



Trench 5E - progress from concrete debris into area of soil fill



Pot Hole H1



Pot Hole H2



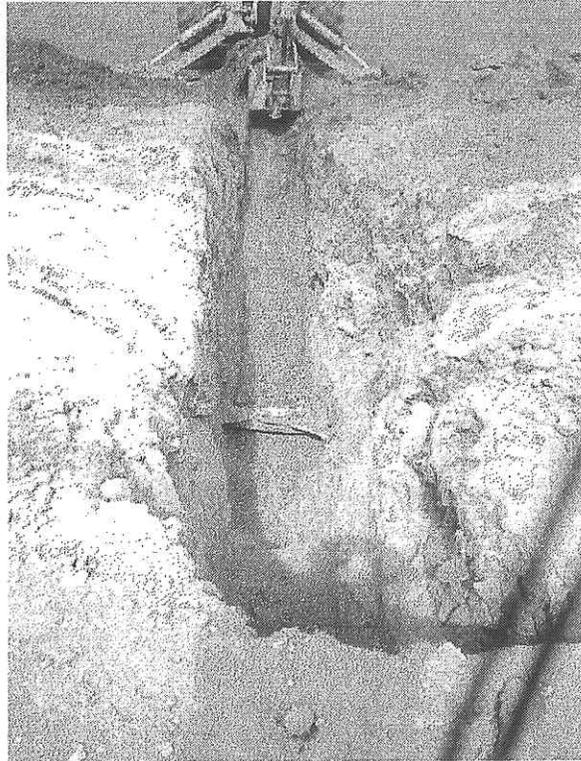
Trench 1E - Reinforced concrete debris



Pot Hole H2



Trench 1E



Pot Hole H1 - crushed corrugated steel roof, magnetic anomaly source



Sample collection from bucket

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D-1 GROUNDWATER DATA

EMAX

LABORATORIES, INC.

630 Maple Ave.
Torrance, CA 90503

Telephone: (310) 618-8889
Fax: (310) 618-0818

Date: 11-30-1999
EMAX Batch No.: 99K009

Attn: Dwayne Ishida

IT Corporation
3347 Michelson Dr. # 200
Irvine CA 92612

Subject: Laboratory Report
Project: El Toro/20242/D.O. 112

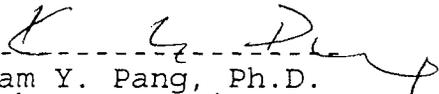
Enclosed is the Laboratory report for samples received on 11/02/99. The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
20242-980	K009-01	11/02/99	Water	EPA 8260 EPA 5030/M8015 EPA M8015 Mercury Nitrate/Nitrite TDS
20242-981	K009-02	11/02/99	Water	CAM Metals EPA 8260 EPA 5030/M8015 EPA M8015 Mercury Nitrate/Nitrite TDS
20242-982	K009-03	11/02/99	Water	CAM Metals EPA 8260

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,



Kam Y. Pang, Ph.D.
Laboratory Director

HOD M8015
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : IT CORPORATION
 Project : EL TORO/20242/D.O. 112
 Batch No. : 99K009

Matrix : WATER
 Instrument ID : GCT019

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	SUR2 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Receive DATETIME
MBLK1W	DSK008WB	ND	73	90	1	NA	.1	.012	11/05/9923:54	11/03/9914:30	TK05-20	TK05-13	DSK008W	NA	11/03/99
LCS1W	DSK008WL	5.01	76	93	1	NA	.1	.012	11/05/9918:19	11/03/9914:30	TK05-11	TK05-2	DSK008W	NA	11/03/99
LCD1W	DSK008WC	4.87	75	88	1	NA	.1	.012	11/05/9918:56	11/03/9914:30	TK05-12	TK05-2	DSK008W	NA	11/03/99
20242-980	K009-01	.98	77	91	.95	NA	.095	.011	11/05/9920:48	11/03/9914:30	TK05-15	TK05-13	DSK008W	11/02/99	11/02/99
20242-981	K009-02	ND	76	91	.98	NA	.098	.012	11/05/9921:25	11/03/9914:30	TK05-16	TK05-13	DSK008W	11/02/99	11/02/99

QC LIMIT : (SOIL) 60-140 55-150
 QC LIMIT : (WATER) 65-135 60-145
 SURR1 : Bromobenzene
 SURR2 : Hexacosane
 RL : Reporting Limit
 H-C RANGE: C7-C18 = JP-5
 C6-C12 = Gas
 C10-C24 = Diesel
 C18-C34 = Motor Oil

5004

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K009
METHOD: M8015/LUFT

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: DSK008WB DSK008WL DSK008WC
LAB FILE ID: TK05-20 TK05-11 TK05-12
DATE EXTRACTED: 11/03/9914:30 11/03/9914:30 11/03/9914:30 DATE COLLECTED: NA
DATE ANALYZED: 11/05/9923:54 11/05/9918:19 11/05/9918:56 DATE RECEIVED: 11/03/99
PREP. BATCH: DSK008W DSK008W DSK008W
CALIB. REF: TK05-13 TK05-2 TK05-2

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	5	5.01	100	5	4.87	97	3	61-143	50

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromobenzene	1	.763	76	1	.748	75	65-135
Hexacosane	1	.926	93	1	.884	88	60-145

METHOD: EPA/M8015
 TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

Client : IT CORPORATION
 Project : EL TORO/20242/D.O. 112
 Batch No. : 99K009

Matrix : WATER
 Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	VAK0339B	ND	81	1	NA	.1	.018	11/03/9915:30	11/03/9915:30	EK02-35	EK02-29	VAK0339	NA	NA
LCS1W	VAK0339L	1.13	93	1	NA	.1	.018	11/03/9916:05	11/03/9916:05	EK02-36	EK02-29	VAK0339	NA	NA
LCD1W	VAK0339C	1.15	91	1	NA	.1	.018	11/03/9916:40	11/03/9916:40	EK02-37	EK02-29	VAK0339	NA	NA
20242-980	K009-01	ND	82	1	NA	.1	.018	11/04/9906:00	11/04/9906:00	EK02-60	EK02-55	VAK0339	11/02/99	11/02/99
20242-981	K009-02	ND	83	1	NA	.1	.018	11/04/9906:35	11/04/9906:35	EK02-61	EK02-55	VAK0339	11/02/99	11/02/99

SURR : Bromofluorobenzene(BFB), WATER:65-135%, SOIL:60-140%
 RL : Reporting Limit
 * : Out of QC limit due to matrix interference

4004

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K009
METHOD: METHOD 5030A/M8015

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VAK0339B VAK0339L VAK0339C
LAB FILE ID: EK02-35 EK02-36 EK02-37
DATE EXTRACTED: 11/03/9915:30 11/03/9916:05 11/03/9916:40 DATE COLLECTED: NA
DATE ANALYZED: 11/03/9915:30 11/03/9916:05 11/03/9916:40 DATE RECEIVED:
REP. BATCH: VAK0339 VAK0339 VAK0339
CALIB. REF: EK02-29 EK02-29 EK02-29

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	1.1	1.13	103	1.1	1.15	105	2	67-136	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
1,2-dichlorobenzene	.05	.0467	93	.05	.0457	91	65-135

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client       : IT CORPORATION           Date Collected: 11/02/99
Project      : EL TORO/20242/D.O. 112  Date Received: 11/02/99
Sample No.   : 99K009                  Date Extracted: 11/09/99 23:26
Sample ID    : 20242-980                Date Analyzed: 11/09/99 23:26
Lab Samp ID  : K009-01                  Dilution Factor: 1
Lab File ID  : RKQ197                   Matrix          : WATER
Ext Btch ID  : VOK1305                  % Moisture      : NA
Calib. Ref.  : RKQ189                   Instrument ID   : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
,1,1-TRICHLOROETHANE	ND	5	1.1
,1,2,2-TETRACHLOROETHANE	ND	5	.49
,1,2-TRICHLOROETHANE	ND	5	.52
,1-DICHLOROETHANE	ND	5	1.2
,1-DICHLOROETHENE	ND	5	.2
,2-DICHLOROETHANE	ND	5	.58
,2-DICHLOROPROPANE	ND	5	.53
-BUTANONE	ND	50	7.9
-CHLOROETHYLVINYLETHER	ND	50	.83
-HEXANONE	ND	50	.1
-METHYL-2-PENTANONE	ND	50	.1
CETONE	ND	50	10
ENZENE	ND	5	.85
ROMODICHLOROMETHANE	ND	5	.33
ROMOFORM	ND	5	.29
ROMOMETHANE	ND	5	1.5
ARBON DISULFIDE	ND	5	1.3
ARBON TETRACHLORIDE	ND	5	1.3
HLOROBENZENE	ND	5	.68
HLOROETHANE	ND	5	2.9
HLOROFORM	ND	5	.85
HLOROMETHANE	ND	5	1.7
,2-DICHLOROETHENE	ND	5	.97
,3-DICHLOROPROPENE	ND	5	.47
IBROMOCHLOROMETHANE	ND	5	.29
THYLBENZENE	ND	5	.72
TBE	ND	10	.96
ETHYLENE CHLORIDE	ND	5	1.8
TYRENE	ND	5	.58
ETRACHLOROETHENE	ND	5	1.2
OLUENE	ND	5	.92
RANS-1,2-DICHLOROETHENE	ND	5	1.5
RANS-1,3-DICHLOROPROPENE	ND	5	.45
RICHLOROETHENE	ND	5	.9
INYL ACETATE	ND	50	6.2
INYL CHLORIDE	ND	5	1.7
YLENES	ND	5	2.4

URROGATE PARAMETERS	% RECOVERY	QC LIMIT
,2-DICHLOROETHANE-D4	94	62-139
OLUENE-D8	98	75-125
ROMOFLUOROBENZENE	91	75-125

RL: Project Reporting Limit
 : Out side of QC Limit
 : An estimated value between PRL and MDL
 : Value exceed the upper level of the initial calibration
 : Found in the associated blank
 : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: 11/02/99
Project    : EL TORO/20242/D.O. 112   Date Received: 11/02/99
Batch No.  : 99K009                   Date Extracted: 11/10/99 00:02
Sample ID  : 20242-981                 Date Analyzed: 11/10/99 00:02
Lab Samp ID: K009-02                   Dilution Factor: 1
Lab File ID: RKQ198                     Matrix      : WATER
Ext Btch ID: VOK1305                    % Moisture  : NA
Calib. Ref.: RKQ189                     Instrument ID : T-005
=====

```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYLVINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	89	75-125

PRL: Project Reporting Limit
* : Out side of QC Limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : IT CORPORATION           Date Collected: 11/02/99
Project     : EL TORO/20242/D.O. 112  Date Received: 11/02/99
No.        : 99K009                  Date Extracted: 11/10/99 00:40
Sample ID  : 20242-982               Date Analyzed: 11/10/99 00:40
Lab Samp ID: K009-03                 Dilution Factor: 1
Lab File ID: RKQ199                  Matrix          : WATER
Ext Btch ID: VOK1305                 % Moisture     : NA
Calib. Ref.: RKQ189                  Instrument ID   : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
,1,1-TRICHLOROETHANE	ND	5	1.1
,1,2,2-TETRACHLOROETHANE	ND	5	.49
,1,2-TRICHLOROETHANE	ND	5	.52
,1-DICHLOROETHANE	ND	5	1.2
,1-DICHLOROETHENE	ND	5	2
,2-DICHLOROETHANE	ND	5	.58
,2-DICHLOROPROPANE	ND	5	.53
-BUTANONE	ND	50	7.9
-CHLOROETHYLVINYLETHER	ND	50	.83
-HEXANONE	ND	50	1
-METHYL-2-PENTANONE	ND	50	1
CETONE	ND	50	10
ENZENE	ND	5	.85
ROMODICHLOROMETHANE	ND	5	.33
ROMOFORM	ND	5	.29
ROMOMETHANE	ND	5	1.5
ARBON DISULFIDE	ND	5	1.3
ARBON TETRACHLORIDE	ND	5	1.3
HLOROBENZENE	ND	5	.68
HLOROETHANE	ND	5	2.9
HLOROFORM	ND	5	.85
ROMOMETHANE	ND	5	1.7
,2-DICHLOROETHENE	ND	5	.97
,3-DICHLOROPROPENE	ND	5	.47
BROMOCHLOROMETHANE	ND	5	.29
HYLBENZENE	ND	5	.72
BE	ND	10	.96
ETHYLENE CHLORIDE	ND	5	1.8
TYRENE	ND	5	.58
ETRACHLOROETHENE	ND	5	1.2
DLUENE	ND	5	.92
RANS-1,2-DICHLOROETHENE	ND	5	1.5
RANS-1,3-DICHLOROPROPENE	ND	5	.45
RICHLOROETHENE	ND	5	.9
INYL ACETATE	ND	50	6.2
INYL CHLORIDE	ND	5	1.7
YLENES	ND	5	2.4

RRROGATE PARAMETERS	% RECOVERY	QC LIMIT
,2-DICHLOROETHANE-D4	98	62-139
DLUENE-D8	95	75-125
ROMOFLUOROBENZENE	90	75-125

RL: Project Reporting Limit
 : Out side of QC Limit
 : An estimated value between PRL and MDL
 : Value exceed the upper level of the initial calibration
 : Found in the associated blank
 : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: NA
Project     : EL TORO/20242/D.O. 112  Date Received: 11/09/99
Batch No.   : 99K009                  Date Extracted: 11/09/99 20:56
Sample ID   : MBLK1W                   Date Analyzed: 11/09/99 20:56
Lab Samp ID : VOK13058                 Dilution Factor: 1
Lab File ID : RKQ193                   Matrix          : WATER
Ext Btch ID : VOK1305                  % Moisture      : NA
Calib. Ref.: RKQ189                    Instrument ID   : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	94	62-139
TOLUENE-D8	95	75-125
BROMOFLUOROBENZENE	91	75-125

PRL: Project Reporting Limit
 * : Out side of QC Limit
 J : An estimated value between PRL and MDL
 E : Value exceed the upper level of the initial calibration
 B : Found in the associated blank
 D : Value from dilution analysis

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K009
D: METHOD 5030A/8260A

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VOK1305B VOK1305L VOK1305C
LAB FILE ID: RKQ193 RKQ190 RKQ191
DATE EXTRACTED: 11/09/9920:56 11/09/9919:03 11/09/9919:41 DATE COLLECTED: NA
DATE ANALYZED: 11/09/9920:56 11/09/9919:03 11/09/9919:41 DATE RECEIVED: 11/09/99
REP. BATCH: VOK1305 VOK1305 VOK1305
ALIB. REF: RKQ189 RKQ189 RKQ189

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	19.9	100	20	19.7	99	1	75-125	20
benzene	ND	20	19.3	97	20	20.1	101	4	75-125	20
chlorobenzene	ND	20	19.5	97	20	19.5	98	0	75-125	20
toluene	ND	20	19.1	96	20	19.1	95	0	74-125	20
trichloroethene	ND	20	18.6	93	20	19.3	97	4	71-125	20

URROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	50	45.8	92	50	46.2	92	62-139
toluene-d8	50	48.2	96	50	48.5	97	75-125
chlorofluorobenzene	50	45.3	91	50	45.6	91	75-125

METHOD 3010A/6010A
 CAM METALS BY ICP

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=====
Client      : IT CORPORATION           Date Collected: 11/02/99
Project     : EL TORO/20242/D.O. 112   Date Received: 11/02/99
SDG NO.    : 99K009                   Date Extracted: 11/03/99 11:30
Sample ID   : 20242-980                 Date Analyzed: 11/06/99 01:23
Lab Samp ID: K009-01                     Dilution Factor: 1
Lab File ID: I07K016017                 Matrix          : WATER
Ext Btch ID: IPK006W                     % Moisture     : NA
Calib. Ref.: I07K016010                 Instrument ID   : EMAXT107
=====
  
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PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Titanium	ND	100	4.7
Zinc	ND	20	2.47

L: Reporting Limit

METHOD 3010A/6010A
 CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 11/02/99
Project     : EL TORO/20242/D.O. 112  Date Received: 11/02/99
SDG NO.    : 99K009                  Date Extracted: 11/03/99 11:30
Sample ID   : 20242-981              Date Analyzed: 11/06/99 01:17
Lab Samp ID: K009-02                 Dilution Factor: 1
Lab File ID: I07K016016             Matrix          : WATER
Ext Btch ID: IPK006W                % Moisture     : NA
Calib. Ref.: I07K016010             Instrument ID   : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	48.1	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

METHOD 3010A/6010A
METALS BY TRACE-ICP

```
=====
Client      : IT CORPORATION           Date Collected: 11/02/99
Project     : EL TORO/20242/D.O. 112   Date Received: 11/02/99
Site ID    : 99K009                   Date Extracted: 11/03/99 11:30
Lab Samp ID: 20242-981                Date Analyzed: 11/10/99 10:14
Lab File ID: K009-02                  Dilution Factor: 1
Lab File ID: 131K024021               Matrix          : WATER
Ext Btch ID: IPK006W                  % Moisture      : NA
Calib. Ref.: 131K024014               Instrument ID   : EMAXT131
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	26.4	10	4.37
Lead	ND	10	1.42
Selenium	22.8	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

METHOD 3010A/6010A
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: NA
Project     : EL TORO/20242/D.O. 112   Date Received: 11/03/99
SDG NO.    : 99K009                   Date Extracted: 11/03/99 11:30
Sample ID   : MBLK1W                   Date Analyzed: 11/06/99 00:53
Lab Samp ID: IPK006WB                  Dilution Factor: 1
Lab File ID: 107K016012                Matrix          : WATER
Ext Btch ID: IPK006W                    % Moisture      : NA
Calib. Ref.: 107K016010                Instrument ID   : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

METHOD 3010A/6010A
METALS BY TRACE-ICP

```
=====  
Client      : IT CORPORATION           Date Collected: NA  
Project     : EL TORO/20242/D.O. 112   Date Received: 11/03/99  
           : 99K009                     Date Extracted: 11/03/99 11:30  
Sample ID: MBLK1W                       Date Analyzed: 11/10/99 09:53  
Lab Samp ID: IPK006WB                    Dilution Factor: 1  
Lab File ID: I31K024016                  Matrix           : WATER  
Lab Btch ID: IPK006W                      % Moisture      : NA  
Lab. Ref.: I31K024014                    Instrument ID   : EMAXT131  
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
arsenic	ND	10	4.37
cadmium	ND	10	1.42
chromium	ND	10	4.21
mercury	ND	400	3.31

: Reporting Limit

7009

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K009
METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: MBLK1W
CONTROL NO.: IPK006WB IPK006WL
LAB FILE ID: I07K016012 I07K016013
DATIME EXTRCTD: 11/03/9911:30 11/03/9911:30 DATE COLLECTED: NA
DATIME ANALYZD: 11/06/9900:53 11/06/9900:59 DATE RECEIVED: 11/03/99
PREP. BATCH: IPK006W IPK006W
CALIB. REF: I07K016010 I07K016010

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
Antimony	ND	5000	4930	99	80-120
Barium	ND	1000	1010	101	80-120
Beryllium	ND	1000	1020	102	80-120
Cadmium	ND	1000	980	98	80-120
Chromium	ND	1000	1040	104	80-120
Cobalt	ND	1000	1030	103	80-120
Copper	ND	1000	957	96	80-120
Manganese	ND	1000	1020	102	80-120
Molybdenum	ND	1000	1030	103	80-120
Nickel	ND	1000	1010	101	80-120
Silver	ND	1000	998	100	80-120
Vanadium	ND	1000	1030	103	80-120
Zinc	ND	1000	1000	100	80-120

7010

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K009
METH: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: MBLK1W
CONTROL NO.: IPK006WB IPK006WL
LAB FILE ID: I31K024016 I31K024017
DATIME EXTRACTD: 11/03/9911:30 11/03/9911:30 DATE COLLECTED: NA
DATIME ANALYZD: 11/10/9909:53 11/10/9909:57 DATE RECEIVED: 11/03/99
PREP. BATCH: IPK006W IPK006W
CALIB. REF: I31K024014 I31K024014

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	QC LIMIT (%)
Arsenic	ND	1000	1030	103	80-120
Lead	ND	1000	1010	101	80-120
Selenium	ND	1000	1050	105	80-120
Thallium	ND	1000	1070	107	80-120

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K009
METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 5
SAMPLE ID: 20242-980 20242-980DL
EMAX SAMP ID: K009-01 K009-01T
LAB FILE ID: I07K016017 I07K016018
DATE EXTRACTED: 11/03/9911:30 11/03/9911:30 DATE COLLECTED: 11/02/99
DATE ANALYZED: 11/06/9901:23 11/06/9901:31 DATE RECEIVED: 11/02/99
PREP. BATCH: IPK006W IPK006W
CALIB. REF: I07K016010 I07K016010

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Barium	ND	ND	0	10
Beryllium	ND	ND	0	10
Cadmium	ND	ND	0	10
Chromium	ND	ND	0	10
Cobalt	ND	ND	0	10
Copper	ND	ND	0	10
Manganese	ND	ND	0	10
Molybdenum	ND	ND	0	10
Nickel	ND	ND	0	10
Silver	ND	ND	0	10
Titanium	ND	ND	0	10
Zinc	ND	ND	0	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
ATCH NO.: 99K009
METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 5
SAMPLE ID: 20242-980 20242-980DL
MAX SAMP ID: K009-01 K009-01T
LAB FILE ID: I31K024020 I31K024019
DATE EXTRACTED: 11/03/99 11:30 11/03/99 11:30 DATE COLLECTED: 11/02/99
DATE ANALYZED: 11/10/99 10:10 11/10/99 10:06 DATE RECEIVED: 11/02/99
REP. BATCH: IPK006W IPK006W
LIB. REF: I31K024014 I31K024014

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
senic	ND	ND	0	10
ad	ND	ND	0	10
lenium	ND	ND	0	10
allium	ND	ND	0	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K009
METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: 20242-980
CONTROL NO.: K009-01 K009-01A
LAB FILE ID: I31K024020 I31K024023
DATIME EXTRCTD: 11/03/9911:30 11/03/9911:30 DATE COLLECTED: 11/02/99
DATIME ANALYZD: 11/10/9910:10 11/10/9910:22 DATE RECEIVED: 11/02/99
PREP. BATCH: IPK006W IPK006W
CALIB. REF: I31K024014 I31K024014

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Arsenic	ND	500	570	114	75-125
Lead	ND	500	554	111	75-125
Selenium	ND	500	586	117	75-125
Thallium	ND	500	586	117	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K009
METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: 20242-980
CONTROL NO.: K009-01 K009-01A
LAB FILE ID: I07K016017 I07K016019
DATIME EXTRCTD: 11/03/9911:30 11/03/9911:30 DATE COLLECTED: 11/02/99
DATIME ANALYZD: 11/06/9901:23 11/06/9901:37 DATE RECEIVED: 11/02/99
PREP. BATCH: IPK006W IPK006W
CALIB. REF: I07K016010 I07K016010

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Antimony	ND	5000	459	92	75-125
Barium	ND	1000	1010	101	75-125
Beryllium	ND	1000	1010	101	75-125
Cadmium	ND	1000	979	98	75-125
Chromium	ND	1000	1020	102	75-125
Cobalt	ND	1000	1010	101	75-125
Copper	ND	1000	973	97	75-125
Manganese	ND	1000	993	99	75-125
Molybdenum	ND	1000	1010	101	75-125
Nickel	ND	1000	990	99	75-125
Silver	ND	1000	861	86	75-125
Selenium	ND	1000	1010	101	75-125
Zinc	ND	1000	1010	101	75-125

EPA METHOD 160.1
TOTAL DISSOLVED SOLIDS

Client : IT CORPORATION
Project : EL TORO/20242/D.O. 112
Batch No. : 99K009

Matrix : WATER
Instrument ID : TI16

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSK001WB	ND	1	NA	10	3.36	11/04/9916:30	NA	DSK001W-1	NA	DSK001W	NA	NA
LCS1W	DSK001WL	680	1	NA	10	3.36	11/04/9916:31	NA	DSK001W-2	NA	DSK001W	NA	NA
LCD1W	DSK001WC	720	1	NA	10	3.36	11/04/9916:32	NA	DSK001W-3	NA	DSK001W	NA	NA
20242-980	K009-01	ND	1	NA	10	3.36	11/04/9916:33	NA	DSK001W-4	NA	DSK001W	11/02/99	11/02/99
20242-981	K009-02	2290	1	NA	10	3.36	11/04/9916:34	NA	DSK001W-5	NA	DSK001W	11/02/99	11/02/99
20242-981DUP	K009-02D	2340	1	NA	10	3.36	11/04/9916:35	NA	DSK001W-6	NA	DSK001W	11/02/99	11/02/99

RL : Reporting Limit

8002

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
METHOD: EPA 160.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 99K009
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: DSK001WL/C

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 11/04/99 16:31/16:32

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD %	QC LIMIT %	RPD LIMIT %
TDS	ND	732	680	93	732	720	98	6	85-115	20

1008

METHOD 300.0
NITRATE/NITRITE

=====

CLIENT:	IT Corporation	DATE COLLECTED:	11/02/99
PROJECT:	El Toro/20242/D.O. 112	DATE RECEIVED:	11/02/99
BATCH NO.:	99K009	DATE EXTRACTED:	NA
MATRIX:	WATER	DATE ANALYZED:	11/03/99

=====

SAMPLE ID	CONTROL NO	RESULT (mg/L)	DILUTION FACTOR	PRL (mg/L)
20242-980	K009-01	ND	1	.1
20242-981	K009-02	5.52	5	.5
MBLK1W	ICK001WB	ND	1	.1

PRL: Project Reporting Limit

8008

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT Corporation
PROJECT: El Toro/20242/D.O. 112
METHOD: METHOD 300.0
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 99K009
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: ICK001WL/C

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 11/03/99

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD %	QC LIMIT %	RPD LIMIT %
Nitrate/Nitrite-N	ND	2.00	2.02	101	2.00	2.01	100	0	85-115	20

8010

LDC Report# 4358A8

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 2, 1999
LDC Report Date: December 27, 1999
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Extractables
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 99K009

Sample Identification

20242-980
20242-981

COPY

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field blanks were identified in this SDG.

X. Field Blanks

Sample 20242-980 was identified as an equipment rinsate. No total petroleum hydrocarbons as extractable contaminants were found in this blank with the following exceptions:

Equipment Rinsate ID	Compound	Concentration (mg/L)
20242-980	TPH as extractables	0.98

MCAS EI Toro
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 99K009

No Sample Data Qualified in this SDG

MCAS EI Toro
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 99K009

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 2, 1999
LDC Report Date: December 27, 1999
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Gasoline
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 99K009

Sample Identification

20242-980
20242-981

COPY

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

Sample 20242-980 was identified as an equipment rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

MCAS EI Toro
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 99K009

No Sample Data Qualified in this SDG

MCAS EI Toro
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 99K009

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 2, 1999
LDC Report Date: December 29, 1999
Matrix: Water
Parameters: Volatiles
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 99K009

Sample Identification

20242-980
20242-981
20242-982

COPY

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

Average relative response factors (RRF) for all semivolatile target compounds and system monitoring compounds were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

All of the continuing calibration RRF values were greater than or equal to 0.05 . . .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Sample 20242-980 was identified as an equipment rinsate. No volatile contaminants were found in this blank.

Sample 20242-982 was identified as a trip blank. No volatile contaminants were found in this blank.

MCAS EI Toro
Volatiles - Data Qualification Summary - SDG 99K009

No Sample Data Qualified in this SDG

MCAS EI Toro
Volatiles - Laboratory Blank Data Qualification Summary - SDG 99K009

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 2, 1999
LDC Report Date: January 3, 2000
Matrix: Water
Parameters: Metals
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 99K009

Sample Identification

20242-980
20242-981

COPY

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010 and 7000 for Metals. The metals analyzed were Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found above the reporting limit in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Copper Nickel Selenium	1.77 ug/L 10.3 ug/L 4.23 ug/L	All samples in SDG 99K009

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike analyses specified for the samples in this SDG and therefore matrix spike analyses were not performed for this SDG.

VI. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate sample analyses specified for the samples in this SDG, and therefore duplicate sample analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards (ICP-MS)

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

Although ICP serial dilution analysis was not required by the method, it was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

Raw data were not reviewed for this SDG.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

Sample 20242-980 was identified as an equipment rinsate. No metal contaminants were found in this blank.

**MCAS El Toro
Metals - Data Qualification Summary - SDG 99K009**

No Sample Data Qualified in this SDG

**MCAS El Toro
Metals - Laboratory Blank Data Qualification Summary - SDG 99K009**

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 2, 1999
LDC Report Date: January 3, 2000
Matrix: Water
Parameters: Wet Chemistry
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 99K009

Sample Identification

20242-980
20242-981
20242-981MS
20242-981DUP

COPY

Introduction

This data review covers 4 water samples listed on the cover sheet. The analyses were per EPA Method 160.1 for Total Dissolved Solids and EPA Method 300.0 for Nitrate/Nitrite as Nitrogen.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section VII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Accuracy and Precision Data

a. Matrix Spike/(Matrix Spike) Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Relative percent differences (RPD) were within QC limits.

b. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Sample Result Verification

Raw data were not reviewed for this SDG.

VI. Overall Assessment of Data

Data flags are summarized at the end of this report.

VII. Field Duplicates

No field duplicates were identified in this SDG.

VIII. Field Blanks

Sample 20242-980 was identified as an equipment rinsate. No contaminant concentrations were found in this blank.

**MCAS EI Toro
Wet Chemistry - Data Qualification Summary - SDG 99K009**

No Sample Data Qualified in this SDG

**MCAS EI Toro
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG 99K009**

No Sample Data Qualified in this SDG

4358 B

EMAX

LABORATORIES, INC.

630 Maple Ave.
Torrance, CA 90503

Telephone: (310) 618-8889
Fax: (310) 618-0818

Date: 12-07-1999
EMAX Batch No.: 99K022

Attn: Dwayne Ishida

IT Corporation
3347 Michelson Dr. # 200
Irvine CA 92612

Subject: Laboratory Report
Project: El Toro/20242/D.O. 112

Enclosed is the Laboratory report for samples received on 11/04/99. The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
20242-983	K022-01	11/03/99	Water	EPA 8260A EPA 5030A/M8015 EPA M8015 Mercury Nitrate/Nitrite TDS
20242-984	K022-02	11/03/99	Water	CAM Metals EPA 8260A EPA 5030A/M8015 EPA M8015 Mercury Nitrate/Nitrite TDS
20242-985	K022-03	11/03/99	Water	CAM Metals EPA 8260A EPA 5030A/M8015 EPA M8015 Mercury Nitrate/Nitrite TDS
20242-986	K022-04	11/03/99	Water	CAM Metals EPA 8260A

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

ME M8015
 TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : IT CORPORATION
 Project : EL TORO/20242/D.O. 112
 Batch No. : 99K022

Matrix : WATER
 Instrument ID : GCT019

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	SUR2 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSK013WB	ND	76	96	1	NA	.1	.012	11/07/9903:11	11/04/9909:30	TK05-57	TK05-13	DSK013W	NA	11/04/99
LCS1W	DSK013WL	4.81	72	87	1	NA	.1	.012	11/06/9901:46	11/04/9909:30	TK05-23	TK05-13	DSK013W	NA	11/04/99
LCD1W	DSK013WC	4.87	73	88	1	NA	.1	.012	11/06/9903:01	11/04/9909:30	TK05-25	TK05-24	DSK013W	NA	11/04/99
20242-984	K022-02	ND	70	89	.96	NA	.095	.011	11/06/9907:23	11/04/9909:30	TK05-32	TK05-24	DSK013W	11/03/99	11/04/99
20242-985	K022-03	ND	70	81	.96	NA	.097	.012	11/06/9908:01	11/04/9909:30	TK05-33	TK05-24	DSK013W	11/03/99	11/04/99
20242-983	K022-01	ND	66	81	.95	NA	.095	.011	11/06/9908:38	11/04/9909:30	TK05-34	TK05-24	DSK013W	11/03/99	11/04/99

QC LIMIT : (SOIL) 60-140 55-150
 QC LIMIT : (WATER) 65-135 60-145
 SURR1 : Bromobenzene
 SURR2 : Hexacosane
 RL : Reporting Limit
 H-C RANGE: C7-C18 = JP-5
 C6-C12 = Gas
 C10-C24 = Diesel
 C18-C34 = Motor Oil

5004

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K022
METHOD: M8015/LUFT

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: DSK013WB DSK013WL DSK013WC
LAB FILE ID: TK05-62 TK05-23 TK05-25
DATE EXTRACTED: 11/04/9909:30 11/04/9909:30 11/04/9909:30 DATE COLLECTED: NA
DATE ANALYZED: 11/07/9903:11 11/06/9901:46 11/06/9903:01 DATE RECEIVED: 11/04/99
PREP. BATCH: DSK013W DSK013W DSK013W
CALIB. REF: TK05-57 TK05-13 TK05-24

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	5	4.81	96	5	4.87	97	1	61-143	50

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromobenzene	1	.718	72	1	.727	73	65-135
Hexacosane	1	.868	87	1	.882	88	60-145

METHOD 5018015
 TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

Client : IT CORPORATION
 Project : EL TORO/20242/D.O. 112
 Batch No. : 99K022

Matrix : WATER
 Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATE/TIME	Extraction DATE/TIME	LFID	CAL REF	PREP BATCH	Collection DATE/TIME	Received DATE/TIME
MBLK1W	VAK0839B	ND	93	1	NA	.1	.018	11/06/9917:33	11/06/9917:33	EK05-4	EK05-3	VAK0839	NA	NA
LCS1W	VAK0839L	1.22	106	1	NA	.1	.018	11/06/9918:08	11/06/9918:08	EK05-5	EK05-3	VAK0839	NA	NA
LCD1W	VAK0839C	1.14	103	1	NA	.1	.018	11/06/9918:43	11/06/9918:43	EK05-6	EK05-3	VAK0839	NA	NA
20242-983	K022-01	ND	88	1	NA	.1	.018	11/06/9920:26	11/06/9920:26	EK05-9	EK05-3	VAK0839	11/03/99	11/04/99
20242-984	K022-02	ND	88	1	NA	.1	.018	11/06/9921:00	11/06/9921:00	EK05-10	EK05-3	VAK0839	11/03/99	11/04/99
20242-985	K022-03	ND	90	1	NA	.1	.018	11/06/9921:35	11/06/9921:35	EK05-11	EK05-3	VAK0839	11/03/99	11/04/99

SURR : Bromofluorobenzene(BFB), WATER:65-135%, SOIL:60-140%
 RL : Reporting Limit
 * : Out of QC limit due to matrix interference

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K022
METHOD: METHOD 5030A/M8015

=====

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VAK0839B VAK0839L VAK0839C
LAB FILE ID: EK05-4 EK05-5 EK05-6
DATE EXTRACTED: 11/06/9917:33 11/06/9918:08 11/06/9918:43 DATE COLLECTED: NA
DATE ANALYZED: 11/06/9917:33 11/06/9918:08 11/06/9918:43 DATE RECEIVED:
PREP. BATCH: VAK0839 VAK0839 VAK0839
CALIB. REF: EK05-3 EK05-3 EK05-3

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	1.1	1.22	111	1.1	1.14	104	7	65-135	30

=====

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromofluorobenzene	.05	.053	106	.05	.0515	103	65-135

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: 11/03/99
Project     : EL TORO/20242/D.O. 112  Date Received: 11/04/99
Batch No.   : 99K022                 Date Extracted: 11/10/99 19:13
Sample ID   : 20242-983              Date Analyzed: 11/10/99 19:13
Lab Samp ID: K022-01                 Dilution Factor: 1
Lab File ID: RKQ212                 Matrix          : WATER
Ext Btch ID: VOK1405                % Moisture     : NA
Calib. Ref.: RKQ206                 Instrument ID   : T-005
=====

