74	12-Jan-96	40.44	581.30	
			621.74	28-Feb-96	40.88	580.86	-0.44
			621.74	27-Mar-96	40.58	581.16	0.30
			621.74	30-Oct-96	42.48	579.26	-1.90
			621.74	26-Nov-96	42.88	578.86	-0.40
			621.74	27-Dec-96	42.50	579.24	0.38
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
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
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
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
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
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
02_NEW1	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
02_NEW2	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

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 ELEVATION (+ or - feet)
02_NEW3	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
02_NEW6	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
02_NEW7	WT	103 - 143	479.12	30-Oct-96	125.60	353.52	
			479.12	26-Nov-96	125.26	353.86	0.34
02_NEW8A	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
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
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
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
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
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
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
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

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 ELEVATION (+ or - feet)
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
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
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
05_DBMW41	WT	182 - 222	424.77	12-Jan-96	163.12	261.65	
			424.77	7-Feb-96	162.82	261.95	0.30
			424.77	28-Feb-96	162.82	261.95	0.00
			424.77	27-Mar-96	162.45	262.32	0.37
			424.77	31-Oct-96	161.60	263.17	0.85
			424.77	26-Nov-96	161.16	263.61	0.44
			424.77	26-Dec-96	161.12	263.65	0.04
05_DGMW67	WT	187 - 227	428.56	12-Jan-96	166.52	262.04	
			428.56	9-Feb-96	166.26	262.30	0.26
			428.56	27-Feb-96	166.19	262.37	0.07
			428.56	27-Mar-96	165.85	262.71	0.34
			428.56	31-Oct-96	165.34	263.22	0.51
			428.56	26-Nov-96	164.80	263.76	0.54
			428.56	26-Dec-96	164.68	263.88	0.12
05_DGMW68	WT	190 - 210	416.95	12-Jan-96	168.71	248.24	
			416.95	26-Feb-96	168.11	248.84	0.60
			416.95	27-Feb-96	168.11	248.84	0.00
			416.95	27-Mar-96	167.79	249.16	0.32
			416.95	31-Oct-96	166.28	250.67	1.51
			416.95	26-Nov-96	165.68	251.27	0.60
			416.95	26-Dec-96	165.52	251.43	0.16
05_NEW1	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
05_UGMW27	WT	198 - 238	437.86	11-Jan-96	169.84	268.02	
			437.86	29-Jan-96	169.72	268.14	0.12
			437.86	28-Feb-96	169.70	268.16	0.02
			437.86	27-Mar-96	169.32	268.54	0.38
			437.86	31-Oct-96	168.92	268.94	0.40
			437.86	26-Nov-96	168.40	269.46	0.52
			437.86	26-Dec-96	168.34	269.52	0.06
06_DGMW69	WT	150 - 190	324.33	12-Jan-96	134.00	190.33	
			324.33	27-Feb-96	133.50	190.83	#REF!
			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

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 ELEVATION (+ or - feet)
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
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
07_DGMW70	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
07_DBMW71	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
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
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
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
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

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 ELEVATION (+ 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
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
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
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
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
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
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
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

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 ELEVATION (+ or - feet)
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
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
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	119.70	151.10	-0.10
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
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
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
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
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

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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
17_NEW1	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
17_NEW2	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
18_BGMP06A	MP	445 - 455	175.41	7-Feb-96	47.84	127.57	
			175.41	27-Feb-96	46.93	128.48	0.91
			175.41	27-Mar-96	46.85	128.56	0.08
			175.41	1-Nov-96	76.06	99.35	-29.21
			175.41	26-Nov-96	61.00	114.41	15.06
			175.41	26-Dec-96	53.47	121.94	7.53
18_BGMP06B	MP	380 - 390	175.41	7-Feb-96	66.42	108.99	
			175.41	27-Feb-96	64.46	110.95	1.96
			175.41	27-Mar-96	66.32	109.09	-1.86
			175.41	1-Nov-96	105.83	69.58	-39.51
			175.41	26-Nov-96	84.25	91.16	21.58
			175.41	26-Dec-96	74.45	100.96	9.80
18_BGMP06C	MP	295 - 305	175.41	7-Feb-96	53.47	121.94	
			175.41	27-Feb-96	53.00	122.41	0.47
			175.41	27-Mar-96	52.60	122.81	0.40
			175.41	1-Nov-96	76.23	99.18	-23.63
			175.41	26-Nov-96	64.92	110.49	11.31
			175.41	26-Dec-96	58.24	117.17	6.68
18_BGMP06D	MP - WT	168 - 178	175.41	7-Feb-96	45.69	129.72	
			175.41	27-Feb-96	45.57	129.84	0.12
			175.41	27-Mar-96	45.57	129.84	0.00
			175.41	1-Nov-96	48.37	127.04	-2.80
			175.41	26-Nov-96	47.99	127.42	0.38
			175.41	26-Dec-96	46.56	128.85	1.43
18_BGMP06E	MP	105 - 115	175.41	7-Feb-96	49.39	126.02	
			175.41	27-Feb-96	49.25	126.16	0.14
			175.41	27-Mar-96	49.16	126.25	0.09
			175.41	1-Nov-96	50.08	125.33	-0.92
			175.41	26-Nov-96	50.62	124.79	-0.54
			175.41	26-Dec-96	49.94	125.47	0.68
18_BGMP08A	MP	439 - 449	195.70	11-Jan-96	47.64	148.06	
			195.70	27-Mar-96	45.09	150.61	2.55
			195.70	7-Nov-96	62.08	133.62	-16.99
			195.70	26-Dec-96	49.50	146.20	12.58
18_BGMP08C	MP	297 - 307	195.70	11-Jan-96	43.35	152.35	
			195.70	27-Feb-96	44.27	151.43	-0.92
			195.70	27-Mar-96	43.84	151.86	0.43
			195.70	7-Nov-96	57.01	138.69	-13.17
			195.70	26-Dec-96	46.78	148.92	10.23

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18_BGMP08D	MP	126 - 136	195.70	11-Jan-96	40.96	154.74	
			195.70	27-Feb-96	40.87	154.83	0.09
			195.70	27-Mar-96	40.54	155.16	0.33
			195.70	7-Nov-96	43.25	152.45	-2.71
			195.70	26-Dec-96	40.72	154.98	2.53
18_BGMP08E	MP - WT	61 - 71	195.70	11-Jan-96	43.89	151.81	
			195.70	27-Feb-96	43.78	151.92	0.11
			195.70	7-Nov-96	44.94	150.76	-1.16
			195.70	26-Dec-96	43.31	152.39	1.63
18_BGMP09A	MP	453 - 463	235.43	11-Jan-96	49.57	185.86	
			235.43	28-Feb-96	48.92	186.51	0.65
			235.43	27-Mar-96	48.65	186.78	0.27
			235.43	31-Oct-96	53.16	182.27	-4.51
			235.43	25-Nov-96	57.52	177.91	-4.36
			235.43	26-Dec-96	49.45	185.98	8.07
18_BGMP09B	MP	375 - 385	235.43	11-Jan-96	48.50	186.93	
			235.43	28-Feb-96	47.84	187.59	0.66
			235.43	27-Mar-96	47.31	188.12	0.53
			235.43	31-Oct-96	52.19	183.24	-4.88
			235.43	25-Nov-96	50.07	185.36	2.12
			235.43	26-Dec-96	48.05	187.38	2.02
18_BGMP09C	MP	268 - 278	235.43	11-Jan-96	21.65	213.78	
			235.43	28-Feb-96	-0.47	235.90	22.12
			235.43	27-Mar-96	45.52	189.91	-45.99
			235.43	31-Oct-96	49.32	186.11	-3.80
			235.43	25-Nov-96	47.55	187.88	1.77
			235.43	26-Dec-96	46.03	189.40	1.52
18_BGMP09D	MP	222 - 232	235.43	11-Jan-96	NA	233.63	
			235.43	28-Feb-96	46.62	188.81	-44.82
			235.43	27-Mar-96	46.31	189.12	0.31
			235.43	31-Oct-96	48.76	186.67	-2.45
			235.43	25-Nov-96	48.04	187.39	0.72
			235.43	26-Dec-96	46.55	188.88	1.49
18_BGMP09E	MP	133 - 143	235.43	11-Jan-96	38.95	196.48	
			235.43	28-Feb-96	48.43	187.00	-9.48
			235.43	27-Mar-96	48.03	187.40	0.40
			235.43	31-Oct-96	49.25	186.18	-1.22
			235.43	25-Nov-96	49.11	186.32	0.14
			235.43	26-Dec-96	48.38	187.05	0.73
18_BGMP09F	MP-WT	59 - 69	235.43	11-Jan-96	49.52	185.91	
			235.43	28-Feb-96	49.91	185.52	-0.39
			235.43	27-Mar-96	49.43	186.00	0.48
			235.43	31-Oct-96	50.00	185.43	-0.57
			235.43	25-Nov-96	56.25	179.18	-6.25
			235.43	26-Dec-96	49.82	185.61	6.43
18_BGMP10A	MP	1001 - 1011	58.24	19-Jan-96	23.79	34.45	
			58.24	27-Mar-96	17.74	40.50	6.05
			58.24	1-Nov-96	77.15	-18.91	-59.41
			58.24	25-Nov-96	52.42	5.82	24.73
			58.24	26-Dec-96	32.97	25.27	19.45
18_BGMP10B	MP	886 - 896	58.24	19-Jan-96	20.58	37.66	
			58.24	27-Mar-96	NA	118.86	81.20
			58.24	1-Nov-96	74.40	-16.16	-135.02
			58.24	25-Nov-96	46.59	11.65	27.81
			58.24	26-Dec-96	27.91	30.33	18.68

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 ELEVATION (+ or - feet)
18_BGMP10C	MP	752 - 762	58.24	19-Jan-96	16.38	41.86	
			58.24	27-Mar-96	23.35	34.89	-6.97
			58.24	1-Nov-96	67.78	-9.54	-44.43
			58.24	25-Nov-96	38.87	19.37	28.91
			58.24	26-Dec-96	21.88	36.36	16.99
18_BGMP10D	MP	563 - 573	58.24	19-Jan-96	17.30	40.94	
			58.24	27-Mar-96	20.84	37.40	-3.54
			58.24	1-Nov-96	67.06	-8.82	-46.22
			58.24	25-Nov-96	37.59	20.65	29.47
			58.24	26-Dec-96	21.38	36.86	16.21
18_BGMP10E	MP	429 - 449	58.24	19-Jan-96	2.59	55.65	
			58.24	27-Mar-96	NA	60.15	4.50
			58.24	1-Nov-96	46.72	11.52	-48.63
			58.24	25-Nov-96	26.35	31.89	20.37
			58.24	26-Dec-96	10.31	47.93	16.04
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
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
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
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
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
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

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 ELEVATION (+ or - feet)
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
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
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
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
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
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
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
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

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 ELEVATION (+ or - feet)
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
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
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
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
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
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
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
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

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

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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
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
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	28-Feb-96	165.30	154.29	0.49
			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
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
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
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
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
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

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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 ELEVATION (+ 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
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
18_BGMW19E	CL	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
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
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
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
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
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

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 ELEVATION (+ or - feet)
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
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
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
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
18_MCAS01-1	MP	60 - 70	140.13	12-Jan-96	22.74	117.39	
			140.13	27-Feb-96	22.90	117.23	-0.16
			140.13	27-Mar-96	21.84	118.29	1.06
			140.13	31-Oct-96	24.08	116.05	-2.24
			140.13	25-Nov-96	24.31	115.82	-0.23
			140.13	26-Dec-96	23.85	116.28	0.46
18_MCAS01-2	MP	150 - 160	140.13	12-Jan-96	30.27	109.86	
			140.13	27-Feb-96	31.89	108.24	-1.62
			140.13	27-Mar-96	28.83	111.30	3.06
			140.13	31-Oct-96	30.89	109.24	-2.06
			140.13	25-Nov-96	33.54	106.59	-2.65
			140.13	26-Dec-96	28.85	111.28	4.69
18_MCAS01-3	MP	210 - 220	140.13	12-Jan-96	30.84	109.29	
			140.13	27-Feb-96	31.19	108.94	-0.35
			140.13	27-Mar-96	28.80	111.33	2.39
			140.13	31-Oct-96	44.88	95.25	-16.08
			140.13	25-Nov-96	38.99	101.14	5.89
			140.13	26-Dec-96	31.10	109.03	7.89
18_MCAS01-4	MP	270 - 280	140.13	12-Jan-96	38.80	101.33	
			140.13	27-Feb-96	34.39	105.74	4.41
			140.13	27-Mar-96	35.41	104.72	-1.02
			140.13	31-Oct-96	79.22	60.91	-43.81
			140.13	25-Nov-96	52.67	87.46	26.55
			140.13	26-Dec-96	42.26	97.87	10.41

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 ELEVATION (+ or - feet)
18_MCAS01-5	MP	330 - 340	140.13	12-Jan-96	38.64	101.49	
			140.13	27-Feb-96	33.82	106.31	4.82
			140.13	27-Mar-96	34.59	105.54	-0.77
			140.13	31-Oct-96	79.86	60.27	-45.27
			140.13	25-Nov-96	52.23	87.90	27.63
			140.13	26-Dec-96	41.72	98.41	10.51
18_MCAS01-6	MP	450 - 460	140.13	12-Jan-96	39.38	100.75	
			140.13	27-Feb-96	33.94	106.19	5.44
			140.13	27-Mar-96	35.49	104.64	-1.55
			140.13	31-Oct-96	85.83	54.30	-50.34
			140.13	25-Nov-96	53.77	86.36	32.06
			140.13	26-Dec-96	42.57	97.56	11.20
18_MCAS01-7	MP	540 - 550	140.13	12-Jan-96	45.41	94.72	
			140.13	27-Feb-96	39.86	100.27	5.55
			140.13	27-Mar-96	38.30	101.83	1.56
			140.13	31-Oct-96	80.23	59.90	-41.93
			140.13	25-Nov-96	65.55	74.58	14.68
			140.13	26-Dec-96	53.55	86.58	12.00
18_MCAS02-1	MP	40 - 50	160.60	12-Jan-96	30.88	129.72	
			160.60	27-Feb-96	30.60	130.00	0.28
			160.60	27-Mar-96	30.72	129.88	-0.12
			160.60	31-Oct-96	32.93	127.67	-2.21
			160.60	25-Nov-96	32.73	127.87	0.20
			160.60	26-Dec-96	32.38	128.22	0.35
18_MCAS02-2	MP	130 - 140	160.60	12-Jan-96	36.73	123.87	
			160.60	27-Feb-96	39.25	121.35	-2.52
			160.60	27-Mar-96	38.59	122.01	0.66
			160.60	31-Oct-96	39.88	120.72	-1.29
			160.60	25-Nov-96	39.29	121.31	0.59
			160.60	26-Dec-96	38.03	122.57	1.26
18_MCAS02-3	MP	200 - 210	160.60	12-Jan-96	40.08	120.52	
			160.60	27-Feb-96	40.09	120.51	-0.01
			160.60	27-Mar-96	39.63	120.97	0.46
			160.60	31-Oct-96	49.66	110.94	-10.03
			160.60	25-Nov-96	44.79	115.81	4.87
			160.60	26-Dec-96	41.89	118.71	2.90
18_MCAS02-4	MP	370 - 380	160.60	12-Jan-96	42.68	117.92	
			160.60	27-Feb-96	41.30	119.30	1.38
			160.60	27-Mar-96	37.09	123.51	4.21
			160.60	31-Oct-96	76.02	84.58	-38.93
			160.60	25-Nov-96	56.21	104.39	19.81
			160.60	26-Dec-96	47.62	112.98	8.59
18_MCAS02-5	MP	420 - 430	160.60	12-Jan-96	41.46	119.14	
			160.60	27-Feb-96	39.78	120.82	1.68
			160.60	27-Mar-96	39.56	121.04	0.22
			160.60	31-Oct-96	73.58	87.02	-34.02
			160.60	25-Nov-96	54.54	106.06	19.04
			160.60	26-Dec-96	46.12	114.48	8.42
18_MCAS02-6	MP	490 - 500	160.60	12-Jan-96	47.97	112.63	
			160.60	27-Feb-96	44.43	116.17	3.54
			160.60	27-Mar-96	43.01	117.59	1.42
			160.60	31-Oct-96	67.47	93.13	-24.46
			160.60	25-Nov-96	64.57	96.03	2.90
			160.60	26-Dec-96	57.08	103.52	7.49

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 ELEVATION (+ or - feet)
18_MCAS02-7	MP	550 - 560	160.60	12-Jan-96	47.15	113.45	
			160.60	27-Feb-96	43.96	116.64	3.19
			160.60	27-Mar-96	42.51	118.09	1.45
			160.60	31-Oct-96	66.41	94.19	-23.90
			160.60	25-Nov-96	63.34	97.26	3.07
			160.60	26-Dec-96	56.26	104.34	7.08
18_MCAS02-8	MP	620 - 630	160.60	12-Jan-96	49.89	110.71	
			160.60	27-Feb-96	46.67	113.93	3.22
			160.60	27-Mar-96	44.63	115.97	2.04
			160.60	31-Oct-96	67.21	93.39	-22.58
			160.60	25-Nov-96	64.79	95.81	2.42
			160.60	26-Dec-96	58.27	102.33	6.52
18_MCAS03-1	MP	85 - 95	216.22	12-Jan-96	71.68	144.54	
			216.22	27-Feb-96	71.68	144.54	0.00
			216.22	27-Mar-96	70.80	145.42	0.88
			216.22	1-Nov-96	73.03	143.19	-2.23
			216.22	25-Nov-96	75.24	140.98	-2.21
			216.22	26-Dec-96	74.94	141.28	0.30
18_MCAS03-2	MP	160 - 170	216.22	12-Jan-96	74.48	141.74	
			216.22	27-Feb-96	74.22	142.00	0.26
			216.22	27-Mar-96	73.70	142.52	0.52
			216.22	1-Nov-96	74.25	141.97	-0.55
			216.22	25-Nov-96	74.46	141.76	-0.21
			216.22	26-Dec-96	74.11	142.11	0.35
18_MCAS03-3	MP	220 - 230	216.22	12-Jan-96	72.94	143.28	
			216.22	27-Feb-96	72.10	144.12	0.84
			216.22	27-Mar-96	71.60	144.62	0.50
			216.22	1-Nov-96	80.88	135.34	-9.28
			216.22	25-Nov-96	76.17	140.05	4.71
			216.22	26-Dec-96	74.24	141.98	1.93
18_MCAS03-4	MP	340 - 350	216.22	12-Jan-96	74.98	141.24	
			216.22	27-Feb-96	73.11	143.11	1.87
			216.22	27-Mar-96	72.65	143.57	0.46
			216.22	1-Nov-96	94.70	121.52	-22.05
			216.22	25-Nov-96	81.71	134.51	12.99
			216.22	26-Dec-96	77.38	138.84	4.33
18_MCAS03-5	MP	420 - 430	216.22	12-Jan-96	76.11	140.11	
			216.22	27-Feb-96	73.75	142.47	2.36
			216.22	27-Mar-96	73.36	142.86	0.39
			216.22	1-Nov-96	96.72	119.50	-23.36
			216.22	25-Nov-96	83.72	132.50	13.00
			216.22	26-Dec-96	78.72	137.50	5.00
18_MCAS03-6	MP	490 - 500	216.22	12-Jan-96	74.40	141.82	
			216.22	27-Feb-96	72.39	143.83	2.01
			216.22	27-Mar-96	71.77	144.45	0.62
			216.22	1-Nov-96	93.83	122.39	-22.06
			216.22	25-Nov-96	81.91	134.31	11.92
			216.22	26-Dec-96	77.03	139.19	4.88
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

Table B-1: WATER LEVEL MEASUREMENTS AND GROUNDWATER ELEVATIONS
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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 ELEVATION (+ or - feet)
18_MCAS05A	SH	120 - 130	159.97	31-Jan-96	30.01	129.96	
			159.97	27-Nov-96	31.15	128.82	-1.14
			159.97	27-Dec-96	30.55	129.42	0.60
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	27-Dec-96	20.10	94.75	-0.90
18_MCAS07-1	MP	90 - 100	101.19	12-Jan-96	12.65	88.54	
			101.19	28-Feb-96	12.17	89.02	0.48
			101.19	27-Mar-96	11.82	89.37	0.35
			101.19	1-Nov-96	14.48	86.71	-2.66
			101.19	26-Nov-96	13.74	87.45	0.74
			101.19	26-Dec-96	13.09	88.10	0.65
18_MCAS07-2	MP	190 - 200	101.19	12-Jan-96	6.48	94.71	
			101.19	28-Feb-96	4.40	96.79	2.08
			101.19	27-Mar-96	5.62	95.57	-1.22
			101.19	1-Nov-96	25.73	75.46	-20.11
			101.19	26-Nov-96	15.12	86.07	10.61
			101.19	26-Dec-96	9.37	91.82	5.75
18_MCAS07-3	MP	350 - 360	101.19	12-Jan-96	33.35	67.84	
			101.19	28-Feb-96	25.02	76.17	8.33
			101.19	27-Mar-96	35.31	65.88	-10.29
			101.19	1-Nov-96	89.98	11.21	-54.67
			101.19	26-Nov-96	54.35	46.84	35.63
			101.19	26-Dec-96	39.94	61.25	14.41
18_MCAS07-4	MP	440 - 450	101.19	12-Jan-96	42.44	58.75	
			101.19	28-Feb-96	31.37	69.82	11.07
			101.19	27-Mar-96	48.48	52.71	-17.11
			101.19	1-Nov-96	104.23	-3.04	-55.75
			101.19	26-Nov-96	64.99	36.20	39.24
			101.19	26-Dec-96	51.17	50.02	13.82
18_MCAS07-5	MP	510 - 520	101.19	12-Jan-96	37.52	63.67	
			101.19	28-Feb-96	27.33	73.86	10.19
			101.19	27-Mar-96	40.05	61.14	-12.72
			101.19	1-Nov-96	101.90	-0.71	-61.85
			101.19	26-Nov-96	60.37	40.82	41.53
			101.19	26-Dec-96	46.53	54.66	13.84
18_MCAS07-6	MP	800 - 810	101.19	12-Jan-96	49.18	52.01	
			101.19	28-Feb-96	60.50	40.69	-11.32
			101.19	27-Mar-96	52.54	48.65	7.96
			101.19	1-Nov-96	56.04	45.15	-3.50
			101.19	26-Nov-96	54.74	46.45	1.30
			101.19	26-Dec-96	53.48	47.71	1.26
18_MCAS07-7	MP	910 - 920	101.19	12-Jan-96	50.94	50.25	
			101.19	28-Feb-96	61.50	39.69	-10.56
			101.19	27-Mar-96	56.28	44.91	5.22
			101.19	1-Nov-96	56.34	44.85	-0.06
			101.19	26-Nov-96	55.03	46.16	1.31
			101.19	26-Dec-96	53.92	47.27	1.11

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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 ELEVATION (+ or - feet)
18_MCAS07-8	MP	980 - 990	101.19	12-Jan-96	49.94	51.25	
			101.19	28-Feb-96	9.56	91.63	40.38
			101.19	27-Mar-96	28.29	72.90	-18.73
			101.19	1-Nov-96	52.38	48.81	-24.09
			101.19	26-Nov-96	50.34	50.85	2.04
			101.19	26-Dec-96	50.07	51.12	0.27
18_MCAS07-9	MP	1100 - 1110	101.19	28-Feb-96	55.89	45.30	
			101.19	27-Mar-96	43.68	57.51	12.21
			101.19	1-Nov-96	52.27	48.92	-8.59
			101.19	26-Nov-96	50.36	50.83	1.91
			101.19	26-Dec-96	49.56	51.63	0.80
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
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
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
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
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
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	31-Oct-96	NA (well obstructed)		
			266.47	27-Nov-96	NA (well obstructed)		
			266.47	26-Dec-96	NA (well obstructed)		
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

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 ELEVATION (+ or - feet)
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
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
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
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
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
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
18_RW3	DP	370 - 390	NA	11-Jan-96	50.22	NA	
			NA	25-Jan-96	50.04	NA	
			NA	28-Feb-96	48.70	NA	
				(well abandoned Mar-96)			
18_RW4	SH	65 - 85	NA	11-Jan-96	48.13	NA	
			NA	26-Jan-96	48.12	NA	
			NA	28-Feb-96	47.90	NA	
				(well abandoned Mar-96)			

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 ELEVATION (+ or - feet)
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
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
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
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
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
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
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
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

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 ELEVATION (+ or - feet)
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
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
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
24_NEW1	SH	225 - 245	281.10	31-Oct-96	123.51	157.59	
			281.10	26-Nov-96	118.76	162.34	4.75
			281.10	26-Dec-96	116.70	164.40	2.06
24_NEW4	WT	108 - 148	281.80	26-Nov-96	109.75	172.05	
			281.80	26-Dec-96	109.50	172.30	0.25
24_NEW5	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
24_NEW6	SH	165 - 185	265.60	27-Nov-96	83.05	182.55	
			265.60	26-Dec-96	82.63	182.97	0.42
24_NEW7	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
24_NEW8	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

EXPLANATION

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

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

APPENDIX C

GROUNDWATER SAMPLING FIELD PARAMETERS

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

STATION ID	SAMPLE DATE	TEMPERATURE (degrees °C)	pH	ELECTRICIAL CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	DISSOLVED OXYGEN (mg/L)	REDOX (mv)
01_DGMW57	7-Feb-96	22.1	7.15	799	-10	9.96	235.0
01_DGMW57	20-Nov-96	22.6	7.19	980	0.5	0.28	-457.4
01_DGMW58	28-Feb-96	17.0	7.55	522	86	9.49	NA
01_DGMW58	18-Nov-96	21.1	7.19	843	1	8.69	50.9
01_MW101	18-Nov-96	24.4	8.23	768	129.1	2.29	26.8
01_MW102	18-Nov-96	22.2	7.05	1,405	188.4	3.82	12.6
01_MW201	18-Nov-96	24.2	7.13	1,008	47.8	5.63	-27.3
02_DGMW59	6-Feb-96	20.8	7.18	1,410	-10	11.90	245.0
02_DGMW59	4-Nov-96	20.9	7.14	1,500	0.1	0.00	72.8
02_DGMW60	6-Feb-96	22.4	6.86	1,540	-10	9.11	260.0
02_DGMW60	4-Nov-96	23.7	6.90	1,630	0.4	0.30	68.8
02_DGMW61	8-Feb-96	22.4	6.99	1,020	-10	10.58	250.0
02_DGMW61	4-Nov-96	22.8	7.09	1,060	0	2.99	75.1
02_NEW1	4-Nov-96	23.7	7.57	740	5.2	0.45	-116.5
02_NEW2	26-Nov-96	22.7	7.23	1,400	4.7	6.14	95.6
02_NEW3	8-Nov-96	22.3	6.88	1,430	172.7	3.78	36.2
02_NEW6	7-Nov-96	22.2	7.03	1,320	15.1	4.91	11.1
02_NEW7	8-Jan-97	22.1	7.05	970	0.7	5.62	101.1
02_NEW8A	7-Nov-96	23.1	7.07	1,020	3.5	4.08	66.2
02_NEW11	12-Nov-96	22.3	6.98	1,120	43	7.64	72.4
02_NEW12	7-Nov-96	25.4	7.23	1,120	52.4	3.13	34.1
02_UGMW25	7-Feb-96	18.0	7.16	2,200	-10	14.96	240.0
02_UGMW25	12-Nov-96	19.4	6.95	1,930	0.6	3.07	58.3
03_DBMW39	30-Jan-96	24.8	7.21	1,220	-10	7.42	125.0
03_DBMW39	12-Nov-96	25.9	7.17	1,380	73.7	5.34	42.1
03_DGMW64	26-Feb-96	21.3	7.77	1,870	30	7.00	NA
03_DGMW64	12-Nov-96	26.4	7.23	1,430	15.2	6.37	39.9
03_DGMW65X	26-Feb-96	21.0	7.67	1,790	30	6.63	NA
03_DGMW65X	11-Nov-96	25.0	7.26	1,299	22.7	7.06	78.3
03_UGMW26	27-Feb-96	21.7	7.22	1,020	74	6.52	NA
03_UGMW26	14-Nov-96	24.4	7.20	1,600	1.1	8.56	70.8
04_DBMW40	26-Feb-96	21.4	7.44	1,950	149	6.42	NA
04_DBMW40	12-Nov-96	25.5	6.84	1,693	0	2.41	72.4
04_DGMW66	26-Feb-96	21.0	7.52	1,630	38	6.17	NA
04_DGMW66	12-Nov-96	25.6	7.13	1,186	0.9	7.92	102.3
04_UGMW63	30-Jan-96	24.0	7.07	1,330	187	6.60	190.0
04_UGMW63	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
05_DBMW41	13-Nov-96	23.2	7.20	1,410	3.4	7.77	107.8

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

STATION ID	SAMPLE DATE	TEMPERATURE (degrees °C)	pH	ELECTRICIAL CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	DISSOLVED OXYGEN (mg/L)	REDOX (mv)
05_DGMW67	9-Feb-96	20.9	7.03	1,400	-10	7.49	245.0
05_DGMW67	13-Nov-96	22.7	7.20	1,480	14.6	4.63	45.4
05_DGMW68	27-Feb-96	20.9	7.16	1,260	49	7.98	NA
05_DGMW68	15-Nov-96	22.9	7.06	1,919	1.1	8.41	58.9
05_NEW1	13-Nov-96	25.1	6.91	1,330	81.2	6.86	78.8
05_UGMW27	29-Jan-96	22.0	7.25	1,280	5	9.78	95.0
05_UGMW27	13-Nov-96	22.7	7.37	1,380	1	6.02	68.6
06_DGMW69	2-Feb-96	24.0	6.60	1,440	4	6.18	205.0
06_UGMW28	16-Feb-96	25.9	6.79	2,030	9	7.33	160.0
06_UGMW28	4-Dec-96	23.6	6.90	3,382	199.3	7.32	122.5
07_DBMW100	31-Jan-96	23.4	6.76	1,070	-10	6.82	230.0
07_DBMW100	14-Nov-96	23.8	6.89	1,670	10.7	8.64	104.8
07_DBMW43	19-Feb-96	24.8	7.01	897	67	7.09	220.0
07_DBMW43	21-Nov-96	21.6	7.55	1,329	2.5	1.79	121.1
07_DBMW70	13-Feb-96	24.1	6.73	1,480	0	7.89	245.0
07_DBMW70	21-Nov-96	23.3	6.95	1,884	2.3	7.87	146.1
07_DGMW71	13-Feb-96	24.5	6.69	1,350	0	9.37	235.0
07_DGMW71	21-Nov-96	23.1	6.87	1,699	3	6.90	116.7
07_DGMW72	13-Feb-96	24.5	6.64	1,290	0	8.17	220.0
07_DGMW72	21-Nov-96	23.4	6.90	1,614	3.1	7.04	104.3
07_DGMW91	8-Feb-96	23.9	6.63	1,300	0	7.10	200.0
07_DGMW91	21-Nov-96	22.8	6.90	1,600	3.9	5.09	62.5
08_DGMW73	14-Feb-96	23.3	6.79	1,620	0	8.06	NA
08_DGMW73	2-Dec-96	23.2	716.00	2,050	27.6	5.05	49.1
08_DGMW74	14-Feb-96	23.9	6.96	1,280	1	8.26	235.0
08_DGMW74	13-Nov-96	23.9	7.19	1,380	23	6.70	63.5
08_UGMW29	14-Feb-96	23.4	6.89	1,300	8	8.11	NA
08_UGMW29	25-Nov-96	24.0	7.12	1,715	197.1	22.30	240.0
09_DBMW45	15-Feb-96	23.5	6.39	1,490	241	7.11	NA
09_DBMW45	18-Nov-96	23.5	6.86	2,125	29.7	8.01	71.9
09_DGMW75	14-Feb-96	25.2	6.93	1,780	52	8.62	140.0
09_DGMW75	4-Dec-96	23.7	6.81	2,363	77.2	7.01	112.6
10_DGMW77	14-Feb-96	25.5	6.94	1,410	-10	7.77	185.0
10_DGMW77	9-Dec-96	24.6	6.97	1,899	22.7	7.91	122.5
12_DBMW48	16-Feb-96	23.2	6.68	2,120	0	7.34	255.0
12_DBMW48	13-Nov-96	23.9	6.92	2,118	25.6	8.12	72.4
12_UGMW31	14-Feb-96	25.3	6.90	1,350	-10	7.60	235.0
12_UGMW31	13-Nov-96	23.9	6.91	1,469	41.2	8.46	119.8
13_DBMW49	6-Feb-96	24.1	6.72	2,400	38	7.06	250.0
13_DBMW49	19-Nov-96	25.2	7.04	3,280	0.1	0.07	84.9
13_DGMW78	1-Feb-96	23.9	6.50	2,550	9	6.98	NA
13_DGMW78	19-Nov-96	25.1	6.89	3,830	0.6	0.26	82.9

