M60050.001191

PREPARED BY:
Southwest Division, Naval Facilities
Engineering Command
1220 Pacific Highway
San Diego, California 92132-5190

THROUGH:
CONTRACT #N68711-89-D-9296
CTO #145
DOCUMENT CONTROL NO:
CLE-C01-01F145-X3-0028

WITH:
Jacobs Engineering Group Inc.
3655 Nobel Drive, Suite 200
San Diego, California 92122

In association with:
International Technology Corporation
CH2M HILL

Marine Corps Air Station
El Toro, California

Installation Restoration Program
Remedial Investigation/Feasibility Study

GROUNDWATER QUALITY DATA REPORT

30 September 1994

ACRONYMS AND SHORT FORMS

AL	action level
BGMW	background monitoring well
bgs	below ground surface
conc.	concentration
CRDL	contract-required detection limit
DBMW	deep boring monitoring well
deg C	degrees centigrade
DGMW	downgradient monitoring well
DTSC	(California) Department of Toxic Substances Control
EPA	(U.S.) Environmental Protection Agency
FS	Feasibility Study
ft	feet
IAFS	Interim-Action Feasibility Study
IDL	instrument detection limit
IDP	Irvine Desalter Project
MCAS	Marine Corps Air Station
MCL	maximum contaminant level
MP	multiple-port (monitoring well)
MW	monitoring well
µg/L	microgram per liter
mg/L	milligram per liter
msl	mean sea level
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene, perchloroethylene
pCi/L	picocuries per liter
pH	measure of acidity/alkalinity
RI	Remedial Investigation
sec.	secondary
Station	MCAS El Toro
SVOC	semivolatile organic compound
TCE	trichloroethylene
TD	total depth
TDS	total dissolved solids
TFH	total fuel hydrocarbons
TIC	The Irvine Company
TSS	total suspended solids
UGMW	upgradient monitoring well
VOC	volatile organic compound

CONTENTS

1.0 INTRODUCTION 1

2.0 DATA PRESENTED AND SELECTION CRITERIA 1

3.0 DATA SUMMARY TABLES 4
- 3.1 Data Presented
- 3.2 Data Qualifier Flags

4.0 HISTOGRAMS 4
- 4.1 Data Presented
- 4.2 Arrangement by Parameter Group
- 4.3 Horizontal Axis (Sampling Dates)
- 4.4 Vertical Axis
- 4.5 Vertical Bars (Detected Concentrations or Detection Limits)
- 4.6 Detection Limits

5.0 WELL LOCATION MAPS 6

6.0 HYDROGRAPHS 6

7.0 MONITORING WELL DETAILS 7
- 7.1 Well Diagrams and Lithology
- 7.2 Well Construction Summaries

APPENDIX GROUNDWATER QUALITY DATA REPORTS

TABLES

2-1 Summary of Analytes and Their Maximum Concentrations Detected in Groundwater 2

FIGURES

1-1 Locations of Wells . . . . . (in pocket)

4-1 Typical Histograms 4
4-2 Detection Limit Differences 5

5-1 Sample Well Location Map 6

6-1 Sample Hydrograph 6

7-1 Sample Interpreted Boring Log 7
7-2 Sample Well Construction Summary 7

1.0 INTRODUCTION

The Marine Corps Air Station (MCAS) El Toro has been identified as a potential source of contamination of the regional groundwater in the Irvine Groundwater Subbasin. The Naval Facilities Engineering Command, Southwest Division, has implemented a comprehensive program to:

- Address immediate site concerns.
- Conduct a Remedial Investigation (RI) and Feasibility Study (FS) to characterize the physical conditions and the extent of contamination at the site, and to determine feasible, cost-effective remedial alternatives for final closure of the site.
- Implement various remedial alternatives and other actions to protect the local environment and residents living near MCAS El Toro (the Station).

As part of the RI/FS, the Navy developed an extensive network of groundwater monitoring wells at the Station. During the Phase I RI, the Navy installed 110 monitoring wells (including some cluster wells and several multiple-port wells) and has sampled them twice (Rounds 1 and 2). In addition, 53 existing monitoring wells owned by the Station have been sampled at various times since the mid-1980s. Data from these and 35 other previously drilled wells (mostly used for agricultural irrigation) are included in this summary report, because they are important for evaluation of the regional groundwater quality. Figure 1-1 (in a pocket at the end of this introductory text) shows the locations of all 198 wells, both on- and off-Station.

The Navy's groundwater database now comprises more than 200,000 groundwater quality data records. This report provides concise, informative displays of the key water quality data from samples collected at each monitoring well. The data summaries are arranged in numerical order by their well identification numbers, with Site 1 wells being listed first, and Site 22 wells being last.

2.0 DATA PRESENTED AND SELECTION CRITERIA

In the groundwater samples, 114 chemical and physical parameters were detected or measured at least once. These parameters and the maximum detected concentration of each are listed in Table 2-1.

Of these 114 analytical parameters, 76 have been selected for detailed presentation in this report's data summaries. (These parameters are shown in boldface on Table 2-1.) Data on these 76 parameters are presented in the data tables and histograms in the following groups:

- 25 volatile organic compounds (VOCs)
- 6 semivolatile organic compounds (SVOCs)
- 4 pesticides
- 4 herbicides
- 2 total fuel hydrocarbons (TFH)
- 23 dissolved metals
- 7 general chemistry parameters
- 3 chemical/physical parameters
- 2 radionuclides

The following criteria were used to select these parameters:

- Compounds were selected that (1) have been detected relatively frequently, (2) have state or federal maximum contaminant levels (MCLs), and/or (3) may indicate contaminant migration from a landfill.
- Also selected were three chemical/physical parameters that provide information on general water quality and geochemical processes (pH, temperature, and total dissolved solids [TDS]).
- In general, chemicals were excluded from this report that have been detected relatively infrequently (fewer than 2 to 10 detections at the Station) or that provide little information on the potential nature and extent of contamination or contaminant fate and transport.

The summary of selected groundwater quality data for each well is presented on two facing pages of this report. The summary for each well comprises:

- A table listing all data for the selected 76 parameters
- 76 histogram plots (bar graphs) of the data, one for each selected parameter
- A well location map
- A groundwater level hydrograph
- Well details (schematic diagram, lithology, and construction summary)

Table 2-1
Summary of Analytes and Their Maximum Concentrations Detected in Groundwater
MCAS El Toro Groundwater Quality Data Report

Analyte by Group[a]	Units	Number of Samples	Number of Times Detected	Number of Sampling Locations	Number Exceeding Regulatory Standards	Regulatory Standard	Regulatory Standard Code[b]	Maximum Detected Conc.	Data Qual. Flag[c]	Well with Maximum Detected Conc.	Sampling Date	Sampling Depth (ft)
VOLATILE ORGANIC COMPOUNDS												
1,1,1-TRICHLOROETHANE	µg/L	521	3	191	0	200	1	0.5	J	07_DGMW72	07/21/93	110
										13_UGMW32	06/28/93	144
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	µg/L	108	1	191				5.5		18_IDP1-S	10/20/93	120
1,1,2-TRICHLOROETHANE	µg/L	461	9	191	0	5	1	3		08_DGMW73	07/20/93	90
											07/20/93	
1,1-DICHLOROETHANE	µg/L	469	1	191	0	5	2	0.7		18_IDP1-S	10/20/93	120
1,1-DICHLOROETHYLENE	µg/L	469	14	191				8		08_DGMW73	12/02/92	90
1,2-DICHLOROETHANE	µg/L	521	7	191	2	0.5	2	0.9	J	02_DGMW60	11/18/92	80
1,2-DICHLOROETHYLENE (TOTAL)	µg/L	429	20	191				9		18_IDP1-S	10/20/93	120
1,2-DICHLOROPROPANE	µg/L	461	5	191	0	5	1	4		18_BGMW18	11/10/92	140
2-BUTANONE	µg/L	454	2	191				1	J	18_BGMW05D	11/03/92	83
										18MCAS01-5	11/30/93	330
2-HEXANONE	µg/L	361	4	191				7		04_DBMW40	12/03/92	220
4-METHYL-2-PENTANONE	µg/L	454	4	191				5		18_BGMW01A	07/01/93	466
BENZENE	µg/L	461	18	191	14	1	2	730	D	13_UGMW32	10/28/92	144
BROMODICHLOROMETHANE	µg/L	419	12	191				11		18_BGMW02A	06/04/92	462
BROMOFORM	µg/L	461	1	191				2		18_BGMW02A	06/04/92	462
CARBON DISULFIDE	µg/L	361	10	191				6		18MCAS07-8	11/01/93	979
CARBON TETRACHLORIDE	µg/L	529	43	191	41	0.5	2	26		14_DBMW50	06/29/93	120
CHLOROBENZENE	µg/L	521	1	191				0.5		18MCAS01-7	09/18/92	540
CHLORODIBROMOMETHANE	µg/L	461	10	191				11		18_BGMW02A	06/04/92	462
CHLOROFORM	µg/L	529	89	191	0	100	1	12		14_DGMW79	11/20/92	118
CHLOROMETHANE (METHYL CHLORIDE)	µg/L	461	64	191				20		18_BGMP06B	10/07/92	380
CIS-1,2-DICHLOROETHYLENE	µg/L	42	5	191				1.6		18MCAS03-2	02/06/93	160
											02/06/93	
DICHLORODIFLUOROMETHANE	µg/L	99	1	191				0.8		18_TIC055	08/02/93	300
ETHYLBENZENE	µg/L	521	13	191	0	680	2	8		13_DGMW78	06/16/93	127
METHYLENE CHLORIDE	µg/L	460	19	191	0	5	1	1	J	17_DGMW82	06/03/93	235
STYRENE	µg/L	402	8	191	0	100	1	1		18_BGMP10B	01/25/93	887
TETRACHLOROETHYLENE (PCE)	µg/L	529	69	191	23	5	1	58		18_PS3	12/10/92	102
TOLUENE	µg/L	529	26	191	0	100	3	15		18_BGMW05A	12/15/92	462
TRICHLOROETHYLENE (TCE)	µg/L	529	180	191	75	5	1	2000	D	09_DBMW45	12/10/92	117
XYLENES (TOTAL)	µg/L	402	24	191	0	1750	2	58		13_UGMW32	10/28/92	144
										18_BGMW01E	10/27/92	205
SEMIVOLATILE ORGANIC COMPOUNDS												
4-METHYLPHENOL	µg/L	321	2	164				41		18MCAS07-8	11/01/93	979
BENZYL BUTYL PHTHALATE	µg/L	323	4	164				19		10_DGMW77	11/17/92	130
BIS(2-ETHYLHEXYL)PHTHALATE	µg/L	323	47	164	30	4	2	49		01_DGMW57	06/14/93	63
DI-N-BUTYL PHTHALATE	µg/L	323	1	164				11		18_MCAS04	08/04/93	177.5
DI-N-OCTYL PHTHALATE	µg/L	321	1	164				0.6	J	18MCAS03-2	11/19/93	160
DIETHYL PHTHALATE	µg/L	323	1	164				3	J	18_BGMW15	10/30/92	175
DIMETHYL PHTHALATE	µg/L	323	26	164				740	D	18_PS5	06/08/93	106
N-NITROSODIPHENYLAMINE	µg/L	321	5	164				57		18_BGMW05A	07/08/93	462
PHENOL	µg/L	321	2	164	1	5	3	14		06_DGMW69	12/02/92	150
PESTICIDES AND PCBs												
4,4'-DDT	µg/L	306	3	151				0.141		18_BGMW19E	11/12/92	98
ALDRIN	µg/L	306	1	151	1	0.05	3	0.059		18_BGMW19E	11/12/92	98
BHC-GAMMA(LINDANE)	µg/L	306	4	151	0	0.2	1	0.06		18_BGMW19E	11/12/92	98
DIELDRIN	µg/L	306	2	151	2	0.05	3	0.136		18_BGMW19E	11/12/92	98
ENDOSULFAN SULFATE	µg/L	306	1	151				0.003		18_PS7	12/16/92	106
HEPTACHLOR	µg/L	306	2	151	2	0.01	2	0.068		03_DGMW64	01/15/93	245
METHOXYCHLOR	µg/L	306	1	151				1.48		08_UGMW29	07/09/93	95
HERBICIDES												
2,4 DICHLOROPHENOXY ACETIC ACID	µg/L	178	1	91	0	70	1	8.56		12_UGMW31	10/08/92	105
2,4,5-TP (SILVEX)	µg/L	178	1	91				2.67		12_UGMW31	10/08/92	105
2,4,5-TRICHLOROPHENOXYACETIC ACID	µg/L	178	1	91				11.4		18_RW1	12/15/92	430
2,4-DB	µg/L	178	1	91				2.88	J	12_UGMW31	10/08/92	105
DICAMBA	µg/L	178	1	91				4.39		12_UGMW31	10/08/92	105
DICHLOROPROP	µg/L	178	1	91				10		18_BGMW02A	06/08/93	462
DINOSEB	µg/L	179	1	91				0.419		18_BGMW16	10/23/92	223
MCPA	µg/L	178	1	91				3490		12_UGMW31	10/08/92	105
MCPP	µg/L	178	2	91				3530		12_UGMW31	10/08/92	105
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)												
TFH DIESEL	µg/L	319	57	160				4500		18_BGMW01A	07/01/93	466
TFH GASOLINE	µg/L	322	41	162				1690		13_UGMW32	10/28/92	144
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS												
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	mg/L	313	1	162				0.836		18MCAS02-4	11/11/93	370
DISSOLVED METALS												
ALUMINUM	µg/L	324	90	174	22	50 to 200	1 [S]	22000		18_BGMW19B	06/11/93	400
ANTIMONY	µg/L	323	135	174	135	6	1	54.6	J	15_DBMW51	10/08/93	125
ARSENIC	µg/L	324	210	174	1	50	1	122		18_BGMW19B	12/17/92	400
BARIUM	µg/L	324	323	174	0	1000	2	241	E	18_BGMW19B	06/11/93	400
BERYLLIUM	µg/L	323	16	174	0	4	1	0.94	J	18_BGMW05B	11/11/92	321
BORON	mg/L	9	9	174				0.7		18_NLAKE	06/02/93	370
CADMIUM	µg/L	324	48	174	8	5	1	118		18_BGMW05D	11/03/92	83
CALCIUM	µg/L	367	367	174				869000		15_DBMW51	12/04/92	125
CHROMIUM	µg/L	324	41	174	2	50	2	176		18_BGMW19B	06/11/93	400
COBALT	µg/L	320	19	174				97.9		18MCAS03-6	11/17/93	490
COPPER	µg/L	324	74	174	0	1000	1 [S]	30.8		18_BGMP08D	06/10/93	75

Table 2-1
Summary of Analytes and Their Maximum Concentrations Detected in Groundwater
MCAS El Toro Groundwater Quality Data Report

Analyte by Group[a]	Units	Number of Samples	Number of Times Detected	Number of Sampling Locations	Number Exceeding Regulatory Standards	Regulatory Standard	Regulatory Standard Code[b]	Maximum Detected Conc.	Data Qual. Flag[c]	Well with Maximum Detected Conc.	Sampling Date	Sampling Depth (ft)
IRON	µg/L	324	144	174	16	300	1 [S]	29700		18_BGMW19B	06/11/93	400
LEAD	µg/L	324	12	174	0	15	4	11.7		18_BGMW19B	06/11/93	400
MAGNESIUM	µg/L	367	367	174				351000		15_DBMW51	12/04/92	125
MANGANESE	µg/L	324	305	174	106	50	1 [S]	1800		13_DGMW78	11/23/92	127
MERCURY	µg/L	321	18	174	0	2	1	0.48		18_DW135	12/22/92	115
NICKEL	µg/L	322	190	174	86	100	1	5200		18MCAS03-6	11/17/93	490
POTASSIUM	µg/L	367	348	174				10200		18_BGMW19B	06/11/93	400
SELENIUM	µg/L	324	256	174	159	10	2	192		16_DGMW81	06/24/93	176
SILVER	µg/L	324	23	174	0	50	2	3.9	J	19_DGMW85	12/16/92	143
SODIUM	µg/L	367	367	174				798000		18_BGMW05A	12/15/92	462
THALLIUM	µg/L	323	11	174	0	2	1	1.2	J	18_BGMW101	11/13/92	90
VANADIUM	µg/L	320	302	174				96.9		18_BGMW19B	06/11/93	400
ZINC	µg/L	324	185	174	0	5000	1 [S]	4350		18_BGMW19B	06/11/93	400
GENERAL CHEMISTRY AND PHYSICAL PARAMETERS												
ALKALINITY AS CACO3	mg/L	328	327	187				465		21_UGMW37	07/07/93	90
AMMONIA-N	mg/L	5	1	187				0.2		18_TIC106	10/29/93	405
ANIONS, TOTAL	meq/L	1	1	187				14.332		18_NLAKE	06/02/93	370
BICARBONATE	mg/L	45	45	187				720		18MCAS07-9	09/22/92	1099
BICARBONATE (AS CACO3)	mg/L	325	324	187				465		21_UGMW37	07/07/93	90
BROMIDE	mg/L	10	6	187				1.4		18_NLAKE	06/02/93	370
CARBONATE (AS CACO3)	mg/L	317	306	187				126		18_BGMW01A	07/01/93	466
CATIONS, TOTAL	meq/L	1	1	187				13.687		18_NLAKE	06/02/93	370
CHLORIDE	mg/L	365	365	187	92	250 [S]	1	1580		18_BGMW05A	12/15/92	462
COLOR	units	2	1	187				28		18_TIC106	10/21/93	405
COLOR (UNFILTERED)	units	1	1	187				30		18_TIC106	10/21/93	405
CONDUCTIVITY (FIELD)	u mhos/cm	45	45	187				4100		18MCAS02-2	02/17/93	130
CONDUCTIVITY, UMHOS/CM	u mhos/cm	176	176	187				8500		15_DBMW51	08/13/93	125
CYANIDE	µg/L	319	40	187	0	200	1	9	J	02_DGMW60	06/23/93	80
FLUORIDE IC	mg/L	1	1	187				0.44		18_TIC113	06/11/93	280
HARDNESS AS CACO3	mg/L	10	10	187				815		18_TIC056	12/15/92	336
M.B.A.S. (SURFACTANTS)	mg/L	3	1	187				0.05		18_TIC111	10/28/93	200
NITRATE	mg/L	18	14	187				162.66		18_IDP2-S	10/27/93	120
NITRATE AS N	mg/L	37	23	187	13	10	1	50.5		18MCAS02-1	09/17/92	40
NITRATE/NITRITE-N	mg/L	332	301	187	173	10	1	69.7		18_BGMW19D	06/14/93	150
NITROGEN, TOTAL ORGANIC	mg/L	4	1	187				0.3		18_TIC106	10/29/93	405
PH	units	358	358	187				9.79		18_BGMW01A	07/01/93	466
PH (FIELD)	units	213	213	187				24.7		18_TIC113	06/11/93	280
PHOSPHORUS (AS-P)	mg/L	8	1	187				0.3		18_TIC113	06/11/93	280
SILICA, DISSOLVED	mg/L	1	1	187				38		18_NLAKE	06/02/93	370
SPECIFIC CONDUCTANCE	u mho	60	60	187				4000		18MCAS02-2	09/17/92	130
SULFATE	mg/L	365	363	187	139	250	2	2200		18_MCAS10	11/04/93	285
TEMPERATURE, DEGREE C	deg C	213	213	187				2606		18_MCAS08	08/05/93	205
TOTAL DISSOLVED SOLIDS	mg/L	371	371	187	365	500	1 [S]	6600		15_DBMW51	08/13/93	125
TOTAL KJELDAHL NITROGEN (TKN)	mg/L	4	1	187				0.5		18_TIC106	10/29/93	405
TOTAL ORGANIC CARBON	mg/L	10	10	187				3		18_TIC106	10/29/93	405
RADIONUCLIDES												
GROSS ALPHA	pCi/L	35	34	19	7	15	1	24.9		05_DGMW67	11/30/92	177
GROSS BETA	pCi/L	36	36	19	1	50	2	53		05_DGMW67	11/30/92	177

[a] Analytes shown in boldface are the 76 selected parameters for which data are summarized by well in the data summary tables of this Groundwater Quality Data Report. Data for all of these parameters are also presented as histograms in this report.

[b] Regulatory Standard Codes:
1 - Federal MCL
2 - State MCL
3 - State DTSC Action Level
1[S] - Federal Secondary MCL
4 - EPA Action Level

[c] Flags:
J = Reported value was less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).
E = The reported value is estimated because of interference
D = The value for this compound came from a diluted sample.

3.0 DATA SUMMARY TABLES

3.1 Data Presented

The data summary table for each well lists the following data for each of the 76 chemical and physical parameters.

Concentration units
Number of samples analyzed
Sampling date(s)
Concentration detected
Laboratory data qualifier flag

3.2 Data Qualifier Flags

Several data qualifier flags are used in the data summary tables:

N	Identification of compound is tentative (gas chromatography analysis only).
J	Estimated value is for qualitative use only (organic parameters).
R	Data are restricted and may not be used for any purpose.
U	Concentration is below the instrument detection limit (IDL) (i.e., not detected).
UJ	Concentration is less than the estimated detection limit; detection limit should be used qualitatively, and may bias the result to a false negative.
b or B	Estimated value is below the contract-required detection limit, but greater than or equal to the instrument detection limit (inorganic parameters).
d or D	Sample was diluted before analysis due to concentrations exceeding the linear range of the analytical instrument.
*	Compound was observed in the field blank; however, the sample concentrations are higher.

4.0 HISTOGRAMS

4.1 Data Presented

For each well, histograms (bar graphs) are plotted to visually summarize these data for the 76 selected chemical and physical parameters:

The number of analyses for specific contaminants
The number of times each contaminant was detected (or not detected)
The relative concentrations

Review of these histograms can quickly identify the monitoring wells at which a substantial number of chemicals were detected, as well as historical trends in concentration and variations in each parameter. Typical histograms are shown in Figure 4-1.

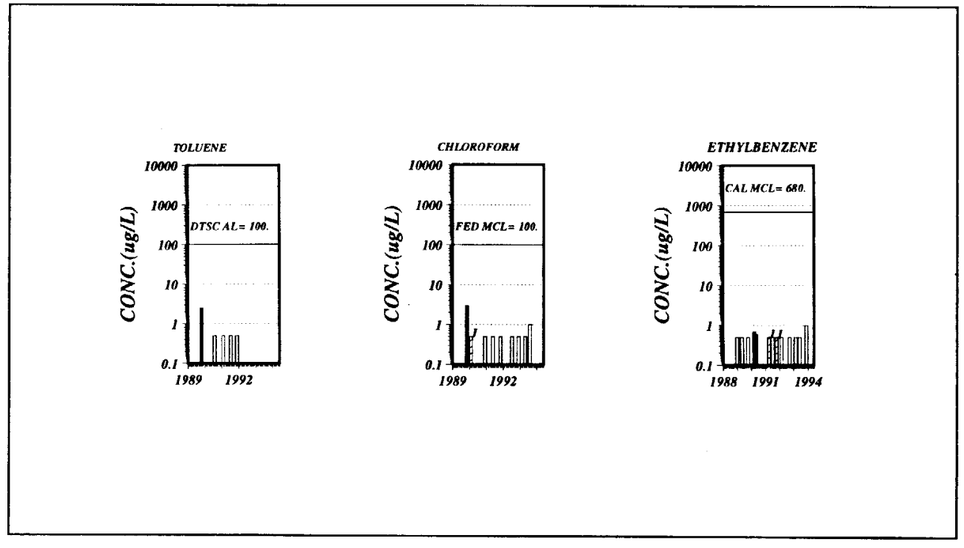


Figure 4-1
Typical Histograms

4.2 Arrangement by Parameter Group

The 76 histograms are arranged by their (labeled) parameter groups, and appear in alphabetical order by parameter within each group.

4.3 Horizontal Axis (Sampling Dates)

The placement of the vertical bars along the horizontal time scale (in years) indicates the approximate sampling date for each groundwater quality data record at a well.

4.4 Vertical Axis

Units. The units for the vertical axis of each histogram are displayed on the left.

Scale. Two types of scales are used on the vertical axis:

- **Log Scale:** Chemical concentrations are plotted on a log-scale vertical axis, which effectively displays a wide range of concentrations on the same graph—from less than 1 microgram per liter (µg/L) to greater than 10,000 µg/L on the same graph. The scale of the vertical axis varies, as it is based on the range of concentrations observed for a particular parameter.

- **Linear Scale:** Temperature and pH values are plotted on a linear-scale vertical axis.

MCLs. For those compounds with federal or state MCLs, a horizontal line extending from the vertical axis represents the value of the lower MCL. This MCL line is labeled with the value of the MCL and its regulatory agency source, using the following abbreviations:

CAL MCL	State MCL
FED MCL	Federal MCL
FED SEC	Federal Secondary MCL
DTSC AL	(California) Department of Toxic Substances Control (DTSC) Action Level

4.5 Vertical Bars (Detected Concentrations or Detection Limits)

Solid Bar (Detected Concentration). A solid bar indicates a sample concentration value above the detection limit, and its height indicates the detected concentration.

Hatched Bar (Detected Concentration, Qualified Data). A hatched bar indicates a concentration value that is above the detection limit, but that has been assigned a data qualifier flag through the U.S. Environmental Protection Agency's (EPA's) data validation process. The flagged values typically represent data that should be used qualitatively rather than quantitatively; i.e., the actual concentration present in the sample may be somewhat different than the value reported. (See Subsection 3.2.)

Blank Bar (Nondetect). A blank bar indicates that the sample contained no detected concentration; i.e., the data is below the detection limit of a given laboratory analysis. The height of this bar represents the detection limit.

4.6 Detection Limits

The detection limits for the histograms vary, as each limit is specific to a particular parameter; see Figure 4-2. In addition, the detection limit for a particular parameter can vary between samples, with different detection limits being used for samples collected at different times (e.g., in Rounds 1 and 2).

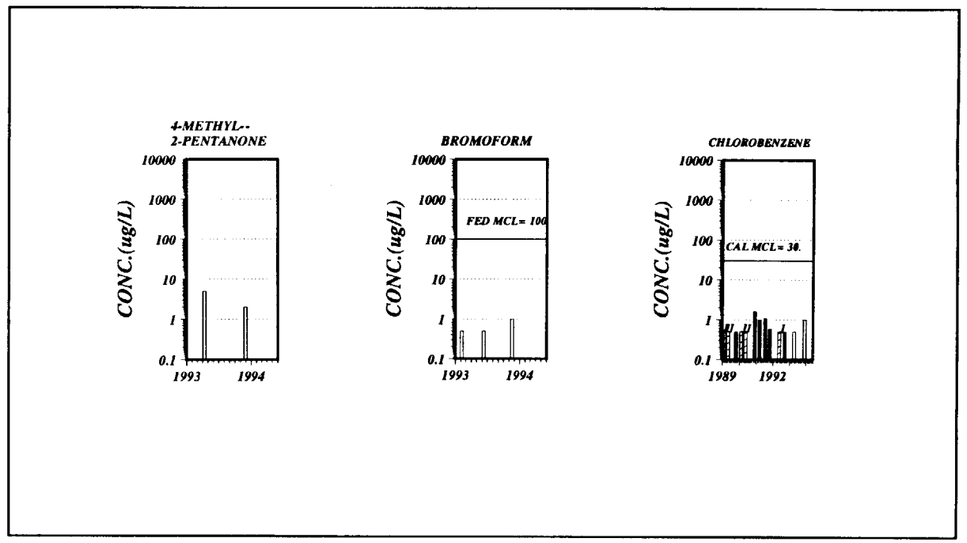


Figure 4-2
Detection Limit Differences

5.0 WELL LOCATION MAPS

The location map (Figure 5-1) plotted in the upper right corner of each data summary shows the approximate location of the monitoring well at or near MCAS El Toro. This map includes the boundaries of the Station and regional roads.

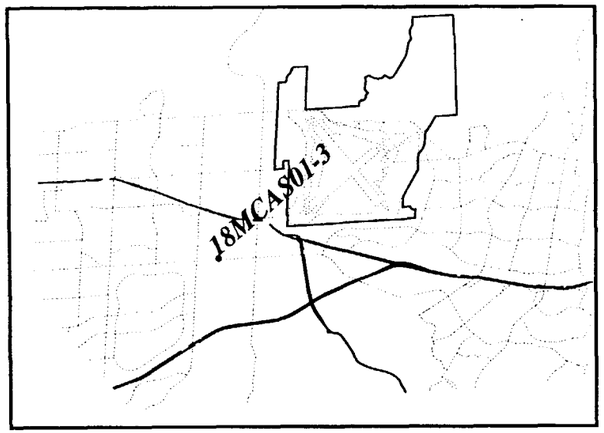


Figure 5-1
Sample Well Location Map

6.0 HYDROGRAPHS

A groundwater level hydrograph (Figure 6-1) is plotted for each well beneath the well location map. The scale of the vertical axis for each well is varied to accommodate the range of water levels measured at that monitoring well. The scale of the horizontal axis also varies, as the time period for which water level data are available ranges from a few years to more than 50 years.

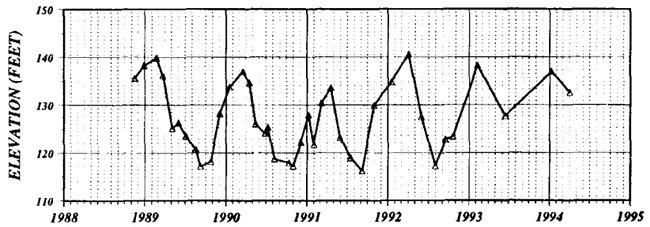
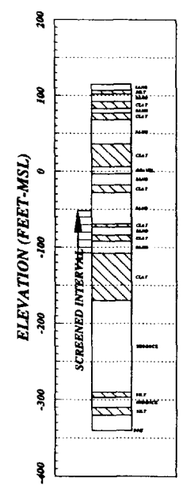


Figure 6-1
Sample Hydrograph

7.0 MONITORING WELL DETAILS

7.1 Well Diagrams and Lithology

The interpreted boring log (from Appendix K of the Phase I RI Draft Technical Memorandum, 07 May 1993) of each monitoring well installed during the RI is shown beneath the groundwater hydrograph (Figure 7-1), with a schematic diagram of the well that shows the surface elevation and the top and bottom elevations of the screened interval.



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
8.0	SAND	107.0
13.0	SILT	102.0
23.0	SAND	92.0
32.0	CLAY	83.0
38.0	SAND	77.0
47.0	CLAY	68.0
79.0	SAND	36.0
109.0	CLAY	6.0
118.0	GRAVEL	-3.0
133.0	SAND	-18.0
143.0	CLAY	-28.0
184.0	SAND	-69.0
188.0	CLAY	-73.0
199.0	SAND	-84.0
207.0	CLAY	-92.0
223.0	SAND	-108.0
285.0	CLAY	-170.0
405.0	BEDROCK	-290.0
412.0	SILT	-297.0
425.0	BEDROCK	-310.0
435.0	SILT	-320.0
455.0	TD	-340.0

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

Figure 7-1
Sample Interpreted Boring Log

7.2 Well Construction Summaries

The well construction summaries in the lower right corner present available well construction details of each monitoring well, such as the surface, screen, and gravel pack elevations; the installation date; casing specifications; and gravel pack material. Figure 7-2 shows a sample well construction summary.

18_TIC110 WELL CONSTRUCTION SUMMARY

WELL TYPE	AGRICULTURAL/IR		WELL SUBTYPE	SINGLE CASING
SURF ELEV(FT MSL)	165.00		OWNER	THE IRVINE COMPANY - IRVINE
	(ft bgs)	(ft msl)	WELL_STATUS	INACTIVE
BORE DEPTH	1061.00	-896.00	STATE_WELL ID.	06S/09W-01A0
CASE TOP	3.00	162.00	DATE_DRILLED	09/20/1983
CASE BASE	1050.00	-885.00		
SCREEN TOP	182.00	-17.00		
SCREEN BASE	1030.00	-865.00		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE
DATA PROVIDED BY OCWD

Figure 7-2
Sample Well Construction Summary

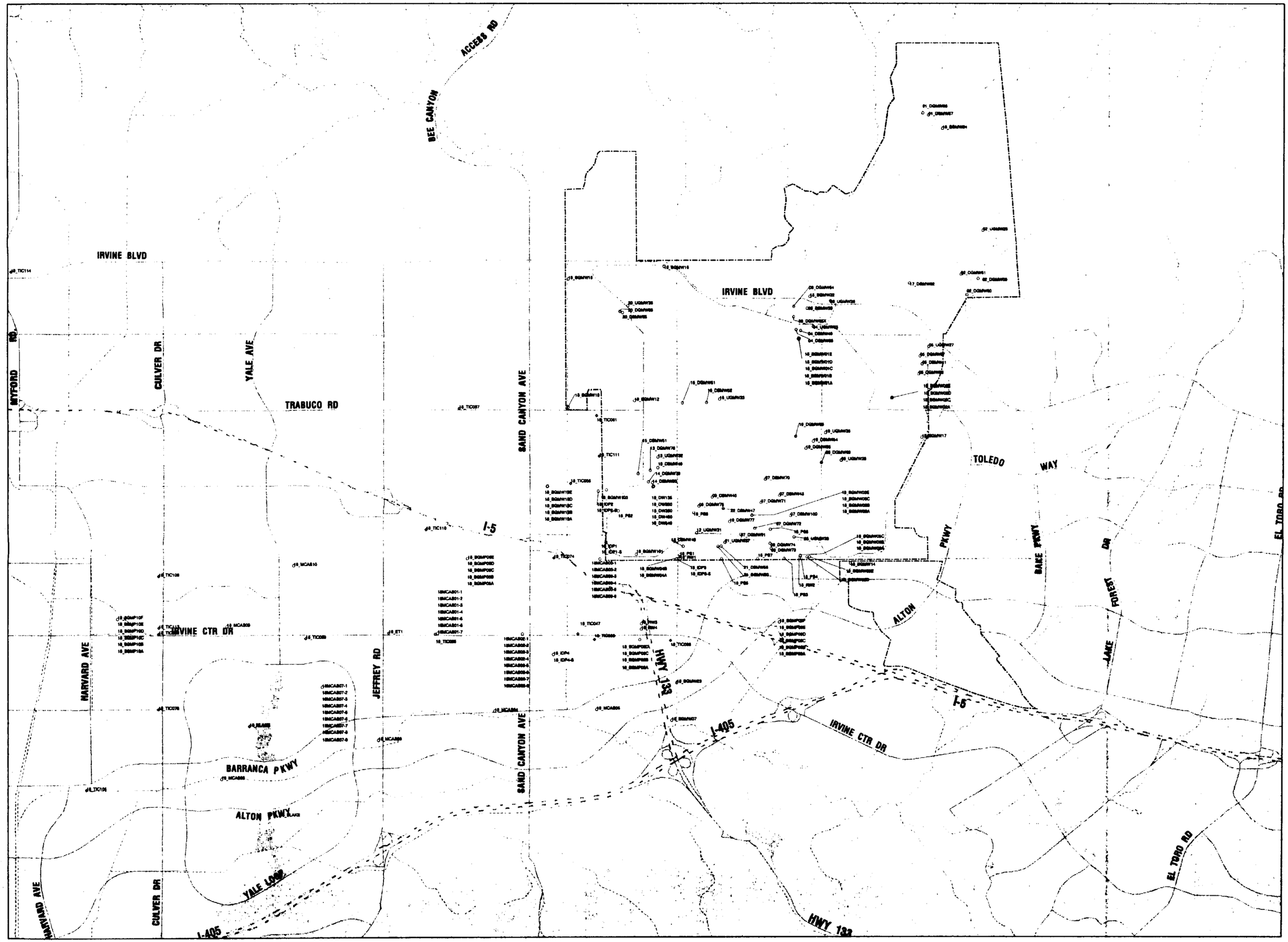


Figure 1-1

Locations of RI and Regional Wells

GROUNDWATER QUALITY DATA REPORTS

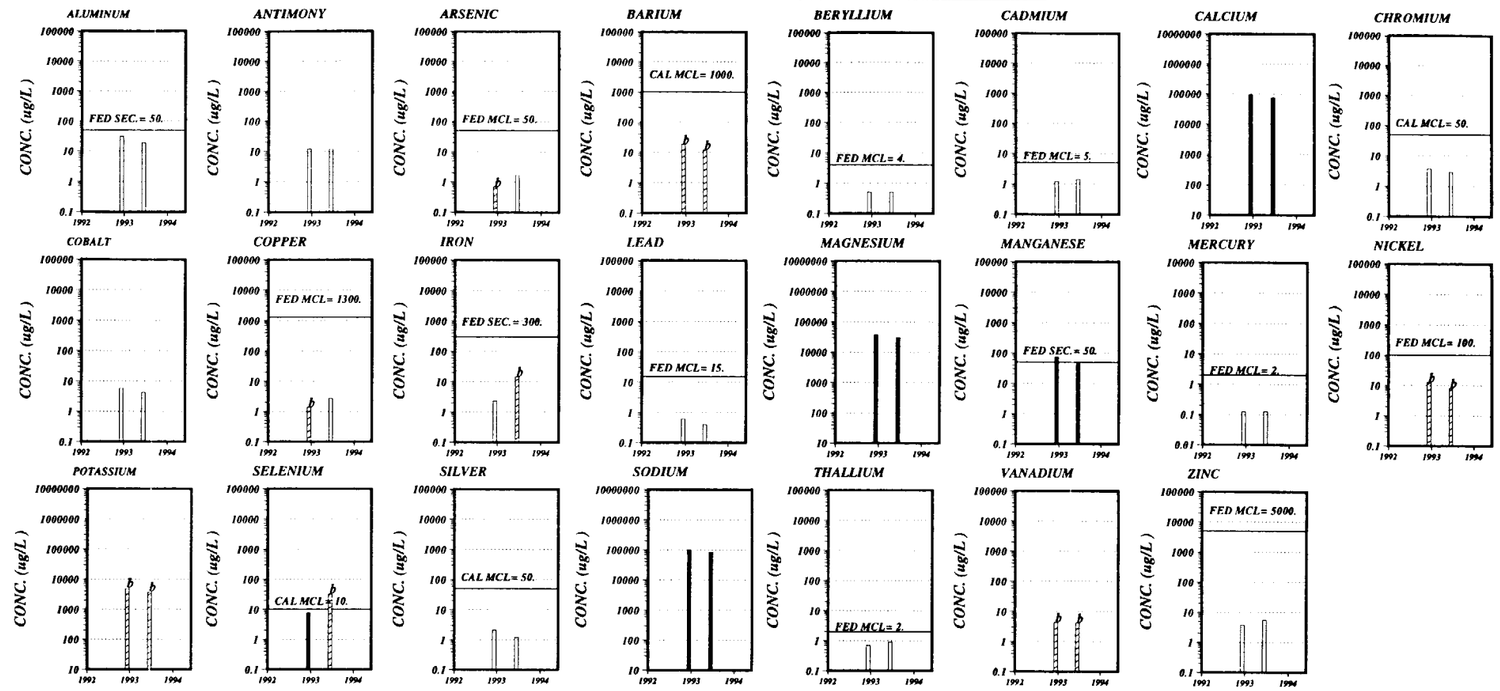
Site 1
Explosive Ordnance Disposal Range

CHEMICAL DATA SUMMARY FOR WELL 01_DGMW57

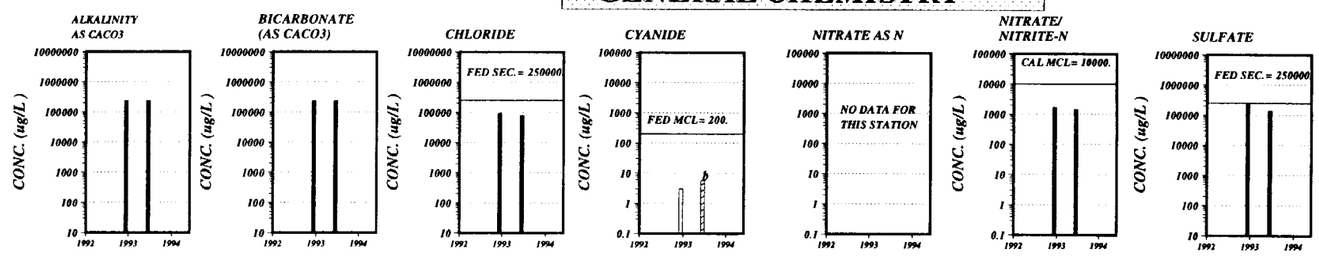
Table B-1
Groundwater Quality Data Summary - Well 01_DGMW57
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/10/92	1	U	06/14/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/10/92	1	U	06/14/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/10/92	1	U	06/14/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/10/92	1	U	06/14/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/10/92	1	U	06/14/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/10/92	1	U	06/14/93	1	U
2-BUTANONE	UG/L	2	12/10/92	2	U	06/14/93	2	U
2-HEXANONE	UG/L	2	12/10/92	2	U	06/14/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/10/92	2	U	06/14/93	2	U
BENZENE	UG/L	2	12/10/92	1	U	06/14/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/10/92	1	U	06/14/93	1	U
BROMOFORM	UG/L	2	12/10/92	1	U	06/14/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/10/92	1	U	06/14/93	1	U
CHLOROBENZENE	UG/L	2	12/10/92	1	U	06/14/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/10/92	1	U	06/14/93	1	U
CHLOROFORM	UG/L	2	12/10/92	1	U	06/14/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/10/92	0.7	J	06/14/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/10/92	1	U	06/14/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/10/92	1	U	06/14/93	1	U
STYRENE	UG/L	2	12/10/92	1	U	06/14/93	1	U
TETRACHLOROETHENE	UG/L	2	12/10/92	1	U	06/14/93	1	U
TOLUENE	UG/L	2	12/10/92	1	U	06/14/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/10/92	1	U	06/14/93	1	U
XYLENE (TOTAL)	UG/L	2	12/10/92	1	U	06/14/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/10/92	10	U	06/14/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/10/92	10	U	06/14/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/10/92	10	U	06/14/93	49	
DIMETHYL PHTHALATE	UG/L	2	12/10/92	10	U	06/14/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/10/92	10	U	06/14/93	10	U
PHENOL	UG/L	2	12/10/92	10	U	06/14/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/10/92	0.1	U	06/14/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/10/92	0.05	U	06/14/93	0.05	U
DIELDRIN	UG/L	2	12/10/92	0.1	U	06/14/93	0.1	U
HEPTACHLOR	UG/L	2	12/10/92	0.05	U	06/14/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/10/92	250	U	06/14/93	250	U
TFH-GASOLINE	UG/L	2	12/10/92	50	U	06/14/93	50	U
METALS								
ALUMINUM	UG/L	2	12/10/92	31	U	06/14/93	19.2	U
ANTIMONY	UG/L	2	12/10/92	12.1	U	06/14/93	12	U
ARSENIC	UG/L	2	12/10/92	0.7	b	06/14/93	1.7	U
BARIUM	UG/L	2	12/10/92	18.2	b	06/14/93	12.1	b
BERYLLIUM	UG/L	2	12/10/92	0.5	U	06/14/93	0.5	U
CADMIUM	UG/L	2	12/10/92	1.2	U	06/14/93	1.4	U
CALCIUM	UG/L	2	12/10/92	94600		06/14/93	74400	
CHROMIUM	UG/L	2	12/10/92	3.7	U	06/14/93	2.9	U
COBALT	UG/L	2	12/10/92	5.8	U	06/14/93	4.2	U
COPPER	UG/L	2	12/10/92	1.4	b	06/14/93	2.7	U
IRON	UG/L	2	12/10/92	2.3	U	06/14/93	14.6	b
LEAD	UG/L	2	12/10/92	0.8	U	06/14/93	0.4	U
MAGNESIUM	UG/L	2	12/10/92	37800		06/14/93	30600	
MANGANESE	UG/L	2	12/10/92	74.7		06/14/93	44.4	
MERCURY	UG/L	2	12/10/92	0.1	U	06/14/93	0.1	U
NICKEL	UG/L	2	12/10/92	12.6	b	06/14/93	8.1	b
POTASSIUM	UG/L	2	12/10/92	4860	b	06/14/93	3650	b
SELENIUM	UG/L	2	12/10/92	7.7		06/14/93	32.5	b
SILVER	UG/L	2	12/10/92	2.1	U	06/14/93	1.2	U
SODIUM	UG/L	2	12/10/92	99600		06/14/93	83200	
THALLIUM	UG/L	2	12/10/92	0.7	U	06/14/93	0.9	U
VANADIUM	UG/L	2	12/10/92	4.3	b	06/14/93	4.1	b
ZINC	UG/L	2	12/10/92	3.8	U	06/14/93	5.5	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/10/92	235000		06/14/93	237000	
BICARBONATE (AS CACO3)	UG/L	2	12/10/92	235000		06/14/93	237000	
CHLORIDE	UG/L	2	12/10/92	91600		06/14/93	79500	
CYANIDE	UG/L	2	12/10/92	3	U	06/14/93	5.7	b
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/10/92	1860		06/14/93	1450	
SULFATE	UG/L	2	12/10/92	250000		06/14/93	139000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	12/10/92	7.58		06/14/93	7.25	
TEMPERATURE, DEGREE C	DEG/C	2	12/10/92	22.1		06/14/93	23.9	
TOTAL DISSOLVED SOLIDS	UG/L	2	12/10/92	808000		06/14/93	602000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	2	12/10/92	5.8		06/14/93	4.5	
GROSS BETA	PCI/L	2	12/10/92	12.2		06/14/93	6.6	

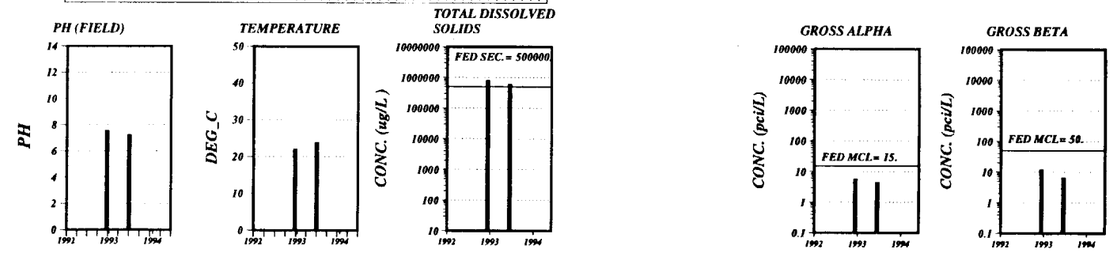
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



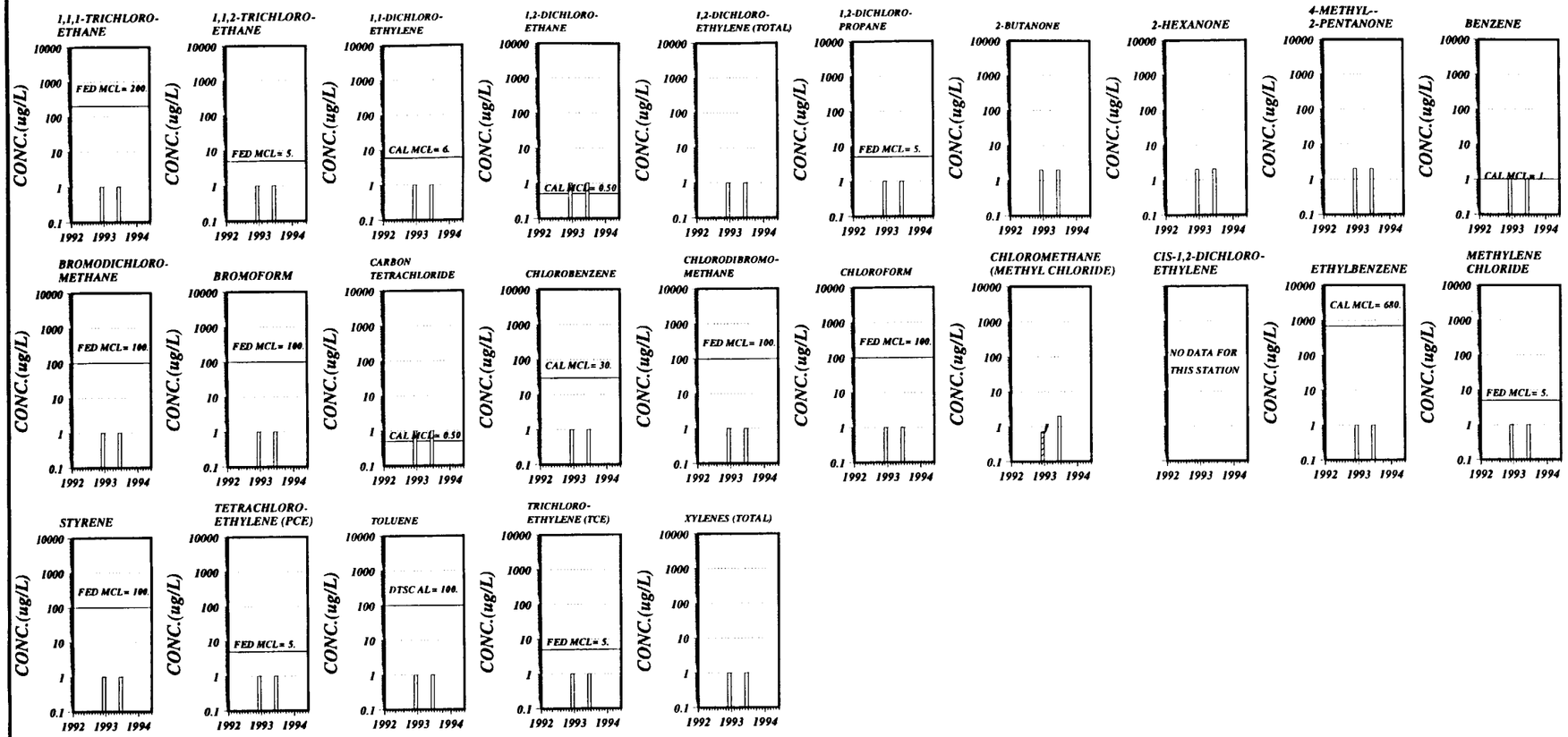
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

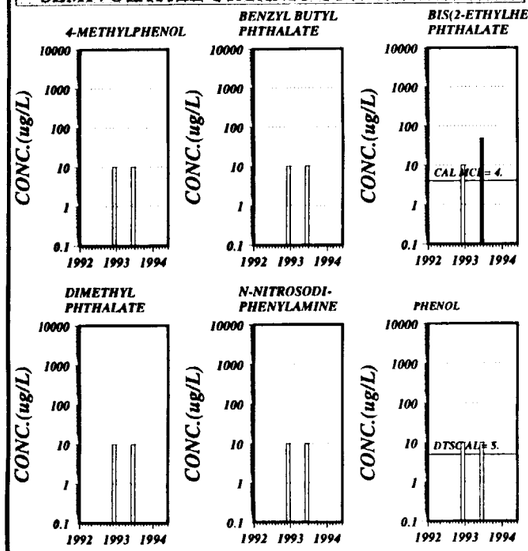
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

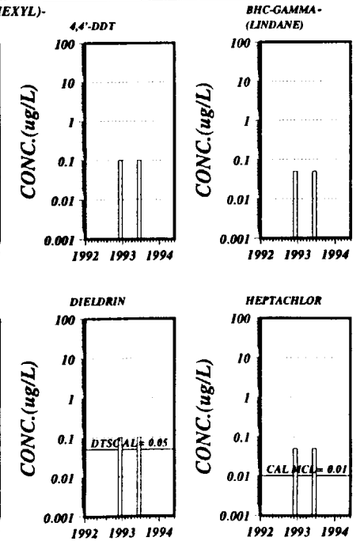
01_DGMW57



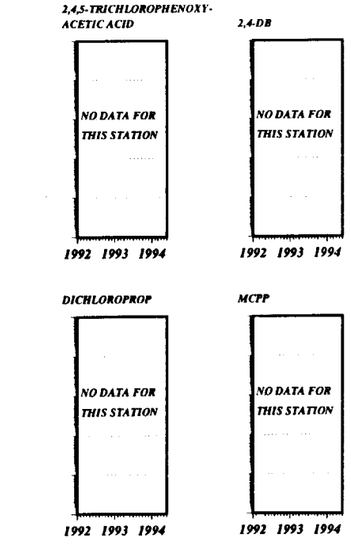
SEMIVOLATILE ORGANIC COMPOUNDS



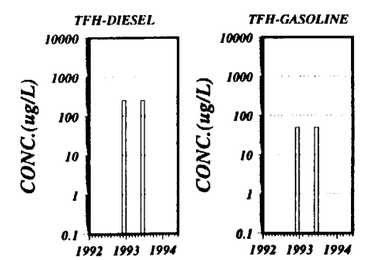
PESTICIDES AND PCBs

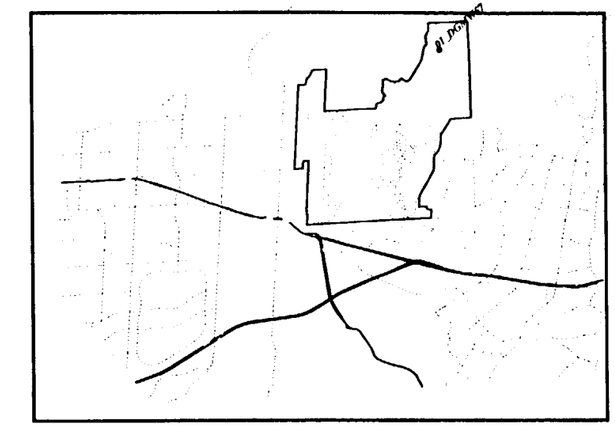


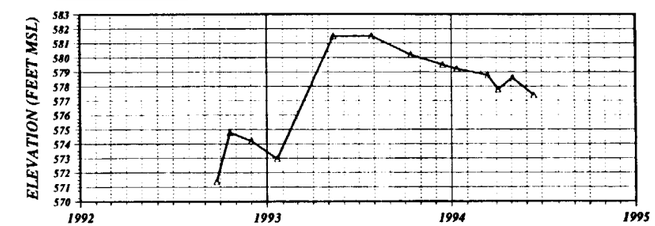
HERBICIDES



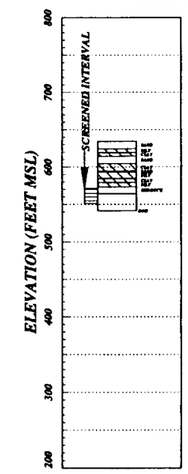
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SAND	624.3
15.0	SILT	619.3
20.0	CLAY	614.3
30.0	SAND	604.3
40.0	CLAY	594.3
41.0	SAND	593.3
50.0	SILT	584.3
55.0	CLAY	579.3
61.0	SILT	573.3
70.0	BEDROCK	564.3
93.0	TD	541.3

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

01_DGMW57 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	634.30		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	93.00	541.30		
CASE TOP	-1.00	635.30		
CASE BASE	63.00	571.30		
SCREEN TOP	63.00	571.30		
SCREEN BASE	83.00	551.30		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 01_DGMW57

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

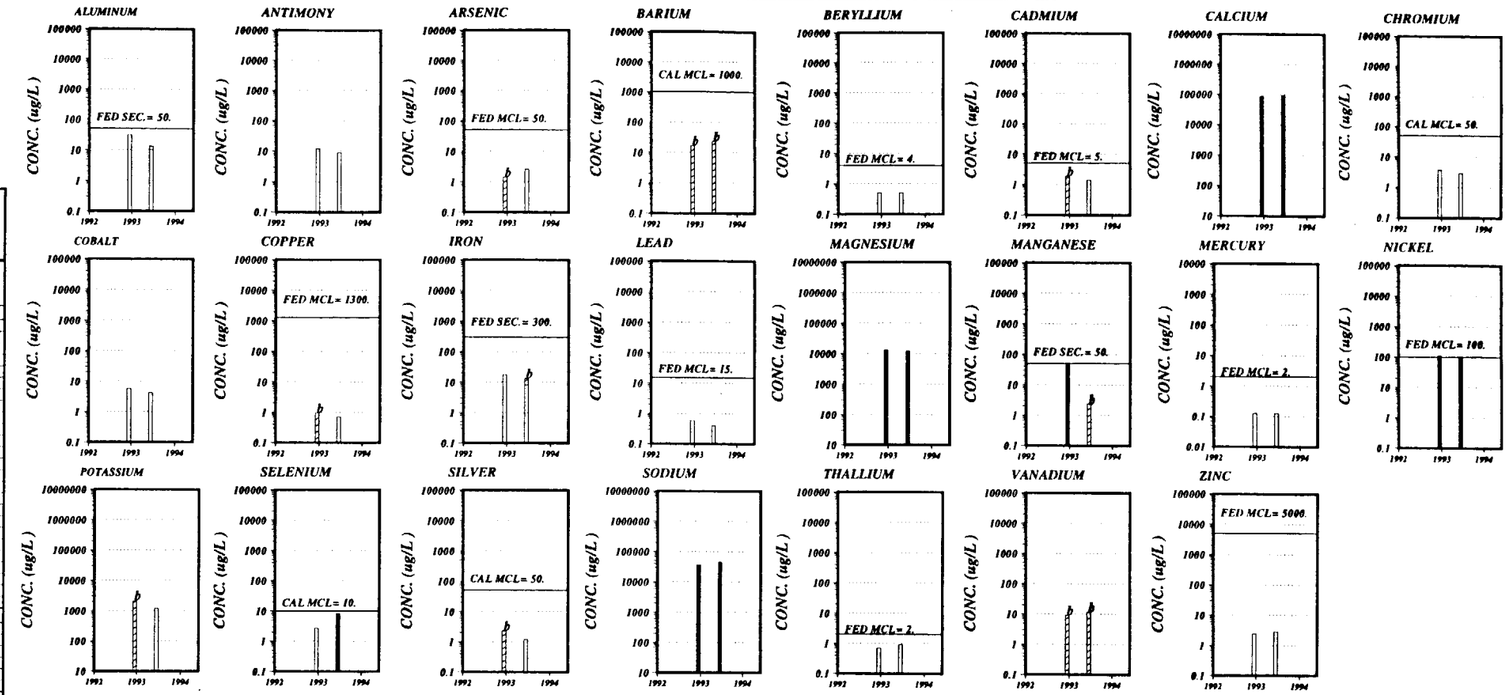
Tue Jul 26 11:09:23 1994

CHEMICAL DATA SUMMARY FOR WELL 01_DGMW58

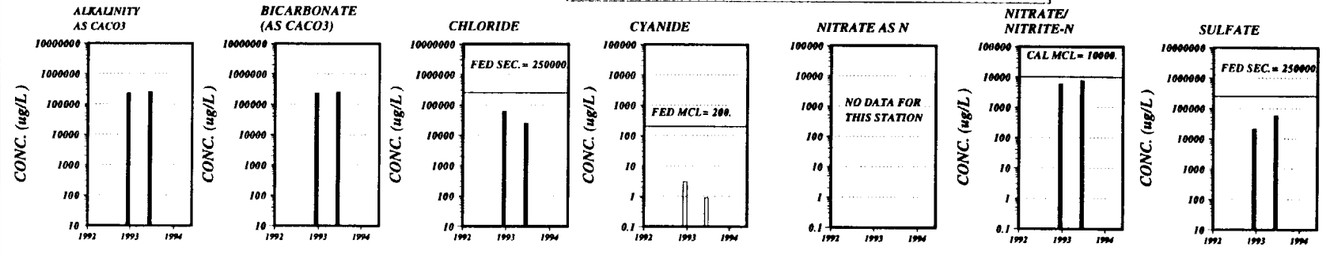
Table B-2
Groundwater Quality Data Summary - Well 01_DGMW58
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
1,2 DICHLOROETHANE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
2-BUTANONE	UG/L	3	12/14/92	2	U	06/14/93	2	U	06/14/93	2	U						
2-HEXANONE	UG/L	3	12/14/92	2	U	06/14/93	2	U	06/14/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	12/14/92	2	U	06/14/93	2	U	06/14/93	2	U						
BENZENE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
BROMOFORM	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
CHLOROBENZENE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
CHLOROFORM	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	12/14/92	0.7	J	06/14/93	2	U	06/14/93	2	U						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
METHYLENE CHLORIDE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
STYRENE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
TETRACHLOROETHENE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
TOLUENE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
TRICHLOROETHYLENE	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
XYLENE (TOTAL)	UG/L	3	12/14/92	1	U	06/14/93	1	U	06/14/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	3	12/14/92	10	U	06/14/93	10	U	06/14/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	12/14/92	10	U	06/14/93	10	U	06/14/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	12/14/92	10	U	06/14/93	10	U	06/14/93	10	U						
DIMETHYL PHTHALATE	UG/L	3	12/14/92	10	U	06/14/93	10	U	06/14/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	12/14/92	10	U	06/14/93	10	U	06/14/93	10	U						
PHENOL	UG/L	3	12/14/92	10	U	06/14/93	10	U	06/14/93	10	U						
PESTICIDES AND PCBs																	
4,4 DDT	UG/L	3	12/14/92	0.1	U	06/14/93	0.1	U	06/14/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	12/14/92	0.05	U	06/14/93	0.05	U	06/14/93	0.05	U						
DIELDRIN	UG/L	3	12/14/92	0.1	U	06/14/93	0.1	U	06/14/93	0.1	U						
HEPTACHLOR	UG/L	3	12/14/92	0.05	U	06/14/93	0.05	U	06/14/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0															
2,4-DB	UG/L	0															
DICHLOROPROP	UG/L	0															
MCPP	UG/L	0															
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TPH-DIESEL	UG/L	3	12/14/92	250	U	06/14/93	250	U	06/14/93	250	U						
TPH-GASOLINE	UG/L	3	12/14/92	50	U	06/14/93	5.88		06/14/93	50	U						
METALS																	
ALUMINUM	UG/L	3	12/14/92	31	U	06/14/93	10.2	U	06/14/93	13.2	U						
ANTIMONY	UG/L	3	12/14/92	12.1	U	06/14/93	9	U	06/14/93	9	U						
ARSENIC	UG/L	3	12/14/92	1.4	b	06/14/93	2.8	U	06/14/93	2.1	U						
BARIUM	UG/L	3	12/14/92	16.8	b	06/14/93	23.3	b	06/14/93	22.7	b						
BERYLLIUM	UG/L	3	12/14/92	0.5	U	06/14/93	0.5	U	06/14/93	0.5	U						
CADMIUM	UG/L	3	12/14/92	1.9	b	06/14/93	1.4	U	06/14/93	1.4	U						
CALCIUM	UG/L	3	12/14/92	87000		06/14/93	90300		06/14/93	89400							
CHROMIUM	UG/L	3	12/14/92	3.7	U	06/14/93	2.9	U	06/14/93	2.9	U						
COBALT	UG/L	3	12/14/92	5.8	U	06/14/93	4.2	U	06/14/93	4.2	U						
COPPER	UG/L	3	12/14/92	0.98	b	06/14/93	0.7	U	06/14/93	0.7	U						
IRON	UG/L	3	12/14/92	17.2	U	06/14/93	13.2	b	06/14/93	8.2	U						
LEAD	UG/L	3	12/14/92	0.6	U	06/14/93	0.4	U	06/14/93	0.4	U						
MAGNESIUM	UG/L	3	12/14/92	13200		06/14/93	12100		06/14/93	12000							
MANGANESE	UG/L	3	12/14/92	45.4		06/14/93	2.4	b	06/14/93	2.2	b						
MERCURY	UG/L	3	12/14/92	0.1	U	06/14/93	0.1	U	06/14/93	0.1	U						
NICKEL	UG/L	3	12/14/92	110		06/14/93	91.8		06/14/93	98.9							
POTASSIUM	UG/L	3	12/14/92	2040	b	06/14/93	1150	U	06/14/93	1200	U						
SELENIUM	UG/L	3	12/14/92	2.7	U	06/14/93	6.9		06/14/93	8.2							
SILVER	UG/L	3	12/14/92	2.3	b	06/14/93	1.2	U	06/14/93	1.2	U						
SODIUM	UG/L	3	12/14/92	36400		06/14/93	44100		06/14/93	43800							
THALLIUM	UG/L	3	12/14/92	0.7	U	06/14/93	0.9	U	06/14/93	0.9	U						
VANADIUM	UG/L	3	12/14/92	9.1	b	06/14/93	11.1	b	06/14/93	11.9	b						
ZINC	UG/L	3	12/14/92	2.4	U	06/14/93	2.8	U	06/14/93	2.2	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	12/14/92	234000		06/14/93	251000		06/14/93	252000							
BICARBONATE (AS CACO3)	UG/L	3	12/14/92	234000		06/14/93	251000		06/14/93	252000							
CHLORIDE	UG/L	3	12/14/92	61200		06/14/93	24500		06/14/93	24800							
CYANIDE	UG/L	3	12/14/92	3	U	06/14/93	0.9	U	06/14/93	0.9	U						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	12/14/92	5770		06/14/93	7880		06/14/93	7880							
SULFATE	UG/L	3	12/14/92	21100		06/14/93	58200		06/14/93	58500							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	2	12/14/92	7.32		06/14/93	7.38										
TEMPERATURE, DEGREE C	DEG/C	2	12/14/92	21.1		06/14/93	22.5										
TOTAL DISSOLVED SOLIDS	UG/L	3	12/14/92	429000		06/14/93	468000		06/14/93	462000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	2	12/14/92	5.9		06/14/93	7.5										
GROSS BETA	PCI/L	2	12/14/92	8		06/14/93	8.6										

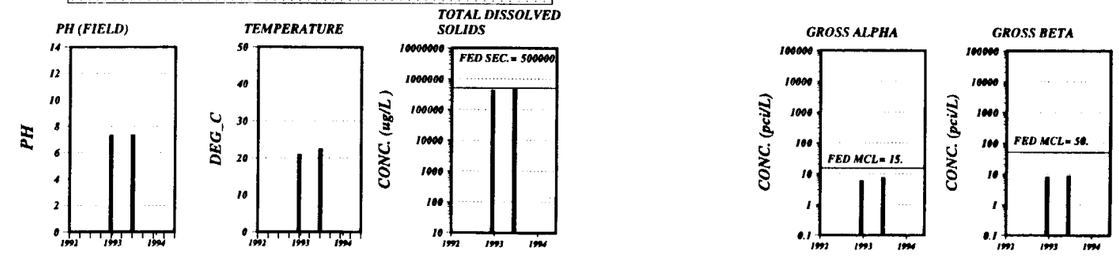
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



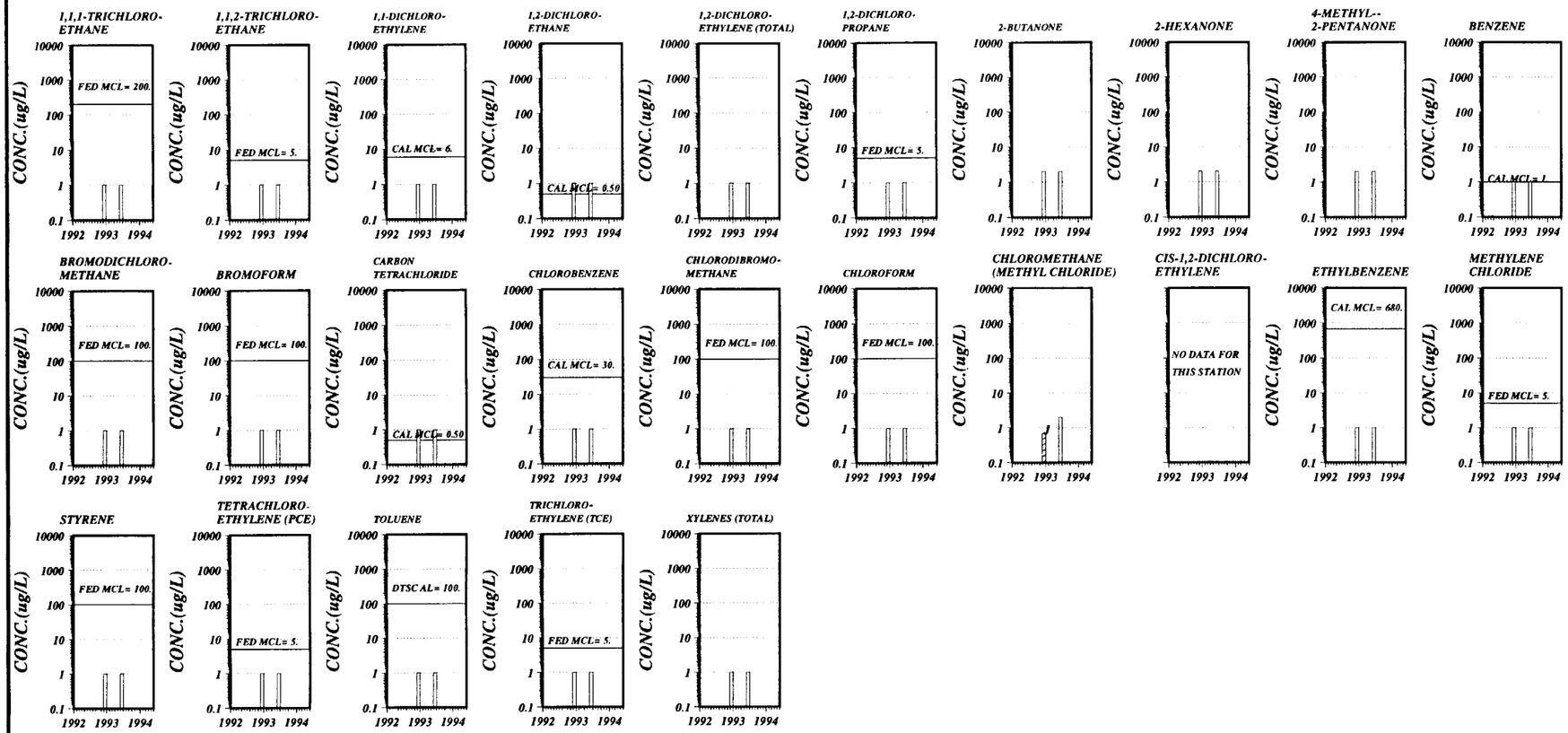
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

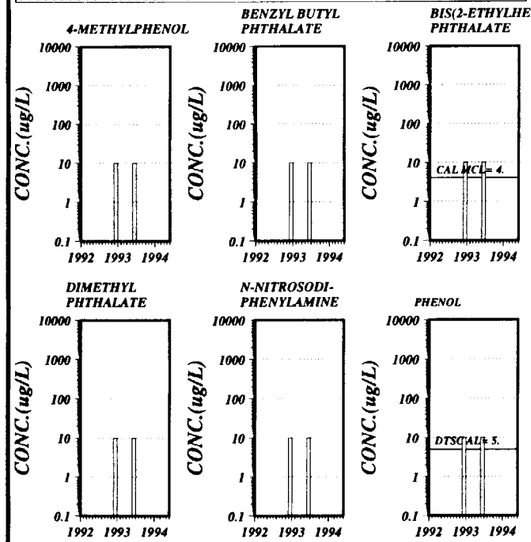
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

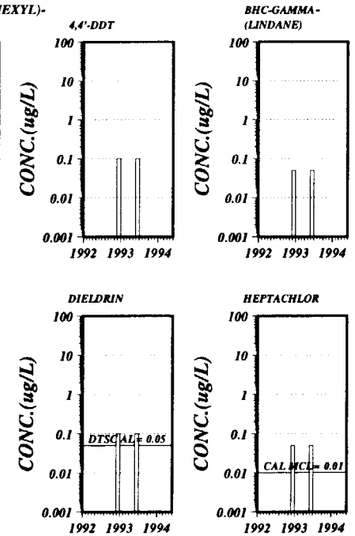
01_DGMW58



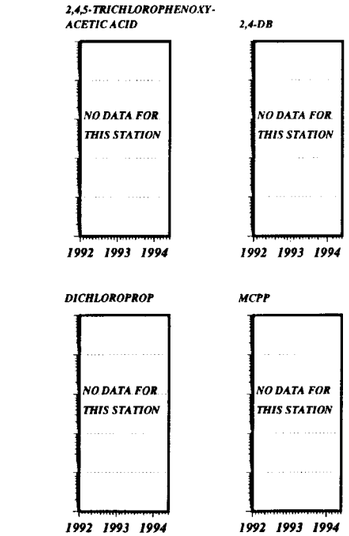
SEMIVOLATILE ORGANIC COMPOUNDS



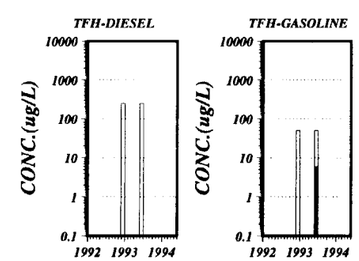
PESTICIDES AND PCBs

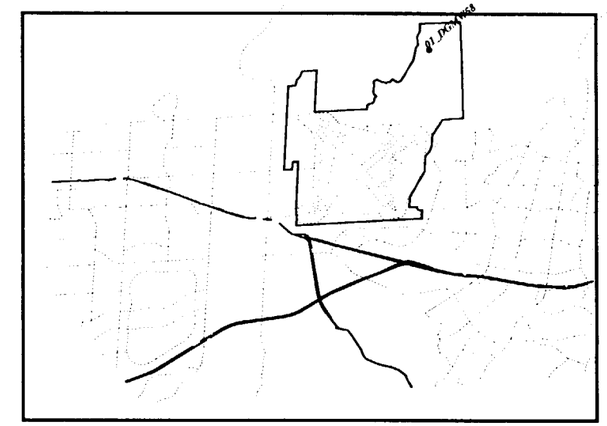


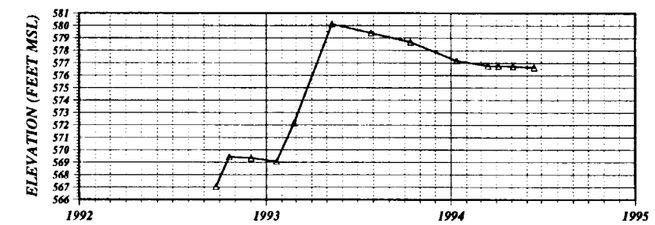
HERBICIDES



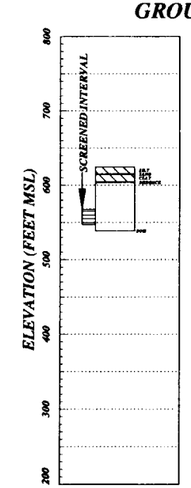
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
9.0	SILT	615.4
10.0	SAND	614.4
20.0	CLAY	604.4
21.0	BEDROCK	603.4
86.0	TD	538.4

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

01_DGMW58 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	624.40		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	83.00	541.40		
CASE TOP	-1.00	625.40		
CASE BASE	57.00	567.40		
SCREEN TOP	57.00	567.40		
SCREEN BASE	77.00	547.40		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 01_DGMW58

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Tue Jul 26 11:11:17 1994

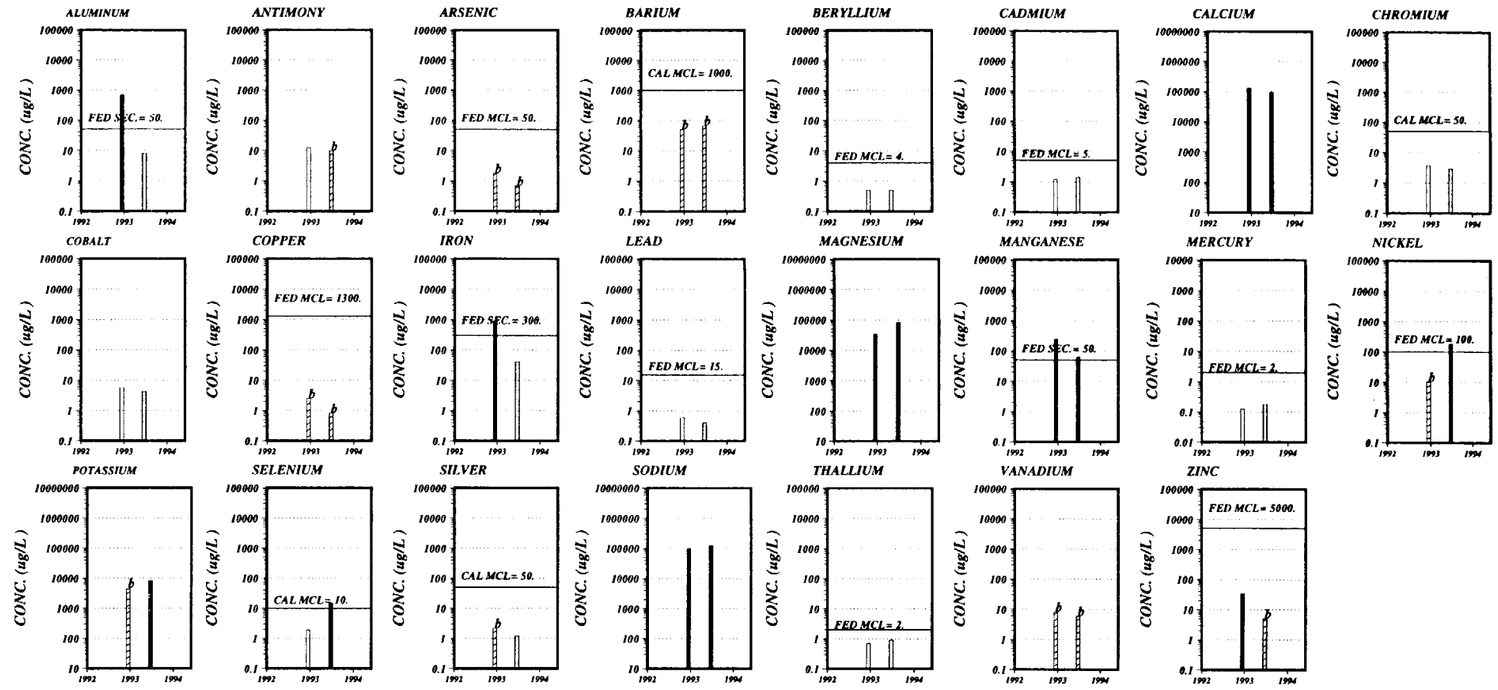
Site 2
Magazine Road Landfill

CHEMICAL DATA SUMMARY FOR WELL 02_DGMW59

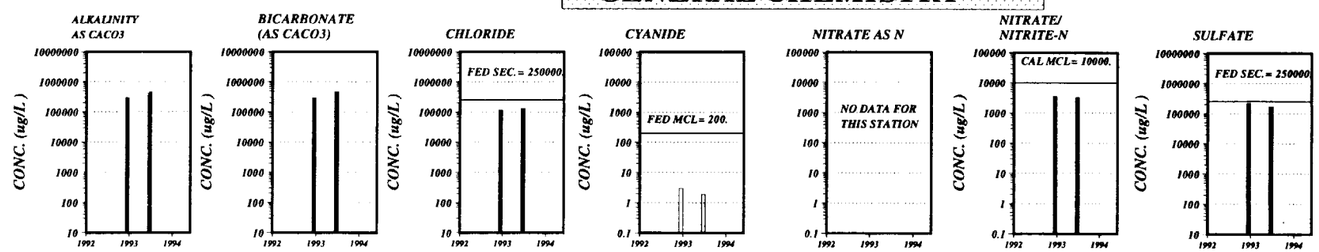
Table B-3
Groundwater Quality Data Summary - Well 02_DGMW59
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/15/92	1	U	06/23/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/15/92	1	U	06/23/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/15/92	1	U	06/23/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/15/92	1	U	06/23/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/15/92	1	U	06/23/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/15/92	1	U	06/23/93	1	U
2-BUTANONE	UG/L	2	12/15/92	2	U	06/23/93	2	U
2-HEXANONE	UG/L	2	12/15/92	2	U	06/23/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/15/92	2	U	06/23/93	2	U
BENZENE	UG/L	2	12/15/92	1	U	06/23/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/15/92	1	U	06/23/93	1	U
BROMOFORM	UG/L	2	12/15/92	1	U	06/23/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/15/92	1	U	06/23/93	1	U
CHLOROBENZENE	UG/L	2	12/15/92	1	U	06/23/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/15/92	1	U	06/23/93	1	U
CHLOROFORM	UG/L	2	12/15/92	1	U	06/23/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/15/92	2	U	06/23/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/15/92	1	U	06/23/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/15/92	1	U	06/23/93	1	U
STYRENE	UG/L	2	12/15/92	1	U	06/23/93	1	U
TETRACHLOROETHENE	UG/L	2	12/15/92	1	U	06/23/93	1	U
TOLUENE	UG/L	2	12/15/92	1	U	06/23/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/15/92	0.6	J	06/23/93	1	U
XYLENE (TOTAL)	UG/L	2	12/15/92	1	U	06/23/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/15/92	10	U	06/23/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/15/92	10	U	06/23/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/15/92	10	U	06/23/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/15/92	10	U	06/23/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/15/92	10	U	06/23/93	10	U
PHENOL	UG/L	2	12/15/92	10	U	06/23/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/15/92	0.1	U	06/23/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/15/92	0.05	U	06/23/93	0.05	U
DIELDRIN	UG/L	2	12/15/92	0.1	U	06/23/93	0.1	U
HEPTACHLOR	UG/L	2	12/15/92	0.05	U	06/23/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	12/15/92	0.25	U	06/23/93	1.85	U
2,4-DB	UG/L	2	12/15/92	0.5	U	06/23/93	0.98	U
DICHLOROPROP	UG/L	2	12/15/92	0.5	U	06/23/93	1.52	U
MCPP	UG/L	2	12/15/92	250	U	06/23/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/15/92	250	U	06/23/93	250	U
TFH-GASOLINE	UG/L	2	12/15/92	50	U	06/23/93	50	U
METALS								
ALUMINUM	UG/L	2	12/15/92	672		06/23/93	7.8	U
ANTIMONY	UG/L	2	12/15/92	12.1	U	06/23/93	9.7	b
ARSENIC	UG/L	2	12/15/92	1.8	b	06/23/93	0.7	b
BARIUM	UG/L	2	12/15/92	49.9	b	06/23/93	65.6	b
BERYLLIUM	UG/L	2	12/15/92	0.5	U	06/23/93	0.5	U
CADMIUM	UG/L	2	12/15/92	1.2	U	06/23/93	1.4	U
CALCIUM	UG/L	2	12/15/92	128000		06/23/93	93200	
CHROMIUM	UG/L	2	12/15/92	3.7	U	06/23/93	2.9	U
COBALT	UG/L	2	12/15/92	5.8	U	06/23/93	4.2	U
COPPER	UG/L	2	12/15/92	2.5	b	06/23/93	0.83	b
IRON	UG/L	2	12/15/92	895		06/23/93	41.4	U
LEAD	UG/L	2	12/15/92	0.6	U	06/23/93	0.4	U
MAGNESIUM	UG/L	2	12/15/92	34100		06/23/93	80400	
MANGANESE	UG/L	2	12/15/92	239		06/23/93	63	
MERCURY	UG/L	2	12/15/92	0.1	U	06/23/93	0.18	U
NICKEL	UG/L	2	12/15/92	10.2	b	06/23/93	183	
POTASSIUM	UG/L	2	12/15/92	4360	b	06/23/93	8200	
SELENIUM	UG/L	2	12/15/92	1.9	U	06/23/93	15	
SILVER	UG/L	2	12/15/92	2.2	b	06/23/93	1.2	U
SODIUM	UG/L	2	12/15/92	95500		06/23/93	126000	
THALLIUM	UG/L	2	12/15/92	0.7	U	06/23/93	0.9	U
VANADIUM	UG/L	2	12/15/92	8.3	b	06/23/93	5.9	b
ZINC	UG/L	2	12/15/92	34.4		06/23/93	5.1	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/15/92	294000		06/23/93	464000	
BICARBONATE (AS CACO3)	UG/L	2	12/15/92	294000		06/23/93	464000	
CHLORIDE	UG/L	2	12/15/92	119000		06/23/93	128000	
CYANIDE	UG/L	2	12/15/92	3	U	06/23/93	1.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/15/92	3530		06/23/93	3280	
SULFATE	UG/L	2	12/15/92	215000		06/23/93	187000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	12/15/92	7.13		06/23/93	7.32	
TEMPERATURE, DEGREE C	DEG/C	2	12/15/92	23.2		06/23/93	24.5	
TOTAL DISSOLVED SOLIDS	UG/L	2	12/15/92	839000		06/23/93	970000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	2	12/15/92	16.3		06/23/93	21.6	
GROSS BETA	PCI/L	2	12/15/92	14.1		06/23/93	15.8	

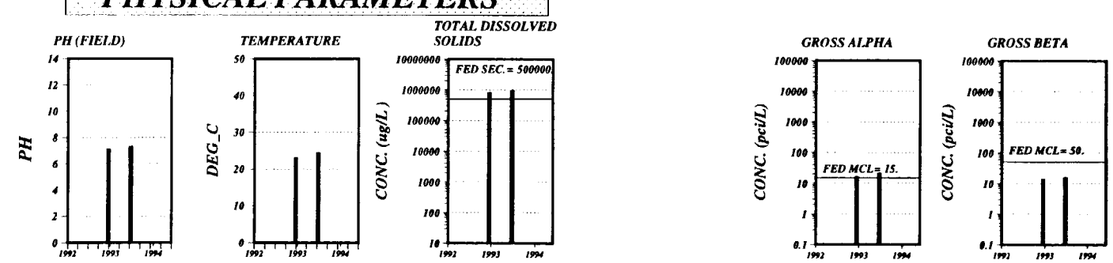
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



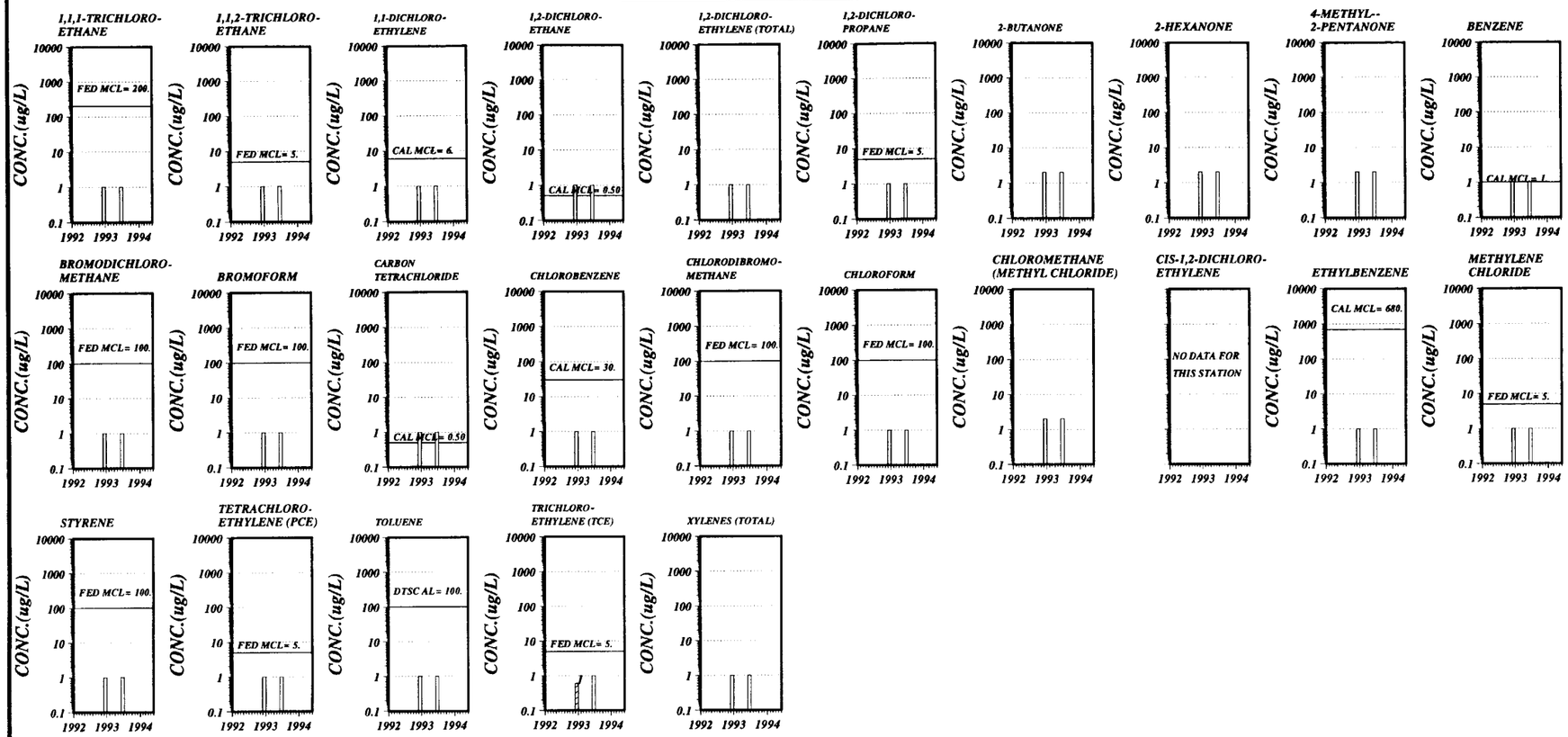
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

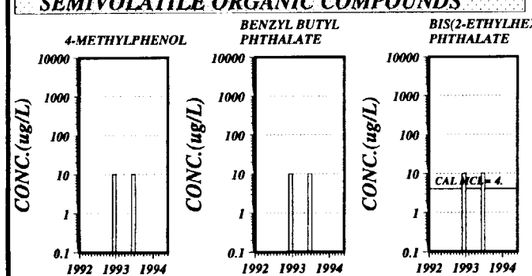
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

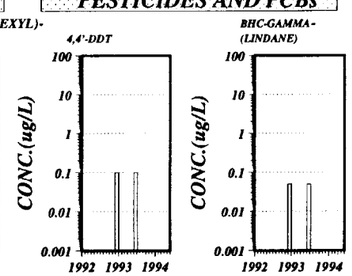
02_DGMW59



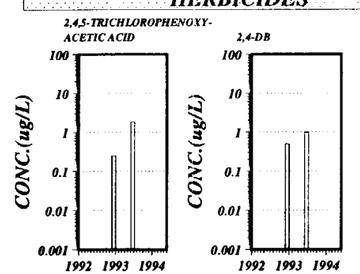
SEMIVOLATILE ORGANIC COMPOUNDS



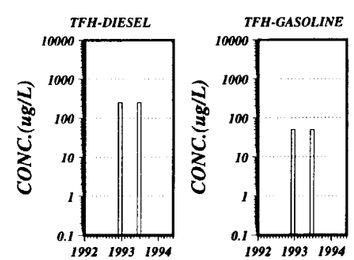
PESTICIDES AND PCBs

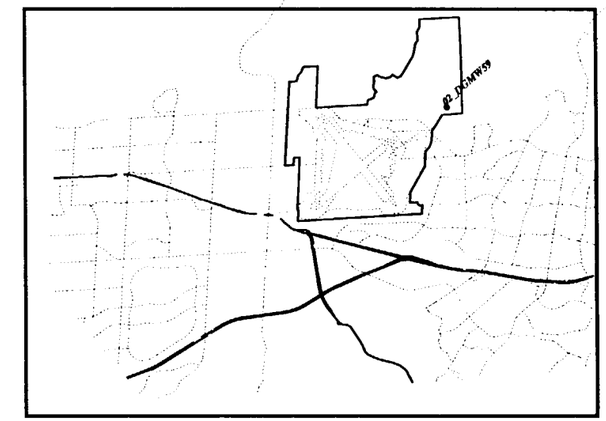


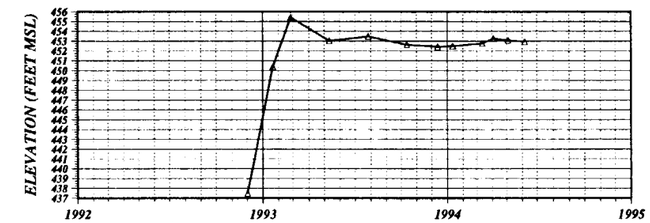
HERBICIDES



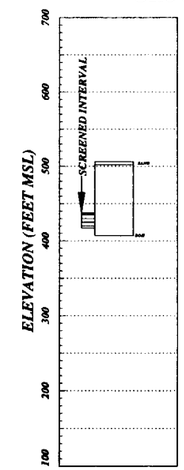
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
4.0	SAND	502.2
99.0	TD	407.2

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

02_DGMW59 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	506.20		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	99.00	407.20		
CASE TOP	-1.00	507.20		
CASE BASE	69.12	437.08		
SCREEN TOP	69.00	437.20		
SCREEN BASE	88.90	417.30		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 02_DGMW59

