2415 Mariner Square Drive

February 20, 1991
SCI 554.002

Mr. Stan Kintz
John Beery Organization
2236 Mariner Square
Alameda, CA 94501

Environmental Engineering Services
Mariner Boat Yard Gasoline Tank
Mariner Square
Alameda California

Dear Mr. Kintz:

This letter records the results of environmental engineering services performed by Subsurface Consultants, Inc. (SCI) during underground tank removal activities at the referenced facility. One underground storage tank and an associated fuel pump dispenser was situated as shown on the attached Site Plan, Plate 1. A tank description is summarized below.

Tank Contents	Capacity	Diameter	Length	Depth To Bottom
Leaded Gasoline	550	4'	6'	7'

Tank Removal

Prior to tank removal an underground tank closure/modification plan was submitted to and approved by the Alameda County Health Care Services Agency (ACHCSA). In addition, a tank removal permit was obtained from the City of Alameda and City of Alameda Fire Department. An SCI field technician was on-site full time to observe removal activities and collect required soil and water samples for analyses. Representatives from the City of Alameda Fire Department intermittently observed site activities.

Bay Area Tank and Marine (BATM), a contractor specializing in underground tank installations and removals, performed pavement demolition, excavation and tank removal activities on December 17, 1990.

Subsurface Consultants, Inc.
171 12th Street • Suite 201 • Oakland, California 94607 • Telephone 415-268-0461 • FAX 415-268-0137

On November 28, 1990 Refineries Service, Inc. removed about 100 gallons of water/gasoline and then pressure washed the tank. The tank contents and rinsate were transported under manifest to a TSD facility. Prior to tank removal on December 11, 1990 rainwater which had accumulated in the tank was removed and transported under manifest by Refinery Services, Inc. Treatment Facility. Copies of the manifests are attached.

On December 17, 1990 the tanks were purged of vapors by adding dry ice. The tank atmospheres were checked by the Alameda Fire Department using a combustible gas meter to confirm that the atmospheres were less than 10 percent of the lower explosive limit (LEL) prior to removal.

No visible deterioration of the gasoline tank nor the exposed piping was observed. The tank was transported under manifest from the site by Erickson, Inc. A copy of the manifest is attached.

Soil Excavation and Backfilling

Following tank removal, the excavation was deepened to obtain a soil sample approximately 2 feet below the bottom of the tank. At a depth of about 8 feet, sloughing of soil into the excavation allowed perched groundwater located below the adjacent footing to flood the excavation. After a few minutes the water stabilized at a depth of about 5 feet. A visible sheen of oil or diesel was noted on the water surface. The excavated material was stockpiled and covered with plastic sheeting at the location shown on the Site Plan.

Soil samples were obtained from the side walls of the excavation and submitted for analyses. In accordance with removal guidelines, a sample of water which had accumulated in the excavation was also collected and submitted for analyses.

The excavation was backfilled with CalTrans class 2 aggregate base material on December 18, 1991. The material was placed in thin lifts and compacted. The excavation was topped with a asphalt concrete patch. The soil stockpile was removed from the site and trucked to a class III landfill for disposal on February 13, 1991.

Environmental Sampling

Two soil samples and one water sample were collected and analyzed from within the excavation. A soil sample was obtained and analyzed from below the dispenser. In addition, samples of the excavated stockpiled material were also collected and analyzed. Soil samples were retained in precleaned 2-inch-diameter brass

sample liners. Sample liner ends were covered with Teflon sheeting and plastic caps, prior to sealing them with duct tape. The water sample was retained in a glass container, precleaned by the supplier in accordance with EPA protocol. Soil and water samples were refrigerated until delivery to the analytical laboratory.

The samples were transmitted to Curtis & Tompkins, Ltd., a laboratory certified by the California Department of Health Services to conduct hazardous waste and water testing. The testing program for soil samples included analysis for total volatile hydrocarbons (TVH), benzene, toluene, ethylbenzene, xylene, (BTEX), and total lead. The water sample was analyzed for TVH, BTEX, total extractable hydrocarbons (TEH), total lead, and total oil and grease (TOG). The results of the analyses are summarized in Table 1. Analytical laboratory test reports and Chain of Custody documents are attached.