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

STATION ID	SAMPLE DATE	TEMPERATURE (degrees °C)	pH	ELECTRICIAL CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	DISSOLVED OXYGEN (mg/L)	REDOX (mv)
13_UGMW32	5-Feb-96	24.8	6.67	1,630	0	11.98	240.0
14_DBMW50	5-Feb-96	24.0	6.79	2,410	-10	8.28	240.0
14_DBMW50	19-Nov-96	24.8	6.97	3,180	6.5	0.90	82.1
14_DGMW79	5-Feb-96	24.2	6.71	2,680	-10	9.20	250.0
14_DGMW79	19-Nov-96	25.0	6.96	3,640	0.02	0.00	57.3
15_DBMW51	6-Feb-96	24.9	6.56	4,750	0	7.32	255.0
15_DBMW51	9-Dec-96	24.4	6.88	4,985	10.9	2.82	149.1
16_DBMW52	7-Feb-96	25.9	7.20	1,850	0	7.81	NA
16_DBMW52	25-Nov-96	25.5	7.38	2,040	22.9	5.73	89.7
16_DGMW81	8-Feb-96	24.7	6.81	2,150	8	6.75	NA
16_DGMW81	8-Jan-97	24.9	7.11	2,180	5.7	10.16	93.1
16_UGMW33	7-Feb-96	24.5	6.93	867	1	7.07	240.0
16_UGMW33	25-Nov-96	25.0	7.25	1,050	1.5	5.58	94.9
17_DGMW82	9-Feb-96	24.8	7.23	1,110	-10	10.79	NA
17_DGMW82	20-Nov-96	25.9	6.94	1,490	27.3	1.79	-301.0
17_NEW1	20-Nov-96	25.7	7.09	960	40.5	6.18	-237.0
17_NEW2	20-Nov-96	24.0	7.38	900	4.3	0.23	-493.2
18_BGMP06A	7-Feb-96	22.2	7.84	792	-9	8.04	220.0
18_BGMP06A	8-Nov-96	22.7	7.17	912	10.9	8.36	-30.0
18_BGMP06B	7-Feb-96	22.7	7.70	920	-10	9.51	240.0
18_BGMP06B	8-Nov-96	23.1	7.23	561	9.5	8.14	-31.3
18_BGMP06C	7-Feb-96	22.9	8.02	787	-10	10.08	55.0
18_BGMP06C	8-Nov-96	23.3	7.60	957	7.3	6.98	-32.0
18_BGMP06D	7-Feb-96	23.3	7.47	1,740	-10	10.57	195.0
18_BGMP06D	8-Nov-96	23.1	7.12	2,005	2.1	6.19	-34.4
18_BGMP06E	7-Feb-96	22.9	7.32	2,170	-10	10.40	200.0
18_BGMP06E	8-Nov-96	23.4	6.97	2,531	1.1	7.08	-186.7
18_BGMP08A	15-Jan-96	20.6	7.14	2,080	10	10.16	145.0
18_BGMP08A	7-Nov-96	21.1	7.59	1,154	197.6	6.67	-196.0
18_BGMP08C	16-Jan-96	20.3	7.14	1,110	18	8.89	90.0
18_BGMP08C	7-Nov-96	22.0	7.51	1,191	43.7	10.47	-220.8
18_BGMP08D	16-Jan-96	20.1	7.45	1,120	10	9.07	90.0
18_BGMP08D	7-Nov-96	21.2	7.32	1,279	184.2	5.92	-226.5
18_BGMP08E	17-Jan-96	19.5	7.32	1,400	10	7.04	235.0
18_BGMP08E	7-Nov-96	21.4	7.46	1,515	182.6	4.88	-233.1
18_BGMP09A	31-Jan-96	18.2	NA	3,860	0	NA	15.0
18_BGMP09A	13-Nov-96	23.4	8.46	4,181	0.5	11.07	-265.0
18_BGMP09B	31-Jan-96	19.6	NA	1,930	-10	NA	250.0
18_BGMP09B	13-Nov-96	24.0	7.57	1,233	5.3	13.56	-247.3
18_BGMP09C	1-Feb-96	20.1	7.09	1,120	-5	8.51	240.0
18_BGMP09C	13-Nov-96	22.6	8.08	1,116	0.3	11.27	-248.6

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

STATION ID	SAMPLE DATE	TEMPERATURE (degrees °C)	pH	ELECTRICIAL CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	DISSOLVED OXYGEN (mg/L)	REDOX (mv)
18_BGMP09D	2-Feb-96	20.2	7.32	1,120	2	8.31	265.0
18_BGMP09D	13-Nov-96	22.1	7.77	705	1	11.03	-249.1
18_BGMP09E	2-Feb-96	20.1	7.31	1,480	1	8.75	295.0
18_BGMP09E	13-Nov-96	21.6	7.32	851	0.9	14.35	-220.8
18_BGMP09F	2-Feb-96	19.3	7.99	1,680	3	9.28	265.0
18_BGMP09F	13-Nov-96	21.4	7.62	877	0.6	8.01	-257.2
18_BGMP10A	19-Jan-96	18.5	8.57	960	0	9.46	-40.0
18_BGMP10A	19-Nov-96	20.3	9.16	1,097	0.7	15.66	-365.7
18_BGMP10B	23-Jan-96	18.5	7.53	804	8	8.88	-35.0
18_BGMP10B	19-Nov-96	20.5	7.48	1,102	2.2	13.25	-324.1
18_BGMP10C	23-Jan-96	18.1	8.30	549	8	8.82	-40.0
18_BGMP10C	19-Nov-96	20.3	8.81	707	3.1	10.95	-359.6
18_BGMP10D	23-Jan-96	16.7	7.20	639	0	8.87	5.0
18_BGMP10D	19-Nov-96	20.4	8.26	796	2.2	13.15	-361.3
18_BGMP10E	24-Jan-96	18.3	7.38	727	3	10.72	10.0
18_BGMP10E	19-Nov-96	20.7	7.34	1,119	2.6	12.49	-353.3
18_BGMP10F	24-Jan-96	20.7	7.87	1,630	3	12.61	205.0
18_BGMP10F	19-Nov-96	19.2	7.35	2,130	.1	11.80	-335.0
18_BGMW01A	26-Jan-96	23.7	7.04	1,920	10	8.78	NA
18_BGMW01A	8-Nov-96	26.0	7.05	2,240	0	0.00	-225.9
18_BGMW01B	24-Jan-96	26.5	7.36	1,080	109	9.01	215.0
18_BGMW01B	6-Nov-96	26.9	7.31	1,230	5.6	2.15	-45.6
18_BGMW01C	23-Jan-96	25.2	7.16	1,050	10	6.73	175.0
18_BGMW01C	5-Nov-96	26.1	7.17	1,090	1.3	6.84	31.5
18_BGMW01D	23-Jan-96	25.0	7.01	1,280	10	8.33	230.0
18_BGMW01D	1-Nov-96	25.6	7.04	1,220	1.0	0.75	70.5
18_BGMW01E	5-Feb-96	24.8	6.79	1,200	1	11.33	210.0
18_BGMW01E	1-Nov-96	25.5	7.05	1,290	0.9	0.00	58.8
18_BGMW02A	19-Jan-96	25.5	7.43	920	5	8.16	NA
18_BGMW02A	19-Nov-96	26.1	7.67	1,170	1.5	0.00	-185.2
18_BGMW02C	18-Jan-96	25.4	7.27	890	10	6.02	315.0
18_BGMW02C	5-Nov-96	25.5	7.35	991	6.4	2.09	313.0
18_BGMW02D	17-Jan-96	24.6	7.27	934	10	5.17	305.0
18_BGMW02D	6-Nov-96	25.2	7.31	1,070	10.1	2.26	28.9
18_BGMW02E	1-Feb-96	23.6	6.86	1,160	-10	6.79	155.0
18_BGMW02E	1-Nov-96	23.5	6.96	1,160	23.9	8.34	74.7
18_BGMW03A	29-Feb-96	25.3	7.16	941	0	7.90	NA
18_BGMW03A	7-Nov-96	25.8	7.07	1,072	11.2	8.22	55.3
18_BGMW03B	29-Feb-96	25.0	7.00	872	0	7.98	NA
18_BGMW03B	7-Nov-96	24.9	7.02	870	196.9	8.73	42.5
18_BGMW03C	12-Feb-96	24.2	6.69	900	0	8.79	245.0
18_BGMW03C	6-Nov-96	24.2	7.11	913	10.4	9.50	33.0

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

STATION ID	SAMPLE DATE	TEMPERATURE (degrees °C)	pH	ELECTRICIAL CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	DISSOLVED OXYGEN (mg/L)	REDOX (mv)
18_BGMW03E	5-Feb-96	25.1	7.01	1,300	-10	8.87	240.0
18_BGMW03E	21-Nov-96	24.7	6.95	1,470	125.1	4.50	101.7
18_BGMW04A	28-Feb-96	23.5	6.67	959	0	6.87	NA
18_BGMW04A	11-Nov-96	25.6	6.86	1,072	19.2	6.02	84.0
18_BGMW04B	19-Jan-96	23.0	7.00	1,400	144	9.51	195.0
18_BGMW04B	14-Nov-96	23.3	6.66	1,790	36.6	9.20	125.2
18_BGMW05A	26-Jan-96	26.1	7.37	3,700	9	7.48	NA
18_BGMW05A	9-Jan-97	26.0	7.57	5,840	5.3	0.17	-148.8
18_BGMW05B	29-Feb-96	25.2	6.20	1,080	0	8.06	NA
18_BGMW05B	7-Nov-96	25.7	7.00	1,153	1.5	7.51	42.2
18_BGMW05C	29-Feb-96	24.8	7.05	1,100	0	8.35	NA
18_BGMW05C	7-Nov-96	24.5	7.09	1,137	6.5	8.28	71.1
18_BGMW05D	19-Feb-96	22.9	6.51	1,480	41	8.23	150.0
18_BGMW05D	4-Dec-96	22.8	6.89	1,775	25.7	5.80	88.9
18_BGMW07	9-Feb-96	20.4	6.67	2,020	-10	8.37	240.0
18_BGMW101	29-Jan-96	23.0	6.96	2,150	84	8.92	105.0
18_BGMW101	14-Nov-96	22.9	6.83	2,940	26.4	7.84	99.2
18_BGMW12	2-Feb-96	25.1	6.82	2,370	4	6.25	10.0
18_BGMW12	25-Nov-96	26.0	7.32	2,600	32	0.09	31.9
18_BGMW14	16-Feb-96	22.5	6.41	1,720	0	9.64	160.0
18_BGMW14	15-Nov-96	21.8	6.62	2,250	60	6.14	54.4
18_BGMW15	2-Feb-96	23.8	6.91	2,480	5	6.91	245.0
18_BGMW15	8-Nov-96	24.7	6.95	3,120	1.9	5.12	37.3
18_BGMW16	19-Jan-96	24.7	7.03	1,500	68	7.62	80.0
18_BGMW16	14-Nov-96	23.7	7.16	2,249	13.1	8.18	110.3
18_BGMW17	29-Jan-96	22.8	7.13	1,250	122	8.44	90.0
18_BGMW17	8-Nov-96	24.4	6.76	1,380	19	6.59	-37.6
18_BGMW18	5-Feb-96	23.6	6.91	1,470	2	11.15	245.0
18_BGMW18	9-Jan-97	23.8	7.23	1,580	6.6	7.69	79.0
18_BGMW19A	1-Mar-96	26.1	6.84	1,130	0	7.65	NA
18_BGMW19A	4-Nov-96	26.6	6.96	1,284	9.5	4.72	179.0
18_BGMW19B	11-Mar-96	25.4	7.10	1,060	0	7.99	NA
18_BGMW19B	4-Nov-96	25.7	7.15	1,105	4.9	5.84	135.2
18_BGMW19C	29-Feb-96	23.8	6.91	1,850	0	8.82	NA
18_BGMW19C	5-Nov-96	29.4	7.01	1,952	8.9	5.45	-89.8
18_BGMW19D	16-Feb-96	25.0	6.93	2,410	-7	8.39	205.0
18_BGMW19D	4-Nov-96	22.3	7.04	2,730	19.5	7.96	170.4
18_BGMW19E	6-Feb-96	22.8	6.74	2,270	0	7.70	255.0
18_BGMW19E	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
18_BGMW22	14-Nov-96	24.5	7.36	1,850	8.1	7.17	72.2

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

STATION ID	SAMPLE DATE	TEMPERATURE (degrees °C)	pH	ELECTRICIAL CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	DISSOLVED OXYGEN (mg/L)	REDOX (mv)
18_BGMW23	19-Feb-96	21.4	6.66	1,220	39	8.79	215.0
18_BGMW23	5-Dec-96	21.4	7.13	1,771	120.1	8.54	142.7
18_BGMW24	7-Feb-96	21.7	7.27	1,000	1	11.69	240.0
18_BGMW24	26-Nov-96	21.7	7.53	1,420	9.2	5.59	92.7
18_DW135	19-Feb-96	24.1	6.62	2,870	39	7.52	250.0
18_DW135	5-Nov-96	24.5	6.88	3,052	77	5.63	-154.1
18_DW250	31-Jan-96	23.1	6.90	1,050	0	7.39	75.0
18_DW250	5-Nov-96	24.4	7.11	1,091	21.2	8.18	-96.8
18_DW350	29-Jan-96	25.3	7.01	980	36	7.44	125.0
18_DW350	6-Nov-96	26.0	7.23	972	404.2	3.99	-90.6
18_DW450	29-Jan-96	24.8	6.99	1,030	0	8.09	145.0
18_DW450	5-Nov-96	25.6	7.17	1,156	14.9	5.14	-173.9
18_DW540	30-Jan-96	24.9	6.91	1,050	21	6.47	NA
18_DW540	6-Nov-96	26.8	7.25	1,080	97.3	4.32	-31.0
18_MCAS01-1	24-Jan-96	19.2	7.57	2,060	2	11.57	230.0
18_MCAS01-1	15-Nov-96	21.0	5.85	1,509	0.8	16.17	-276.5
18_MCAS01-2	24-Jan-96	18.2	7.26	3,010	2	8.20	245.0
18_MCAS01-2	15-Nov-96	20.2	6.62	1,505	1.5	11.62	-266.3
18_MCAS01-3	18-Jan-95	20.8	7.31	2,220	10	11.28	165.0
18_MCAS01-3	18-Nov-96	20.5	7.64	1,653	3.4	11.69	-178.3
18_MCAS01-4	18-Jan-95	18.4	7.46	1,780	0	9.08	165.0
18_MCAS01-4	18-Nov-96	20.9	7.20	1,102	3.4	12.02	-191.4
18_MCAS01-5	18-Jan-96	20.2	7.60	1,350	1	8.55	160.0
18_MCAS01-5	18-Nov-96	20.5	6.87	1,916	3.7	12.43	-206.3
18_MCAS01-6	18-Jan-96	19.2	7.01	1,250	1	8.65	160.0
18_MCAS01-6	18-Nov-96	20.6	6.95	4,275	10.7	15.69	-186.3
18_MCAS01-7	17-Jan-96	18.9	6.25	1,010	13	9.63	-35.0
18_MCAS01-7	18-Nov-96	19.9	7.04	2,890	0.6	9.61	-243.2
18_MCAS02-1	30-Jan-96	18.2	7.09	3,520	72	NA	270.0
18_MCAS02-1	12-Nov-96	22.1	5.98	2,135	13	6.63	-153.7
18_MCAS02-2	30-Jan-96	19.5	6.92	3,600	2	NA	260.0
18_MCAS02-2	12-Nov-96	22.4	6.57	2,676	1.6	5.73	-182.7
18_MCAS02-3	30-Jan-96	19.4	6.87	1,660	1	8.51	205.0
18_MCAS02-3	12-Nov-96	20.8	7.21	2,195	2.1	8.26	-192.5
18_MCAS02-4	29-Jan-96	19.8	7.60	1,700	180	8.28	245.0
18_MCAS02-4	12-Nov-96	22.3	7.27	1,190	3.8	5.30	-173.3
18_MCAS02-5	29-Jan-96	18.6	7.67	1,580	-7	8.73	260.0
18_MCAS02-5	12-Nov-96	21.7	7.03	1,478	2.2	7.18	-179.3
18_MCAS02-6	29-Jan-96	19.3	7.70	2,420	-6	8.43	255.0
18_MCAS02-6	12-Nov-96	21.2	7.42	1,632	1.8	6.58	-207.8
18_MCAS02-7	29-Jan-96	19.5	7.09	3,050	0	8.50	65.0
18_MCAS02-7	12-Nov-96	21.1	7.08	1,802	11.4	5.99	-202.6

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

STATION ID	SAMPLE DATE	TEMPERATURE (degrees °C)	pH	ELECTRICIAL 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
18_MCAS02-8	12-Nov-96	20.9	7.33	1,834	65.6	5.22	-209.3
18_MCAS03-1	6-Feb-96	19.8	7.62	2,350	14	8.28	145.0
18_MCAS03-1	6-Nov-96	21.9	5.77	1,097	3.9	9.37	-18.7
18_MCAS03-2	6-Feb-95	21.0	7.08	1,910	12	8.31	120.0
18_MCAS03-2	6-Nov-96	22.4	7.44	953	196.1	7.08	-19.6
18_MCAS03-3	6-Feb-95	22.0	7.36	1,170	0	9.00	230.0
18_MCAS03-3	6-Nov-96	24.6	7.31	1,095	212.6	9.64	-30.4
18_MCAS03-4	6-Feb-96	21.1	7.63	1,020	9	9.86	195.0
18_MCAS03-4	6-Nov-96	22.5	7.26	1,322	205.8	9.10	-191.5
18_MCAS03-5	6-Feb-96	21.3	7.63	817	4	8.22	230.0
18_MCAS03-5	6-Nov-96	22.0	6.69	2,030	257.5	6.94	-192.0
18_MCAS03-6	6-Feb-96	21.3	5.73	1,030	-10	7.53	80.0
18_MCAS03-6	6-Nov-96	20.2	6.97	2,346	198.7	4.91	-198.4
18_MCAS04	9-Feb-96	20.6	6.62	1,380	0	7.88	60.0
18_MCAS04	19-Nov-96	20.2	6.80	1,940	3.7	4.57	-8.2
18_MCAS05A	31-Jan-96	21.4	7.01	1,140	0	9.61	-35.0
18_MCAS05A	26-Nov-96	21.6	7.35	1,345	4.6	2.88	-111.2
18_MCAS06	16-Jan-96	21.9	7.14	1,100	10	8.26	NA
18_MCAS06	19-Nov-96	22.0	6.95	1,595	4.3	1.95	-46.0
18_MCAS07-1	9-Feb-96	20.0	7.17	2,930	31	9.10	285.0
18_MCAS07-1	11-Nov-96	22.7	6.29	2,855	0.2	5.60	-202.8
18_MCAS07-2	9-Feb-96	20.2	7.22	1,130	-10	8.67	285.0
18_MCAS07-2	11-Nov-96	23.0	6.40	3,194	0.4	6.74	-203.8
18_MCAS07-3	9-Feb-96	20.4	7.47	1,110	-10	8.05	280.0
18_MCAS07-3	11-Nov-96	23.1	6.65	2,985	0.5	4.73	-202.4
18_MCAS07-4	8-Feb-96	23.1	7.63	1,090	-10	10.00	280.0
18_MCAS07-4	11-Nov-96	23.1	6.73	2,948	0.1	5.27	-208.5
18_MCAS07-5	8-Feb-96	23.7	7.01	2,490	-10	9.96	240.0
18_MCAS07-5	11-Nov-96	22.7	6.53	2,778	0.3	5.68	-218.6
18_MCAS07-6	8-Feb-96	23.6	7.26	2,600	-10	10.28	245.0
18_MCAS07-6	20-Nov-96	22.6	7.23	1,369	0.5	6.75	38.1
18_MCAS07-7	8-Feb-96	24.1	7.23	2,130	6	10.27	250.0
18_MCAS07-7	20-Nov-96	22.2	7.20	1,105	0.5	7.88	86.2
18_MCAS07-8	8-Feb-96	22.3	7.05	2,630	-10	8.31	160.0
18_MCAS07-8	20-Nov-96	21.8	7.44	1,300	0.5	7.94	73.8
18_MCAS07-9	25-Jan-96	18.9	6.39	2,870	1	8.34	165.0
18_MCAS07-9	20-Nov-96	20.5	7.27	3,860	0.5	8.53	93.8
18_MCAS08	1-Feb-96	24.4	7.48	1,670	0	7.65	10.0
18_MCAS08	20-Nov-96	24.2	8.07	2,169	0.4	-0.01	-255.4
18_MCAS09	16-Jan-96	23.7	7.28	720	10	9.85	50.0
18_MCAS09	19-Nov-96	24.5	7.21	1,207	7	0.69	-106.9

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

STATION ID	SAMPLE DATE	TEMPERATURE (degrees °C)	pH	ELECTRICIAL CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	DISSOLVED OXYGEN (mg/L)	REDOX (mv)
18_MCAS10	19-Jan-96	23.7	7.23	1,260	<10	8.32	40.0
18_MCAS10	19-Nov-96	23.7	7.17	1,890	6.4	0.72	-110.5
18_PS1	19-Jan-96	22.3	7.19	2,620	<10	7.36	150.0
18_PS1	25-Nov-96	23.8	6.62	3,020	64	18.07	290.0
18_PS2	18-Jan-96	23.2	7.08	2,130	<10	6.44	215.0
18_PS2	25-Nov-96	24.1	6.79	2,759	28.3	29.50	260.0
18_PS3	22-Feb-96	22.8	6.73	1,180	28	8.43	225.0
18_PS3	8-Jan-97	23.1	6.98	1,169	86.2	8.27	93.7
18_PS4	21-Feb-96	22.5	6.62	1,620	29	8.68	250.0
18_PS4	15-Dec-96	22.1	6.97	1,950	10.7	7.67	177.2
18_PS5	22-Jan-96	22.4	8.41	1,670	<10	10.18	215.0
18_PS5	11-Nov-96	22.5	6.91	1,672	18.9	8.85	101.9
18_PS6	26-Jan-96	23.8	6.65	1,780	0	6.28	260.0
18_PS6	25-Nov-96	24.3	6.84	2,282	59.2	12.39	290.0
18_PS7	22-Jan-96	22.6	8.82	1,130	-4	10.15	245.0
18_PS7	8-Nov-96	24.5	7.12	1,474	8.2	8.47	32.1
18_PS8	26-Jan-96	23.7	6.62	1,330	2	6.13	260.0
18_PS8	25-Nov-96	22.7	6.76	1,702	16.1	29.35	230.0
18_RW1	23-Jan-96	24.1	7.94	1,270	-10	3.72	100.0
18_RW1	8-Nov-96	25.5	7.12	1,374	203.4	3.22	-34.2
18_RW2	24-Jan-96	23.7	7.24	1,040	4	4.56	115.0
18_RW2	8-Nov-96	25.2	7.14	1,122	188.4	5.96	2.1
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
19_DBMW54	3-Dec-96	24.6	7.04	1,440	191.8	7.67	82.6
19_DGMW85	19-Feb-96	25.5	6.93	1,150	68	7.45	175.0
19_DGMW85	3-Dec-96	24.7	7.14	1,588	-795.3	6.77	91.9
19_DGMW86	27-Feb-96	21.1	7.40	1,250	560	7.67	NA
19_DGMW86	3-Dec-96	21.0	7.33	1,730	162.4	5.83	53.1
19_UGMW35	8-Feb-96	24.0	6.54	1,030	0	6.47	150.0
19_UGMW35	21-Nov-96	24.7	6.65	30	165.7	6.44	81.5
20_DBMW55	27-Feb-96	22.0	6.93	2,120	14	7.58	NA
20_DBMW55	14-Nov-96	23.9	4.53	2,931	189.7	2.27	60.2
20_DGMW88	1-Feb-96	24.9	6.90	2,280	183	7.06	155.0
20_DGMW88	25-Nov-96	25.8	7.34	1,950	135	1.21	31.4
20_UGMW36	5-Feb-96	25.5	6.81	2,610	4	10.38	140.0
20_UGMW36	14-Nov-96	24.6	7.23	3,502	17.5	6.34	54.5
21_DBMW56	15-Feb-96	23.2	6.43	1,290	0	9.27	195.0
21_DBMW56	13-Nov-96	23.6	6.92	1,271	1.4	8.88	76.7

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

STATION ID	SAMPLE DATE	TEMPERATURE (degrees °C)	pH	ELECTRICIAL CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	DISSOLVED OXYGEN (mg/L)	REDOX (mv)
21_DGMW90	2-Feb-96	22.7	6.96	1,350	-10	7.85	130.0
21_DGMW90	26-Nov-96	23.6	6.97	1,730	89	5.96	64.9
21_UGMW37	12-Feb-96	23.3	6.66	1,410	0	7.38	130.0
21_UGMW37	11-Nov-96	25.0	7.01	1,540	473.8	6.97	51.8
22_DBMW47	15-Feb-96	25.9	6.88	1,400	2	7.89	215.0
22_DBMW47	2-Dec-96	23.7	7.01	1,805	15	8.00	125.9
24_NEW1	2-Dec-96	24.8	7.02	1,442	38.7	6.55	106.5
24_NEW4	3-Dec-96	23.9	7.03	1,726	729.4	7.21	56.7
24_NEW5	2-Dec-96	24.7	7.13	1,350	19.2	7.81	132.8
24_NEW6	2-Dec-96	23.9	7.38	1,258	87.6	4.06	135.6
24_NEW7	3-Dec-96	23.6	6.75	2,686	487.7	5.27	71.0
24_NEW8	3-Dec-96	24.6	6.94	2,285	317.1	7.04	88.9

EXPLANATION

1. Abbreviations: NTU = nephelometric turbidity unit, NA = not available or applicable, mg/L = milligrams per liter, umhos/cm = micromhos per centimeter. mv = millivolts.

2. Field measurements for electical conductivity and dissolved oxygen are corrected to 25°C.

APPENDIX D

DATA VALIDATION REPORT
NOVEMBER-DECEMBER 1996 GROUNDWATER SAMPLING ROUND
Marine Corps Air Station, El Toro, California

During the November-December 1996 groundwater sampling round at Marine Corps Air Station, El Toro, California, groundwater monitoring wells were sampled for analyses of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs), herbicides, general chemistry parameters, metals, total petroleum hydrocarbons (TPHs) as gasoline, TPHs as diesel, and treatability study parameters. In addition to groundwater samples, quality control (QC) samples, i.e., field duplicates, source water blanks (SWBs), rinsate blanks (RBs), trip blanks (TBs), 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 requirement described in the Navy's SOW and the Quality Assurance Project Plan (QAPP), (CDM Federal 1995, 1996a) ten percent (%) of the analytical data was validated. 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.

This Data Validation Report (DVR) includes eight individual DVRs, one for each respective analysis. These DVRs are presented in the order of VOCs, SVOCs, pesticides and PCBs, herbicides, general chemistry and treatability parameters, metals, TPHs as gasoline, and TPHs as diesel.

All data are considered valid except those that have been qualified with "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detected), "R" (unusable), or "JN" (presumptive evidence for the presence of the material at an estimated value). Data qualifications are detailed in the individual DVRs.

It should be noted that the "R" flag means that the originally detected value is unusable. This means that due to significant QC problems, the analysis is considered invalid and provides no information as to whether the analyte is present or not. Therefore, values associated with the "R" flag did not appear on data tables because they cannot be relied upon.

Report No. 1
NOVEMBER-DECEMBER 1996
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD: Volatile Organic Compounds
By CLP SOW OLM03.0

SAMPLE DELIVERY GROUP: 964504

SAMPLE NUMBERS:

01DGMW57	01M101-002	01MW102-002
18BGMW19E-002	17DGMW82-002	17NEW1-002
17NEW2-002	18MCAS05A-0021	18MCAS08-002
18MCAS07-6-002	18MCAS07-7-002	18MCAS07-8-002
18MCAS07-9-002		

18MCAS07-7-002DIL (dilution of 18MCAS07-7-002)
18MCAS05A-302 (duplicate of 18MCAS05A-002)
01MW102-702 (source water blank)
18MCAS05A-502 (rinsate blank)
18MCAS07-7-502 (rinsate blank)
TB-DP-11-21-96 (trip blank)
TB-ND-11-21-96 (trip blank)
TB-WB-11-21-96 (trip blank)

1. SAMPLE PRESERVATION AND TEMPERATURE

The samples were preserved according to the required protocol. The sample coolers arrived at the laboratory at 5.5 degrees centigrade (°C), which met the criteria.

2. HOLDING TIME

The samples were analyzed within the required holding time.

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

A GC/MS instrument performance check was conducted and all criteria were met.

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 RSD of 2-hexanone (41.6%) from the initial calibration performed on 15 November 1996 exceeded the required limit and one of the RRFs (0.036) for this compound was less than the minimum requirement. Because 2-hexanone was not detected in any samples within this SDG, non-detected 2-hexanone results in this SDG were rejected (R). The data validation summary table is presented in Table A attached to this report.

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 limit (Table 1-1). Because these analytes were not detected in any associated samples, non-detected results of these analytes in the associated samples listed in Table 1-1 were qualified as estimated (UJ). In addition, %D for 2-hexanone from all continuing calibration exceeded the 25% limit. Because this compound had been previously rejected (R) due to initial calibration deficiency, no further action was taken.

Table 1-1
Samples with Continuing Calibration Deficiencies

Analyte (%D)	Associated Sample
2-Butanone (25.1, 33.5, 34.5)	01DGMW57 01M2101-002 01MW102-002 01MW102-702 18BGMW19E-002 17DGMW82-002 17NEW1-002 17NEW2-002 18MCAS05A-002 TB-DP-11-21-96 TB-ND-11-21-96 TB-WB-11-21-96 18MCAS07-7-502 18MCAS07-7-002DIL
4-Methyl-2-Pentanone (26.1)	TB-DP-11-21-96 TB-ND-11-21-96 18MCAS07-7-002DIL 18MCAS07-7-502 TB-WB-11-21-96

5. BLANK CONTAMINATION:

A) Method Blank Contamination

No analyte was detected in any method blank samples

B) Other Blank Contamination

Other blank samples (three TBs, two RBs, and SWB were included in this SDG. In addition, two air contamination blanks (ACBs) were also collected during this sampling program to monitor the air condition at the site. Results of the ACBs were included in SDG 4621 but were used to evaluate data from this package for blank contamination. Concentrations of analytes detected in the blank samples are listed in Table 1-2.

Table 1-2
Analytes Detected in the Blank Samples

Analyte	Blank Sample (ug/L)							
	SWB	ACB1	ACB2	RB1	RB2	TB1	TB2	TB3
Bromodichloromethane	15	<1	<1	<1	1	<1	<1	<1
Bromoform	2	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	11	<1	<1	<1	0.6 J	<1	<1	<1
Chloroform	14	<1	<1	<1	2	<1	<1	<1
Methylene Chloride	1	<1	1	1	1	2	<1	1
Toluene	<1	1	1	0.7 J	0.8 J	<1	<1	<1
Tetrachloroethene	<1	<1	1	<1	<1	<1	<1	<1
Trichloroethene	<1	<1	2	<1	<1	<1	<1	<1

SWB: 01MW102--702
ACB1: 19DGMW86-902
ACB2: 24NEW7-902
RB1: 18MCAS05A--502
RB2: 18MCAS07--7-502
TB1: TB-DP-11--21-96
TB2: TB-ND-11-21-96
TB3: TB-WB-11--21-96

Source Water Blank

The SWB, 01MW102-702, was filled with on-site tap water. It contained typical chlorination compounds that were commonly found in tap water, such as bromodichloromethane, bromoform, chlorodibromomethane, and chloroform. These compounds were either not found in most other blank samples or at concentrations much higher than in other blanks. Since during equipment decontamination process all sampling equipment was rinsed with ASTM Type II water after it was rinsed with tap water, the SWB was collected to monitor the quality of tap water. Therefore, the above-mentioned compounds detected in the SWB were not used to qualify samples for blank contamination. The only other compound detected in the SWB, methylene chloride, was also detected in other blanks and was used to qualify samples for blank contamination.

Air Contamination Blank

One ACB sample, 24NEW7-902, detected tetrachloroethene and trichloroethene that were not detected in any other blanks. Toluene was detected in both ACB samples at 1 micrograms per liter (ug/L) that was higher than the levels detected in rinsate blank samples. Since the ACB samples were collected at locations downwind from heavy air traffic activities and these compounds detected from ACB samples may have been associated with air traffic activities, the ACB samples reflected the air quality at the site and were not used for sample qualification.

Rinsate Blank and Trip Blank

A few analytes were detected in RB and TB samples, except TB-ND-11-21-96. Toluene detected in RBs was not detected in any samples. Therefore, no action was required. Methylene chloride, a common laboratory contaminant, was detected in RBs and TBs. Methylene chloride sample concentration that was less than 10 times (10x) the associated blank concentration was qualified as non-detected (U). For all other analytes detected in RB or TB, sample concentration that was less than 5 times (5x) the associated blank concentration was qualified as non-detected (U). A sample result that was initially detected at the concentration that was less than the Contract Required Quantitation Limit (CRQL) and was less than the 5x or 10x of the associated blank result was qualified as non-detected (U) and the reporting limit was raised to the CRQL. Samples that were qualified due to blank contamination are summarized in Table 3.

Table 1-3
Samples Qualified Due to Blank Contamination

Analyte	Affected Samples
Bromodichloromethane	01MW101-002 18BGMW19E-002
Chlorodibromomethane	01MW101-002 18BGMW19E-002
Chloroform	01MW101-002 18BGMW19E-002 17DGMW82-002
Methylene Chloride	18MCAS07-7-002DIL
Toluene	None

6. SYSTEM MONITORING COMPOUNDS (SMC)

SMCs were added to all samples and quality control (QC) samples. All criteria were met.

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

MS/MSD analyses were performed with the two samples, 18BGMP10F-002 and 18MCAS05A-302 and results met the required control limits. Sample results for 18BGMP10F-002 were included in SDG 4493.

8. LABORATORY CONTROL SAMPLES

The laboratory control samples were analyzed and results were within the required control limits.

9. INTERNAL STANDARDS

Internal standards were added to all samples and QC samples. All criteria were met.

