5090
Ser 1843.2/5007
April 27, 1995

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

SUBJ: MOFFETT FEDERAL AIRFIELD (MFA) SITE 9 SOURCE CONTROL MEASURES (SCM) SELF-MONITORING REPORT FOR JANUARY 9, 1995 TO FEBRUARY 5, 1995

Dear Ms. Gladstone:

The U.S. Navy is submitting this self-monitoring report for the three Site 9 SCMs at MFA. This self-monitoring report covers operations from January 9, 1995 to February 5, 1995. 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 nearly continuously during this reporting period. The Building 45 system was off line during this period and will not operate until a chemical addition system can be installed to minimize a precipitate problem. Discharge limits for organic constituents were met by both of the operating systems for this reporting period, except for total petroleum hydrocarbons (TPH) extractable as motor oil at Building 6. The discharge limit for TPH is 50 micrograms per liter (µg/L). TPH as motor oil at Building 6 was not detected in the system influent, but was measured at 290 µg/L after the lead carbon bed, and at 180 µg/L in the effluent. The source of the motor oil is unknown since it was not present in the influent. The last time motor oil was detected in the system influent was November 21, 1994.

The Building 6 system samples exceeded the discharge limit for selenium and zinc in both the dissolved and total metals analyses. The selenium levels in the effluent were consistent with influent levels and only slightly exceeded the discharge limit. The effluent zinc levels were 271 µg/L in the dissolved sample and 184 µg/L in the total sample. The discharge limit for zinc is 110 µg/L. The Building 12 system met discharge limits for inorganic constituents. All fish toxicity tests showed the treatment systems' effluent to be nontoxic to the three spined stickleback. Also, there is no apparent relationship between inorganic constituent concentrations in the National Aeronautics and Space Administration (NASA) settling basin and concentrations in the treatment system effluents. Details of all treatment system discharge limit exceedences and all sample data are included as an attachment.

5090
Ser 1843.2/5007

The inorganic constituents that exceeded discharge limits during this operating period are both naturally occurring in groundwater. These constituents are at levels consistent with those found in background data, historical extraction well data, basewide groundwater data, and receiving water data. The effluent zinc concentrations at the Building 6 system have been consistently higher than influent zinc concentrations. However, the effluent concentrations have been inconsistent, the amount of increase through the system has been inconsistent, and there is no apparent affect on receiving waters. These constituents will continue to be monitored to evaluate if any trends are apparent or if the fluctuating effluent concentrations are due to fluctuating natural levels.

I certify that the information contained in this document and all attachments is, to the best of my knowledge, accurate and complete. Please call Su Don Tu of my staff at 415-244-2524 or Mark Kadnuck at 303-295-1101 if you have any questions or comments.

Sincerely,

STEPHEN CHAO
BRAC Installation Coordinator

Encl:
(1) Self-Monitoring Report for January 9,1995 to February 5, 1995

Blind copy to:
PRC Environmental Management Inc. (Attn: Mark Kadnuck)
18, 1843, 18432, 18433
Admin. record
Chron, green
File: Moffett

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

Reporting Period: Jan. 9, 1995 - Feb. 5, 1995

System Data*	Bldg 45 System	Bldg 12 System	Bldg 6 System
Total Flow for Period (gal)	NA	61720	76040
Influent pH	NA	7.3	7.8
Effluent pH	NA	7.6	7.8
Influent Temperature (C)	NA	25	25
Effluent Temperature (C)	NA	25	25

* Analytical data is attached

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

Treatment System Maintenance for Period
Building 45: System did not operate during reporting period.
Building 12: Changed out bagfilter and cleaned well flow meter on 1-11-95. Installed valves at outlet of GAC units on 1-19-95.
Building 6: Changed out bagfilter on 1-11-95. Replaced bag filter pressure differential indicator and installed valves at outlet of GAC units on 1-17-95.

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

Reporting Period: Jan. 9, 1995 - Feb. 5, 1995

TREATMENT SYSTEM
DISCHARGE LIMIT EXCEEDENCE SUMMARY

Sample ID	Analyte	Concentration (ug/L)	Discharge Limit (ug/L)
TS-S9-SP4-06	Se (diss.)	6.1	5
TS-S9-SP4-06	Zn (diss.)	271	110
TS-S9-SP4-06	Se (tot.)	6.8	5
TS-S9-SP4-06	Zn (tot.)	184	110
TS-S9-SP4-06	TPH motor oil	180	50

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 PROFESSIONAL ENGINEER

5-1-95

1/9/95 - 2/3/95

Inchcape Testing Services
Anametrix Laboratories

FAX TRANSMITTAL COVER SHEET

TO: **DATE:** 2-10-95

NAME: Jean Barranco

COMPANY: PRC

FAX #: (303) 295-2818

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

NOTE: Please confirm receipt of the fax and return this coversheet via fax:

RECEIVED BY: _____ **DATE:** 11

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 : 0235 SDG # MFC01
Moffett Site 9 SCM - 5 days TAT
Metals · 9502033-01, 03, 04, 06 (Totals + Dissolve
" -07 (Totals only) -