Table 1. Contaminants in Soil and Water From Gasoline Tank and Dispenser Area

Tank Excavation	Gasoline (ppm)[1]	Benzene (ppb)[2]	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	[redacted]
T1 @ 5'	ND[3]	ND	ND	ND	6.3	11
T2 @ 5'	ND	ND	17	ND	20	[redacted]
Dispenser						
D1 @ 1'	ND	ND	ND	ND	ND	12
Stockpile Composite						
SP-A,B,C & D	1.3	ND	15	ND	24	29

Tank Excavation	Gasoline (ppb)	BTEX[4] (ppb)	Kerosene (ppb)	Diesel (ppb)	TOG[5] (ppm)	Lead (ppm)
Water Sample	ND	ND	ND	6,900	160	ND

1 ppm = parts per million
2 ppb = parts per billion
3 ND = Not detected, chemicals not present at concentrations above detection limits
4 BTEX = Benzene, Toluene, Ethylbenzene, and Xylene
5 TOG = Total Oil and Grease

Samples of the soil and water from within the excavation were individually analyzed. A composited sample of the excavated materials containing 4 individual soil samples was obtained from the soil stockpile. The stockpile contained less than 10 cubic yards of soil.

Discussion and Conclusions

Test results of soil samples from the excavation sidewalls and from below the dispenser did not contain TVH as gasoline above detection limits. The soils below the tank did contain low concentrations of toluene and xylene. Analytical tests on soil samples from the stockpile of excavated soil indicate that some of the soils contains minor concentrations of TVH as gasoline, toluene, and total xylenes. These concentrations are very low and lead us to conclude that there is no evidence of significant leakage from the gasoline tank, associated piping and dispenser.

Elevated concentrations of diesel and total oil and grease were present in groundwater in the excavation. However, since the water did not contain elevated concentrations of TVH or BTEX, we conclude that groundwater has not been impacted by leakage from the gasoline tank.

If you have any questions regarding our services, please call.
Yours very truly,

Subsurface Consultants, Inc.

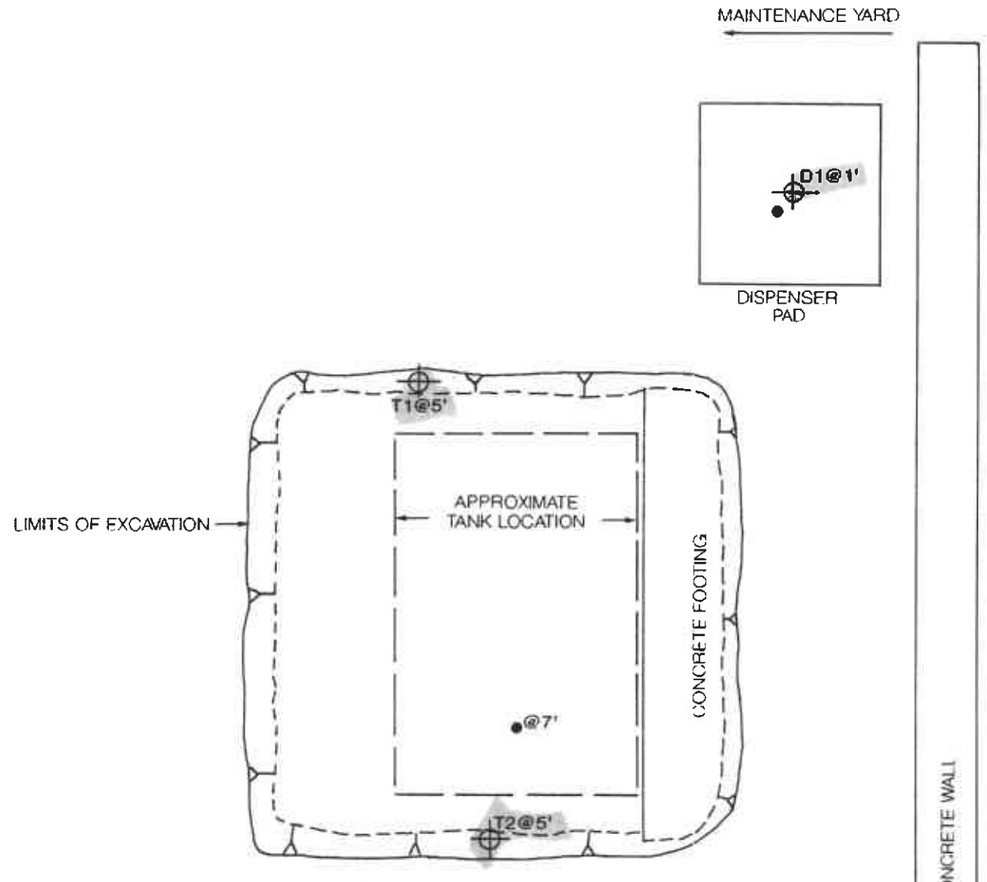
John V. Bosche
Geotechnical Engineer 156 (expires 3/31/92)

