



93 AUG 30 PM 1:18

TRANSMITTAL LETTER

FROM: Alison Watts

DATE: August 27, 1993

TO: Jennifer Eberle
Alameda County Department
of Environmental Health
80 Swan Way, Rm 80
Oakland, California, 94621

VIA: First Class Mail
 Fax ___ pages
 UPS (Surface)
 Federal Express
 Courier

SUBJECT: Analytical Results
2120 Montana Street
Oakland, California

JOB: 81-741

AS: We discussed on the telephone on _____
 You requested August 27, 1993
 We believe you may be interested
 Is required

WE ARE SENDING: Enclosed
 Under Separate Cover Via _____

Analytical Results for soil sampling at Shell Station, 2120 Montana St, Oakland.

FOR: Your information
 Your use
 Your review & comments
 Return to you

PLEASE: Keep this material
 Return within 2 weeks
 Acknowledge receipt

MESSAGE: Please call if you have any further questions, Alison



Inchcape Testing Services

Anametrix Laboratories

1961 Concourse Drive
Suite E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8198

93 AUG 30 PM 1:18

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307040
Date Received : 07/07/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813

The following samples were received at Anametrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9307040- 1	SS-1
9307040- 2	SS-2
9307040- 3	SS-3
9307040- 4	SS-4

This report consists of 11 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen for

Sarah Schoen, Ph.D.
Laboratory Director

7-16-93

Date

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307040
Date Received : 07/07/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9307040- 1	SS-1	SOIL	07/06/93	TPHgBTEX
9307040- 2	SS-2	SOIL	07/06/93	TPHgBTEX
9307040- 3	SS-3	SOIL	07/06/93	TPHgBTEX
9307040- 4	SS-4	SOIL	07/06/93	TPHgBTEX

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307040
Date Received : 07/07/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Charles Borch 7/12/93
Department Supervisor Date

Charles M Borch 7-12-93
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9307040
Matrix : **SOIL**
Date Sampled : 07/06/93

Project Number : 204-5508-0208
Date Released : 07/12/93

Reporting Limit	Sample I.D.# SS-1	Sample I.D.# SS-2	Sample I.D.# SS-3	Sample I.D.# SS-4	Sample I.D.# BL0801E2
COMPOUNDS (mg/Kg)	-01	-02	-03	-04	BLANK
Benzene	0.005	0.052	8.3 0.11	ND	ND
Toluene	0.005	0.055	ND	0.10	0.013
Ethylbenzene	0.005	0.046	8.0	0.061	ND
Total Xylenes	0.005	0.041	100	0.14	0.006
TPH as Gasoline	0.5	13	560 4.9	ND	ND
% Surrogate Recovery	103%	90%	98%	86%	82%
Instrument I.D.	HP12	HP12	HP12	HP4	HP4
Date Analyzed	07/09/93	07/09/93	07/09/93	07/08/93	07/08/93
RLMF	2.5	250	2.5	1	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
- RLMF - Reporting Limit Multiplication Factor.

Anamatrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charles M. Burch 7/12/93
Analyst Date

Cheryl Balmer 7/12/93
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9307040
Matrix : SOIL
Date Sampled : N/A

Project Number : 204-5508-0208
Date Released : 07/12/93

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# BL0901E2 BLANK
Benzene	0.005	ND
Toluene	0.005	ND
Ethylbenzene	0.005	ND
Total Xylenes	0.005	ND
TPH as Gasoline	0.5	ND
% Surrogate Recovery		100%
Instrument I.D.		HP12
Date Analyzed		07/09/93
RLMF		1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
- RLMF - Reporting Limit Multiplication Factor.

Anamatrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charles M. Burch 7/12/93
Analyst Date

Cheryl Badman 7/12/93
Supervisor Date

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
 EPA METHOD 5030 WITH GC/FID
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
 Matrix : SOIL
 Date Sampled : N/A
 Date Analyzed : 07/08/93

Anamatrix I.D. : ML0801E1
 Analyst : *CMB*
 Supervisor : *AS*
 Date Released : 07/12/93
 Instrument I.D.: HP4

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS
GASOLINE	0.50	0.55	110%	58-130
p-BFB			82%	53-147

* Quality control established by Anamatrix, Inc.

