

RECEIVED
SEP 08 1997
DEPT. OF ECOLOGY

September 4, 1997

Ms. Sue Goertzan
Windemere Real Estate
2737 - 77th Avenue SE, Suite 100
Mercer Island, Washington 98040

Re: 3rd Quarter Ground Water Monitoring Data
6501-6515 California Avenue SW, Seattle, Washington

EPI Project No. 15103.0

Dear Ms. Goertzan:

This letter presents a summary of ground water analytical results obtained during the June, 1997 quarterly monitoring sampling event at the subject property referenced above. Environmental Partners, Inc. (EPI) sampled three on-site ground water monitoring wells (MW-1, MW-2, and MW-3) on Tuesday, June 3, 1997. Samples obtained from these wells were analyzed for volatile organic compounds (VOCs) by Method 8260 at Analytical Resources, Inc. (ARI) of Seattle, Washington. The June, 1997 sampling event represents the third time that ground water has been collected from the three on-site monitoring wells for analysis.

Ground Water Sampling Procedure

Ground water samples from all three monitoring wells were collected by hand, using a 1.66 inch by 36 inch, opaque, PVC bailer. EPI used one disposable bailer per well; each bailer was discarded upon completion of sampling.

Prior to purging and sampling each well, the depth to water and total depth of the well was measured. Measurements were made using a Solinst electronic water level meter. To ensure reproducibility of the data, all measurements were made to a specific mark on the top surface of the PVC well casing. These measurements were used to determine the volume of water that would be purged from the well prior to the collection of ground water samples. The measurements were also used to determine the elevation of the water table, which will be discussed in more detail below.

Based on the initial measurements taken at each well, a purge volume equal to three times the volume of water contained within the well was calculated. Purging continued until the calculated purge volume was removed from the well. Field measurements of pH, conductivity, and temperature were collected as purging progressed (Table 1).

Table 1
Ground Water pH, Conductivity, and Temperature
(June 3, 1997)

Well Name	Purge Volume (gallons)	pH	Conductivity (μmhos/cm)	Temperature (Fahrenheit)
MW-1	0.75	7.58	324	61.4
	1.50	7.60	325	60.6
	2.25	7.65	326	60.7
MW-2	1.0	7.94	288	60.6
	2.0	7.84	278	60.3
	3.0	7.82	277	59.2
MW-3	1.0	8.56	415	61.0
	2.0	8.39	365	60.1
	3.0	8.25	344	60.6

At each well, ground water samples were extracted using the same bailer that was used for purging. All ground water samples were placed into appropriate sample containers, recorded on a chain of custody, placed in a chilled ice chest, and hand delivered by EPI to ARI. Ground water samples were analyzed for VOCs by Method 8260.

Site Hydrogeology

During the first quarterly monitoring event, which occurred in October of 1996, ground water at the subject property was determined to flow in a general southeasterly direction. A similar direction of ground water flow was identified during the second quarterly monitoring event (February 17, 1997).

Based on water level measurements collected on-site during the third quarterly monitoring event (June, 1997) the direction of ground water flow at the site is towards the north-northeast (see Potentiometric Surface Map). It should be noted that this direction of ground water flow is roughly perpendicular to ground water flow directions noted during the previous two sampling events. The change in observed flow direction may be the result of seasonal variations in hydrogeologic conditions. Water table elevations during the June, 1997 sampling event were observed to be approximately 0.1 to 1.17 feet lower (deeper) than water levels recorded during the February, 1997 sampling event. The greatest variation was noted at MW-3, where the June water level was 1.17 feet deeper than previously noted.

The June, 1997 direction of flow places monitoring well MW-2 hydraulically up-gradient of the other on-site wells; this could explain why contaminants of concern have not been identified to date at the MW-2 location. It should be noted that previous sampling rounds showed MW-2 to be more cross-gradient from the suspected source area located near monitoring well MW-3.