10. FIELD DUPLICATES

One pair of field duplicate samples, 18MCAS05A-002 and 18MCAS05A-302, was included in this SDG. The relative percent differences (RPDs) between duplicate sample results were within the required control limit for this project.

11. COMPOUND IDENTIFICATION AND QUANTITATION

Criteria for compound identification and quantitation were all met.

12. TENTATIVELY IDENTIFIED COMPOUND (TIC)

A number of TICs were detected from majority of samples. Results of all TICs were qualified as tentatively identified and their associated numerical value were estimated (NJ). In addition, TICs were identified in several blank samples (see Table 1-4). The same rules discussed in Section 5 of the applied to qualification of TICs. Concentrations of TICs in samples that were less than 5x of concentrations in associated blanks were qualified as non-detected (U). Copies of TIC results and their qualifications are attached to this report.

Table 1-4

TICs Qualified Due to Blank Contamination

Analyte	RB1	RB2	TB1	TB2	TB3	Affected Sample
Trimethyl Silanol	6	1				01DGMW57 01MW101-002 01MW102-002 17NEW1-002 17NEW2-002 18MCAS05A-002 18MCAS05A-302 18MCAS07-6-002 18MCAS07-8-002 18MCAS07-9-002 18MCAS08-002
Octamethyl Cyclotetrasiloxane	4		3	1		01DGMW57 01MW101-002 01MW102-002 18BGMW19E-002 17DGMW82-002 17NEW1-002 17NEW2-002 18MCAS05A-002 18MCAS05A-302 18MCAS07-6-002 18MCAS07-7-002 18MCAS07-8-002 18MCAS07-9-002 18MCAS08-002
2-Trimethyl Benzoic Acid			1			01MW101-002 01MW102-002

RB1: 18MCAS05A--502
RB2: 18MCAS07--7-502

TB1: TB-DP-11--21-96
TB2: TB-ND-11-21-96
TB3: TB-WB-11--21-96

13. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Trichloroethene in sample 18MCAS07-7-002 was qualified as estimated (J) since the result exceeded the calibration range. Some analytes were identified at concentrations lower than the CRQL. These results were qualified as estimated. The affected samples and analytes include toluene in samples 18MCASO5A-502 and 18MCAS07-7-502, total 1,2-dichloroethene in sample 18MCAS07- 7-002, and chlorodibromomethane in sample 18MCAS07-7-502.

Overall, data (except the 2-hexanone data that were rejected) generated in this SDG were usable for the intended purposes with the consideration of data qualifiers assigned.

Site: El Toro
Laboratory: Applied P&Ch Laboratory
Method: CLP

TABLE 1-5: VOLATILE ORGANIC COMPOUND RESULTS (ug/L)
NOVEMBER 1996 GROUNDWATER SAMPLING

Sample Number	01DGMW57		01MW101-002		01MW102-002		01MW102-702		17DGMW82-002		17NEW1-002		17NEW2-002	
SDG	964504		964504		964504		964504		964504		964504		964504	
Sample Type							Source Water Blank							
Date Sampled	20-Nov-96		20-Nov-96		20-Nov-96		20-Nov-96		20-Nov-96		20-Nov-96		20-Nov-96	
Date Analyzed	22-Nov-96		22-Nov-96		22-Nov-96		22-Nov-96		22-Nov-96		22-Nov-96		22-Nov-96	
Dilution Factor														
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene (Total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone (MEK)	10	UJ	10	UJ	10	UJ	10	UJ	10	U	10	U	10	U
2-Hexanone		R		R		R		R		R		R		R
4-Methyl-2-pentanone (MIBK)	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	2		1	U	15		1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	2		1	U	1	U	1	U
Bromomethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chlorodibromomethane	1	U	1		1	U	11		1	U	1	U	1	U
Chloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloroform	1	U	2		1	U	14		1	U	1	U	1	U
Chloromethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Freon-113	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methylene chloride	1	U	1	U	1	U	1		1	U	1	U	1	U
Styrene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Trichloroethene	1	U	18		8		1	U	1	U	1	U	1	U
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylenes (total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U

CRQL: Contract Required Quantitation Limit
D: The data was obtained with the diluted sample analysis.
U: The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ: The analyte was not detected above the reported sample quantitation limit and the reported quantitation limit is estimated.
R: The sample results are rejected due to serious deficiencies in meeting the quality control criteria. The presence or absence of the analyte can not be verified.

Site: El Toro
Laboratory: Applied P&Ch Laboratory
Method: CLP

TABLE 1-5: VOLATILE ORGANIC COMPOUND RESULTS (ug/L)
NOVEMBER 1996 GROUNDWATER SAMPLING

Sample Number	18BGMW19E-002		18MCAS05A-002		18MCAS05A-302		18MCAS05A-502		18MCAS07-6-002		18MCAS07-7-002		18MCAS07-7-002DI		18MCAS07-7-502	
SDG	964504		964504		964504		964504		964504		964504		964504		964504	
Sample Type							Rinsate Blank								Rinsate Blank	
Date Sampled	20-Nov-96		20-Nov-96		20-Nov-96		20-Nov-96		20-Nov-96		20-Nov-96		20-Nov-96		20-Nov-96	
Date Analyzed	22-Nov-96		22-Nov-96		22-Nov-96		22-Nov-96		22-Nov-96		22-Nov-96		22-Nov-96		22-Nov-96	
Dilution Factor																
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
1,1-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
1,2-Dichloroethene (Total)	1	U	1	U	1	U	1	U	8		0.5	J	5	J	1	U
1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
2-Butanone (MEK)	10	UJ	10	UJ	10	U	10	U	10	U	10	U	50	UJ	10	UJ
2-Hexanone		R		R		R		R		R		R		R		R
4-Methyl-2-pentanone (MIBK)	10	U	10	U	10	U	10	U	10	U	10	U	50	UJ	10	UJ
Acetone	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
Benzene	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	
Bromoform	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
Bromomethane	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
Carbon disulfide	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
Carbon tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
Chlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
Chlorodibromomethane	1	U	1	U	1	U	1	U	1	U	1	U	5	U	0.6	J
Chloroethane	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
Chloroform	1	U	1	U	1	U	1	U	1	U	1	U	5	U	2	
Chloromethane	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
Freon-113	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
Methylene chloride	1	U	1	U	1	U	1		1	U	1	U	8	U	1	
Styrene	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
Toluene	1	U	1	U	1	U	0.7	J	1	U	1	U	5	U	0.8	J
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U	50	U	10	U
Trichloroethene	1	U	4		4		1	U	33		46		45	J	1	U
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U
Xylenes (total)	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U

CRQL: Contract Required Quantitation Limit
D: The data was obtained with the diluted sample analysis.
U: The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ: The analyte was not detected above the reported sample quantitation limit and the reported quantitation limit is estimated.
R: The sample results are rejected due to serious deficiencies in meeting the quality control criteria. The presence or absence of the analyte can not be verified.

Site: El Toro
Laboratory: Applied P&Ch Laboratory
Method: CLP

TABLE 1-5: VOLATILE ORGANIC COMPOUND RESULTS (ug/L)
NOVEMBER 1996 GROUNDWATER SAMPLING

Sample Number	18MCAS07-8-002		18MCAS07-9-002		18MCAS08-002		TB-DP-11-21-96		TB-ND-11-21-96		TB-WB-11-21-96		CRQL	
SDG	964504		964504		964504		964504		964504		964504			
Sample Type														
Date Sampled	20-Nov-96		20-Nov-96		20-Nov-96		21-Nov-96		21-Nov-96		21-Nov-96			
Date Analyzed	22-Nov-96		22-Nov-96		22-Nov-96		23-Nov-96		23-Nov-96		23-Nov-96			
Dilution Factor														
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene (Total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone (MEK)	10	U	10	U	10	U	10	UJ	10	UJ	10	UJ	10	U
2-Hexanone		R		R		R		R		R		R	10	R
4-Methyl-2-pentanone (MIBK)	10	U	10	U	10	U	10	UJ	10	UJ	10	UJ	10	U
Acetone	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chlorodibromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloroform	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloromethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Freon-113	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methylene chloride	1	U	1	U	1	U	2		1	U	1		1	U
Styrene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Trichloroethene	1		1	U	1		1	U	1	U	1	U	1	
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylenes (total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U

CRQL: Contract Required Quantitation Limit
D: The data was obtained with the diluted sample analysis.
U: The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ: The analyte was not detected above the reported sample quantitation limit and the reported quantitation limit is estimated.
R: The sample results are rejected due to serious deficiencies in meeting the quality control criteria. The presence or absence of the analyte can not be verified.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
01DGMW57

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-01

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-01.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.20	6	NJ
2. 1066-40-6	Silanol, trimethyl-	9.82	4	~~NJ~~ U
3. 556-67-2	Cyclotetrasiloxane, octameth	23.49	4	~~NJ~~ U
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
01MW101-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-45

Matrix: (soil/water) WATER Lab Sample ID: 4504-02

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-02.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 4 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.19	4	NJ
2. 1066-40-6	Silanol, trimethyl-	9.79	3	~~NJ~~ il
3. 556-67-2	Cyclotetrasiloxane, octameth	23.49	4	~~NJ~~ il
4. 3789-85-3	Benzoic acid, 2-[(trimethyls	26.10	2	~~NJ~~ il
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
01MW102-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-03

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-03.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 4 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 1066-40-6	Silanol, trimethyl-	9.79	2	NJ
2. 590-73-8	Hexane, 2,2-dimethyl-	14.41	1	~~NJ~~ U
3. 556-67-2	Cyclotetrasiloxane, octameth	23.49	4	~~NJ~~ U
4. 3789-85-3	Benzoic acid, 2-[(trimethyls	26.10	6	~~NJ~~ U
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
01MW102-702

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-45(

Matrix: (soil/water) WATER Lab Sample ID: 4504-04

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-04.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.20	1	NJ
2. 556-67-2	Cyclotetrasiloxane, octameth	23.49	7	NJ
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18BGMW19E-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-05

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-05.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 556-67-2	Cyclotetrasiloxane, octameth	23.50	1	~~NJ~~ U
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
17DGMW82-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4

Matrix: (soil/water) WATER Lab Sample ID: 4504-06

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-06.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 556-67-2	Cyclotetrasiloxane, octameth	23.49	3	~~NJ~~ 4
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

17NEW1-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-07

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-07.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.20	6	NJ
2. 1066-40-6	Silanol, trimethyl-	9.80	3	~~NJ~~ UJ
3. 556-67-2	Cyclotetrasiloxane, octameth	23.50	3	~~NJ~~ UJ
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
17NEW2-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-450

Matrix: (soil/water) WATER Lab Sample ID: 4504-08

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-08.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.20	28	NJ
2. 1066-40-6	Silanol, trimethyl-	9.81	9	~~NJ~~ U
3. 556-67-2	Cyclotetrasiloxane, octameth	23.49	2	~~NJ~~ U
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18MCAS05A-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-09

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-09.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.20	19	NJ
2. 1066-40-6	Silanol, trimethyl-	9.79	9	~~NJ~~ UJ
3. 556-67-2	Cyclotetrasiloxane, octameth	23.49	3	~~NJ~~ UJ
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18MCAS05A-302

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-45

Matrix: (soil/water) WATER Lab Sample ID: 4504-10

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-10.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.20	3	NJ
2. 1066-40-6	Silanol, trimethyl-	9.85	2	~~NJ~~ U
3. 556-67-2	Cyclotetrasiloxane, octameth	23.50	3	~~NJ~~ U
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18MCAS05A-502

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-11

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-11.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 1066-40-6	Silanol, trimethyl-	9.80	6	NJ
2. 556-67-2	Cyclotetrasiloxane, octameth	23.49	4	NJ
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18MCAS07-6-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-450

Matrix: (soil/water) WATER Lab Sample ID: 4504-12

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-12.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.20	4	NJ
2. 1066-40-6	Silanol, trimethyl-	9.84	4	~~NJ~~ U
3. 556-67-2	Cyclotetrasiloxane, octameth	23.49	5	~~NJ~~ U
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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18MCAS07-7-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-13

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-13.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.22	2	NJ
2. 556-67-2	Cyclotetrasiloxane, octameth	23.49	3	~~NJ~~
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18MCAS07-7-502

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-45

Matrix: (soil/water) WATER Lab Sample ID: 4504-14

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-14.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/23/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 1066-40-6	Silanol, trimethyl-	9.82	1	NJ
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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18MCAS07-8-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-15

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-15.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 4 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.19	5	NJ
2. 1066-40-6	Silanol, trimethyl-	9.80	5	~~NJ~~ U
3. 110-82-7	Cyclohexane	14.23	7	NJ
4. 556-67-2	Cyclotetrasiloxane, octameth	23.49	3	~~NJ~~ U
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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18MCAS07-9-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-450

Matrix: (soil/water) WATER Lab Sample ID: 4504-16

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-16.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 4 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.20	3	NJ
2. 1066-40-6	Silanol, trimethyl-	9.82	4	~~NJ~~ U
3. 110-82-7	Cyclohexane	14.23	3	NJ
4. 556-67-2	Cyclotetrasiloxane, octameth	23.49	3	~~NJ~~ U
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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18MCAS08-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-17

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-17.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/22/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 420-56-4	Silane, fluorotrimethyl-	5.17	8	NJ
2. 1066-40-6	Silanol, trimethyl-	9.77	7	~~NJ~~ UJ
3. 556-67-2	Cyclotetrasiloxane, octameth	23.49	3	~~NJ~~ UJ
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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
TB-DP-11-21-96

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-18

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-18.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/23/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 556-67-2	Cyclotetrasiloxane, octameth	23.49	3	NJ
2. 3789-85-3	Benzoic acid, 2-[(trimethyls	26.11	1	NJ
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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
TB-ND-11-21-96

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-19

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-19.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/23/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 556-67-2	Cyclotetrasiloxane, octameth	23.47	1	NJ
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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-WB-11-21-96

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4504

Matrix: (soil/water) WATER Lab Sample ID: 4504-20

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 4504-20.D

Level: (low/med) _____ Date Received: 11/21/96

% Moisture: not dec. _____ Date Analyzed: 11/23/96

GC Column: VOCOL ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 590-73-8	Hexane, 2,2-dimethyl-	14.40	1	NJ
2. 556-67-2	Cyclotetrasiloxane, octameth	23.49	1	NJ
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024472

Report No. 2
NOVEMBER-DECEMBER 1996
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD: Semivolatile Organic Compounds
By CLP SOW OLM03.0

SAMPLE DELIVERY GROUP: 964332

SAMPLE NUMBERS:

O2DGMW59-002	O2DGMW60-002	O2DGMW61-002
02NEW1-002	18BGMW01D-002	18BGMW01E-002
18BGMW02E-002	18BGMW19B-002	18BGMW19C-002

1. SAMPLE PRESERVATION AND TEMPERATURE

The samples were preserved according to the required protocol. Sample coolers arrived at the laboratory at 4 °C, which met the criteria.

2. HOLDING TIME

The samples were extracted and analyzed within the required holding time.

3. GAS CHROMATOGRAPH/MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

A GC/MS instrument performance check was conducted and all criteria were met.

4. INITIAL CALIBRATION

The %RSD of RRFs within the initial calibration are required to be less than or equal to 30%. In addition, RRFs for all analytes are required to be greater than or equal to 0.05. The RSDs of 2,4-dinitrophenol (57.3%) and 4,6-dinitro-2-methylphenol (54.8%) from the initial

calibration performed on 16 November 1996 exceeded the required limit, and two of the four RRFs for 2,4-dinitrophenol (0.018 and 0.042) and 4,6-dinitro-2-methylphenol (0.013 and 0.049) were less than the minimum RRF requirement. Because both of these compounds were not detected in any samples within this SDG, non-detected results of 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol in this SDG were rejected (R). The data validation summary table is in Table B attached to this report.

5. CONTINUING CALIBRATION

The %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 only compound that exceeded the %D control limit was 2,4-dinitrophenol. Because results from this compound had been rejected (R) due to initial calibration deficiencies, no further action was taken. The continuing calibration criteria for all other compounds were met.

6. BLANK CONTAMINATION:

A) Method Blank Contamination

No analyte was detected in the method blank sample performed with this SDG.

B) Other Blank Contamination

There were no other field-activity-related blanks, (i.e., RBs, SWBs, or ACBs) in this SDG. Because SWBs or ACBs were collected for monitoring of on-site water or air quality, results were not used for blank qualification on samples. The RB is the only field-activity-related

blank used for sample qualification. Results of RBs from other SDGs were reviewed. Out of the total nine RBs collected, only one compound, di-n-butyl phthalate (a common laboratory contaminant) was detected, in two RB. Because this compound was not detected in the MB sample for this SDG, the detection of di-n-butyl phthalate in other SDG RBs was not applied to this SDG. Based on professional judgment, no blank qualification was taken for this SDG.

7. SYSTEM MONITORING COMPOUNDS

SMCs were added to all samples and to QC samples. The SMC %R in several samples did not meet the required control limits (see Table 2-1). Because only one SMC recovery in each respective sample listed in Table 1 was outside of the control limits, no action was required.

Table 2-1
Samples With SMC Recovery Deficiency

Sample Number	SMC (%R)	Control Limits (%)
02DGMW59-002	2-Fluorobiphenyl (37)	43-116
18BGMW01E-002	2-Fluorophenol (17)	21-110
02DGMW59-002 DUP	2-Fluorobiphenyl (37)	43-116
18BGMW01E-002 DUP	2-Fluorophenol (17)	21-110

8. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Because of the lack of sufficient sample volumes, MS/MSD analyses were not performed. However, spike analyses were performed with laboratory control samples and results met the required control limits.

9. LABORATORY CONTROL SAMPLES

The laboratory control samples were analyzed. The results of laboratory duplicate analyses and spike sample analyses were within the required control limits.

10. INTERNAL STANDARDS

Internal standards were added to all samples and QC samples. All criteria were met.

11. FIELD DUPLICATES

Field duplicate samples were not included in this SDG. However, the laboratory performed duplicate analyses with samples 02DGMW59-002 and 18BGMW01E-002. Target compounds from both samples and their duplicate analyses were non-detected. RPDs from these duplicate results were within the control limits.

12. COMPOUND IDENTIFICATION AND QUANTITATION

Criteria for compound identification and quantitation were all met.

13. TENTATIVELY IDENTIFIED COMPOUNDS

A number of TICs were detected from a majority of the samples. Results of all TICs were qualified as tentatively identified and their associated numerical values were estimated (NJ). Copies of TIC results and their qualifications are attached to this report.

14. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Target compound 2-methylnaphthalene was detected in sample 18BGMW01D-002 and di-n-butyl phthalate was detected in samples 18BGMW01D-002, 18BGMW01E-002, 18BGMW02E-002, and 18BGMW19B-002 at concentrations lower than the CRQL. These results were qualified as estimated (J).

Overall, data (except the 2,4-dinitrophenol and 4,6-dinitro-methylphenol data that were rejected) generated in this SDG were usable for the intended purposes with the consideration of data qualifiers assigned.

Site: El Toro
Laboratory: Applied P&Ch Laboratory
Method: CLP

TABLE 2-2 SEMIVOLATILE ORGANIC COMPOUND RESULTS (ug/L)
NOVEMBER-DECEMBER 1996 GROUNDWATER SAMPLING

Sample Number	02DGMW59-002	02DGMW60-002	02DGMW61-002	02NEW1-002	18BGMW01D-002	18BGMW01E-002	18BGMW02E-002	18BGMW19B-002	18BGMW19C-002	CRQL
SDG	964332	964332	964332	964332	964332	964332	964332	964332	964332	
Sample Type										
Date Sampled	4-Nov-96	4-Nov-96	4-Nov-96	4-Nov-96	1-Nov-96	1-Nov-96	1-Nov-96	4-Nov-96	4-Nov-96	
Date Analyzed	18-Nov-96	18-Nov-96	18-Nov-96	18-Nov-96	18-Nov-96	18-Nov-96	18-Nov-96	18-Nov-96	18-Nov-96	
Dilution Factor										
1,2,4-Trichlorobenzene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
1,2-Dichlorobenzene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
1,3-Dichlorobenzene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
1,4-Dichlorobenzene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
2,4,5-Trichlorophenol	25 U	25 U	25	25 U	25 U	25 U	25 U	25 U	25 U	25
2,4,6-Trichlorophenol	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
2,4-Dichlorophenol	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
2,4-Dimethylphenol	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
2,4-Dinitrophenol	R	R		R	R	R	R	R	R	25
2,4-Dinitrotoluene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
2,6-Dinitrotoluene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
2-Chloronaphthalene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
2-Chlorophenol	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
2-Methylnaphthalene	10 U	10 U	10	10 U	4.2 J	10 U	10 U	10 U	10 U	10
2-Methylphenol (o-Cresol)	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
2-Nitroaniline	25 U	25 U	25	25 U	25 U	25 U	25 U	25 U	25 U	25
2-Nitrophenol	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
3,3'-Dichlorobenzidine	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
3/4-Methylphenol (m/p-Cresol)	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
3-Nitroaniline	25 U	25 U	25	25 U	25 U	25 U	25 U	25 U	25 U	25
4,6-Dinitro-2-methylphenol	R	R		R	R	R	R	R	R	25
4-Bromophenyl phenyl ether	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
4-Chloro-3-methylphenol	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
4-Chloroaniline	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
4-Chlorophenyl phenyl ether	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
4-Nitroaniline	25 U	25 U	25	25 U	25 U	25 U	25 U	25 U	25 U	25
4-Nitrophenol	25 U	25 U	25	25 U	25 U	25 U	25 U	25 U	25 U	25
Acenaphthene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Acenaphthylene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Anthracene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Benz(a)anthracene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Benzo(a)pyrene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Benzo(b)fluoranthene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Benzo(g,h,i)perylene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Benzo(k)fluoranthene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Bis(2-chloroethoxy) methane	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Bis(2-chloroethyl) ether	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Bis(2-chloroisopropyl) ether	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Bis(2-ethylhexyl) phthalate	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Butyl Benzyl Phthalate (BBP)	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Carbazole	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Chrysene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Dibenz(a,h)anthracene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Dibenzofuran	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Diethyl phthalate (DEP)	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Dimethyl phthalate (DMP)	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Di-n-butyl phthalate (DBP)	10 U	10 U	10	10 U	4.3 J	3.4 J	4.1 J	3.7 J	10 U	10
Di-n-octyl phthalate (DOP)	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Fluoranthene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Fluorene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Hexachlorobenzene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Hexachlorobutadiene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Hexachlorocyclopentadiene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Hexachloroethane	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Indeno(1,2,3-cd)pyrene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Isophorone	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Naphthalene	10 U	10 U	10	10 U	46	10 U	10 U	10 U	10 U	10
Nitrobenzene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
N-Nitroso-di-n-propylamine	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
N-Nitrosodiphenylamine	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Pentachlorophenol (PCP)	25 U	25 U	25	25 U	25 U	25 U	25 U	25 U	25 U	25
Phenanthrene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Phenol	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10
Pyrene	10 U	10 U	10	10 U	10 U	10 U	10 U	10 U	10 U	10

CRQL: Contract Required Quantitation Limit
D: The data was obtained with the diluted sample analysis.
U: The analyte was analyzed for, but was not detected above the reported sample quantitation limit
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample
UJ: The analyte was not detected above the reported sample quantitation limit and the reported quantitation limit is estimated.
R: The sample results are rejected due to serious deficiencies in meeting the quality control criteria. The presence or absence of the analyte can not be verified.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

02DGMW60-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4332

Matrix: (soil/water) WATER Lab Sample ID: 4332-02

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 4332-02.D

Level: (low/med) _____ Date Received: 11/5/96

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 11/7/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 111-77-3	Ethanol, 2-(2-methoxyethoxy)	6.68	6	NJ
2.				
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

02DGMW61-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4332

Matrix: (soil/water) WATER Lab Sample ID: 4332-03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 4332-03.D

Level: (low/med) _____ Date Received: 11/5/96

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 11/7/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 111-77-3	Ethanol, 2-(2-methoxyethoxy)	6.68	6	NJ
2.				
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

02NEW1-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4332

Matrix: (soil/water) WATER Lab Sample ID: 4332-04

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 4332-04.D

Level: (low/med) _____ Date Received: 11/5/96

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 11/7/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 111-77-3	Ethanol, 2-(2-methoxyethoxy)	6.69	17	NJ
2. 15726-15-5	4-Heptanone, 3-methyl-	20.12	5	J
3.	Unknown	22.02	4	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

18BGMW01D-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4332

Matrix: (soil/water) WATER Lab Sample ID: 4332-05

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 4332-05B.D

Level: (low/med) _____ Date Received: 11/5/96

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 11/7/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 10 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 111-77-3	Ethanol, 2-(2-methoxyethoxy)	6.70	21	NJ
2. 611-14-3	Benzene, 1-ethyl-2-methyl-	7.49	5	NJ
3. 526-73-8	Benzene, 1,2,3-trimethyl-	7.78	4	NJ
4.	Unknown Hydrocarbon	8.02	23	J
5.	Unknown Hydrocarbon	8.07	7	J
6.	Unknown Hydrocarbon	8.21	14	J
7. 526-73-8	Benzene, 1,2,3-trimethyl-	8.25	11	NJ
8. 933-98-2	Benzene, 1-ethyl-2,3-dimethy	10.38	4	NJ
9. 91-57-6	Naphthalene, 2-methyl-	12.85	6	NJ
10. 496-11-7	Indane	13.33	5	NJ
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

18BGMW01E-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4332

Matrix: (soil/water) WATER Lab Sample ID: 4332-06

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 4332-06.D

Level: (low/med) _____ Date Received: 11/5/96

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 11/7/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 20 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 590-50-1	2-Pentanone, 4,4-dimethyl-	4.11	17	NJ
2. 97-96-1	Butanal, 2-ethyl-	4.82	7	NJ
3.	Unknown Hydrocarbon	4.99	7	J
4. 17301-22-3	Undecane, 2,5-dimethyl-	5.02	9	NJ
5.	Unknown Hydrocarbon	5.54	9	J
6.	Unknown Hydrocarbon	6.17	48	J
7. 870-63-3	2-Butene, 1-bromo-3-methyl-	6.39	23	NJ
8. 98-82-8	Benzene, (1-methylethyl)-	6.53	48	NJ
9. 111-77-3	Ethanol, 2-(2-methoxyethoxy)	6.69	9	NJ
10. 870-63-3	2-Butene, 1-bromo-3-methyl-	6.81	42	NJ
11.	Unknown Hydrocarbon	8.23	5	J
12. 96-47-9	Furan, tetrahydro-2-methyl-	8.34	7	NJ
13.	Unknown Hydrocarbon	8.51	9	J
14. 6069-98-3	Cyclohexane, 1-methyl-4-(1-m	8.73	10	NJ
15.	Unknown Hydrocarbon	9.42	14	J
16.	Unknown Hydrocarbon	9.69	6	J
17.	Unknown Hydrocarbon	9.82	15	J
18. 5455-94-7	2,2,5,5-Tetramethyltetrahydr	10.03	29	NJ
19.	Unknown Hydrocarbon	10.65	12	J
20.	Unknown Hydrocarbon	13.41	10	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

18BGMW01E-002 DUP

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4332

Matrix: (soil/water) WATER Lab Sample ID: 4332-06B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 4332-06B.D

Level: (low/med) _____ Date Received: 11/5/96

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 11/7/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 18 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 590-50-1	2-Pentanone, 4,4-dimethyl-	4.11	17	NJ
2.	Unknown Hydrocarbon	4.81	7	J
3. 13950-21-5	2H-Pyrrol-2-one, 1,5-dihydro	5.00	8	NJ
4.	Unknown Hydrocarbon	5.02	8	J
5. 870-63-3	2-Butene, 1-bromo-3-methyl-	5.54	9	NJ
6.	Unknown Hydrocarbon	6.18	43	J
7.	Unknown Hydrocarbon	6.38	24	J
8. 98-82-8	Benzene, (1-methylethyl)-	6.53	46	NJ
9. 870-63-3	2-Butene, 1-bromo-3-methyl-	6.80	38	NJ
10. 106-30-9	Heptanoic acid, ethyl ester	7.98	5	NJ
11.	Unknown Hydrocarbon	8.23	5	J
12.	Unknown Hydrocarbon	8.34	7	J
13.	Unknown Hydrocarbon	8.51	10	J
14.	Unknown Hydrocarbon	8.73	9	J
15.	Unknown Hydrocarbon	9.82	11	J
16.	Unknown Hydrocarbon	10.72	12	J
17.	Unknown Hydrocarbon	10.86	5	J
18. 7270-50-0	6-Methyl-1,5-heptadiene	11.20	10	NJ
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

18BGMW02E-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4332

Matrix: (soil/water) WATER Lab Sample ID: 4332-07

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 4332-07.D

Level: (low/med) _____ Date Received: 11/5/96

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 11/7/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 111-77-3	Ethanol, 2-(2-methoxyethoxy)	6.68	11	NJ
2.				
3.				
4.				
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
18BGMW19C-002

Lab Name: APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 96-4332

Matrix: (soil/water) WATER Lab Sample ID: 4332-10

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 4332-10B.D

Level: (low/med) _____ Date Received: 11/5/96

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 11/7/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 2 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 111-77-3	Ethanol, 2-(2-methoxyethoxy)	6.68	5	NJ
2.	Unknown	12.40	5	J
3.				
4.				
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6.				
7.				
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Report No. 3
NOVEMBER-DECEMBER 1996
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD: Pesticides and PCBs
By CLP SOW OLM03.0

SAMPLE DELIVERY GROUP: 964427

SAMPLE NUMBERS: 02NEW11-002 03DBMW39-002 03DGMW64-002
03DGMW64-302 (duplicate of 03DGMW64-002)
03DGMW64-702(source water blank)

1. SAMPLE TEMPERATURE

The sample coolers arrived at the laboratory at 3.1 degrees centigrade (°C), which met the criteria.

2. HOLDING TIME

The samples were extracted and analyzed within the required holding time.

3. GAS CHROMATOGRAPH/ELECTRON CAPTURE DETECTOR INSTRUMENT PERFORMANCE CHECK

The GC/ECD instrument performance check was conducted and all criteria were met.

4. INITIAL CALIBRATION

The %RSD of RRFs within the initial calibration are required to be less than or equal to 20% for single-component target compounds. The %RSD for the compounds in Table 3-1 did not meet the control limit. Because none of these compounds were detected in groundwater

samples, non-detected results for the affected target compounds were qualified as estimated (UJ). A summary of data validation results is presented in Table 3-2.

Table 3-1
Compounds with Initial Calibration Deficiency

Compound	%RSD
alpha-BHC	27.5
gamma-BHC	22.7
Delta-BHC	24.4

5. CALIBRATION VERIFICATION

All criteria for calibration verification were met.

6. BLANK CONTAMINATION

A) Method Blank Contamination

No target compound was detected in the method blank sample with this SDG.

B) Source Water Blank Contamination

No target compound was detected in the SWB sample, 03DGMW64-702.

7. SYSTEM MONITORING COMPOUNDS

SMCs, also known as surrogates, were added to all samples and to QC samples. The surrogate %R for all samples were within the control limits.

8. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD analyses were performed with sample 05DGMW67-002. The %R for one compound, endrin (130), exceeded the control limits (56-121). Control limits for all other compounds were met. No action was taken based on the MS/MSD results alone. Analytical results of sample 05DGMW67-002 were included in SDG 96-4436.

9. LABORATORY CONTROL SAMPLES

The laboratory control samples were analyzed and results were within the required control limits.

10. FIELD DUPLICATES

Field duplicate samples, 03DGMW64-002 and 03DGMW64-302, were included in this SDG. RPDs from duplicate sample results were within the control limits.

11. COMPOUND IDENTIFICATION AND QUANTITATION

The criteria for compound identification and quantitation were met.

12. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

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

Site: El Toro
Laboratory: Applied P&Ch Laboratory
Method: CLP

TABLE 3-2: PESTICIDE ORGANIC COMPOUND RESULTS (ug/L)
NOVEMBER-DECEMBER 1996 GROUNDWATER SAMPLING

Sample Number	02NEW11-002		03DBMW39-002		03DGMW64-002		03DGMW64-302		03DGMW64-702		CRQL
SDG	964427		964427		964427		964427		964427		
Sample Type	PEST		PEST		PEST		PEST		PEST		
Date Sampled	12-Nov-96		12-Nov-96		12-Nov-96		13-Nov-96		13-Nov-96		
Date Analyzed	17-Nov-96		17-Nov-96		17-Nov-96		17-Nov-96		17-Nov-96		
Dilution Factor	1		1		1		1		1		
4,4'-DDD	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1
4,4'-DDE	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1
4,4'-DDT	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1
Aldrin	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05
alpha-BHC	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05
alpha-Chlordane	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05
Aroclor-1016 (PCB-1016)	1	U	1	U	1	U	1	U	1	U	1
Aroclor-1221 (PCB-1221)	2	U	2	U	2	U	2	U	2	U	2
Aroclor-1232 (PCB-1232)	1	U	1	U	1	U	1	U	1	U	1
Aroclor-1242 (PCB-1242)	1	U	1	U	1	U	1	U	1	U	1
Aroclor-1248 (PCB-1248)	1	U	1	U	1	U	1	U	1	U	1
Aroclor-1254 (PCB-1254)	1	U	1	U	1	U	1	U	1	U	1
Aroclor-1260 (PCB-1260)	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ	1
beta-BHC	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05
delta-BHC	66	UJ	63		63		61		63		63
Dieldrin	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05
Endosulfan I	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1
Endosulfan II	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05
Endosulfan sulfate	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1
Endrin	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1
Endrin aldehyde	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1
Endrin ketone	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1
gamma-BHC (Lindane)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1
gamma-Chlordane	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05
Heptachlor	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05
Heptachlor epoxide	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05
Methoxychlor	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05
Toxaphene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5
	5	U	5	U	5	U	5	U	5	U	5

CRQL: Contract Required Quantitation Limit
D: The data was obtained with the diluted sample analysis.
U: The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ: The analyte was not detected above the reported sample quantitation limit and the reported quantitation limit is estimated.
R: The sample results are rejected due to serious deficiencies in meeting the quality control criteria. The presence or absence of the analyte can not be verified.