CHAIN-OF-CUSTODY RECORD

DESTINATION

PROJECT NAME: MOFFETT SITE 9 SCM

PROJECT JOB #: 044-0235 IRSC9C

SAMPLER(S): PRINTED NAME AND SIGNATURE: Steve Bowing

SAMPLING TEAM #

SAMPLE I.D.	DATE OF COLLECTION	TIME OF COLLECTION	SAMPLE MEDIUM (MATRIX)	GRAB	COMP	SAMPLE LOCATION	NUMBER/SIZE OF CONTAINERS	VOC 8010	TPH Purge 8015	TPH Extractable	Total Metals	Dis Metals						REMARKS
								ANALYSES REQUIRED										
								FIELD SAMPLE PREPARATION										
TB-59-SP1-06	12-2-95	1235	WATER	X		BUILDING 6 SP1	6x40ml, 2x1-liter Amber, 1x½-liter Poly	P	P	U	P	B						5 DAY TAT
TB-59-SP3-06	(2)	1245	WATER	X		BUILDING 6 SP3	6x40ml, 2x1-liter Amber	P	P	U			1x VOC w/bubbles					
TB-59-SP4-06	(3)	1255	WATER	X		BUILDING 6 SP4	6x40ml, 2x1-liter Amber, 1x½-liter Poly	P	P	U	P	B						
TB-59-SP1-12	(4)	1440	WATER	X		BUILDING 12 SP1	6x40ml, 2x1-liter Amber, 1x½-liter Poly	P	P	U	P	B						
TB-59-SP3-12	(5)	1500	WATER	X		BUILDING 12 SP3	6x40ml, 2x1-liter Amber	P	P	U			3x VOC w/bubbles					
TB-59-SP4-12	(6)	1520	WATER	X		BUILDING 12 SP4	6x40ml, 2x1-liter Amber, 1x½-liter Poly	P	P	U	P	B	4x VOC w/bubbles					
RW-59-NSB-01	(7)	1540	WATER	X		NASA SETTLING BASIN EFFLUENT	2x½-liter Poly				P							
TB-01	(8)	1235	WATER	X		TRIP BLANK	2x40 ml	P										

	SIGNATURE	NAME (print)	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Steve Bowing	Steven Bowing	PRC - Envr. Sci.	2/3/95	1045
RECEIVED BY:	Benny S. Carrizosa	BENNY S. CARRIZOSA	ITS ANAMETRIX	2/3/95	1045
RELINQUISHED BY:	Benny S. Carrizosa	BENNY S. CARRIZOSA	ITS ANAMETRIX	2/3/95	1410
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:	[illegible]	[illegible]	ITS/Anametrix	[illegible]	[illegible]

REMARKS:

REQ. TURN AROUND: 5 DAY

INSTRUCTIONS: Enter only one of the following four codes for each analysis required & for each sample listed. The codes should be entered under the columns labeled "ANALYSES REQUIRED".

U = UNPRESERVED AND UNFILTERED SAMPLE P = PRESERVED SAMPLE F = FILTERED SAMPLE B = BOTH PRESERVED & FILTERED SAMPLE

Laboratory: Please do dispose. Call if you are unsure. The number zero is "0". The letter O is "O".

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

NSB01T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: 0235 SAS No.: 000000 SDG No.: MF001

Matrix (soil/water): WATER Lab Sample ID: 02033-07T

Level (low/med): LOW Date Received: 02/02/95

% 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	94.0			P
7440-36-0	Antimony	1.5	U		P
7440-38-2	Arsenic	2.7	U		P
7440-39-3	Barium	67.1	B		P
7440-41-7	Beryllium	0.28	B		P
7440-43-9	Cadmium	0.20	B		P
7440-70-2	Calcium	171000			P
7440-47-3	Chromium	1.9	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	19.9	B		P
7439-89-6	Iron	113			P
7439-92-1	Lead	5.9			P
7439-95-4	Magnesium	75800			P
7439-96-5	Manganese	52.1			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	11.9			P
7440-02-0	Nickel	2.4	B		P
7440-09-7	Potassium	3820	B		P
7782-49-2	Selenium	6.9			P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	42100			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	2.7	B		P
7440-66-6	Zinc	92.0		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP106D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: 0235 SAS No.: 000000 SDG No.: MF001

Matrix (soil/water): WATER Lab Sample ID: 02033-01D

Level (low/med): LOW Date Received: 02/02/95

% 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	56.9			P
7440-36-0	Antimony	1.5	U		P
7440-38-2	Arsenic	2.7	U		P
7440-39-3	Barium	25.1	B		P
7440-41-7	Beryllium	0.29	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	184000			P
7440-47-3	Chromium	1.9	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	3.7	B		P
7439-89-6	Iron	17.1	U		P
7439-92-1	Lead	1.0	U		P
7439-95-4	Magnesium	63200			P
7439-96-5	Manganese	24.4			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	2.2	U		P
7440-02-0	Nickel	1.8	U		P
7440-09-7	Potassium	2090	B		P
7782-49-2	Selenium	6.3			P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	55300			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	2.2	B		P
7440-66-6	Zinc	75.2		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

mments:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP106T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: 0235 SAS No.: 000000 SDG No.: MF001