Analytical Results

Table 2 contains a summary of analytes that were detected during the June, 1997 round of quarterly monitoring. It should be noted that the results of the preceding quarterly monitoring events have also been provided in Table 2 to allow a direct comparison of the data. A complete copy of ARI's analytical data package (for June, 1997) is included as Attachment A to this letter.

Ms. Sue Goertzan
 Re: June, 1997 Quarterly Sampling Results
 September 4, 1997

Table 2
Detected Analytes in Ground Water ($\mu\text{g/L}$)

Detected Analyte	MW-1			MW-2			MW-3			Cleanup Level
	Oct. 1996	Feb. 1997	June 1997	Oct. 1997	Oct. 1996	Feb. 1997	June 1997	Oct. 1997	June 1997	Oct. 1997
Tetrachloroethylene	6.0	5.5	5.3	—	nd	nd	nd	—	46	—
Trichloroethylene	nd	nd	nd	—	nd	nd	nd	—	1.4	—

a Washington State Model Toxics Control Act (MTCA) Method A Cleanup Level for Ground Water.
 b Washington State Model Toxics Control Act (MTCA) Method B Cleanup Level for Ground Water.
 nd Analyte not detected above applicable method detection limit.
 Note: Shaded table cells indicate the most recent (June, 1997) sampling results. Bolded analytical results indicate concentrations higher than applicable MTCA Cleanup Levels. The next scheduled quarterly monitoring event will occur in October of 1997.

Ms. Sue Goertzan
Re: June, 1997 Quarterly Sampling Results
September 4, 1997

It should be noted that a laboratory error was identified by EPI upon review of the original June, 1997 data package. The original data package reported concentrations of tetrachloroethene and trichloroethene at MW-2. No target analyte detections were reported at MW-3 by the original June 1997 data package. Additionally, EPI observed that the tetrachloroethene concentration reported at MW-2 was consistent with concentrations identified at MW-3 during previous sampling events. Once the potential error was identified, EPI contacted Mr. Mark Harris of ARI to determine whether a labeling error had occurred, or if samples MW-2 and MW-3 had been switched during analysis.

Mr. Harris pulled remaining sample volumes for MW-2 and MW-3 from ARI's sample archive. He reported that sample MW-2 had been assigned a laboratory identification number of S717B and that MW-3 was assigned a laboratory identification number of S717C. The laboratory identifiers had been assigned when the samples were turned in to ARI by EPI on June 3, 1997. Mr. Harris had both samples re-analyzed by method 8260. He reported that the results of the re-analyses indicated that the samples had been inadvertently switched prior to their initial analyses in June. During the re-analysis, tetrachloroethene and trichloroethene were detected in the MW-3 sample at concentrations that were similar to the concentrations reported for the "MW-2" sample by the original data package.

Because the re-analyses of the MW-2 and MW-3 samples were not conducted within acceptable laboratory hold-times, EPI instructed ARI to reprint the original data sheets with corrected sample identification. The corrected data sheets are included with Attachment A.

The results of the water analyses indicate that, in wells MW-1 and MW-3, tetrachloroethene is present at concentrations that exceed the applicable Ecology Method A Ground Water Cleanup Level; these exceedences have been noted during all of the quarterly monitoring sampling events that have occurred on the subject property to-date. These concentrations appear to be remaining constant.

A small concentration of trichloroethene was identified at MW-3 during the June, 1997 sampling event; this represents the first time that trichloroethene has been identified in ground water since quarterly monitoring began. The detected trichloroethene concentration is well below the applicable MTCA Method B Cleanup Level for ground water. It should be noted that trichloroethene may be produced by the degradation of tetrachloroethene. Consequently, the presence of trichloroethene in the MW-3 sample may be attributable to the presence of tetrachloroethene.

It is our pleasure to provide this service for you. If you have any questions regarding the information in this letter or about the project in general, please call me at (425) 889-4747.

Sincerely,



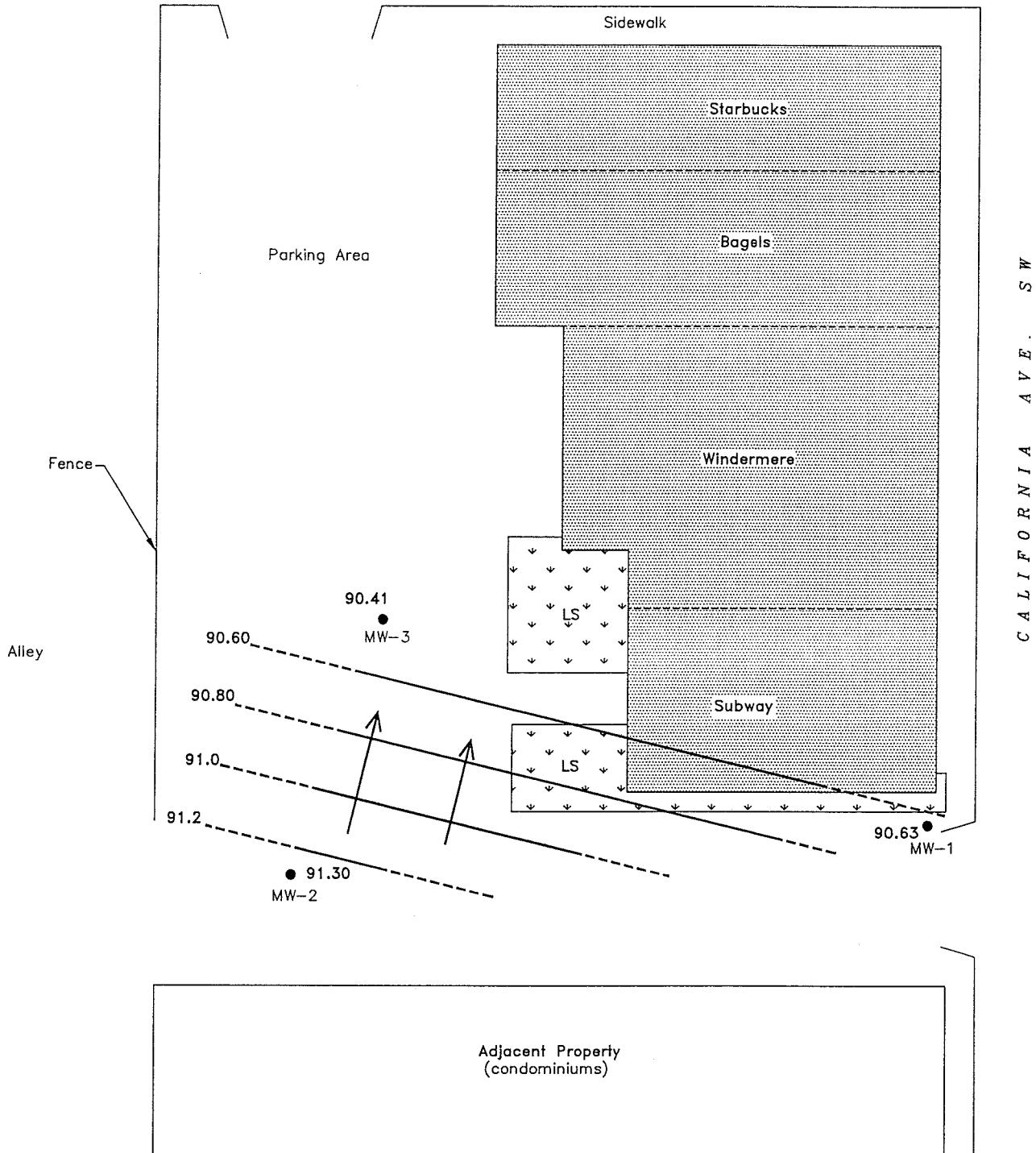
Terry Brasino
Principal

Enc: Potentiometric Surface Map
Laboratory Data Sheets

Ms. Sue Goertzan
Re: June, 1997 Quarterly Sampling Results
September 4, 1997

cc: Mr. Louis Perez - Bank of California
Ms. Emily DiLaura - Bank of California
Mr. Ching Pi Wang - Department of Ecology

FAUNTLEROY WAY SW



KEY



● MW-1 Ground Water Monitoring Well

LS Landscaping

↑ Direction of Ground Water Flow

SCALE: 1" = 30'

ENVIRONMENTAL
PARTNERS INC

Potentiometric Surface Map
June 3, 1997

PROJECT	Quarterly GW Monitoring, June 1997			
PREPARED FOR	Sue Goertzen			
LOCATION	6501-6515 California Ave. SW Seattle, WA			
PROJ. #	DRAWN BY	DATE	SHEET	
15103.0	TSS	8/28/97	1 of 1	

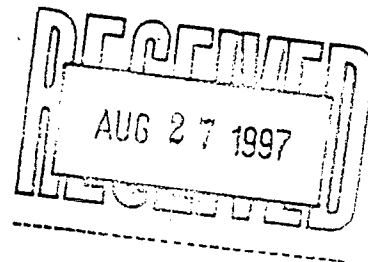
8:55 AM C:\chris\goertzen\151\15103.0 Potentiometric Map.dwg 9/2/97

Attachment A
ARI Analytical Data Package
June, 1997



Analytical Resources, Incorporated
Analytical Chemists and Consultants

26 August 1997



Don Harnden
Environmental Partners
10940 NE 33rd Place, Suite 110
Bellevue, WA 98004

Re: Project: W. Seattle
ARI Job No. S717

Dear Don:

Please find enclosed the corrected VOA reports for two samples from the project referenced above.

Samples MW-2 and MW-3 were retrieved from archive and the two vials for each sample were examined. Sample MW-2 was labeled "S717B" and Sample MW-3 was labeled "S717C" for each sample's two respective vials. Each sample was re-analyzed for VOAs by Method 8260. Based on the results obtained for the re-analyses, it appears that the two samples were inadvertently switched at some point prior to the initial analyses that were performed in June. Toluene was detected at very low level for the re-analysis of Sample MW-2. Trichloroethene, toluene and tetrachloroethene were detected for the re-analysis of Sample MW-3. Since the re-analyses were not performed within holding time, the results for the initial analyses of these two samples have been switched and re-reported using all data obtained on June 7, 1997.

A copy of these reports will remain on file at ARI. Should you have any further questions, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
(206) 340-2866 x-113

Enclosures

cc: Files S717

MDH/mdh

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: MW-2

Lab Sample ID: S717B

QC Report No: S717-Environmental Partners

LIMS ID: 97-8898

Project: W. Seattle

Matrix: Water

Data Release Authorized: *MA*

Date Sampled: 06/03/97

Reported: 08/26/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
1330-20-7	m,p-Xylene	1.0 U



Sample No: MW-2

Lab Sample ID: S717B

QC Report No: S717-Environmental Partners

LIMS ID: 97-8898

Project: W. Seattle

Matrix: Water

Data Release Authorized: *not*

Date Sampled: 06/03/97

Reported: 08/26/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	o-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	95.3%
d4-1,2-Dichlorobenzene	99.6%



Sample No: MW-3

Lab Sample ID: S717C

LIMS ID: 97-8899

Matrix: Water

Data Release Authorized: *OK*

Reported: 08/26/97

QC Report No: S717-Environmental Partners

Project: W. Seattle

Date Sampled: 06/03/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.4
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	46
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
1330-20-7	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: MW-3

Lab Sample ID: S717C

LIMS ID: 97-8899

Matrix: Water

Data Release Authorized: *[Signature]*

Reported: 08/26/97

QC Report No: S717-Environmental Partners

Project: W. Seattle

Date Sampled: 06/03/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

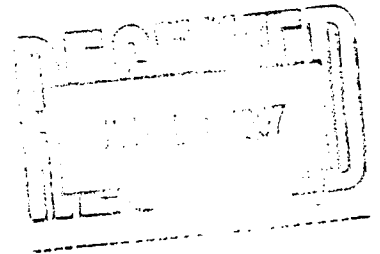
CAS Number	Analyte	ug/L
95-47-6	o-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	98.3%
Bromofluorobenzene	94.1%
d4-1,2-Dichlorobenzene	98.9%