Report No. 4
NOVEMBER-DECEMBER 1996
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD: Herbicides/Method 8150

SAMPLE DELIVERY GROUP: 964436

SAMPLE NUMBERS: 05DBMW41-002 05DGMW67-002 05NEW1-002
05UGMW27-002 12UGMW31-002

1. SAMPLE TEMPERATURE

The sample coolers arrived at the laboratory at 5.7 °C, which met the criteria. Sample results and their associated data qualifiers are included in Table 4-1.

2. HOLDING TIME

The samples were extracted and analyzed within the required holding time.

3. INITIAL CALIBRATION

The initial calibration was performed and all method specific criteria was met.

4. CALIBRATION VERIFICATION

The %D between initial calibration and calibration verification responses for all samples were within the method specific criteria.

5. BLANK CONTAMINATION

No target compound was detected in the MB sample performed with this SDG. There were no other blanks included in this SDG.

6. SYSTEM MONITORING COMPOUNDS

SMCs, also known as surrogates, were added to all samples and QC samples. The surrogate %R for all samples were within the control limits.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD analyses were performed. All results were within the required control limits.

8. LABORATORY CONTROL SAMPLES

The laboratory control sample analyses were performed and results were within the required control limits.

9. FIELD DUPLICATES

No field duplicate samples were collected.

10. COMPOUND IDENTIFICATION AND QUANTITATION

Criteria for compound identification and quantitation were met.

11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, data generated in this SDG were usable for the intended purposes.

Site: El Toro
Laboratory: Applied P&Ch Laboratory
Method: 8150

TABLE 4-1: HERBICIDE ORGANIC COMPOUND RESULTS (ug/L)
NOVEMBER-DECEMBER 1996 GROUNDWATER SAMPLING

Sample Number	05DBMW41-002		05DGMW67-002		05NEW1-002		05UGMW27-002		12UGMW31-002		PQL
SDG	964436		964436		964436		964436		964436		
Sample Type											
Analysis Type	HERBICIDES		HERBICIDES		HERBICIDES		HERBICIDES		HERBICIDES		
Date Sampled	13-Nov-96		13-Nov-96		13-Nov-96		13-Nov-96		13-Nov-96		
Date Analyzed	21-Nov-96		21-Nov-96		21-Nov-96		21-Nov-96		21-Nov-96		
Dilution Factor	1		1		1		1		1		
2,4,5-T	1	U	1	U	1	U	1	U	1	U	1
2,4,5-TP (Silvex)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5
2,4-D	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5
2,4-DB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5
Dalapon (dichloroacetic acid)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5
Dicamba	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5
Dichloroprop	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5
Dinoseb (DNBP)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5

PQL: Practical Quantitation Limit
U: The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Report No. 5
NOVEMBER-DECEMBER 1996
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD: Alkalinity/EPA Method 310.1
Bicarbonate and Carbonate/Standard Method 2320B
Chloride, Phosphorus, and Sulfate/EPA Method 300.0
Nitrate and Nitrite as Nitrogen/Method 300.0 and 354.1
Total Organic Carbon (TOC)/Method 415.1
Chemical Oxygen Demand (COD)/Method 410.4
Color/Method 110.2
Dissolved Silica/Method 370.1
Total Suspended Solids (TSS)/Method 160.2
Total Dissolved Solids (TDS)/Method 160.1
Total Organic Carbon (TOC)/Method 415.1
Hexavalent Chromium (Cr VI)/Method 7196

SAMPLE DELIVERY GROUP: 964419

SAMPLE NUMBERS:

18MCAS07-1-002	18MCAS07-2-002	18MCAS07-4-002
18MCAS07-5-002	18MCAS07-3-002	21UGMW37-002
03DGMW65X-002	02UGMW25-002	04DBMW40-002
04DGMW66-002	18MCAS07-5-502(rinsate blank)	

1. SAMPLE TEMPERATURE

Sample coolers arrived at the laboratory at 6 °C, which met the criteria.

2. HOLDING TIME

All analyses met the holding time requirement except the Cr VI analysis of sample 03DGMW65X-002 which exceeded the 24-hour holding time by 50 minutes. The Cr VI non-detected result for this sample was qualified as estimated (UJ). A summary of sample results and their associated data qualifiers are presented in Table 5-1.

3. LABORATORY CONTROL SAMPLES (LCS)/LABORATORY CONTROL SAMPLE DUPLICATE (LCSD)

The LCS/LCSD results were within acceptance control limits for all analyses.

4. BLANKS

No analytes were detected in any of the MBs or the RB.

5. CALIBRATION VERIFICATION

Criteria for calibration verification were all met.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were performed and required control limits were met.

7. LABORATORY CONTROL SAMPLES

The laboratory control sample analyses were performed and results were within the required control limits.

8. OVERALL ASSESSMENT

Due to a high chloride content that might cause matrix interference, nitrate/nitrite was analyzed with Method 354.1 rather than Method 300.0, which had been originally requested.

According to raw data, the results for sample 18MCAS07-5-502 (RB) and 18MCAS07-5-002 were originally switched. The laboratory claimed that the error had been introduced during the analyses and therefore the analytical report was corrected by the laboratory.

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

Site: El Toro
Laboratory: Applied P&Ch Laboratory

TABLE 5-1: GENERAL CHEM ORGANIC COMPOUND RESULTS (MG/L)
NOVEMBER-DECEMBER 1996 GROUNDWATER SAMPLING

Sample Number	02UGMW25-002		03DGMW65X-002		04DBMW40-002		04DGMW66-002		18MCAS07-1-002		18MCAS07-2-002		18MCAS07-3-002		PQL
SDG	964419		964419		964419		964419		964419		964419		964419		
Sample Type															
Analysis Type	GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		
Date Sampled	12-Nov-96		11-Nov-96		12-Nov-96		12-Nov-96		11-Nov-96		11-Nov-96		11-Nov-96		
Date Analyzed	14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		
Dilution Factor	1		1		1		1		1		1		1		
Alkalinity	237		323		517		250		360		239		265		2
Bicarbonate	237		323		517		250		360		239		265		2
Carbon, Total Organic (TOC)	4		2		2		2		2	U					1
Carbonate	2	U	2	U	2	U	2	U	394		2	U	2	U	2
Chemical Oxygen Demand (COD)	20		20	U	20	U	20	U	0.1	U					20
Chloride	276		146		138		132		1960		471		438		0.2
Chromium (VI)	0.002		0.002	UJ	0.002	U	0.002		586						0.002
Color	1	U	1		1		1	U	239						1
Nitrate/Nitrite, as N	35		13		22		13		239		10	U	10	U	10
Phosphorus, Orthophosphate	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U					0.1
Silica (SiO2) dissolved	34		48		50		51		471						1
Solids, Total Dissolved (TDS)	1700		792		984		764		0.1	U	2340		2250		0.1
Solids, Total Suspended (TSS)	4	U	4	U	4	U	4	U	2340						4
Sulfate	559		85		78		112		812		812		759		1

Sample Number	18MCAS07-4-002		18MCAS07-5-002		18MCAS07-5-502		21UGMW37-002	
SDG	964419		964419		964419		964419	
Sample Type					rinsate blank			
Analysis Type	GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM	
Date Sampled	11-Nov-96		11-Nov-96		11-Nov-96		11-Nov-96	
Date Analyzed	14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96	
Dilution Factor	1		1		1		1	
Alkalinity	259		373		2	U	222	
Bicarbonate	259		373		2	U	222	
Carbonate	2	U	2	U	2	U	2	U
Chloride	438		416		0.2	U	212	
Nitrate/Nitrite, as N	0.1	U	0.1	U	0.1	U	19	
Solids, Total Dissolved (TDS)	2200		2030		10	U	967	
Sulfate	717		562		1	U	175	

PQL: Practical Quantitation Limit
U: The analyte was analyzed for but was not detecte above the sample quantitation limit.
J: The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample.
UJ: The analyte was not detected above the reported sample quantitation limit and the reported quantitation limit is estimated.

Report No. 6
NOVEMBER-DECEMBER 1996
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD: Alkalinity/EPA Method 310.1
Bicarbonate and Carbonate/Standard Method 2320B
Chloride, Phosphorus, and Sulfate/EPA Method 300.0
Nitrate and Nitrite as Nitrogen/Method 300.0 and 354.1
Total Organic Carbon (TOC)/Method 415.1
Chemical Oxygen Demand (COD)/Method 410.4
Color/Method 110.2
Dissolved Silica/Method 370.1
Total Suspended Solids (TSS)/Method 160.2
Total Dissolved Solids (TDS)/Method 160.1
Total Organic Carbon (TOC)/Method 415.1
Hexavalent Chromium (Cr VI)/Method 7196
Ammonia as Nitrogen/Method 350.2

SAMPLE DELIVERY GROUP: 964427

SAMPLE NUMBERS:

03DGMW64-002	18MCAS02-06-002	03NEW11-002
18MCAS02-08-002	18MCAS02-01-002	18MCAS02-02-002
18MCAS02-05-002	18MCAS02-04-002	18MCAS02-03-002
18MCAS02-07-002	08DGMW74-002	02NEW11-002

03DGMW64-302 (duplicate of 03DGMW64-002)
03DGMW64-702 (source water blank)

1. SAMPLE TEMPERATURE

The sample coolers were received at the laboratory at 3.1°C, which met the criteria.

2. HOLDING TIME

All analyses met the holding time requirements except the CR VI analyses of samples, 02NEW11-002 and 03DBMW39-002, which exceeded the 24-hour holding time by 50 and 21 minutes, respectively. The positive CR VI result in sample 02NEW11-002 was qualified as

estimated (J) and non-detected CR VI result in sample 03DBMW39-002 was qualified as estimated (UJ). Summary of sample results and their associated data qualifiers are presented in Table 6-1.

3. LABORATORY CONTROL SAMPLES LABORATORY CONTROL SAMPLE DUPLICATE

The Laboratory Control Sample/Laboratory Control Sample Duplicate results were within acceptable control limits for all analyses.

4. BLANKS

No analytes were detected in any of the MBs. The SWB filled with tap water detected typical several analytes that are for tap water. Results from this sample were used to monitor tap water quality but not used to qualify samples for blank contamination.

5. CALIBRATION VERIFICATION

Criteria for calibration verification were all met.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were performed and required control limits were met.

7. FIELD DUPLICATE

RPD results for majority analytes between field duplicate samples 03DGMW64-002 and 03DGMW64-302 were within the control limits, which were 20%, 25%, and 30% depending on analyses. The only exception was sulfate with a RPD of 71%. Based on professional judgement, no action was taken based solely on the field duplicate results.

8. OVERALL ASSESSMENT

Due to high chloride content which may cause matrix interference, nitrite analyses was performed using Method 354.1 rather than Method 300.0 which was originally requested.

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

Site: El Toro
Laboratory: Applied P&Ch Laboratory
Method: CLP

TABLE 6-1: GENERAL CHEM ORGANIC COMPOUND RESULTS (MG/L)
NOVEMBER-DECEMBER 1996 GROUNDWATER SAMPLING

Sample Number	02NEW11-002		03DBMW39-002		03DGMW64-002		03DGMW64-302		03DGMW64-702		08DGMW74-002		18MCAS02-01-002		PQL
SDG	4427		4427		4427		4427		4427		4427		4427		
Sample Type					DUPLICATE 1		DUPLICATE 1		SOURCE WATER BLANK						
Analysis Type	GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		
Date Sampled	12-Nov-96		12-Nov-96		12-Nov-96		12-Nov-96		13-Nov-96		13-Nov-96		12-Nov-96		
Date Analyzed	14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		
Dilution Factor	1		1		1		1		1		1				
Alkalinity	233		403		302		300		121		261		153		2
Ammonia, as N	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U			0.2
Bicarbonate	233		403		302		300		121		261		153		2
Carbon, Total Organic (TOC)	1		1	U	1	U	1	U	3		1	U			1
Carbonate	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2
Chemical Oxygen Demand (COD)	20	U	20	U	20	U	26		20	U	20	U			20
Chloride	84		143		138		131		102		224		527		0.2
Chromium (VI)	0.003	J	0.002	UJ	0.002	U	0.002	U	0.002	U	0.002	U			0.002
Color	1		1		1		1		1	U	1	U			1
Nitrate/Nitrite, as N	6		7		5		5		0		16		0	U	10
Phosphorus, Orthophosphate	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1
Silica (SiO2) dissolved	43		56		49		49		7		55				1
Solids, Total Dissolved (TDS)	747		801		836		846		685		828		1350		0.1
Solids, Total Suspended (TSS)	14		22		55		26		4	U	5				4
Sulfate	205		51		174		168		266		58		438		1

Sample Number	18MCAS02-02-002		18MCAS02-03-002		18MCAS02-04-002		18MCAS02-05-002		18MCAS02-06-002		18MCAS02-07-002		18MCAS02-08-002	
SDG	4427		4427		4427		4427		4427		4427		4427	
Sample Type														
Analysis Type	GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM		GENL CHEM	
Date Sampled	12-Nov-96		12-Nov-96		12-Nov-96		12-Nov-96		12-Nov-96		12-Nov-96		12-Nov-96	
Date Analyzed	14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96		14-Nov-96	
Dilution Factor	1		1		1		1		1		1			
Alkalinity	351		209		233		216		203		306		470	
Bicarbonate	351		209		233		216		203		306		470	
Carbonate	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Chloride	399		338		166		187		206		704		475	
Nitrate/Nitrite, as N	0.1	U	0	U	7		19		24		40		102	
Solids, Total Dissolved (TDS)	1700		1340		874		999		1150		2870		2720	
Sulfate	458		399		176		212		262		995		611	

PQL : Practical Quantitation Limit
U: The analyte was analyzed for but was not detected above the sample quantitation limit.
J: The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in teh sample.
UJ: The analyte was not detected above the reported sample quantitation limit and the reported quantitation limit is estimated.

Report No. 7
NOVEMBER-DECEMBER 1996
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD: TPHs-Gas and TPHs-Diesel/Method 8015 (Modified)

SAMPLE DELIVERY GROUP: 964332

SAMPLE NUMBERS: 18BGMW01D-002 18BGMW02E-002 18BGM219B-002

1. SAMPLE TEMPERATURE

The sample coolers arrived at the laboratory at 4.0 °C, which met the criteria. Sample results and their associated data qualifiers are included in Table 7-1.

2. HOLDING TIME

The samples were extracted and analyzed within the required holding time.

3. INITIAL CALIBRATION

The initial calibration was performed and all method specific criteria was met.

4. CONTINUING CALIBRATION

The %D for all samples were within the method specific criteria.

5. BLANK CONTAMINATION

No target compound was detected in the MB sample performed with this SDG. There were no other blanks included in this SDG.

6. SYSTEM MONITORING COMPOUNDS

SMCs, also known as surrogates, were added to all samples and QC samples. The surrogate %R for all samples were within the control limits.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD analyses were performed with. All results were within the required control limits.

8. LABORATORY CONTROL SAMPLES

The laboratory control sample analyses were performed and results were within the required control limits.

9. FIELD DUPLICATES

No field duplicate samples were collected.

10. COMPOUND IDENTIFICATION AND QUANTITATION

Criteria for compound identification and quantitation were met.

11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, data generated in this SDG were usable for the intended purposes.

Site: El Toro
Laboratory: Applied P&Ch Laboratory

TABLE 7-1: GASOLINE AND DIESEL RESULTS (UG/L)
NOVEMBER-DECEMBER 1996 GROUNDWATER SAMPLING

Sample Number	18BGMW01D-002		18BGMW02E-002		18BGMW19B-002		PQL
SDG	964332		964332		964332		
Sample Type							
Analysis Type	TPH		TPH		TPH		
Date Sampled	1-Nov-96		1-Nov-96		4-Nov-96		
Date Analyzed	9-Nov-96		9-Nov-96		9-Nov-96		
Dilution Factor	1		1		1		
TPH-gas	120		50	U	50	U	50
TPH-diesel	0.25	U	0.25	U	0.25	U	0.25

PQL: Practical Quantitation Limit
U: The analyte was analyzed for but was not detecte above the sample quantitation limit.

Report No. 8
NOVEMBER-DECEMBER 1996
GROUNDWATER SAMPLING DATA VALIDATION REPORT

ANALYSIS/METHOD: Metals/CLP

SAMPLE DELIVERY GROUP: 964436

SAMPLE NUMBERS:

05DBMW41-002	05DGMW67-002	05NEW1-002
05UGMW27-002	12DBMW48-002	12UGMW31-002

1. HOLDING TIME AND SAMPLE PRESERVATION

The samples were analyzed within prescribed holding times. Sample results and their associated data qualifiers are included in Table G.

2. INSTRUMENT CALIBRATION AND CALIBRATION VERIFICATION

The criteria for initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

The Contract Required Detection Limit (CRDL) recoveries were within the control limits for all analytes except lead (131.8%). Lead results in the associated samples may be biased high due to CRDL recoveries. However, no action was required based on this criterion alone.

4. BLANK CONTAMINATION

There were no field blank or RB analyses included in this SDG. Laboratory blanks were contaminated with several analytes. The highest concentration found in the laboratory blanks are presented in Table 8-1. The action levels listed in Table 8-1 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-detected (U). The affected samples are listed in Table 8-1.

Table 8-1
The Highest Concentrations Detected In The Blank (ug/L)

Analyte	Blank Concentration	Action Level	Affected Sample
Aluminum	27.7	138.5	05DBMW41-002 05DGMW67-002 05NEW1-002 05UGMW27-002 12DBMW48-002 12UGMW31-002
Antimony	2.9	14.5	05DGMW67-002
Beryllium	0.7	3.5	None
Chromium	1.8	9.0	05DBMW41-002 05DGMW67-002 05NEW1-002 12UGMW31-002
Cobalt	1.5	7.5	05DGMW67-002 05NEW1-002 12DBMW48-002
Copper	1.9	9.5	05DBMW41-002 05NEW1-002 05UGMW27-002
Iron	37.5	187.5	05DGMW67-002 05NEW1-002 05UGMW27-002
Lead	1.1	5.5	05DBMW41-002 05DGMW67-002 05NEW1-002 05UGMW27-002 12DBMW48-002
Magnesium	358.7	1793.5	None
Potassium	132.1	660.5	None
Silver	1.3	6.5	None
Sodium	514.2	2571	None
Thallium	2.3	11.5	None

5. INDUCTIVELY COUPLED PLASMA (ICP) INTERFERENCE CHECK SAMPLE

All recoveries in the ICP Interference Check Sample were between 80% and 120% which met the criteria.

6. LABORATORY CONTROL SAMPLES

The laboratory control samples were analyzed at the required frequencies and were within the required criteria.

7. LABORATORY DUPLICATE SAMPLE ANALYSIS

The RPD results for laboratory duplicate samples are below the required 20% control limit for all analytes except for aluminum (29.0%), chromium (200.0%), cobalt (200.0%), selenium (29.0%), and thallium (200.0%). However, no action is required as the 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.

9. INDUCTIVELY COUPLED PLASMA SERIAL DILUTION

Criteria for ICP serial dilution analyses were met.

10. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The analytes listed in Table 8-2 were detected in the samples. The detected concentrations were either less than the CRDL or greater than the calibration range. These results were qualified as estimated (J).

Table 8-2
Sample Results That Were Out of the Calibration Range

Analyte	Affected Sample			
Arsenic	05DBMW41-002	05DGMW67-002	05NEW1-002	05UGMW27-002
	12UGMW31-002			
Barium	05DBMW41-002	05DGMW67-002	05NEW1-002	05UGMW27-002
	12DBMW48-002	12UGMW31-002		
Magnesium	05DBMW41-002	05DGMW67-002	05NEW1-002	05UGMW27-002
	12DBMW48-002	12UGMW31-002		
Manganese	05DBMW41-002	05DGMW67-002	12DBMW48-002	
Nickel	05DBMW41-002	05DGMW67-002	05UGMW27-002	12UGMW31-002
Potassium	05DBMW41-002	05DGMW67-002	05NEW1-002	05UGMW27-002
	12DBMW48-002	12UGMW31-002		
Selenium	05DBMW41-002	05DGMW67-002	05UGMW27-002	
Vanadium	05DBMW41-002	05DGMW67-002	05NEW1-002	05UGMW27-002
	12DBMW48-002	12UGMW31-002		
Zinc	05DBMW41-002	05DGMW67-002	05NEW1-002	05UGMW27-002
	12DBMW48-002	12UGMW31-002		

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

Site: El Toro
Laboratory: Applied P&Ch Lab
Method: CLP

TABLE 8-3: METALS RESULTS (ug/L)
NOVEMBER-DECEMBER 1996 GROUNDWATER SAMPLING

Sample Number	05DBMW41-002		05DGMW67-002		05NEW1-002		05UGMW27-002		12DBMW48-002		12UGMW31-002		CRDL	IDL
SDG	964436		964436		964436		964436		964436		964436			
Sample Type														
Analysis Type	METALS		METALS		METALS		METALS		METALS		METALS			
Date Sampled	13-Nov-96		13-Nov-96		13-Nov-96		13-Nov-96		13-Nov-96		13-Nov-96			
Date Analyzed	19-Nov-96		19-Nov-96		19-Nov-96		19-Nov-96		19-Nov-96		19-Nov-96			
Dilution Factor	1		1		1		1		1		1			
Aluminum	200	U	244		29	U	18	U	13	U	200	U	200	10.1
Antimony	60	U	3.1	U	60	U	60	U	60	U	60	U	60	2.3
Arsenic	4	J	4.4	J	2.4	J	5.8	J	10	U	2.1	U	10	2.1
Barium	66	J	86.4	J	136	J	62.7	J	32.2	J	38.3	J	200	2.3
Beryllium	5	U	5	U	5	U	5	U	5	U	5	U	5	0.3
Cadmium	5	U	5	U	5	U	5	U	5	U	5	U	5	0.6
Calcium	123000		160000		126000		136000		264000		162000		5000	24.2
Chromium	2.7	U	1.2	U	4.8	U	10	U	16.9		3.9	U	10	1.1
Cobalt	50	U	1.6	U	3.4	U	50	U	2.1	U	50	U	50	1.2
Copper	3	U	25	U	2.6	U	2.4	U	25	U	25	U	25	1.7
Iron	100	U	69.5	U	39.7	U	36.8	U	223		100	U	100	19.3
Lead	0.98	U	1.6	U	0.7	U	1.7	U	2	U	5	U	5	0.9
Magnesium	33200	J	42400	J	33500	J	34800	J	62700	J	42700	J	5000	45.7
Manganese	1.8	J	4.9	J	73.6		15	U	14.6	J	15	U	15	1.5
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	0.2
Nickel	16.5	J	21.4	J	444		2.4	J	294		15.1	J	40	1.8
Potassium	3170	J	2500	J	3600	J	2290	J	2830	J	2450	J	5000	47.1
Selenium	4.8	J	2.9	J	6.4		4.3	J	30.2		12.1		5	2.6
Silver	10	U	10	U	10	U	10	U	10	U	10	U	10	0.9
Sodium	141000		115000		103000		121000		96300		74000		5000	378.9
Thallium	10	U	10	U	10	U	10	U	10	U	10	U	10	1.7
Vanadium	11.2	J	9.5	J	9.4	J	12.3	J	13.3	J	15.9	J	50	1.3
Zinc	5.8	J	6.3	J	6.7	J	6.6	J	16.4	J	10.2	J	20	3.2

CRDL: Contract Required Detection Limit
IDL: Instrument Detection Limit
U: The material was analyzed for, but was not detected above the level of the associated CRDL.
J: The material was positively identified: the associated value is an estimated quantity.

GROUNDWATER MONITORING REPORT
NOVEMBER-DECEMBER 1996 SAMPLING ROUND

Volume II

GROUNDWATER MONITORING PROGRAM
FOR
MARINE CORPS AIR STATION
EL TORO, CALIFORNIA

Contract No. N68711-95-D-7530
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Prepared for:

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CDM FEDERAL PROGRAMS CORPORATION
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San Diego, California 92111

February 27, 1997

Appendix E

APPENDIX E

APCL LABORATORY ANALYTICAL REPORTS, NOVEMBER-DECEMBER 1996 SAMPLING ROUND

TABLE E-1
INDEX OF LABORATORY ANALYTICAL REPORTS
November-December 1996 Sampling Round -- MCAS El Toro Groundwater Monitoring Program

LABORATORY REPORT		WET SAMPLE ANALYSES		FIELD QC ANLYSES		LAB QC ANALYSES	
Report No.	Report Date	Well/Station No.	Analyses	Field QC Sample (Sample ID)	Analyses	Sample ID	Analysis
96-4332	11/20/96	02DGMW59	V, SV, GC, M, T, H, P			Trip Blank	V
			R, S, A, B 96-7325 (Truesdail)				
		02DGMW60	V, SV, GC, M, T, H, P				
			R, S, A, B 96-7325 (Truesdail)				
		02DGMW61	V, SV, GC, M, T, H, P				
			R, S, A, B 96-7325 (Truesdail)				
		02NEW1	V, SV, M, GC, T, H, P,				
		18BGMW01D	V, SV, GC, TPH				
			R, S, A, B 96-7325 (Truesdail)				
		18BGMW01E	V, SV, GC, P				
		18BGMW02E	V, SV, GC, TPH				
		18BGMW19A	V, GC				
		18BGMW19B	V, SV, GC, TPH				
		18BGMW19C	V, SV, GC, P				
		18BGMW19D	V, GC				
96-4351	11/19/96	18BGMW01C	V, SV, GC, TPH			Trip Blank	V
		18BGMW02C	V, GC, TPH				
		18DW135	V, GC, T				
			R, S 97-1276 (Truesdail)				
		18DW250	V, SV, GC, TPH				
		18DW450	V, SV, GC, TPH				
96-4389	11/21/96	02NEW06	V, SV, GC, M, T			Trip Blank	V
			R, S, A, B 97-1276 (Truesdail)				
		18BGMW01B	V, SV, GC, TPH				
		18BGMW02D	V, SV, GC				
		18BGMW03A	V, GC				
		18BGMW03B	V, SV, GC, TPH				
		18BGMW03C	V, SV, GC				
		18DW350	V, SV, GC, TPH				
		18DW540	V, SV, GC				
		18MCAS03-1*	V, GC				
		18MCAS03-2*	V, SV, GC				
		18MCAS03-3*	V, SV, GC				
		18MCAS03-4*	V, GC				
		18MCAS03-5*	V, GC				
		18MCAS03-6*	V, GC				
96-4392		18BGMP06A	V, GC			Trip Blank	V
		18BGMP06B	V, GC				
		18BGMP06C	V, GC				
		18BGMP06D	V, GC				
		18BGMP06E	V, GC				
		18BGMW01A	V, SV, GC, TPH				
		18BGMW15	V, SV, GC				
		18BGMW17	V, GC				
		18PS7	V, SV, GC, P				
		18RW1	V, SV, GC, H				
		18RW2	V, SV, GC				

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November-December 1996 Sampling Round -- MCAS El Toro Groundwater Monitoring Program

LABORATORY REPORT		WET SAMPLE ANALYSES		FIELD QC ANLYSES		LAB QC ANALYSES	
Report No.	Report Date	Well/Station No.	Analyses	Field QC Sample (Sample ID)	Analyses	Sample ID	Analysis
96-4393	11/21/96	02NEW12	V, GC, M, T, P, H			Trip Blank	V
			R, S, A, B 97-1276 (Truesdail)				
		18BGMW05C	V, SV, GC				
		02NEW03	V, SV, GC, M, T, P, H				
			R, S, A, B 97-1276 (Truesdail)				
		02NEW08A	V, SV, GC, M, T, P, H				
			R, S, A, B 97-1276 (Truesdail)				
		18BGMP08A	V, GC				
		18BGMP08C	V, GC				
		18BGMP08D	V, GC				
		18BGMP08E	V, GC				
		18BGMW05B	V, GC				
96-4408	11/27/96	18BGMW4A	V, GC			Trip Blank	V
		18PS5	V, SV, GC, TPH				
96-4419	11/25/96	02UGMW25	V, SV, GC, M, T, P, H			Trip Blank	V
			R, S, A, B 97-1119 (Truesdail)				
		03DGMW65X	V, SV, GC, M, T, P, H				
			R, S, A, B 97-1119 (Truesdail)				
		04DBMW40	V, SV, GC, M, T, P, H				
			R, S, A, B 97-1119 (Truesdail)				
		04DGMW66	V, SV, GC, M, T, P, H				
			R, S, A, B 97-1119 (Truesdail)				
		18MCAS07-1*	V, GC				
		18MCAS07-2*	V, GC				
		18MCAS07-3*	V, GC				
		18MCAS07-4*	V, GC				
		18MCAS07-5*	V, GC	Rinsate (502)	V, SV, GC		
		21UGMW37	V, GC				
96-4427	11/26/96	02NEW11	V, SV, GC, M, T, H, P	Duplicate (302)	V, SV, GC, M, T, H, P, TPH	Trip Blank	V
			R, S, A, B 96-4751 (Truesdail)				
		03DBMW39	V, SV, GC, M, T, H, P				
			R, S, A, B 96-4751 (Truesdail)				
		03DGMW64	V, SV, GC, M, T, H, P, TPH	Duplicate (302)	V, SV, GC, M, T, H, P, TPH		
			R, S, A, B 96-4751 (Truesdail)	Field Blank (702)	V, SV, GC, M, T, H, P, TPH		
		08DGMW74	V, GC, M, T				
			R, S 96-4751 (Truesdail)				
		18MCAS02-3*	V, GC				
		18MCAS02-4*	V, GC				
		18MCAS02-7*	V, GC				
		18MCAS02-1*	V, GC				
		18MCAS02-2*	V, GC				
		18MCAS02-5*	V, GC				
		18MCAS02-6*	V, GC				
		18MCAS02-8*	V, GC				
96-4436	11/26/96	05DBMW41	V, SV, GC, M, T, H, P			Trip Blank	V
			R, S A, B 96-4565 (Truesdail)				
		05DGMW67	V, SV, GC, M, T, H, P				
			R, S A, B 96-4565 (Truesdail)				

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LABORATORY REPORT		WET SAMPLE ANALYSES		FIELD QC ANLYSES		LAB QC ANALYSES	
Report No.	Report Date	Well/Station No.	Analyses	Field QC Sample (Sample ID)	Analyses	Sample ID	Analysis
		05NEW1	V, SV, GC, M, T, H, P				
			R, S, A, B 96-4751/4565 (Truesdail)				
		05UGMW27	V, SV, GC, M, T, H, P				
			R, S, A, B 96-4565 (Truesdail)				
		12DBMW48	V, GC, M, T				
			R, S 96-4565 (Truesdail)				
		12UGMW31	V, GC, M, T, H				
			R, S 96-4565 (Truesdail)				
		18BGMP09A	V, GC				
		18BGMP09B	V, GC				
		18BGMP09C	V, GC				
		18BGMP09D	V, GC				
		18BGMP09E	V, GC				
		18BGMP09F	V, GC				
96-4437	11/26/96	03UGMW26	V, SV, GC, M, T, H, P	Duplicate (302)	V, SV, GC, M, T, H, P	Trip Blank	V
			R, S, A, B 96-4565 (Truesdail)		R, S, A, B 96-4565 (Truesdail)		
		04UGMW63	V, SV, GC, M, T, H, P, TPH	Duplicate (302)	V, SV, GC, M, T, H, P, TPH		
			R, S, A, B 96-4565 (Truesdail)		R, S, A, B 96-4565 (Truesdail)		
		18BGMW16	V, SV, GC, H, TPH				
		21DBMW56	V, GC				
96-4467	11/26/96	05DGMW68	V, SV, GC, M, T, H, P			Trip Blank	V
			R, S, A, B 96-4565 (Truesdail)				
		07DBMW100	V, GC				
		18BGMW14	V, GC	Duplicate (302)	V, GC		
				(2) DTSC (802)	V		
		18BGMW22	V, SV, GC				
		18BGMW4B (1)	V, SV, GC				
		18BGMW101	V, SV, GC	Duplicate (302)	V, SV, GC		
		18MCAS01-1*	V, GC				
		18MCAS01-2*	V, GC				
		20DBMW55	V, SV, GC, T				
			R, S 96-4565 (Truesdail)				
		20UGMW36	V, GC				
96-4481	12/3/96	01MW201	V, SV, GC, M				
			A, B 96-4565 (Truesdail)				
		09DBMW45	V, GC, T				
			R, S 96-4565 (Truesdail)				
		01DGMW58	V, SV, GC, M				
			A, B 96-4565 (Truesdail)				
		18MCAS01-3*	V, GC				
		18MCAS01-4*	V, GC				
		18MCAS01-5*	V, GC				
		18MCAS01-6*	V, GC				
		18MCAS01-7*	V, GC	Rinsate (502)	V, GC		
96-4493	12/9/96	13DGMW78	V, GC, M, T			(3) Trip Blank	V
			R, S 96-4565 (Truesdail)				
		13DBMW49	V, SV, GC, M, T	Duplicate (302)	V, SV, GC, M, T		
			R, S 96-4565 (Truesdail)		R, S 96-4565 (Truesdail)		