ANAMETRIX REPORT DESCRIPTION INORGANICS

Analytical Data Report (ADR)

The ADR contains tabulated results for inorganic analytes. All field samples, QC samples and blanks were prepared and analyzed according to procedures in the following references:

- EPA Method 6010/7000/9000 series - "Test Methods for Evaluating Solid Waste," SW-846, EPA, 3rd Edition, November 1986.
- EPA Method 100, 200, 300 series - "Methods for Chemical Analysis of Water and Wastes," EPA, 3rd Edition, 1983.
- Toxicity Characteristic Leaching Procedure (EPA Method 1311) - 40 CFR, Part 268, Appendix 1, June 1990.
- Waste Extraction Test - Results are reported in mg/L of extract according to procedures of CCR Title 22, Section 66261, Appendix II.
- Organic Lead - CCR Title 22, Section 66261, Appendix XI.
- Standard Method 2340B - "Standard Methods for the Examination of Water and Wastewater," APHA, AWWA, WEF, 18th Edition, 1992.

Matrix Spike Report (MSR)

The MSR summarizes percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. MSRs may not be provided with all analytical reports. Anamatrix control limit for MSR is 75-125% with 25% for RPD limits.

Laboratory Control Sample Report (LCSR)

The LCSR summarizes percent recovery information for laboratory control spikes on reagent water or soil. This information is a statement of performance for the method, i.e., the samples are properly prepared and analyzed according to the applicable methods. Anamatrix control limit for LCSR is 80-120%.

Method Blank Report (MBR)

The MBR summarizes quality control information for reagents used in preparing samples. The absolute value of each analyte measured in the method blank should be below the method reporting limit for that analyte.

Post Digestion Spike Report (PDSR)

The PDSR summarizes percent recovery information for post digestion spikes. A post digestion spike is performed for a particular analyte if the matrix spike recovery is outside of established control limits. Any percent recovery for a post digestion spike outside of established limits for an analyte indicates probable matrix effects and interferences for that analyte. Anamatrix control limit for PDSR is 85-115%.

Qualifiers (Q)

Anamatrix uses several data qualifiers in inorganic reports. These qualifiers give additional information on the analytes reported. The following is a list of qualifiers and their meanings:

- I - Sample was analyzed at the stated dilution due to spectral interferences.
- U - Analyte concentration was below the method reporting limit. For matrix and post digestion spike reports, a value of "0.0" is entered for calculation of the percent recovery.
- B - Sample concentration was below the reporting limit but above the instrument detection limit. Result is entered for calculation of the percent recovery only.
- H - Spike percent recovery was outside of Anamatrix control limits due to interferences from relatively high concentration level of the analyte in the unspiked sample.

Comment Codes

In addition to qualifiers, the following codes are used in the comment section of all reports to give additional information about sample preparation methods:

- A - Sample was prepared for silver based on the silver digestion method developed by the Southern California Laboratory, Department of Health Services, "Acid Digestion for Sediments, Sludges, Soils and Solid Wastes. A Proposed Alternative to EPA SW846, Method 3050." Environmental Science and Technology, 1989, 23, 898-900.
- T - Spikes were prepared after extraction by the Toxicity Characteristic Leaching Procedure (TCLP).
- C - Spikes were prepared after extraction by the California Waste Extraction Test (CWET) method.
- D - Reported results are dissolved, not total, metals.

Reporting Conventions

Analytical values reported are gross values, i.e., not corrected for method blank contamination. Solid matrices are reported on a wet weight basis, unless specifically requested otherwise.

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307040
Date Received : 07/07/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : METALS
Sub-Department: METALS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9307040- 1	SS-1	SOIL	07/06/93	7421
9307040- 2	SS-2	SOIL	07/06/93	7421
9307040- 3	SS-3	SOIL	07/06/93	7421
9307040- 4	SS-4	SOIL	07/06/93	7421

INORGANIC ANALYSIS DATA SHEET
 ANAMETRIX, INC. (408) 432-8192

Analyte-Method: ~~Lead-7421~~
 Project I.D. : 204-5508-0208
 Matrix : SOIL
 Reporting Unit: mg/Kg

Analyst : MK
 Supervisor : MW
 Date Sampled : 07/06/93
 Date Released : 07/16/93
 Instrument I.D. : AA2