Matrix (soil/water): WATER Lab Sample ID: 02033-01T

Level (low/med): LOW Date Received: 02/02/95

% 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	36.0	B		P
7440-36-0	Antimony	1.5	U		P
7440-38-2	Arsenic	2.7	U		P
7440-39-3	Barium	24.5	B		P
7440-41-7	Beryllium	0.31	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	183000			P
7440-47-3	Chromium	1.9	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	8.5	B		P
7439-89-6	Iron	17.1	U		P
7439-92-1	Lead	1.0	B		P
7439-95-4	Magnesium	63200			P
7439-96-5	Manganese	23.7			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	2.7	B		P
7440-02-0	Nickel	1.8	U		P
7440-09-7	Potassium	1930	B		P
7782-49-2	Selenium	6.2			P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	39900			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	1.7	B		P
7440-66-6	Zinc	94.1		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP112D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: 0235 SAS No.: 000000 SDG No.: MF001

Matrix (soil/water): WATER Lab Sample ID: 02033-04D

Level (low/med): LOW Date Received: 02/02/95

% 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	36.3	B		P
7440-36-0	Antimony	1.5	U		P
7440-38-2	Arsenic	9.8	B		P
7440-39-3	Barium	441			P
7440-41-7	Beryllium	0.31	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	155000			P
7440-47-3	Chromium	1.9	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	4.1	B		P
7439-89-6	Iron	2390			P
7439-92-1	Lead	1.0	U		P
7439-95-4	Magnesium	67600			P
7439-96-5	Manganese	557			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	2.2	U		P
7440-02-0	Nickel	1.8	U		P
7440-09-7	Potassium	2880	B		P
7782-49-2	Selenium	2.1	U		P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	52400			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.50	U		P
7440-66-6	Zinc	22.5		E	P

lor Before: COLORLESS Clarity Before: CLEAR Texture:

lor After: COLORLESS Clarity After: CLEAR Artifacts:

nts:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP112T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: 0235 SAS No.: 000000 SDG No.: MF001

Matrix (soil/water): WATER Lab Sample ID: 02033-04T

Level (low/med): LOW Date Received: 02/02/95

% 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	39.0	B		P
7440-36-0	Antimony	1.5	U		P
7440-38-2	Arsenic	10.4			P
7440-39-3	Barium	456			P
7440-41-7	Beryllium	0.29	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	157000			P
7440-47-3	Chromium	1.9	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	6.3	B		P
7439-89-6	Iron	2610			P
7439-92-1	Lead	4.2			P
7439-95-4	Magnesium	68600			P
7439-96-5	Manganese	581			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	2.2	U		P
7440-02-0	Nickel	1.8	U		P
7440-09-7	Potassium	2960	B		P
7782-49-2	Selenium	2.3	B		P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	55300			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.50	U		P
7440-66-6	Zinc	52.6		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

mments:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP406D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: 0235 SAS No.: 000000 SDG No.: MF001

Matrix (soil/water): WATER Lab Sample ID: 02033-03D

Level (low/med): LOW Date Received: 02/02/95

% 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	55.6			P
7440-36-0	Antimony	1.6	B		P
7440-38-2	Arsenic	2.7	U		P
7440-39-3	Barium	27.3	B		P
7440-41-7	Beryllium	0.34	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	183000			P
7440-47-3	Chromium	1.9	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	4.1	B		P
7439-89-6	Iron	17.1	U		P
7439-92-1	Lead	1.0	U		P
7439-95-4	Magnesium	63000			P
7439-96-5	Manganese	10.9	B		P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	2.2	U		P
7440-02-0	Nickel	4.1	B		P
7440-09-7	Potassium	2010	B		P
7782-49-2	Selenium	6.1			P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	46700			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.88	B		P
7440-66-6	Zinc	271		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP406T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: 0235 SAS No.: 000000 SDG No.: MF001

Matrix (soil/water): WATER Lab Sample ID: 02033-03T

Level (low/med): LOW Date Received: 02/02/95

% 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	52.4			P
7440-36-0	Antimony	1.5	U		P
7440-38-2	Arsenic	2.7	U		P
7440-39-3	Barium	26.1	B		P
7440-41-7	Beryllium	0.36	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	165000			P
7440-47-3	Chromium	1.9	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	5.7	B		P
7439-89-6	Iron	103			P
7439-92-1	Lead	1.0	U		P
7439-95-4	Magnesium	57600			P
7439-96-5	Manganese	10.1	B		P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	3.7	B		P
7440-02-0	Nickel	4.5	B		P
7440-09-7	Potassium	1750	B		P
7782-49-2	Selenium	6.8			P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	36200			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.50	U		P
7440-66-6	Zinc	184		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

ENVIROFORMS/INORGANIC CLP

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SP412D

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: 0235 SAS No.: 000000 SDG No.: MF001

Matrix (soil/water): WATER Lab Sample ID: 02033-06D

Level (low/med): LOW Date Received: 02/02/95

% 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	41.5	B		P
7440-36-0	Antimony	1.5	U		P
7440-38-2	Arsenic	2.7	U		P
7440-39-3	Barium	425			P
7440-41-7	Beryllium	0.30	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	148000			P
7440-47-3	Chromium	1.9	U		P
7440-48-4	Cobalt	0.79	B		P
7440-50-8	Copper	4.1	B		P
7439-89-6	Iron	117			P
7439-92-1	Lead	1.0	U		P
7439-95-4	Magnesium	65700			P
7439-96-5	Manganese	495			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	2.2	U		P
7440-02-0	Nickel	4.2	B		P
7440-09-7	Potassium	3360	B		P
7782-49-2	Selenium	2.1	U		P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	50800			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.87	B		P
7440-66-6	Zinc	64.6		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SP412T