```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYLVINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	12	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	14	5	.85
BROMOMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	8.2	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	62-139
TOLUENE-D8	100	75-125
BROMOFLUOROBENZENE	95	75-125

PRL: Project Reporting Limit
 * : Out side of QC Limit
 J : An estimated value between PRL and MDL
 E : Value exceed the upper level of the initial calibration
 B : Found in the associated blank
 D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client   : IT CORPORATION           Date Collected: 11/03/99
Project  : EL TORO/20242/D.O. 112   Date Received: 11/04/99
Batch No. : 99K022                 Date Extracted: 11/10/99 19:51
Sample ID: 20242-984               Date Analyzed: 11/10/99 19:51
Lab Samp ID: K022-02                Dilution Factor: 1
Lab File ID: RKQ213                 Matrix       : WATER
Ext Btch ID: VOK1405                % Moisture   : NA
Calib. Ref.: RKQ206                 Instrument ID : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHYR	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	97	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	94	75-125

PRL: Project Reporting Limit
 * : Out side of QC Limit
 J : An estimated value between PRL and MDL
 E : Value exceed the upper level of the initial calibration
 B : Found in the associated blank
 D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: 11/03/99
Project     : EL TORO/20242/D.O. 112  Date Received: 11/04/99
Batch No.   : 99K022                 Date Extracted: 11/10/99 20:28
Sample ID   : 20242-985              Date Analyzed: 11/10/99 20:28
Lab Samp ID : K022-03                Dilution Factor: 1
Lab File ID : RKQ214                 Matrix          : WATER
Ext Btch ID : VOK1405                % Moisture     : NA
Calib. Ref. : RKQ206                 Instrument ID   : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	6.4	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROETHANE	ND	5	.68
CHLOROETHANE	ND	5	2.9
BROMOFORM	7.2	5	.85
BROMOMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	4.6J	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	62-139
TOLUENE-D8	98	75-125
BROMOFLUOROBENZENE	93	75-125

PRL: Project Reporting Limit
 * : Out side of QC Limit
 J : An estimated value between PRL and MDL
 E : Value exceed the upper level of the initial calibration
 B : Found in the associated blank
 D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: 11/03/99
Project     : EL TORO/20242/D.O. 112  Date Received: 11/04/99
Batch No.   : 99K022                 Date Extracted: 11/10/99 18:36
Sample ID   : 20242-986              Date Analyzed: 11/10/99 18:36
Lab Samp ID: K022-04                 Dilution Factor: 1
Lab File ID: RKQ211                  Matrix          : WATER
Ext Btch ID: VOK1405                 % Moisture      : NA
Calib. Ref.: RKQ206                  Instrument ID    : T-005
=====

```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYLVINYLEETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	62-139
TOLUENE-DB	99	75-125
BROMOFLUOROBENZENE	94	75-125

PRL: Project Reporting Limit
* : Out side of QC Limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : IT CORPORATION           Date Collected: NA
Subject     : EL TORO/20242/D.O. 112  Date Received: 11/10/99
Batch No.   : 99K022                 Date Extracted: 11/10/99 17:59
Sample ID   : MBLK1W                 Date Analyzed: 11/10/99 17:59
Lab Samp ID: VOK1405B               Dilution Factor: 1
Lab File ID: RKQ210                 Matrix          : WATER
Ext Btch ID: VOK1405                % Moisture     : NA
Calib. Ref.: RKQ206                 Instrument ID   : T-005
=====

```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYLVINYLETHER	ND	50	.83
2-HEXANONE	ND	50	.1
4-METHYL-2-PENTANONE	ND	50	.1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
BROMOMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	97	62-139
TOLUENE-D8	97	75-125
BROMOFLUOROBENZENE	91	75-125

PRL: Project Reporting Limit

* : Out side of QC Limit

J : An estimated value between PRL and MDL

E : Value exceed the upper level of the initial calibration

B : Found in the associated blank

D : Value from dilution analysis

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K022
METHOD: METHOD 5030A/8260A

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VOK1405B VOK1405L VOK1405C
LAB FILE ID: RKQ210 RKQ207 RKQ208
DATE EXTRACTED: 11/10/9917:59 11/10/9916:06 11/10/9916:44 DATE COLLECTED: NA
DATE ANALYZED: 11/10/9917:59 11/10/9916:06 11/10/9916:44 DATE RECEIVED: 11/10/99
PREP. BATCH: VOK1405 VOK1405 VOK1405
CALIB. REF: RKQ206 RKQ206 RKQ206

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	24	120	20	24	120	0	75-125	20
Benzene	ND	20	20.7	103	20	20.8	104	1	75-125	20
Chlorobenzene	ND	20	20.4	102	20	20.3	101	1	75-125	20
Toluene	ND	20	20.3	101	20	20.5	103	1	74-125	20
Trichloroethene	ND	20	20.5	103	20	20.7	104	1	71-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	50	49.3	99	50	48.5	97	62-139
Toluene-d8	50	48.9	98	50	49.2	98	75-125
Bromofluorobenzene	50	46	92	50	47.9	96	75-125

METHOD 3010A/6010A
 CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 11/03/99
Subject     : EL TORO/20242/D.O. 112   Date Received: 11/04/99
SDG NO.    : 99K022                   Date Extracted: 11/04/99 12:00
Sample ID   : 20242-983                 Date Analyzed: 11/05/99 05:50
Lab Samp ID: K022-01                     Dilution Factor: 1
Lab File ID: I07K013060                 Matrix          : WATER
Ext Btch ID: IPK009W                    % Moisture      : NA
Calib. Ref.: I07K013057                 Instrument ID   : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	33.8	20	2.47

RL: Reporting Limit

: Redigested on 11/19/99 (IPK036W) and analyzed on 11/22/99, file I07K051

METHOD 3010A/6010A
METALS BY TRACE-ICP

```
=====
Client      : IT CORPORATION           Date Collected: 11/03/99
Project    : EL TORO/20242/D.O. 112   Date Received: 11/04/99
SDG NO.    : 99K022                   Date Extracted: 11/04/99 12:00
Sample ID  : 20242-983                 Date Analyzed: 11/12/99 11:22
Lab Samp ID: K022-01                   Dilution Factor: 1
Lab File ID: I31K029021                Matrix          : WATER
Ext Btch ID: IPK009W                   % Moisture      : NA
Calib. Ref.: I31K029014                Instrument ID   : EMAXTI31
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	ND	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

METHOD 3010A/6010A
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 11/03/99
Project     : EL TORO/20242/D.O. 112   Date Received: 11/04/99
SDG NO.    : 99K022                   Date Extracted: 11/04/99 12:00
Sample ID: 20242-984                   Date Analyzed: 11/05/99 05:20
Lab Samp ID: K022-02                   Dilution Factor: 1
Lab File ID: I07K013055                Matrix       : WATER
Ext Btch ID: IPK009W                   % Moisture   : NA
Calib. Ref.: I07K013045                Instrument ID : EMAXTI07
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	259	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	29.4	20	2.47

RL: Reporting Limit

: Redigested on 11/19/99 (IPK036W) and analyzed on 11/22/99, file I07K051

METHOD 3010A/6010A
METALS BY TRACE-ICP

```
=====
Client   : IT CORPORATION           Date Collected: 11/03/99
Project  : EL TORO/20242/D.O. 112   Date Received: 11/04/99
SDG NO.  : 99K022                   Date Extracted: 11/04/99 12:00
Sample ID: 20242-984                Date Analyzed: 11/12/99 11:26
Lab Samp ID: K022-02                 Dilution Factor: 1
Lab File ID: I31K029022              Matrix       : WATER
Ext Btch ID: IPK009W                 % Moisture   : NA
Calib. Ref.: I31K029014              Instrument ID : EMAXTI31
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	18	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

METHOD 3010A/6010A
CAM METALS BY ICP

```

=====
ent      : IT CORPORATION           Date Collected: 11/03/99
Subject  : EL TORO/20242/D.O. 112   Date Received: 11/04/99
SDG NO.  : 99K022                  Date Extracted: 11/04/99 12:00
Sample ID: 20242-985               Date Analyzed: 11/05/99 05:26
Lab Samp ID: K022-03               Dilution Factor: 1
Lab File ID: I07K013056           Matrix      : WATER
Ext Btch ID: IPK009W              % Moisture  : NA
Calib. Ref.: I07K013045           Instrument ID : EMAXTI07
=====

```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	24.3	20	2.47

RL: Reporting Limit

: Redigested on 11/19/99 (IPK036W) and analyzed on 11/22/99, file 107K051

METHOD 3010A/6010A
METALS BY TRACE-ICP

```
=====
Client   : IT CORPORATION           Date Collected: 11/03/99
Project  : EL TORO/20242/D.O. 112   Date Received: 11/04/99
SDG NO.  : 99KQ22                   Date Extracted: 11/04/99 12:00
Sample ID: 20242-985                 Date Analyzed: 11/12/99 11:50
Lab Samp ID: K022-03                 Dilution Factor: 1
Lab File ID: I31K029028              Matrix          : WATER
Ext Btch ID: IPK009W                 % Moisture      : NA
Calib. Ref.: I31K029026              Instrument ID   : EMAXT131
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	ND	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

METHOD 3010A/6010A
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: NA
Project     : EL TORO/20242/D.O. 112  Date Received: 11/04/99
SDG NO.    : 99K022                  Date Extracted: 11/04/99 12:00
Sample ID   : MBLK1W                 Date Analyzed: 11/05/99 04:33
Lab Samp ID: IPK009WB                Dilution Factor: 1
Lab File ID: I07K013047              Matrix          : WATER
Ext Btch ID: IPK009W                 % Moisture     : NA
Calib. Ref.: I07K013045              Instrument ID   : EMAXTI07
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

: Redigested on 11/19/99 (1PK036W) and analyzed on 11/22/99, file 107K051

METHOD 3010A/6010A
METALS BY TRACE-ICP

```
=====
Client      : IT CORPORATION           Date Collected: NA
Project     : EL TORO/20242/D.O. 112   Date Received: 11/04/99
SDG NO.    : 99K022                   Date Extracted: 11/04/99 12:00
Sample ID   : MBLK1W                   Date Analyzed: 11/12/99 11:03
Lab Samp ID: IPK009WB                   Dilution Factor: 1
Lab File ID: I31K029016                 Matrix          : WATER
Ext Btch ID: IPK009W                     % Moisture     : NA
Calib. Ref.: I31K029014                 Instrument ID  : EMAXT131
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	ND	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
 SUBJECT: EL TORO/20242/D.O. 112
 NO.: 99K022
 METHOD: METHOD 3010A/6010A

MATRIX: WATER % MOISTURE: NA
 DILTN FACTR: 1 1 1
 SAMPLE ID: MBLK1W
 CONTROL NO.: IPK009WB IPK009WL IPK009WC
 LAB FILE ID: I07K013047 I07K013048 I07K013049
 DATIME EXTRCTD: 11/04/9912:00 11/04/9912:00 11/04/9912:00 DATE COLLECTED: NA
 DATIME ANALYZD: 11/05/9904:33 11/05/9904:39 11/05/9904:45 DATE RECEIVED: 11/04/99
 PREP. BATCH: IPK009W IPK009W IPK009W
 CALIB. REF: I07K013045 I07K013045 I07K013045

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	5000	5510	110	5000	5210	104	6	80-120	20
Barium	ND	1000	1130	113	1000	1090	109	4	80-120	20
Beryllium	ND	1000	1130	113	1000	1080	108	5	80-120	20
Cadmium	ND	1000	1090	109	1000	1040	104	5	80-120	20
Chromium	ND	1000	1120	112	1000	1070	107	5	80-120	20
Cobalt	ND	1000	1110	111	1000	1070	107	4	80-120	20
Copper	ND	1000	1100	110	1000	1050	105	5	80-120	20
Manganese	ND	1000	1100	110	1000	1050	105	5	80-120	20
Molybdenum	ND	1000	1120	112	1000	1070	107	4	80-120	20
Nickel	ND	1000	1100	110	1000	1050	105	4	80-120	20
Silver	ND	1000	1110	111	1000	1060	106	5	80-120	20
Vanadium	ND	1000	1130	113	1000	1070	107	5	80-120	20
Zinc	ND	1000	1030	103	1000	1020	102	1	80-120	20

: Redigested on 11/19/99 (IPK036W) and analyzed on 11/22/99, file I07K051

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K022
METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1 1
SAMPLE ID: MBLK1W
CONTROL NO.: IPK009WB IPK009WL IPK009WC
LAB FILE ID: I31K029016 I31K029017 I31K029018
DATIME EXTRCTD: 11/04/9912:00 11/04/9912:00 11/04/9912:00 DATE COLLECTED: NA
DATIME ANALYZD: 11/12/9911:03 11/12/9911:07 11/12/9911:10 DATE RECEIVED: 11/04/99
PREP. BATCH: IPK009W IPK009W IPK009W
CALIB. REF: I31K029014 I31K029014 I31K029014

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Arsenic	ND	1000	1090	109	1000	1040	104	5	80-120	20
Lead	ND	1000	1050	105	1000	1000	100	4	80-120	20
Selenium	ND	1000	1130	113	1000	1080	108	5	80-120	20
Thallium	ND	1000	1090	109	1000	1030	103	5	80-120	20

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
 SUBJECT: EL TORO/20242/D.O. 112
 CH NO.: 99K022
 METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
 DILUTION FACTOR: 1 5
 SAMPLE ID: 20242-983 20242-983DL
 EMAX SAMP ID: K022-01 K022-01T
 LAB FILE ID: I07K013060 I07K013059
 DATE EXTRACTED: 11/04/9912:00 11/04/9912:00 DATE COLLECTED: 11/03/99
 DATE ANALYZED: 11/05/9905:50 11/05/9905:44 DATE RECEIVED: 11/04/99
 PREP. BATCH: IPK009W IPK009W
 CALIB. REF: I07K013057 I07K013057

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Barium	ND	ND	0	10
Beryllium	ND	ND	0	10
Cadmium	ND	ND	0	10
Chromium	ND	ND	0	10
Cobalt	ND	ND	0	10
Copper	ND	ND	0	10
Manganese	ND	ND	0	10
Molybdenum	ND	ND	0	10
Nickel	ND	ND	0	10
Silver	ND	ND	0	10
Lead	ND	ND	0	10
	33.8	ND	NA	10

: Redigested on 11/19/99 (IPK036W) and analyzed on 11/22/99, file I07K051

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K022
METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 5
SAMPLE ID: 20242-984 20242-984DL
EMAX SAMP ID: K022-02 K022-02T
LAB FILE ID: I31K029022 I31K029020
DATE EXTRACTED: 11/04/9912:00 11/04/9912:00 DATE COLLECTED: 11/03/99
DATE ANALYZED: 11/12/9911:26 11/12/9911:18 DATE RECEIVED: 11/04/99
PREP. BATCH: IPK009W IPK009W
CALIB. REF: I31K029014 I31K029014

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Arsenic	ND	ND	0	10
Lead	ND	ND	0	10
Selenium	18	ND	NA	10
Thallium	ND	ND	0	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
 SUBJECT: EL TORO/20242/D.O. 112
 JOB NO.: 99K022
 METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
 DILTN FACTR: 1 1
 SAMPLE ID: 20242-983
 CONTROL NO.: K022-01 K022-01A
 LAB FILE ID: I07K013060 I07K013063
 DATIME EXTRCTD: 11/04/9912:00 11/04/9912:00 DATE COLLECTED: 11/03/99
 DATIME ANALYZD: 11/05/9905:50 11/05/9906:08 DATE RECEIVED: 11/04/99
 PREP. BATCH: IPK009W IPK009W
 CALIB. REF: I07K013057 I07K013057

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Antimony	ND	500	504	101	75-125
Barium	ND	1000	1130	113	75-125
Beryllium	ND	1000	1060	106	75-125
Cadmium	ND	1000	1040	104	75-125
Chromium	ND	1000	1050	105	75-125
Cobalt	ND	1000	1050	105	75-125
Copper	ND	1000	1040	104	75-125
Manganese	ND	1000	1040	104	75-125
Molybdenum	ND	1000	1050	105	75-125
Nickel	ND	1000	1040	104	75-125
Silver	ND	1000	930	93	75-125
Lead	ND	1000	1070	107	75-125
Cadmium	33.8	1000	1020	99	75-125

: Redigested on 11/19/99 (IPK036W) and analyzed on 11/22/99, file I07K051

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K022
METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: 20242-984
CONTROL NO.: K022-02 K022-02A
LAB FILE ID: I31K029022 I31K029023
DATIME EXTRCTD: 11/04/9912:00 11/04/9912:00 DATE COLLECTED: 11/03/99
DATIME ANALYZD: 11/12/9911:26 11/12/9911:29 DATE RECEIVED: 11/04/99
PREP. BATCH: IPK009W IPK009W
CALIB. REF: I31K029014 I31K029014

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Arsenic	ND	500	498	100	75-125
Lead	ND	500	458	92	75-125
Selenium	18	500	543	109	75-125
Thallium	ND	500	483	97	75-125

METHOD 7470
MERCURY BY COLD VAPOR

Client : IT CORPORATION
Project : EL TORO/20242/D.O. 112
Batch No. : 99K022

Matrix : WATER
Instrument ID : TI023

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HGK012WB	ND	1	NA	.2	.179	11/09/9914:48	11/09/9909:00	M99K015032	M99K015030	HGK012W	NA	11/09/99
LCS1W	HGK012WL	4.76	1	NA	.2	.179	11/09/9914:51	11/09/9909:00	M99K015033	M99K015030	HGK012W	NA	11/09/99
LCD1W	HGK012WC	4.72	1	NA	.2	.179	11/09/9914:53	11/09/9909:00	M99K015034	M99K015030	HGK012W	NA	11/09/99
20242-983	K022-01	ND	1	NA	.2	.179	11/09/9914:55	11/09/9909:00	M99K015035	M99K015030	HGK012W	11/03/99	11/04/99
20242-984	K022-02	ND	1	NA	.2	.179	11/09/9914:57	11/09/9909:00	M99K015036	M99K015030	HGK012W	11/03/99	11/04/99
20242-985	K022-03	ND	1	NA	.2	.179	11/09/9914:59	11/09/9909:00	M99K015037	M99K015030	HGK012W	11/03/99	11/04/99
20242-985MS	K022-03M	4.52	1	NA	.2	.179	11/09/9915:01	11/09/9909:00	M99K015038	M99K015030	HGK012W	11/03/99	11/04/99
20242-985MSD	K022-03S	4.4	1	NA	.2	.179	11/09/9915:04	11/09/9909:00	M99K015039	M99K015030	HGK012W	11/03/99	11/04/99
20242-985DL	K022-03T	ND	1	NA	.2	.179	11/09/9915:06	11/09/9909:00	M99K015040	M99K015030	HGK012W	11/03/99	11/04/99
20242-985AS	K022-03A	2.01	1	NA	.2	.179	11/09/9915:08	11/09/9909:00	M99K015041	M99K015030	HGK012W	11/03/99	11/04/99

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

IENT: IT CORPORATION
 OJECT: EL TORO/20242/D.O. 112
 G NO.: 99K022
 THOD: METHOD 7470A

=====
 TRIX: WATER % MOISTURE: NA
 LTN FACTR: 1 1 1
 MPLE ID: 20242-985
 NTROL NO.: K022-03 K022-03M K022-03S
 B FILE ID: M99K015037 M99K015038 M99K015039
 TIME EXTRCTD: 11/09/9909:00 11/09/9909:00 11/09/9909:00 DATE COLLECTED: 11/03/99
 TIME ANALYZD: 11/09/9914:59 11/09/9915:01 11/09/9915:04 DATE RECEIVED: 11/04/99
 EP. BATCH: HGK012W HGK012W HGK012W
 LIB. REF: M99K015030 M99K015030 M99K015030

SESSION:

PARAMETER	SMPL RSLT ug/L	SPIKE AMT ug/L	MS RSLT ug/L	MS % REC	SPIKE AMT ug/L	MSD RSLT ug/L	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
mercury	ND	5	4.52	90	5	4.4	88	3	77-120	15

7051

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
ATCH NO.: 99K022
METHOD: METHOD 7470A

=====

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: 20242-985 20242-985DL
MAX SAMP ID: K022-03 K022-03T
LAB FILE ID: M99K015037 M99K015040
DATE EXTRACTED: 11/09/9909:00 11/09/9909:00 DATE COLLECTED: 11/03/99
DATE ANALYZED: 11/09/9914:59 11/09/9915:06 DATE RECEIVED: 11/04/99
REP. BATCH: HGK012W HGK012W
ALIB. REF: M99K015030 M99K015030

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	ND	0	10

7052

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K022
METHOD: METHOD 7470A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: 20242-985
CONTROL NO.: K022-03 K022-03A
LAB FILE ID: M99K015037 M99K015041
DATE EXTRCTD: 11/09/9909:00 11/09/9909:00 DATE COLLECTED: 11/03/99
DATE ANALYZD: 11/09/9914:59 11/09/9915:08 DATE RECEIVED: 11/04/99
PREP. BATCH: HGK012W HGK012W
CALIB. REF: M99K015030 M99K015030

