U S.Department
of Transportotion

United States
Coast Guard

Commanding Officer
U. S. Coast Guard
Civil Engineering Unit Oakland

2000 Embarcadero
Suite 200
Oakland, CA 94606-5337
(510) 535-7200

5090
14 Sept. 1995

95 SEP 18 PM 4:31
ENVIRONMENTAL PROTECTION

Ms. Juliet Shin
Alameda County
UST Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 93940

Dear Ms. Shin:

The enclosed Quarterly Monitoring Well Sampling and Analysis Report for the Exchange and Swimming Pool locations at U.S. Coast Guard Support Center Alameda is provided for your review. This submittal is the fourthr sampling events requested in your letter of March 23, 1994.

Please contact Mr. Louis Rivero at (510) 535-7275 if you have any questions or require additional information.

Sincerely,

Louis Rivero

for DAVE STALTERS
Chief, Environmental Division
U.S. Coast Guard
By direction of the Commanding Officer

Encl: (1) Quarterly Monitoring Well Sampling and Analysis Third Quarter 1995

Copy: Tim Madden, SUPRTCEN Alameda

QUARTERLY MONITORING WELL SAMPLING AND ANALYSIS THIRD QUARTER 1995

U.S. Coast Guard Support Center
Exchange Center Location
Coast Guard Island
Alameda, California

PSI Project No. 582-34006

SEPTEMBER 11, 1995

Professional Service Industries, Inc.

PSI Environmental Geotechnical Construction
Consulting • Engineering • Testing

September 11, 1995

United States Coast Guard Support Center
Civil Engineering Unit
2000 Embarcadero, Suite 200
Oakland, CA 94606-5000

Attention: Mr. Louis Rivero

Subject: QUARTERLY MONITORING WELL SAMPLING & ANALYSIS
THIRD QUARTER 1995

Project: Exchange Center Location
Coast Guard Island
Alameda, California 94606
Project # 582-34006

Dear Mr. Rivero:

Professional Service Industries, Inc. (PSI) is pleased to present the results of the final scheduled groundwater sampling for the Coast Guard at the subject site. A description of the sampling and laboratory analysis for the six monitoring wells located at the Exchange Center Location. A Vicinity Map, Site Plan, and Monitoring Well Location Map of the site are presented in the Appendices.

This is the fourth of four quarterly sampling events, authorized by Ms. Evelyn E. Navarro, contracting officer with the U.S. Coast Guard, on August 31, 1994

Field activities for this monitoring episode were conducted on July 13, 1995. The purpose of this program is to collect information on groundwater elevations and to monitor hydrocarbon concentrations in the groundwater below the Site.

SAMPLING METHOD

Prior to purging and sampling the six monitoring wells, the groundwater in each well was measured, and the elevation was then calculated. The monitoring wells were purged in order to establish a flow of groundwater into the wells and to remove any longstanding water. Well purging was accomplished by means of a bailer. Approximately 6 to 8 gallons of water (at least 3 casing volumes) were removed from each well prior to sampling. The purged groundwater from the wells was contained in six labeled 55-gallon drums and temporarily left on-site pending analytical results for future disposal. After allowing the wells to recharge to a minimum of 80% of the original well volume, groundwater samples were collected.

Prior to sampling from the wells, the bailer was cleaned using trisodium phosphate solution and triple-rinsed with potable water. Water samples were drained from the bailer into certified clean, 40 ml vials, with care being taken to eliminate headspace. The vials were labeled and placed into cold storage and delivered to Geotest Laboratories in Long

Beach, California, a California-certified laboratory, for analysis. Proper chain-of-custody procedures were observed. Chain-of-custody is included with the attached analytical results.

OBSERVATIONS

The ground water in wells MW-1, MW-2, MW-3, MW-5, and MW-6 appeared clear with no determinable odors. The groundwater from well MW-4 appeared cloudy but had no determinable odor. Note: see Appendix, Groundwater Sampling Data.

LABORATORY ANALYSES

The groundwater samples were submitted to Geotest, a California certified laboratory, and analyzed for Aromatic Volatile Organics by Environmental Protection Agency (EPA) method 8020 and Total Petroleum Hydrocarbons modified for gasoline (TPH-g) utilizing EPA method 8015M, using gas chromatography with photoionization detection. The analytical results are summarized below. The complete laboratory report, including analytical results, and chain-of-custody is presented in the Appendix.