Lab Name: ANAMETRIX INC Contract: 000000

Lab Code: ANAMET Case No.: 0235 SAS No.: 000000 SDG No.: MF001

Matrix (soil/water): WATER Lab Sample ID: 02033-06T

Level (low/med): LOW Date Received: 02/02/95

% 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	44.0	B		P
7440-36-0	Antimony	1.5	U		P
7440-38-2	Arsenic	2.7	U		P
7440-39-3	Barium	434			P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	148000			P
7440-47-3	Chromium	1.9	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	6.5	B		P
7439-89-6	Iron	107			P
7439-92-1	Lead	1.3	B		P
7439-95-4	Magnesium	66100			P
7439-96-5	Manganese	497			P
7439-97-6	Mercury	0.10	U		CV
7439-98-7	Molybdenum	2.2	U		P
7440-02-0	Nickel	4.0	B		P
7440-09-7	Potassium	2830	B		P
7782-49-2	Selenium	2.1	U		P
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	50100			P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	0.50	U		P
7440-66-6	Zinc	78.9		E	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN (ILM02.1)

Inchcape Testing Services
Anametrix Laboratories

FAX TRANSMITTAL COVER SHEET

TO: **DATE:** 2-10-95

NAME: Jean Barranco

COMPANY: PRC

FAX #: (303) 295-2818

TOTAL NUMBER OF PAGES (INCLUDING THIS COVER SHEET): 9

NOTE: Please confirm receipt of the fax and return this coversheet via fax:

RECEIVED BY: _____ **DATE:** _____

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 : 0235 SDG # MF001
Moffett Site 9 SCM - 5 days TAT
GCVOA/8010 : 9502033-01,02,03,04,05,06 and 08.

CHAIN-OF-CUSTODY RECORD

DESTINATION

PROJECT NAME: MOFFETT SITE 9 SCM

PROJECT JOB #: 044-0235/RSC9C

SAMPLER(S): PRINTED NAME AND SIGNATURE: Steve Bowing

SAMPLING TEAM #

SAMPLE I.D.	DATE OF COLLECTION	TIME OF COLLECTION	SAMPLE MEDIUM (MATRIX)	GRAB	COMP	SAMPLE LOCATION	NUMBER/SIZE OF CONTAINERS	VOC 8010	TPH purge 8015	TPH diesel 8015	Total Metals CLP	Diss Metals CLP						REMARKS
								FIELD SAMPLE PREPARATION										
TB-59-SP1-06	12-2-95	1235	WATER	X		BUILDING 6 SP1	6x40ml, 2x1-liter Amber, 4x1-liter Poly	P	P	U	P	B						5 DAY TAT
TB-59-SP3-06	(2)	1245	WATER	X		BUILDING 6 SP3	6x40ml, 2x1-1.1 Amber	P	P	U			1x VOC w/bubbles					
TB-59-SP4-06	(3)	1255	WATER	X		BUILDING 6 SP4	6x40ml, 2x1-liter Amber, 4x1-liter Poly	P	P	U	P	B						
TB-59-SP1-12	(9)	1440	WATER	X		BUILDING 12 SP1	6x40ml, 2x1-1.1 Amber, 4x1-liter Poly	P	P	U	P	B						
TB-59-SP3-12	(7)	1500	WATER	X		BUILDING 12 SP3	6x40ml, 2x1-1.1 Amber	P	P	U			3x VOC w/bubbles					
TB-59-SP4-12	(6)	1520	WATER	X		BUILDING 12 SP4	6x40ml, 2x1-1.1 Amber, 4x1-liter Poly	P	P	U	P	B	1x VOC w/bubbles					
RW-59-NSB-01	(4)	1540	WATER	X		NASA SETTLING BASIN EFFLUENT	2x1-liter Poly				P							
TB-01	(8)	1235	WATER	X		TRIP BLANK	2x40 ml	P										

Laboratory, Please distribute. Call if you are unsure. The number zero is "0" and the letter O is "O".

	SIGNATURE	NAME (print)	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Steve Bowing	Steven Bowing	PRC - Envr. Sci.	2/3/95	1045
RECEIVED BY:	Benny S. Carrizosa	BENNY S. CARRIZOSA	ITS ANAMETRIX	2/3/95	1045
RELINQUISHED BY:	Benny S. Carrizosa	BENNY S. CARRIZOSA	ITS ANAMETRIX	2/3/95	1410
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:	[illegible]	[illegible]	ITS/Anametrix	[illegible]	[illegible]

REMARKS:

REQ. TURN AROUND

INSTRUCTIONS: Enter only one of the following four codes for each analysis required & for each sample listed. The codes should be entered under the columns labeled "ANALYSES REQUIRED".

U = UNPRESERVED AND UNFILTERED SAMPLE P = PRESERVED SAMPLE F = FILTERED SAMPLE B = BOTH PRESERVED & FILTERED SAMPLE

FEB-10-1995 09:46 P.02

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP106

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: 0235 SAS No.: SDG No.: MF001

Matrix: (soil/water) WATER Lab Sample ID: 9502033-01

Sample wt/vol: .100 (g/mL) ML Lab File ID: HPF03301

Level: (low/med) LOW Date Received: 02/02/95

% Moisture: not dec._____ Date Analyzed: 02/07/95

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	390.	
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	1300.	
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	140.	
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

FORM I VOA 3/90

PRELIM RESULTS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP306

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: 0235 SAS No.: SDG No.: MF001

Matrix: (soil/water) WATER Lab Sample ID: 9502033-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HPF03302

Level: (low/med) LOW Date Received: 02/02/95

% Moisture: not dec._____ Date Analyzed: 02/07/95

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.