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
mercury	ND	2	2.01	100	77-120

7053

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

AGENT: IT CORPORATION
 OBJECT: EL TORO/20242/D.O. 112
 TAG NO.: 99K022
 METHOD: METHOD 7470A

=====

MATRIX: WATER % MOISTURE: NA
 LTN FACTR: 1 1 1
 SAMPLE ID: MBLK1W
 CONTROL NO.: HGK012WB HGK012WL HGK012WC
 LAB FILE ID: M99K015032 M99K015033 M99K015034
 TIME EXTRACTED: 11/09/9909:00 11/09/9909:00 11/09/9909:00 DATE COLLECTED: NA
 TIME ANALYZED: 11/09/9914:48 11/09/9914:51 11/09/9914:53 DATE RECEIVED: 11/09/99
 EP. BATCH: HGK012W HGK012W HGK012W
 LIB. REF: M99K015030 M99K015030 M99K015030

SESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
mercury	ND	5	4.76	95	5	4.72	94	1	77-120	15

7054

EPA METHOD 160.1
TOTAL DISSOLVED SOLIDS

Client : IT CORPORATION
Project : EL TORO/20242/D.O. 112
Batch No. : 99K022

Matrix : WATER
Instrument ID : TI16

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSK002WB	ND	1 NA	10	3.36	11/06/9916:00	NA	DSK002W-1	NA	DSK002W	NA	NA
LCS1W	DSK002WL	975	1 NA	10	3.36	11/06/9916:01	NA	DSK002W-2	NA	DSK002W	NA	NA
LCD1W	DSK002WC	1070	1 NA	10	3.36	11/06/9916:02	NA	DSK002W-3	NA	DSK002W	NA	NA
20242-983	K022-01	290	1 NA	10	3.36	11/06/9916:03	NA	DSK002W-4	NA	DSK002W	11/03/99	11/04/99
20242-984	K022-02	1920	1 NA	10	3.36	11/06/9916:04	NA	DSK002W-5	NA	DSK002W	11/03/99	11/04/99
20242-985	K022-03	65	1 NA	10	3.36	11/06/9916:05	NA	DSK002W-6	NA	DSK002W	11/03/99	11/04/99
20242-985DUP	K022-03D	65	1 NA	10	3.36	11/06/9916:06	NA	DSK002W-7	NA	DSK002W	11/03/99	11/04/99

RL : Reporting Limit

8011

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

ENT: IT CORPORATION
JECT: EL TORO/20242/D.O. 112
HOD: EPA 160.1
RIX: WATER
OISTURE: NA

=====

CH NO.: 99K022 DATE RECEIVED: 11/04/99
PLE ID: 20242-985DUP DATE EXTRACTED: NA
TROL NO.: K022-03D DATE ANALYZED: 11/06/99 16:06

SESSION:

AMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
-----	65	65	0	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
METHOD: EPA 160.1
MATRIX: WATER
MOISTURE: NA

BATCH NO.: 99K022
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: DSK002WL/C

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 11/06/99 16:01/16:02

SESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD %	QC LIMIT %	RPD LIMIT %
IS	ND	1080	975	90	1080	1070	100	10	85-115	20

8013

METHOD 300.0
NITRATE/NITRITE-N

Client : IT CORPORATION
Project : EL TORO/20242/D.O. 112
Batch No. : 99K022

Matrix : WATER
Instrument ID : TI06

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICK002WB	ND	1 NA	.1	.012	11/04/9913:01	NA	AK02-3	AK02-1	ICK002W	NA	NA
LCS1W	ICK002WL	2.01	1 NA	.1	.012	11/04/9913:15	NA	AK02-4	AK02-1	ICK002W	NA	NA
LCD1W	ICK002WC	2	1 NA	.1	.012	11/04/9913:29	NA	AK02-5	AK02-1	ICK002W	NA	NA
20242-984	K022-02	3.23	5 NA	.5	.06	11/04/9913:57	NA	AK02-7	AK02-1	ICK002W	11/03/99	11/04/99
20242-984DUP	K022-02D	3.18	5 NA	.5	.06	11/04/9914:26	NA	AK02-9	AK02-1	ICK002W	11/03/99	11/04/99
20242-984MS	K022-02M	13.4	5 NA	.5	.06	11/04/9914:40	NA	AK02-10	AK02-1	ICK002W	11/03/99	11/04/99
20242-983	K022-01	.399	1 NA	.1	.012	11/04/9914:54	NA	AK02-11	AK02-1	ICK002W	11/03/99	11/04/99
20242-985	K022-03	.101	1 NA	.1	.012	11/04/9915:51	NA	AK02-15	AK02-13	ICK002W	11/03/99	11/04/99

RL: Reporting Limit

8002

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

ENT: IT CORPORATION
JECT: EL TORO/20242/D.O. 112
HOD: METHOD 300.0
RIX: WATER
OISTURE: NA

=====

CH NO.: 99K022 DATE RECEIVED: 11/04/99
PLE ID: 20242-984DUP DATE EXTRACTED: NA
TROL NO.: K022-02D DATE ANALYZED: 11/04/99 14:26

SESSION:

AMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
rate/Nitrite-N	3.23	3.18	2	20

8003

EMAX QUALITY CONTROL DATA
MS ANALYSIS

ENT: IT CORPORATION
JECT: EL TORO/20242/D.O. 112
HOD: METHOD 300.0
RIX: WATER
OISTURE: NA

=====

CH NO.: 99K022 DATE RECEIVED: 11/04/99
PLE ID: 20242-984MS DATE EXTRACTED: NA
TROL NO.: K022-02M DATE ANALYZED: 11/04/99 14:40

SSION:

AMETER	SAMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	QC LIMIT (%)
rate/Nitrite-N	3.23	10	13.4	102	75-125

R00A

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

IENT: IT CORPORATION
 OJECT: EL TORO/20242/D.O. 112
 THOD: METHOD 300.0
 TRIX: WATER
 MOISTURE: NA

TCH NO.: 99K022
 MPLE ID: LCS1W/LCD1W
 NTROL NO.: ICK002WL/C

DATE RECEIVED: NA
 DATE EXTRACTED: NA
 DATE ANALYZED: 11/04/99 13:15/13:29

SESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD %	QC LIMIT %	RPD LIMIT %
trate/Nitrite-N	ND	2	2.01	100	2	2	100	0	75-125	20

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 3, 1999
LDC Report Date: December 27, 1999
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Extractables
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 99K022

Sample Identification

20242-983
20242-984
20242-985

COPY

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria..

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

Samples 20242-983 and 20242-985 were identified as equipments rinsates. No total petroleum hydrocarbons as extractable contaminants were found in these blanks.

**MCAS El Toro
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG
99K022**

No Sample Data Qualified in this SDG

**MCAS El Toro
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification
Summary - SDG 99K022**

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 3, 1999
LDC Report Date: December 27, 1999
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Gasoline
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 99K022

Sample Identification

20242-983
20242-984
20242-985

COPY

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

Samples 20242-983 and 20242-985 were identified as equipment rinsates. No total petroleum hydrocarbons as gasoline contaminants were found in these blanks.

**MCAS El Toro
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG
99K022**

No Sample Data Qualified in this SDG

**MCAS El Toro
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification
Summary - SDG 99K022**

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 3, 1999
LDC Report Date: December 29, 1999
Matrix: Water
Parameters: Volatiles
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 99K022

Sample Identification

20242-983
20242-984
20242-985
20242-986

COPY

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

Average relative response factors (RRF) for all semivolatile target compounds and system monitoring compounds were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Samples 20242-983 and 20242-985 were identified as equipment rinsates. No volatile contaminants were found in these blanks with the following exceptions:

Equipment Rinsate ID	Compound	Concentration (ug/L)
20242-983	Bromodichloromethane	12
	Chloroform	14
	Dibromochloromethane	3.2

Equipment Rinsate ID	Compound	Concentration (ug/L)
20242-985	Bromodichloromethane Chloroform Dibromochloromethane	6.4 7.2 4.6

Sample 20242-986 was identified as a trip blank. No volatile contaminants were found in this blank.

MCAS EI Toro
Volatiles - Data Qualification Summary - SDG 99K022

No Sample Data Qualified in this SDG

MCAS EI Toro
Volatiles - Laboratory Blank Data Qualification Summary - SDG 99K022

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 3, 1999
LDC Report Date: January 3, 2000
Matrix: Water
Parameters: Metals
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 99K022

Sample Identification

20242-983
20242-984
20242-985
20242-985MS
20242-985MSD

COPY

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010 and 7000 for Metals. The metals analyzed were Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found above the reporting limit in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Barium Beryllium Chromium Cobalt Copper Manganese Selenium Zinc	1.34 ug/L 0.800 ug/L 5.73 ug/L 6.63 ug/L 1.87 ug/L 1.03 ug/L 4.04 ug/L 3.15 ug/L	All samples in SDG 99K022

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
20242-984	Selenium	18 ug/L	18U ug/L

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards (ICP-MS)

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

Although ICP serial dilution analysis was not required by the method, it was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

Raw data were not reviewed for this SDG.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

Samples 20242-983 and 20242-985 were identified as equipment rinsates. No metal contaminants were found in these blanks with the following exceptions:

Equipment Rinsate ID	Analyte	Concentration (ug/L)
20242-983	Zinc	33.8
20242-985	Zinc	24.3

**MCAS EI Toro
Metals - Data Qualification Summary - SDG 99K022**

No Sample Data Qualified in this SDG

**MCAS EI Toro
Metals - Laboratory Blank Data Qualification Summary - SDG 99K022**

SDG	Sample	Analyte	Modified Final Concentration	A or P
99K022	20242-984	Selenium	18U ug/L	A

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 3, 1999
LDC Report Date: January 3, 2000
Matrix: Water
Parameters: Wet Chemistry
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 99K022

Sample Identification

20242-983
20242-984
20242-985
20242-984MS
20242-984DUP
20242-985DUP

COPY

Introduction

This data review covers 6 water samples listed on the cover sheet. The analyses were per EPA Method 160.1 for Total Dissolved Solids and EPA Method 300.0 for Nitrate/Nitrite as Nitrogen.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section VII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Accuracy and Precision Data

a. Matrix Spike/(Matrix Spike) Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Relative percent differences (RPD) were within QC limits.

b. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Sample Result Verification

Raw data were not reviewed for this SDG.

VI. Overall Assessment of Data

Data flags are summarized at the end of this report.

VII. Field Duplicates

No field duplicates were identified in this SDG.

VIII. Field Blanks

Samples 20242-983 and 20242-985 were identified as equipment rinsates. No contaminant concentrations were found in these blanks with the following exceptions:

Equipment Rinsate ID	Analyte	Concentration (mg/L)
20242-983	Nitrate/Nitrite as N Total dissolved solids	0.399 290
20242-985	Nitrate/Nitrite as N Total dissolved solids	0.101 65

**MCAS El Toro
Wet Chemistry - Data Qualification Summary - SDG 99K022**

No Sample Data Qualified in this SDG

**MCAS El Toro
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG 99K022**

No Sample Data Qualified in this SDG

COMPLETED



IT Corporation
2790 Mosside Blvd.
Monroeville, PA 15146-2792
(412)372-7701

CHAIN-OF-CUSTODY RECORD

PROJECT DATA MANAGER'S COPY

A 10031

Anomaly Area 3

FORM 0019 REV. 9-99

IT'S LAB COORDINATOR L. Borkowski	LAB COORDINATOR'S PHONE (412) 460-9537	LAB COORDINATOR'S FAX (412) 475-5433	LABORATORY SERVICE ID 89903452	LABORATORY CONTACT CAS	MAIL REPORT (COMPANY NAME) IT Corp.
PROJECT NAME NCAS EIToro	PROJECT LOCATION EIToro - D112	PROJECT NUMBER 20842	LABORATORY PHONE	LABORATORY FAX	REGIPIENT NAME Lisa Borkowski
PROJECT CONTACT L. Borkowski	PROJECT PHONE NUMBER (412) 451-1066	PROJECT FAX	LABORATORY ADDRESS 537 1st St	ADDRESS 347 Market Dr #200	
PROJECT ADDRESS	CITY, STATE AND ZIP CODE	CLIENT SLUDIV	CITY, STATE AND ZIP CODE Santa Clara, CA	CITY, STATE AND ZIP CODE Irvine, CA 92612	
PROJECT MANAGER D. Sellat	PROJECT MANAGER'S PHONE (412) 460-5444	PROJECT MANAGER'S FAX	Analytes Inappropriate		

Item	Sample Identifier	Matrix	1999 Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	Analytes	Comments
1	20842-980	W	11-2	0815	4°C	1	3	5day	X	
2	20842-981	W	11-2	1340	4°C	1	3	5day	X	
3	20842-983	W	11-	0800	4°C	1	3	5d	X	
4	20842-134	W	11-3	1125	4°C	1	3	5d	X	
5	20842-135	W	11-3	1245	4°C	1	3	2d	X	
6	20842-987	W	11-4	0800	4°C	1	3	7day	X	
7	20842-988	W	11-4	0821	4°C	1	3	5day	X	
8	20842-989	W	11-4	0825	4°C	1	3	5day	X	
9	20842-990	W	11-4	0831	4°C	1	4	5day	X	
10							# 470			

SAMPLES COLLECTED BY: AS +	COURIER AND AIR BILL NUMBER: 20842-9784	COOLER TEMPERATURE UPON RECEIPT:
RELINQUISHED BY: [Signature]	RECEIVED BY: FELEX	SAMPLE'S CONDITION UPON RECEIPT:
	DATE: 11/13/00	TIME: 12:00

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Manilla - Project Data Manager

**Project Information Section
For Project Personnel Only
Do Not Submit to Laboratory**

Sample Point Location	Sample Type			
	G	C	F	QC
1. Equipment Rinse				X
2. Anomaly Area 3-MW4	X			
3. Equipment Rinse				X
4. Anomaly Area 3-MW2	X			
5. Equipment Rinse				X
6. Anomaly Area 3-MW1				
7. Equipment Rinse				
8. Anomaly Area 3-MW3				
9. Anomaly Area 3-MW1 (DUP)				

Comments

Sample Type: G - Grab, C - Composite, F - Field Sample, QC - Quality Control Sample

208785

**Columbia
Analytical
Services** ^{INC.}

An Employee-Owned Company

November 12, 1999

Service Request No.: S9903452

Ms. Lisa Bienkowski
IT Group
3347 Michelson Drive, Suite 200
Irvine, CA 92612

RE: El Toro-DO 112/20242

Dear Ms. Bienkowski:

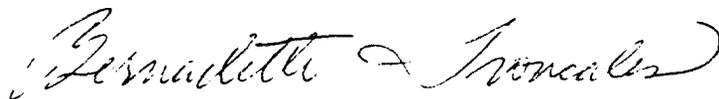
Enclosed are the results of the sample(s) submitted to our laboratory on November 5, 1999. All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply to the sample(s) analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Signature of this CAS Analytical Report confirms that pages 2 through 6, following, have been thoroughly reviewed and approved for release.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 2352, expiration: January 31, 2001).

If you have any questions, please call me at (408) 748-9700.

Respectfully submitted,

Columbia Analytical Services, Inc.



Bernadette Troncales
Project Chemist

4358E6

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: IT Corporation
Project: El Toro-DO 112/20242
Sample Matrix: Water

Service Request: S9903452
Date Collected: 11/2 - 11/4/99
Date Received: 11/5/99

Perchlorate

Prep Method: NONE
Analysis Method: CADHS CLOR4METH
Test Notes:

Units: ug/L (ppb)
Basis: NA

Sample Name	Lab Code	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
20242-980	S9903452-001	4	1	NA	11/5/99	ND	
20242-981	S9903452-002	4	1	NA	11/5/99	ND	
20242-983	S9903452-003	4	1	NA	11/5/99	ND	
20242-984	S9903452-004	4	1	NA	11/5/99	ND	
20242-985	S9903452-005	4	1	NA	11/5/99	ND	
20242-987	S9903452-006	4	1	NA	11/5/99	ND	
20242-988	S9903452-007	4	1	NA	11/8/99	ND	
20242-989	S9903452-008	4	1	NA	11/8/99	ND	
20242-990	S9903452-009	4	1	NA	11/8/99	ND	
Method Blank	S9903452-MB	4	1	NA	11/5-8/99	ND	

Approved By: _____

RT

Date: _____

11/12/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: IT Corporation
Project: El Toro-DO 112/20242

Service Request: S9903452
Date Analyzed: 11/5/99

Initial Calibration Verification (ICV) Summary
Perchlorate

Sample Name: ICV
Lab Code: ICV1
Test Notes:

Units: ug/L (ppb)
Basis: NA

ICV Source:

Analyte	Analysis Method	True Value	Result	Percent Recovery	Result Notes
Perchlorate	CADHS CLOR4METH	20	20	100	

Approved By: _____

JE

Date: _____

11/12/99

ICV 02/99

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 4, 1999
LDC Report Date: January 4, 2000
Matrix: Water
Parameters: Perchlorate
Validation Level: NFESC Level C & D
Laboratory: Columbia Analytical Services, Inc.
Sample Delivery Group (SDG): S9903452

COPY

Sample Identification

20242-980
20242-981
20242-983
20242-984
20242-985
20242-987
20242-988
20242-989
20242-990**
20242-980MS
20242-980MSD
20242-988MS
20242-988MSD

**Indicates sample underwent NFESC Level D review

Introduction

This data review covers 13 water samples listed on the cover sheet. The analyses were per Method CADHS for Perchlorate.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section VII.

Samples indicated by a double asterisk on the front cover underwent a NFESC Level D review. A NFESC Level C review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level C criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Matrix Spike/(Matrix Spike) Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

b. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Sample Result Verification

All sample result verifications were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

VI. Overall Assessment of Data

Data flags are summarized at the end of this report.

VII. Field Duplicates

Samples 20242-987 and 20242-990** were identified as field duplicates. No perchlorate was detected in any of the samples.

VIII. Field Blanks

Samples 20242-980, 20242-983, and 20242-985 were identified as equipment rinsates. No perchlorate contaminants were found in these blanks.

MCAS EI Toro
Perchlorate - Data Qualification Summary - SDG S9903452

No Sample Data Qualified in this SDG

MCAS EI Toro
Perchlorate - Laboratory Blank Data Qualification Summary - SDG S9903452

No Sample Data Qualified in this SDG



IT Corporation
2790 Mosside Blvd.
Monroeville, PA 15146-2792
(412)372-7701

CHAIN-OF-CUSTODY RECORD

PROJECT DATA MANAGER'S COPY

Anomaly Area 3

A 10030

FORM 0019 REV. 9-99

IT'S LAB COORDINATOR L. Bienkowski	LAB COORDINATOR'S PHONE (412) 660-7537	LAB COORDINATOR'S FAX (412) 475-5433	LABORATORY SERVICE ID 13459	LABORATORY CONTACT Quinterra	MAIL REPORT (COMPANY NAME) IT Corp.
PROJECT NAME MCAS EITOP	PROJECT LOCATION EITOP - D0112	PROJECT NUMBER 20242	LABORATORY PHONE 59935	LABORATORY FAX	RECIPIENT NAME Lisa Bienkowski
PROJECT CONTACT L. Bienkowski	PROJECT PHONE NUMBER (412) 475-1544	PROJECT FAX	LABORATORY ADDRESS 260 George Washington Way	ADDRESS 3317 Nicholson Dr., Suite 207	
PROJECT ADDRESS	CITY, STATE AND ZIP CODE	CLIENT SW DIV	CITY, STATE AND ZIP CODE Richland, WA 99352	CITY, STATE AND ZIP CODE Irvine, GA 92612	
PROJECT MANAGER B. Sedlak	PROJECT MANAGER'S PHONE (412) 660-5446	PROJECT MANAGER'S FAX			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	Analyses	Comments
1	20242-980	W	11-2	0815	-	1	-	1 day	X X	
2	20242-981	W	11-2	1340	-	1	-	1 day	X X	
3	20242-983	W	11-3	0800	-	1	-	21 day	X X	
4	20242-984	W	11-3	1125	-	1	-	21 day	X X	
5	20242-985	W	11-3	1245	-	1	-	21 day	X X	
6	20242-986	W								
7	20242-987	W	11-4	0840	-	1	-	21 day	X X	
8	20242-988	W	11-4	1022	-	1	-	21 day	X X	
9	20242-989	W	11-4	1225	-	1	-	21 day	X X	
10	20242-990	W	11-4	0845	-	1	-	1 day	X X	

SAMPLES COLLECTED BY: AS + WJ	COURIER AND AIR BILL NUMBER: 355 1049 175	COOLER TEMPERATURE UPON RECEIPT:
RELINQUISHED BY: L. Bienkowski	RECEIVED BY: FEDEX	SAMPLE'S CONDITION UPON RECEIPT:
DATE: 11/19/99	TIME: 1530	

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Manilla - Project Data Manager

Project Information Section
For Project Personnel Only
Do Not Submit to Laboratory

Anomaly Area 3 Gutter Sampling Sample Point Location	Sample Type			
	G	C	F	QC
1. Equipment Pinstats				X
2. Anomaly Area 3-MW4	X			
3. Equipment Pinstats				X
4. Anomaly Area 3-MW2	X			
5. Equipment Pinstats				X
6. Anomaly Area 3-MW1	X			
7. Equipment Pinstats				X
8. Anomaly Area 3-MW3	X			
9. Anomaly Area 3-MW1 (low)	X			X
10.				

Comments

Sample Type: G - Grab, C - Composite, F - Field Sample, QC - Quality Control Sample

30011921

November 29, 1999

IT Corporation
3347 Michelson Drive
Suite 200
Irvine, CA 92612

Attention: Lisa Bienkowski

Date Received by Lab	:	November 5, 1999
Number of Samples	:	Nine Water Samples
SDG Number	:	13459
Project Name	:	MCAS El Toro
Project Number	:	20242

I. Introduction

On November 5, 1999, nine water samples were received by the Quanterra Environmental Services Richland (QTESRL) laboratory for radiochemical analysis. Upon receipt, these samples were assigned the QTESRL identification number as described on the cover page of the Analytical Data Package report form. These samples were assigned to Lot Number J9K050186.

II. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information; analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gross Alpha by method Quanterra-RICHRC5014 (EPA 9310)
Gross Beta by method Quanterra-RICHRC5014 (EPA 9310)

III. Quality Control

The analytical results for each analysis performed includes a minimum of one Laboratory Control Sample (LCS), one method (reagent) blank, and one duplicate. Any exceptions have been noted in the "comments" section. Quality control sample results are reported in the same units as the sample results.

IV. Comments

Gross Alpha by method Quanterra-RICHRC5014 (EPA 9310)

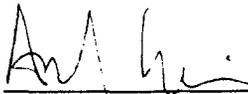
Sample 20242-981, 984, 987, 989 and 990 had MDA (minimum detectable activity) results greater than our internal evaluation criteria of 3.0 pCi/liter but the results for these samples were greater than the achieved MDA values. Except as noted, the LCS, batch blank, sample duplicate and sample results are within contractual requirements.

Gross Beta by method Quanterra-RICHRC5014 (EPA 9310)

Except for sample 20242-980, all of the samples in this batch either met our internal evaluation criteria for the MDA (minimum detectable activity) of 4.0 pCi/liter or had results greater than the MDA. Sample 20242-980 had a result less than the MDA and the MDA did not meet our internal evaluation criteria. This sample did not meet the MDA due to a reduced sample volume used based on our screening results. Except as noted, the LCS, batch blank, sample duplicate and sample results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Reviewed and approved:



Andy Kopriva
Project Manager

Sample Results Summary
Quanterra, Richland

Date: 11/29/99

REPORT No. : 9223

SDG NBR: 13459

CLIENT ID	WORK ORDER NUMBER	PARAMETER	RESULT	UNITS	YIELD	MDA
20242-980	D4LCW102	ALPHA	2.15E-01 +- 3.85E-01 (1s)	pCi/L	100.00%	2.00E+00
20242-980	D4LCW101	BETA	1.05E+00 +- 2.34E+00 (1s)	pCi/L	100.00%	1.03E+01
20242-980 DUP	D4LCW103	ALPHA	-1.30E-01 +- 2.34E-01 (1s)	pCi/L	100.00%	1.86E+00
20242-981	D4LD5102	ALPHA	5.00E+01 +- 7.33E+00 (1s)	pCi/L	100.00%	6.79E+00
20242-981	D4LD5101	BETA	2.05E+01 +- 2.64E+00 (1s)	pCi/L	100.00%	7.14E+00
20242-981 DUP	D4LD5103	BETA	1.70E+01 +- 2.35E+00 (1s)	pCi/L	100.00%	6.62E+00
20242-983	D4LD8102	ALPHA	1.80E+00 +- 6.96E-01 (1s)	pCi/L	100.00%	1.86E+00
20242-983	D4LD8101	BETA	2.36E+00 +- 7.22E-01 (1s)	pCi/L	100.00%	2.71E+00
20242-984	D4LDG102	ALPHA	2.35E+01 +- 4.29E+00 (1s)	pCi/L	100.00%	7.38E+00
20242-984	D4LDG101	BETA	3.47E+01 +- 3.29E+00 (1s)	pCi/L	100.00%	6.37E+00
20242-985	D4LDL102	ALPHA	7.16E-01 +- 3.91E-01 (1s)	pCi/L	100.00%	1.33E+00
20242-985	D4LDL101	BETA	8.30E+00 +- 1.07E+00 (1s)	pCi/L	100.00%	2.78E+00
20242-987	D4LDP102	ALPHA	3.46E+01 +- 5.27E+00 (1s)	pCi/L	100.00%	6.31E+00
20242-987	D4LDP101	BETA	1.14E+01 +- 1.88E+00 (1s)	pCi/L	100.00%	5.80E+00
20242-988	D4LDV102	ALPHA	2.46E-01 +- 2.11E-01 (1s)	pCi/L	100.00%	8.82E-01
20242-988	D4LDV101	BETA	1.41E+00 +- 6.30E-01 (1s)	pCi/L	100.00%	2.52E+00
20242-989	D4LE0102	ALPHA	3.55E+01 +- 5.23E+00 (1s)	pCi/L	100.00%	5.64E+00
20242-989	D4LE0101	BETA	1.28E+01 +- 1.84E+00 (1s)	pCi/L	100.00%	5.28E+00
20242-990	D4LE3102	ALPHA	3.53E+01 +- 5.41E+00 (1s)	pCi/L	100.00%	5.64E+00
20242-990	D4LE3101	BETA	1.15E+01 +- 1.88E+00 (1s)	pCi/L	100.00%	5.67E+00
BLANK QC	D4RJ2101	ALPHA	7.87E-02 +- 9.92E-02 (1s)	pCi/L	100.00%	4.16E-01
BLANK QC	D4RJ9101	BETA	6.56E-01 +- 4.34E-01 (1s)	pCi/L	100.00%	1.69E+00
LCS	D4RJ2102	ALPHA	2.16E+01 +- 2.41E+00 (1s)	pCi/L	100.00%	4.59E-01
LCS	D4RJ9102	BETA	2.43E+01 +- 1.87E+00 (1s)	pCi/L	100.00%	1.79E+00

Comments: CID:INTRA-LAB CHECK, LOT:J9K100000244 v2.4

Sample Results Summary
Quanterra, Richland

Date: 11/29/99

REPORT No. : 9223

SDG NBR: 13459

CLIENT ID	WORK ORDER NUMBER	PARAMETER	RESULT	UNITS	YIELD	MDA
-----------	-------------------	-----------	--------	-------	-------	-----

Number of Results: 24

FORM I

Date: 11/29/99

SAMPLE RESULTS

LAB NAME: QUANTERRA, Richland
 LOT,RPT DB ID: J9K050186-1 9D4LCW10
 CLIENT ID: 20242-980

SDG: 13459
 REPORT NBR: 9223
 ORDER NBR:

COLLECTION DATE: 11/2/99 8:15:00 AM
 RECEIVED DATE: 11/5/99 11:00:00 AM
 MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LCW102												
ALPHA	2.15E-01	7.7E-01	7.7E-01	2.00E+00	pCi/L	100.00%	0.11	0.56	1/23/99 09:24 a	0.1	L	GPC10B	RICHRC5014
Batch: 9314244	Work Order: D4LCW101												
BETA	1.05E+00	4.7E+00	4.7E+00	1.03E+01	pCi/L	100.00%	0.1	0.45	1/23/99 07:53 a	0.05	L	GPC27D	RICHRC5014