SUMMARY OF ANALYTICAL RESULTS
THIRD QUARTER 1995 GROUNDWATER MONITORING

Well Number	Date of Sample	Benzene	Toluene	Ethylbenzene	Xylenes	TPH-g
MW-1	4/8/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-1	7/8/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-1	10/20/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-1	10/20/94	N.D.	N.D.	N.D.	N.D.	N.D.
MW-1	1/31/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-1	4/25/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-1	7/13/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	4/8/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	7/8/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	10/20/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	10/20/94	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	1/31/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	4/25/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	7/13/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-3	4/8/93	30	N.D.	N.D.	N.D.	6,000
MW-3	7/8/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-3	10/20/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-3	10/20/94	N D	N D	N D	N D	N D
MW-3	1/31/95	N D	N D	N D	N D	N D
MW-3	4/25/95	N D	N D	N D	N D	N D
MW-3	7/13/95	N D	N D	N D	N D	N D

Well Number	Date of Sample	Benzene	Toluene	Ethylbenzene	Xylenes	TPH-g
MW-4	4/8/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-4	7/8/93	8.8	N.D.	N.D.	N.D.	N.D.
MW-4	10/20/93	N.D.	N.D.	N.D.	N.D.	2,700
MW-4	10/20/94	N.D.	N.D.	N.D.	N.D.	N.D.
MW-4	1/31/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-4	4/25/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-4	7/13/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-5	4/8/93	14.0	0.63	N.D.	1.5	170
MW-5	7/8/93	3.7	0.46	N.D.	170	4,300
MW-5	10/20/93	N.D.	N.D.	N.D.	N.D.	N.D.
MW-5	10/20/94	N.D.	N.D.	N.D.	N.D.	N.D.
MW-5	1/31/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-5	4/25/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-5	7/13/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-6	4/8/93	7.4	1.2	20	20	720
MW-6	7/8/93	N.A.	N.D.	N.D.	N.D.	610
MW-6	10/20/93	N.D.	N.D.	N.D.	N.D.	660
MW-6	10/20/94	N.D.	N.D.	N.D.	N.D.	200
MW-6	1/31/95	N.D.	N.D.	N.D.	N.D.	N.D.
MW-6	4/25/95	N.D.	N.D.	N.D.	6.8	N.D.
MW-6	7/13/95	N.D.	0.3	N.D.	N.D.	N.D.
MCL		1.0	100	680	1,750	N/A

Notes: All concentrations are in micrograms per liter, (ug/l) (parts per billion).
N.D.= Analytes reported as not detected above the analytical reporting limit.
The well referred to as MW-1 In the report dated December 16, 1993, is referred to as MW-6 in this report.

MCL = Maximum Contaminant Levels as allowed by the California Department of Health Services.

N/A = MCL not applicable, determined on a case-by-case basis.

DISCUSSION OF RESULTS

Based on the analytical results for this sampling event, it appears that no concentrations of TPH-g or BTEX were detected in groundwater samples collected from MW-1, MW-2, MW-3, MW-4 and MW-5 This is consistent with the results observed in the groundwater monitoring episode of Quarter 2, 1995 (4/25/95) Groundwater sampled from MW-6 revealed petroleum hydrocarbons were not detected with the exception of toluene at a concentration of

0.3 ppb. This concentration of toluene is below its respective MCL of 100 ppb. In Quarter 2, 1995, ethylbenzene at a concentration of 6.8 ppb was detected in MW-6, but no concentrations of ethylbenzene were detected in this well during this monitoring episode.

In comparison to the last quarterly monitoring event, groundwater has decreased substantially in elevation in MW-2, decreased slightly in MW-3 and MW-6, has risen substantially in MW-1 and MW-5, and has risen slightly in MW-4. Groundwater was determined to flow in a east-southeasterly direction. This direction varies with the flow direction and slope observed during the previous quarter. A Groundwater Contour Map is presented in the Appendix.

This is PSI's final scheduled quarterly sampling event for this site.

RECOMMENDATIONS

Based on the low to non-detectable concentrations of petroleum hydrocarbons found in the past four groundwater monitoring episodes, PSI recommends that the Coast Guard apply for site closure from the Alameda County Department of Environmental Health.

LIMITATIONS OF INVESTIGATION

Our investigation was performed using the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental consultants practicing at this or similar localities. The samples collected and used for testing and observations are believed representative of Site conditions. No other warranty, expressed or implied, is made to conclusions and professional advice included in this report.

This report is issued with the understanding that it is the responsibility of the owner, or of his representative, to ensure that the information and recommendations contained herein are brought to the attention of the proper authorities and/or regulating agencies.

The findings of this report reflect the conditions of the Site during the time of the Site visit. However, changes in the conditions of a property can occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties.

In addition, changes in applicable or appropriate standards may occur from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should be updated as changes may occur.

The opportunity to be of service is appreciated. Should you have any questions regarding the content of this report, or we can be of further assistance, please do not hesitate to contact us.

Sincerely,

Professional Service Industries, Inc.