ANAMETRIX SAMPLE I.D.	CLIENT I.D.	DATE PREPARED	DATE ANALYZED	REP. LIMIT	DIL. FACTOR	RESULT	Q
9307040-01	SS-1	07/13/93	07/15/93	3.0	20	47.4	
9307040-02	SS-2	07/13/93	07/15/93	3.0	20	47.4	
9307040-03	SS-3	07/13/93	07/15/93	3.0	20	30.0	
9307040-04	SS-4	07/13/93	07/15/93	0.15	1	2.2	
MB0713S	METHOD BLANK	07/13/93	07/15/93	0.15	1	ND	

COMMENT:

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307040
Date Received : 07/07/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : METALS
Sub-Department: METALS

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Watts 7/16/93
Department Supervisor Date

Mona Kamel 7/16/93
Chemist Date

MATRIX SPIKE REPORT
 ANAMETRIX, INC. (408) 432-8192

Spike I.D. : 9307040-01MS,MD
 Client I.D. : SS-1
 Project I.D. : 204-5508-0208
 Matrix : SOIL
 Reporting Unit: mg/Kg

Date Prepared : 07/13/93
 Date Analyzed : 07/15/93
 Analyst : *MJK*
 Supervisor : *MJK*
 Date Released : 07/16/93
 Instrument I.D. : AA2

ANALYTE-METHOD	SPIKE AMOUNT	SAMPLE CONC.	M.S. CONC.	% REC.	M.S.D. CONC.	% REC.	RPD	Q
Lead-7421	1.0	47.4	15.9	NR	28.3	NR	56.1	H

COMMENT:



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: _____

Date: **7/6/93**

Page **1** of **1**

Site Address: **2120 MONTANA ST, OAKLAND**

Analysis Required

LAB: **ANIMETRIX**

WIC#: **204-5508-0208**

Shell Engineer: **DAN KIRK** Phone No.: _____
Fax #: _____

Consultant Name & Address: **WEISS ASSOCIATES**
5500 SHELLMOUND ST EMERYVILLE CA 94608

Consultant Contact: **AIISON WATTS** Phone No.: _____
WA JOB # 81-741 (510) 547-5420
Fax #: 547-5043

Comments: **ANIMETRIX # 2745K** **48 hr TAT on TPH/BTEX, Standard on Lead**

Sampled by: **Alison Watts**
Printed Name: **Alison Watts**

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4461	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	4441	48 hours <input checked="" type="checkbox"/> TPH/BTEX
Soil Classify/Disposal <input type="checkbox"/>	4442	15 days <input checked="" type="checkbox"/> (Normal) LEAD
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4452	
Water Rem. or Sys. O & M <input type="checkbox"/>	4453	
Other <input type="checkbox"/>		

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	TOTAL LEAD	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
① SS-1	7/6/93		X			1						X	X						
② SS-2	7/6/93		↓			1						↓	↓						
③ SS-3	7/6/93		↓			1						↓	↓						
④ SS-4	7/6/93		↓			1						↓	↓						

Relinquished By (signature): <i>[Signature]</i>	Printed Name: Alison Watts	Date: 7/7/93	Received (signature): <i>[Signature]</i>	Printed Name: BENNY S. CARRAZOSA	Date: 7-7-93
Relinquished By (signature): <i>[Signature]</i>	Printed Name: BENNY S. CARRAZOSA	Date: 7-7-93	Received (signature): <i>[Signature]</i>	Printed Name: Mania Barajas	Date: 7/7/93
Relinquished By (signature): _____	Printed Name: _____	Date: _____	Received (signature): _____	Printed Name: _____	Date: _____

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS



Inchcape Testing Services

Anamatrix Laboratories

1961 Concourse Drive
 Suite E
 San Jose, CA 95131
 Tel: 408-432-8192
 Fax: 408-432-8198

93 AUG 30 PM 1:18

MS. ALISON WATTS
 WEISS ASSOC./SHELL OIL
 5500 SHELLMOUND STREET
 EMERYVILLE, CA 94608

Workorder # : 9307223
 Date Received : 07/22/93
 Project ID : 204-5508-0208
 Purchase Order: MOH-B813

The following samples were received at Anamatrix, Inc. for analysis :

ANAMATRIX ID	CLIENT SAMPLE ID
9307223- 1	SS-2

This report consists of 5 pages not including the cover letter, and is organized in sections according to the specific Anamatrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anamatrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

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 Sarah Schoen, Ph.D.
 Laboratory Director

 Date

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- C - Spikes were prepared after extraction by the California Waste Extraction Test (CWET) method.
- D - Reported results are dissolved, not total, metals.