R. William Rudolph
Geotechnical Engineer 741 (expires 12/31/92)

JVB:RWR:ddh

cc: Ms. Kathrine Chesick
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
80 Swan Way, Room 200
Oakland, CA 94621

Attachments: Site Plan, Plate 1
Hazardous Waste Manifests
Analytic Test Reports
Chain-of-Custody Documents



VICINITY MAP

● OVM READING

⊕ SAMPLE LOCATION

N

APPROXIMATE SCALE (feet)

0 2.5 5

SITE PLAN

Subsurface Consultants

MARINER BOAT YARD GAS TANK

JOB NUMBER	DATE	APPROVED	PLATE
554.002	1/9/91	JVB	1

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-91)
Please print or type. *(Form designed for use on elite (12-pitch typewriter).*

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAC010152088 | Manifest Document No. 837115 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
MARINER SQUARE And ASSOCIATES
2415 MARINER SQUARE DR ALAMEDA, CA 94501
4. Generator's Phone (415) 521-2726

A. State Manifest Document Number 89806102
B. State Generator's ID
C. State Transporter's ID 102172
D. Transporter's Phone 800-874-4444

5. Transporter 1 Company Name: Refineries Service | 6. US EPA ID Number: CAD053166725
7. Transporter 2 Company Name | 8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Refineries Service
13331 N. HWY. 33
Patterson, CA. 95363
10. US EPA ID Number: CAD053166725
G. State Facility's ID
H. Facility's Phone 800-874-4444

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NON RCRA HAZARDOUS WASTE LIQUID N.O.S.	001	T	005000	G	State 135 EPA/Other EXEMPT
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
WATER - 99%
GAS — 1%

K. Handling Codes for Wastes Listed Above
a. | b. | c. | d.

15. Special Handling Instructions and Additional Information
WEAR GLOVES, GOGGLES & PROTECTIVE CLOTHING
IN CASE OF SPILL CALL EMERGENCY RESPONSE
800-874-4444 OR (209) 892-6742

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: John Rollo for Mariner Square A... | Signature | Month Day Year: 1 12 1990

TRANSPORTER
17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DANIEL GERSON | Signature | Month Day Year: 1 12 1990
18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

FACILITY
19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

DHS 8022 A (1/88)
EPA 8700—22
(Rev. 9-88) Previous editions are obsolete.

Do Not Write Below This Line

YELLOW: GENERATOR RETAINS

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

89806102

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-91)
Please print or type. (Form designed for use on elite (12-pitch typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAC000520888 Manifest Document No. 72034
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
mariner square + associates
2236 mariner square Drive Alameda ca 94501

4. Generator's Phone 415 521 2776

A. State Manifest Document Number 90272034

B. State Generator's ID

5. Transporter 1 Company Name: Refineries Services
6. US EPA ID Number: CAD 0831 66728

C. State Transporter's ID 102070
D. Transporter's Phone (209) 892-6747

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Refineries Services
13331 N Hy 33
Patterson CA. 95363

10. US EPA ID Number: CAD083166728

G. State Facility's ID
H. Facility's Phone (209) 1-800-874-4444

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NON RCRA HAZARDOUS WASTE Liquid	001	TT	00100	G	State 134 EPA/Other Exempt
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
A-1 99% water
140 gal

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
Avoid skin contact + wear protective clothing
Emergency # (415) 944-9219

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, If I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month Day Year
John Bosche for Mariner Sq. Assoc	[signature]	1/1 28 90

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
JEROME R. VOSS	[signature]	1/1 28 90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year

GENERATOR / TRANSPORTER / FACILITY

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

90272034

DHS 8022 A (1/88)
EPA 8700—22
(Rev. 9-88) Previous editions are obsolete.

Do Not Write Below This Line

Blue: GENERATOR SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 400, Sacramento, CA 95812-0400

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-91)
Please print or type. *(Form designed for use on elite (12-pitch typewriter).*

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CACDDD5BDEK8 Manifest Document No. 00001
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address MARINER BOAT YARD / MARINER SQUARE & ASSOCIATES / 2415 MARINER SQUARE DRIVE ALAMEDA CA 94501
4. Generator's Phone 415 521-3726

A. State Manifest Document Number 89891193
B. State Generator's ID

5. Transporter 1 Company Name Erickson Trucking inc
6. US EPA ID Number CAD009466392
C. State Transporter's ID 106249
D. Transporter's Phone 415-235-1393

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Erickson, Inc.
255 Parr Blvd.
Richmond, Ca. 94801

10. US EPA ID Number C A D 0 0 9 4 6 6 3 9 2
G. State Facility's ID
H. Facility's Phone (415) 235-1393

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. ~~Waste Empty Storage Tank~~ NON-RCRA Hazardous Waste Solid.	001	TP	500	P	State 512 / EPA/Other NONE
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above
Qty. 1 Empty Storage Tank (s) #5240, ____, ____ ____, ____. Tank (s) have been inerted with 15 lbs. Dry Ice per 1000 Gal. Capacity.