Number of Results: 2

FORM I

Date: 11/29/99

SAMPLE RESULTS

LAB NAME: QUANTERRA, Richland
 LOT,RPT DB ID: J9K050186-2 9D4LD510
 CLIENT ID: 20242-981

SDG: 13459
 REPORT NBR: 9223
 ORDER NBR:

COLLECTION DATE: 11/2/99 1:40:00 PM
 RECEIVED DATE: 11/5/99 11:00:00 AM
 MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LD5102												
ALPHA	5.00E+01	1.0E+01	1.5E+01	6.79E+00	pCi/L	100.00%	(7.4)	(9.9)	1/23/99 11:51 a	0.028	L	GPC10C	RICHRC5014
Batch: 9314244	Work Order: D4LD5101												
BETA	2.05E+01	4.5E+00	5.3E+00	7.14E+00	pCi/L	100.00%	(2.9)	(9.2)	1/23/99 08:43 a	0.066	L	GPC28C	RICHRC5014

Number of Results: 2

FORM I

Date: 11/29/99

SAMPLE RESULTS

LAB NAME: QUANTERRA, Richland
 LOT,RPT DB ID: J9K050186-3 9D4LD810
 CLIENT ID: 20242-983

SDG: 13459
 REPORT NBR: 9223
 ORDER NBR:

COLLECTION DATE: 11/3/99 8:00:00 AM
 RECEIVED DATE: 11/5/99 11:00:00 AM
 MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LD8102												
ALPHA	1.80E+00	1.3E+00	1.4E+00	1.86E+00	pCi/L	100.00%	0.97	(2.7)	1/23/99 09:24 a	0.2	L	GPC10F	RICHRC5014
Batch: 9314244	Work Order: D4LD8101												
BETA	2.36E+00	1.4E+00	1.4E+00	2.71E+00	pCi/L	100.00%	0.87	(3.3)	1/23/99 09:45 a	0.2	L	GPC26C	RICHRC5014

Number of Results: 2

FORM I
SAMPLE RESULTS

Date: 11/29/99

LAB NAME: QUANTERRA, Richland
LOT,RPT DB ID: J9K050186-4 9D4LDG10
CLIENT ID: 20242-984

SDG: 13459
REPORT NBR: 9223
ORDER NBR:

COLLECTION DATE: 11/3/99 11:25:00 AM
RECEIVED DATE: 11/5/99 11:00:00 AM
MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LDG102												
ALPHA	2.35E+01	7.0E+00	8.6E+00	7.38E+00	pCi/L	100.00%	(3.2)	(6.7)	1/23/99 11:51 a	0.029	L	GPC10A	RICHRC5014
Batch: 9314244	Work Order: D4LDG101												
BETA	3.47E+01	4.7E+00	6.6E+00	6.37E+00	pCi/L	100.00%	(5.5)	(14.7)	1/23/99 08:43 a	0.07	L	GPC28A	RICHRC5014

Number of Results: 2

FORM I

Date: 11/29/99

SAMPLE RESULTS

LAB NAME: QUANTERRA, Richland
 LOT,RPT DB ID: J9K050186-5 9D4LDL10
 CLIENT ID: 20242-985

SDG: 13459
 REPORT NBR: 9223
 ORDER NBR:

COLLECTION DATE: 11/3/99 12:45:00 PM
 RECEIVED DATE: 11/5/99 11:00:00 AM
 MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LDL102												
ALPHA	7.16E-01	7.7E-01	7.8E-01	1.33E+00	pCi/L	100.00%	0.54	(1.9)	1/23/99 09:24 a	0.2	L	GPC10D	RICHRC5014
Batch: 9314244	Work Order: D4LDL101												
BETA	8.30E+00	1.8E+00	2.1E+00	2.78E+00	pCi/L	100.00%	(3.)	(9.1)	1/23/99 09:45 a	0.2	L	GPC26A	RICHRC5014

Number of Results: 2

FORM I

Date: 11/29/99

SAMPLE RESULTS

LAB NAME: QUANTERRA, Richland
 LOT,RPT DB ID: J9K050186-6 9D4LDP10
 CLIENT ID: 20242-987

SDG: 13459
 REPORT NBR: 9223
 ORDER NBR:

COLLECTION DATE: 11/4/99 8:40:00 AM
 RECEIVED DATE: 11/5/99 11:00:00 AM
 MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQUOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LDP102												
ALPHA	3.46E+01	7.9E+00	1.1E+01	6.31E+00	pCi/L	100.00%	(5.5)	(8.8)	1/23/99 11:51 a	0.032	L	GPC10B	RICHRC5014
Batch: 9314244	Work Order: D4LDP101												
BETA	1.14E+01	3.4E+00	3.8E+00	5.80E+00	pCi/L	100.00%	(2.)	(6.6)	1/23/99 08:43 a	0.077	L	GPC28B	RICHRC5014
Number of Results: 2													

FORM I
SAMPLE RESULTS

Date: 11/29/99

LAB NAME: QUANTERRA, Richland
 LOT,RPT DB ID: J9K050186-7 9D4LDV10
 CLIENT ID: 20242-988

SDG: 13459
 REPORT NBR: 9223
 ORDER NBR:

COLLECTION DATE: 11/4/99 10:22:00 AM
 RECEIVED DATE: 11/5/99 11:00:00 AM
 MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LDV102												
ALPHA	2.46E-01	4.2E-01	4.2E-01	8.82E-01	pCi/L	100.00%	0.28	(1.2)	1/23/99 09:24 a	0.2	L	GPC10E	RICHRC5014
Batch: 9314244	Work Order: D4LDV101												
BETA	1.41E+00	1.2E+00	1.3E+00	2.52E+00	pCi/L	100.00%	0.56	(2.3)	1/23/99 09:45 a	0.2	L	GPC26B	RICHRC5014

Number of Results: 2

FORM I

Date: 11/29/99

SAMPLE RESULTS

LAB NAME: QUANTERRA, Richland
 LOT,RPT DB ID: J9K050186-8 9D4LE010
 CLIENT ID: 20242-989

SDG: 13459
 REPORT NBR: 9223
 ORDER NBR:

COLLECTION DATE: 11/4/99 12:25:00 PM
 RECEIVED DATE: 11/5/99 11:00:00 AM
 MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LE0102												
ALPHA	3.55E+01	7.5E+00	1.0E+01	5.64E+00	pCi/L	100.00%	(6.3)	(9.5)	1/23/99 11:51 a	0.0358	L	GPC10D	RICHRC5014
Batch: 9314244	Work Order: D4LE0101												
BETA	1.28E+01	3.2E+00	3.7E+00	5.28E+00	pCi/L	100.00%	(2.4)	(7.9)	1/23/99 10:36 a	0.084	L	GPC27A	RICHRC5014

Number of Results: 2

FORM I
SAMPLE RESULTS

Date: 11/29/99

LAB NAME: QUANTERRA, Richland
 LOT,RPT DB ID: J9K050186-9 9D4LE310
 CLIENT ID: 20242-990

SDG: 13459
 REPORT NBR: 9223
 ORDER NBR:

COLLECTION DATE: 11/4/99 8:45:00 AM
 RECEIVED DATE: 11/5/99 11:00:00 AM
 MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LE3102												
ALPHA	3.53E+01	7.8E+00	1.1E+01	5.64E+00	pCi/L	100.00%	(6.3)	(9.1)	1/23/99 11:51 a	0.031	L	GPC10E	RICHRC5014
Batch: 9314244	Work Order: D4LE3101												
BETA	1.15E+01	3.4E+00	3.8E+00	5.67E+00	pCi/L	100.00%	(2.)	(6.8)	1/23/99 10:36 a	0.076	L	GPC27B	RICHRC5014

Number of Results: 2

FORM II

Date: 11/29/99

DUPLICATE RESULTS

LAB NAME: QUANTERRA, Richland SDG: 13459 COLLECTION DATE: 11/2/99 8:15:00 AM
 RPT DB ID/ORIG ID: D4LCW13R / 9D4LCW10 REPORT NBR: 9223 RECEIVED DATE: 11/5/99 11:00:00 AM
 CLIENT ID: 20242-980 DUP ORDER NBR: MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	ORIG RESULT	RPD	ANALYSIS DATE	ALiquot SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4LCW103												
ALPHA	-1.30E-01	4.7E-01	4.7E-01	1.86E+00	pCi/L	100.00%	2.15E-01	812.52%	1/23/99 09:24 a	0.1	L	GPC10C	RICHRC5014

Number of Results: 1

FORM II
DUPLICATE RESULTS

Date: 11/29/99

LAB NAME: QUANTERRA, Richland
RPT DB ID/ORIG ID: D4LD513R / 9D4LD510
CLIENT ID: 20242-981 DUP

SDG: 13459
REPORT NBR: 9223
ORDER NBR:

COLLECTION DATE: 11/2/99 1:40:00 PM
RECEIVED DATE: 11/5/99 11:00:00 AM
MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	ORIG RESULT	RPD	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314244	Work Order: D4LD5103												
BETA	1.70E+01	4.1E+00	4.7E+00	6.62E+00	pCi/L	100.00%	2.05E+01	19.05%	1/23/99 08:43 a	0.066	L	GPC28D	RICHRC5014

Number of Results: 1

FORM II

Date: 11/29/99

BLANK RESULTS

LAB NAME: QUANTERRA, Richland
LOT,RPT DB ID: J9K100000-242 D4RJ211B

SDG: 13459
REPORT NBR: 9223

ORDER NBR:
MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4RJ2101												
ALPHA	7.87E-02	2.0E-01	2.0E-01	4.16E-01	pCi/L	100.00%	0.19	0.8	1/23/99 11:51 a	0.2	L	GPC10F	RICHRC5014

Number of Results: 1

FORM II
BLANK RESULTS

Date: 11/29/99

LAB NAME: QUANTERRA, Richland

SDG: 13459

ORDER NBR:

LOT,RPT DB ID: J9K100000-244 D4RJ911B

REPORT NBR: 9223

MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2s)	MDC	REPORT UNIT	YIELD	RST/MDC	RST/CNTERR	ANALYSIS DATE	ALIQOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314244	Work Order: D4RJ9101												
BETA	6.56E-01	8.6E-01	8.7E-01	1.69E+00	pCi/L	100.00%	0.39	(1.5)	1/23/99 10:36 a	0.2	L	GPC27C	RICHRC5014

Number of Results: 1

Comments: CID:INTRA-LAB BLANK, LOT:J9K100000244 v2.4

FORM II

Date: 11/29/99

LABORATORY CONTROL SAMPLE

LAB NAME: QUANTERRA, Richland

SDG: 13459

ORDER NBR:

LOT,RPT DB ID: J9K100000-242 D4RJ212S

REPORT NBR: 9223

MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	Expected	Expected Uncert	Recovery	ANALYSIS DATE	ALIQUOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314242	Work Order: D4RJ2102													
ALPHA	2.16E+01	1.5E+00	4.8E+00	4.59E-01	pCi/L	100.00%	2.26E+01	0.0E+00	95.56%	1/23/99 03:31 p	0.2	L	GPC10A	RICHRC5014

Number of Results: 1

FORM II

Date: 11/29/99

LABORATORY CONTROL SAMPLE

LAB NAME: QUANTERRA, Richland

SDG: 13459

ORDER NBR:

LOT,RPT DB ID: J9K100000-244 D4RJ912S

REPORT NBR: 9223

MATRIX: WATER

ISOTOPE	RESULT	COUNTING ERROR (2 s)	TOTAL ERROR (2 s)	MDC	REPORT UNIT	YIELD	Expected	Expected Uncert	Recovery	ANALYSIS DATE	ALIQUOT SIZE	ALQ UNIT	DETECTOR ID	METHOD NUMBER
Batch: 9314244	Work Order: D4RJ9102													
BETA	2.43E+01	1.8E+00	3.7E+00	1.79E+00	pCi/L	100.00%	2.27E+01	0.0E+00	106.81%	1/23/99 10:36 a	0.2	L	GPC27D	RICHRC5014

Number of Results: 1

4358C

EMAX

LABORATORIES, INC.

630 Maple Ave.
Torrance, CA 90503

Telephone: (310) 618-8889
Fax: (310) 618-0818

Date: 12-01-1999
EMAX Batch No.: 99K030

Attn: Dwayne Ishida

IT Corporation
3347 Michelson Dr. # 200
Irvine CA 92612

Subject: Laboratory Report
Project: El Toro/20242/D.O. 112

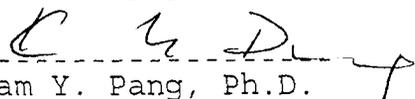
Enclosed is the Laboratory report for samples received on 11/04/99. The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
20242-987	K030-01	11/04/99	Water	EPA 8260A EPA 5030A/M8015 EPA M8015 Mercury Nitrate/Nitrite TDS
20242-988	K030-02	11/04/99	Water	CAM Metals EPA 8260A EPA 5030A/M8015 EPA M8015 CAM Metals Nitrate/Nitrite TDS
20242-989	K030-03	11/04/99	Water	Mercury EPA 8260A EPA 5030A/M8015 EPA M8015 CAM Metals Mercury Nitrate/Nitrite TDS
20242-990	K030-04	11/04/99	Water	EPA 8260A EPA 5030A/M8015 EPA M8015 Mercury CAM Metals Nitrate/Nitrite TDS
20242-991	K030-05	11/04/99	Water	EPA 8260A

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,



Kam Y. Pang, Ph.D.
Laboratory Director

TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

MOD M8015

Client : IT CORPORATION
 Project : EL TORO/20242/D.O. 112
 Batch No. : 99K030

Matrix : WATER
 Instrument ID : GCT019

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	SUR2 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Receive DATETIME
MBLK1W	DSK013WB	ND	76	96	1	NA	.1	.012	11/07/9903:11	11/04/9909:30	TK05-62	TK05-57	DSK013W	NA	11/04/99
LCS1W	DSK013WL	4.81	72	87	1	NA	.1	.012	11/06/9901:46	11/04/9909:30	TK05-23	TK05-13	DSK013W	NA	11/04/99
LCD1W	DSK013WC	4.87	73	88	1	NA	.1	.012	11/06/9903:01	11/04/9909:30	TK05-25	TK05-24	DSK013W	NA	11/04/99
20242-987	K030-01	ND	71	85	.95	NA	.095	.011	11/06/9903:38	11/04/9909:30	TK05-26	TK05-24	DSK013W	11/04/99	11/04/99
20242-988	K030-02	ND	72	87	.96	NA	.096	.012	11/06/9904:16	11/04/9909:30	TK05-27	TK05-24	DSK013W	11/04/99	11/04/99
20242-989	K030-03	ND	72	85	.95	NA	.095	.011	11/06/9904:53	11/04/9909:30	TK05-28	TK05-24	DSK013W	11/04/99	11/04/99
20242-990	K030-04	ND	67	81	.95	NA	.095	.011	11/06/9905:31	11/04/9909:30	TK05-29	TK05-24	DSK013W	11/04/99	11/04/99

QC LIMIT : (SOIL) 60-140 55-150
 QC LIMIT : (WATER) 65-135 60-145
 SURR1 : Bromobenzene
 SURR2 : Hexacosane
 RL : Reporting Limit
 H-C RANGE: C7-C18 = JP-5
 C6-C12 = Gas
 C10-C24 = Diesel
 C18-C34 = Motor Oil

5004

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K030
METHOD: M8015/LUFT

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: DSK013WB DSK013WL DSK013WC
LAB FILE ID: TK05-62 TK05-23 TK05-25
DATE EXTRACTED: 11/04/9909:30 11/04/9909:30 11/04/9909:30 DATE COLLECTED: NA
DATE ANALYZED: 11/07/9903:11 11/06/9901:46 11/06/9903:01 DATE RECEIVED: 11/04/99
PREP. BATCH: DSK013W DSK013W DSK013W
CALIB. REF: TK05-57 TK05-13 TK05-24

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	5	4.81	96	5	4.87	97	1	61-143	50

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromobenzene	1	.718	72	1	.727	73	65-135
Hexacosane	1	.868	87	1	.882	88	60-145

M 5030A/M8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

Client : IT CORPORATION
 Project : EL TORO/20242/D.O. 112
 Batch No. : 99K030

Matrix : WATER
 Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	VAK0839B	ND	93	1	NA	.1	.018	11/06/9917:33	11/06/9917:33	EK05-4	EK05-3	VAK0839	NA	NA
LCS1W	VAK0839L	1.22	106	1	NA	.1	.018	11/06/9918:08	11/06/9918:08	EK05-5	EK05-3	VAK0839	NA	NA
LCD1W	VAK0839C	1.14	103	1	NA	.1	.018	11/06/9918:43	11/06/9918:43	EK05-6	EK05-3	VAK0839	NA	NA
20242-987	K030-01	ND	85	1	NA	.1	.018	11/07/9900:26	11/07/9900:26	EK05-16	EK05-15	VAK0839	11/04/99	11/04/99
20242-988	K030-02	ND	89	1	NA	.1	.018	11/07/9901:01	11/07/9901:01	EK05-17	EK05-15	VAK0839	11/04/99	11/04/99
20242-989	K030-03	ND	89	1	NA	.1	.018	11/07/9901:36	11/07/9901:36	EK05-18	EK05-15	VAK0839	11/04/99	11/04/99
20242-990	K030-04	ND	86	1	NA	.1	.018	11/07/9902:11	11/07/9902:11	EK05-19	EK05-15	VAK0839	11/04/99	11/04/99
20242-990MS	K030-04M	1.08	101	1	NA	.1	.018	11/07/9902:46	11/07/9902:46	EK05-20	EK05-15	VAK0839	11/04/99	11/04/99
20242-990MSD	K030-04S	1.11	96	1	NA	.1	.018	11/07/9903:21	11/07/9903:21	EK05-21	EK05-15	VAK0839	11/04/99	11/04/99

SURR : Bromofluorobenzene(BFB), WATER:65-135%, SOIL:60-140%
 RL : Reporting Limit
 * : Out of QC limit due to matrix interference

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EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K030
METHOD: METHOD 5030A/M8015

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VAK0839B VAK0839L VAK0839C
LAB FILE ID: EK05-4 EK05-5 EK05-6
DATE EXTRACTED: 11/06/9917:33 11/06/9918:08 11/06/9918:43 DATE COLLECTED: NA
DATE ANALYZED: 11/06/9917:33 11/06/9918:08 11/06/9918:43 DATE RECEIVED:
PREP. BATCH: VAK0839 VAK0839 VAK0839
CALIB. REF: EK05-3 EK05-3 EK05-3

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	1.1	1.22	111	1.1	1.14	104	7	65-135	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromofluorobenzene	.05	.053	106	.05	.0515	103	65-135

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K030
METHOD: METHOD 5030A/M8015

=====

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: 20242-990
LAB SAMP ID: K030-04 K030-04M K030-04S
LAB FILE ID: EK05-19 EK05-20 EK05-21
DATE EXTRACTED: 11/07/9902:11 11/07/9902:46 11/07/9903:21 DATE COLLECTED: 11/04/99
DATE ANALYZED: 11/07/9902:11 11/07/9902:46 11/07/9903:21 DATE RECEIVED: 11/04/99
REP. BATCH: VAK0839 VAK0839 VAK0839
CALIB. REF: EK05-15 EK05-15 EK05-15

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
asoline	ND	1.1	1.08	98	1.1	1.11	101	3	65-135	30

=====

PROBATE PARAMETER	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	QC LIMIT (%)
monofluorobenzene	.05	.0504	101	.05	.0478	96	65-135

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Project    : EL TORO/20242/D.O. 112   Date Received: 11/04/99
Batch.No.  : 99K030                   Date Extracted: 11/11/99 14:13
Sample ID  : 20242-987                 Date Analyzed: 11/11/99 14:13
Lab Samp ID: K030-01                   Dilution Factor: 1
Lab File ID: RKP210                     Matrix          : WATER
Ext Btch ID: VOK0902                    % Moisture     : NA
Calib. Ref.: RKP204                     Instrument ID  : T-002
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
M7BE	2.6J	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	62-139
TOLUENE-D8	94	75-125
BROMOFLUOROBENZENE	91	75-125

PRL: Project Reporting Limit

* : Out side of QC Limit

J : An estimated value between PRL and MDL

E : Value exceed the upper level of the initial calibration

B : Found in the associated blank

D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Address    : EL TORO/20242/D.O. 112   Date Received: 11/04/99
Sample No. : 99K030                   Date Extracted: 11/11/99 14:49
Sample ID  : 20242-988                 Date Analyzed: 11/11/99 14:49
Lab Samp ID: K030-02                  Dilution Factor: 1
Lab File ID: RKP211                   Matrix          : WATER
Lab Btch ID: VOK0902                  % Moisture      : NA
Lab Ref.: RKP204                       Instrument ID   : T-002
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
,1,1-TRICHLOROETHANE	ND	5	1.1
,1,2,2-TETRACHLOROETHANE	ND	5	.49
,1,2-TRICHLOROETHANE	ND	5	.52
,1-DICHLOROETHANE	ND	5	1.2
,1-DICHLOROETHENE	ND	5	2
,2-DICHLOROETHANE	ND	5	.58
,2-DICHLOROPROPANE	ND	5	.53
-BUTANONE	ND	50	7.9
-CHLOROETHYLVINYLEETHER	ND	50	.83
-HEXANONE	ND	50	1
-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
DIBROMODICHLOROMETHANE	ND	5	.33
DIBROMOFORM	ND	5	.29
DIBROMOMETHANE	ND	5	1.5
DIBROMO DISULFIDE	ND	5	1.3
DIBROMO TETRACHLORIDE	ND	5	1.3
DIBROMOBENZENE	ND	5	.68
DIBROMOETHANE	ND	5	2.9
DIBROMOFORM	ND	5	.85
DIBROMO METHANE	ND	5	1.7
DIBROMO-2-DICHLOROETHENE	ND	5	.97
DIBROMO-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
DIBROMOBENZENE	ND	5	.72
DIBROMOETHANE	ND	10	.96
DIBROMOETHYLENE CHLORIDE	ND	5	1.8
DIBROMOETHYLENE	ND	5	.58
DIBROMOTETRACHLOROETHENE	ND	5	1.2
DIBROMODUENE	ND	5	.92
DIBROMO-1,2-DICHLOROETHENE	ND	5	1.5
DIBROMO-1,3-DICHLOROPROPENE	ND	5	.45
DIBROMODICHLOROETHENE	ND	5	.9
DIBROMOETHYL ACETATE	ND	50	6.2
DIBROMOETHYL CHLORIDE	ND	5	1.7
DIBROMOETHYLENES	ND	5	2.4

PROBATE PARAMETERS	% RECOVERY	QC LIMIT
,2-DICHLOROETHANE-D4	98	62-139
DIBROMODUENE-DB	94	75-125
DIBROMODIFLUOROBENZENE	95	75-125

RL: Project Reporting Limit
 : Out side of QC Limit
 : An estimated value between PRL and MDL
 : Value exceed the upper level of the initial calibration
 : Found in the associated blank
 : Value from dilution analysis

2005

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Project     : EL TORO/20242/D.O. 112  Date Received: 11/04/99
Batch No.   : 99K030                 Date Extracted: 11/11/99 15:22
Sample ID   : 20242-989              Date Analyzed: 11/11/99 15:22
Lab Samp ID : K030-03                Dilution Factor: 1
Lab File ID : RKP212                 Matrix          : WATER
Ext Btch ID : VOK0902                % Moisture     : NA
Calib. Ref.: RKP204                 Instrument ID   : T-002
=====

```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	106	62-139
TOLUENE-D8	94	75-125
BROMOFLUOROBENZENE	93	75-125

PRL: Project Reporting Limit
* : Out side of QC Limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Sample No. : EL TORO/20242/D.O. 112   Date Received: 11/04/99
Lab No.    : 99K030                  Date Extracted: 11/11/99 15:55
Sample ID  : 20242-990                Date Analyzed: 11/11/99 15:55
Sample ID  : K030-04                  Dilution Factor: 1
File ID    : RKP213                   Matrix          : WATER
Batch ID   : VOK0902                  % Moisture      : NA
Lib. Ref.  : RKP204                   Instrument ID   : T-002
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1-TRICHLOROETHANE	ND	5	1.1
1,2,2-TETRACHLOROETHANE	ND	5	.49
1,2-TRICHLOROETHANE	ND	5	.52
1-DICHLOROETHANE	ND	5	1.2
1-DICHLOROETHENE	ND	5	.2
2-DICHLOROETHANE	ND	5	.58
2-DICHLOROPROPANE	ND	5	.53
BUTANONE	ND	50	7.9
CHLOROETHYLVINYLETHER	ND	50	.83
HEXANONE	ND	50	.1
METHYL-2-PENTANONE	ND	50	.1
ETONE	ND	50	10
NZENE	ND	5	.85
OMODICHLOROMETHANE	ND	5	.33
OMOFORM	ND	5	.29
OMOMETHANE	ND	5	1.5
RBON DISULFIDE	ND	5	1.3
RBON TETRACHLORIDE	ND	5	1.3
LOROBENZENE	ND	5	.68
LOROETHANE	ND	5	2.9
FORM	ND	5	.85
ETHANE	ND	5	1.7
S-1,2-DICHLOROETHENE	ND	5	.97
S-1,3-DICHLOROPROPENE	ND	5	.47
BROMOCHLOROMETHANE	ND	5	.29
HYLBENZENE	ND	5	.72
BE	2.5J	10	.96
THYLENE CHLORIDE	ND	5	1.8
YRENE	ND	5	.58
TRACHLOROETHENE	ND	5	1.2
LUENE	ND	5	.92
ANS-1,2-DICHLOROETHENE	ND	5	1.5
ANS-1,3-DICHLOROPROPENE	ND	5	.45
ICHLOROETHENE	ND	5	.9
NYL ACETATE	ND	50	6.2
NYL CHLORIDE	ND	5	1.7
LENES	ND	5	2.4

IRROGATE PARAMETERS	% RECOVERY	QC LIMIT
2-DICHLOROETHANE-D4	103	62-139
LUENE-D8	95	75-125
OMOFLUOROBENZENE	95	75-125

RL: Project Reporting Limit
 : Out side of QC Limit
 : An estimated value between PRL and MDL
 : Value exceed the upper level of the initial calibration
 : Found in the associated blank
 : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Project     : EL TORO/20242/D.O. 112 Date Received: 11/04/99
Batch No.   : 99K030                 Date Extracted: 11/11/99 16:29
Sample ID   : 20242-991              Date Analyzed: 11/11/99 16:29
Lab Samp ID : K030-05                 Dilution Factor: 1
Lab File ID : RKP214                  Matrix          : WATER
Ext Btch ID : VOK0902                 % Moisture      : NA
Calib. Ref. : RKP204                  Instrument ID   : T-002
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYLVINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	62-139
TOLUENE-D8	92	75-125
BROMOFLUOROBENZENE	94	75-125

PRL: Project Reporting Limit
 * : Out side of QC Limit
 J : An estimated value between PRL and MDL
 E : Value exceed the upper level of the initial calibration
 B : Found in the associated blank
 D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client      : IT CORPORATION           Date Collected: NA
Site       : EL TORO/20242/D.O. 112   Date Received: 11/11/99
Lab No.    : 99K030                   Date Extracted: 11/11/99 13:37
Sample ID  : MBLK1W                   Date Analyzed: 11/11/99 13:37
Lab Samp ID: VOK0902Q                 Dilution Factor: 1
Lab File ID: RKP209                   Matrix          : WATER
Ext Btch ID: VOK0902                  % Moisture      : NA
Alib. Ref.: RKP204                    Instrument ID   : T-002
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
,1,1-TRICHLOROETHANE	ND	5	1.1
,1,2,2-TETRACHLOROETHANE	ND	5	.49
,1,2-TRICHLOROETHANE	ND	5	.52
,1-DICHLOROETHANE	ND	5	1.2
,1-DICHLOROETHENE	ND	5	.2
,2-DICHLOROETHANE	ND	5	.58
,2-DICHLOROPROPANE	ND	5	.53
-BUTANONE	ND	50	7.9
-CHLOROETHYLVINYLETHER	ND	50	.83
-HEXANONE	ND	50	.1
-METHYL-2-PENTANONE	ND	50	.1
CETONE	ND	50	10
ENZENE	ND	5	.85
ROMODICHLOROMETHANE	ND	5	.33
ROMOFORM	ND	5	.29
ROMOMETHANE	ND	5	1.5
ARBON DISULFIDE	ND	5	1.3
ARBON TETRACHLORIDE	ND	5	1.3
HLOROBENZENE	ND	5	.68
HLOROETHANE	ND	5	2.9
ROFORM	ND	5	.85
METHANE	ND	5	1.7
IS-1,2-DICHLOROETHENE	ND	5	.97
IS-1,3-DICHLOROPROPENE	ND	5	.47
IBROMOCHLOROMETHANE	ND	5	.29
THYLBENZENE	ND	5	.72
TBE	ND	10	.96
ETHYLENE CHLORIDE	1.8J	5	1.8
TYRENE	ND	5	.58
ETRACHLOROETHENE	ND	5	1.2
OLUENE	ND	5	.92
RANS-1,2-DICHLOROETHENE	ND	5	1.5
RANS-1,3-DICHLOROPROPENE	ND	5	.45
RICHLOROETHENE	ND	5	.9
INYL ACETATE	ND	50	6.2
INYL CHLORIDE	ND	5	1.7
YLENES	ND	5	2.4

RRROGATE PARAMETERS	% RECOVERY	QC LIMIT
,2-DICHLOROETHANE-D4	106	62-139
OLUENE-D8	99	75-125
ROMOFLUOROBENZENE	98	75-125

RL: Project Reporting Limit
 : Out side of QC Limit
 : An estimated value between PRL and MDL
 : Value exceed the upper level of the initial calibration
 : Found in the associated blank
 : Value from dilution analysis

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
BATCH NO.: 99K030
METHOD: METHOD 5030A/8260A

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VOK0902Q VOK0902L VOK0902C
LAB FILE ID: RKP209 RKP206 RKP207
DATE EXTRACTED: 11/11/9913:37 11/11/9911:57 11/11/9912:30 DATE COLLECTED: NA
DATE ANALYZED: 11/11/9913:37 11/11/9911:57 11/11/9912:30 DATE RECEIVED: 11/11/99
PREP. BATCH: VOK0902 VOK0902 VOK0902
CALIB. REF: RKP204 RKP204 RKP204

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	24.7	124	20	24.6	123	1	75-125	20
Benzene	ND	20	21	105	20	21	105	0	75-125	20
Chlorobenzene	ND	20	20.6	103	20	21.1	105	2	75-125	20
Toluene	ND	20	20.2	101	20	19.8	99	2	74-125	20
Trichloroethene	ND	20	18.9	94	20	19.4	97	3	71-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	50	56.3	113	50	55.1	110	62-139
Toluene-d8	50	49.6	99	50	49.5	99	75-125
Bromofluorobenzene	50	49.1	98	50	51.3	103	75-125

METHOD 3010A/6010A
 CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Project     : EL TORO/20242/D.O. 112   Date Received: 11/04/99
SPS NO.    : 99K030                   Date Extracted: 11/05/99 12:00
Sample ID: 20242-987                   Date Analyzed: 11/09/99 01:17
Camp ID: K030-01                       Dilution Factor: 1
Lab File ID: I07K020025                 Matrix : WATER
Ext Btch ID: IPK013W                    % Moisture : NA
Calib. Ref.: I07K020022                 Instrument ID : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Arsenic	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	80.2	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

ND: Reporting Limit

METHOD 3010A/6010A
METALS BY TRACE-ICP