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

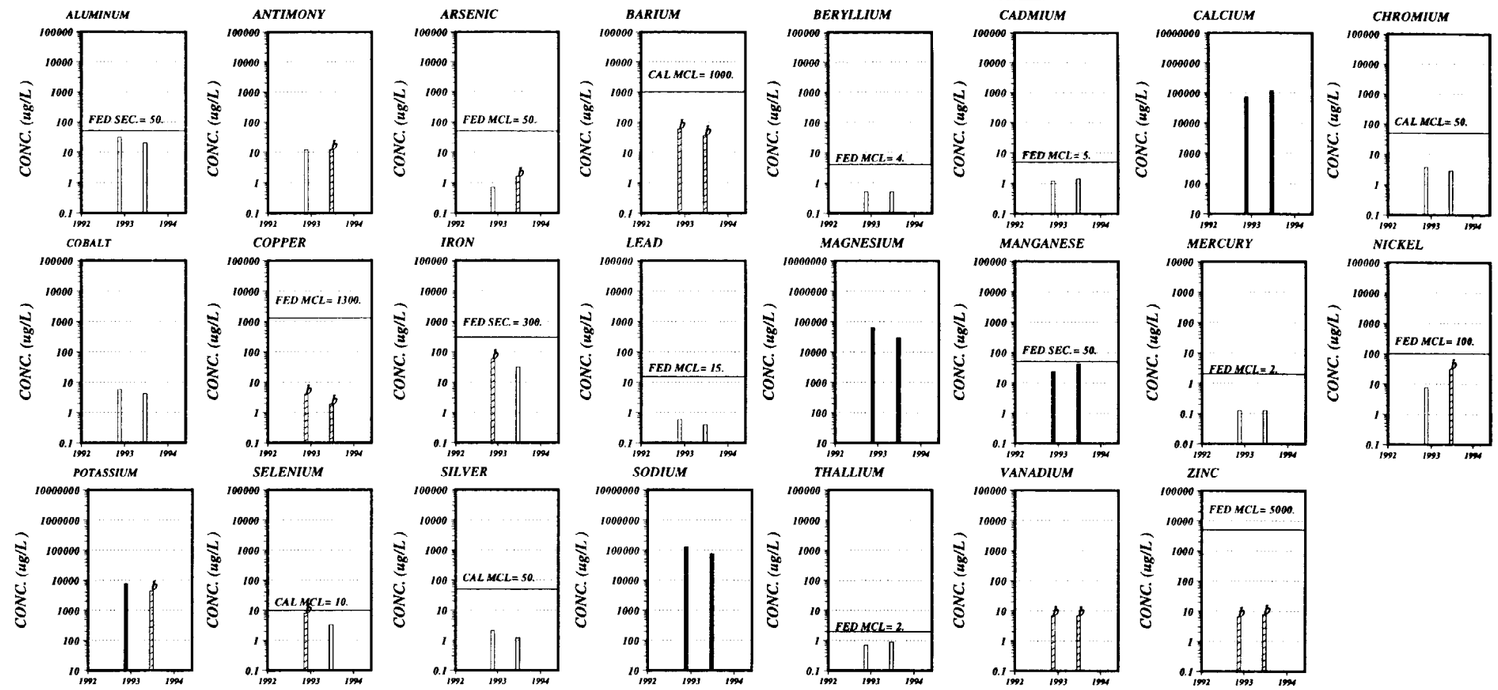
Fri Sep 23 14:56:56 1994

CHEMICAL DATA SUMMARY FOR WELL 02_DGMW60

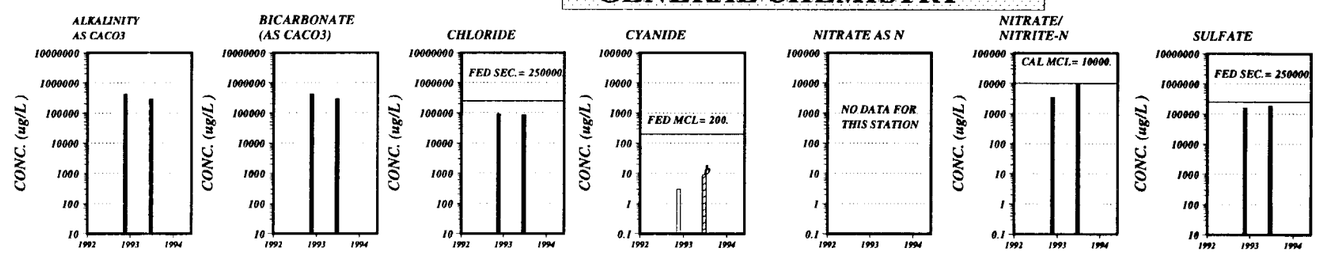
Table B-4
Groundwater Quality Data Summary - Well 02_DGMW60
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	11/18/92	1	U	06/23/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	11/18/92	1	U	06/23/93	2	
1,1-DICHLOROETHENE	UG/L	2	11/18/92	1	U	06/23/93	1	U
1,2-DICHLOROETHANE	UG/L	2	11/18/92	0.9	J	06/23/93	0.8	J
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	11/18/92	6		06/23/93	5	
1,2-DICHLOROPROPANE	UG/L	2	11/18/92	1	U	06/23/93	1	U
2-BUTANONE	UG/L	2	11/18/92	2	U	06/23/93	2	U
2-HEXANONE	UG/L	2	11/18/92	2	U	06/23/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	11/18/92	2	U	06/23/93	2	U
BENZENE	UG/L	2	11/18/92	1	U	06/23/93	1	U
BROMODICHLOROMETHANE	UG/L	2	11/18/92	1	U	06/23/93	1	U
BROMOFORM	UG/L	2	11/18/92	1	U	06/23/93	1	U
CARBON TETRACHLORIDE	UG/L	2	11/18/92	1	U	06/23/93	1	U
CHLOROBENZENE	UG/L	2	11/18/92	1	U	06/23/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	11/18/92	1	U	06/23/93	1	U
CHLOROFORM	UG/L	2	11/18/92	6		06/23/93	5	
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	11/18/92	2	U	06/23/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	11/18/92	1	U	06/23/93	1	U
METHYLENE CHLORIDE	UG/L	2	11/18/92	1	U	06/23/93	1	U
STYRENE	UG/L	2	11/18/92	1	U	06/23/93	1	U
TETRACHLOROETHENE	UG/L	2	11/18/92	8		06/23/93	6	
TOLUENE	UG/L	2	11/18/92	1	U	06/23/93	1	U
TRICHLOROETHYLENE	UG/L	2	11/18/92	82	d	06/23/93	61	d
XYLENE (TOTAL)	UG/L	2	11/18/92	1	U	06/23/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	11/18/92	10	U	06/23/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	11/18/92	10	U	06/23/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	11/18/92	10	U	06/23/93	10	U
DIMETHYL PHTHALATE	UG/L	2	11/18/92	10	U	06/23/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	11/18/92	10	U	06/23/93	10	U
PHENOL	UG/L	2	11/18/92	10	U	06/23/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	11/18/92	0.1	U	06/23/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	11/18/92	0.05	U	06/23/93	0.05	U
DIELDRIN	UG/L	2	11/18/92	0.1	U	06/23/93	0.1	U
HEPTACHLOR	UG/L	2	11/18/92	0.05	U	06/23/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	11/18/92	0.25	U	06/23/93	1.85	U
2,4-DB	UG/L	2	11/18/92	0.5	U	06/23/93	0.98	U
DICHLOROPROP	UG/L	2	11/18/92	0.5	U	06/23/93	1.52	U
MCPP	UG/L	2	11/18/92	250	U	06/23/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	11/18/92	250	U	06/23/93	250	U
TFH-GASOLINE	UG/L	2	11/18/92	50	U	06/23/93	54.4	J
METALS								
ALUMINUM	UG/L	2	11/18/92	31	U	06/23/93	20.2	U
ANTIMONY	UG/L	2	11/18/92	12.1	U	06/23/93	12.4	b
ARSENIC	UG/L	2	11/18/92	0.7	U	06/23/93	1.6	b
BARIUM	UG/L	2	11/18/92	59.8	b	06/23/93	36.7	b
BERYLLIUM	UG/L	2	11/18/92	0.5	U	06/23/93	0.5	U
CADMIUM	UG/L	2	11/18/92	1.2	U	06/23/93	1.4	U
CALCIUM	UG/L	2	11/18/92	72400		06/23/93	118000	
CHROMIUM	UG/L	2	11/18/92	3.7	U	06/23/93	2.9	U
COBALT	UG/L	2	11/18/92	5.8	U	06/23/93	4.2	U
COPPER	UG/L	2	11/18/92	4.1	b	06/23/93	1.9	b
IRON	UG/L	2	11/18/92	57.1	b	06/23/93	31.8	U
LEAD	UG/L	2	11/18/92	0.6	U	06/23/93	0.4	U
MAGNESIUM	UG/L	2	11/18/92	64000		06/23/93	29500	
MANGANESE	UG/L	2	11/18/92	24.1		06/23/93	42.2	
MERCURY	UG/L	2	11/18/92	0.1	U	06/23/93	0.1	U
NICKEL	UG/L	2	11/18/92	7.7	U	06/23/93	31.3	b
POTASSIUM	UG/L	2	11/18/92	7740		06/23/93	4390	b
SELENIUM	UG/L	2	11/18/92	8	b	06/23/93	3.3	U
SILVER	UG/L	2	11/18/92	2.1	U	06/23/93	1.2	U
SODIUM	UG/L	2	11/18/92	129000		06/23/93	77400	
THALLIUM	UG/L	2	11/18/92	0.7	U	06/23/93	0.9	U
VANADIUM	UG/L	2	11/18/92	7	b	06/23/93	6.9	b
ZINC	UG/L	2	11/18/92	6.6	b	06/23/93	8	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	11/18/92	430000		06/23/93	297000	
BICARBONATE (AS CACO3)	UG/L	2	11/18/92	430000		06/23/93	297000	
CHLORIDE	UG/L	2	11/18/92	91700		06/23/93	86900	
CYANIDE	UG/L	2	11/18/92	3	U	06/23/93	9	b
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	11/18/92	3450		06/23/93	9670	
SULFATE	UG/L	2	11/18/92	163000		06/23/93	183000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	11/18/92	7.3		06/23/93	7.1	
TEMPERATURE, DEGREE C	DEG/C	2	11/18/92	22.2		06/23/93	25	
TOTAL DISSOLVED SOLIDS	UG/L	2	11/18/92	834000		06/23/93	751000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	2	11/18/92	20.9		06/23/93	24	
GROSS BETA	PCI/L	2	11/18/92	10.8		06/23/93	30.2	

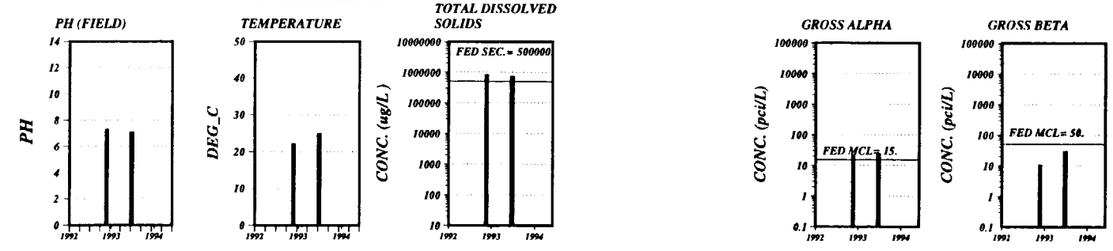
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



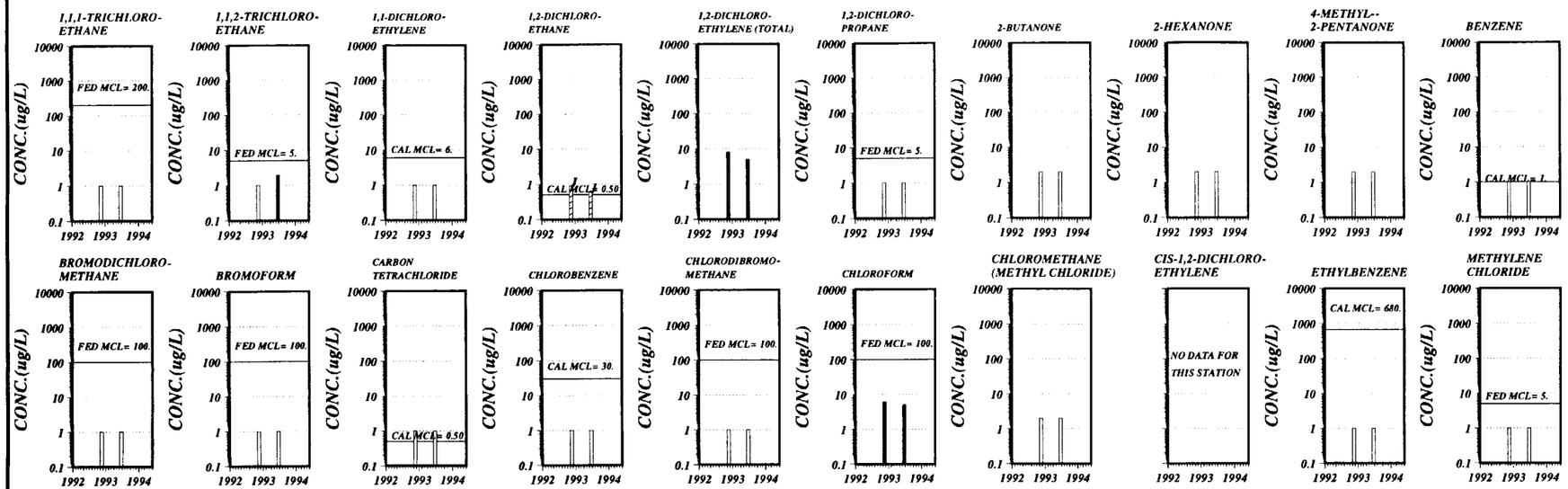
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

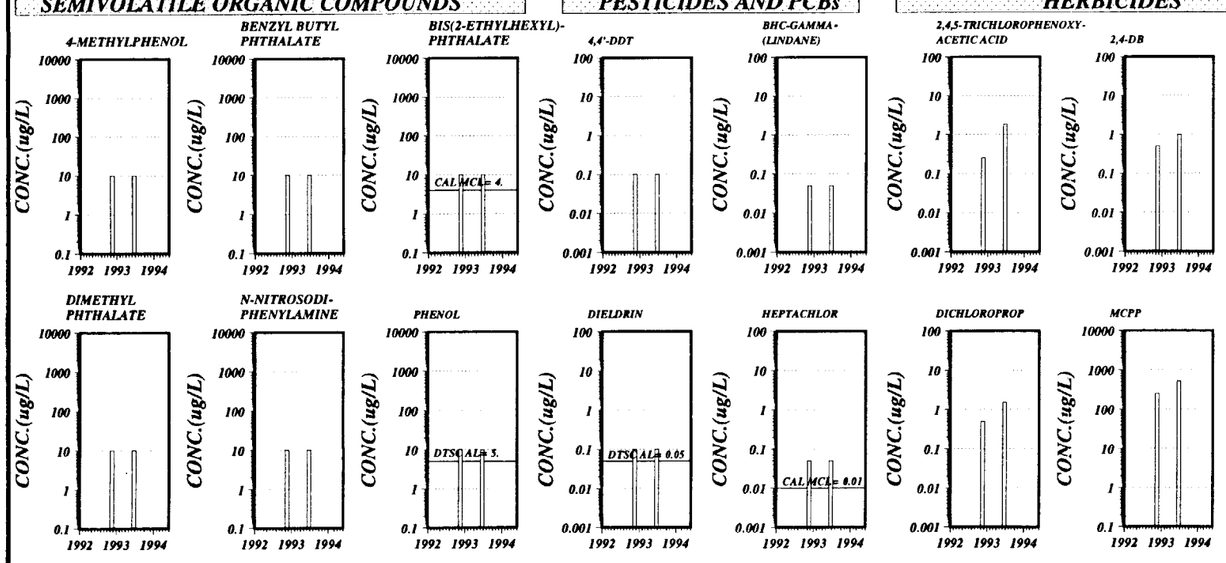
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

02_DGMW60



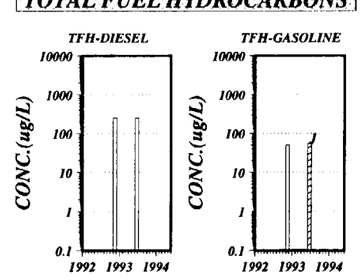
SEMIVOLATILE ORGANIC COMPOUNDS

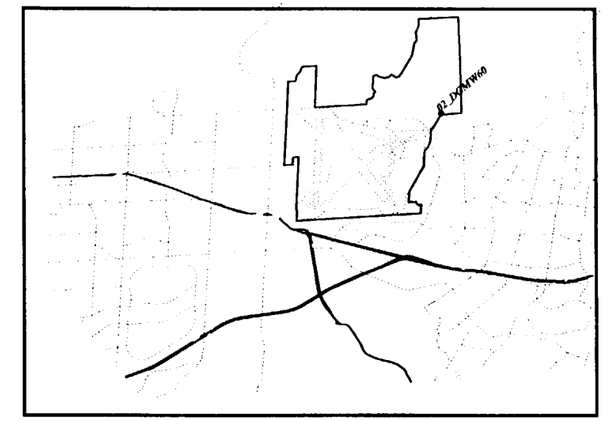


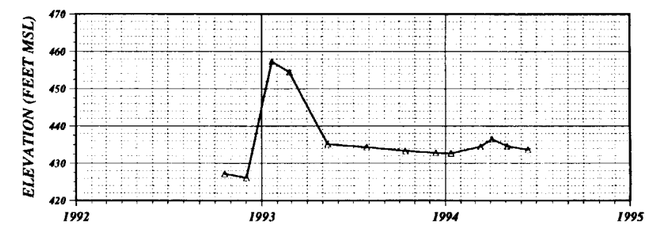
PESTICIDES AND PCBs

HERBICIDES

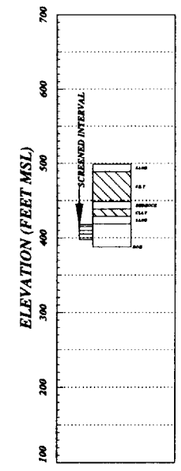
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SAND	488.6
50.0	SILT	448.6
60.0	BEDROCK	438.6
70.0	CLAY	428.6
80.0	SAND	418.6
111.0	TD	387.6

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

02_DGMW60 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	498.60		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	108.00	390.60		
CASE TOP	-1.00	499.60		
CASE BASE	81.00	417.60		
SCREEN TOP	81.00	417.60		
SCREEN BASE	101.00	397.60		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 02_DGMW60

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

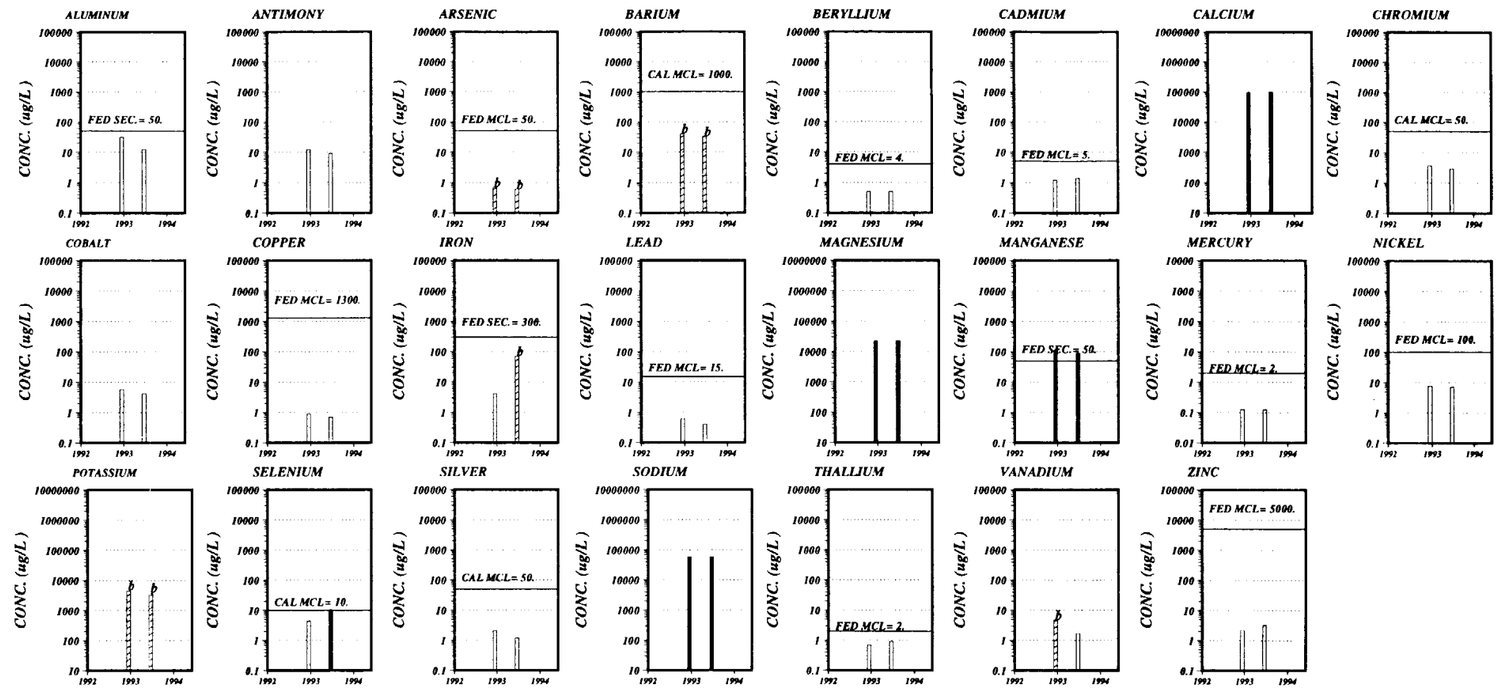
Tue Jul 26 11:15:43 1994

CHEMICAL DATA SUMMARY FOR WELL 02_DGMW61

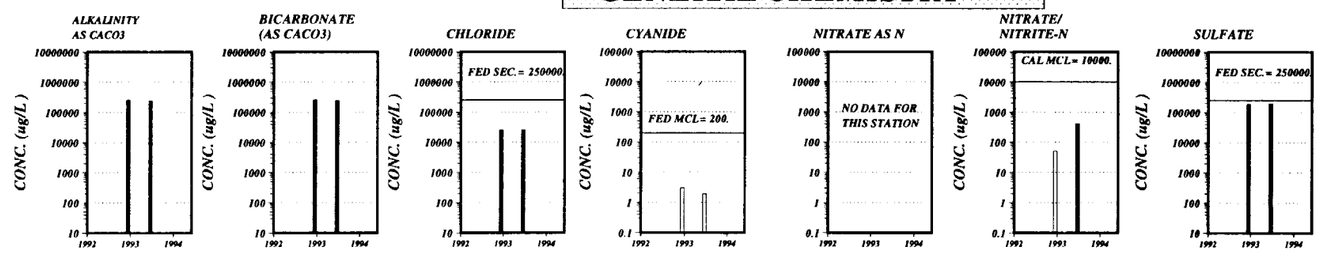
Table B-5
Groundwater Quality Data Summary - Well 02_DGMW61
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/14/92	1	U	06/22/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/14/92	1	U	06/22/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/14/92	1	U	06/22/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/14/92	1	U	06/22/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/14/92	1	U	06/22/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/14/92	1	U	06/22/93	1	U
2-BUTANONE	UG/L	2	12/14/92	2	U	06/22/93	2	U
2-HEXANONE	UG/L	2	12/14/92	2	U	06/22/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/14/92	2	U	06/22/93	2	U
BENZENE	UG/L	2	12/14/92	1	U	06/22/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/14/92	1	U	06/22/93	1	U
BROMOFORM	UG/L	2	12/14/92	1	U	06/22/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/14/92	1	U	06/22/93	1	U
CHLOROBENZENE	UG/L	2	12/14/92	1	U	06/22/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/14/92	1	U	06/22/93	1	U
CHLOROFORM	UG/L	2	12/14/92	1	U	06/22/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/14/92	2	U	06/22/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/14/92	1	U	06/22/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/14/92	1	U	06/22/93	1	U
STYRENE	UG/L	2	12/14/92	1	U	06/22/93	1	U
TETRACHLOROETHENE	UG/L	2	12/14/92	2		06/22/93	4	
TOLUENE	UG/L	2	12/14/92	1	U	06/22/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/14/92	1		06/22/93	2	
XYLENE (TOTAL)	UG/L	2	12/14/92	1	U	06/22/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/14/92	10	U	06/22/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/14/92	10	U	06/22/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/14/92	10	U	06/22/93	2	J
DIMETHYL PHTHALATE	UG/L	2	12/14/92	10	U	06/22/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/14/92	10	U	06/22/93	10	U
PHENOL	UG/L	2	12/14/92	10	U	06/22/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/14/92	0.1	U	06/22/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/14/92	0.05	U	06/22/93	0.05	U
DIELDRIN	UG/L	2	12/14/92	0.1	U	06/22/93	0.1	U
HEPTACHLOR	UG/L	2	12/14/92	0.05	U	06/22/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	12/14/92	0.25	U	06/22/93	1.85	U
2,4-DB	UG/L	2	12/14/92	0.5	U	06/22/93	0.98	U
DICHLOROPROP	UG/L	2	12/14/92	0.5	U	06/22/93	1.52	U
MCPP	UG/L	2	12/14/92	250	U	06/22/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/14/92	250	U	06/22/93	250	U
TFH-GASOLINE	UG/L	2	12/14/92	50	U	06/22/93	50	U
METALS								
ALUMINUM	UG/L	2	12/14/92	31	U	06/22/93	12.3	U
ANTIMONY	UG/L	2	12/14/92	12.1	U	06/22/93	9	U
ARSENIC	UG/L	2	12/14/92	0.7	b	06/22/93	0.6	b
BARIUM	UG/L	2	12/14/92	40.3	b	06/22/93	32.4	b
BERYLLIUM	UG/L	2	12/14/92	0.5	U	06/22/93	0.5	U
CADMIUM	UG/L	2	12/14/92	1.2	U	06/22/93	1.4	U
CALCIUM	UG/L	2	12/14/92	94800		06/22/93	99800	
CHROMIUM	UG/L	2	12/14/92	3.7	U	06/22/93	2.9	U
COBALT	UG/L	2	12/14/92	5.8	U	06/22/93	4.2	U
COPPER	UG/L	2	12/14/92	0.9	U	06/22/93	0.7	U
IRON	UG/L	2	12/14/92	4.1	U	06/22/93	71.1	b
LEAD	UG/L	2	12/14/92	0.8	U	06/22/93	0.4	U
MAGNESIUM	UG/L	2	12/14/92	22600		06/22/93	22800	
MANGANESE	UG/L	2	12/14/92	115		06/22/93	90	
MERCURY	UG/L	2	12/14/92	0.1	U	06/22/93	0.1	U
NICKEL	UG/L	2	12/14/92	7.7	U	06/22/93	7.1	U
POTASSIUM	UG/L	2	12/14/92	4390	b	06/22/93	3710	b
SELENIUM	UG/L	2	12/14/92	4.4	U	06/22/93	10.5	
SILVER	UG/L	2	12/14/92	2.1	U	06/22/93	1.2	U
SODIUM	UG/L	2	12/14/92	57900		06/22/93	57800	
THALLIUM	UG/L	2	12/14/92	0.7	U	06/22/93	0.9	U
VANADIUM	UG/L	2	12/14/92	4.8	b	06/22/93	1.7	U
ZINC	UG/L	2	12/14/92	2.2	U	06/22/93	3.2	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/14/92	256000		06/22/93	242000	
BICARBONATE (AS CACO3)	UG/L	2	12/14/92	256000		06/22/93	242000	
CHLORIDE	UG/L	2	12/14/92	25300		06/22/93	25600	
CYANIDE	UG/L	2	12/14/92	3	U	06/22/93	1.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/14/92	50	U	06/22/93	420	
SULFATE	UG/L	2	12/14/92	188000		06/22/93	194000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	1	12/14/92	7.41				
TEMPERATURE, DEGREE C	DEG/C	2	12/14/92	20.9		06/22/93	24.5	
TOTAL DISSOLVED SOLIDS	UG/L	2	12/14/92	579000		06/22/93	578000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	2	12/14/92	6.5		06/22/93	9.2	
GROSS BETA	PCI/L	2	12/14/92	8.9		06/22/93	10.5	

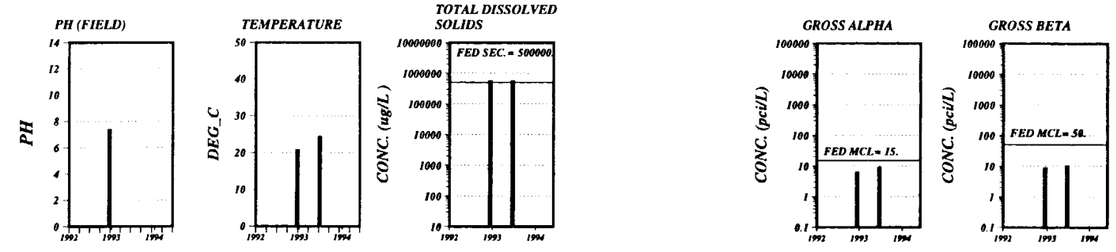
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



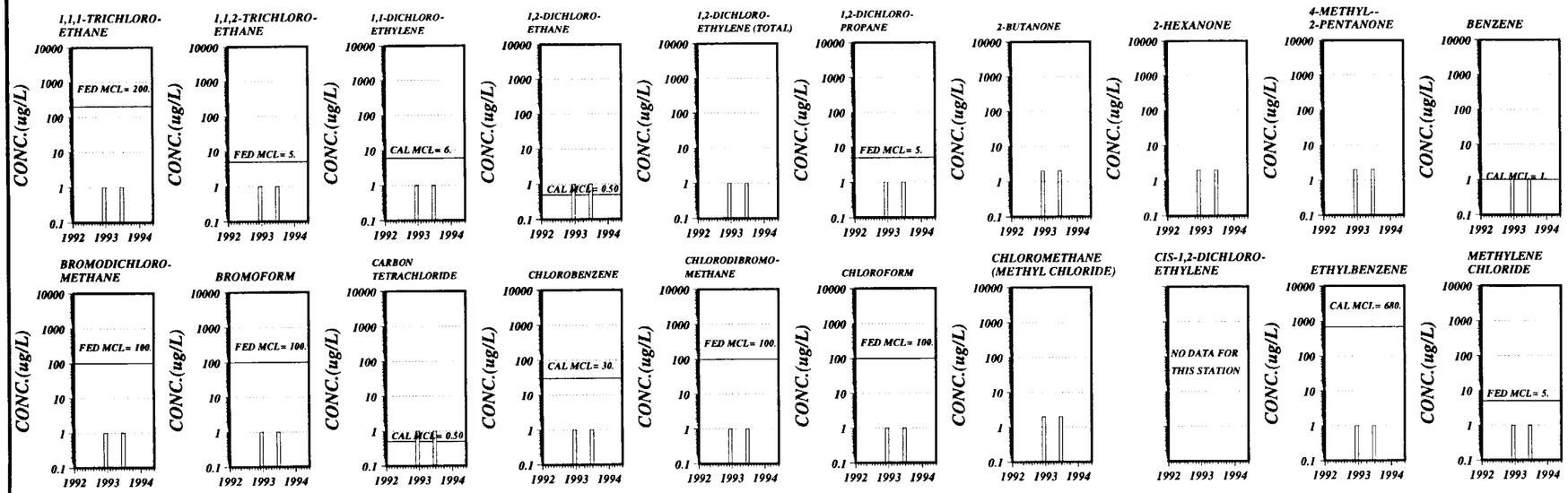
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

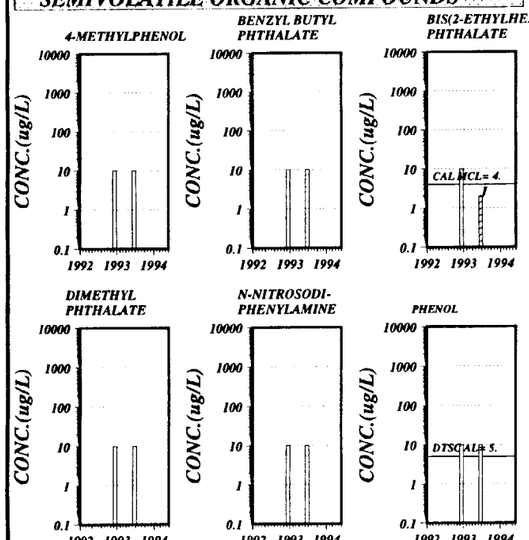
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

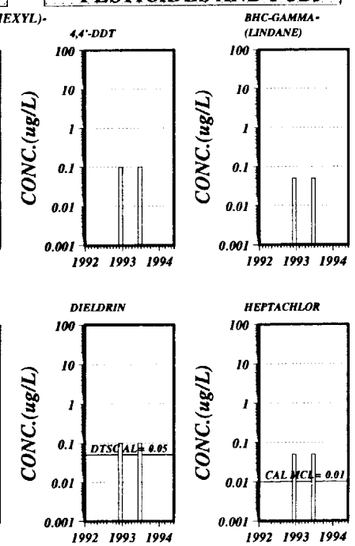
02_DGMW61



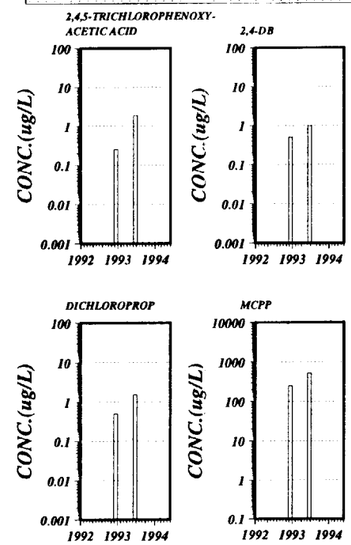
SEMIVOLATILE ORGANIC COMPOUNDS



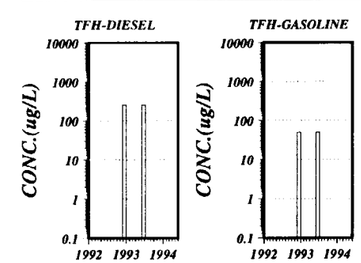
PESTICIDES AND PCBs

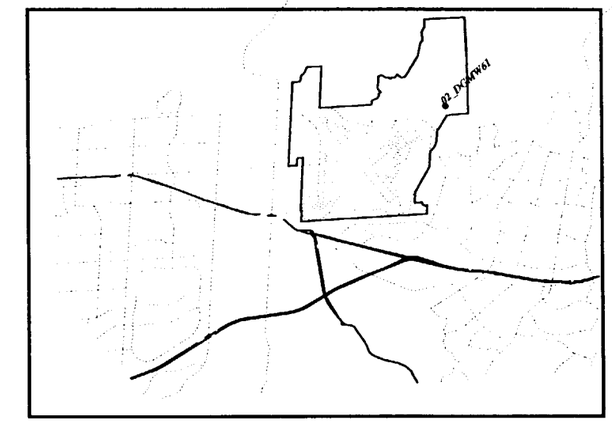


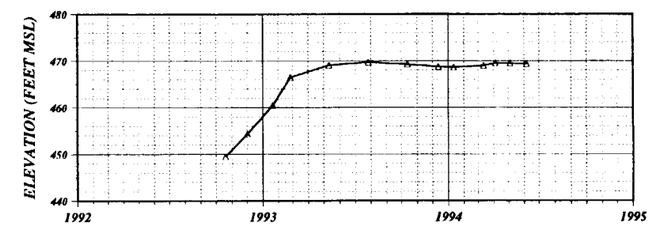
HERBICIDES



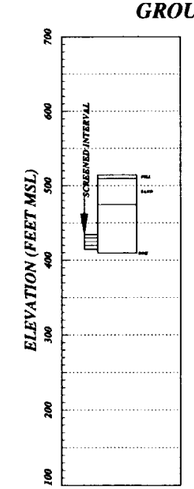
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
5.0	FILL	509.3
40.0	SAND	474.3
105.0	TD	409.3

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

02_DGMW61 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	514.30		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	108.00	406.30		
CASE TOP	-1.00	515.30		
CASE BASE	80.00	434.30		
SCREEN TOP	80.00	434.30		
SCREEN BASE	100.00	414.30		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 02_DGMW61

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

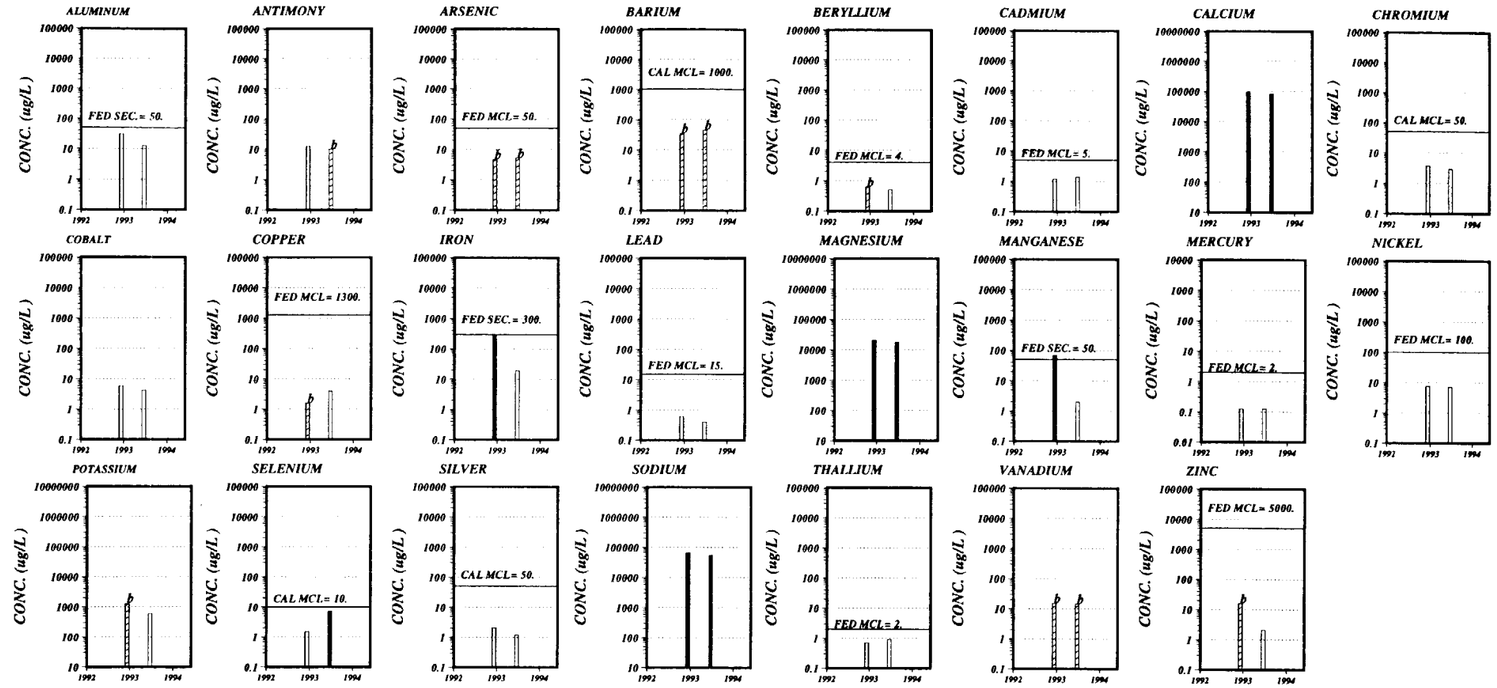
Tue Jul 26 11:18:14 1994

CHEMICAL DATA SUMMARY FOR WELL 02_UGMW25

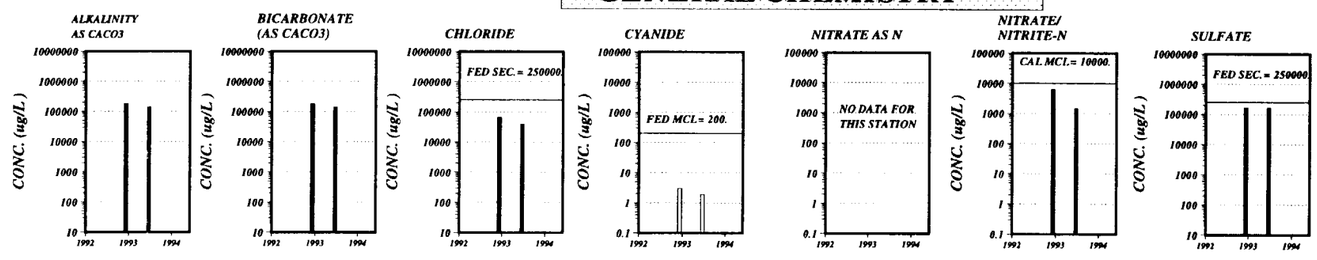
Table B-6
Groundwater Quality Data Summary - Well 02_UGMW25
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/09/92	1	U	06/22/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/09/92	1	U	06/22/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/09/92	1	U	06/22/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/09/92	1	U	06/22/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/09/92	1	U	06/22/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/09/92	1	U	06/22/93	1	U
2-BUTANONE	UG/L	2	12/09/92	2	U	06/22/93	2	U
2-HEXANONE	UG/L	2	12/09/92	2	U	06/22/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/09/92	2	U	06/22/93	2	U
BENZENE	UG/L	2	12/09/92	1	U	06/22/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/09/92	1	U	06/22/93	1	U
BROMOFORM	UG/L	2	12/09/92	1	U	06/22/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/09/92	1	U	06/22/93	1	U
CHLOROBENZENE	UG/L	2	12/09/92	1	U	06/22/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/09/92	1	U	06/22/93	1	U
CHLOROFORM	UG/L	2	12/09/92	1	U	06/22/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/09/92	2	U	06/22/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/09/92	1	U	06/22/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/09/92	1	U	06/22/93	1	U
STYRENE	UG/L	2	12/09/92	1	U	06/22/93	1	U
TETRACHLOROETHENE	UG/L	2	12/09/92	1	U	06/22/93	1	U
TOLUENE	UG/L	2	12/09/92	1	U	06/22/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/09/92	0.9	J	06/22/93	1	U
XYLENE (TOTAL)	UG/L	2	12/09/92	1	U	06/22/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/09/92	10	U	06/22/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/09/92	10	U	06/22/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/09/92	10	U	06/22/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/09/92	10	U	06/22/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/09/92	10	U	06/22/93	10	U
PHENOL	UG/L	2	12/09/92	10	U	06/22/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/09/92	0.1	U	06/22/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/09/92	0.05	U	06/22/93	0.05	U
DIELDRIN	UG/L	2	12/09/92	0.1	U	06/22/93	0.1	U
HEPTACHLOR	UG/L	2	12/09/92	0.05	U	06/22/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	12/09/92	0.25	U	06/22/93	1.85	U
2,4-DB	UG/L	2	12/09/92	0.5	U	06/22/93	0.98	U
DICHLOROPROP	UG/L	2	12/09/92	0.5	U	06/22/93	1.52	U
MCPP	UG/L	2	12/09/92	250	U	06/22/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/09/92	250	U	06/22/93	250	U
TFH-GASOLINE	UG/L	2	12/09/92	50	U	06/22/93	50	U
METALS								
ALUMINUM	UG/L	2	12/09/92	31	U	06/22/93	12.8	U
ANTIMONY	UG/L	2	12/09/92	12.1	U	06/22/93	9.9	b
ARSENIC	UG/L	2	12/09/92	4.7	b	06/22/93	5.2	b
BARIUM	UG/L	2	12/09/92	34.4	b	06/22/93	43.7	b
BERYLLIUM	UG/L	2	12/09/92	0.64	b	06/22/93	0.5	U
CADMIUM	UG/L	2	12/09/92	1.2	U	06/22/93	1.4	U
CALCIUM	UG/L	2	12/09/92	93500		06/22/93	81500	
CHROMIUM	UG/L	2	12/09/92	3.7	U	06/22/93	2.9	U
COBALT	UG/L	2	12/09/92	5.8	U	06/22/93	4.2	U
COPPER	UG/L	2	12/09/92	1.8	b	06/22/93	3.9	U
IRON	UG/L	2	12/09/92	275		06/22/93	19.1	U
LEAD	UG/L	2	12/09/92	0.8	U	06/22/93	0.4	U
MAGNESIUM	UG/L	2	12/09/92	20600		06/22/93	17700	
MANGANESE	UG/L	2	12/09/92	70.6		06/22/93	2	U
MERCURY	UG/L	2	12/09/92	0.1	U	06/22/93	0.1	U
NICKEL	UG/L	2	12/09/92	7.7	U	06/22/93	7.1	U
POTASSIUM	UG/L	2	12/09/92	1280	b	06/22/93	590	U
SELENIUM	UG/L	2	12/09/92	1.5	U	06/22/93	7.2	
SILVER	UG/L	2	12/09/92	2.1	U	06/22/93	1.2	U
SODIUM	UG/L	2	12/09/92	67100		06/22/93	54900	
THALLIUM	UG/L	2	12/09/92	0.7	U	06/22/93	0.9	U
VANADIUM	UG/L	2	12/09/92	15	b	06/22/93	14.5	b
ZINC	UG/L	2	12/09/92	15.8	b	06/22/93	2.1	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/09/92	180000		06/22/93	140000	
BICARBONATE (AS CACO3)	UG/L	2	12/09/92	180000		06/22/93	140000	
CHLORIDE	UG/L	2	12/09/92	66000		06/22/93	39700	
CYANIDE	UG/L	2	12/09/92	3	U	06/22/93	1.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/09/92	6290		06/22/93	1450	
SULFATE	UG/L	2	12/09/92	167000		06/22/93	164000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	12/09/92	7.45		06/22/93	7.74	
TEMPERATURE, DEGREE C	DEG/C	2	12/09/92	23.8		06/22/93	19.4	
TOTAL DISSOLVED SOLIDS	UG/L	2	12/09/92	598000		06/22/93	538000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	2	12/09/92	7.8		06/22/93	0.7	U
GROSS BETA	PCI/L	2	12/09/92	5.2		06/22/93	3.7	

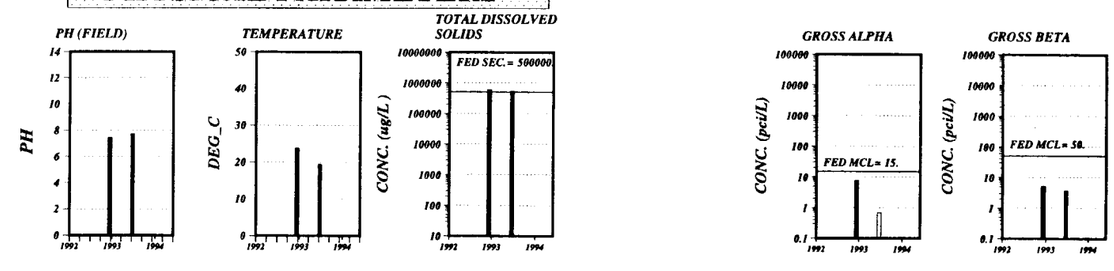
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



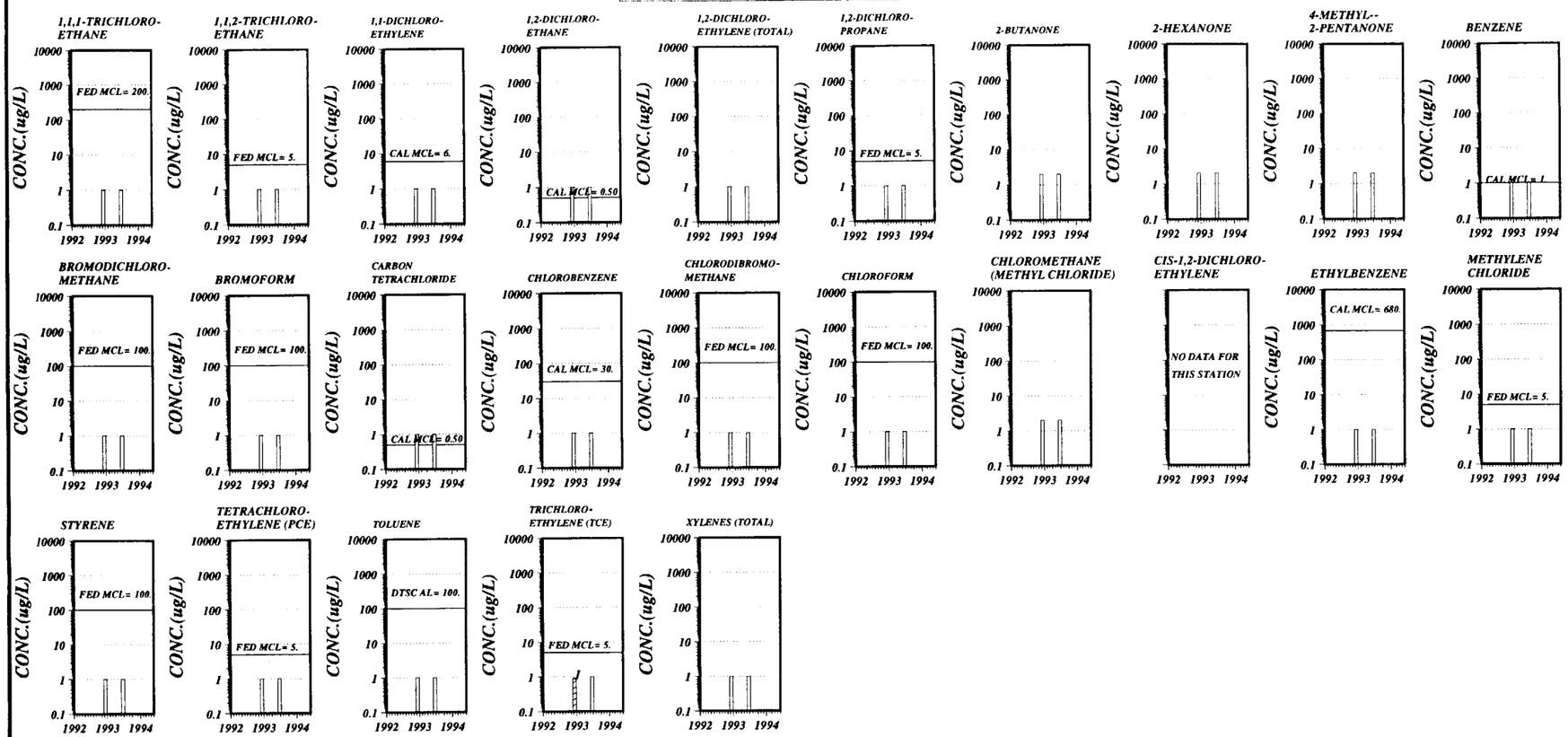
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

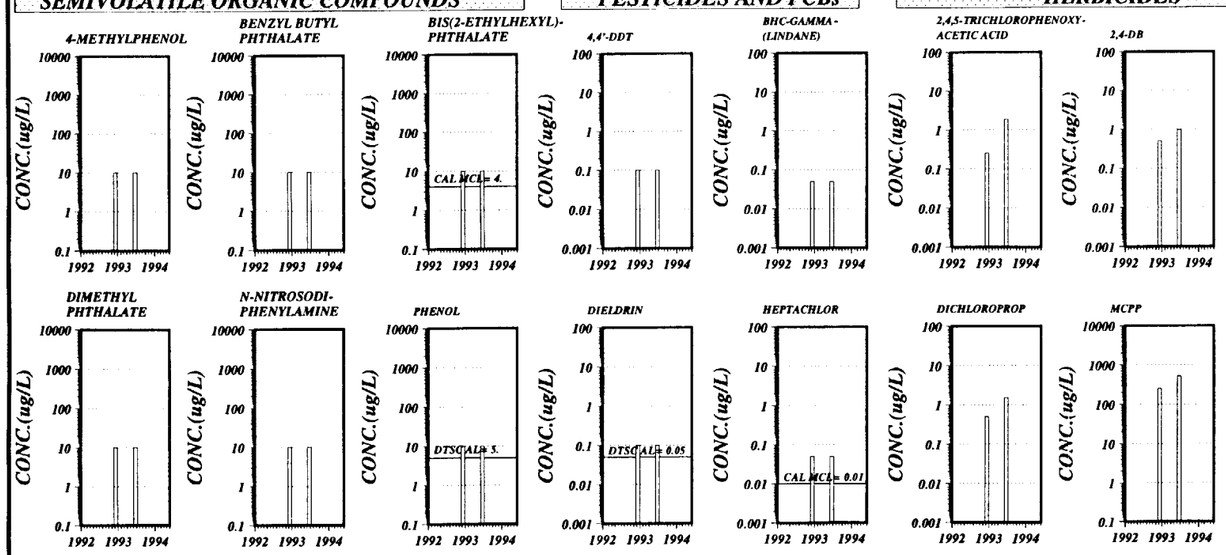
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

02_UGMW25



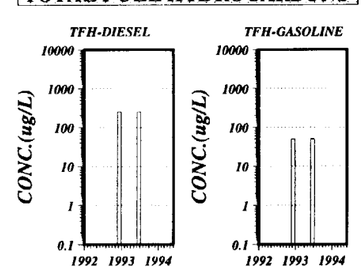
SEMIVOLATILE ORGANIC COMPOUNDS

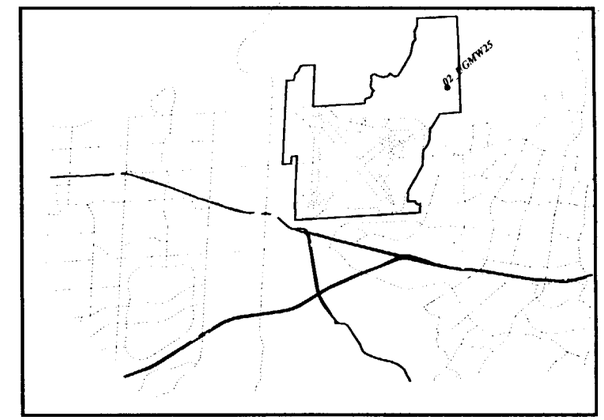


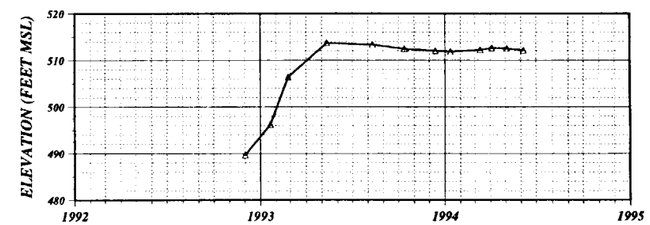
PESTICIDES AND PCBs

HERBICIDES

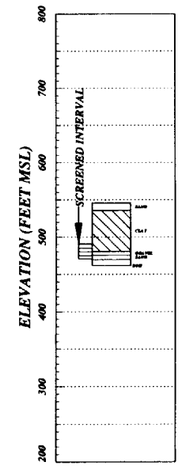
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SAND	535.7
65.0	CLAY	480.7
70.0	GRAVEL	475.7
76.0	SAND	469.7
84.0	TD	461.7

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

02_UGMW25 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	545.70		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	84.00	461.70		
CASE TOP				
CASE BASE	55.00	490.70		
SCREEN TOP	55.00	490.70		
SCREEN BASE	75.00	470.70		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 02_UGMW25

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Tue Jul 26 11:20:06 1994

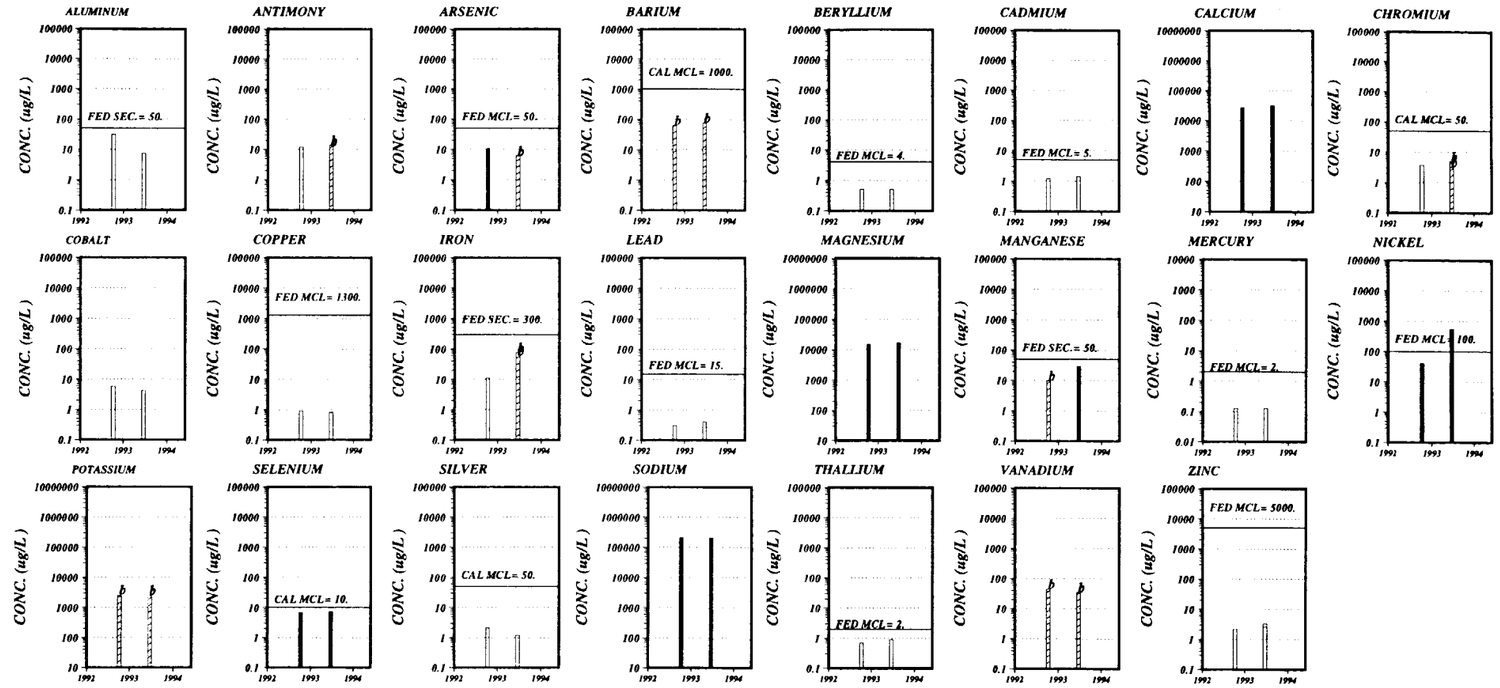
Site 3
Original Landfill

CHEMICAL DATA SUMMARY FOR WELL 03_DBMW39

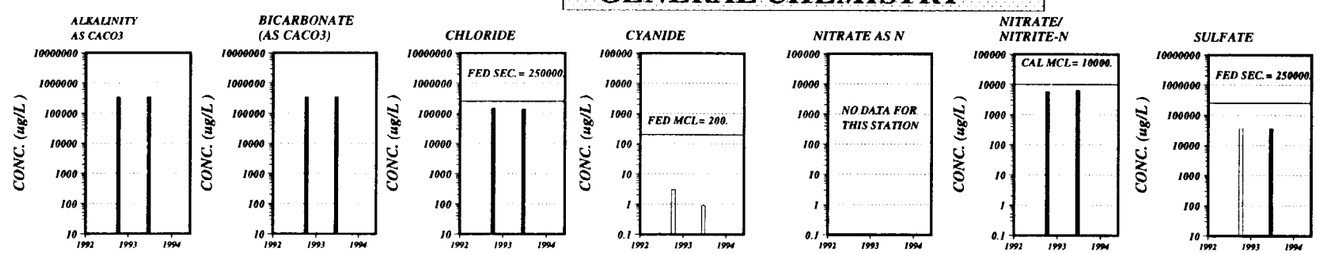
Table B-7
Groundwater Quality Data Summary - Well 03_DBMW39
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
1,2-DICHLOROETHANE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
2-BUTANONE	UG/L	3	10/09/92	2	U	06/21/93	2	U	06/21/93	2	U						
2-HEXANONE	UG/L	3	10/09/92	2	U	06/21/93	2	U	06/21/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	10/09/92	2	U	06/21/93	2	U	06/21/93	2	U						
BENZENE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
BROMOFORM	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
CHLOROBENZENE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
CHLOROFORM	UG/L	3	10/09/92	0.6	J	06/21/93	1		06/21/93	0.8	J						
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	10/09/92	3		06/21/93	2	U	06/21/93	2	U						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
METHYLENE CHLORIDE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
STYRENE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
TETRACHLOROETHENE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
TOLUENE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
TRICHLOROETHYLENE	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
XYLENE (TOTAL)	UG/L	3	10/09/92	1	U	06/21/93	1	U	06/21/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	3	10/09/92	10	U	06/21/93	10	U	06/21/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	10/09/92	10	U	06/21/93	10	U	06/21/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	10/09/92	10	U	06/21/93	14		06/21/93	9	J						
DIMETHYL PHTHALATE	UG/L	3	10/09/92	10	U	06/21/93	10	U	06/21/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	10/09/92	10	U	06/21/93	10	U	06/21/93	10	U						
PHENOL	UG/L	3	10/09/92	10	U	06/21/93	10	U	06/21/93	10	U						
PESTICIDES AND PCBs																	
4,4'-DDT	UG/L	3	10/09/92	0.1	U	06/21/93	0.1	U	06/21/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	10/09/92	0.05	U	06/21/93	0.05	U	06/21/93	0.05	U						
DIELDRIN	UG/L	3	10/09/92	0.1	U	06/21/93	0.1	U	06/21/93	0.1	U						
HEPTACHLOR	UG/L	3	10/09/92	0.05	U	06/21/93	0.05	U	06/21/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	3	10/09/92	0.83	U	06/21/93	1.85	U	06/21/93	1.85	U						
2,4-D8	UG/L	3	10/09/92	1.67	U	06/21/93	0.98	U	06/21/93	0.98	U						
DICHLOROPROP	UG/L	3	10/09/92	1.67	U	06/21/93	1.52	U	06/21/93	1.52	U						
MCPP	UG/L	3	10/09/92	833	U	06/21/93	522	U	06/21/93	522	U						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TPH-DIESEL	UG/L	3	10/09/92	250	U	06/21/93	250	U	06/21/93	250	U						
TPH-GASOLINE	UG/L	3	10/09/92	50	U	06/21/93	50	U	06/21/93	50	U						
METALS																	
ALUMINUM	UG/L	3	10/09/92	31	U	06/21/93	7.2	U	06/21/93	7	U						
ANTIMONY	UG/L	3	10/09/92	12.1	U	06/21/93	14	b	06/21/93	12.5	b						
ARSENIC	UG/L	3	10/09/92	10.7		06/21/93	6.2	b	06/21/93	5.9	b						
BARIUM	UG/L	3	10/09/92	62.9	b	06/21/93	74.1	b	06/21/93	75.7	b						
BERYLLIUM	UG/L	3	10/09/92	0.5	U	06/21/93	0.5	U	06/21/93	0.5	U						
CADMIUM	UG/L	3	10/09/92	1.2	U	06/21/93	1.4	U	06/21/93	1.4	U						
CALCIUM	UG/L	3	10/09/92	27300		06/21/93	30900		06/21/93	31200							
CHROMIUM	UG/L	3	10/09/92	3.7	U	06/21/93	3.2	b	06/21/93	5	b						
COBALT	UG/L	3	10/09/92	5.8	U	06/21/93	4.2	U	06/21/93	4.2	U						
COPPER	UG/L	3	10/09/92	0.9	U	06/21/93	0.8	U	06/21/93	0.7	U						
IRON	UG/L	3	10/09/92	11	U	06/21/93	76.6	b	06/21/93	57.8	b						
LEAD	UG/L	3	10/09/92	0.3	U	06/21/93	0.4	U	06/21/93	0.4	U						
MAGNESIUM	UG/L	3	10/09/92	14900		06/21/93	16600		06/21/93	16800							
MANGANESE	UG/L	3	10/09/92	9.9	b	06/21/93	29		06/21/93	29							
MERCURY	UG/L	3	10/09/92	0.1	U	06/21/93	0.1	U	06/21/93	0.1	U						
NICKEL	UG/L	3	10/09/92	40.2		06/21/93	557		06/21/93	554							
POTASSIUM	UG/L	3	10/09/92	2520	b	06/21/93	2440	b	06/21/93	2320	b						
SELENIUM	UG/L	3	10/09/92	6.8		06/21/93	7.2		06/21/93	7.2							
SILVER	UG/L	3	10/09/92	2.1	U	06/21/93	1.2	U	06/21/93	1.2	U						
SODIUM	UG/L	3	10/09/92	210000		06/21/93	203000		06/21/93	206000							
THALLIUM	UG/L	3	10/09/92	0.7	U	06/21/93	0.9	U	06/21/93	0.9	U						
VANADIUM	UG/L	3	10/09/92	44.9	b	06/21/93	33.9	b	06/21/93	35.4	b						
ZINC	UG/L	3	10/09/92	2.2	U	06/21/93	2.6	U	06/21/93	3.3	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	10/09/92	335000		06/21/93	349000		06/21/93	340000							
BICARBONATE (AS CACO3)	UG/L	3	10/09/92	335000		06/21/93	349000		06/21/93	340000							
CHLORIDE	UG/L	3	10/09/92	146000		06/21/93	138000		06/21/93	137000							
CYANIDE	UG/L	3	10/09/92	3	U	06/21/93	0.9	U	06/21/93	0.9	U						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	10/09/92	5730		06/21/93	6330		06/21/93	6340							
SULFATE	UG/L	3	10/09/92	36400	U	06/21/93	35300		06/21/93	35300							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	1	06/21/93	7.3													
TEMPERATURE, DEGREE C	DEG/C	1	06/21/93	26.2													
TOTAL DISSOLVED SOLIDS	UG/L	3	10/09/92	731000		06/21/93	737000		06/21/93	768000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	3	10/09/92	15.9		06/21/93	12.3		06/21/93	11.5							
GROSS BETA	PCI/L	3	10/09/92	10.3		06/21/93	15		06/21/93	11.7							

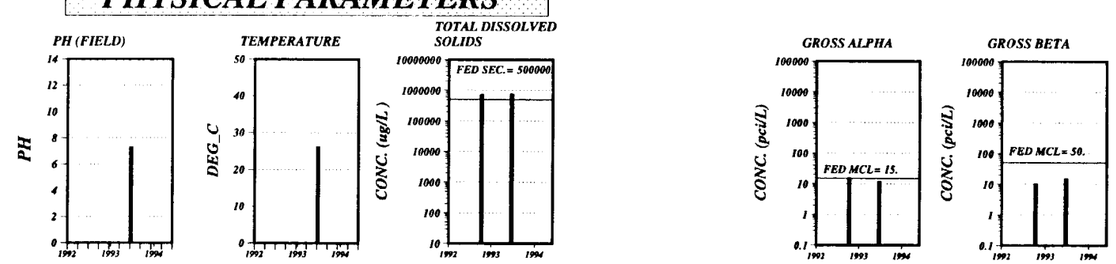
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



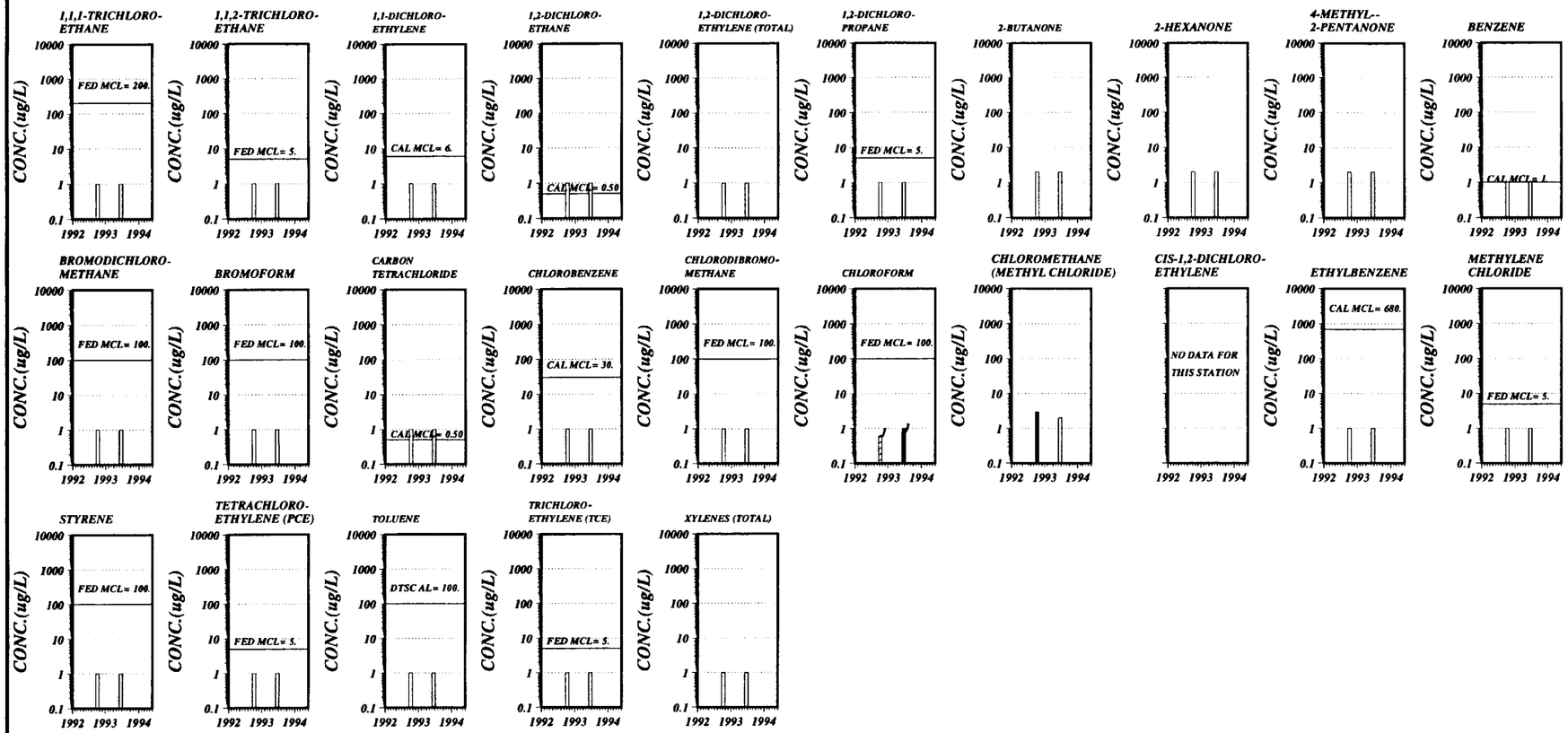
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

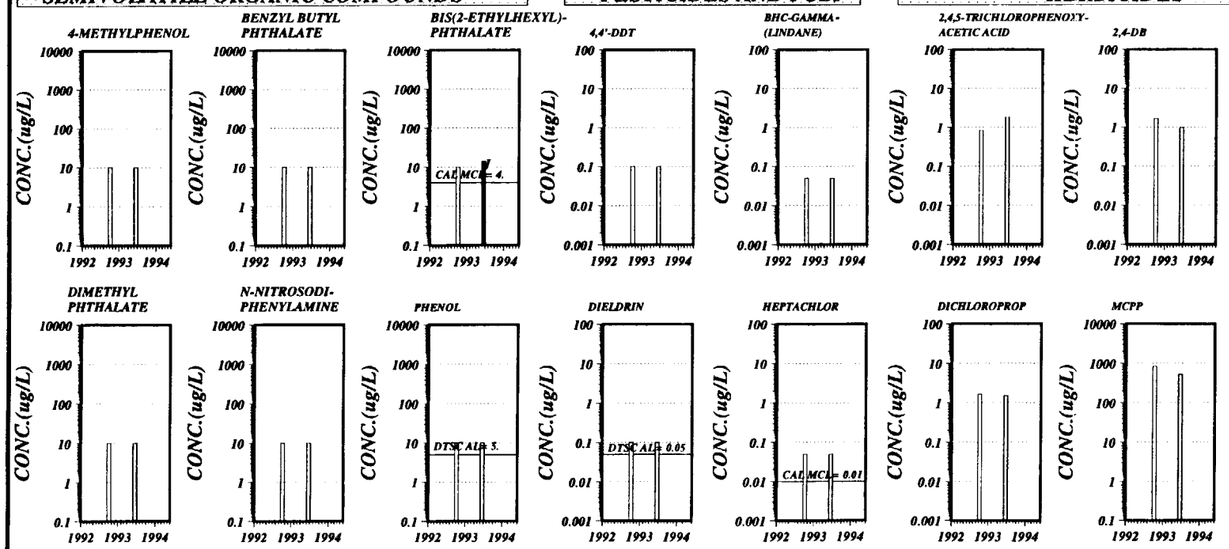
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

03_DBMW39



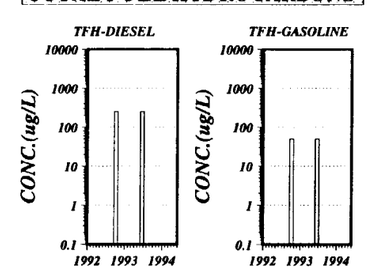
SEMIVOLATILE ORGANIC COMPOUNDS

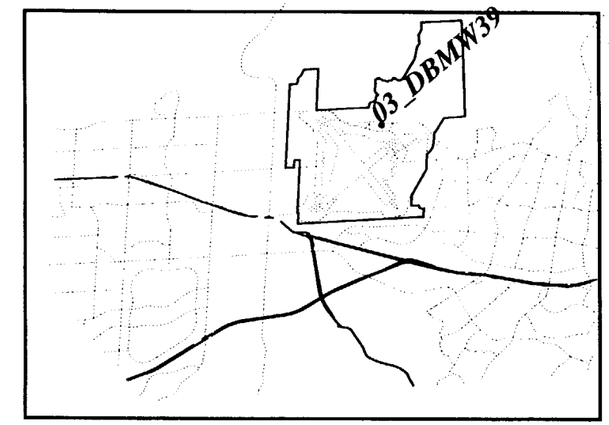


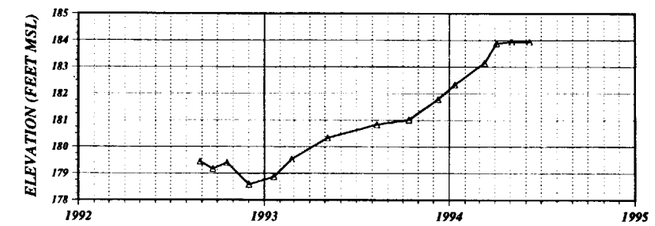
PESTICIDES AND PCBs

HERBICIDES

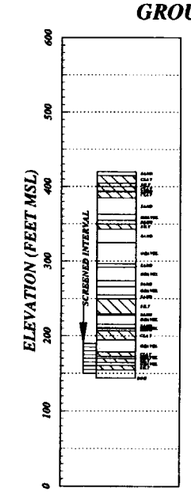
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)	LITH.	ELEV. (ft msl)
5.0	SAND	414.7	259.0	GRAVEL 160.7
15.0	CLAY	404.7	265.0	SILT 154.7
20.0	SILT	399.7	276.0	TD 143.7
26.0	CLAY	393.7		
27.0	SAND	392.7		
35.0	CLAY	384.7		
57.0	SAND	362.7		
65.0	GRAVEL	354.7		
70.0	SAND	349.7		
77.0	SILT	342.7		
95.0	SAND	324.7		
123.0	GRAVEL	296.7		
128.0	SAND	291.7		
146.0	GRAVEL	273.7		
154.0	SAND	265.7		
165.0	GRAVEL	254.7		
170.0	SAND	249.7		
190.0	SILT	229.7		
192.0	SAND	227.7		
204.0	GRAVEL	215.7		
209.0	SAND	210.7		
210.0	GRAVEL	209.7		
213.0	SAND	206.7		
225.0	CLAY	194.7		
241.0	GRAVEL	178.7		
247.0	CLAY	172.7		
250.0	GRAVEL	169.7		
255.0	SILT	164.7		

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

03_DBMW39 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	5.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	5.00		CASING MAT.	S80 PVC
SURF ELEV(FT MSL)	419.70		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	276.00	143.70		
CASE TOP	-1.00	420.70		
CASE BASE	230.00	189.70		
SCREEN TOP	230.00	189.70		
SCREEN BASE	270.00	149.70		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 03_DBMW39

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

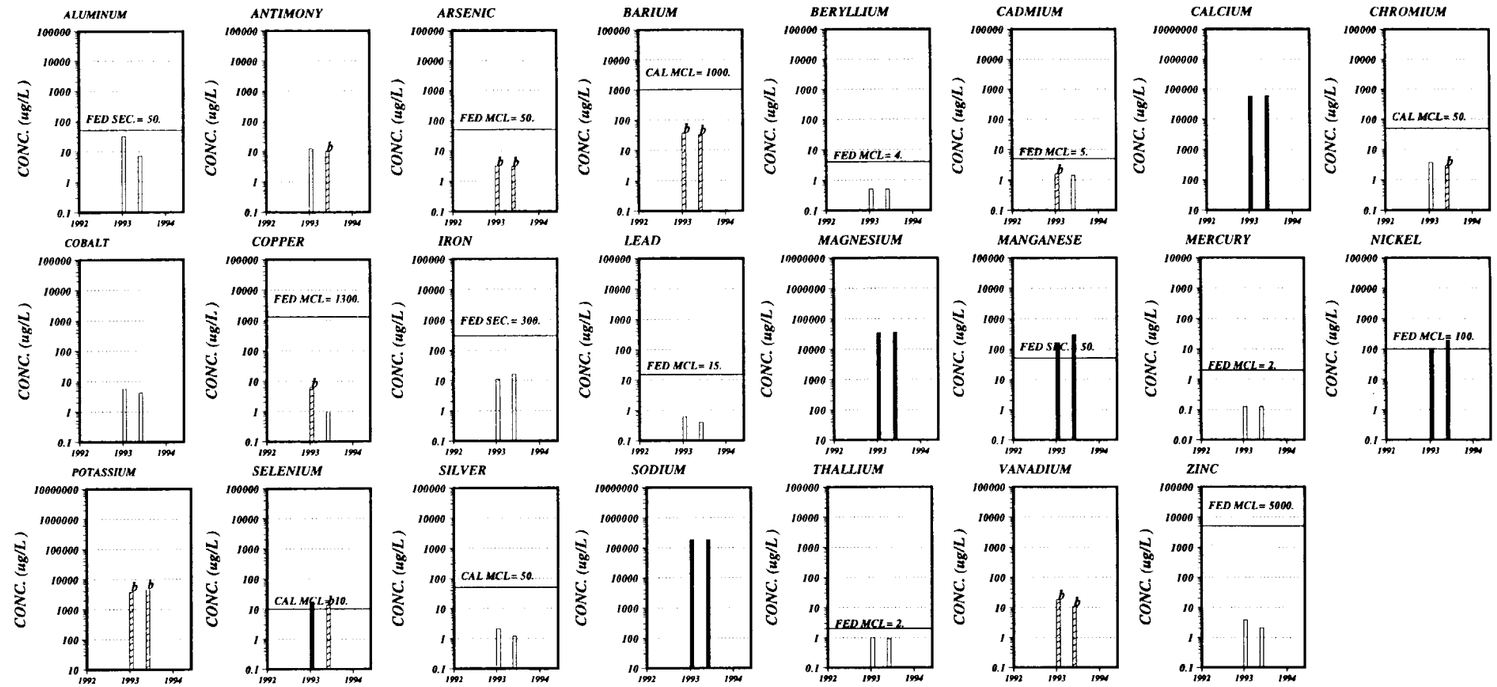
Tue Jul 26 11:22:31 1994

CHEMICAL DATA SUMMARY FOR WELL 03_DGMW64

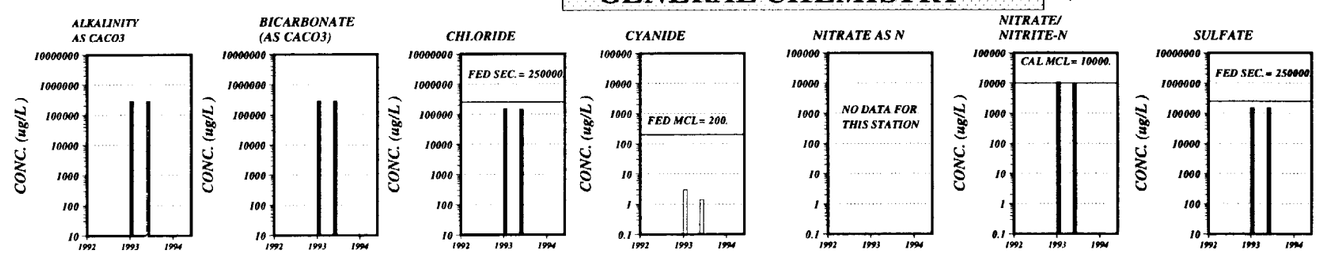
Table B-8
Groundwater Quality Data Summary - Well 03_DGMW64
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	01/15/93	1	U	06/02/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	01/15/93	1	U	06/02/93	1	U
1,1-DICHLOROETHENE	UG/L	2	01/15/93	1	U	06/02/93	1	U
1,2-DICHLOROETHANE	UG/L	2	01/15/93	1	U	06/02/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	01/15/93	1	U	06/02/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	01/15/93	1	U	06/02/93	1	U
2-BUTANONE	UG/L	2	01/15/93	2	U	06/02/93	2	U
2-HEXANONE	UG/L	2	01/15/93	2	U	06/02/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	01/15/93	2	U	06/02/93	2	U
BENZENE	UG/L	2	01/15/93	1	U	06/02/93	1	U
BROMODICHLOROMETHANE	UG/L	2	01/15/93	1	U	06/02/93	1	U
BROMOFORM	UG/L	2	01/15/93	1	U	06/02/93	1	U
CARBON TETRACHLORIDE	UG/L	2	01/15/93	1	U	06/02/93	1	U
CHLOROBENZENE	UG/L	2	01/15/93	1	U	06/02/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	01/15/93	1	U	06/02/93	1	U
CHLOROFORM	UG/L	2	01/15/93	1	U	06/02/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	01/15/93	2	U	06/02/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	01/15/93	1	U	06/02/93	1	U
METHYLENE CHLORIDE	UG/L	2	01/15/93	1	U	06/02/93	1	U
STYRENE	UG/L	2	01/15/93	1	U	06/02/93	1	U
TETRACHLOROETHENE	UG/L	2	01/15/93	1	U	06/02/93	1	U
TOLUENE	UG/L	2	01/15/93	1	U	06/02/93	1	U
TRICHLOROETHYLENE	UG/L	2	01/15/93	1	U	06/02/93	1	U
XYLENE (TOTAL)	UG/L	2	01/15/93	1	U	06/02/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	01/15/93	10	U	06/02/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	01/15/93	10	U	06/02/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	01/15/93	10	U	06/02/93	6	J
DIMETHYL PHTHALATE	UG/L	2	01/15/93	10	U	06/02/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	01/15/93	10	U	06/02/93	10	U
PHENOL	UG/L	2	01/15/93	10	U	06/02/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	01/15/93	0.11		06/02/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	01/15/93	0.05		06/02/93	0.05	U
DIELDRIN	UG/L	2	01/15/93	0.11		06/02/93	0.1	U
HEPTACHLOR	UG/L	2	01/15/93	0.07		06/02/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	01/15/93	0.25	U	06/02/93	1.85	U
2,4-DB	UG/L	2	01/15/93	0.5	U	06/02/93	0.98	U
DICHLOROPROP	UG/L	2	01/15/93	0.5	U	06/02/93	1.52	U
MCPP	UG/L	2	01/15/93	250	U	06/02/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	01/15/93	250	U	06/02/93	250	U
TFH-GASOLINE	UG/L	2	01/15/93	50	U	06/02/93	50	U
METALS								
ALUMINUM	UG/L	2	01/15/93	31	U	06/02/93	7	U
ANTIMONY	UG/L	2	01/15/93	12.1	U	06/02/93	10	b
ARSENIC	UG/L	2	01/15/93	3.1	b	06/02/93	3	b
BARIUM	UG/L	2	01/15/93	35.9	b	06/02/93	32	b
BERYLLIUM	UG/L	2	01/15/93	0.5	U	06/02/93	0.5	U
CADMIUM	UG/L	2	01/15/93	1.6	b	06/02/93	1.4	U
CALCIUM	UG/L	2	01/15/93	57100		06/02/93	58700	
CHROMIUM	UG/L	2	01/15/93	3.7	U	06/02/93	2.9	b
COBALT	UG/L	2	01/15/93	5.8	U	06/02/93	4.2	U
COPPER	UG/L	2	01/15/93	6.2	b	06/02/93	0.92	U
IRON	UG/L	2	01/15/93	11	U	06/02/93	18	U
LEAD	UG/L	2	01/15/93	0.6	U	06/02/93	0.4	U
MAGNESIUM	UG/L	2	01/15/93	35300		06/02/93	35400	
MANGANESE	UG/L	2	01/15/93	161		06/02/93	300	
MERCURY	UG/L	2	01/15/93	0.1	U	06/02/93	0.1	U
NICKEL	UG/L	2	01/15/93	96.4		06/02/93	194	
POTASSIUM	UG/L	2	01/15/93	3790	b	06/02/93	4460	b
SELENIUM	UG/L	2	01/15/93	17.4		06/02/93	13.3	b
SILVER	UG/L	2	01/15/93	2.1	U	06/02/93	1.2	U
SODIUM	UG/L	2	01/15/93	181000		06/02/93	180000	
THALLIUM	UG/L	2	01/15/93	1	U	06/02/93	0.9	U
VANADIUM	UG/L	2	01/15/93	18.1	b	06/02/93	10.7	b
ZINC	UG/L	2	01/15/93	3.8	U	06/02/93	2.1	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	01/15/93	286000		06/02/93	284000	
BICARBONATE (AS CACO3)	UG/L	2	01/15/93	286000		06/02/93	284000	
CHLORIDE	UG/L	2	01/15/93	152000		06/02/93	144000	
CYANIDE	UG/L	2	01/15/93	3	U	06/02/93	1.4	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	01/15/93	10600		06/02/93	8970	
SULFATE	UG/L	2	01/15/93	153000		06/02/93	148000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	0						
TEMPERATURE, DEGREE C	DEG/C	0						
TOTAL DISSOLVED SOLIDS	UG/L	2	01/15/93	847000		06/02/93	854000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	2	01/15/93	14.3		06/02/93	13.3	
GROSS BETA	PCI/L	2	01/15/93	13.1		06/02/93	16.6	

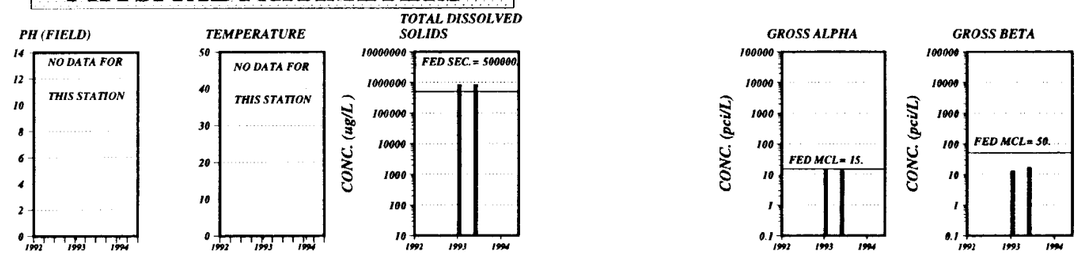
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



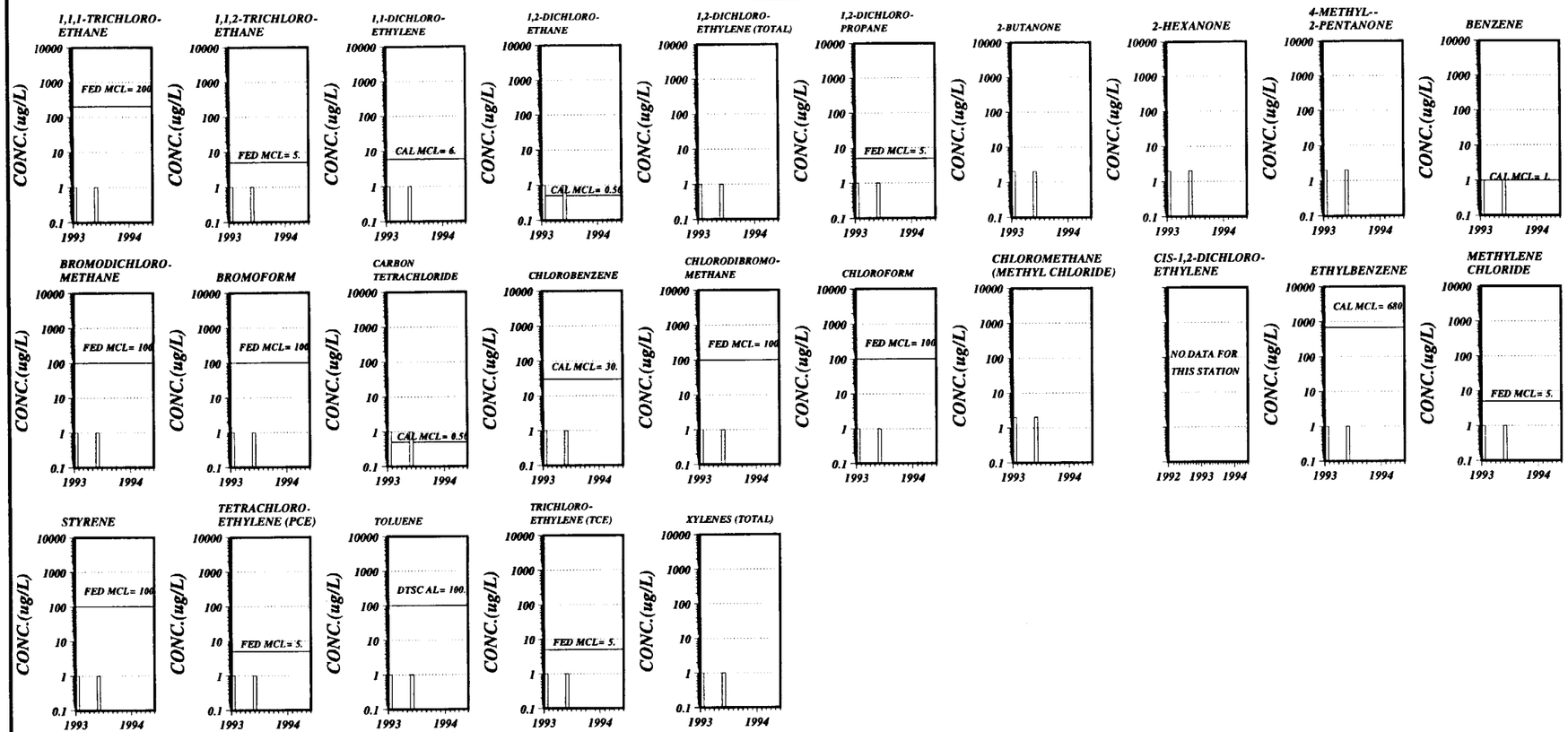
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

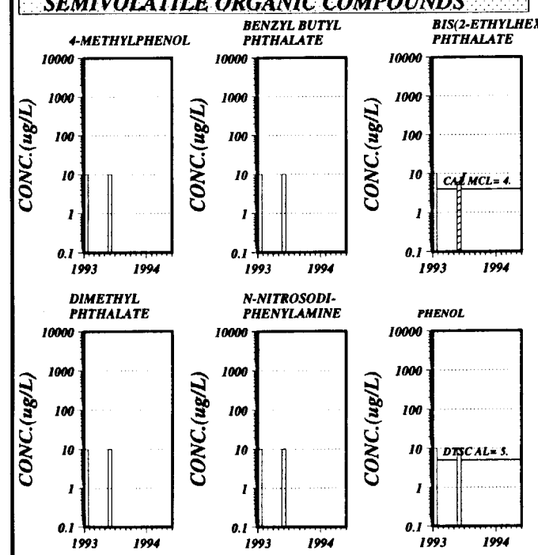
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