Reporting Conventions

Analytical values reported are gross values, i.e., not corrected for method blank contamination. Solid matrices are reported on a wet weight basis, unless specifically requested otherwise.

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307223
Date Received : 07/22/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : METALS
Sub-Department: METALS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9307223- 1	SS-2	SOIL	07/06/93	CWET-INORG
9307223- 1	SS-2	SOIL	07/06/93	CWETMETALS

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307223
Date Received : 07/22/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : METALS
Sub-Department: METALS

QA/QC SUMMARY :

- No QA/QC problems encountered for sample.

Ta an m... g... 7-30-93
Department/Supervisor Date

Hona Kamel 8/02/93
Chemist Date

INORGANIC ANALYSIS DATA SHEET
 ANAMETRIX, INC. (408) 432-8192

Analyte-Method: Lead-CVET-6010
 Project I.D. : 204-5508-0208
 Matrix : SOIL
 Reporting Unit: mg/L

Analyst : WP
 Supervisor : MK
~~Date Sampled : 07/29/93~~
 Date Released : 07/30/93
 Instrument I.D. : ICP1

ANAMETRIX SAMPLE I.D.	CLIENT I.D.	DATE PREPARED	DATE ANALYZED	REP. LIMIT	DIL. FACTOR	RESULT	Q
9307223-01	SS-2	07/28/93	07/29/93	0.200	5		
WMB0728S	METHOD BLANK	07/28/93	07/29/93	0.040	1	ND	

COMMENT:

MATRIX SPIKE REPORT
ANAMETRIX, INC. (408) 432-8192

Spike I.D. : 9307223-01MS
Client I.D. : SS-2
Project I.D. : 204-5508-0208
Matrix : SOIL
Reporting Unit: mg/L

Date Prepared : 07/28/93
Date Analyzed : 07/29/93
Analyst : MK
Supervisor : MK
Date Released : 07/30/93
Instrument I.D. : ICP1

ANALYTE-METHOD	SPIKE AMOUNT	SAMPLE CONC.	M.S. CONC.	% REC.	Q
Lead-CWET-6010	7.00	3.32	10.1	96.9	

COMMENT:



ANAMETRIX INC
 Environmental & Analytical Chemistry
 1961 Concourse Drive, Suite E, San Jose, CA 95131
 (408) 432-8192 • Fax (408) 432-8198

9307223

10/30

CHAIN-OF-CUSTODY RECORD

PROJECT NUMBER		PROJECT NAME				Number of Cntnrs	Type of Containers	Type of Analysis								Condition of Samples	Initial
Send Report Attention of:		Report Due	Verbal Due														
Sample Number	Date	Time	Comp	Matrix	Station Location												
204-5508-0208	P.O. MOH-B813																
Ms. Alison Watts		08105193	1 1														
① SS-2	7/6/93			S		1	BL	X									
Relinquished by: (Signature)		Date/Time	Received by: (Signature)		Date/Time	Remarks: please run CWET for Pb. From workorder 159307040											
Justin V. Karpman		7/6/93															
Relinquished by: (Signature)		Date/Time	Received by: (Signature)		Date/Time	COMPANY: WEISS ASSOCIATES											
						ADDRESS:											
Relinquished by: (Signature)		Date/Time	Received by Lab:		Date/Time	PHONE :											
						FAX :											



Inchcape Testing Services

Anametrix Laboratories

1961 Concourse Drive
 Suite E
 San Jose, CA 95131
 Tel: 408-432-8192
 Fax: 408-432-8198

93 AUG 30 PM 1:18

MS. ALISON WATTS
 WEISS ASSOC./SHELL OIL
 5500 SHELLMOUND STREET
 EMERYVILLE, CA 94608

Workorder # : 9307210
 Date Received : 07/21/93
 Project ID : 204-5508-0208
 Purchase Order: MOH-B813

The following samples were received at Anametrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9307210- 1	SS-5
9307210- 2	SS-6
9307210- 3	SS-8
9307210- 4	SS-9
9307210- 5	SS-10

This report consists of 5 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

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If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen, Ph.D.
 Laboratory Director

07-26-93

Date

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307210
Date Received : 07/21/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9307210- 1	SS-5	SOIL	07/19/93	TPHgBTEX
9307210- 2	SS-6	SOIL	07/20/93	TPHgBTEX
9307210- 3	SS-8	SOIL	07/20/93	TPHgBTEX
9307210- 4	SS-9	SOIL	07/21/93	TPHgBTEX

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307210
Date Received : 07/21/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The recovery of total xylenes in the BTEX matrix spike duplicate on sample SS-8 is outside of quality control limits due to a soil matrix effect.