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LABORATORY REPORT		WET SAMPLE ANALYSES		FIELD QC ANLYSES		LAB QC ANALYSES	
Report No.	Report Date	Well/Station No.	Analyses	Field QC Sample (Sample ID)	Analyses	Sample ID	Analysis
		14DBMW50	V, GC, M, T				
			R, S 96-4565 (Truesdail)				
		14DGMW79	V, GC, M, T				
			R, S 96-4565 (Truesdail)				
		18BGMP10A	V, GC				
		18BGMP10B	V, SV, GC				
		18BGMP10C	V, GC				
		18BGMP10D	V, SV, GC				
		18BGMP10E	V, GC				
		18BGMP10F	V, GC				
		18BGMW2A	V, SV, GC, H, TPH				
		18MCAS04	V, SV, GC	Field Blank (702)	V, SV, GC, M, T, H, P, TPH		
					R, S, A, B 96-4565 (Truesdail)		
		18MCAS06	V, SV, GC				
		18MCAS10	V, SV, GC				
		18MCAS09	V, SV, GC	Rinsate (502)	V, SV, GC, H, P, TPH		
96-4504	12/3/96	01DGMW57	V, SV, GC, M			(3) Trip Blank	V
			A, B 96-4577 (Truesdail)				
		01MW101	V, SV, GC, M				
			A, B 96-4577 (Truesdail)				
		01MW102	V, SV, GC, M	Field Blank (702)	V, SV, GC, M, T, H, P, TPH		
			A, B 96-4577 (Truesdail)		R, S, A, B 96-4577 (Truesdail)		
		18BGMW19E	V, GC, P, TPH				
		17DGMW82	V, SV, GC, M, T, H, P				
			R, S, A, B 96-4577 (Truesdail)				
		17NEW1	V, GC, M, H, P				
			A, B 96-4577 (Truesdail)				
		17NEW2	V, SV, GC, M, H, P				
			A, B 96-4577 (Truesdail)				
		18MCAS05A	V, SV, GC	Duplicate (302)	V, SV, GC		
				Rinsate (502)	V, SV, GC, M, T, H, P, TPH		
		18MCAS07-6*	V, GC				
		18MCAS07-7*	V, SV, GC	Rinsate (502)	V, SV, GC		
		18MCAS07-8*	V, SV, GC				
		18MCAS07-9*	V, SV, GC				
		18MCAS08	V, SV, GC				
96-4524	12/9/96	07DBMW43 (2)	V, GC			(2) Trip Blank	V
		07DGMW70	V, GC, TPH	Duplicate (302)	V, GC, TPH		
		07DGMW71	V, GC				
		07DGMW72	V, GC, T				
			R, S 96-4577 (Truesdail)				
		07DGMW91	V, GC, T				
			R, S 96-4577 (Truesdail)				
		18BGMW03E	V, GC, T, TPH				
			R, S 96-4577 (Truesdail)				
		19UGMW35	V, GC, T				
			R, S 96-4577 (Truesdail)				
96-4562	12/9/96	08UGMW29	V, GC, M, P			(2) Trip Blank	V
		16DBMW52	V, GC, M, T				
			R, S 96-4577 (Truesdail)				

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LABORATORY REPORT		WET SAMPLE ANALYSES		FIELD QC ANLYSES		LAB QC ANALYSES	
Report No.	Report Date	Well/Station No.	Analyses	Field QC Sample (Sample ID)	Analyses	Sample ID	Analysis
		16UGMW33	V, GC, M				
		18BGMW12	V, GC, TPH				
		18PS1	V, GC				
		18PS2	V, SV, GC	Rinsate (502)	V, SV, GC		
		18PS6	V, GC	Duplicate (302)	V, GC		
		18PS8	V, SV, GC				
		20DGMW88 (3)	V, SV, GC	Duplicate (302)	V, SV, GC		
96-4571	12/9/96	02NEW2	V, SV, GC, M, T, H, P			Trip Blank	V
			R, S, A, B 96-4577 (Truesdail)				
		18BGMW24	V, GC	Duplicate (302)	V, GC		
		21DGMW90	V, GC				
96-4588	12/9/96	18BGMW01D-002R	Nitrite/Nitrate				
		18BGMW02E-002R	Nitrite/Nitrate				
		02DGMW59-002R	Chromium VI				
		02NEW1-002R	Chromium VI				
		02NEW11-002R	Chromium VI				
96-4603	12/13/96	24NEW5	V, GC, M, T			Trip Blank	V
			R, S 96-4651 (Truesdail)				
		24NEW6	V, GC, M, T				
			R, S 96-4651 (Truesdail)				
96-4605	12/12/96	08DGMW73	V, GC, M, T	Duplicate (302)	V, GC, M, T		
			R, S 96-4651 (Truesdail)	~~Rinsate (502)~~ ~~06~~	R, S 96-4651 (Truesdail)		
		22DBMW47	V, GC, M, T	4603 12/13/96	V, SV, GC, T		
			R, S 96-4651 (Truesdail)		R, S 96-4651 (Truesdail)		
		24NEW1	V, GC, M, T				
			R, S 96-4651 (Truesdail)				
96-4621	12/13/96	19DBMW54	V, GC, T				
			R, S 96-4651 (Truesdail)				
		19DGMW85	V, GC, T				
			R, S 96-4651 (Truesdail)				
		19DGMW86	V, GC	Duplicate (302)	V, GC		
				AC Blank (902)	V, SV, TPH		
		24NEW4	V, GC, M, T				
			R, S 96-4651 (Truesdail)				
		24NEW7	V, GC, M, T	AC Blank (902)	V, SV, TPH		
			R, S 96-4651 (Truesdail)				
		24NEW8	V, GC, M, T				
			R, S 96-4651 (Truesdail)				
96-4636	12/13/96	06UGMW28	V, SV, GC	Duplicate (302)	V, SV, GC	Trip Blank	V
		09DGMW75	V, GC, T	Rinsate (502)	V, GC, T		
			R, S 96-4651 (Truesdail)		R, S 96-4651 (Truesdail)		
		10DGMW77	V, SV, GC, T				
			R, S 96-4651 (Truesdail)				
		15DBMW51	V, SV, GC, M, T				
			R, S 96-4651 (Truesdail)				
		18BGMW05D	V, SV, GC, TPH				

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LABORATORY REPORT		WET SAMPLE ANALYSES		FIELD QC ANLYSES		LAB QC ANALYSES	
Report No.	Report Date	Well/Station No.	Analyses	Field QC Sample (Sample ID)	Analyses	Sample ID	Analysis
96-4656	12/16/96	18BGMW23	V, GC	Duplicate (302)	V, GC	Trip Blank	V
				DTSC (802)	V		
		18PS4	V, GC	Duplicate (302)	V, GC		
				Rinsate (502)	V, GC		
				DTSC (802)	V		
		03DGMW64-002R	M				
		02NEW13	V				
		02NEW14	V				
97-1072	1/21/97	16DGMW81	V, GC, M, T, TPH	AC Blank (902)	V, SV, TPH		
			R, S 97-1119 (Truesdail)				
		18PS3	V, GC				
		02NEW7	V, SV, GC, M, T, H, P				
			R, S, A, B 97-1119 (Truesdail)				
97-1075	1/20/97	18BGMW05A	V, SV, GC, TPH				
		18BGMW18	V, GC, TPH				

EXPLANATION

LAB ANALYSIS ABBREVIATION:

A = Gross Alpha
B = Gross Beta
GC = General Chemistry
H = Chlorinated herbicides (8150 method)
M = Metals (includes Chromium VI) (CLP method)
P = Organochlorine pesticides & PCB (CLP method)
R = Radon
S = Strontium
SV = Semi-Volatiles (CLP method)
T = Treatability Parameters (includes TOC, COD, Phosphate, TSS, Color, Silica)
TPH = Total Petroleum Hydrocarbons (includes Diesel & Gasoline)
V = Volatiles (CLP method)

FIELD QC SAMPLE ABBREVIATION:

AC Blank = Air Contaminant Blank
DTSC = Split sample collected on the request of DTSC
002R = Analysis resampled for expired holding time

* = Port samples at MCAS wells were transposed in the field as follows:

18MCAS01-1* = 18MCAS01-7
18MCAS01-2* = 18MCAS01-6
18MCAS01-3* = 18MCAS01-5
18MCAS01-4* = 18MCAS01-4
18MCAS01-5* = 18MCAS01-3
18MCAS01-6* = 18MCAS01-2
18MCAS01-7* = 18MCAS01-1

18MCAS02-1* = 18MCAS02-8
18MCAS02-2* = 18MCAS02-7
18MCAS02-3* = 18MCAS02-6
18MCAS02-4* = 18MCAS02-5
18MCAS02-5* = 18MCAS02-4
18MCAS02-6* = 18MCAS02-3
18MCAS02-7* = 18MCAS02-2
18MCAS02-8* = 18MCAS02-1

18MCAS03-1* = 18MCAS03-6
18MCAS03-2* = 18MCAS03-5
18MCAS03-3* = 18MCAS03-4
18MCAS03-4* = 18MCAS03-3
18MCAS03-5* = 18MCAS03-2
18MCAS03-6* = 18MCAS03-1

18MCAS07-1* = 18MCAS07-9
18MCAS07-2* = 18MCAS07-8
18MCAS07-3* = 18MCAS07-7
18MCAS07-4* = 18MCAS07-6
18MCAS07-5* = 18MCAS07-5
18MCAS07-6* = 18MCAS07-4
18MCAS07-7* = 18MCAS07-3
18MCAS07-8* = 18MCAS07-2
18MCAS07-9* = 18MCAS07-1

(1) Sample number 18BGMW4B was recorded by APCL as 18BGMW48.
(2) Sample number 07DBMW43 was recorded on the C.O.C. and by APCL as 07DGMW43.
(3) Sample number 20DGMW88 was recorded on the C.O.C. and by APCL as 20DBMW88.

Truesdail Laboratory Results are provided at the end of Appendix E

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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964332
Collected by: Scott Schroeder
Collected on: 11/01-05/96

Received: 11/05/96
Extracted: 11/07/96
Tested: 11/05-19/96
Reported: 11/20/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02DGMW59-002 96-04332-1	02DGMW60-002 96-04332-2	02DGMW61-002 96-04332-3	02NEW1-002 96-04332-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	231	472	300	198
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	231	472	300	198
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	141	122	45.0	48.0
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	11.0	21.0	6.7	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,130	1,050	763	455
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	372	228	231	115
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.	17	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.	2	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	20	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.	7	20	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.	6	N.D.	N.D.
Trichloroethene	CLP-VOC	µg/L	1	0.7J	203	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	CRDL (PQL)	Analysis Result 02DGMW59-002 96-04332-1	02DGMW60-002 96-04332-2	02DGMW61-002 96-04332-3	02NEW1-002 96-04332-4
CLP: Semi-VOC by GC/MS							
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.

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Fluorene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW01D-002 96-04332-5	18BGMW01E-002 96-04332-6	18BGMW02E-002 96-04332-7	18BGMW19A-002 96-04332-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	293	472	177	246
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	293	472	177	246
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	141	147	134	98.0
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	8.1	10.6	9.4	1.7
Solids, Total Dissolved (TDS)	160.1	mg/L	10	896	879	847	859
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	187	56.0	223	247

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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	9	113	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.
1,1-Dichloroethene	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.
1,2-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.	0.6J	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	2	20	N.D.	N.D.
Freon-113 [a]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.	N.D.

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CLP: Semi-VOC by GC/MS							
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	4.3J	3.4J	4.1J	-
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	-
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	-
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	-

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Fluorene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Hexachlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Hexachlorobutadiene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Hexachlorocyclopentadiene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Hexachloroethane	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Indeno(1,2,3-cd)pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Isophorone	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
2-Methylnaphthalene	CLP-SVOC	μg/L	10	4.2J	N.D.	N.D.	-
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
2-Methylphenol (o-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Naphthalene	CLP-SVOC	μg/L	10	46	N.D.	N.D.	-
2-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	-
3-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	-
4-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	-
Nitrobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
2-Nitrophenol	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
4-Nitrophenol	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	-
N-Nitroso-di-n-propylamine	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
N-Nitrosodiphenylamine	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Pentachlorophenol (PCP)	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	-
Phenanthrene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Phenol	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
Pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
1,2,4-Trichlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-
2,4,5-Trichlorophenol	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.	-
2,4,6-Trichlorophenol	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.	-

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW19B-002 96-04332-9	18BGMW19C-002 96-04332-10	18BGMW19D-002 96-04332-11	TB-11-5-96 96-04332-12
Alkalinity	310.1	mg-$CaCO_3$/L	2	242	218	246	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	242	218	246	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	87.0	232	201	-
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	4.2	21.0	85.0	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	728	1,230	2,230	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	173	416	817	-

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Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW19B-002 96-04332-9	18BGMW19C-002 96-04332-10	18BGMW19D-002 96-04332-11	TB-11-5-96 96-04332-12
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.
1,1-Dichloroethene	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.
1,2-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.	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.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW19B-002 96-04332-9	18BGMW19C-002 96-04332-10	18BGMW19D-002 96-04332-11	TB-11-5-96 96-04332-12
CLP: Semi-VOC by GC/MS							
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	3.7J	N.D.	-	-
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	-	-
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	-	-
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	-	-

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Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW19B-002 96-04332-9	18BGMW19C-002 96-04332-10	18BGMW19D-002 96-04332-11	TB-11-5-96 96-04332-12
Fluorene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Hexachlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Hexachlorobutadiene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Hexachlorocyclopentadiene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Hexachloroethane	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Indeno(1,2,3-cd)pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Isophorone	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
2-Methylnaphthalene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
2-Methylphenol (o-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Naphthalene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
2-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	-	-
3-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	-	-
4-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	-	-
Nitrobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
2-Nitrophenol	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
4-Nitrophenol	CLP-SVOC	μg/L	25	N.D.	N.D.	-	-
N-Nitroso-di-n-propylamine	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
N-Nitrosodiphenylamine	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Pentachlorophenol (PCP)	CLP-SVOC	μg/L	25	N.D.	N.D.	-	-
Phenanthrene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Phenol	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
Pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
1,2,4-Trichlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-
2,4,5-Trichlorophenol	CLP-SVOC	μg/L	25	N.D.	N.D.	-	-
2,4,6-Trichlorophenol	CLP-SVOC	μg/L	10	N.D.	N.D.	-	-

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02DGMW59-002 96-04332-1	02DGMW60-002 96-04332-2	02DGMW61-002 96-04332-3	02NEW1-002 96-04332-4
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.	N.D.	N.D.	N.D.
Color, for drinking water	110.2	Color Unit	1	N.D.	N.D.	N.D.	1
Phosphorus, Orthophosphate	300.0	mg/L	1	N.D.	N.D.	N.D.	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	26	26	28	26
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	N.D.	N.D.	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	5	1	3	1

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Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02DGMW59-002 96-04332-1	02DGMW60-002 96-04332-2	02DGMW61-002 96-04332-3	02NEW1-002 96-04332-4
CLP Metals (Full CLP 23 metals)							
Aluminum	CLP-Metal	µg/L	200	40.7J	45.3J	53.2J	46.7J
Antimony	CLP-Metal	µg/L	60	N.D.	N.D.	N.D.	N.D.
Arsenic	CLP-Metal	µg/L	10	2.8J	2.0J	3.2J	3.5J
Barium	CLP-Metal	µg/L	200	103J	79.7J	49.5J	11.2J
Beryllium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.	N.D.
Calcium	CLP-Metal	µg/L	5000	180,000	94,000	131,000	45,000
Chromium	CLP-Metal	µg/L	10	2.1J	4.1J	4.1J	2.5J
Cobalt	CLP-Metal	µg/L	50	N.D.	N.D.	N.D.	N.D.
Copper	CLP-Metal	µg/L	25	5.6J	3.6J	3.4J	3.3J
Iron	CLP-Metal	µg/L	100	30.3J	24.7J	N.D.	38.7J
Lead	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.	2J
Magnesium	CLP-Metal	µg/L	5000	43,000	88,000	29,000	33,000
Manganese	CLP-Metal	µg/L	15	85	3.1J	3.0J	56
Mercury	CLP-Metal	µg/L	0.2	N.D.	N.D.	N.D.	N.D.
Nickel	CLP-Metal	µg/L	40	16J	N.D.	N.D.	6.2J
Potassium	CLP-Metal	µg/L	5000	2180J	8,880	3870J	3940J
Selenium	CLP-Metal	µg/L	5	4J	10	34	N.D.
Silver	CLP-Metal	µg/L	10	N.D.	N.D.	N.D.	N.D.
Sodium	CLP-Metal	µg/L	5000	102,000	121,000	62,000	64,000
Thallium	CLP-Metal	µg/L	10	3.1J	1.3J	1.3J	1.6J
Vanadium	CLP-Metal	µg/L	50	8.3J	4.9J	N.D.	N.D.
Zinc	CLP-Metal	µg/L	20	12J	7.2J	8.6J	8.7J
Chromium (VI)	7196	mg/L	0.002	N.D.	N.D.	N.D.	N.D.
CLP: Organochlorine pesticides & PCB							
Aldrin	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Heptachlor	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.	N.D.	N.D.	N.D.
Toxaphene	CLP-Pest	µg/L	5.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02DGMW59-002 96-04332-1	02DGMW60-002 96-04332-2	02DGMW61-002 96-04332-3	02NEW1-002 96-04332-4
Chlorinated herbicides							
2,4-D	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
2,4-DB	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Dalapon (dichloroacetic acid)	8150	µg/L	1	N.D.	N.D.	N.D.	N.D.
Dicamba	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Dichloroprop	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Dinoseb (DNBP)	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
2,4,5-T	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
2,4,5-TP (Silvex)	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	PQL	Analysis Result 18BGMW01D-002 96-04332-5	18BGMW02E-002 96-04332-7	18BGMW19B-002 96-04332-9
TPH: Gasoline	M8015	mg/L	0.05	0.12	N.D.	N.D.
TPH: Diesel	M8015	mg/L	0.25	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMW01E-002 96-04332-6	18BGMW19C-002 96-04332-10
CLP: Organochlorine pesticides & PCB					
Aldrin	CLP-Pest	µg/L	0.050	N.D.	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	N.D.

Applied P & Ch Laboratory
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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMW01E-002 96-04332-6	Analysis Result 18BGMW19C-002 96-04332-10
Endosulfan sulfate	CLP-Pest	μg/L	0.10	N.D.	N.D.
Endrin	CLP-Pest	μg/L	0.10	N.D.	N.D.
Endrin aldehyde	CLP-Pest	μg/L	0.10	N.D.	N.D.
Endrin ketone	CLP-Pest	μg/L	0.10	N.D.	N.D.
Heptachlor	CLP-Pest	μg/L	0.050	N.D.	N.D.
Heptachlor epoxide	CLP-Pest	μg/L	0.050	N.D.	N.D.
Methoxychlor	CLP-Pest	μg/L	0.50	N.D.	N.D.
Toxaphene	CLP-Pest	μg/L	5.0	N.D.	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	μg/L	1.0	N.D.	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	μg/L	2.0	N.D.	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	μg/L	1.0	N.D.	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	μg/L	1.0	N.D.	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	μg/L	1.0	N.D.	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	μg/L	1.0	N.D.	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	μg/L	1.0	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

- REFER TO PREVIOUSLY SENT PROJECT SPECIFIC DETECTION LIMITS
- SAMPLES FOR METALS HAVE BEEN PROPERLY FILTERED AND PRESERVED IN FIELD. NO ADDITIONAL LAB FILTERING REQUIRED
- NFESC QC LEVEL D FOR ALL SAMPLES

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CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 62D6-009

PROJECT NAME: MCAS EL TORO GWM

SAMPLERS: (Signature) Scott Schwalder / Scot Muth

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	SEMI-VOC (CLP)	METALS (FILTERED)-CLP	GENERAL CHEM*	TPH - GAS (M8015)	TPH - DIESEL (M8015)	PHOSPHATE, TSS, COLOR, SILICA	HERBICIDES - 8150B	PESTICIDES (CLP)	COD - (410.4)	TOC (415.1)	CHROME VI (7196)	REMARKS	PRESERVATIVE USED
18BGMW01D-002	11-1-96	1430		✓	H_2O		7	2	1		1	2	1								
02NEW1-002	11-4-96	1625		✓	H_2O		11	2	1	1	1			1	1	1	1	1	1	✓	PR
18BGMW19A-002	11-4-96	1247		✓	H_2O		3	2			1										
18BGMW01E-002	11-1-96	1555		✓	H_2O		5	2	1		1					1					
18BGMW02E-002	11-1-96	1730		✓	H_2O		7	2	1		1	2	1								
18BGMW19B-002	11-4-96	1500		✓	H_2O		7	2	1		1	2	1								
18BGMW19D-002	11-4-96	1635		✓	H_2O		3	2			1										
02DGMW61-002	11-4-96	1735		✓	H_2O		11	2	1	1	1			1	1	1	1	1	1	✓	PR
02DGMW60-002	11-4-96	1505		✓	H_2O		11	2	1	1	1			1	1	1	1	1	1	✓	PR
02DGMW59-002	11-4-96	1315		✓	H_2O		11	2	1	1	1			1	1	1	1	1	1	✓	PR
18BGMW19C-002	11-5-96	955		✓	H_2O		5	2	1		1					1					
TB-11-5-96	11-5-96						1	✓													

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russell	11/5/96 1:44				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	11/5/96 1:44				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER / 3 COOLERS				* GEN CHEM INCLUDES NITRATE/NITRITE-N, CHLORIDE, SULFATE, CARBONATE, bi-CARBONATE AND ALKALINITY, 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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964351
Collected by: Scott Schroeder
Collected on: 11/05/96

Received: 11/06/96
Extracted: 11/07/96
Tested: 11/07-19/96
Reported: 11/19/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW01C-002 96-04351-1	18BGMW02C-002 96-04351-2	18DW135-002 96-04351-3
Alkalinity	310.1	mg-$CaCO_3$/L	2	242	226	170
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	242	226	170
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	88.0	77.0	404
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	22.0	2.1	28.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	776	604	2,330
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	135	145	1,040
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.	19
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.	2
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.
1,1-Dichloroethene	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.
1,2-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	11	2	1J
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.	18
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 18DW250-002 96-04351-4	18DW450-002 96-04351-5	TB-11-6-96 96-04351-6
Alkalinity	310.1	mg-$CaCO_3$/L	2	205	259	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	205	259	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	135	83.0	-
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	8.2	9.4	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	806	726	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	163	171	-
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	11	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.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	1	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	1	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.	2	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.	5	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 18DW135-002 96-04351-3
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.
Color, for drinking water	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	47
Solids, Total Suspended (TSS)	160.2	mg/L	4	89
Carbon, Total Organic (TOC)	415.1	mg/L	1	2

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW01C-002 96-04351-1	18BGMW02C-002 96-04351-2	18DW250-002 96-04351-4	18DW450-002 96-04351-5
TPH: Gasoline	M8015	mg/L	0.05	N.D.	N.D.	N.D.	N.D.
TPH: Diesel	M8015	mg/L	0.25	N.D.	N.D.	N.D.	N.D.
CLP: Semi-VOC by GC/MS							
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW01C-002 96-04351-1	18BGMW02C-002 96-04351-2	18DW250-002 96-04351-4	18DW450-002 96-04351-5
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	-	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	-	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	-	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	-	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	-	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW01C-002 96-04351-1	18BGMW02C-002 96-04351-2	18DW250-002 96-04351-4	18DW450-002 96-04351-5
1,2,4-Trichlorobenzene	CLP-SVOC	μg/L	10	N.D.	-	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	μg/L	25	N.D.	-	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	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

435 1

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6202-009

PROJECT NAME: MCAS EL TORO GWM

SAMPLERS: (Signature) Scott Schwab

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOCs (CLP)	SVOCs (CLP)	TPH DIESEL (M8015)	TPH GAS (M8015)	TOC (415.1)	GEN CHEM	PHOSPHATE, COLOR, TSS, SILICA	COD, AMMONIA, NITROGEN	REMARKS	PRESERVATIVE USED
18DW135-002	11-5-96	1540					6	2				1	1	1	1		
18BGMW02C-002	11-5-96	1510					6	2		1	2		1			REFER TO PREVIOUS SENT	
18BGMW01C-002	11-5-96	1035					7	2	1	1	2		1			PROJECT SPECIFIC DETECTION	
18DW250-002	11-5-96	1230					7	2	1	1	2		1			LIMITS	
18DW450-002	11-5-96	1415					7	2	1	1	2		1				
TB-11-6-96	11-6-96						1	1								NFESC QC LEVEL D	
																FOR ALL SAMPLES	

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russell	11-6-96				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	11/6/96 2:00				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER / 1 COOLERS				APCL LAB (909) 590-1828 GEN CHEM INCLUDES: NITRATE/NITRITE-N, CHLORIDE SULFATE, CARBONATE, bi-CARBONATE ALKALINITY, 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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964389
Collected by: Scott Schroeder
Collected on: 11/06-07/96

Received: 11/07/96
Extracted: 11/08-11/96
Tested: 11/07-18/96
Reported: 11/21/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW06-002 96-04389-1	18BGMW01B-002 96-04389-2	18BGMW02D-002 96-04389-3	18BGMW03A-002 96-04389-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	313	216	173	183
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	313	216	173	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	109	111	103	114
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	11.0	1.4	2.7	16.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	951	675	664	680
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	258	187	171	131
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.
1,1-Dichloroethene	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.
1,2-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	0.9J	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	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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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW03B-002 96-04389-5	18BGMW03C-002 96-04389-6	18DW350-002 96-04389-7	18DW540-002 96-04389-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	177	164	233	233
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	177	164	233	233
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	113	127	73.0	86.0
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	7.7	9.5	2.8	8.7
Solids, Total Dissolved (TDS)	160.1	mg/L	10	607	616	624	690
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	96.0	105	160	162
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.
1,1-Dichloroethene	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.
1,2-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.	1
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.	3
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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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS03-1-002 96-04389-9	18MCAS03-2-002 96-04389-10	18MCAS03-3-002 96-04389-11	18MCAS03-4-002 96-04389-12
Alkalinity	310.1	mg-$CaCO_3$/L	2	43	244	203	164
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	43	244	203	164
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	199	79.0	126	220
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	0.1	1.7	8.4	23.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	738	631	680	843
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	213	164	123	97.0
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.	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.
1,1-Dichloroethene	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.
1,2-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	1	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.	1	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	CRDL (PQL)	Analysis Result 18MCAS03-5-002 96-04389-13	18MCAS03-6-002 96-04389-14	TB-11-7-96 96-04389-15
Alkalinity	310.1	mg-$CaCO_3$/L	2	179	114	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	179	114	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	348	233	-
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	21.0	23.0	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,550	1,940	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	397	917	-
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.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	4	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	2	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	115	5	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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Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW06-002 96-04389-1
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.
Color	110.2	Color Unit	1	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	< 0.4
Silica (SiO_2) dissolved	370.1	mg/L	1	47
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	3
CLP Metals (Full CLP 23 metals)				
Aluminum	CLP-Metal	μg/L	200	16.3J
Antimony	CLP-Metal	μg/L	60	N.D.
Arsenic	CLP-Metal	μg/L	10	N.D.
Barium	CLP-Metal	μg/L	200	56.8J
Beryllium	CLP-Metal	μg/L	5	N.D.
Cadmium	CLP-Metal	μg/L	5	N.D.
Calcium	CLP-Metal	μg/L	5000	149,000
Chromium	CLP-Metal	μg/L	10	3.8J
Cobalt	CLP-Metal	μg/L	50	N.D.
Copper	CLP-Metal	μg/L	25	4.2J
Iron	CLP-Metal	μg/L	100	31.8J
Lead	CLP-Metal	μg/L	5	N.D.
Magnesium	CLP-Metal	μg/L	5000	41,000
Manganese	CLP-Metal	μg/L	15	5.0J
Mercury	CLP-Metal	μg/L	0.2	N.D.
Nickel	CLP-Metal	μg/L	40	9.4J
Potassium	CLP-Metal	μg/L	5000	1950J
Selenium	CLP-Metal	μg/L	5	7
Silver	CLP-Metal	μg/L	10	N.D.
Sodium	CLP-Metal	μg/L	5000	85,000
Thallium	CLP-Metal	μg/L	10	N.D.
Vanadium	CLP-Metal	μg/L	50	6.6J
Zinc	CLP-Metal	μg/L	20	6.7J
Chromium (VI)	7196	mg/L	0.002	0.004

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW06-002 96-04389-1
CLP: Semi-VOC by GC/MS				
Acenaphthene	CLP-SVOC	µg/L	10	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.

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Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW06-002 96-04389-1
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.
CLP: Organochlorine pesticides & PCB				
Aldrin	CLP-Pest	µg/L	0.050	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.
Endrin	CLP-Pest	µg/L	0.10	N.D.
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.
Heptachlor	CLP-Pest	µg/L	0.050	N.D.
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.
Toxaphene	CLP-Pest	µg/L	5.0	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	N.D.

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Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW06-002 96-04389-1
Chlorinated herbicides				
2,4-D	8150	µg/L	0.5	N.D.
2,4-DB	8150	µg/L	0.5	N.D.
Dalapon (dichloroacetic acid)	8150	µg/L	1	N.D.
Dicamba	8150	µg/L	0.5	N.D.
Dichloroprop	8150	µg/L	0.5	N.D.
Dinoseb (DNBP)	8150	µg/L	0.5	N.D.
2,4,5-T	8150	µg/L	0.5	N.D.
2,4,5-TP (Silvex)	8150	µg/L	0.5	N.D.

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW01B-002 96-04389-2	18BGMW03B-002 96-04389-5	18DW350-002 96-04389-7
TPH: Gasoline	M8015	mg/L	0.05	N.D.	N.D.	N.D.
TPH: Diesel	M8015	mg/L	0.25	N.D.	N.D.	N.D.
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.