```
=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Project     : EL TORO/20242/D.O. 112  Date Received: 11/04/99
SDG NO.    : 99K030                   Date Extracted: 11/05/99 12:00
Sample ID   : 20242-987                Date Analyzed: 11/11/99 17:27
Lab Samp ID: K030-01                   Dilution Factor: 1
Lab File ID: I31K028021                 Matrix          : WATER
Ext Btch ID: IPK013W                    % Moisture     : NA
Calib. Ref.: I31K028014                 Instrument ID   : EMAXT131
=====
```

PARAMETERS	RESULTS	RL	MDL
-----	(ug/L)	(ug/L)	(ug/L)
-----	-----	-----	-----
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	5.47J	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

7003

METHOD 3010A/6010A
 CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Project     : EL TORO/20242/D.O. 112   Date Received: 11/04/99
Sample ID   : 99K030                   Date Extracted: 11/05/99 12:00
Lab ID      : 20242-988                 Date Analyzed: 11/09/99 01:23
Lab Samp ID : K030-02                   Dilution Factor: 1
Lab File ID : I07K020026                Matrix          : WATER
Lab Btch ID : IPK013W                    % Moisture      : NA
Lab. Ref.:  I07K020022                   Instrument ID   : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Arsenic	ND	100	1.41
Beryllium	ND	10	.12
Bismuth	ND	10	2.06
Bromine	ND	50	4.77
Cadmium	ND	50	6.64
Calcium	ND	50	6.47
Copper	ND	50	6.47
Chromium	ND	20	.64
Lead	ND	100	9.37
Nickel	ND	150	3.93
Mercury	ND	50	4.69
Manganese	ND	100	4.7
Molybdenum	ND	20	2.47

: Reporting Limit

METHOD 3010A/6010A
METALS BY TRACE-ICP

=====
Client : IT CORPORATION Date Collected: 11/04/99
Project : EL TORO/20242/D.O. 112 Date Received: 11/04/99
SDG NO. : 99K030 Date Extracted: 11/05/99 12:00
Sample ID: 20242-988 Date Analyzed: 11/11/99 17:31
Lab Samp ID: K030-02 Dilution Factor: 1
Lab File ID: I31K028022 Matrix : WATER
Ext Btch ID: IPK013W % Moisture : NA
Calib. Ref.: I31K028014 Instrument ID : EMAXT131
=====

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	ND	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

7005

METHOD 3010A/6010A
 CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Project     : EL TORO/20242/D.O. 112  Date Received: 11/04/99
Sample ID   : 99K030                 Date Extracted: 11/05/99 12:00
Lab ID      : 20242-989              Date Analyzed: 11/09/99 01:28
Lab Samp ID: K030-03                Dilution Factor: 1
Lab File ID: I07K020027             Matrix          : WATER
Ext Btch ID: IPK013W                % Moisture      : NA
Calib. Ref.: I07K020022             Instrument ID   : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	20.9	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Selenium	ND	100	4.7
Zinc	ND	20	2.47

ND: Reporting Limit

METHOD 3010A/6010A
METALS BY TRACE-ICP

=====
Client : IT CORPORATION Date Collected: 11/04/99
Project : EL TORO/20242/D.O. 112 Date Received: 11/04/99
SDG NO. : 99K030 Date Extracted: 11/05/99 12:00
Sample ID: 20242-989 Date Analyzed: 11/11/99 18:07
Lab Samp ID: K030-03 Dilution Factor: 1
Lab File ID: I31K028028 Matrix : WATER
Ext Btch ID: IPK013W % Moisture : NA
Calib. Ref.: I31K028026 Instrument ID : EMAXT131
=====

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	50.3	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

7007

METHOD 3010A/6010A
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Project     : EL TORO/20242/D.O. 112   Date Received: 11/04/99
Sample No.  : 99K030                  Date Extracted: 11/05/99 12:00
Sample ID   : 20242-990                Date Analyzed: 11/09/99 01:34
Lab Samp ID : K030-04                  Dilution Factor: 1
Lab File ID : I07K020028               Matrix          : WATER
Ext Btch ID : IPK013W                  % Moisture      : NA
Calib. Ref. : I07K020022               Instrument ID   : EMAXT107
=====

```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Arsenic	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	77.1	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Selenium	ND	100	4.7
Zinc	ND	20	2.47

ND: Reporting Limit

7008

METHOD 3010A/6010A
METALS BY TRACE-ICP

```
=====
Client      : IT CORPORATION           Date Collected: 11/04/99
Project     : EL TORO/20242/D.O. 112  Date Received: 11/04/99
SDG NO.    : 99K030                  Date Extracted: 11/05/99 12:00
Sample ID: 20242-990                  Date Analyzed: 11/11/99 18:11
Lab Samp ID: K030-04                  Dilution Factor: 1
Lab File ID: I31K028029               Matrix          : WATER
Ext Btch ID: IPK013W                  % Moisture      : NA
Calib. Ref.: I31K028026               Instrument ID   : EMAXTI31
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	9.32J	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

METHOD 3010A/6010A
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: NA
Project     : EL TORO/20242/D.O. 112  Date Received: 11/05/99
Sample ID   : 99K030                  Date Extracted: 11/05/99 12:00
Lab ID      : MBLK1W                   Date Analyzed: 11/09/99 00:03
Lab Samp ID: IPK013WB                  Dilution Factor: 1
Lab File ID: I07K020012                Matrix           : WATER
Ext Btch ID: IPK013W                    % Moisture       : NA
Lab. Ref.: I07K020010                  Instrument ID    : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Arsenic	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Selenium	ND	100	4.7
Zinc	ND	20	2.47

: Reporting Limit

METHOD 3010A/6010A
METALS BY TRACE-ICP

```
=====
Client      : IT CORPORATION           Date Collected: NA
Project     : EL TORO/20242/D.O. 112  Date Received: 11/05/99
SDG NO.    : 99K030                   Date Extracted: 11/05/99 12:00
Sample ID:  MBLK1W                     Date Analyzed: 11/11/99 17:07
Lab Samp ID: IPK013WB                  Dilution Factor: 1
Lab File ID: I31K028016                Matrix          : WATER
Ext Btch ID: IPK013W                   % Moisture      : NA
Calib. Ref.: I31K028014                Instrument ID   : EMAXTI31
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	ND	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

7011

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
NO.: 99K030
METHOD: 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
 ILTN FACTR: 1 1 1
 SAMPLE ID: MBLK1W
 CONTROL NO.: IPK013WB IPK013WL IPK013WC
 AB FILE ID: I07K020012 I07K020013 I07K020014
 ATIME EXTRCTD: 11/05/9912:00 11/05/9912:00 11/05/9912:00 DATE COLLECTED: NA
 ATIME ANALYZD: 11/09/9900:03 11/09/9900:09 11/09/9900:14 DATE RECEIVED: 11/05/99
 REP. BATCH: IPK013W IPK013W IPK013W
 ALIB. REF: I07K020010 I07K020010 I07K020010

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	5000	5360	107	5000	5560	111	4	80-120	20
Arsium	ND	1000	1070	107	1000	1110	111	3	80-120	20
Beryllium	ND	1000	1100	110	1000	1140	114	4	80-120	20
Cadmium	ND	1000	1020	102	1000	1060	106	4	80-120	20
Chromium	ND	1000	1080	108	1000	1130	113	5	80-120	20
Cobalt	ND	1000	1080	108	1000	1130	113	5	80-120	20
Copper	ND	1000	1020	102	1000	1050	105	3	80-120	20
Manganese	ND	1000	1070	107	1000	1110	111	4	80-120	20
Polychlorinated Biphenyls	ND	1000	1070	107	1000	1130	113	5	80-120	20
Mercury	ND	1000	1080	108	1000	1100	110	2	80-120	20
Nickel	ND	1000	1050	105	1000	1080	108	4	80-120	20
Vanadium	ND	1000	1080	108	1000	1130	113	4	80-120	20
Zinc	ND	1000	1050	105	1000	1100	110	5	80-120	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K030
METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1 1
SAMPLE ID: MBLK1W
CONTROL NO.: IPK013WB IPK013WL IPK013WC
LAB FILE ID: I31K028016 I31K028017 I31K028018
DATE EXTRACTED: 11/05/9912:00 11/05/9912:00 11/05/9912:00 DATE COLLECTED: NA
DATE ANALYZED: 11/11/9917:07 11/11/9917:11 11/11/9917:15 DATE RECEIVED: 11/05/99
PREP. BATCH: IPK013W IPK013W IPK013W
CALIB. REF: I31K028014 I31K028014 I31K028014

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
arsenic	ND	1000	1020	102	1000	1060	106	4	80-120	20
lead	ND	1000	1000	100	1000	1040	104	4	80-120	20
elenium	ND	1000	1040	104	1000	1080	108	4	80-120	20
thallium	ND	1000	1070	107	1000	1110	111	4	80-120	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
JOB NO.: 99K030
METHOD: 3010A/6010A

MATRIX: WATER % MOISTURE: NA
 LTN FACTR: 1 1 1
 SAMPLE ID: 20242-987
 CONTROL NO.: K030-01 K030-01M K030-01S
 LAB FILE ID: I07K020025 I07K020019 I07K020020
 TIME EXTRACTD: 11/05/9912:00 11/05/9912:00 11/05/9912:00 DATE COLLECTED: 11/04/99
 TIME ANALYZD: 11/09/9901:17 11/09/9900:43 11/09/9900:49 DATE RECEIVED: 11/04/99
 EP. BATCH: IPK013W IPK013W IPK013W
 LIB. REF: I07K020022 I07K020010 I07K020010

SESSION:

PARAMETER	SMPL RSLT ug/L	SPIKE AMT ug/L	MS RSLT ug/L	MS % REC	SPIKE AMT ug/L	MSD RSLT ug/L	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	5000	5920	118	5000	5800	116	2	80-120	20
Barium	ND	1000	1100	110	1000	1070	107	2	80-120	20
Beryllium	ND	1000	1130	113	1000	1110	111	2	80-120	20
Bismuth	ND	1000	1160	116	1000	1140	114	2	80-120	20
Bromine	ND	1000	1140	114	1000	1120	112	2	80-120	20
Calcium	ND	1000	1150	115	1000	1130	113	2	80-120	20
Copper	ND	1000	1110	111	1000	1080	108	3	80-120	20
Manganese	80.2	1000	1210	113	1000	1200	112	1	80-120	20
Molybdenum	ND	1000	1190	119	1000	1140	114	5	80-120	20
Nickel	ND	1000	1110	111	1000	1090	109	2	80-120	20
Silver	ND	1000	1170	117	1000	1150	115	2	80-120	20
Radium	ND	1000	1160	116	1000	1140	114	2	80-120	20
Zinc	ND	1000	1150	115	1000	1140	114	1	80-120	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K030
METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
 DILTN FACTR: 1 1 1
 SAMPLE ID: 20242-987
 CONTROL NO.: K030-01 K030-01M K030-01S
 LAB FILE ID: I31K028021 I31K028024 I31K028025
 DATE EXTRACTD: 11/05/9912:00 11/05/9912:00 11/05/9912:00 DATE COLLECTED: 11/04/99
 DATE ANALYZD: 11/11/9917:27 11/11/9917:39 11/11/9917:45 DATE RECEIVED: 11/04/99
 REP. BATCH: IPK013W IPK013W IPK013W
 ALIB. REF: I31K028014 I31K028014 I31K028014

ACCESSION:

PARAMETER	SMPL RSLT ug/L	SPIKE AMT ug/L	MS RSLT ug/L	MS % REC	SPIKE AMT ug/L	MSD RSLT ug/L	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
arsenic	ND	1000	1150	115	1000	1170	117	2	80-120	20
lead	ND	1000	1080	108	1000	1110	111	3	80-120	20
elenium	ND	1000	1160	116	1000	1190	119	2	80-120	20
thallium	ND	1000	1180	118	1000	1190	119	1	80-120	20

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
NO.: 99K030
METHOD 3010A/6010A

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 5
SAMPLE ID: 20242-987 20242-987DL
MAX SAMP ID: K030-01 K030-01T
LAB FILE ID: I07K020025 I07K020024
DATE EXTRACTED: 11/05/9912:00 11/05/9912:00 DATE COLLECTED: 11/04/99
DATE ANALYZED: 11/09/9901:17 11/09/9901:11 DATE RECEIVED: 11/04/99
EP. BATCH: IPK013W IPK013W
LIB. REF: I07K020022 I07K020022

SESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Barium	ND	ND	0	10
Beryllium	ND	ND	0	10
Bismuth	ND	ND	0	10
Bromine	ND	ND	0	10
Cadmium	ND	ND	0	10
Copper	ND	ND	0	10
Manganese	80.2	ND	NA	10
Molybdenum	ND	ND	0	10
Nickel	ND	ND	0	10
Lead	ND	ND	0	10
Radium	ND	ND	0	10
Vanadium	ND	ND	0	10

EMAX QUALITY CONTROL DATA
 SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
 PROJECT: EL TORO/20242/D.O. 112
 BATCH NO.: 99K030
 METHOD: METHOD 3010A/6010A

=====

MATRIX: WATER % MOISTURE: NA
 DILUTION FACTOR: 1 5
 SAMPLE ID: 20242-987 20242-987DL
 EMAX SAMP ID: K030-01 K030-01T
 LAB FILE ID: I31K028021 I31K028020
 DATE EXTRACTED: 11/05/9912:00 11/05/9912:00 DATE COLLECTED: 11/04/99
 DATE ANALYZED: 11/11/9917:27 11/11/9917:23 DATE RECEIVED: 11/04/99
 PREP. BATCH: IPK013W IPK013W
 CALIB. REF: I31K028014 I31K028014

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Arsenic	ND	ND	0	10
Lead	ND	ND	0	10
Selenium	ND	ND	0	10
Thallium	ND	ND	0	10

METHOD A
MERCURY BY COLD VAPOR

Client : IT CORPORATION
Project : EL TORO/20242/D.O. 112
Batch No. : 99K030

Matrix : WATER
Instrument ID : TI023

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HGK012WB	ND	1	NA	.2	.179	11/09/9914:48	11/09/9909:00	M99K015032	M99K015030	HGK012W	NA	11/09/99
LCS1W	HGK012WL	4.76	1	NA	.2	.179	11/09/9914:51	11/09/9909:00	M99K015033	M99K015030	HGK012W	NA	11/09/99
LCD1W	HGK012WC	4.72	1	NA	.2	.179	11/09/9914:53	11/09/9909:00	M99K015034	M99K015030	HGK012W	NA	11/09/99
20242-987	K030-01	ND	1	NA	.2	.179	11/09/9915:15	11/09/9909:00	M99K015044	M99K015042	HGK012W	11/04/99	11/04/99
20242-988	K030-02	ND	1	NA	.2	.179	11/09/9915:17	11/09/9909:00	M99K015045	M99K015042	HGK012W	11/04/99	11/04/99
20242-989	K030-03	ND	1	NA	.2	.179	11/09/9915:20	11/09/9909:00	M99K015046	M99K015042	HGK012W	11/04/99	11/04/99
20242-990	K030-04	ND	1	NA	.2	.179	11/09/9915:22	11/09/9909:00	M99K015047	M99K015042	HGK012W	11/04/99	11/04/99

RL: Reporting Limit

7026

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
SDG NO.: 99K030
METHOD: METHOD 7470A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1 1
SAMPLE ID: MBLK1W
CONTROL NO.: HGK012WB HGK012WL HGK012WC
LAB FILE ID: M99K015032 M99K015033 M99K015034
DATIME EXTRCTD: 11/09/9909:00 11/09/9909:00 11/09/9909:00 DATE COLLECTED: NA
DATIME ANALYZD: 11/09/9914:48 11/09/9914:51 11/09/9914:53 DATE RECEIVED: 11/09/99
PREP. BATCH: HGK012W HGK012W HGK012W
CALIB. REF: M99K015030 M99K015030 M99K015030

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	5	4.76	95	5	4.72	94	1	77-120	15

7027

EPA 800.160.1
TOTAL DISSOLVED SOLIDS

Client : IT CORPORATION
Project : EL TORO/20242/D.O. 112
Batch No. : 99K030

Matrix : WATER
Instrument ID : TI16

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSK002WB	ND	1	NA	10	3.36	11/06/9916:00	NA	DSK002W-1	NA	DSK002W	NA	NA
LCS1W	DSK002WL	975	1	NA	10	3.36	11/06/9916:01	NA	DSK002W-2	NA	DSK002W	NA	NA
LCD1W	DSK002WC	1070	1	NA	10	3.36	11/06/9916:02	NA	DSK002W-3	NA	DSK002W	NA	NA
20242-987	K030-01	1760	1	NA	10	3.36	11/06/9916:07	NA	DSK002W-8	NA	DSK002W	11/04/99	11/04/99
20242-988	K030-02	65	1	NA	10	3.36	11/06/9916:08	NA	DSK002W-9	NA	DSK002W	11/04/99	11/04/99
20242-989	K030-03	1740	1	NA	10	3.36	11/06/9916:09	NA	DSK002W-10	NA	DSK002W	11/04/99	11/04/99
20242-990	K030-04	1860	1	NA	10	3.36	11/06/9916:10	NA	DSK002W-11	NA	DSK002W	11/04/99	11/04/99

RL : Reporting Limit

8002

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
METHOD: EPA 160.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 99K030
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: DSK002WL/C'

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 11/06/99 16:01/16:02

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD %	QC LIMIT %	RPD LIMIT %
TDS	ND	1080	975	90	1080	1070	100	10	85-115	20

8003

Client : IT CORPORATION
 Project : EL TORO/20242/D.O. 112
 Batch No. : 99K030

Matrix : WATER
 Instrument ID : T106

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	ICK003WB	ND	1	NA	.1	.012	11/05/9910:34	NA	AK03-3	AK03-1	ICK003W	NA	NA
LCS1W	ICK003WL	1.97	1	NA	.1	.012	11/05/9910:48	NA	AK03-4	AK03-1	ICK003W	NA	NA
LCD1W	ICK003WC	1.98	1	NA	.1	.012	11/05/9911:02	NA	AK03-5	AK03-1	ICK003W	NA	NA
20242-987	K030-01	1.33	1	NA	.1	.012	11/05/9911:16	NA	AK03-6	AK03-1	ICK003W	11/04/99	11/04/99
20242-987DUP	K030-01D	1.32	1	NA	.1	.012	11/05/9911:30	NA	AK03-7	AK03-1	ICK003W	11/04/99	11/04/99
20242-987MS	K030-01M	3.41	1	NA	.1	.012	11/05/9911:44	NA	AK03-8	AK03-1	ICK003W	11/04/99	11/04/99
20242-988	K030-02	ND	1	NA	.1	.012	11/05/9911:59	NA	AK03-9	AK03-1	ICK003W	11/04/99	11/04/99
20242-989	K030-03	1.14	1	NA	.1	.012	11/05/9912:13	NA	AK03-10	AK03-1	ICK003W	11/04/99	11/04/99
20242-990	K030-04	1.32	1	NA	.1	.012	11/05/9912:27	NA	AK03-11	AK03-1	ICK003W	11/04/99	11/04/99

RL: Reporting Limit

8007

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
METHOD: METHOD 300.0
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 99K030
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: ICK003WL/C

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 11/05/99 10:48/11:02

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD %	QC LIMIT %	RPD LIMIT %
Nitrate/Nitrite-N	ND	2	1.97	98	2	1.98	99	1	75-125	20

6008

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: IT CORPORATION
PROJECT: EL TORO/20242/D.O. 112
METHOD: METHOD 300.0
MATRIX: WATER
% MOISTURE: NA

=====

BATCH NO.: 99K030 DATE RECEIVED: 11/04/99
SAMPLE ID: 20242-987DUP DATE EXTRACTED: NA
CONTROL NO.: K030-01D DATE ANALYZED: 11/05/99 11:30

ACCESSION:

PARAMETER	SAMPLE (mg/L)	DUP. SAMPLE (mg/L)	RPD (%)	RPD LIMIT (%)
Nitrate/Nitrite-N	1.33	1.32	1	20

8011

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 4, 1999
LDC Report Date: December 27, 1999
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Extractables
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 99K030

Sample Identification

20242-987
20242-988
20242-989
20242-990

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

Samples 20242-987 and 20242-990 were identified as field duplicates. No total hydrocarbons as extractables were detected in any of the samples.

X. Field Blanks

No field blanks were identified in this SDG.

**MCAS El Toro
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG
99K030**

No Sample Data Qualified in this SDG

**MCAS El Toro
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification
Summary - SDG 99K030**

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 4, 1999
LDC Report Date: December 27, 1999
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Gasoline
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 99K030

Sample Identification

20242-987
20242-988
20242-989
20242-990
20242-990MS
20242-990MSD

COPY

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

Samples 20242-987 and 20242-990 were identified as field duplicates. No total petroleum hydrocarbons as gasoline contaminants were detected in any of the samples.

X. Field Blanks

No field blanks were identified in this SDG.

**MCAS El Toro
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG
99K030**

No Sample Data Qualified in this SDG

**MCAS El Toro
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification
Summary - SDG 99K030**

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 4, 1999
LDC Report Date: December 29, 1999
Matrix: Water
Parameters: Volatiles
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 99K030

Sample Identification

20242-987
20242-988
20242-989
20242-990
20242-991

COPY

v. 1/15/01

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

Average relative response factors (RRF) for all semivolatile target compounds and system monitoring compounds were greater than or equal to 0.05 as required with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/26/99	Chloroethane	0.03727 (≥ 0.05)	All samples in SDG 99K030	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

All of the continuing calibration RRF values were greater than or equal to 0.05 with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
11 11 99	Chloroethane	0.04286 (≥ 0.05)	All samples in SDG 99K030	J (all detects) R (all non-detects)	A
	Acetone	0.03573 (≥ 0.05)		J (all detects) R (all non-detects)	

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
MBLK1W	11/11/99	Methylene chloride	1.8 ug/L	20242-987 20242-988 20242-989 20242-990 20242-991

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples 20242-987 and 20242-990 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	20242-987	20242-990	
Methyl-tert-butyl ether	2.6	2.5	4

XVII. Field Blanks

Sample 20242-991 was identified as a trip blank. No volatile contaminants were found in this blank.

MCAS EI Toro
Volatiles - Data Qualification Summary - SDG 99K030

SDG	Sample	Compound	Flag	A or P	Reason
99K030	20242-987 20242-988 20242-989 20242-990 20242-991	Chloroethane	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
99K030	20242-987 20242-988 20242-989 20242-990 20242-991	Chloroethane Acetone	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Continuing calibration (RRF)

MCAS EI Toro
Volatiles - Laboratory Blank Data Qualification Summary - SDG 99K030

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 4, 1999
LDC Report Date: January 3, 2000
Matrix: Water
Parameters: Metals
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 99K030

Sample Identification

20242-987
20242-988
20242-989
20242-990
20242-987MS
20242-987MSD

COPY

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010 and 7000 for Metals. The metals analyzed were Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found above the reporting limit in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Chromium	3.55 ug/L	All samples in SDG 99K030

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards (ICP-MS)

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

Although ICP serial dilution analysis was not required by the method, it was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

Raw data were not reviewed for this SDG.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

Samples 20242-987 and 20242-990 were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (ug/L)		RPD
	20242-987	20242-990	
Manganese	80.2	77.1	4
Selenium	5.47	9.32	52

XIV. Field Blanks

No field blanks were identified in this SDG.

**MCAS EI Toro
Metals - Data Qualification Summary - SDG 99K030**

No Sample Data Qualified in this SDG

**MCAS EI Toro
Metals - Laboratory Blank Data Qualification Summary - SDG 99K030**

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: November 4, 1999
LDC Report Date: January 3, 2000
Matrix: Water
Parameters: Wet Chemistry
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 99K030

Sample Identification

20242-987
20242-988
20242-989
20242-990
20242-987MS
20242-987DUP

COPY

Introduction

This data review covers 6 water samples listed on the cover sheet. The analyses were per EPA Method 160.1 for Total Dissolved Solids and EPA Method 300.0 for Nitrate/Nitrite as Nitrogen.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section VII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Accuracy and Precision Data

a. Matrix Spike/(Matrix Spike) Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Relative percent differences (RPD) were within QC limits.

b. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Sample Result Verification

Raw data were not reviewed for this SDG.

VI. Overall Assessment of Data

Data flags are summarized at the end of this report.

VII. Field Duplicates

Samples 20242-987 and 20242-990 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L)		RPD
	20242-987	20242-990	
Total dissolved solids	1760	1860	6
Nitrate/Nitrite as N	1.33	1.32	0.8

VIII. Field Blanks

No field blanks were identified in this SDG.