Cheryl Palmer 7/26/93
Department Supervisor Date

Charles Burch 7.26.93
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9307210
Matrix : SOIL
Date Sampled : 07/19-21/93

Project Number : 204-5508-0208
Date Released : 07/26/93

Reporting Limit	Sample I.D.# SS-5	Sample I.D.# SS-6	Sample I.D.# SS-8	Sample I.D.# SS-9	Sample I.D.# BL2301E2
COMPOUNDS (mg/Kg)	-01	-02	-03	-04	BLANK
Benzene	0.005	ND	ND	ND	ND
Toluene	0.005	0.073	ND	ND	ND
Ethylbenzene	0.005	0.47	ND	ND	ND
Total Xylenes	0.005	2.0	0.090	ND	ND
TPH as Gasoline	0.5	2.0	0.090	ND	ND
% Surrogate Recovery	94%	105%	104%	86%	110%
Instrument I.D.	HP8	HP8	HP8	HP8	HP8
Date Analyzed	07/23/93	07/23/93	07/23/93	07/23/93	07/23/93
RLMF	10	5	1	1	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
- RLMF - Reporting Limit Multiplication Factor.

Anamatrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Charles M. Birch 7.26.93
Analyst Date

Cheryl Balsman 7/26/93
Supervisor Date

TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT
 EPA METHOD 5030 WITH GC/FID
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 204-5508-0208 SS-8
 Matrix : SOIL
 Date Sampled : 07/20/93
 Date Analyzed : 07/23/93

Anamatrix I.D. : 07210-03
 Analyst : *CMB*
 Supervisor : *CA*
 Date Released : 07/26/93
 Instrument I.D.: HP8

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS
BENZENE	0.040	0.000	0.035	88%	0.036	90%	3%	45-139
TOLUENE	0.040	0.000	0.029	73%	0.027	68%	-7%	51-138
ETHYLBENZENE	0.040	0.000	0.027	68%	0.027	68%	0%	48-146
TOTAL XYLENES	0.040	0.000	0.020	50%	0.019	48%	-5%	50-139
p-BFB				88%		97%		53-147

* Quality control limit established by Anamatrix, Inc.

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
 EPA METHOD 5030 WITH GC/FID
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
 Matrix : SOIL
 Date Sampled : N/A
 Date Analyzed : 07/23/93

Anamatrix I.D. : ML2301E1
 Analyst : *omb*
 Supervisor : *cs*
 Date Released : 07/26/93
 Instrument ID : HP8

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS
BENZENE	0.020	0.018	90%	52-133
TOLUENE	0.020	0.020	100%	57-136
ETHYLBENZENE	0.020	0.020	100%	56-139
TOTAL-XYLENES	0.020	0.019	95%	56-141
P-BFB			101%	53-147

* Quality control limit established by Anamatrix, Inc.



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 9307210

②

Date: 7/21/93

Page 1 of 1

Site Address: 2120 MONTANA ST, Oakland

Analysis Required

LAB: Anaometry

WIC#: 204-5508-0208

Shell Engineer: Dan Kirk Phone No.:
Fax #:

Consultant Name & Address: WEISS ASSOCIATES
5500 SHELLMOUND ST EMERYVILLE CA 94608

Consultant Contact: Alison Watts Phone No.:
WA JOB # 91-741 (510) 547-5420
Fax #: 547-5043

Comments:

Sampled by: David Elias

Printed Name: DAVID ELIAS

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4461	24 hours <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	4441	48 hours <input checked="" type="checkbox"/>
Soil Classify/Disposal <input type="checkbox"/>	4442	15 days <input type="checkbox"/> (Normal)
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4452	
Water Rem. or Sys. O & M <input type="checkbox"/>	4453	
Other <input type="checkbox"/>		

NOTE: Notify lab as soon as possible of 24/48 hrs. TAT.

