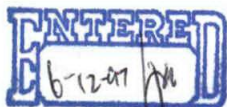




# Shamrock

SERVICES, INC.

2601 W. Marina Pl., Ste. P  
Seattle, WA 98199  
(206) 282-2100  
FAX (206) 282-2803



March 11, 1996

Richard Embry  
Gramor Development NW, Inc.  
1133 164th Street SW, Suite 107  
Lynnwood, WA 98037

RECEIVED  
MAR 14 1996  
DEPT. OF ECOLOGY

DEPARTMENT OF ECOLOGY NWRO/TCP TANKS UNIT	
INTERIM CLEANUP REPORT	<input type="checkbox"/>
SITE CHARACTERIZATION	<input checked="" type="checkbox"/>
FINAL CLEANUP REPORT	<input checked="" type="checkbox"/>
OTHER <i>4th Qtr - 1 yr complete</i>	<input checked="" type="checkbox"/>
AFFECTED MEDIA: SOIL	<input type="checkbox"/>
OTHER GW	<input type="checkbox"/>
INSPECTOR (INIT.)	DATE <i>6-12-97</i>

\* site characterization is actually many reports taken together over the entire cleanup.

**RE: Rainier Valley Square - Former Service Station Site  
Ground Water Test Results - 4th Quarter**

Dear Richard:

Per your request, ground water samples were obtained tested from the former service station site in the southwest corner of the Rainier Valley Square site, 3820 Rainier Avenue South, Seattle, Washington. Fourth quarter tests should have occurred during the month of March; however, to accommodate your timing needs, the samples were obtained in advance of the actual fourth quarter time interval.

The samples were obtained on February 28, 1996, and tested on March 1, 1996 by Pacific Testing Laboratories, with the actual testing conducted by CCI Analytical Laboratories in Everett, WA. The samples were tested for TPH-gasoline, benzene, toluene, ethylbenzene, and xylenes. The detected levels of these products were below MTCA Method A Cleanup levels. The summary results and the accompanying laboratory results are enclosed herewith as Exhibit 1.

Because the samples obtained during all previous testing periods exhibited hydrocarbon levels below MTCA cleanup levels, we believe further testing of the ground water is not necessary or warranted.

If you need any further information or help, please don't hesitate to call upon us.

Very truly yours,

Shamrock Services, Inc.

Edward O'Sullivan

Enclosures

EXHIBIT '1'

**SHAMROCK SERVICES**

2601 West Marina Place  
Seattle, Washington 98199

Attention: Mr. Ed O'Sullivan

Subject:

**Summary of Gauging, Sampling, and Analysis of Groundwater**

**PACIFIC TESTING LABORATORIES**

3257 16th Avenue West  
Seattle, Washington 98119

March 11, 1996

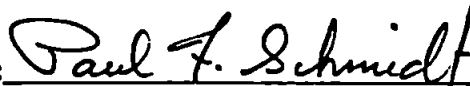
Certificate No. 9602-6625.R

Prepared by:



Clinton Holzhauser, Environmental Chemist  
Environmental Services Department

Reviewed by:



Paul F. Schmidt, Manager  
Environmental Services Department

Approved by:



Alan C. Topinka, P.E.  
General Manager

**SHAMROCK SERVICES**  
**Certificate No. 9602-6625.R**  
**March 11, 1996**  
**Page 1**

## **EXECUTIVE SUMMARY**

### ***Site***

3800 Rainier Avenue South  
Seattle, Washington  
A site map is included in Appendix A.

### ***History***

It is believed that a service station formerly occupied the south end of the site. Underground storage tanks are believed to have been removed in the early 1990's. Pacific Testing Laboratories (PTL) understands that three groundwater monitoring wells are present at the site. This report details the gauging of groundwater elevation, and sampling and analysis of groundwater from wells MW-5, MW-6 and MW-7.

PTL has not been informed of the nature or extent of any past remedial activities.

PTL's analytical results are presented in Tables I and II. Results from the gauging of water depths is included in Table III.

### ***Field Activities***

On February 28, 1996, PTL obtained and analyzed groundwater samples from MW-5, MW-6, and MW-7. Concurrent with sample collection, PTL surveyed the top of casing (TOC) elevations for each of the three wells. The elevations obtained were tied in to the site's previous TOC survey. An assumed reference elevation of 50 feet was used for the temporary bench mark (TBM). The TBM for the site was established at the north side of the top of the concrete support for the light standard just southwest of MW-1.

The depth to static water was gauged in each of the sampled wells.