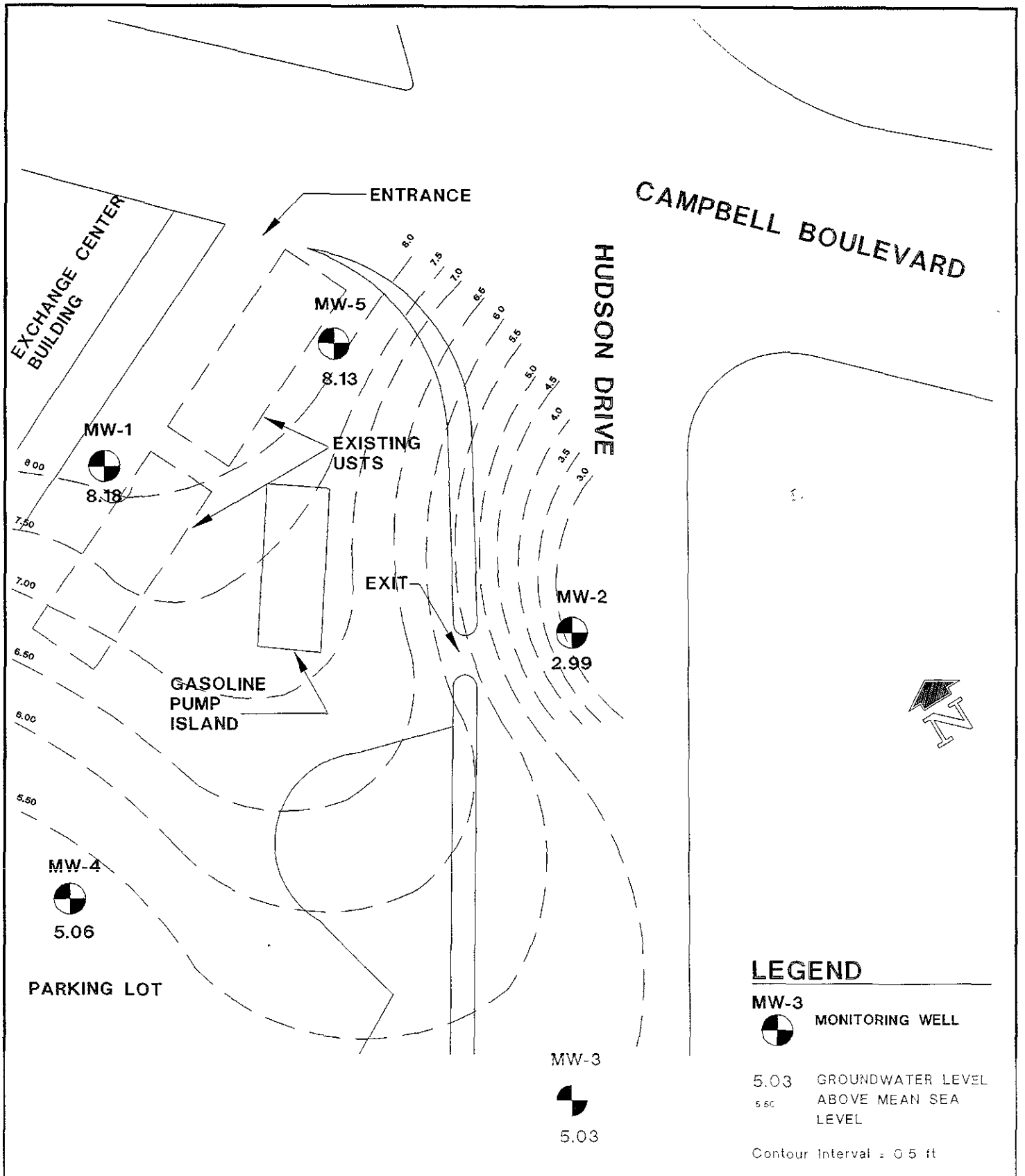
Beverly Jones
Environmental Specialist

Glenn G. Hilton
Geologist RG #5318

BJ/pj

APPENDICES

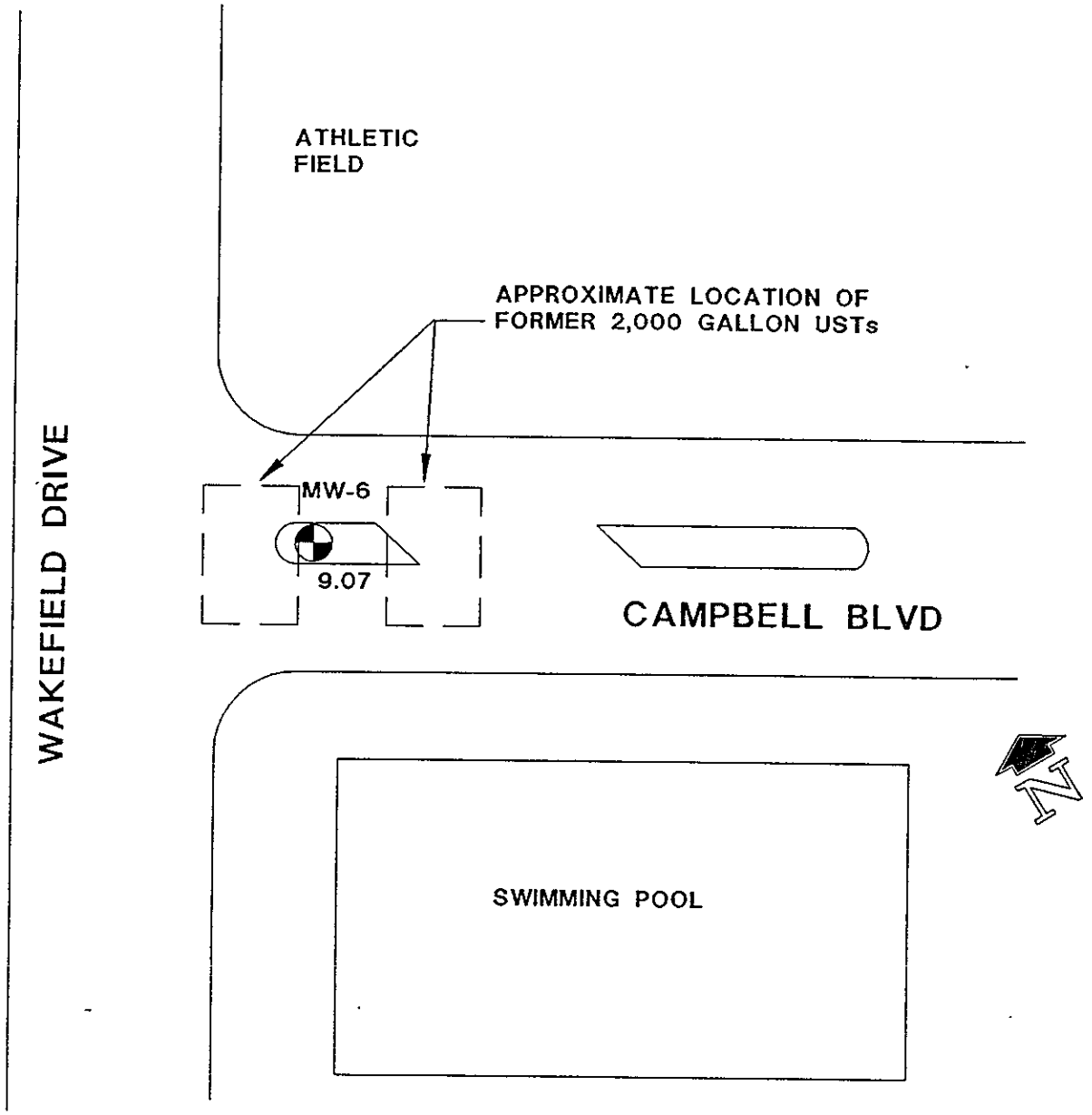
FIGURES



PROJECT NAME
U.S. COAST GUARD
ALAMEDA, CA

TITLE
GROUNDWATER CONTOUR MAP

DATE 7 13 95
DWG NO
PROJ NO 582-34006
DRAWN BY PEJ
APP'D BY BJ
SCALE NOT TO SCALE



LEGEND

MW-3
MONITORING WELL

5.03 GROUNDWATER LEVEL ABOVE MEAN SEA LEVEL

PROFESSIONAL SERVICE INDUSTRIES, INC.
2280 BATES AVENUE, SUITE D CONCORD, CA 94520
(510) 685-2488

PROJECT NAME: U.S. COAST GUARD ALAMEDA, CA	DATE: 7/13/95
	DWG NO.:
	PROJ NO: 582-34006
TITLE: GROUNDWATER CONTOUR MAP	DRAWN BY: PEJ
	APP'D BY: BJ
	SCALE: NOT TO SCALE

GROUNDWATER SAMPLING DATA

DAILY FIELD RECORD

DATE: 7/13/95

Project No: 582-34006

Project Name: Coast Guard Alameda

Location: Alameda, CA

Time on Job: 7:30 AM/PM to: 14:00 AM/PM

Weather Conditions: sunny and clear

Activity: Quarterly Groundwater Sampling

PERSONNEL ON SITE

Name	Company	Time In	Time Out
Beverly Jones	PSI	7:00	14:00