UST AGENCY:

Sample ID	Date	Sludge	Soil	Water	Air	No. of conds.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS	
④ 55-9	7/21		X									X					Soil 1/2 GAS		
⑤ 55-10	7/21		X									X						"	

Relinquished By (signature): <u>David Elias</u>	Printed Name: <u>DAVID ELIAS</u>	Date: <u>7-21-93</u> Time: <u>17:00</u>	Received (signature): <u>Alison Watts</u>	Printed Name: <u>Alison Watts</u>	Date: <u>7-21-93</u> Time: <u>17:00</u>
Relinquished By (signature): <u>Alison Watts</u>	Printed Name: <u>Alison Watts</u>	Date: <u>7/21/93</u> Time: <u>17:05</u>	Received (signature): <u>JL Thompson</u>	Printed Name: <u>JL THOMPSON</u>	Date: <u>7/21/93</u> Time: <u>17:09</u>
Relinquished By (signature): <u>JL Thompson</u>	Printed Name: <u>JL THOMPSON</u>	Date: <u>7/21/93</u> Time: <u>18:50</u>	Received (signature): <u>Maria Barajas</u>	Printed Name: <u>Maria Barajas</u>	Date: <u>7/21/93</u> Time: <u>18:50</u>

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 9307210

(2)

Date: 7/21/93

Page 1 of 1

Site Address: 2120 MONTANA ST, Oakland

Analysis Required

LAB: Ammetrix

WIC#: 204-5508-0208

Shell Engineer: Dan Kirk Phone No.:

Consultant Name & Address: WEISS ASSOCIATES
5500 SHELLMOUND ST EMERYVILLE CA 94608

Consultant Contact: Alison Watts Phone No.:
WA JOB # 81-741 (510) 547-5420
Fax #: 547-5043

Comments:

Sampled by: Alison Watts

Printed Name: Alison Watts

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4461	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	4441	48 hours <input checked="" type="checkbox"/>
Soil Classify/Disposal <input type="checkbox"/>	4442	15 days <input type="checkbox"/> (Normal)
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4452	
Water Rem. or Sys. O & M <input type="checkbox"/>	4453	
Other <input type="checkbox"/>		

NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.

UST AGENCY:

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS	
1 SS-5	7/19		X									X					Soil + Gas		
2 SS-6	7/20		X									X							
3 SS-8	7/20		X									X							
\$																			

Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>Alison Watts</u>	Date: <u>7/21/93</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>W. THOMPSON</u>	Date: <u>7/21/93</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>W. THOMPSON</u>	Date: <u>7/21/93</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>Maria Barajas</u>	Date: <u>7/21/93</u>
Relinquished By (signature):	Printed Name:	Date:	Received (signature):	Printed Name:	Date:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS



Inchcape Testing Services

Anamatrix Laboratories

1961 Concourse Drive
 Suite E
 San Jose, CA 95131
 Tel: 408-432-8192
 Fax: 408-432-8198

MS. ALISON WATTS
 WEISS ASSOC./SHELL OIL
 5500 SHELLMOUND STREET
 EMERYVILLE, CA 94608

Workorder # : 9307316
 Date Received : 07/29/93
 Project ID : 204-5508-0208
 Purchase Order: MOH-B813

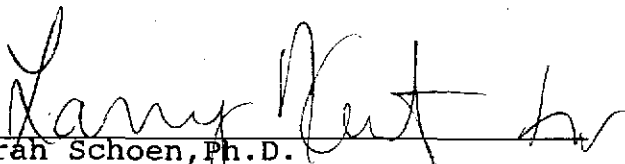
The following samples were received at Anamatrix, Inc. for analysis :

ANAMATRIX ID	CLIENT SAMPLE ID
9307316- 1	SS-5
9307316- 2	SS-6

This report consists of 4 pages not including the cover letter, and is organized in sections according to the specific Anamatrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anamatrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anamatrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anamatrix.