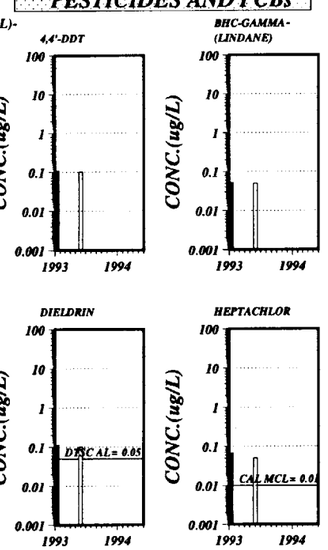
03_DGMW64



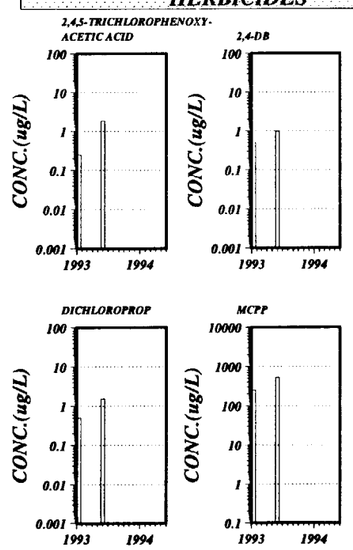
SEMIVOLATILE ORGANIC COMPOUNDS



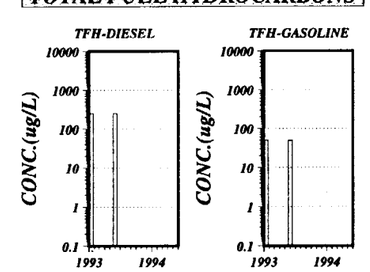
PESTICIDES AND PCBs

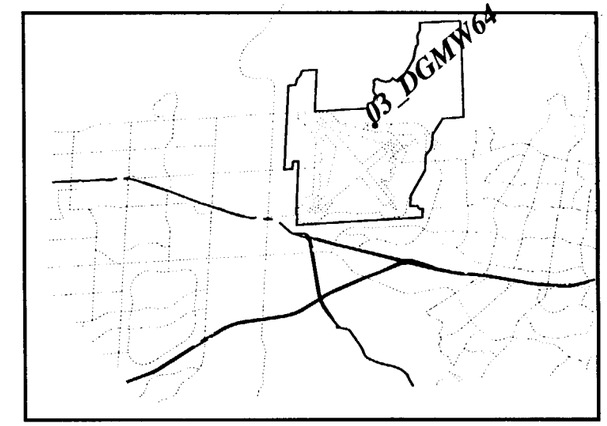


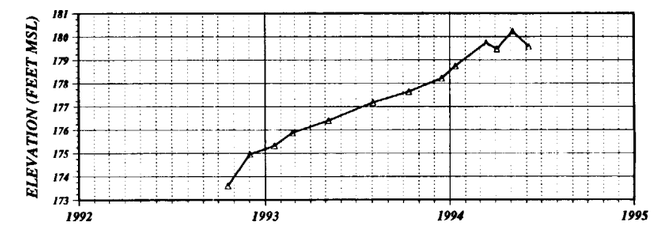
HERBICIDES



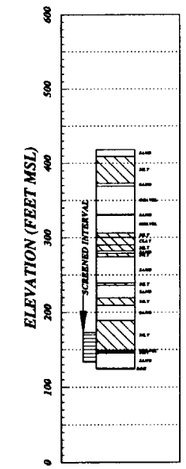
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
9.0	SAND	409.2
45.0	SILT	373.2
49.0	SAND	369.2
87.0	GRAVEL	331.2
88.0	SAND	330.2
112.0	GRAVEL	306.2
118.0	SILT	300.2
128.0	CLAY	290.2
136.0	SILT	282.2
139.0	SAND	279.2
144.0	SILT	274.2
179.0	SAND	239.2
182.0	SILT	236.2
199.0	SAND	219.2
209.0	SILT	209.2
229.0	SAND	189.2
269.0	SILT	149.2
271.0	GRAVEL	147.2
273.0	SILT	145.2
293.0	SAND	125.2
294.0	TD	124.2

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

03_DGMW64 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	5.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	5.00		CASING MAT.	S80 PVC
SURF ELEV(FT MSL)	418.19		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	293.00	125.19		
CASE TOP				
CASE BASE	245.40	172.79		
SCREEN TOP	245.00	173.19		
SCREEN BASE	285.00	133.19		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 03_DGMW64

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

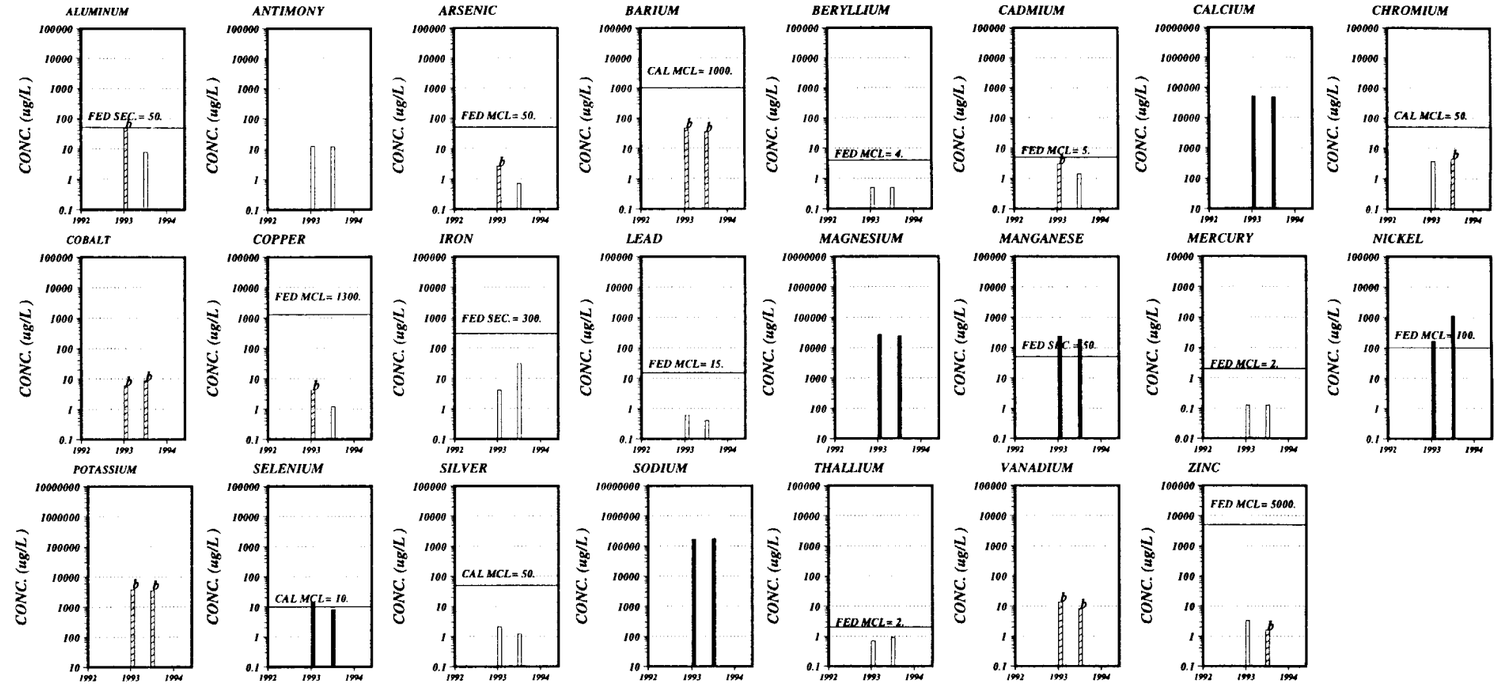
Tue Jul 26 11:24:17 1994

CHEMICAL DATA SUMMARY FOR WELL 03_DGMW65X

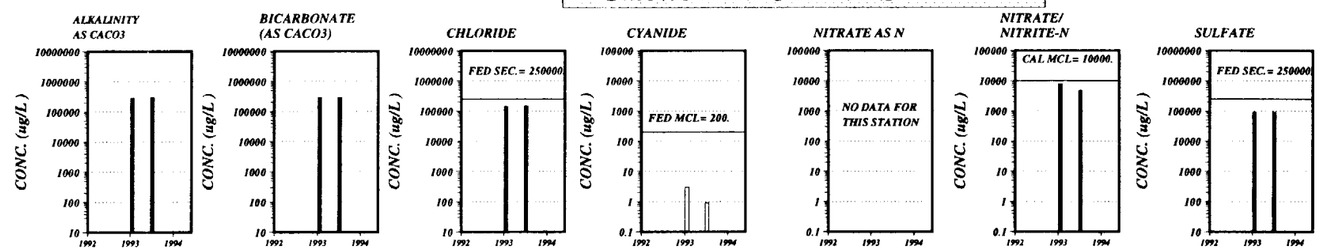
Table B-9
Groundwater Quality Data Summary - Well 03_DGMW65X
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	01/18/93	1	U	07/07/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	01/18/93	1	U	07/07/93	1	U
1,1-DICHLOROETHENE	UG/L	2	01/18/93	1	U	07/07/93	1	U
1,2-DICHLOROETHANE	UG/L	2	01/18/93	1	U	07/07/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	01/18/93	1	U	07/07/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	01/18/93	1	U	07/07/93	1	U
2-BUTANONE	UG/L	2	01/18/93	2	U	07/07/93	2	U
2-HEXANONE	UG/L	2	01/18/93	2	U	07/07/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	01/18/93	2	U	07/07/93	2	U
BENZENE	UG/L	2	01/18/93	1	U	07/07/93	1	U
BROMODICHLOROMETHANE	UG/L	2	01/18/93	1	U	07/07/93	1	U
BROMOFORM	UG/L	2	01/18/93	1	U	07/07/93	1	U
CARBON TETRACHLORIDE	UG/L	2	01/18/93	1	U	07/07/93	1	U
CHLOROBENZENE	UG/L	2	01/18/93	1	U	07/07/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	01/18/93	1	U	07/07/93	1	U
CHLOROFORM	UG/L	2	01/18/93	1		07/07/93	1	
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	01/18/93	2	U	07/07/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	01/18/93	1	U	07/07/93	1	U
METHYLENE CHLORIDE	UG/L	2	01/18/93	0.5	J	07/07/93	1	U
STYRENE	UG/L	2	01/18/93	1	U	07/07/93	1	U
TETRACHLOROETHENE	UG/L	2	01/18/93	1	U	07/07/93	1	U
TOLUENE	UG/L	2	01/18/93	1	U	07/07/93	1	U
TRICHLOROETHYLENE	UG/L	2	01/18/93	1	U	07/07/93	1	U
XYLENE (TOTAL)	UG/L	2	01/18/93	0.8	J	07/07/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	01/18/93	10	U	07/07/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	01/18/93	10	U	07/07/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	01/18/93	2	J	07/07/93	10	U
DIMETHYL PHTHALATE	UG/L	2	01/18/93	10	U	07/07/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	01/18/93	10	U	07/07/93	10	U
PHENOL	UG/L	2	01/18/93	10	U	07/07/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	01/18/93	0.1	U	07/07/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	01/18/93	0.05	U	07/07/93	0.05	U
DIELDRIN	UG/L	2	01/18/93	0.1	U	07/07/93	0.1	U
HEPTACHLOR	UG/L	2	01/18/93	0.05	U	07/07/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	01/18/93	0.25	U	07/07/93	1.85	U
2,4-DB	UG/L	2	01/18/93	0.5	U	07/07/93	0.98	U
DICHLOROPROP	UG/L	2	01/18/93	0.5	U	07/07/93	1.52	U
MCPP	UG/L	2	01/18/93	250	U	07/07/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	01/18/93	250	U	07/07/93	250	U
TFH-GASOLINE	UG/L	2	01/18/93	50	U	07/07/93	50	U
METALS								
ALUMINUM	UG/L	2	01/18/93	47.5	b	07/07/93	7.8	U
ANTIMONY	UG/L	2	01/18/93	12.1	U	07/07/93	11.7	U
ARSENIC	UG/L	2	01/18/93	2.6	b	07/07/93	0.7	U
BARIUM	UG/L	2	01/18/93	46.4	b	07/07/93	34.7	b
BERYLLIUM	UG/L	2	01/18/93	0.5	U	07/07/93	0.5	U
CADMIUM	UG/L	2	01/18/93	3	b	07/07/93	1.4	U
CALCIUM	UG/L	2	01/18/93	51700		07/07/93	48000	
CHROMIUM	UG/L	2	01/18/93	3.7	U	07/07/93	4.4	b
COBALT	UG/L	2	01/18/93	6	b	07/07/93	8.7	b
COPPER	UG/L	2	01/18/93	4.3	b	07/07/93	1.2	U
IRON	UG/L	2	01/18/93	4.1	U	07/07/93	31.1	U
LEAD	UG/L	2	01/18/93	0.6	U	07/07/93	0.4	U
MAGNESIUM	UG/L	2	01/18/93	27300		07/07/93	24400	
MANGANESE	UG/L	2	01/18/93	238		07/07/93	189	
MERCURY	UG/L	2	01/18/93	0.1	U	07/07/93	0.1	U
NICKEL	UG/L	2	01/18/93	166		07/07/93	1140	
POTASSIUM	UG/L	2	01/18/93	3850	b	07/07/93	3550	b
SELENIUM	UG/L	2	01/18/93	14.7		07/07/93	8.1	
SILVER	UG/L	2	01/18/93	2.1	U	07/07/93	1.2	U
SODIUM	UG/L	2	01/18/93	168000		07/07/93	174000	
THALLIUM	UG/L	2	01/18/93	0.7	U	07/07/93	0.9	U
VANADIUM	UG/L	2	01/18/93	13.8	b	07/07/93	8.2	b
ZINC	UG/L	2	01/18/93	3.3	U	07/07/93	1.6	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	01/18/93	288000		07/07/93	297000	
BICARBONATE (AS CACO3)	UG/L	2	01/18/93	288000		07/07/93	297000	
CHLORIDE	UG/L	2	01/18/93	145000		07/07/93	148000	
CYANIDE	UG/L	2	01/18/93	3	U	07/07/93	0.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	01/18/93	7950		07/07/93	4700	
SULFATE	UG/L	2	01/18/93	91600		07/07/93	91000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	1	07/07/93	7.36				
TEMPERATURE, DEGREE C	DEG/C	1	07/07/93	27.2				
TOTAL DISSOLVED SOLIDS	UG/L	2	01/18/93	750000		07/07/93	731000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	2	01/18/93	8.6		07/07/93	14.5	
GROSS BETA	PCI/L	2	01/18/93	8.8		07/07/93	13.2	

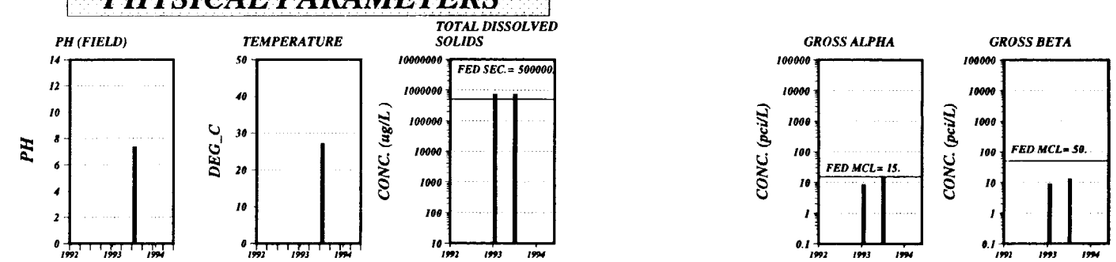
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



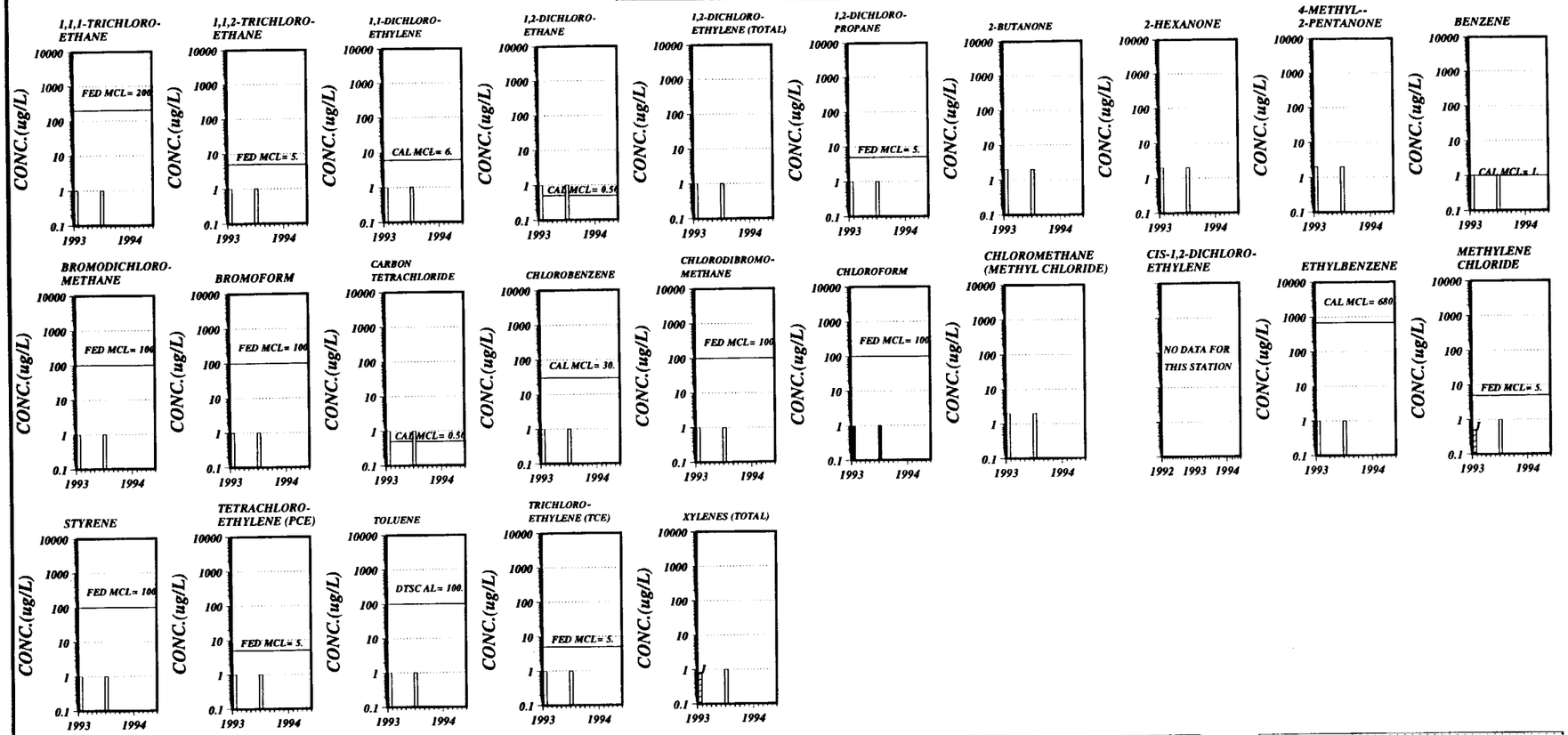
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

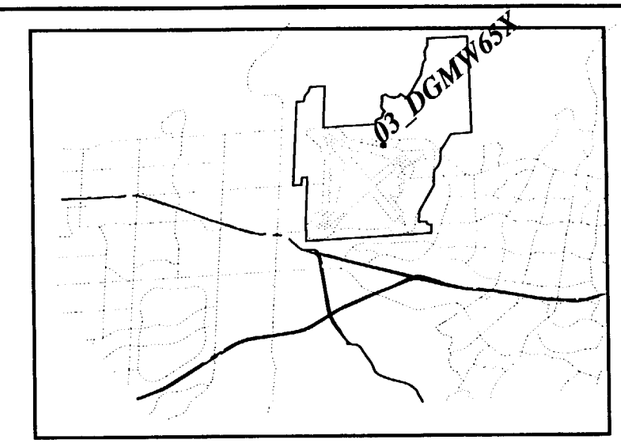
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

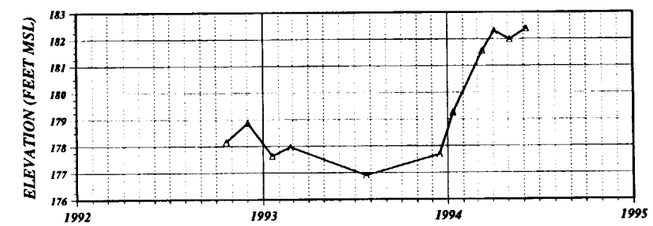
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

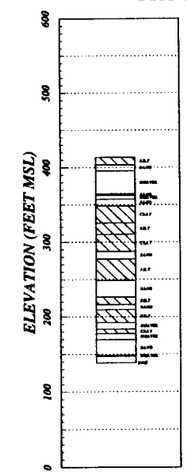
03_DGMW65X







GROUNDWATER LEVEL HYDROGRAPH

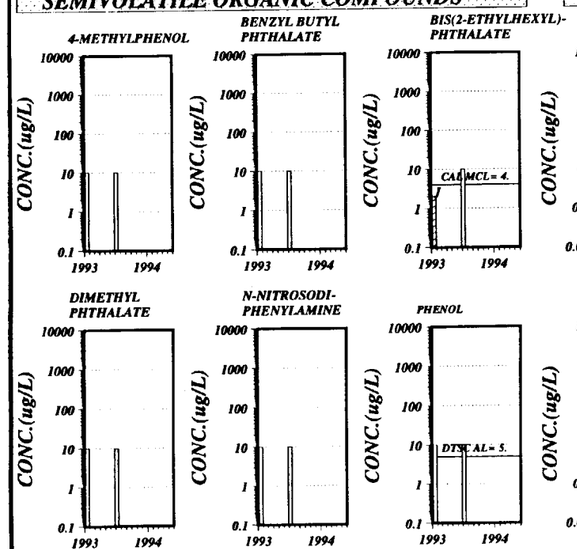


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SILT	403.4
18.0	SAND	395.4
49.0	GRAVEL	364.4
51.0	SAND	362.4
56.0	GRAVEL	357.4
65.0	SAND	348.4
88.0	CLAY	325.4
103.0	SILT	310.4
126.0	CLAY	287.4
136.0	SAND	277.4
165.0	SILT	248.4
187.0	SAND	226.4
197.0	SILT	216.4
204.0	SAND	209.4
221.0	SILT	192.4
230.0	GRAVEL	183.4
236.0	CLAY	177.4
244.0	GRAVEL	169.4
265.0	SAND	148.4
266.0	GRAVEL	147.4
275.0	TD	138.4

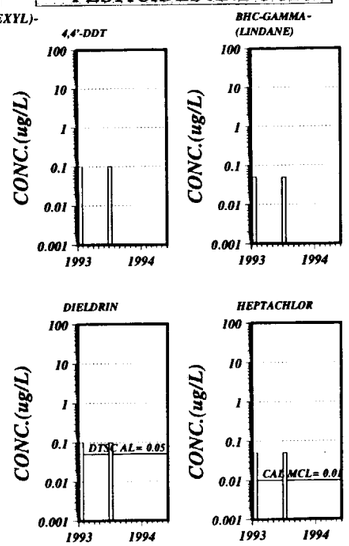
LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

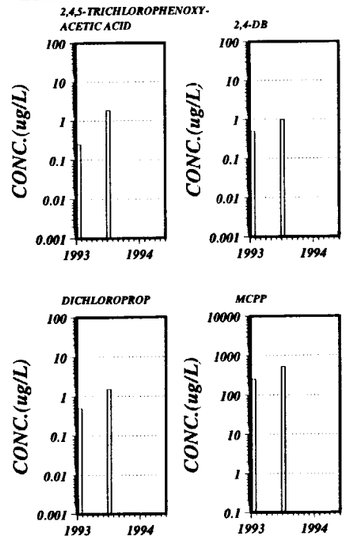
SEMIVOLATILE ORGANIC COMPOUNDS



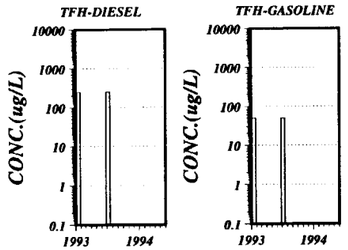
PESTICIDES AND PCBs



HERBICIDES



TOTAL FUEL HYDROCARBONS



03_DGMW65X WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL		
CASE DIA(INCHES)			SURF. CASING MAT.
SCREEN DIA(INCHES)			CASING MAT.
SURF ELEV(FT MSL)	413.40		SCREEN MAT.
	(ft bgs)	(ft msl)	
BORE DEPTH			
CASE TOP			
CASE BASE			
SCREEN TOP			
SCREEN BASE			

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 03_DGMW65X

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

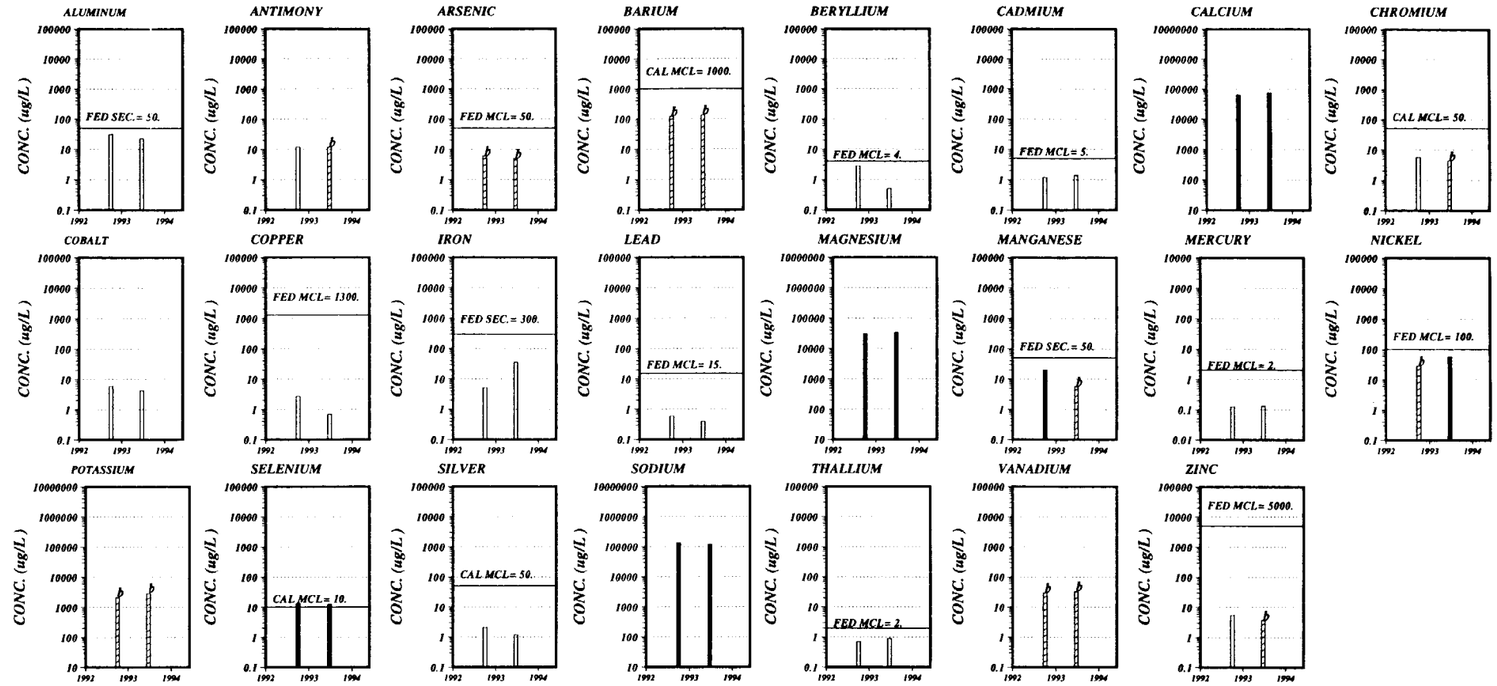
Tue Jul 26 11:26:38 1994

CHEMICAL DATA SUMMARY FOR WELL 03_UGMW26

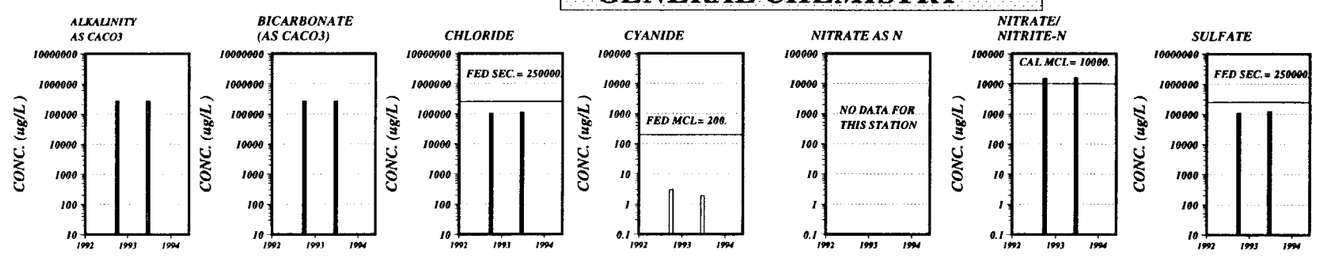
Table B-10
Groundwater Quality Data Summary - Well 03_UGMW26
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	10/01/92	1	U	06/23/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	10/01/92	1	U	06/23/93	1	U
1,1-DICHLOROETHENE	UG/L	2	10/01/92	1	U	06/23/93	1	U
1,2-DICHLOROETHANE	UG/L	2	10/01/92	1	U	06/23/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	10/01/92	1	U	06/23/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	10/01/92	1	U	06/23/93	1	U
2-BUTANONE	UG/L	2	10/01/92	2	U	06/23/93	2	U
2-HEXANONE	UG/L	2	10/01/92	2	U	06/23/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	10/01/92	2	U	06/23/93	2	U
BENZENE	UG/L	2	10/01/92	1	U	06/23/93	1	U
BROMODICHLOROMETHANE	UG/L	2	10/01/92	1	U	06/23/93	1	U
BROMOFORM	UG/L	2	10/01/92	1	U	06/23/93	1	U
CARBON TETRACHLORIDE	UG/L	2	10/01/92	1	U	06/23/93	1	U
CHLOROBENZENE	UG/L	2	10/01/92	1	U	06/23/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	10/01/92	1	U	06/23/93	1	U
CHLOROFORM	UG/L	2	10/01/92	1	U	06/23/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	10/01/92	2	U	06/23/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	10/01/92	1	U	06/23/93	1	U
METHYLENE CHLORIDE	UG/L	2	10/01/92	1	U	06/23/93	1	U
STYRENE	UG/L	2	10/01/92	1	U	06/23/93	1	U
TETRACHLOROETHENE	UG/L	2	10/01/92	1	U	06/23/93	1	U
TOLUENE	UG/L	2	10/01/92	1	U	06/23/93	1	U
TRICHLOROETHYLENE	UG/L	2	10/01/92	1	U	06/23/93	1	U
XYLENE (TOTAL)	UG/L	2	10/01/92	1	U	06/23/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	10/01/92	10	U	06/23/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	10/01/92	10	U	06/23/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	10/01/92	10	U	06/23/93	10	U
DIMETHYL PHTHALATE	UG/L	2	10/01/92	10	U	06/23/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	10/01/92	10	U	06/23/93	10	U
PHENOL	UG/L	2	10/01/92	10	U	06/23/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	10/01/92	0.1	U	06/23/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	10/01/92	0.05	U	06/23/93	0.05	U
DIELDRIN	UG/L	2	10/01/92	0.1	U	06/23/93	0.1	U
HEPTACHLOR	UG/L	2	10/01/92	0.05	U	06/23/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	10/01/92	0.25	U	06/23/93	1.85	U
2,4-DB	UG/L	2	10/01/92	0.5	U	06/23/93	0.98	U
DICHLOROPROP	UG/L	2	10/01/92	0.5	U	06/23/93	1.52	U
MCPP	UG/L	2	10/01/92	250	U	06/23/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	10/01/92	250	U	06/23/93	250	U
TFH-GASOLINE	UG/L	2	10/01/92	50	U	06/23/93	50	U
METALS								
ALUMINUM	UG/L	2	10/01/92	31	U	06/23/93	22.6	U
ANTIMONY	UG/L	2	10/01/92	12.1	U	06/23/93	12	b
ARSENIC	UG/L	2	10/01/92	6	b	06/23/93	5	b
BARIUM	UG/L	2	10/01/92	120	b	06/23/93	132	b
BERYLLIUM	UG/L	2	10/01/92	2.8	U	06/23/93	0.5	U
CADMIUM	UG/L	2	10/01/92	1.2	U	06/23/93	1.4	U
CALCIUM	UG/L	2	10/01/92	64500		06/23/93	76500	
CHROMIUM	UG/L	2	10/01/92	5.6	U	06/23/93	4.3	b
COBALT	UG/L	2	10/01/92	5.8	U	06/23/93	4.2	U
COPPER	UG/L	2	10/01/92	2.7	U	06/23/93	0.7	U
IRON	UG/L	2	10/01/92	5.1	U	06/23/93	35.9	U
LEAD	UG/L	2	10/01/92	0.6	U	06/23/93	0.4	U
MAGNESIUM	UG/L	2	10/01/92	30900		06/23/93	34000	
MANGANESE	UG/L	2	10/01/92	20		06/23/93	5.7	b
MERCURY	UG/L	2	10/01/92	0.1	U	06/23/93	0.13	U
NICKEL	UG/L	2	10/01/92	28.5	b	06/23/93	57.4	
POTASSIUM	UG/L	2	10/01/92	2110	b	06/23/93	2860	b
SELENIUM	UG/L	2	10/01/92	13.3		06/23/93	12.7	
SILVER	UG/L	2	10/01/92	2.1	U	06/23/93	1.2	U
SODIUM	UG/L	2	10/01/92	133000		06/23/93	121000	
THALLIUM	UG/L	2	10/01/92	0.7	U	06/23/93	0.9	U
VANADIUM	UG/L	2	10/01/92	29.7	b	06/23/93	33.5	b
ZINC	UG/L	2	10/01/92	5.5	U	06/23/93	3.7	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	10/01/92	271000		06/23/93	267000	
BICARBONATE (AS CACO3)	UG/L	2	10/01/92	271000		06/23/93	267000	
CHLORIDE	UG/L	2	10/01/92	104000		06/23/93	112000	
CYANIDE	UG/L	2	10/01/92	3	U	06/23/93	1.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	10/01/92	15300		06/23/93	16200	
SULFATE	UG/L	2	10/01/92	110000		06/23/93	126000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	1	06/23/93	7.02				
TEMPERATURE, DEGREE C	DEG/C	1	06/23/93	24				
TOTAL DISSOLVED SOLIDS	UG/L	2	10/01/92	762000		06/23/93	761000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	2	10/01/92	14.2		06/23/93	14.5	
GROSS BETA	PCI/L	2	10/01/92	10.9		06/23/93	10.7	

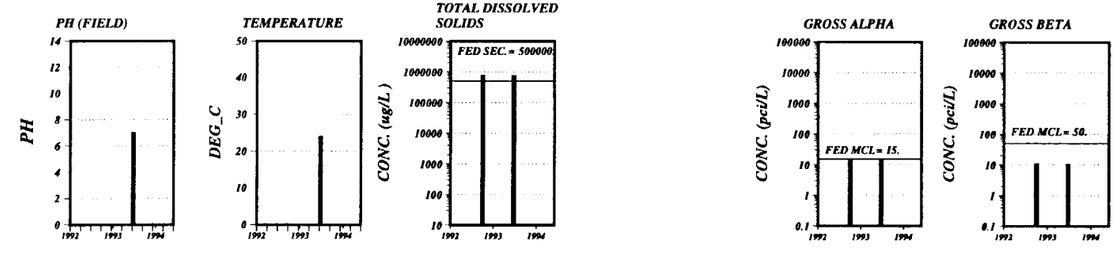
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



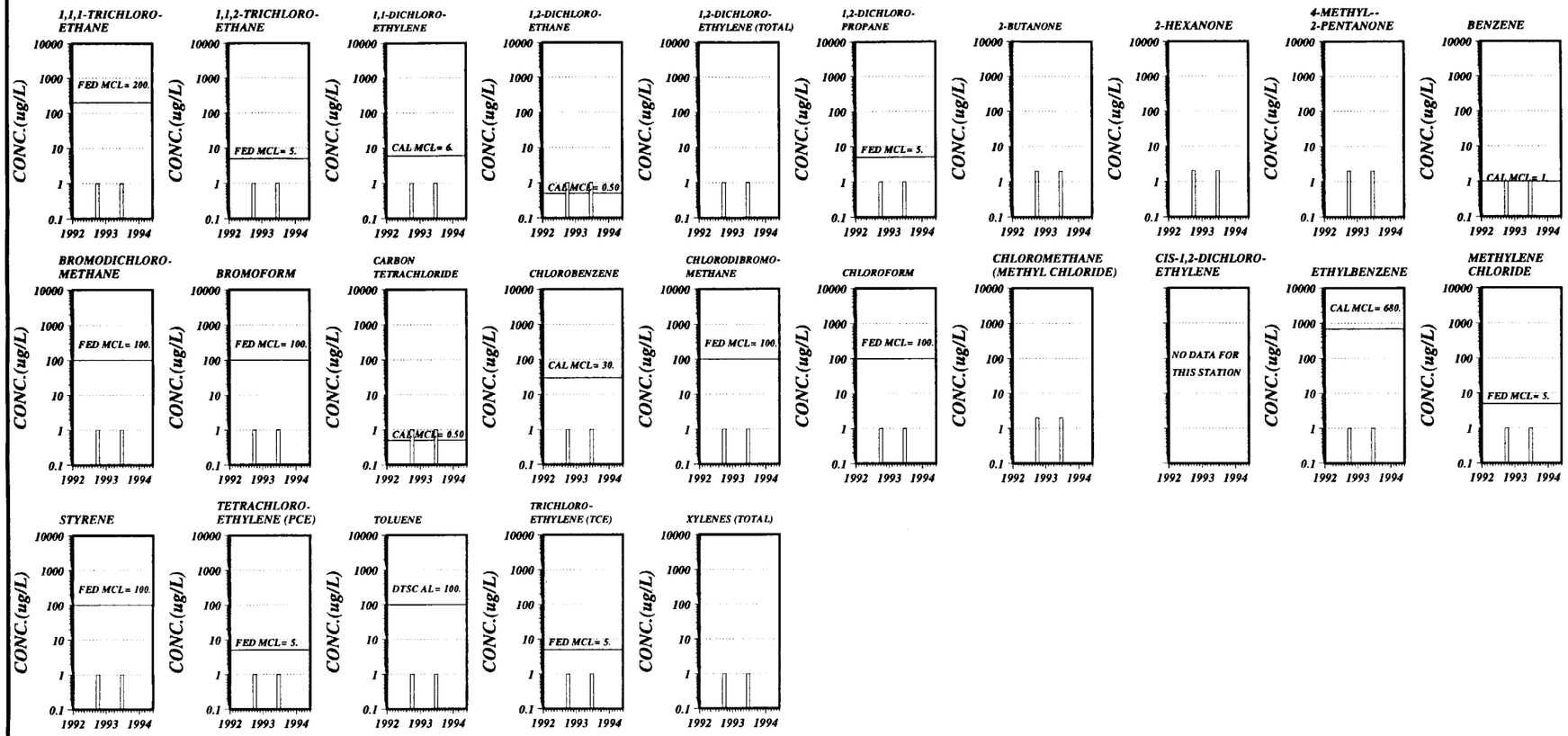
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

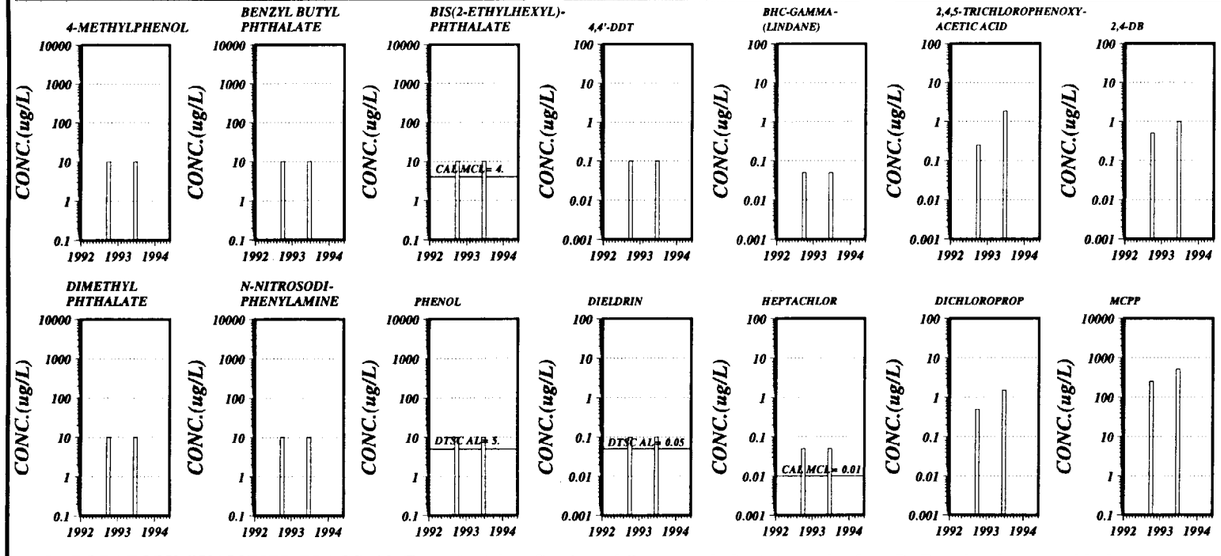
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

03_UGMW26



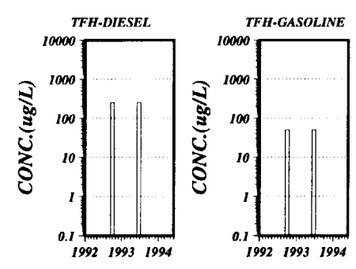
SEMIVOLATILE ORGANIC COMPOUNDS

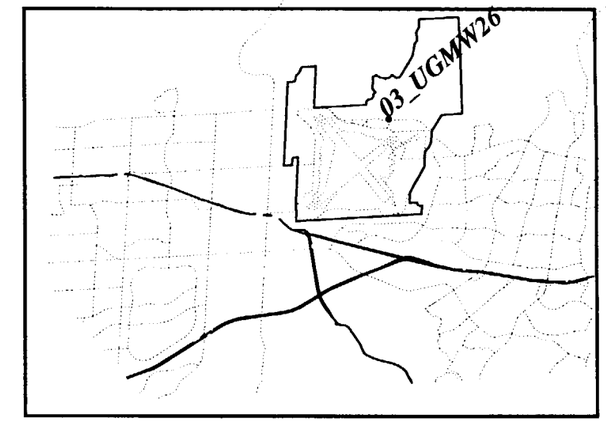


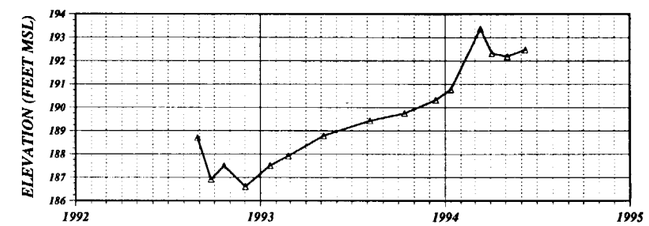
PESTICIDES AND PCBs

HERBICIDES

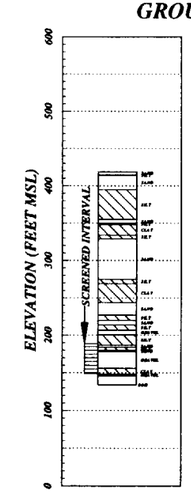
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
4.0	SAND	414.8
5.0	SILT	413.8
24.0	SAND	394.8
64.0	SILT	354.8
69.0	SAND	349.8
71.0	SILT	347.8
85.0	CLAY	333.8
90.0	SILT	328.8
144.0	SAND	274.8
150.0	SILT	268.8
175.0	CLAY	243.8
192.0	SAND	226.8
199.0	SILT	219.8
205.0	SAND	213.8
212.0	SILT	206.8
218.0	GRAVEL	200.8
232.0	SILT	186.8
235.0	SAND	183.8
239.0	SILT	179.8
241.0	SAND	177.8
263.0	GRAVEL	155.8
271.0	CLAY	147.8
273.0	GRAVEL	145.8
285.0	TD	133.8

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

03_UGMW26 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	5.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	5.00		CASING MAT.	S80 PVC
SURF ELEV(FT MSL)	418.80		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	285.00	133.80		
CASE TOP	-1.00	419.80		
CASE BASE	230.00	188.80		
SCREEN TOP	230.00	188.80		
SCREEN BASE	270.00	148.80		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 03_UGMW26

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Fri Sep 23 13:49:58 1994

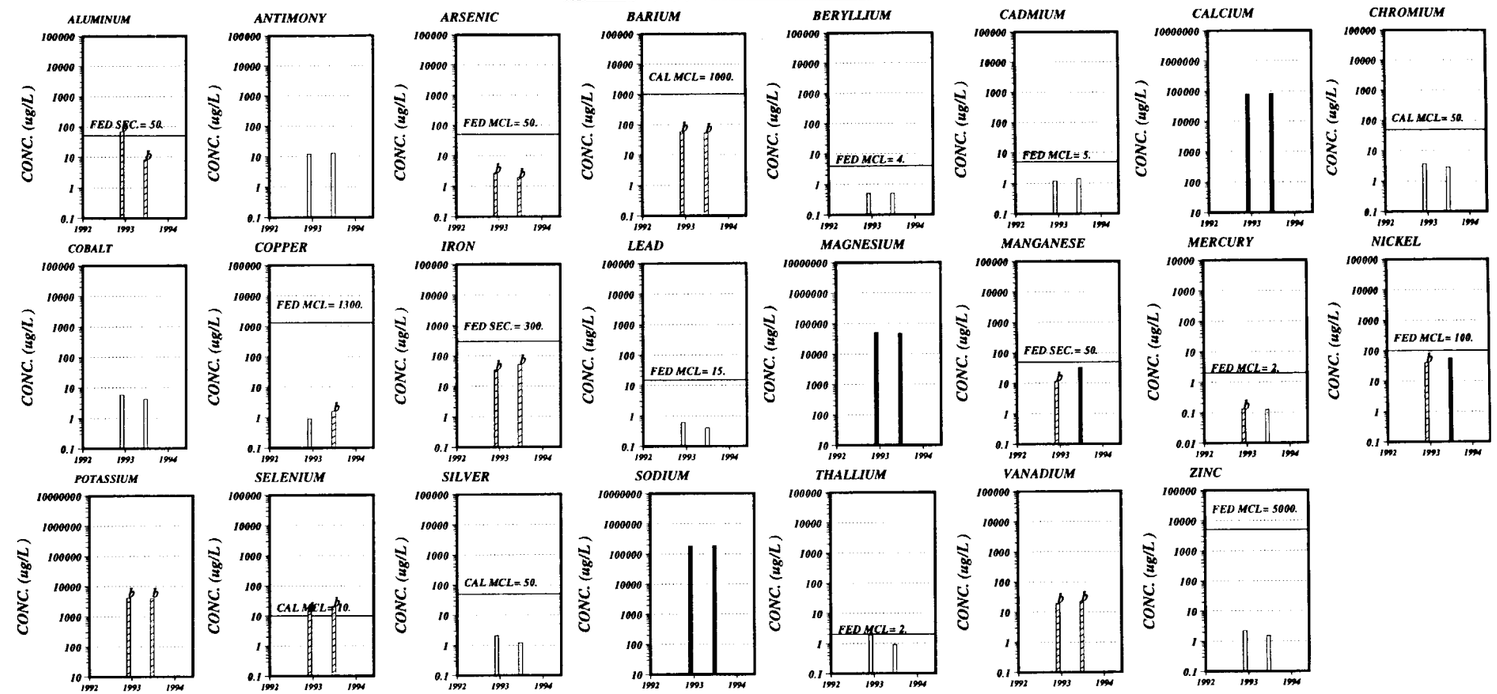
Site 4
Ferrocene Spill Area

CHEMICAL DATA SUMMARY FOR WELL 04_DBMW40

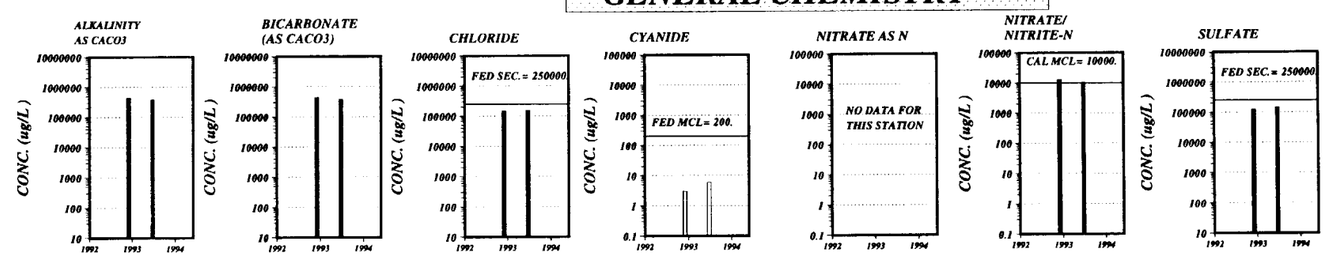
Table B-11
Groundwater Quality Data Summary - Well 04_DBMW40
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/03/92	1	U	06/24/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/03/92	1	U	06/24/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/03/92	1	U	06/24/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/03/92	1	U	06/24/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/03/92	1	U	06/24/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/03/92	1	U	06/24/93	1	U
2-BUTANONE	UG/L	2	12/03/92	2	U	06/24/93	2	U
2-HEXANONE	UG/L	2	12/03/92	7		06/24/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/03/92	2	U	06/24/93	2	U
BENZENE	UG/L	2	12/03/92	1	U	06/24/93	4	
BROMODICHLOROMETHANE	UG/L	2	12/03/92	1	U	06/24/93	1	U
BROMOFORM	UG/L	2	12/03/92	1	U	06/24/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/03/92	1	U	06/24/93	1	U
CHLOROBENZENE	UG/L	2	12/03/92	1	U	06/24/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/03/92	1	U	06/24/93	1	U
CHLOROFORM	UG/L	2	12/03/92	1	U	06/24/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/03/92	2	U	06/24/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/03/92	1	U	06/24/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/03/92	1	U	06/24/93	1	U
STYRENE	UG/L	2	12/03/92	1	U	06/24/93	1	U
TETRACHLOROETHENE	UG/L	2	12/03/92	1	U	06/24/93	1	U
TOLUENE	UG/L	2	12/03/92	1	U	06/24/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/03/92	1	U	06/24/93	1	U
XYLENE (TOTAL)	UG/L	2	12/03/92	1	U	06/24/93	3	
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/03/92	10	U	06/24/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/03/92	10	U	06/24/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/03/92	10	U	06/24/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/03/92	10	U	06/24/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/03/92	10	U	06/24/93	10	U
PHENOL	UG/L	2	12/03/92	10	U	06/24/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/03/92	0.1	U	06/24/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/03/92	0.05	U	06/24/93	0.05	U
DIELDRIN	UG/L	2	12/03/92	0.1	U	06/24/93	0.1	U
HEPTACHLOR	UG/L	2	12/03/92	0.05	U	06/24/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/03/92	769		06/24/93	250	U
TFH-GASOLINE	UG/L	2	12/03/92	77.7		06/24/93	282	J
METALS								
ALUMINUM	UG/L	2	12/03/92	69	b	06/24/93	8	b
ANTIMONY	UG/L	2	12/03/92	12.1	U	06/24/93	12.8	U
ARSENIC	UG/L	2	12/03/92	2.7	b	06/24/93	1.9	b
BARIUM	UG/L	2	12/03/92	57.6	b	06/24/93	52.5	b
BERYLLIUM	UG/L	2	12/03/92	0.5	U	06/24/93	0.5	U
CADMIUM	UG/L	2	12/03/92	1.2	U	06/24/93	1.4	U
CALCIUM	UG/L	2	12/03/92	78500		06/24/93	80900	
CHROMIUM	UG/L	2	12/03/92	3.7	U	06/24/93	2.9	U
COBALT	UG/L	2	12/03/92	5.8	U	06/24/93	4.2	U
COPPER	UG/L	2	12/03/92	0.9	U	06/24/93	1.6	b
IRON	UG/L	2	12/03/92	34.1	b	06/24/93	51.7	b
LEAD	UG/L	2	12/03/92	0.6	U	06/24/93	0.4	U
MAGNESIUM	UG/L	2	12/03/92	50900		06/24/93	46500	
MANGANESE	UG/L	2	12/03/92	11.7	b	06/24/93	33.5	
MERCURY	UG/L	2	12/03/92	0.13	b	06/24/93	0.1	U
NICKEL	UG/L	2	12/03/92	39.4	b	06/24/93	55.9	
POTASSIUM	UG/L	2	12/03/92	4110	b	06/24/93	3980	b
SELENIUM	UG/L	2	12/03/92	13.6	b	06/24/93	20.2	b
SILVER	UG/L	2	12/03/92	2.1	U	06/24/93	1.2	U
SODIUM	UG/L	2	12/03/92	181000		06/24/93	184000	
THALLIUM	UG/L	2	12/03/92	1.9	U	06/24/93	0.9	U
VANADIUM	UG/L	2	12/03/92	20.1	b	06/24/93	22.9	b
ZINC	UG/L	2	12/03/92	2.2	U	06/24/93	1.5	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/03/92	438000		06/24/93	384000	
BICARBONATE (AS CACO3)	UG/L	2	12/03/92	438000		06/24/93	384000	
CHLORIDE	UG/L	2	12/03/92	149000		06/24/93	153000	
CYANIDE	UG/L	2	12/03/92	3	U	06/24/93	5.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/03/92	12800		06/24/93	10300	
SULFATE	UG/L	2	12/03/92	123000		06/24/93	146000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	12/03/92	6.91		06/24/93	6.93	
TEMPERATURE, DEGREE C	DEG/C	2	12/03/92	23.3		06/24/93	25.6	
TOTAL DISSOLVED SOLIDS	UG/L	2	12/03/92	940000		06/24/93	1000000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

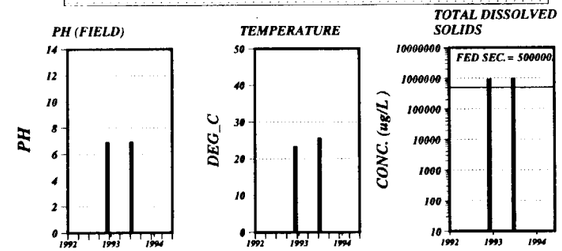
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



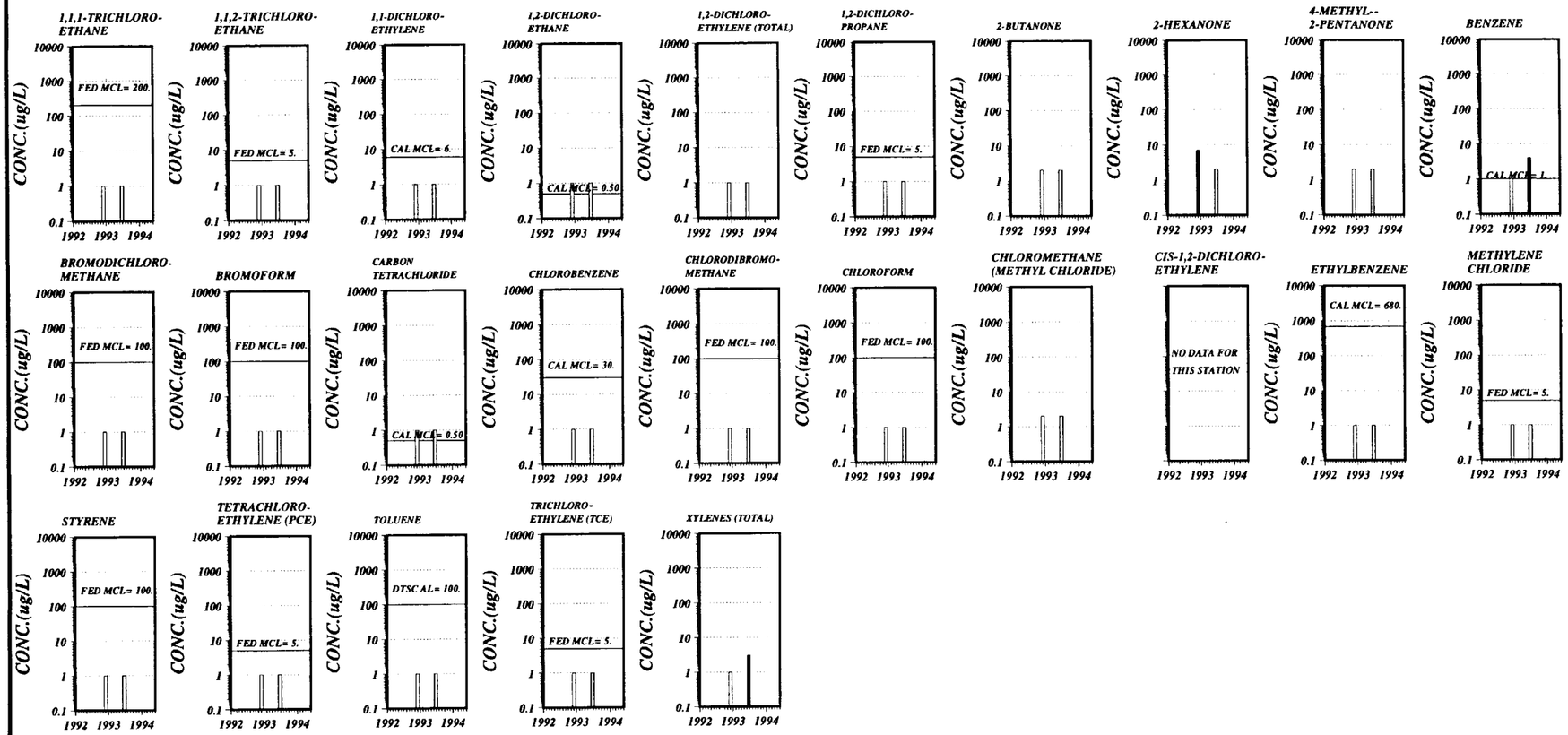
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

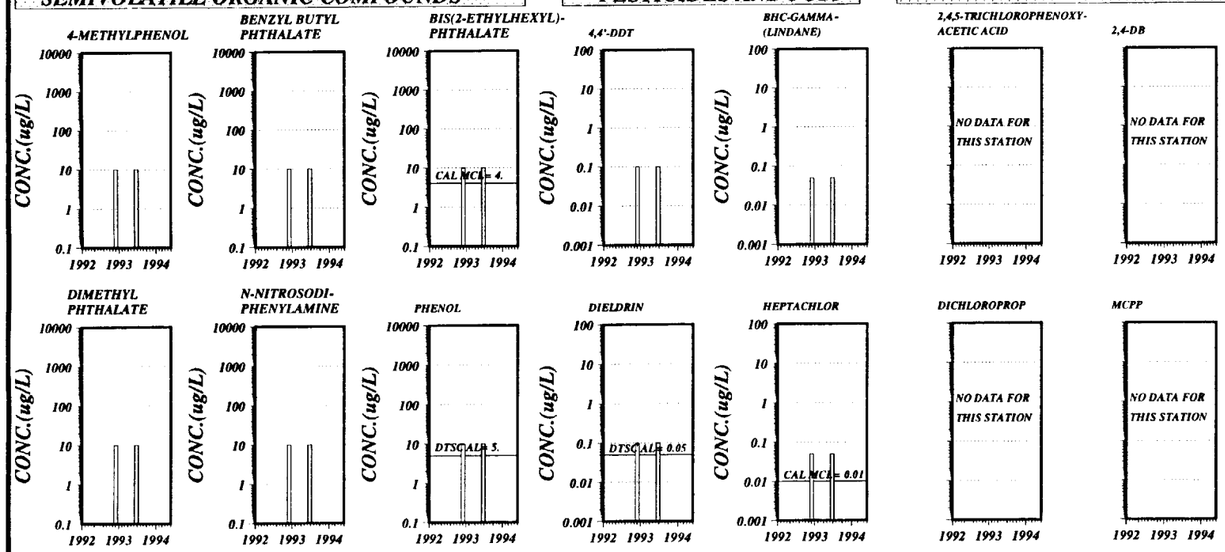
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

04_DBMW40



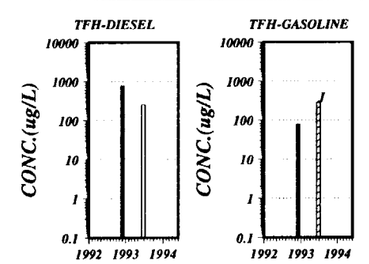
SEMIVOLATILE ORGANIC COMPOUNDS

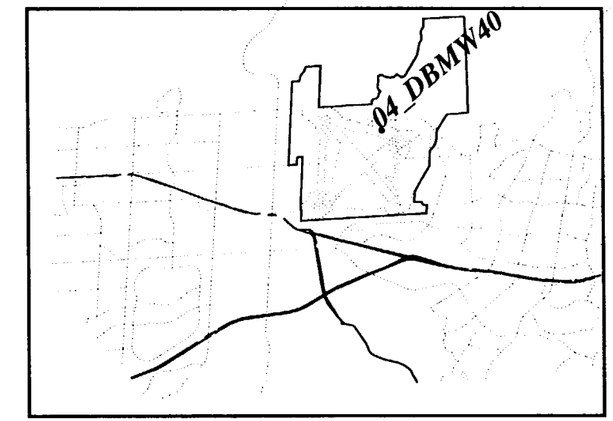


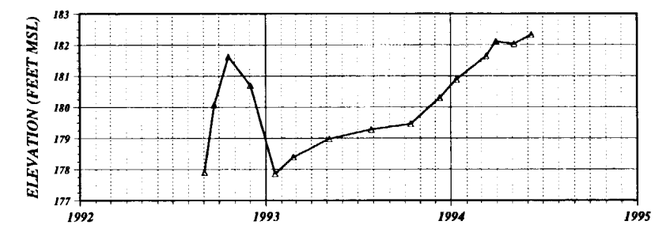
PESTICIDES AND PCBs

HERBICIDES

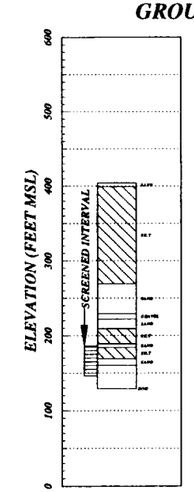
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
5.0	SAND	399.1
135.0	SILT	269.1
175.0	SAND	229.1
182.0	GRAVEL	222.1
195.0	SAND	209.1
215.0	SILT	189.1
220.0	SAND	184.1
235.0	SILT	169.1
244.0	SAND	160.1
275.0	TD	129.1

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

04_DBMW40 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	404.10		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	275.00	129.10		
CASE TOP	-1.00	405.10		
CASE BASE	218.00	186.10		
SCREEN TOP	218.00	186.10		
SCREEN BASE	258.00	146.10		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 04_DBMW40

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

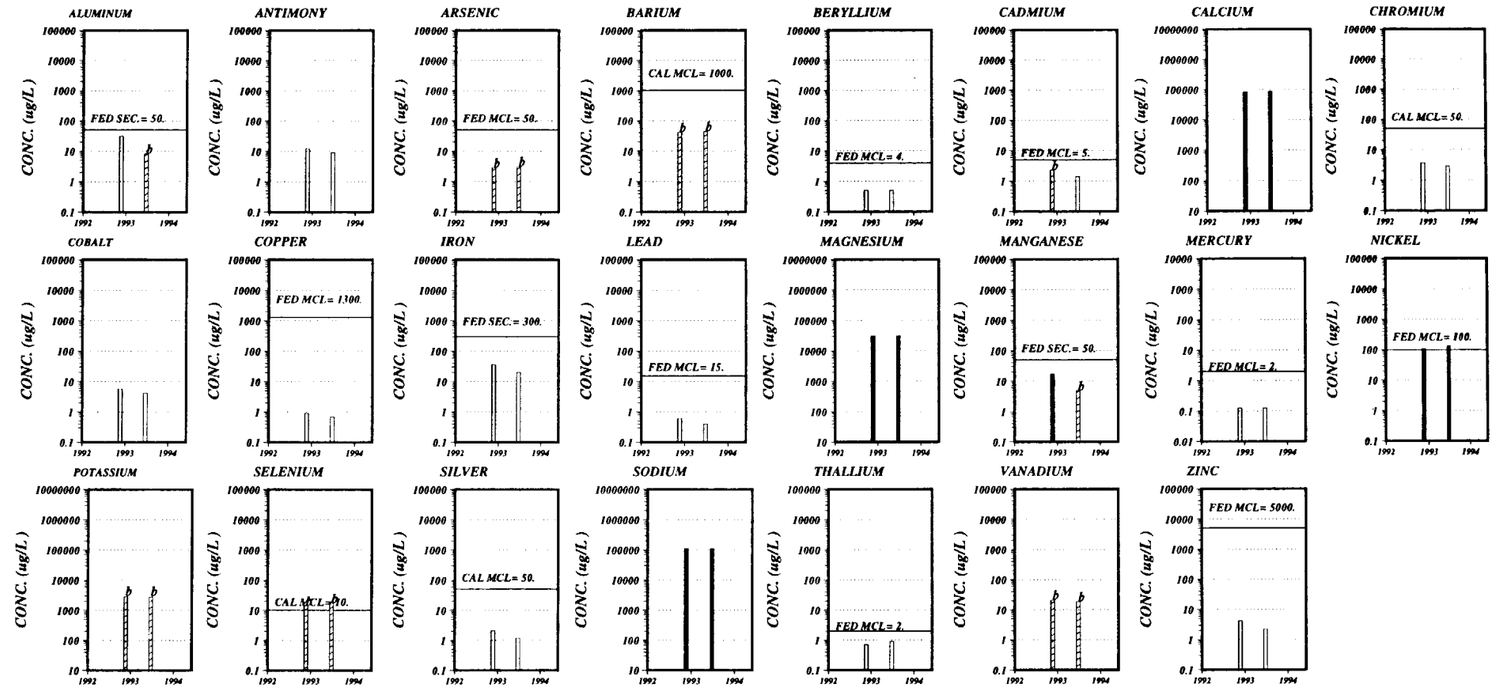
Tue Jul 26 11:30:57 1994

CHEMICAL DATA SUMMARY FOR WELL 04_DGMW66

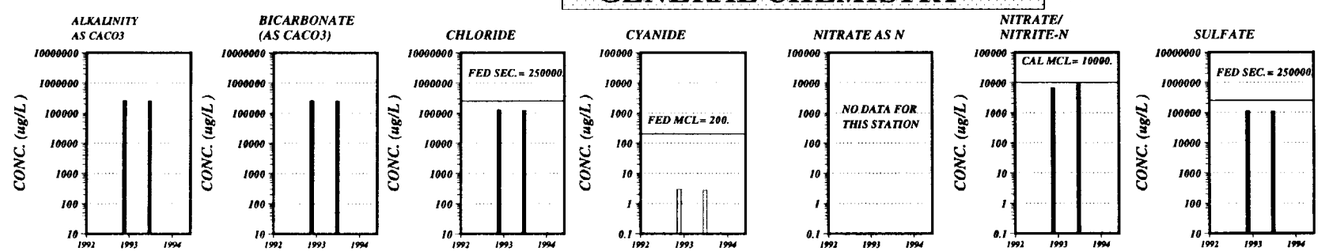
Table B-12
Groundwater Quality Data Summary - Well 04_DGMW66
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	01/14/93	1	U	06/24/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	01/14/93	1	U	06/24/93	1	U
1,1-DICHLOROETHENE	UG/L	2	01/14/93	1	U	06/24/93	1	U
1,2-DICHLOROETHANE	UG/L	2	01/14/93	1	U	06/24/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	01/14/93	1	U	06/24/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	01/14/93	1	U	06/24/93	1	U
2-BUTANONE	UG/L	2	01/14/93	2	U	06/24/93	2	U
2-HEXANONE	UG/L	2	01/14/93	2	U	06/24/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	01/14/93	2	U	06/24/93	2	U
BENZENE	UG/L	2	01/14/93	1	U	06/24/93	1	U
BROMODICHLOROMETHANE	UG/L	2	01/14/93	1	U	06/24/93	1	U
BROMOFORM	UG/L	2	01/14/93	1	U	06/24/93	1	U
CARBON TETRACHLORIDE	UG/L	2	01/14/93	1	U	06/24/93	1	U
CHLOROBENZENE	UG/L	2	01/14/93	1	U	06/24/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	01/14/93	1	U	06/24/93	1	U
CHLOROFORM	UG/L	2	01/14/93	1	U	06/24/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	01/14/93	2	U	06/24/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	01/14/93	1	U	06/24/93	1	U
METHYLENE CHLORIDE	UG/L	2	01/14/93	1	U	06/24/93	1	U
STYRENE	UG/L	2	01/14/93	1	U	06/24/93	1	U
TETRACHLOROETHENE	UG/L	2	01/14/93	1	U	06/24/93	1	U
TOLUENE	UG/L	2	01/14/93	1	U	06/24/93	1	U
TRICHLOROETHYLENE	UG/L	2	01/14/93	1	U	06/24/93	1	U
XYLENE (TOTAL)	UG/L	2	01/14/93	1	U	06/24/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	11/20/92	10	U	06/24/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	11/20/92	10	U	06/24/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	11/20/92	10	U	06/24/93	3	J
DIMETHYL PHTHALATE	UG/L	2	11/20/92	10	U	06/24/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	11/20/92	10	U	06/24/93	10	U
PHENOL	UG/L	2	11/20/92	10	U	06/24/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	11/20/92	0.1	U	06/24/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	11/20/92	0.05	U	06/24/93	0.05	U
DIELDRIN	UG/L	2	11/20/92	0.1	U	06/24/93	0.1	U
HEPTACHLOR	UG/L	2	11/20/92	0.05	U	06/24/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	11/20/92	250	U	06/24/93	250	U
TFH-GASOLINE	UG/L	2	11/20/92	50	U	06/24/93	50	U
METALS								
ALUMINUM	UG/L	2	11/20/92	31	U	06/24/93	8	b
ANTIMONY	UG/L	2	11/20/92	12.1	U	06/24/93	9	U
ARSENIC	UG/L	2	11/20/92	2.8	b	06/24/93	3.1	b
BARIUM	UG/L	2	11/20/92	41.1	b	06/24/93	43.6	b
BERYLLIUM	UG/L	2	11/20/92	0.5	U	06/24/93	0.5	U
CADMIUM	UG/L	2	11/20/92	2.3	b	06/24/93	1.4	U
CALCIUM	UG/L	2	11/20/92	82500		06/24/93	87200	
CHROMIUM	UG/L	2	11/20/92	3.7	U	06/24/93	2.9	U
COBALT	UG/L	2	11/20/92	5.8	U	06/24/93	4.2	U
COPPER	UG/L	2	11/20/92	0.9	U	06/24/93	0.7	U
IRON	UG/L	2	11/20/92	36.5	U	06/24/93	20.6	U
LEAD	UG/L	2	11/20/92	0.6	U	06/24/93	0.4	U
MAGNESIUM	UG/L	2	11/20/92	30600		06/24/93	31200	
MANGANESE	UG/L	2	11/20/92	16.8		06/24/93	4.8	b
MERCURY	UG/L	2	11/20/92	0.1	U	06/24/93	0.1	U
NICKEL	UG/L	2	11/20/92	107		06/24/93	138	
POTASSIUM	UG/L	2	11/20/92	2830	b	06/24/93	2780	b
SELENIUM	UG/L	2	11/20/92	14	b	06/24/93	17.4	b
SILVER	UG/L	2	11/20/92	2.1	U	06/24/93	1.2	U
SODIUM	UG/L	2	11/20/92	112000		06/24/93	108000	
THALLIUM	UG/L	2	11/20/92	0.7	U	06/24/93	0.9	U
VANADIUM	UG/L	2	11/20/92	21.2	b	06/24/93	18.6	b
ZINC	UG/L	2	11/20/92	4.2	U	06/24/93	2.2	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	11/20/92	260000		06/24/93	256000	
BICARBONATE (AS CACO3)	UG/L	2	11/20/92	260000		06/24/93	256000	
CHLORIDE	UG/L	2	11/20/92	128000		06/24/93	124000	
CYANIDE	UG/L	2	11/20/92	3	U	06/24/93	2.8	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	11/20/92	6520		06/24/93	9170	
SULFATE	UG/L	2	11/20/92	112000		06/24/93	109000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	11/20/92	7.21		06/24/93	7.1	
TEMPERATURE, DEGREE C	DEG/C	2	11/20/92	23.5		06/24/93	25.6	
TOTAL DISSOLVED SOLIDS	UG/L	2	11/20/92	730000		06/24/93	770000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

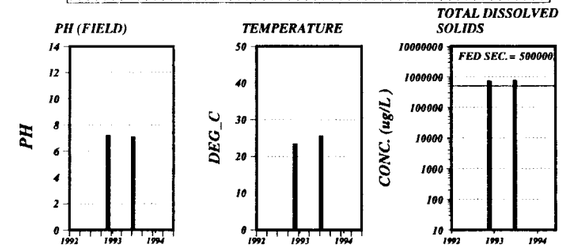
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



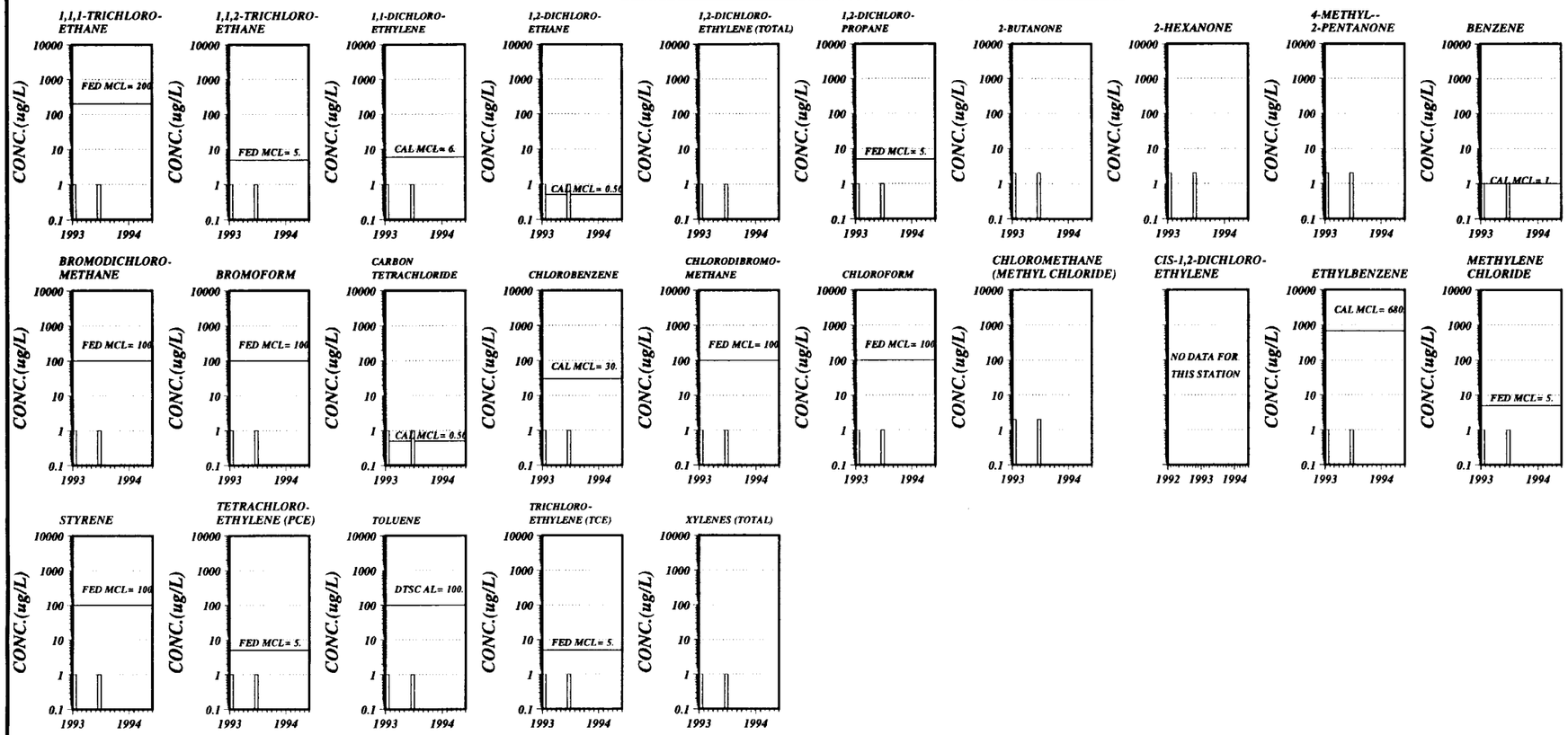
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

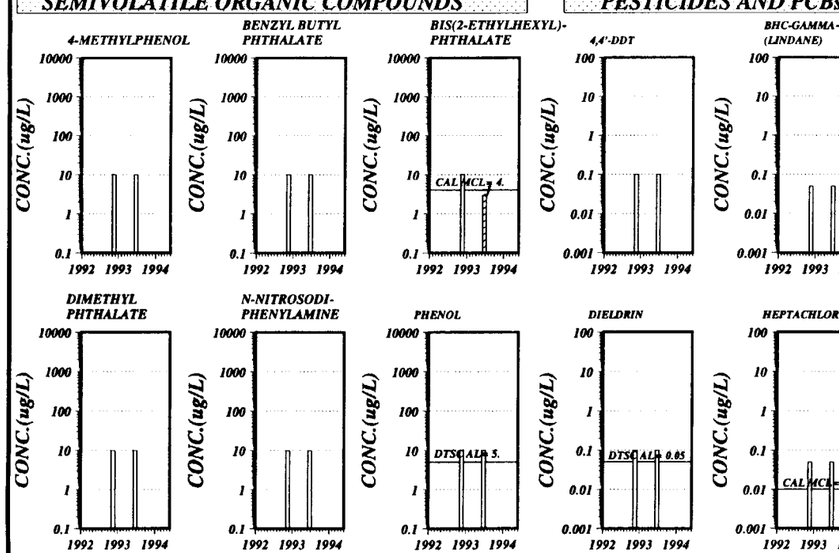
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

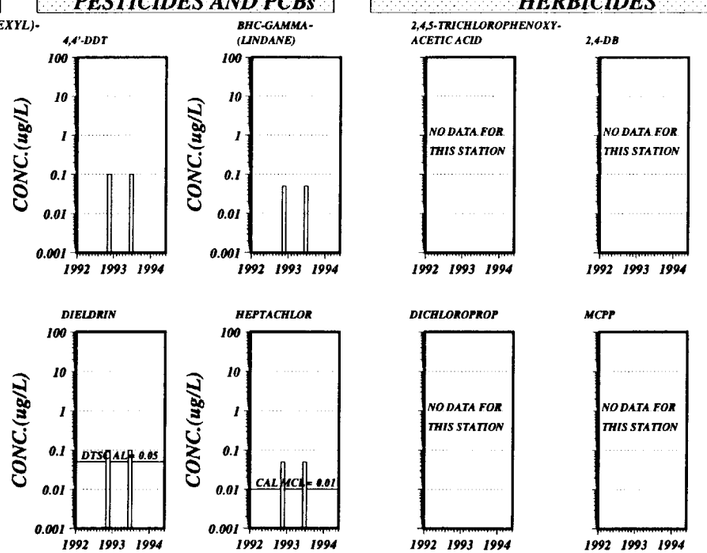
04_DGMW66



SEMIVOLATILE ORGANIC COMPOUNDS

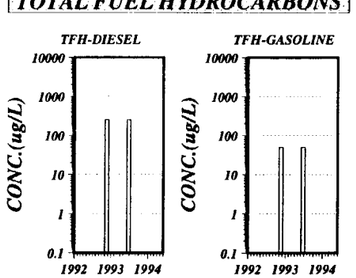


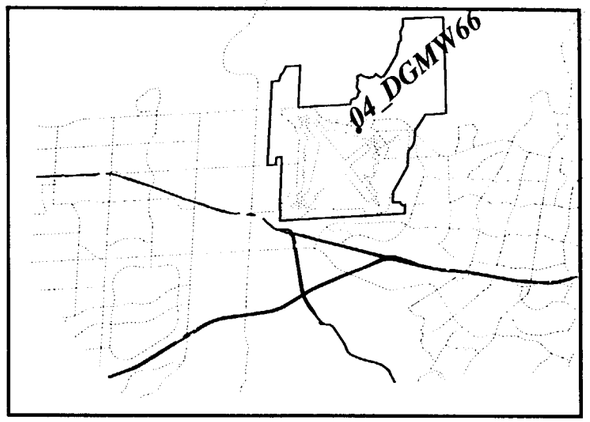
PESTICIDES AND PCBs

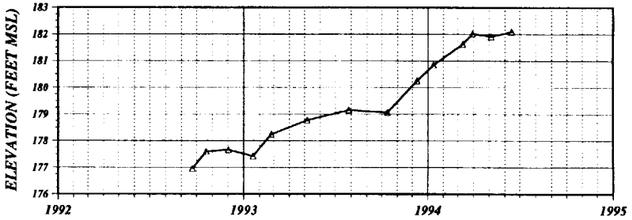


HERBICIDES

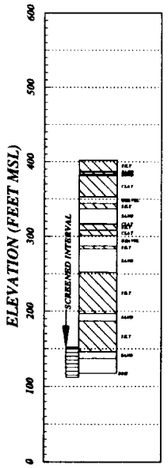
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
15.0	SILT	387.2
16.0	SAND	386.2
19.0	SILT	383.2
21.0	SAND	381.2
49.0	CLAY	353.2
58.0	GRAVEL	344.2
65.0	SILT	337.2
85.0	SAND	317.2
86.0	CLAY	316.2
94.0	SILT	308.2
101.0	CLAY	301.2
115.0	GRAVEL	287.2
119.0	SILT	283.2
150.0	SAND	252.2
205.0	SILT	197.2
215.0	SAND	187.2
256.0	SILT	146.2
265.0	SAND	137.2
306.0	TD	117.2

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

04_DGMW66 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	5.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	5.00		CASING MAT.	S80 PVC
SURF ELEV(FT MSL)	402.20		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	306.00	96.20		
CASE TOP	-1.00	403.20		
CASE BASE	249.70	152.50		
SCREEN TOP	250.00	152.20		
SCREEN BASE	290.00	112.20		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 04_DGMW66

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

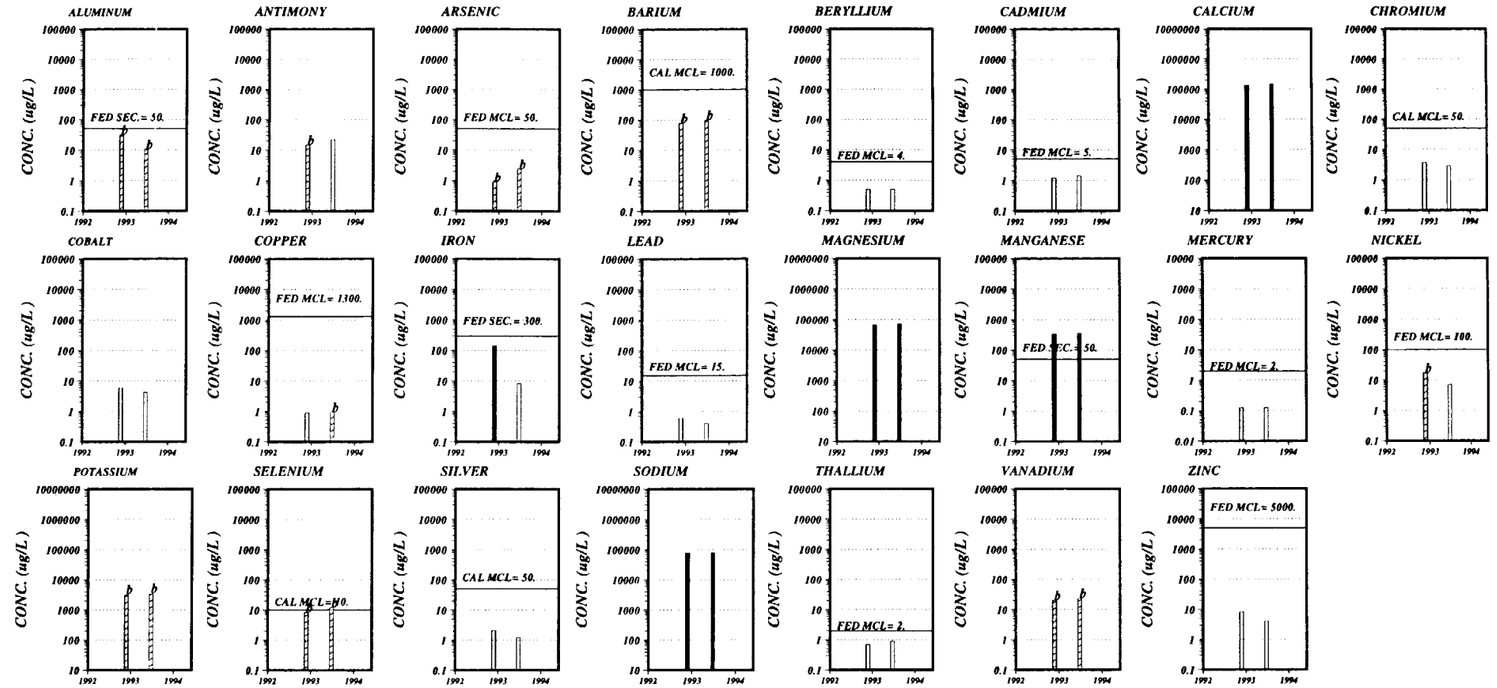
Fri Sep 23 13:51:53 1994

CHEMICAL DATA SUMMARY FOR WELL 04_UGMW63

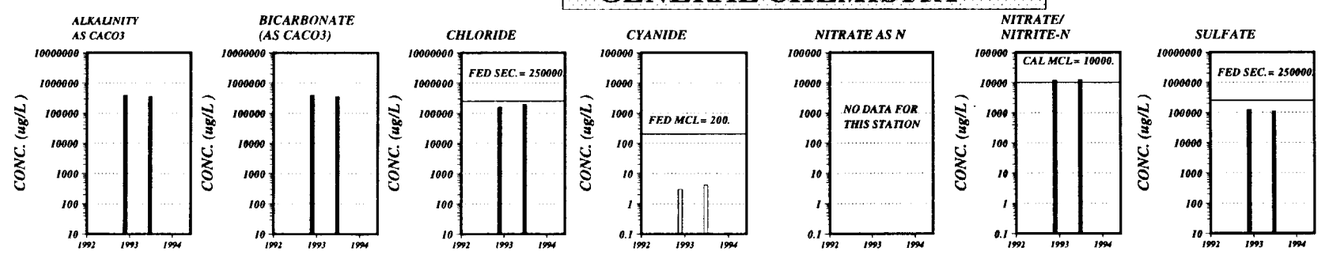
Table B-13
Groundwater Quality Data Summary - Well 04_UGMW63
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	11/24/92	1	U	06/25/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	11/24/92	1	U	06/25/93	1	U
1,1-DICHLOROETHENE	UG/L	2	11/24/92	1	U	06/25/93	1	U
1,2-DICHLOROETHANE	UG/L	2	11/24/92	1	U	06/25/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	11/24/92	1	U	06/25/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	11/24/92	1	U	06/25/93	1	U
2-BUTANONE	UG/L	2	11/24/92	2	U	06/25/93	2	U
2-HEXANONE	UG/L	2	11/24/92	2	U	06/25/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	11/24/92	2	U	06/25/93	2	U
BENZENE	UG/L	2	11/24/92	3		06/25/93	4	
BROMODICHLOROMETHANE	UG/L	2	11/24/92	1	U	06/25/93	1	U
BROMOFORM	UG/L	2	11/24/92	1	U	06/25/93	1	U
CARBON TETRACHLORIDE	UG/L	2	11/24/92	1	U	06/25/93	1	U
CHLOROBENZENE	UG/L	2	11/24/92	1	U	06/25/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	11/24/92	1	U	06/25/93	1	U
CHLOROFORM	UG/L	2	11/24/92	1	U	06/25/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	11/24/92	2	U	06/25/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	11/24/92	1	U	06/25/93	1	U
METHYLENE CHLORIDE	UG/L	2	11/24/92	2	*	06/25/93	0.6	J
STYRENE	UG/L	2	11/24/92	1	U	06/25/93	1	U
TETRACHLOROETHENE	UG/L	2	11/24/92	1	U	06/25/93	1	U
TOLUENE	UG/L	2	11/24/92	1	U	06/25/93	1	U
TRICHLOROETHYLENE	UG/L	2	11/24/92	1	U	06/25/93	1	U
XYLENE (TOTAL)	UG/L	2	11/24/92	1	U	06/25/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	11/24/92	10	U	06/25/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	11/24/92	10	U	06/25/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	11/24/92	10	U	06/25/93	10	U
DIMETHYL PHTHALATE	UG/L	2	11/24/92	10	U	06/25/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	11/24/92	10	U	06/25/93	10	U
PHENOL	UG/L	2	11/24/92	10	U	06/25/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	11/24/92	0.1	U	06/25/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	11/24/92	0.05	U	06/25/93	0.05	U
DIELDRIN	UG/L	2	11/24/92	0.1	U	06/25/93	0.1	U
HEPTACHLOR	UG/L	2	11/24/92	0.05	U	06/25/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	1	11/24/92	0.94	*			
2,4-DB	UG/L	1	11/24/92	0.5	U			
DICHLOROPROP	UG/L	1	11/24/92	0.5	U			
MCPP	UG/L	1	11/24/92	250	U			
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	11/24/92	250	U	06/25/93	439	
TFH-GASOLINE	UG/L	2	11/24/92	50	U	06/25/93	522	
METALS								
ALUMINUM	UG/L	2	11/24/92	31.3	b	06/25/93	10.5	b
ANTIMONY	UG/L	2	11/24/92	14.7	b	06/25/93	22	U
ARSENIC	UG/L	2	11/24/92	0.9	b	06/25/93	2.4	b
BARIUM	UG/L	2	11/24/92	76.8	b	06/25/93	96.5	b
BERYLLIUM	UG/L	2	11/24/92	0.5	U	06/25/93	0.5	U
CADMIUM	UG/L	2	11/24/92	1.2	U	06/25/93	1.4	U
CALCIUM	UG/L	2	11/24/92	134000		06/25/93	142000	
CHROMIUM	UG/L	2	11/24/92	3.7	U	06/25/93	2.9	U
COBALT	UG/L	2	11/24/92	5.8	U	06/25/93	4.2	U
COPPER	UG/L	2	11/24/92	0.9	U	06/25/93	0.95	b
IRON	UG/L	2	11/24/92	142		06/25/93	8.2	U
LEAD	UG/L	2	11/24/92	0.6	U	06/25/93	0.4	U
MAGNESIUM	UG/L	2	11/24/92	67200		06/25/93	70600	
MANGANESE	UG/L	2	11/24/92	337		06/25/93	359	
MERCURY	UG/L	2	11/24/92	0.1	U	06/25/93	0.1	U
NICKEL	UG/L	2	11/24/92	17.1	b	06/25/93	7.1	U
POTASSIUM	UG/L	2	11/24/92	3140	b	06/25/93	3380	b
SELENIUM	UG/L	2	11/24/92	8.2	b	06/25/93	12.2	b
SILVER	UG/L	2	11/24/92	2.1	U	06/25/93	1.2	U
SODIUM	UG/L	2	11/24/92	77400		06/25/93	78600	
THALLIUM	UG/L	2	11/24/92	0.7	U	06/25/93	0.9	U
VANADIUM	UG/L	2	11/24/92	20.1	b	06/25/93	23.5	b
ZINC	UG/L	2	11/24/92	8.3	U	06/25/93	4	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	11/24/92	386000		06/25/93	360000	
BICARBONATE (AS CACO3)	UG/L	2	11/24/92	386000		06/25/93	360000	
CHLORIDE	UG/L	2	11/24/92	160000		06/25/93	201000	
CYANIDE	UG/L	2	11/24/92	3	U	06/25/93	4.1	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	11/24/92	11800		06/25/93	12400	
SULFATE	UG/L	2	11/24/92	123000		06/25/93	108000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	11/24/92	7.06		06/25/93	7.1	
TEMPERATURE, DEGREE C	DEG/C	2	11/24/92	22.9		06/25/93	26.2	
TOTAL DISSOLVED SOLIDS	UG/L	2	11/24/92	993000		06/25/93	1080000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	1	11/24/92	11.3				

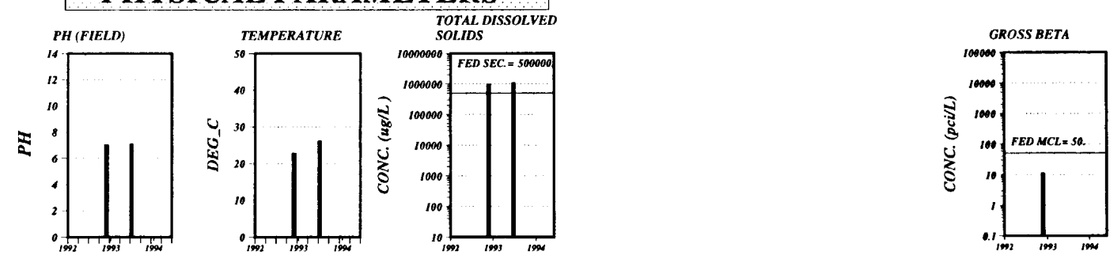
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