**MCAS EI Toro
Wet Chemistry - Data Qualification Summary - SDG 99K030**

No Sample Data Qualified in this SDG

**MCAS EI Toro
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG 99K030**

No Sample Data Qualified in this SDG



A P C L

Applied Physics & Chemistry Laboratory

13760 Magnolia Ave. Chino CA 91710

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

May 5, 2000

FILE COPY

The IT Group
Attention: Dwayne Ishida
3347 Michelson Dr. Ste 200
Irvine, CA 92612-1692
Tel: (949)261-6441 Fax: (949)475-5433

Dear Dwayne,

This package contains samples in our Service ID 00-2656 and your project 20242 El Toro
Enclosed please find:

- (1) Original report.
- (2) Original Chain of Custody.
- (3) One original and one copy of Standard Data Package Deliverable.
- (4) One diskette containing EDD deliverable.

If anything is missing or you have any questions, please feel free to contact me.

Respectfully submitted,



Kevin Xie, Ph.D.,

QA/QC Director
Applied P & Ch Laboratory

MAY 9 2000

4824 AL

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

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

APCL Analytical Report

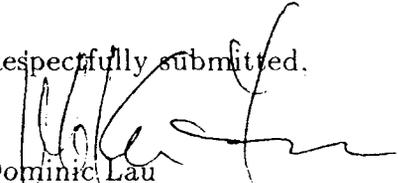
Submitted to:
The IT Group
Attention: Dwayne Ishida
3347 Michelson Dr. Ste 200
Irvine CA 92612-1692
Tel: (949)261-6441 Fax: (949)475-5433

Service ID #: 801-002656 Received: 04/20/00
Collected by: W.Jefferson Extracted: N/A
Collected on: 04/19-20/00 Tested: 04/27/00
Reported: 04/28/00
Sample Description: Water from MCAS
Project Description: 20242 El Toro

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result			
				20242-1120 00-02656-2	20242-1122 00-02656-4	20242-1123 00-02656-5	20242-1124 00-02656-6
PERCHLORATE	300.0	µg/L	4	< 4	< 4	< 4	< 4

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
Wet Analysis Results for Method 300.0

Client Name: The IT Group
Project ID: El Toro

Project No: 20242
Service ID: 2656

Anal. Method 300.0
Collected by:

Component Name: Perchlorate
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
00-2656-2	20242-1120	Water	04/19/00	04/20/00	04/26/00	00W3024	µg/L	4	<4	U
00-2656-4	20242-1122	Water	04/20/00	04/20/00	04/26/00	00W3024	µg/L	4	<4	U
00-2656-5	20242-1123	Water	04/20/00	04/20/00	04/26/00	00W3024	µg/L	4	<4	U
00-2656-6	20242-1124	Water	04/20/00	04/20/00	04/26/00	00W3024	µg/L	4	<4	U
00W3024-MB-01	00W3024-MB-01	Water	04/26/00	04/26/00	04/26/00	00W3024	µg/L	4	<4	U

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

073506

FORM-3

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 300.0

Client Name: The IT Group	Contract No:	Lab Code: APCL
Case No:	SAS No:	Service ID: 2656
Project ID: El Toro	Project No: 20242	Sample Matrix: Water
	Batch No: 00W3024	
LCS Filename: -	Date Analyzed: 042600	Time Analyzed: 14:08
LCSD Filename: -	Date Analyzed: 042600	Time Analyzed: 16:08

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
PERCHLORATE	µg/L	50	0	45.2	90	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
PERCHLORATE	µg/L	50	48.6	97	7	20	80-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

073507

FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 300.0

Client Name: The IT Group	Contract No:	Lab Code: APCL
Case No:	SAS No:	Service ID: 2656
Project ID: El Toro	Project No: 20242	Sample Matrix: Water
	Batch No: 00W3024	
MS Filename: -	Date Analyzed: 042600	Time Analyzed: 15:55
MSD Filename: -	Date Analyzed: -	Time Analyzed: -
MS Sample No: 20242-1119	Sample Lab ID: 00-2656-1	

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
PERCHLORATE	µg/L	50	0	50.1	100	75-125
# of Out-of-control					0	

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

073508

EMAX

LABORATORIES, INC.

630 Maple Ave.

Torrance, CA 90503

Telephone: (310) 618-8889

Fax: (310) 618-0818

Date: 05-01-2000

EMAX Batch No.: 00D119

Attn: Dwayne Ishida

IT Corporation

3347 Michelson Dr. # 200

Irvine CA 92612

Subject: Laboratory Report

Project: MCAS El Toro/20242/D.O. 112

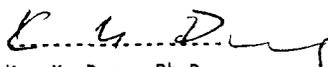
Enclosed is the Laboratory report for samples received on
04/20/00. The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
20242-1121	D119-01	04/20/00	Water	Modified 8015 by Extraction Modified 8015 by Purge & Trap Volatile Organics by GC/MS CAM Metals Mercury
20242-1122	D119-02	04/20/00	Water	Mercury Modified 8015 by Extraction Modified 8015 by Purge & Trap Volatile Organics by GC/MS CAM Metals
20242-1123	D119-03	04/20/00	Water	Volatile Organics by GC/MS Modified 8015 by Extraction Modified 8015 by Purge & Trap CAM Metals Mercury
20242-1124	D119-04	04/20/00	Water	Volatile Organics by GC/MS Modified 8015 by Extraction Modified 8015 by Purge & Trap CAM Metals Mercury
20242-1125	D119-05	04/20/00	Water	Volatile Organics by GC/MS

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,



Kam Y. Pang, Ph.D.
Laboratory Director

M8015B
 TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : IT CORPORATION
 Project : MCAS EL TORO/20242/D.O. 112
 Batch No. : 00D119

Matrix : WATER
 Instrument ID : GCT043

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	SUR2 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSD035WB	ND	82	94	1	NA	.1	.012	04/22/0008:39	04/21/0015:00	DD12020A	DD12015A	DSD035W	NA	04/21/00
LCS1W	DSD035WL	5.24	79	120	1	NA	.1	.012	04/22/0009:21	04/21/0015:00	DD12021A	DD12015A	DSD035W	NA	04/21/00
LCD1W	DSD035WC	6.32	97	133	1	NA	.1	.012	04/22/0010:03	04/21/0015:00	DD12022A	DD12015A	DSD035W	NA	04/21/00
20242-1121	D119-01	ND	74	106	.92	NA	.092	.011	04/22/0012:09	04/21/0015:00	DD12025A	DD12015A	DSD035W	04/20/00	04/20/00
20242-1122	D119-02	ND	81	124	.92	NA	.092	.011	04/22/0014:15	04/21/0015:00	DD12028A	DD12026A	DSD035W	04/20/00	04/20/00
20242-1123	D119-03	ND	79	98	.96	NA	.096	.0115	04/22/0014:57	04/21/0015:00	DD12029A	DD12026A	DSD035W	04/20/00	04/20/00
20242-1124	D119-04	ND	95	98	.92	NA	.092	.011	04/22/0015:39	04/21/0015:00	DD12030A	DD12026A	DSD035W	04/20/00	04/20/00

RL : Reporting Limit
 SURR1 : Bromobenzene
 SURR2 : Hexacosane
 Parameter H-C Range
 JP5 C7 - C18
 Diesel C10 - C24
 Motor Oil C18 - C34
 Gas C6 - C12

5004

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
BATCH NO.: 00D119
METHOD: METHOD M8015B

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: DSD035WB DSD035WL DSD035WC
LAB FILE ID: DD12020A DD12021A DD12022A
DATE EXTRACTED: 04/21/0015:00 04/21/0015:00 04/21/0015:00 DATE COLLECTED: NA
DATE ANALYZED: 04/22/0008:39 04/22/0009:21 04/22/0010:03 DATE RECEIVED: 04/21/00
PREP. BATCH: DSD035W DSD035W DSD035W
CALIB. REF: DD12015A DD12015A DD12015A

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	5	5.24	105	5	6.32	126	19	61-143	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (ng/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromobenzene	1	.794	79	1	.967	97	65-135
Hexacosane	.25	.3	120	.25	.332	133	60-145

METHOD 3/M8015
 TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

Client : IT CORPORATION
 Project : NCAS EL TORO/20242/D.O. 112
 Batch No. : UOD119

Matrix : WATER
 Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	VAD3039B	ND	101	1	NA	.1	.018	04/21/0018:33	04/21/0018:33	ED12004A	ED12003A	VAD3039	NA	04/21/00
LCS1W	VAD3039L	.575	100	1	NA	.1	.018	04/21/0019:09	04/21/0019:09	ED12005A	ED12003A	VAD3039	NA	04/21/00
LCD1W	VAD3039C	.583	104	1	NA	.1	.018	04/21/0019:44	04/21/0019:44	ED12006A	ED12003A	VAD3039	NA	04/21/00
20242-1121	D119-01	ND	88	1	NA	.1	.018	04/21/0021:30	04/21/0021:30	ED12009A	ED12003A	VAD3039	04/20/00	04/20/00
20242-1122	D119-02	ND	89	1	NA	.1	.018	04/21/0022:05	04/21/0022:05	ED12010A	ED12003A	VAD3039	04/20/00	04/20/00
20242-1123	D119-03	ND	88	1	NA	.1	.018	04/21/0022:40	04/21/0022:40	ED12011A	ED12003A	VAD3039	04/20/00	04/20/00
20242-1124	D119-04	ND	90	1	NA	.1	.018	04/21/0023:15	04/21/0023:15	ED12012A	ED12003A	VAD3039	04/20/00	04/20/00
20242-1124MS	D119-04M	.559	99	1	NA	.1	.018	04/21/0023:50	04/21/0023:50	ED12013A	ED12003A	VAD3039	04/20/00	04/20/00
20242-1124MSD	D119-04S	.564	103	1	NA	.1	.018	04/22/0001:35	04/22/0001:35	ED12016A	ED12015A	VAD3039	04/20/00	04/20/00

SURR : Bromofluorobenzene(BFB), WATER:65-135%, SOIL:60-140%
 RL : Reporting Limit
 * : Out of QC limit due to matrix interference

4004

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
ATCH NO.: 00D119
METHOD: METHOD 5030A/M8015

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VAD3039B VAD3039L VAD3039C
LAB FILE ID: ED12004A ED12005A ED12006A
DATE EXTRACTED: 04/21/0018:33 04/21/0019:09 04/21/0019:44 DATE COLLECTED: NA
DATE ANALYZED: 04/21/0018:33 04/21/0019:09 04/21/0019:44 DATE RECEIVED: 04/21/00
REP. BATCH: VAD3039 VAD3039 VAD3039
CALIB. REF: ED12003A ED12003A ED12003A

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	.55	.575	105	.55	.583	106	1	67-136	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromofluorobenzene	.05	.05	100	.05	.052	104	65-135

4010

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
BATCH NO.: 00D119
METHOD: METHOD 5030A/M8015

=====

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: 20242-1124
LAB SAMP ID: D119-04 D119-04M D119-04S
LAB FILE ID: ED12012A ED12013A ED12016A
DATE EXTRACTED: 04/21/0023:15 04/21/0023:50 04/22/0001:35 DATE COLLECTED: 04/20/00
DATE ANALYZED: 04/21/0023:15 04/21/0023:50 04/22/0001:35 DATE RECEIVED: 04/20/00
PREP. BATCH: VAD3039 VAD3039 VAD3039
CALIB. REF: ED12003A ED12003A ED12015A

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	HSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	.55	.559	102	.55	.564	103	1	67-136	30

=====

SURROGATE PARAMETER	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	QC LIMIT (%)
Bromofluorobenzene	.05	.0493	99	.05	.0515	103	65-135

4011

METHOD 5030A/6260A
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : IT CORPORATION           Date Collected: 04/20/00
Project     : MCAS EL TORO/20242/D.O. 112   Date Received: 04/20/00
Batch No.   : 00D119                   Date Extracted: 04/22/00 05:10
Sample ID   : 20242-1121                Date Analyzed: 04/22/00 05:10
Lab Samp ID: 0119-01                     Dilution Factor: 1
Lab File ID: RDV551                       Matrix          : WATER
Ext Btch ID: V004001                       % Moisture     : NA
Calib. Ref.: RDV541                       Instrument ID   : T-001
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	2.4JB	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	62-139
TOLUENE-D8	106	75-125
BROMOFLUOROBENZENE	102	75-125

PRL: Project Reporting Limit
 * : Out side of QC Limit
 J : An estimated value between PRL and MDL
 E : Value exceed the upper level of the initial calibration
 B : Found in the associated blank
 D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : IT CORPORATION           Date Collected: 04/20/00
Sector     : MCAS EL TCRO/20242/D.O. 112 Date Received: 04/20/00
Lab No.    : 000119                  Date Extracted: 04/22/00 04:36
Sample ID  : 20242-1122              Date Analyzed: 04/22/00 04:36
Lab Samp ID: D119-02                 Dilution Factor: 1
Lab File ID: RDV550                  Matrix          : WATER
Ext Btch ID: V004001                 % Moisture     : NA
Calib. Ref.: RDV541                  Instrument ID   : T-001
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
BROMOMETHANE	ND	5	1.7
1,2-DICHLOROETHENE	ND	5	.97
1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	5.9B	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	107	62-139
TOLUENE-DB	106	75-125
BROMOFLUOROBENZENE	104	75-125

PRL: Project Reporting Limit
 * : Out side of QC Limit
 J : An estimated value between PRL and MDL
 E : Value exceed the upper level of the initial calibration
 B : Found in the associated blank
 D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

```

=====
Client   : IT CORPORATION           Date Collected: 04/20/00
Project  : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
Batch No. : 00D119                 Date Extracted: 04/22/00 04:01
Sample ID: 20242-1123             Date Analyzed: 04/22/00 04:01
Lab Samp ID: D119-03              Dilution Factor: 1
Lab File ID: RDV549               Matrix       : WATER
Ext Btch ID: V004001             % Moisture   : NA
Calib. Ref.: RDV541              Instrument ID : T-001
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	5.2B	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	62-139
TOLUENE-DB	108	75-125
BROMOFLUOROBENZENE	104	75-125

PRL: Project Reporting Limit
 * : Out side of QC Limit
 J : An estimated value between PRL and MDL
 E : Value exceed the upper level of the initial calibration
 B : Found in the associated blank
 D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : IT CORPORATION           Date Collected: 04/20/00
Project    : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
Lab No.    : 00D119                   Date Extracted: 04/22/00 03:27
Sample ID  : 20242-1124                Date Analyzed: 04/22/00 03:27
Lab Samp ID: 0119-04                   Dilution Factor: 1
Lab File ID: RDV548                     Matrix          : WATER
Ext Btch ID: V004001                    % Moisture     : NA
Calib. Ref.: RDV541                     Instrument ID   : T-001
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROETHANE	ND	5	.68
CHLOROBENZENE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	5.18	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	62-139
TOLUENE-D8	108	75-125
BROMOFLUOROBENZENE	106	75-125

PRL: Project Reporting Limit

* : Out side of QC Limit

J : An estimated value between PRL and MDL

E : Value exceed the upper level of the initial calibration

B : Found in the associated blank

D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

```

=====
Client   : IT CORPORATION           Date Collected: 04/20/00
Project  : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
Batch No. : 00D119                 Date Extracted: 04/22/00 02:53
Sample ID: 20242-1125              Date Analyzed: 04/22/00 02:53
Lab Samp ID: D119-05               Dilution Factor: 1
Lab File ID: RDV547                 Matrix          : WATER
Ext Btch ID: V004001                % Moisture      : NA
Calib. Ref.: RDV541                 Instrument ID    : T-001
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	6B	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	62-139
TOLUENE-D8	110	75-125
BROMOFLUOROBENZENE	108	75-125

PRL: Project Reporting Limit
* : Out side of QC Limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : IT CORPORATION           Date Collected: NA
Project    : MCAS EL TORO/20242/D.O. 112 Date Received: 04/22/00
Batch No.  : 00D119                   Date Extracted: 04/22/00 02:19
Sample ID  : MBLK1W                     Date Analyzed: 04/22/00 02:19
Lab Samp ID: V004001B                   Dilution Factor: 1
Lab File ID: RDV546                     Matrix          : WATER
Ext Btch ID: V004001                    % Moisture     : NA
Calib. Ref.: RDV541                     Instrument ID  : T-001
=====

```

PARAMETERS	RESULTS (ug/L)	PRL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	5	.53
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	.1
4-METHYL-2-PENTANONE	ND	50	.1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	5.2	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	62-139
TOLUENE-DB	102	75-125
BROMOFLUOROBENZENE	104	75-125

PRL: Project Reporting Limit

* : Out side of QC Limit

J : An estimated value between PRL and MDL

E : Value exceed the upper level of the initial calibration

B : Found in the associated blank

D : Value from dilution analysis

EMAX QUALITY CONTROL DATA
LCS/LCO ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
BATCH NO.: 000119
METHOD: METHOD 5030A/8260A

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VOD4001B VOD4001L VOD4001C
LAB FILE ID: RDV546 RDV544 RDV545
DATE EXTRACTED: 04/22/0002:19 04/22/0001:11 04/22/0001:45 DATE COLLECTED: NA
DATE ANALYZED: 04/22/0002:19 04/22/0001:11 04/22/0001:45 DATE RECEIVED: 04/22/00
PREP. BATCH: VOD4001 VOD4001 VOD4001
CALIB. REF: RDV541 RDV541 RDV541

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	21.2	106	20	23.5	118	10	75-125	20
Benzene	ND	20	21.3	106	20	22.8	114	7	75-125	20
Chlorobenzene	ND	20	21.1	105	20	22.2	111	5	75-125	20
Toluene	ND	20	21.7	108	20	23.6	118	9	74-125	20
Trichloroethene	ND	20	22	110	20	23.6	118	7	71-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	50	52.6	105	50	51.6	103	62-139
Toluene-d8	50	54.1	108	50	56.3	113	75-125
Bromofluorobenzene	50	56.2	112	50	55.2	110	75-125

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
LAB NO.: 000119
METHOD: METHOD 5030A/8250A

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: 20242-1121
LAB SAMP ID: D119-01 D119-01M D119-01S
LAB FILE ID: RDV551 RDV552 RDV553
DATE EXTRACTED: 04/22/0005:10 04/22/0005:44 04/22/0006:17 DATE COLLECTED: 04/20/00
DATE ANALYZED: 04/22/0005:10 04/22/0005:44 04/22/0006:17 DATE RECEIVED: 04/20/00
PREP. BATCH: V004001 V004001 V004001
CALIB. REF: RDV541 RDV541 RDV541

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	50	46	92	50	53.6	107	15	75-125	20
Benzene	ND	50	50.8	102	50	55.1	110	8	75-125	20
Chlorobenzene	ND	50	50.9	102	50	54.4	109	7	75-125	20
Toluene	ND	50	51.8	104	50	55.7	111	7	74-125	20
Trichloroethene	ND	50	48.7	97	50	56.1	112	14	71-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	50	60.3	121	50	58.3	117	62-139
Toluene-d8	50	55.7	112	50	61.5	123	75-125
1,4-Difluorobenzene	50	56.7	113	50	62.5	125	75-125

* : Out side of QC Limit

METHOD 3010A/6010B
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 04/20/00
Project     : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
SDG NO.    : 00D119                  Date Extracted: 04/24/00 15:30
Sample ID   : 20242-1121              Date Analyzed: 04/27/00 05:46
Lab Samp ID: D119-01                  Dilution Factor: 1
Lab File ID: I07D069021              Matrix          : WATER
Ext Btch ID: I00051W                  % Moisture      : NA
Calib. Ref.: I07D069019              Instrument ID   : EMAXT107
=====

```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	20.6	20	2.47

RL: Reporting Limit

METHOD 3010A/6010B
METALS BY TRACE-ICP

=====
Client : IT CORPORATION Date Collected: 04/20/00
Project : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
Job NO. : 000119 Date Extracted: 04/24/00 15:30
Sample ID: 20242-1121 Date Analyzed: 04/27/00 16:15
Lab Samp ID: D119-01 Dilution Factor: 1
Lab File ID: I31D063039 Matrix : WATER
Ext Btch ID: IPD051W % Moisture : NA
Calib. Ref.: I31D063032 Instrument ID : EMAXT131
=====

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	ND	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

METHOD 3010A/6010B
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 04/20/00
Project    : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
SDG NO.   : 00D119                   Date Extracted: 04/24/00 15:30
Sample ID  : 20242-1122               Date Analyzed: 04/27/00 05:52
Lab Samp ID: D119-02                  Dilution Factor: 1
Lab File ID: I07D069022              Matrix          : WATER
Ext Btch ID: IPD051W                  % Moisture     : NA
Calib. Ref.: I07D069019              Instrument ID   : EMAXTI07
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

7004

METHOD 3010A/6010B
METALS BY TRACE-ICP

=====
Client : IT CORPORATION Date Collected: 04/20/00
Project : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
Lab NO. : 00D119 Date Extracted: 04/24/00 15:30
Sample ID: 20242-1122 Date Analyzed: 04/27/00 16:02
Lab Samp ID: D119-02 Dilution Factor: 1
Lab File ID: I310063036 Matrix : WATER
Ext Btch ID: IPD051W % Moisture : NA
Calib. Ref.: I310063032 Instrument ID : EMAXT131
=====

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	23.2	10	4.37
Lead	ND	10	1.42
Selenium	19.4	10	4.21
Thallium	ND	400	3.31

L: Reporting Limit

METHOD 3010A/6010B
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: 04/20/00
Project     : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
SDG NO.    : 00D119                   Date Extracted: 04/24/00 15:30
Sample ID   : 20242-1123               Date Analyzed: 04/27/00 05:58
Lab Samp ID: D119-03                   Dilution Factor: 1
Lab File ID: I07D069023                Matrix          : WATER
Ext Btch ID: IPD051W                   % Moisture      : NA
Calib. Ref.: I07D069019                Instrument ID   : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

METHOD 3010A/6010B
 METALS BY TRACE-ICP

```

=====
Client      : IT CORPORATION           Date Collected: 04/20/00
Project    : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
Lab NO.    : 00D119                   Date Extracted: 04/24/00 15:30
Sample ID  : 20242-1123                Date Analyzed: 04/27/00 16:06
Lab Samp ID: D119-03                   Dilution Factor: 1
Lab File ID: I31D063037                Matrix          : WATER
Ext Btch ID: IPD051W                   % Moisture     : NA
Calib. Ref.: I31D063032                 Instrument ID  : EMAXT131
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	12.9	10	4.21
Thallium	ND	400	3.31

ND: Reporting Limit

METHOD 3010A/6010B
 CAM METALS BY ICP

```

=====
Client   : IT CORPORATION           Date Collected: 04/20/00
Project  : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
SDG NO.  : 00D119                   Date Extracted: 04/24/00 15:30
Sample ID: 20242-1124               Date Analyzed: 04/27/00 06:03
Lab Samp ID: D119-04                Dilution Factor: 1
Lab File ID: I07D069024             Matrix          : WATER
Ext Btch ID: IPD051W                % Moisture     : NA
Calib. Ref.: I07D069019             Instrument ID   : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	357	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	433	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

METHOD 3010A/6010B
 METALS BY TRACE-ICP

```

=====
Client      : IT CORPORATION           Date Collected: 04/20/00
Project    : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
Lab NO.    : 00D119                   Date Extracted: 04/24/00 15:30
Sample ID  : 20242-1124                Date Analyzed: 04/27/00 16:10
Lab Samp ID: D119-04                   Dilution Factor: 1
Lab File ID: I31D063038                Matrix          : WATER
Ext Btch ID: IPD051W                   % Moisture      : NA
Calib. Ref.: I31D063032                Instrument ID   : EMAXTI31
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	11.8	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

METHOD 3010A/6010B
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: NA
Project    : MCAS EL TORO/20242/D.O. 112 Date Received: 04/24/00
SDG NO.    : 00D119                   Date Extracted: 04/24/00 15:30
Sample ID  : MBLK1W                    Date Analyzed: 04/27/00 04:38
Lab Samp ID: IPD051WB                  Dilution Factor: 1
Lab File ID: I07D069009                 Matrix          : WATER
Ext Btch ID: IPD051W                    % Moisture     : NA
Calib. Ref.: I07D069007                 Instrument ID  : EMAXT107
=====

```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

METHOD 3010A/6010B
METALS BY TRACE-ICP

```
=====
Client      : IT CORPORATION           Date Collected: NA
Site       : MCAS EL TORO/20242/D.O. 112 Date Received: 04/24/00
Lab ID    : 00D119                   Date Extracted: 04/24/00 15:30
Sample ID : MBLK1W                   Date Analyzed: 04/27/00 15:08
Lab Samp ID: IPD051WB                Dilution Factor: 1
Lab File ID: I31D063024              Matrix          : WATER
Ext Btch ID: IPD051W                 % Moisture      : NA
Calib. Ref.: I31D063020              Instrument ID   : EMAXT131
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Cadmium	ND	10	1.42
Chromium	ND	10	4.21
Lead	ND	400	3.31

ND: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
SDG NO.: 00D119
METHOD: METHOD 3010A/6010B

MATRIX: WATER % MOISTURE: NA
DILT N FACTR: 1 1
SAMPLE ID: MBLK1W
CONTROL NO.: IPD051WB IPD051WL IPD051WC
LAB FILE ID: I07D069009 I07D069010 I07D069011
DATIME EXTRCTD: 04/24/0015:30 04/24/0015:30 04/24/0015:30 DATE COLLECTED: NA
DATIME ANALYZD: 04/27/0004:38 04/27/0004:44 04/27/0004:49 DATE RECEIVED: 04/24/00
PREP. BATCH: IPD051W IPD051W IPD051W
CALIB. REF: I07D069007 I07D069007 I07D069007

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	5000	5320	106	5000	5250	105	1	80-120	20
Barium	ND	1000	1090	109	1000	1080	108	1	80-120	20
Beryllium	ND	1000	1100	110	1000	1100	110	0	80-120	20
Cadmium	ND	1000	1060	106	1000	1050	105	1	80-120	20
Chromium	ND	1000	1090	109	1000	1100	110	0	80-120	20
Cobalt	ND	1000	1090	109	1000	1100	110	0	80-120	20
Copper	ND	1000	1070	107	1000	1050	105	1	80-120	20
Manganese	ND	1000	1070	107	1000	1070	107	0	80-120	20
Molybdenum	ND	1000	1080	108	1000	1080	108	0	80-120	20
Nickel	ND	1000	1070	107	1000	1070	107	1	80-120	20
Silver	ND	1000	1080	108	1000	1070	107	1	80-120	20
Vanadium	ND	1000	1090	109	1000	1090	109	0	80-120	20
Zinc	ND	1000	1070	107	1000	1070	107	0	80-120	20

7012

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
 CT: MCAS EL TORO/20242/D.O. 112
 NO.: 00D119
 METHOD: METHOD 3010A/6010B

MATRIX: WATER % MOISTURE: NA
 DILTN FACTR: 1 1 1
 SAMPLE ID: MBLK1W
 CONTROL NO.: IPD051WB IPD051WL IPD051WC
 LAB FILE ID: I31D063024 I31D063025 I31D063026
 DATE TIME EXTRCTD: 04/24/0015:30 04/24/0015:30 04/24/0015:30 DATE COLLECTED: NA
 DATE TIME ANALYZD: 04/27/0015:08 04/27/0015:12 04/27/0015:16 DATE RECEIVED: 04/24/00
 PREP. BATCH: IPD051W IPD051W IPD051W
 CALIB. REF: I31D063020 I31D063020 I31D063020

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Arsenic	ND	1000	1010	101	1000	1000	100	1	80-120	20
Lead	ND	1000	976	98	1000	962	96	1	80-120	20
Selenium	ND	1000	1030	103	1000	1010	101	2	80-120	20
Thallium	ND	1000	1050	105	1000	1040	104	1	80-120	20

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
BATCH NO.: 00D119
METHOD: METHOD 3010A/6010B

=====

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	18310-1102	18310-1102DL		
EMAX SAMP ID:	D120-02	D120-02T		
LAB FILE ID:	I07D069014	I07D069015		
DATE EXTRACTED:	04/24/0015:30	04/24/0015:30	DATE COLLECTED:	04/18/00
DATE ANALYZED:	04/27/0005:07	04/27/0005:12	DATE RECEIVED:	04/20/00
PREP. BATCH:	IPD051W	IPD051W		
CALIB. REF:	I07D069007	I07D069007		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Barium	ND	ND	0	10
Beryllium	ND	ND	0	10
Cadmium	ND	ND	0	10
Chromium	ND	ND	0	10
Cobalt	ND	ND	0	10
Copper	ND	ND	0	10
Manganese	662	699	6	10
Molybdenum	ND	ND	0	10
Nickel	ND	ND	0	10
Silver	ND	ND	0	10
Vanadium	ND	ND	0	10
Zinc	ND	ND	0	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
 PROJECT: MCAS EL TORO/20242/D.O. 112
 NO.: 00D119
 METHOD: METHOD 3010A/6010B

MATRIX: WATER % MOISTURE: NA
 DILUTION FACTOR: 1 5
 SAMPLE ID: 18310-1102 18310-1102DL
 EMAX SAMP ID: D120-02 D120-02T
 LAB FILE ID: I31D063027 I31D063034
 DATE EXTRACTED: 04/24/0015:30 04/24/0015:30 DATE COLLECTED: 04/18/00
 DATE ANALYZED: 04/27/0015:21 04/27/0015:49 DATE RECEIVED: 04/20/00
 PREP. BATCH: IPD051W IPD051W
 CALIB. REF: I31D063020 I31D063032

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Arsenic	14.7	ND	NA	10
Lead	ND	ND	0	10
Selenium	ND	ND	0	10
Thallium	ND	ND	0	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
SDG NO.: 00D119
METHOD: METHOD 3010A/6010B

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: 18310-1102
CONTROL NO.: D120-02 D120-02A
LAB FILE ID: I07D069014 I07D069018
DATIME EXTRACTD: 04/24/0015:30 04/24/0015:30 DATE COLLECTED: 04/18/00
DATIME ANALYZD: 04/27/0005:07 04/27/0005:29 DATE RECEIVED: 04/20/00
PREP. BATCH: IPD051W IPD051W
CALIB. REF: I07D069007 I07D069007

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Antimony	ND	500	547	109	75-125
Barium	ND	1000	1090	109	75-125
Beryllium	ND	1000	1050	105	75-125
Cadmium	ND	1000	1010	101	75-125
Chromium	ND	1000	1030	103	75-125
Cobalt	ND	1000	1040	104	75-125
Copper	ND	1000	1020	102	75-125
Manganese	662	1000	1660	99	75-125
Molybdenum	ND	1000	1040	104	75-125
Nickel	ND	1000	1020	102	75-125
Silver	ND	1000	986	99	75-125
Vanadium	ND	1000	1030	103	75-125
Zinc	ND	1000	1040	104	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
 SUBJECT: MCAS EL TORO/20242/D.O. 112
 NO.: 00D119
 METHOD: METHOD 3010A/6010B

=====

MATRIX: WATER % MOISTURE: NA
 DILTN FACTR: 1 1
 SAMPLE ID: 18310-1102
 CONTROL NO.: D120-02 D120-02A
 LAB FILE ID: I31D063027 I31D063029
 DATIME EXTRCTD: 04/24/0015:30 04/24/0015:30 DATE COLLECTED: 04/18/00
 DATIME ANALYZD: 04/27/0015:21 04/27/0015:29 DATE RECEIVED: 04/20/00
 PREP. BATCH: IPD051W IPD051W
 CALIB. REF: I31D063020 I31D063020

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Arsenic	14.7	500	530	103	75-125
Lead	ND	500	484	97	75-125
Selenium	ND	500	519	104	75-125
Thallium	ND	500	522	104	75-125

METHOD 7470A
MERCURY BY COLD VAPOR

Client : IT CORPORATION
Project : MCAS EL TORO/20242/D.O. 112
Batch No. : 00D119

Matrix : WATER
Instrument ID : T1023

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HGD023WB	ND	1	NA	.2	.179	04/25/0008:52	04/24/0015:00	M00D031008	M00D031006	HGD023W	NA	04/24/00
LCS1W	HGD023WL	4.94	1	NA	.2	.179	04/25/0008:54	04/24/0015:00	M00D031009	M00D031006	HGD023W	NA	04/24/00
LCD1W	HGD023WC	4.81	1	NA	.2	.179	04/25/0008:56	04/24/0015:00	M00D031010	M00D031006	HGD023W	NA	04/24/00
20242-1121	D119-01	ND	1	NA	.2	.179	04/25/0008:57	04/24/0015:00	M00D031011	M00D031006	HGD023W	04/20/00	04/20/00
20242-1121MS	D119-01M	4.37	1	NA	.2	.179	04/25/0008:59	04/24/0015:00	M00D031012	M00D031006	HGD023W	04/20/00	04/20/00
20242-1121MSD	D119-01S	4.37	1	NA	.2	.179	04/25/0009:01	04/24/0015:00	M00D031013	M00D031006	HGD023W	04/20/00	04/20/00
20242-1121DL	D119-01T	ND	5	NA	1	.895	04/25/0009:03	04/24/0015:00	M00D031014	M00D031006	HGD023W	04/20/00	04/20/00
20242-1121AS	D119-01A	2.05	1	NA	.2	.179	04/25/0009:05	04/24/0015:00	M00D031015	M00D031006	HGD023W	04/20/00	04/20/00
20242-1122	D119-02	ND	1	NA	.2	.179	04/25/0009:08	04/24/0015:00	M00D031016	M00D031006	HGD023W	04/20/00	04/20/00
20242-1123	D119-03	ND	1	NA	.2	.179	04/25/0009:09	04/24/0015:00	M00D031017	M00D031006	HGD023W	04/20/00	04/20/00
20242-1124	D119-04	ND	1	NA	.2	.179	04/25/0009:14	04/24/0015:00	M00D031020	M00D031018	HGD023W	04/20/00	04/20/00

RL: Reporting Limit

7028

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
SDG NO.: 000119
METHOD: METHOD 7470A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1 1
SAMPLE ID: MBLK1W
CONTROL NO.: HGD023WB HGD023WL HGD023WC
LAB FILE ID: M00D031008 M00D031009 M00D031010
DATIME EXTRCTD: 04/24/0015:00 04/24/0015:00 04/24/0015:00 DATE COLLECTED: NA
DATIME ANALYZD: 04/25/0008:52 04/25/0008:54 04/25/0008:56 DATE RECEIVED: 04/24/00
PREP. BATCH: HGD023W HGD023W HGD023W
CALIB. REF: M00D031006 M00D031006 M00D031006

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	5	4.94	99	5	4.81	96	3	77-120	15

7029

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
SDG NO.: 00D119
METHOD: METHOD 7470A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1 1
SAMPLE ID: 20242-1121
CONTROL NO.: D119-01 D119-01M D119-01S
LAB FILE ID: M00D031011 M00D031012 M00D031013
DATIME EXTRCTD: 04/24/0015:00 04/24/0015:00 04/24/0015:00 DATE COLLECTED: 04/20/00
DATIME ANALYZD: 04/25/0008:57 04/25/0008:59 04/25/0009:01 DATE RECEIVED: 04/20/00
PREP. BATCH: HGD023W HGD023W HGD023W
CALIB. REF: M00D031006 M00D031006 M00D031006

ACCESSION:

PARAMETER	SMPL RSLT ug/L	SPIKE AMT ug/L	MS RSLT ug/L	MS % REC	SPIKE AMT ug/L	MSD RSLT ug/L	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	5	4.37	87	5	4.37	87	0	77-120	15

7030

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
BATCH NO.: 00D119
METHOD: METHOD 7470A

=====

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	20242-1121	20242-1121DL		
EMAX SAMP ID:	D119-01	D119-01T		
LAB FILE ID:	M00D031011	M00D031014		
DATE EXTRACTED:	04/24/0015:00	04/24/0015:00	DATE COLLECTED:	04/20/00
DATE ANALYZED:	04/25/0008:57	04/25/0009:03	DATE RECEIVED:	04/20/00
PREP. BATCH:	HGD023W	HGD023W		
CALIB. REF:	M00D031006	M00D031006		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	ND	0	10

7031

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
SDG NO.: 00D119
METHOD: METHOD 7470A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: 20242-1121
CONTROL NO.: D119-01 D119-01A
LAB FILE ID: M00D031011 M00D031015
DATIME EXTRCTD: 04/24/0015:00 04/24/0015:00 DATE COLLECTED: 04/20/00
DATIME ANALYZD: 04/25/0008:57 04/25/0009:05 DATE RECEIVED: 04/20/00
PREP. BATCH: HGD023W HGD023W
CALIB. REF: M00D031006 M00D031006

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Mercury	ND	2	2.05	103	85-115

7032

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: April 20, 2000
LDC Report Date: May 31, 2000
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Extractables
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 00D119

Sample Identification

20242-1121
20242-1122
20242-1123
20242-1124

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

**MCAS El Toro
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG
00D119**

No Sample Data Qualified in this SDG

**MCAS El Toro
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification
Summary - SDG 00D119**

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: April 20, 2000
LDC Report Date: May 31, 2000
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Gasoline
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 00D119

Sample Identification

20242-1121
20242-1122
20242-1123
20242-1124
20242-1124MS
20242-1124MSD

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

MCAS El Toro

Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 00D119

No Sample Data Qualified in this SDG

MCAS El Toro

Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 00D119

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: April 20, 2000
LDC Report Date: May 31, 2000
Matrix: Water
Parameters: Volatiles
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 00D119

Sample Identification

20242-1121
20242-1122
20242-1123
20242-1124
20242-1125
20242-1121MS
20242-1121MSD

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

Average relative response factors (RRF) for all semivolatile target compounds and system monitoring compounds were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/21/00	2-Chloroethylvinyl ether	162.2	All samples in SDG 00D119	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
MBLK1W	4/22/00	Methylene chloride	5.2 ug/L	All samples in SDG 00D119

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
20242-1121	Methylene chloride	2.4 ug/L	5U ug/L
20242-1122	Methylene chloride	5.9 ug/L	5.9U ug/L
20242-1123	Methylene chloride	5.2 ug/L	5.2U ug/L
20242-1124	Methylene chloride	5.1 ug/L	5.1U ug/L
20242-1125	Methylene chloride	6 ug/L	6U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

MCAS EI Toro
Volatiles - Data Qualification Summary - SDG 00D119

SDG	Sample	Compound	Flag	A or P	Reason
00D119	20242-1121 20242-1122 20242-1123 20242-1124 20242-1125	2-Chloroethylvinyl ether	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

MCAS EI Toro
Volatiles - Laboratory Blank Data Qualification Summary - SDG 00D119

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
00D119	20242-1121	Methylene chloride	5U ug/L	A
00D119	20242-1122	Methylene chloride	5.9U ug/L	A
00D119	20242-1123	Methylene chloride	5.2U ug/L	A
00D119	20242-1124	Methylene chloride	5.1U ug/L	A
00D119	20242-1125	Methylene chloride	6U ug/L	A

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: April 20, 2000
LDC Report Date: May 30, 2000
Matrix: Water
Parameters: Metals
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 00D119

Sample Identification

20242-1121
20242-1122
20242-1123
20242-1124
20242-1121MS
20242-1121MSD

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010 and 7000 for Metals. The metals analyzed were Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found above the reporting limit in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Barium Beryllium Chromium Copper Manganese Selenium Silver Vanadium	2.71 ug/L 2.11 ug/L 4.82 ug/L 4.94 ug/L 2.72 ug/L 4.15 ug/L 7.69 ug/L 5.39 ug/L	All samples in SDG 00D114

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
20242-1122	Selenium	19.4 ug/L	19.4U ug/L
20242-1123	Selenium	12.9 ug/L	12.9U ug/L
20242-1124	Selenium	11.8 ug/L	11.8U ug/L

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Internal Standards (ICP-MS)

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

Although ICP serial dilution analysis was not required by the method, it was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

Raw data were not reviewed for this SDG.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

**MCAS EI Toro
Metals - Data Qualification Summary - SDG 00D119**

No Sample Data Qualified in this SDG

**MCAS EI Toro
Metals - Laboratory Blank Data Qualification Summary - SDG 00D119**

SDG	Sample	Analyte	Modified Final Concentration	A or P
00D119	20242-1122	Selenium	19.4U ug/L	A
00D119	20242-1123	Selenium	12.9U ug/L	A
00D119	20242-1124	Selenium	11.8U ug/L	A

EMAX

LABORATORIES, INC.

630 Maple Ave.

Torrance, CA 90503

Telephone: (310) 618-8889

Fax: (310) 618-0818

Date: 04-28-2000

EMAX Batch No.: 00D114

Attn: Dwayne Ishida

IT Corporation

3347 Michelson Dr. # 200

Irvine CA 92612

Subject: Laboratory Report

Project: MCAS El Toro/20242/D.O. 112

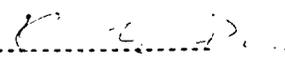
Enclosed is the Laboratory report for samples received on 04/19/00. The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
20242-1119	D114-01	04/19/00	Water	Volatile Organics by GC/MS Modified 8015 by Purge & Trap Modified 8015 by Extraction CAM Metals Mercury
20242-1120	D114-02	04/19/00	Water	Volatile Organics by GC/MS Modified 8015 by Extraction Modified 8015 by Purge & Trap CAM Metals Mercury

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,



 Kam Y. Pang, Ph.D.
 Laboratory Director

D M8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : IT CORPORATION
 Project : MCAS EL TORO/20242/D.O. 112
 Batch No. : 000114

Matrix : WATER
 Instrument ID : GCT043

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	SUR2 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSD035WB	ND	82	94	1	NA	.1	.012	04/22/0008:39	04/21/0015:00	DD12020A	DD12015A	DSD035W	NA	04/21/00
LCS1W	DSD035WL	5.24	79	120	1	NA	.1	.012	04/22/0009:21	04/21/0015:00	DD12021A	DD12015A	DSD035W	NA	04/21/00
LCD1W	DSD035WC	6.32	97	133	1	NA	.1	.012	04/22/0010:03	04/21/0015:00	DD12022A	DD12015A	DSD035W	NA	04/21/00
20242-1119	D114-01	ND	96	127	.94	NA	.094	.0113	04/22/0010:45	04/21/0015:00	DD12023A	DD12015A	DSD035W	04/19/00	04/19/00
20242-1120	D114-02	ND	86	123	.94	NA	.094	.0113	04/22/0011:27	04/21/0015:00	DD12024A	DD12015A	DSD035W	04/19/00	04/19/00

RL : Reporting Limit
 SURR1 : Bromobenzene
 SURR2 : Hexacosane
 Parameter H-C Range
 JP5 C7 -C18
 Diesel C10-C24
 Motor Oil C18-C34
 Gas C6 -C12

5004

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
BATCH NO.: 00D114
METHOD: METHOD M8015B

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: DSD035WB DSD035WL DSD035WC
LAB FILE ID: DD12020A DD12021A DD12022A
DATE EXTRACTED: 04/21/0015:00 04/21/0015:00 04/21/0015:00 DATE COLLECTED: NA
DATE ANALYZED: 04/22/0008:39 04/22/0009:21 04/22/0010:03 DATE RECEIVED: 04/21/00
PREP. BATCH: DSD035W DSD035W DSD035W
CALIB. REF: DD12015A DD12015A DD12015A

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	5	5.24	105	5	6.32	126	19	61-143	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromobenzene	1	.794	79	1	.967	97	65-135
Hexacosane	.25	.3	120	.25	.332	133	60-145

METHOD 8015
 TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

Client : IT CORPORATION
 Project : MCAS EL TORO/20242/D.O. 112
 Batch No. : 00D114

Matrix : WATER
 Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	VAD2739B	ND	92	1	NA	.1	.018	04/20/0009:18	04/20/0009:18	ED10029A	ED10025A	VAD2739	NA	04/20/00
LCS1W	VAD2739L	.669	102	1	NA	.1	.018	04/20/0008:01	04/20/0008:01	ED10027A	ED10025A	VAD2739	NA	04/20/00
LCD1W	VAD2739C	.591	96	1	NA	.1	.018	04/20/0008:36	04/20/0008:36	ED10028A	ED10025A	VAD2739	NA	04/20/00
20242-1119	D114-01	ND	91	1	NA	.1	.018	04/20/0011:05	04/20/0011:05	ED10032A	ED10025A	VAD2739	04/19/00	04/19/00
20242-1119MS	D114-01M	.62	99	1	NA	.1	.018	04/20/0011:40	04/20/0011:40	ED10033A	ED10025A	VAD2739	04/19/00	04/19/00
20242-1119MSD	D114-01S	.56	101	1	NA	.1	.018	04/20/0012:16	04/20/0012:16	ED10034A	ED10025A	VAD2739	04/19/00	04/19/00
20242-1120	D114-02	ND	86	1	NA	.1	.018	04/20/0012:51	04/20/0012:51	ED10035A	ED10025A	VAD2739	04/19/00	04/19/00

SURR : Bromofluorobenzene(BFB), WATER:65-135%, SOIL:60-140%
 RL : Reporting Limit
 * : Out of QC limit due to matrix interference

5004

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
BATCH NO.: 000114
METHOD: METHOD 5030A/M8015

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: VAD2739B VAD2739L VAD2739C
LAB FILE ID: ED10029A ED10027A ED10028A
DATE EXTRACTED: 04/20/0009:18 04/20/0008:01 04/20/0008:36 DATE COLLECTED: NA
DATE ANALYZED: 04/20/0009:18 04/20/0008:01 04/20/0008:36 DATE RECEIVED: 04/20/00
PREP. BATCH: VAD2739 VAD2739 VAD2739
CALIB. REF: ED10025A ED10025A ED10025A

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	.55	.669	122	.55	.591	108	12	67-136	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromofluorobenzene	.05	.0512	102	.05	.0478	96	65-135

4008

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
BATCH NO.: 00D114
METHOD: METHOD 5030A/M8015

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: 20242-1119
LAB SAMP ID: D114-01 D114-01M D114-01S
LAB FILE ID: ED10032A ED10033A ED10034A
DATE EXTRACTED: 04/20/0011:05 04/20/0011:40 04/20/0012:16 DATE COLLECTED: 04/19/00
DATE ANALYZED: 04/20/0011:05 04/20/0011:40 04/20/0012:16 DATE RECEIVED: 04/19/00
PREP. BATCH: VAD2739 VAD2739 VAD2739
CALIB. REF: ED10025A ED10025A ED10025A

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	.55	.62	113	.55	.56	102	10	67-136	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	QC LIMIT (%)
Bromofluorobenzene	.05	.0497	99	.05	.0506	101	65-135

4009

METHOD 5030A/2260A
VOLATILE ORGANICS BY GC/MS

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=====
Client   : IT CORPORATION           Date Collected: 04/19/00
Project  : MCAS EL TORO/20242/D.O. 112 Date Received: 04/19/00
Batch No. : 00D114                 Date Extracted: 04/21/00 04:02
Sample ID: 20242-1119              Date Analyzed: 04/21/00 04:02
Lab Samp ID: D114-01               Dilution Factor: 1
Lab File ID: RDV507                 Matrix          : WATER
Ext Btch ID: VOD3601                % Moisture     : NA
Calib. Ref.: RDV501                 Instrument ID   : I-001
=====
  
```

PARAMETERS	RESULTS (ug/L)	PRC (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYLVINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	62-139
TOLUENE-DB	103	75-125
BROMOFLUOROBENZENE	105	75-125

1,2-Dichloroethane-d4
62-139
52-149

Toluene-d8

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : IT CORPORATION           Date Collected: 04/19/00
Project     : MCAS EL TORO/20242/D.O. 112 Date Received: 04/19/00
Job No.    : 000114                   Date Extracted: 04/21/00 04:35
Sample ID  : 20242-1120                Date Analyzed: 04/21/00 04:35
Lab Samp ID: D114-02                   Dilution Factor: 1
Lab File ID: RDV508                     Matrix          : WATER
Ext Btch ID: V003601                   % Moisture     : NA
Calib. Ref.: RDV501                     Instrument ID  : T-001
=====
  
```

PARAMETERS	RESULTS (ug/L)	PR (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	.2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	.1
4-METHYL-2-PENTANONE	ND	50	.1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROETHANE FORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	95	62-139
TOLUENE-D8	101	75-125
BROMOFLUOROBENZENE	100	75-125

1,2-Dichloroethane-d4
1,2-Dichloroethane-d4
62-139
52-149

Toluene-d8

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

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=====
Client   : IT CORPORATION           Date Collected: NA
Project  : MCAS EL TCRO/20242/D.O. 112 Date Received: 04/21/00
Batch No. : 000114                 Date Extracted: 04/21/00 02:53
Sample ID: MBLK1W                  Date Analyzed: 04/21/00 02:53
Lab Samp ID: V003601B              Dilution Factor: 1
Lab File ID: RDV505                Matrix       : WATER
Ext Btch ID: V003601              % Moisture   : NA
Calib. Ref.: RDV501                Instrument ID : T-001
=====

```

PARAMETERS	RESULTS (ug/L)	PR (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1.1
1,1,2,2-TETRACHLOROETHANE	ND	5	.49
1,1,2-TRICHLOROETHANE	ND	5	.52
1,1-DICHLOROETHANE	ND	5	1.2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	.58
1,2-DICHLOROPROPANE	ND	5	.53
2-BUTANONE	ND	50	7.9
2-CHLOROETHYL VINYLETHER	ND	50	.83
2-HEXANONE	ND	50	1
4-METHYL-2-PENTANONE	ND	50	1
ACETONE	ND	50	10
BENZENE	ND	5	.85
BROMODICHLOROMETHANE	ND	5	.33
BROMOFORM	ND	5	.29
BROMOMETHANE	ND	5	1.5
CARBON DISULFIDE	ND	5	1.3
CARBON TETRACHLORIDE	ND	5	1.3
CHLOROBENZENE	ND	5	.68
CHLOROETHANE	ND	5	2.9
CHLOROFORM	ND	5	.85
CHLOROMETHANE	ND	5	1.7
CIS-1,2-DICHLOROETHENE	ND	5	.97
CIS-1,3-DICHLOROPROPENE	ND	5	.47
DIBROMOCHLOROMETHANE	ND	5	.29
ETHYLBENZENE	ND	5	.72
MTBE	ND	10	.96
METHYLENE CHLORIDE	ND	5	1.8
STYRENE	ND	5	.58
TETRACHLOROETHENE	ND	5	1.2
TOLUENE	ND	5	.92
TRANS-1,2-DICHLOROETHENE	ND	5	1.5
TRANS-1,3-DICHLOROPROPENE	ND	5	.45
TRICHLOROETHENE	ND	5	.9
VINYL ACETATE	ND	50	6.2
VINYL CHLORIDE	ND	5	1.7
XYLENES	ND	5	2.4

SURROGATE PARAMETERS	% RECOVER	QC LIMIT
1,2-DICHLOROETHANE-D4	96	62-139
TOLUENE-D8	106	75-125
BROMOFLUOROBENZENE	107	75-125

1,2-Dichloroethane-d4
62-139
52-149

Toluene-d8

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
I NO.: 00D114
JOB: METHOD 5030A/8260A

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MELK1W
LAB SAMP ID: VCD3601B VCD3601L VCD3601C
LAB FILE ID: RDV505 RDV503 RDV504
DATE EXTRACTED: 04/21/0002:53 04/21/0001:45 04/21/0002:19 DATE COLLECTED: NA
DATE ANALYZED: 04/21/0002:53 04/21/0001:45 04/21/0002:19 DATE RECEIVED: 04/21/00
PREP. BATCH: VCD3601 VCD3601 VCD3601
CALIB. REF: RDV501 RDV501 RDV501

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	17.8	89	20	19.8	99	11	75-125	20
Benzene	ND	20	18.2	91	20	20.1	101	10	75-125	20
Chlorobenzene	ND	20	18	90	20	20.1	101	11	75-125	20
Toluene	ND	20	18.5	92	20	20.1	101	9	74-125	20
Trichloroethene	ND	20	18.5	93	20	20.3	101	9	71-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	50	45	90	50	52.1	104	62-139
ne-d8	50	46.2	92	50	53.9	108	75-125
fluorobenzene	50	46.7	93	50	54	108	75-125

METHOD 3010A/6010B
CAM METALS BY ICP

```

=====
Client       : IT CORPORATION           Date Collected: 04/19/00
Project      : MCAS EL TORO/20242/D.O. 112 Date Received: 04/19/00
SDG NO.     : 00D114                   Date Extracted: 04/20/00 15:05
Sample ID: 20242-1119                   Date Analyzed: 04/21/00 20:09
Lab Samp ID: D114-01                     Dilution Factor: 1
Lab File ID: I07D062038                 Matrix          : WATER
Ext Btch ID: IPD046W                     % Moisture      : NA
Calib. Ref.: I07D062035                 Instrument ID   : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	71	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

METHOD 3010A/6010B
 METALS BY TRACE-ICP

```

=====
Client      : IT CORPORATION           Date Collected: 04/19/00
Contract    : MCAS EL TORO/20242/D.O. 112 Date Received: 04/19/00
Lab No.     : 00D114                 Date Extracted: 04/20/00 15:05
Sample ID   : 20242-1119             Date Analyzed: 04/26/00 11:28
Lab Samp ID : D114-01                Dilution Factor: 1
Lab File ID : I31D058013            Matrix          : WATER
Ext Btch ID : IPD046W                % Moisture      : NA
Calib. Ref. : I31D058008            Instrument ID   : EMAXTI31
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	ND	10	4.21
Thallium	ND	400	3.31

ND: Reporting Limit

METHOD 3010A/6010B
CAM METALS BY ICP

```
=====
Client      : IT CORPORATION           Date Collected: 04/19/00
Project     : MCAS EL TORO/20242/D.O. 112 Date Received: 04/19/00
SDG NO.    : 00D114                  Date Extracted: 04/20/00 15:05
Sample ID: 20242-1120                Date Analyzed: 04/21/00 20:14
Lab Samp ID: 0114-02                 Dilution Factor: 1
Lab File ID: I07D062039              Matrix          : WATER
Ext Btch ID: IPD046W                 % Moisture      : NA
Calib. Ref.: I07D062035              Instrument ID   : EMAXT107
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

METHOD 3010A/6010B
METALS BY TRACE-ICP

=====
Client : IT CORPORATION Date Collected: 04/19/00
Project : MCAS EL TORO/20242/D.O. 112 Date Received: 04/19/00
IO. : 00D114 Date Extracted: 04/20/00 15:05
Sample ID: 20242-1120 Date Analyzed: 04/26/00 11:37
Lab Samp ID: D114-02 Dilution Factor: 1
Lab File ID: I31D058015 Matrix : WATER
Ext Btch ID: IPD046W % Moisture : NA
Calib. Ref.: I31D058008 Instrument ID : EMAXT131
=====

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	37.7	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

METHOD 3010A/6010B
CAM METALS BY ICP

```

=====
Client      : IT CORPORATION           Date Collected: NA
Project     : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00
SDG NO.    : 00D114                  Date Extracted: 04/20/00 15:05
Sample ID   : MBLK1W                  Date Analyzed: 04/21/00 19:18
Lab Samp ID: IPD046WB                 Dilution Factor: 1
Lab File ID: 107D062029               Matrix          : WATER
Ext Btch ID: IPD046W                  % Moisture      : NA
Calib. Ref.: 107D062023               Instrument ID   : EMAXT107
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Antimony	ND	500	39.8
Barium	ND	100	1.41
Beryllium	ND	10	.12
Cadmium	ND	10	2.06
Chromium	ND	50	4.77
Cobalt	ND	50	6.64
Copper	ND	50	6.47
Manganese	ND	20	.64
Molybdenum	ND	100	9.37
Nickel	ND	150	3.93
Silver	ND	50	4.69
Vanadium	ND	100	4.7
Zinc	ND	20	2.47