SP406

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: 0235 SAS No.: SDG No.: MF001

Matrix: (soil/water) WATER Lab Sample ID: 9502033-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HPF03303

Level: (low/med) LOW Date Received: 02/02/95

% Moisture: not dec._____ Date Analyzed: 02/07/95

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: ANAMET Case No.: 0235 SAS No.: SDG No.: MF001

Matrix: (soil/water) WATER Lab Sample ID: 9502033-04

Sample wt/vol: .500 (g/mL) ML Lab File ID: HPF03304

Level: (low/med) LOW Date Received: 02/02/95

% Moisture: not dec._____ Date Analyzed: 02/07/95

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	82.	
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.	
75-09-2	Methylene chloride	5.	U
156-60-5	trans-1,2-Dichloroethene	23.	
75-34-3	1,1-Dichloroethane	25.	
156-59-2	cis-1,2-Dichloroethene	190.	
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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP312

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: 0235 SAS No.: SDG No.: MF001

Matrix: (soil/water) WATER Lab Sample ID: 9502033-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HPF03305

Level: (low/med) LOW Date Received: 02/02/95

% Moisture: not dec._____ Date Analyzed: 02/07/95

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.: 0235 SAS No.: SDG No.: MF001

Matrix: (soil/water) WATER Lab Sample ID: 9502033-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HPF03306

Level: (low/med) LOW Date Received: 02/02/95

% Moisture: not dec._____ Date Analyzed: 02/07/95

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-01

Lab Name: Anametrix, Inc. Contract:

Lab Code: ANAMET Case No.: 0235 SAS No.: SDG No.: MF001

Matrix: (soil/water) WATER Lab Sample ID: 9502033-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: HPF03308

Level: (low/med) LOW Date Received: 02/02/95

% Moisture: not dec._____ Date Analyzed: 02/07/95

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	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
76-13-1	Trichlorotrifluoroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
110-75-8	2-Chloroethylvinylether	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U

PRELIM RESULTS

Inchcape Testing Services
Anametrix Laboratories

FAX TRANSMITTAL COVER SHEET

TO: DATE: 2-24-95

NAME: Jean Barranco

COMPANY: PRC

FAX #: 303-295-2818

TOTAL NUMBER OF PAGES (INCLUDING THIS COVER SHEET): 16

NOTE: Please confirm receipt of the fax and return this coversheet via fax:

RECEIVED BY: _____ DATE: _____

FROM:

NAME: Richard Jacobs

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: 235 SDG MF001
Moffett Site 9
gas/BTEX: 9502033 - 01 through 06

ENVIRONMENTAL MANAGEMENT DIV.

9502033 (14/30) (15/16)

CHAIN-OF-CUSTODY RECORD

DESTINATION

PROJECT NAME: MOFFETT SITE 9 SCM

PROJECT JOB #: 044-0235/RSC9C

SAMPLERS: PRINTED NAME AND SIGNATURE: Steve Bearing

SAMPLING TEAM #

NUMBER/SIZE OF CONTAINERS

ANALYSES REQUIRED

SAMPLE I.D.	DATE OF COLLECTION	TIME OF COLLECTION	SAMPLE MEDIUM (MATRIX)	GRAB	COMP	SAMPLE LOCATION	NUMBER/SIZE OF CONTAINERS	VOC 8010	TPH	SVOC	TPH	Total Metals	Diss. Metals						REMARKS
								FIELD SAMPLE PREPARATION											
TB-S9-SP1-06	02-2-95	1235	WATER	X		BUILDING 6 SP1	6x40ml, 2x1-liter Amber, 2x1-liter Poly	P	P	U	P	B							5 DAY TAT
TB-S9-SP3-06	(2)	1245	WATER	X		BUILDING 6 SP3	6x40ml, 2x1-1.4 Amber	P	P	U			1						
TB-S9-SP4-06	(3)	1255	WATER	X		BUILDING 6 SP4	6x40ml, 2x1-liter Amber, 2x1-liter Poly	P	P	U	P	B							
TB-S9-SP1-12	(4)	1400.	WATER	X		BUILDING 12 SP1	6x40ml, 2x1-liter Amber, 2x1-liter Poly	P	P	U	P	B							
TB-S9-SP3-12	(5)	1500	WATER	X		BUILDING 12 SP3	6x40ml, 2x1-liter Amber	P	P	U			3						
TB-S9-SP4-12	(6)	1520	WATER	X		BUILDING 12 SP4	6x40ml, 2x1-liter Amber, 2x1-liter Poly	P	P	U	P	B	1						
RW-S9-NSB-01	(7)	1540	WATER	X		NASA SETTLING BASIN EFFLUENT	2x1-liter Poly				P								
TB-01	(8)	1235	WATER	X		TRIP BLANK	2x40 ml	P											

SIGNATURE	NAME (print)	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Steven Bearing	PRC - Envr. Sci.	2/3/95	1045
RECEIVED BY:	BENNY S. CARRIZOSA	ITS ANAMETRIX	2/3/95	1045
RELINQUISHED BY:	BENNY S. CARRIZOSA	ITS ANAMETRIX	2/3/95	1410
RECEIVED BY:				
RELINQUISHED BY:				
RECEIVED BY:	JOE [illegible]	ITS ANAMETRIX		

REMARKS:

REQ. TURN AROUND

INSTRUCTIONS: Enter only one of the following four codes for each analysis required & for each sample listed. This codes should be entered under the columns labeled "ANALYSES REQUIRED".