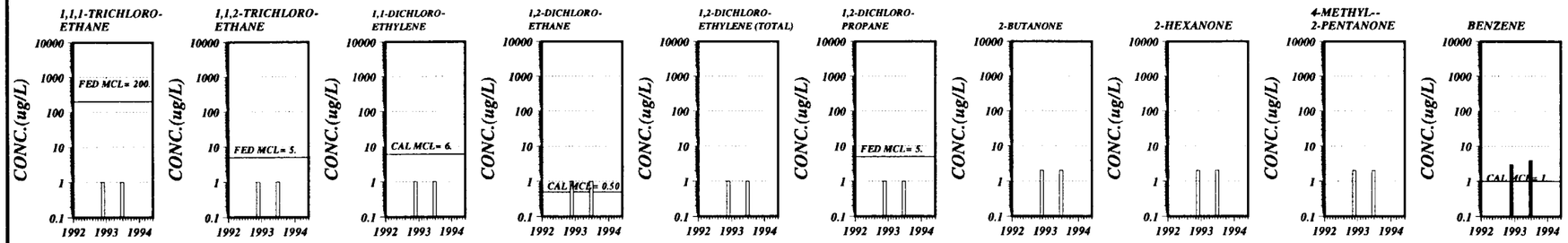
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

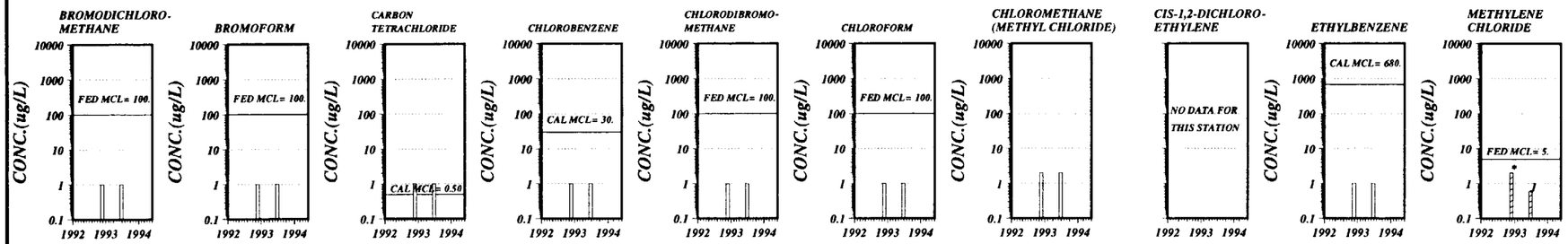
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

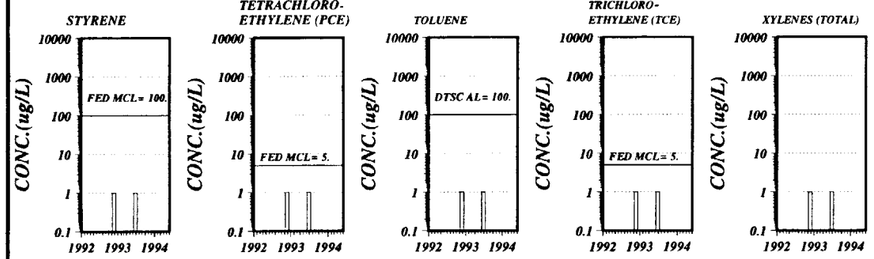
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

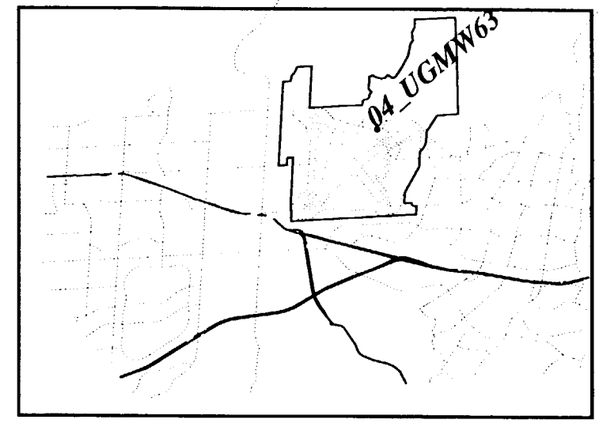
VOLATILE ORGANIC COMPOUNDS

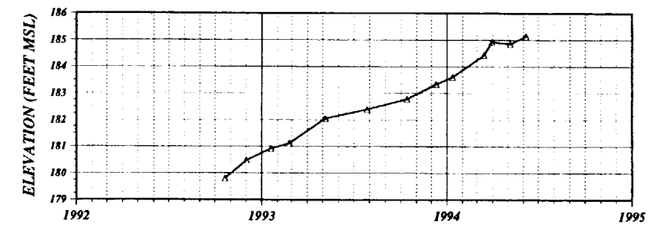
04_UGMW63



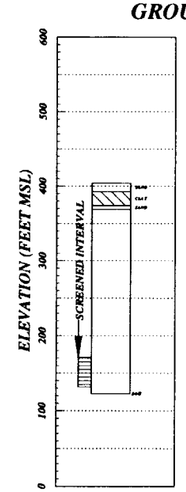








GROUNDWATER LEVEL HYDROGRAPH

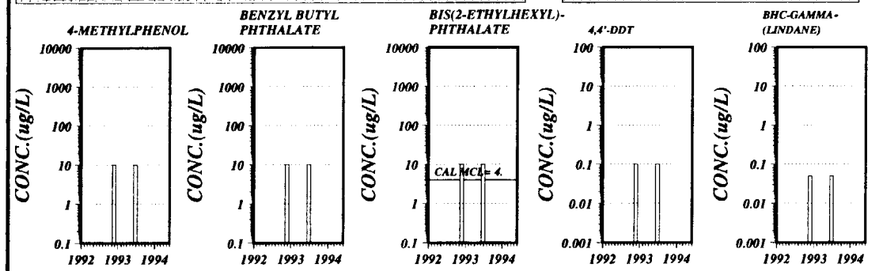


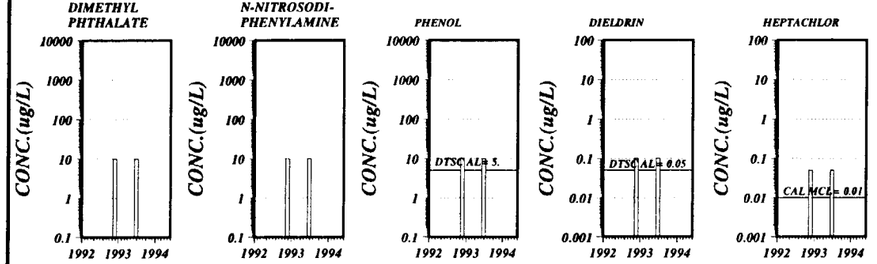
DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
11.0	SAND	392.9
30.0	CLAY	373.9
35.0	SAND	368.9
281.0	TD	122.9

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

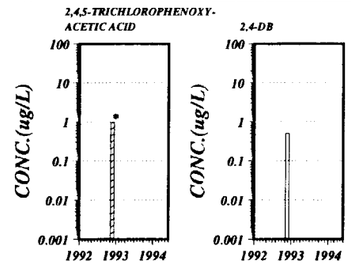
SEMIVOLATILE ORGANIC COMPOUNDS

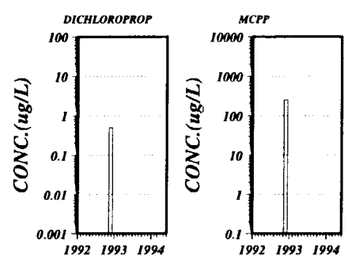




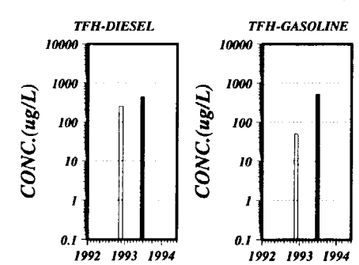
PESTICIDES AND PCBs

HERBICIDES





TOTAL FUEL HYDROCARBONS



04_UGMW63 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	5.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	5.00		CASING MAT.	S80 PVC
SURF ELEV(FT MSL)	403.89		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	281.00	122.89		
CASE TOP				
CASE BASE	233.00	170.89		
SCREEN TOP	233.00	170.89		
SCREEN BASE	272.30	131.59		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 04_UGMW63

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Tue Jul 26 11:35:07 1994

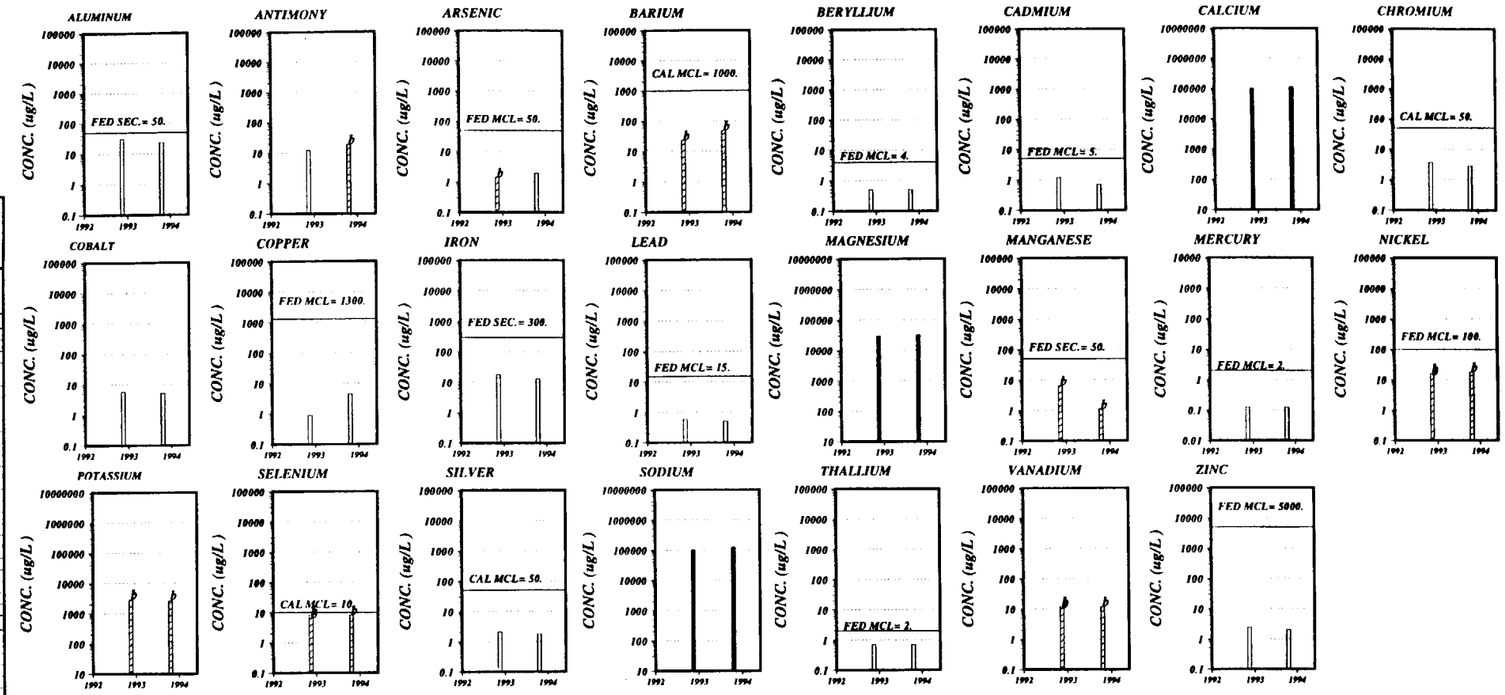
Site 5
Perimeter Road Landfill

CHEMICAL DATA SUMMARY FOR WELL 05_DBMW41

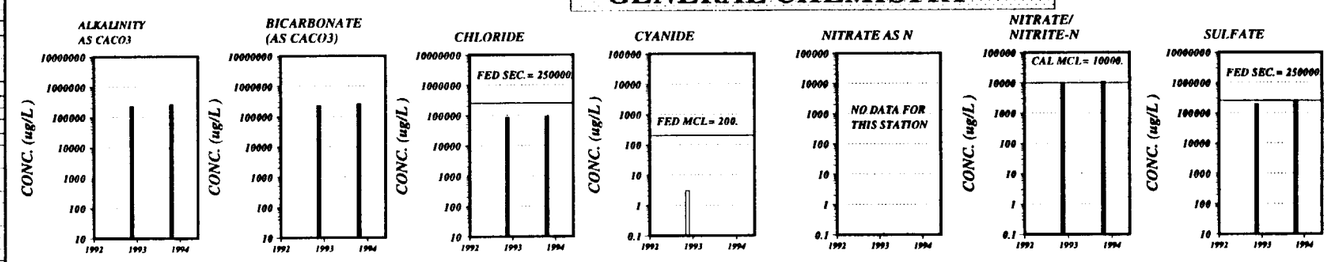
Table B-14
Groundwater Quality Data Summary - Well 05_DBMW41
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
1,2-DICHLOROETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
2-BUTANONE	UG/L	3	11/16/92	2	U	11/16/92	2	U	10/20/93	2	U						
2-HEXANONE	UG/L	3	11/16/92	2	U	11/16/92	2	U	10/20/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	11/16/92	2	U	11/16/92	2	U	10/20/93	2	U						
BENZENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
BROMOFORM	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
CHLOROBENZENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
CHLOROFORM	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	11/16/92	2	J	11/16/92	2	U	10/20/93	0.6	J						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
METHYLENE CHLORIDE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
STYRENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
TETRACHLOROETHENE	UG/L	3	11/16/92	0.8	J	11/16/92	0.6	J	10/20/93	0.7	J						
TOLUENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
TRICHLOROETHYLENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
XYLENE (TOTAL)	UG/L	3	11/16/92	1	U	11/16/92	1	U	10/20/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	3	11/16/92	10	U	11/16/92	10	U	10/20/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	11/16/92	10	U	11/16/92	10	U	10/20/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	11/16/92	10	U	11/16/92	10	U	10/20/93	10	U						
DIMETHYL PHTHALATE	UG/L	3	11/16/92	10	U	11/16/92	10	U	10/20/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	11/16/92	10	U	11/16/92	10	U	10/20/93	10	U						
PHENOL	UG/L	3	11/16/92	10	U	11/16/92	10	U	10/20/93	10	U						
PESTICIDES AND PCBs																	
4,4-DDT	UG/L	3	11/16/92	0.1	U	11/16/92	0.1	U	10/20/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	11/16/92	0.05	U	11/16/92	0.05	U	10/20/93	0.05	U						
DIELDRIN	UG/L	3	11/16/92	0.1	U	11/16/92	0.1	U	10/20/93	0.1	U						
HEPTACHLOR	UG/L	3	11/16/92	0.05	U	11/16/92	0.05	U	10/20/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	3	11/16/92	0.25	U	11/16/92	0.25	U	10/20/93	1.85	U						
2,4-DB	UG/L	3	11/16/92	0.5	U	11/16/92	0.5	U	10/20/93	0.98	U						
DICHLOROPROP	UG/L	3	11/16/92	0.5	U	11/16/92	0.5	U	10/20/93	1.52	U						
MCPP	UG/L	3	11/16/92	250	U	11/16/92	250	U	10/20/93	522	U						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TPH-DIESEL	UG/L	3	11/16/92	250	U	11/16/92	250	U	10/20/93	250	U						
TPH-GASOLINE	UG/L	3	11/16/92	50	U	11/16/92	50	U	10/20/93	50	U						
METALS																	
ALUMINUM	UG/L	3	11/16/92	31	U	11/16/92	31	U	10/20/93	23.5	U						
ANTIMONY	UG/L	3	11/16/92	12.1	U	11/16/92	12.1	U	10/20/93	18.8	b						
ARSENIC	UG/L	3	11/16/92	1.4	b	11/16/92	1.4	b	10/20/93	1.9	U						
BARIUM	UG/L	3	11/16/92	22.6	b	11/16/92	22.5	b	10/20/93	47.6	b						
BERYLLIUM	UG/L	3	11/16/92	0.5	U	11/16/92	0.5	U	10/20/93	0.5	U						
CADMIUM	UG/L	3	11/16/92	1.2	U	11/16/92	1.2	U	10/20/93	0.7	U						
CALCIUM	UG/L	3	11/16/92	99200		11/16/92	98900		10/20/93	110000							
CHROMIUM	UG/L	3	11/16/92	3.7	U	11/16/92	3.7	U	10/20/93	2.8	U						
COBALT	UG/L	3	11/16/92	5.8	U	11/16/92	5.8	U	10/20/93	5.2	U						
COPPER	UG/L	3	11/16/92	0.9	U	11/16/92	0.9	U	10/20/93	4.5	U						
IRON	UG/L	3	11/16/92	14.1	U	11/16/92	17.8	U	10/20/93	12.8	U						
LEAD	UG/L	3	11/16/92	0.6	U	11/16/92	0.6	U	10/20/93	0.5	U						
MAGNESIUM	UG/L	3	11/16/92	29100		11/16/92	28900		10/20/93	32000							
MANGANESE	UG/L	3	11/16/92	6.5	b	11/16/92	6.5	b	10/20/93	1.1	b						
MERCURY	UG/L	3	11/16/92	0.1	U	11/16/92	0.1	U	10/20/93	0.1	U						
NICKEL	UG/L	3	11/16/92	16	b	11/16/92	13.3	b	10/20/93	17.8	b						
POTASSIUM	UG/L	3	11/16/92	2830	b	11/16/92	2850	b	10/20/93	2610	b						
SELENIUM	UG/L	3	11/16/92	6.4	b	11/16/92	8.2	b	10/20/93	8.2	b						
SILVER	UG/L	3	11/16/92	2.1	U	11/16/92	2.1	U	10/20/93	1.8	U						
SODIUM	UG/L	3	11/16/92	99100		11/16/92	96800		10/20/93	124000							
THALLIUM	UG/L	3	11/16/92	0.7	U	11/16/92	0.7	U	10/20/93	0.7	U						
VANADIUM	UG/L	3	11/16/92	10.5	b	11/16/92	12.2	b	10/20/93	11.8	b						
ZINC	UG/L	3	11/16/92	2.4	U	11/16/92	2.4	U	10/20/93	2	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	11/16/92	228000		11/16/92	233000		10/20/93	263000							
BICARBONATE (AS CACO3)	UG/L	3	11/16/92	228000		11/16/92	233000		10/20/93	263000							
CHLORIDE	UG/L	3	11/16/92	85200		11/16/92	86200		10/20/93	93200							
CYANIDE	UG/L	2	11/16/92	3	U	11/16/92	3	U									
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	11/16/92	8610		11/16/92	8940		10/20/93	10800							
SULFATE	UG/L	3	11/16/92	193000		11/16/92	194000		10/20/93	242000							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	2	11/16/92	7.24		11/16/92	7.24										
TEMPERATURE, DEGREE C	DEG/C	2	11/16/92	23.2		11/16/92	23.2										
TOTAL DISSOLVED SOLIDS	UG/L	3	11/16/92	790000		11/16/92	758000		10/20/93	877000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	2	11/16/92	9		11/16/92	9.4										
GROSS BETA	PCI/L	2	11/16/92	6.3		11/16/92	5.9										

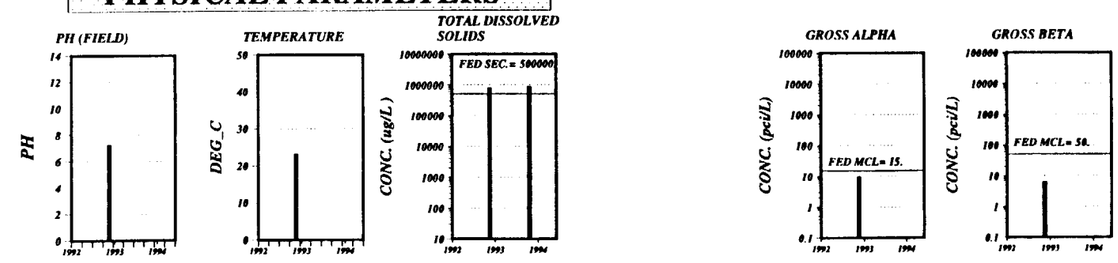
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



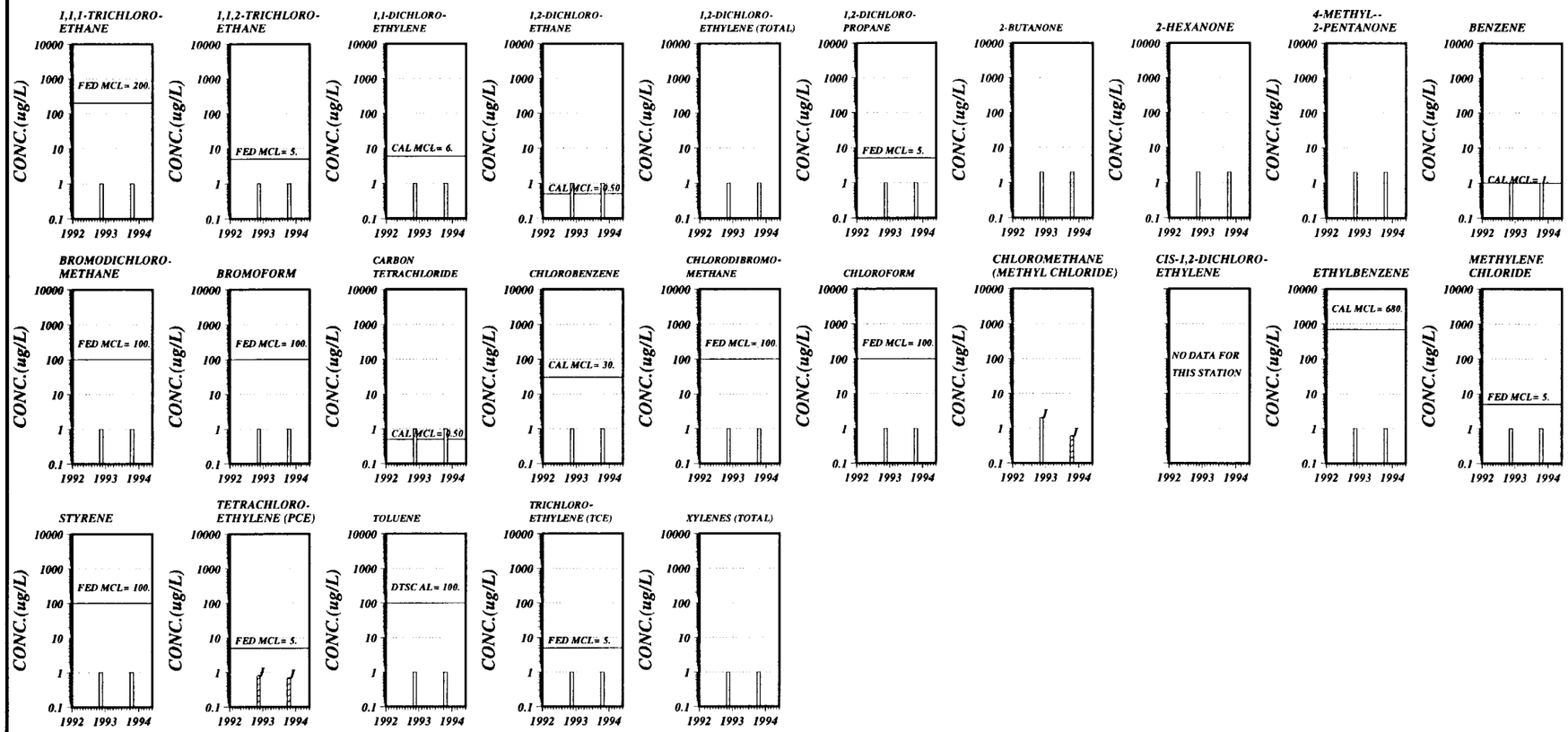
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

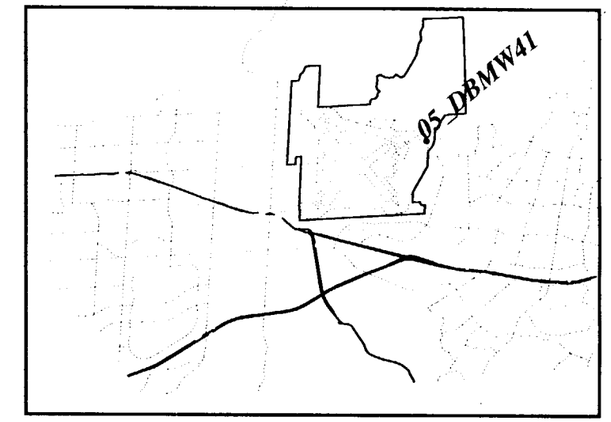
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

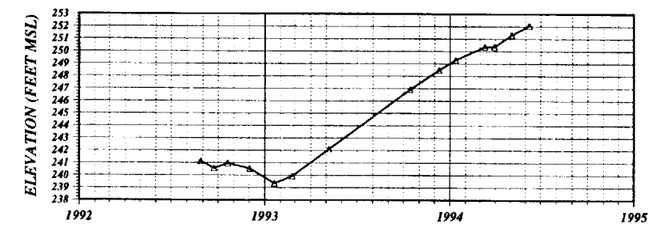
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

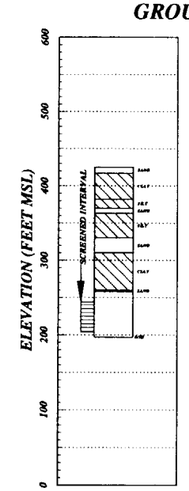
05_DBMW41







GROUNDWATER LEVEL HYDROGRAPH

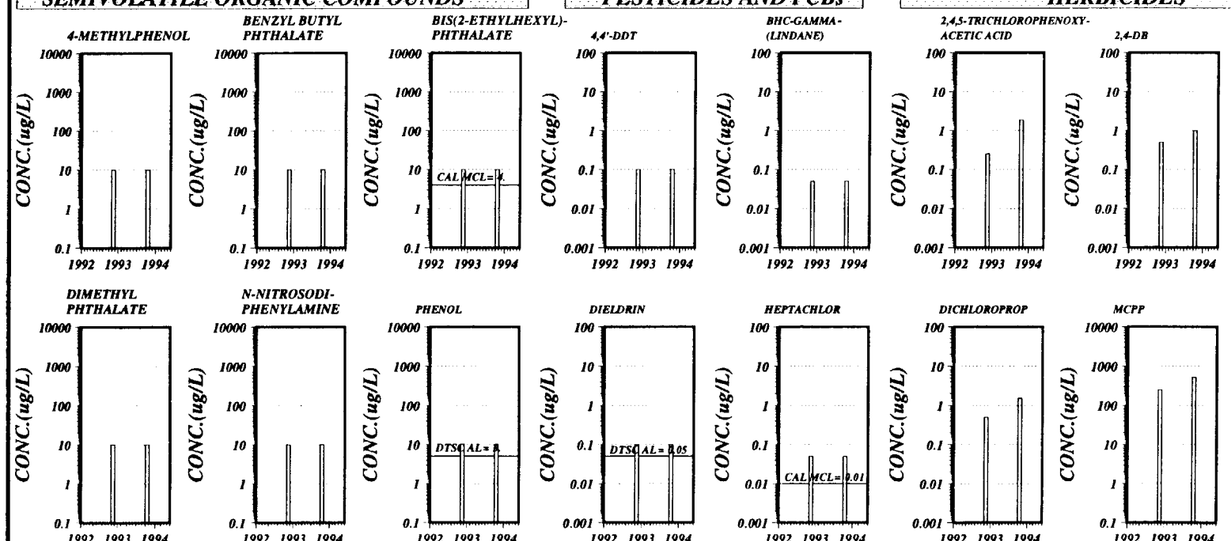


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
8.0	SAND	417.0
43.0	CLAY	382.0
55.0	SILT	370.0
62.0	SAND	363.0
95.0	SILT	330.0
115.0	SAND	310.0
165.0	CLAY	260.0
167.0	SAND	258.0
228.0	TD	197.0

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

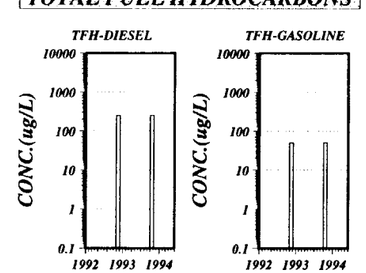
SEMIVOLATILE ORGANIC COMPOUNDS



PESTICIDES AND PCBs

HERBICIDES

TOTAL FUEL HYDROCARBONS



05_DBMW41 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	425.00		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	228.00	197.00		
CASE TOP	-1.00	426.00		
CASE BASE	181.30	243.70		
SCREEN TOP	181.00	244.00		
SCREEN BASE	221.00	204.00		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 05_DBMW41

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

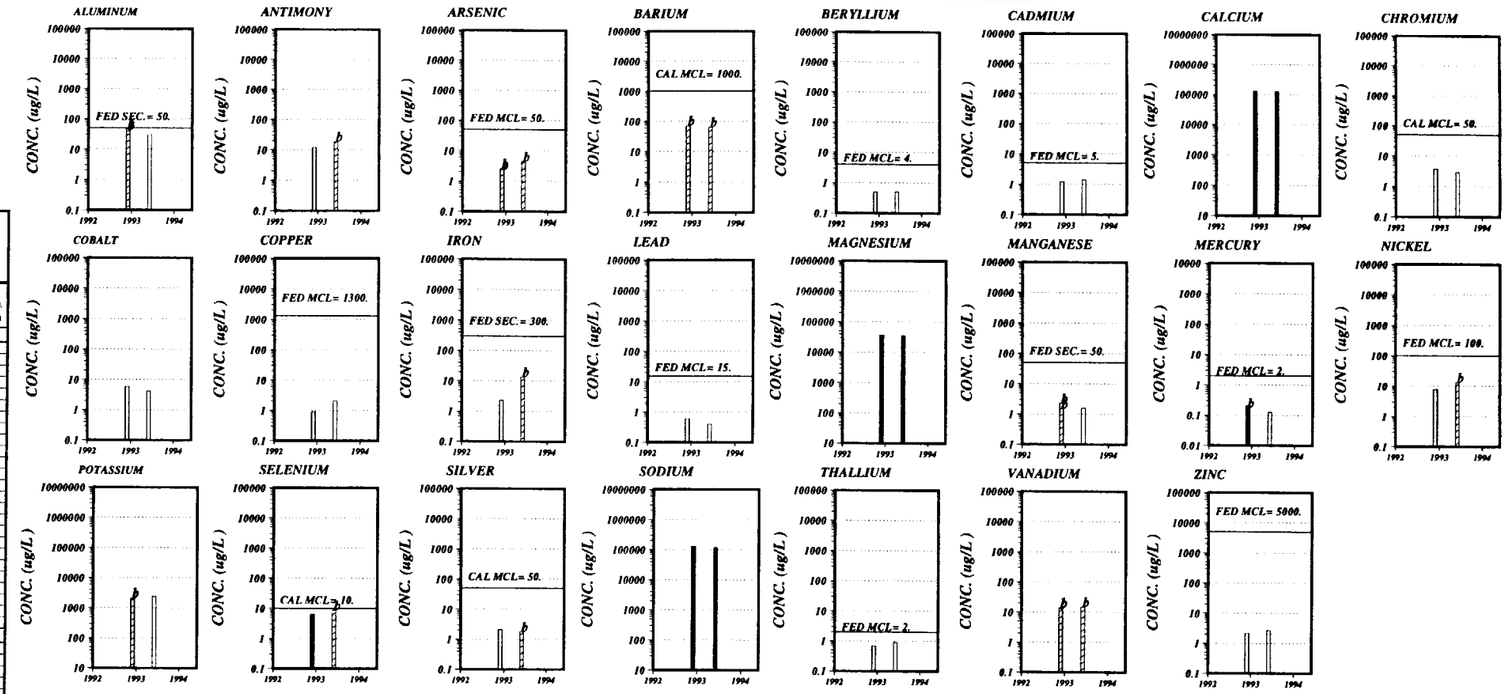
Tue Jul 26 11:36:44 1994

CHEMICAL DATA SUMMARY FOR WELL 05_DGMW67

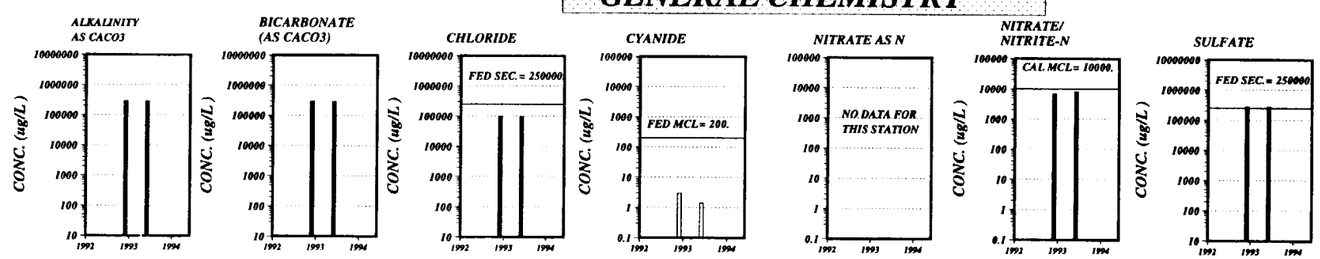
Table B-15
Groundwater Quality Data Summary - Well 05_DGMW67
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
1,2-DICHLOROETHANE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
2-BUTANONE	UG/L	3	11/30/92	2	U	11/30/92	2	U	06/03/93	2	U						
2-HEXANONE	UG/L	3	11/30/92	2	U	11/30/92	2	U	06/03/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	11/30/92	2	U	11/30/92	2	U	06/03/93	2	U						
BENZENE	UG/L	3	11/30/92	0.3	J	11/30/92	1	U	06/03/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
BROMOFORM	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
CHLOROBENZENE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
CHLOROFORM	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	11/30/92	0.5	J	11/30/92	0.7	J	06/03/93	2	U						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
METHYLENE CHLORIDE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
STYRENE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
TETRACHLOROETHENE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
TOLUENE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
TRICHLOROETHYLENE	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
XYLENE (TOTAL)	UG/L	3	11/30/92	1	U	11/30/92	1	U	06/03/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	3	11/30/92	10	U	11/30/92	10	U	06/03/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	11/30/92	10	U	11/30/92	10	U	06/03/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	11/30/92	10	U	11/30/92	10	U	06/03/93	12							
DIMETHYL PHTHALATE	UG/L	3	11/30/92	10	U	11/30/92	10	U	06/03/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	11/30/92	10	U	11/30/92	10	U	06/03/93	10	U						
PHENOL	UG/L	3	11/30/92	10	U	11/30/92	10	U	06/03/93	10	U						
PESTICIDES AND PCBs																	
4,4'-DDT	UG/L	3	11/30/92	0.1	U	11/30/92	0.1	U	06/03/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	11/30/92	0.05	U	11/30/92	0.05	U	06/03/93	0.05	U						
DIELDRIN	UG/L	3	11/30/92	0.1	U	11/30/92	0.1	U	06/03/93	0.1	U						
HEPTACHLOR	UG/L	3	11/30/92	0.05	U	11/30/92	0.05	U	06/03/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	3	11/30/92	0.25	U	11/30/92	0.89	*	06/03/93	1.86	U						
2,4-DB	UG/L	3	11/30/92	0.5	U	11/30/92	0.5	U	06/03/93	0.98	U						
DICHLOROPROP	UG/L	3	11/30/92	0.5	U	11/30/92	0.5	U	06/03/93	1.52	U						
MCPP	UG/L	3	11/30/92	250	U	11/30/92	250	U	06/03/93	522	U						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TPH-DIESEL	UG/L	3	11/30/92	250	U	11/30/92	250	U	06/03/93	250	U						
TPH-GASOLINE	UG/L	3	11/30/92	50	U	11/30/92	50	U	06/03/93	50	U						
METALS																	
ALUMINUM	UG/L	3	11/30/92	38.9	b	11/30/92	50.7	b	06/03/93	30.4	U						
ANTIMONY	UG/L	3	11/30/92	12.1	U	11/30/92	12.1	U	06/03/93	18.6	b						
ARSENIC	UG/L	3	11/30/92	2.6	b	11/30/92	2.3	b	06/03/93	4.4	b						
BARIUM	UG/L	3	11/30/92	58.5	b	11/30/92	69.6	b	06/03/93	62.2	b						
BERYLLIUM	UG/L	3	11/30/92	0.5	U	11/30/92	0.5	U	06/03/93	0.5	U						
CADMIUM	UG/L	3	11/30/92	1.2	U	11/30/92	1.2	U	06/03/93	1.4	U						
CALCIUM	UG/L	3	11/30/92	128000		11/30/92	131000		06/03/93	128000							
CHROMIUM	UG/L	3	11/30/92	3.7	U	11/30/92	3.7	U	06/03/93	2.9	U						
COBALT	UG/L	3	11/30/92	5.8	U	11/30/92	5.8	U	06/03/93	4.2	U						
COPPER	UG/L	3	11/30/92	0.9	U	11/30/92	0.9	U	06/03/93	2.1	U						
IRON	UG/L	3	11/30/92	2.3	U	11/30/92	2.3	U	06/03/93	13.6	b						
LEAD	UG/L	3	11/30/92	0.6	U	11/30/92	0.6	U	06/03/93	0.4	U						
MAGNESIUM	UG/L	3	11/30/92	36100		11/30/92	36700		06/03/93	35400							
MANGANESE	UG/L	3	11/30/92	1.5	b	11/30/92	2.3	b	06/03/93	1.6	U						
MERCURY	UG/L	3	11/30/92	0.21		11/30/92	0.16	b	06/03/93	0.1	U						
NICKEL	UG/L	3	11/30/92	7.7	U	11/30/92	7.7	U	06/03/93	13	b						
POTASSIUM	UG/L	3	11/30/92	1960	b	11/30/92	2090	b	06/03/93	2400	U						
SELENIUM	UG/L	3	11/30/92	6.4		11/30/92	6.3		06/03/93	8.7	b						
SILVER	UG/L	3	11/30/92	2.1	U	11/30/92	2.1	U	06/03/93	1.8	b						
SODIUM	UG/L	3	11/30/92	127000		11/30/92	128000		06/03/93	117000							
THALLIUM	UG/L	3	11/30/92	0.7	U	11/30/92	0.7	U	06/03/93	0.9	U						
VANADIUM	UG/L	3	11/30/92	13.2	b	11/30/92	14	b	06/03/93	14.6	b						
ZINC	UG/L	3	11/30/92	2.2	U	11/30/92	2.2	U	06/03/93	2.7	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	11/30/92	296000		11/30/92	296000		06/03/93	289000							
BICARBONATE (AS CACO3)	UG/L	3	11/30/92	296000		11/30/92	296000		06/03/93	289000							
CHLORIDE	UG/L	3	11/30/92	96800		11/30/92	97300		06/03/93	96000							
CYANIDE	UG/L	3	11/30/92	3	U	11/30/92	3	U	06/03/93	1.4	U						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	11/30/92	6790		11/30/92	6890		06/03/93	8080							
SULFATE	UG/L	3	11/30/92	284000		11/30/92	284000		06/03/93	275000							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	0															
TEMPERATURE, DEGREE C	DEG/C	0															
TOTAL DISSOLVED SOLIDS	UG/L	3	11/30/92	934000		11/30/92	925000		06/03/93	985000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	3	11/30/92	15		11/30/92	24.9		06/03/93	16.7							
GROSS BETA	PCI/L	3	11/30/92	7.7		11/30/92	53		06/03/93	19							

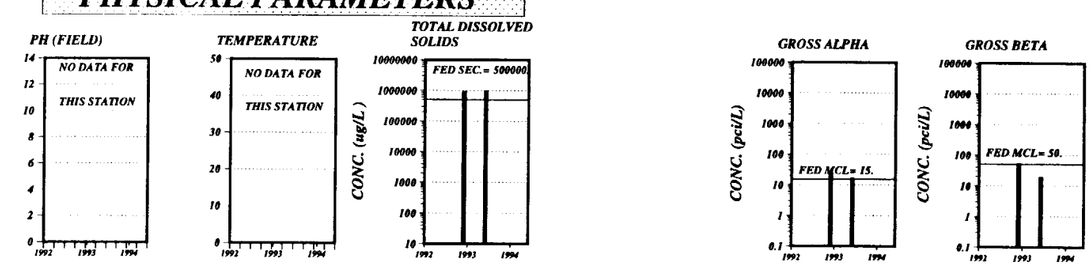
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



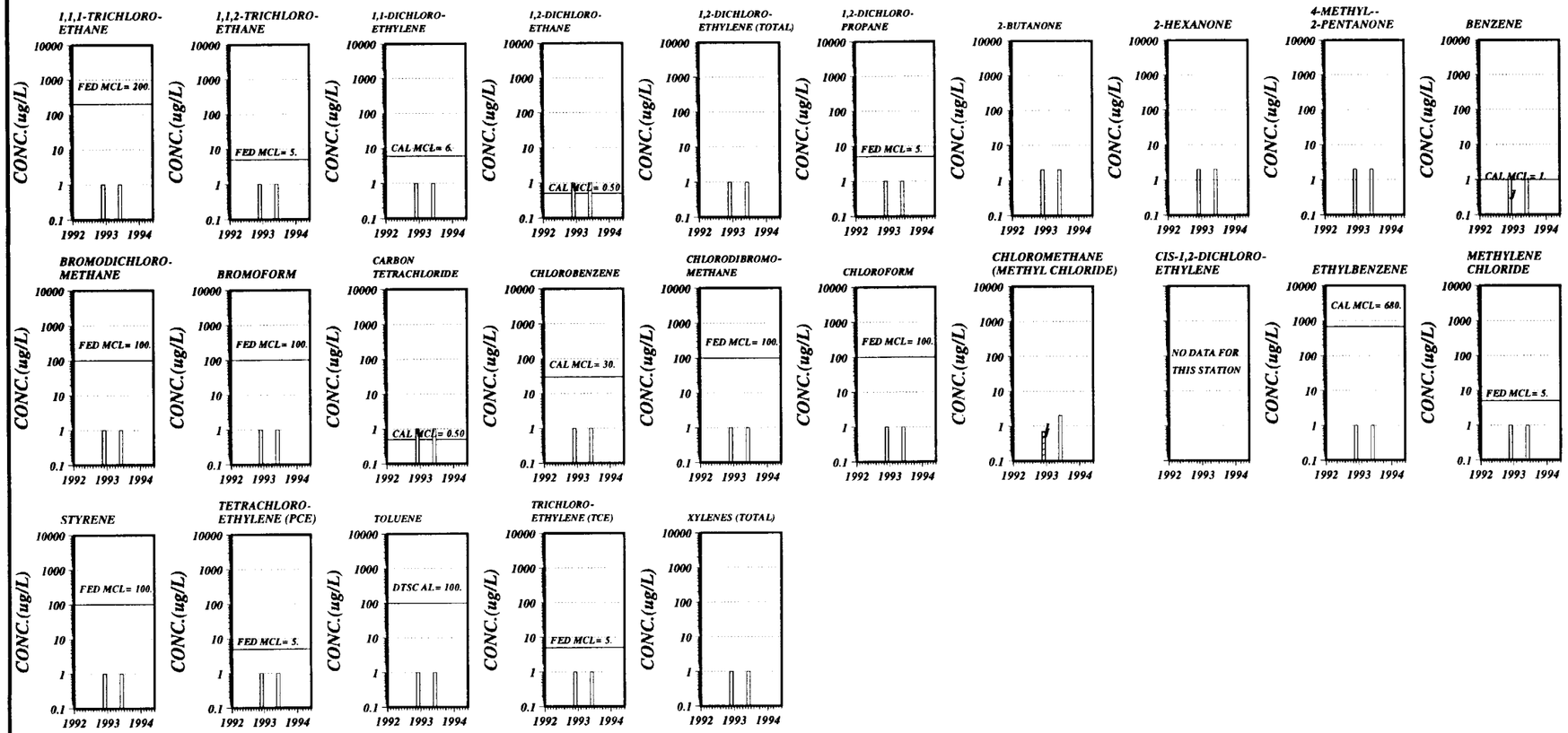
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

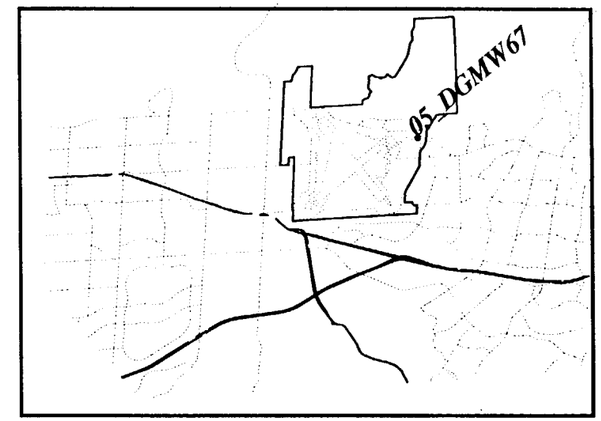
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

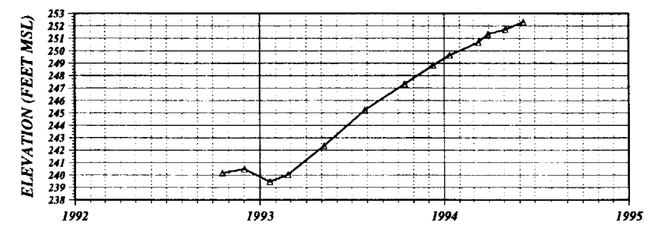
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

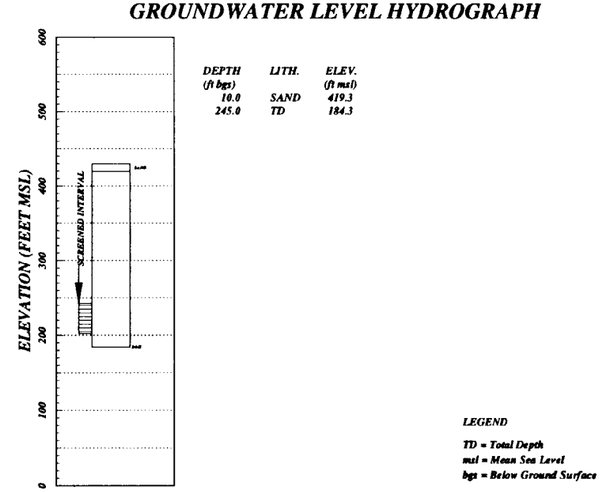
05_DGMW67



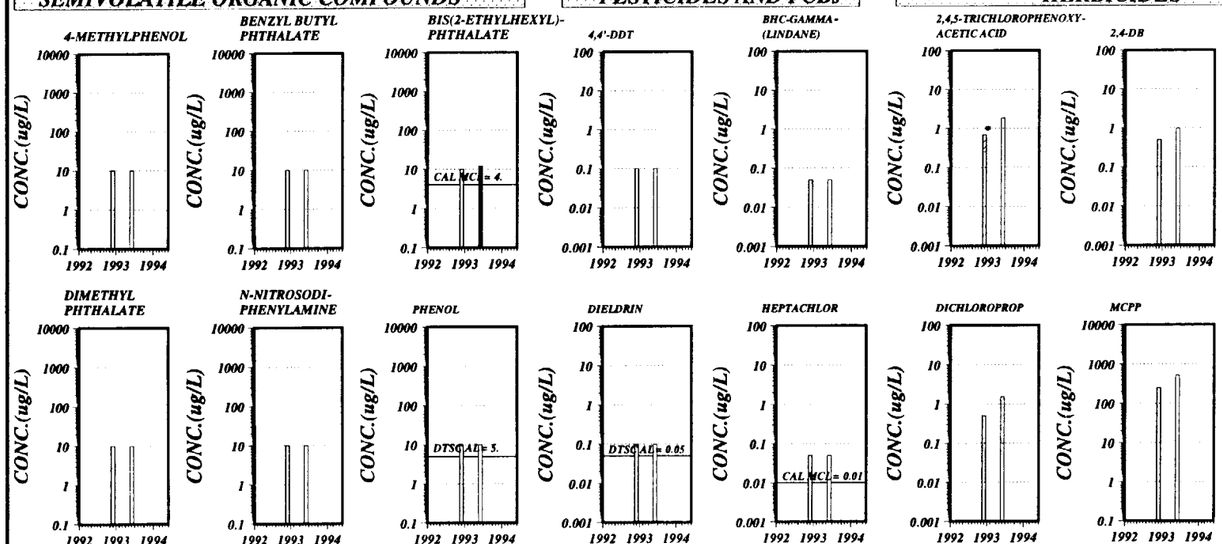




GROUNDWATER LEVEL HYDROGRAPH



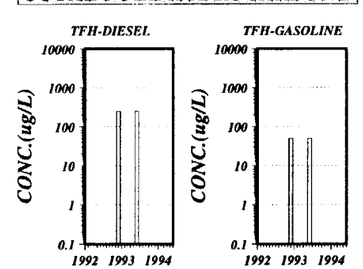
SEMIVOLATILE ORGANIC COMPOUNDS



PESTICIDES AND PCBs

HERBICIDES

TOTAL FUEL HYDROCARBONS



05_DGMW67 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	5.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	5.00		CASING MAT.	S80 PVC
SURF ELEV(FT MSL)	429.30		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	245.00	184.30		
CASE TOP	-1.00	430.30		
CASE BASE	187.40	241.90		
SCREEN TOP	187.00	242.30		
SCREEN BASE	227.00	202.30		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 05_DGMW67

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

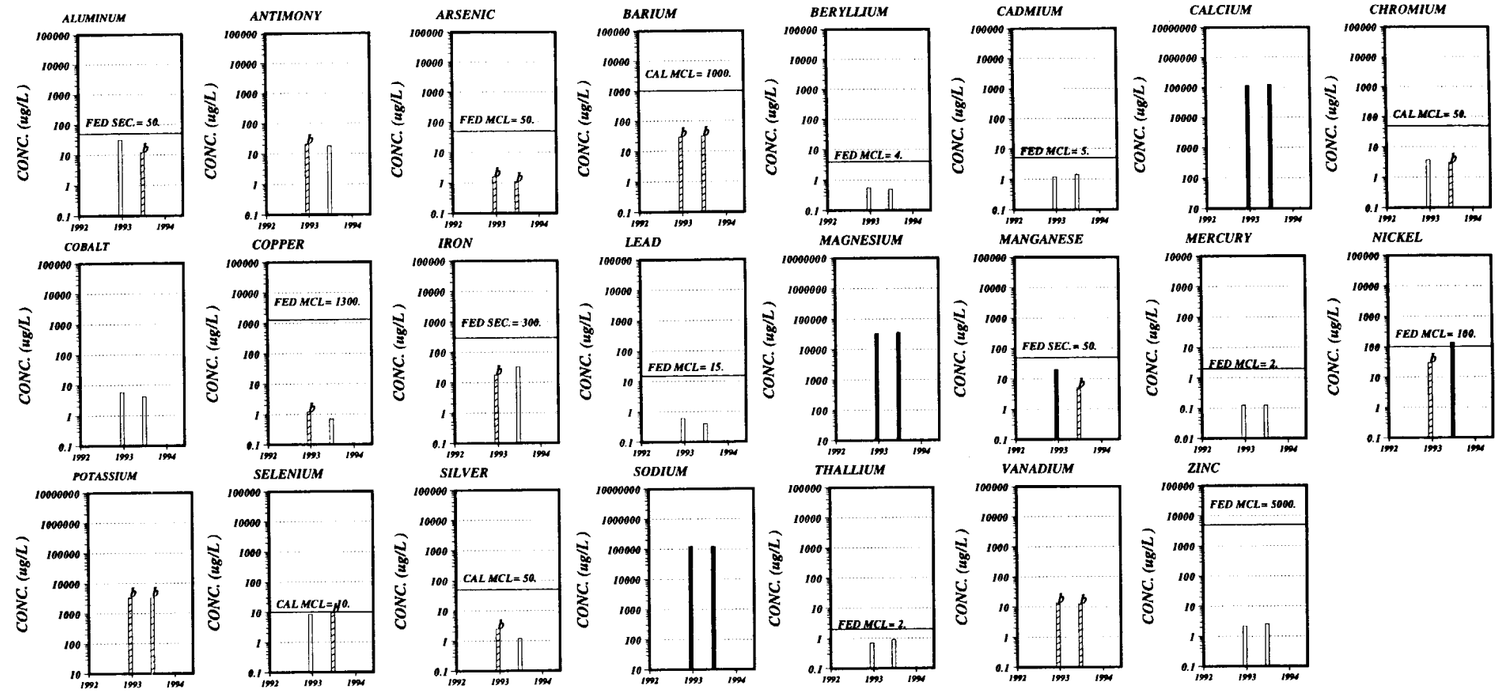
Fri Sep 23 12:39:14 1994

CHEMICAL DATA SUMMARY FOR WELL 05_DGMW68

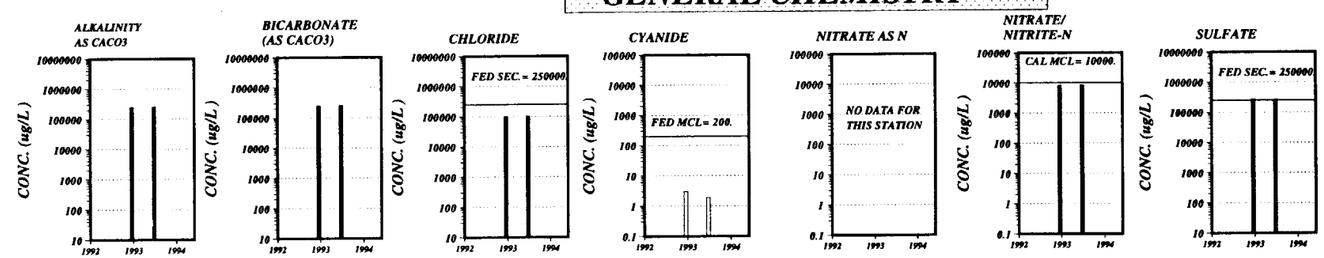
Table B-16
Groundwater Quality Data Summary - Well 05_DGMW68
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/17/92	1	U	06/29/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/17/92	1	U	06/29/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/17/92	1	U	06/29/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/17/92	1	U	06/29/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/17/92	1	U	06/29/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/17/92	1	U	06/29/93	1	U
2-BUTANONE	UG/L	2	12/17/92	2	U	06/29/93	2	U
2-HEXANONE	UG/L	2	12/17/92	2	U	06/29/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/17/92	2	U	06/29/93	2	U
BENZENE	UG/L	2	12/17/92	1	U	06/29/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/17/92	1	U	06/29/93	1	U
BROMOFORM	UG/L	2	12/17/92	1	U	06/29/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/17/92	1	U	06/29/93	1	U
CHLOROBENZENE	UG/L	2	12/17/92	1	U	06/29/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/17/92	1	U	06/29/93	1	U
CHLOROFORM	UG/L	2	12/17/92	1	U	06/29/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/17/92	2	U	06/29/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/17/92	1	U	06/29/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/17/92	0.5	J	06/29/93	1	U
STYRENE	UG/L	2	12/17/92	1	U	06/29/93	1	U
TETRACHLOROETHENE	UG/L	2	12/17/92	1	U	06/29/93	1	U
TOLUENE	UG/L	2	12/17/92	1	U	06/29/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/17/92	1	U	06/29/93	1	U
XYLENE (TOTAL)	UG/L	2	12/17/92	1	U	06/29/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/17/92	10	U	06/29/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/17/92	10	U	06/29/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/17/92	10	U	06/29/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/17/92	10	U	06/29/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/17/92	10	U	06/29/93	10	U
PHENOL	UG/L	2	12/17/92	10	U	06/29/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/17/92	0.1	U	06/29/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/17/92	0.05	U	06/29/93	0.05	U
DIELDRIN	UG/L	2	12/17/92	0.1	U	06/29/93	0.1	U
HEPTACHLOR	UG/L	2	12/17/92	0.05	U	06/29/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	12/17/92	0.25	U	06/29/93	1.85	U
2,4-DB	UG/L	2	12/17/92	0.5	U	06/29/93	0.98	U
DICHLOROPROP	UG/L	2	12/17/92	0.5	U	06/29/93	1.52	U
MCPP	UG/L	2	12/17/92	250	U	06/29/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/17/92	250	U	06/29/93	250	U
TFH-GASOLINE	UG/L	2	12/17/92	50	U	06/29/93	50	U
METALS								
ALUMINUM	UG/L	2	12/17/92	31	U	06/25/93	12	b
ANTIMONY	UG/L	2	12/17/92	20.8	b	06/25/93	18.1	U
ARSENIC	UG/L	2	12/17/92	1.6	b	06/25/93	1.1	b
BARIUM	UG/L	2	12/17/92	29.2	b	06/25/93	31.2	b
BERYLLIUM	UG/L	2	12/17/92	0.55	U	06/25/93	0.5	U
CADMIUM	UG/L	2	12/17/92	1.2	U	06/25/93	1.4	U
CALCIUM	UG/L	2	12/17/92	116000		06/25/93	122000	
CHROMIUM	UG/L	2	12/17/92	3.7	U	06/25/93	3	b
COBALT	UG/L	2	12/17/92	5.8	U	06/25/93	4.2	U
COPPER	UG/L	2	12/17/92	1.2	b	06/25/93	0.7	U
IRON	UG/L	2	12/17/92	17.7	b	06/25/93	33.4	U
LEAD	UG/L	2	12/17/92	0.6	U	06/25/93	0.4	U
MAGNESIUM	UG/L	2	12/17/92	33700		06/25/93	35800	
MANGANESE	UG/L	2	12/17/92	20.6		06/25/93	5.1	b
MERCURY	UG/L	2	12/17/92	0.1	U	06/25/93	0.1	U
NICKEL	UG/L	2	12/17/92	29.2	b	06/25/93	138	
POTASSIUM	UG/L	2	12/17/92	3350	b	06/25/93	3400	b
SELENIUM	UG/L	2	12/17/92	8.5	U	06/25/93	9.4	b
SILVER	UG/L	2	12/17/92	2.5	b	06/25/93	1.2	U
SODIUM	UG/L	2	12/17/92	122000		06/25/93	120000	
THALLIUM	UG/L	2	12/17/92	0.7	U	06/25/93	0.9	U
VANADIUM	UG/L	2	12/17/92	13.6	b	06/25/93	12.5	b
ZINC	UG/L	2	12/17/92	2.2	U	06/25/93	2.6	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/17/92	250000		06/25/93	254000	
BICARBONATE (AS CACO3)	UG/L	2	12/17/92	250000		06/25/93	254000	
CHLORIDE	UG/L	2	12/17/92	101000		06/25/93	102000	
CYANIDE	UG/L	2	12/17/92	3	U	06/25/93	1.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/17/92	8140		06/25/93	8430	
SULFATE	UG/L	2	12/17/92	270000		06/25/93	262000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	12/17/92	6.93		06/25/93	7.21	
TEMPERATURE, DEGREE C	DEG/C	2	12/17/92	23.5		06/25/93	26	
TOTAL DISSOLVED SOLIDS	UG/L	2	12/17/92	905000		06/25/93	961000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	2	12/17/92	7		06/25/93	10.8	
GROSS BETA	PCI/L	2	12/17/92	13.6		06/25/93	12.4	

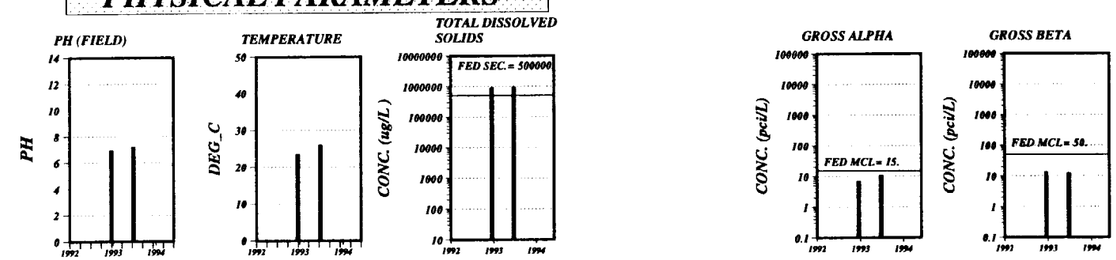
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



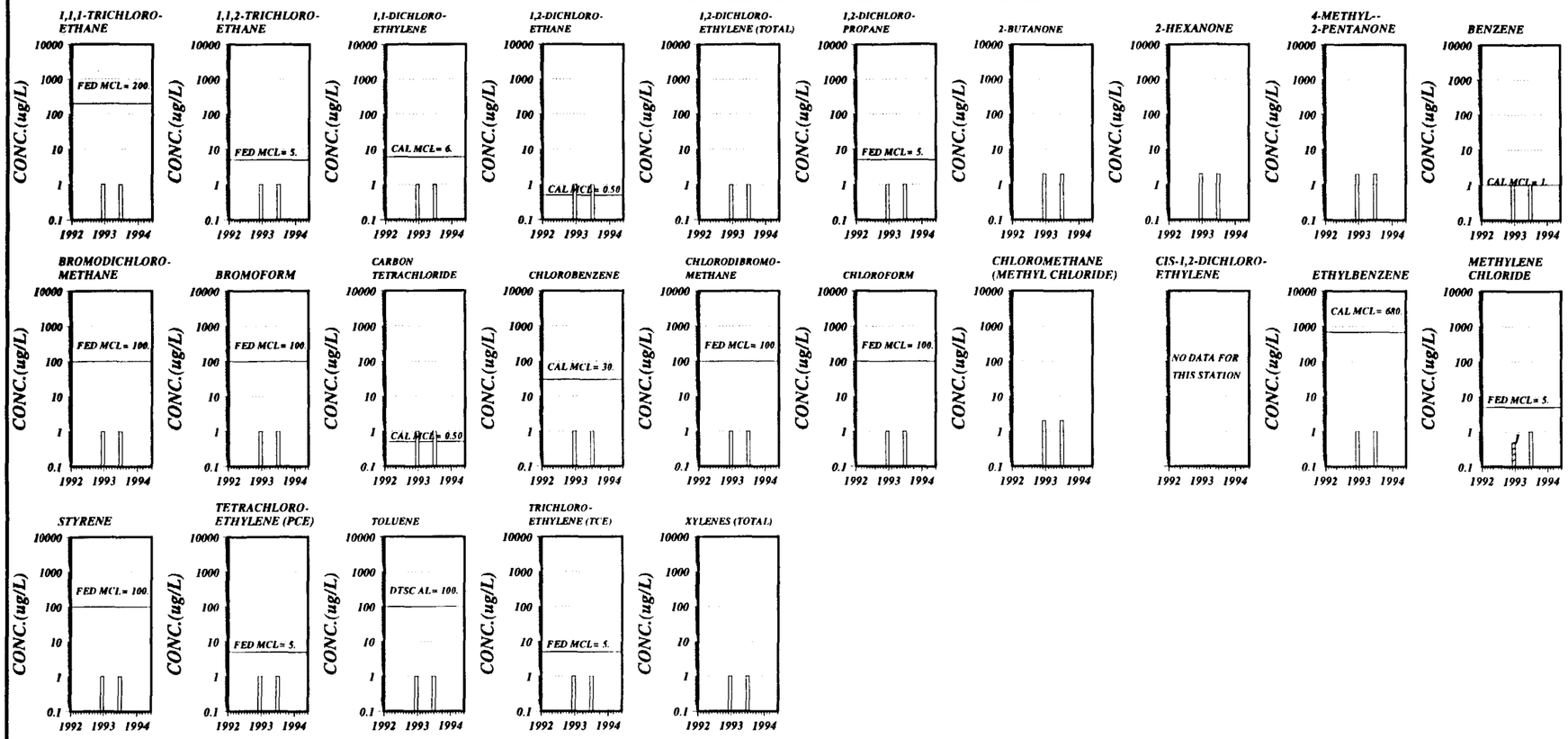
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

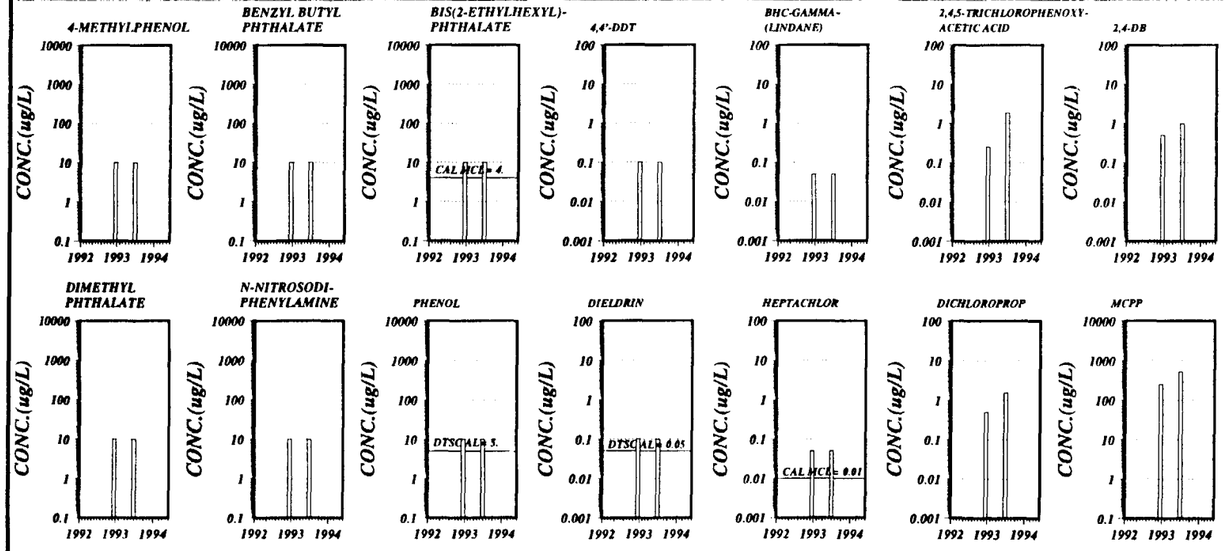
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

05_DGMW68



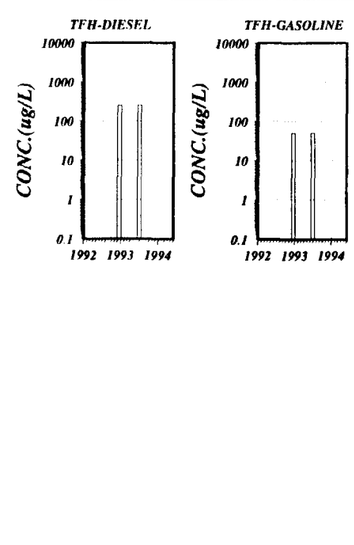
SEMIVOLATILE ORGANIC COMPOUNDS

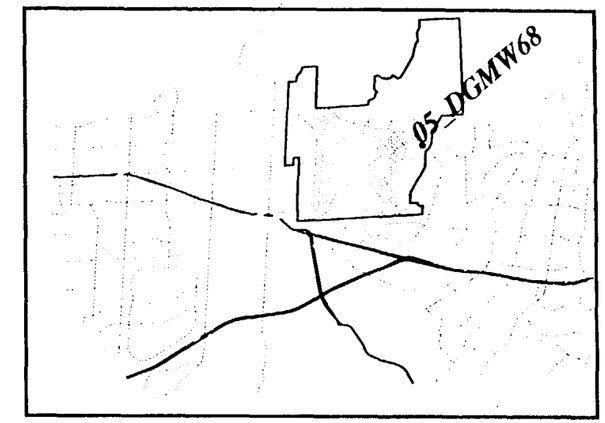


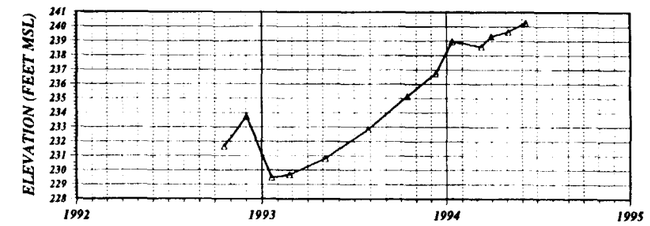
PESTICIDES AND PCBs

HERBICIDES

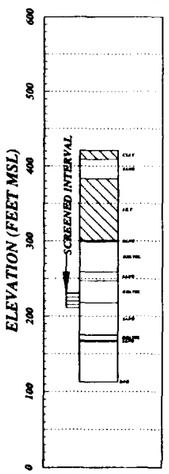
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
12.0	CLAY	408.8
38.0	SAND	382.8
120.0	SILT	300.8
122.0	SAND	298.8
162.0	GRAVEL	258.8
174.0	SAND	246.8
203.0	GRAVEL	217.8
246.0	SAND	174.8
253.0	GRAVEL	167.8
255.0	SAND	165.8
308.0	TD	112.8

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

05_DGMW68 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	5.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	5.00		CASING MAT.	S80 PVC
SURF ELEV(FT MSL)	420.80		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	308.00	112.80		
CASE TOP	-1.00	421.80		
CASE BASE	308.00	112.80		
SCREEN TOP	190.00	230.80		
SCREEN BASE	210.00	210.80		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 05_DGMW68

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

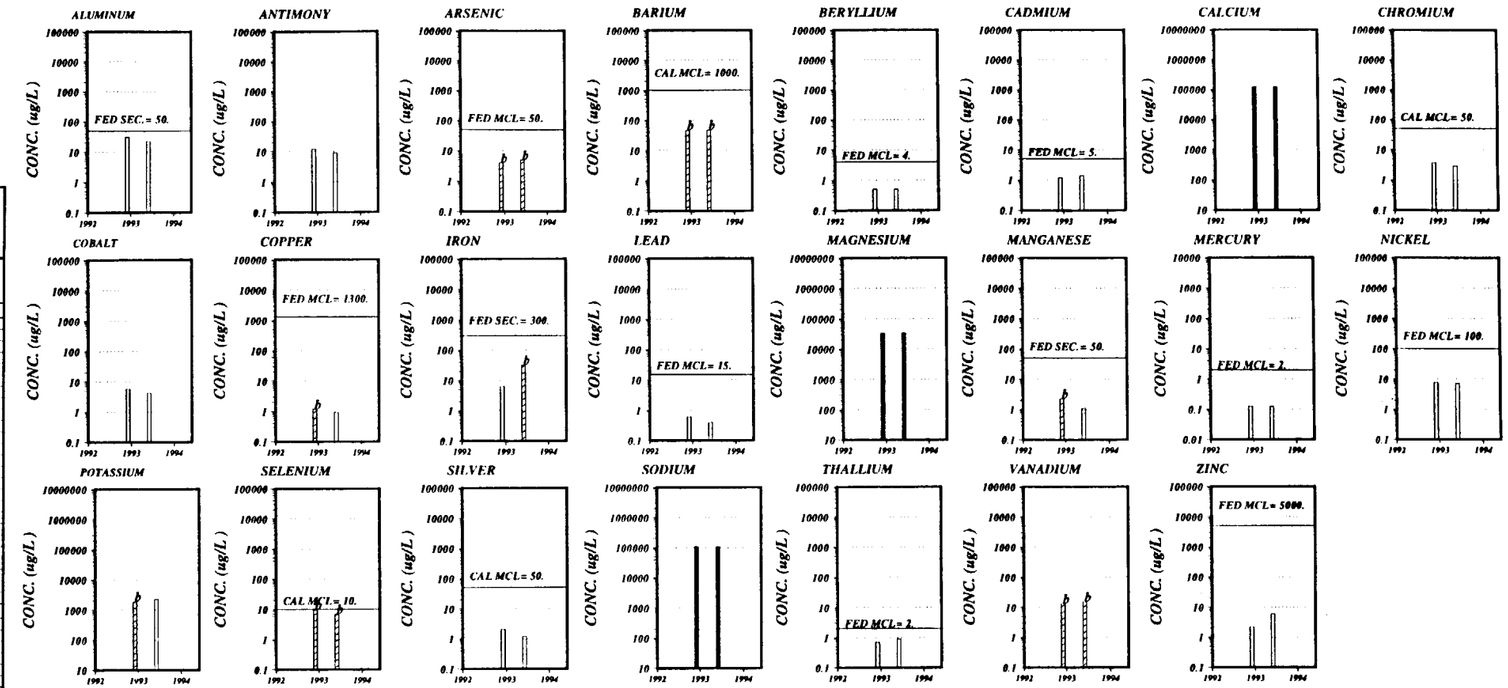
Fri Sep 23 13:53:56 1994

CHEMICAL DATA SUMMARY FOR WELL 05_UGMW27

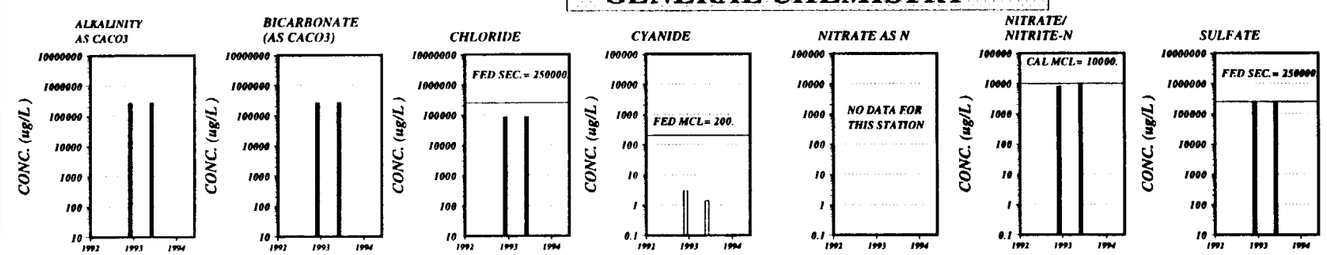
Table B-17
Groundwater Quality Data Summary - Well 05_UGMW27
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
1,2-DICHLOROETHANE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
2-BUTANONE	UG/L	3	12/03/92	2	U	06/03/93	2	U	06/03/93	2	U						
2-HEXANONE	UG/L	3	12/03/92	2	U	06/03/93	2	U	06/03/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	12/03/92	2	U	06/03/93	2	U	06/03/93	2	U						
BENZENE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
BROMOFORM	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
CHLOROBENZENE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
CHLOROFORM	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	12/03/92	2	U	06/03/93	2	U	06/03/93	2	U						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
METHYLENE CHLORIDE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
STYRENE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
TETRACHLOROETHENE	UG/L	3	12/03/92	0.9	J	06/03/93	0.8	J	06/03/93	0.8	J						
TOLUENE	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
TRICHLOROETHYLENE	UG/L	3	12/03/92	0.6	J	06/03/93	0.6	J	06/03/93	0.6	J						
XYLENE (TOTAL)	UG/L	3	12/03/92	1	U	06/03/93	1	U	06/03/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	5	12/03/92	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	5	12/03/92	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	5	12/03/92	10	U	06/03/93	10	U	06/03/93	8	J	06/03/93	10	U	06/03/93	8	J
DIMETHYL PHTHALATE	UG/L	5	12/03/92	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	5	12/03/92	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U
PHENOL	UG/L	5	12/03/92	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U	06/03/93	10	U
PESTICIDES AND PCBs																	
4,4'-DDT	UG/L	3	12/03/92	0.1	U	06/03/93	0.1	U	06/03/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	12/03/92	0.05	U	06/03/93	0.05	U	06/03/93	0.05	U						
DIELDRIN	UG/L	3	12/03/92	0.1	U	06/03/93	0.1	U	06/03/93	0.1	U						
HEPTACHLOR	UG/L	3	12/03/92	0.05	U	06/03/93	0.05	U	06/03/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	06/03/93	1.85	U	06/03/93	1.85	U									
2,4-D8	UG/L	2	06/03/93	0.98	U	06/03/93	0.98	U									
DICHLOROPROP	UG/L	2	06/03/93	1.52	U	06/03/93	1.52	U									
MCPP	UG/L	2	06/03/93	522	U	06/03/93	522	U									
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TPH-DIESEL	UG/L	3	12/03/92	250	U	06/03/93	250	U	06/03/93	250	U						
TPH-GASOLINE	UG/L	3	12/03/92	50	U	06/03/93	50	U	06/03/93	50	U						
METALS																	
ALUMINUM	UG/L	3	12/03/92	31	U	06/03/93	22.8	U	06/03/93	22.8	U						
ANTIMONY	UG/L	3	12/03/92	12.1	U	06/03/93	9	U	06/03/93	9	U						
ARSENIC	UG/L	3	12/03/92	4	b	06/03/93	5	b	06/03/93	5	b						
BARIUM	UG/L	3	12/03/92	45.2	b	06/03/93	46.4	b	06/03/93	46.4	b						
BERYLLIUM	UG/L	3	12/03/92	0.5	U	06/03/93	0.5	U	06/03/93	0.5	U						
CADMIUM	UG/L	3	12/03/92	1.2	U	06/03/93	1.4	U	06/03/93	1.4	U						
CALCIUM	UG/L	3	12/03/92	121000		06/03/93	124000		06/03/93	124000							
CHROMIUM	UG/L	3	12/03/92	3.7	U	06/03/93	2.9	U	06/03/93	2.9	U						
COBALT	UG/L	3	12/03/92	5.8	U	06/03/93	4.2	U	06/03/93	4.2	U						
COPPER	UG/L	3	12/03/92	1.2	b	06/03/93	0.92	U	06/03/93	0.92	U						
IRON	UG/L	3	12/03/92	8.4	U	06/03/93	32.2	b	06/03/93	32.2	b						
LEAD	UG/L	3	12/03/92	0.6	U	06/03/93	0.4	U	06/03/93	0.4	U						
MAGNESIUM	UG/L	3	12/03/92	33000		06/03/93	34400		06/03/93	34400							
MANGANESE	UG/L	3	12/03/92	2.3	b	06/03/93	1.1	U	06/03/93	1.1	U						
MERCURY	UG/L	3	12/03/92	0.1	U	06/03/93	0.1	U	06/03/93	0.1	U						
NICKEL	UG/L	3	12/03/92	7.7	U	06/03/93	7.1	U	06/03/93	7.1	U						
POTASSIUM	UG/L	3	12/03/92	1830	b	06/03/93	2240	U	06/03/93	2240	U						
SELENIUM	UG/L	3	12/03/92	9.6	b	06/03/93	7	b	06/03/93	7	b						
SILVER	UG/L	3	12/03/92	2.1	U	06/03/93	1.2	U	06/03/93	1.2	U						
SODIUM	UG/L	3	12/03/92	108000		06/03/93	108000		06/03/93	108000							
THALLIUM	UG/L	3	12/03/92	0.7	U	06/03/93	0.9	U	06/03/93	0.9	U						
VANADIUM	UG/L	3	12/03/92	13.1	b	06/03/93	15.1	b	06/03/93	15.1	b						
ZINC	UG/L	3	12/03/92	2.2	U	06/03/93	6	U	06/03/93	6	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	12/03/92	266000		06/03/93	266000		06/03/93	266000							
BICARBONATE (AS CACO3)	UG/L	3	12/03/92	266000		06/03/93	266000		06/03/93	266000							
CHLORIDE	UG/L	3	12/03/92	84500		06/03/93	85900		06/03/93	85900							
CYANIDE	UG/L	3	12/03/92	3	U	06/03/93	1.4	U	06/03/93	1.4	U						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	12/03/92	8090		06/03/93	9230		06/03/93	9230							
SULFATE	UG/L	3	12/03/92	253000		06/03/93	250000		06/03/93	250000							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	1	12/03/92	7.38													
TEMPERATURE, DEGREE C	DEG/C	1	12/03/92	21.4													
TOTAL DISSOLVED SOLIDS	UG/L	3	12/03/92	844000		06/03/93	878000		06/03/93	878000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	2	06/03/93	9.3		06/03/93	9.3										
GROSS BETA	PCI/L	2	06/03/93	14.1		06/03/93	14.1										

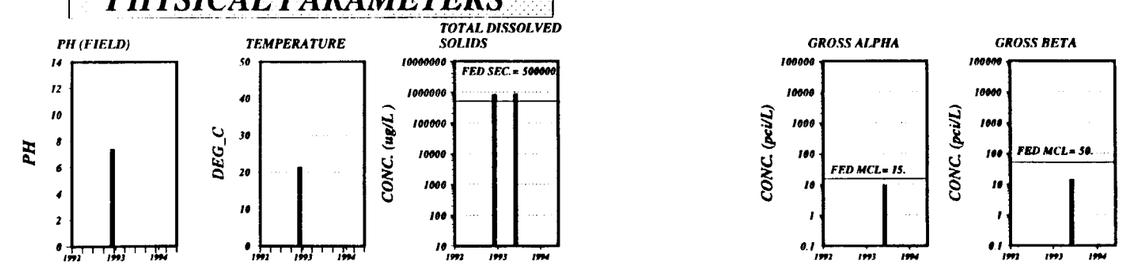
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



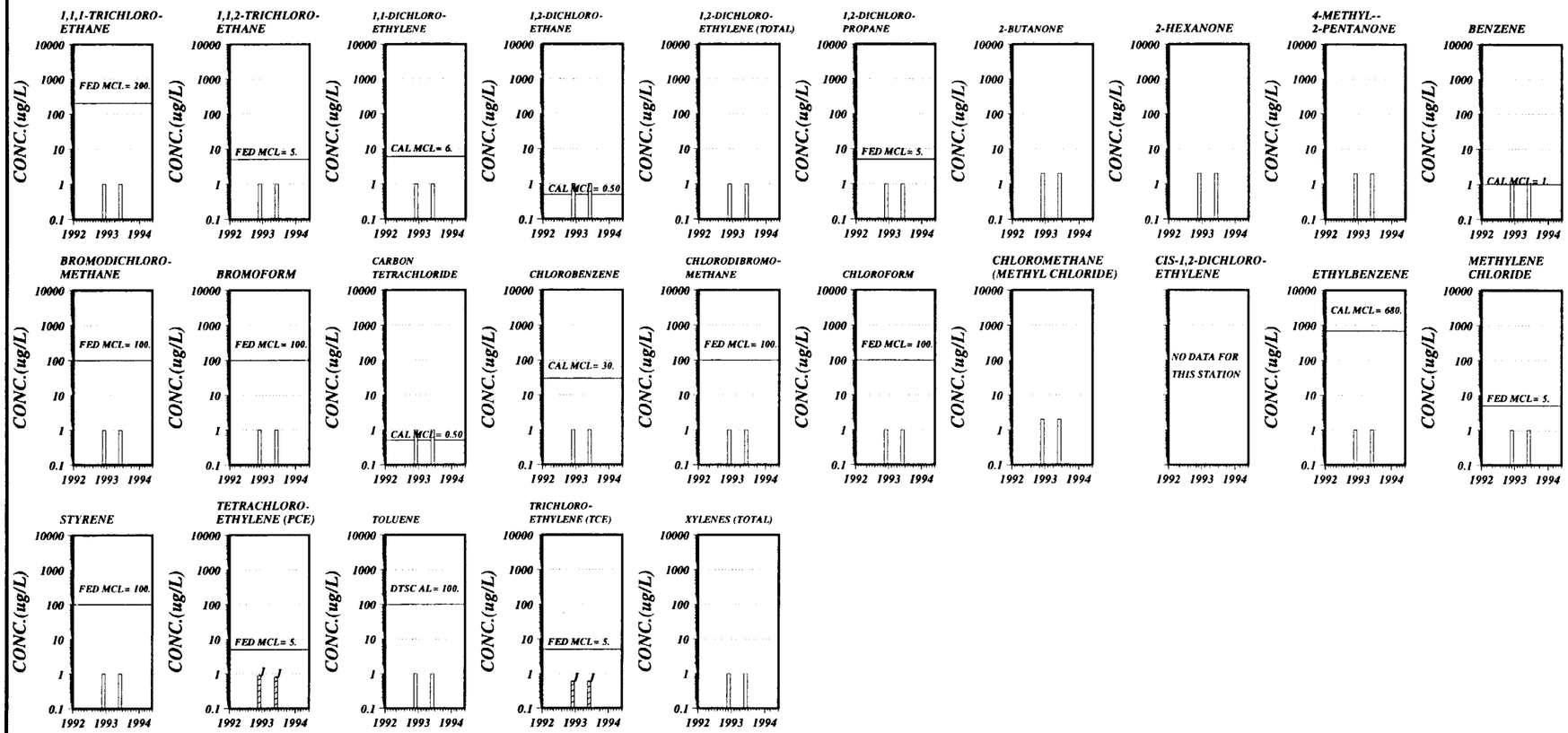
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

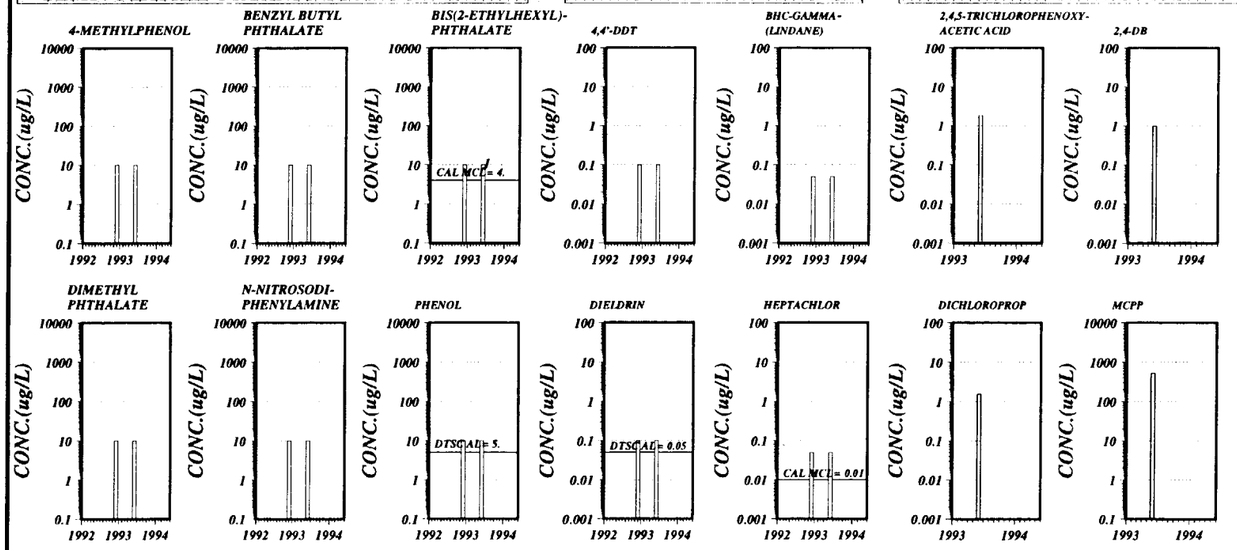
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

05_UGMW27



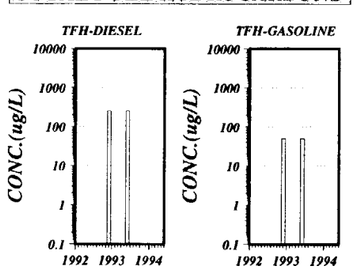
SEMIVOLATILE ORGANIC COMPOUNDS

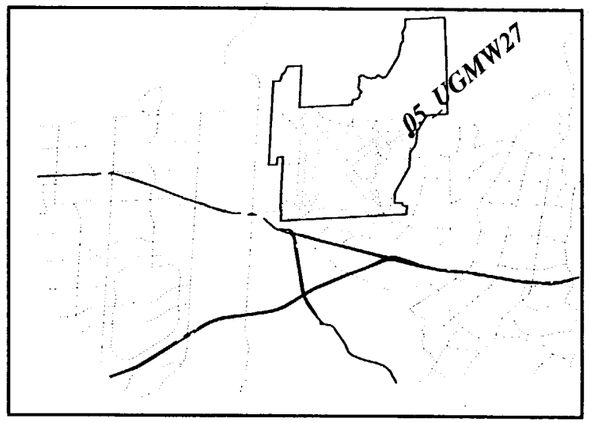


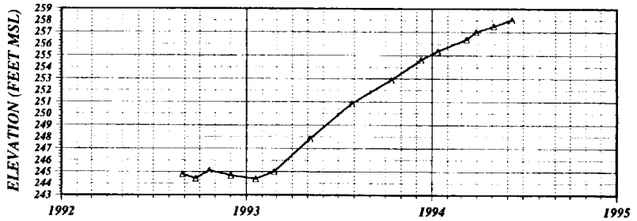
PESTICIDES AND PCBs

HERBICIDES

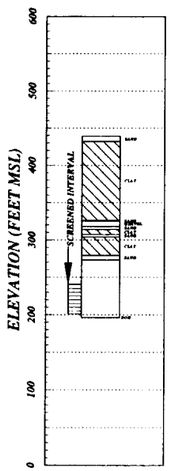
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
7.0	SAND	432.2
113.0	CLAY	326.2
114.0	SAND	325.2
121.0	GRAVEL	318.2
125.0	SAND	314.2
132.0	CLAY	307.2
135.0	SAND	304.2
160.0	CLAY	279.2
166.0	SAND	273.2
243.0	TD	196.2

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

05_UGMW27 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	439.20		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	243.00	196.20		
CASE TOP	-1.00	440.20		
CASE BASE	198.00	241.20		
SCREEN TOP	198.00	241.20		
SCREEN BASE	238.00	201.20		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 05_UGMW27

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Tue Jul 26 11:43:13 1994

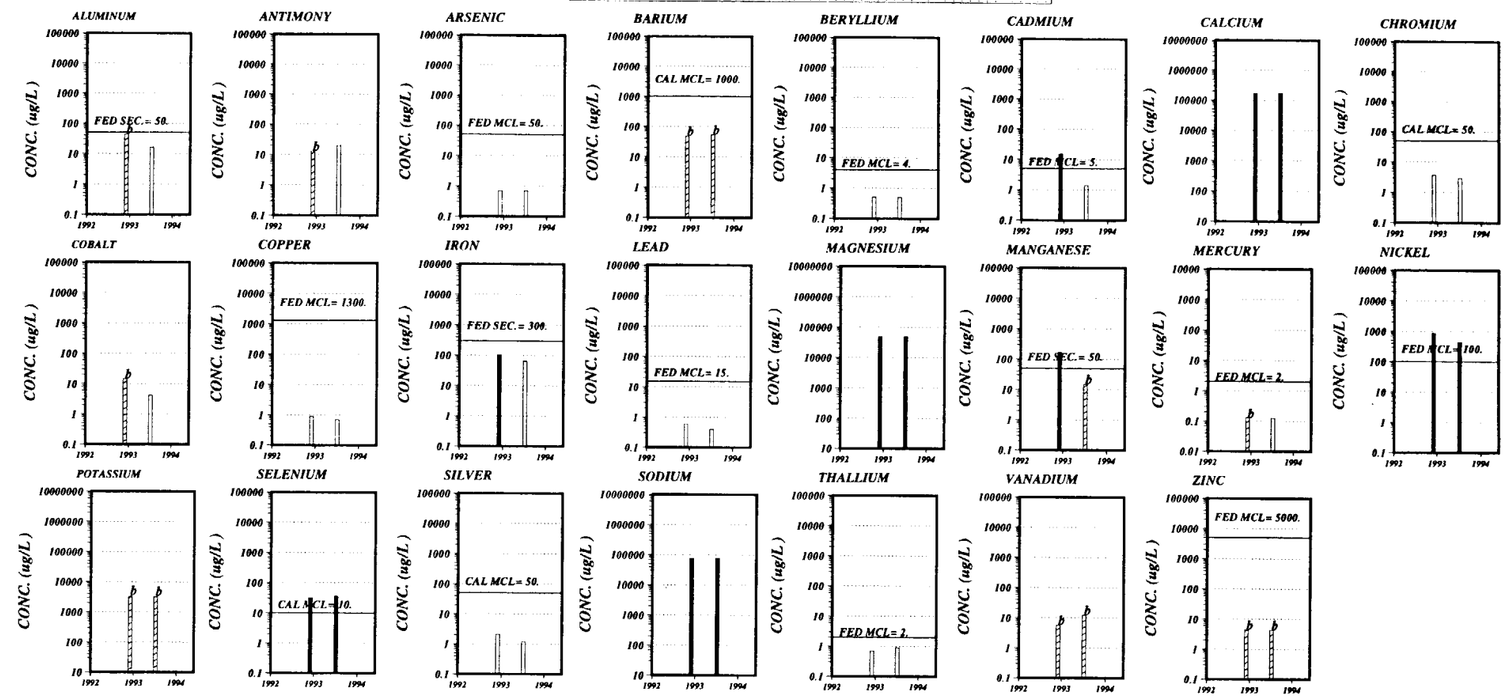
Site 6
Drop Tank Drainage Area No. 1

CHEMICAL DATA SUMMARY FOR WELL 06_DGMW69

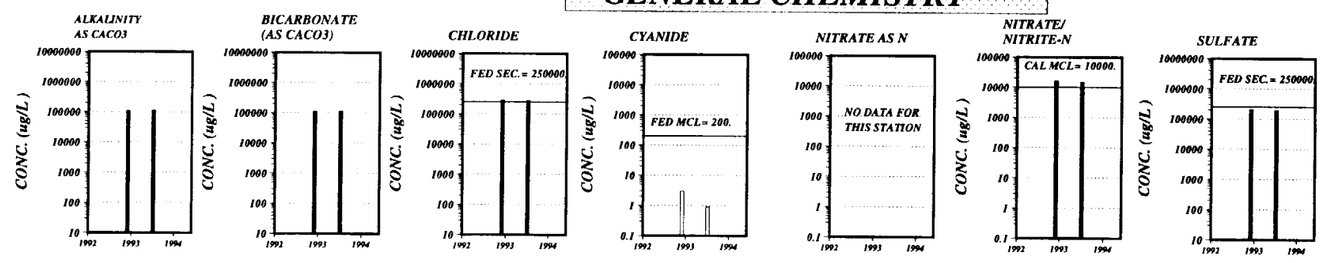
Table B-18
Groundwater Quality Data Summary - Well 06_DGMW69
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/02/92	0.4	J	07/07/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/02/92	1	U	07/07/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/02/92	1	U	07/07/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/02/92	1	U	07/07/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/02/92	1	U	07/07/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/02/92	1	U	07/07/93	1	U
2-BUTANONE	UG/L	2	12/02/92	2	U	07/07/93	2	U
2-HEXANONE	UG/L	2	12/02/92	2	U	07/07/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/02/92	2	U	07/07/93	2	U
BENZENE	UG/L	2	12/02/92	1	U	07/07/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/02/92	1	U	07/07/93	1	U
BROMOFORM	UG/L	2	12/02/92	1	U	07/07/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/02/92	1	U	07/07/93	1	U
CHLOROBENZENE	UG/L	2	12/02/92	1	U	07/07/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/02/92	1	U	07/07/93	1	U
CHLOROFORM	UG/L	2	12/02/92	1	U	07/07/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/02/92	2	U	07/07/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/02/92	1	U	07/07/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/02/92	1	U	07/07/93	1	U
STYRENE	UG/L	2	12/02/92	1	U	07/07/93	1	U
TETRACHLOROETHENE	UG/L	2	12/02/92	1	U	07/07/93	1	U
TOLUENE	UG/L	2	12/02/92	1	U	07/07/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/02/92	1	U	07/07/93	1	U
XYLENE (TOTAL)	UG/L	2	12/02/92	1	U	07/07/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/02/92	10	U	07/07/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/02/92	10	U	07/07/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/02/92	10	U	07/07/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/02/92	10	U	07/07/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/02/92	10	U	07/07/93	10	U
PHENOL	UG/L	2	12/02/92	14		07/07/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/02/92	0.1	U	07/07/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/02/92	0.05	U	07/07/93	0.05	U
DIELDRIN	UG/L	2	12/02/92	0.1	U	07/07/93	0.1	U
HEPTACHLOR	UG/L	2	12/02/92	0.05	U	07/07/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/02/92	250	U	07/07/93	250	U
TFH-GASOLINE	UG/L	2	12/02/92	50	U	07/07/93	50	U
METALS								
ALUMINUM	UG/L	2	12/02/92	43.9	b	07/07/93	16.1	U
ANTIMONY	UG/L	2	12/02/92	12.9	b	07/07/93	19.8	U
ARSENIC	UG/L	2	12/02/92	0.7	U	07/07/93	0.7	U
BARIUM	UG/L	2	12/02/92	48	b	07/07/93	53.1	b
BERYLLIUM	UG/L	2	12/02/92	0.5	U	07/07/93	0.5	U
CADMIUM	UG/L	2	12/02/92	15.3		07/07/93	1.4	U
CALCIUM	UG/L	2	12/02/92	169000		07/07/93	170000	
CHROMIUM	UG/L	2	12/02/92	3.7	U	07/07/93	2.9	U
COBALT	UG/L	2	12/02/92	14.4	b	07/07/93	4.2	U
COPPER	UG/L	2	12/02/92	0.9	U	07/07/93	0.7	U
IRON	UG/L	2	12/02/92	104		07/07/93	64	U
LEAD	UG/L	2	12/02/92	0.6	U	07/07/93	0.4	U
MAGNESIUM	UG/L	2	12/02/92	47800		07/07/93	47900	
MANGANESE	UG/L	2	12/02/92	167		07/07/93	15	b
MERCURY	UG/L	2	12/02/92	0.13	b	07/07/93	0.1	U
NICKEL	UG/L	2	12/02/92	866		07/07/93	434	
POTASSIUM	UG/L	2	12/02/92	3350	b	07/07/93	3180	b
SELENIUM	UG/L	2	12/02/92	31.4		07/07/93	36.6	
SILVER	UG/L	2	12/02/92	2.1	U	07/07/93	1.2	U
SODIUM	UG/L	2	12/02/92	76000		07/07/93	78000	
THALLIUM	UG/L	2	12/02/92	0.7	U	07/07/93	0.9	U
VANADIUM	UG/L	2	12/02/92	5.7	b	07/07/93	12.3	b
ZINC	UG/L	2	12/02/92	4.4	b	07/07/93	4.3	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/02/92	110000		07/07/93	113000	
BICARBONATE (AS CACO3)	UG/L	2	12/02/92	110000		07/07/93	113000	
CHLORIDE	UG/L	2	12/02/92	286000		07/07/93	283000	
CYANIDE	UG/L	2	12/02/92	3	U	07/07/93	0.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/02/92	16300		07/07/93	15100	
SULFATE	UG/L	2	12/02/92	209000		07/07/93	197000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	12/02/92	6.91		07/07/93	7	
TEMPERATURE, DEGREE C	DEG/C	2	12/02/92	24.1		07/07/93	25	
TOTAL DISSOLVED SOLIDS	UG/L	2	12/02/92	1080000		07/07/93	1330000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

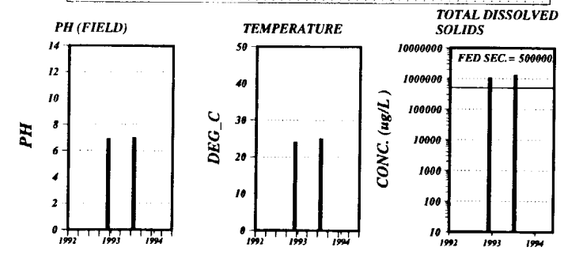
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



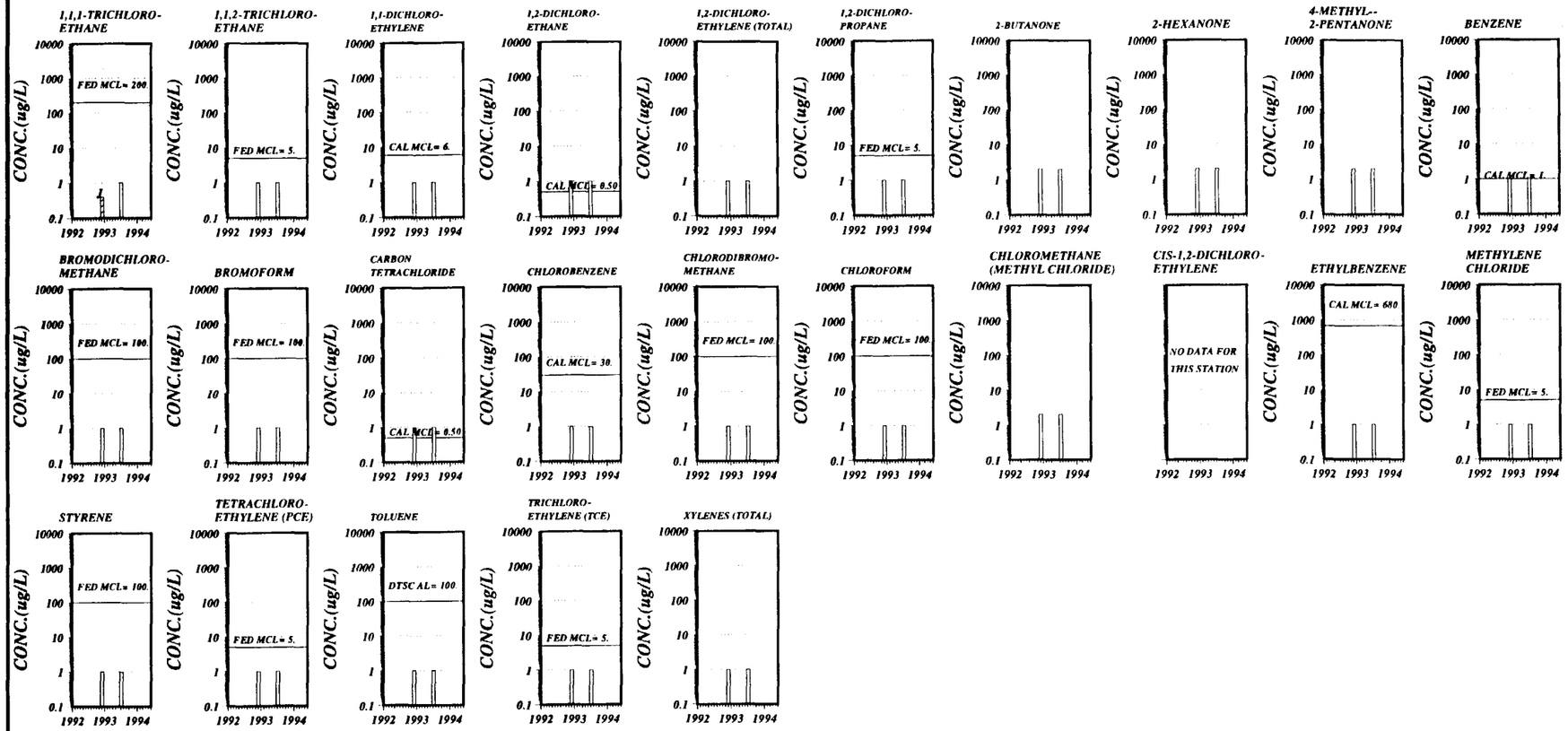
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

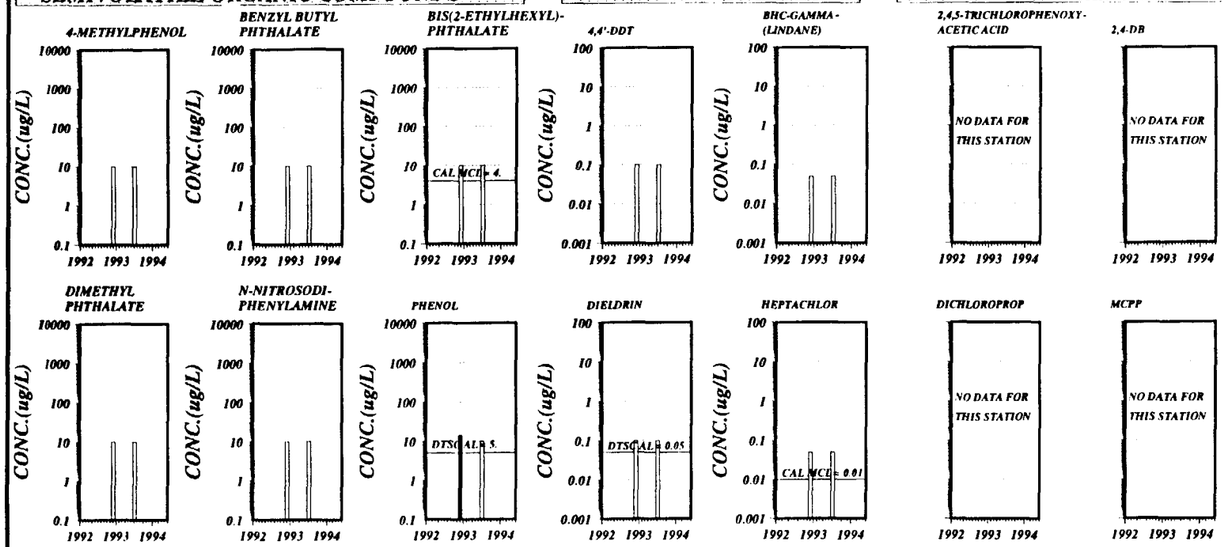
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

06_DGMW69



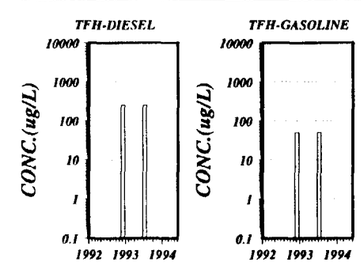
SEMIVOLATILE ORGANIC COMPOUNDS

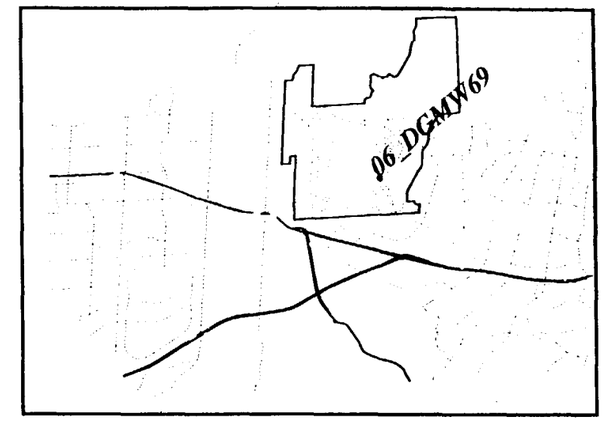


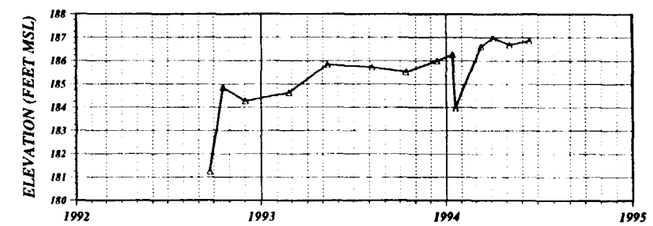
PESTICIDES AND PCBs

HERBICIDES

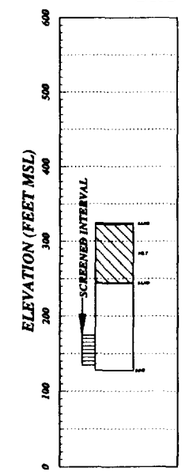
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
2.0	SAND	322.5
80.0	SILT	244.5
81.0	SAND	243.5
197.0	TD	127.5

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

06_DGMW69 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	324.45		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	195.00	129.45		
CASE TOP				
CASE BASE	150.00	174.45		
SCREEN TOP	150.00	174.45		
SCREEN BASE	190.00	134.45		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 06_DGMW69

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

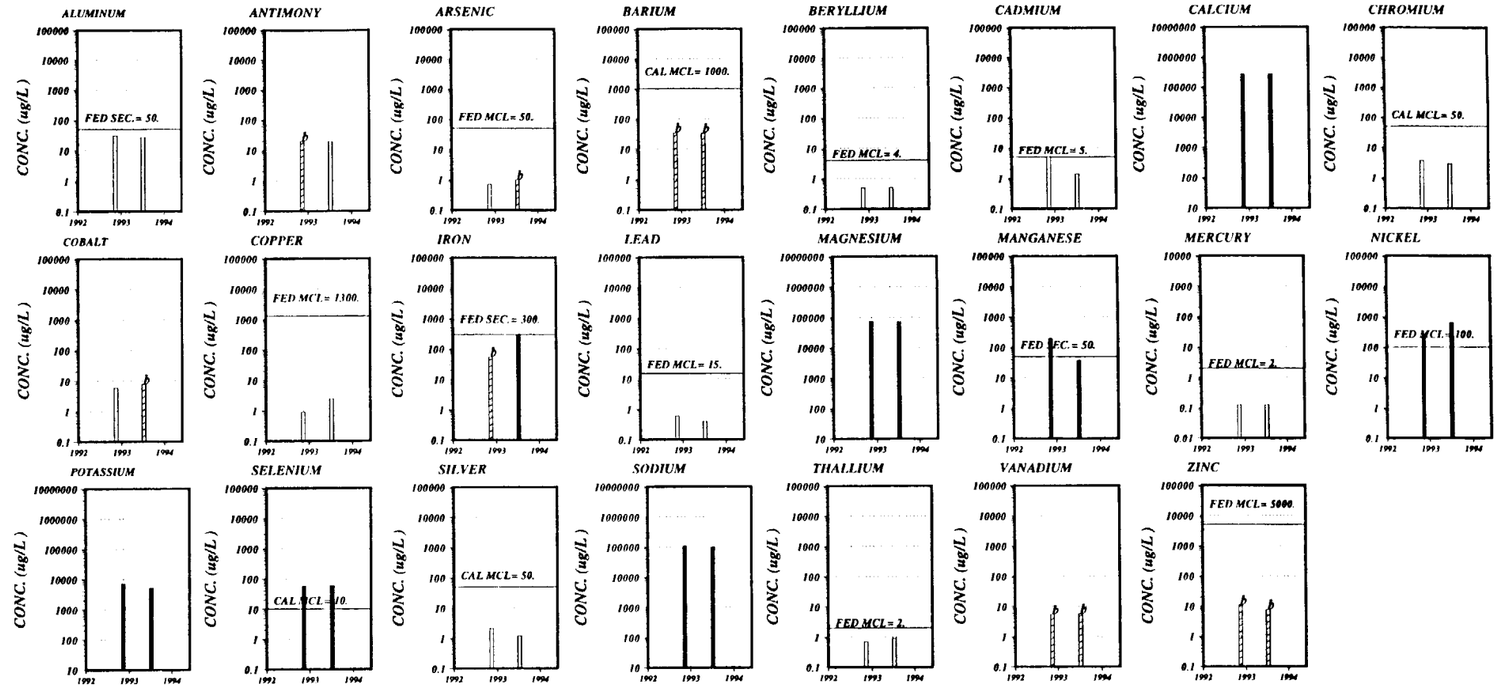
Tue Jul 26 11:44:55 1994

CHEMICAL DATA SUMMARY FOR WELL 06_UGMW28

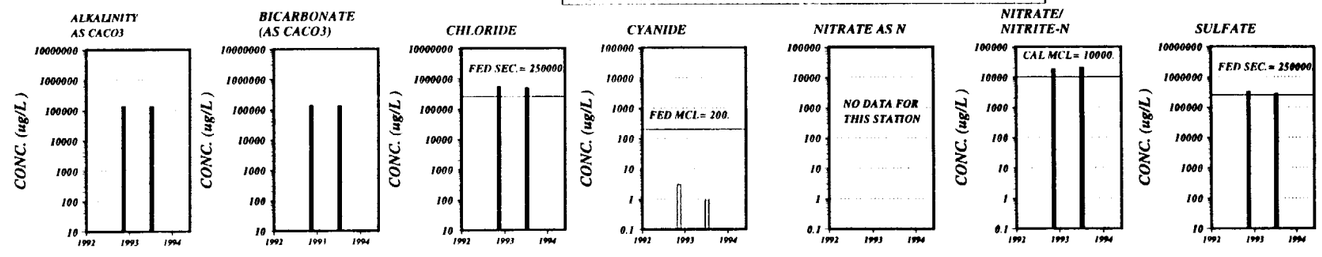
Table B-19
Groundwater Quality Data Summary - Well 06_UGMW28
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	11/13/92	1	U	07/09/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	11/13/92	1	U	07/09/93	1	U
1,1-DICHLOROETHENE	UG/L	2	11/13/92	1	U	07/09/93	1	U
1,2-DICHLOROETHANE	UG/L	2	11/13/92	1	U	07/09/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	11/13/92	1	U	07/09/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	11/13/92	1	U	07/09/93	1	U
2-BUTANONE	UG/L	2	11/13/92	2	U	07/09/93	2	U
2-HEXANONE	UG/L	2	11/13/92	2	U	07/09/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	11/13/92	2	U	07/09/93	2	U
BENZENE	UG/L	2	11/13/92	1	U	07/09/93	1	U
BROMODICHLOROMETHANE	UG/L	2	11/13/92	1	U	07/09/93	1	U
BROMOFORM	UG/L	2	11/13/92	1	U	07/09/93	1	U
CARBON TETRACHLORIDE	UG/L	2	11/13/92	1	U	07/09/93	1	U
CHLOROBENZENE	UG/L	2	11/13/92	1	U	07/09/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	11/13/92	1	U	07/09/93	1	U
CHLOROFORM	UG/L	2	11/13/92	1	U	07/09/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	11/13/92	2	J	07/09/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	11/13/92	1	U	07/09/93	1	U
METHYLENE CHLORIDE	UG/L	2	11/13/92	1	U	07/09/93	1	U
STYRENE	UG/L	2	11/13/92	1	U	07/09/93	1	U
TETRACHLOROETHENE	UG/L	2	11/13/92	1	U	07/09/93	1	U
TOLUENE	UG/L	2	11/13/92	1	U	07/09/93	1	U
TRICHLOROETHYLENE	UG/L	2	11/13/92	1	U	07/09/93	1	U
XYLENE (TOTAL)	UG/L	2	11/13/92	1	U	07/09/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	11/13/92	10	U	07/09/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	11/13/92	3	J	07/09/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	11/13/92	10	U	07/09/93	10	U
DIMETHYL PHTHALATE	UG/L	2	11/13/92	10	U	07/09/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	11/13/92	10	U	07/09/93	10	U
PHENOL	UG/L	2	11/13/92	10	U	07/09/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	11/13/92	0.1	U	07/09/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	11/13/92	0.05	U	07/09/93	0.05	U
DIELDRIN	UG/L	2	11/13/92	0.1	U	07/09/93	0.1	U
HEPTACHLOR	UG/L	2	11/13/92	0.05	U	07/09/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	11/13/92	250	U	07/09/93	250	U
TFH-GASOLINE	UG/L	2	11/13/92	50	U	07/09/93	50	U
METALS								
ALUMINUM	UG/L	2	11/13/92	31	U	07/09/93	27.9	U
ANTIMONY	UG/L	2	11/13/92	19.6	b	07/09/93	19.8	U
ARSENIC	UG/L	2	11/13/92	0.7	U	07/09/93	1	b
BARIUM	UG/L	2	11/13/92	34.4	b	07/09/93	33.2	b
BERYLLIUM	UG/L	2	11/13/92	0.5	U	07/09/93	0.5	U
CADMIUM	UG/L	2	11/13/92	5.2	U	07/09/93	1.4	U
CALCIUM	UG/L	2	11/13/92	264000		07/09/93	266000	
CHROMIUM	UG/L	2	11/13/92	3.7	U	07/09/93	2.9	U
COBALT	UG/L	2	11/13/92	5.8	U	07/09/93	7.8	b
COPPER	UG/L	2	11/13/92	0.9	U	07/09/93	2.5	U
IRON	UG/L	2	11/13/92	54.5	b	07/09/93	294	
LEAD	UG/L	2	11/13/92	0.6	U	07/09/93	0.4	U
MAGNESIUM	UG/L	2	11/13/92	73000		07/09/93	70300	
MANGANESE	UG/L	2	11/13/92	197		07/09/93	37.7	
MERCURY	UG/L	2	11/13/92	0.1	U	07/09/93	0.1	U
NICKEL	UG/L	2	11/13/92	230		07/09/93	843	
POTASSIUM	UG/L	2	11/13/92	7220		07/09/93	5180	
SELENIUM	UG/L	2	11/13/92	56.2		07/09/93	58.2	
SILVER	UG/L	2	11/13/92	2.1	U	07/09/93	1.2	U
SODIUM	UG/L	2	11/13/92	109000		07/09/93	99900	
THALLIUM	UG/L	2	11/13/92	0.7	U	07/09/93	0.9	U
VANADIUM	UG/L	2	11/13/92	5.4	b	07/09/93	5.7	b
ZINC	UG/L	2	11/13/92	10.9	b	07/09/93	7.7	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	11/13/92	136000		07/09/93	134000	
BICARBONATE (AS CACO3)	UG/L	2	11/13/92	136000		07/09/93	134000	
CHLORIDE	UG/L	2	11/13/92	541000		07/09/93	494000	
CYANIDE	UG/L	2	11/13/92	3	U	07/09/93	0.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	11/13/92	18800		07/09/93	20400	
SULFATE	UG/L	2	11/13/92	332000		07/09/93	277000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	11/13/92	6.68		07/09/93	7	
TEMPERATURE, DEGREE C	DEG/C	1	11/13/92	24.2				
TOTAL DISSOLVED SOLIDS	UG/L	2	11/13/92	1890000		07/09/93	2180000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

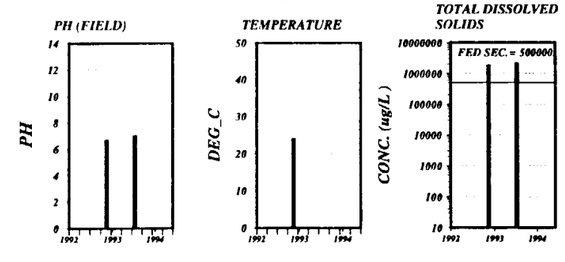
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



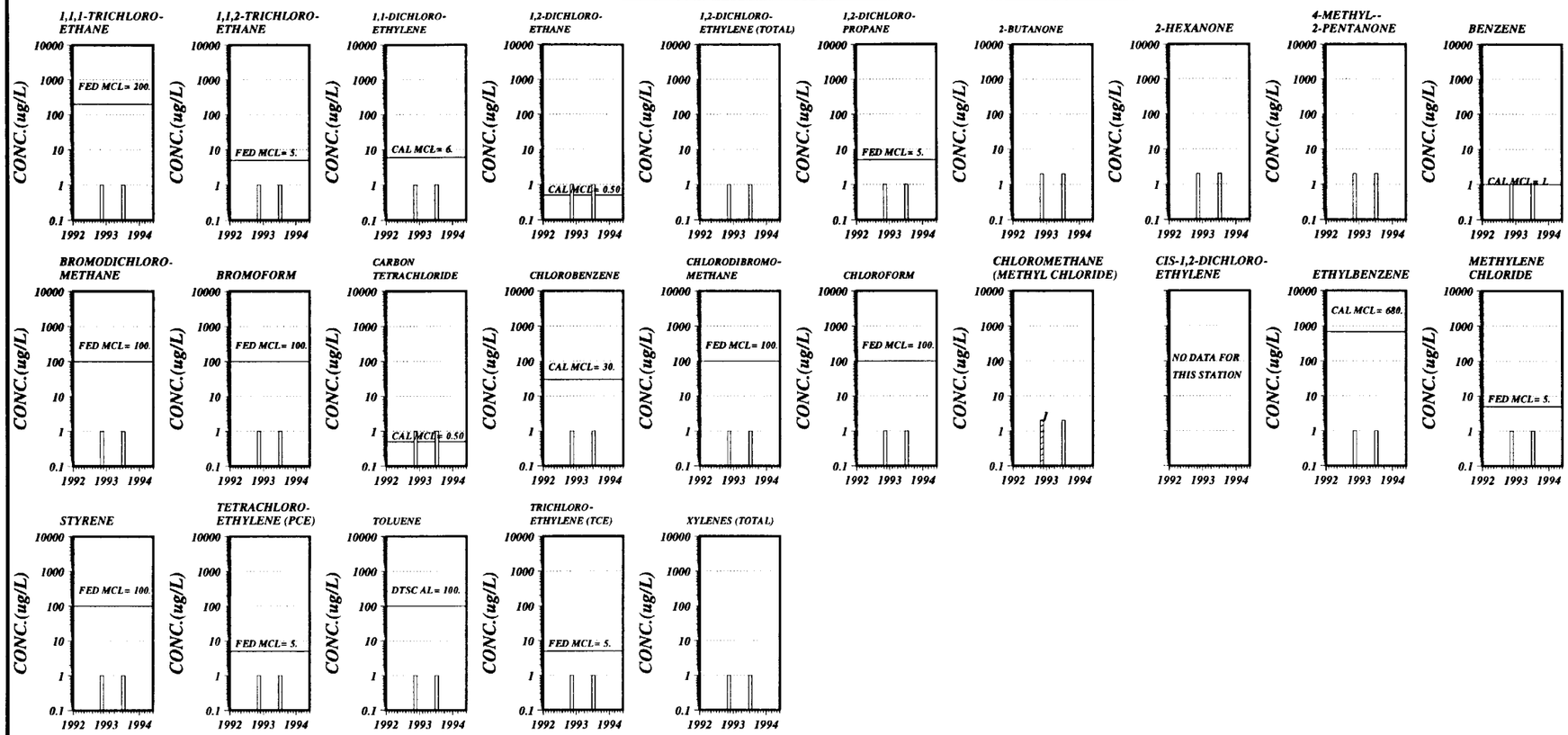
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

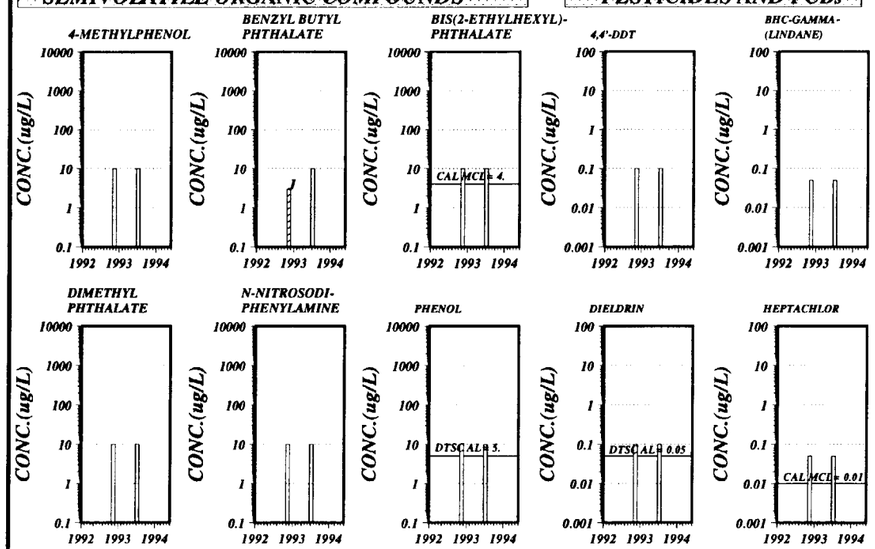
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

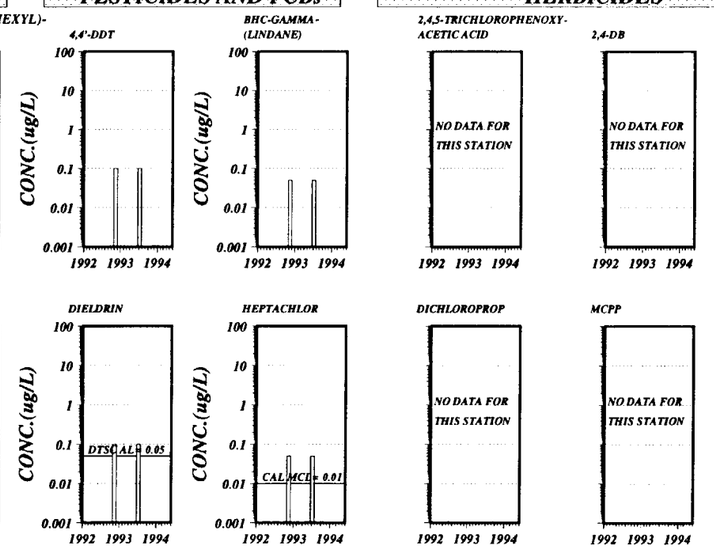
06_UGMW28



SEMIVOLATILE ORGANIC COMPOUNDS

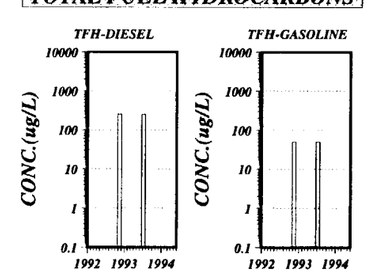


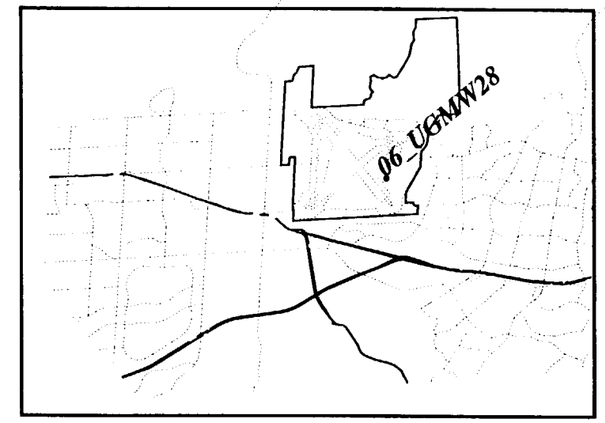
PESTICIDES AND PCBs

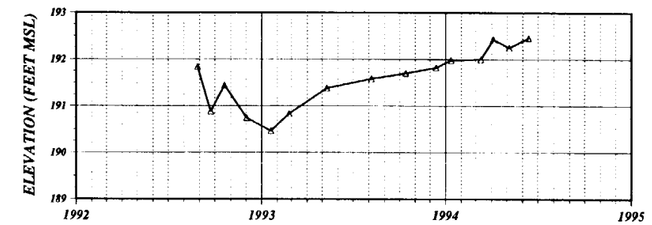


HERBICIDES

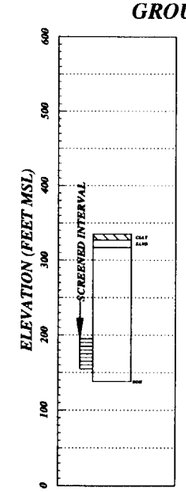
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
8.0	CLAY	326.9
18.0	SAND	316.9
197.0	TD	137.9

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

06_UGMW28 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	334.86		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	198.00	136.86		
CASE TOP				
CASE BASE	140.00	194.86		
SCREEN TOP	140.00	194.86		
SCREEN BASE	180.00	154.86		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 06_UGMW28

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Fri Sep 23 12:43:33 1994

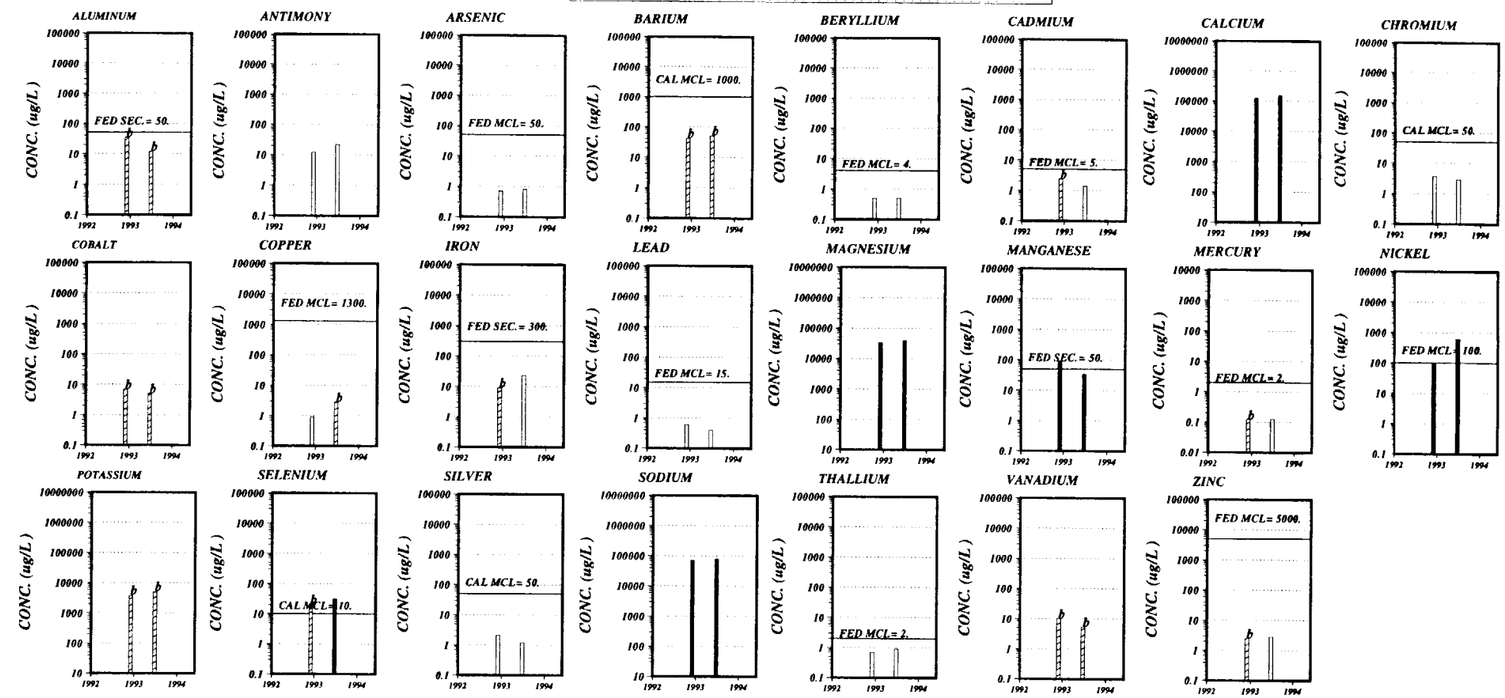
Site 7
Drop Tank Drainage Area No. 2

CHEMICAL DATA SUMMARY FOR WELL 07_DBMW43

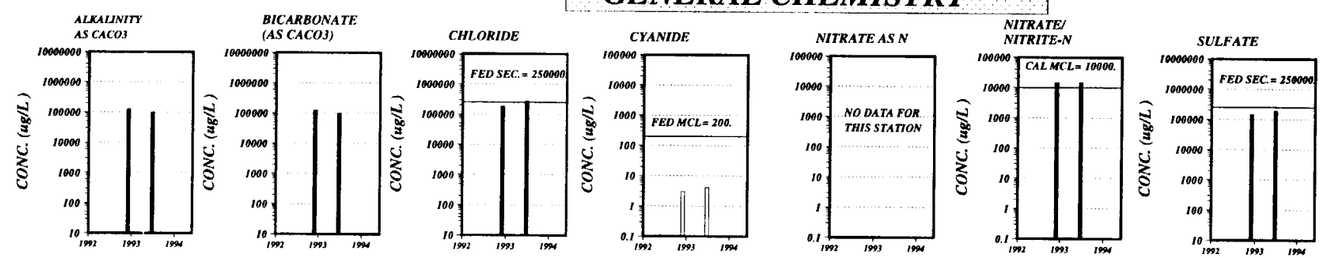
Table B-20
Groundwater Quality Data Summary - Well 07_DBMW43
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/01/92	1	U	06/29/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/01/92	1	U	06/29/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/01/92	1	U	06/29/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/01/92	1	U	06/29/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/01/92	1	U	06/29/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/01/92	1	U	06/29/93	1	U
2-BUTANONE	UG/L	2	12/01/92	2	U	06/29/93	2	U
2-HEXANONE	UG/L	2	12/01/92	2	U	06/29/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/01/92	2	U	06/29/93	2	U
BENZENE	UG/L	2	12/01/92	1	U	06/29/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/01/92	1	U	06/29/93	1	U
BROMOFORM	UG/L	2	12/01/92	1	U	06/29/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/01/92	0.3	J	06/29/93	1	U
CHLOROBENZENE	UG/L	2	12/01/92	1	U	06/29/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/01/92	1	U	06/29/93	1	U
CHLOROFORM	UG/L	2	12/01/92	1	U	06/29/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/01/92	2	U	06/29/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/01/92	1	U	06/29/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/01/92	1	U	06/29/93	1	U
STYRENE	UG/L	2	12/01/92	1	U	06/29/93	1	U
TETRACHLOROETHENE	UG/L	2	12/01/92	1	U	06/29/93	1	U
TOLUENE	UG/L	2	12/01/92	1	U	06/29/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/01/92	1	U	06/29/93	1	U
XYLENE (TOTAL)	UG/L	2	12/01/92	1	U	06/29/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/01/92	10	U	06/29/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/01/92	10	U	06/29/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/01/92	10	U	06/29/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/01/92	10	U	06/29/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/01/92	10	U	06/29/93	10	U
PHENOL	UG/L	2	12/01/92	10	U	06/29/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/01/92	0.1	U	06/29/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/01/92	0.05	U	06/29/93	0.05	U
DIELDRIN	UG/L	2	12/01/92	0.1	U	06/29/93	0.1	U
HEPTACHLOR	UG/L	2	12/01/92	0.05	U	06/29/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/01/92	250	U	06/29/93	250	U
TFH-GASOLINE	UG/L	2	12/01/92	50	U	06/29/93	50	U
METALS								
ALUMINUM	UG/L	2	12/01/92	34.2	b	06/25/93	11.9	b
ANTIMONY	UG/L	2	12/01/92	12.1	U	06/25/93	22	U
ARSENIC	UG/L	2	12/01/92	0.7	U	06/25/93	0.8	U
BARIUM	UG/L	2	12/01/92	41.3	b	06/25/93	51.2	b
BERYLLIUM	UG/L	2	12/01/92	0.5	U	06/25/93	0.5	U
CADMIUM	UG/L	2	12/01/92	2.4	b	06/25/93	1.4	U
CALCIUM	UG/L	2	12/01/92	122000		06/25/93	150000	
CHROMIUM	UG/L	2	12/01/92	3.7	U	06/25/93	2.9	U
COBALT	UG/L	2	12/01/92	6.9	b	06/25/93	5	b
COPPER	UG/L	2	12/01/92	0.9	U	06/25/93	2.8	b
IRON	UG/L	2	12/01/92	9	b	06/25/93	23.4	U
LEAD	UG/L	2	12/01/92	0.6	U	06/25/93	0.4	U
MAGNESIUM	UG/L	2	12/01/92	33400		06/25/93	39200	
MANGANESE	UG/L	2	12/01/92	90.8		06/25/93	34.2	
MERCURY	UG/L	2	12/01/92	0.12	b	06/25/93	0.1	U
NICKEL	UG/L	2	12/01/92	95.8		06/25/93	615	
POTASSIUM	UG/L	2	12/01/92	3680	b	06/25/93	4920	b
SELENIUM	UG/L	2	12/01/92	20.6	b	06/25/93	31.6	
SILVER	UG/L	2	12/01/92	2.1	U	06/25/93	1.2	U
SODIUM	UG/L	2	12/01/92	70100		06/25/93	78200	
THALLIUM	UG/L	2	12/01/92	0.7	U	06/25/93	0.9	U
VANADIUM	UG/L	2	12/01/92	10	b	06/25/93	5.4	b
ZINC	UG/L	2	12/01/92	2.5	b	06/25/93	2.8	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/01/92	126000		06/25/93	100000	
BICARBONATE (AS CACO3)	UG/L	2	12/01/92	126000		06/25/93	100000	
CHLORIDE	UG/L	2	12/01/92	185000		06/25/93	272000	
CYANIDE	UG/L	2	12/01/92	3	U	06/25/93	4.1	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/01/92	14800		06/25/93	14600	
SULFATE	UG/L	2	12/01/92	144000		06/25/93	191000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	1	06/25/93	7.05				
TEMPERATURE, DEGREE C	DEG/C	1	06/25/93	27.6				
TOTAL DISSOLVED SOLIDS	UG/L	2	12/01/92	880000		06/25/93	1220000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

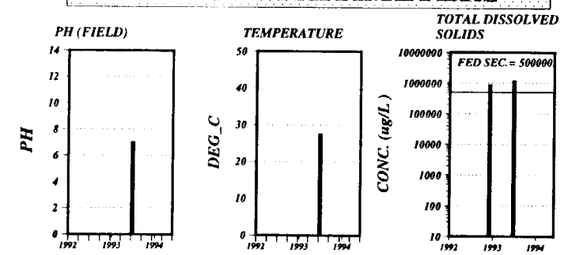
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



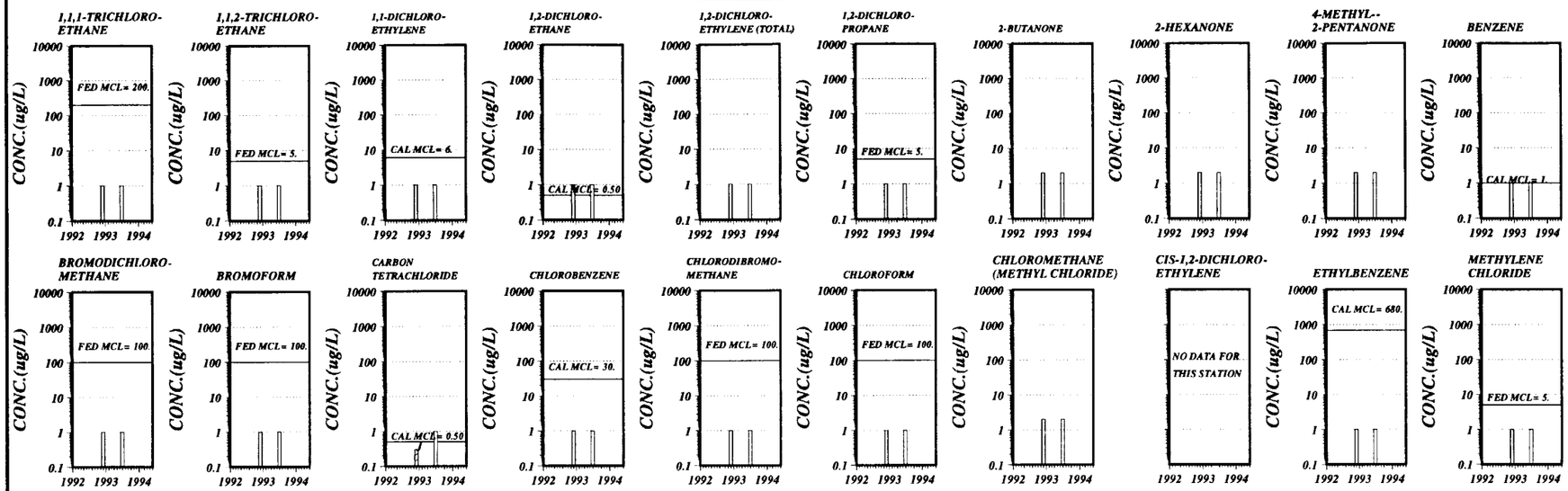
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

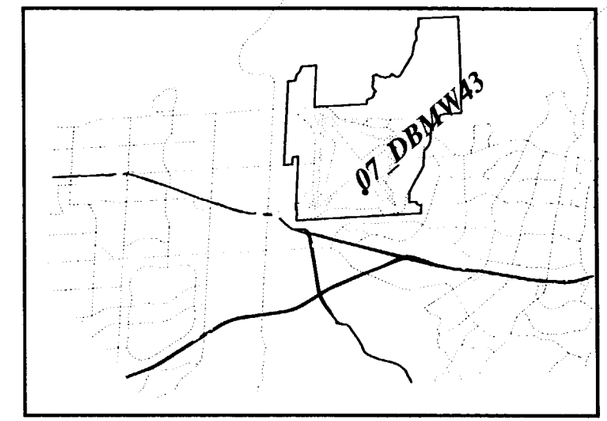
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

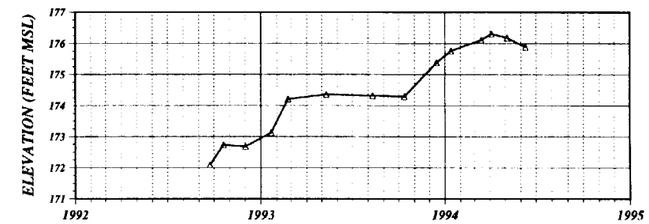
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

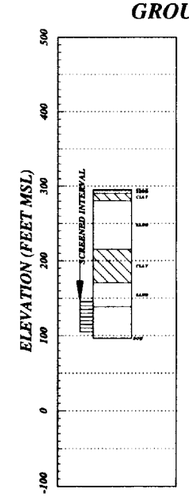
07_DBMW43







GROUNDWATER LEVEL HYDROGRAPH

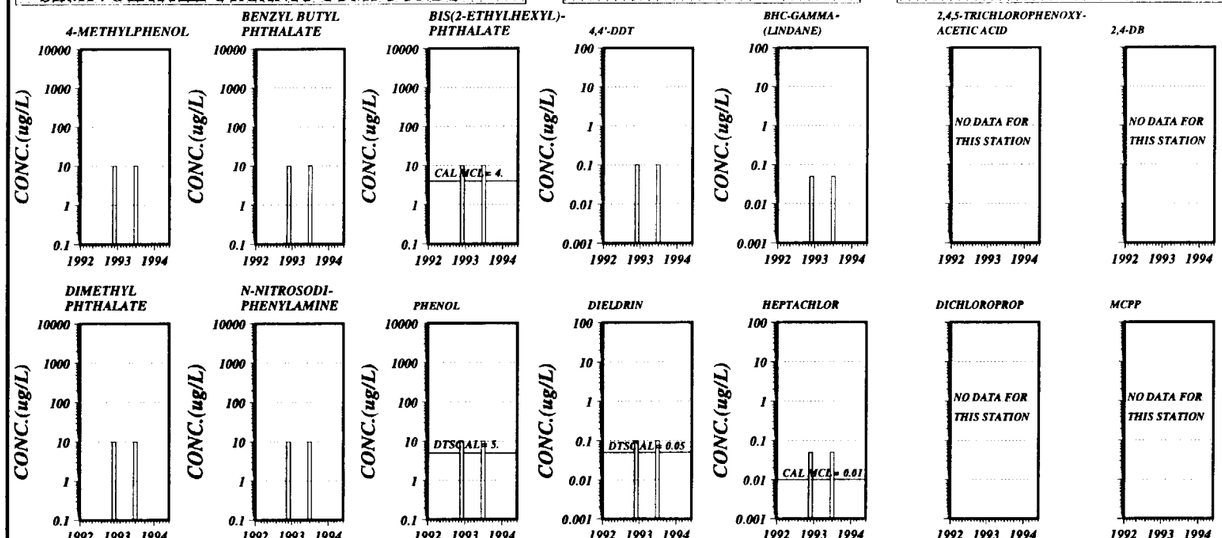


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
1.0	CLAY	294.3
5.0	SAND	290.3
15.0	CLAY	280.3
80.0	SAND	215.3
125.0	CLAY	170.3
157.0	SAND	138.3
199.0	TD	96.3

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

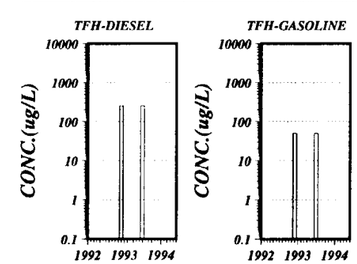
SEMIVOLATILE ORGANIC COMPOUNDS



PESTICIDES AND PCBs

HERBICIDES

TOTAL FUEL HYDROCARBONS



07_DBMW43 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	295.30		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	199.00	96.30		
CASE TOP				
CASE BASE	150.40	144.90		
SCREEN TOP	150.00	145.30		
SCREEN BASE	190.00	105.30		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 07_DBMW43

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

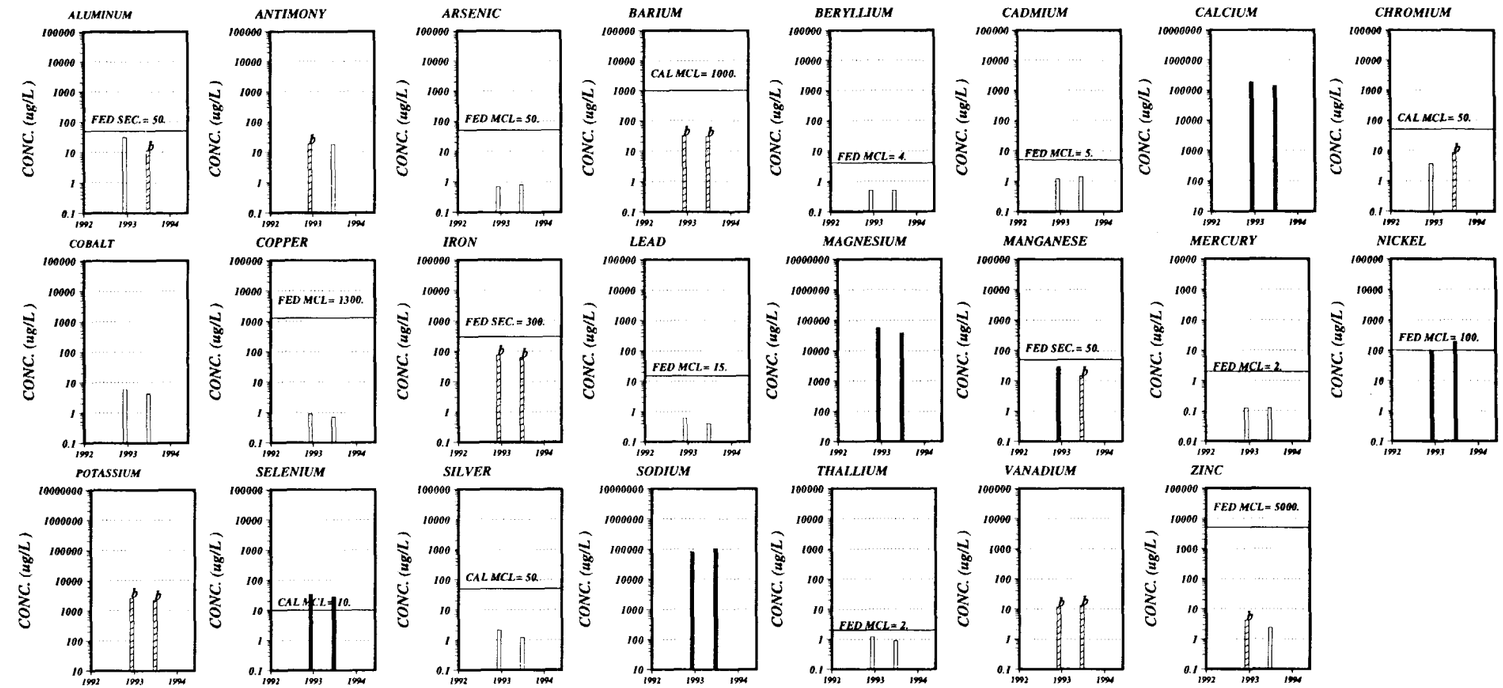
Fri Sep 23 15:01:17 1994

CHEMICAL DATA SUMMARY FOR WELL 07_DBMW70

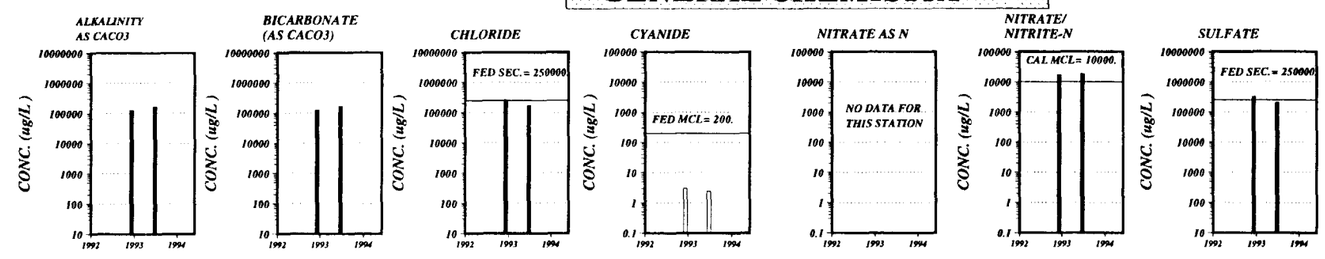
Table B-21
Groundwater Quality Data Summary - Well 07_DBMW70
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/08/92	1	U	06/29/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/08/92	1	U	06/29/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/08/92	1	U	06/29/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/08/92	1	U	06/29/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/08/92	1	U	06/29/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/08/92	1	U	06/29/93	1	U
2-BUTANONE	UG/L	2	12/08/92	2	U	06/29/93	2	U
2-HEXANONE	UG/L	2	12/08/92	2	U	06/29/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/08/92	2	U	06/29/93	2	U
BENZENE	UG/L	2	12/08/92	1	U	06/29/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/08/92	1	U	06/29/93	1	U
BROMOFORM	UG/L	2	12/08/92	1	U	06/29/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/08/92	1		06/29/93	4	
CHLOROBENZENE	UG/L	2	12/08/92	1	U	06/29/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/08/92	1	U	06/29/93	1	U
CHLOROFORM	UG/L	2	12/08/92	1	U	06/29/93	0.9	J
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/08/92	2	U	06/29/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/08/92	1	U	06/29/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/08/92	2	*	06/29/93	1	U
STYRENE	UG/L	2	12/08/92	1	U	06/29/93	1	U
TETRACHLOROETHENE	UG/L	2	12/08/92	1	U	06/29/93	1	U
TOLUENE	UG/L	2	12/08/92	1	U	06/29/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/08/92	1	U	06/29/93	1	U
XYLENE (TOTAL)	UG/L	2	12/08/92	1	U	06/29/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/08/92	10	U	06/29/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/08/92	10	U	06/29/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/08/92	10	U	06/29/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/08/92	10	U	06/29/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/08/92	10	U	06/29/93	10	U
PHENOL	UG/L	2	12/08/92	10	U	06/29/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/08/92	0.1	U	06/29/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/08/92	0.05	U	06/29/93	0.05	U
DIELDRIN	UG/L	2	12/08/92	0.1	U	06/29/93	0.1	U
HEPTACHLOR	UG/L	2	12/08/92	0.05	U	06/29/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/08/92	2660		06/29/93	250	U
TFH-GASOLINE	UG/L	2	12/08/92	50	U	06/29/93	467	J
METALS								
ALUMINUM	UG/L	2	12/08/92	31	U	06/25/93	11.4	b
ANTIMONY	UG/L	2	12/08/92	18.4	b	06/25/93	17.8	U
ARSENIC	UG/L	2	12/08/92	0.7	U	06/25/93	0.8	U
BARIUM	UG/L	2	12/08/92	32.2	b	06/25/93	29.7	b
BERYLLIUM	UG/L	2	12/08/92	0.5	U	06/25/93	0.5	U
CADMIUM	UG/L	2	12/08/92	1.2	U	06/25/93	1.4	U
CALCIUM	UG/L	2	12/08/92	181000		06/25/93	137000	
CHROMIUM	UG/L	2	12/08/92	3.7	U	06/25/93	8.3	b
COBALT	UG/L	2	12/08/92	5.8	U	06/25/93	4.2	U
COPPER	UG/L	2	12/08/92	0.9	U	06/25/93	0.7	U
IRON	UG/L	2	12/08/92	73.9	b	06/25/93	60.7	b
LEAD	UG/L	2	12/08/92	0.6	U	06/25/93	0.4	U
MAGNESIUM	UG/L	2	12/08/92	56100		06/25/93	38200	
MANGANESE	UG/L	2	12/08/92	28.5		06/25/93	14.4	b
MERCURY	UG/L	2	12/08/92	0.1	U	06/25/93	0.1	U
NICKEL	UG/L	2	12/08/92	93.8		06/25/93	191	
POTASSIUM	UG/L	2	12/08/92	2540	b	06/25/93	2170	b
SELENIUM	UG/L	2	12/08/92	33.8		06/25/93	28.2	
SILVER	UG/L	2	12/08/92	2.1	U	06/25/93	1.2	U
SODIUM	UG/L	2	12/08/92	82600		06/25/93	102000	
THALLIUM	UG/L	2	12/08/92	1.2	U	06/25/93	0.9	U
VANADIUM	UG/L	2	12/08/92	11.8	b	06/25/93	13	b
ZINC	UG/L	2	12/08/92	4.2	b	06/25/93	2.4	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/08/92	126000		06/25/93	166000	
BICARBONATE (AS CACO3)	UG/L	2	12/08/92	126000		06/25/93	166000	
CHLORIDE	UG/L	2	12/08/92	267000		06/25/93	172000	
CYANIDE	UG/L	2	12/08/92	3	U	06/25/93	2.4	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/08/92	17100		06/25/93	18500	
SULFATE	UG/L	2	12/08/92	319000		06/25/93	206000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	1	06/25/93	6.95				
TEMPERATURE, DEGREE C	DEG/C	1	06/25/93	24.2				
TOTAL DISSOLVED SOLIDS	UG/L	2	12/08/92	1210000		06/25/93	963000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

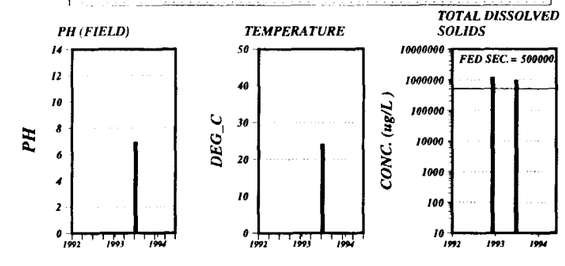
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



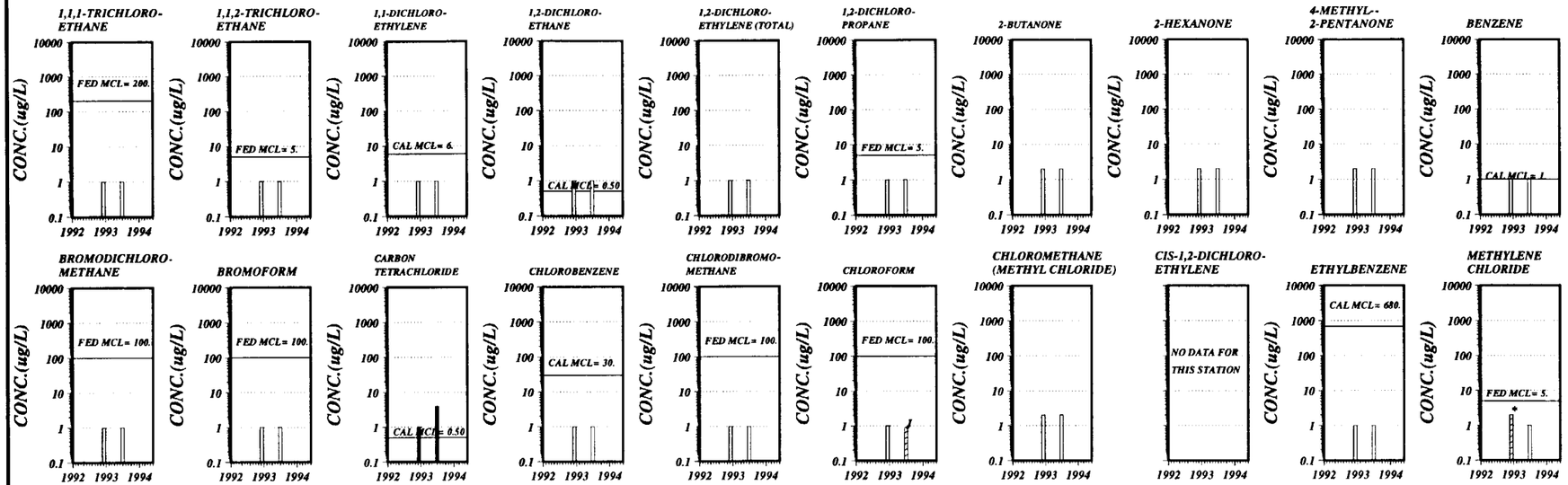
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

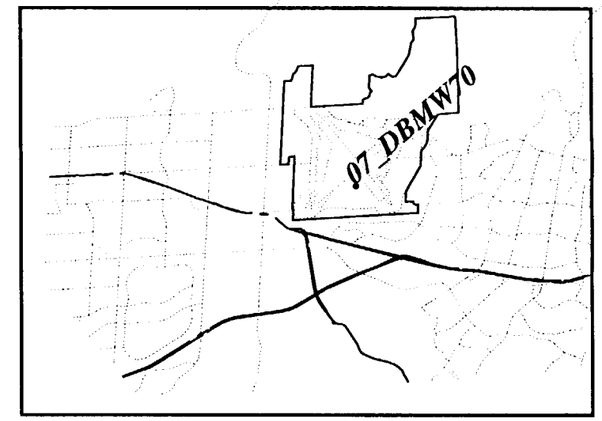
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

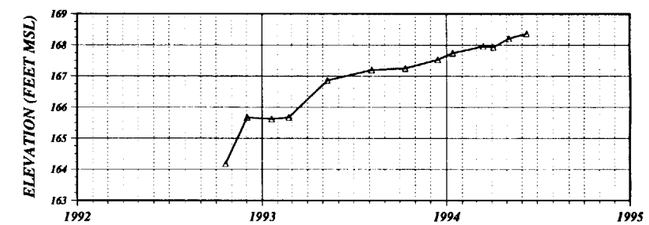
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

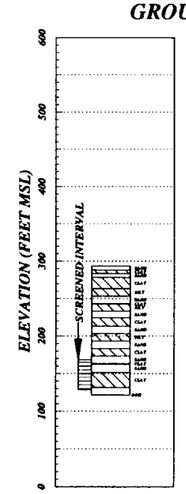
07_DBMW70







GROUNDWATER LEVEL HYDROGRAPH

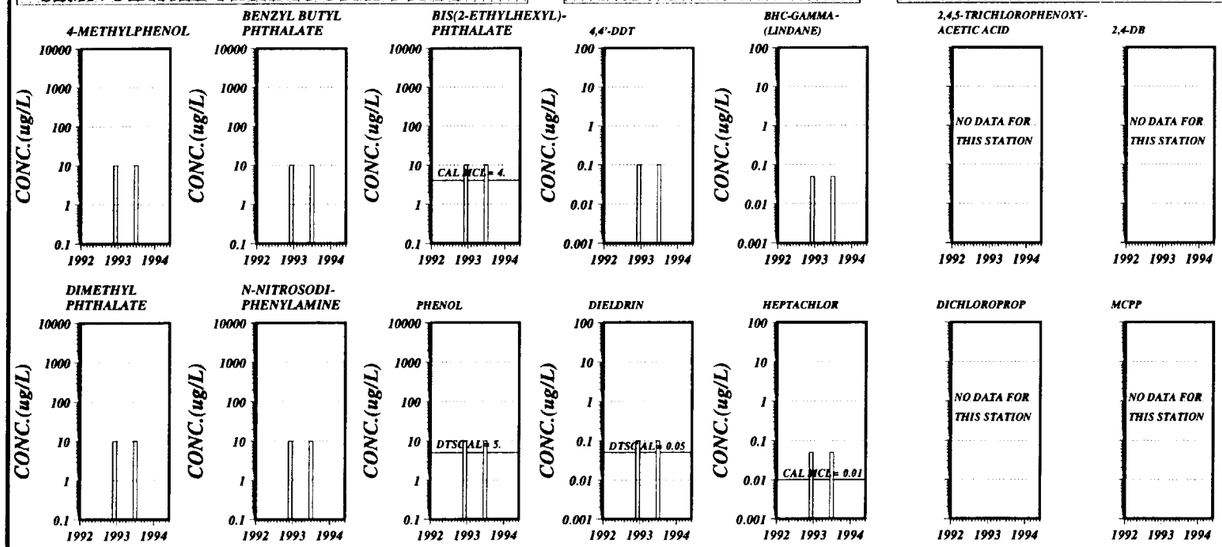


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
5.0	SAND	288.3
10.0	CLAY	283.3
15.0	SAND	278.3
30.0	CLAY	263.3
40.0	SILT	253.3
50.0	SAND	243.3
51.0	CLAY	242.3
60.0	SILT	233.3
69.0	SAND	224.3
80.0	CLAY	213.3
90.0	SAND	203.3
100.0	SILT	193.3
110.0	SAND	183.3
120.0	CLAY	173.3
130.0	SAND	163.3
131.0	CLAY	162.3
142.0	SAND	151.3
162.0	CLAY	131.3
172.0	TD	121.3

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

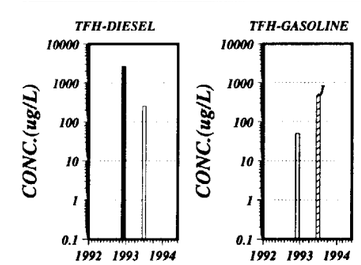
SEMIVOLATILE ORGANIC COMPOUNDS



PESTICIDES AND PCBs

HERBICIDES

TOTAL FUEL HYDROCARBONS



07_DBMW70 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	293.33		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	170.00	123.33		
CASE TOP				
CASE BASE	125.00	168.33		
SCREEN TOP	125.00	168.33		
SCREEN BASE	165.00	128.33		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 07_DBMW70

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

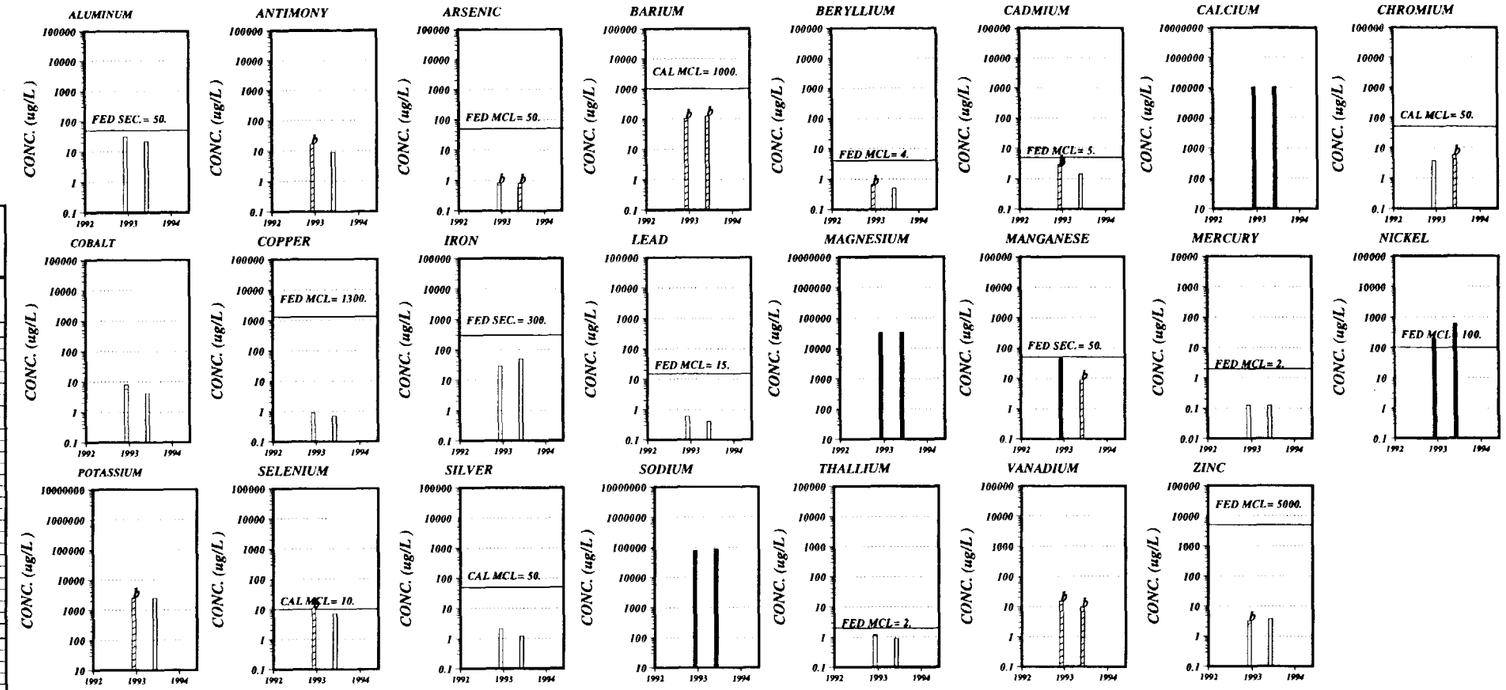
Fri Sep 23 12:47:36 1994

CHEMICAL DATA SUMMARY FOR WELL 07_DBMW100

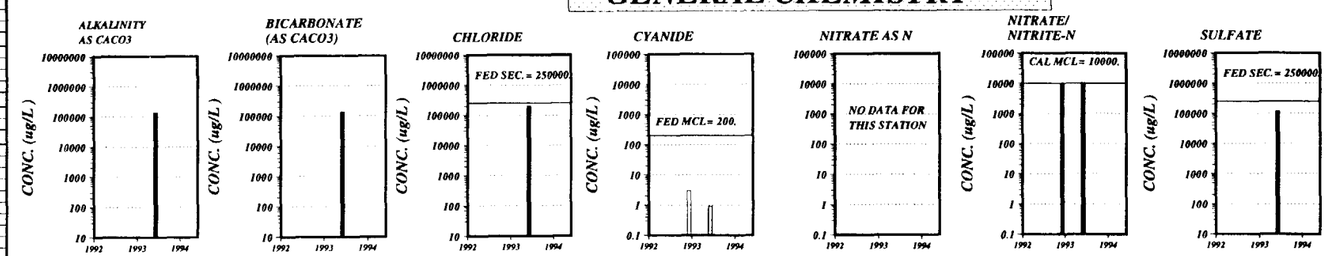
Table B-22
Groundwater Quality Data Summary - Well 07_DBMW100
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
1,2-DICHLOROETHANE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
2-BUTANONE	UG/L	3	12/08/92	2	U	12/08/92	2	U	06/04/93	2	U						
2-HEXANONE	UG/L	3	12/08/92	2	U	12/08/92	2	U	06/04/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	12/08/92	2	U	12/08/92	2	U	06/04/93	2	U						
BENZENE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
BROMOFORM	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	12/08/92	0.6	J	12/08/92	0.6	J	06/04/93	0.6	J						
CHLOROBENZENE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
CHLOROFORM	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	12/08/92	2	U	12/08/92	2	U	06/04/93	2	U						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
METHYLENE CHLORIDE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
STYRENE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
TETRACHLOROETHENE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
TOLUENE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
TRICHLOROETHYLENE	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
XYLENE (TOTAL)	UG/L	3	12/08/92	1	U	12/08/92	1	U	06/04/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4 METHYLPHENOL	UG/L	3	12/08/92	10	U	12/08/92	10	U	06/04/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	12/08/92	10	U	12/08/92	10	U	06/04/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	12/08/92	10	U	12/08/92	10	U	06/04/93	10	U						
DIMETHYL PHTHALATE	UG/L	3	12/08/92	10	U	12/08/92	10	U	06/04/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	12/08/92	10	U	12/08/92	10	U	06/04/93	10	U						
PHENOL	UG/L	3	12/08/92	10	U	12/08/92	10	U	06/04/93	10	U						
PESTICIDES AND PCBs																	
4,4-DDT	UG/L	3	12/08/92	0.1	U	12/08/92	0.1	U	06/04/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	12/08/92	0.05	U	12/08/92	0.05	U	06/04/93	0.05	U						
DIELDRIN	UG/L	3	12/08/92	0.1	U	12/08/92	0.1	U	06/04/93	0.1	U						
HEPTACHLOR	UG/L	3	12/08/92	0.05	U	12/08/92	0.05	U	06/04/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0															
2,4-D	UG/L	0															
DICHLOROPROP	UG/L	0															
MCPP	UG/L	0															
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TFH-DIESEL	UG/L	3	12/08/92	250	U	12/08/92	250	U	06/04/93	250	U						
TFH-GASOLINE	UG/L	3	12/08/92	50	U	12/08/92	50	U	06/04/93	68.1	J						
METALS																	
ALUMINUM	UG/L	3	12/08/92	31	U	12/08/92	31	U	06/04/93	21.3	U						
ANTIMONY	UG/L	3	12/08/92	16.6	b	12/08/92	16.6	b	06/04/93	9	U						
ARSENIC	UG/L	3	12/08/92	0.7	U	12/08/92	0.8	b	06/04/93	0.8	b						
BARIUM	UG/L	3	12/08/92	100	b	12/08/92	100	b	06/04/93	124	b						
BERYLLIUM	UG/L	3	12/08/92	0.64	b	12/08/92	0.64	b	06/04/93	0.5	U						
CADMIUM	UG/L	3	12/08/92	3	b	12/08/92	2.5	b	06/04/93	1.4	U						
CALCIUM	UG/L	3	12/08/92	104000		12/08/92	104000		06/04/93	107000							
CHROMIUM	UG/L	3	12/08/92	3.7	U	12/08/92	3.7	U	06/04/93	5.7	b						
COBALT	UG/L	3	12/08/92	5.8	U	12/08/92	8	U	06/04/93	4.2	U						
COPPER	UG/L	3	12/08/92	0.9	U	12/08/92	0.9	U	06/04/93	0.7	U						
IRON	UG/L	3	12/08/92	28.8	U	12/08/92	26.1	U	06/04/93	50.6	U						
LEAD	UG/L	3	12/08/92	0.6	U	12/08/92	0.8	U	06/04/93	0.4	U						
MAGNESIUM	UG/L	3	12/08/92	32800		12/08/92	32900		06/04/93	33800							
MANGANESE	UG/L	3	12/08/92	42.9		12/08/92	44.5		06/04/93	8.9	b						
MERCURY	UG/L	3	12/08/92	0.1	U	12/08/92	0.1	U	06/04/93	0.1	U						
NICKEL	UG/L	3	12/08/92	180		12/08/92	190		06/04/93	608							
POTASSIUM	UG/L	3	12/08/92	2420	b	12/08/92	2570	b	06/04/93	2510	U						
SELENIUM	UG/L	3	12/08/92	11.2	b	12/08/92	10.6	b	06/04/93	7	U						
SILVER	UG/L	3	12/08/92	2.1	U	12/08/92	2.1	U	06/04/93	1.2	U						
SODIUM	UG/L	3	12/08/92	76400		12/08/92	77000		06/04/93	87500							
THALLIUM	UG/L	3	12/08/92	1.1	U	12/08/92	1.2	U	06/04/93	0.9	U						
VANADIUM	UG/L	3	12/08/92	15.5	b	12/08/92	14.3	b	06/04/93	9.3	b						
ZINC	UG/L	3	12/08/92	3.3	b	12/08/92	2.2	U	06/04/93	3.8	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	1	06/04/93	136000													
BICARBONATE (AS CACO3)	UG/L	1	06/04/93	136000													
CHLORIDE	UG/L	1	06/04/93	200000													
CYANIDE	UG/L	3	12/08/92	3	U	12/08/92	3	U	06/04/93	0.9	U						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	12/08/92	9270		12/08/92	9370		06/04/93	10400							
SULFATE	UG/L	1	06/04/93	116000													
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	2	12/08/92	6.94		06/04/93	7.13										
TEMPERATURE, DEGREE C	DEG/C	2	12/08/92	23		06/04/93	24.9										
TOTAL DISSOLVED SOLIDS	UG/L	1	06/04/93	882000													
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	0															
GROSS BETA	PCI/L	0															

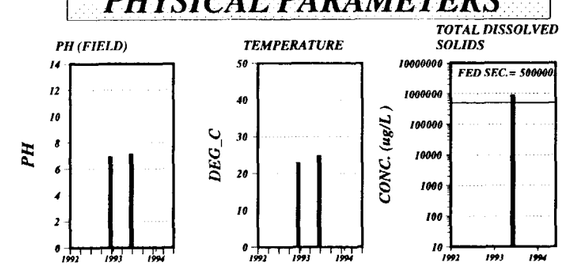
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



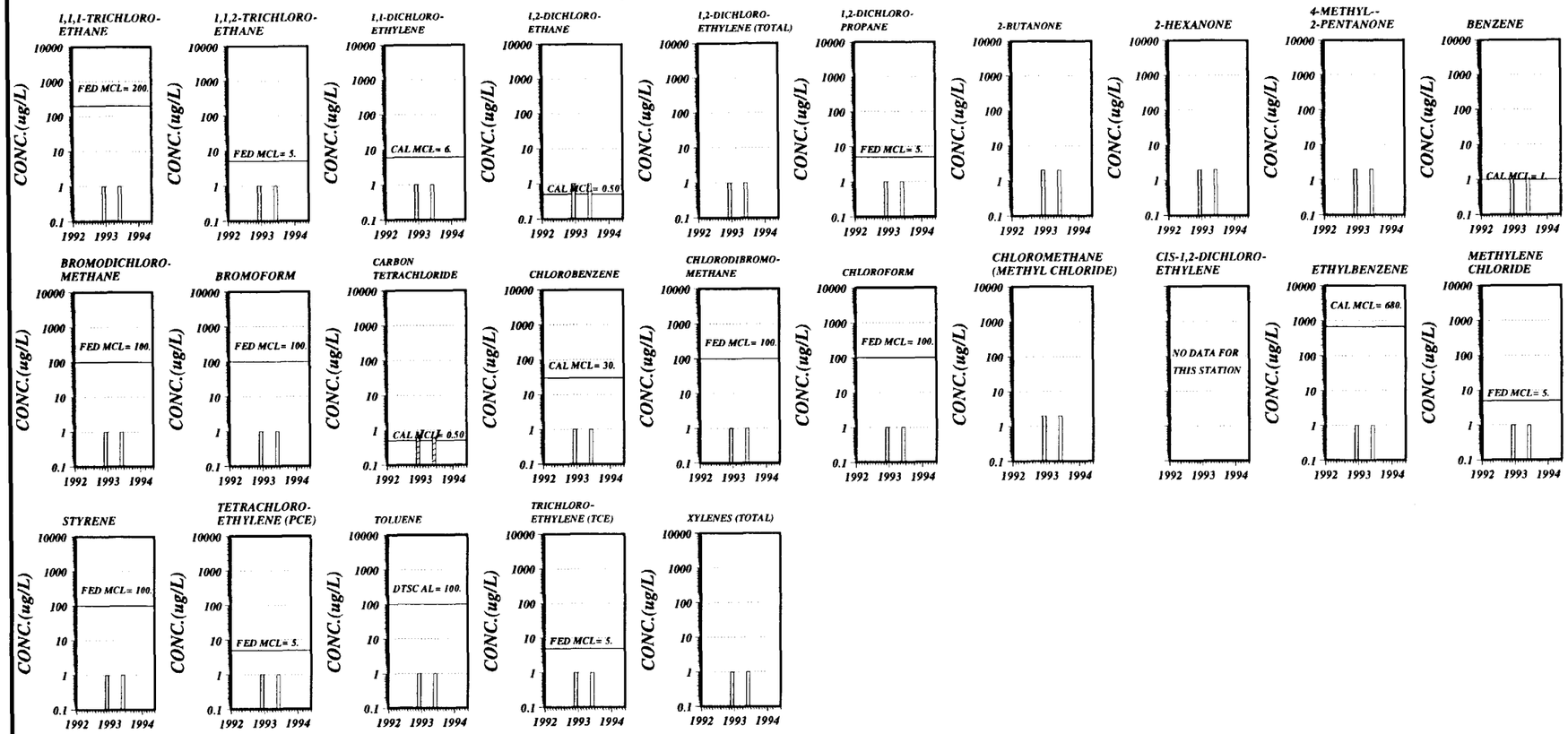
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

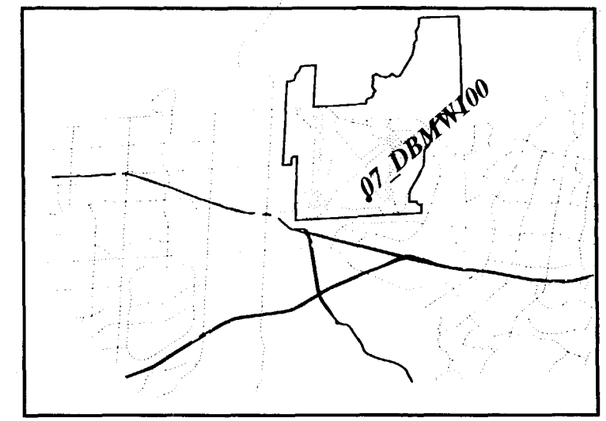
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

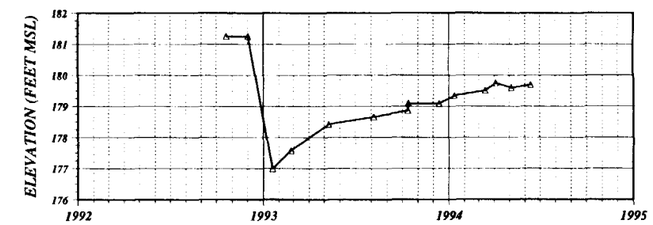
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

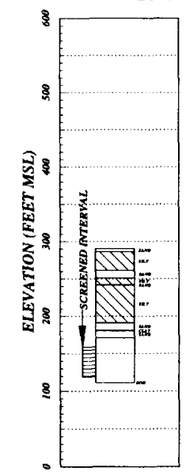
07_DBMW100







GROUNDWATER LEVEL HYDROGRAPH

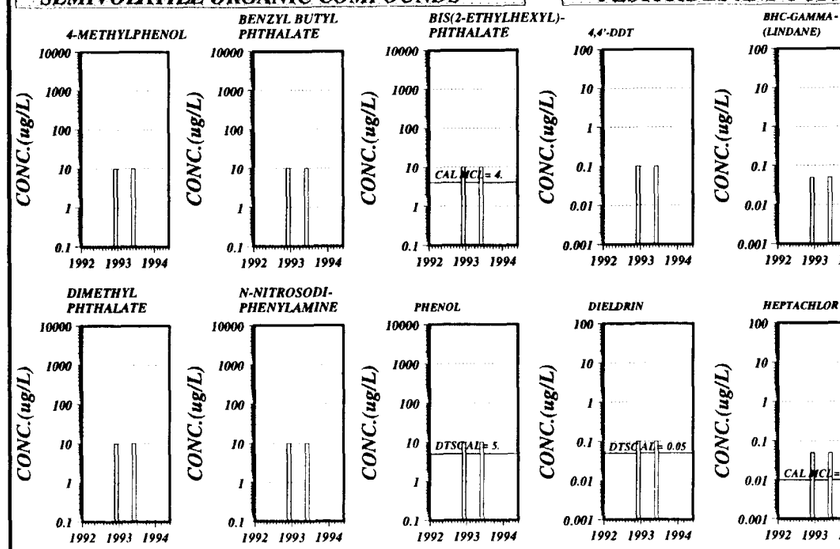


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
4.0	SAND	286.2
29.0	SILT	261.2
39.0	SAND	251.2
48.0	SILT	242.2
49.0	SAND	241.2
99.0	SILT	191.2
109.0	SAND	181.2
110.0	CLAY	180.2
119.0	SAND	171.2
179.0	TD	111.2

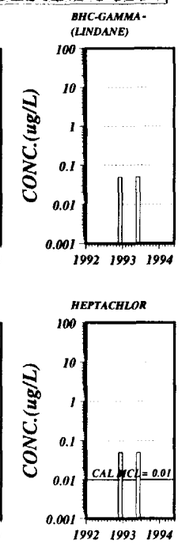
LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

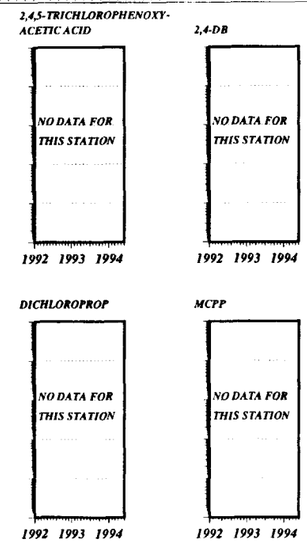
SEMIVOLATILE ORGANIC COMPOUNDS



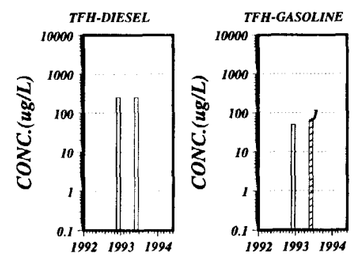
PESTICIDES AND PCBs



HERBICIDES



TOTAL FUEL HYDROCARBONS



07_DBMW100 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	290.20		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	179.00	111.20		
CASE TOP				
CASE BASE	131.00	159.20		
SCREEN TOP	131.00	159.20		
SCREEN BASE	171.00	119.20		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 07_DBMW100

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

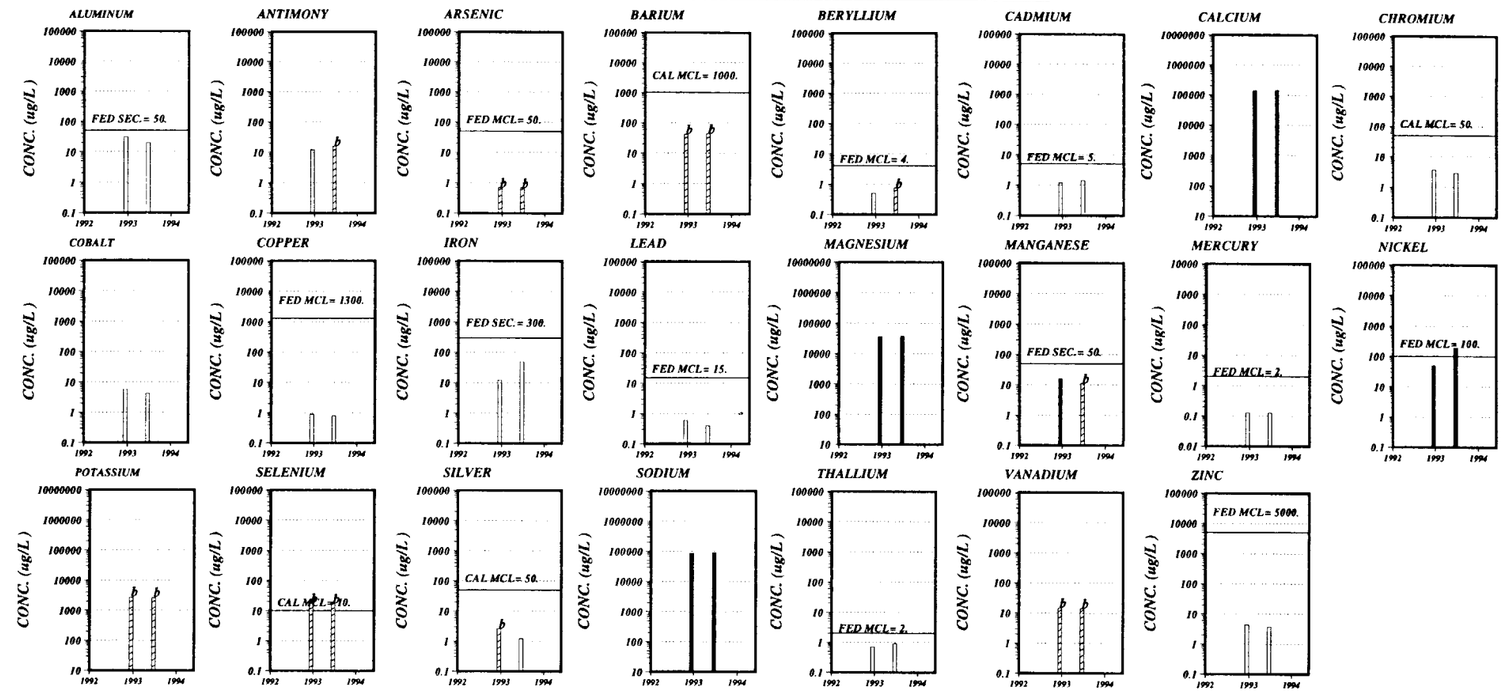
Tue Jul 26 11:48:51 1994

CHEMICAL DATA SUMMARY FOR WELL 07_DGMW71

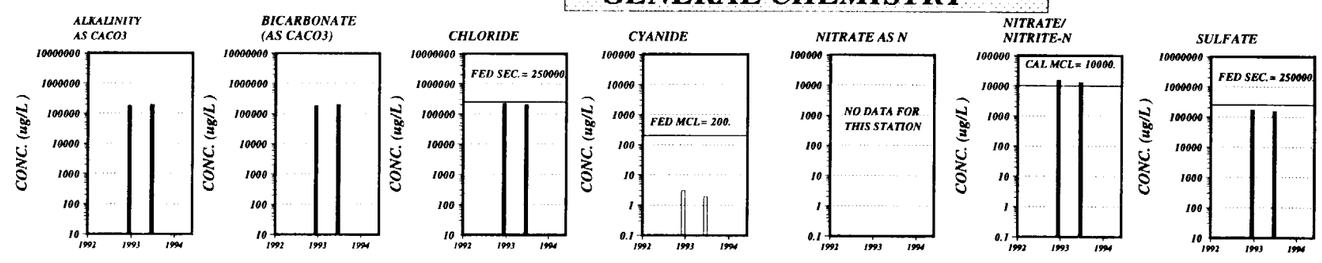
Table B-23
Groundwater Quality Data Summary - Well 07_DGMW71
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/15/92	1	U	06/22/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/15/92	1	U	06/22/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/15/92	0.7	J	06/22/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/15/92	1	U	06/22/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/15/92	1	U	06/22/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/15/92	1	U	06/22/93	1	U
2-BUTANONE	UG/L	2	12/15/92	2	U	06/22/93	2	U
2-HEXANONE	UG/L	2	12/15/92	2	U	06/22/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/15/92	2	U	06/22/93	2	U
BENZENE	UG/L	2	12/15/92	1	U	06/22/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/15/92	1	U	06/22/93	1	U
BROMOFORM	UG/L	2	12/15/92	1	U	06/22/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/15/92	1	U	06/22/93	1	U
CHLOROBENZENE	UG/L	2	12/15/92	1	U	06/22/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/15/92	1	U	06/22/93	1	U
CHLOROFORM	UG/L	2	12/15/92	1	U	06/22/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/15/92	2	U	06/22/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/15/92	1	U	06/22/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/15/92	1	U	06/22/93	1	U
STYRENE	UG/L	2	12/15/92	1	U	06/22/93	1	U
TETRACHLOROETHENE	UG/L	2	12/15/92	1	U	06/22/93	1	U
TOLUENE	UG/L	2	12/15/92	1	U	06/22/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/15/92	23		06/22/93	21	
XYLENE (TOTAL)	UG/L	2	12/15/92	1	U	06/22/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/15/92	10	U	06/22/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/15/92	10	U	06/22/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/15/92	10	U	06/22/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/15/92	10	U	06/22/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/15/92	10	U	06/22/93	10	U
PHENOL	UG/L	2	12/15/92	10	U	06/22/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/15/92	0.1	U	06/22/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/15/92	0.05	U	06/22/93	0.05	U
DIELDRIN	UG/L	2	12/15/92	0.1	U	06/22/93	0.1	U
HEPTACHLOR	UG/L	2	12/15/92	0.05	U	06/22/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/15/92	500	U	06/22/93	250	U
TFH-GASOLINE	UG/L	2	12/15/92	50	U	06/22/93	50	U
METALS								
ALUMINUM	UG/L	2	12/15/92	31	U	06/22/93	19.6	U
ANTIMONY	UG/L	2	12/15/92	12.1	U	06/22/93	15.9	b
ARSENIC	UG/L	2	12/15/92	0.7	b	06/22/93	0.7	b
BARIUM	UG/L	2	12/15/92	41.1	b	06/22/93	42.9	b
BERYLLIUM	UG/L	2	12/15/92	0.5	U	06/22/93	0.75	b
CADMIUM	UG/L	2	12/15/92	1.2	U	06/22/93	1.4	U
CALCIUM	UG/L	2	12/15/92	139000		06/22/93	141000	
CHROMIUM	UG/L	2	12/15/92	3.7	U	06/22/93	2.9	U
COBALT	UG/L	2	12/15/92	5.8	U	06/22/93	4.2	U
COPPER	UG/L	2	12/15/92	0.9	U	06/22/93	0.8	U
IRON	UG/L	2	12/15/92	12	U	06/22/93	48.7	U
LEAD	UG/L	2	12/15/92	0.6	U	06/22/93	0.4	U
MAGNESIUM	UG/L	2	12/15/92	35500		06/22/93	36500	
MANGANESE	UG/L	2	12/15/92	16		06/22/93	11.1	b
MERCURY	UG/L	2	12/15/92	0.1	U	06/22/93	0.1	U
NICKEL	UG/L	2	12/15/92	49.6		06/22/93	190	
POTASSIUM	UG/L	2	12/15/92	2700	b	06/22/93	2600	b
SELENIUM	UG/L	2	12/15/92	17.8	b	06/22/93	17.3	b
SILVER	UG/L	2	12/15/92	2.6	b	06/22/93	1.2	U
SODIUM	UG/L	2	12/15/92	85100		06/22/93	88500	
THALLIUM	UG/L	2	12/15/92	0.7	U	06/22/93	0.9	U
VANADIUM	UG/L	2	12/15/92	15	b	06/22/93	14.1	b
ZINC	UG/L	2	12/15/92	4.4	U	06/22/93	3.7	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/15/92	182000		06/22/93	196000	
BICARBONATE (AS CACO3)	UG/L	2	12/15/92	182000		06/22/93	196000	
CHLORIDE	UG/L	2	12/15/92	217000		06/22/93	204000	
CYANIDE	UG/L	2	12/15/92	3	U	06/22/93	1.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/15/92	15400		06/22/93	13100	
SULFATE	UG/L	2	12/15/92	174000		06/22/93	155000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	12/15/92	7.14		06/22/93	7.02	
TEMPERATURE, DEGREE C	DEG/C	2	12/15/92	22.8		06/22/93	25.2	
TOTAL DISSOLVED SOLIDS	UG/L	2	12/15/92	937000		06/22/93	945000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	1	12/15/92	6.3				
GROSS BETA	PCI/L	1	12/15/92	11.7				