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
Keep away from sources of ignition. Always wear hardhats when working around U.S.T.'s

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Don Boche for Mariner Sq. Assoc | Signature: [signature] | Month Day Year 1 2 1 7 9 0

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Lindsey Berg | Signature: [signature] | Month Day Year 12 17 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

GENERATOR — TRANSPORTER — FACILITY

89891193 IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

DHS 8022 A (1/88)
EPA 8700—22
(Rev. 9-88) Previous editions are obsolete.

Do Not Write Below This Line

YELLOW: GENERATOR RETAINS

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 12/20/90
DATE REPORTED: 01/04/91

LAB NUMBER: 102589

CLIENT: SUBSURFACE CONSULTANTS

REPORT ON: 3 SOIL SAMPLES, 1 SOIL COMPOSITE
AND 1 WATER SAMPLE

PROJECT #: 554.002
LOCATION: MARINER BOAT YARD GASOLINE TANK

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd.

LAB NUMBER: 102589-4
CLIENT: SUBSURFACE CONSULTANTS
PROJECT # : 554.002

DATE RECEIVED: 12/20/90
DATE ANALYZED: 12/31/90
DATE REPORTED: 01/04/91

ANALYSIS: HYDROCARBON OIL AND GREASE
METHOD: SMWW 17:5520 B&F

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
102589-4	TANK EX. WATER	160	mg/L	20

ND = Not detected at or above reporting limit

QA/QC SUMMARY

RPD, %	<1
RECOVERY, %	81

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 102589
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 554.002

DATE RECEIVED: 12/20/90
DATE ANALYZED: 12/27/90
DATE REPORTED: 01/04/91

ANALYSIS: LEAD
ANALYSIS METHOD: EPA 7420

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
102589-1	T1 @ 5'	11	mg/Kg	2.5
102589-2	T2 @ 5'	150	mg/Kg	2.5
102589-3	D1 @ 1'	12	mg/Kg	2.5
102589-5	SP-A, SP-B, SP-C, SP-D	29	mg/Kg	2.5
102589-4	TANK EX. WATER	ND	mg/L	0.05

QA/QC SUMMARY

RPD, %	<1
RECOVERY, %	98

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 102589
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 554.002
LOCATION: MARINER BOAT YARD

DATE RECEIVED: 12/20/90
DATE EXTRACTED: 12/21/90
DATE ANALYZED: 12/31/90
DATE REPORTED: 01/04/91

Extractable Petroleum Hydrocarbons in Aqueous Solutions
California DOHS Method
LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT* (ug/L)
102589-4	TANK EX. WATER	ND	6,900	50

ND = Not detected at or above reporting limit.

*Reporting limit applies to all analytes.

QA/QC SUMMARY

RPD, %	3
RECOVERY, %	105

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 102589
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 554.002
JOB LOCATION: MARINER BOAT YARD

DATE RECEIVED: 12/20/90
DATE ANALYZED: 12/27/90
DATE REPORTED: 01/04/91

Total Volatile Hydrocarbons with BTXE in Soils & Wastes
TVH by California DOHS Method/LUFT Manual October 1989
BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (mg/Kg)	BENZENE (ug/Kg)	TOLUENE (ug/Kg)	ETHYL BENZENE (ug/Kg)	TOTAL XYLENES (ug/Kg)
102589-1	T1 @ 5'	ND(1.0)	ND(5.0)	ND(5.0)	ND(5.0)	6.3
102589-2	T2 @ 5'	ND(1.0)	ND(5.0)	17	ND(5.0)	20
102589-3	D1 @ 1'	ND(1.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
102589-5	SP-A, SP-B SP-C, SP-D	1.3	ND(5.0)	15	ND(5.0)	24

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, %	2
RECOVERY, %	98

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 102589
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 554.002
JOB LOCATION: MARINER BOAT YARD

DATE RECEIVED: 12/20/90
DATE ANALYZED: 12/29/90
DATE REPORTED: 01/04/91

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
TVH by California DOHS Method/LUFT Manual October 1989
BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
102589-4	TANK EX. WATER	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, %	1
RECOVERY, %	80