Analytical Resources, Incorporated
Analytical Chemists and Consultants



12 June 1997

Don Harnden
Environmental Partners
10940 NE 33rd Place, Suite 110
Bellevue, WA 98004

Re: Project: W. Seattle
ARI Job No. S717

Dear Don:

Please find enclosed the original Chain-of-Custody record (COC) and final results for samples from the project referenced above. Analytical Resources, Inc. accepted three water samples and one trip blank in good condition on June 3, 1997. The samples were analyzed for VOAs as requested.

There were no problems with these analyses.

A copy of the results and all raw data will remain on file at ARI. Should you have questions or require further information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
(206) 340-2866 x-113

Enclosures

cc: Files S717

MDH/mdh

Analytical Resources, Incorporated
Analytical Chemist and Consultants
400 Ninth Avenue North
Seattle, WA 98109-4708
(206) 621-6490
(206) 621-7523 (Fax)

6-3-77

Phone#: 626-977-9797

11-11-11

D: W. Sattle

Mer Ten

	Sample ID	Date	Time	Matx	No Cont	Lab ID
1	ALW-1	6-3-77	12:50	H ₂ O	3	
2	ALW-2	6-3-77	12:20	H ₂ O	3	
3	ALW-3	6-3-77	11:45	H ₂ O	3	
4	Tap Bleb	5-28-77	—	H ₂ O	1	
5						
6						
7						

ARI Project No:	Relinquished by: (Signature)	Relinquished by: (Signature)	Relinquished by: (Signature)
Comments/Special Instructions:	Printed Name:	Printed Name:	Printed Name:
	Company:	Company:	Company:
	Date:	Date:	Date:
	Time:	Time:	Time:
	Received by: (Signature)	Received by: (Signature)	Received by: (Signature)
	Printed Name:	Printed Name:	Printed Name:
	Company:	Company:	Company:
	Date:	Date:	Date:
	Time:	Time:	Time:

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following Standard Operating Procedures and our Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI releases ARI from any liability in excess thereof, notwithstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the client.



**ORGANIC COMPOUND
DATA REPORTING QUALIFIERS**

- U Indicates the compound was undetected at the reported concentration. (Same as ND).
- J Indicates an estimated concentration when the value is less than the calculated reporting limit.
- D Indicates the surrogate/spike(s) was not detected, due to dilution of extract.
- NR Indicates the surrogate recovery cannot be reported due to matrix interference.
- E Indicates a value above the linear range of the detector. Sample dilution required.
- S Indicates no value reported due to saturation of the detector. Sample dilution required.
- NA Indicates compound not analyzed for.
- M Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match.
- B Indicates possible/probable blank contamination. Flagged when the analyte is detected in the blank as well as the sample.
- Y Indicates raised reporting limit due to background interference or to activity on the instrument. Compound is still not detected at or above the raised level.

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Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: Method Blank

Lab Sample ID: 060797MB

QC Report No: S717-Environmental Partners

LIMS ID: 97-8897

Project: W. Seattle

Matrix: Water

Data Release Authorized: *AK*

Date Sampled: NA

Reported: 06/12/97

Date Received: NA

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U



Sample No: Method Blank

Lab Sample ID: 060797MB

QC Report No: S717-Environmental Partners

LIMS ID: 97-8897

Project: W. Seattle

Matrix: Water

Data Release Authorized: *MS*

Date Sampled: NA

Reported: 06/12/97

Date Received: NA

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	o-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.2%
d8-Toluene	100%
Bromofluorobenzene	96.2%
d4-1,2-Dichlorobenzene	97.8%



ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample No: MW-1

Lab Sample ID: S717A QC Report No: S717-Environmental Partners
LIMS ID: 97-8897 Project: W. Seattle
Matrix: Water
Data Release Authorized: *[Signature]* Date Sampled: 06/03/97
Reported: 06/12/97 Date Received: 06/03/97

Instrument: FINN3 Sample Amount: 5.00 mL
Date Analyzed: 06/07/97 Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	5.3
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

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Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: MW-1

Lab Sample ID: S717A

QC Report No: S717-Environmental Partners

LIMS ID: 97-8897

Project: W. Seattle

Matrix: Water

Data Release Authorized: *AK*

Date Sampled: 06/03/97

Reported: 06/12/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	o-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.7%
d8-Toluene	101%
Bromofluorobenzene	95.5%
d4-1,2-Dichlorobenzene	96.0%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: MW-2

Lab Sample ID: S717B

QC Report No: S717-Environmental Partners

LIMS ID: 97-8898

Project: W. Seattle

Matrix: Water

Data Release Authorized: *MM*

Date Sampled: 06/03/97

Reported: 06/12/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.4
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	46
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

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Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: MW-2

Lab Sample ID: S717B

QC Report No: S717-Environmental Partners

LIMS ID: 97-8898

Project: W. Seattle

Matrix: Water

Data Release Authorized: *[Signature]*

Date Sampled: 06/03/97

Reported: 06/12/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	o-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	98.3%
Bromofluorobenzene	94.1%
d4-1,2-Dichlorobenzene	98.9%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: MW-3

Lab Sample ID: S717C

QC Report No: S717-Environmental Partners

LIMS ID: 97-8899

Project: W. Seattle

Matrix: Water

Data Release Authorized: *OK*

Date Sampled: 06/03/97

Reported: 06/12/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

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Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: MW-3

Lab Sample ID: S717C

QC Report No: S717-Environmental Partners

LIMS ID: 97-8899

Project: W. Seattle

Matrix: Water

Data Release Authorized: *DA*

Date Sampled: 06/03/97

Reported: 06/12/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	o-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	95.3%
d4-1,2-Dichlorobenzene	99.6%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: Tripblank

Lab Sample ID: S717D

QC Report No: S717-Environmental Partners

LIMS ID: 97-8900

Project: W. Seattle

Matrix: Water

Data Release Authorized: *NA*

Date Sampled: 05/28/97

Reported: 06/12/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Sample No: Tripblank

Lab Sample ID: S717D

QC Report No: S717-Environmental Partners

LIMS ID: 97-8900

Project: W. Seattle

Matrix: Water

Data Release Authorized: *AK*

Date Sampled: 05/28/97

Reported: 06/12/97

Date Received: 06/03/97

Instrument: FINN3

Sample Amount: 5.00 mL

Date Analyzed: 06/07/97

Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	o-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	98.9%
Bromofluorobenzene	97.3%
d4-1,2-Dichlorobenzene	96.9%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Lab Sample ID: S717SB