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Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW01B-002 96-04389-2	18BGMW03B-002 96-04389-5	18DW350-002 96-04389-7
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMW02D-002 96-04389-3	18BGMW03C-002 96-04389-6
CLP: Semi-VOC by GC/MS					
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMW02D-002 96-04389-3	18BGMW03C-002 96-04389-6
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL	Analysis Result 18DW540-002 96-04389-8	18MCAS03-2-002 96-04389-10	18MCAS03-3-002 96-04389-11
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18DW540-002 96-04389-8	18MCAS03-2-002 96-04389-10	18MCAS03-3-002 96-04389-11
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18DW540-002 96-04389-8	18MCAS03-2-002 96-04389-10	18MCAS03-3-002 96-04389-11
1,2,4-Trichlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	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

- TO PREVIOUS SENT PROJECT SPECIFIC DETECTION LIMITS
- FOR METALS HAVE BEEN PROPERLY FILTERED AND PRESERVED IN FIELD
- NTESC QC LEVEL D FOR ALL SAMPLES
* GEN CHEM INCLUDES NITRATE/NITRITE-N, CHLORIDE, SULFATE, CARBONATE, BI-CARBONATE ALKALINITY & TDS

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 62Clo-009

PROJECT NAME: MCAS EL TORO - GWM

SAMPLERS: (Signature) [signature]

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	SEMI VOC (CLP)	GEN CHEM *	TPH DIESEL (M8015)	TPH GAS (M8015)	METALS (Filtered) (CLP)	COD (410.4)	Pesticides (CLP)	CHROME VI	HERBICIDES (8150B)	TOC (415.1)	PHOSPHATE/TSS/Silica/Color	REMARKS	PRESERVATIVE USED
18DW540-002	11-6-96	1115		✓	H_2O		4	2	1	1											
18DW350-002	11-6-96	1335		✓			7	2	1	1	1	2									
18BGMW03A-002	11-7-96	950		✓			3	2		1											
18BGMW03B-002	11-7-96	11:25		✓			7	2	1	1	1	2									
18BGMW03C-002	11-6-96	1555		✓			4	2	1	1											
18BGMW02D-002	11-6-96	0950		✓			4	2	1	1											
18MCAS03-2-002	11-6-96	12:30		✓			4	2	1	1											
18MCAS03-3-002	11-6-96	1410		✓			4	2	1	1											
18BGMW01B-002	11-6-96	1400		✓			7	2	1	1	1	2									
18MCAS03-6-002	11-6-96	1705		✓			3	2		1											
18MCAS03-4-002	11-6-96	1520		✓			3	2		1											
18MCAS03-5-002	11-6-96	1615		✓			3	2		1											
18MCAS03-1-002	11-6-96	11:00		✓			3	2		1											
02NEW06-002	11-7-96	11:25		✓	✓		11	2	1	1			1	1	1	1	1	1	1		
TB-11-7-96	11-7-96	—					1	1													

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[signature]	11/7/96 1410				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[signature]	11/7/96 17:10 pm				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER - 2 COOLERS				APCL LAB 909-590-1828	

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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964392
Collected by: Scott Schroeder
Collected on: 11/08/96

Received: 11/08/96
Extracted: 11/08-11/96
Tested: 11/09-18/96
Reported: 11/21/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMP06A-002 96-04392-1	18BGMP06B-002 96-04392-2	18BGMP06C-002 96-04392-3	18BGMP06D-002 96-04392-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	226	252	218	226
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	226	252	218	226
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	77.0	69.0	83.0	317
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	2.0	0.7	N.D.	18.0 [a]
Solids, Total Dissolved (TDS)	160.1	mg/L	10	657	711	649	1,380
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	157	176	153	377
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.
1,1-Dichloroethene	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.
1,2-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.	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 [b]	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 18BGMP06E-002 96-04392-5	18BGMW01A-002 96-04392-6	18BGMW15-002 96-04392-7	18BGMW17-002 96-04392-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	274	147	257	226
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	274	147	257	226
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	267	379	207	124
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	28.0	N.D.	17.0	24.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,870	1,220	2,510	892
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	683	303	1,290	210
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.	18	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.	0.7J	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.
1,1-Dichloroethene	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.
1,2-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	N.D.	N.D.	N.D.	N.D.
Freon-113 [b]	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 18PS7-002 96-04392-9	18RW1-002 96-04392-10	18RW2-002 96-04392-11	TB-11-8a-96 96-04392-12
Alkalinity	310.1	mg-$CaCO_3$/L	2	246	218	185	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	246	218	185	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	148	163	132	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	40.0	4.7	17.0	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	969	849	691	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	165	193	132	-
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.
1,1-Dichloroethene	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.
1,2-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.	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 [b]	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 18BGMW01A-002 96-04392-6
TPH: Gasoline	M8015	mg/L	0.05	0.07
TPH: Diesel	M8015	mg/L	0.25	0.39 (c)
CLP: Semi-VOC by GC/MS				
Acenaphthene	CLP-SVOC	µg/L	10	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW01A-002 96-04392-6
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	24
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW15-002 96-04392-7	18PS7-002 96-04392-9	18RW1-002 96-04392-10	18RW2-002 96-04392-11
CLP: Semi-VOC by GC/MS							
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	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 18BGMW15-002 96-04392-7	18PS7-002 96-04392-9	18RW1-002 96-04392-10	18RW2-002 96-04392-11
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	16	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	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 18BGMW15-002 96-04392-7	18PS7-002 96-04392-9	18RW1-002 96-04392-10	18RW2-002 96-04392-11
CLP: Organochlorine pesticides & PCB							
Aldrin	CLP-Pest	µg/L	0.050	-	N.D.	-	-
beta-BHC	CLP-Pest	µg/L	0.050	-	N.D.	-	-
alpha-BHC	CLP-Pest	µg/L	0.050	-	N.D.	-	-
delta-BHC	CLP-Pest	µg/L	0.050	-	N.D.	-	-
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	-	N.D.	-	-
alpha-Chlordane	CLP-Pest	µg/L	0.050	-	N.D.	-	-
gamma-Chlordane	CLP-Pest	µg/L	0.050	-	N.D.	-	-
4,4'-DDD	CLP-Pest	µg/L	0.10	-	N.D.	-	-
4,4'-DDE	CLP-Pest	µg/L	0.10	-	N.D.	-	-
4,4'-DDT	CLP-Pest	µg/L	0.10	-	N.D.	-	-
Dieldrin	CLP-Pest	µg/L	0.10	-	N.D.	-	-
Endosulfan I	CLP-Pest	µg/L	0.050	-	N.D.	-	-
Endosulfan II	CLP-Pest	µg/L	0.10	-	N.D.	-	-
Endosulfan sulfate	CLP-Pest	µg/L	0.10	-	N.D.	-	-
Endrin	CLP-Pest	µg/L	0.10	-	N.D.	-	-
Endrin aldehyde	CLP-Pest	µg/L	0.10	-	N.D.	-	-
Endrin ketone	CLP-Pest	µg/L	0.10	-	N.D.	-	-
Heptachlor	CLP-Pest	µg/L	0.050	-	N.D.	-	-
Heptachlor epoxide	CLP-Pest	µg/L	0.050	-	N.D.	-	-
Methoxychlor	CLP-Pest	µg/L	0.50	-	N.D.	-	-
Toxaphene	CLP-Pest	µg/L	5.0	-	N.D.	-	-
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	-	N.D.	-	-
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	-	N.D.	-	-
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	-	N.D.	-	-
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	-	N.D.	-	-
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	-	N.D.	-	-
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	-	N.D.	-	-
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	-	N.D.	-	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW15-002 96-04392-7	18PS7-002 96-04392-9	18RW1-002 96-04392-10	18RW2-002 96-04392-11
Chlorinated herbicides							
2,4-D	8150	μg/L	0.5	-	-	N.D.	-
2,4-DB	8150	μg/L	0.5	-	-	N.D.	-
Dalapon (dichloroacetic acid)	8150	μg/L	1	-	-	N.D.	-
Dicamba	8150	μg/L	0.5	-	-	N.D.	-
Dichloroprop	8150	μg/L	0.5	-	-	N.D.	-
Dinoseb (DNBP)	8150	μg/L	0.5	-	-	N.D.	-
2,4,5-T	8150	μg/L	0.5	-	-	N.D.	-
2,4,5-TP (Silvex)	8150	μg/L	0.5	-	-	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) Sample contains 0.81 mg/L of Nitrite per 354.1.

(b) Additional compound per client's request.

(c) Unknown hydrocarbons in Jet Fuel/Diesel range.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6266-009

PROJECT NAME: MCAS El Toro - CKUM

SAMPLERS: (Signature)

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	General Chem.	SVOC (CLP)	Metals - Filtered (CLP)	Phosphate, TSS, color, silica	TPH-GCS	TPH-DRO	Chlorine	Pesticides (CLP)	Herbicides (8150)	REMARKS	PRESERVATIVE USED
18RW1-002	11/8/96	0920		✓	H_2O		5	2	1	1							1		
18RW2-002	11/8/96	1225					4	2	1	1								Refer to previously	
18PS7-002	11/8/96	1350					5	2	1	1					1			sent project specific	
18BGMP06E-002	11/8/96	1345					3	2	1									detection limits	
18BGMP06D-002	11/8/96	1240					3	2	1										
18BGMP06B-002	11/8/96	1100					3	2	1									NFESC GC cert ID	
18BGMP06A-002	11/8/96	1015					3	2	1									for all samples	
18BGMP06C-002	11/8/96	1145					3	2	1										
18BGMW01A-002	11/8/96	0930					7	2	1	1			2	1				General chem	
18BGMW17-002	11/8/96	1225					3	2	1									includes nitrate/	
18BGMW15-002	11/8/96	1430		✓			4	2	1	1								nitrite as N, chloride,	
TB-11-8a-96	11/8/96				✓		1	1										sulfate, carbonate,	
																		bicarbonate, alkalinity,	
																		TDS	

CDM Federal

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Scott Schwab	11/8/96 1505 p.m.				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Caitlin Dragula	11/8/96 15:05 p.m.				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
AFCL Cooler / 1 cooler				AFCL - Chino, CA 909-590-1525	

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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964393
Collected by: Scott Schroeder
Collected on: 11/07-08/96

Received: 11/08/96
Extracted: 11/08-11/96
Tested: 11/08-18/96
Reported: 11/21/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW12-002 96-04393-1	18BGMW05C-002 96-04393-2	02NEW03-002 96-04393-3	02NEW08A-002 96-04393-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	242	183	298	304
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	242	183	298	304
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	115	129	116	45.0
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	6.8	22.0	11.0	11.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	740	771	1,010	695
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	147	152	285	137
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.
1,1-Dichloroethene	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.
1,2-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.	5	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.	19
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.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMP08A-002 96-04393-5	18BGMP08C-002 96-04393-6	18BGMP08D-002 96-04393-7
Alkalinity	310.1	mg-$CaCO_3$/L	2	190	190	170
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	190	190	170
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	239	137	169
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	3.8 [b]	11.0	22.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	973	803	864
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	231	183	162
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.
1,1-Dichloroethene	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.
1,2-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.	0.9J	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 18BGMP08E-002 96-04393-8	18BGMW05B-002 96-04393-9	TB-11-8-96 96-04393-10
Alkalinity	310.1	mg-$CaCO_3$/L	2	280	188	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	280	188	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	199	142	-
Nitrate/Nitrite as N	300.0	mg-N/L	0.1	41.0	12.0	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,450	718	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	398	127	-
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	1	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	3	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.
1,1-Dichloroethene	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.
1,2-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	CRDL (PQL)	Analysis Result 02NEW12-002 96-04393-1	02NEW03-002 96-04393-3	02NEW08A-002 96-04393-4
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.	N.D.	N.D.
Color	110.2	Color Unit	1	1	1	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	< 0.4	< 0.4	< 0.4
Silica (SiO_2) dissolved	370.1	mg/L	1	60	45	43
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	49	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	1	2	1
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	µg/L	200	39.2J	24.1J	25.8J
Antimony	CLP-Metal	µg/L	60	N.D.	N.D.	N.D.
Arsenic	CLP-Metal	µg/L	10	9.1J	3.5J	2.1J
Barium	CLP-Metal	µg/L	200	70.1J	83.7J	49.3J
Beryllium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.
Calcium	CLP-Metal	µg/L	5000	135,000	163,000	131,000
Chromium	CLP-Metal	µg/L	10	4.0J	4.3J	3.2J
Cobalt	CLP-Metal	µg/L	50	N.D.	N.D.	N.D.
Copper	CLP-Metal	µg/L	25	7.4J	4.2J	3.3J
Iron	CLP-Metal	µg/L	100	157	63.6J	5.93J
Lead	CLP-Metal	µg/L	5	2J	1J	1J
Magnesium	CLP-Metal	µg/L	5000	22,000	43,000	24,000
Manganese	CLP-Metal	µg/L	15	61	11J	5.8J
Mercury	CLP-Metal	µg/L	0.2	N.D.	N.D.	N.D.
Nickel	CLP-Metal	µg/L	40	440	32J	23J
Potassium	CLP-Metal	µg/L	5000	2400J	2150J	1830J
Selenium	CLP-Metal	µg/L	5	8	10	19
Silver	CLP-Metal	µg/L	10	N.D.	N.D.	N.D.
Sodium	CLP-Metal	µg/L	5000	90,000	87,000	58,000
Thallium	CLP-Metal	µg/L	10	2.8J	1.5J	2.1J
Vanadium	CLP-Metal	µg/L	50	27J	10J	4.3J
Zinc	CLP-Metal	µg/L	20	10J	14J	6.2J
Chromium (VI)	7196	mg/L	0.002	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW12-002 96-04393-1	02NEW03-002 96-04393-3	02NEW08A-002 96-04393-4
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	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 02NEW12-002 96-04393-1	02NEW03-002 96-04393-3	02NEW08A-002 96-04393-4
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
CLP: Organochlorine pesticides & PCB						
Aldrin	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Heptachlor	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.	N.D.	N.D.
Toxaphene	CLP-Pest	µg/L	5.0	N.D.	N.D.	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.	N.D.	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW12-002 96-04393-1	02NEW03-002 96-04393-3	02NEW08A-002 96-04393-4
Chlorinated herbicides						
2,4-D	8150	µg/L	0.5	N.D.	N.D.	N.D.
2,4-DB	8150	µg/L	0.5	N.D.	N.D.	N.D.
Dalapon (dichloroacetic acid)	8150	µg/L	1	N.D.	N.D.	N.D.
Dicamba	8150	µg/L	0.5	N.D.	N.D.	N.D.
Dichloroprop	8150	µg/L	0.5	N.D.	N.D.	N.D.
Dinoseb (DNBP)	8150	µg/L	0.5	N.D.	N.D.	N.D.
2,4,5-T	8150	µg/L	0.5	N.D.	N.D.	N.D.
2,4,5-TP (Silvex)	8150	µg/L	0.5	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMW05C-002 96-04393-2
CLP: Semi-VOC by GC/MS				
Acenaphthene	CLP-SVOC	µg/L	10	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMW05C-002 96-04393-2
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result 18BGMP08C-002 96-04393-6
Chlorinated herbicides				
2,4-D	8150	μg/L	0.5	N.D.
2,4-DB	8150	μg/L	0.5	N.D.
Dalapon (dichloroacetic acid)	8150	μg/L	1	N.D.
Dicamba	8150	μg/L	0.5	N.D.
Dichloroprop	8150	μg/L	0.5	N.D.
Dinoseb (DNBP)	8150	μg/L	0.5	N.D.
2,4,5-T	8150	μg/L	0.5	N.D.
2,4,5-TP (Silvex)	8150	μg/L	0.5	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.

(b) Sample contains 1.3 mg/L of Nitrite as analyzed by method 354.1.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 62DL-001

PROJECT NAME: MCAS EL TORO - GDUM

SAMPLERS: (Signature) [signature]

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (CLP)	SVOC (CLP)	GEN. CHEM. *	METALS-FILTERED (CLP)	PHOSPHATE, TSS, COLOR, SILICA	TOC (415.1)	COD (410.4)	CHROME VI	PESTICIDES (CLP)	HERBICIDES (8150B)	REMARKS	PRESERVATIVE USED
18BGMW05C-002	11-7-96	1515		✓	H_2O		4	2	1	1									
02NEW12-002	11-7-96	1655		✓	H_2O		10	2		1	1	1	1	1	1	1	1	REFER TO PREVIOUS SHEET	
02NEW08A-002	11-7-96	1540		✓	H_2O		11	2	1	1	1	1	1	1	1	1	1	PROJECT SPECIFIC	
18BGMW05B-002	11-7-96	1400		✓	H_2O		3	2		1								DETECTION LIMITS	
02NEW03-002	11-7-96	1415		✓	H_2O		11	2	1	1	1	1	1	1	1	1	1		
18BGMP08D-002	11-7-96	1405		✓	H_2O		3	2		1								NFESC QC LEVEL D	
18PGMP08C-002	11-7-96	1305		✓	H_2O		3	2		1							1	FOR ALL SAMPLES	
18BGMP08E-002	11-7-96	1520		✓	H_2O		3	2		1									
18BGMP08A-002	11-7-96	1120		✓	H_2O		3	2		1								GEN CHEM INCLUDES:	
TB-11-8-96	11-8-96						1	1										NITRATE/NITRITE-N, CHLORIDE	
																		SULFATE, CARBONATE,	
																		BICARBONATE, ALKALINITY	
																		TDS	

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russell	11/8/96 10:43				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[signature]	11/8/96 10:44				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER / 2 COOLERS				APCL - CHINO, CA 909-590-1828	

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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964408
Collected by: B.T.
Collected on: 11/11/96

Received: 11/11/96
Extracted: 11/12-15/96
Tested: 11/12-21/96
Reported: 11/27/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW4A-002 96-04408-1	18PS5-002 96-04408-2
Alkalinity	310.1	mg-$CaCO_3$/L	2	198	250
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	198	250
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	118	143
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	5.4	37.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	673	1,110
Sulfate (SO_4^{--})	300.0	mg/L	0.5	121	221
TPH: Gasoline	M8015	mg/L	0.05	-	N.D.
TPH: Diesel	M8015	mg/L	0.25	-	N.D.
CLP: Semi-VOC by GC/MS					
Acenaphthene	CLP-SVOC	µg/L	10	-	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	-	N.D.
Anthracene	CLP-SVOC	µg/L	10	-	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	-	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	-	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	-	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	-	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	-	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	-	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	-	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	-	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	-	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	-	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	-	N.D.
Carbazole	CLP-SVOC	µg/L	10	-	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	-	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	-	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	-	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	-	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	-	N.D.
Chrysene	CLP-SVOC	µg/L	10	-	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	-	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	-	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	-	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	-	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	-	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW4A-002 96-04408-1	18PS5-002 96-04408-2
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	-	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	-	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	-	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	-	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	-	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	-	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	-	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	-	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	-	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	-	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	-	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	-	N.D.
Fluorene	CLP-SVOC	µg/L	10	-	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	-	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	-	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	-	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	-	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	-	N.D.
Isophorone	CLP-SVOC	µg/L	10	-	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	-	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	-	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	-	N.D.
Naphthalene	CLP-SVOC	µg/L	10	-	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	-	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	-	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	-	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	-	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	-	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	-	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	-	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	-	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	-	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	-	N.D.
Phenol	CLP-SVOC	µg/L	10	-	N.D.
Pyrene	CLP-SVOC	µg/L	10	-	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	-	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	-	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	-	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMW4A-002 96-04408-1	18PS5-002 96-04408-2	TB-11-1196 96-04408-3
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.
1,1-Dichloroethene	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.
1,2-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.	1J	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

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6206-009

PROJECT NAME: MCAS ELTORO GWM

SAMPLERS: (Signature)

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOCs	SVOCs	GEN CHEM	TPH GAS (MBOIS)	TPH DIESEL (MBOIS)				REMARKS	PRESERVATIVE USED
B.T	18BGMW41A-002	11/11/96	1155		✓	H_2O		3	2		1						TRIPLE VOLUMES OF SAMPLE	
B.T	18PS5-002	11/11/96	930		✓	H_2O		11	2	3	1	2	3				18PS5-002 SVOC & DIESEL	
	TB-11-11-96	11/11/96	-		-	H_2O		1	1								FOR APCL MS/MSD.	
																	-REFER TO PLANS SENT	
																	PROJECT SPECIFIC REPORTING LIMITS	
																	-NFESC GC LEVEL D	
																	FOR ALL SAMPLES	
																	GEN CHEM INCLUDES	
																	NITRATE, AMMONIA, N. CHLORIDE	
																	SULFATE, CARBONATE,	
																	DI-CARBONATE, ALKALINITY	
																	TDS	

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Scott Schwan	11/11/96				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER 1 COOLER				APCL LAB - CHINO CA TEL - 510-1525	

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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego, CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964419
Collected by: Scott Schroeder
Collected on: 11/11-12/96

Received: 11/12/96
Extracted: 11/14/96
Tested: 11/12-20/96
Reported: 11/25/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02UGMW25-002 96-04419-1	03DGMW65X-002 96-04419-2	04DBMW40-002 96-04419-3	04DGMW66-002 96-04419-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	237	323	517	250
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	237	323	517	250
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	276	146	138	132
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	35.0	13.0	21.8 [a]	13.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,700	792	984	764
Sulfate (SO_4^{--})	300.0	mg/L	0.5	559	85.0	78.0	112
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.	40	0.7J
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.
1,1-Dichloroethene	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.
1,2-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.	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.	7	N.D.
Freon-113 [b]	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 18MCAS07-1-002 96-04419-5	18MCAS07-2-002 96-04419-6	18MCAS07-3-002 96-04419-7	18MCAS07-4-002 96-04419-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	360	239	265	259
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	360	239	265	259
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	394	471	438	438
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	N.D.	N.D.	N.D.	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,960	2,340	2,250	2,200
Sulfate (SO_4^{--})	300.0	mg/L	0.5	586	812	759	717
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.
1,1-Dichloroethene	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.
1,2-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.	N.D.
Toluene	CLP-VOC	μg/L	1	N.D.	N.D.	N.D.	1
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.	0.6J
Freon-113 [b]	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 (PQL)	Analysis Result 18MCAS07-5-502 96-04419-10	18MCAS07-5-002 96-04419-9	21UGMW37-002 96-04419-11	TB-11-12-96 96-04419-12
Alkalinity	310.1	mg-$CaCO_3$/L	2	N.D.	373	222	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	373	222	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	-
Chloride Cl^-	300.0	mg/L	0.2	N.D.	416	212	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	N.D.	N.D.	19.0	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	N.D.	2,030	967	-
Sulfate (SO_4^{--})	300.0	mg/L	0.5	N.D.	562	175	-
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.	1	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.
1,1-Dichloroethene	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.	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.	1	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.	13	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.	25	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 (b)	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 02UGMW25-002 96-04419-1	03DGMW65X-002 96-04419-2	04DBMW40-002 96-04419-3	04DGMW66-002 96-04419-4
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	20	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	N.D.	N.D.	N.D.	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	34	48	50	51
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	N.D.	N.D.	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	4	2	2	2
Chromium (VI)	7196	mg/L	0.002	0.002	N.D.	N.D.	0.003
CLP Metals (Full CLP 23 metals)							
Aluminum	CLP-Metal	µg/L	200	29.4J	34.6J	34.9J	61.7J
Antimony	CLP-Metal	µg/L	60	N.D.	N.D.	N.D.	N.D.
Arsenic	CLP-Metal	µg/L	10	8.1J	4.3J	3.5J	6.4J
Barium	CLP-Metal	µg/L	200	138J	60.4J	89.7J	66.1J
Beryllium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.	N.D.
Calcium	CLP-Metal	µg/L	5000	275,000	66,000	92,000	94,000
Chromium	CLP-Metal	µg/L	10	7.8J	6.9J	1.9J	6.7J
Cobalt	CLP-Metal	µg/L	50	4.9J	2.2J	N.D.	2.6J
Copper	CLP-Metal	µg/L	25	9.8J	4.3J	1.9J	4.8J
Iron	CLP-Metal	µg/L	100	42.3J	26.0J	N.D.	33.7J
Lead	CLP-Metal	µg/L	5	3J	1J	N.D.	2J
Magnesium	CLP-Metal	µg/L	5000	61,000	37,000	64,000	32,000
Manganese	CLP-Metal	µg/L	15	2.2J	12J	65	4.7J
Mercury	CLP-Metal	µg/L	0.2	N.D.	N.D.	N.D.	N.D.
Nickel	CLP-Metal	µg/L	40	6.5J	570	5.0J	120
Potassium	CLP-Metal	µg/L	5000	3020J	3470J	4960J	3140J
Selenium	CLP-Metal	µg/L	5	N.D.	17	5	14
Silver	CLP-Metal	µg/L	10	N.D.	N.D.	N.D.	N.D.
Sodium	CLP-Metal	µg/L	5000	162,000	155,000	157,000	107,000
Thallium	CLP-Metal	µg/L	10	N.D.	N.D.	N.D.	4.3J
Vanadium	CLP-Metal	µg/L	50	10J	19J	23J	21J
Zinc	CLP-Metal	µg/L	20	16J	21	22	12J

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02UGMW25-002 96-04419-1	03DGMW65X-002 96-04419-2	04DBMW40-002 96-04419-3	04DGMW66-002 96-04419-4
CLP: Semi-VOC by GC/MS							
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	6J	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	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 02UGMW25-002 96-04419-1	03DGMW65X-002 96-04419-2	04DBMW40-002 96-04419-3	04DGMW66-002 96-04419-4
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
CLP: Organochlorine pesticides & PCB							
Aldrin	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Heptachlor	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.	N.D.	N.D.	N.D.
Toxaphene	CLP-Pest	µg/L	5.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.

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Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02UGMW25-002 96-04419-1	03DGMW65X-002 96-04419-2	04DBMW40-002 96-04419-3	04DGMW66-002 96-04419-4
Chlorinated herbicides							
2,4-D	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
2,4-DB	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Dalapon (dichloroacetic acid)	8150	µg/L	1	N.D.	N.D.	N.D.	N.D.
Dicamba	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Dichloroprop	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Dinoseb (DNBP)	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
2,4,5-T	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
2,4,5-TP (Silvex)	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL	Analysis Result 18MCAS07-5-002 96-04419-9
CLP: Semi-VOC by GC/MS				
Acenaphthene	CLP-SVOC	µg/L	10	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	4J
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.

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Component Analyzed	Method	Unit	CRDL	Analysis Result 18MCAS07-5-002 96-04419-9
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	4J
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18MCAS07-5-002 96-04419-9
Phenol	CLP-SVOC	μg/L	10	N.D.
Pyrene	CLP-SVOC	μg/L	10	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	μg/L	10	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	μg/L	25	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	μg/L	10	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) Sample contains 1.5 mg/L of Nitrite as analyzed by method 354.1.

(b) Additional compound per client's request.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

4417

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

014003

PROJ. NO.: 6206-009

PROJECT NAME: MCAS EL TORO GWM

SAMPLERS: (Signature) Brian [illegible] Scott [illegible] [illegible]

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOCs (CLP)	SEMI-VOCs (CLP)	GEN CHEM + PHOSPHATE, CONDUCT, TSS, SILICA	CHROME VI	HERBICIDES (8150)	PESTICIDES (CLP)	METALS (CLP)	METALS-FILTERED-CLP	COD (410.4)	TOC (415.1)	REMARKS	PRESERVATIVE USED
18MCAS07-1-002	11-11-96	11:00		✓	H_2O	3	2		1								-REFER TO PREVIOUSLY	
18MCAS07-2-002	11-11-96	12:10		✓	H_2O	3	2		1								SENT PROJECT SPECIFIC	
18MCAS07-4-002	11-11-96	1420		✓	H_2O	3	2		1								DETECTION LIMITS.	
18MCAS07-5-002	11-11-96	1545		✓	H_2O	3	2		1									
18MCAS07-3-002	11-11-96	1320		✓	H_2O	3	2		1								SAMPLES FOR METALS HAVE	
21UGMW37-002	11-11-96	1318		✓	H_2O	3	2		1								BEEN FILTERED IN THE	
03DGMW65X-002	11-11-96	1610		✓	H_2O	11	2	1	1	1	1	1	1	1	1	1	FIELD.	
02UGMW25-002	11-12-96	1135		✓	H_2O	11	2	1	1	1	1	1	1	1	1	1		
04DBMW40-002	11-12-96	1200		✓	H_2O	11	2	1	1	1	1	1	1	1	1	1	NFESC LEVEL D QC	
04DGMW66-002	11-12-96	0950		✓	H_2O	11	2	1	1	1	1	1	1	1	1	1	FOR ALL SAMPLES	
TB-11-12-96	11-12-96					1	1										GEN CHEM INCLUDES	
18MCAS07-5-502	11-11-96	1540		✓	H_2O	4	2	1	1								NITRATE/NITRITE-N, chloride	
																	SULFATE, CARBONATE	
																	bicarbonate & ALKALINITY	
																	TDS	

CDM Federal

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Scott Schwab	11/12/96 1320				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Nelson	11-12-96 1:20				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL Courier - 2 coolers				APCL LABORATORY - CHINO CA. 909-590-1828	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

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APCL Analytical Report

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

Service ID #: 801-964427
Collected by: Scott Schroeder
Collected on: 11/12-13/96

Received: 11/13/96
Extracted: 11/14-15/96
Tested: 11/13-21/96
Reported: 11/26/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS - El Toro GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW11-002 96-04427-1	03DBMW39-002 96-04427-2	03DGMW64-002 96-04427-3
Alkalinity	310.1	mg-$CaCO_3$/L	2	233	403	302
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	233	403	302
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	84.0	143	138
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	5.8	6.5	5.2
Solids, Total Dissolved (TDS)	160.1	mg/L	10	747	801	836
Sulfate (SO_4^{--})	300.0	mg/L	0.5	205	51.0	174
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.	0.5J	1
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.
1,1-Dichloroethene	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.
1,2-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	CRDL (PQL)	Analysis Result 03DGMW64-302 96-04427-4	03DGMW64-702 96-04427-5	08DGMW74-002 96-04427-6
Alkalinity	310.1	mg-$CaCO_3$/L	2	300	121	261
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	300	121	261
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	131	102	224
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	4.9	0.3	16.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	846	685	828
Sulfate (SO_4^{--})	300.0	mg/L	0.5	168	266	58.0
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.	16	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	2	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.	2
Chlorobenzene	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	13	N.D.
Chloroethane	CLP-VOC	μg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	1	15	6
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.
1,1-Dichloroethene	CLP-VOC	μg/L	1	N.D.	N.D.	1
1,2-Dichloroethene (Total)	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.	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	N.D.	N.D.	103
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 18MCAS02-03-002 96-04427-7	18MCAS02-04-002 96-04427-8	18MCAS02-07-002 96-04427-9
Alkalinity	310.1	mg-$CaCO_3$/L	2	209	233	306
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	209	233	306
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	338	166	704
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	N.D.	7.3 [b]	40.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,340	874	2,870
Sulfate (SO_4^{--})	300.0	mg/L	0.5	399	176	995
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.
1,1-Dichloroethene	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.
1,2-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.	24	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 18MCAS02-01-002 96-04427-10	18MCAS02-02-002 96-04427-11	18MCAS02-05-002 96-04427-12
Alkalinity	310.1	mg-$CaCO_3$/L	2	153	351	216
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	153	351	216
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	527	399	187
Nitrate/Nitrite, as N by IC	300.0	mg-N/L	0.1	N.D.	N.D.	19.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,350	1,700	999
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	438	458	212
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	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.	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.
1,1-Dichloroethene	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.
1,2-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.	16
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 18MCAS02-06-002 96-04427-13	18MCAS02-08-002 96-04427-14	TB-11-13-96 96-04427-15
Alkalinity	310.1	mg-$CaCO_3$/L	2	203	470	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	203	470	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	206	475	-
Nitrate/Nitrite, as N by IC	300.0	mg-N/L	0.1	24.0	102	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,150	2,720	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	262	611	-
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.
1,1-Dichloroethene	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.
1,2-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.	2
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	3	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 02NEW11-002 96-04427-1	03DBMW39-002 96-04427-2	03DGMW64-002 96-04427-3
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.	N.D.	N.D.
Color	110.2	Color Unit	1	1	1	1
Phosphorus, Orthophosphate	300.0	mg/L	0.1	<0.4	<0.4	<0.4
Silica (SiO_2) dissolved	370.1	mg/L	1	43	56	49
Solids, Total Suspended (TSS)	160.2	mg/L	4	14	22	55
Carbon, Total Organic (TOC)	415.1	mg/L	1	1	N.D.	N.D.
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	μg/L	200	45.1J	37.1J	30.2J
Antimony	CLP-Metal	μg/L	60	N.D.	N.D.	N.D.
Arsenic	CLP-Metal	μg/L	10	4.8J	4.2J	N.D.
Barium	CLP-Metal	μg/L	200	82.8J	158J	37.8J
Beryllium	CLP-Metal	μg/L	5	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5	N.D.	N.D.	N.D.
Calcium	CLP-Metal	μg/L	5000	107,000	60,000	60,000
Chromium	CLP-Metal	μg/L	10	3.9J	4.8J	3.3J
Cobalt	CLP-Metal	μg/L	50	N.D.	N.D.	2.5J
Copper	CLP-Metal	μg/L	25	2.9J	2.2J	2.6J
Iron	CLP-Metal	μg/L	100	45.7J	56.3J	35.2J
Lead	CLP-Metal	μg/L	5	1J	N.D.	N.D.
Magnesium	CLP-Metal	μg/L	5000	30,000	33,000	35,000
Manganese	CLP-Metal	μg/L	15	22	19	40
Mercury	CLP-Metal	μg/L	0.2	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40	150	500	710
Potassium	CLP-Metal	μg/L	5000	2380J	3030J	4110J
Selenium	CLP-Metal	μg/L	5	N.D.	5	9
Silver	CLP-Metal	μg/L	10	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	82,000	167,000	169,000
Thallium	CLP-Metal	μg/L	10	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50	11J	28J	8.9J
Zinc	CLP-Metal	μg/L	20	13J	15J	30
Chromium (VI)	7196	mg/L	0.002	0.003	N.D.	N.D.
TPH: Gasoline	M8015	mg/L	0.05	-	-	N.D.
TPH: Diesel	M8015	mg/L	0.25	-	-	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW11-002 96-04427-1	03DBMW39-002 96-04427-2	03DGMW64-002 96-04427-3
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.

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3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
CLP: Organochlorine pesticides & PCB						
Aldrin	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Heptachlor	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.	N.D.	N.D.
Toxaphene	CLP-Pest	µg/L	5.0	N.D.	N.D.	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.	N.D.	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.

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Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 02NEW11-002 96-04427-1	03DBMW39-002 96-04427-2	03DGMW64-002 96-04427-3
Chlorinated herbicides						
2,4-D	8150	µg/L	0.5	N.D.	N.D.	N.D.
2,4-DB	8150	µg/L	0.5	N.D.	N.D.	N.D.
Dalapon (dichloroacetic acid)	8150	µg/L	1	N.D.	N.D.	N.D.
Dicamba	8150	µg/L	0.5	N.D.	N.D.	N.D.
Dichloroprop	8150	µg/L	0.5	N.D.	N.D.	N.D.
Dinoseb (DNBP)	8150	µg/L	0.5	N.D.	N.D.	N.D.
2,4,5-T	8150	µg/L	0.5	N.D.	N.D.	N.D.
2,4,5-TP (Silvex)	8150	µg/L	0.5	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 03DGMW64-302 96-04427-4	03DGMW64-702 96-04427-5	08DGMW74-002 96-04427-6
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	26	N.D.	N.D.
Color	110.2	Color Unit	1	1	N.D.	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	<0.4	<0.4	<0.4
Silica (SiO_2) dissolved	370.1	mg/L	1	49	7	55
Solids, Total Suspended (TSS)	160.2	mg/L	4	26	N.D.	5
Carbon, Total Organic (TOC)	415.1	mg/L	1	N.D.	3	N.D.
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	µg/L	200	37.4J	183J	27.2J
Antimony	CLP-Metal	µg/L	60	N.D.	N.D.	N.D.
Arsenic	CLP-Metal	µg/L	10	3.0J	N.D.	2.1J
Barium	CLP-Metal	µg/L	200	35.9J	136J	93.1J
Beryllium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.
Calcium	CLP-Metal	µg/L	5000	60,000	77,000	82,000
Chromium	CLP-Metal	µg/L	10	3.6J	N.D.	5.9J
Cobalt	CLP-Metal	µg/L	50	1.5J	N.D.	5.2J
Copper	CLP-Metal	µg/L	25	1.5J	4.2J	6.3J
Iron	CLP-Metal	µg/L	100	44.3J	N.D.	32.5J
Lead	CLP-Metal	µg/L	5	N.D.	N.D.	2J
Magnesium	CLP-Metal	µg/L	5000	37,000	30,000	22,000
Manganese	CLP-Metal	µg/L	15	23	1.8J	22
Mercury	CLP-Metal	µg/L	0.2	N.D.	N.D.	N.D.
Nickel	CLP-Metal	µg/L	40	540	N.D.	79
Potassium	CLP-Metal	µg/L	5000	4090J	5,170	2390J
Selenium	CLP-Metal	µg/L	5	7	N.D.	3J
Silver	CLP-Metal	µg/L	10	N.D.	N.D.	N.D.
Sodium	CLP-Metal	µg/L	5000	175,000	101,000	156,000
Thallium	CLP-Metal	µg/L	10	1.3J	N.D.	2.3J
Vanadium	CLP-Metal	µg/L	50	12J	1.6J	25J
Zinc	CLP-Metal	µg/L	20	13J	66	36
Chromium (VI)	7196	mg/L	0.002	N.D.	N.D.	N.D.
TPH: Gasoline	M8015	mg/L	0.05	N.D.	N.D.	-
TPH: Diesel	M8015	mg/L	0.25	N.D.	N.D.	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 03DGMW64-302 96-04427-4	03DGMW64-702 96-04427-5	08DGMW74-002 96-04427-6
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	-
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	-
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	-
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	-
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	-
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	-

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3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	-
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	-
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	-
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	-
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	-
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	-
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	-
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	-
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	-
CLP: Organochlorine pesticides & PCB						
Aldrin	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	N.D.	-
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	N.D.	-
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	N.D.	-
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	-
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	N.D.	-
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.	N.D.	-
Endrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	-
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.	N.D.	-
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.	N.D.	-
Heptachlor	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.	N.D.	-
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.	N.D.	-
Toxaphene	CLP-Pest	µg/L	5.0	N.D.	N.D.	-
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.	N.D.	-
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.	N.D.	-
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.	N.D.	-
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.	N.D.	-
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.	N.D.	-
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.	N.D.	-
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	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 03DGMW64-302 96-04427-4	03DGMW64-702 96-04427-5	08DGMW74-002 96-04427-6
Chlorinated herbicides						
2,4-D	8150	μg/L	0.5	N.D.	N.D.	-
2,4-DB	8150	μg/L	0.5	N.D.	N.D.	-
Dalapon (dichloroacetic acid)	8150	μg/L	1	N.D.	N.D.	-
Dicamba	8150	μg/L	0.5	N.D.	N.D.	-
Dichloroprop	8150	μg/L	0.5	N.D.	N.D.	-
Dinoseb (DNBP)	8150	μg/L	0.5	N.D.	N.D.	-
2,4,5-T	8150	μg/L	0.5	N.D.	N.D.	-
2,4,5-TP (Silvex)	8150	μg/L	0.5	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.