VISITORS ON SITE

Name	Company/Agency	Time In	Time Out

PERSONAL SAFETY

X	Protective Gloves	X	Hard hat		Tyvek Coveralls (W/Y)
X	Protective Boots	X	Safety Goggles/Glasses	X	1/2 - Mask Respirator

Other Safety Equipment (describe):

Monitoring Equipment: Hy Pac combination pH/temperature/condition meter

Field Calibration: _____

WASTE STORAGE INVENTORY

Container Type	Container I.D.	Description of Contents and Quantity	Location
6-55 gallon	purge	water MW_1, MW-2, MW-3,	
drums		MW-4, MW-5, MW-6.	
		10-20-94, 1-31-95, 4-24-95, 7-13-95	on-site

Signature of Field Representative

Date. 7/13/95

Notes _____

PROFESSIONAL SERVICE INDUSTRIES, INC.
2280 BATES AVENUE, SUITE D
CONCORD, CA 94520
(510) 685-2488

DAILY FIELD RECORD
(continued)

DATE: 7/13/95

TIME	DESCRIPTION OF DAILY ACTIVITIES & EVENTS
7:00	Arrive at site, set up equipment
8:00	Purge and sample MW-1
9:15	Purge and sample MW_2
10:35	Purge and sample MW-3
11:20	Purge and sample MW-4
12:05	Purge and sample MW-5
12:55	Purge and sample MW-6
14:00	Clean up and leave site