LIMS ID: 97-8897

Matrix: Water

Data Release Authorized: *MM*

Reported: 06/12/97

Date Analyzed: 06/07/97

Instrument: FINN3

QC Report No: S717-Environmental Partners

Project: W. Seattle

Date Received: 06/03/97

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
Chloromethane	29.6	50.0	59.2%
Bromomethane	35.2	50.0	70.4%
Vinyl Chloride	31.7	50.0	63.4%
Chloroethane	37.5	50.0	75.0%
Methylene Chloride	42.1	50.0	84.2%
Acetone	234.	250	93.6%
Carbon Disulfide	20.3	50.0	40.6%
1,1-Dichloroethene	38.1	50.0	76.2%
1,1-Dichloroethane	42.1	50.0	84.2%
trans-1,2-Dichloroethene	37.2	50.0	74.4%
cis-1,2-Dichloroethene	46.5	50.0	93.0%
Chloroform	42.8	50.0	85.6%
1,2-Dichloroethane	43.3	50.0	86.6%
2-Butanone	229.	250	91.6%
1,1,1-Trichloroethane	40.9	50.0	81.8%
Carbon Tetrachloride	41.7	50.0	83.4%
Vinyl Acetate	43.1	50.0	86.2%
Bromodichloromethane	44.3	50.0	88.6%
1,2-Dichloropropane	46.0	50.0	92.0%
cis-1,3-Dichloropropene	44.6	50.0	89.2%
Trichloroethene	42.7	50.0	85.4%
Dibromochloromethane	40.4	50.0	80.8%
1,1,2-Trichloroethane	45.5	50.0	91.0%
Benzene	43.3	50.0	86.6%
trans-1,3-Dichloropropene	46.1	50.0	92.2%
2-Chloroethylvinylether	21.0	50.0	42.0%
Bromoform	41.1	50.0	82.2%
4-Methyl-2-Pentanone (MIBK)	229.	250	91.6%
2-Hexanone	213.	250	85.2%
Tetrachloroethene	39.6	50.0	79.2%
1,1,2,2-Tetrachloroethane	42.8	50.0	85.6%
Toluene	44.1	50.0	88.2%
Chlorobenzene	42.3	50.0	84.6%
Ethylbenzene	41.4	50.0	82.8%
Styrene	42.1	50.0	84.2%
Trichlorofluoromethane	34.9	50.0	69.8%
1,1,2-Trichlorotrifluoroethane	32.0	50.0	64.0%
m,p-Xylene	85.1	100	85.1%
O-Xylene	42.7	50.0	85.4%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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ANALYTICAL
RESOURCES
INCORPORATED

Lab Sample ID: S717SB

LIMS ID: 97-8897

Matrix: Water

Data Release Authorized: *AM*

Reported: 06/12/97

Date Analyzed: 06/07/97

Instrument: FINN3

QC Report No: S717-Environmental Partners

Project: W. Seattle

Date Received: 06/03/97

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
1,2-Dichlorobenzene	42.6	50.0	85.2%
1,3-Dichlorobenzene	42.6	50.0	85.2%
1,4-Dichlorobenzene	42.6	50.0	85.2%
Acrolein	248.	250	99.2%
Methyl Iodide	31.5	50.0	63.0%
Bromoethane	32.3	50.0	64.6%
Acrylonitrile	45.8	50.0	91.6%
1,1-Dichloropropene	42.8	50.0	85.6%
Dibromomethane	44.3	50.0	88.6%
1,1,1,2-Tetrachloroethane	42.2	50.0	84.4%
1,2-Dibromo-3-chloropropane	43.2	50.0	86.4%
1,2,3-Trichloropropane	42.5	50.0	85.0%
trans-1,4-Dichloro-2-butene	46.0	50.0	92.0%
1,3,5-Trimethylbenzene	40.3	50.0	80.6%
1,2,4-Trimethylbenzene	41.8	50.0	83.6%
Hexachlorobutadiene	44.1	50.0	88.2%
Ethylene Dibromide	45.4	50.0	90.8%
Bromochloromethane	42.9	50.0	85.8%
2,2-Dichloropropane	41.6	50.0	83.2%
1,3-Dichloropropane	42.2	50.0	84.4%
Isopropylbenzene	41.3	50.0	82.6%
n-Propylbenzene	41.2	50.0	82.4%
Bromobenzene	42.7	50.0	85.4%
2-Chlorotoluene	40.8	50.0	81.6%
4-Chlorotoluene	41.4	50.0	82.8%
tert-Butylbenzene	41.0	50.0	82.0%
sec-Butylbenzene	42.3	50.0	84.6%
4-Isopropyltoluene	42.6	50.0	85.2%
n-Butylbenzene	41.3	50.0	82.6%
1,2,4-Trichlorobenzene	42.4	50.0	84.8%
Naphthalene	43.0	50.0	86.0%
1,2,3-Trichlorobenzene	40.6	50.0	81.2%

Lab Control Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	104%
Bromofluorobenzene	98.6%
d4-1,2-Dichlorobenzene	101%

Reported in ug/L