### ***Analytical Testing***

Three groundwater samples were submitted to PTL's Chemistry Department for analytical testing for the presence of gasoline range organics (GRO) and diesel range organics (DRO) constituents. The samples were also analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX).

SHAMROCK SERVICES  
Certificate No. 9602-6625.R  
March 11, 1996  
Page 2

## **EXECUTIVE SUMMARY, CONTINUED**

### ***Results***

Laboratory test data do not indicate the presence of gasoline range organics (GRO), diesel range organics (DRO), or BTEX constituents above the analytical method's reporting limits.

An interpreted groundwater flow direction for the south end of the site indicates that the flow is to the southeast.

### ***Conclusions***

On the basis of PTL's analytical testing, concentrations of GRO, DRO, and BTEX are less than the MTCA cleanup levels.

## **SAMPLING METHODOLOGY**

Prior to sampling, each well was purged a minimum of three casing volumes of water. One groundwater sample was then obtained from each well using a stainless steel bailer. These samples were then placed into appropriately labeled sample containers. Prior to each use, the stainless steel bailer was decontaminated to prevent cross-contamination between the wells. Filled sample containers were placed into an ice-filled cooler for transport to the laboratory for analysis.

## **ANALYTICAL METHODOLOGY**

The groundwater samples were analyzed in accordance with Washington State Department of Ecology (Ecology) WTPH-D and WTPH-G methods. BTEX concentrations were obtained following the US Environmental Protection Agency (EPA) Method 8020. A summary of analytical results are presented in Tables I and II. Laboratory data sheets and the chain-of-custody record are included in Appendix B.

## SHAMROCK SERVICES

Certificate No. 9602-6625.R

March 11, 1996

Page 3

**Table I.**  
**DRO Concentrations in Water**  
**Results Reported as  $\mu\text{g/L}$  (ppb)**  
**3800 Rainier Avenue S, Seattle, WA**

Sample I.D.	Sampling Dates	DRO
MW-5	02/28/96	< 250
MW-6	02/28/96	< 250
MW-7	02/28/96	< 250
Analytical Method Reporting Limit	—	250
MTCA Method A Cleanup Level	—	1,000

**Table II.**  
**GRO and BTEX Concentrations in Water**  
**Results Reported as  $\mu\text{g/L}$  (ppb)**  
**3800 Rainier Avenue S. Seattle, WA**

Sample I.D.	Sampling Dates	GRO	Benzene	Toluene	Ethylbenzene	Xylenes
MW-5	02/28/96	< 50	< 1.0	< 1.0	< 1.0	< 3.0
MW-6	02/28/96	< 50	< 1.0	< 1.0	< 1.0	< 3.0
MW-7	02/28/96	< 50	< 1.0	< 1.0	< 1.0	< 3.0
Analytical Method Reporting Limit	—	50	1.0	1.0	1.0	3.0
MTCA Method A cleanup Level	—	100	5.0	40.0	30.0	20.0

**SHAMROCK SERVICES**

Certificate No. 9602-6625.R

March 11, 1996

Page 4

**DISCUSSION OF ANALYTICAL RESULTS**

The results from groundwater samples from each of the three monitoring wells indicate the GRO and DRO components do not exceed the analytical method's reporting detection limits.

**GAUGING OF WATER DEPTHS AND TOP OF CASING ELEVATION SURVEY**

During the sampling episode, the depth to static water was gauged in each of the sampled wells. The depth to water was gauged at a permanent reference point on the top north side of each well casing (TOC). The results of the gauging activities are recorded below. The assumed TOC elevation is relative to the temporary bench mark (TBM) elevation of 50.0 feet established at the same site while doing a TOC survey of the four other monitoring wells sampled previously. The TBM is the northside of the top of the concrete post supporting the light pole just southwest of MW-1. Relative TOC elevations were surveyed by PTL using a transit and stadia rod. The field survey data sheet is included in Appendix C.

**Table III.**  
**Depth to Groundwater & Interpreted Groundwater Elevations**  
**3800 Rainier Avenue S, Seattle, WA**

<b>Monitoring Well I.D.</b>	<b>Sampling Date</b>	<b>TOC Elevation (feet)</b>	<b>Gauged Depth to Groundwater (feet)</b>	<b>Interpreted Groundwater Elevation (feet)</b>
MW-5	02/28/96	45.53	5.81	39.72
MW-6	02/28/96	45.23	6.71	38.52
MW-7	02/28/96	42.77	5.34	37.43

**GROUNDWATER FLOW**

Depth to groundwater measurements were used to model the elevation contours of the water table and to establish a groundwater flow direction. The interpreted groundwater flow direction for this side of the site is to the southeast.

**SHAMROCK SERVICES**  
**Certificate No. 9602-6625.R**  
**March 11, 1996**  
**Page 5**

## **CONCLUSIONS**

On the basis of PTL's analytical testing, concentrations of GRO, DRO, and BTEX are less than the MTCA cleanup levels.

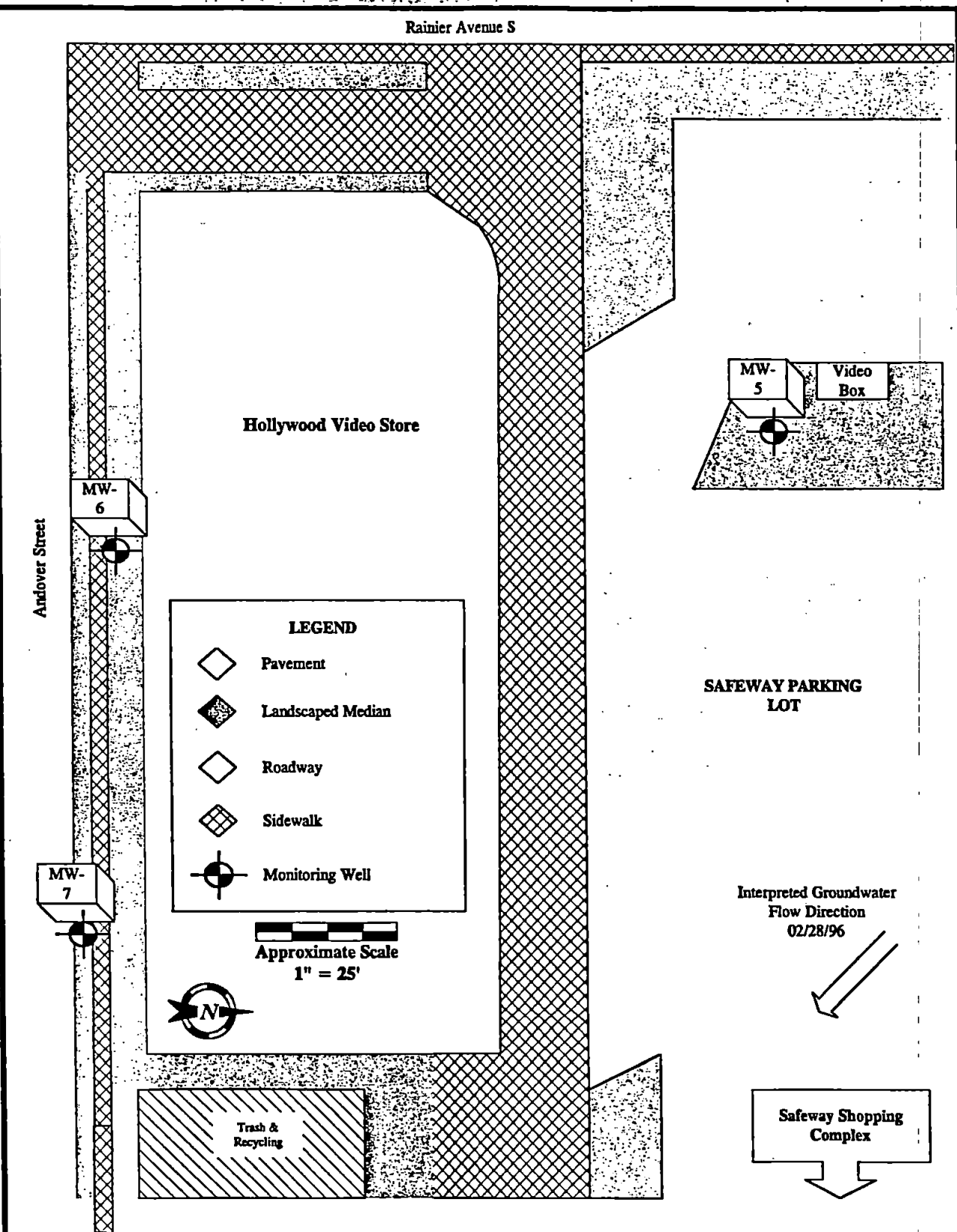
## **LIMITATIONS**

This report has been prepared to aid in the evaluation of the site. Our conclusions and recommendations have been prepared in accordance with generally accepted professional engineering principles and practices. We make no other warranty, either expressed or implied. Our conclusions are based on results of field explorations in a limited portion of the subject site, and on our interpretation of analytical results. If conditions are encountered that appear different from those described in this report, we must be notified so we may review and verify or modify our recommendations.

