5090
Ser 09ER5SD/L5145
01 Feb 95

Ms. Susan Gladstone
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Subject: **Moffett Federal Airfield (MFA) Site 9 Source Control Measure (SCM) Self-Monitoring Report for October 17, 1994 to November 6, 1994**

Dear Ms. Gladstone:

The U.S. Navy is submitting this self-monitoring report for the three Site 9 source control measures at MFA. This self-monitoring report covers operations from October 17, 1994, to November 6, 1994. This report contains, in attachments, information on flow volumes, process stream pH and temperature, documentation of any leakage or overflow, system maintenance, discharge limit exceedences, and all sample analytical results.

The Building 6 and Building 12 treatment systems ran continuously during this reporting period. The Building 45 treatment system ran only briefly and was not sampled due to transfer pump malfunctions. Discharge limits for organic constituents were met by both systems for all 3 weeks of operation. During the week of October 17, the Building 6 system exceeded the discharge limits for copper, lead, selenium, and zinc and the Building 12 system slightly exceeded the discharge limit for zinc. During the week of October 24, all inorganic discharge limits were met with the exception of zinc at Building 6, which was detected at 5.2 micrograms per liter (μg/L), 0.2 μg/L above the discharge limit. During the week of October 31, copper, selenium, and zinc were detected above discharge limits in the Building 6 effluent and all inorganic discharge limits were met at Building 12. Details of all discharge limit exceedences are included as an attachment. The weekly fish toxicity tests showed the treatment systems effluent to be nontoxic to the three-spined stickleback. Also, there appears to be no direct correlation between the inorganic levels in the system effluent streams and levels measured at the NASA settling basin.

The constituents that exceeded discharge limits during these first 3 weeks of operation are all naturally occurring in MFA groundwater. These constituents will continue to be monitored to evaluate if the fluctuating effluent concentrations are due to changing natural levels or possible introduction from the systems.

SUBJ: MOFFETT FEDERAL AIRFIELD (MFA) SITE 9 SOURCE CONTROL MEASURE (SCM) SELF-MONITORING REPORT FOR OCTOBER 17, 1994 TO NOVEMBER 6, 1994

I certify that the information contained in this document and all attachments is, to the best of my knowledge, accurate and complete. Please call me at 415-244-2563 or Mark Kadnuck at 303-295-1101 if you have any questions or comments.

Sincerely,

Original signed by:

Stephen Chao
BRAC Environmental Coordinator.

Encl:
Self- Monitoring Report for October 17, 1994 to November 6, 1994

Blind copy to :
09ER5, 09ER5ST, 09ER5DC
Mark Kadnuck (PRC)
Admin. record
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File:SM101794.doc/30 Jan 95

N00296.002164
MOFFETT FIELD
SSIC NO. 5090.3

MOFFETT FEDERAL AIRFIELD SITE 9 SOURCE CONTROL MEASURES SELF-MONITORING REPORT FOR OCTOBER 17, 1994 TO NOVEMBER 6, 1994

THE ABOVE IDENTIFIED REPORT IS INCOMPLETE. IT COULD NOT BE DETERMINED WHETHER PAGES ARE MISSING OR THE DOCUMENT WAS ISSUED WITHOUT THESE PAGES.

QUESTIONS MAY BE DIRECTED TO:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

MOFFETT FEDERAL AIRFIELD
SITE 9 SOURCE CONTROL MEASURES
SELF-MONITORING REPORT

Reporting Period: Oct. 17, 1994 - Oct. 23, 1994

System Data*	Bldg 45 System	Bldg 12 System	Bldg 6 System
Total Flow for Period (gal)	NA	16800	32800
Influent pH	NA	7.14	7.31
Effluent pH	NA	7.66	7.83
Influent Temperature (C)	NA	20.5	20.9
Effluent Temperature (C)	NA	19.4	20.5

* Analytical data is attached

Leakage or Overflow Documentation (include date, time, duration, location, and volume)
None

Treatment System Maintenance for Period
Building 45: System down. Replace system air relief valve, set up transfer pump repairs.
Building 12: Replace system air relief valve, change out dirty bag filter.
Building 6: Replace system air relief valve.

MOFFETT FEDERAL AIRFIELD
SITE 9 SOURCE CONTROL MEASURES
SELF-MONITORING REPORT

Reporting Period: Oct. 17, 1994 - Oct. 23, 1994

TREATMENT SYSTEM
DISCHARGE LIMIT EXCEEDENCE SUMMARY

Sample ID	Analyte	Concentration (ug/L)	Discharge Limit (ug/L)
TS-S9-SP4-06	Cu (tot)	115	11.8
TS-S9-SP4-06	Pb (tot)	6.6	3.2
TS-S9-SP4-06	Se (tot)	5.9	5
TS-S9-SP4-06	Zn (tot)	338	110
TS-S9-SP4-06	Se (diss)	6.3	5
TS-S9-SP4-12	Zn (tot)	127	110

SAMPLE ID DESCRIPTION

BUILDING 6:
TS-S9-SP1-06 -- System Influent
TS-S9-SP3-06 -- GAC Bed 1 Effluent
TS-S9-SP4-06 -- System Effluent

BUILDING 12:
TS-S9-SP1-12 -- System Influent
TS-S9-SP3-12 -- GAC Bed 1 Effluent
TS-S9-SP4-12 -- System Effluent

BUILDING 45:
TS-S9-SP1-45 -- W61-1 System Influent
TS-S9-SP2-45 -- FP9-1 System Influent
TS-S9-SP3-45 -- Air Stripper Effluent
TS-S9-SP5-45 -- GAC Bed 1 Effluent
TS-S9-SP6-45 -- System Effluent

NASA SETTLING BASIN:
RW-S9-NSB-01 -- Settling Basin Effluent

CERTIFICATION

I certify that the information contained in this document is, to the best of my knowledge, accurate and complete.

Mark A. Kadnuck

Mark A. Kadnuck, P.E.
Project Engineer

COLORADO REGISTERED
MARK A. KADNUCK
29842
02-09-95
PROFESSIONAL ENGINEER

week of 10-11

Inchcape Testing Services
Anametrix Laboratories

1981 Concourse Drive
Suite E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8188

FACSIMILE TRANSMITTAL COVER SHEET

TO: DATE: 10-27-94

Name: Jean Barrancd

Company: PRC

Fax #: (303) 295 - ~~4881~~

FROM:

Name: SU PATEL

9410171
SDG #: SP112.

Total Number of Pages (INCLUDING COVER): _____
If all pages are not received, please notify sender at (408) 432-8192.

DID YOU KNOW THAT:

INCHCAPE TESTING SERVICES ENVIRONMENTAL LABORATORIES is a group of six laboratories in the United States and one in the United Kingdom.

COMMENTS: Moffet : site 9 Prelim Results
8010 : 1 — 6 faxed
TPHg : 1 - 6 ↓
TPHd : 1 - 6 ↓
Metals : 1, 3, 4, 6, 7 ✓ 10/27/94

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ITS Aquatec Laboratories, MA (508)990-3400
ITS West-Paine Laboratories, LA (504)769-4900
ITS Environmental Laboratories, St. Helens, UK (44) 0744-611553

CVR.doc/94

Prelim. results

INORGANICS QA/QC SUMMARY

CTO #: RSC9C SDG #: SP112

- The serial dilution result for potassium was outside control limits for sample SP112, possibly due to high level of interfering analytes. Consequently, all sample results were flagged with "E" flags for this element.

- In order to distinguish results between total and dissolved metals, a suffix "1" was added to the sample ID for total metals, and a suffix "2" was added to the sample ID for dissolved metals.

- The percent recoveries for thallium in the initial and final CRI solution analyzed on 10/26/94 was outside the 75-125 % control limit set by PRC SOW, possibly due to the low CRDL value required compared to the high IDL value obtained. The solutions were re-analyzed once, and the results were reported.

Manny Nguyen 10/27/94
Manny Nguyen Date
Inorganic Manager

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

NSB011

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP112

Matrix (soil/water): WATER Lab Sample ID: 10171-07T

Level (low/med): LOW Date Received: 10/18/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	104			P
7440-36-0	Antimony	1.7	B		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	35.7	B		P
7440-41-7	Beryllium	0.38	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	92000			P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	12.5	B		P
7439-89-6	Iron	127			P
7439-92-1	Lead	3.9			P
7439-95-4	Magnesium	37800			P
7439-96-5	Manganese	19.2			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	5.0			P
7440-02-0	Nickel	3.6	B		P
7440-09-7	Potassium	3340	B	E	P
7782-49-2	Selenium	4.5	B		P
7440-22-4	Silver	0.40	B		P
7440-23-5	Sodium	51900			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	2.5	B		P
7440-66-6	Zinc	74.5			P

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Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

Prelim. results

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP1061

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP112

Matrix (soil/water): WATER Lab Sample ID: 10171-04T

Level (low/med): LOW Date Received: 10/19/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	329			P
7440-36-0	Antimony	1.4	B		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	28.7	B		P
7440-41-7	Beryllium	0.42	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	187000			P
7440-47-3	Chromium	1.5	B		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	13.2	B		P
7439-89-6	Iron	596			P
7439-92-1	Lead	6.8			P
7439-95-4	Magnesium	63500			P
7439-96-5	Manganese	92.8			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	1.3	B		P
7440-02-0	Nickel	7.8	B		P
7440-09-7	Potassium	1720	B	E	P
7782-49-2	Selenium	8.0			P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	42800			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	2.4	B		P
7440-66-6	Zinc	74.7			P

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Comments:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP1062

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP112

Matrix (soil/water): WATER Lab Sample ID: 10171-04D

Level (low/med): LOW Date Received: 10/19/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20.6	B		P
7440-36-0	Antimony	4.4	B		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	29.0	B		P
7440-41-7	Beryllium	0.43	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	182000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	7.6	B		P
7439-89-6	Iron	10.1	U		P
7439-92-1	Lead	2.0	B		P
7439-95-4	Magnesium	62600			P
7439-96-5	Manganese	54.8			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	1.5	B		P
7440-02-0	Nickel	1.4	U		P
7440-09-7	Potassium	1630	B	E	P
7782-49-2	Selenium	7.0			P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	42700			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	1.5	B		P
7440-66-6	Zinc	27.1			P

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Comments:

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP1121

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP112

Matrix (soil/water): WATER Lab Sample ID: 10171-01T

Level (low/med): LOW Date Received: 10/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	32.3	B		P
7440-36-0	Antimony	1.2	B		P
7440-38-2	Arsenic	5.1	B		P
7440-39-3	Barium	351			P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	164000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	0.30	U		P
7439-89-6	Iron	2550			P
7439-92-1	Lead	1.1	B		P
7439-95-4	Magnesium	65800			P
7439-96-5	Manganese	488			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	4.8	B		P
7440-02-0	Nickel	1.6	B		P
7440-09-7	Potassium	2470	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	63500			P
7440-28-0	Thallium	2.7			P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	47.9			P

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Comments:

Porum. results

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP1122

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP112

Matrix (soil/water): WATER Lab Sample ID: 10171-01D

Level (low/med): LOW Date Received: 10/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26.5	B		P
7440-36-0	Antimony	3.7	B		P
7440-38-2	Arsenic	5.8	B		P
7440-39-3	Barium	345			P
7440-41-7	Beryllium	0.46	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	161000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	0.30	U		P
7439-89-6	Iron	2300			P
7439-92-1	Lead	1.0	B		P
7439-95-4	Magnesium	65400			P
7439-96-5	Manganese	488			P
7439-97-6	Mercury	0.10	U	E	CV
7439-98-7	Molybdenum	0.77	B		P
7440-02-0	Nickel	1.4	U		P
7440-09-7	Potassium	2460	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	63000			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	30.9			P

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ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP4061

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP112

Matrix (soil/water): WATER Lab Sample ID: 10171-06T

Level (low/med): LOW Date Received: 10/19/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	42.2	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	59.1	B		P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	188000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	8.8	B		P
7440-50-8	Copper	115			P
7439-89-6	Iron	443			P
7439-92-1	Lead	6.6			P
7439-95-4	Magnesium	63600			P
7439-96-5	Manganese	75.3			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	0.70	U		P
7440-02-0	Nickel	32.8	B		P
7440-09-7	Potassium	1590	B	E	P
7782-49-2	Selenium	5.9			P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	42900			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	338			P

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ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP4062

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP112

Matrix (soil/water): WATER Lab Sample ID: 10171-06D

Level (low/med): LOW Date Received: 10/19/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19.5	B		P
7440-36-0	Antimony	3.0	B		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	57.6	B		P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	185000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	8.4	B		P
7440-50-8	Copper	0.30	U		P
7439-89-6	Iron	348			P
7439-92-1	Lead	0.61	B		P
7439-95-4	Magnesium	63500			P
7439-96-5	Manganese	74.5			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	0.70	U		P
7440-02-0	Nickel	31.3	B		P
7440-09-7	Potassium	1620	B	E	P
7782-49-2	Selenium	6.3			P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	42800			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	54.6			P

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Comments:

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP4121

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP112

Matrix (soil/water): WATER Lab Sample ID: 10171-03T

Level (low/med): LOW Date Received: 10/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	59.8			P
7440-36-0	Antimony	1.8	B		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	262			P
7440-41-7	Beryllium	0.53	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	157000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	5.8	B		P
7440-50-8	Copper	6.2	B		P
7439-89-6	Iron	237			P
7439-92-1	Lead	0.90	B		P
7439-95-4	Magnesium	68400			P
7439-96-5	Manganese	479			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	0.70	U		P
7440-02-0	Nickel	18.6	B		P
7440-09-7	Potassium	3650	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.50	B		P
7440-23-5	Sodium	66700			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	127			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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Comments:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP4122

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP112

Matrix (soil/water): WATER Lab Sample ID: 10171-03D

Level (low/med): LOW Date Received: 10/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	45.4	B		P
7440-36-0	Antimony	5.8	B		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	254			P
7440-41-7	Beryllium	0.47	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	149000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	5.2	B		P
7440-50-8	Copper	2.1	B		P
7439-89-6	Iron	46.1	B		P
7439-92-1	Lead	1.0	B		P
7439-95-4	Magnesium	66300			P
7439-96-5	Manganese	351			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	0.93	B		P
7440-02-0	Nickel	19.2	B		P
7440-09-7	Potassium	2660	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	64700			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	62.9			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN (ILM02.1)

ITS-ANAMETRIX LABORATORIES
1961 Concourse Drive, San Jose, CA 95131, (408) 432-8182 FX (408) 432-8188

TOTAL FUEL HYDROCARBON REPORT

TPH as Diesel / Motor Oil

Preliminary Results

Workorder # 9410171 Client PRC

Date Extracted 10/21/94 Project # RSC9C

Matrix WATER / SOIL Instrument ID # HP9 / HP19 / HP23

ANAMETRIX ID #	CLIENT ID #	DATE ANALYZED	REPORTING LIMIT	AMOUNT FOUND ppb / ppm Diesel method		% SURROGATE RECOVERY
-1	SP112	10/22/94	100	670	ND	106 %
-2	SP312	"	100	ND	410	105 %
-3	SP412	"	100	ND	ND	93 %
-4	SP106	"	100	ND	"J" 94	96 %
-5	SP306	"	100	ND	ND	102 %
-6	SP406	"	100	ND	ND	99 %
B021116G	Method Blank	10/22/94	100 tpv 10/27	ND	ND	111 %

Date: 10/27/94 Date:

Analyst: APP. Reviewer:

METHODS PERFORMED ARE THOSE SPECIFIED BY TRIREGIONAL GUIDELINES.

Prelim Results

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD TPHg
ANAMETRIX, INC. (408)432-8192

Project ID	: RSC9C	Anametrix ID	: 9410171-04
Sample ID	: SP106	Lab File ID	: FP017104
Matrix	: WATER	% Moisture	: 100.
Date Sampled	:10/19/94		
Date Analyzed	:10/21/94	Dilution Factor	: 1.0
Instrument ID	: HP8	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
3333-33-3	Gasoline	50.	660.	Z

GC/TPH - PAGE

3

Prelim Results

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD TPHg
ANAMETRIX, INC. (408)432-8192

Project ID	: RSC9C	Anametrix ID	: 9410171-01
Sample ID	: SP112	Lab File ID	: FP017101
Matrix	: WATER	% Moisture	: 100.
Date Sampled	:10/20/94		
Date Analyzed	:10/21/94	Dilution Factor	: 50.0
Instrument ID	: HP8	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
3333-33-3	Gasoline	2500.	14000.	

GC/TPH - PAGE

4

Prelim Results

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD TPHg
ANAMETRIX, INC. (408)432-8192

Project ID	: RSC9C	Anametrix ID	: 9410171-05
Sample ID	: SP306	Lab File ID	: FP017105
Matrix	: WATER	% Moisture	: 100.
Date Sampled	:10/19/94		
Date Analyzed	:10/21/94	Dilution Factor	: 1.0
Instrument ID	: HP8	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
3333-33-3	Gasoline	50.	ND	U

GC/TPH - PAGE

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Prelim Result

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD TPHg
ANAMETRIX, INC. (408)432-8192

Project ID : RSC9C
Sample ID : SP312
Matrix : WATER
Date Sampled :10/20/94
Date Analyzed :10/21/94
Instrument ID : HP8

Anametrix ID : 9410171-02
Lab File ID : FP017102
% Moisture : 100.

Dilution Factor : 1.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
3333-33-3	Gasoline	50.	ND	U

GC/TPH - PAGE

Prelim Results

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD TPHg
ANAMETRIX, INC. (408)432-8192

Project ID	: RSC9C	Anametrix ID	: 9410171-06
Sample ID	: SP406	Lab File ID	: FP017106
Matrix	: WATER	% Moisture	: 100.
Date Sampled	:10/19/94		
Date Analyzed	:10/21/94	Dilution Factor	: 1.0
Instrument ID	: HP8	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
3333-33-3	Gasoline	50.	ND	U

GC/TPH - PAGE

Prelim Results

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD TPHg
ANAMETRIX, INC. (408)432-8192

Project ID	: RSC9C	Anametrix ID	: 9410171-03
Sample ID	: SP412	Lab File ID	: FP017103
Matrix	: WATER	% Moisture	: 100.
Date Sampled	:10/20/94		
Date Analyzed	:10/21/94	Dilution Factor	: 1.0
Instrument ID	: HP8	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
3333-33-3	Gasoline	50.	ND	U

GC/TPH - PAGE

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Prelim. Results

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP112

Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP112

Matrix: (soil/water) WATER Lab Sample ID: 9410171-01

Sample wt/vol: .250 (g/mL) ML Lab File ID: HP017101

Level: (low/med) LOW Date Received: 10/20/94

% Moisture: not dec._____ Date Analyzed: 10/24/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 20.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	10.	U
74-87-3	Chloromethane	10.	U
75-01-4	Vinyl chloride	43.	
74-83-9	Bromomethane	10.	U
75-00-3	Chloroethane	6.	J
75-69-4	Trichlorofluoromethane	10.	U
76-13-1	Trichlorotrifluoroethane	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-09-2	Methylene chloride	10.	U
156-60-5	trans-1,2-Dichloroethene	18.	
75-34-3	1,1-Dichloroethane	15.	
156-59-2	cis-1,2-Dichloroethene	100.	
67-66-3	Chloroform	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon tetrachloride	10.	U
107-06-2	1,2-Dichloroethane	10.	U
79-01-6	Trichloroethene	10.	U
78-87-5	1,2-Dichloropropane	10.	U
75-27-4	Bromodichloromethane	10.	U
110-75-8	2-Chloroethylvinylether	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
127-18-4	Tetrachloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
108-90-7	Chlorobenzene	10.	U
75-25-2	Bromoform	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U

Prelim. Results

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP312

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP112

Matrix: (soil/water) WATER Lab Sample ID: 9410171-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HP017102

Level: (low/med) LOW Date Received: 10/20/94

% Moisture: not dec._____ Date Analyzed: 10/24/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

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Prelim. Results.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP412

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP112

Matrix: (soil/water) WATER Lab Sample ID: 9410171-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HP017103

Level: (low/med) LOW Date Received: 10/20/94

% Moisture: not dec._____ Date Analyzed: 10/24/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.4	J
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.2	J
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

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Prelim. Results.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP106

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP112

Matrix: (soil/water) WATER Lab Sample ID: 9410171-04

Sample wt/vol: .100 (g/mL) ML Lab File ID: HR017104

Level: (low/med) LOW Date Received: 10/19/94

% Moisture: not dec._____ Date Analyzed: 10/25/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 50.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	25.	U
74-87-3	Chloromethane	25.	U
75-01-4	Vinyl chloride	25.	U
74-83-9	Bromomethane	25.	U
75-00-3	Chloroethane	25.	U
75-69-4	Trichlorofluoromethane	25.	U
76-13-1	Trichlorotrifluoroethane	25.	U
75-35-4	1,1-Dichloroethene	28.	
75-09-2	Methylene chloride	25.	U
156-60-5	trans-1,2-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-59-2	cis-1,2-Dichloroethene	440.	
67-66-3	Chloroform	25.	U
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon tetrachloride	25.	U
107-06-2	1,2-Dichloroethane	25.	U
79-01-6	Trichloroethene	1500.	
78-87-5	1,2-Dichloropropane	25.	U
75-27-4	Bromodichloromethane	25.	U
110-75-8	2-Chloroethylvinylether	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
127-18-4	Tetrachloroethene	25.	U
124-48-1	Dibromochloromethane	25.	U
108-90-7	Chlorobenzene	25.	U
75-25-2	Bromoform	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
541-73-1	1,3-Dichlorobenzene	25.	U
106-46-7	1,4-Dichlorobenzene	25.	U
95-50-1	1,2-Dichlorobenzene	25.	U

Prelim. Results.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP306

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP112

Matrix: (soil/water) WATER Lab Sample ID: 9410171-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HP017105

Level: (low/med) LOW Date Received: 10/19/94

% Moisture: not dec._____ Date Analyzed: 10/24/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

Kuelim. Results.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP406

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP112

Matrix: (soil/water) WATER Lab Sample ID: 9410171-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HP017106

Level: (low/med) LOW Date Received: 10/19/94

% Moisture: not dec._____ Date Analyzed: 10/24/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

Incncape Testing Service
Anametrix Laboratories

FAX TRANSMITTAL COVER SHEET

TO: DATE: 11-14-94

NAME: Jean Barranco

COMPANY: PRC

FAX #: (303) 295-2818

9411047

TOTAL NUMBER OF PAGES (INCLUDING THIS COVER SHEET): 2

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FROM:

NAME: Tracey Pham

ITS - ANAMETRIX LABORATORIES
FAX : (408) 432 - 8198
PHONE : (408) 432 - 8192

If all pages are not received, please notify the sender at (408) 432 - 8192.

COMMENTS: CTO : RSC9C SDG: SP306
Moffet Site 9
TPHd : 01 → 06

1

PRELIM RESULTS

ITS-ANAMETRIX LABORATORIES
1961 Concourse Drive, San Jose, CA 95131, (408) 432-8192 FX (408) 432-8198

TOTAL FUEL HYDROCARBON REPORT

TPH as Diesel / Motor Oil

Workorder # 9411C47 Client PRC

Date Extracted 11/14/94 Project # RSC4C

Matrix WATER / SOIL Instrument ID # HP9 / HP19 / HP23

ANAMETRIX ID #	CLIENT ID #	DATE ANALYZED	REPORTING LIMIT	AMOUNT FOUND ppb / ppm Diesel	Motor Oil			% SURROGATE RECOVERY
-1	SP106	11/10/94	100	ND	250	ND	ND	88 %
-2	SP506	"	100	ND	60	ND	ND	88 %
-3	SP406	"	100	ND	ND	ND	ND	90 %
-4	SP112	11/11/94	~~50~~ 500	ND	ND	ND	320	81 %
-5	SP312	"	100	ND	ND	ND	ND	85 %
-6	SP412	"	100	ND	ND	ND	ND	84 %
Blank	method Blank	11/10/94	100	ND	ND	ND	ND	85 %

Date: 11/14/94 Date: 11/14/94

Analyst: ARP Reviewer: CB

METHODS PERFORMED ARE THOSE SPECIFIED BY TRIREGIONAL GUIDELINES.

PRELIM RESULTS

ToxScan Inc.

42 Hangar Way
Watsonville, CA 95076

(408) 724-4522

FAX (408) 724-3188

LABORATORY NUMBER T-11363

TO: FAX #: 1-303-295-2818

ATTN: Jean Barranco

COMPANY: PRC Environmental Mgt.

CITY: Denver, Co

REFERENCE TO: 96 hr. Bioassay

FROM: ToxScan

NUMBER OF PAGES (INCLUDING COVER PAGE) 4

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SPECIAL INSTRUCTIONS

Jean - I will be mailing the report out to you today.

OUR FASCIMILE # IS (408) 724-3188

OPERATOR Deborah Chiesa TIME _____ DATE 10/26

ToxScan Inc.

42 Hangar Way
Watsonville, CA 95076

(408) 724-4522

FAX (408) 724-3188

PRC Environmental Management, Inc.
1099 18th Street, Suite 1960
Denver, CO 80202

26 October, 1994

ATTN: Jean Barranco

Static acute bioassays were performed on two water samples received from PRC using the 3-spined Stickleback (*Gasterosteus aculeatus*). Samples were collected by PRC personnel and delivered to ToxScan's Watsonville laboratory where the sample set was assigned ToxScan number T-11363. The water was tested using 100%, and 0% (control) concentrations of the sample as delivered. The testing method used was: *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.* EPA/600/4-90/027, 1991.

Electrical conductivity of the two samples was relatively high (1200 µmhos/cm), so the conductivity of control water was increased to match sample conductivity by addition of seawater. All fish were held in the laboratory for 10 days prior to test initiation, and no mortality was observed in the species within the week before test were started.

BIOASSAY CONDITIONS

Date Sampled:	20 October, 1994
Date Started:	21 October, 1994
Lighting:	Fluorescent at 150 microEinsteins

	Sticklebacks
No. Fish/Tank:	10
Vol. of Test Solution:	7 L
Test Temperature:	20 ± 2°C

SUMMARY TABLE Percent Survival after 96 hours.

Sample ID	Sticklebacks (*G. aculeatus*)
TS-S9-SP4-12	100
TS-S9-SP4-06	100
Control	100

If you have any questions regarding this report or the methods used for this test please give us a call. Thank you for your patronage.

Raymond P. Markel, Ph.D.
Director, Bioassay Division

96 h Acute Toxicity Test Data Sheet

Lab #	T-11363	Start Date	21 October 1994
Client	PRC Environmental Management, Inc.	End Date	25 October 1994
ID	TS-S9-SP4-12 & TS-S9-SP4-06	Species	G. aculeatus

Treatment (ID)	Number Alive at Observation Time (h) 0	24	48	72	96	Environmental Monitoring	0	24	48	72	96
Control	10	10	10	10	10	pH	8.5	7.8	8.0	7.9	8.0
						DO	8.6	6.4	7.1	6.9	7.8
						Temp	21.0	21.0	20.7	21.1	20.1
Control	10	10	10	10	10	pH	8.5	7.8	8.1	8.0	8.0
						DO	8.6	6.6	7.4	7.5	7.6
						Temp	21.0	21.0	20.7	21.2	20.3
-12	10	10	10	10	10	pH	7.7	7.8	8.1	8.2	8.2
						DO	9.1	6.4	7.8	7.9	8.0
						Temp	20.1	21.0	20.6	21.1	20.3
-12	10	10	10	10	10	pH	7.7	7.8	8.1	8.2	8.2
						DO	9.0	6.1	7.9	7.7	7.7
						Temp	20.0	21.0	20.6	21.1	20.3
-06	10	10	10	10	10	pH	7.6	8.0	8.1	8.0	8.0
						DO	8.4	6.4	7.2	7.2	7.4
						Temp	19.6	21.0	20.7	21.2	20.3
-06	10	10	10	10	10	pH	7.6	8.1	8.3	8.1	8.1
						DO	8.4	6.6	7.9	8.2	8.3
						Temp	19.6	20.9	20.4	21.0	20.1

Hardness

Control-initial	162	Conc. -12-initial	680	Conc. -06-initial	725
Control-final	172	Conc. -12-final	440	Conc. -06-final	600

Alkalinity

Control-initial	124	Conc. -12-initial	680	Conc. -06-initial	380
Control-final	130	Conc. -12-final	430	Conc. 06-final	300

FISH WEIGHT AND LENGTH ANALYSIS SHEET

TEST SPECIFICATIONS:

Date Started:	21 October 1994
Date Completed:	25 October 1994
Test Species:	3-spined Stickleback (*Gasterosteus aculeatus*)
# Organisms/Tank:	10
Volume/Tank:	7 Liters
Test Material Concentrations:	0% (control) and 100%
Replicates/Concentration:	2

Fish Weights and Lengths: Lot Number Gas102094

Fish No.	Weight (g)	Length (mm)
1	.3300	29
2	.4527	33
3	.4374	32
4	.4051	31
5	.4081	30
6	.3954	29
7	.4020	30
8	.4162	30
9	.4335	30
10	.4025	29
Total	4.0829	303
Mean	0.4083	30.3

MOFFETT FEDERAL AIRFIELD
SITE 9 SOURCE CONTROL MEASURES
SELF-MONITORING REPORT

Reporting Period: Oct. 24, 1994 - Oct. 30, 1994

System Data*	Bldg 45 System	Bldg 12 System	Bldg 6 System
Total Flow for Period (gal)	NA	19800	37500
Influent pH	NA	7	7.4
Effluent pH	NA	7.3	7.5
Influent Temperature (C)	NA	21.2	20.7
Effluent Temperature (C)	NA	19.9	21.5

* Analytical data is attached

Leakage or Overflow Documentation (include date, time, duration, location, and volume)
None

Treatment System Maintenance for Period
Building 45: System down. Disassembled transfer pump and saw no apparent problem. Reassembled pump and started system on 10-27-94. Changed out dirty bag filter.
Building 12: None
Building 6: None

MOFFETT FEDERAL AIRFIELD
SITE 9 SOURCE CONTROL MEASURES
SELF-MONITORING REPORT

Reporting Period: Oct. 24, 1994 - Oct. 30, 1994

TREATMENT SYSTEM
DISCHARGE LIMIT EXCEEDENCE SUMMARY

Sample ID	Analyte	Concentration (ug/L)	Discharge Limit (ug/L)
TS-S9-SP4-06	Se (diss)	5.2	5

SAMPLE ID DESCRIPTION

BUILDING 6:
TS-S9-SP1-06 -- System Influent
TS-S9-SP3-06 -- GAC Bed 1 Effluent
TS-S9-SP4-06 -- System Effluent

BUILDING 12:
TS-S9-SP1-12 -- System Influent
TS-S9-SP3-12 -- GAC Bed 1 Effluent
TS-S9-SP4-12 -- System Effluent

BUILDING 45:
TS-S9-SP1-45 -- W61-1 System Influent
TS-S9-SP2-45 -- FP9-1 System Influent
TS-S9-SP3-45 -- Air Stripper Effluent
TS-S9-SP5-45 -- GAC Bed 1 Effluent
TS-S9-SP6-45 -- System Effluent

NASA SETTLING BASIN:
RW-S9-NSB-01 -- Settling Basin Effluent

CERTIFICATION

I certify that the information contained in this document is, to the best of my knowledge, accurate and complete.

Mark A. Kadnuck, P.E.
Project Engineer

COLORADO REGISTERED PROFESSIONAL ENGINEER
MARK A. KADNUCK
29842
02-09-95

Week of 10-24

Inchcape Testing Services
Anametrix Laboratories

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COMMENTS: Moffet field : Site 9
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP106

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP106

Matrix: (soil/water) WATER Lab Sample ID: 9410226-01

Sample wt/vol: .100 (g/mL) ML Lab File ID: HP022601

Level: (low/med) Date Received: 10/26/94

% Moisture: not dec._____ Date Analyzed: 10/31/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 50.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	25.	U
74-87-3	Chloromethane	25.	U
75-01-4	Vinyl chloride	25.	U
74-83-9	Bromomethane	25.	U
75-00-3	Chloroethane	25.	U
75-69-4	Trichlorofluoromethane	25.	U
76-13-1	Trichlorotrifluoroethane	16.	J
75-35-4	1,1-Dichloroethene	19.	J
75-09-2	Methylene chloride	25.	U
156-60-5	trans-1,2-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	12.	J
156-59-2	cis-1,2-Dichloroethene	350.	
67-66-3	Chloroform	24.	J
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon tetrachloride	25.	U
107-06-2	1,2-Dichloroethane	25.	U
79-01-6	Trichloroethene	1300.	
78-87-5	1,2-Dichloropropane	25.	U
75-27-4	Bromodichloromethane	37.	
110-75-8	2-Chloroethylvinylether	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
127-18-4	Tetrachloroethene	35.	
124-48-1	Dibromochloromethane	13.	J
108-90-7	Chlorobenzene	25.	U
75-25-2	Bromoform	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
541-73-1	1,3-Dichlorobenzene	25.	U
106-46-7	1,4-Dichlorobenzene	25.	U
95-50-1	1,2-Dichlorobenzene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP112

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP106

Matrix: (soil/water) WATER Lab Sample ID: 9410226-04

Sample wt/vol: .500 (g/mL) ML Lab File ID: HP022604

Level: (low/med) Date Received: 10/27/94

% Moisture: not dec._____ Date Analyzed: 10/31/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.	U
74-87-3	Chloromethane	5.	U
75-01-4	Vinyl chloride	41.	
74-83-9	Bromomethane	5.	U
75-00-3	Chloroethane	4.	J
75-69-4	Trichlorofluoromethane	5.	U
76-13-1	Trichlorotrifluoroethane	5.	U
75-35-4	1,1-Dichloroethene	6.	
75-09-2	Methylene chloride	5.	U
156-60-5	trans-1,2-Dichloroethene	28.	
75-34-3	1,1-Dichloroethane	20.	
156-59-2	cis-1,2-Dichloroethene	170.	
67-66-3	Chloroform	5.	
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon tetrachloride	5.	U
107-06-2	1,2-Dichloroethane	5.	U
79-01-6	Trichloroethene	5.	U
78-87-5	1,2-Dichloropropane	5.	U
75-27-4	Bromodichloromethane	5.	U
110-75-8	2-Chloroethylvinylether	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
127-18-4	Tetrachloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
108-90-7	Chlorobenzene	5.	U
75-25-2	Bromoform	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
541-73-1	1,3-Dichlorobenzene	5.	U
106-46-7	1,4-Dichlorobenzene	5.	U
95-50-1	1,2-Dichlorobenzene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP306

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP106

Matrix: (soil/water) WATER Lab Sample ID: 9410226-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HP022602

Level: (low/med) Date Received: 10/26/94

% Moisture: not dec._____ Date Analyzed: 10/31/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP312

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP106

Matrix: (soil/water) WATER Lab Sample ID: 9410226-05

Sample wt/vol: 1.000 (g/mL) ML Lab File ID: HR022605

Level: (low/med) Date Received: 10/27/94

% Moisture: not dec._____ Date Analyzed: 11/01/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 5.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	2.	U
74-87-3	Chloromethane	2.	U
75-01-4	Vinyl chloride	22.	
74-83-9	Bromomethane	2.	U
75-00-3	Chloroethane	3.	
75-69-4	Trichlorofluoromethane	2.	U
76-13-1	Trichlorotrifluoroethane	2.	U
75-35-4	1,1-Dichloroethene	3.	
75-09-2	Methylene chloride	2.	U
156-60-5	trans-1,2-Dichloroethene	18.	
75-34-3	1,1-Dichloroethane	15.	
156-59-2	cis-1,2-Dichloroethene	140.	
67-66-3	Chloroform	2.	U
71-55-6	1,1,1-Trichloroethane	2.	U
56-23-5	Carbon tetrachloride	2.	U
107-06-2	1,2-Dichloroethane	2.	J
79-01-6	Trichloroethene	2.	J
78-87-5	1,2-Dichloropropane	2.	U
75-27-4	Bromodichloromethane	2.	U
110-75-8	2-Chloroethylvinylether	2.	U
10061-01-5	cis-1,3-Dichloropropene	2.	U
10061-02-6	trans-1,3-Dichloropropene	2.	U
79-00-5	1,1,2-Trichloroethane	2.	U
127-18-4	Tetrachloroethene	2.	U
124-48-1	Dibromochloromethane	2.	U
108-90-7	Chlorobenzene	2.	U
75-25-2	Bromoform	2.	U
79-34-5	1,1,2,2-Tetrachloroethane	2.	U
541-73-1	1,3-Dichlorobenzene	2.	U
106-46-7	1,4-Dichlorobenzene	2.	U
95-50-1	1,2-Dichlorobenzene	2.	U

Prelim results

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP406

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP106

Matrix: (soil/water) WATER Lab Sample ID: 9410226-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HP022603

Level: (low/med) Date Received: 10/26/94

% Moisture: not dec._____ Date Analyzed: 10/31/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

Prelim results

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP412

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: RSC9C SAS No.: SDG No.: SP106

Matrix: (soil/water) WATER Lab Sample ID: 9410226-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HP022606

Level: (low/med) Date Received: 10/27/94

% Moisture: not dec._____ Date Analyzed: 10/31/94

GC Column: Rtx-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.3	J
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

Inchcape Testing Services
Anametrix Laboratories

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NAME: Jean Barranco

COMPANY: PRC 9410 026

FAX #: (303) 295-2818

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SDG # : SP106
5 day TAT
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prelim Results. Others
will follow

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1961 Concourse Drive, San Jose, CA 95131, (408) 432-8192 FX (408) 432-8188

TOTAL FUEL HYDROCARBON REPORT

TPH as Diesel / Motor Oil

Prelim. results

Workorder # 9410 226 Client PRC

Date Extracted 10/28/94 Project # RSCAC

Matrix WATER / SOIL Instrument ID # HP9 / HP19 / HP23

ANAMETRIX ID #	CLIENT ID #	DATE ANALYZED	REPORTING LIMIT	AMOUNT FOUND ppb / ppm Diesel motor oil		% SURROGATE RECOVERY
-1	SP106	11/01/94	100	ND	950	90%
-2	SP306	"	100	"J" 93	ND	92%
-3	SP406	"	100	ND	ND	92%
-4	SP112	"	100	1200	ND	95%
-5	SP312	"	100	970	170	89%
-6	SP412	"	100	ND	ND	93%
B028121-9	Method Blank	10/31/94	100	ND	ND	92%

Date: ~~11/03/94~~ 11/03/94 Date:

Analyst: AR Reviewer:

METHODS PERFORMED ARE THOSE SPECIFIED BY TRIREGIONAL GUIDELINES.

ANAMETRIX, INC.
1961 Concourse Drive, San Jose, CA 95131, (408) 432-8192

TOTAL FUEL HYDROCARBON REPORT

TPHg with BTEX
Precision Results

Workorder # 9410226 Client Project # RSC9C

ANAMETRIX ID #	01	02	03	04	05	06
CLIENT ID #	SP106	SP306	SP406	SP112	SP312	SP412
CONCENTRATION UNITS	µg/L	→	→	→	→	→
BENZENE	<0.5	<0.5	<0.5	780	580	<0.5
TOLUENE	↓	↓	↓	550	380	↓
ETHYLBENZENE	↓	↓	↓	1100	560	↓
XYLENES	↓	4.0	↓	1100	800	↓
GASOLINE	810	<50	<50	20000	10000	<50
% SURROGATE RECOVERY	111%	89%	102%	109%	106%	111%
INSTRUMENT #	HP21	→	→	→	→	→
DATE ANALYZED	11/01/94	10/31/94	10/31/94	10/31/94	→	→
RLMF *	2	1	1	50	50	1

Date: 11/3/94 Date: _____

Analyst: IS Reviewer: _____

METHODS DONE ARE THOSE SPECIFIED BY CRWQCB.
Anametrix, Inc. GC Department Form 2-1

* RLMF - Reporting Limit Multiplication Factor

/1330(/2913)

3

Inchcape Testing Services
Anametrix Laboratories

FAX TRANSMITTAL COVER SHEET

TO: DATE: 11/3/94

NAME: Jean Bassanco

COMPANY: PRC 9410226

FAX #: (303) 295-2818

TOTAL NUMBER OF PAGES (INCLUDING THIS COVER SHEET): 10

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FROM:

NAME: Tracey Pham / Claudia Serna

ITS - ANAMETRIX LABORATORIES
FAX : (408) 385-7810
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COMMENTS: Moffet Field : Site 9
SDG # : SP166
5 day TAT
CLP metals
Prelim. results

Prelim. results

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

NSB01T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP106

Matrix (soil/water): WATER Lab Sample ID: 10226-07T

Level (low/med): LOW Date Received: 10/27/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	67.6			P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	2.2	B		P
7440-39-3	Barium	42.7	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	90000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	13.7	B		P
7439-89-6	Iron	100			P
7439-92-1	Lead	2.6	B		P
7439-95-4	Magnesium	36600			P
7439-96-5	Manganese	14.2	B	E	P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	8.7			P
7440-02-0	Nickel	1.4	U		P
7440-09-7	Potassium	5070		E	P
7782-49-2	Selenium	4.1	B		P
7440-22-4	Silver	0.54	B		P
7440-23-5	Sodium	65800			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	2.4	B		P
7440-66-6	Zinc	37.3		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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Prelim Results

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP106D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP106

Matrix (soil/water): WATER Lab Sample ID: 10226-01D

Level (low/med): LOW Date Received: 10/26/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	35.6	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	29.8	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	175000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	3.2	B		P
7439-89-6	Iron	38.1	B		P
7439-92-1	Lead	0.60	U		P
7439-95-4	Magnesium	59700			P
7439-96-5	Manganese	30.3		E	P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	2.5	B		P
7440-02-0	Nickel	1.8	B		P
7440-09-7	Potassium	1520	B	E	P
7782-49-2	Selenium	4.4	B		P
7440-22-4	Silver	1.4	B		P
7440-23-5	Sodium	40300			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	2.4	B		P
7440-66-6	Zinc	26.4		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP106T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP106

Matrix (soil/water): WATER Lab Sample ID: 10226-01T

Level (low/med): LOW Date Received: 10/26/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	42.9	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	26.8	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	181000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	36.7			P
7439-89-6	Iron	48.4	B		P
7439-92-1	Lead	14.6			P
7439-95-4	Magnesium	61800			P
7439-96-5	Manganese	28.7		E	P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	2.2	B		P
7440-02-0	Nickel	10.0	B		P
7440-09-7	Potassium	1550	B	E	P
7782-49-2	Selenium	4.5	B		P
7440-22-4	Silver	0.71	B		P
7440-23-5	Sodium	41600			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	2.3	B		P
7440-66-6	Zinc	69.3		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP112D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP106

Matrix (soil/water): WATER Lab Sample ID: 10226-04D

Level (low/med): LOW Date Received: 10/27/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.4	U		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	10.1			P
7440-39-3	Barium	434			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	167000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	2.2	B		P
7439-89-6	Iron	2800			P
7439-92-1	Lead	0.60	U		P
7439-95-4	Magnesium	68700			P
7439-96-5	Manganese	571		E	P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	1.5	B		P
7440-02-0	Nickel	1.4	U		P
7440-09-7	Potassium	2580	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.62	B		P
7440-23-5	Sodium	66600			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	55.8		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP112T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP106

Matrix (soil/water): WATER Lab Sample ID: 10226-04T

Level (low/med): LOW Date Received: 10/27/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18.9	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	9.3	B		P
7440-39-3	Barium	419			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	162000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	1.7	B		P
7439-89-6	Iron	2700			P
7439-92-1	Lead	0.60	U		P
7439-95-4	Magnesium	67100			P
7439-96-5	Manganese	551		E	P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	0.92	B		P
7440-02-0	Nickel	1.4	U		P
7440-09-7	Potassium	2500	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.59	B		P
7440-23-5	Sodium	64800			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	53.3		E	P

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Color After: COLORLESS Clarity After: CLEAR Artifacts:

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ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP406D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP106

Matrix (soil/water): WATER Lab Sample ID: 10226-03D

Level (low/med): LOW Date Received: 10/26/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.9	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	34.7	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	177000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	3.3	B		P
7440-50-8	Copper	1.1	B		P
7439-89-6	Iron	60.0	B		P
7439-92-1	Lead	0.60	U		P
7439-95-4	Magnesium	60900			P
7439-96-5	Manganese	24.6		E	P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	1.3	B		P
7440-02-0	Nickel	18.6	B		P
7440-09-7	Potassium	1580	B	E	P
7782-49-2	Selenium	5.2			P
7440-22-4	Silver	0.45	B		P
7440-23-5	Sodium	41400			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	46.8		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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Comments:

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ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP406T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP106

Matrix (soil/water): WATER Lab Sample ID: 10226-03T

Level (low/med): LOW Date Received: 10/26/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26.2	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	35.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	180000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	2.8	B		P
7440-50-8	Copper	8.2	B		P
7439-89-6	Iron	73.7	B		P
7439-92-1	Lead	0.60	U		P
7439-95-4	Magnesium	61200			P
7439-96-5	Manganese	25.1		E	P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	1.6	B		P
7440-02-0	Nickel	18.5	B		P
7440-09-7	Potassium	1510	B	E	P
7782-49-2	Selenium	4.7	B		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	41100			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	71.1		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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Comments:

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ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP412D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: R5C9C SAS No.: 000000 SDG No.: SP106

Matrix (soil/water): WATER Lab Sample ID: 10226-06D

Level (low/med): LOW Date Received: 10/27/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26.6	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	2.3	B		P
7440-39-3	Barium	377			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	162000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	4.7	B		P
7440-50-8	Copper	2.1	B		P
7439-89-6	Iron	117			P
7439-92-1	Lead	0.60	U		P
7439-95-4	Magnesium	68200			P
7439-96-5	Manganese	451		E	P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	0.99	B		P
7440-02-0	Nickel	17.4	B		P
7440-09-7	Potassium	2540	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.69	B		P
7440-23-5	Sodium	65600			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	55.4		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP412T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP106

Matrix (soil/water): WATER Lab Sample ID: 10226-06T

Level (low/med): LOW Date Received: 10/27/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34.0	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	2.2	B		P
7440-39-3	Barium	361			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	153000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	4.2	B		P
7440-50-8	Copper	3.2	B		P
7439-89-6	Iron	216			P
7439-92-1	Lead	0.60	U		P
7439-95-4	Magnesium	64800			P
7439-96-5	Manganese	430		E	P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	0.92	B		P
7440-02-0	Nickel	16.0	B		P
7440-09-7	Potassium	2440	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.43	B		P
7440-23-5	Sodium	62100			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	59.5		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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Comments:

FORM I - IN (ILM02.1)

ToxScan Inc.

42 Hangar Way
Watsonville, CA 95076

(408) 724-4522

FAX (408) 724-3188

November 2, 1994

PRC Environmental Management, Inc.
1099 18th Street, Suite 1960
Denver, CO 80202

ATTN: Jean Barranco

Dear Jean:

In the attached report concerning PRC water samples sent to ToxScan on 28 October (ID numbers TS-S9-SP4-06 and TS-S9-SP4-12), you will find reference to only TS-S9-SP4-06. The other sample, TS-S9-SP4-12, was not successfully completed. Per your conversation with Ray Markel on 2 November, we have finalized the report for water sample TS-S9-SP4-06.

If you have any questions concerning this matter please feel free to contact us.

Sincerely,

Deborah J. Chirco

Deborah J. Chirco
Report Coordinator

ToxScan Inc.

42 Hangar Way
Watsonville, CA 95076

(408) 724-4522

FAX (408) 724-3188

PRC Environmental Management, Inc.
1099 18th Street, Suite 1960
Denver, CO 80202

2 November, 1994

ATTN: Jean Barranco

A static acute bioassay was performed on one water sample received from PRC using the 3-spined Stickleback (*Gasterosteus aculeatus*). The sample was collected by PRC personnel and delivered to ToxScan's Watsonville laboratory where the sample set was assigned ToxScan number T-11384. The water was tested using 100%, and 0% (control) concentrations of the sample as delivered. The testing method used was: *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.* EPA/600/4-90/027, 1991.

All fish were held in the laboratory for 10 days prior to test initiation, and no mortality was observed in the species within the week before test were started.

BIOASSAY CONDITIONS

Date Sampled:	27 October, 1994
Date Started:	28 October, 1994
Lighting:	Fluorescent at 150 microEinsteins

	Sticklebacks
No. Fish/Tank:	10
Vol. of Test Solution:	8 L
Test Temperature:	20 ± 2°C

SUMMARY TABLE Percent Survival after 96 hours.

Sample ID	Sticklebacks (*G. aculeatus*)
TS-S9-SP4-06	100
Control	100

If you have any questions regarding this report or the methods used for this test please give us a call. Thank you for your patronage.

Raymond P. Markel, Ph.D.
Director, Bioassay Division

96 h Acute Toxicity Test Data Sheet

Lab #	T-11384	Start Date	28 October 1994
Client	PRC Environmental Management, Inc.	End Date	1 November 1994
ID	TS-S9-SP4-06	Species	G. aculeatus

Treat-ment (ID)	Number Alive at Observation Time (h) 0	24	48	72	96	Environmental Monitoring	0	24	48	72	96
Control	10	10	10	10	10	pH	8.3	8.0	8.0	8.0	8.0
						DO	8.8	6.9	6.9	6.7	6.7
						Temp	21.0	20.4	20.1	19.9	19.9
Control	10	10	10	10	10	pH	8.4	8.0	8.0	8.0	7.9
						DO	8.8	6.8	6.8	6.4	6.4
						Temp	21.0	20.4	20.4	20.2	20.0
-06	10	10	10	10	10	pH	7.6	8.0	8.2	8.1	8.1
						DO	7.5	6.3	6.1	6.3	6.3
						Temp	20.3	20.6	20.5	20.5	20.2
-06	10	10	10	10	10	pH	7.6	8.1	8.2	8.1	8.1
						DO	7.4	6.6	6.7	6.7	6.6
						Temp	21.0	20.7	20.6	20.6	20.3

Hardness

Control-initial	178	Conc. -06-initial	700
Control-final	176	Conc. -06-final	660

Alkalinity

Control-initial	132	Conc. -06-initial	390
Control-final	124	Conc. -06-final	300

FISH WEIGHT AND LENGTH ANALYSIS SHEET

TEST SPECIFICATIONS:

Date Started:	28 October 1994
Date Completed:	1 November 1994
Test Species:	3-spined Stickleback (*Gasterosteus aculeatus*)
# Organisms/Tank:	10
Volume/Tank:	8 Liters
Test Material Concentrations:	0% (control) and 100%
Replicates/Concentration:	2

Fish Weights and Lengths: Lot Number Gas102094

Fish No.	Weight (g)	Length (mm)
1	.2466	27
2	.4065	33
3	.3848	32
4	.4194	33
5	.2895	29
6	.3872	32
7	.2599	28
8	.3472	32
9	.3151	30
10	.3498	30
Total	3.406	306
Mean	.3406	30.6

MOFFETT FEDERAL AIRFIELD
SITE 9 SOURCE CONTROL MEASURES
SELF-MONITORING REPORT

Reporting Period: Oct. 31, 1994 - Nov. 6, 1994

System Data*	Bldg 45 System	Bldg 12 System	Bldg 6 System
Total Flow for Period (gal)	8300	17200	25500
Influent pH	not sampled	6.9	7.52
Effluent pH	not sampled	6.99	7.42
Influent Temperature (C)	not sampled	20.3	21.4
Effluent Temperature (C)	not sampled	17.5	15.6

* Analytical data is attached

Leakage or Overflow Documentation (include date, time, duration, location, and volume)
None

Treatment System Maintenance for Period
Building 45: System went down prior to sampling. Changed out dirty bag filter, set up pump repairs.
Building 12: Changed out dirty bag filter.
Building 6: None

MOFFETT FEDERAL AIRFIELD
SITE 9 SOURCE CONTROL MEASURES
SELF-MONITORING REPORT

Reporting Period: Oct. 31, 1994 - Nov. 6, 1994

TREATMENT SYSTEM
DISCHARGE LIMIT EXCEEDENCE SUMMARY

Sample ID	Analyte	Concentration (ug/L)	Discharge Limit (ug/L)
TS-S9-SP4-06	Se (diss)	6.2	5
TS-S9-SP4-06	Zn (diss)	128	110
TS-S9-SP4-06	Cu (tot)	19.5	11.8
TS-S9-SP4-06	Zn (tot)	194	110

SAMPLE ID DESCRIPTION

BUILDING 6:
TS-S9-SP1-06 -- System Influent
TS-S9-SP3-06 -- GAC Bed 1 Effluent
TS-S9-SP4-06 -- System Effluent

BUILDING 12:
TS-S9-SP1-12 -- System Influent
TS-S9-SP3-12 -- GAC Bed 1 Effluent
TS-S9-SP4-12 -- System Effluent

BUILDING 45:
TS-S9-SP1-45 -- W61-1 System Influent
TS-S9-SP2-45 -- FP9-1 System Influent
TS-S9-SP3-45 -- Air Stripper Effluent
TS-S9-SP5-45 -- GAC Bed 1 Effluent
TS-S9-SP6-45 -- System Effluent

NASA SETTLING BASIN:
FIW-S9-NSB-01 -- Settling Basin Effluent

CERTIFICATION

I certify that the information contained in this document is, to the best of my knowledge, accurate and complete.

Mark A. Kadnuck

Mark A. Kadnuck, P.E.
Project Engineer

COLORADO REGISTERED PROFESSIONAL ENGINEER
MARK A. KADNUCK
29842
02-09-95

Lifescape Testing Services
Anametrix Laboratories

FAX TRANSMITTAL COVER SHEET

TO: DATE: 11/11/94

NAME: Jean Barranco

COMPANY: PRC

FAX #: (303) 295-2818

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COMMENTS: CTO: RSC9C SDG: SP306
PRC : 5 DAY TAT
SDID : 01, 02, 03, 04, 05, 06, 07

PRELIM RESULTS

9411047

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP106

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMT Case No.: RSC9C SAS No.: SDG No.: SP106

Matrix: (soil/water) WATER Lab Sample ID: 9411047-01

Sample wt/vol: .100 (g/mL) ML Lab File ID: HTN04701

Level: (low/med) Date Received: 11/02/94

% Moisture: not dec._____ Date Analyzed: 11/08/94

GC Column: RTX-502. ID: .53 (mm) Dilution Factor: 50.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	25.	U
74-87-3	Chloromethane	25.	U
75-01-4	Vinyl chloride	25.	U
74-83-9	Bromomethane	25.	U
75-00-3	Chloroethane	25.	U
75-69-4	Trichlorofluoromethane	25.	U
76-13-1	Trichlorotrifluoroethane	25.	U
75-35-4	1,1-Dichloroethene	18.	J
75-09-2	Methylene chloride	25.	U
156-60-5	trans-1,2-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-59-2	cis-1,2-Dichloroethene	290.	
67-66-3	Chloroform	25.	U
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon tetrachloride	25.	U
107-06-2	1,2-Dichloroethane	25.	U
79-01-6	Trichloroethene	1200.	
78-87-5	1,2-Dichloropropane	25.	U
75-27-4	Bromodichloromethane	25.	U
110-75-8	2-Chloroethylvinylether	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
127-18-4	Tetrachloroethene	62.	
124-48-1	Dibromochloromethane	25.	U
108-90-7	Chlorobenzene	25.	U
75-25-2	Bromoform	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
541-73-1	1,3-Dichlorobenzene	25.	U
106-46-7	1,4-Dichlorobenzene	25.	U
95-50-1	1,2-Dichlorobenzene	25.	U

PRELIM RESULTS

2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP306

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMT Case No.: RSC9C SAS No.: SDG No.: SP306

Matrix: (soil/water) WATER Lab Sample ID: 9411047-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HRN04702

Level: (low/med) Date Received: 11/02/94

% Moisture: not dec._____ Date Analyzed: 11/08/94

GC Column: RTX-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

PRELIM RESULTS

3

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP406

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMT Case No.: RSC9C SAS No.: SDG No.: SP306

Matrix: (soil/water) WATER Lab Sample ID: 9411047-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HPN04703

Level: (low/med) Date Received: 11/02/94

% Moisture: not dec._____ Date Analyzed: 11/07/94

GC Column: RTX-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

PRELIM RESULTS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP112

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMT Case No.: RSC9C SAS No.: SDG No.: SP306

Matrix: (soil/water) WATER Lab Sample ID: 9411047-04

Sample wt/vol: .500 (g/mL) ML Lab File ID: HRN04704

Level: (low/med) Date Received: 11/03/94

% Moisture: not dec._____ Date Analyzed: 11/07/94

GC Column: RTX-502. ID: .53 (mm) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.	U
74-87-3	Chloromethane	5.	U
75-01-4	Vinyl chloride	33.	
74-83-9	Bromomethane	5.	U
75-00-3	Chloroethane	5.	U
75-69-4	Trichlorofluoromethane	5.	U
76-13-1	Trichlorotrifluoroethane	5.	U
75-35-4	1,1-Dichloroethene	5.	J
75-09-2	Methylene chloride	5.	U
156-60-5	trans-1,2-Dichloroethene	22.	
75-34-3	1,1-Dichloroethane	17.	
156-59-2	cis-1,2-Dichloroethene	170.	
67-66-3	Chloroform	5.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon tetrachloride	5.	U
107-06-2	1,2-Dichloroethane	5.	U
79-01-6	Trichloroethene	5.	U
78-87-5	1,2-Dichloropropane	5.	U
75-27-4	Bromodichloromethane	5.	U
110-75-8	2-Chloroethylvinylether	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
127-18-4	Tetrachloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
108-90-7	Chlorobenzene	5.	U
75-25-2	Bromoform	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
541-73-1	1,3-Dichlorobenzene	5.	U
106-46-7	1,4-Dichlorobenzene	5.	U
95-50-1	1,2-Dichlorobenzene	5.	U

PRELIM RESULTS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP312

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMT Case No.: RSC9C SAS No.: SDG No.: SP306

Matrix: (soil/water) WATER Lab Sample ID: 9411047-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HPN04705

Level: (low/med) Date Received: 11/03/94

% Moisture: not dec._____ Date Analyzed: 11/07/94

GC Column: RTX-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

PRELIM RESULTS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP412

Name: Anametrix, Inc. Contract:

Lab Code: ANAMT Case No.: RSC9C SAS No.: SDG No.: SP306

Matrix: (soil/water) WATER Lab Sample ID: 9411047-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HPN04706

Level: (low/med) Date Received: 11/03/94

% Moisture: not dec._____ Date Analyzed: 11/07/94

GC Column: RTX-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

PRELIM RESULTS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-01

Name: Anametrix, Inc. Contract:

Lab Code: ANAMT Case No.: RSC9C SAS No.: SDG No.: SP3106

Matrix: (soil/water) WATER Lab Sample ID: 9411047-07

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HPN04707

Level: (low/med) Date Received: 11/03/94

% Moisture: not dec._____ Date Analyzed: 11/07/94

GC Column: RTX-502. ID: .53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	.5	U
74-87-3	Chloromethane	.5	U
75-01-4	Vinyl chloride	.5	U
74-83-9	Bromomethane	.5	U
75-00-3	Chloroethane	.5	U
75-69-4	Trichlorofluoromethane	.5	U
76-13-1	Trichlorotrifluoroethane	.5	U
75-35-4	1,1-Dichloroethene	.5	U
75-09-2	Methylene chloride	.5	U
156-60-5	trans-1,2-Dichloroethene	.5	U
75-34-3	1,1-Dichloroethane	.5	U
156-59-2	cis-1,2-Dichloroethene	.5	U
67-66-3	Chloroform	.5	U
71-55-6	1,1,1-Trichloroethane	.5	U
56-23-5	Carbon tetrachloride	.5	U
107-06-2	1,2-Dichloroethane	.5	U
79-01-6	Trichloroethene	.5	U
78-87-5	1,2-Dichloropropane	.5	U
75-27-4	Bromodichloromethane	.5	U
110-75-8	2-Chloroethylvinylether	.5	U
10061-01-5	cis-1,3-Dichloropropene	.5	U
10061-02-6	trans-1,3-Dichloropropene	.5	U
79-00-5	1,1,2-Trichloroethane	.5	U
127-18-4	Tetrachloroethene	.5	U
124-48-1	Dibromochloromethane	.5	U
108-90-7	Chlorobenzene	.5	U
75-25-2	Bromoform	.5	U
79-34-5	1,1,2,2-Tetrachloroethane	.5	U
541-73-1	1,3-Dichlorobenzene	.5	U
106-46-7	1,4-Dichlorobenzene	.5	U
95-50-1	1,2-Dichlorobenzene	.5	U

FORM I VOA 3/90

PRELIM RESULTS

Inchcape Testing Services
Anametrix Laboratories

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Gas/BTEX 01, 02, 03 04, 05, 06

PRELIM RESULTS

~~940~~ 9411047

PRELIM RESULTS

ANAMETRIX, INC.
1961 Concourse Drive, San Jose, CA 95131, (408) 432-8192

TOTAL FUEL HYDROCARBON REPORT

TPHg with BTEX

Workorder # 9411047 Client Project # RSC9C

ANAMETRIX ID #	1	2	3	4	5
CLIENT ID #	Sp 106	Sp 306	Sp 406	SP 112	Sp 312
CONCENTRATION UNITS	µg/L	→	→	→	→
BENZENE	<0.5	<0.5	<0.5	750	<0.5
TOLUENE	↓	↓	↓	330	↓
ETHYLBENZENE	↓	3.1	↓	810	↓
XYLENES	↓	13	↓	760	↓
GASOLINE	500 (2)	50	<50	17000	<50
% SURROGATE RECOVERY	78	85%	98%	104%	99%
INSTRUMENT #	HP 8	→	→	→	→
DATE ANALYZED	11/8/94	→	→	→	→
RLMF *	2	1	→	50	1

Date: 11/11/94 Date: 11/11/94

Analyst: IS Reviewer: GS

METHODS DONE ARE THOSE SPECIFIED BY CRWQCB.
Anametrix, Inc. GC Department Form 2-1

* RLMF - Reporting Limit Multiplication Factor

/1330(/2913)

2

PRELIM RESULTS

ANAMETRIX, INC.
1961 Concourse Drive, San Jose, CA 95131, (408) 432-8192

TOTAL FUEL HYDROCARBON REPORT

TPHg with BTEX

Workorder # 9411047 Client Project # RSC9C

ANAMETRIX ID #	6				
CLIENT ID #	SP 412				
CONCENTRATION UNITS	µg/L				
BENZENE	<0.5				
TOLUENE	↓				
ETHYLBENZENE					
XYLENES					
GASOLINE	<50				
% SURROGATE RECOVERY	99%				
INSTRUMENT #	MP8				
DATE ANALYZED	11/8/94				
RLMF *	1				

Date: 11/11/94 Date: 11/11/94

Analyst: IJ Reviewer: LS

METHODS DONE ARE THOSE SPECIFIED BY CRWQCB.
Anametrix, Inc. GC Department Form 2-1

* RLMF - Reporting Limit Multiplication Factor

/1330(/2913)

Inchcape Testing Services
Anametrix Laboratories

FAX TRANSMITTAL COVER SHEET

TO: DATE: 11-11-94

NAME: Jean Barranco

COMPANY: PRC

FAX #: (303) 295-2818

TOTAL NUMBER OF PAGES (INCLUDING THIS COVER SHEET): 10

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FROM:

NAME: Tracey Pham

ITS - ANAMETRIX LABORATORIES
FAX : (408) 383-7810
PHONE : (408) 432 - 8192

If all pages are not received, please notify the sender at (408) 432 - 8192.

COMMENTS: CTO : RSC9C SDG : SP306
Moffett Site 9. 5 days TAT
Metals : -01, -03, -04, -06 and -08
(total and Dissolved)

PRELIM RESULTS

PRELIM RESULTS

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP106D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP306

Matrix (soil/water): WATER Lab Sample ID: 11047-01D

Level (low/med): LOW Date Received: 11/02/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.9	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	24.5	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	177000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	1.4	B		P
7439-89-6	Iron	32.4	B		P
7439-92-1	Lead	2.5	B		P
7439-95-4	Magnesium	60500			P
7439-96-5	Manganese	31.5			P
7439-97-6	Mercury	0.27			CV
7439-98-7	Molybdenum	1.2	B		P
7440-02-0	Nickel	1.4	U		P
7440-09-7	Potassium	1530	B	E	P
7782-49-2	Selenium	6.5			P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	39800			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	1.7	B		P
7440-66-6	Zinc	56.6			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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Comments:

FORM I - IN (ILM02.1)

PRELIM RESULTS

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP106T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP306

Matrix (soil/water): WATER Lab Sample ID: 11047-01T

Level (low/med): LOW Date Received: 11/02/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28.3	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	25.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	173000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	5.4	B		P
7439-89-6	Iron	28.8	B		P
7439-92-1	Lead	2.7	B		P
7439-95-4	Magnesium	59000			P
7439-96-5	Manganese	34.6			P
7439-97-6	Mercury	0.16	B		CV
7439-98-7	Molybdenum	1.3	B		P
7440-02-0	Nickel	2.6	B		P
7440-09-7	Potassium	1480	B	E	P
7782-49-2	Selenium	6.0			P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	38500			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	1.8	B		P
7440-66-6	Zinc	91.4			P

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Comments:

PRELIM RESULTS

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP406D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP306

Matrix (soil/water): WATER Lab Sample ID: 11047-03D

Level (low/med): LOW Date Received: 11/02/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20.8	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	28.6	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	177000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	2.2	B		P
7440-50-8	Copper	0.36	B		P
7439-89-6	Iron	151			P
7439-92-1	Lead	1.1	B		P
7439-95-4	Magnesium	59700			P
7439-96-5	Manganese	26.3			P
7439-97-6	Mercury	0.14	B		CV
7439-98-7	Molybdenum	0.70	U		P
7440-02-0	Nickel	15.0	B		P
7440-09-7	Potassium	1510	B	E	P
7782-49-2	Selenium	6.2			P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	39000			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	128			P

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Comments:

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PRELIM RESULTS

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP406T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP306

Matrix (soil/water): WATER Lab Sample ID: 11047-03T

Level (low/med): LOW Date Received: 11/02/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	37.1	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	32.1	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	177000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	2.3	B		P
7440-50-8	Copper	19.5	B		P
7439-89-6	Iron	194			P
7439-92-1	Lead	1.4	B		P
7439-95-4	Magnesium	60200			P
7439-96-5	Manganese	26.9			P
7439-97-6	Mercury	0.16	B		CV
7439-98-7	Molybdenum	0.70	U		P
7440-02-0	Nickel	14.9	B		P
7440-09-7	Potassium	1530	B	E	P
7782-49-2	Selenium	4.5	B		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	39500			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	194			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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Comments:

FORM I - IN (ILM02.1)

PRELIM RESULTS

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP112D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP306

Matrix (soil/water): WATER Lab Sample ID: 11047-04D

Level (low/med): LOW Date Received: 11/03/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.6	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	9.6	B		P
7440-39-3	Barium	368			P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	158000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	0.30	U		P
7439-89-6	Iron	2410			P
7439-92-1	Lead	1.1	B		P
7439-95-4	Magnesium	64800			P
7439-96-5	Manganese	507			P
7439-97-6	Mercury	0.32			CV
7439-98-7	Molybdenum	0.70	U		P
7440-02-0	Nickel	1.4	U		P
7440-09-7	Potassium	2490	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	61400			P
7440-28-0	Thallium	3.1			P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	40.8			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN (ILM02.1)

PRELIM RESULTS

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP112T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP306

Matrix (soil/water): WATER Lab Sample ID: 11047-04T

Level (low/med): LOW Date Received: 11/03/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	31.6	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	10.0			P
7440-39-3	Barium	384			P
7440-41-7	Beryllium	0.12	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	163000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	0.70	U		P
7440-50-8	Copper	0.75	B		P
7439-89-6	Iron	2610			P
7439-92-1	Lead	1.1	B		P
7439-95-4	Magnesium	64800			P
7439-96-5	Manganese	524			P
7439-97-6	Mercury	0.20			CV
7439-98-7	Molybdenum	0.70	U		P
7440-02-0	Nickel	1.9	B		P
7440-09-7	Potassium	2390	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	60400			P
7440-28-0	Thallium	2.0			P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	145			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN (ILM02.1)

PRELIM RESULTS

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP412D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP306

Matrix (soil/water): WATER Lab Sample ID: 11047-06D

Level (low/med): LOW Date Received: 11/03/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	29.8	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	2.3	B		P
7440-39-3	Barium	373			P
7440-41-7	Beryllium	0.15	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	161000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	4.2	B		P
7440-50-8	Copper	0.33	B		P
7439-89-6	Iron	165			P
7439-92-1	Lead	0.60	U		P
7439-95-4	Magnesium	68000			P
7439-96-5	Manganese	454			P
7439-97-6	Mercury	0.21			CV
7439-98-7	Molybdenum	0.70	U		P
7440-02-0	Nickel	15.6	B		P
7440-09-7	Potassium	2860	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	64800			P
7440-28-0	Thallium	3.5			P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	68.8			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN (ILM02.1)

PRELIM RESULTS

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP412T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP306

Matrix (soil/water): WATER Lab Sample ID: 11047-06T

Level (low/med): LOW Date Received: 11/03/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.0	B		P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.7	U		P
7440-39-3	Barium	352			P
7440-41-7	Beryllium	0.13	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	151000			P
7440-47-3	Chromium	0.80	U		P
7440-48-4	Cobalt	4.1	B		P
7440-50-8	Copper	0.30	U		P
7439-89-6	Iron	194			P
7439-92-1	Lead	0.60	U		P
7439-95-4	Magnesium	64000			P
7439-96-5	Manganese	431			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	0.70	U		P
7440-02-0	Nickel	14.7	B		P
7440-09-7	Potassium	2420	B	E	P
7782-49-2	Selenium	2.3	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	60400			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	53.1			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN (ILM02.1)

PRELIM RESULTS

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

NSB01T

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: RSC9C SAS No.: 000000 SDG No.: SP306

Matrix (soil/water): WATER Lab Sample ID: 11047-08T

Level (low/med): LOW Date Received: 11/03/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	190			P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	1.9	B		P
7440-39-3	Barium	43.3	B		P
7440-41-7	Beryllium	0.17	B		P
7440-43-9	Cadmium	0.46	B		P
7440-70-2	Calcium	86800			P
7440-47-3	Chromium	2.6	B		P
7440-48-4	Cobalt	0.98	B		P
7440-50-8	Copper	14.3	B		P
7439-89-6	Iron	329			P
7439-92-1	Lead	9.5			P
7439-95-4	Magnesium	33100			P
7439-96-5	Manganese	32.7			P
7439-97-6	Mercury	0.38			CV
7439-98-7	Molybdenum	7.1			P
7440-02-0	Nickel	8.1	B		P
7440-09-7	Potassium	3480	B	E	P
7782-49-2	Selenium	3.5	B		P
7440-22-4	Silver	0.75	B		P
7440-23-5	Sodium	59000			P
7440-28-0	Thallium	2.0			P
7440-62-2	Vanadium	3.3	B		P
7440-66-6	Zinc	137			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

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Comments:

FORM I - IN (ILM02.1)

PRC Environmental Management, Inc.
1099 18th Street, Suite 1960
Denver, CO 80202

9 November, 1994

ATTN: Jean Barranco

Static acute bioassays were performed on two water samples received from PRC using the 3-spined Stickleback (*Gasterosteus aculeatus*). Samples were collected by PRC personnel and delivered to ToxScan's Watsonville laboratory where the sample set was assigned ToxScan number T-11409. The water was tested using 100%, and 0% (control) concentrations of the sample as delivered. The testing method used was: *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.* EPA/600/4-90/027, 1991.

All fish were held in the laboratory for 10 days prior to test initiation, and no mortality was observed in the species within the week before testing was started.

BIOASSAY CONDITIONS

Date Sampled:	3 November, 1994
Date Started:	4 November, 1994
Lighting:	Fluorescent at 150 microEinsteins

	Sticklebacks
No. Fish/Tank:	10
Vol. of Test Solution:	8 L
Test Temperature:	20 ± 2°C

SUMMARY TABLE Percent Survival after 96 hours.

Sample ID	Sticklebacks (*G. aculeatus*)
TS-S9-SP4-06	100
TS-S9-SP4-12	100
Control	95

If you have any questions regarding this report or the methods used for this test please give us a call. Thank you for your patronage.

Raymond P. Markel, Ph.D.
Director, Bioassay Division

96 h Acute Toxicity Test Data Sheet

Lab #	T-11409	Start Date	4 November 1994
Client	PRC Environmental Management, Inc.	End Date	8 November 1994
ID	TS-S9-SP4-06 & TS-S9-SP4-12	Species	G. aculeatus

Treat-ment (ID)	Number Alive at Observation Time (h) 0	24	48	72	96	Environmental Monitoring	0	24	48	72	96
Control	10	10	10	10	9	pH	8.4	8.0	7.9	8.0	7.9
						DO	8.7	6.9	6.4	6.7	6.3
						Temp	20.0	19.6	20.1	19.1	20.1
Control	10	10	10	10	10	pH	8.4	8.0	7.9	8.0	7.9
						DO	8.7	7.1	6.5	6.7	6.3
						Temp	20.1	19.6	20.0	19.1	20.1
-06	10	10	10	10	10	pH	7.4	8.1	8.2	8.1	8.0
						DO	8.5	7.2	6.6	7.1	6.5
						Temp	21.0	19.6	19.7	19.0	20.2
-06	10	10	10	10	10	pH	7.4	8.1	8.2	8.1	8.1
						DO	8.6	7.0	6.3	6.7	6.1
						Temp	21.0	19.7	19.8	19.0	20.2
-12	10	10	10	10	10	pH	7.4	8.0	8.0	7.8	7.8
						DO	8.8	7.0	6.2	6.6	5.8
						Temp	20.4	19.8	19.9	19.1	20.3
-12	10	10	10	10	10	pH	7.4	8.1	8.0	7.9	7.9
						DO	8.8	7.0	6.1	6.5	5.7
						Temp	20.3	19.9	19.9	19.1	20.2

Hardness

Control-initial	164	Conc. -06-initial	700	Conc. -12-initial	680
Control-final	172	Conc. -06-final	680	Conc. -12-final	520

Alkalinity

Control-initial	148	Conc. -12-initial	375	Conc. -06-initial	685
Control-final	140	Conc. -12-final	380	Conc. 06-final	530

FISH WEIGHT AND LENGTH ANALYSIS SHEET

TEST SPECIFICATIONS:

Date Started:	4 November 1994
Date Completed:	8 November 1994
Test Species:	3-spined Stickleback (*Gasterosteus aculeatus*)
# Organisms/Tank:	10
Volume/Tank:	8 Liters
Test Material Concentrations:	0% (control) and 100%
Replicates/Concentration:	2

Fish Weights and Lengths: Lot Number Gas102594

Fish No.	Weight (g)	Length (mm)
1	.3942	31
2	.3214	29
3	.4925	32
4	.3865	30
5	.3936	30
6	.4440	32
7	.3698	30
8	.4028	30
9	.4143	30
10	.3595	30
Total	3.9786	304
Mean	.3979	30.4