COMMENTS & CHANGES FROM WORK PLAN

TIME	TELEPHONE CONVERSATION RECORD

Signature of Field Representative

Date: 7/13/95

PROFESSIONAL SERVICE INDUSTRIES, INC
2280 BATES AVENUE, SUITE D
CONCORD, CA 94520
(510) 685-2488

GROUNDWATER SAMPLING DATA

Well No. MW-1
Project No. 582-34006

Time (24 Hr. Clock)	Volume Removed (gal)	Electrical Conductivity (umhos/cm)x100	Temperature (F)	pH	Turbidity
7:30	begin purging				
7:35	1.00	1.07	68.10		Clear
7:40	2.00	1.08	69.21		Clear
7:45	3.00	1.06	69.01		Clear
7:50	4.00	1.05	70.01		Clear
7:55	5.00	1.05	69.35		Clear
8:00	collect sample	1.04	69.31		Clear

Total Depth to Bottom	Depth to - Water =	Water Column (ft.)
18.2	5.54	12.66
Volume Factor	x Water Column =	Well Casing Vol. (gal)
0.163	12.66	2.06

Well Inside Diameter (in.) 2.00

Volume Factor V.F. = gal/ft.
2" = 0.163 5" = 1.02 10" = 4.08
3" = 0.367 6" = 1.47 12" = 4.08
4" = 0.653 8" = 2.61

Date (s) Purged		7/13/95	Well Dewatered Yes No X
Purge Method		Bailer	Date Sampled 7/13/95
Total Volume Removed (gal)		6.00	Time Sampled 8:00
Casing Volumes Removed (gal)		3.17	Sample Method Bailer
Purge Rate (GPM)		0.20	Weather Conditio clear
			Purged / Sampled by Beverly Jones
Depth to Water After Recovery (ft) =			99% Recovered Prior to Sampling

Notes

Professional Service Industries, Inc
WELL PURGING AND SAMPLING FIELD DATA
Monitoring Well MW-1

GROUNDWATER SAMPLING DATA

Well No. MW-2
Project No. 582-34006

Time (24 Hr. Clock)	Volume Removed (gal)	Electrical Conductivity (umhos/cm)x100	Temperature (F)	pH	Turbidity
8:45	begin purging				
8:50	1.00	1.04	67.20		Clear
8:55	2.00	1.05	66.30		Clear
9:00	3.00	1.05	66.20		Clear
9:05	4.00	1.06	67.30		Clear
9:10	5.00	1.08	68.20		Clear
9:15	collect sample	1.07	67.30		Clear

Total Depth to Bottom	Depth to - Water =	Water Column (ft.)
19.4	8.65	10.75

Volume Factor	x Water Column =	Well Casing Vol. (gal)
0.163	10.75	1.75

Well Inside Diameter (in.) 2.00

Volume Factor V.F. = gal/ft.: 2"=0.163, 3"=0.367, 4"=0.653, 5"=1.02, 6"=1.47, 8"=2.61, 10"=4.08, 12"=4.08

Date (s) Purged		7/13/95	Well Dewatered Yes No X
Purge Method		Bailer	Date Sampled 7/13/95
Total Volume Removed (gal)		6.00	Time Sampled 9:15
Casing Volumes Removed (gal)		3.17	Sample Method Bailer
Purge Rate (GPM)		0.20	Weather Conditio clear
			Purged / Sampled by Beverly Jones
Depth to Water After Recovery (ft) =			99% Recovered Prior to Sampling

Notes

Professional Service Industries, Inc
WELL PURGING AND SAMPLING FIELD DATA
Monitoring Well MW-2

GROUNDWATER SAMPLING DATA

Well No. MW-3
Project No. 582-34006

Time (24 Hr. Clock)	Volume Removed (gal)	Electrical Conductivity (umhos/cm)x100	Temperature (F)	pH	Turbidity
10:00	begin purging				
10:05	1.00	1.04	66.01		Clear
10:10	2.00	1.05	66.20		Clear
10:15	3.00	1.06	65.30		Clear
10:20	4.00	1.04	66.15		Clear
10:25	5.00	1.05	65.20		Clear
10:30	6.00	1.06	66.40		Clear
10:35	Collect Sample	1.06	66.30		Clear

Total Depth to Bottom	Depth to - Water =	Water Column (ft.)	
19.5	8.47	11.03	
Volume Factor	x Water Column =	Well Casing Vol. (gal)	
0.163	11.03	1.80	

Well Inside Diameter (in.) 2.00

Volume Factor: 2"=0.163 5"=1.02 10"=4.08 3"=0.367 6"=1.47 12"=4.08 V.F.=gal/ft. 4"=0.653 8"=2.61