U = UNPRESERVED AND UNFILTERED SAMPLE P = PRESERVED SAMPLE F = FILTERED SAMPLE B = BOTH PRESERVED & FILTERED SAMPLE

Laboratory: Please dispose of the sample after analysis. But if you are unsure, please return to the address on the other side.

00 02

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MS. JEAN BARRANCO
PRC ENVIRONMENTAL MANAGEMENT
1099 18TH STREET SUITE 1960
DENVER, CO 80202

Workorder # : 9502033
Date Received : 02/03/95
Project ID : 0235
Purchase Order: MF001
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9502033- 1	SP106	WATER	02/02/95	TPHd
9502033- 2	SP306	WATER	02/02/95	TPHd
9502033- 3	SP406	WATER	02/02/95	TPHd
9502033- 4	SP112	WATER	02/02/95	TPHd
9502033- 5	SP312	WATER	02/02/95	TPHd
9502033- 6	SP412	WATER	02/02/95	TPHd
9502033- 1	SP106	WATER	02/02/95	TPHgBTEX
9502033- 2	SP306	WATER	02/02/95	TPHgBTEX
9502033- 3	SP406	WATER	02/02/95	TPHgBTEX
9502033- 4	SP112	WATER	02/02/95	TPHgBTEX
9502033- 5	SP312	WATER	02/02/95	TPHgBTEX
9502033- 6	SP412	WATER	02/02/95	TPHgBTEX

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MS. JEAN BARRANCO
PRC ENVIRONMENTAL MANAGEMENT
1099 18TH STREET SUITE 1960
DENVER, CO 80202

Workorder # : 9502033
Date Received : 02/03/95
Project ID : 0235
Purchase Order: MF001
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.
- No QA/QC problems were encountered for this workorder.

Cheryl Baemer 2/22/95
Department Supervisor Date

Irma Shor 2/22/95
Chemist Date

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

Project ID	: 0235	Anametrix ID	: 9502033-01
Sample ID	: SP106	Lab File ID	: FPF03301
Matrix	: WATER	% Moisture	: 100.
Date Sampled	: 2/ 2/95		
Date Analyzed	: 2/ 6/95	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.	600.	

GC/TPH - PAGE

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

Project ID : 0235
Sample ID : SP106
Matrix : WATER
Date Sampled : 2/ 2/95
Date Analyzed : 2/ 6/95
Instrument ID : HP8

Anametrix ID : 9502033-01
Lab File ID : PPF03301
% Moisture : 100.

Dilution Factor : 1.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
71-43-2	Benzene	.50	ND	U
108-88-3	Toluene	.50	ND	U
100-41-4	Ethylbenzene	.50	ND	U
1111-11-1	Total Xylenes	.50	ND	U

GC/TPH - PAGE

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

Project ID	: 0235	Anametrix ID	: 9502033-04
Sample ID	: SP112	Lab File ID	: FRF03304
Matrix	: WATER	% Moisture	: 100.
Date Sampled	: 2/ 2/95		
Date Analyzed	: 2/13/95	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.	20000.	

GC/TPH - PAGE

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

Project ID : 0235
Sample ID : SP112
Matrix : WATER
Date Sampled : 2/ 2/95
Date Analyzed : 2/13/95
Instrument ID : HP8

Anametrix ID : 9502033-04
Lab File ID : PRF03304
% Moisture : 100.

Dilution Factor : 50.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
71-43-2	Benzene	25.	900.	
108-88-3	Toluene	25.	400.	
100-41-4	Ethylbenzene	25.	1100.	
1111-11-1	Total Xylenes	25.	850.	

GC/TPH - PAGE

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

Project ID	: 0235	Anametrix ID	: 9502033-02
Sample ID	: SP306	Lab File ID	: FPF03302
Matrix	: WATER	% Moisture	: 100.
Date Sampled	: 2/ 2/95		
Date Analyzed	: 2/ 6/95	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

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

Project ID : 0235
Sample ID : SP306
Matrix : WATER
Date Sampled : 2/ 2/95
Date Analyzed : 2/ 6/95
Instrument ID : HP8

Anametrix ID : 9502033-02
Lab File ID : PPF03302
% Moisture : 100.
Dilution Factor : 1.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
71-43-2	Benzene	.50	ND	U
108-88-3	Toluene	.50	ND	U
100-41-4	Ethylbenzene	.50	ND	U
1111-11-1	Total Xylenes	.50	ND	U

GC/TPH - PAGE

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

Project ID	: 0235	Anametrix ID	: 9502033-05
Sample ID	: SP312	Lab File ID	: FPF03305
Matrix	: WATER	% Moisture	: 100.
Date Sampled	: 2/ 2/95		
Date Analyzed	: 2/ 7/95	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.	49.	J