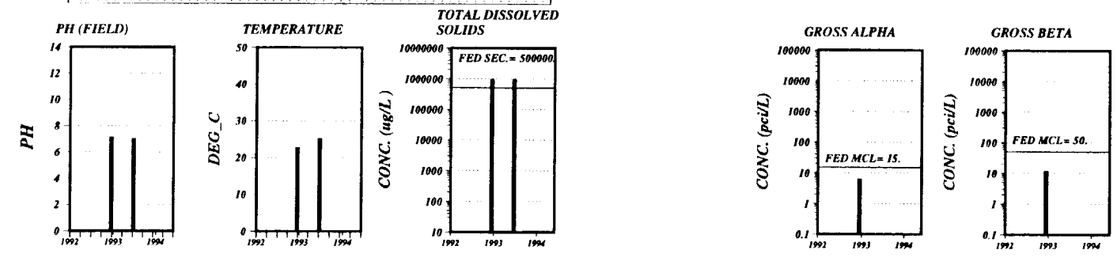
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



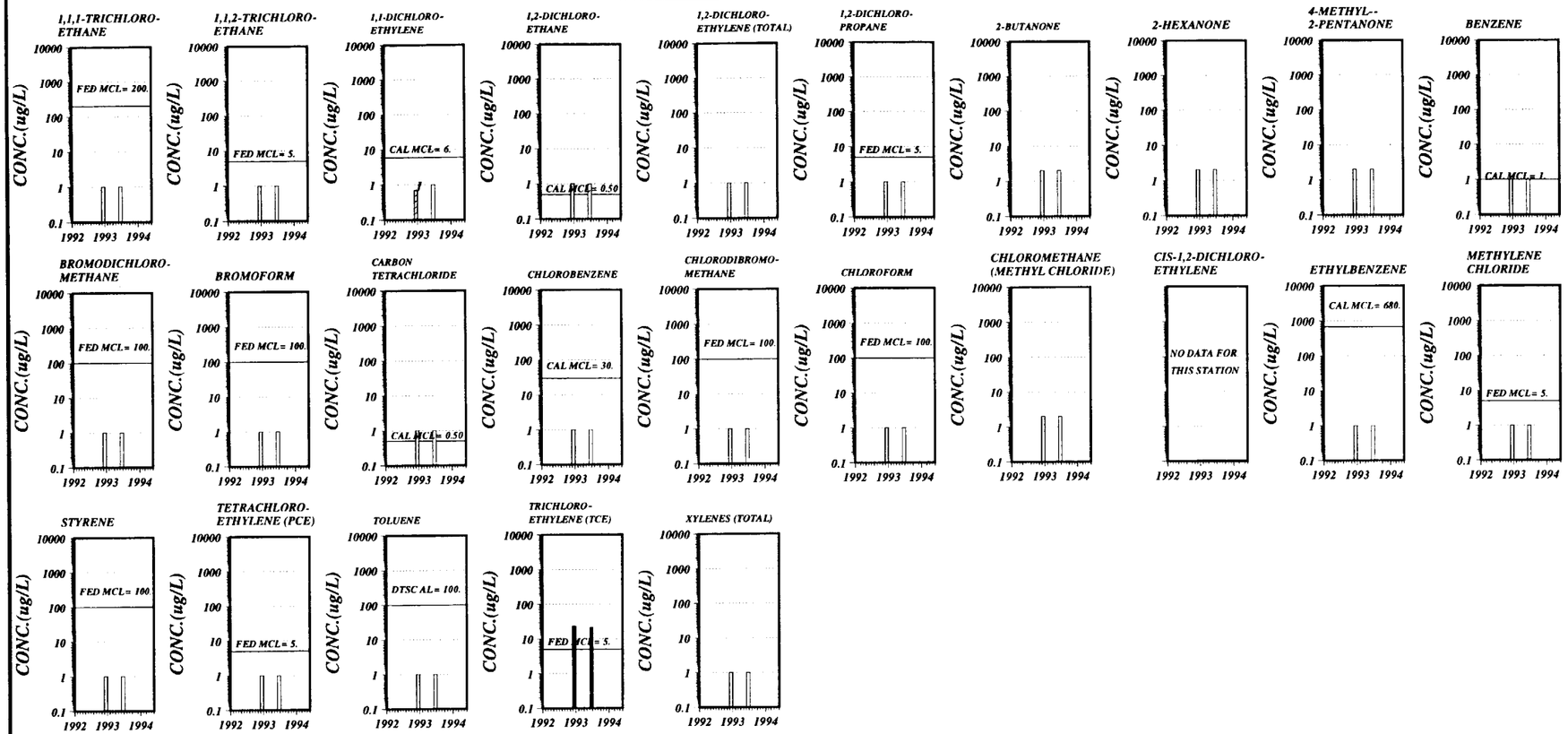
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

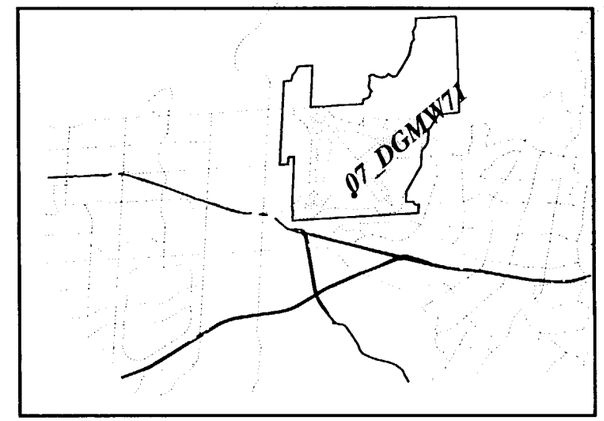
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

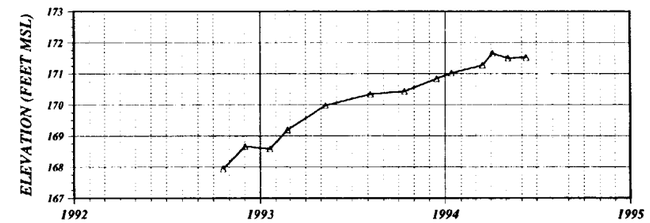
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

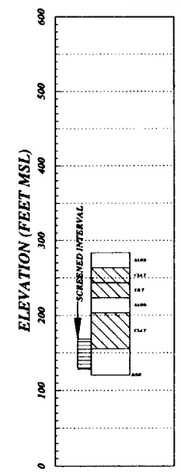
07_DGMW71







GROUNDWATER LEVEL HYDROGRAPH

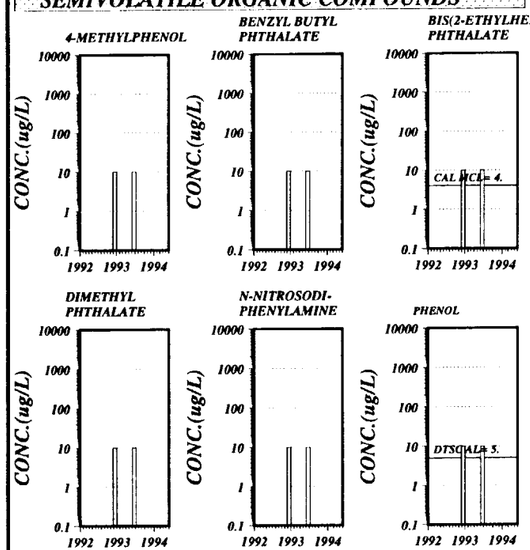


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
20.0	SAND	263.4
40.0	CLAY	243.4
60.0	SILT	223.4
80.0	SAND	203.4
128.0	CLAY	155.4
163.0	TD	120.4

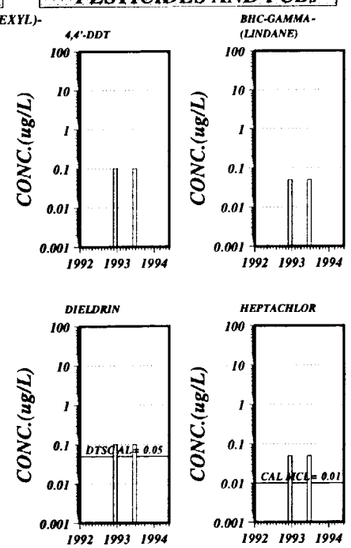
LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

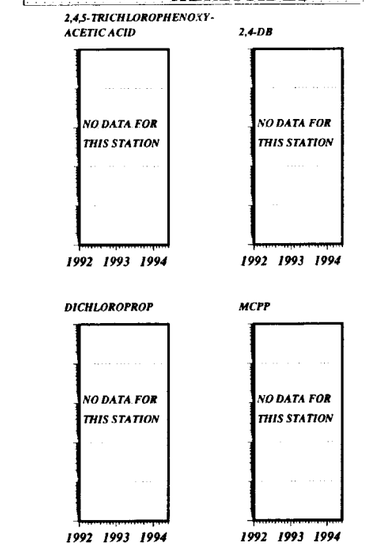
SEMIVOLATILE ORGANIC COMPOUNDS



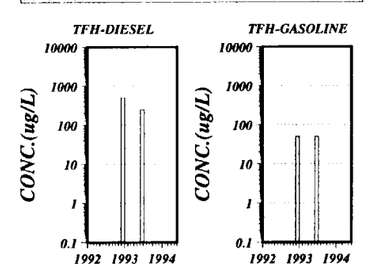
PESTICIDES AND PCBs



HERBICIDES



TOTAL FUEL HYDROCARBONS



07_DGMW71 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	283.44		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	163.00	120.44		
CASE TOP				
CASE BASE	115.00	168.44		
SCREEN TOP	115.00	168.44		
SCREEN BASE	155.00	128.44		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 07_DGMW71

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

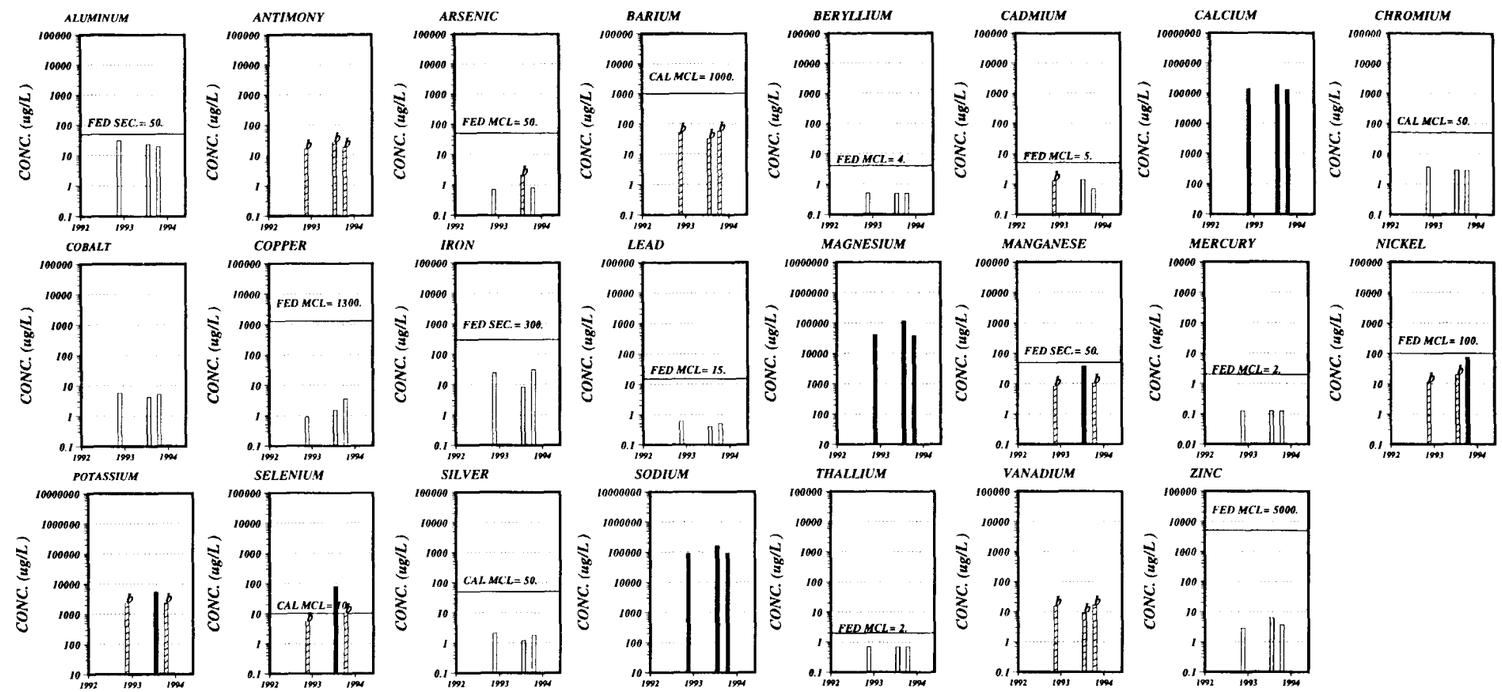
Tue Jul 26 11:55:07 1994

CHEMICAL DATA SUMMARY FOR WELL 07_DGMW72

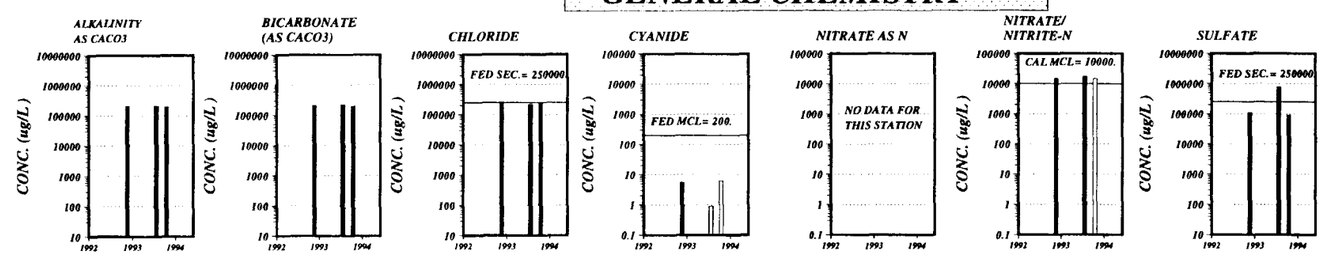
Table B-24
Groundwater Quality Data Summary - Well 07_DGMW72
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	11/19/92	1	U	07/21/93	0.5	J	10/15/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
1,2-DICHLOROETHANE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
2-BUTANONE	UG/L	3	11/19/92	2	U	07/21/93	2	U	10/15/93	2	U						
2-HEXANONE	UG/L	3	11/19/92	2	U	07/21/93	2	U	10/15/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	11/19/92	2	U	07/21/93	2	U	10/15/93	2	U						
BENZENE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
BROMOFORM	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	11/19/92	3		07/21/93	1	U	10/15/93	4							
CHLOROBENZENE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
CHLOROFORM	UG/L	3	11/19/92	4		07/21/93	1	U	10/15/93	4							
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	11/19/92	2	U	07/21/93	2	U	10/15/93	2	U						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
METHYLENE CHLORIDE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
STYRENE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
TETRACHLOROETHENE	UG/L	3	11/19/92	2		07/21/93	1	U	10/15/93	2							
TOLUENE	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
TRICHLOROETHYLENE	UG/L	3	11/19/92	120	d	07/21/93	2	U	10/15/93	100	d						
XYLENE (TOTAL)	UG/L	3	11/19/92	1	U	07/21/93	1	U	10/15/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	3	11/19/92	10	U	07/21/93	10	U	10/15/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	11/19/92	10	U	07/21/93	10	U	10/15/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	11/19/92	10	U	07/21/93	10	U	10/15/93	4	J						
DIMETHYL PHTHALATE	UG/L	3	11/19/92	10	U	07/21/93	10	U	10/15/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	11/19/92	10	U	07/21/93	10	U	10/15/93	10	U						
PHENOL	UG/L	3	11/19/92	10	U	07/21/93	10	U	10/15/93	10	U						
PESTICIDES AND PCBs																	
4,4'-DDT	UG/L	3	11/19/92	0.1	U	07/21/93	0.1	U	10/15/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	11/19/92	0.05	U	07/21/93	0.05	U	10/15/93	0.05	U						
DIELDRIN	UG/L	3	11/19/92	0.1	U	07/21/93	0.1	U	10/15/93	0.1	U						
HEPTACHLOR	UG/L	3	11/19/92	0.05	U	07/21/93	0.05	U	10/15/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	07/21/93	1.85	U	10/15/93	1.85	U									
2,4-DB	UG/L	2	07/21/93	0.98	U	10/15/93	0.98	U									
DICHLOROPROP	UG/L	2	07/21/93	1.52	U	10/15/93	1.52	U									
MCPP	UG/L	2	07/21/93	522	U	10/15/93	522	U									
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TFH-DIESEL	UG/L	3	11/19/92	250	U	07/21/93	250	U	10/15/93	250	U						
TFH-GASOLINE	UG/L	3	11/19/92	50	U	07/21/93	70.3	J	10/15/93	50	U						
METALS																	
ALUMINUM	UG/L	3	11/19/92	31	U	07/21/93	23.4	U	10/15/93	19.5	U						
ANTIMONY	UG/L	3	11/19/92	18.1	b	07/21/93	26.7	b	10/15/93	18.3	b						
ARSENIC	UG/L	3	11/19/92	0.7	U	07/21/93	2.1	b	10/15/93	0.8	U						
BARIUM	UG/L	3	11/19/92	51.1	b	07/21/93	32.2	b	10/15/93	56.6	b						
BERYLLIUM	UG/L	3	11/19/92	0.5	U	07/21/93	0.5	U	10/15/93	0.5	U						
CADMIUM	UG/L	3	11/19/92	1.3	b	07/21/93	1.4	U	10/15/93	0.7	U						
CALCIUM	UG/L	3	11/19/92	136000		07/21/93	186000		10/15/93	129000							
CHROMIUM	UG/L	3	11/19/92	3.7	U	07/21/93	2.9	U	10/15/93	2.8	U						
COBALT	UG/L	3	11/19/92	5.8	U	07/21/93	4.2	U	10/15/93	5.2	U						
COPPER	UG/L	3	11/19/92	0.9	U	07/21/93	1.5	U	10/15/93	3.6	U						
IRON	UG/L	3	11/19/92	24.1	U	07/21/93	8.2	U	10/15/93	30.9	U						
LEAD	UG/L	3	11/19/92	0.6	U	07/21/93	0.4	U	10/15/93	0.5	U						
MAGNESIUM	UG/L	3	11/19/92	40300		07/21/93	115000		10/15/93	39000							
MANGANESE	UG/L	3	11/19/92	8.4	b	07/21/93	38		10/15/93	10.3	b						
MERCURY	UG/L	3	11/19/92	0.1	U	07/21/93	0.1	U	10/15/93	0.1	U						
NICKEL	UG/L	3	11/19/92	11.6	b	07/21/93	19.7	b	10/15/93	72.8							
POTASSIUM	UG/L	3	11/19/92	2250	b	07/21/93	5520		10/15/93	2280	b						
SELENIUM	UG/L	3	11/19/92	5.4	b	07/21/93	79.4		10/15/93	10.7	b						
SILVER	UG/L	3	11/19/92	2.1	U	07/21/93	1.2	U	10/15/93	1.8	U						
SODIUM	UG/L	3	11/19/92	88800		07/21/93	160000		10/15/93	92100							
THALLIUM	UG/L	3	11/19/92	0.7	U	07/21/93	0.7	U	10/15/93	0.7	U						
VANADIUM	UG/L	3	11/19/92	15.8	b	07/21/93	9.3	b	10/15/93	16.5	b						
ZINC	UG/L	3	11/19/92	2.9	U	07/21/93	6.4	U	10/15/93	3.7	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	11/19/92	209000		07/21/93	216000		10/15/93	199000							
BICARBONATE (AS CACO3)	UG/L	3	11/19/92	209000		07/21/93	216000		10/15/93	199000							
CHLORIDE	UG/L	3	11/19/92	241000		07/21/93	220000		10/15/93	250000							
CYANIDE	UG/L	3	11/19/92	5.5		07/21/93	0.9	U	10/15/93	6.3	U						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	11/19/92	14800		07/21/93	17200		10/15/93	14800	U						
SULFATE	UG/L	3	11/19/92	112000		07/21/93	769000		10/15/93	90300							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	1	11/19/92	6.9													
TEMPERATURE, DEGREE C	DEG/C	1	11/19/92	25													
TOTAL DISSOLVED SOLIDS	UG/L	3	11/19/92	1120000		07/21/93	1860000		10/15/93	1002000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	0															
GROSS BETA	PCI/L	0															

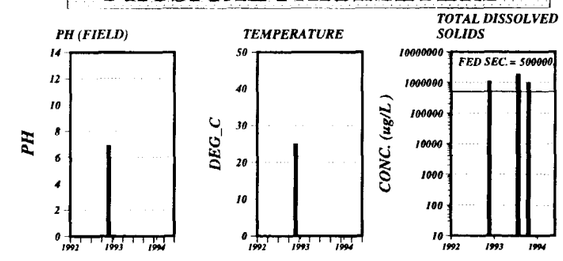
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



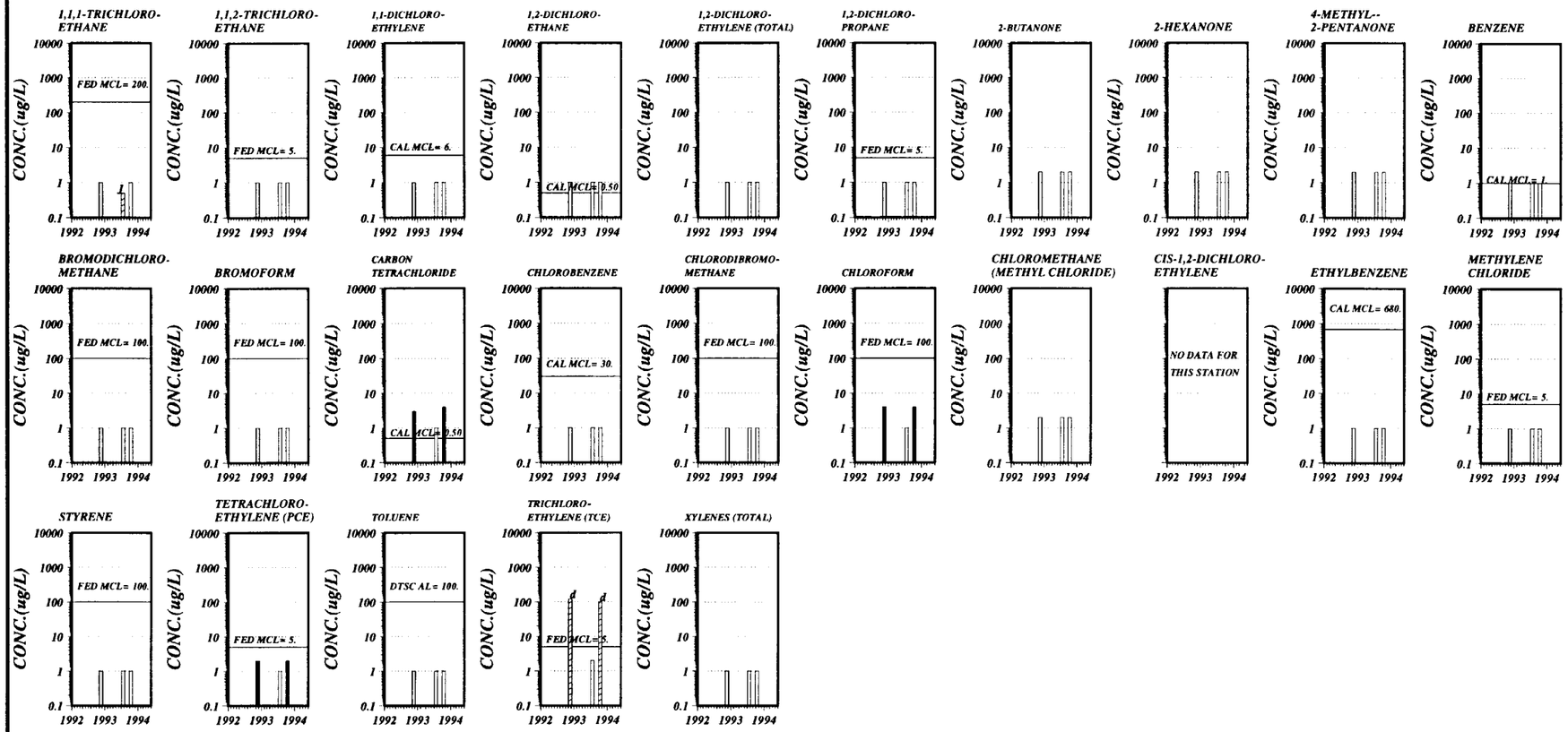
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

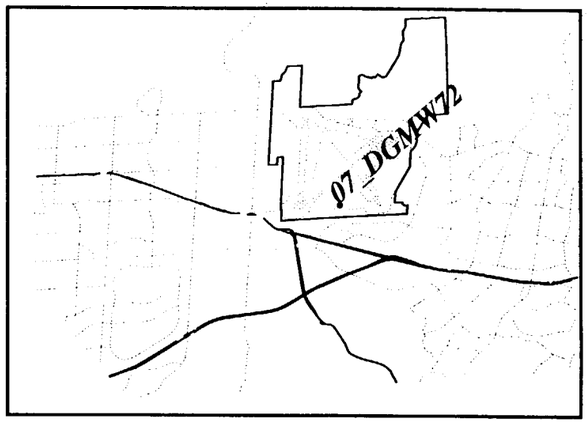
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

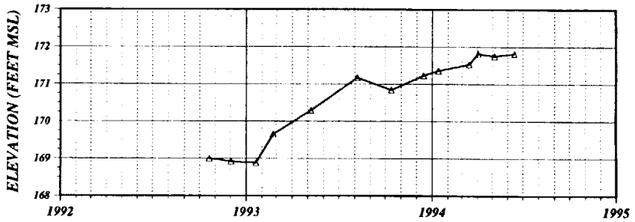
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

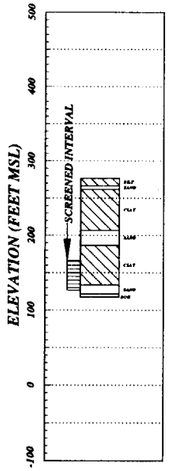
07_DGMW72







GROUNDWATER LEVEL HYDROGRAPH

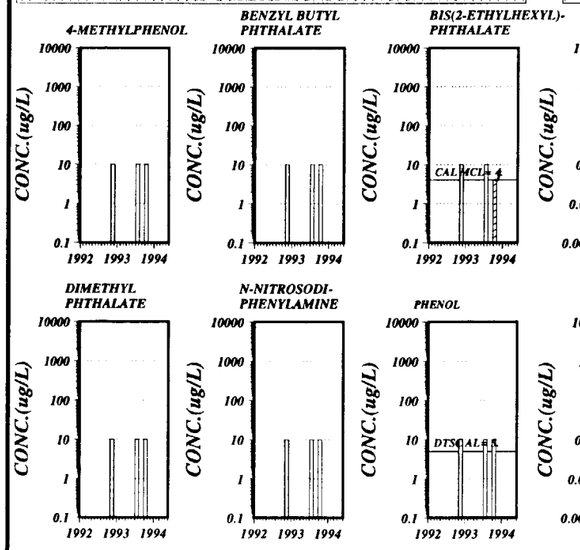


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SILT	266.7
15.0	SAND	261.7
70.0	CLAY	206.7
90.0	SAND	186.7
143.0	CLAY	133.7
155.0	SAND	121.7
159.0	TD	117.7

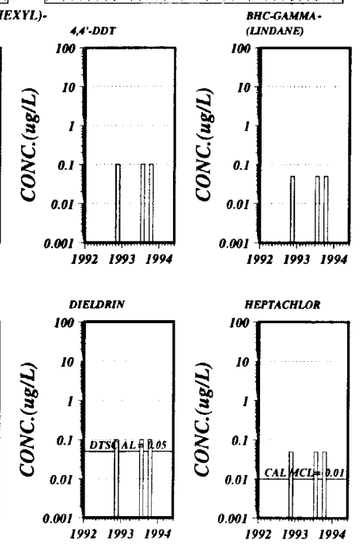
LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

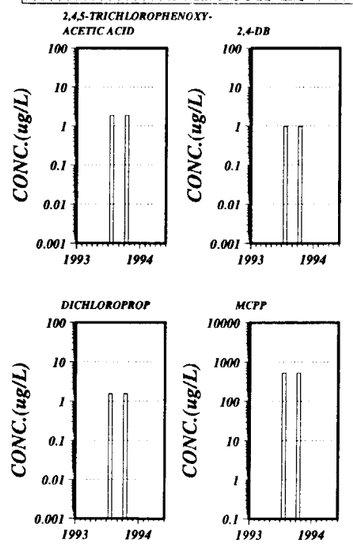
SEMIVOLATILE ORGANIC COMPOUNDS



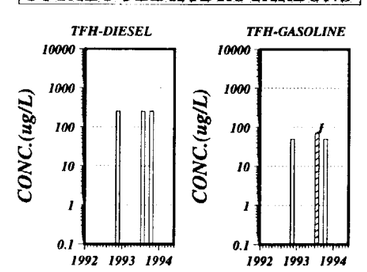
PESTICIDES AND PCBs



HERBICIDES



TOTAL FUEL HYDROCARBONS



07_DGMW72 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	276.70		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	158.00	118.70		
CASE TOP				
CASE BASE	110.00	166.70		
SCREEN TOP	110.00	166.70		
SCREEN BASE	150.00	126.70		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 07_DGMW72

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

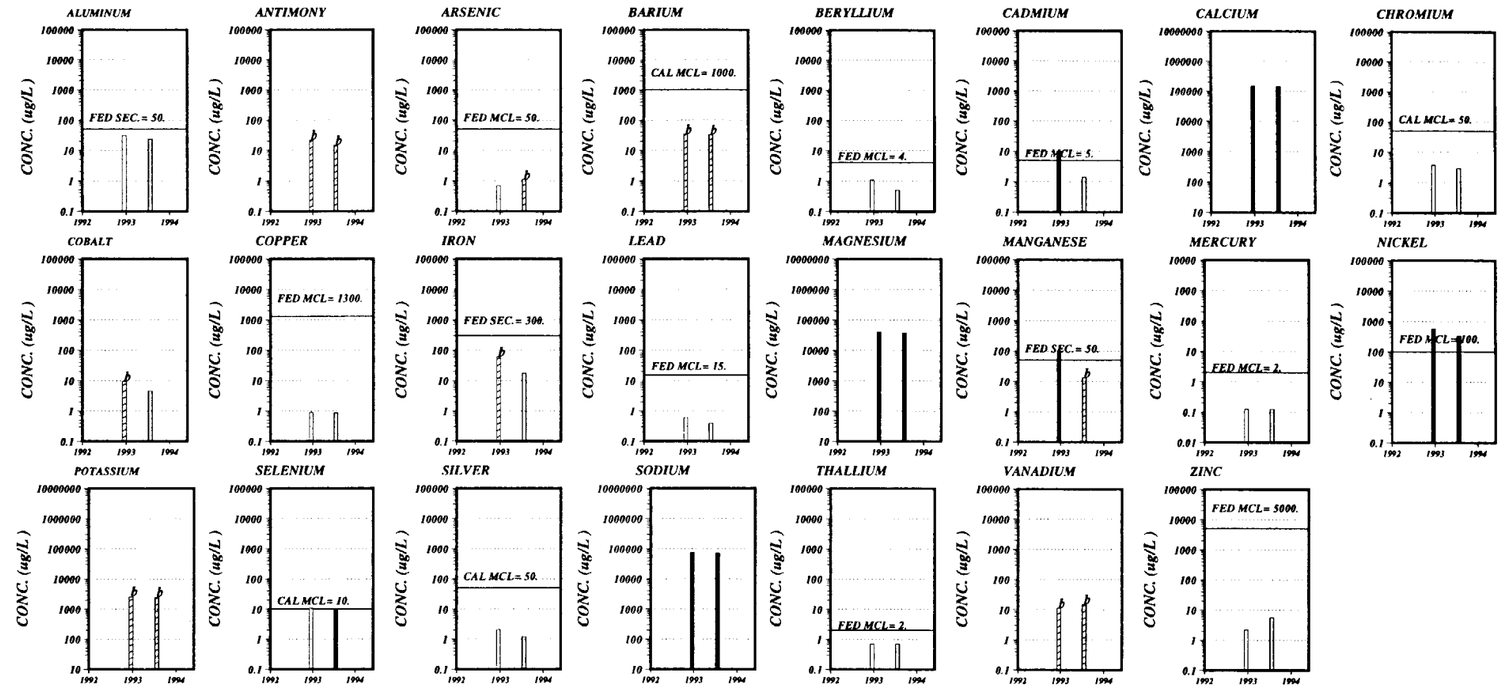
Tue Jul 26 11:56:45 1994

CHEMICAL DATA SUMMARY FOR WELL 07_DGMW91

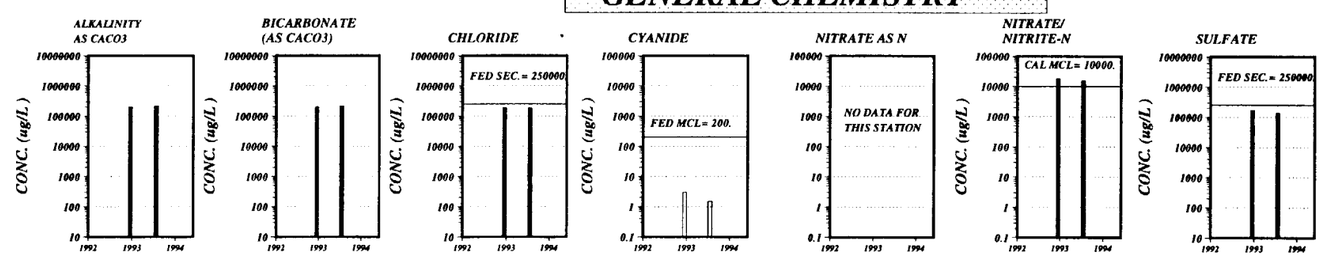
Table B-25
Groundwater Quality Data Summary - Well 07_DGMW91
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/18/92	1	U	07/21/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/18/92	1	U	07/21/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/18/92	1	U	07/21/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/18/92	1	U	07/21/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/18/92	1	U	07/21/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/18/92	1	U	07/21/93	1	U
2-BUTANONE	UG/L	2	12/18/92	2	U	07/21/93	2	U
2-HEXANONE	UG/L	2	12/18/92	2	U	07/21/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/18/92	2	U	07/21/93	2	U
BENZENE	UG/L	2	12/18/92	1	U	07/21/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/18/92	1	U	07/21/93	1	U
BROMOFORM	UG/L	2	12/18/92	1	U	07/21/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/18/92	2		07/21/93	2	
CHLOROBENZENE	UG/L	2	12/18/92	1	U	07/21/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/18/92	1	U	07/21/93	1	U
CHLOROFORM	UG/L	2	12/18/92	3		07/21/93	4	
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/18/92	2	U	07/21/93	2	
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/18/92	1	U	07/21/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/18/92	1	U	07/21/93	1	U
STYRENE	UG/L	2	12/18/92	1	U	07/21/93	1	U
TETRACHLOROETHENE	UG/L	2	12/18/92	3		07/21/93	4	
TOLUENE	UG/L	2	12/18/92	1	U	07/21/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/18/92	48		07/21/93	55	
XYLENE (TOTAL)	UG/L	2	12/18/92	1	U	07/21/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/18/92	10	U	07/21/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/18/92	10	U	07/21/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/18/92	10	U	07/21/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/18/92	10	U	07/21/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/18/92	10	U	07/21/93	10	U
PHENOL	UG/L	2	12/18/92	10	U	07/21/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/18/92	0.1	U	07/21/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/18/92	0.05	U	07/21/93	0.05	U
DIELDRIN	UG/L	2	12/18/92	0.1	U	07/21/93	0.1	U
HEPTACHLOR	UG/L	2	12/18/92	0.05	U	07/21/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	1	12/18/92	0.25	U			
2,4-DB	UG/L	1	12/18/92	0.5	U			
DICHLOROPROP	UG/L	1	12/18/92	0.5	U			
MCPP	UG/L	1	12/18/92	250	U			
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/18/92	250	U	07/21/93	250	U
TFH-GASOLINE	UG/L	2	12/18/92	50	U	07/21/93	54.8	J
METALS								
ALUMINUM	UG/L	2	12/18/92	31	U	07/21/93	23.7	U
ANTIMONY	UG/L	2	12/18/92	22.3	b	07/21/93	14.9	b
ARSENIC	UG/L	2	12/18/92	0.7	U	07/21/93	1.1	b
BARIUM	UG/L	2	12/18/92	34.3	b	07/21/93	32.7	b
BERYLLIUM	UG/L	2	12/18/92	1.1	U	07/21/93	0.5	U
CADMIUM	UG/L	2	12/18/92	10.2		07/21/93	1.4	U
CALCIUM	UG/L	2	12/18/92	146000		07/21/93	143000	
CHROMIUM	UG/L	2	12/18/92	3.7	U	07/21/93	2.9	U
COBALT	UG/L	2	12/18/92	9.5	b	07/21/93	4.6	U
COPPER	UG/L	2	12/18/92	0.9	U	07/21/93	0.86	U
IRON	UG/L	2	12/18/92	61	b	07/21/93	17.2	U
LEAD	UG/L	2	12/18/92	0.6	U	07/21/93	0.4	U
MAGNESIUM	UG/L	2	12/18/92	41100		07/21/93	38000	
MANGANESE	UG/L	2	12/18/92	102		07/21/93	13.1	b
MERCURY	UG/L	2	12/18/92	0.1	U	07/21/93	0.1	U
NICKEL	UG/L	2	12/18/92	567		07/21/93	335	
POTASSIUM	UG/L	2	12/18/92	2540	b	07/21/93	2440	b
SELENIUM	UG/L	2	12/18/92	10.9	U	07/21/93	9.9	
SILVER	UG/L	2	12/18/92	2.1	U	07/21/93	1.2	U
SODIUM	UG/L	2	12/18/92	74800		07/21/93	70600	
THALLIUM	UG/L	2	12/18/92	0.7	U	07/21/93	0.7	U
VANADIUM	UG/L	2	12/18/92	11.3	b	07/21/93	15.1	b
ZINC	UG/L	2	12/18/92	2.2	U	07/21/93	5.6	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/18/92	200000		07/21/93	215000	
BICARBONATE (AS CACO3)	UG/L	2	12/18/92	200000		07/21/93	215000	
CHLORIDE	UG/L	2	12/18/92	192000		07/21/93	185000	
CYANIDE	UG/L	2	12/18/92	3	U	07/21/93	1.5	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/18/92	17700		07/21/93	15400	
SULFATE	UG/L	2	12/18/92	168000		07/21/93	138000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	12/18/92	7.13		07/21/93	8.79	
TEMPERATURE, DEGREE C	DEG/C	2	12/18/92	24		07/21/93	24	
TOTAL DISSOLVED SOLIDS	UG/L	2	12/18/92	913000		07/21/93	950000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

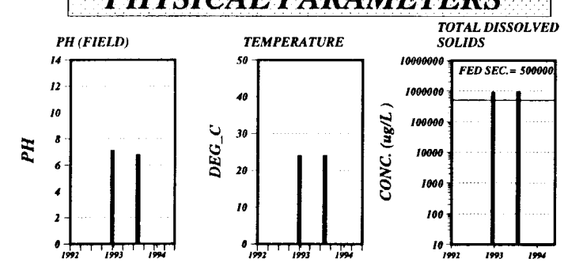
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



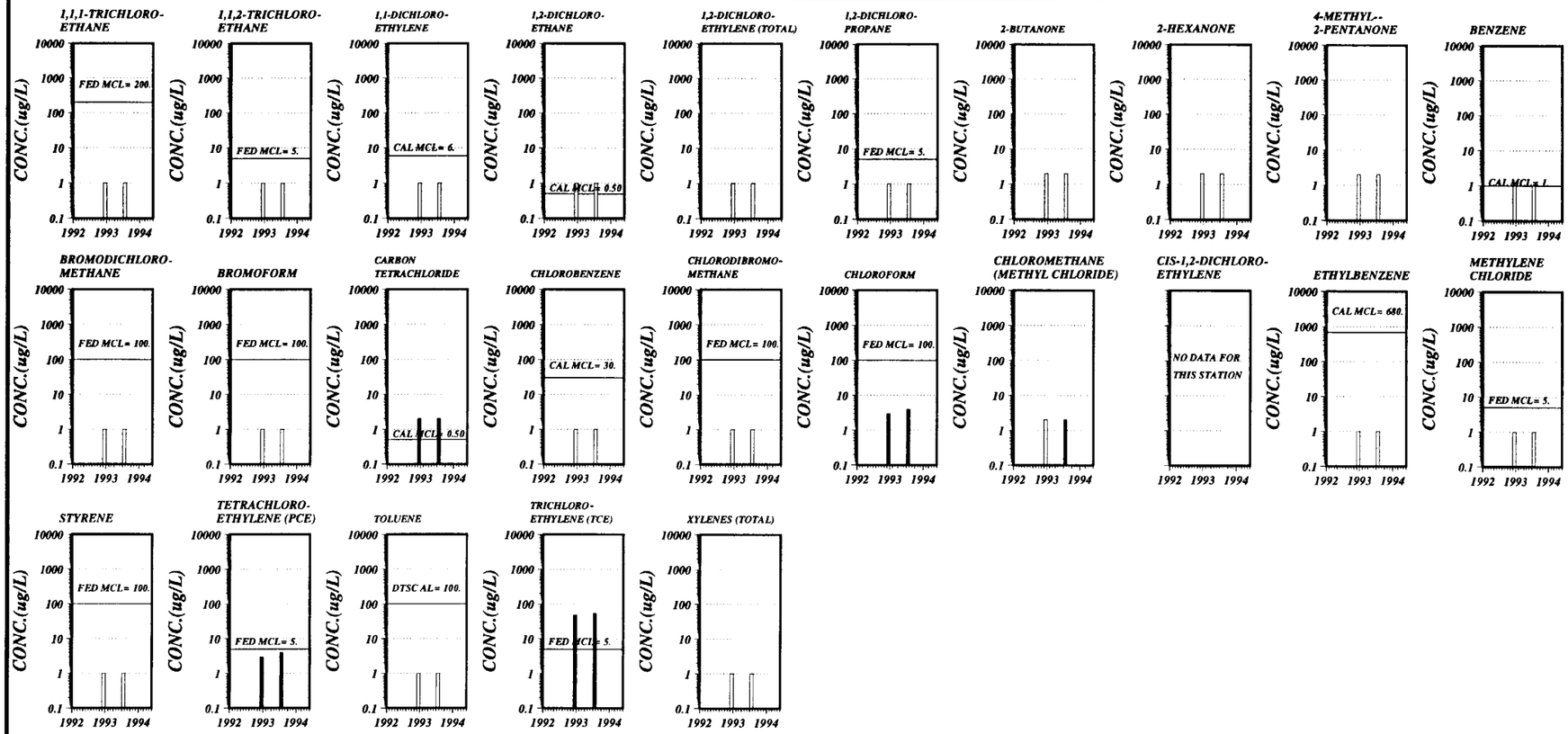
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

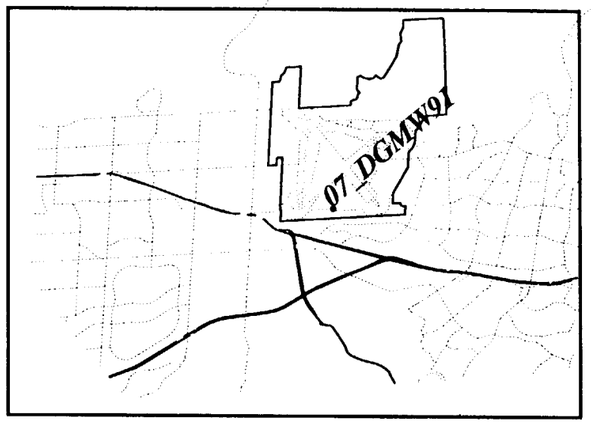
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

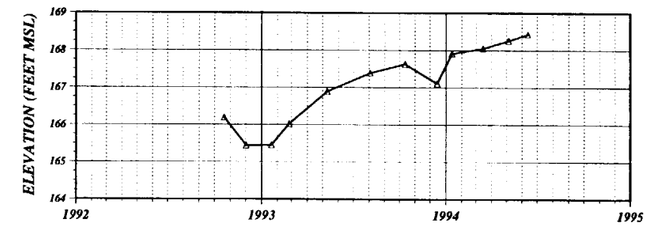
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

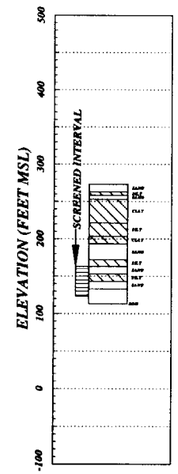
07_DGMW91







GROUNDWATER LEVEL HYDROGRAPH

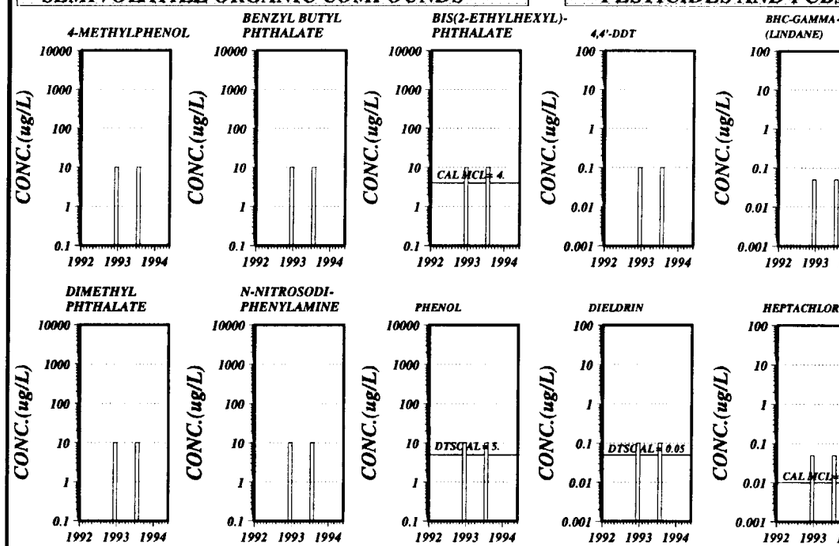


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SAND	263.2
15.0	SILT	258.2
20.0	SAND	253.2
52.0	CLAY	221.2
70.0	SILT	203.2
80.0	CLAY	193.2
101.0	SAND	172.2
110.0	SILT	163.2
120.0	SAND	153.2
130.0	SILT	143.2
140.0	SAND	133.2
160.0	TD	113.2

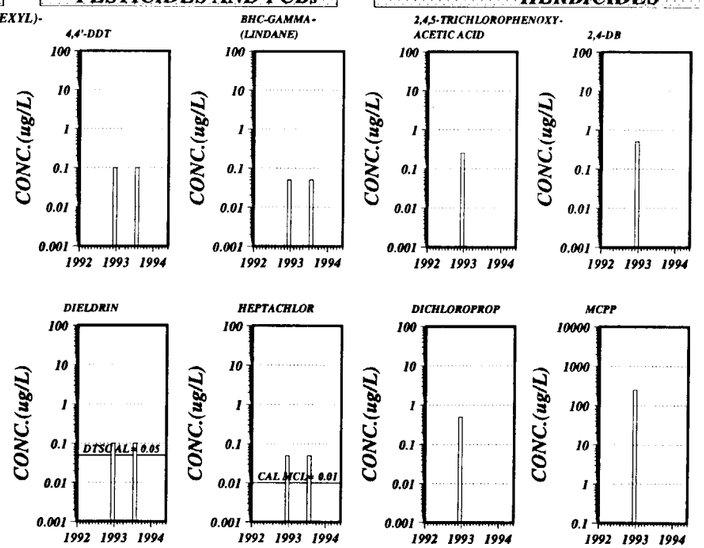
LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

SEMIVOLATILE ORGANIC COMPOUNDS

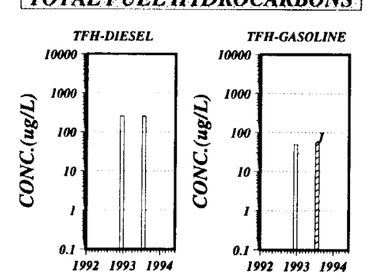


PESTICIDES AND PCBs



HERBICIDES

TOTAL FUEL HYDROCARBONS



07_DGMW91 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	273.19		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	160.00	113.19		
CASE TOP				
CASE BASE	110.00	163.19		
SCREEN TOP	110.00	163.19		
SCREEN BASE	150.00	123.19		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 07_DGMW91

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Fri Sep 23 14:13:04 1994

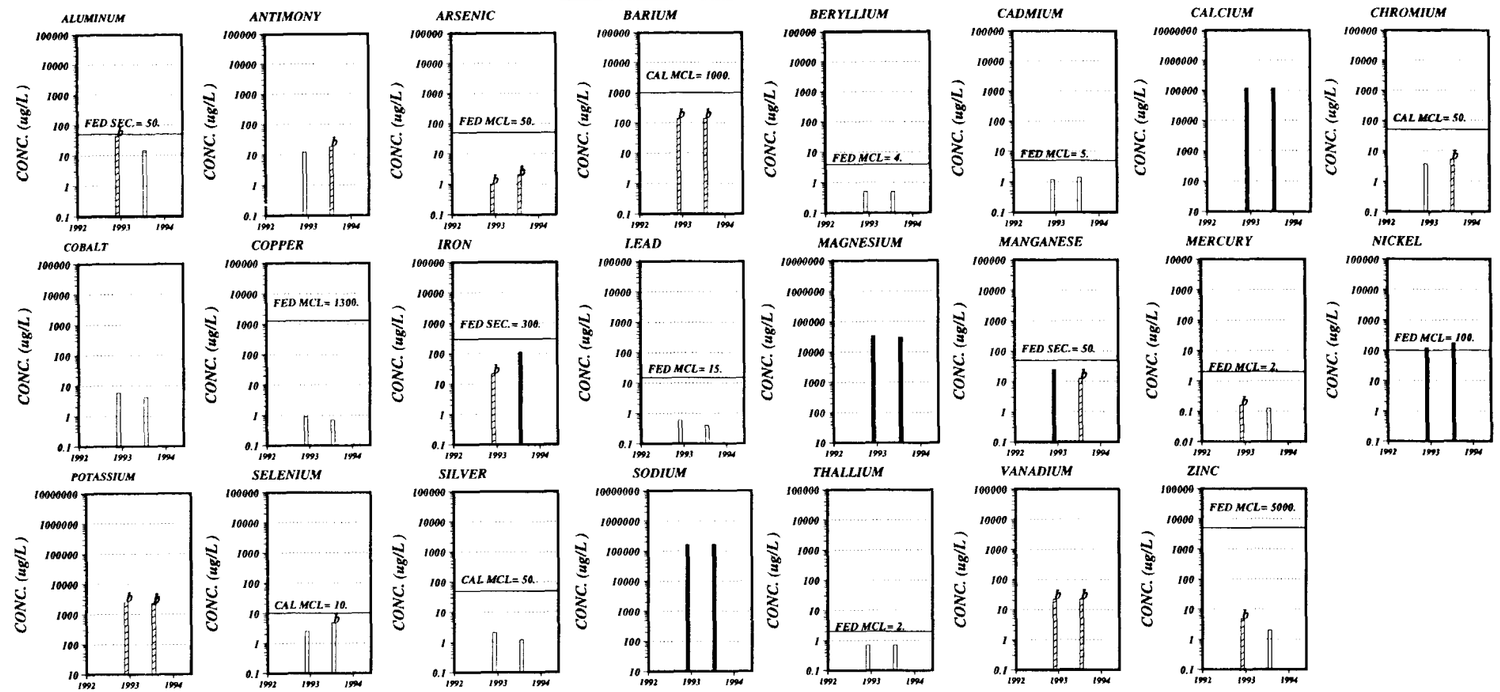
Site 8
DRMO Storage Yard

CHEMICAL DATA SUMMARY FOR WELL 08_DGMW73

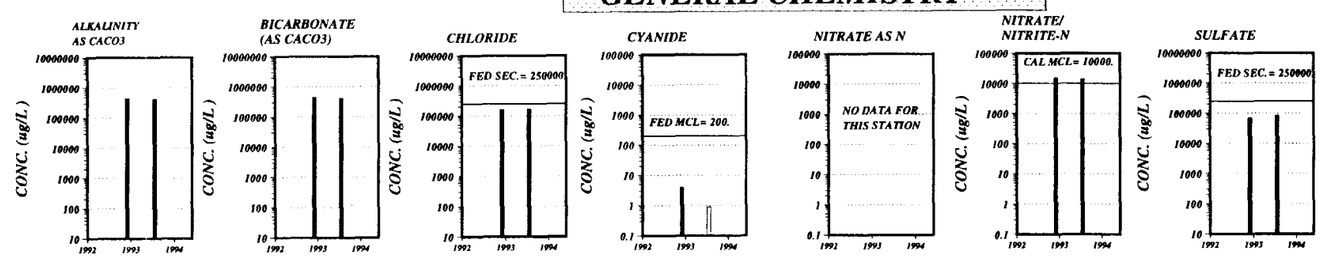
Table B-26
Groundwater Quality Data Summary - Well 08_DGMW73
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	12/02/92	2		07/20/93	3		07/20/93	3							
1,1-DICHLOROETHENE	UG/L	3	12/02/92	8		07/20/93	4		07/20/93	4							
1,2-DICHLOROETHANE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
2-BUTANONE	UG/L	3	12/02/92	2	U	07/20/93	2	U	07/20/93	2	U						
2-HEXANONE	UG/L	3	12/02/92	2	U	07/20/93	2	U	07/20/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	12/02/92	2	U	07/20/93	2	U	07/20/93	2	U						
BENZENE	UG/L	3	12/02/92	0.3	J	07/20/93	1	U	07/20/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
BROMOFORM	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	12/02/92	0.9	J	07/20/93	0.8	J	07/20/93	0.7	J						
CHLOROBENZENE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
CHLOROFORM	UG/L	3	12/02/92	9		07/20/93	8		07/20/93	8							
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	12/02/92	0.4	J	07/20/93	6		07/20/93	2	J						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
METHYLENE CHLORIDE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
STYRENE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
TETRACHLOROETHENE	UG/L	3	12/02/92	7		07/20/93	6		07/20/93	5							
TOLUENE	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
TRICHLOROETHYLENE	UG/L	3	12/02/92	140	d	07/20/93	110	d	07/20/93	100	d						
XYLENE (TOTAL)	UG/L	3	12/02/92	1	U	07/20/93	1	U	07/20/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	3	12/02/92	10	U	07/20/93	10	U	07/20/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	12/02/92	10	U	07/20/93	10	U	07/20/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	12/02/92	10	U	07/20/93	10	U	07/20/93	10	U						
DIMETHYL PHTHALATE	UG/L	3	12/02/92	10	U	07/20/93	10	U	07/20/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	12/02/92	10	U	07/20/93	10	U	07/20/93	10	U						
PHENOL	UG/L	3	12/02/92	10	U	07/20/93	10	U	07/20/93	10	U						
PESTICIDES AND PCBs																	
4,4-DDT	UG/L	3	12/02/92	0.1	U	07/20/93	0.1	U	07/20/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	12/02/92	0.05	U	07/20/93	0.05	U	07/20/93	0.05	U						
DIELDRIN	UG/L	3	12/02/92	0.1	U	07/20/93	0.1	U	07/20/93	0.1	U						
HEPTACHLOR	UG/L	3	12/02/92	0.05	U	07/20/93	0.05	U	07/20/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	3	12/02/92	0.25	U	07/20/93	1.85	U	07/20/93	1.85	U						
2,4-DB	UG/L	3	12/02/92	0.5	U	07/20/93	0.98	U	07/20/93	0.98	U						
DICHLOROPROP	UG/L	3	12/02/92	0.5	U	07/20/93	1.52	U	07/20/93	1.52	U						
MCPP	UG/L	3	12/02/92	250	U	07/20/93	522	U	07/20/93	522	U						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TPH-DIESEL	UG/L	3	12/02/92	250	U	07/20/93	250	U	07/20/93	250	U						
TPH-GASOLINE	UG/L	3	12/02/92	50	U	07/20/93	50	U	07/20/93	50	U						
METALS																	
ALUMINUM	UG/L	3	12/02/92	41.7	b	07/20/93	12.6	U	07/20/93	14.5	U						
ANTIMONY	UG/L	3	12/02/92	12.1	U	07/20/93	18.5	b	07/20/93	18.5	b						
ARSENIC	UG/L	3	12/02/92	1	b	07/20/93	1.9	b	07/20/93	2	b						
BARIUM	UG/L	3	12/02/92	137	b	07/20/93	137	b	07/20/93	140	b						
BERYLLIUM	UG/L	3	12/02/92	0.5	U	07/20/93	0.5	U	07/20/93	0.5	U						
CADMIUM	UG/L	3	12/02/92	1.2	U	07/20/93	1.4	U	07/20/93	1.4	U						
CALCIUM	UG/L	3	12/02/92	120000		07/20/93	115000		07/20/93	117000							
CHROMIUM	UG/L	3	12/02/92	3.7	U	07/20/93	5.2	b	07/20/93	5.1	b						
COBALT	UG/L	3	12/02/92	5.8	U	07/20/93	4.2	U	07/20/93	4.2	U						
COPPER	UG/L	3	12/02/92	0.9	U	07/20/93	0.7	U	07/20/93	0.7	U						
IRON	UG/L	3	12/02/92	21.5	b	07/20/93	112		07/20/93	108							
LEAD	UG/L	3	12/02/92	0.6	U	07/20/93	0.4	U	07/20/93	0.4	U						
MAGNESIUM	UG/L	3	12/02/92	33800		07/20/93	29800		07/20/93	30300							
MANGANESE	UG/L	3	12/02/92	25.2		07/20/93	11.9	b	07/20/93	12.4	b						
MERCURY	UG/L	3	12/02/92	0.16	b	07/20/93	0.1	U	07/20/93	0.1	U						
NICKEL	UG/L	3	12/02/92	122		07/20/93	176		07/20/93	171							
POTASSIUM	UG/L	3	12/02/92	2450	b	07/20/93	2120	b	07/20/93	2330	b						
SELENIUM	UG/L	3	12/02/92	2.5	U	07/20/93	4.8	U	07/20/93	4.6	b						
SILVER	UG/L	3	12/02/92	2.1	U	07/20/93	1.2	U	07/20/93	1.2	U						
SODIUM	UG/L	3	12/02/92	163000		07/20/93	181000		07/20/93	164000							
THALLIUM	UG/L	3	12/02/92	0.7	U	07/20/93	0.7	U	07/20/93	0.7	U						
VANADIUM	UG/L	3	12/02/92	22.3	b	07/20/93	22.6	b	07/20/93	22.1	b						
ZINC	UG/L	3	12/02/92	4.8	b	07/20/93	2	U	07/20/93	1.8	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	12/02/92	447000		07/20/93	420000		07/20/93	424000							
BICARBONATE (AS CACO3)	UG/L	3	12/02/92	447000		07/20/93	420000		07/20/93	424000							
CHLORIDE	UG/L	3	12/02/92	162000		07/20/93	170000		07/20/93	169000							
CYANIDE	UG/L	3	12/02/92	3.9		07/20/93	0.9	U	07/20/93	0.9	U						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	12/02/92	15400		07/20/93	14100		07/20/93	14000							
SULFATE	UG/L	3	12/02/92	69500		07/20/93	85700		07/20/93	84600							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	2	12/02/92	7.01		07/20/93	7.14										
TEMPERATURE, DEGREE C	DEG/C	2	12/02/92	22.7		07/20/93	24.6										
TOTAL DISSOLVED SOLIDS	UG/L	3	12/02/92	942000		07/20/93	954000		07/20/93	961000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	0															
GROSS BETA	PCI/L	0															

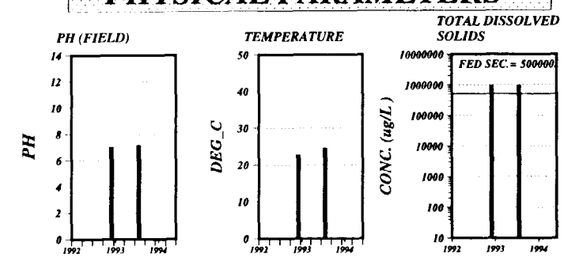
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



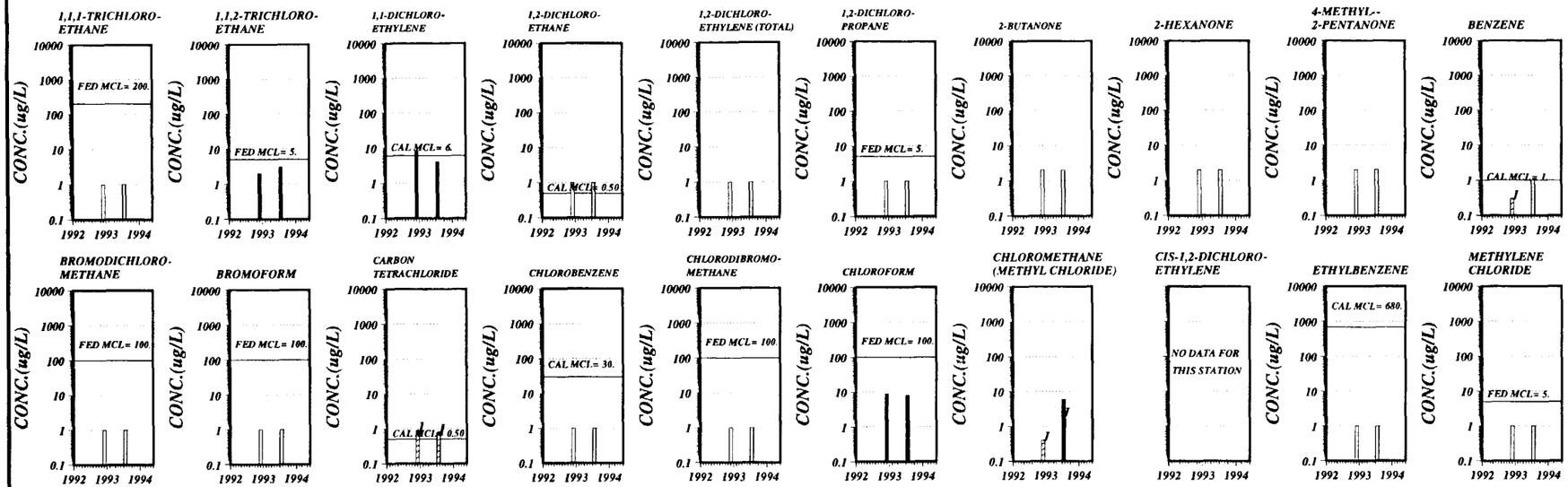
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

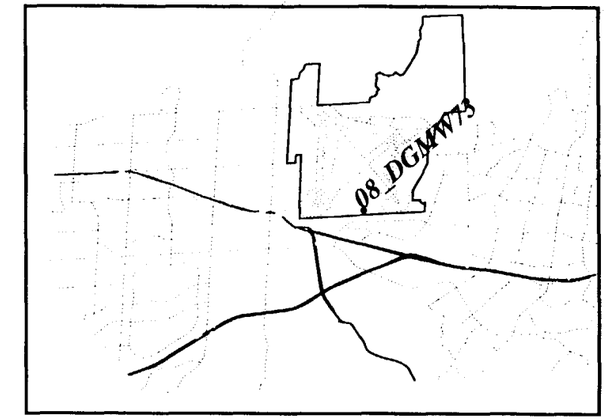
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

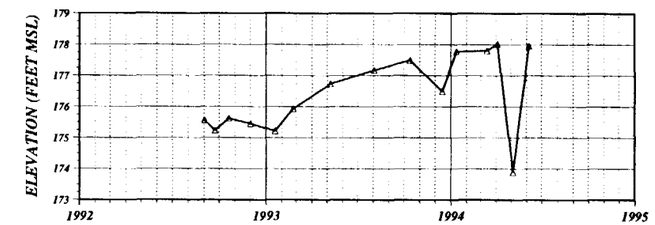
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

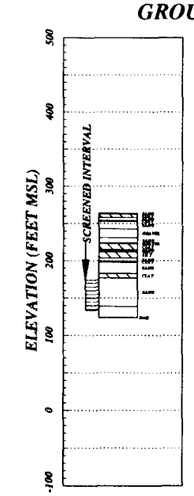
08_DGMW73







GROUNDWATER LEVEL HYDROGRAPH

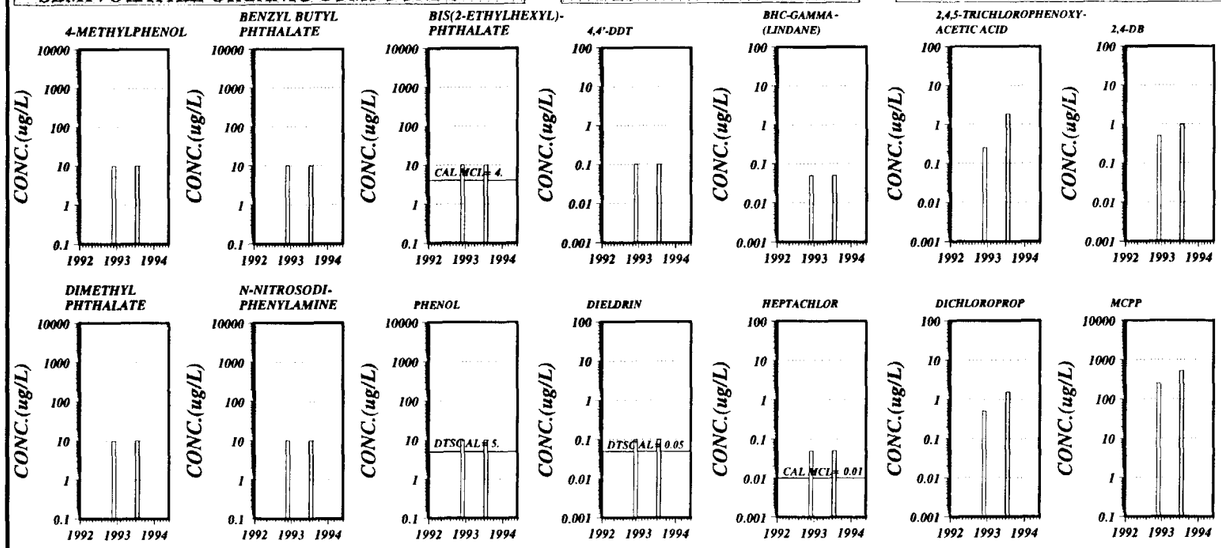


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
1.0	SAND	262.8
6.0	CLAY	257.8
10.0	SAND	253.8
11.0	CLAY	252.8
21.0	SAND	242.8
33.0	GRAVEL	230.8
40.0	SAND	223.8
41.0	GRAVEL	222.8
49.0	CLAY	214.8
50.0	SAND	213.8
52.0	CLAY	211.8
60.0	SILT	203.8
65.0	SAND	198.8
66.0	CLAY	197.8
81.0	SAND	182.8
87.0	CLAY	176.8
125.0	SAND	138.8
140.0	TD	123.8

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

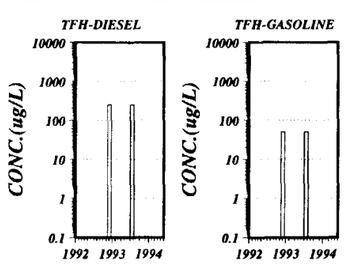
SEMIVOLATILE ORGANIC COMPOUNDS



PESTICIDES AND PCBs

HERBICIDES

TOTAL FUEL HYDROCARBONS



08_DGMW73 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	263.80		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	138.00	125.80		
CASE TOP				
CASE BASE	90.00	173.80		
SCREEN TOP	90.00	173.80		
SCREEN BASE	130.00	133.80		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 08_DGMW73

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

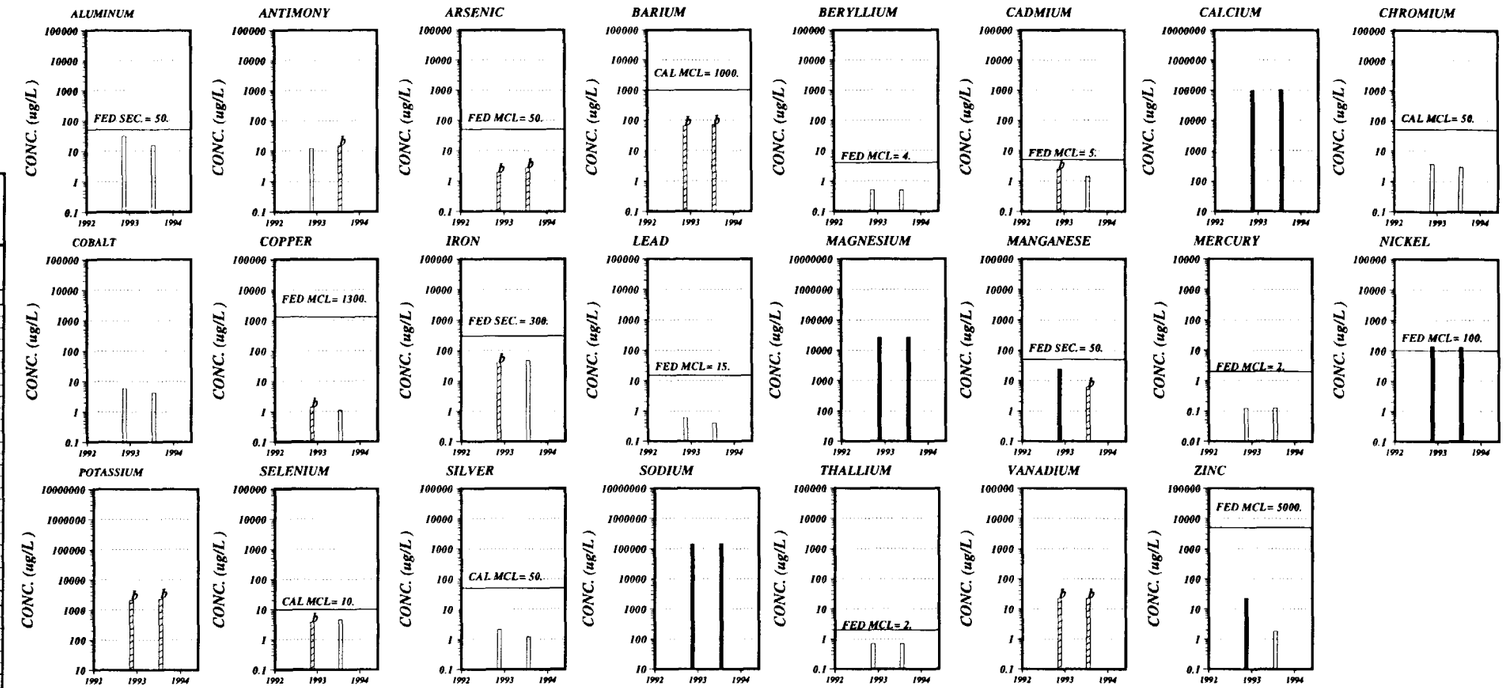
Tue Jul 26 12:00:46 1994

CHEMICAL DATA SUMMARY FOR WELL 08_DGMW74

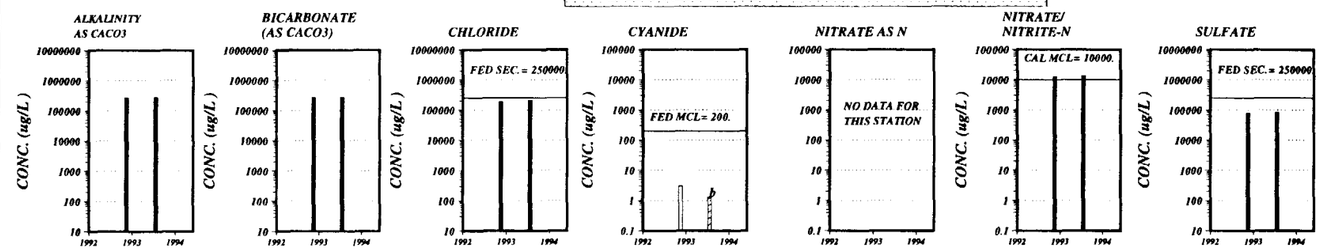
Table B-27
Groundwater Quality Data Summary - Well 08_DGMW74
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	11/16/92	5		11/16/92	5		07/20/93	3							
1,2-DICHLOROETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
2-BUTANONE	UG/L	3	11/16/92	2	U	11/16/92	2	U	07/20/93	2	U						
2-HEXANONE	UG/L	3	11/16/92	2	U	11/16/92	2	U	07/20/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	11/16/92	2	U	11/16/92	2	U	07/20/93	2	U						
BENZENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
BROMOFORM	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	11/16/92	6		11/16/92	6		07/20/93	5							
CHLOROBENZENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
CHLOROFORM	UG/L	3	11/16/92	6		11/16/92	6		07/20/93	7							
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	11/16/92	0.9	J	11/16/92	0.9	J	07/20/93	3							
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
METHYLENE CHLORIDE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
STYRENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
TETRACHLOROETHENE	UG/L	3	11/16/92	8		11/16/92	8		07/20/93	6							
TOLUENE	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
TRICHLOROETHYLENE	UG/L	3	11/16/92	100	d	11/16/92	100	d	07/20/93	100	d						
XYLENE (TOTAL)	UG/L	3	11/16/92	1	U	11/16/92	1	U	07/20/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	3	11/16/92	10	U	11/16/92	10	U	07/20/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	11/16/92	10	U	11/16/92	10	U	07/20/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	11/16/92	10	U	11/16/92	10	U	07/20/93	10	U						
DIMETHYL PHTHALATE	UG/L	3	11/16/92	10	U	11/16/92	10	U	07/20/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	11/16/92	10	U	11/16/92	10	U	07/20/93	10	U						
PHENOL	UG/L	3	11/16/92	10	U	11/16/92	10	U	07/20/93	10	U						
PESTICIDES AND PCBs																	
4,4'-DDT	UG/L	5	11/16/92	0.1	U	11/16/92	0.1	U	11/16/92	0.1	U	11/16/92	0.1	U	07/20/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	5	11/16/92	0.05	U	11/16/92	0.05	U	11/16/92	0.05	U	11/16/92	0.05	U	07/20/93	0.05	U
DIELDRIN	UG/L	5	11/16/92	0.1	U	11/16/92	0.1	U	11/16/92	0.1	U	11/16/92	0.1	U	07/20/93	0.1	U
HEPTACHLOR	UG/L	5	11/16/92	0.05	U	11/16/92	0.05	U	11/16/92	0.05	U	11/16/92	0.05	U	07/20/93	0.05	U
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	3	11/16/92	0.25	U	11/16/92	0.25	U	07/20/93	1.85	U						
2,4-DB	UG/L	3	11/16/92	0.5	U	11/16/92	0.5	U	07/20/93	0.98	U						
DICHLOROPROP	UG/L	3	11/16/92	0.5	U	11/16/92	0.5	U	07/20/93	1.52	U						
MCPP	UG/L	3	11/16/92	250	U	11/16/92	250	U	07/20/93	522	U						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TPH-DIESEL	UG/L	3	11/16/92	250	U	11/16/92	250	U	07/20/93	250	U						
TPH-GASOLINE	UG/L	3	11/16/92	50	U	11/16/92	50	U	07/20/93	50	U						
METALS																	
ALUMINUM	UG/L	3	11/16/92	31	U	11/16/92	31	U	07/20/93	15.4	U						
ANTIMONY	UG/L	3	11/16/92	12.1	U	11/16/92	12.1	U	07/20/93	15.1	b						
ARSENIC	UG/L	3	11/16/92	1.9	b	11/16/92	1.9	b	07/20/93	2.7	b						
BARIUM	UG/L	3	11/16/92	64.6	b	11/16/92	64.6	b	07/20/93	71	b						
BERYLLIUM	UG/L	3	11/16/92	0.5	U	11/16/92	0.5	U	07/20/93	0.5	U						
CADMIUM	UG/L	3	11/16/92	2.5	b	11/16/92	2.5	b	07/20/93	1.4	U						
CALCIUM	UG/L	3	11/16/92	95700		11/16/92	95700		07/20/93	99800							
CHROMIUM	UG/L	3	11/16/92	3.7	U	11/16/92	3.7	U	07/20/93	2.9	U						
COBALT	UG/L	3	11/16/92	5.8	U	11/16/92	5.8	U	07/20/93	4.2	U						
COPPER	UG/L	3	11/16/92	1.4	b	11/16/92	1.4	b	07/20/93	1.1	U						
IRON	UG/L	3	11/16/92	38.2	b	11/16/92	38.2	b	07/20/93	46.8	U						
LEAD	UG/L	3	11/16/92	0.6	U	11/16/92	0.6	U	07/20/93	0.4	U						
MAGNESIUM	UG/L	3	11/16/92	26000		11/16/92	26000		07/20/93	26300							
MANGANESE	UG/L	3	11/16/92	24.8		11/16/92	24.8		07/20/93	6.2	b						
MERCURY	UG/L	3	11/16/92	0.1	U	11/16/92	0.1	U	07/20/93	0.1	U						
NICKEL	UG/L	3	11/16/92	138		11/16/92	138		07/20/93	130							
POTASSIUM	UG/L	3	11/16/92	2060	b	11/16/92	2060	b	07/20/93	2260	b						
SELENIUM	UG/L	3	11/16/92	3.8	b	11/16/92	3.8	b	07/20/93	4.6	U						
SILVER	UG/L	3	11/16/92	2.1	U	11/16/92	2.1	U	07/20/93	1.2	U						
SODIUM	UG/L	3	11/16/92	138000		11/16/92	138000		07/20/93	145000							
THALLIUM	UG/L	3	11/16/92	0.7	U	11/16/92	0.7	U	07/20/93	0.7	U						
VANADIUM	UG/L	3	11/16/92	22.9	b	11/16/92	22.9	b	07/20/93	22.6	b						
ZINC	UG/L	3	11/16/92	23		11/16/92	23		07/20/93	1.8	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	11/16/92	266000		11/16/92	266000		07/20/93	276000							
BICARBONATE (AS CACO3)	UG/L	3	11/16/92	266000		11/16/92	266000		07/20/93	276000							
CHLORIDE	UG/L	3	11/16/92	189000		11/16/92	189000		07/20/93	210000							
CYANIDE	UG/L	3	11/16/92	3	U	11/16/92	3	U	07/20/93	1.3	b						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	11/16/92	12600		11/16/92	12600		07/20/93	13400							
SULFATE	UG/L	3	11/16/92	79600		11/16/92	79600		07/20/93	85200							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	3	11/16/92	6.89		11/16/92	6.89		07/20/93	7.06							
TEMPERATURE, DEGREE C	DEG/C	3	11/16/92	24		11/16/92	24		07/20/93	23.8							
TOTAL DISSOLVED SOLIDS	UG/L	3	11/16/92	804000		11/16/92	804000		07/20/93	895000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	0															
GROSS BETA	PCI/L	0															

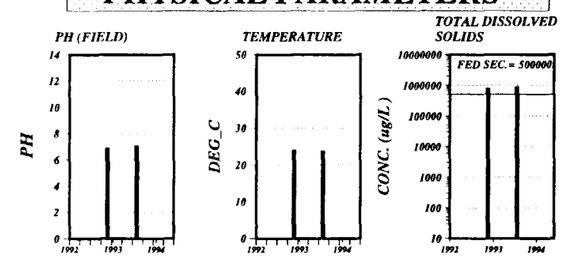
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



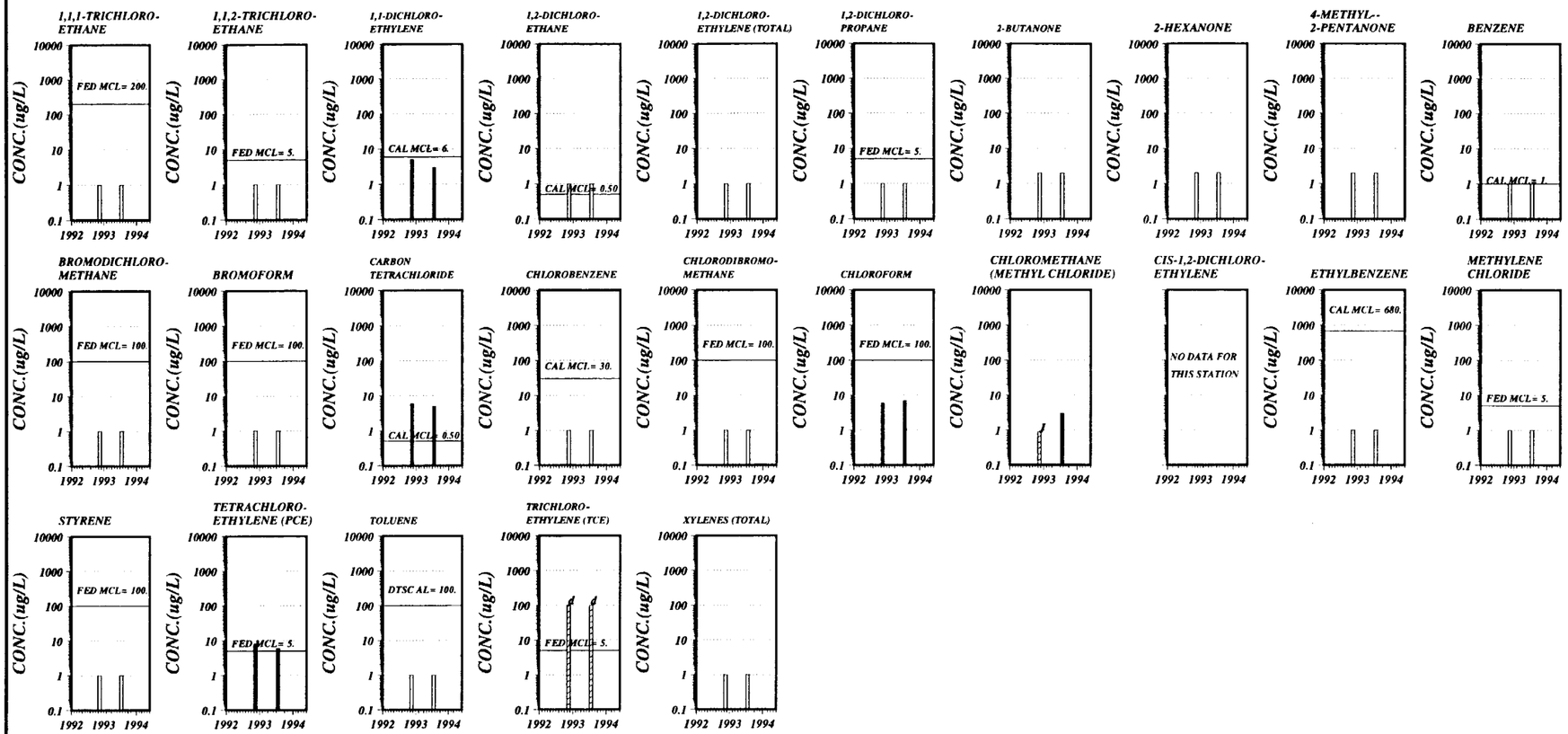
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

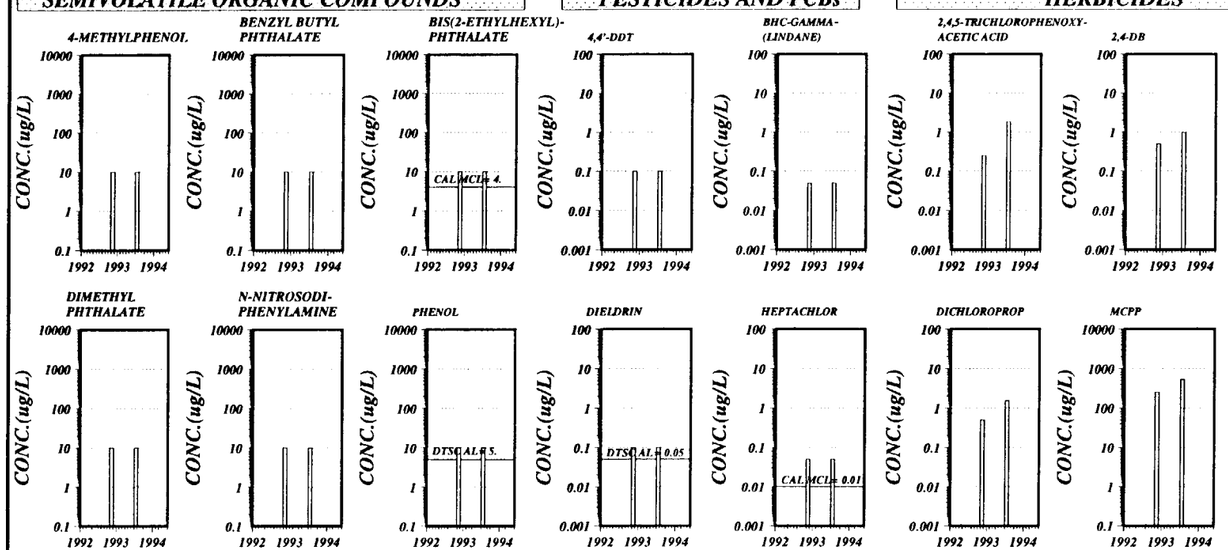
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

08_DGMW74



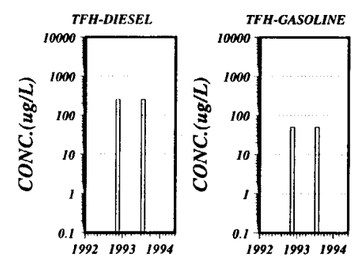
SEMIVOLATILE ORGANIC COMPOUNDS

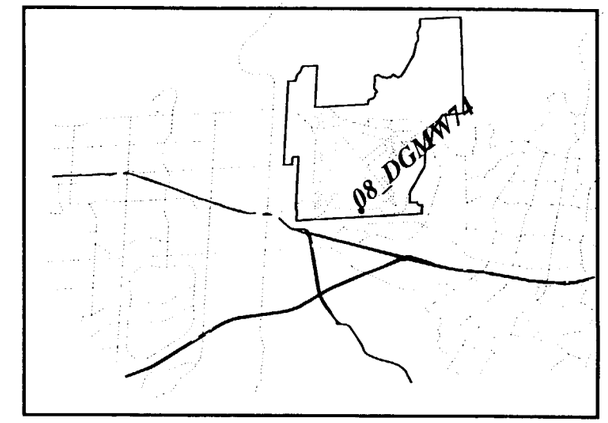


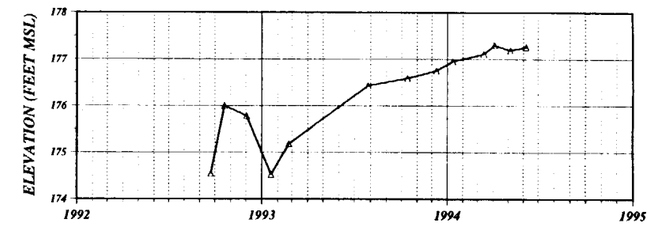
PESTICIDES AND PCBs

HERBICIDES

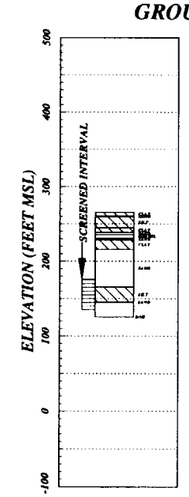
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
5.0	CLAY	260.7
6.0	SAND	259.7
21.0	SILT	244.7
27.0	CLAY	238.7
30.0	SAND	235.7
35.0	GRAVEL	230.7
37.0	SAND	228.7
50.0	CLAY	215.7
100.0	SAND	165.7
120.0	SILT	145.7
121.0	SAND	144.7
140.0	TD	125.7

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

08_DGMW74 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	265.70		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	140.00	125.70		
CASE TOP	-1.00	266.70		
CASE BASE	90.00	175.70		
SCREEN TOP	90.00	175.70		
SCREEN BASE	130.00	135.70		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 08_DGMW74

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

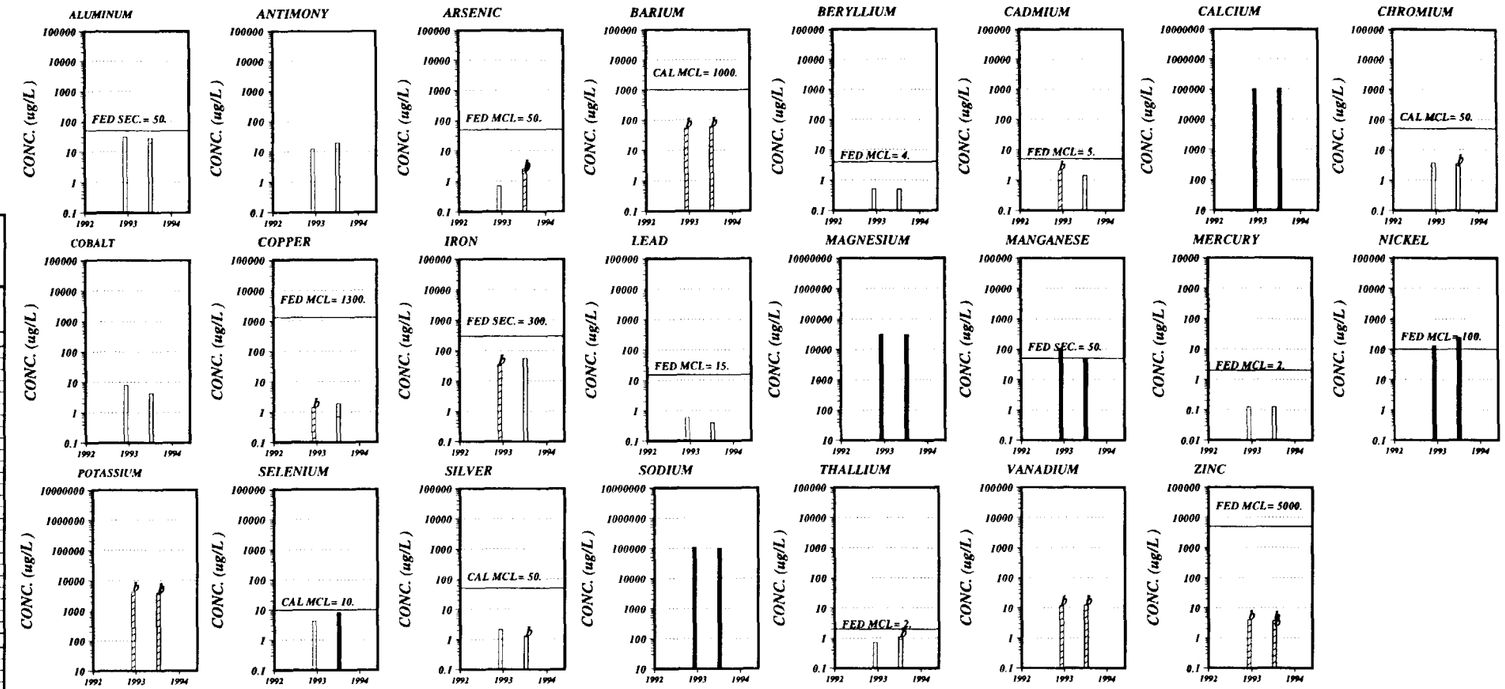
Tue Jul 26 12:01:06 1994

CHEMICAL DATA SUMMARY FOR WELL 08_UGMW29

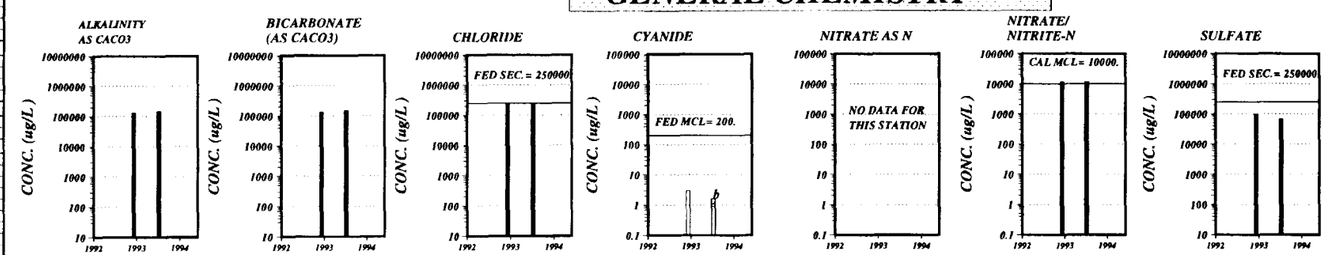
Table B-28
Groundwater Quality Data Summary - Well 08_UGMW29
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
1,2-DICHLOROETHANE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
2-BUTANONE	UG/L	3	12/08/92	2	U	07/09/93	2	U	07/09/93	2	U						
2-HEXANONE	UG/L	3	12/08/92	2	U	07/09/93	2	U	07/09/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	12/08/92	2	U	07/09/93	2	U	07/09/93	2	U						
BENZENE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
BROMODICHLOROMETHANE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
BROMOFORM	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
CHLOROBENZENE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
CHLOROFORM	UG/L	3	12/08/92	0.8	J	07/09/93	1	U	07/09/93	1	U						
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	12/08/92	2	U	07/09/93	2	U	07/09/93	2	U						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
METHYLENE CHLORIDE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
STYRENE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
TETRACHLOROETHENE	UG/L	3	12/08/92	1	U	07/09/93	1	U	07/09/93	1	U						
TOLUENE	UG/L	3	12/08/92	0.7	J	07/09/93	1	U	07/09/93	1	U						
TRICHLOROETHYLENE	UG/L	3	12/08/92	20		07/09/93	12		07/09/93	12							
XYLENE (TOTAL)	UG/L	3	12/08/92	1	J	07/09/93	1	U	07/09/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	3	12/08/92	10	U	07/09/93	10	U	07/09/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	12/08/92	10	U	07/09/93	10	U	07/09/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	12/08/92	10	U	07/09/93	10	U	07/09/93	10	U						
DIMETHYL PHTHALATE	UG/L	3	12/08/92	10	U	07/09/93	10	U	07/09/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	12/08/92	10	U	07/09/93	10	U	07/09/93	10	U						
PHENOL	UG/L	3	12/08/92	10	U	07/09/93	10	U	07/09/93	10	U						
PESTICIDES AND PCBs																	
4,4-DDT	UG/L	3	12/08/92	0.1	U	07/09/93	0.1	U	07/09/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	12/08/92	0.05	U	07/09/93	0.05	U	07/09/93	0.05	U						
DIELDRIN	UG/L	3	12/08/92	0.1	U	07/09/93	0.1	U	07/09/93	0.1	U						
HEPTACHLOR	UG/L	3	12/08/92	0.05	U	07/09/93	0.05	U	07/09/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	07/09/93	1.99	U	07/09/93	1.85	U									
2,4-DB	UG/L	2	07/09/93	1.05	U	07/09/93	0.98	U									
DICHLOROPROP	UG/L	2	07/09/93	1.63	U	07/09/93	1.52	U									
MCPP	UG/L	2	07/09/93	561	U	07/09/93	522	U									
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TFH-DIESEL	UG/L	3	12/08/92	250	U	07/09/93	250	U	07/09/93	250	U						
TFH-GASOLINE	UG/L	3	12/08/92	50	U	07/09/93	50	U	07/09/93	50	U						
METALS																	
ALUMINUM	UG/L	3	12/08/92	31	U	07/09/93	19.4	U	07/09/93	28.4	U						
ANTIMONY	UG/L	3	12/08/92	12.1	U	07/09/93	12.2	U	07/09/93	19.3	U						
ARSENIC	UG/L	3	12/08/92	0.7	U	07/09/93	2.1	b	07/09/93	2.5	b						
BARIUM	UG/L	3	12/08/92	54.6	b	07/09/93	59.6	b	07/09/93	59.8	b						
BERYLLIUM	UG/L	3	12/08/92	0.5	U	07/09/93	0.5	U	07/09/93	0.5	U						
CADMIUM	UG/L	3	12/08/92	2.1	b	07/09/93	1.4	U	07/09/93	1.4	U						
CALCIUM	UG/L	3	12/08/92	97900		07/09/93	102000		07/09/93	106000							
CHROMIUM	UG/L	3	12/08/92	3.7	U	07/09/93	2.9	U	07/09/93	3.4	b						
COBALT	UG/L	3	12/08/92	8	U	07/09/93	4.2	U	07/09/93	4.2	U						
COPPER	UG/L	3	12/08/92	1.4	b	07/09/93	0.7	U	07/09/93	1.9	U						
IRON	UG/L	3	12/08/92	34.6	b	07/09/93	48.7	U	07/09/93	55	U						
LEAD	UG/L	3	12/08/92	0.6	U	07/09/93	0.4	U	07/09/93	0.4	U						
MAGNESIUM	UG/L	3	12/08/92	30800		07/09/93	30000		07/09/93	30300							
MANGANESE	UG/L	3	12/08/92	110		07/09/93	46.7		07/09/93	48.3							
MERCURY	UG/L	3	12/08/92	0.1	U	07/09/93	0.1	U	07/09/93	0.1	U						
NICKEL	UG/L	3	12/08/92	134		07/09/93	237		07/09/93	246							
POTASSIUM	UG/L	3	12/08/92	4150	b	07/09/93	3470	b	07/09/93	3840	b						
SELENIUM	UG/L	3	12/08/92	4.2	U	07/09/93	7.5		07/09/93	8.1							
SILVER	UG/L	3	12/08/92	2.1	U	07/09/93	1.2	U	07/09/93	1.3	b						
SODIUM	UG/L	3	12/08/92	109000		07/09/93	100000		07/09/93	98900							
THALLIUM	UG/L	3	12/08/92	0.7	U	07/09/93	0.9	U	07/09/93	1.1	b						
VANADIUM	UG/L	3	12/08/92	12.3	b	07/09/93	12.1	b	07/09/93	12.6	b						
ZINC	UG/L	3	12/08/92	4.1	b	07/09/93	3.7	b	07/09/93	2.4	b						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	12/08/92	132000		07/09/93	149000		07/09/93	149000							
BICARBONATE (AS CACO3)	UG/L	3	12/08/92	132000		07/09/93	149000		07/09/93	149000							
CHLORIDE	UG/L	3	12/08/92	245000		07/09/93	228000		07/09/93	232000							
CYANIDE	UG/L	3	12/08/92	3	U	07/09/93	0.9	U	07/09/93	1.6	b						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	12/08/92	11700		07/09/93	11700		07/09/93	11500							
SULFATE	UG/L	3	12/08/92	99500		07/09/93	67300		07/09/93	68200							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	2	12/08/92	7.33		07/09/93	7.2										
TEMPERATURE, DEGREE C	DEG/C	2	12/08/92	22.9		07/09/93	25.9										
TOTAL DISSOLVED SOLIDS	UG/L	3	12/08/92	847000		07/09/93	963000		07/09/93	959000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	0															
GROSS BETA	PCI/L	0															

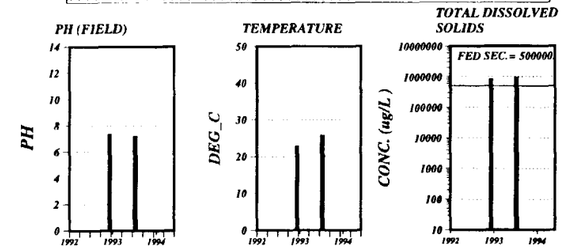
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



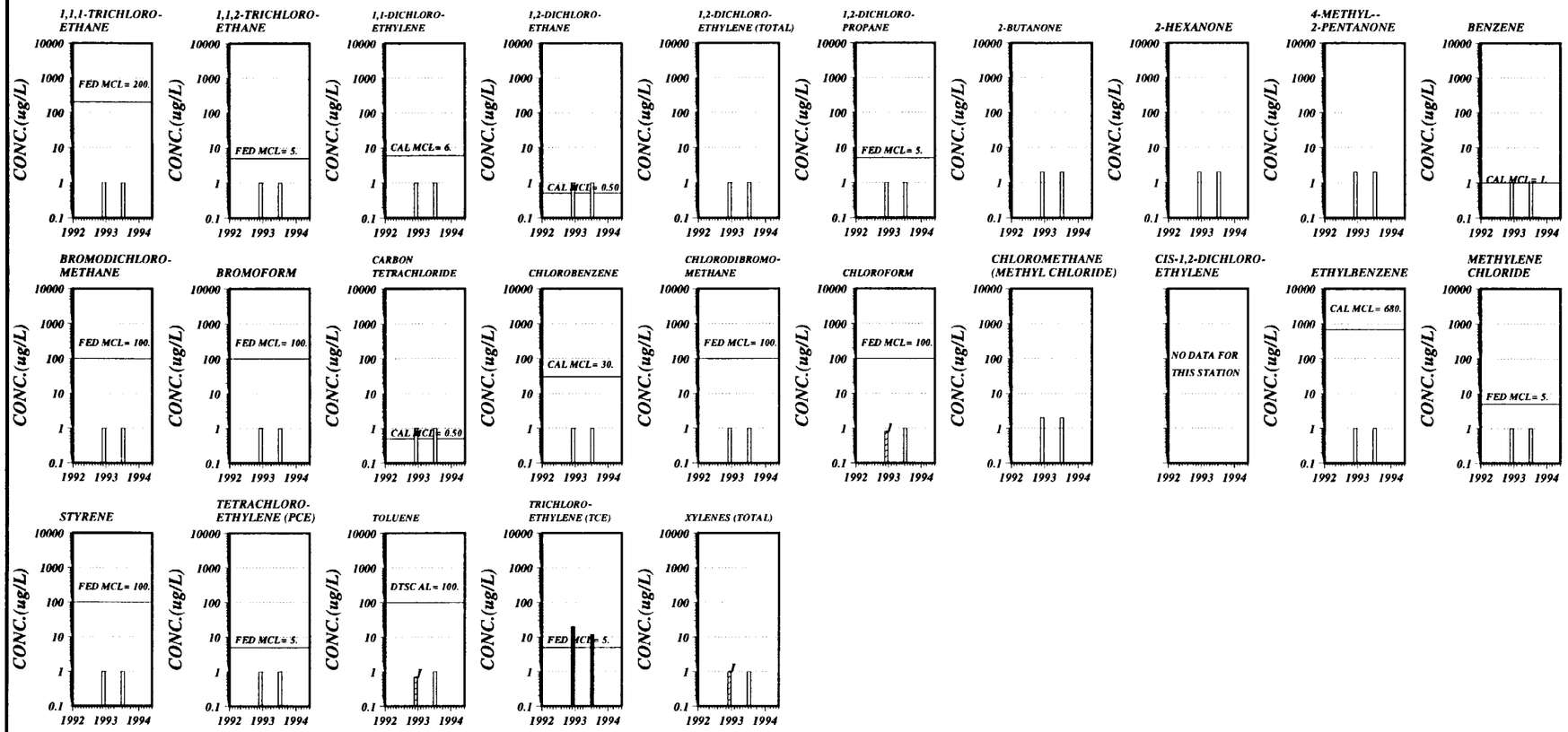
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

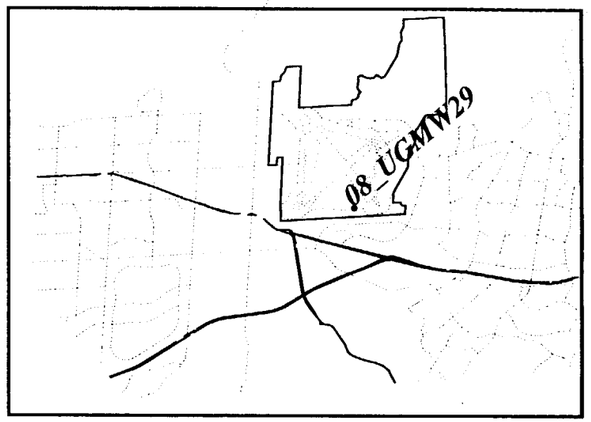
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

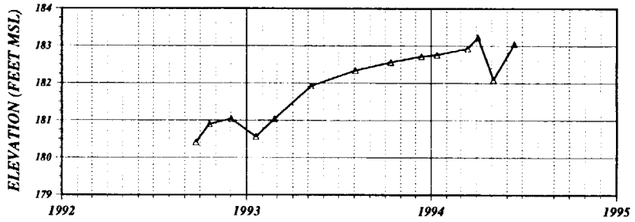
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

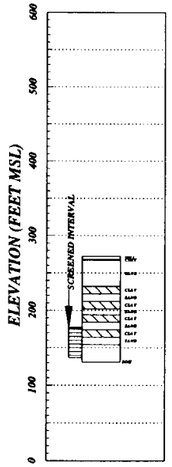
08_UGMW29







GROUNDWATER LEVEL HYDROGRAPH

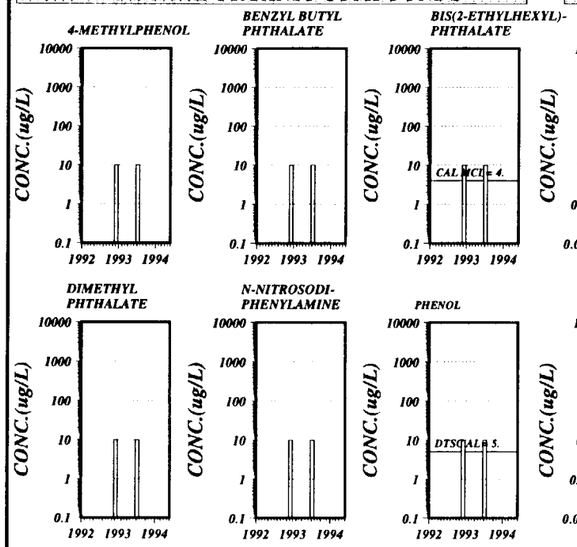


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
4.0	FILL	268.2
5.0	CLAY	267.2
40.0	SAND	232.2
50.0	CLAY	222.2
60.0	SAND	212.2
70.0	CLAY	202.2
78.0	SAND	194.2
88.0	CLAY	184.2
98.0	SAND	174.2
108.0	CLAY	164.2
118.0	SAND	154.2
143.0	TD	131.2

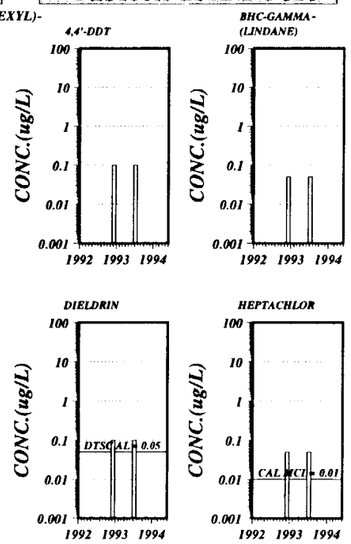
LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

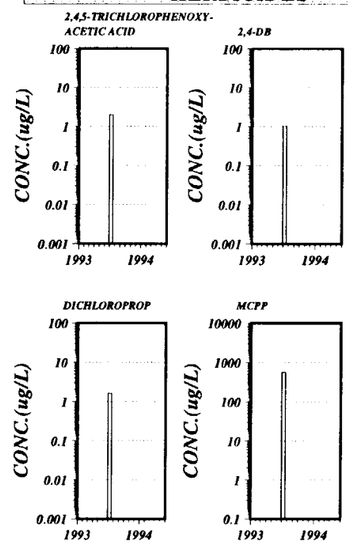
SEMIVOLATILE ORGANIC COMPOUNDS



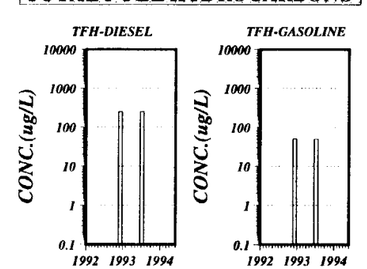
PESTICIDES AND PCBs



HERBICIDES



TOTAL FUEL HYDROCARBONS



08_UGMW29 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	272.20		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	143.00	129.20		
CASE TOP				
CASE BASE	95.00	177.20		
SCREEN TOP	95.00	177.20		
SCREEN BASE	135.00	137.20		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 08_UGMW29

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Tue Jul 26 12:04:47 1994

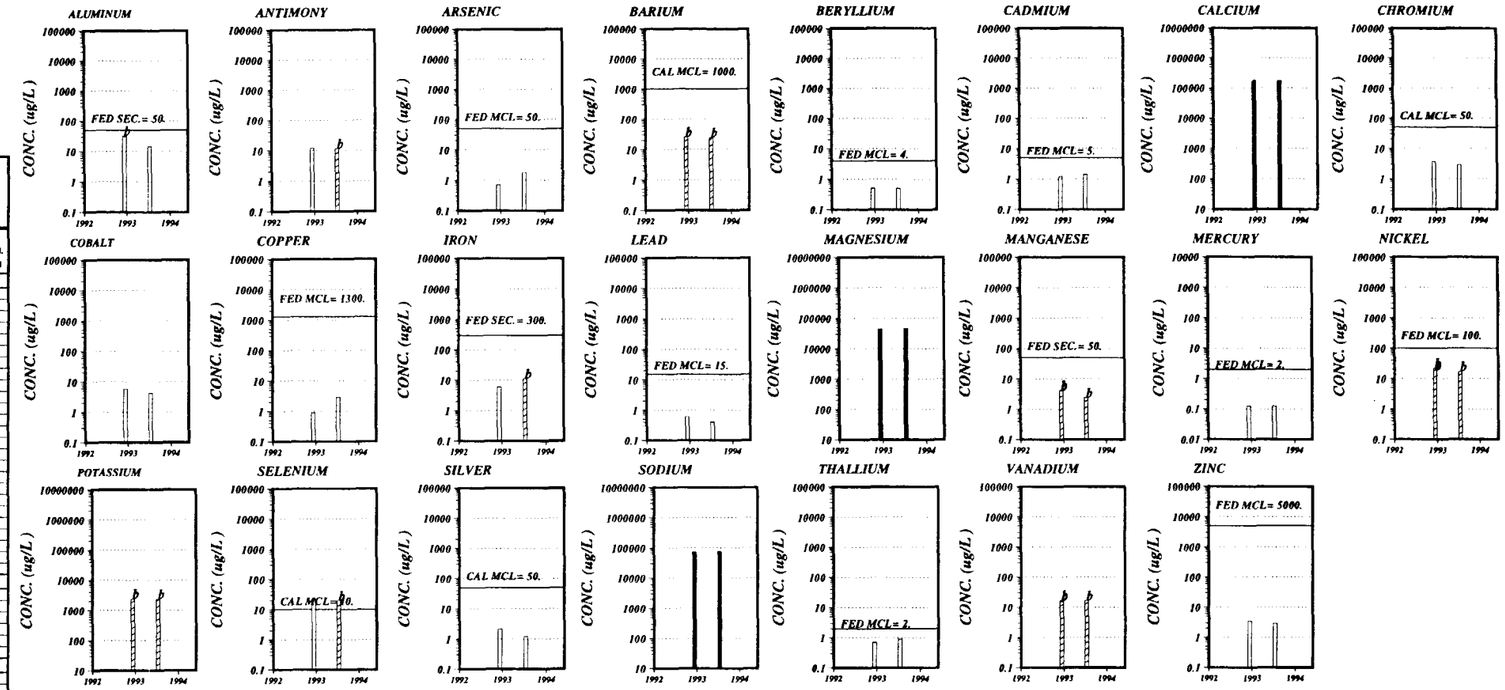
Site 9
Crash Crew Pit No. 1

CHEMICAL DATA SUMMARY FOR WELL 09_DBMW45

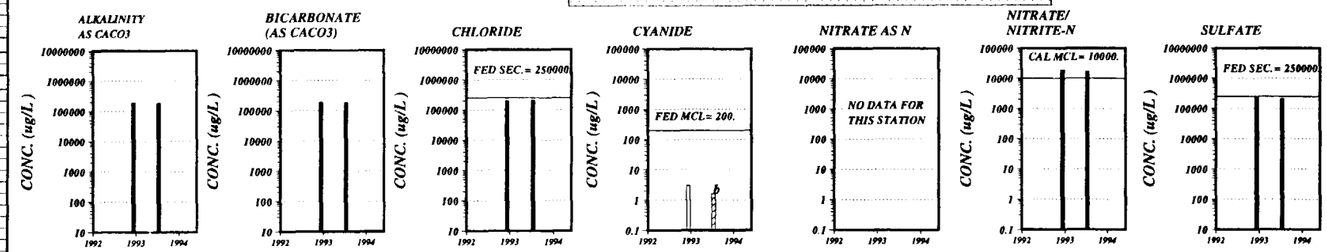
Table B-29
Groundwater Quality Data Summary - Well 09_DBMW45
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
1,1,2-TRICHLOROETHANE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
1,1-DICHLOROETHENE	UG/L	4	07/20/92	2		12/10/92	4		12/10/92	1	U	07/13/93	1	U			
1,2-DICHLOROETHANE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	0.5	J	07/13/93	1	U			
1,2-DICHLOROETHENE (TOTAL)	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1		07/13/93	1	U			
1,2-DICHLOROPROPANE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
2-BUTANONE	UG/L	4	07/20/92	2	U	12/10/92	2	U	12/10/92	2	U	07/13/93	2	U			
2-HEXANONE	UG/L	4	07/20/92	2	U	12/10/92	2	U	12/10/92	2	U	07/13/93	2	U			
4-METHYL-2-PENTANONE	UG/L	4	07/20/92	2	U	12/10/92	2	U	12/10/92	2	U	07/13/93	2	U			
BENZENE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
BROMODICHLOROMETHANE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
BROMOFORM	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
CARBON TETRACHLORIDE	UG/L	4	07/20/92	3		12/10/92	7		12/10/92	6		07/13/93	5				
CHLOROBENZENE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
CHLORODIBROMOMETHANE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
CHLOROFORM	UG/L	4	07/20/92	2		12/10/92	2		12/10/92	2		07/13/93	3				
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	4	07/20/92	2	U	12/10/92	2	U	12/10/92	2	U	07/13/93	2	U			
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
METHYLENE CHLORIDE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
STYRENE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
TETRACHLOROETHENE	UG/L	4	07/20/92	5		12/10/92	7		12/10/92	8		07/13/93	5				
TOLUENE	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
TRICHLOROETHYLENE	UG/L	4	07/20/92	1000	d	12/10/92	1800	d	12/10/92	2000	d	07/13/93	1700	d			
XYLENE (TOTAL)	UG/L	4	07/20/92	1	U	12/10/92	1	U	12/10/92	1	U	07/13/93	1	U			
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	3	12/10/92	10	U	12/10/92	10	U	07/13/93	10	U						
BENZYL BUTYL PHTHALATE	UG/L	3	12/10/92	10	U	12/10/92	10	U	07/13/93	10	U						
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	3	12/10/92	10	U	12/10/92	10	U	07/13/93	10	U						
DIMETHYL PHTHALATE	UG/L	3	12/10/92	10	U	12/10/92	10	U	07/13/93	10	U						
N-NITROSODIPHENYLAMINE	UG/L	3	12/10/92	10	U	12/10/92	10	U	07/13/93	10	U						
PHENOL	UG/L	3	12/10/92	10	U	12/10/92	10	U	07/13/93	10	U						
PESTICIDES AND PCBs																	
4,4'-DDT	UG/L	3	12/10/92	0.1	U	12/10/92	0.1	U	07/13/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	12/10/92	0.05	U	12/10/92	0.05	U	07/13/93	0.05	U						
DIELDRIN	UG/L	3	12/10/92	0.1	U	12/10/92	0.1	U	07/13/93	0.1	U						
HEPTACHLOR	UG/L	3	12/10/92	0.05	U	12/10/92	0.05	U	07/13/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0															
2,4-DB	UG/L	0															
DICHLOROPROP	UG/L	0															
MCPP	UG/L	0															
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TFH-DIESEL	UG/L	3	12/10/92	250	U	12/10/92	250	U	07/13/93	250	U						
TFH-GASOLINE	UG/L	3	12/10/92	85		12/10/92	250		07/13/93	346	J						
METALS																	
ALUMINUM	UG/L	3	12/10/92	33.1	b	12/10/92	31	U	07/13/93	14.3	U						
ANTIMONY	UG/L	3	12/10/92	12.1	U	12/10/92	12.1	U	07/13/93	11.5	b						
ARSENIC	UG/L	3	12/10/92	0.7	U	12/10/92	0.7	U	07/13/93	1.8	U						
BARIUM	UG/L	3	12/10/92	25.5	b	12/10/92	24.9	b	07/13/93	24.6	b						
BERYLLIUM	UG/L	3	12/10/92	0.5	U	12/10/92	0.5	U	07/13/93	0.5	U						
CADMIUM	UG/L	3	12/10/92	1.2	U	12/10/92	1.2	U	07/13/93	1.4	U						
CALCIUM	UG/L	3	12/10/92	173000		12/10/92	169000		07/13/93	173000							
CHROMIUM	UG/L	3	12/10/92	3.7	U	12/10/92	3.7	U	07/13/93	2.9	U						
COBALT	UG/L	3	12/10/92	5.8	U	12/10/92	5.8	U	07/13/93	4.2	U						
COPPER	UG/L	3	12/10/92	0.9	U	12/10/92	0.9	U	07/13/93	2.9	U						
IRON	UG/L	3	12/10/92	5.9	U	12/10/92	2.3	U	07/13/93	11.3	b						
LEAD	UG/L	3	12/10/92	0.6	U	12/10/92	0.6	U	07/13/93	0.4	U						
MAGNESIUM	UG/L	3	12/10/92	45000		12/10/92	43700		07/13/93	46200							
MANGANESE	UG/L	3	12/10/92	4.3	b	12/10/92	3.9	b	07/13/93	2.4	b						
MERCURY	UG/L	3	12/10/92	0.1	U	12/10/92	0.1	U	07/13/93	0.1	U						
NICKEL	UG/L	3	12/10/92	22.2	b	12/10/92	18.4	b	07/13/93	17	b						
POTASSIUM	UG/L	3	12/10/92	2320	b	12/10/92	2300	b	07/13/93	2300	b						
SELENIUM	UG/L	3	12/10/92	20.2	U	12/10/92	22	U	07/13/93	19.6	b						
SILVER	UG/L	3	12/10/92	2.1	U	12/10/92	2.1	U	07/13/93	1.2	U						
SODIUM	UG/L	3	12/10/92	72800		12/10/92	70100		07/13/93	75700							
THALLIUM	UG/L	3	12/10/92	0.7	U	12/10/92	0.7	U	07/13/93	0.9	U						
VANADIUM	UG/L	3	12/10/92	15.7	b	12/10/92	17	b	07/13/93	16.8	b						
ZINC	UG/L	3	12/10/92	3.5	U	12/10/92	2.2	U	07/13/93	2.9	U						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	12/10/92	189000		12/10/92	188000		07/13/93	186000							
BICARBONATE (AS CACO3)	UG/L	3	12/10/92	189000		12/10/92	186000		07/13/93	186000							
CHLORIDE	UG/L	3	12/10/92	197000		12/10/92	202000		07/13/93	206000							
CYANIDE	UG/L	3	12/10/92	3	U	12/10/92	3	U	07/13/93	1.6	b						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	12/10/92	19100		12/10/92	18700		07/13/93	17000							
SULFATE	UG/L	3	12/10/92	228000		12/10/92	231000		07/13/93	212000							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	2	12/10/92	6.95		07/13/93	7.01										
TEMPERATURE, DEGREE C	DEG-C	2	12/10/92	22.8		07/13/93	24.5										
TOTAL DISSOLVED SOLIDS	UG/L	3	12/10/92	1050000		12/10/92	1090000		07/13/93	1040000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	2	12/10/92	9.6		12/10/92	8.3										
GROSS BETA	PCI/L	2	12/10/92	11.2		12/10/92	9.9										

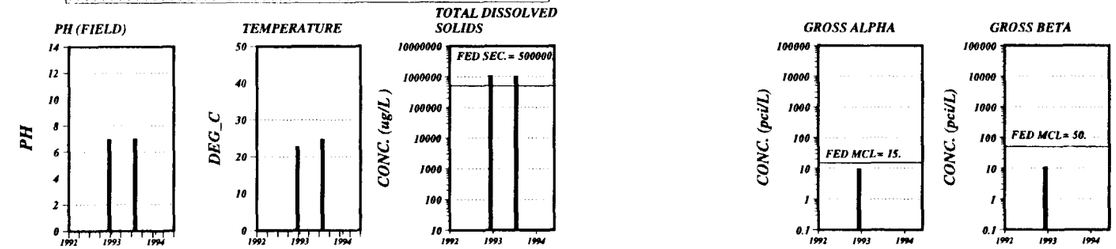
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



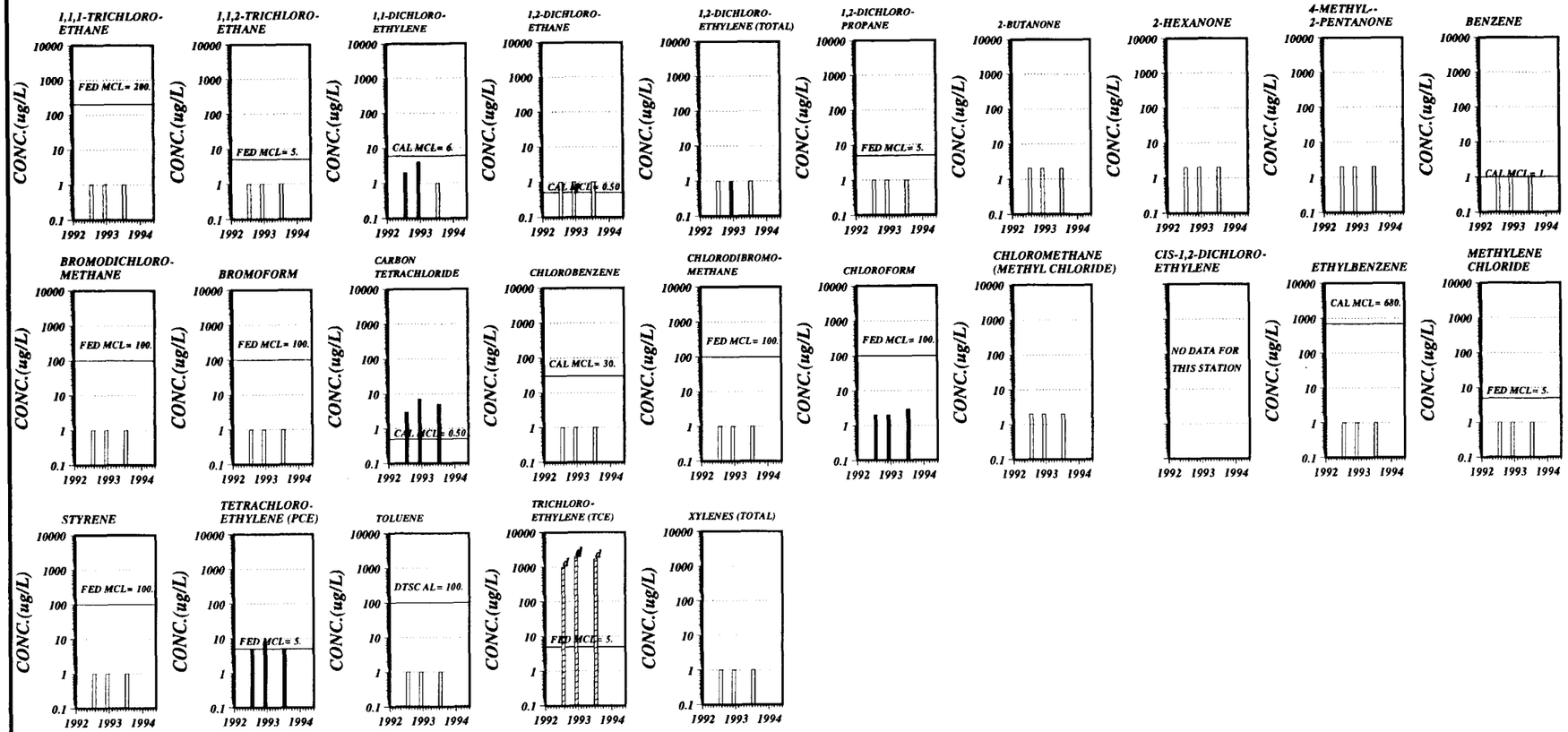
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

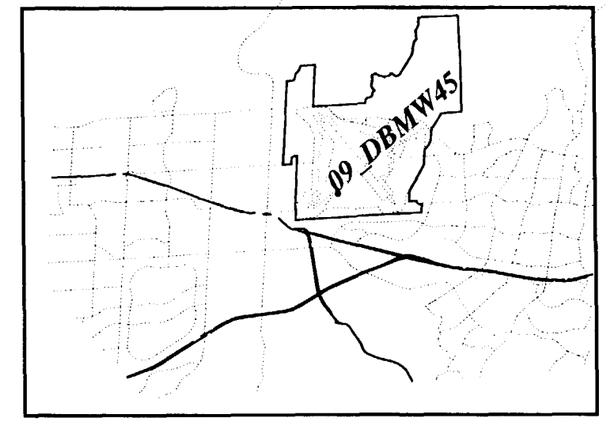
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

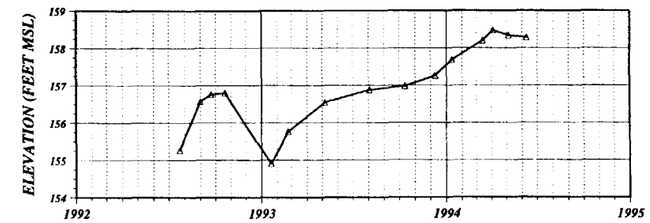
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

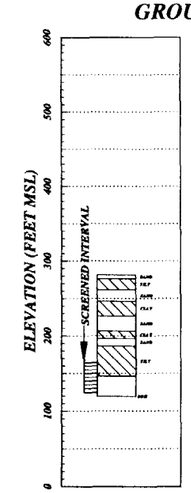
09_DBMW45







GROUNDWATER LEVEL HYDROGRAPH

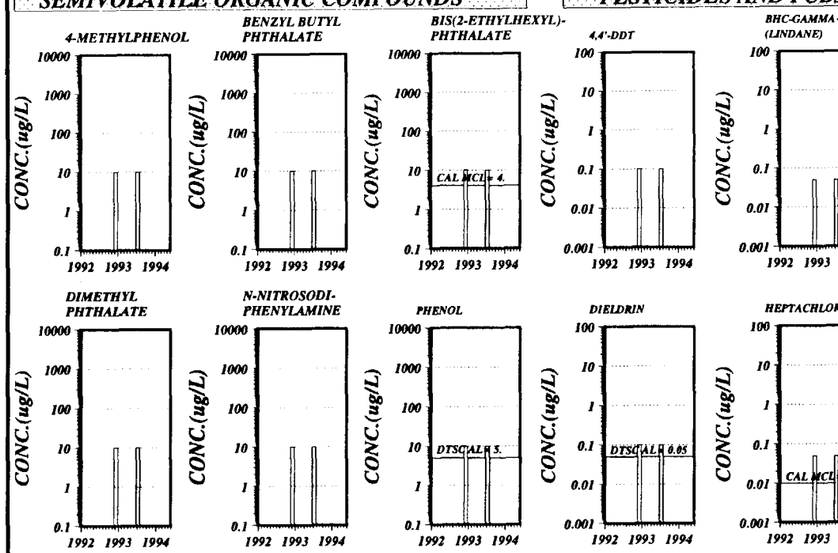


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
5.0	SAND	276.4
20.0	SILT	261.4
35.0	SAND	246.4
55.0	CLAY	226.4
75.0	SAND	206.4
85.0	CLAY	196.4
95.0	SAND	186.4
135.0	SILT	146.4
162.0	TD	119.4

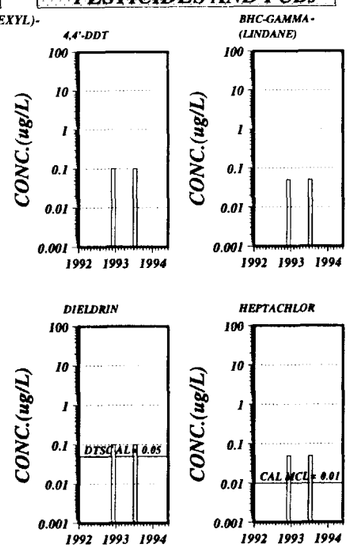
LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

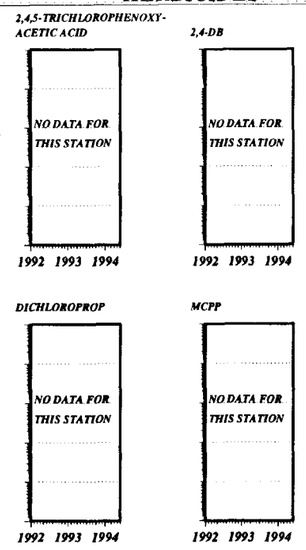
SEMIVOLATILE ORGANIC COMPOUNDS



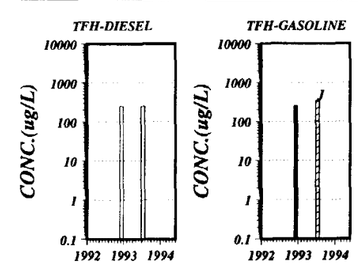
PESTICIDES AND PCBs



HERBICIDES



TOTAL FUEL HYDROCARBONS



09_DBMW45 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	281.40		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	162.00	119.40		
CASE TOP	-1.00	282.40		
CASE BASE	116.50	164.90		
SCREEN TOP	117.00	164.40		
SCREEN BASE	157.00	124.40		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 09_DBMW45

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

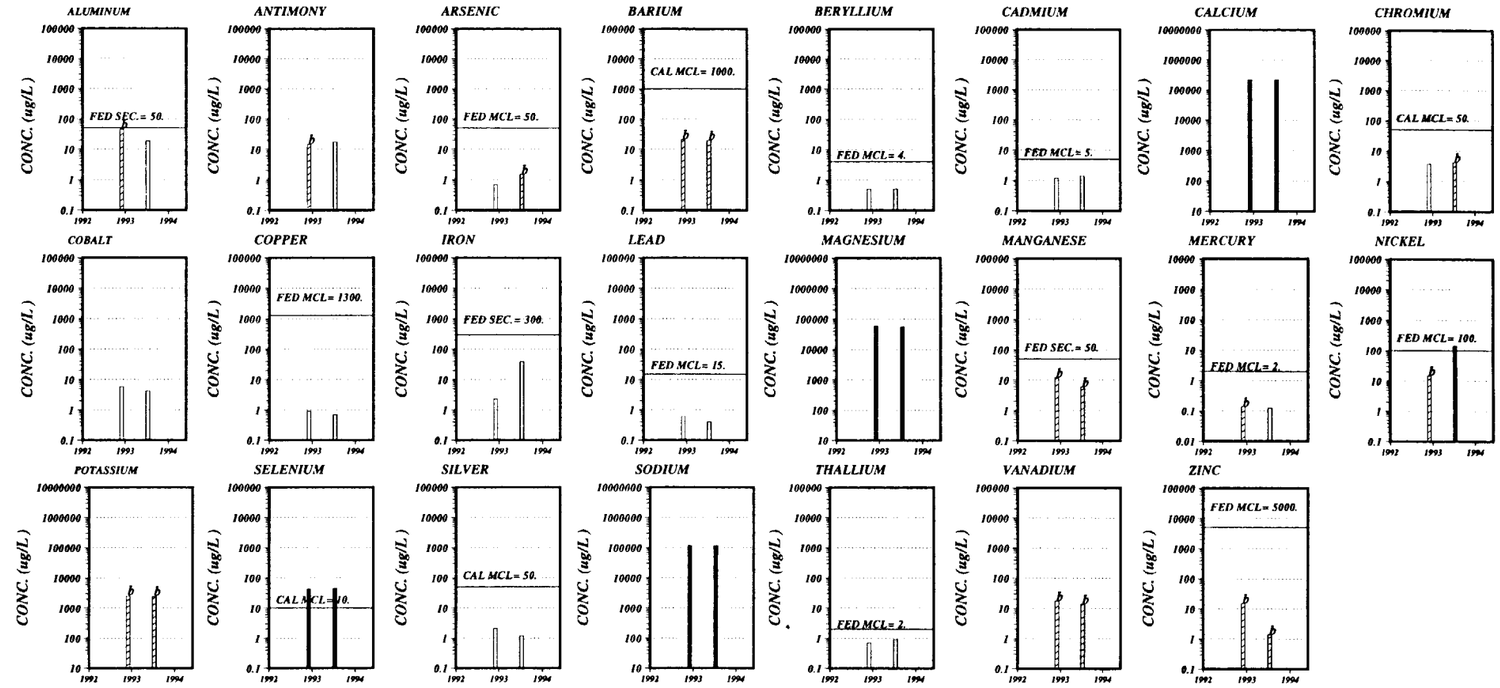
Fri Sep 23 14:59:06 1994

CHEMICAL DATA SUMMARY FOR WELL 09_DGMW75

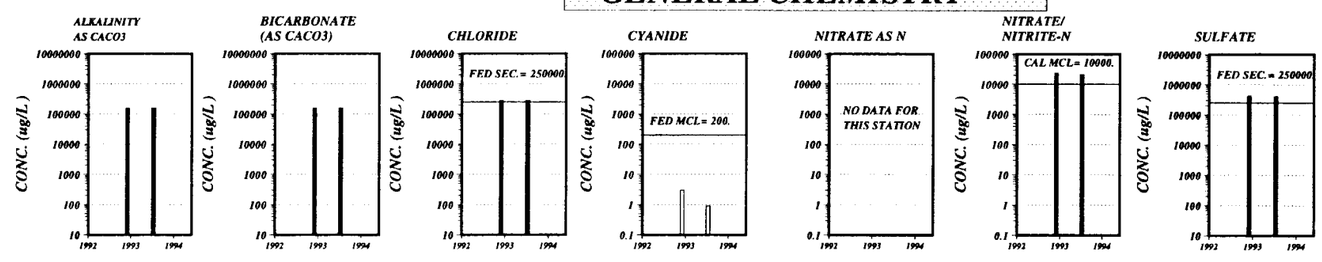
Table B-30
Groundwater Quality Data Summary - Well 09_DGMW75
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	12/01/92	1	U	07/12/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	12/01/92	1	U	07/12/93	1	U
1,1-DICHLOROETHENE	UG/L	2	12/01/92	0.5	J	07/12/93	1	U
1,2-DICHLOROETHANE	UG/L	2	12/01/92	1	U	07/12/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	12/01/92	1	U	07/12/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	12/01/92	1	U	07/12/93	1	U
2-BUTANONE	UG/L	2	12/01/92	2	U	07/12/93	2	U
2-HEXANONE	UG/L	2	12/01/92	2	U	07/12/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	12/01/92	2	U	07/12/93	2	U
BENZENE	UG/L	2	12/01/92	1	U	07/12/93	1	U
BROMODICHLOROMETHANE	UG/L	2	12/01/92	1	U	07/12/93	1	U
BROMOFORM	UG/L	2	12/01/92	1	U	07/12/93	1	U
CARBON TETRACHLORIDE	UG/L	2	12/01/92	2		07/12/93	1	
CHLOROBENZENE	UG/L	2	12/01/92	1	U	07/12/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	12/01/92	1	U	07/12/93	1	U
CHLOROFORM	UG/L	2	12/01/92	0.9	J	07/12/93	0.9	J
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	12/01/92	0.6	J	07/12/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	12/01/92	1	U	07/12/93	1	U
METHYLENE CHLORIDE	UG/L	2	12/01/92	1	U	07/12/93	1	U
STYRENE	UG/L	2	12/01/92	1	U	07/12/93	1	U
TETRACHLOROETHENE	UG/L	2	12/01/92	8		07/12/93	5	
TOLUENE	UG/L	2	12/01/92	1	U	07/12/93	1	U
TRICHLOROETHYLENE	UG/L	2	12/01/92	270	d	07/12/93	280	d
XYLENE (TOTAL)	UG/L	2	12/01/92	1	U	07/12/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	12/01/92	10	U	07/12/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	12/01/92	10	U	07/12/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	12/01/92	10	U	07/12/93	10	U
DIMETHYL PHTHALATE	UG/L	2	12/01/92	10	U	07/12/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	12/01/92	10	U	07/12/93	10	U
PHENOL	UG/L	2	12/01/92	10	U	07/12/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	12/01/92	0.1	U	07/12/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	12/01/92	0.05	U	07/12/93	0.05	U
DIELDRIN	UG/L	2	12/01/92	0.1	U	07/12/93	0.1	U
HEPTACHLOR	UG/L	2	12/01/92	0.05	U	07/12/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	12/01/92	250	U	07/12/93	250	U
TFH-GASOLINE	UG/L	2	12/01/92	50	U	07/12/93	64.3	J
METALS								
ALUMINUM	UG/L	2	12/01/92	44.3	b	07/12/93	18.9	U
ANTIMONY	UG/L	2	12/01/92	14.6	b	07/12/93	17.6	U
ARSENIC	UG/L	2	12/01/92	0.7	U	07/12/93	1.5	b
BARIUM	UG/L	2	12/01/92	20.8	b	07/12/93	19.7	b
BERYLLIUM	UG/L	2	12/01/92	0.5	U	07/12/93	0.5	U
CADMIUM	UG/L	2	12/01/92	1.2	U	07/12/93	1.4	U
CALCIUM	UG/L	2	12/01/92	216000		07/12/93	211000	
CHROMIUM	UG/L	2	12/01/92	3.7	U	07/12/93	4.2	b
COBALT	UG/L	2	12/01/92	5.6	U	07/12/93	4.2	U
COPPER	UG/L	2	12/01/92	0.9	U	07/12/93	0.7	U
IRON	UG/L	2	12/01/92	2.3	U	07/12/93	39.2	U
LEAD	UG/L	2	12/01/92	0.6	U	07/12/93	0.4	U
MAGNESIUM	UG/L	2	12/01/92	58900		07/12/93	55200	
MANGANESE	UG/L	2	12/01/92	12.1	b	07/12/93	6	b
MERCURY	UG/L	2	12/01/92	0.14	b	07/12/93	0.1	U
NICKEL	UG/L	2	12/01/92	14.8	b	07/12/93	144	
POTASSIUM	UG/L	2	12/01/92	2480	b	07/12/93	2420	b
SELENIUM	UG/L	2	12/01/92	41.8		07/12/93	44.3	
SILVER	UG/L	2	12/01/92	2.1	U	07/12/93	1.2	U
SODIUM	UG/L	2	12/01/92	116000		07/12/93	117000	
THALLIUM	UG/L	2	12/01/92	0.7	U	07/12/93	0.9	U
VANADIUM	UG/L	2	12/01/92	17.4	b	07/12/93	13.9	b
ZINC	UG/L	2	12/01/92	15	b	07/12/93	1.4	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	12/01/92	156000		07/12/93	160000	
BICARBONATE (AS CACO3)	UG/L	2	12/01/92	156000		07/12/93	160000	
CHLORIDE	UG/L	2	12/01/92	273000		07/12/93	279000	
CYANIDE	UG/L	2	12/01/92	3	U	07/12/93	0.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	12/01/92	23600		07/12/93	21400	
SULFATE	UG/L	2	12/01/92	423000		07/12/93	412000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	1	07/12/93	7.14				
TEMPERATURE, DEGREE C	DEG/C	1	07/12/93	24.9				
TOTAL DISSOLVED SOLIDS	UG/L	2	12/01/92	1370000		07/12/93	1470000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

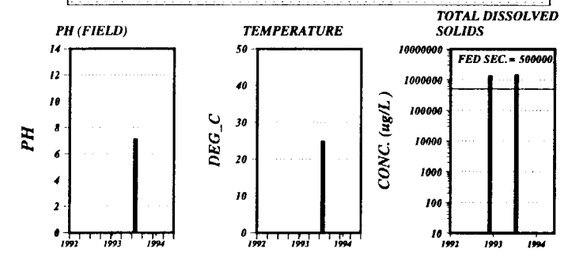
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



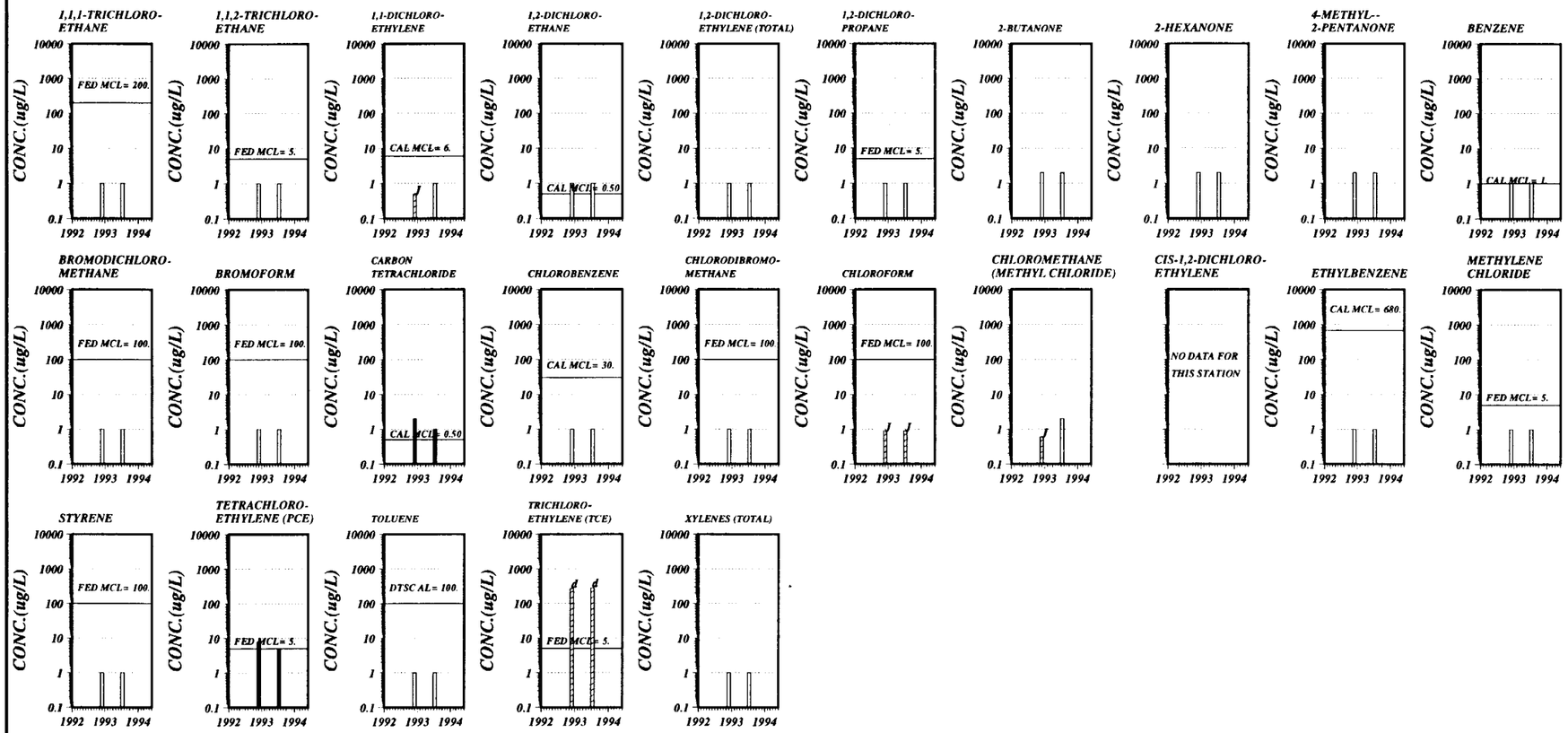
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

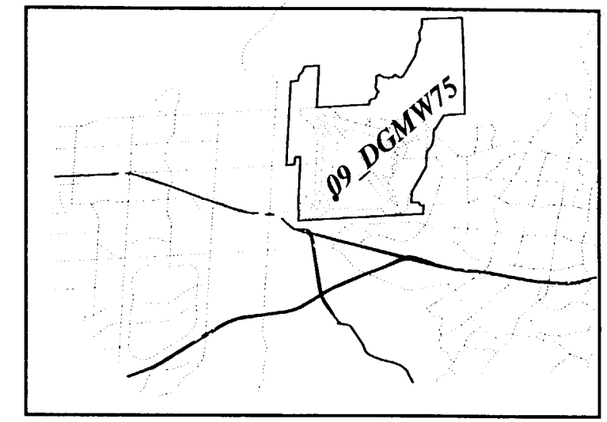
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

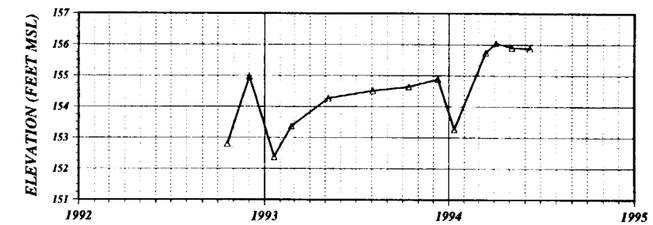
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

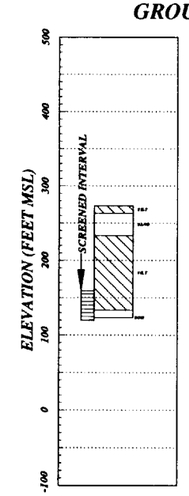
09_DGMW75







GROUNDWATER LEVEL HYDROGRAPH

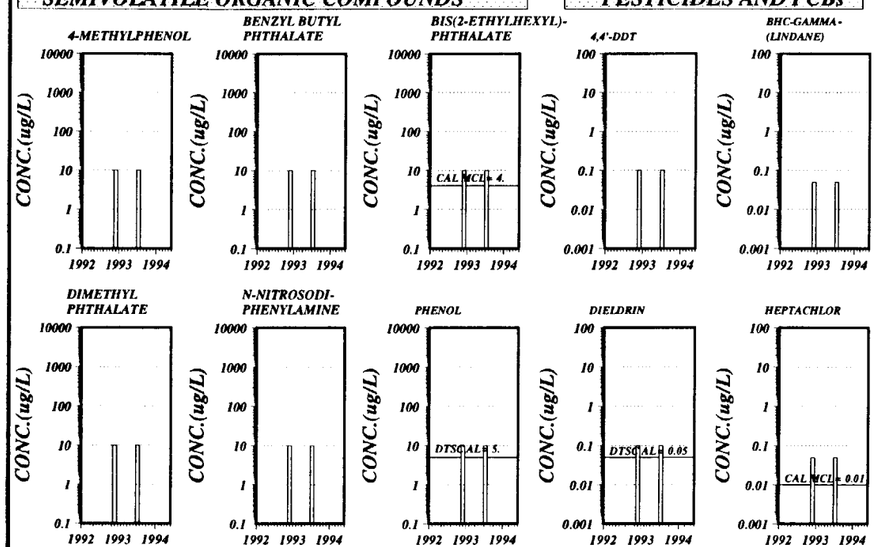


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SILT	263.4
40.0	SAND	233.4
140.0	SILT	133.4
150.0	TD	123.4

LEGEND

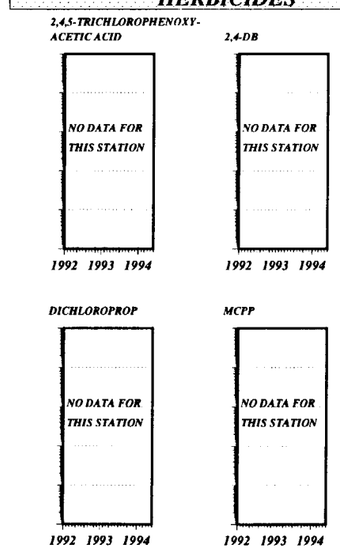
TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

SEMIVOLATILE ORGANIC COMPOUNDS

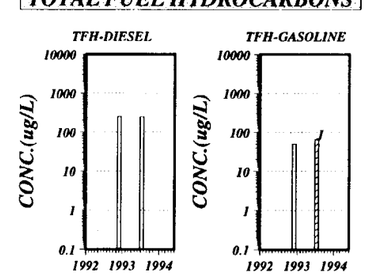


PESTICIDES AND PCBs

HERBICIDES



TOTAL FUEL HYDROCARBONS



09_DGMW75 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	273.40		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	165.00	108.40		
CASE TOP				
CASE BASE	114.00	159.40		
SCREEN TOP	114.00	159.40		
SCREEN BASE	154.00	119.40		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 09_DGMW75

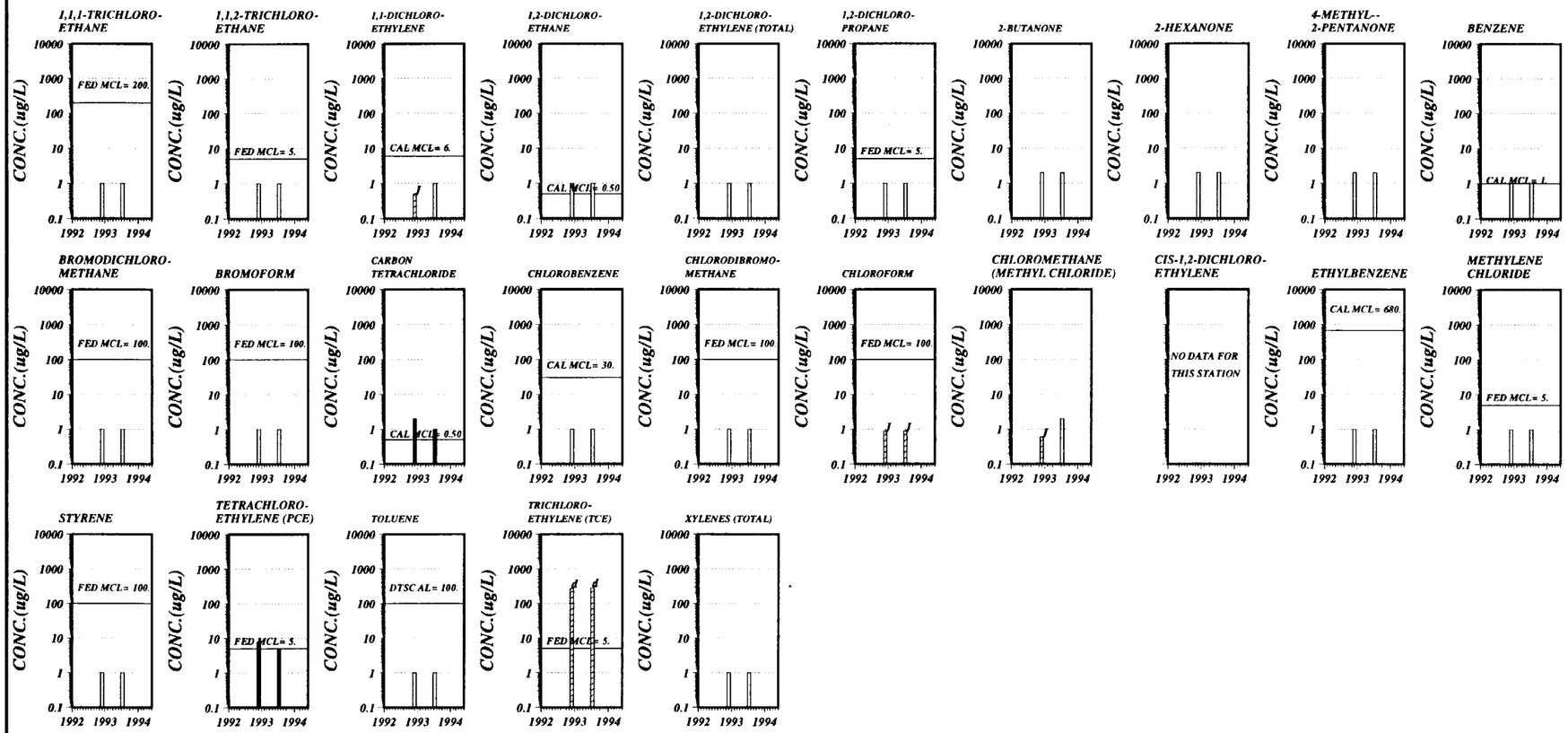
MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

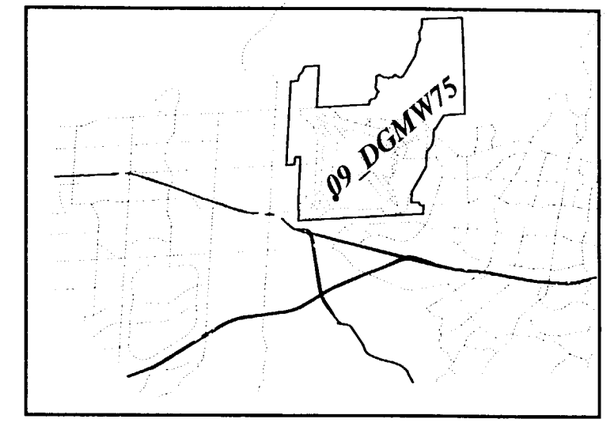
DATA PROCESSED BY CH2M HILL

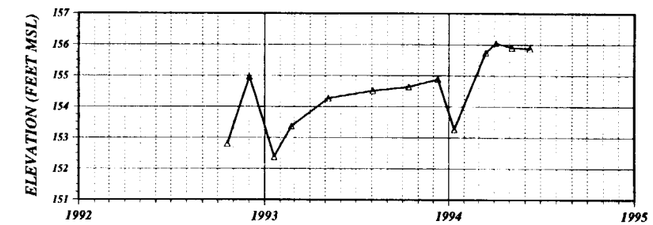
Tue Jul 26 12:08:43 1994

VOLATILE ORGANIC COMPOUNDS

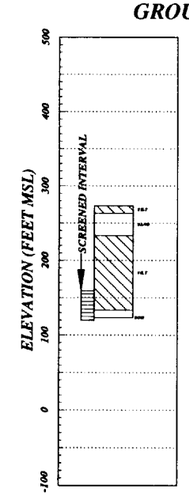
09_DGMW75







GROUNDWATER LEVEL HYDROGRAPH

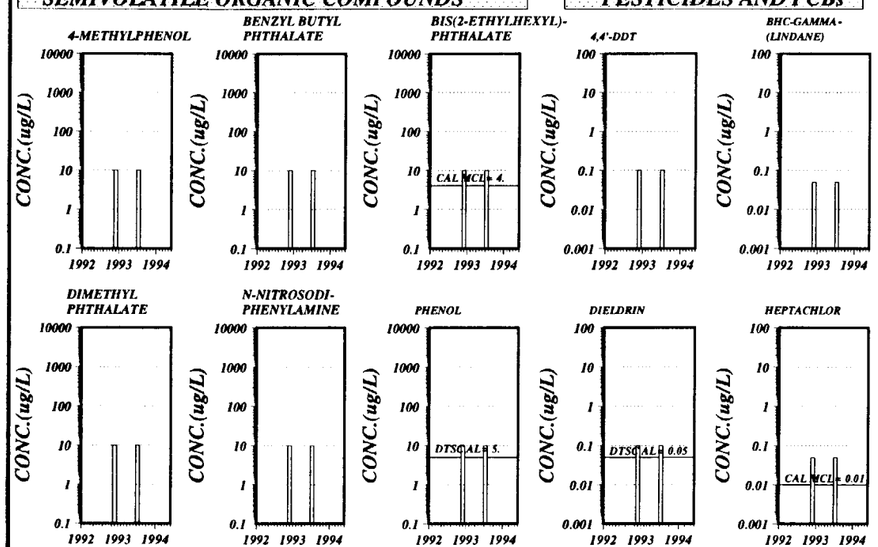


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SILT	263.4
40.0	SAND	233.4
140.0	SILT	133.4
150.0	TD	123.4

LEGEND

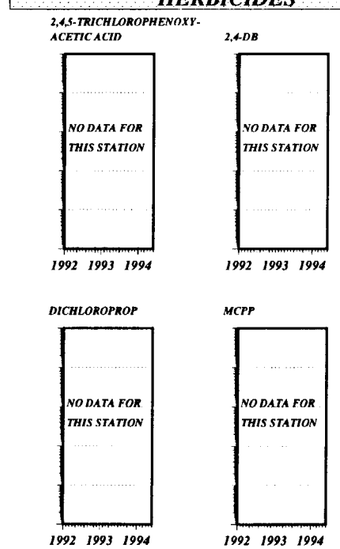
TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

SEMIVOLATILE ORGANIC COMPOUNDS

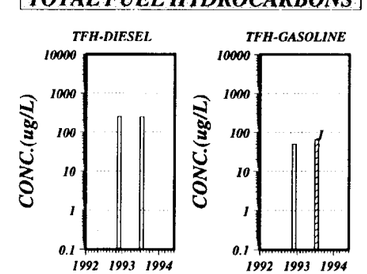


PESTICIDES AND PCBs

HERBICIDES



TOTAL FUEL HYDROCARBONS



09_DGMW75 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	273.40		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	165.00	108.40		
CASE TOP				
CASE BASE	114.00	159.40		
SCREEN TOP	114.00	159.40		
SCREEN BASE	154.00	119.40		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 09_DGMW75

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

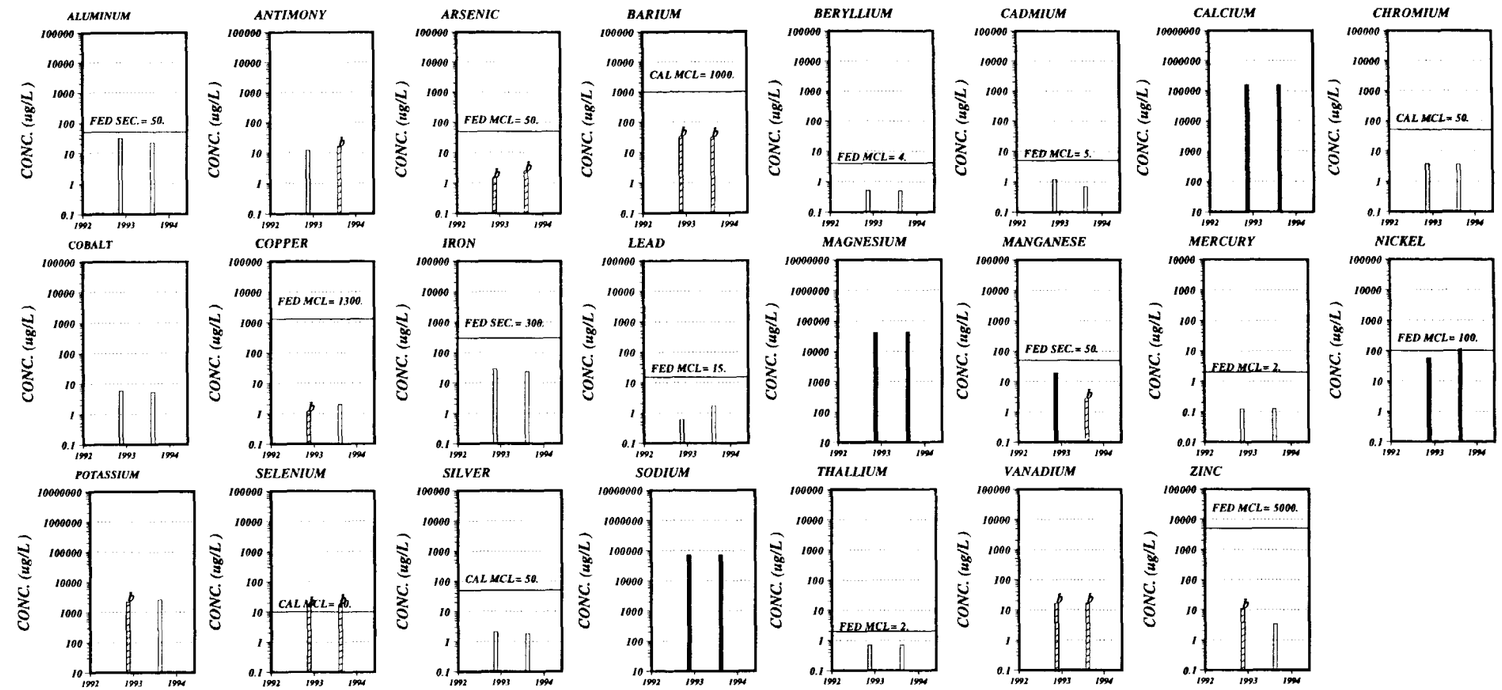
Tue Jul 26 12:08:43 1994

CHEMICAL DATA SUMMARY FOR WELL 10_DGMW77

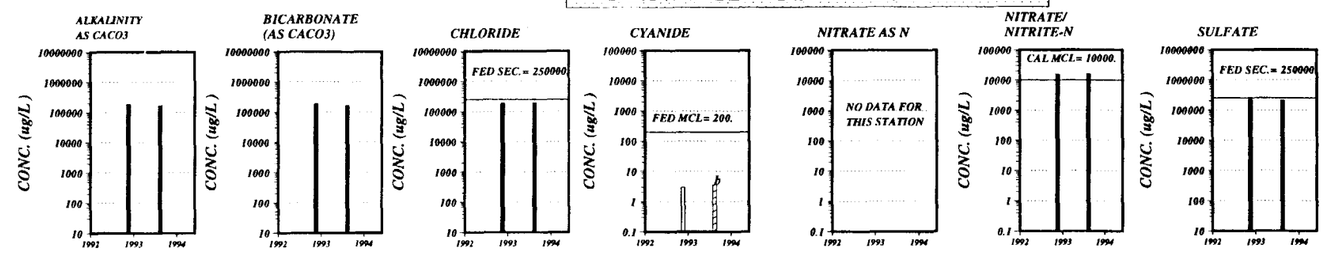
Table B-31
Groundwater Quality Data Summary - Well 10_DGMW77
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	11/17/92	1	U	08/13/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	11/17/92	1	U	08/13/93	1	U
1,1-DICHLOROETHENE	UG/L	2	11/17/92	0.6	J	08/13/93	1	U
1,2-DICHLOROETHANE	UG/L	2	11/17/92	1	U	08/13/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	11/17/92	1	U	08/13/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	11/17/92	1	U	08/13/93	1	U
2-BUTANONE	UG/L	2	11/17/92	2	U	08/13/93	2	U
2-HEXANONE	UG/L	2	11/17/92	2	U	08/13/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	11/17/92	2	U	08/13/93	2	U
BENZENE	UG/L	2	11/17/92	1	U	08/13/93	0.7	J
BROMODICHLOROMETHANE	UG/L	2	11/17/92	1	U	08/13/93	1	U
BROMOFORM	UG/L	2	11/17/92	1	U	08/13/93	1	U
CARBON TETRACHLORIDE	UG/L	2	11/17/92	2		08/13/93	3	
CHLOROBENZENE	UG/L	2	11/17/92	1	U	08/13/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	11/17/92	1	U	08/13/93	1	U
CHLOROFORM	UG/L	2	11/17/92	1		08/13/93	2	
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	11/17/92	1	J	08/13/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	11/17/92	1	U	08/13/93	1	U
METHYLENE CHLORIDE	UG/L	2	11/17/92	1	U	08/13/93	1	U
STYRENE	UG/L	2	11/17/92	1	U	08/13/93	0.8	J
TETRACHLOROETHENE	UG/L	2	11/17/92	8		08/13/93	3	
TOLUENE	UG/L	2	11/17/92	1	U	08/13/93	1	U
TRICHLOROETHYLENE	UG/L	2	11/17/92	35	d	08/13/93	61	d
XYLENE (TOTAL)	UG/L	2	11/17/92	1	U	08/13/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	11/17/92	10	U	08/13/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	11/17/92	19		08/13/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	11/17/92	10	U	08/13/93	10	U
DIMETHYL PHTHALATE	UG/L	2	11/17/92	10	U	08/13/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	11/17/92	10	U	08/13/93	10	U
PHENOL	UG/L	2	11/17/92	10	U	08/13/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	11/17/92	0.1	U	08/13/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	11/17/92	0.05	U	08/13/93	0.05	U
DIELDRIN	UG/L	2	11/17/92	0.1	U	08/13/93	0.1	U
HEPTACHLOR	UG/L	2	11/17/92	0.05	U	08/13/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	11/17/92	250	U	08/13/93	250	U
TFH-GASOLINE	UG/L	2	11/17/92	50	U	08/13/93	50	U
METALS								
ALUMINUM	UG/L	2	11/17/92	31	U	08/13/93	21.9	U
ANTIMONY	UG/L	2	11/17/92	12.1	U	08/13/93	16.1	b
ARSENIC	UG/L	2	11/17/92	1.5	b	08/13/93	2.5	b
BARIUM	UG/L	2	11/17/92	32.6	b	08/13/93	31	b
BERYLLIUM	UG/L	2	11/17/92	0.5	U	08/13/93	0.5	U
CADMIUM	UG/L	2	11/17/92	1.2	U	08/13/93	0.7	U
CALCIUM	UG/L	2	11/17/92	158000		08/13/93	156000	
CHROMIUM	UG/L	2	11/17/92	3.7	U	08/13/93	3.6	U
COBALT	UG/L	2	11/17/92	5.8	U	08/13/93	5.2	U
COPPER	UG/L	2	11/17/92	1.2	b	08/13/93	2	U
IRON	UG/L	2	11/17/92	28.8	U	08/13/93	23.7	U
LEAD	UG/L	2	11/17/92	0.8	U	08/13/93	1.7	U
MAGNESIUM	UG/L	2	11/17/92	41400		08/13/93	43100	
MANGANESE	UG/L	2	11/17/92	19.3		08/13/93	2.8	b
MERCURY	UG/L	2	11/17/92	0.1	U	08/13/93	0.1	U
NICKEL	UG/L	2	11/17/92	57.3		08/13/93	112	
POTASSIUM	UG/L	2	11/17/92	2210	b	08/13/93	2570	U
SELENIUM	UG/L	2	11/17/92	15.4	b	08/13/93	18.4	b
SILVER	UG/L	2	11/17/92	2.1	U	08/13/93	1.8	U
SODIUM	UG/L	2	11/17/92	70600		08/13/93	72200	
THALLIUM	UG/L	2	11/17/92	0.7	U	08/13/93	0.7	U
VANADIUM	UG/L	2	11/17/92	16.7	b	08/13/93	17	b
ZINC	UG/L	2	11/17/92	11.3	b	08/13/93	3.4	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	11/17/92	189000		08/13/93	169000	
BICARBONATE (AS CACO3)	UG/L	2	11/17/92	189000		08/13/93	169000	
CHLORIDE	UG/L	2	11/17/92	188000		08/13/93	192000	
CYANIDE	UG/L	2	11/17/92	3	U	08/13/93	3.6	b
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	11/17/92	15800		08/13/93	16200	
SULFATE	UG/L	2	11/17/92	217000		08/13/93	211000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	11/17/92	7.08		08/13/93	6.83	
TEMPERATURE, DEGREE C	DEG/C	2	11/17/92	24.4		08/13/93	24.9	
TOTAL DISSOLVED SOLIDS	UG/L	2	11/17/92	1030000		08/13/93	1100000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

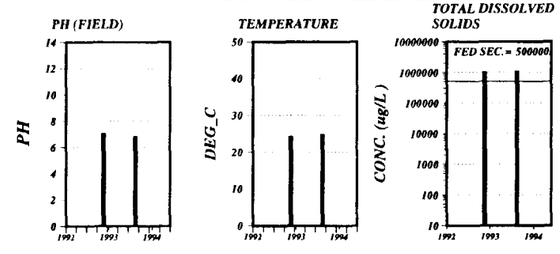
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



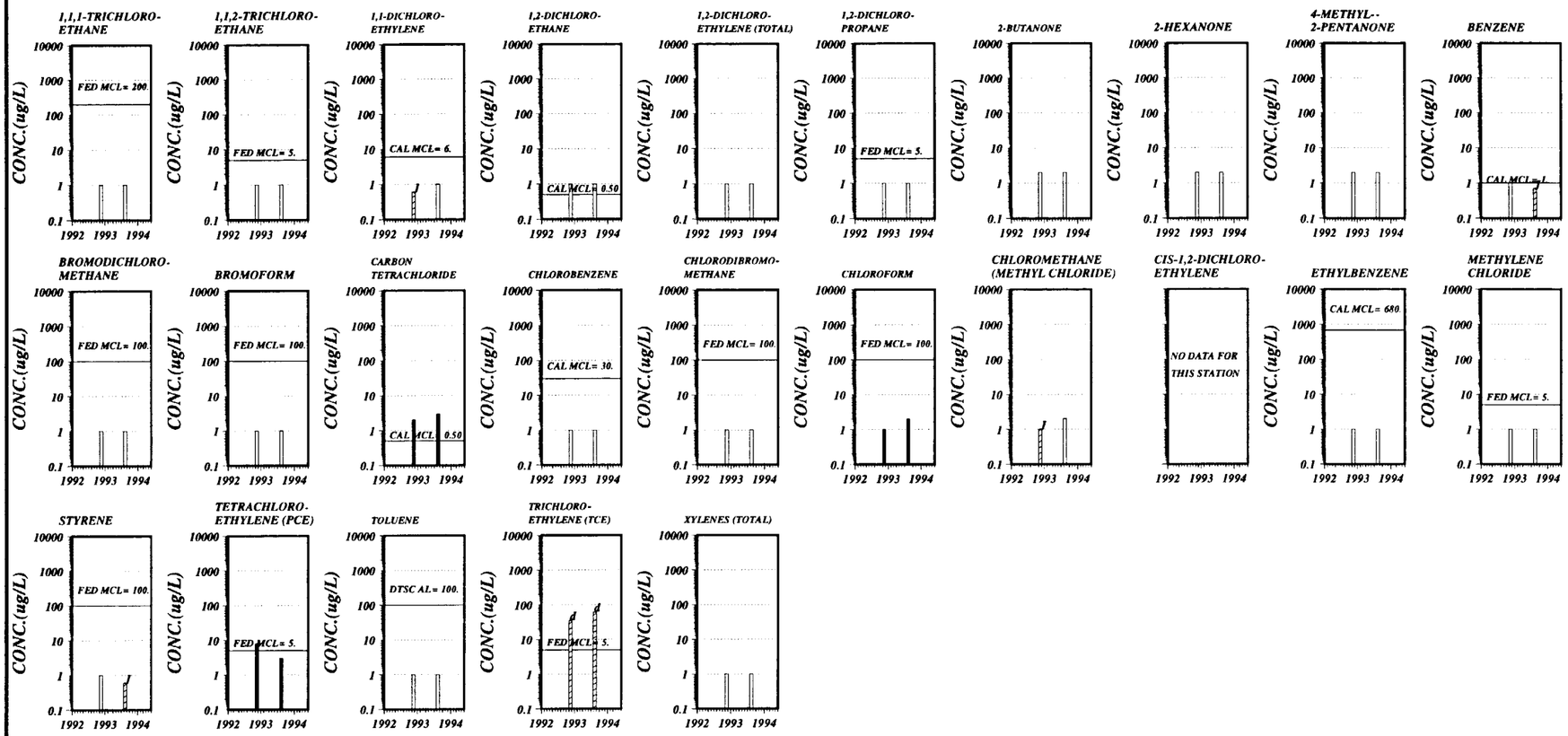
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

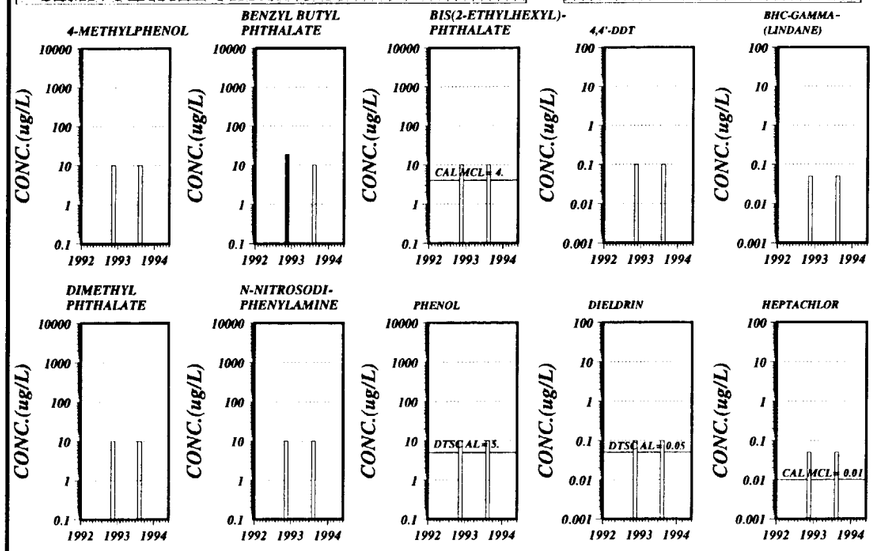
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

10_DGMW77

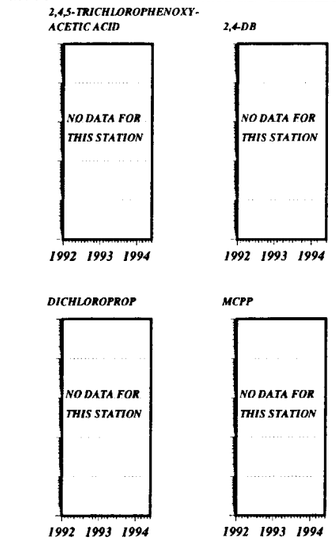


SEMIVOLATILE ORGANIC COMPOUNDS

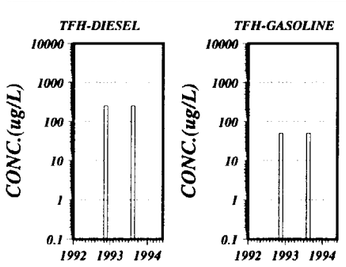


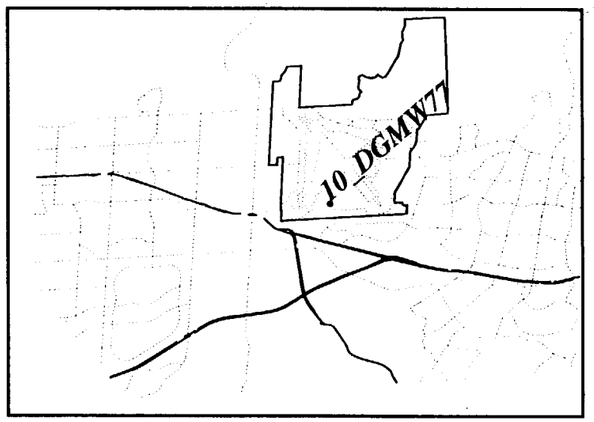
PESTICIDES AND PCBs

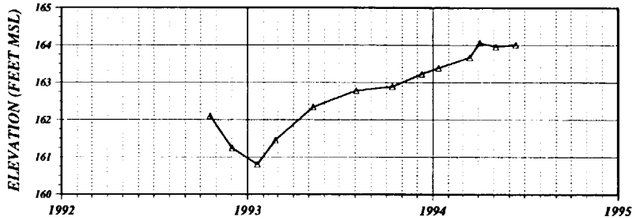
HERBICIDES



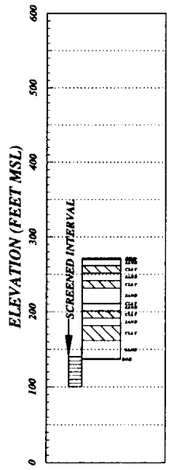
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
1.0	FILL	270.6
2.0	CLAY	269.6
10.0	SAND	261.6
20.0	CLAY	251.6
30.0	SAND	241.6
40.0	CLAY	231.6
60.0	SAND	211.6
61.0	CLAY	210.6
70.0	SAND	201.6
80.0	CLAY	191.6
90.0	SAND	181.6
110.0	CLAY	161.6
134.0	SAND	137.6
135.0	TD	136.6

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

10_DGMW77 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	271.60		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	176.60	95.00		
CASE TOP				
CASE BASE	131.00	140.60		
SCREEN TOP	131.00	140.60		
SCREEN BASE	171.00	100.60		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 10_DGMW77

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

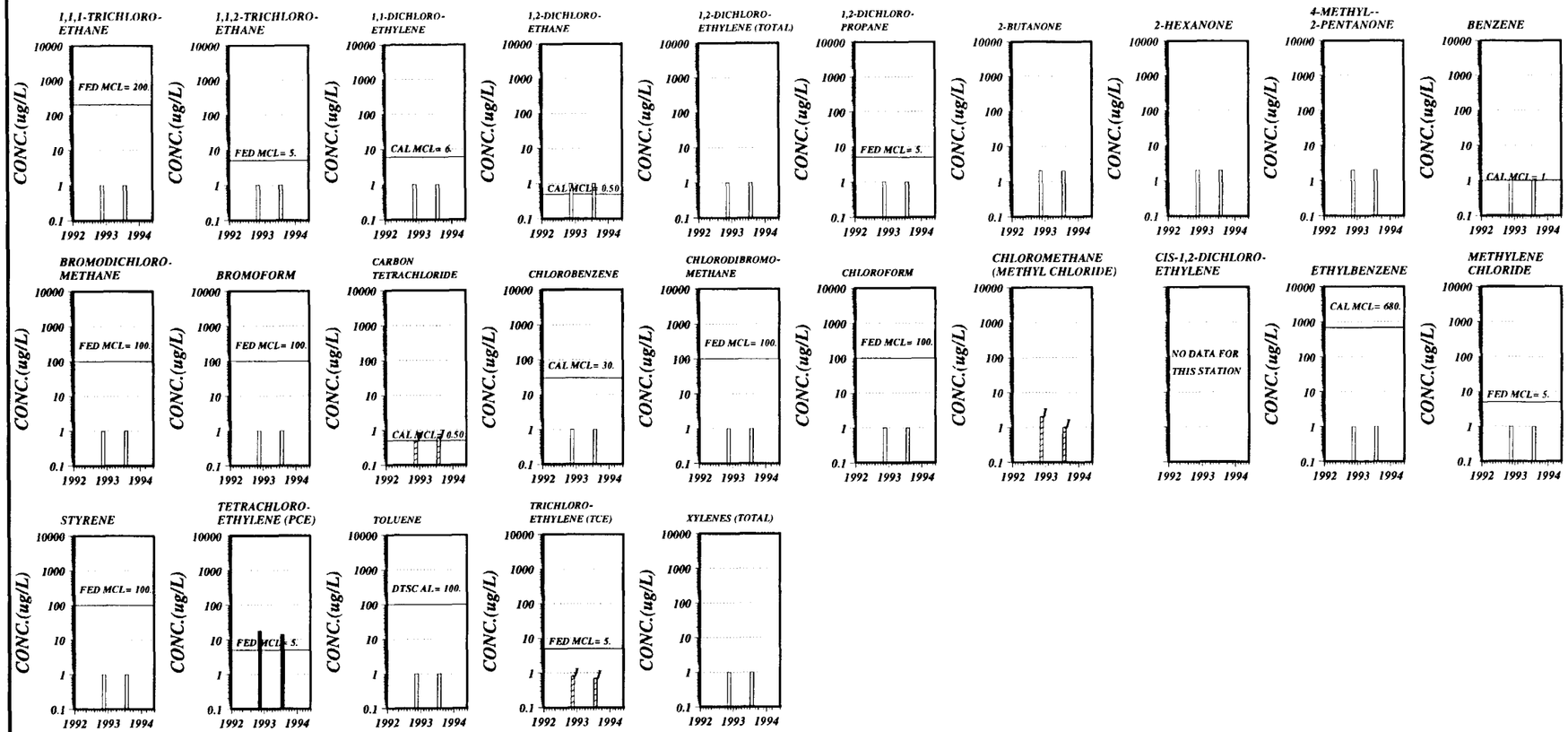
Tue Jul 26 12:11:02 1994

No wells were drilled at Site 11, so
no groundwater samples were collected.

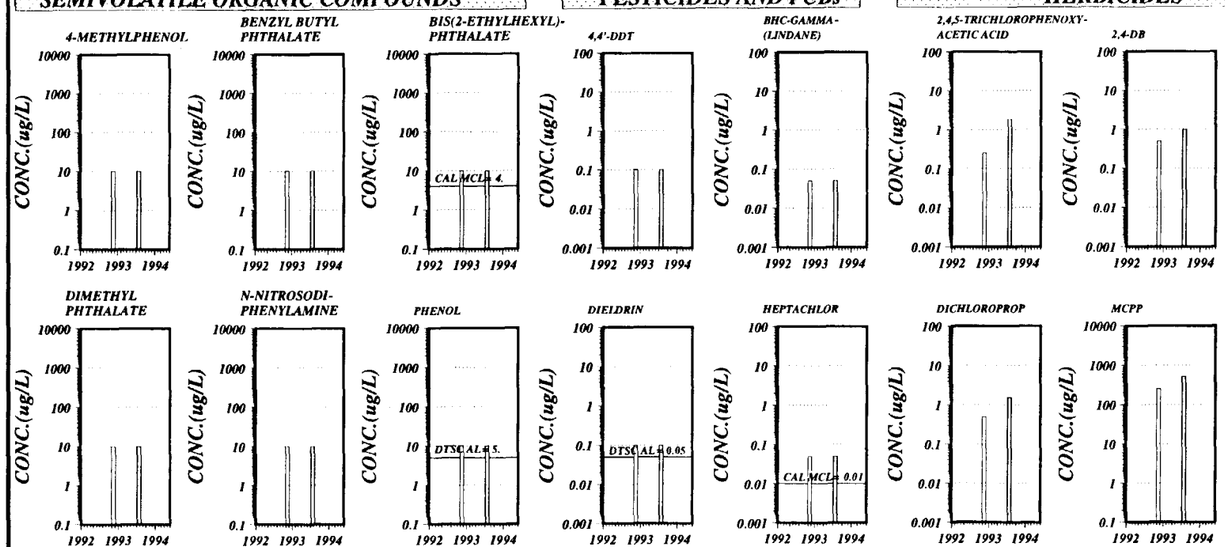
Site 11
Transformer Storage Area

VOLATILE ORGANIC COMPOUNDS

12_DBMW48



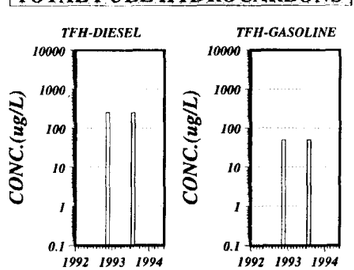
SEMIVOLATILE ORGANIC COMPOUNDS

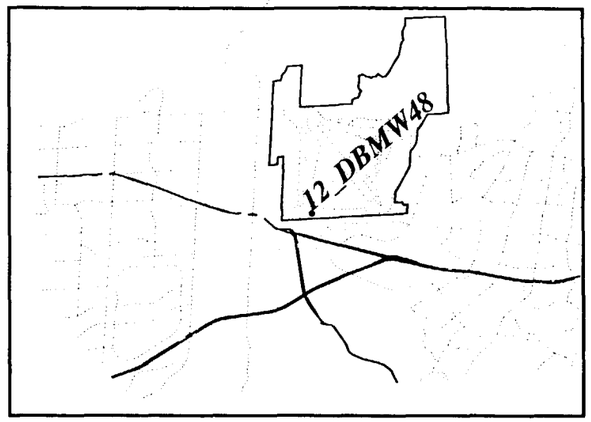


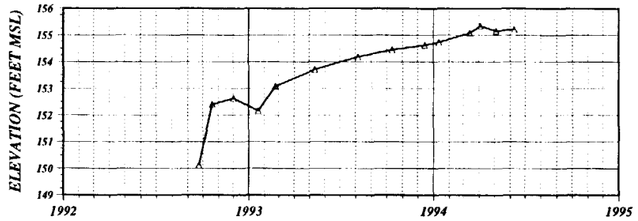
PESTICIDES AND PCBs

HERBICIDES

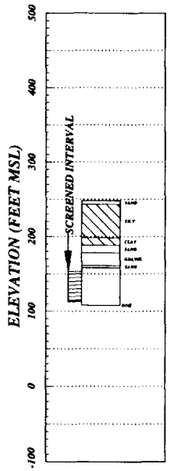
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
5.0	SAND	243.1
50.0	SILT	198.1
60.0	CLAY	188.1
70.0	SAND	178.1
87.0	GRAVEL	161.1
90.0	SAND	158.1
140.0	TD	108.0

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

12_DBMW48 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	248.10		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	140.00	108.10		
CASE TOP	-1.00	249.10		
CASE BASE	94.60	153.50		
SCREEN TOP	95.00	153.10		
SCREEN BASE	135.00	113.10		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 12_DBMW48

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

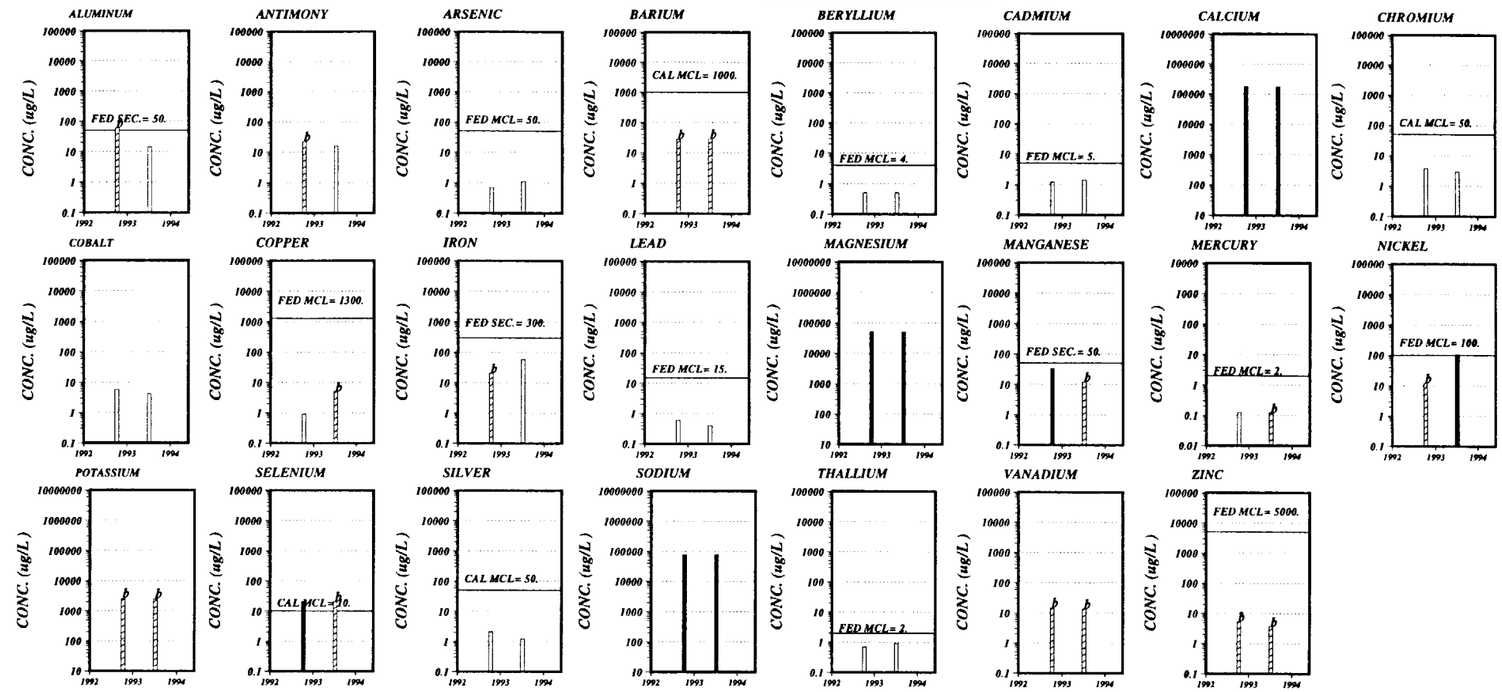
Tue Jul 26 12:12:40 1994

CHEMICAL DATA SUMMARY FOR WELL 12_UGMW31

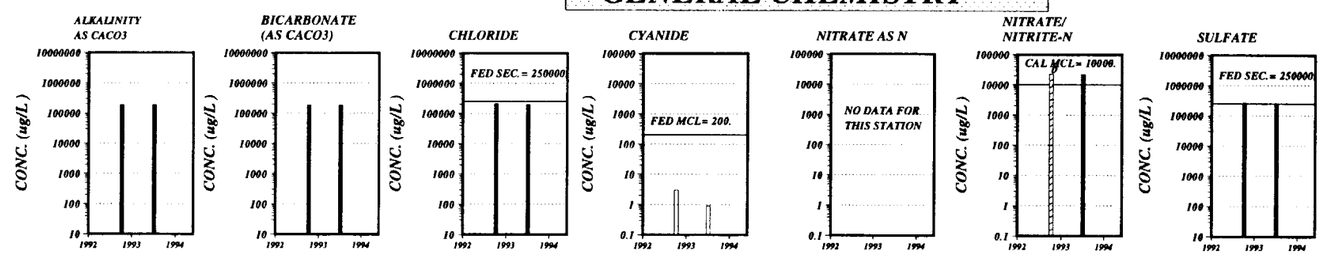
Table B-33
Groundwater Quality Data Summary - Well 12_UGMW31
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	10/08/92	1	U	07/07/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	10/08/92	1	U	07/07/93	1	U
1,1-DICHLOROETHENE	UG/L	2	10/08/92	1	U	07/07/93	1	U
1,2-DICHLOROETHANE	UG/L	2	10/08/92	1	U	07/07/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	10/08/92	1	U	07/07/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	10/08/92	1	U	07/07/93	1	U
2-BUTANONE	UG/L	2	10/08/92	2	U	07/07/93	2	U
2-HEXANONE	UG/L	2	10/08/92	2	U	07/07/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	10/08/92	2	U	07/07/93	2	U
BENZENE	UG/L	2	10/08/92	1	U	07/07/93	1	U
BROMODICHLOROMETHANE	UG/L	2	10/08/92	1	U	07/07/93	1	U
BROMOFORM	UG/L	2	10/08/92	1	U	07/07/93	1	U
CARBON TETRACHLORIDE	UG/L	2	10/08/92	1	U	07/07/93	1	U
CHLOROBENZENE	UG/L	2	10/08/92	1	U	07/07/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	10/08/92	1	U	07/07/93	1	U
CHLOROFORM	UG/L	2	10/08/92	0.4	J	07/07/93	0.5	J
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	10/08/92	2	U	07/07/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	10/08/92	1	U	07/07/93	1	U
METHYLENE CHLORIDE	UG/L	2	10/08/92	1	U	07/07/93	1	U
STYRENE	UG/L	2	10/08/92	1	U	07/07/93	1	U
TETRACHLOROETHENE	UG/L	2	10/08/92	1	U	07/07/93	1	U
TOLUENE	UG/L	2	10/08/92	1	U	07/07/93	1	U
TRICHLOROETHYLENE	UG/L	2	10/08/92	7		07/07/93	7	
XYLENE (TOTAL)	UG/L	2	10/08/92	1	U	07/07/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	10/08/92	10	U	07/07/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	10/08/92	10	U	07/07/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	10/08/92	10	U	07/07/93	10	U
DIMETHYL PHTHALATE	UG/L	2	10/08/92	10	U	07/07/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	10/08/92	10	U	07/07/93	10	U
PHENOL	UG/L	2	10/08/92	10	U	07/07/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	10/08/92	0.1	U	07/07/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	10/08/92	0.05	U	07/07/93	0.05	U
DIELDRIN	UG/L	2	10/08/92	0.1	U	07/07/93	0.1	U
HEPTACHLOR	UG/L	2	10/08/92	0.05	U	07/07/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	10/08/92	2.51	*	07/07/93	1.85	U
2,4-DB	UG/L	2	10/08/92	2.88	J	07/07/93	0.98	U
DICHLOROPROP	UG/L	2	10/08/92	6.41	*	07/07/93	1.52	U
MCPP	UG/L	2	10/08/92	3530		07/07/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	10/08/92	250	U	07/07/93	250	U
TFH-GASOLINE	UG/L	2	10/08/92	50	U	07/07/93	50	U
METALS								
ALUMINUM	UG/L	2	10/08/92	60.2	b	07/07/93	13.9	U
ANTIMONY	UG/L	2	10/08/92	22.2	b	07/07/93	15.9	U
ARSENIC	UG/L	2	10/08/92	0.7	U	07/07/93	1.1	U
BARIUM	UG/L	2	10/08/92	27.6	b	07/07/93	28.7	b
BERYLLIUM	UG/L	2	10/08/92	0.5	U	07/07/93	0.5	U
CADMIUM	UG/L	2	10/08/92	1.2	U	07/07/93	1.4	U
CALCIUM	UG/L	2	10/08/92	177000		07/07/93	173000	
CHROMIUM	UG/L	2	10/08/92	3.7	U	07/07/93	2.9	U
COBALT	UG/L	2	10/08/92	5.8	U	07/07/93	4.2	U
COPPER	UG/L	2	10/08/92	0.9	U	07/07/93	5	b
IRON	UG/L	2	10/08/92	20.6	b	07/07/93	57.5	U
LEAD	UG/L	2	10/08/92	0.6	U	07/07/93	0.4	U
MAGNESIUM	UG/L	2	10/08/92	50700		07/07/93	49900	
MANGANESE	UG/L	2	10/08/92	33.4		07/07/93	12.1	b
MERCURY	UG/L	2	10/08/92	0.1	U	07/07/93	0.11	b
NICKEL	UG/L	2	10/08/92	12.1	b	07/07/93	106	
POTASSIUM	UG/L	2	10/08/92	2510	b	07/07/93	2430	b
SELENIUM	UG/L	2	10/08/92	20.5		07/07/93	20.6	b
SILVER	UG/L	2	10/08/92	2.1	U	07/07/93	1.2	U
SODIUM	UG/L	2	10/08/92	77100		07/07/93	77900	
THALLIUM	UG/L	2	10/08/92	0.7	U	07/07/93	0.9	U
VANADIUM	UG/L	2	10/08/92	14.9	b	07/07/93	13.4	b
ZINC	UG/L	2	10/08/92	5.4	b	07/07/93	3.7	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	10/08/92	188000		07/07/93	187000	
BICARBONATE (AS CACO3)	UG/L	2	10/08/92	188000		07/07/93	187000	
CHLORIDE	UG/L	2	10/08/92	211000		07/07/93	197000	
CYANIDE	UG/L	2	10/08/92	3	U	07/07/93	0.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	10/08/92	22500	b	07/07/93	22200	
SULFATE	UG/L	2	10/08/92	263000		07/07/93	246000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	10/08/92	6.81		07/07/93	6.89	
TEMPERATURE, DEGREE C	DEG/C	2	10/08/92	25.3		07/07/93	24	
TOTAL DISSOLVED SOLIDS	UG/L	2	10/08/92	1100000		07/07/93	1160000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

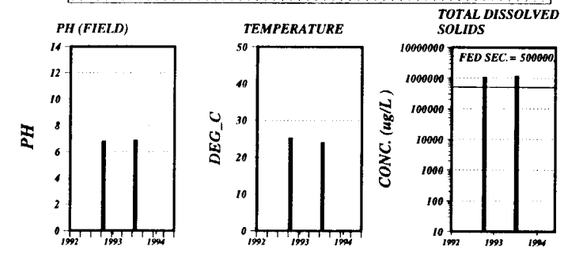
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

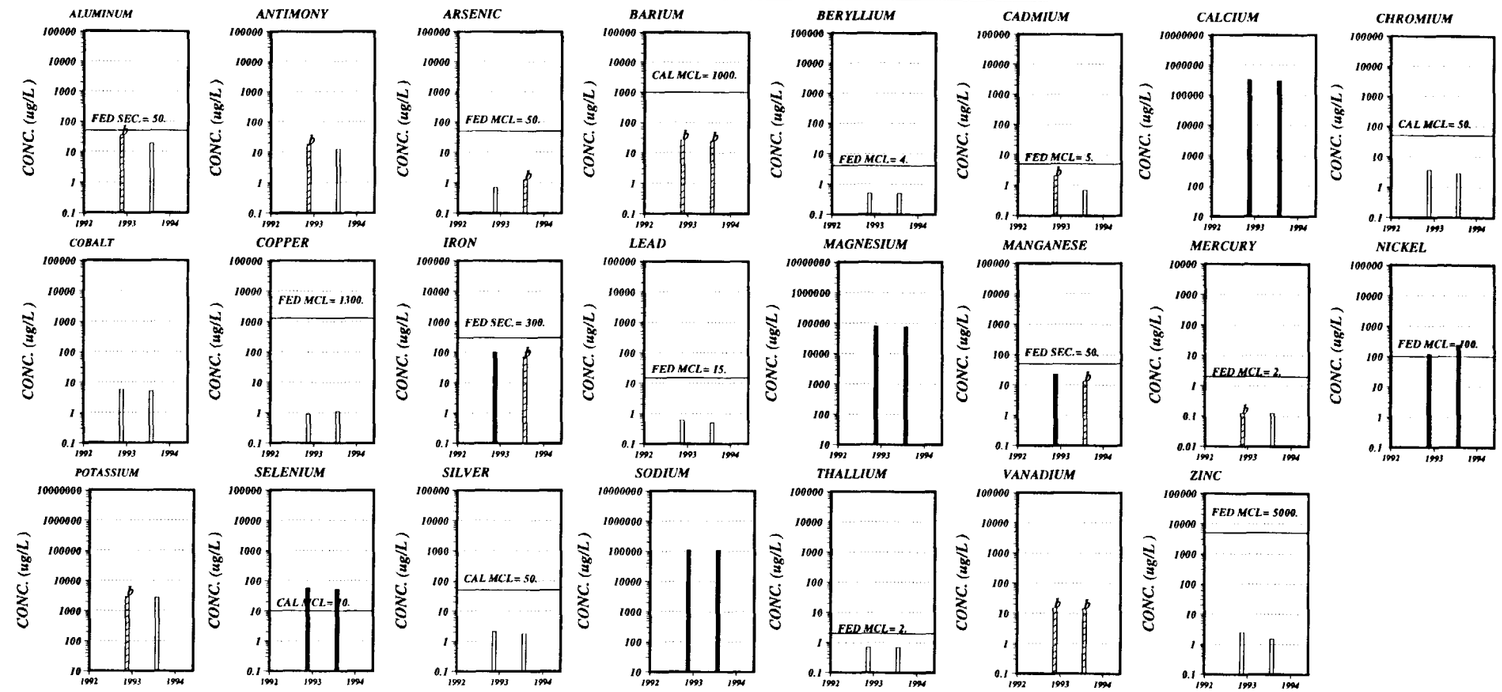
Site 12
Sludge Drying Beds

CHEMICAL DATA SUMMARY FOR WELL 12_DBMW48

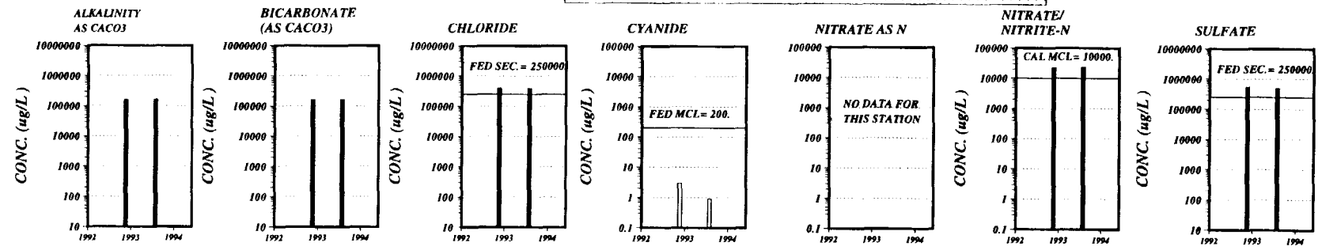
Table B-32
Groundwater Quality Data Summary - Well 12_DBMW48
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	11/17/92	1	U	07/27/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	11/17/92	1	U	07/27/93	1	U
1,1-DICHLOROETHENE	UG/L	2	11/17/92	1	U	07/27/93	1	U
1,2-DICHLOROETHANE	UG/L	2	11/17/92	1	U	07/27/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	11/17/92	1	U	07/27/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	11/17/92	1	U	07/27/93	1	U
2-BUTANONE	UG/L	2	11/17/92	2	U	07/27/93	2	U
2-HEXANONE	UG/L	2	11/17/92	2	U	07/27/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	11/17/92	2	U	07/27/93	2	U
BENZENE	UG/L	2	11/17/92	1	U	07/27/93	1	U
BROMODICHLOROMETHANE	UG/L	2	11/17/92	1	U	07/27/93	1	U
BROMOFORM	UG/L	2	11/17/92	1	U	07/27/93	1	U
CARBON TETRACHLORIDE	UG/L	2	11/17/92	0.5	J	07/27/93	0.6	J
CHLOROBENZENE	UG/L	2	11/17/92	1	U	07/27/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	11/17/92	1	U	07/27/93	1	U
CHLOROFORM	UG/L	2	11/17/92	1	U	07/27/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	11/17/92	2	J	07/27/93	1	J
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	11/17/92	1	U	07/27/93	1	U
METHYLENE CHLORIDE	UG/L	2	11/17/92	1	U	07/27/93	1	U
STYRENE	UG/L	2	11/17/92	1	U	07/27/93	1	U
TETRACHLOROETHENE	UG/L	2	11/17/92	18		07/27/93	14	
TOLUENE	UG/L	2	11/17/92	1	U	07/27/93	1	U
TRICHLOROETHYLENE	UG/L	2	11/17/92	0.8	J	07/27/93	0.7	J
XYLENE (TOTAL)	UG/L	2	11/17/92	1	U	07/27/93	1	U
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	11/17/92	10	U	07/27/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	11/17/92	10	U	07/27/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	11/17/92	10	U	07/27/93	10	U
DIMETHYL PHTHALATE	UG/L	2	11/17/92	10	U	07/27/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	11/17/92	10	U	07/27/93	10	U
PHENOL	UG/L	2	11/17/92	10	U	07/27/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	11/17/92	0.1	U	07/27/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	11/17/92	0.05	U	07/27/93	0.05	U
DIELDRIN	UG/L	2	11/17/92	0.1	U	07/27/93	0.1	U
HEPTACHLOR	UG/L	2	11/17/92	0.05	U	07/27/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	2	11/17/92	0.25	U	07/27/93	1.85	U
2,4-DB	UG/L	2	11/17/92	0.5	U	07/27/93	0.98	U
DICHLOROPROP	UG/L	2	11/17/92	0.5	U	07/27/93	1.52	U
MCPP	UG/L	2	11/17/92	250	U	07/27/93	522	U
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	11/17/92	250	U	07/27/93	250	U
TFH-GASOLINE	UG/L	2	11/17/92	50	U	07/27/93	50	U
METALS								
ALUMINUM	UG/L	2	11/17/92	34.8	b	07/27/93	18.8	U
ANTIMONY	UG/L	2	11/17/92	18	b	07/27/93	12.7	U
ARSENIC	UG/L	2	11/17/92	0.7	U	07/27/93	1.3	b
BARIUM	UG/L	2	11/17/92	26.7	b	07/27/93	24.3	b
BERYLLIUM	UG/L	2	11/17/92	0.5	U	07/27/93	0.5	U
CADMIUM	UG/L	2	11/17/92	2	b	07/27/93	0.7	U
CALCIUM	UG/L	2	11/17/92	316000		07/27/93	298000	
CHROMIUM	UG/L	2	11/17/92	3.7	U	07/27/93	2.8	U
COBALT	UG/L	2	11/17/92	5.8	U	07/27/93	5.2	U
COPPER	UG/L	2	11/17/92	0.9	U	07/27/93	1.1	U
IRON	UG/L	2	11/17/92	101		07/27/93	71.1	b
LEAD	UG/L	2	11/17/92	0.6	U	07/27/93	0.5	U
MAGNESIUM	UG/L	2	11/17/92	79000		07/27/93	77100	
MANGANESE	UG/L	2	11/17/92	22.3		07/27/93	13.4	b
MERCURY	UG/L	2	11/17/92	0.1	b	07/27/93	0.1	U
NICKEL	UG/L	2	11/17/92	120		07/27/93	243	
POTASSIUM	UG/L	2	11/17/92	2940	b	07/27/93	2690	U
SELENIUM	UG/L	2	11/17/92	56.7		07/27/93	52.2	
SILVER	UG/L	2	11/17/92	2.1	U	07/27/93	1.8	U
SODIUM	UG/L	2	11/17/92	110000		07/27/93	112000	
THALLIUM	UG/L	2	11/17/92	0.7	U	07/27/93	0.7	U
VANADIUM	UG/L	2	11/17/92	15.3	b	07/27/93	14.2	b
ZINC	UG/L	2	11/17/92	2.5	U	07/27/93	1.5	U
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	11/17/92	163000		07/27/93	164000	
BICARBONATE (AS CACO3)	UG/L	2	11/17/92	163000		07/27/93	164000	
CHLORIDE	UG/L	2	11/17/92	401000		07/27/93	392000	
CYANIDE	UG/L	2	11/17/92	3	U	07/27/93	0.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	11/17/92	22900		07/27/93	23800	
SULFATE	UG/L	2	11/17/92	549000		07/27/93	497000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	1	07/27/93	6.77				
TEMPERATURE, DEGREE C	DEG/C	1	07/27/93	22.5				
TOTAL DISSOLVED SOLIDS	UG/L	2	11/17/92	1800000		07/27/93	2246000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

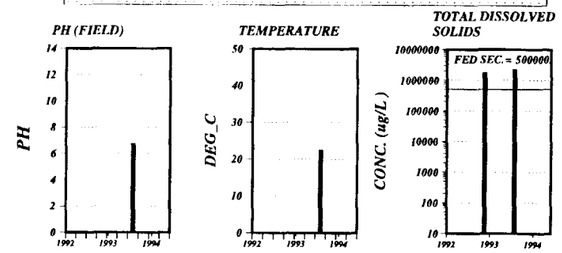
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



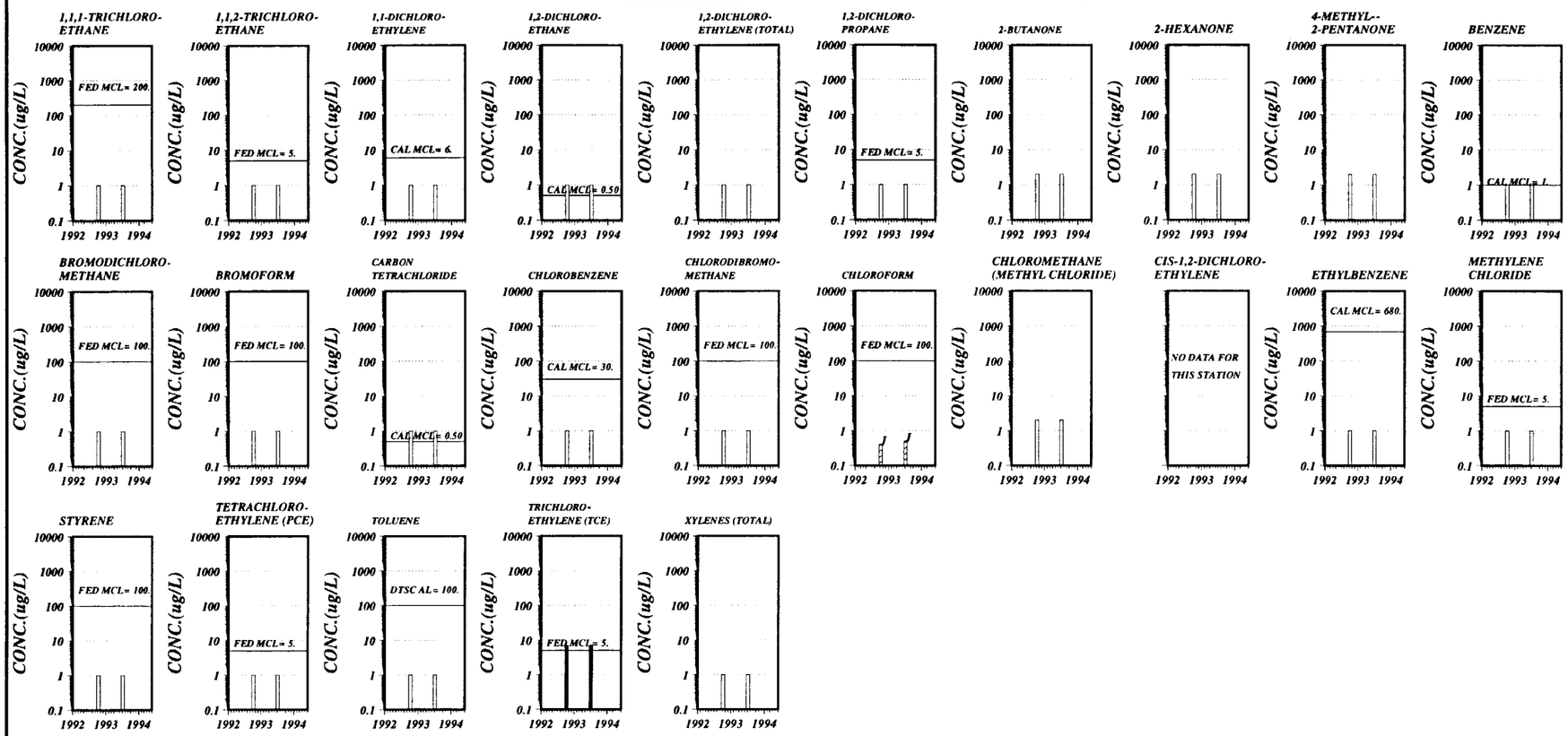
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMI[illegible] LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

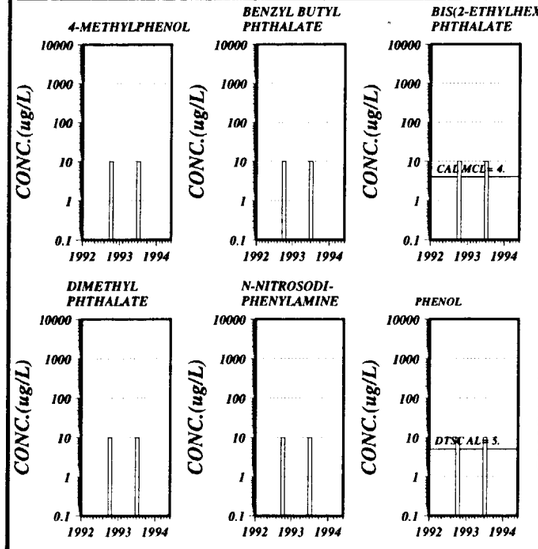
EXPLANATION: S[illegible]ARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

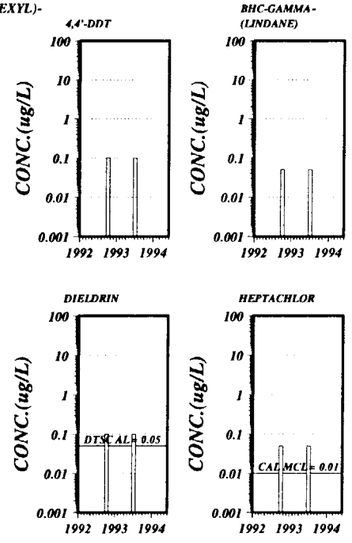
12_UGMW31



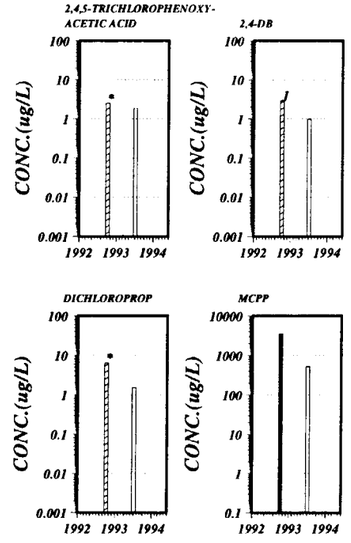
SEMIVOLATILE ORGANIC COMPOUNDS



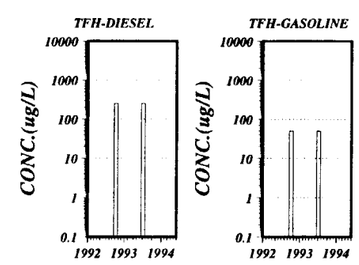
PESTICIDES AND PCBs



HERBICIDES



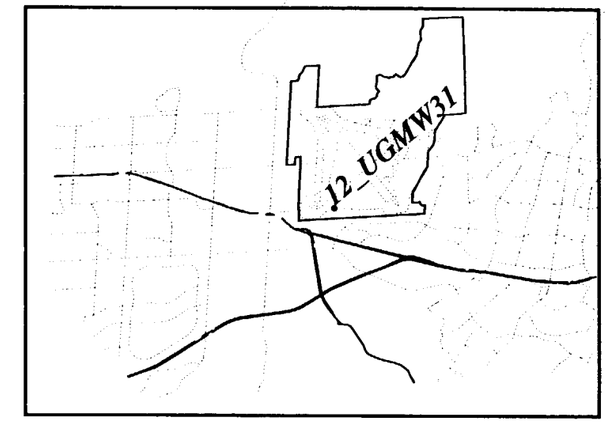
TOTAL FUEL HYDROCARBONS

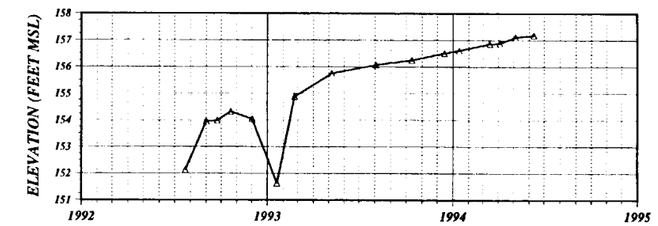


LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

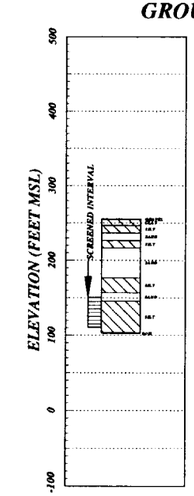
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.





GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
1.0	GRAVEL	254.6
9.0	CLAY	246.6
19.0	SILT	236.6
29.0	SAND	226.6
39.0	SILT	216.6
79.0	SAND	176.6
99.0	SILT	156.6
110.0	SAND	145.6
152.0	SILT	103.6
153.0	TD	102.6

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

12_UGMW31 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	255.60		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	153.00	102.60		
CASE TOP				
CASE BASE	105.00	150.60		
SCREEN TOP	105.00	150.60		
SCREEN BASE	145.00	110.60		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

WELL 12_UGMW31

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Tue Jul 26 12:15:02 1994

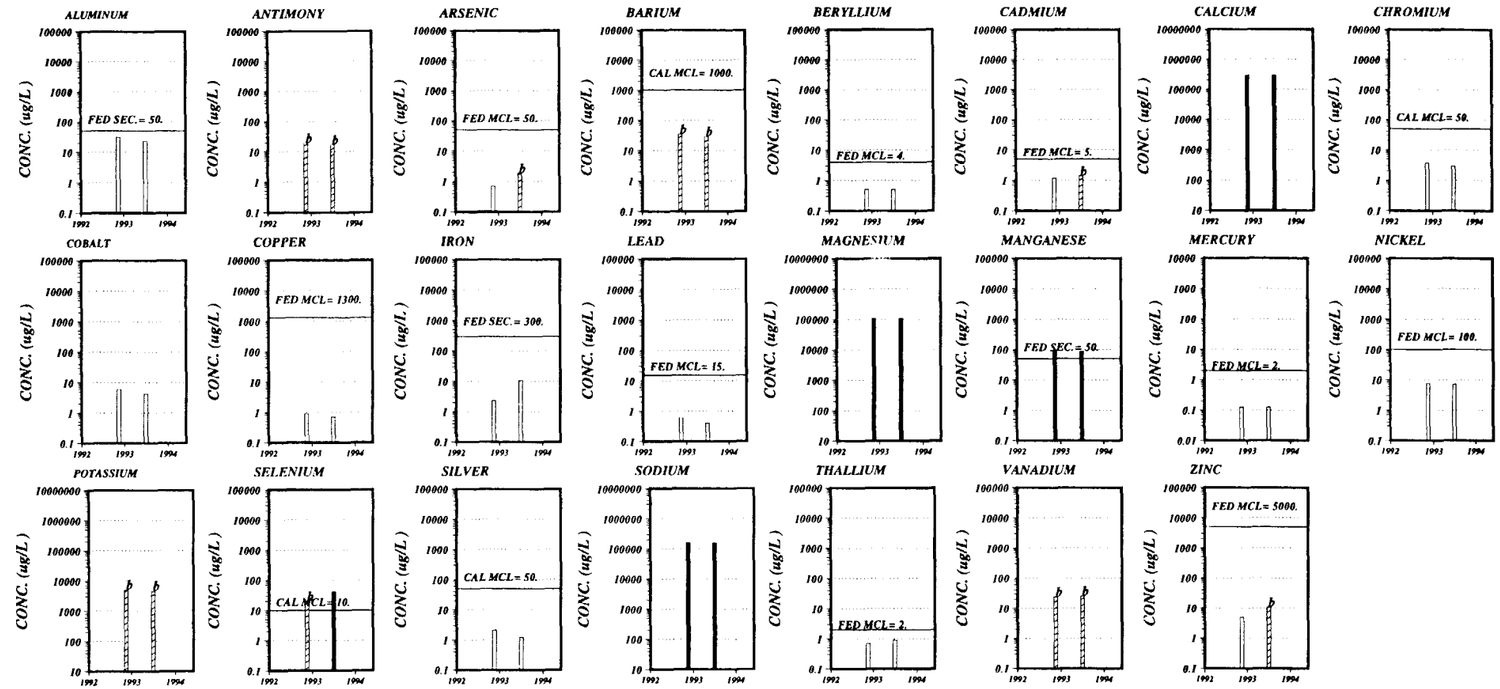
Site 13
Oil Change Area

CHEMICAL DATA SUMMARY FOR WELL 13_DBMW49

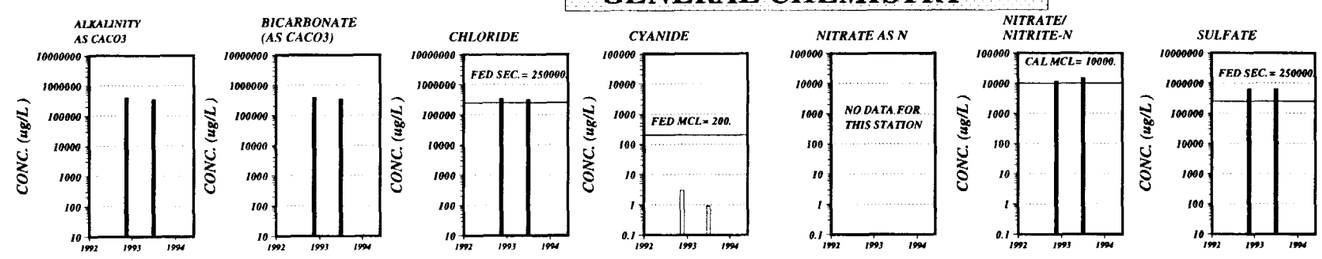
Table B-34
Groundwater Quality Data Summary - Well 13_DBMW49
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS																	
1,1,1-TRICHLOROETHANE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
1,1,2-TRICHLOROETHANE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
1,1-DICHLOROETHENE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
1,2-DICHLOROETHANE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
1,2-DICHLOROETHENE (TOTAL)	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
1,2-DICHLOROPROPANE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
2-BUTANONE	UG/L	3	11/16/92	2	U	06/30/93	2	U	06/30/93	2	U						
2-HEXANONE	UG/L	3	11/16/92	2	U	06/30/93	2	U	06/30/93	2	U						
4-METHYL-2-PENTANONE	UG/L	3	11/16/92	2	U	06/30/93	2	U	06/30/93	2	U						
BENZENE	UG/L	3	11/16/92	23		06/30/93	7		06/30/93	7							
BROMODICHLOROMETHANE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
BROMOFORM	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
CARBON TETRACHLORIDE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
CHLOROBENZENE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
CHLORODIBROMOMETHANE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
CHLOROFORM	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	3	11/16/92	6		06/30/93	2	U	06/30/93	2	U						
CIS-1,2-DICHLOROETHYLENE	UG/L	0															
ETHYLBENZENE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
METHYLENE CHLORIDE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
STYRENE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
TETRACHLOROETHENE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
TOLUENE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
TRICHLOROETHYLENE	UG/L	3	11/16/92	1	U	06/30/93	1	U	06/30/93	1	U						
XYLENE (TOTAL)	UG/L	3	11/16/92	5		06/30/93	1	U	06/30/93	1	U						
SEMIVOLATILE ORGANIC COMPOUNDS																	
4-METHYLPHENOL	UG/L	5	11/16/92	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	5	11/16/92	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	5	11/16/92	10	U	06/30/93	3	J	06/30/93	5	J	06/30/93	3	J	06/30/93	5	J
DIMETHYL PHTHALATE	UG/L	5	11/16/92	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	5	11/16/92	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U
PHENOL	UG/L	5	11/16/92	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U	06/30/93	10	U
PESTICIDES AND PCBs																	
4,4-DDT	UG/L	3	11/16/92	0.1	U	06/30/93	0.1	U	06/30/93	0.1	U						
BHC-GAMMA(LINDANE)	UG/L	3	11/16/92	0.05	U	06/30/93	0.05	U	06/30/93	0.05	U						
DIELDRIN	UG/L	3	11/16/92	0.1	U	06/30/93	0.1	U	06/30/93	0.1	U						
HEPTACHLOR	UG/L	3	11/16/92	0.05	U	06/30/93	0.05	U	06/30/93	0.05	U						
HERBICIDES																	
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0															
2,4-DB	UG/L	0															
DICHLOROPROP	UG/L	0															
MCPP	UG/L	0															
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)																	
TFH-DIESEL	UG/L	3	11/16/92	250	U	06/30/93	3370		06/30/93	3370							
TFH-GASOLINE	UG/L	3	11/16/92	68.1		06/30/93	216	J	06/30/93	216	J						
METALS																	
ALUMINUM	UG/L	3	11/16/92	31	U	06/30/93	22.9	U	06/30/93	22.9	U						
ANTIMONY	UG/L	3	11/16/92	19.5	b	06/30/93	16.9	b	06/30/93	16.9	b						
ARSENIC	UG/L	3	11/16/92	0.7	U	06/30/93	1.9	b	06/30/93	1.9	b						
BARIUM	UG/L	3	11/16/92	34.3	b	06/30/93	28.7	b	06/30/93	28.7	b						
BERYLLIUM	UG/L	3	11/16/92	0.5	U	06/30/93	0.5	U	06/30/93	0.5	U						
CADMIUM	UG/L	3	11/16/92	1.2	U	06/30/93	1.4	b	06/30/93	1.4	b						
CALCIUM	UG/L	3	11/16/92	290000		06/30/93	289000		06/30/93	289000							
CHROMIUM	UG/L	3	11/16/92	3.7	U	06/30/93	2.9	U	06/30/93	2.9	U						
COBALT	UG/L	3	11/16/92	5.8	U	06/30/93	4.2	U	06/30/93	4.2	U						
COPPER	UG/L	3	11/16/92	0.9	U	06/30/93	0.7	U	06/30/93	0.7	U						
IRON	UG/L	3	11/16/92	2.3	U	06/30/93	10.8	U	06/30/93	10.8	U						
LEAD	UG/L	3	11/16/92	0.6	U	06/30/93	0.4	U	06/30/93	0.4	U						
MAGNESIUM	UG/L	3	11/16/92	110000		06/30/93	109000		06/30/93	109000							
MANGANESE	UG/L	3	11/16/92	99.2		06/30/93	87.9		06/30/93	87.9							
MERCURY	UG/L	3	11/16/92	0.1	U	06/30/93	0.12	U	06/30/93	0.12	U						
NICKEL	UG/L	3	11/16/92	7.7	U	06/30/93	7.1	U	06/30/93	7.1	U						
POTASSIUM	UG/L	3	11/16/92	4860	b	06/30/93	4420	b	06/30/93	4420	b						
SELENIUM	UG/L	3	11/16/92	20.4	b	06/30/93	41		06/30/93	41							
SILVER	UG/L	3	11/16/92	2.1	U	06/30/93	1.2	U	06/30/93	1.2	U						
SODIUM	UG/L	3	11/16/92	160000		06/30/93	158000		06/30/93	158000							
THALLIUM	UG/L	3	11/16/92	0.7	U	06/30/93	0.9	U	06/30/93	0.9	U						
VANADIUM	UG/L	3	11/16/92	24	b	06/30/93	25.5	b	06/30/93	25.5	b						
ZINC	UG/L	3	11/16/92	5	U	06/30/93	10.8	b	06/30/93	10.8	b						
GENERAL CHEMISTRY																	
ALKALINITY AS CACO3	UG/L	3	11/16/92	398000		06/30/93	357000		06/30/93	357000							
BICARBONATE (AS CACO3)	UG/L	3	11/16/92	398000		06/30/93	357000		06/30/93	357000							
CHLORIDE	UG/L	3	11/16/92	346000		06/30/93	318000		06/30/93	318000							
CYANIDE	UG/L	3	11/16/92	3	U	06/30/93	0.9	U	06/30/93	0.9	U						
NITRATE AS N	UG/L	0															
NITRATE/NITRITE-N	UG/L	3	11/16/92	11800		06/30/93	15000		06/30/93	15000							
SULFATE	UG/L	3	11/16/92	651000		06/30/93	640000		06/30/93	640000							
PHYSICAL PARAMETERS																	
PH (FIELD)	UNITS	3	11/16/92	6.68		06/30/93	7.09		06/30/93	7.09							
TEMPERATURE, DEGREE C	DEG/C	3	11/16/92	24.8		06/30/93	25.9		06/30/93	25.9							
TOTAL DISSOLVED SOLIDS	UG/L	3	11/16/92	2050000		06/30/93	2020000		06/30/93	2020000							
GROSS ALPHA AND BETA																	
GROSS ALPHA	PCI/L	0															
GROSS BETA	PCI/L	0															

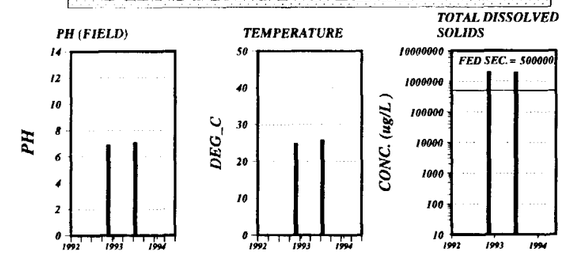
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



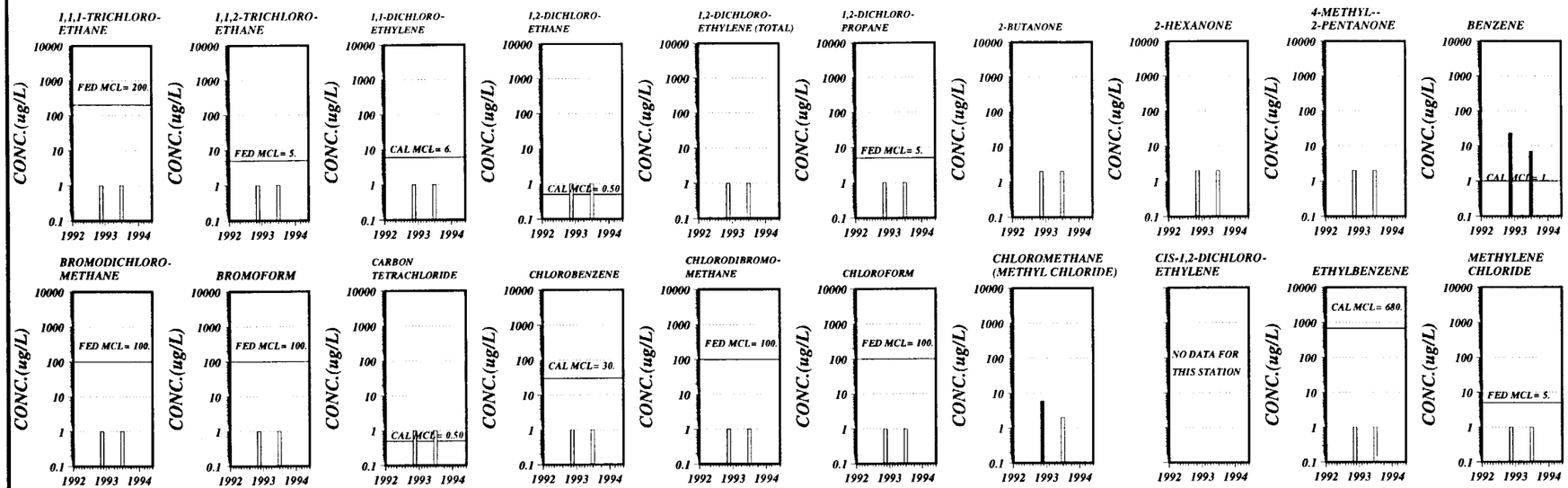
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

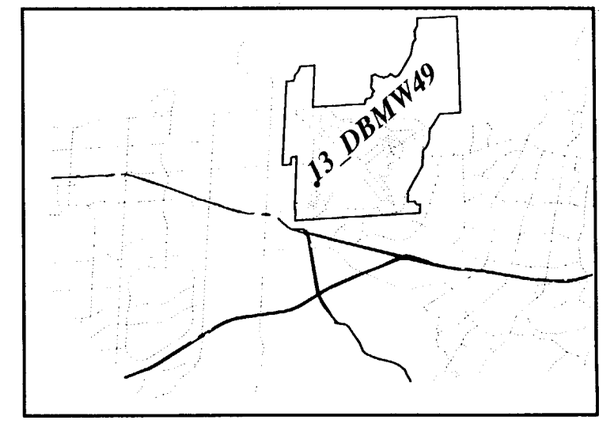
MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

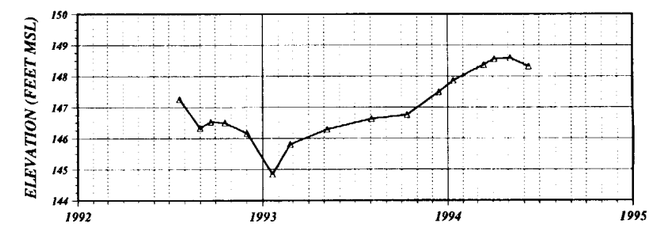
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

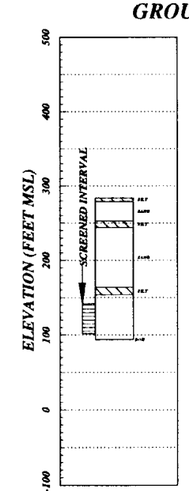
13_DBMW49







GROUNDWATER LEVEL HYDROGRAPH

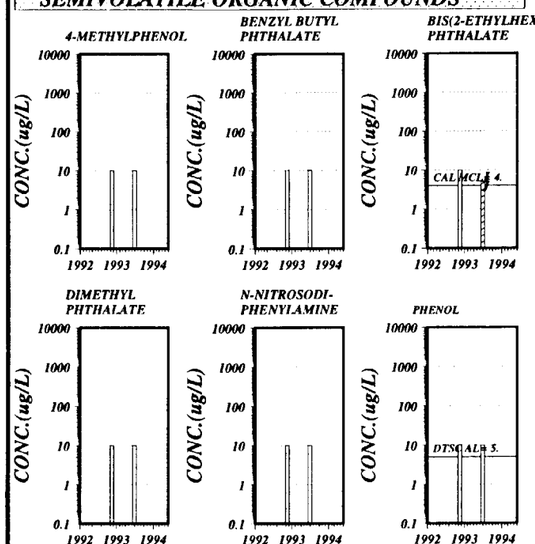


DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
5.0	SILT	278.9
31.0	SAND	252.9
40.0	SILT	243.9
120.0	SAND	163.9
130.0	SILT	153.9
190.0	TD	93.9

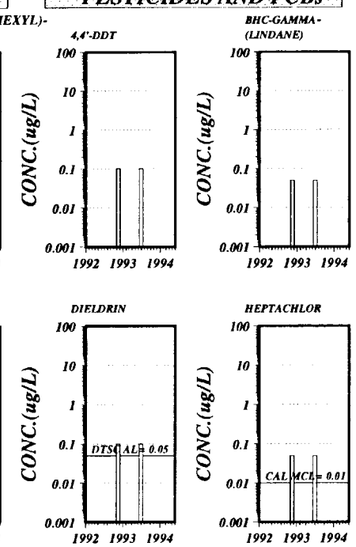
LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

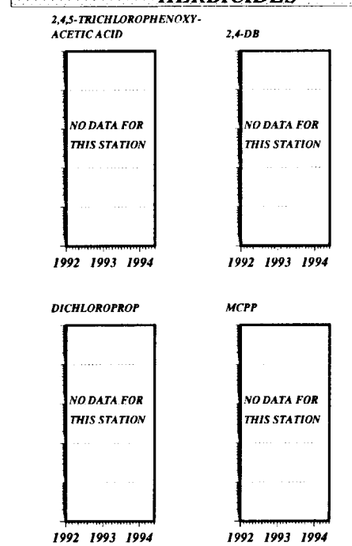
SEMIVOLATILE ORGANIC COMPOUNDS



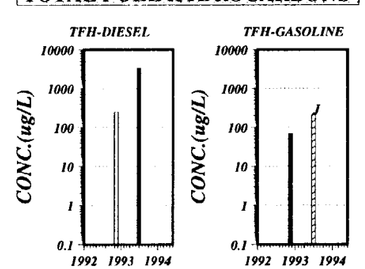
PESTICIDES AND PCBs



HERBICIDES



TOTAL FUEL HYDROCARBONS



13_DBMW49 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	283.90		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	190.00	93.90		
CASE TOP	-1.00	284.90		
CASE BASE	142.00	141.90		
SCREEN TOP	142.00	141.90		
SCREEN BASE	182.00	101.90		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 13_DBMW49

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

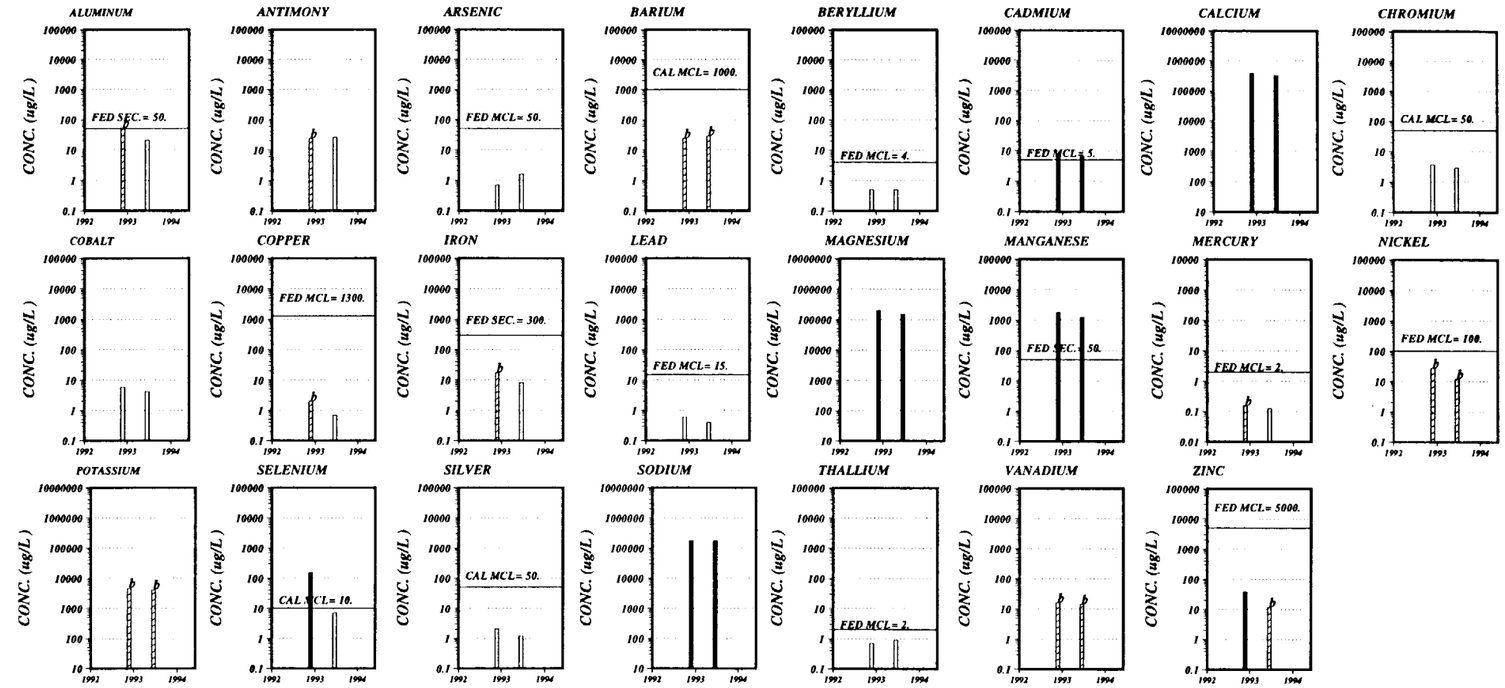
Tue Jul 26 12:16:42 1994

CHEMICAL DATA SUMMARY FOR WELL 13_DGMW78

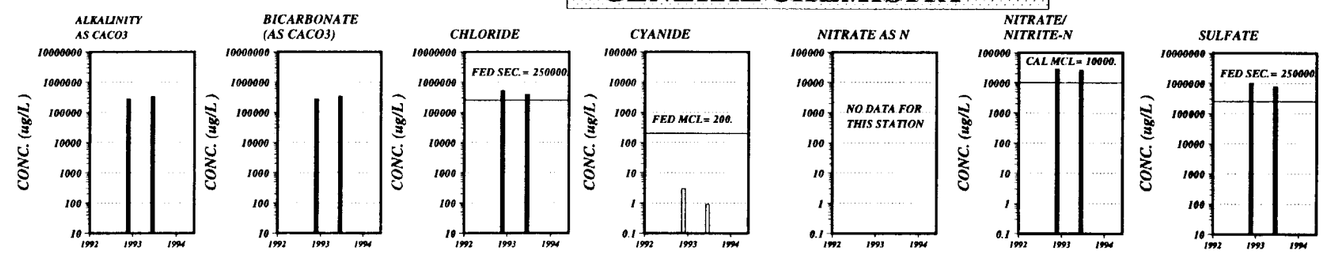
Table B-36
Groundwater Quality Data Summary - Well 13_DGMW78
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	11/23/92	1	U	06/16/93	1	U
1,1,2-TRICHLOROETHANE	UG/L	2	11/23/92	1	U	06/16/93	1	U
1,1-DICHLOROETHENE	UG/L	2	11/23/92	1	U	06/16/93	1	U
1,2-DICHLOROETHANE	UG/L	2	11/23/92	1	U	06/16/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	11/23/92	1	U	06/16/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	11/23/92	1	U	06/16/93	1	U
2-BUTANONE	UG/L	2	11/23/92	2	U	06/16/93	2	U
2-HEXANONE	UG/L	2	11/23/92	2	U	06/16/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	11/23/92	2	U	06/16/93	2	U
BENZENE	UG/L	2	11/23/92	110	d	06/16/93	12	
BROMODICHLOROMETHANE	UG/L	2	11/23/92	1	U	06/16/93	1	U
BROMOFORM	UG/L	2	11/23/92	1	U	06/16/93	1	U
CARBON TETRACHLORIDE	UG/L	2	11/23/92	1	U	06/16/93	1	U
CHLOROBENZENE	UG/L	2	11/23/92	1	U	06/16/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	11/23/92	1	U	06/16/93	1	U
CHLOROFORM	UG/L	2	11/23/92	1	U	06/16/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	11/23/92	2	U	06/16/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	11/23/92	2		06/16/93	8	
METHYLENE CHLORIDE	UG/L	2	11/23/92	1	U	06/16/93	1	U
STYRENE	UG/L	2	11/23/92	1	U	06/16/93	1	U
TETRACHLOROETHENE	UG/L	2	11/23/92	1	U	06/16/93	1	U
TOLUENE	UG/L	2	11/23/92	1	U	06/16/93	1	U
TRICHLOROETHYLENE	UG/L	2	11/23/92	1	U	06/16/93	1	U
XYLENE (TOTAL)	UG/L	2	11/23/92	26		06/16/93	9	
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	11/23/92	10	U	06/16/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	11/23/92	10	U	06/16/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	11/23/92	10	U	06/16/93	10	U
DIMETHYL PHTHALATE	UG/L	2	11/23/92	10	U	06/16/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	11/23/92	10	U	06/16/93	10	U
PHENOL	UG/L	2	11/23/92	10	U	06/16/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	11/23/92	0.1	U	06/16/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	11/23/92	0.05	U	06/16/93	0.05	U
DIELDRIN	UG/L	2	11/23/92	0.1	U	06/16/93	0.1	U
HEPTACHLOR	UG/L	2	11/23/92	0.05	U	06/16/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	11/23/92	436		06/16/93	250	U
TFH-GASOLINE	UG/L	2	11/23/92	138		06/16/93	445	
METALS								
ALUMINUM	UG/L	2	11/23/92	51.9	b	06/16/93	20.7	U
ANTIMONY	UG/L	2	11/23/92	23.7	b	06/16/93	26.1	U
ARSENIC	UG/L	2	11/23/92	0.7	U	06/16/93	1.6	U
BARIUM	UG/L	2	11/23/92	23.6	b	06/16/93	28.4	b
BERYLLIUM	UG/L	2	11/23/92	0.5	U	06/16/93	0.5	U
CADMIUM	UG/L	2	11/23/92	8		06/16/93	6.6	
CALCIUM	UG/L	2	11/23/92	383000		06/16/93	328000	
CHROMIUM	UG/L	2	11/23/92	3.7	U	06/16/93	2.9	U
COBALT	UG/L	2	11/23/92	5.8	U	06/16/93	4.2	U
COPPER	UG/L	2	11/23/92	2	b	06/16/93	0.7	U
IRON	UG/L	2	11/23/92	17.3	b	06/16/93	8.2	U
LEAD	UG/L	2	11/23/92	0.6	U	06/16/93	0.4	U
MAGNESIUM	UG/L	2	11/23/92	199000		06/16/93	150000	
MANGANESE	UG/L	2	11/23/92	1800		06/16/93	1230	
MERCURY	UG/L	2	11/23/92	0.16	b	06/16/93	0.1	U
NICKEL	UG/L	2	11/23/92	27.2	b	06/16/93	12.2	b
POTASSIUM	UG/L	2	11/23/92	4520	b	06/16/93	4050	b
SELENIUM	UG/L	2	11/23/92	152		06/16/93	7	U
SILVER	UG/L	2	11/23/92	2.1	U	06/16/93	1.2	U
SODIUM	UG/L	2	11/23/92	177000		06/16/93	173000	
THALLIUM	UG/L	2	11/23/92	0.7	U	06/16/93	0.9	U
VANADIUM	UG/L	2	11/23/92	16	b	06/16/93	14.4	b
ZINC	UG/L	2	11/23/92	38.4		06/16/93	12	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	11/23/92	273000		06/16/93	336000	
BICARBONATE (AS CACO3)	UG/L	2	11/23/92	273000		06/16/93	336000	
CHLORIDE	UG/L	2	11/23/92	522000		06/16/93	394000	
CYANIDE	UG/L	2	11/23/92	3	U	06/16/93	0.9	U
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	11/23/92	28700		06/16/93	26500	
SULFATE	UG/L	2	11/23/92	1040000		06/16/93	764000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	1	06/16/93	7.42				
TEMPERATURE, DEGREE C	DEG/C	1	06/16/93	25.3				
TOTAL DISSOLVED SOLIDS	UG/L	2	11/23/92	2910000		06/16/93	2570000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

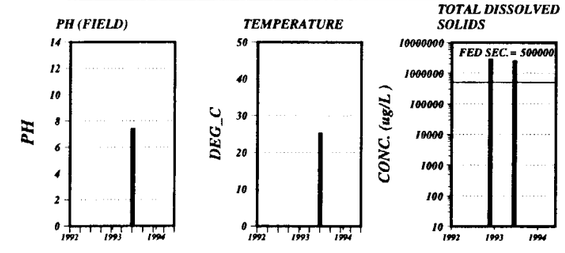
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



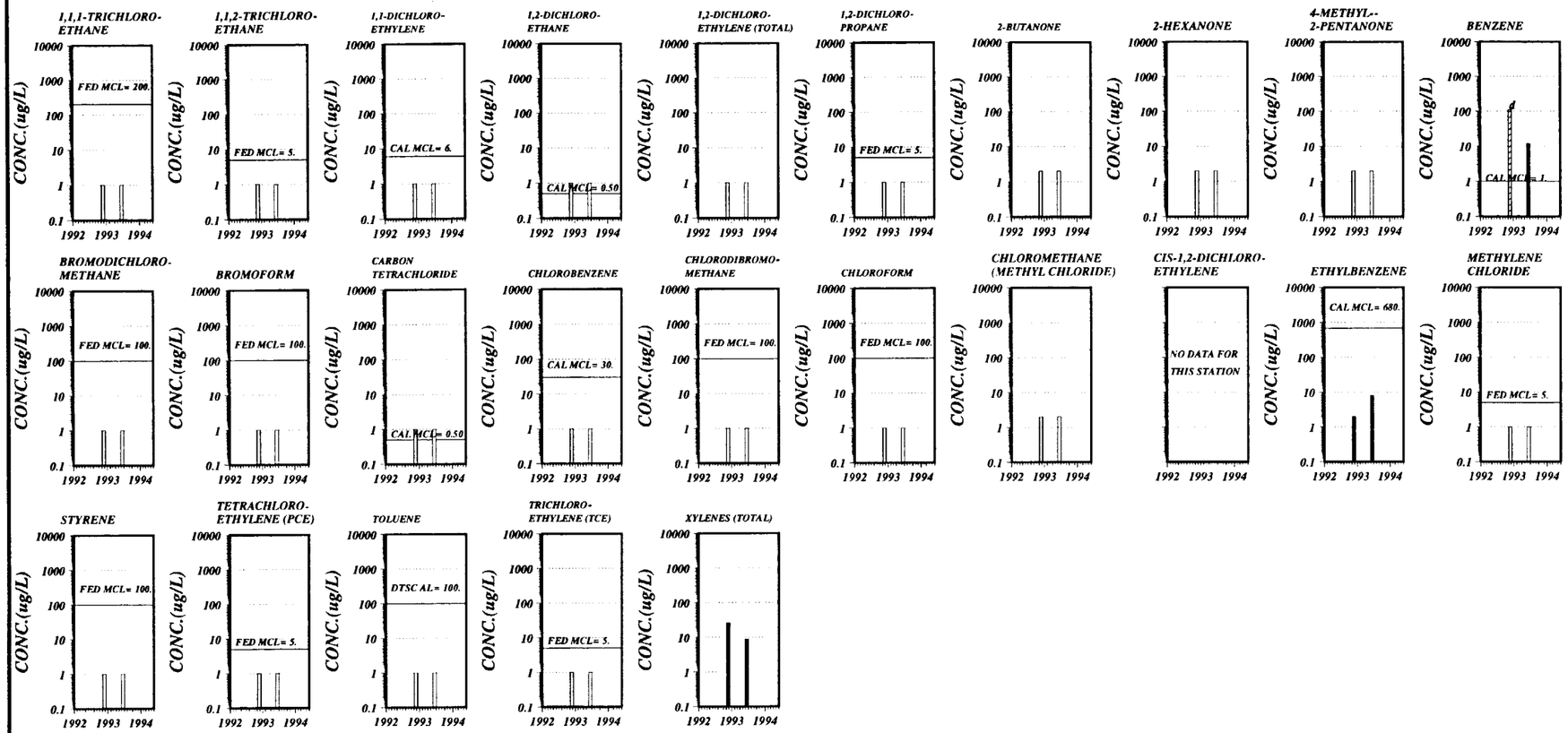
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

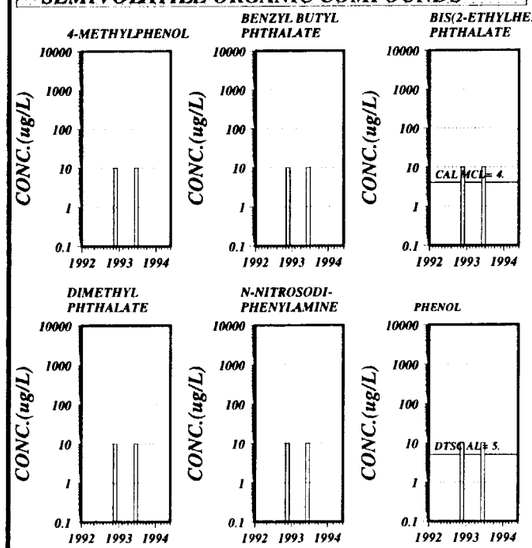
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

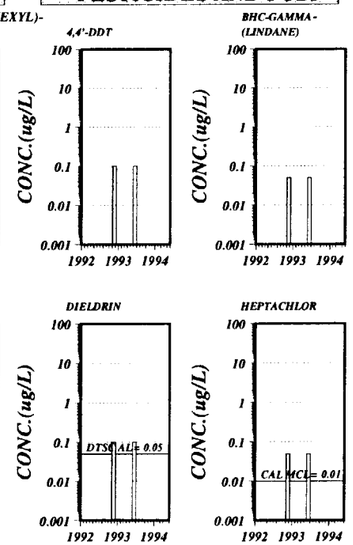
13_DGMW78



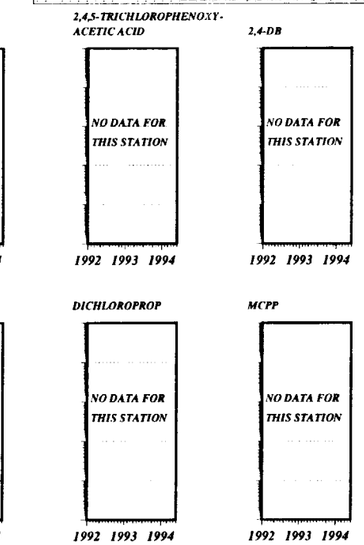
SEMIVOLATILE ORGANIC COMPOUNDS



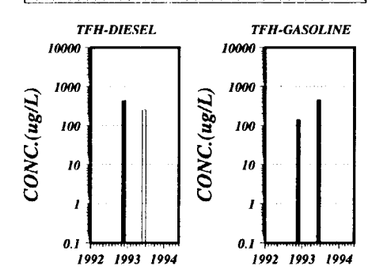
PESTICIDES AND PCBs

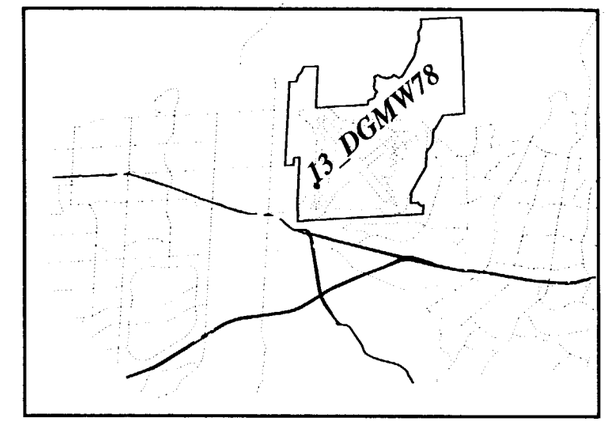


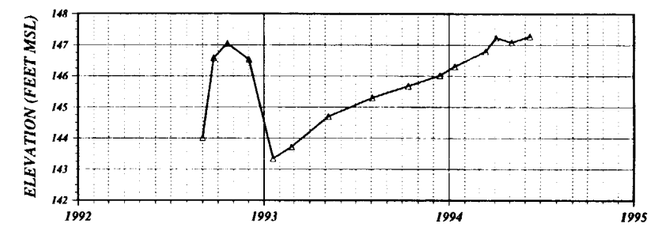
HERBICIDES



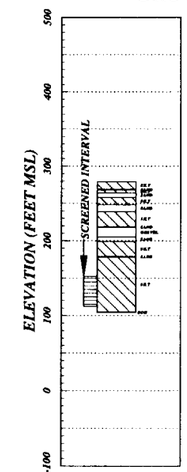
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SILT	269.2
11.0	SAND	268.2
15.0	SILT	264.2
21.0	SAND	258.2
31.0	SILT	248.2
40.0	SAND	239.2
60.0	SILT	219.2
61.0	SAND	218.2
74.0	GRAVEL	205.2
80.0	SAND	199.2
100.0	SILT	179.2
101.0	SAND	178.2
174.0	SILT	105.2
175.0	TD	104.2

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

13_DGMW78 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	279.20		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	175.00	104.20		
CASE TOP				
CASE BASE	126.80	152.40		
SCREEN TOP	126.80	152.40		
SCREEN BASE	166.80	112.40		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 13_DGMW78

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

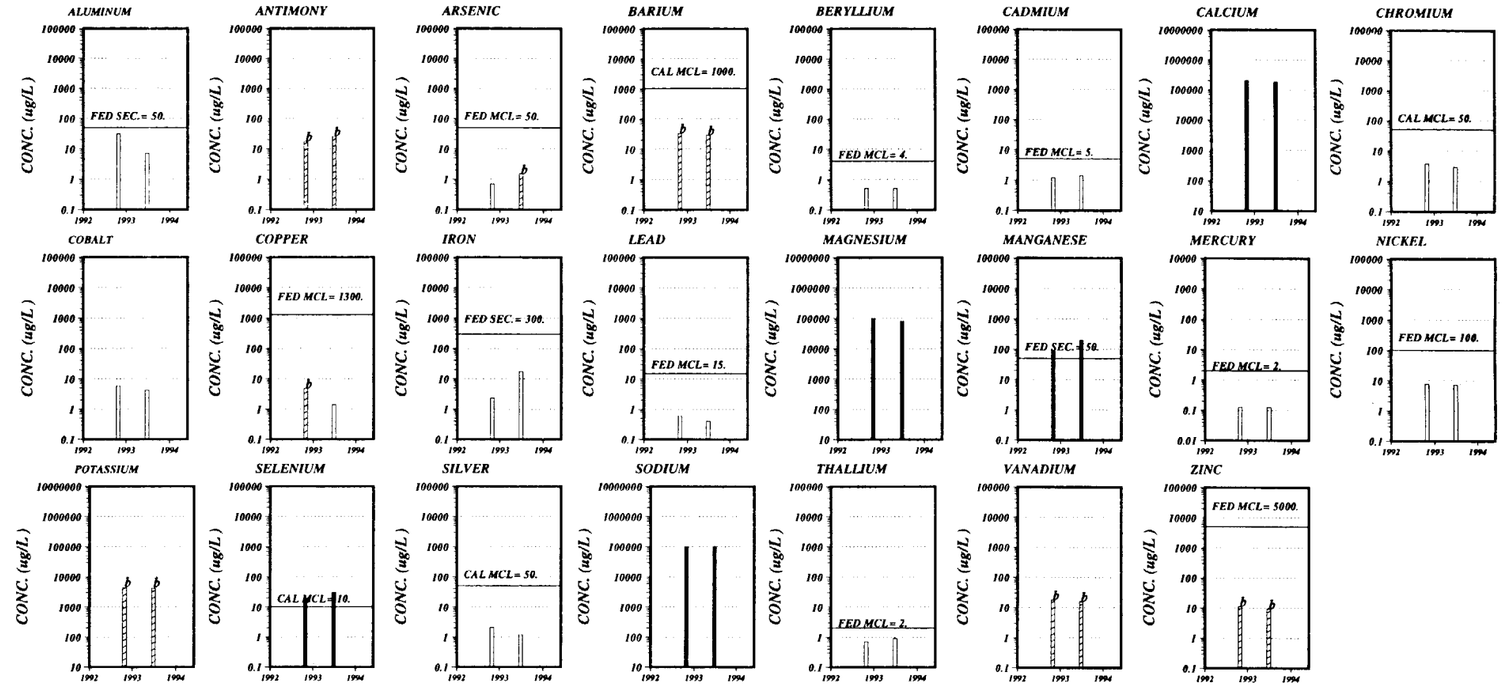
Tue Jul 26 12:19:02 1994

CHEMICAL DATA SUMMARY FOR WELL 13_UGMW32

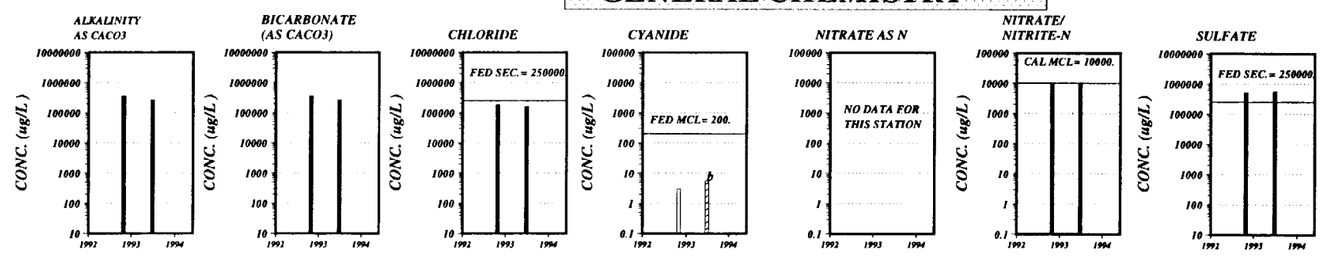
Table B-37
Groundwater Quality Data Summary - Well 13_UGMW32
MCAS El Toro OU-1 RI Report

Parameter	Units	Number of Samples	Sampling Date	Conc.	Qual. Flag	Sampling Date	Conc.	Qual. Flag
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	UG/L	2	10/28/92	1	U	06/28/93	0.5	J
1,1,2-TRICHLOROETHANE	UG/L	2	10/28/92	1	U	06/28/93	1	U
1,1-DICHLOROETHENE	UG/L	2	10/28/92	1	U	06/28/93	1	U
1,2-DICHLOROETHANE	UG/L	2	10/28/92	1	U	06/28/93	1	U
1,2-DICHLOROETHENE (TOTAL)	UG/L	2	10/28/92	1	U	06/28/93	1	U
1,2-DICHLOROPROPANE	UG/L	2	10/28/92	1	U	06/28/93	1	U
2-BUTANONE	UG/L	2	10/28/92	2	U	06/28/93	2	U
2-HEXANONE	UG/L	2	10/28/92	2	U	06/28/93	2	U
4-METHYL-2-PENTANONE	UG/L	2	10/28/92	2	U	06/28/93	2	U
BENZENE	UG/L	2	10/28/92	730	d	06/28/93	15	
BROMODICHLOROMETHANE	UG/L	2	10/28/92	1	U	06/28/93	1	U
BROMOFORM	UG/L	2	10/28/92	1	U	06/28/93	1	U
CARBON TETRACHLORIDE	UG/L	2	10/28/92	1	U	06/28/93	1	U
CHLOROBENZENE	UG/L	2	10/28/92	1	U	06/28/93	1	U
CHLORODIBROMOMETHANE	UG/L	2	10/28/92	1	U	06/28/93	1	U
CHLOROFORM	UG/L	2	10/28/92	1	U	06/28/93	1	U
CHLOROMETHANE (METHYL CHLORIDE)	UG/L	2	10/28/92	2	U	06/28/93	2	U
CIS-1,2-DICHLOROETHYLENE	UG/L	0						
ETHYLBENZENE	UG/L	2	10/28/92	1	U	06/28/93	1	U
METHYLENE CHLORIDE	UG/L	2	10/28/92	6	U	06/28/93	1	U
STYRENE	UG/L	2	10/28/92	1	U	06/28/93	1	U
TETRACHLOROETHENE	UG/L	2	10/28/92	1	U	06/28/93	1	U
TOLUENE	UG/L	2	10/28/92	2		06/28/93	1	U
TRICHLOROETHYLENE	UG/L	2	10/28/92	1	U	06/28/93	1	U
XYLENE (TOTAL)	UG/L	2	10/28/92	58		06/28/93	3	
SEMIVOLATILE ORGANIC COMPOUNDS								
4-METHYLPHENOL	UG/L	2	10/28/92	10	U	06/28/93	10	U
BENZYL BUTYL PHTHALATE	UG/L	2	10/28/92	10	U	06/28/93	10	U
BIS(2-ETHYLHEXYL)PHTHALATE	UG/L	2	10/28/92	26		06/28/93	4	J
DIMETHYL PHTHALATE	UG/L	2	10/28/92	10	U	06/28/93	10	U
N-NITROSODIPHENYLAMINE	UG/L	2	10/28/92	10	U	06/28/93	10	U
PHENOL	UG/L	2	10/28/92	10	U	06/28/93	10	U
PESTICIDES AND PCBs								
4,4'-DDT	UG/L	2	10/28/92	0.1	U	06/28/93	0.1	U
BHC-GAMMA(LINDANE)	UG/L	2	10/28/92	0.05	U	06/28/93	0.05	U
DIELDRIN	UG/L	2	10/28/92	0.1	U	06/28/93	0.1	U
HEPTACHLOR	UG/L	2	10/28/92	0.05	U	06/28/93	0.05	U
HERBICIDES								
2,4,5-TRICHLOROPHENOXYACETIC ACID	UG/L	0						
2,4-DB	UG/L	0						
DICHLOROPROP	UG/L	0						
MCPP	UG/L	0						
TOTAL FUEL HYDROCARBONS (DIESEL AND GASOLINE)								
TFH-DIESEL	UG/L	2	10/28/92	308		06/28/93	250	U
TFH-GASOLINE	UG/L	2	10/28/92	1690		06/28/93	297	J
METALS								
ALUMINUM	UG/L	2	10/28/92	31	U	06/28/93	7	U
ANTIMONY	UG/L	2	10/28/92	17.4	b	06/28/93	25.6	b
ARSENIC	UG/L	2	10/28/92	0.7	U	06/28/93	1.5	b
BARIUM	UG/L	2	10/28/92	32.5	b	06/28/93	28.4	b
BERYLLIUM	UG/L	2	10/28/92	0.5	U	06/28/93	0.5	U
CADMIUM	UG/L	2	10/28/92	1.2	U	06/28/93	1.4	U
CALCIUM	UG/L	2	10/28/92	202000		06/28/93	181000	
CHROMIUM	UG/L	2	10/28/92	3.7	U	06/28/93	2.9	U
COBALT	UG/L	2	10/28/92	5.8	U	06/28/93	4.2	U
COPPER	UG/L	2	10/28/92	4.8	b	06/28/93	1.4	U
IRON	UG/L	2	10/28/92	2.3	U	06/28/93	17.3	U
LEAD	UG/L	2	10/28/92	0.6	U	06/28/93	0.4	U
MAGNESIUM	UG/L	2	10/28/92	96400		06/28/93	80200	
MANGANESE	UG/L	2	10/28/92	85.5		06/28/93	197	
MERCURY	UG/L	2	10/28/92	0.1	U	06/28/93	0.1	U
NICKEL	UG/L	2	10/28/92	7.7	U	06/28/93	7.1	U
POTASSIUM	UG/L	2	10/28/92	4330	b	06/28/93	4180	b
SELENIUM	UG/L	2	10/28/92	19.3		06/28/93	30.8	
SILVER	UG/L	2	10/28/92	2.1	U	06/28/93	1.2	U
SODIUM	UG/L	2	10/28/92	99800		06/28/93	103000	
THALLIUM	UG/L	2	10/28/92	0.7	U	06/28/93	0.9	U
VANADIUM	UG/L	2	10/28/92	17.8	b	06/28/93	15.6	b
ZINC	UG/L	2	10/28/92	11.3	b	06/28/93	9.2	b
GENERAL CHEMISTRY								
ALKALINITY AS CACO3	UG/L	2	10/28/92	362000		06/28/93	262000	
BICARBONATE (AS CACO3)	UG/L	2	10/28/92	362000		06/28/93	262000	
CHLORIDE	UG/L	2	10/28/92	184000		06/28/93	161000	
CYANIDE	UG/L	2	10/28/92	3	U	06/28/93	5.5	b
NITRATE AS N	UG/L	0						
NITRATE/NITRITE-N	UG/L	2	10/28/92	9820		06/28/93	10100	
SULFATE	UG/L	2	10/28/92	511000		06/28/93	554000	
PHYSICAL PARAMETERS								
PH (FIELD)	UNITS	2	10/28/92	6.78		06/28/93	8.88	
TEMPERATURE, DEGREE C	DEG/C	2	10/28/92	25.2		06/28/93	27.7	
TOTAL DISSOLVED SOLIDS	UG/L	2	10/28/92	1540000		06/28/93	1490000	
GROSS ALPHA AND BETA								
GROSS ALPHA	PCI/L	0						
GROSS BETA	PCI/L	0						

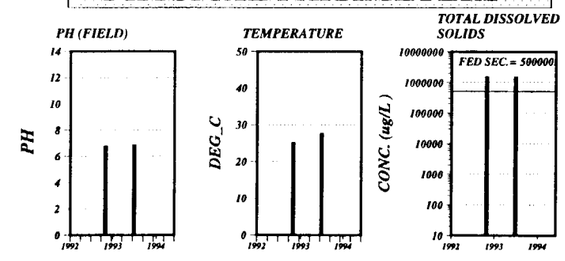
DISSOLVED METALS



GENERAL CHEMISTRY



PHYSICAL PARAMETERS



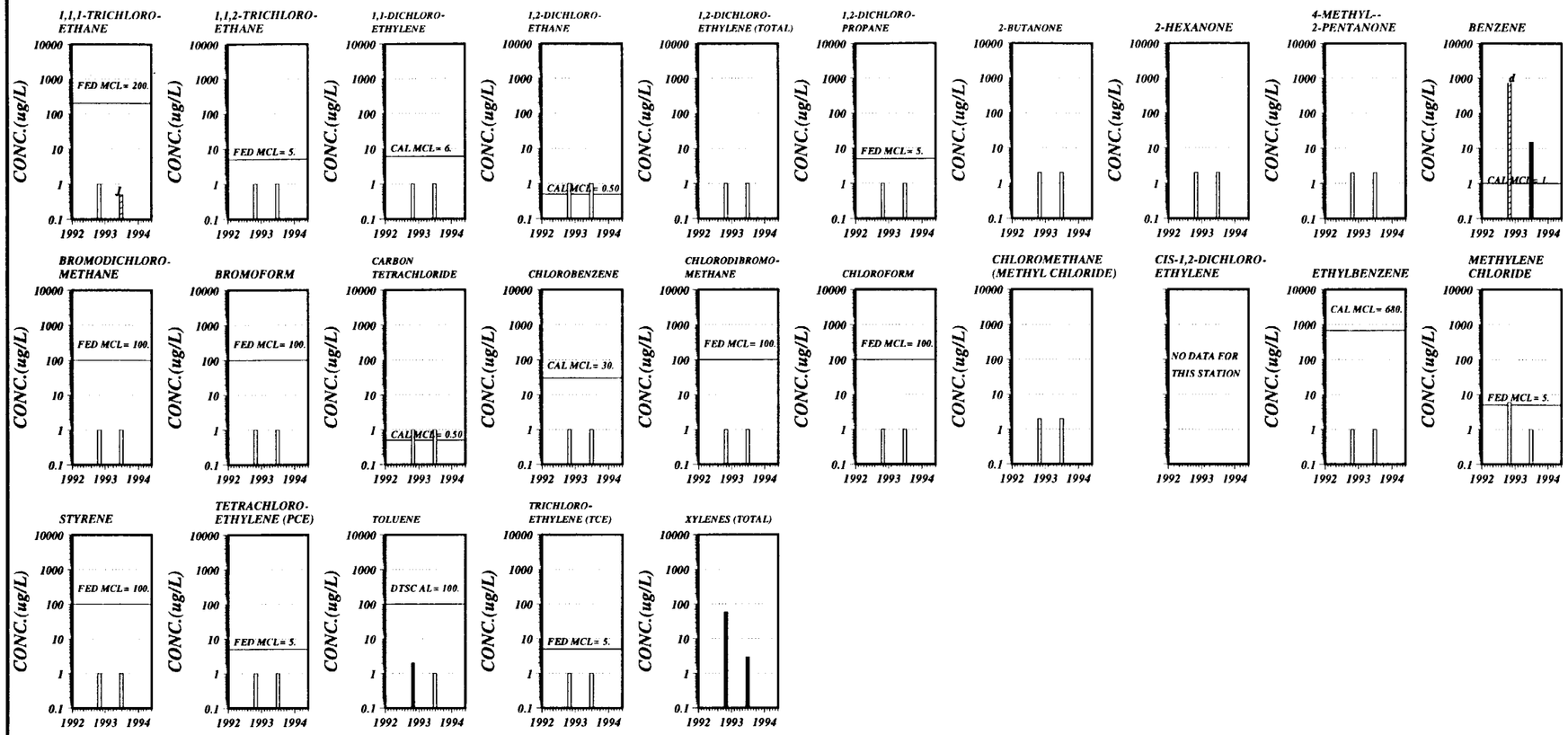
*LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.*

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level

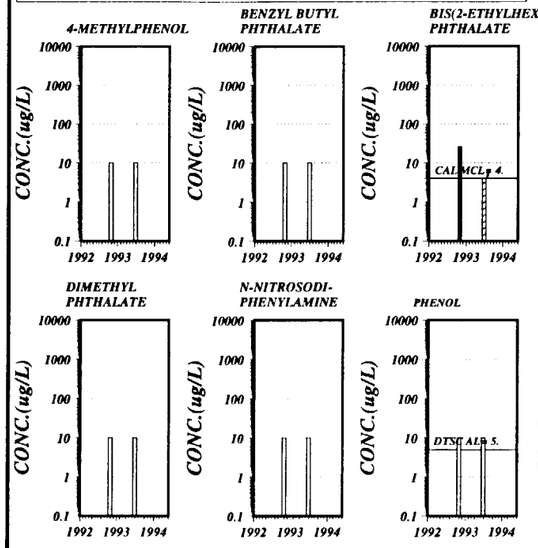
EXPLANATION: SOLID BARS=Data Above Detection Limit; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

VOLATILE ORGANIC COMPOUNDS

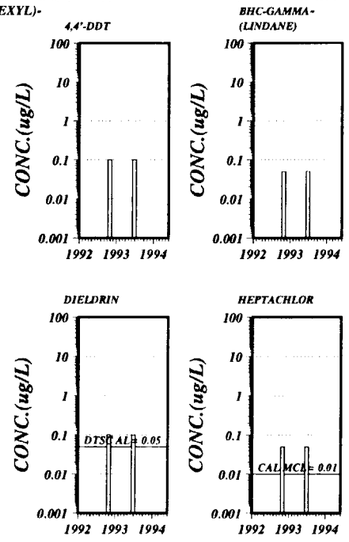
13_UGMW32



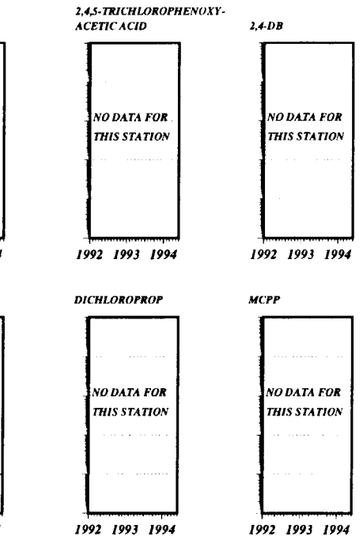
SEMIVOLATILE ORGANIC COMPOUNDS



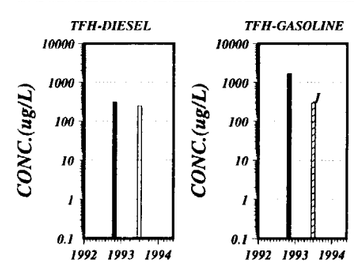
PESTICIDES AND PCBs

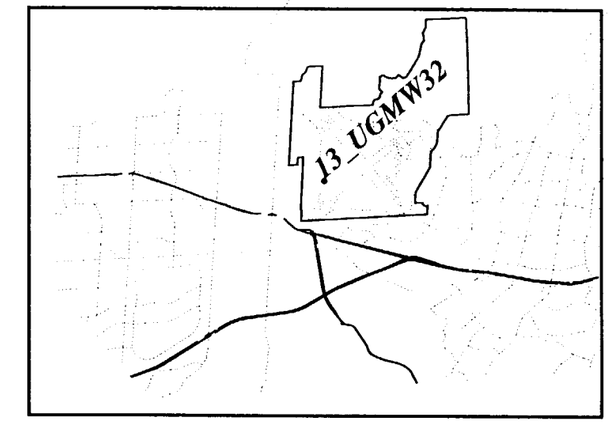


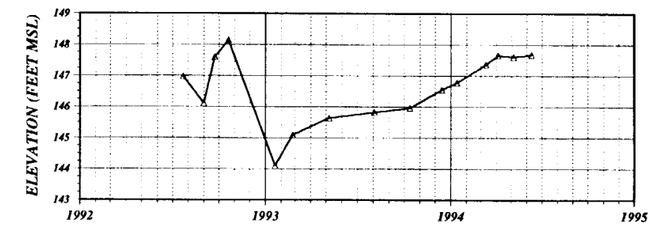
HERBICIDES



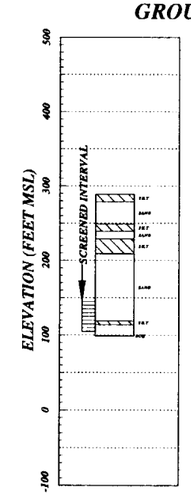
TOTAL FUEL HYDROCARBONS







GROUNDWATER LEVEL HYDROGRAPH



DEPTH (ft bgs)	LITH.	ELEV. (ft msl)
10.0	SILT	278.9
40.0	SAND	248.9
50.0	SILT	238.9
60.0	SAND	228.9
80.0	SILT	208.9
170.0	SAND	118.9
175.0	SILT	113.9
190.0	TD	98.9

LEGEND

TD = Total Depth
msl = Mean Sea Level
bgs = Below Ground Surface

13_UGMW32 WELL CONSTRUCTION SUMMARY

WELL TYPE	MONITORING WELL			
CASE DIA(INCHES)	4.00		SURF. CASING MAT.	
SCREEN DIA(INCHES)	4.00		CASING MAT.	S40 PVC
SURF ELEV(FT MSL)	288.90		SCREEN MAT.	S.STEEL
	(ft bgs)	(ft msl)		
BORE DEPTH	190.00	98.90		
CASE TOP				
CASE BASE	144.00	144.90		
SCREEN TOP	144.00	144.90		
SCREEN BASE	184.00	104.90		

NOTE: NA OR BLANK = INFORMATION NOT AVAILABLE

LABORATORY QUALIFIER FLAGS: N=Tentative Identification of Compound; J=Estimated value; R=Restricted, not usable for any purposes; U=Below instrument detection limit; *=Some blank contamination may exist; b or B=Less than CRDL, but > or = IDL; d or D=Value from diluted sample; UJ = Below estimated detection limit.

MAXIMUM CONTAMINANT LEVEL (MCL) CODES: CAL MCL = State MCL; FED MCL= Federal MCL; FED Sec. = Federal Secondary MCL; DTSC AL= DTSC Action Level.

EXPLANATION: FILLED BARS=Data Above Detection Limi; BLANK BARS=Data Below Detection Limit; HATCHED BARS= Data With Laboratory Qualifier.

WELL 13_UGMW32

MCAS EL TORO GROUNDWATER QUALITY DATA REPORT

DATA PROCESSED BY CH2M HILL

Tue Jul 26 12:20:42 1994