RL: Reporting Limit

METHOD 3010A/6010B
METALS BY TRACE-ICP

```
=====  
Client      : IT CORPORATION           Date Collected: NA  
Project     : MCAS EL TORO/20242/D.O. 112 Date Received: 04/20/00  
NO.        : 000114                   Date Extracted: 04/20/00 15:05  
Sample ID   : MBLK1W                   Date Analyzed: 04/26/00 11:16  
Lab Samp ID : IPD046WB                   Dilution Factor: 1  
Lab File ID : I31D058010                 Matrix           : WATER  
Ext Btch ID : IPD046W                     % Moisture      : NA  
Calib. Ref. : I31D058008                 Instrument ID    : EMAXTI31  
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	10	4.37
Lead	ND	10	1.42
Selenium	ND	10	4.21
Thallium	ND	400	3.31

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
SDG NO.: 00D114
METHOD: METHOD 3010A/6010B

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1 1
SAMPLE ID: MBLK1W
CONTROL NO.: IPD046WB IPD046WL IPD046WC
LAB FILE ID: I07D062029 I07D062030 I07D062031
DATIME EXTRACTD: 04/20/0015:05 04/20/0015:05 04/20/0015:05 DATE COLLECTED: NA
DATIME ANALYZD: 04/21/0019:18 04/21/0019:23 04/21/0019:29 DATE RECEIVED: 04/20/00
PREP. BATCH: IPD046W IPD046W IPD046W
CALIB. REF: I07D062023 I07D062023 I07D062023

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	5000	5140	103	5000	5140	103	0	80-120	20
Barium	ND	1000	1060	106	1000	1050	105	1	80-120	20
Beryllium	ND	1000	1070	107	1000	1060	106	1	80-120	20
Cadmium	ND	1000	1050	105	1000	1030	103	2	80-120	20
Chromium	ND	1000	1060	106	1000	1040	104	2	80-120	20
Cobalt	ND	1000	1070	107	1000	1040	104	2	80-120	20
Copper	ND	1000	1050	105	1000	1040	104	1	80-120	20
Manganese	ND	1000	1050	105	1000	1030	103	2	80-120	20
Molybdenum	ND	1000	1040	104	1000	1040	104	0	80-120	20
Nickel	ND	1000	1050	105	1000	1030	103	2	80-120	20
Silver	ND	1000	1070	107	1000	1070	107	0	80-120	20
Vanadium	ND	1000	1070	107	1000	1050	105	2	80-120	20
Zinc	ND	1000	1070	107	1000	1040	104	3	80-120	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
 PROJECT: MCAS EL TORO/20242/D.O. 112
 ID.: 00D114
 .OD: METHOD 3010A/6010B

MATRIX: WATER % MOISTURE: NA
 DILTN FACTR: 1 1 1
 SAMPLE ID: MBLK1W
 CONTROL NO.: IPD046WB IPD046WL IPD046WC
 LAB FILE ID: I31D058010 I31D058011 I31D058012
 DATIME EXTRCTD: 04/20/0015:05 04/20/0015:05 04/20/0015:05 DATE COLLECTED: NA
 DATIME ANALYZD: 04/26/0011:16 04/26/0011:20 04/26/0011:24 DATE RECEIVED: 04/20/00
 PREP. BATCH: IPD046W IPD046W IPD046W
 CALIB. REF: I310058008 I310058008 I310058008

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Arsenic	ND	1000	1000	100	1000	973	97	3	80-120	20
Lead	ND	1000	962	96	1000	932	93	3	80-120	20
Selenium	ND	1000	1010	101	1000	981	98	3	80-120	20
Thallium	ND	1000	1030	103	1000	988	99	4	80-120	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
SDG NO.: 00D114
METHOD: METHOD 3010A/6010B

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1 1
SAMPLE ID: 20242-1119
CONTROL NO.: D114-01 D114-01M D114-01S
LAB FILE ID: I07D062038 I07D062032 I07D062033
DATIME EXTRACTD: 04/20/0015:05 04/20/0015:05 04/20/0015:05 DATE COLLECTED: 04/19/00
DATIME ANALYZD: 04/21/0020:09 04/21/0019:35 04/21/0019:40 DATE RECEIVED: 04/19/00
PREP. BATCH: IPD046W IPD046W IPD046W
CALIB. REF: I07D062035 I07D062023 I07D062023

ACCESSION:

PARAMETER	SMPL RSLT ug/L	SPIKE AMT ug/L	MS RSLT ug/L	MS % REC	SPIKE AMT ug/L	MSD RSLT ug/L	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	5000	5060	101	5000	4930	99	3	80-120	20
Barium	ND	1000	1030	103	1000	1020	102	1	80-120	20
Beryllium	ND	1000	1030	103	1000	1020	102	2	80-120	20
Cadmium	ND	1000	1010	101	1000	995	99	1	80-120	20
Chromium	71	1000	1070	100	1000	1060	99	1	80-120	20
Cobalt	ND	1000	1030	103	1000	1020	102	1	80-120	20
Copper	ND	1000	1020	102	1000	1010	101	1	80-120	20
Manganese	ND	1000	1020	102	1000	1000	100	1	80-120	20
Molybdenum	ND	1000	1040	104	1000	1020	102	2	80-120	20
Nickel	ND	1000	1120	112	1000	1110	111	0	80-120	20
Silver	ND	1000	1030	103	1000	1030	103	0	80-120	20
Vanadium	ND	1000	1030	103	1000	1020	102	1	80-120	20
Zinc	ND	1000	1020	102	1000	1010	101	1	80-120	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: IT CORPORATION
 PROJECT: MCAS EL TORO/20242/D.O. 112
 ID.: 00D114
 .OD: METHOD 3010A/6010B

MATRIX: WATER % MOISTURE: NA
 DILTN FACTR: 1 1 1
 SAMPLE ID: 20242-1119
 CONTROL NO.: D114-01 D114-01M D114-01S
 LAB FILE ID: I31D058013 I31D058017 I31D058018
 DATIME EXTRCTD: 04/20/0015:05 04/20/0015:05 04/20/0015:05 DATE COLLECTED: 04/19/00
 DATIME ANALYZD: 04/26/0011:28 04/26/0011:45 04/26/0011:49 DATE RECEIVED: 04/19/00
 PREP. BATCH: IPD046W IPD046W IPD046W
 CALIB. REF: I31D058008 I31D058008 I31D058008

ACCESSION:

PARAMETER	SMPL RSLT ug/L	SPIKE AMT ug/L	MS RSLT ug/L	MS % REC	SPIKE AMT ug/L	MSD RSLT ug/L	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Arsenic	ND	1000	958	96	1000	940	94	2	80-120	20
Lead	ND	1000	908	91	1000	895	89	1	80-120	20
Selenium	ND	1000	962	96	1000	948	95	1	80-120	20
Thallium	ND	1000	964	96	1000	949	95	2	80-120	20

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
SDG NO.: 00D114
METHOD: METHOD 3010A/6010B

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: 20242-1119
CONTROL NO.: D114-01 D114-01A
LAB FILE ID: I07D062038 I07D062034
DATIME EXTRCTD: 04/20/0015:05 04/20/0015:05 DATE COLLECTED: 04/19/00
DATIME ANALYZD: 04/21/0020:09 04/21/0019:46 DATE RECEIVED: 04/19/00
PREP. BATCH: IPD046W IPD046W
CALIB. REF: I07D062035 I07D062023

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Antimony	ND	500	490	98	75-125
Barium	ND	1000	1020	102	75-125
Beryllium	ND	1000	1020	102	75-125
Cadmium	ND	1000	997	100	75-125
Chromium	71	1000	1080	100	75-125
Cobalt	ND	1000	1010	101	75-125
Copper	ND	1000	1010	101	75-125
Manganese	ND	1000	1010	101	75-125
Molybdenum	ND	1000	997	100	75-125
Nickel	ND	1000	1110	111	75-125
Silver	ND	1000	981	98	75-125
Vanadium	ND	1000	1020	102	75-125
Zinc	ND	1000	1020	102	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: IT CORPORATION
 SUBJECT: MCAS EL TORO/20242/D.O. 112
 NO.: 00D114
 HOD: METHOD 3010A/6010B

=====

MATRIX: WATER % MOISTURE: NA
 DILTN FACTR: 1 1
 SAMPLE ID: 20242-1119
 CONTROL NO.: D114-01 D114-01A
 LAB FILE ID: I31D058013 I31D058016
 DATIME EXTRCTD: 04/20/0015:05 04/20/0015:05 DATE COLLECTED: 04/19/00
 DATIME ANALYZD: 04/26/0011:28 04/26/0011:41 DATE RECEIVED: 04/19/00
 PREP. BATCH: IPD046W IPD046W
 CALIB. REF: I31D058008 I31D058008

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Arsenic	ND	500	492	98	75-125
Lead	ND	500	473	95	75-125
Selenium	ND	500	491	98	75-125
Thallium	ND	500	500	100	75-125

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
BATCH NO.: 00D114
METHOD: METHOD 3010A/6010B

=====

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 5
SAMPLE ID: 20242-1119 20242-1119DL
EMAX SAMP ID: D114-01 D114-01T
LAB FILE ID: I07D062038 I07D062037
DATE EXTRACTED: 04/20/0015:05 04/20/0015:05 DATE COLLECTED: 04/19/00
DATE ANALYZED: 04/21/0020:09 04/21/0020:03 DATE RECEIVED: 04/19/00
PREP. BATCH: IPD046W IPD046W
CALIB. REF: I07D062035 I07D062035

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Barium	ND	ND	0	10
Beryllium	ND	ND	0	10
Cadmium	ND	ND	0	10
Chromium	71	ND	NA	10
Cobalt	ND	ND	0	10
Copper	ND	ND	0	10
Manganese	ND	ND	0	10
Molybdenum	ND	ND	0	10
Nickel	ND	ND	0	10
Silver	ND	ND	0	10
Vanadium	ND	ND	0	10
Zinc	ND	ND	0	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
NO.: 00D114
ID: METHOD 3010A/6010B

=====

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 5
SAMPLE ID: 20242-1119 20242-1119DL
EMAX SAMP ID: D114-01 D114-01T
LAB FILE ID: I31D058013 I31D058014
DATE EXTRACTED: 04/20/0015:05 04/20/0015:05 DATE COLLECTED: 04/19/00
DATE ANALYZED: 04/26/0011:28 04/26/0011:33 DATE RECEIVED: 04/19/00
PREP. BATCH: IPD046W IPD046W
CALIB. REF: I31D058008 I31D058008

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Arsenic	ND	ND	0	10
Lead	ND	ND	0	10
Selenium	ND	ND	0	10
Thallium	ND	ND	0	10

METHOD 7470A
MERCURY BY COLD VAPOR

Client : IT CORPORATION
Project : MCAS EL TORO/20242/D.O. 112
Batch No. : 00D114

Matrix : WATER
Instrument ID : T1023

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HGD023WB	ND	1	NA	.2	.179	04/25/0008:52	04/24/0015:00	M00D031008	M00D031006	HGD023W	NA	04/24/00
LCS1W	HGD023WL	4.94	1	NA	.2	.179	04/25/0008:54	04/24/0015:00	M00D031009	M00D031006	HGD023W	NA	04/24/00
LCD1W	HGD023WC	4.81	1	NA	.2	.179	04/25/0008:56	04/24/0015:00	M00D031010	M00D031006	HGD023W	NA	04/24/00
20242-1119	D114-01	ND	1	NA	.2	.179	04/25/0009:16	04/24/0015:00	M00D031021	M00D031018	HGD023W	04/19/00	04/19/00
20242-1120	D114-02	ND	1	NA	.2	.179	04/25/0009:18	04/24/0015:00	M00D031022	M00D031018	HGD023W	04/19/00	04/19/00

RL: Reporting Limit

7026

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: IT CORPORATION
PROJECT: MCAS EL TORO/20242/D.O. 112
SDG NO.: 00D114
METHOD: METHOD 7470A

=====

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: MBLK1W
CONTROL NO.: HGDO23WB HGDO23WL HGDO23WC
LAB FILE ID: M00D031008 M00D031009 M00D031010
DATIME EXTRCTD: 04/24/0015:00 04/24/0015:00 04/24/0015:00 DATE COLLECTED: NA
DATIME ANALYZD: 04/25/0008:52 04/25/0008:54 04/25/0008:56 DATE RECEIVED: 04/24/00
PREP. BATCH: HGDO23W HGDO23W HGDO23W
CALIB. REF: M00D031006 M00D031006 M00D031006

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	5	4.94	99	5	4.81	96	3	77-120	15

7027

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: April 19, 2000
LDC Report Date: May 31, 2000
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Extractables
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.
Sample Delivery Group (SDG): 00D114

Sample Identification

20242-1119
20242-1120

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. A cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

**MCAS El Toro
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG
00D114**

No Sample Data Qualified in this SDG

**MCAS El Toro
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification
Summary - SDG 00D114**

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: April 19, 2000
LDC Report Date: May 31, 2000
Matrix: Water
Parameters: Total Petroleum Hydrocarbons as Gasoline
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 00D114

Sample Identification

20242-1119
20242-1120
20242-1119MS
20242-1119MSD

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

**MCAS El Toro
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - 00D114**

No Sample Data Qualified in this SDG

**MCAS El Toro
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 00D114**

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: April 19, 2000
LDC Report Date: May 31, 2000
Matrix: Water
Parameters: Volatiles
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 00D114

Sample Identification

20242-1119
20242-1120

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

Average relative response factors (RRF) for all semivolatile target compounds and system monitoring compounds were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/21/00	2-Chloroethylvinyl ether	103.6	All samples in SDG 00D114	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

MCAS EI Toro
Volatiles - Data Qualification Summary - SDG 00D114

SDG	Sample	Compound	Flag	A or P	Reason
00D114	20242-1119 20242-1120	2-Chloroethylvinyl ether	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

MCAS EI Toro
Volatiles - Laboratory Blank Data Qualification Summary - SDG 00D114

No Sample Data Qualified in this SDG

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: MCAS El Toro
Collection Date: April 19, 2000
LDC Report Date: May 30, 2000
Matrix: Water
Parameters: Metals
Validation Level: NFESC Level C
Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 00D114

Sample Identification

20242-1119
20242-1120
20242-1119MS
20242-1119MSD

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010 and 7000 for Metals. The metals analyzed were Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UU Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found above the reporting limit in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Arsenic Barium Beryllium Manganese	4.70 ug/L 2.10 ug/L 1.69 ug/L 1.78 ug/L	All samples in SDG 00D114

Sample concentrations were compared to the maximum contaminant concentrations detected in the ICB/CCB/PBs. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Internal Standards (ICP-MS)

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

Although ICP serial dilution analysis was not required by the method, it was performed by the laboratory. The analysis criteria were met.

XI. Sample Result Verification

Raw data were not reviewed for this SDG.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

**MCAS EI Toro
Metals - Data Qualification Summary - SDG 00D114**

No Sample Data Qualified in this SDG

**MCAS EI Toro
Metals - Laboratory Blank Data Qualification Summary - SDG 00D114**

No Sample Data Qualified in this SDG

D-2 SOIL VAPOR DATA

5228A51

Client: IT Corporation
Attn: Dwayne Ishida

Client's Project: AA3 - Piezometer, MCAS El Toro, CA, # 20242
Date Received: 07/25/2000
Matrix: Air
Units: % v/v

ASTM D1946 Fixed Gases

Lab No.:	A0072502-001	A0072502-002	A0072502-003	A0072502-004							
Client Sample I.D.:	20242-1134	20242-1135	20242-1136	20242-1137							
Date Sampled:	07/24/2000	07/24/2000	07/24/2000	07/24/2000							
Date Analyzed:	07/25/2000	07/25/2000	07/25/2000	07/25/2000							
Analyst Initials:	DT	DT	DT	DT							
Data File:	25jul024	25jul025	25jul026	25jul027							
QC Batch:	000725GC8A1	000725GC8A1	000725GC8A1	000725GC8A1							
Dilution Factor:	1.0	1.0	1.0	1.0							
ANALYTE	MDL	DLR	Results	DLR	Results	DLR	Results	DLR	Results		
Oxygen/Argon	0.50	0.50	18	0.50	21	0.50	19	0.50	19		
Nitrogen	1.0	1.0	78	1.0	77	1.0	77	1.0	78		
Methane	0.0010	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND		
Carbon Dioxide	0.010	0.010	2.6	0.010	0.040	0.010	1.6	0.010	1.5		

MDL = Method Detection Limit
ND = Not Detected (Below DLR).
DLR = MDL X Dilution Factor

Reviewed/Approved By: Mark Johnson
Mark J. Johnson
Air Toxics Operations Manager

Date: 8-1-00

The cover letter is an integral part of this analytical report.



QC Batch No.: 000725GC8A1

Matrix: Air

Units: % v/v

QC for ASTM D1946 Fixed Gases

Lab No.:	Method Blank	LCS	LCSD						
Date Analyzed:	07/25/00	07/25/00	07/25/00						
Analyst Initials:	DT	DT	DT						
Datafile:	25jul22	25jul020	25jul021						
Dilution Factor:	1.0	1.0	1.0						
ANALYTE	MDL	DLR	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Oxygen/Argon	0.50	0.50	ND	99	70-130%	99	70-130%	0.2	<30
Nitrogen	1.0	1.0	ND	99	70-130%	99	70-130%	0.1	<30
Methane	0.0010	0.0010	ND	94	70-130%	94	70-130%	0.2	<30
Carbon Dioxide	0.010	0.010	ND	94	70-130%	94	70-130%	0.0	<30

MDL = Method Detection Limit

ND = Not Detected (Below DLR).

DLR = MDL X Dilution Factor

Reviewed/Approved By:



Mark J. Johnson
Air Toxics Operations Manager

Date:

8-1-00

The cover letter is an integral part of this analytical report.



Advanced Technology
Laboratories

18501 E. Gale Avenue Suite 130 City of Industry, CA 91748 Tel: 626 964-4032 Fax: 626 964-5832

QC Batch No.: 000725GC8A1
 Matrix: Air
 Units: % v/v

QC for ASTM D1946 Fixed Gases

Lab No.:	Method Blank	LCS	LCSD						
Date Analyzed:	07/25/00	07/25/00	07/25/00						
Analyst Initials:	DT	DT	DT						
Datafile:	25jul22	25jul020	25jul021						
Dilution Factor:	1.0	1.0	1.0						
ANALYTE	MDL	DLR	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Oxygen/Argon	0.50	0.50	ND	99	70-130%	99	85-115%	0.2	<10
Nitrogen	1.0	1.0	ND	99	70-130%	99	85-115%	0.1	<10
Methane	0.0010	0.0010	ND	94	70-130%	94	85-115%	0.2	<10
Carbon Dioxide	0.010	0.010	ND	94	70-130%	94	85-115%	0.0	<10

MDL = Method Detection Limit
 ND = Not Detected (Below DLR).
 DLR = MDL X Dilution Factor

Reviewed/Approved By:



Mark J. Johnson
 Air Toxics Operations Manager

Date: 8-22-00

The cover letter is an integral part of this analytical report.



Client: IT Corporation
 Attu: Dwayne Ishida

Page 1 of 2

Client's Project: AIA3-Piezometer, 20242, DO 112
 Date Received: 07/25/00
 Matrix: Air
 Units: ng/L
 Date Analyzed: 11/07/00

EPA Method TO14									
Lab No:	A0072502-01	A0072502-02	A0072502-03	A0072502-04					
Client Sample I.D.:	20242-1134	20242-1135	20242-1136	20242-1137					
Date Sampled:	07/24/00	07/24/00	07/24/00	07/24/00					
Date Analyzed:	07/26/00	07/26/00	07/26/00	07/26/00					
QC Batch No:	000726MS2A1	000726MS2A1	000726MS2A1	000726MS2A1					
Analyst Initials:	SC	SC	SC	SC					
Dilution Factor:	5.0	1.0	1.0	1.0					
ANALYTE	MDL	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane (12)	0.010	ND	0.049	ND	0.010	ND	0.010	0.29	0.010
Chloromethane	0.0082	0.49	0.041	ND	0.0082	0.19	0.0082	0.50	0.0082
1,2-CI-1,1,2,2-F ethane (114)	0.014	ND	0.070	ND	0.014	ND	0.014	ND	0.014
Vinyl Chloride	0.0051	ND	0.026	ND	0.0051	ND	0.0051	0.0056	0.0051
Bromomethane	0.0078	ND	0.039	ND	0.0078	ND	0.0078	ND	0.0078
Chloroethane	0.011	ND	0.053	ND	0.011	ND	0.011	ND	0.011
Trichlorofluoromethane	0.011	ND	0.056	ND	0.011	ND	0.011	ND	0.011
1,1-Dichloroethane	0.0079	ND	0.040	ND	0.0079	ND	0.0079	ND	0.0079
Carbon Disulfide	0.031	ND	0.16	ND	0.031	0.037	0.031	0.073	0.031
1,1,2-CI 1,2,2-F ethane (113)	0.015	ND	0.076	ND	0.015	ND	0.015	ND	0.015
Acetone	0.024	ND	0.12	0.049	0.024	0.053	0.024	0.051	0.024
Methylene Chloride	0.0069	ND	0.035	ND	0.0069	ND	0.0069	ND	0.0069
1,2-Dichloroethane	0.0079	ND	0.040	ND	0.0079	ND	0.0079	ND	0.0079
1,1-Dichloroethane	0.0081	ND	0.040	ND	0.0081	ND	0.0081	0.011	0.0081
Vinyl Acetate	0.035	ND	0.18	ND	0.035	ND	0.035	ND	0.035
1,2-Dichloroethane	0.0079	ND	0.040	ND	0.0079	ND	0.0079	ND	0.0079
2-Butanone	0.029	ND	0.15	ND	0.029	ND	0.029	ND	0.029
t-Butyl Methyl Ether	0.036	ND	0.18	ND	0.036	ND	0.036	ND	0.036
Chloroform	0.010	ND	0.049	0.010	0.010	0.012	0.010	0.010	0.010
1,1,1-Trichloroethane	0.011	ND	0.054	ND	0.011	ND	0.011	ND	0.011
Carbon Tetrachloride	0.013	ND	0.063	ND	0.013	ND	0.013	ND	0.013
Benzene	0.0064	ND	0.032	ND	0.0064	ND	0.0064	0.013	0.0064
1,2-Dichloroethane	0.0081	ND	0.040	ND	0.0081	ND	0.0081	ND	0.0081
Trichloroethane	0.011	ND	0.054	ND	0.011	ND	0.011	ND	0.011
1,2-Dichloropropane	0.0092	ND	0.046	ND	0.0092	ND	0.0092	ND	0.0092
Bromodichloromethane	0.013	ND	0.067	ND	0.013	ND	0.013	ND	0.013
1,3-Dichloropropane	0.0091	ND	0.045	ND	0.0091	ND	0.0091	ND	0.0091
4-Methyl-2-Pentanone	0.041	ND	0.20	ND	0.041	ND	0.041	ND	0.041
Toluene	0.008	0.42	0.038	0.012	0.0075	0.17	0.0075	0.38	0.0075
1,3-Dichloropropane	0.009	ND	0.045	ND	0.0091	ND	0.0091	ND	0.0091
1,1,2-Trichloroethane	0.011	ND	0.054	ND	0.011	ND	0.011	ND	0.011
Tetrachloroethene	0.014	ND	0.068	ND	0.014	ND	0.014	ND	0.014
2-Hexanone	0.12	ND	0.61	ND	0.12	ND	0.12	ND	0.12
Dibromochloromethane	0.017	ND	0.085	ND	0.017	ND	0.017	ND	0.017
1,2-Dibromoethane	0.015	ND	0.077	ND	0.015	ND	0.015	ND	0.015
Chlorobenzene	0.0092	ND	0.046	ND	0.0092	ND	0.0092	ND	0.0092
Ethylbenzene	0.0087	ND	0.043	ND	0.0087	ND	0.0087	0.010	0.0087
p,m-Xylene	0.0087	0.05	0.043	ND	0.0087	0.024	0.0087	0.033	0.0087
o-Xylene	0.0087	ND	0.043	ND	0.0087	ND	0.0087	0.012	0.0087
Styrene	0.0085	ND	0.043	ND	0.0085	ND	0.0085	ND	0.0085



Client: IT Corporation
 Attn: Dwayne Ishida

Client's Project: AIA3-Piezometer, 20242, DO 112
 Date Received: 07/25/00
 Matrix: Air
 Units: ug/L
 Date Amended: 11/07/00

EPA Method TO14										
Lab No:	A0072502-01		A0072502-02		A0072502-03		A0072502-04			
Client Sample I.D.:	20242-1134		20242-1135		20242-1136		20242-1137			
Date Sampled:	07/24/00		07/24/00		07/24/00		07/24/00			
Date Analyzed:	07/26/00		07/26/00		07/26/00		07/26/00			
QC Batch No:	000726MS2A1		000726MS2A1		000726MS2A1		000726MS2A1			
Analyst Initials:	SC		SC		SC		SC			
Dilution Factor:	5.0		1.0		1.0		1.0			
ANALYTE	MDL	Result	RL	Result	RL	Result	RL	Result	RL	
Bromoform	0.021	ND	0.10	ND	0.021	ND	0.021	ND	0.021	
1,1,2,2-Tetrachloroethane	0.010	ND	0.052	ND	0.010	ND	0.010	ND	0.010	
Benzyl Chloride	0.052	ND	0.26	ND	0.052	ND	0.052	ND	0.052	
4-Ethyl Toluene	0.010	ND	0.049	ND	0.010	ND	0.010	0.011	0.010	
1,3,5-Trimethylbenzene	0.010	ND	0.049	ND	0.010	ND	0.010	ND	0.010	
1,2,4-Trimethylbenzene	0.010	ND	0.049	ND	0.010	0.012	0.010	0.012	0.010	
1,3-Dichlorobenzene	0.012	ND	0.060	ND	0.012	ND	0.012	ND	0.012	
1,4-Dichlorobenzene	0.012	ND	0.060	ND	0.012	ND	0.012	ND	0.012	
1,2-Dichlorobenzene	0.012	ND	0.060	ND	0.012	ND	0.012	ND	0.012	
1,2,4-Trichlorobenzene	0.15	ND	0.74	ND	0.15	ND	0.15	ND	0.15	
Hexachlorobutadiene	0.043	ND	0.21	ND	0.043	ND	0.043	ND	0.043	

MDL = Method Detection Limit
 ND = Not Detected (below RL)
 RL = MDL X Dilution Factor

Reviewed/Approved By: Mark Johnson
 Mark Johnson
 Air Toxics Operations Manager

Date 11-7-00

The cover letter is an integral part of this analytical report



Client: IT Corporation
Attn: Dwayne Ishida

Page 1 of 2

Client's Project: AIA3-Piezometer, 20242, DO 112
Date Received: 07/25/00
Matrix: Air
Units: ug/L
Date Amended: 11/07/00

EPA Method TO14

Lab No:	Method Blank								
Client Sample I.D.:	--								
Date Sampled:	--								
Date Analyzed:	07/26/00								
QC Batch No:	000726MS2A1								
Analyst Initials:	SC								
Dilution Factor:	1.0								
ANALYTE	MDL	Result	RL						
Dichlorodifluoromethane (12)	0.010	ND	0.010						
Chloromethane	0.0082	ND	0.0082						
1,2-CI-1,1,2,2-F ethane (114)	0.014	ND	0.014						
Vinyl Chloride	0.0051	ND	0.0051						
Bromomethane	0.0078	ND	0.0078						
Chloroethane	0.011	ND	0.011						
Trichlorofluoromethane	0.011	ND	0.011						
1,1-Dichloroethene	0.0079	ND	0.0079						
Carbon Disulfide	0.031	ND	0.031						
1,1,2-CI 1,2,2-F ethane (113)	0.015	ND	0.015						
Acetone	0.024	ND	0.024						
Methylene Chloride	0.0069	ND	0.0069						
1,2-Dichloroethene	0.0079	ND	0.0079						
1,1-Dichloroethane	0.0081	ND	0.0081						
Vinyl Acetate	0.035	ND	0.035						
c-1,2-Dichloroethene	0.0079	ND	0.0079						
2-Butanone	0.029	ND	0.029						
t-Butyl Methyl Ether	0.036	ND	0.036						
Chloroform	0.010	ND	0.010						
1,1,1-Trichloroethane	0.011	ND	0.011						
Carbon Tetrachloride	0.013	ND	0.013						
Benzene	0.0064	ND	0.0064						
1,2-Dichloroethane	0.0081	ND	0.0081						
Trichloroethene	0.011	ND	0.011						
1,2-Dichloropropane	0.0092	ND	0.0092						
Bromodichloromethane	0.013	ND	0.013						
c-1,3-Dichloropropene	0.0091	ND	0.0091						
4-Methyl-2-Pentanone	0.041	ND	0.0409						
Toluene	0.008	ND	0.0075						
1,1,3-Dichloropropene	0.009	ND	0.0091						
1,1,2-Trichloroethane	0.011	ND	0.011						
Tetrachloroethene	0.014	ND	0.014						
2-Hexanone	0.12	ND	0.12						
Dibromochloromethane	0.017	ND	0.017						
1,2-Dibromoethane	0.015	ND	0.015						
Chlorobenzene	0.0092	ND	0.0092						
Ethylbenzene	0.0087	ND	0.0087						
p-&m-Xylenes	0.0087	ND	0.0087						
o-Xylene	0.0087	ND	0.0087						
Styrene	0.0085	ND	0.0085						