(b) Sample contains 0.6 mg/L of nitrite (as N) as analyzed by 354.1.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 1226-009

PROJECT NAME: MCAS - EL TORO GWM

SAMPLERS: (Signature) [illegible]

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOCs (CLP)	SEMI-VOCs (CLP)	GEN CHEM	TOC (415.1)	COD (410.4)	HERBICIDES	PESTICIDES (8150B)	CHROME VI	METALS	PHOSPHATES (Filtered)	DIESEL TPH (M8015)	GAS TPH (M8015)	REMARKS	PRESERVATIVE USED
03DGMW64-302	11-12-96	1530		✓	H_2O	14	2	1	1	1	1	1	1	1	1	1	1	2	Refer to previously	
03DGMW64-002	11-12-96	1500		✓	H_2O	14	2	1	1	1	1	1	1	1	1	1	1	2	sent project	
18MCAS02-002	11-12-96	1445		✓	H_2O	3	2		1										specific detection	
18MCAS02-8-002	11-12-96	1645		✓	H_2O	3	2		1										Limits	
18MCAS02-1-002	11-12-96	1000		✓	H_2O	3	2		1										Samples for metals	
18MCAS02-2-002	11-12-96	1110		✓	H_2O	3	2		1										HAVE BEEN FILTERED	
18MCAS02-5-002	11-12-96	1350		✓	H_2O	3	2		1										IN the field	
18MCAS02-4-002	11-12-96	1210		✓	H_2O	3	2		1										-NFESC QC	
18MCAS02-3-002	11-12-96	1300		✓	H_2O	3	2		1										LEVEL D Allsamples	
18MCAS02-7-002	11-12-96	1545		✓	H_2O	3	2		1										-GEN CHEM	
08DGMW74-002	11-13-96	0950		✓	H_2O	8	2		1	1	1			1	1	1			Includes: Nitrate/	
03DGMW64-702	11-13-96	0900		✓	H_2O	14	2	1	1	1	1	1	1	1	1	1	1	2	Nitrite-N, Chloride	
02NEW11-002	11-12-96	1430		✓	H_2O	11	2	1	1	1	1	1	1	1	1	1			Sulfate, carbonate	
03DBMW39-002	11-12-96	1715		✓	H_2O	11	2	1	1	1	1	1	1	1	1	1			bicarbonate TDS	
TB-11-13-96	11-13-96	–		–	–	1	1		TPH										Alkalinity	

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[illegible]	11-13-96 [illegible]				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	[illegible]				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL COURIER 3 coolers				APCL - CHINO CA. 909-590-1828	

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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964436
Collected by: M.P.
Collected on: 11/13/96

Received: 11/14/96
Extracted: 11/14/96
Tested: 11/14-22/96
Reported: 11/26/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro - GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05DBMW41-002 96-04436-1	05DGMW67-002 96-04436-2	05NEW1-002 96-04436-3	05UGMW27-002 96-04436-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	332	317	252	289
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	332	317	252	289
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	100	111	99.0	98.0
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	13.0	10.0	12.0	8.3
Solids, Total Dissolved (TDS)	160.1	mg/L	10	934	1,020	878	966
Sulfate (SO_4^{--})	300.0	mg/L	0.5	213	268	219	262
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.
1,1-Dichloroethene	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.
1,2-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	2	2	1	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	0.8J	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	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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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 12DBMW48-002 96-04436-5	12UGMW31-002 96-04436-6	18BGMP09A-002 96-04436-7
Alkalinity	310.1	mg-$CaCO_3$/L	2	207	205	80
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	207	205	80
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	292	172	866
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	30.0	22.0	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,630	975	2,530
Sulfate (SO_4^{--})	300.0	mg/L	0.5	369	186	717
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.	0.9J	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.
1,1-Dichloroethene	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.
1,2-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.	1	2
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	13	5	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	0.8J	19	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	221	1J	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMP09B-002 96-04436-8	18BGMP09C-002 96-04436-9	18BGMP09D-002 96-04436-10
Alkalinity	310.1	mg-$CaCO_3$/L	2	203	162	235
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	203	162	235
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	318	132	133
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	0.2	N.D.	10.0
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,250	720	852
Sulfate (SO_4^{--})	300.0	mg/L	0.5	322	185	180
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.
1,1-Dichloroethene	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.
1,2-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	1	1	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	CRDL (PQL)	Analysis Result 18BGMP09E-002 96-04436-11	18BGMP09F-002 96-04436-12	TB-11-14-96 96-04436-13
Alkalinity	310.1	mg-$CaCO_3$/L	2	216	211	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	216	211	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^-	300.0	mg/L	0.2	253	224	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	8.7	38.6 [b]	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	969	1,300	-
Sulfate (SO_4^{--})	300.0	mg/L	0.5	170	346	-
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.
1,1-Dichloroethene	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.
1,2-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.	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 05DBMW41-002 96-04436-1	05DGMW67-002 96-04436-2	05NEW1-002 96-04436-3
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.	0.2
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.	20	N.D.
Color	110.2	Color Unit	1	N.D.	N.D.	1
Phosphorus, Orthophosphate	300.0	mg/L	0.1	N.D.	N.D.	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	49	49	55
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	N.D.	9
Carbon, Total Organic (TOC)	415.1	mg/L	1	2	N.D.	N.D.
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	µg/L	200	N.D.	244	28.5J
Antimony	CLP-Metal	µg/L	60	N.D.	3.1J	N.D.
Arsenic	CLP-Metal	µg/L	10	4.2J	4.4J	2.4J
Barium	CLP-Metal	µg/L	200	66.0J	86.5J	136J
Beryllium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.
Calcium	CLP-Metal	µg/L	5000	123,000	160,000	126,000
Chromium	CLP-Metal	µg/L	10	2.7J	1.2J	4.8J
Cobalt	CLP-Metal	µg/L	50	N.D.	1.6J	3.4J
Copper	CLP-Metal	µg/L	25	3.0J	N.D.	2.6J
Iron	CLP-Metal	µg/L	100	N.D.	69.5J	39.7J
Lead	CLP-Metal	µg/L	5	1J	2J	0.7J
Magnesium	CLP-Metal	µg/L	5000	33,000	42,000	34,000
Manganese	CLP-Metal	µg/L	15	1.8J	4.9J	74
Mercury	CLP-Metal	µg/L	0.2	N.D.	N.D.	N.D.
Nickel	CLP-Metal	µg/L	40	16J	21J	440
Potassium	CLP-Metal	µg/L	5000	3170J	2500J	3600J
Selenium	CLP-Metal	µg/L	5	5J	3J	6
Silver	CLP-Metal	µg/L	10	N.D.	N.D.	N.D.
Sodium	CLP-Metal	µg/L	5000	141,000	115,000	103,000
Thallium	CLP-Metal	µg/L	10	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	µg/L	50	11J	9.5J	9.4J
Zinc	CLP-Metal	µg/L	20	5.8J	6.3J	6.7J
Chromium (VI)	7196	mg/L	0.002	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05DBMW41-002 96-04436-1	05DGMW67-002 96-04436-2	05NEW1-002 96-04436-3
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.

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3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
CLP: Organochlorine pesticides & PCB						
Aldrin	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.
Heptachlor	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.	N.D.	N.D.
Toxaphene	CLP-Pest	µg/L	5.0	N.D.	N.D.	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.	N.D.	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05DBMW41-002 96-04436-1	05DGMW67-002 96-04436-2	05NEW1-002 96-04436-3
Chlorinated herbicides						
2,4-D	8150	μg/L	0.5	N.D.	N.D.	N.D.
2,4-DB	8150	μg/L	0.5	N.D.	N.D.	N.D.
Dalapon (dichloroacetic acid)	8150	μg/L	1	N.D.	N.D.	N.D.
Dicamba	8150	μg/L	0.5	N.D.	N.D.	N.D.
Dichloroprop	8150	μg/L	0.5	N.D.	N.D.	N.D.
Dinoseb (DNBP)	8150	μg/L	0.5	N.D.	N.D.	N.D.
2,4,5-T	8150	μg/L	0.5	N.D.	N.D.	N.D.
2,4,5-TP (Silvex)	8150	μg/L	0.5	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05UGMW27-002 96-04436-4	12DBMW48-002 96-04436-5	12UGMW31-002 96-04436-6
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.	N.D.	N.D.
Color	110.2	Color Unit	1	N.D.	1	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	N.D.	N.D.	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	38	51	56
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	6	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	1	N.D.	N.D.
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	μg/L	200	17.8J	13.4J	N.D.
Antimony	CLP-Metal	μg/L	60	N.D.	N.D.	N.D.
Arsenic	CLP-Metal	μg/L	10	5.8J	N.D.	2.1J
Barium	CLP-Metal	μg/L	200	62.7J	32.2J	38.3J
Beryllium	CLP-Metal	μg/L	5	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5	N.D.	N.D.	N.D.
Calcium	CLP-Metal	μg/L	5000	136,000	264,000	162,000
Chromium	CLP-Metal	μg/L	10	N.D.	17	3.9J
Cobalt	CLP-Metal	μg/L	50	N.D.	2.1J	N.D.
Copper	CLP-Metal	μg/L	25	2.4J	N.D.	N.D.
Iron	CLP-Metal	μg/L	100	36.8J	220	N.D.
Lead	CLP-Metal	μg/L	5	2J	2J	N.D.
Magnesium	CLP-Metal	μg/L	5000	35,000	63,000	43,000
Manganese	CLP-Metal	μg/L	15	N.D.	15J	N.D.
Mercury	CLP-Metal	μg/L	0.2	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40	2.4J	290	15J
Potassium	CLP-Metal	μg/L	5000	2290J	2830J	2450J
Selenium	CLP-Metal	μg/L	5	4J	30	12
Silver	CLP-Metal	μg/L	10	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	121,000	96,000	74,000
Thallium	CLP-Metal	μg/L	10	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50	12J	13J	16J
Zinc	CLP-Metal	μg/L	20	6.6J	16J	10J
Chromium (VI)	7196	mg/L	0.002	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05UGMW27-002 96-04436-4	12DBMW48-002 96-04436-5	12UGMW31-002 96-04436-6
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	-	-
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	-	-
Anthracene	CLP-SVOC	µg/L	10	N.D.	-	-
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	-	-
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	-	-
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	-	-
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	-	-
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	-	-
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	-	-
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	-	-
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	-	-
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	-	-
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	-	-
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	-	-
Carbazole	CLP-SVOC	µg/L	10	N.D.	-	-
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	-	-
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	-	-
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	-	-
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	-	-
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	-	-
Chrysene	CLP-SVOC	µg/L	10	N.D.	-	-
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	-	-
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	-	-
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	-	-
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	-	-
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	-
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	-
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	-
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	-	-
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	-	-
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	-	-
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	-	-
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	-	-
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	-	-
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	-	-
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	-	-
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	-	-
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	-	-
Fluorene	CLP-SVOC	µg/L	10	N.D.	-	-
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	-
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	-	-
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	-	-
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	-	-
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	-	-
Isophorone	CLP-SVOC	µg/L	10	N.D.	-	-
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	-	-

Applied P & Ch Laboratory
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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05UGMW27-002 96-04436-4	12DBMW48-002 96-04436-5	12UGMW31-002 96-04436-6
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	-	-
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	-	-
Naphthalene	CLP-SVOC	µg/L	10	N.D.	-	-
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-	-
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-	-
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-	-
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	-	-
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	-	-
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	-	-
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	-	-
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	-	-
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	-	-
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	-	-
Phenol	CLP-SVOC	µg/L	10	N.D.	-	-
Pyrene	CLP-SVOC	µg/L	10	N.D.	-	-
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	-
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	-	-
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	-	-
CLP: Organochlorine pesticides & PCB						
Aldrin	CLP-Pest	µg/L	0.050	N.D.	-	-
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	-	-
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	-	-
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	-	-
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	-	-
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	-	-
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	-	-
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	-	-
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	-	-
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	-	-
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	-	-
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	-	-
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	-	-
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.	-	-
Endrin	CLP-Pest	µg/L	0.10	N.D.	-	-
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.	-	-
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.	-	-
Heptachlor	CLP-Pest	µg/L	0.050	N.D.	-	-
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.	-	-
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.	-	-
Toxaphene	CLP-Pest	µg/L	5.0	N.D.	-	-
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.	-	-
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.	-	-
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.	-	-
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.	-	-
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.	-	-
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.	-	-
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	N.D.	-	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05UGMW27-002 96-04436-4	12DBMW48-002 96-04436-5	12UGMW31-002 96-04436-6
Chlorinated herbicides						
2,4-D	8150	μg/L	0.5	N.D.	-	N.D.
2,4-DB	8150	μg/L	0.5	N.D.	-	N.D.
Dalapon (dichloroacetic acid)	8150	μg/L	1	N.D.	-	N.D.
Dicamba	8150	μg/L	0.5	N.D.	-	N.D.
Dichloroprop	8150	μg/L	0.5	N.D.	-	N.D.
Dinoseb (DNBP)	8150	μg/L	0.5	N.D.	-	N.D.
2,4,5-T	8150	μg/L	0.5	N.D.	-	N.D.
2,4,5-TP (Silvex)	8150	μg/L	0.5	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.

(b) Sample contains 0.3 mg/L of Nitrite as analyzed by method 354.1.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: [illegible]

PROJECT NAME: MCAS El Toro - [illegible]

SAMPLERS: (Signature) [illegible]

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX		NO. OF CONTAINERS	VOC (EPA)	SVOC (EPA)	Gas Chem*	TOC	COD	Herbicides (EPA)	Pesticides (EPA)	Metals (EPA) / Chromium	Phenols, total cyan.	REMARKS	PRESERVATIVE USED
05DCMW07-002	11.13.96	1005		✓	H_2O		17	2	3	1	1	1	3	3	2	1	Total volume [illegible]	
12DBMW48-002	11.13.96	1710		✓	H_2O		8	2		1	1	1			2	1	See [illegible]	
05NEW1-002	11.13.96	1155		✓	H_2O		11	2	1	1	1	1	1	1	2	1	Sample # 05DCMW07 [illegible]	
05DBMW41-002	11.13.96	1455		✓	H_2O		11	2	1	1	1	1	1	1	2	1	[illegible] µS/MS/MSD	
05DCMW27-002	11.13.96	1640		✓	H_2O		11	2	1	1	1	1	1	1	2	1		
12DCMW31-002	11.13.96	1605		✓	H_2O		9	2		1	1	1	1		2	1	Metals sample [illegible]	
18BCMP09B-002	11.13.96	1400		✓	H_2O		3	2		1							Filtered in field	
18BCMP09A-002	11.13.96	1235		✓	H_2O		3	2		1								
18BCMP09C-002	11.13.96	1430		✓	H_2O		3	2		1							NEW WC cont in [illegible]	
18BCMP09D-002	11.13.96	1545		✓	H_2O		3	2		1							all samples	
18BCMP09E-002	11.13.96	1645		✓	H_2O		3	2		1								
18BCMP09F-002	11.13.96	1745		✓	H_2O		3	2		1							*Gas Chem includes methane/ethane/ethylene	
TB 11-14-96	—	—			H_2O		1	1									Check on chlorides, [illegible]	
																	carbonate, bicarbonate, TDS,	
																	Alkalinity	

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
[illegible]	11/14/96 0940				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	11/14/96 0940				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
[illegible]				Arcc - Chino, CA 909-590-1125	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Files

0150

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

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

Service ID #: 801-964437
Collected by: Scott Schroeder
Collected on: 11/13-14/96

Received: 11/14/96
Extracted: 11/15/96
Tested: 11/14-22/96
Reported: 11/26/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro - GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 03UGMW26-002 96-04437-1	03UGMW26-302 96-04437-2	04UGMW63-002 96-04437-3
Alkalinity	310.1	mg-$CaCO_3$/L	2	270	274	356
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	270	274	356
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	99.0	99.0	178
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	22.0	19.0	7.6 [a]
Solids, Total Dissolved (TDS)	160.1	mg/L	10	747	752	835
Sulfate (SO_4^{--})	300.0	mg/L	0.5	112	115	109
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.	7
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.
1,1-Dichloroethene	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.
1,2-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	2	2	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	1	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 [b]	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 04UGMW63-302 96-04437-4	18BGMW16-002 96-04437-5	21DBMW56-002 96-04437-6	TB-11-14a-96 96-04437-7
Alkalinity	310.1	mg-$CaCO_3$/L	2	358	205	216	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	358	205	216	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	-
Chloride Cl^-	300.0	mg/L	0.2	162	125	140	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	7.4 [c]	24.0	24.0	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	867	1,240	765	-
Sulfate (SO_4^{--})	300.0	mg/L	0.5	100	460	131	-
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	7	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.
1,1-Dichloroethene	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.
1,2-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.	7	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 [b]	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 03UGMW26-002 96-04437-1	03UGMW26-302 96-04437-2	04UGMW63-002 96-04437-3	04UGMW63-302 96-04437-4
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.	N.D.	N.D.	N.D.
Color	110.2	Color Unit	1	N.D.	N.D.	N.D.	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	N.D.	N.D.	N.D.	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	69	66	59	67
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	N.D.	N.D.	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	N.D.	N.D.	N.D.	N.D.
CLP Metals (Full CLP 23 metals)							
Aluminum	CLP-Metal	μg/L	200	N.D.	N.D.	N.D.	33.1J
Antimony	CLP-Metal	μg/L	60	N.D.	N.D.	N.D.	N.D.
Arsenic	CLP-Metal	μg/L	10	5.2J	6.8J	4.1J	3.7J
Barium	CLP-Metal	μg/L	200	129J	130J	85.7J	86.1J
Beryllium	CLP-Metal	μg/L	5	N.D.	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5	N.D.	N.D.	N.D.	N.D.
Calcium	CLP-Metal	μg/L	5000	80,000	82,000	130,000	129,000
Chromium	CLP-Metal	μg/L	10	4.7J	4.6J	N.D.	N.D.
Cobalt	CLP-Metal	μg/L	50	N.D.	N.D.	N.D.	N.D.
Copper	CLP-Metal	μg/L	25	N.D.	1.8J	N.D.	1.8J
Iron	CLP-Metal	μg/L	100	33.7J	27.0J	N.D.	28.4J
Lead	CLP-Metal	μg/L	5	1J	1J	2J	2J
Magnesium	CLP-Metal	μg/L	5000	33,000	32,000	59,000	59,000
Manganese	CLP-Metal	μg/L	15	6.5J	5.7J	543	531
Mercury	CLP-Metal	μg/L	0.2	N.D.	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40	62	58	83	80
Potassium	CLP-Metal	μg/L	5000	3060J	2990J	3140J	3110J
Selenium	CLP-Metal	μg/L	5	5	5	7	7
Silver	CLP-Metal	μg/L	10	N.D.	N.D.	1.3J	N.D.
Sodium	CLP-Metal	μg/L	5000	127,000	126,000	76,000	76,000
Thallium	CLP-Metal	μg/L	10	N.D.	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50	33J	33J	20J	20J
Zinc	CLP-Metal	μg/L	20	7.4J	7.8J	11J	11J
Chromium (VI)	7196	mg/L	0.002	N.D.	0.004	N.D.	N.D.
TPH: Gasoline	M8015	mg/L	0.05	-	-	N.D.	N.D.
TPH: Diesel	M8015	mg/L	0.25	-	-	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 03UGMW26-002 96-04437-1	03UGMW26-302 96-04437-2	04UGMW63-002 96-04437-3	04UGMW63-302 96-04437-4
CLP: Semi-VOC by GC/MS							
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	20	25	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	13	26	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	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 03UGMW26-002 96-04437-1	03UGMW26-302 96-04437-2	04UGMW63-002 96-04437-3	04UGMW63-302 96-04437-4
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.	N.D.
CLP: Organochlorine pesticides & PCB							
Aldrin	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endrin	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.	N.D.	N.D.	N.D.
Heptachlor	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.	N.D.	N.D.	N.D.
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.	N.D.	N.D.	N.D.
Toxaphene	CLP-Pest	µg/L	5.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	N.D.	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 03UGMW26-002 96-04437-1	03UGMW26-302 96-04437-2	04UGMW63-002 96-04437-3	04UGMW63-302 96-04437-4
Chlorinated herbicides							
2,4-D	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
2,4-DB	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Dalapon (dichloroacetic acid)	8150	µg/L	1	N.D.	N.D.	N.D.	N.D.
Dicamba	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Dichloroprop	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Dinoseb (DNBP)	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
2,4,5-T	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
2,4,5-TP (Silvex)	8150	µg/L	0.5	N.D.	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW16-002 96-04437-5
TPH: Gasoline	M8015	mg/L	0.05	N.D.
TPH: Diesel	M8015	mg/L	0.25	N.D.
CLP: Semi-VOC by GC/MS				
Acenaphthene	CLP-SVOC	µg/L	10	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW16-002 96-04437-5
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW16-002 96-04437-5
Chlorinated herbicides				
2,4-D	8150	μg/L	0.5	N.D.
2,4-DB	8150	μg/L	0.5	N.D.
Dalapon (dichloroacetic acid)	8150	μg/L	1	N.D.
Dicamba	8150	μg/L	0.5	N.D.
Dichloroprop	8150	μg/L	0.5	N.D.
Dinoseb (DNBP)	8150	μg/L	0.5	N.D.
2,4,5-T	8150	μg/L	0.5	N.D.
2,4,5-TP (Silvex)	8150	μg/L	0.5	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) Sample contains 1.2 mg/kg of Nitrite, as analyzed by Method 354.1.

(b) Additional compound per client's request.

(c) Sample contains 1.1 mg/kg of Nitrite, as analyzed by Method 354.1.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

4487

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6206-009

PROJECT NAME: MCAS El Toro - GWM

SAMPLERS: (Signature) Michael Ogden, Brian Sattler, Scott Schwarzler

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOC (CLP)	SVOC (CLP)	Gen. Chem. + TOC/COD	Herbicides	Pesticides	Metals (CLP)	Phosphate, Silica, Color	Chrom VI	TPH gas/TPH Diesel	REMARKS	PRESERVATIVE USED
B.T.	21DBMW56-002	11-13-96	1205		✓	H_2O	3	2		1							Metals sample have	
B.T.	03UGMW26-002	11-14-96	0920		✓	H_2O	11	2	1	1	2	1	1	2	1		been filtered in the	
B.T.	03UGMW26-302	11-14-96	0935		✓	H_2O	11	2	1	1	2	1	1	2	1		field.	
S.M.	04UGMW63-002	11-14-96	1000		✓	H_2O	14	2	1	1	2	1	1	2	1	3		
S.M.	04UGMW63-302	11-14-96	1005		✓	H_2O	14	2	1	1	2	1	1	2	1	3	NFESC QC level D	
B.T.	1BBGMW16-002	11-14-96	1145		✓	H_2O	8	2	1	1		1				3	all samples	
	TB-11-14a-96	11-14-96	—		—	H_2O	1	1										
																	Gen Chem includes nitrite/	
																	nitrate as N, chloride,	
																	sulfate, carbonate, bicarbonate,	
																	TDS, alkalinity.	
																	Refer to project specific	
																	detection limits	

CDM Federal

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Scott Schwarzler	11/14/96 1:15				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Christine Gonzalez	11/14/96 1:15				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL Courier - 2 coolers				APCL Chino, CA 909-590-1828	

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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego, CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964467
Collected by: Scott Schroeder
Collected on: 11/14-15/96

Received: 11/15/96
Extracted: 11/18-21/96
Tested: 11/15-22/96
Reported: 11/26/96

Sample Description: Water from MCAS El Toro - GWM
Project Description: 6206-009 MCAS El Toro - GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05DGMW68-002 96-04467-1	07DBMW100-002 96-04467-2	18BGMW14-002 96-04467-3	18BGMW14-302 96-04467-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	311	142	164	166
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	311	142	164	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	111	250	321	336
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	10.2	10.4	20.1	19.8
Solids, Total Dissolved (TDS)	160.1	mg/L	10	961	899	1,260	1,710
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	261	107	148	163
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.
1,1-Dichloroethene	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.
1,2-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.	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.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW14-802-1 96-04467-5	18BGMW14-802-2 96-04467-6	18BGMW22-002 96-04467-7	18BGMW48-002 96-04467-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	-	-	319	151
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	-	-	319	151
Carbonate	SM2320B	mg-$CaCO_3$/L	2	-	-	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	-	-	100	268
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	-	-	1.6	17.1
Solids, Total Dissolved (TDS)	160.1	mg/L	10	-	-	843	915
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	-	-	217	93.9
CLP: VOC by GC/MS							
Acetone	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.
Benzene	CLP-VOC	μg/L	1	6	554	N.D.	N.D.
Bromodichloromethane	CLP-VOC	μg/L	1	N.D.	2,020	1	N.D.
Bromoform	CLP-VOC	μg/L	1	N.D.	2,980	1	N.D.
Bromomethane	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.
2-Butanone (MEK)	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.
Carbon disulfide	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.
Carbon tetrachloride	CLP-VOC	μg/L	1	16	900	N.D.	N.D.
Chlorobenzene	CLP-VOC	μg/L	10	7.0J	1950J	1.0J	0.6J
Chlorodibromomethane	CLP-VOC	μg/L	1	N.D.	2,280	1	0.7J
Chloroethane	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.
Chloroform	CLP-VOC	μg/L	1	N.D.	824	2	N.D.
Chloromethane	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.
1,1-Dichloroethane	CLP-VOC	μg/L	1	N.D.	< 200	N.D.	N.D.
1,2-Dichloroethane	CLP-VOC	μg/L	1	16	1,830	0.8J	N.D.
1,1-Dichloroethene	CLP-VOC	μg/L	1	4	< 200	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	μg/L	1	17	< 200	N.D.	0.6J
1,2-Dichloropropane	CLP-VOC	μg/L	1	9	< 200	N.D.	N.D.
cis-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.
trans-1,3-Dichloropropene	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.
Ethylbenzene	CLP-VOC	μg/L	1	10	512	N.D.	N.D.
2-Hexanone	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.
4-Methyl-2-pentanone (MIBK)	CLP-VOC	μg/L	10	N.D.	612J	N.D.	N.D.
Methylene chloride	CLP-VOC	μg/L	1	16	414	N.D.	N.D.
Styrene	CLP-VOC	μg/L	10	7.0J	< 2000	N.D.	N.D.
1,1,2,2-Tetrachloroethane	CLP-VOC	μg/L	10	N.D.	3,260	1.7J	1.0J
Tetrachloroethene	CLP-VOC	μg/L	1	9	616	N.D.	5
Toluene	CLP-VOC	μg/L	1	4	1,120	N.D.	N.D.
1,1,1-Trichloroethane	CLP-VOC	μg/L	1	5	644	N.D.	N.D.
1,1,2-Trichloroethane	CLP-VOC	μg/L	1	10	< 200	N.D.	N.D.
Trichloroethene	CLP-VOC	μg/L	1	15	1,730	1	6
Vinyl chloride	CLP-VOC	μg/L	1	5	< 200	N.D.	N.D.
Xylenes (total)	CLP-VOC	μg/L	1	14	726	N.D.	N.D.
Freon-113 [a]	CLP-VOC	μg/L	10	N.D.	< 2000	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW101-002 96-04467-9	18BGMW101-302 96-04467-10	18MCAS01-1-002 96-04467-11	18MCAS01-2-002 96-04467-12
Alkalinity	310.1	mg-$CaCO_3$/L	2	259	259	235	220
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	259	259	235	220
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	312	307	162	136
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	25.4	24.5	N.D.	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,430	1,500	711	763
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	368	360	94.7	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	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.
1,1-Dichloroethene	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.	4
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.	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	21	20	N.D.	30
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 20DBMW55-002 96-04467-13	20UGMW36-002 96-04467-14	TB-11-15-96 96-04467-15
Alkalinity	310.1	mg-$CaCO_3$/L	2	91	129	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	91	129	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^- by IC	300.0	mg/L	0.2	146	360	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	11.9	25.8	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,690	1,950	-
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	834	702	-
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.
1,1-Dichloroethene	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.
1,2-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.	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 05DGMW68-002 96-04467-1	20DBMW55-002 96-04467-13
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.	N.D.
Color	110.2	Color Unit	1	N.D.	1
Phosphorus, Orthophosphate	300.0	mg/L	0.1	N.D.	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	56	27
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	52
Carbon, Total Organic (TOC)	415.1	mg/L	1	N.D.	3
CLP Metals (Full CLP 23 metals)					
Aluminum	CLP-Metal	µg/L	200	12.6J	-
Antimony	CLP-Metal	µg/L	60	N.D.	-
Arsenic	CLP-Metal	µg/L	10	N.D.	-
Barium	CLP-Metal	µg/L	200	30.4J	-
Beryllium	CLP-Metal	µg/L	5	N.D.	-
Cadmium	CLP-Metal	µg/L	5	N.D.	-
Calcium	CLP-Metal	µg/L	5000	140,000	-
Chromium	CLP-Metal	µg/L	10	2.5J	-
Cobalt	CLP-Metal	µg/L	50	N.D.	-
Copper	CLP-Metal	µg/L	25	3.0J	-
Iron	CLP-Metal	µg/L	100	29.0J	-
Lead	CLP-Metal	µg/L	5	2J	-
Magnesium	CLP-Metal	µg/L	5000	37,000	-
Manganese	CLP-Metal	µg/L	15	3.0J	-
Mercury	CLP-Metal	µg/L	0.2	N.D.	-
Nickel	CLP-Metal	µg/L	40	69	-
Potassium	CLP-Metal	µg/L	5000	3650J	-
Selenium	CLP-Metal	µg/L	5	5	-
Silver	CLP-Metal	µg/L	10	N.D.	-
Sodium	CLP-Metal	µg/L	5000	119,000	-
Thallium	CLP-Metal	µg/L	10	N.D.	-
Vanadium	CLP-Metal	µg/L	50	12J	-
Zinc	CLP-Metal	µg/L	20	5.1J	-
Chromium (VI)	7196	mg/L	0.002	N.D.	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05DGMW68-002 96-04467-1	20DBMW55-002 96-04467-13
CLP: Semi-VOC by GC/MS					
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	40
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05DGMW68-002 96-04467-1	20DBMW55-002 96-04467-13
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
CLP: Organochlorine pesticides & PCB					
Aldrin	CLP-Pest	µg/L	0.050	N.D.	-
beta-BHC	CLP-Pest	µg/L	0.050	N.D.	-
alpha-BHC	CLP-Pest	µg/L	0.050	N.D.	-
delta-BHC	CLP-Pest	µg/L	0.050	N.D.	-
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	N.D.	-
alpha-Chlordane	CLP-Pest	µg/L	0.050	N.D.	-
gamma-Chlordane	CLP-Pest	µg/L	0.050	N.D.	-
4,4'-DDD	CLP-Pest	µg/L	0.10	N.D.	-
4,4'-DDE	CLP-Pest	µg/L	0.10	N.D.	-
4,4'-DDT	CLP-Pest	µg/L	0.10	N.D.	-
Dieldrin	CLP-Pest	µg/L	0.10	N.D.	-
Endosulfan I	CLP-Pest	µg/L	0.050	N.D.	-
Endosulfan II	CLP-Pest	µg/L	0.10	N.D.	-
Endosulfan sulfate	CLP-Pest	µg/L	0.10	N.D.	-
Endrin	CLP-Pest	µg/L	0.10	N.D.	-
Endrin aldehyde	CLP-Pest	µg/L	0.10	N.D.	-
Endrin ketone	CLP-Pest	µg/L	0.10	N.D.	-
Heptachlor	CLP-Pest	µg/L	0.050	N.D.	-
Heptachlor epoxide	CLP-Pest	µg/L	0.050	N.D.	-
Methoxychlor	CLP-Pest	µg/L	0.50	N.D.	-
Toxaphene	CLP-Pest	µg/L	5.0	N.D.	-
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	N.D.	-
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	N.D.	-
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	N.D.	-
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	N.D.	-
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	N.D.	-
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	N.D.	-
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	N.D.	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 05DGMW68-002 96-04467-1	20DBMW55-002 96-04467-13
Chlorinated herbicides					
2,4-D	8150	µg/L	0.5	N.D.	-
2,4-DB	8150	µg/L	0.5	N.D.	-
Dalapon (dichloroacetic acid)	8150	µg/L	1	N.D.	-
Dicamba	8150	µg/L	0.5	N.D.	-
Dichloroprop	8150	µg/L	0.5	N.D.	-
Dinoseb (DNBP)	8150	µg/L	0.5	N.D.	-
2,4,5-T	8150	µg/L	0.5	N.D.	-
2,4,5-TP (Silvex)	8150	µg/L	0.5	N.D.	-

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW22-002 96-04467-7	20UGMW36-002 96-04467-14
TPH: Gasoline	M8015	mg/L	0.05	N.D.	N.D.
TPH: Diesel	M8015	mg/L	0.25	N.D.	N.D.
CLP: Semi-VOC by GC/MS					
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	-
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	-
Anthracene	CLP-SVOC	µg/L	10	N.D.	-
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	-
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	-
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	-
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	-
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	-
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	-
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	-
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	-
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	-
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	-
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	-
Carbazole	CLP-SVOC	µg/L	10	N.D.	-
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	-
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	-
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	-
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	-
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	-
Chrysene	CLP-SVOC	µg/L	10	N.D.	-
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	-
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	-
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	-
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	-
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW22-002 96-04467-7	20UGMW36-002 96-04467-14
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	-
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	-
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	-
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	-
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	-
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	-
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	-
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	-
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	-
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	-
Fluorene	CLP-SVOC	µg/L	10	N.D.	-
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	-
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	-
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	-
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	-
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	-
Isophorone	CLP-SVOC	µg/L	10	N.D.	-
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	-
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	-
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	-
Naphthalene	CLP-SVOC	µg/L	10	N.D.	-
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	-
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	-
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	-
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	-
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	-
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	-
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	-
Phenol	CLP-SVOC	µg/L	10	N.D.	-
Pyrene	CLP-SVOC	µg/L	10	N.D.	-
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	-
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMW48-002 96-04467-8	18BGMW101-002 96-04467-9	18BGMW101-302 96-04467-10
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	8J	N.D.	11
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMW48-002 96-04467-8	18BGMW101-002 96-04467-9	18BGMW101-302 96-04467-10
Fluorene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	μg/L	25	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	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

1 1 6 7

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PRESERVATIVE USED: 118004

PROJ. NO.: 6206-009

PROJECT NAME: MCAS El Toro - GWM

SAMPLERS: (Signature)

	SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOC (CLP)	SVOC (CLP)	General Chemistry*	Treatability Parameters*	Herbicides (8150)	Pesticides (CLP)	Metals (CLP)/Chrom VI	TPH Gas/TPH Diesel	REMARKS
SM	07DBMW100-002	11-14-96	12:05		✓	H_2O	3	2		1						*General chemistry includes
B.T	20DBMW55-002	11-14-96	1510		✓	H_2O	7	2	1	1	3					TDS, nitrate/nitrite as N,
B.T	20UGMW36-002	11-14-96	1330		✓	H_2O	6	2		1					3	sulfate, chloride, carbonate,
SM	18BGMW22-002	11-14-96	1405		✓	H_2O	7	2	1	1					3	bicarbonate, alkalinity
SM	18BGMW101-002	11-14-96	1705		✓	H_2O	4	2	1	1						
SM	18BGMW101-302	11-14-96	1710		✓	H_2O	4	2	1	1						*Treatability parameters
SM	18BGMW48-002	11-14-96	1630		✓	H_2O	4	2	1	1						include COD, TOC, ammonia-
B.T	18BGMW14-002	11/15/96	1018		✓	H_2O	3	2		1						nitrogen, phosphate, silica,
B.T	18BGMW14-302	11/15/96	1038		✓	H_2O	3	2		1						TSS, color
	18BGMW14-802-1	11/15/96	1058		✓	H_2O	2	2								
	18BGMW14-802-2	11/15/96	1118		✓	H_2O	2	2								NFESC QC Level D
B.T	05DGMW68-002	11/15/96	1235		✓	H_2O	11	2	1	1	3	1	1	2		for all samples.
MD	18MCAS01-1-002	11/15/96	1200		✓	H_2O	3	2		1						
MD	18MCAS01-2-002	11/15/96	1320		✓	H_2O	3	2		1						Metals samples have been
	TB-11-15-96	11/15/96	--		-	H_2O	1	1								filtered in the field.