**APPENDIX A**

**SITE MAP**





# **PACIFIC TESTING LABORATORIES**

3257 16th Avenue West, Seattle, WA 98119-1706  
206-282-0666

# **FIGURE 1** **SITE MAP**

3800 Rainier Avenue South, Seattle, WA  
Certificate No. 9602-6625.R  
Prepared for Shamrock Services, 3-11-96

**APPENDIX B**

**LABORATORY DATA SHEETS AND CHAIN OF CUSTODY RECORD**



CCI  
ANALYTICAL  
LABORATORIES, INC.

### CERTIFICATE OF ANALYSIS

CLIENT: PACIFIC TESTING LABORATORIES  
3257 16TH AVE. WEST  
SEATTLE, WA 98119

DATE: 3/1/96  
CCIL JOB #: 602074  
CCIL SAMPLE #: 1  
DATE RECEIVED: 2/29/96  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL SCHMIDT

CLIENT PROJECT ID: SHAMROCK SERVICES 9602-6625  
CLIENT SAMPLE ID: MW-5 2/28/96 13:55

### DATA RESULTS

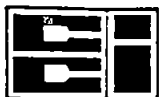
ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-GASOLINE	WTPH-G	ND(<50)	UG/L	1000 UG/L	2/29/96	KLP
BENZENE	EPA-8020	ND(<1)	UG/L	5 UG/L	2/29/96	KLP
TOLUENE	EPA-8020	ND(<1)	UG/L	40 UG/L	2/29/96	KLP
ETHYLBENZENE	EPA-8020	ND(<1)	UG/L	30 UG/L	2/29/96	KLP
XYLENES	EPA-8020	ND(<3)	UG/L	20 UG/L	2/29/96	KLP

\* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY  
CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.  
THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY  
DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: CPH



CCI  
ANALYTICAL  
LABORATORIES, INC.

### CERTIFICATE OF ANALYSIS

CLIENT: PACIFIC TESTING LABORATORIES  
3257 16TH AVE. WEST  
SEATTLE, WA 98119

DATE: 3/1/96  
CCIL JOB #: 602074  
CCIL SAMPLE #: 2  
DATE RECEIVED: 2/29/96  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL SCHMIDT

CLIENT PROJECT ID: SHAMROCK SERVICES 9602-6625  
CLIENT SAMPLE ID: MW-6 2/28/96 14:09

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-GASOLINE	WTPH-G	ND(<50)	UG/L	1000 UG/L	2/29/96	KLP
BENZENE	EPA-8020	ND(<1)	UG/L	5 UG/L	2/29/96	KLP
TOLUENE	EPA-8020	ND(<1)	UG/L	40 UG/L	2/29/96	KLP
ETHYLBENZENE	EPA-8020	ND(<1)	UG/L	30 UG/L	2/29/96	KLP
XYLENES	EPA-8020	ND(<3)	UG/L	20 UG/L	2/29/96	KLP

\* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY  
CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.  
THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY  
DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: C128



CCI  
ANALYTICAL  
LABORATORIES, INC.

### CERTIFICATE OF ANALYSIS

CLIENT: PACIFIC TESTING LABORATORIES  
3257 16TH AVE. WEST  
SEATTLE, WA 98119

DATE: 3/1/96  
CCIL JOB #: 602074  
CCIL SAMPLE #: 3  
DATE RECEIVED: 2/29/96  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL SCHMIDT

CLIENT PROJECT ID: SHAMROCK SERVICES 9602-6625  
CLIENT SAMPLE ID: MW-7 2/28/96 14:28

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-GASOLINE	WTPH-G	ND(<50)	UG/L	1000 UG/L	2/29/96	KLP
BENZENE	EPA-8020	ND(<1)	UG/L	5 UG/L	2/29/96	KLP
TOLUENE	EPA-8020	ND(<1)	UG/L	40 UG/L	2/29/96	KLP
ETHYLBENZENE	EPA-8020	ND(<1)	UG/L	30 UG/L	2/29/96	KLP
XYLENES	EPA-8020	ND(<3)	UG/L	20 UG/L	2/29/96	KLP

\* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY  
CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.  
THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY  
DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: C. 2/1



CCI  
ANALYTICAL  
LABORATORIES, INC.