Date (s) Purged		7/13/95	Well Dewatered Yes No X
Purge Method		Bailer	Date Sampled 7/13/95
Total Volume Removed (gal)		6.00	Time Sampled 10:35
Casing Volumes Removed (gal)		3.17	Sample Method Bailer
Purge Rate (GPM)		0.17	Weather Conditio clear
			Purged / Sampled by Beverly Jones
Depth to Water After Recovery (ft) =			99% Recovered Prior to Sampling

Notes

Professional Service Industries, Inc
WELL PURGING AND SAMPLING FIELD DATA
Monitoring Well MW-3

GROUNDWATER SAMPLING DATA

Well No. MW-4
Project No. 582-34006

Time (24 Hr. Clock)	Volume Removed (gal)	Electrical Conductivity (umhos/cm)x100	Temperature (F)	pH	Turbidity
10:45	begin purging				
10:50	1.00	1.18	72.00		Cloudy
10:55	2.00	1.19	71.20		Cloudy
11:00	3.00	1.2	73.30		Cloudy
11:05	4.00	1.18	72.20		Cloudy
11:10	5.00	1.19	73.30		Cloudy
11:15	6.00	1.18	74.40		Cloudy
11:20	Collect Sample	1.19	74.20		Cloudy

Total Depth to Bottom	Depth to - Water =	Water Column (ft.)
19.49	8.32	11.17
Volume Factor	x Water Column =	Well Casing Vol. (gal)
0.163	11.17	1.82

Well Inside Diameter (in.) 2.00

Volume Factor: 2"=0.163, 3"=0.367, 4"=0.653, 5"=1.02, 6"=1.47, 8"=2.61, 10"=4.08, 12"=4.08; V.F.=gal/ft.

Date (s) Purged		7/13/95	Well Dewatered Yes No X
Purge Method		Bailer	Date Sampled 7/13/95
Total Volume Removed (gal)		6.00	Time Sampled 11:20
Casing Volumes Removed (gal)		3.17	Sample Method Bailer
Purge Rate (GPM)		0.17	Weather Conditio clear
			Purged / Sampled by Beverly Jones
Depth to Water After Recovery (ft) =			99% Recovered Prior to Sampling

Notes

Professional Service Industries, Inc
WELL PURGING AND SAMPLING FIELD DATA
Monitoring Well MW-4

GROUNDWATER SAMPLING DATA

Well No. MW-5
Project No. 582-34006

Time (24 Hr. Clock)	Volume Removed (gal)	Electrical Conductivity (umhos/cm)x100	Temperature (F)	pH	Turbidity
11:30	begin purging				
11:35	1.00	1.18	73.10		Clear
11:40	2.00	1.17	72.35		Clear
11:45	3.00	1.19	71.50		Clear
11:50	4.00	1.18	72.10		Clear
11:55	5.00	1.2	73.20		Clear
12:00	6.00	1.19	74.30		Clear
12:05	Collect Sample	1.18	73.10		Clear

Total Depth to Bottom	Depth to - Water =	Water Column (ft.)	
11.82	5.85	5.97	
Volume Factor	x Water Column =	Well Casing Vol. (gal)	
0.367	5.97	2.19	

Well Inside Diameter (in.) 2.00

Volume Factor: 2"=0.163 3"=0.367 4"=0.653 5"=1.02 6"=1.47 8"=2.61 10"=4.08 12"=4.08 V.F.=gal/ft.

Date (s) Purged		7/13/95	Well Dewatered Yes No X
Purge Method		Bailer	Date Sampled 7/13/95
Total Volume Removed (gal)		6.00	Time Sampled 12:05
Casing Volumes Removed (gal)			Sample Method Bailer
Purge Rate (GPM)		0.17	Weather Conditio clear
			Purged / Sampled by Beverly Jones
Depth to Water After Recovery (ft.) =			99% Recovered Prior to Sampling

Notes

Professional Service Industries, Inc
WELL PURGING AND SAMPLING FIELD DATA
Monitoring Well MW-5

GROUNDWATER SAMPLING DATA

Well No. MW-6
Project No. 582-34006

Time (24 Hr. Clock)	Volume Removed (gal)	Electrical Conductivity (umhos/cm)x100	Temperature (F)	pH	Turbidity
12:15	begin purging				
12:20	1.00	1.07	71.10		Clear
12:25	2.00	1.05	70.20		Clear
12:30	3.00	1.06	71.20		Clear
12:35	4.00	1.07	69.30		Clear
12:40	5.00	1.08	71.20		Clear
12:45	6.00	1.10	71.30		Clear
12:50	7.00	1.09	72.40		Clear
12:55	collect sample	1.08	73.40		

Total Depth to Bottom	Depth to - Water =	Water Column (ft.)
19.31	5.23	14.08
Volume Factor	x Water Column =	Well Casing Vol. (gal)
0.163	14.08	2.30

Well Inside Diameter (in.) 2.00

Volume Factor V.F. = gal/ft.
2" = 0.163
3" = 0.367
4" = 0.653
5" = 1.02
6" = 1.47
8" = 2.61
10" = 4.08
12" = 4.08

Date (s) Purged		7/13/95	Well Dewatered Yes No X
Purge Method		Bailer	Date Sampled 7/13/95
Total Volume Removed (gal)		8.00	Time Sampled 12:55
Casing Volumes Removed (gal)			Sample Method Bailer
Purge Rate (GPM)		0 18	Weather Conditio clear
			Purged / Sampled by Beverly Jones
Depth to Water After Recovery (ft) =			99% Recovered Prior to Sampling

Notes

Professional Service Industries, Inc
WELL PURGING AND SAMPLING FIELD DATA
Monitoring Well MW-6

LABORATORY RESULTS AND

CHAIN OF CUSTODY RECORD

GEOTEST
An Environmental Monitoring and Testing Service
(310)488-9515 (800)624-5744

LABORATORY REPORT

PROFESSIONAL SERVICE INDUSTRIES, INC.
2280 BATES AVENUE, SUITE D
CONCORD, CA 94520

REPORT TO: JOE DERHUKE

GEOTEST PROJECT NO.: 961140-02
CLIENT ID: 582-34006

PROJECT NAME: COAST GUARD-ALAMEDA
SITE LOCATION: ALAMEDA, CA

GEOTEST is pleased to provide you with analytical data for your above referenced project. Samples were collected on 07/13/95 and received intact and cool on 07/14/95. In accordance with the chain of custody, the samples were analyzed for the following analytical parameters:

ANALYTICAL TEST	PAGE
TPH-G/BTEX	2-3

REVIEWED AND APPROVED: Elizabeth Ronnau, Project Manager

REPORT DATE: 7-18-95

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. All samples are analyzed on an as received (wet weight) basis. Any results listed as "ND" are not detected above the indicated limit of detection. All method numbers referenced are EPA method numbers except where otherwise noted. This report is submitted for the exclusive use of the client to whom it is addressed and is only valid in its entirety. ELAP certification #1225.

GEOTEST

An Environmental Monitoring and Testing Service

(510)498-9515 (800)624-5744

LABORATORY REPORT

ANALYST : EM

PREP. METHOD: 5030

DATE PREPARED: 07/17/95

GEOTEST PROJECT NO.: 961140-02

CLIENT ID: 582-34006

MATRIX: WATER

ANALYSIS OF VOLATILE ORGANICS BY GAS CHROMATOGRAPHY/FID/PID
GASOLINE (TPH-G) BY DOHS METHOD / BTEX BY EPA METHOD 8020

COMPONENTS:		TPH-G	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES	SURROGATE RECOVERY
UNITS:		mg/L	µg/L	µg/L	µg/L	µg/L	%
DETECTION LIMITS:		0.5	0.3	0.3	0.6	0.6	
SAMPLE ID	DATE ANALYZED						
METHOD BLANK	07/17/95	ND	ND	ND	ND	ND	100
3 CG - Alameda 1	07/17/95	ND	ND	ND	ND	ND	108
3 CG - Alameda 2	07/17/95	ND	ND	ND	ND	ND	115
3 CG - Alameda 3	07/17/95	ND	ND	ND	ND	ND	117
3 CG - Alameda 4	07/17/95	ND	ND	ND	ND	ND	115
3 CG - Alameda 5	07/17/95	ND	ND	ND	ND	ND	122
3 CG - Alameda 6	07/17/95	ND	ND	0.3	ND	ND	107

Surrogate : a,a,a-Trifluorotoluene

Acceptable Range (%) : 70-130

GEOTEST
An Environmental Monitoring and Testing Service
(510)488-9515 (800)624-5744

QUALITY ASSURANCE/QUALITY CONTROL SUMMARY

ANALYST : EM

PREP. METHOD: 5030
DATE PREPARED: 07/17/95

GEOTEST PROJECT NO.: 961140-02
CLIENT ID: 582-34006

MATRIX: WATER

ANALYSIS OF VOLATILE ORGANICS BY GAS CHROMATOGRAPHY/FID/PID
GASOLINE (TPH-G) BY DOHS METHOD / BTEX BY EPA METHOD 8020

COMPONENTS:		TPH-G	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES	ACCEPTABLE RANGE
RECOVERY UNITS :		%	%	%	%	%	%
SAMPLE ID	DATE ANALYZED						
LCS	07/17/95	94	98	95	103	110	80-120
MATRIX SPIKE	07/17/95	106	81	99	103	108	70-130
MATRIX SPIKE DUPLICATE	07/17/95	99	95	97	105	110	70-130
RPD		6.8	16	2.0	1.9	1.8	0-25

LCS - Laboratory Control Standard

RPD - Relative Percent Difference

9507030

961140-02 9164A

CHAIN OF CUSTODY RECORD

PSI Professional Service Industries, Inc.

PROJECT NAME: Coast Guard - Alameda	REPORT TO: PSI	INVOICE TO:
PROJECT NUMBER: 502-34006	PROJECT MANAGER: Beverly Jones	ADDRESS:
P.O. NUMBER:	ADDRESS: 2280 Bates Ave Suite D	CITY / STATE / ZIP:
REQUIRED DUE DATE:	CITY / STATE / ZIP: Concord, Ca 94520	ATTENTION:
SAMPLES TO LAB VIA: Normal	TELEPHONE: 510-685-2488	TELEPHONE:
NUMBER OF COOLERS: 1	FAX: 510-685-2991	
	REPORT VIA: VERBAL FAX / U.S. MAIL/OVERNIGHT	

LABORATORY SUBMITTED TO:

- ☐ 6913 Hwy. 225, Deer Park, TX 77536, (713) 479-0307
- ☐ 4620 W. 16th Street, Lawrence, KS 66049, (800) 548-7901
- ☐ 6056 Ulmerton Road, Clearwater, FL 34620, (813) 531-1446
- ☐ 850 Poplar Street, Pittsburgh, PA 15220, (412) 922-4000

TRANSFER NUMBER	RELINQUISHED BY DATE / TIME	ACCEPTED BY DATE / TIME	SEAL NUMBER
	Beverly Jones	07-13-95 4:30	
	Fedex 4:30 7/13/95	Fedex 7/13/95	
	Fedex 5:40 7/14/95	Michael Hennessy 7/14/95 5:40	

LABORATORY USE ONLY

SAMPLE CUSTODIAN: Michael Hennessy

DATE / TIME: 7/14/95 5:40

LABORATORY USE ONLY

FIELD SERVICES Y/N $

SHIPPING Y/N $

LABORATORY USE ONLY

ANALYTICAL DUE DATE

REPORT DUE DATE

INORGANIC Seal ____ Row ____ ORGANIC Back ____ Row ____

PSI PROJECT NAME

PSI PROJECT #

PSI BATCH #

PARAMETER LIST

SAMPLE IDENTIFICATION	DATE / TIME	COMP-C GRAB-G	SOIL-S WATER-W WASTE-X	LAB USE ONLY LAB NUMBER	NUMBER OF CONTAINERS	TPH-G	BTEX	
3 CG - Alameda 1	07-13-95 8 PM	G	W		3	X	X	
3 CG - Alameda 2	07-13-95 9 PM	G			3	X	X	
3 CG - Alameda 3	07-13-95 10:35	G			3	X	X	
3 CG - Alameda 4	07-13-95 11:20	G			3	X	X	
3 CG - Alameda 5	07-13-95 12:05	G			3	X	X	1 vial contains air bubbles
3 CG - Alameda 6	07-13-95 12:55	G			3	X	X	1 vial contains air bubbles

ADDITIONAL REMARKS: Date of Samples 07-13-95

T=6°C

SAMPLER'S SIGNATURE

M A 600-10 (1)

GROUNDWATER ELEVATION DATA

GROUNDWATER ELEVATION DATA

Well Number	Measuring Point Elevations	Date of Measurement	Depth to Water (feet)	Water Level Elevations
MW-1	13.72	4/5/93	7.95	5.77
MW-1		7/8/93	8.20	5.52
MW-1		10/20/93	8.60	5.12
MW-1		10/20/94	8.02	5.70
MW-1		1/31/95	6.62	7.10
MW-1		4/25/95	8.15	5.57
MW-1		7/13/95	5.54	8.18
MW-2	13.74	4/5/93	8.00	5.74
MW-2		7/8/93	8.20	5.54
MW-2		10/20/93	8.65	5.09
MW-2		10/20/94	7.86	5.88
MW-2		1/31/95	6.49	7.25
MW-2		4/25/95	8.25	5.49
MW-2		7/13/95	10.75	2.99
MW-3	13.50	4/8/93	8.00	5.74
MW-3		7/8/93	8.10	5.40
MW-3		10/20/93	8.50	5.00
MW-3		10/20/94	7.74	5.76
MW-3		1/31/95	6.58	6.92
MW-3		4/25/95	8.16	5.34
MW-3		7/13/95	8.47	5.03
MW-4	13.38	4/8/93	8.20	5.43
MW-4		7/8/93	8.00	5.38
MW-4		10/20/93	8.35	5.03
MW-4		10/20/94	7.69	5.69
MW-4		1/31/95	6.46	6.92
MW-4		4/25/95	9.90	3.48
MW-4		7/13/95	8.32	5.06
MW-5	13.98	4/8/93	8.00	5.98
MW-5		7/8/93	8.55	5.43
MW-5		10/20/93	8.85	5.13
MW-5		10/20/94	8.25	5.73
MW-5		1/31/95	6.86	7.12
MW-5		4/25/95	8.54	5.44
MW-5		7/13/95	5.85	8.13
MW-6	14 30	4/8/93	4 50	9 85
MW-6		7/8/93	4 90	9 40
MW-6		10/20/93	5 95	8 35
MW-6		10/20/94	3 41	10 89
MW-6		1/31/95	2 46	11 84
MW-6		4/25/95	4 45	9 85
MW-6		7/13/95	5 23	9 07

1 Elevations in feet above Mean Sea Level.