GC/TPH - PAGE

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

Project ID	: 0235	Anametrix ID	: 9502033-05
Sample ID	: SP312	Lab File ID	: PPF03305
Matrix	: WATER	% Moisture	: 100.
Date Sampled	: 2/ 2/95		
Date Analyzed	: 2/ 7/95	Dilution Factor	: 1.0
Instrument ID	: HP8	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
71-43-2	Benzene	.50	ND	U
108-88-3	Toluene	.50	ND	U
100-41-4	Ethylbenzene	.50	ND	U
1111-11-1	Total Xylenes	.50	ND	U

GC/TPH - PAGE

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

Project ID	: 0235	Anametrix ID	: 9502033-03
Sample ID	: SP406	Lab File ID	: FPF03303
Matrix	: WATER	% Moisture	: 100.
Date Sampled	: 2/ 2/95		
Date Analyzed	: 2/ 6/95	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

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

Project ID	: 0235	Anametrix ID	: 9502033-03
Sample ID	: SP406	Lab File ID	: PPF03303
Matrix	: WATER	% Moisture	: 100. :
Date Sampled	: 2/ 2/95		
Date Analyzed	: 2/ 6/95	Dilution Factor	: 1.0
Instrument ID	: HP8	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
71-43-2	Benzene	.50	ND	U
108-88-3	Toluene	.50	ND	U
100-41-4	Ethylbenzene	.50	ND	U
1111-11-1	Total Xylenes	.50	ND	U

GC/TPH - PAGE

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

Project ID	: 0235	Anametrix ID	: 9502033-06
Sample ID	: SP412	Lab File ID	: FPF03306
Matrix	: WATER	% Moisture	: 100.
Date Sampled	: 2/ 2/95		
Date Analyzed	: 2/ 7/95	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.	26.	J

GC/TPH - PAGE

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

Project ID	: 0235	Anametrix ID	: 9502033-06
Sample ID	: SP412	Lab File ID	: PPF03306
Matrix	: WATER	% Moisture	: 100.
Date Sampled	: 2/ 2/95		
Date Analyzed	: 2/ 7/95	Dilution Factor	: 1.0
Instrument ID	: HP8	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
71-43-2	Benzene	.50	ND	U
108-88-3	Toluene	.50	ND	U
100-41-4	Ethylbenzene	.50	ND	U
1111-11-1	Total Xylenes	.50	ND	U

GC/TPH - PAGE

Inchcape Testing Services
Anametrix Laboratories

FAX TRANSMITTAL COVER SHEET

TO: **DATE:** 2-21-95

NAME: Jean Barranco

COMPANY: PRC

FAX #: 303-295-2818

TOTAL NUMBER OF PAGES (INCLUDING THIS COVER SHEET): 3

NOTE: Please confirm receipt of the fax and return this coversheet via fax:

RECEIVED BY: _____ **DATE:** _____

FROM:

NAME: Richard Jacobs

ITS - ANAMETRIX LABORATORIES
FAX : (408) 385-7810
PHONE : (408) 432 - 8192

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

COMMENTS: C-TO: 0235 SDG # MF001
Moffet site 9 - 10 day TAT
~~TPH(diesel)~~ TPH-diesel, motor oil, kerosene, JP-5
9502033-01,02,03,04,05,06.

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 # G502033 Client PRC

Date Extracted 02/07/95 Project # 0235

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

ANAMETRIX ID #	CLIENT ID #	DATE ANALYZED	REPORTING LIMIT	AMOUNT FOUND ppb / ppm Diesel	Motor	Hydraulic	Jet fuel	% SURROGATE RECOVERY
-1	SP106	02/08/95	100	ND	ND	ND	ND	96 %
-2	SP306	"	100	ND	290	ND	ND	83 %
-3	SP406	"	100	ND	180	ND	ND	96 %
-4	SP112	"	100	ND	ND	200	ND	98 %
-5	SP312	"	100	ND	ND	ND	ND	99 %
-6	SP412	"	100	ND	ND	ND	ND	99 %
BF071FG	Method Blank	02/08/95	100	ND	ND	ND	ND	93 %

Date: 02/11/95 Date:

Analyst: ARP Reviewer:

METHODS PERFORMED ARE THOSE SPECIFIED BY TRIREGIONAL GUIDELINES.

S225

PROJECT NAME: MOFFETT SITE 9 SCM

PROJECT JOB #: 044-0235/RSC90

SAMPLERS: PRINTED NAME AND SIGNATURE: Steve Rosing

SAMPLING TEAM #:

SAMPLE I.D.	DATE OF COLLECTION	TIME OF COLLECTION	SAMPLE MEDIUM (MATRIX)	GRAB	COMP	SAMPLE LOCATION	NUMBER/SIZE OF CONTAINERS	VOC 8010	TPH gas 8015	TPH diesel	Total Metals	Diss Metals					REMARKS
								ANALYSES REQUIRED									
TB-S9-SP1-06	02-2-95	1235	WATER	X		BUILDING 6 SP1	6x40ml, 2x1-liter Amber, 1x1-liter Poly	P	P	U	P	B					5 DAY TAT
TB-S9-SP3-06	(2)	1245	WATER	X		BUILDING 6 SP3	6x40ml, 2x1-1.2L Amber	P	P	U			1 x VOC w/ bubbles				
TB-S9-SP4-06	(3)	1255	WATER	X		BUILDING 6 SP4	6x40ml, 2x1-liter Amber, 1x1-liter Poly	P	P	U	P	B					
TB-S9-SP1-12	(4)	1400	WATER	X		BUILDING 12 SP1	6x40ml, 2x1-1.2L Amber, 1x1-liter Poly	P	P	U	P	B					
TB-S9-SP3-12	(5)	1500	WATER	X		BUILDING 12 SP3	6x40ml, 2x1-1.2L Amber	P	P	U			3 x VOC w/ bubbles				
TB-S9-SP4-12	(6)	1520	WATER	X		BUILDING 12 SP4	6x40ml, 2x1-1.2L Amber, 1x1-liter Poly	P	P	U	P	B	1 x VOC w/ bubbles				
RW-S9-NSB-01	(7)	1540	WATER	X		NASA SETTLING BASIN EFFLUENT	2x1-liter Poly				P						
TB-01	(8)	1235	WATER	X		TRIP BLANK	2x40 ml	P									

	SIGNATURE	NAME (print)	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Steve Rosing	Steven Rosing	PRC - Envt. Sci.	2/3/95	1045
RECEIVED BY:	Benny S. Carrizosa	BENNY S. CARRIZOSA	ITS ANAMETRIX	2/3/95	1045
RELINQUISHED BY:	Benny S. Carrizosa	BENNY S. CARRIZOSA	ITS ANAMETRIX	2/3/95	1410
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:	[illegible]	[illegible]	ITS Anametrix	[illegible]	[illegible]

REMARKS:

REQ. TURN AROUND TIME:

INSTRUCTIONS: Enter only one of the following four codes for each analysis required & for each sample listed. The codes should be entered under the columns labeled "ANALYSES REQUIRED"

U = UNPRESERVED AND UNFILTERED SAMPLE P = PRESERVED SAMPLE F = FILTERED SAMPLE B = BOTH PRESERVED & FILTERED SAMPLE

(Laboratory, Please dispatch, but if you are unsure, The number zero is "0" and the letter O is "O".)

ToxScan, Inc. *42 Hangar Way • Watsonville, CA 95076-2404 • (408) 724-4522 • FAX (408) 724-3188*

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

9 February, 1995

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-11755. 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 at least 2 days prior to test initiation, and no mortality was observed in the species before testing was started.

BIOASSAY CONDITIONS

Date Sampled:	2 February, 1995
Date Started:	3 February, 1995
Lighting:	10-20 microE/M^2/s

	Sticklebacks
No. Fish/Tank:	10
Vol. of Test Solution:	9 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	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-11755	Start Date	3 February 1995
Client	PRC Environmental Management, Inc.	End Date	7 February 1995
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	10	pH	8.5	8.0	8.1	8.2	8.2
						DO	8.6	6.3	8.0	8.2	8.2
						Temp	20.5	20.8	20.3	20.8	20.1
Control	10	10	10	10	10	pH	8.4	7.9	8.3	8.3	8.3
						DO	8.6	6.1	8.2	8.4	8.5
						Temp	20.2	20.6	20.3	20.7	20.1
-06	10	10	10	10	10	pH	7.7	8.0	8.5	8.4	8.3
						DO	7.6	6.4	8.0	8.1	8.3
						Temp	20.3	20.5	21.0	20.7	20.4
-06	10	10	10	10	10	pH	7.7	8.0	8.5	8.3	8.2
						DO	7.6	6.2	8.2	8.2	8.4
						Temp	20.5	20.6	20.9	20.7	20.5
-12	10	10	10	10	10	pH	7.5	7.9	8.4	8.4	8.5
						DO	7.7	5.9	8.5	8.4	8.5
						Temp	20.1	20.7	20.7	20.7	20.5
-12	10	10	10	10	10	pH	7.5	8.0	8.2	8.2	8.2
						DO	7.7	6.0	8.2	8.2	8.3
						Temp.	20.1	20.4	20.5	20.5	20.5

Hardness

Control-initial	228	Sample -06-initial	700	Sample -12-initial	660
Control-final	232	Sample -06-final	660	Sample -12-final	360

Alkalinity

Control-initial	124	Sample -06-initial	340	Sample -12-initial	640
Control-final	120	Sample -06-final	280	Sample -12-final	360

Conductivity

Control-initial	1100	Sample -06-initial	1150	Sample -12-initial	1100
Control-final	1100	Sample -06-final	1090	Sample -12-final	710

* Aeration initiated on all test containers

FISH WEIGHT AND LENGTH ANALYSIS SHEET

TEST SPECIFICATIONS:

Date Started:	3 February 1995
Date Completed:	7 February 1995
Test Species:	3-spined Stickleback (*Gasterosteus aculeatus*)
# Organisms/Tank:	10
Volume/Tank:	9 Liters
Test Material Concentrations:	0% (control) and 100%
Replicates/Concentration:	2

Fish Weights and Lengths: Lot Number Gas010495

Fish No.	Weight (g)	Length (mm)
1	0.6138	38
2	0.6728	37
3	0.4213	32
4	0.5330	34
5	0.3460	32
6	0.5080	36
7	0.4232	33
8	0.4566	35
9	0.4380	34
10	0.4971	34
Total	4.9098	345
Mean	0.4910	34.5