---

CERTIFICATE OF ANALYSIS

---

CLIENT: PACIFIC TESTING LABORATORIES  
3257 16TH AVE. WEST  
SEATTLE, WA 98119

DATE: 3/1/96  
CCIL JOB #: 602074

DATE RECEIVED: 2/29/96  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL SCHMIDT

CLIENT PROJECT ID: SHAMROCK SERVICES 9602-6625

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QUALITY CONTROL RESULTS

---

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
602074-01	WTPH-G	TFT	115
602074-01	EPA-8020	TFT	107
602074-02	WTPH-G	TFT	110
602074-02	EPA-8020	TFT	102
602074-03	WTPH-G	TFT	113
602074-03	EPA-8020	TFT	106

APPROVED BY: C142

### CHAIN OF CUSTODY RECORD

PTL Certificate Number

--- PACIFIC TESTING 0006/006

SHAMROCK SERVICES  
Certificate No. 9602-6625.R  
Appendix B

Sample Received: 02/28/96  
Sample Extracted: 02/29/96  
Sample Analyzed: 02/29/96

RESULTS FROM THE ANALYSIS OF WATERS  
FOR WA DOE WTPH-DIESEL  
Results Reported as mg/L (ppm)

Sample ID	Result	% Surrogate Recovery
MW-5	<0.25	96%
MW-6	<0.25	136%
MW-7	<0.25	61%

Quality Assurance

Sample ID	Result	% Surrogate Recovery
Method Blank	<0.25	96%
MW-7 Duplicate	<0.25	52%
Relative % Difference	N/A	---

Surrogate - p-terphenyl  
Surrogate Level - 80 ppm



## PTL Certificate Number

[illegible]

**APPENDIX C**  
**SURVEY DATA**

**Pacific  
Testing  
Laboratories**

**SURVEY DATA**

Cert. No.: 9602-6625

Sheet 1 of 1

Date 2/28/56

copy

Project Name SHAMROCK Location 3800 Rainier Ave S. Completed By CLH  
 Start / Finish 14:40 Survey Equip. Transit & Stadia Rod  
 Site Conditions / Comments \_\_\_\_\_

Location	Back Shot	Height	Front Shot	Elevation	Remarks
TBM 2			4.82	48.71	
MW-5			8.00	48.53'	
MW-6			8.30	45.23'	
MW-7			10.76	42.77'	
LOCATION #2					
TBM 2			5.57	48.71	
TBM 1 (see 9602-6600)			4.28	50.00	
MW-5 (CHECK)			8.73	45.55'	

Temporary Benchmark & Assumed Elevation:

TBM 2 = N side Top of cement base of light pole near MW-5  
 TBM 1 = N side<sup>top</sup> of cement base of light pole near MW-1 (see 9602-6600)

Elev. + BS = Hi. Hi - FS = Elev. Remember to notch casings. Record elevations to 0.01'



March 14, 1996

Elaine Atkinson  
**Department of Ecology**  
Northwest Regional Office  
3190-160th Ave. S.E.  
Bellevue, WA 98008-5452

RECEIVED  
MAR 14 1996  
DEPT. OF ECOLOGY

**RE: Rainier Valley Square - TCP No. 4651**  
**Ground Water Test Results - Former Service Station Location**

Dear Elaine:

Enclosed for your review is a copy of the March 11, 1996 report from Shamrock Services for the fourth series of ground water testing at the former service station site at the Rainier Valley Square shopping center.

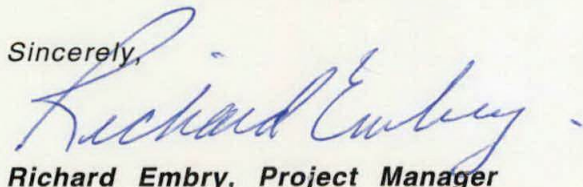
We are scheduled to close on permanent financing in the next three weeks, and the DOE conclusions regarding our remediation actions respective to the former service station site is important to the lender. I was concerned the tests would not be completed, and your determination completed, in a time frame that would work for our loan closing., so I directed Shamrock to conduct the tests approximately March 1, 1996. The ground water tests were taken by Shamrock a few weeks ahead of the three months (one quarter) from the third series of tests (three months from the last series of tests of December 19, 1995, would be March 19, 1996; the enclosed tests were taken on February 28, 1996).

The enclosed report also includes ground water elevation information. Pacific Testing Laboratories reviewed its files, and the ground water elevation levels were unfortunately not recorded during the second and third quarter sampling. I hope the provided ground water information is useful for you.

Also, enclosed for your review and comment is a draft of the proposed Declaration of Restrictive Covenants. The enclosed draft reflects the few review comments you had to it in October, 1995. Please review the document, and let me know if it is satisfactory for execution and recordation.

If you require further information, please feel free to contact me at (206) 742-0520.

Sincerely,



**Richard Embry, Project Manager**

Enclosures

rde