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Scott Schuman	11/15/96 1515				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
Justine Bazaler	11/15/96 15:15				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL Courier · 2 coolers				APCL Chino, CA 909-590-1828	

Distribution: Original Accompanies Shipments; Copy to Coordinator Field Fi'

Applied P & Ch Laboratory
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APCL Analytical Report

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

Service ID #: 801-964481
Collected by: Scott Schroeder
Collected on: 11/18/96

Received: 11/19/96
Extracted: 11/21/96
Tested: 11/19-25/96
Reported: 12/03/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro - GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 01MW201-002 96-04481-1	09DBMW45-002 96-04481-2	01DGMW58-002 96-04481-3	18MCAS01-3-002 96-04481-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	179	188	211	224
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	179	188	211	224
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	36.4	243	38.5	150
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	20.4	16.9	9.9	9.7
Solids, Total Dissolved (TDS)	160.1	mg/L	10	522	1,110	441	876
Sulfate (SO_4^{--})	300.0	mg/L	0.5	53.8	213	16.2	189
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.	0.9J	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.	4	N.D.	N.D.
Chlorobenzene	CLP-VOC	µg/L	10	N.D.	2.0J	N.D.	N.D.
Chlorodibromomethane	CLP-VOC	µg/L	1	N.D.	0.9J	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.	2	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.	1	N.D.	N.D.
1,1-Dichloroethene	CLP-VOC	µg/L	1	N.D.	4	N.D.	N.D.
1,2-Dichloroethene (Total)	CLP-VOC	µg/L	1	N.D.	0.9J	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.	2	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.	0.8J	N.D.	N.D.
Tetrachloroethene	CLP-VOC	µg/L	1	N.D.	6	N.D.	N.D.
Toluene	CLP-VOC	µg/L	1	N.D.	1J	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.	604	1	28
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.	20	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18MCAS01-4-002 96-04481-5	18MCAS01-5-002 96-04481-6	18MCAS01-6-002 96-04481-7
Alkalinity	310.1	mg-$CaCO_3$/L	2	242	207	265
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	242	207	265
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^-	300.0	mg/L	0.2	218	335	532
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	17.6	20.8	31.2
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,150	1,500	2,530
Sulfate (SO_4^{--})	300.0	mg/L	0.5	293	357	710
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.
1,1-Dichloroethene	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.
1,2-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	8	3	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 18MCAS01-7-002 96-04481-8	18MCAS01-7-502 96-04481-9	TB-11-19-96 96-04481-10
Alkalinity	310.1	mg-$CaCO_3$/L	2	451	N.D.	-
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	451	N.D.	-
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	-
Chloride Cl^-	300.0	mg/L	0.2	203	N.D.	-
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	19.0	N.D.	-
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,620	N.D.	-
Sulfate (SO_4^{--})	300.0	mg/L	0.5	466	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.	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.	0.5J	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.
1,1-Dichloroethene	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.
1,2-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.	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.	0.9J	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.	3
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 09DBMW45-002 96-04481-2
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.
Chemical Oxygen Demand (COD)	410.4	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	54
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	4

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 01MW201-002 96-04481-1	01DGMW58-002 96-04481-3
CLP Metals (Full CLP 23 metals)					
Aluminum	CLP-Metal	µg/L	200	N.D.	N.D.
Antimony	CLP-Metal	µg/L	60	N.D.	N.D.
Arsenic	CLP-Metal	µg/L	10	N.D.	N.D.
Barium	CLP-Metal	µg/L	200	5.23J	25.2J
Beryllium	CLP-Metal	µg/L	5	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5	N.D.	N.D.
Calcium	CLP-Metal	µg/L	5000	88,000	84,000
Chromium	CLP-Metal	µg/L	10	2.8J	N.D.
Cobalt	CLP-Metal	µg/L	50	N.D.	N.D.
Copper	CLP-Metal	µg/L	25	2.1J	N.D.
Iron	CLP-Metal	µg/L	100	112	N.D.
Lead	CLP-Metal	µg/L	5	2J	N.D.
Magnesium	CLP-Metal	µg/L	5000	6,270	11,000
Manganese	CLP-Metal	µg/L	15	120	N.D.
Mercury	CLP-Metal	µg/L	0.2	N.D.	N.D.
Nickel	CLP-Metal	µg/L	40	550	89
Potassium	CLP-Metal	µg/L	5000	3520J	1070J
Selenium	CLP-Metal	µg/L	5	N.D.	N.D.
Silver	CLP-Metal	µg/L	10	N.D.	N.D.
Sodium	CLP-Metal	µg/L	5000	52,000	36,000
Thallium	CLP-Metal	µg/L	10	N.D.	N.D.
Vanadium	CLP-Metal	µg/L	50	N.D.	11J
Zinc	CLP-Metal	µg/L	20	18J	6.9J
Chromium (VI)	7196	mg/L	0.002	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 01MW201-002 96-04481-1	01DGMW58-002 96-04481-3
CLP: Semi-VOC by GC/MS					
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	3.0J	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	1.9J	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	5.8J	26
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 01MW201-002 96-04481-1	01DGMW58-002 96-04481-3
Fluorene	CLP-SVOC	μg/L	10	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	μg/L	10	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	μg/L	10	N.D.	N.D.
Hexachloroethane	CLP-SVOC	μg/L	10	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.
Isophorone	CLP-SVOC	μg/L	10	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	μg/L	10	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	μg/L	10	N.D.	N.D.
Naphthalene	CLP-SVOC	μg/L	10	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	μg/L	25	N.D.	N.D.
Nitrobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	μg/L	10	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	μg/L	25	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	μg/L	10	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	μg/L	10	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	μg/L	25	N.D.	N.D.
Phenanthrene	CLP-SVOC	μg/L	10	N.D.	N.D.
Phenol	CLP-SVOC	μg/L	10	N.D.	N.D.
Pyrene	CLP-SVOC	μg/L	10	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	μg/L	10	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	μg/L	25	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	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

4421

CDM FEDERAL PROGRAMS CORPORATION

CHAIN OF CUSTODY RECORD

PROJ. NO.: 6206-009

PROJECT NAME: MCAS El Toro - SWM

SAMPLERS: (Signature) [illegible]

SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	MATRIX	NO. OF CONTAINERS	VOC (CLP)	SVOC (CLP)	General chemistry *	Treatability Parameters *	Herbicides (8150)	Pesticides (CLP)	Metals (CLP) (Inorganics VI)	TPH 8015/TPH Diesel	REMARKS	PRESERVATIVE USED
01DBMW45-002	11-18-96	1615		✓	H_2O	6	2		1	3					* General chemistry include	
01DGMW58-002	11-18-96	1305		✓	H_2O	6	2	1	1				2		TDS, nitrate/nitrite as N,	
18MCAS01-5-002	11-18-96	1250		✓	H_2O	3	2		1						sulfate, chloride, carbonate,	
18MCAS01-6-002	11-18-96	1400		✓	H_2O	3	2		1						bicarbonate, alkalinity	
18MCAS01-4-002	11-18-96	11:30		✓	H_2O	3	2		1							
18MCAS01-3-002	11-18-96	10:05		✓	H_2O	3	2		1						* Treatability Parameters	
18MCAS01-7-002	11-18-96	1500		✓	H_2O	3	2		1						include, COD, TOC, ammonia-	
01MW201-002	11-18-96	1425		✓	H_2O	6	2	1	1				2		nitrogen, phosphate,	
18MCAS01-7-502	11-18-96	1420		✓	H_2O	3	2		1						silica, TSS, color	
															NFESC QC Level D	
															for all samples	
															Metals samples have been	
															field filtered	

Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time
Pat Russell	11/19/96 8:30				
Received by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Date / Time**	**Received by: (Signature)**	**Date / Time**
[illegible]	11/19/96 8:30				
Airbill No.		**Received for Laboratory by: (Signature)**	**Date / Time**	**Laboratory**	
APCL Courier				APCL Chino, CA 909 590 1828	

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: Scott Schroeder
3760 Convoy St., Ste 210
San Diego CA 92111
Tel: (619)268-3383 Fax: (619)268-9677

Service ID #: 801-964493
Collected by:
Collected on: 11/19/96

Received: 11/20/96
Extracted: 11/20-22/96
Tested: 11/20-29/96
Reported: 12/09/96

Sample Description: Water from MCAS El Toro
Project Description: 6206-009 MCAS El Toro - GWM

Analysis of Water Samples

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 13DGMW78-002 96-04493-1	13DBMW49-302 96-04493-2	14DBMW50-002 96-04493-3	13DBMW49-002 96-04493-4
Alkalinity	310.1	mg-$CaCO_3$/L	2	392	282	235	274
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	392	282	235	274
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	323	305	308	294
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	16.7 [a]	19.3 [b]	23.3	19.6 [b]
Solids, Total Dissolved (TDS)	160.1	mg/L	10	2,150	1,850	1,770	1,890
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	854	671	646	639
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.	0.9J	N.D.	1
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.	9	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	1	N.D.	N.D.	N.D.
1,1-Dichloroethene	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.
1,2-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.	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.	2	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 [c]	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 (PQL)	Analysis Result 14DGMW79-002 96-04493-5	18BGMP10A-002 96-04493-6	18BGMP10B-002 96-04493-7	18BGMP10C-002 96-04493-8
Alkalinity	310.1	mg-$CaCO_3$/L	2	270	218	242	175
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	270	218	242	175
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	340	92.2	85.0	21.2
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	21.0 [d]	N.D.	N.D.	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	2,190	600	553	363
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	849	59.0	73.7	79.3
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	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	9	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.
1,1-Dichloroethene	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.
1,2-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.	1	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	1	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 [c]	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 (PQL)	Analysis Result 18BGMP10D-002 96-04493-9	18BGMP10E-002 96-04493-10	18BGMP10F-002 96-04493-11	18BGMW2A-002 96-04493-12
Alkalinity	310.1	mg-$CaCO_3$/L	2	198	265	287	175
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	198	265	287	175
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	24.5	39.0	191	76.0
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	N.D.	N.D.	2.8 [a]	N.D.
Solids, Total Dissolved (TDS)	160.1	mg/L	10	444	602	1,220	535
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	85.2	156	454	163
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.
1,1-Dichloroethene	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.
1,2-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	1	1	N.D.	1
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.	0.6J
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 [c]	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 18MCAS04-002 96-04493-13	18MCAS04-702 96-04493-14	18MCAS06-002 96-04493-15
Alkalinity	310.1	mg-$CaCO_3$/L	2	209	125	190
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	209	125	190
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	198	95.0	152
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	8.6	0.3	6.7
Solids, Total Dissolved (TDS)	160.1	mg/L	10	1,030	680	775
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	294	266	185
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.	16	N.D.
Bromoform	CLP-VOC	µg/L	1	N.D.	2	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.	12	N.D.
Chloroethane	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Chloroform	CLP-VOC	µg/L	1	N.D.	14	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.
1,1-Dichloroethene	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.
1,2-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	1J	1	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	11	N.D.	6
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 [c]	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 18MCAS10-002 96-04493-16	18MCAS09-502 96-04493-17	18MCAS09-002 96-04493-18
Alkalinity	310.1	mg-$CaCO_3$/L	2	250	N.D.	222
Bicarbonate	SM2320B	mg-$CaCO_3$/L	2	250	N.D.	222
Carbonate	SM2320B	mg-$CaCO_3$/L	2	N.D.	N.D.	N.D.
Chloride Cl^- by IC	300.0	mg/L	0.2	145	N.D.	58.7
Nitrate/Nitrite, as N	300.0	mg-N/L	0.1	3.1	N.D.	0.7
Solids, Total Dissolved (TDS)	160.1	mg/L	10	907	41	607
Sulfate (SO_4^{--}), by IC	300.0	mg/L	0.5	272	N.D.	137
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.
1,1-Dichloroethene	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.
1,2-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.	2
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	3	N.D.	3
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 [c]	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 TB-D-11-20-96 96-04493-19	TB-ND-11-20-96 96-04493-20	TB-WB-11-20-96 96-04493-21
CLP: VOC by GC/MS						
Acetone	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.
Benzene	CLP-VOC	µg/L	1	0.7J	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.
1,1-Dichloroethene	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.
1,2-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	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 [c]	CLP-VOC	µg/L	10	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 13DGMW78-002 96-04493-1	13DBMW49-302 96-04493-2	14DBMW50-002 96-04493-3
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	20	N.D.	N.D.
Color	110.2	Color Unit	1	N.D.	N.D.	1
Phosphorus, Orthophosphate	300.0	mg/L	0.1	N.D.	N.D.	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	49	52	49
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	N.D.	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	7	1	1

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Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 13DGMW78-002 96-04493-1	13DBMW49-302 96-04493-2	14DBMW50-002 96-04493-3
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	µg/L	200	N.D.	11.4J	32.1J
Antimony	CLP-Metal	µg/L	60	N.D.	N.D.	N.D.
Arsenic	CLP-Metal	µg/L	10	7.2J	3.9J	N.D.
Barium	CLP-Metal	µg/L	200	28.6J	28.3J	19.3J
Beryllium	CLP-Metal	µg/L	5	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	µg/L	5	4J	0.8J	1J
Calcium	CLP-Metal	µg/L	5000	284,000	247,000	248,000
Chromium	CLP-Metal	µg/L	10	N.D.	N.D.	2.0J
Cobalt	CLP-Metal	µg/L	50	2.7J	N.D.	N.D.
Copper	CLP-Metal	µg/L	25	N.D.	7.6J	9.2J
Iron	CLP-Metal	µg/L	100	N.D.	N.D.	N.D.
Lead	CLP-Metal	µg/L	5	2J	1J	3J
Magnesium	CLP-Metal	µg/L	5000	135,000	96,000	96,000
Manganese	CLP-Metal	µg/L	15	1,480	45	74
Mercury	CLP-Metal	µg/L	0.2	N.D.	N.D.	N.D.
Nickel	CLP-Metal	µg/L	40	18J	5.7J	62
Potassium	CLP-Metal	µg/L	5000	5,440	5,380	4240J
Selenium	CLP-Metal	µg/L	5	31	36	56
Silver	CLP-Metal	µg/L	10	N.D.	N.D.	N.D.
Sodium	CLP-Metal	µg/L	5000	190,000	149,000	137,000
Thallium	CLP-Metal	µg/L	10	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	µg/L	50	14J	22J	14J
Zinc	CLP-Metal	µg/L	20	8.7J	7.2J	9.9J
Chromium (VI)	7196	mg/L	0.002	N.D.	N.D.	N.D.
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	-	N.D.	-
Acenaphthylene	CLP-SVOC	µg/L	10	-	N.D.	-
Anthracene	CLP-SVOC	µg/L	10	-	N.D.	-
Benz(a)anthracene	CLP-SVOC	µg/L	10	-	N.D.	-
Benzo(a)pyrene	CLP-SVOC	µg/L	10	-	N.D.	-
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	-	N.D.	-
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	-	N.D.	-
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	-	N.D.	-
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	-	N.D.	-
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	-	N.D.	-
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	-	N.D.	-
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	-	N.D.	-
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	-	N.D.	-
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	-	N.D.	-
Carbazole	CLP-SVOC	µg/L	10	-	N.D.	-
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	-	N.D.	-
4-Chloroaniline	CLP-SVOC	µg/L	10	-	N.D.	-
2-Chloronaphthalene	CLP-SVOC	µg/L	10	-	N.D.	-
2-Chlorophenol	CLP-SVOC	µg/L	10	-	N.D.	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 13DGMW78-002 96-04493-1	13DBMW49-302 96-04493-2	14DBMW50-002 96-04493-3
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	-	N.D.	-
Chrysene	CLP-SVOC	µg/L	10	-	N.D.	-
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	-	N.D.	-
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	-	N.D.	-
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	-	N.D.	-
Dibenzofuran	CLP-SVOC	µg/L	10	-	N.D.	-
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	-	N.D.	-
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	-	N.D.	-
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	-	N.D.	-
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	-	N.D.	-
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	-	N.D.	-
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	-	N.D.	-
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	-	N.D.	-
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	-	N.D.	-
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	-	N.D.	-
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	-	N.D.	-
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	-	N.D.	-
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	-	N.D.	-
Fluoranthene	CLP-SVOC	µg/L	10	-	N.D.	-
Fluorene	CLP-SVOC	µg/L	10	-	N.D.	-
Hexachlorobenzene	CLP-SVOC	µg/L	10	-	N.D.	-
Hexachlorobutadiene	CLP-SVOC	µg/L	10	-	N.D.	-
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	-	N.D.	-
Hexachloroethane	CLP-SVOC	µg/L	10	-	N.D.	-
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	-	N.D.	-
Isophorone	CLP-SVOC	µg/L	10	-	N.D.	-
2-Methylnaphthalene	CLP-SVOC	µg/L	10	-	N.D.	-
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	-	N.D.	-
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	-	N.D.	-
Naphthalene	CLP-SVOC	µg/L	10	-	N.D.	-
2-Nitroaniline	CLP-SVOC	µg/L	25	-	N.D.	-
3-Nitroaniline	CLP-SVOC	µg/L	25	-	N.D.	-
4-Nitroaniline	CLP-SVOC	µg/L	25	-	N.D.	-
Nitrobenzene	CLP-SVOC	µg/L	10	-	N.D.	-
2-Nitrophenol	CLP-SVOC	µg/L	10	-	N.D.	-
4-Nitrophenol	CLP-SVOC	µg/L	25	-	N.D.	-
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	-	N.D.	-
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	-	N.D.	-
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	-	N.D.	-
Phenanthrene	CLP-SVOC	µg/L	10	-	N.D.	-
Phenol	CLP-SVOC	µg/L	10	-	N.D.	-
Pyrene	CLP-SVOC	µg/L	10	-	N.D.	-
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	-	N.D.	-
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	-	N.D.	-
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	-	N.D.	-

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 13DBMW49-002 96-04493-4	14DGMW79-002 96-04493-5	18MCAS04-702 96-04493-14
Ammonia (NH_4^+-N)	350.2	mg/L	0.2	N.D.	N.D.	N.D.
Chemical Oxygen Demand (COD)	410.4	mg-O_2/L	20	N.D.	N.D.	26
Color	110.2	Color Unit	1	N.D.	N.D.	N.D.
Phosphorus, Orthophosphate	300.0	mg/L	0.1	N.D.	N.D.	N.D.
Silica (SiO_2) dissolved	370.1	mg/L	1	52	52	8
Solids, Total Suspended (TSS)	160.2	mg/L	4	N.D.	N.D.	N.D.
Carbon, Total Organic (TOC)	415.1	mg/L	1	2	N.D.	3
CLP Metals (Full CLP 23 metals)						
Aluminum	CLP-Metal	μg/L	200	14.2J	N.D.	198J
Antimony	CLP-Metal	μg/L	60	N.D.	2.5J	N.D.
Arsenic	CLP-Metal	μg/L	10	2.6J	3.5J	N.D.
Barium	CLP-Metal	μg/L	200	28.2J	17.4J	127J
Beryllium	CLP-Metal	μg/L	5	N.D.	N.D.	N.D.
Cadmium	CLP-Metal	μg/L	5	0.7J	1J	N.D.
Calcium	CLP-Metal	μg/L	5000	249,000	263,000	74,000
Chromium	CLP-Metal	μg/L	10	N.D.	N.D.	N.D.
Cobalt	CLP-Metal	μg/L	50	N.D.	N.D.	N.D.
Copper	CLP-Metal	μg/L	25	1.8J	1.9J	4.4J
Iron	CLP-Metal	μg/L	100	N.D.	N.D.	N.D.
Lead	CLP-Metal	μg/L	5	2J	2J	N.D.
Magnesium	CLP-Metal	μg/L	5000	95,000	116,000	30,000
Manganese	CLP-Metal	μg/L	15	45	85	1.7J
Mercury	CLP-Metal	μg/L	0.2	N.D.	N.D.	N.D.
Nickel	CLP-Metal	μg/L	40	5.0J	5.9J	N.D.
Potassium	CLP-Metal	μg/L	5000	5,270	4110J	5,230
Selenium	CLP-Metal	μg/L	5	39	39	N.D.
Silver	CLP-Metal	μg/L	10	N.D.	N.D.	N.D.
Sodium	CLP-Metal	μg/L	5000	151,000	169,000	102,000
Thallium	CLP-Metal	μg/L	10	N.D.	N.D.	N.D.
Vanadium	CLP-Metal	μg/L	50	23J	17J	3.1J
Zinc	CLP-Metal	μg/L	20	4.0J	10J	19J
Chromium (VI)	7196	mg/L	0.002	N.D.	N.D.	N.D.
TPH: Gasoline	M8015	mg/L	0.05	-	-	N.D.
TPH: Diesel	M8015	mg/L	0.25	-	-	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 13DBMW49-002 96-04493-4	14DGMW79-002 96-04493-5	18MCAS04-702 96-04493-14
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	-	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	-	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	-	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	-	28
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	-	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	-	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	-	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 13DBMW49-002 96-04493-4	14DGMW79-002 96-04493-5	18MCAS04-702 96-04493-14
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	-	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	-	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	-	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	-	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	-	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	-	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	-	N.D.
CLP: Organochlorine pesticides & PCB						
Aldrin	CLP-Pest	µg/L	0.050	-	-	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	-	-	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	-	-	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	-	-	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	-	-	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	-	-	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	-	-	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	-	-	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	-	-	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	-	-	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	-	-	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	-	-	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	-	-	N.D.
Endosulfan sulfate	CLP-Pest	µg/L	0.10	-	-	N.D.
Endrin	CLP-Pest	µg/L	0.10	-	-	N.D.
Endrin aldehyde	CLP-Pest	µg/L	0.10	-	-	N.D.
Endrin ketone	CLP-Pest	µg/L	0.10	-	-	N.D.
Heptachlor	CLP-Pest	µg/L	0.050	-	-	N.D.
Heptachlor epoxide	CLP-Pest	µg/L	0.050	-	-	N.D.
Methoxychlor	CLP-Pest	µg/L	0.50	-	-	N.D.
Toxaphene	CLP-Pest	µg/L	5.0	-	-	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	-	-	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	-	-	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	-	-	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	-	-	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	-	-	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	-	-	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	-	-	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 13DBMW49-002 96-04493-4	14DGMW79-002 96-04493-5	18MCAS04-702 96-04493-14
Chlorinated herbicides						
2,4-D	8150	µg/L	0.5	-	-	N.D.
2,4-DB	8150	µg/L	0.5	-	-	N.D.
Dalapon (dichloroacetic acid)	8150	µg/L	1	-	-	N.D.
Dicamba	8150	µg/L	0.5	-	-	N.D.
Dichloroprop	8150	µg/L	0.5	-	-	N.D.
Dinoseb (DNBP)	8150	µg/L	0.5	-	-	N.D.
2,4,5-T	8150	µg/L	0.5	-	-	N.D.
2,4,5-TP (Silvex)	8150	µg/L	0.5	-	-	N.D.

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW2A-002 96-04493-12	18MCAS09-502 96-04493-17
TPH: Gasoline	M8015	mg/L	0.05	N.D.	N.D.
TPH: Diesel	M8015	mg/L	0.25	N.D.	N.D.
CLP: Semi-VOC by GC/MS					
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW2A-002 96-04493-12	18MCAS09-502 96-04493-17
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	3.2J
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	15	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	1.9J
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL (PQL)	Analysis Result 18BGMW2A-002 96-04493-12	18MCAS09-502 96-04493-17
CLP: Organochlorine pesticides & PCB					
Aldrin	CLP-Pest	µg/L	0.050	-	N.D.
beta-BHC	CLP-Pest	µg/L	0.050	-	N.D.
alpha-BHC	CLP-Pest	µg/L	0.050	-	N.D.
delta-BHC	CLP-Pest	µg/L	0.050	-	N.D.
gamma-BHC (Lindane)	CLP-Pest	µg/L	0.050	-	N.D.
alpha-Chlordane	CLP-Pest	µg/L	0.050	-	N.D.
gamma-Chlordane	CLP-Pest	µg/L	0.050	-	N.D.
4,4'-DDD	CLP-Pest	µg/L	0.10	-	N.D.
4,4'-DDE	CLP-Pest	µg/L	0.10	-	N.D.
4,4'-DDT	CLP-Pest	µg/L	0.10	-	N.D.
Dieldrin	CLP-Pest	µg/L	0.10	-	N.D.
Endosulfan I	CLP-Pest	µg/L	0.050	-	N.D.
Endosulfan II	CLP-Pest	µg/L	0.10	-	N.D.
Endosulfan sulfate	CLP-Pest	µg/L	0.10	-	N.D.
Endrin	CLP-Pest	µg/L	0.10	-	N.D.
Endrin aldehyde	CLP-Pest	µg/L	0.10	-	N.D.
Endrin ketone	CLP-Pest	µg/L	0.10	-	N.D.
Heptachlor	CLP-Pest	µg/L	0.050	-	N.D.
Heptachlor epoxide	CLP-Pest	µg/L	0.050	-	N.D.
Methoxychlor	CLP-Pest	µg/L	0.50	-	N.D.
Toxaphene	CLP-Pest	µg/L	5.0	-	N.D.
Aroclor-1016 (PCB-1016)	CLP-Pest	µg/L	1.0	-	N.D.
Aroclor-1221 (PCB-1221)	CLP-Pest	µg/L	2.0	-	N.D.
Aroclor-1232 (PCB-1232)	CLP-Pest	µg/L	1.0	-	N.D.
Aroclor-1242 (PCB-1242)	CLP-Pest	µg/L	1.0	-	N.D.
Aroclor-1248 (PCB-1248)	CLP-Pest	µg/L	1.0	-	N.D.
Aroclor-1254 (PCB-1254)	CLP-Pest	µg/L	1.0	-	N.D.
Aroclor-1260 (PCB-1260)	CLP-Pest	µg/L	1.0	-	N.D.
Chlorinated herbicides					
2,4-D	8150	µg/L	0.5	N.D.	N.D.
2,4-DB	8150	µg/L	0.5	N.D.	N.D.
Dalapon (dichloroacetic acid)	8150	µg/L	1	N.D.	N.D.
Dicamba	8150	µg/L	0.5	N.D.	N.D.
Dichloroprop	8150	µg/L	0.5	N.D.	N.D.
Dinoseb (DNBP)	8150	µg/L	0.5	N.D.	N.D.
2,4,5-T	8150	µg/L	0.5	N.D.	N.D.
2,4,5-TP (Silvex)	8150	µg/L	0.5	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMP10B-002 96-04493-7	18BGMP10D-002 96-04493-9	18MCAS04-002 96-04493-13
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(g,h,i)perylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(k)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethoxy) methane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroethyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-chloroisopropyl) ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Bis(2-ethylhexyl) phthalate	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Bromophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Butyl Benzyl Phthalate (BBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Carbazole	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloro-3-methylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chloroaniline	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chloronaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Chlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Chlorophenyl phenyl ether	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Chrysene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-butyl phthalate (DBP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Di-n-octyl phthalate (DOP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenz(a,h)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Dibenzofuran	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,3-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,4-Dichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3,3'-Dichlorobenzidine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Diethyl phthalate (DEP)	CLP-SVOC	µg/L	10	N.D.	N.D.	3.9J
Dimethyl phthalate (DMP)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4-Dimethylphenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4,6-Dinitro-2-methylphenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,6-Dinitrotoluene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.

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APCL Analytical Report

Component Analyzed	Method	Unit	CRDL	Analysis Result 18BGMP10B-002 96-04493-7	18BGMP10D-002 96-04493-9	18MCAS04-002 96-04493-13
Fluorene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorobutadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachlorocyclopentadiene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Hexachloroethane	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Indeno(1,2,3-cd)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Isophorone	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylnaphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
3/4-Methylphenol (m/p-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Methylphenol (o-Cresol)	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Naphthalene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
3-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
4-Nitroaniline	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Nitrobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2-Nitrophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
4-Nitrophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
N-Nitroso-di-n-propylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
N-Nitrosodiphenylamine	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pentachlorophenol (PCP)	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
Phenanthrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Phenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
1,2,4-Trichlorobenzene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
2,4,5-Trichlorophenol	CLP-SVOC	µg/L	25	N.D.	N.D.	N.D.
2,4,6-Trichlorophenol	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.

Component Analyzed	Method	Unit	CRDL	Analysis Result 18MCAS06-002 96-04493-15	18MCAS10-002 96-04493-16	18MCAS09-002 96-04493-18
CLP: Semi-VOC by GC/MS						
Acenaphthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Acenaphthylene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benz(a)anthracene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(a)pyrene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.
Benzo(b)fluoranthene	CLP-SVOC	µg/L	10	N.D.	N.D.	N.D.