 Sarah Schoen, Ph.D.
 Laboratory Director

8-12-93
 Date

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307316
Date Received : 07/29/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : METALS
Sub-Department: METALS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9307316- 1	SS-5	SOIL	07/19/93	7421
9307316- 2	SS-6	SOIL	07/20/93	7421

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

MS. ALISON WATTS
WEISS ASSOC./SHELL OIL
5500 SHELLMOUND STREET
EMERYVILLE, CA 94608

Workorder # : 9307316
Date Received : 07/29/93
Project ID : 204-5508-0208
Purchase Order: MOH-B813
Department : METALS
Sub-Department: METALS

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Wendy Guyer 8/12/93
Department Supervisor Date

Mona Kamel 8/12/93
Chemist Date

INORGANIC ANALYSIS DATA SHEET
ANAMETRIX, INC. (408) 432-8192

Analyte-Method: Lead-7421
 Project I.D. : 204-5508-0208
 Matrix : SOIL
 Reporting Unit: ng/Kg

Analyst : MK
 Supervisor : MN
 Date Sampled : 07/19, 07/20/93
 Date Released : 08/12/93
 Instrument I.D. : AA3

ANAMETRIX SAMPLE I.D.	CLIENT I.D.	DATE PREPARED	DATE ANALYZED	REP. LIMIT	DIL. FACTOR	RESULT	Q
9307316-01	SS-5	08/09/93	08/11/93	1.5	10	9.9	✓
9307316-02	SS-5	08/09/93	08/11/93	1.5	10	9.9	✓
MB0809S	METHOD BLANK	08/09/93	08/11/93	0.15	1	ND	✓

COMMENT:

LABORATORY CONTROL SAMPLE REPORT
ANAMETRIX, INC. (408) 432-8192

Anamatrix W.O.# : 9307316
 Spike I.D. : LCS0809S
 Project I.D. : 204-5508-0208
 Matrix : SOIL
 Reporting Unit : mg/Kg

Analyst : MK
 Supervisor : MW
 Date Released : 08/12/93
 Instrument I.D : AA3

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	SPIKE AMT.	METHOD SPIKE	% REC.	Q
Lead-7421	08/09/93	08/11/93	1.0	1.2	120	

COMMENT:



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 7307210

Date: 7/21/93

Page 1 of 1

Site Address: 2120 MONTANA ST, Oakland

Analysis Required

LAB: Ammetrix

WIC#: 204-5508-0208

Shell Engineer: Dan Kirk Phone No.:
Fax #:

Consultant Name & Address: WEISS ASSOCIATES
5500 SHELLMOUND ST EMERYVILLE CA 94608

Consultant Contact: Alison Watts Phone No.:
WA JOB # 81-741 (510) 547-5420
Fax #: 547-5043

Comments:

Sampled by: Alison Watts
Printed Name: Alison Watts

CHECK ONE (1) BOX ONLY	CT/DI	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4461	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	4441	48 hours <input checked="" type="checkbox"/>
Soil Classify/Disposal <input type="checkbox"/>	4442	15 days <input type="checkbox"/> (Normal)
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4452	
Water Rem. or Sys. O & M <input type="checkbox"/>	4453	
Other <input type="checkbox"/>		

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY:

Sample ID	Date	Sludge	Soil	Water	Air	No. of conds.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS	
1 SS-5	7/19		X									X						Soil + Gas	
2 SS-6	7/20		X									X							
3 SS-8	7/20		X									X							
\$																			
<p>Client called (Alison Watts) 7-29-93, and requested 7421 on samples 1 and 2 only. Std TAT.</p> <p>SNH 7-29-93</p>																			

Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>Alison Watts</u>	Date: <u>7/21/93</u>	Time: <u>17:05</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>W. THOMPSON</u>	Date: <u>7/21/93</u>	Time: <u>17:05</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>W. THOMPSON</u>	Date: <u>7/21/93</u>	Time: <u>18:50</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>Maria Barajas</u>	Date: <u>7/21/93</u>	Time: <u>18:50</u>
Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

LABORATORY CONTROL SAMPLE REPORT
ANAMETRIX, INC. (408) 432-8192

Anamatrix W.O.# : 9307040
 Spike I.D. : LCS0713S
 Project I.D. : 204-5508-0208
 Matrix : SOIL
 Reporting Unit : mg/Kg

Analyst : *AKC*
 Supervisor : *MM*
 Date Released : 07/06/93
 Instrument I.D : AA2

ANALYTE-METHOD	DATE PREPARED	DATE ANALYZED	SPIKE AMT.	METHOD SPIKE	% REC.	Q
Lead-7421	07/13/93	07/15/93	1.0	1.1	110	

COMMENT: