Report Environmental Services Former Auburn Subaru-Volkswagen Dealership Auburn, Washington

March 22, 2002

For

ICM Group, L.L.C.

GEOENGINEERSj 7 GeoEngineers

)

GEOENGINEERS Ng



March 22, 2002

ICM Group, L.L.C. P.O. Box 11640 Olympia, Washington 98508-1609

Attention: Andy Durels

Report Environmental Services Former Auburn Subaru-Volkswagen Dealership Auburn, Washington File No. 7618-002-02

### INTRODUCTION

This report presents the results of our environmental services at the former Auburn Subaru-Volkswagen Dealership located at 3025 and 3205 Auburn Way North in Auburn, Washington. We performed a limited Phase II Environmental Site Assessment (ESA) of the site in July 2001. Our Phase II study was performed to evaluate the potential for petroleum-contaminated ground water at the site presumably originating from 14 hydraulic hoists. Nine shallow borings were drilled near and down-gradient, with respect to ground water flow, to the hoists. Diesel- and heavy oil-range hydrocarbons were not detected in ground water samples collected from the nine shallow wells. The complete results of our evaluation are presented in the "Report, Environmental Services, Auburn Subaru-Volkswagen Dealership, Auburn, Washington, July 17, 2001."

We understand that RW Rhine demolished the site building in February 2002 in preparation for redevelopment of the site based on information provided by you. We also understand that the hydraulic hoists were removed from the site at this time. The hoists were located in the northern part of the former building in two east-west oriented rows of seven hoists each.

We understand that petroleum-contaminated soils were encountered near 8 of the 14 hoists by Clearcreek Contractors. We also understand that approximately 35 cubic yards of petroleum-contaminated soil was removed from two excavations at the site prior to our arrival on March 1, 2002. The soil was stockpiled south of the excavations.

Earth Science + Technology

1101 S Fawcett Ave Suite 200 Tacoma, WA 98402

telephone 253.383.4940 facsimile 253.383.4923 website www.geoengineers.com ICM Group, L.L.C. March 22, 2002 Page 2

You requested a proposal from us to perform remedial excavation observation services at the site. The purpose of our services was to observe remedial excavation activities, perform field screening to evaluate potential clean excavation limits, collect and submit confirmatory soil samples, and to summarize our activities and observations in a report. Our services were provided in general accordance with our proposal dated February 28, 2002. Andy Durels of the ICM Group authorized our services on March 1, 2002.

### **PURPOSE AND SCOPE OF SERVICES**

The purpose of our services was to observe remedial excavation activities and to collect soil samples from the limits of the two excavations. The specific scope of services completed for this project includes the following:

- **1.** Prepare a health and safety plan for use by GeoEngineers personnel during field activities.
- **2.** Coordinate our staff with the contractor schedule.
- **3.** Mobilize to the site on March 1, 2002 to observe remedial excavation activities.
- **4.** Field screen soil samples collected from the excavations for organic vapors and for evidence of petroleum-like sheen to evaluate the potential for petroleum-contaminated soils in the excavation sidewalls and base. Field screening was performed to evaluate clean excavation limits.
- **5.** Collect and submit 13 soil samples collected from the limits of the remedial excavations to an accredited analytical laboratory for analysis of diesel- and heavy oil-range hydrocarbons by NWTPH-D extended methods on a normal (10 working days) turnaround basis.
- **6.** Review the chemical analytical data with respect to Model Toxics Control Act (MTCA) Method A cleanup levels for unrestricted land use.
- **7.** Submit a report summarizing our findings, observations and conclusions regarding the presence of petroleum-contaminated soil in the excavations.

### SITE CONDITIONS

### SURFACE CONDITIONS

The site is rectangular and is located within the Green River Valley in Auburn, Washington. The site is bordered to the east by Auburn Way North, to the south and north by commercial properties, and to the west by vacant property. The location of the site in relation to surrounding features is shown on the Vicinity Map, Figure 1.

The site was vacant at the time of our site visit. The car-dealership building and associated features, including 14 hydraulic hoists, had been removed from the site by RW Rhine.

### **EXCAVATION CONDITIONS**

We mobilized to the site on March 1, 2002. We observed two excavations (south and north) where petroleum-contaminated soil was previously encountered by Clearcreek Contractors. Field screening of soil in the excavation sidewalls and base indicated that petroleum-contaminated soil

still existed in the south excavation. Field screening of soil in the north excavation indicated that petroleum-contaminated soil had been successfully removed from this excavation prior to our arrival. Nine confirmatory soil samples were collected from the base and sidewalls of the north excavation.

The south excavation was expanded by Clearcreek Contractors on March 1, 2002. An additional 35 cubic yards (approximate) of petroleum-contaminated soil was removed from the excavation on March 1, 2002. Field screening during excavation indicated that clean limits had been achieved. Four confirmatory soil samples were collected from the excavation sidewalls and base. The excavated soil was stockpiled south of the south remedial excavation.

The approximate location and extent of the excavations relative to the former site structure is shown in Figure 2. The approximate locations of the soil samples collected from the excavations are also shown on Figure 2. Soil sampling procedures and an explanation of field screening is included in Appendix A.

The soil samples were submitted to North Creek Analytical Inc. laboratory in Bothell, Washington for chemical analysis of diesel- and heavy oil-range hydrocarbons. Based on the laboratory report, none of the soil samples submitted contained diesel- or lube oil-range hydrocarbons in excess of the Department of Ecology (Ecology) Method A cleanup level (2,000 mg/kg {milligram per kilogram}) for unrestricted land use. Most (10 out of 13) of the soil samples did not contain detectable concentrations of diesel or lube oil. The greatest concentration of diesel and lube oil detected was 13.6 and 118 mg/kg, respectively. Laboratory reports are contained in Appendix B.

### **CONCLUSIONS AND RECOMMENDATIONS**

It appears that the diesel- and lube oil-range hydrocarbon-contaminated soil discovered by the contractor in the hydraulic hoist area has been successfully removed from the site based on the soil chemical analytical results, our observations and field screening results. For purposes of this report, contaminated soil is defined as soil containing diesel- and lube oil-range hydrocarbons at concentrations greater than the MTCA cleanup level of 2,000 mg/kg.

#### LIMITATIONS

We have prepared this report for use by the ICM Group and Auburn Subaru-Volkswagen. Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

Please refer to Appendix C titled "Report Limitations and Guidelines for Use" for additional information pertaining to use of this report.

-----< < >-----

ICM Group, L.L.C. March 22, 2002 Page 4

We trust the above provides the information you require. Please contact us if you have questions or if we can be of further assistance.

Yours very truly,

GeoEngineers, Inc.

- w Helvery ULLI

Stephen W. Helvey Senior Hydrogeologist

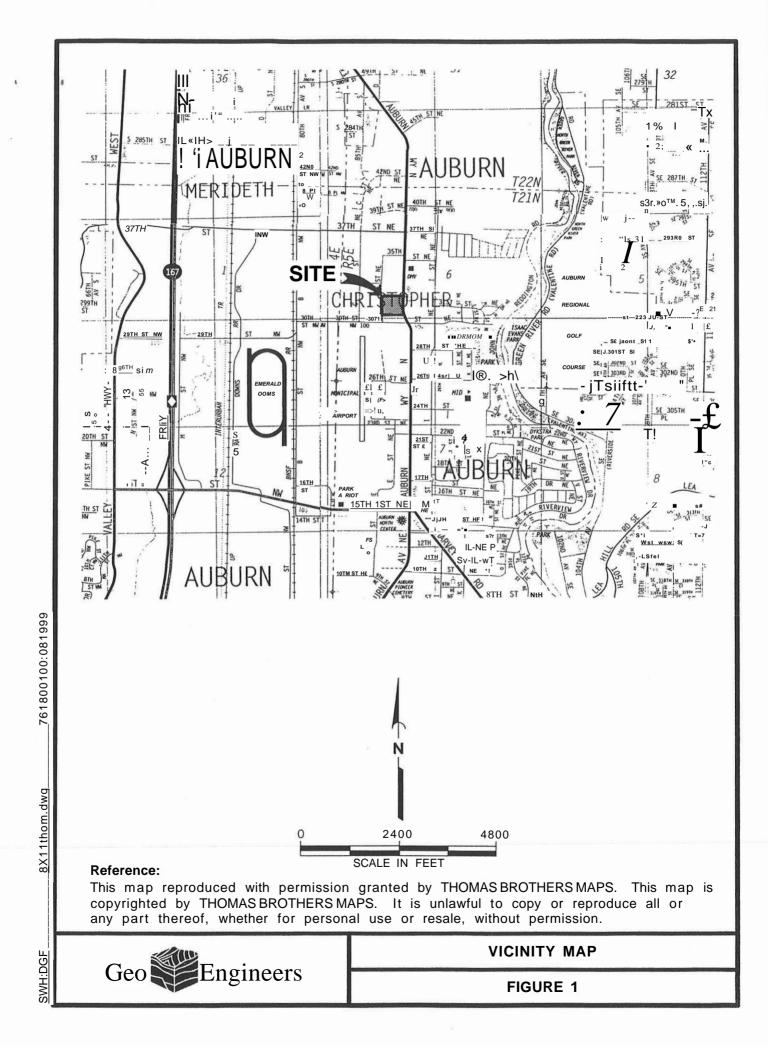
eggore

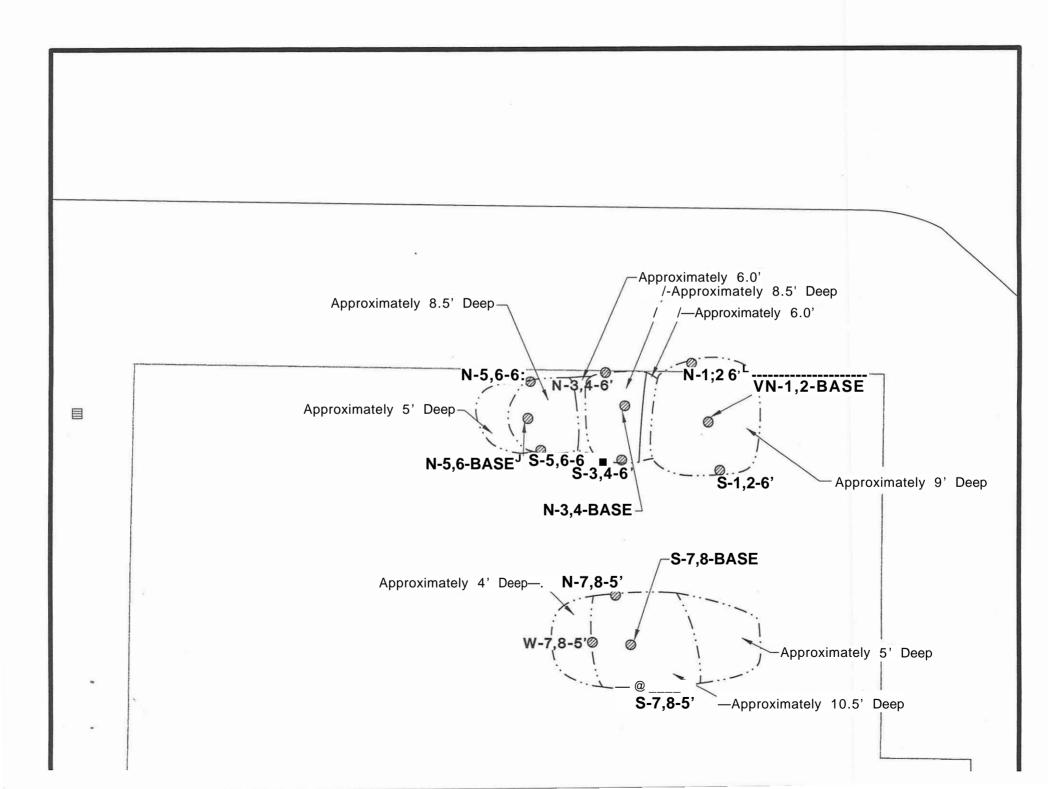
John H. Biggane Principal

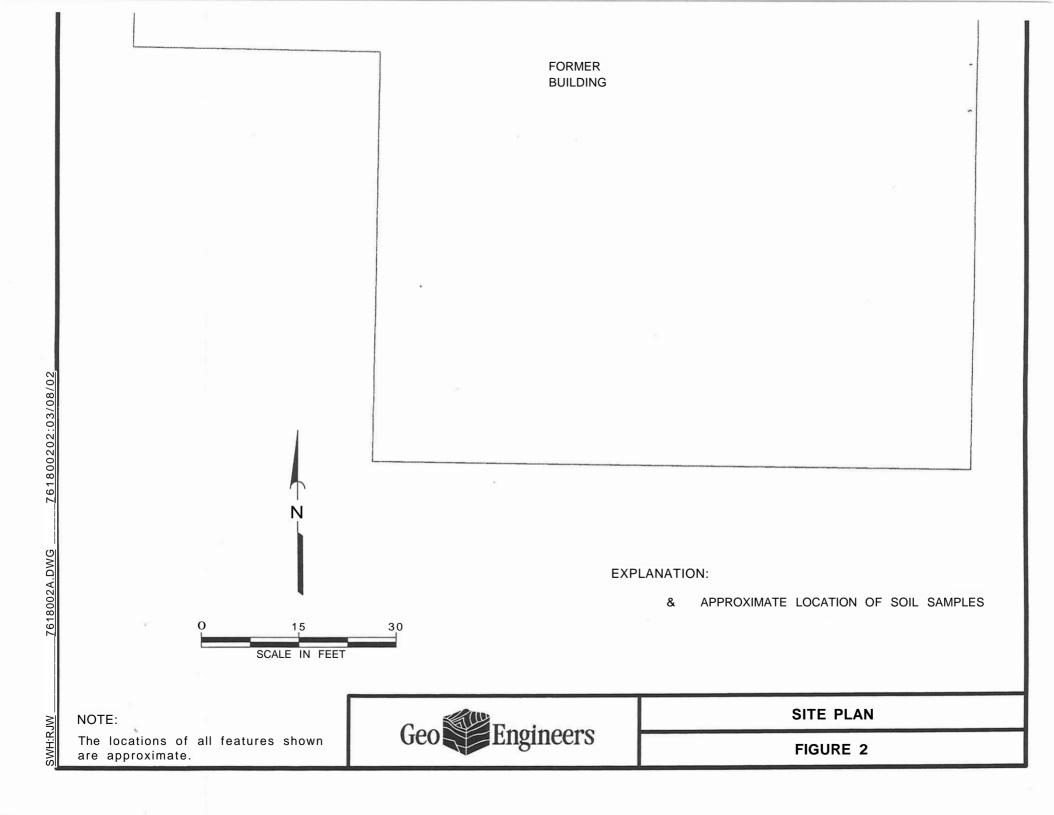
SWH:JHB:tw Document ID: P:\7\7618002\02\Finals\761800202R.DOC

Attachments:

Figure 1 - Vicinity Map Figure 2 - Site Plan Attachment A - Remedial Excavation Program Attachment B - Chemical Analytical Data Attachment C - Report Limitations and Guidelines for Use









### APPENDIX A

### **REMEDIAL EXCAVATION PROGRAM**

#### APPENDIX A

#### **REMEDIAL EXCAVATION PROGRAM**

#### GENERAL

Subsurface conditions for this study were evaluated by observing excavations performed on March 1, 2002 and submitting soil samples from the excavations for analytical testing. The approximate extent of the excavations is shown in Figure 2.

The excavations were completed by Clearcreek Contractors. A backhoe and trackhoe were used to excavate soil. A member of our staff was on site during excavation activities to evaluate the extent of contamination and to advise the contractor when clean limits were reached based on field screening results.

#### SOIL SAMPLING

Discrete soil samples were obtained from the walls and base of the excavations using a backhoe or trackhoe bucket. Samples obtained for analysis were obtained from the center of the bucket using a stainless steel spoon. Soil sampling equipment was cleaned with a Liquinox wash, tap water rinse and a distilled water rinse before each sampling event. Soil samples were placed in laboratory cleaned four-ounce jars. The sealed jars were placed in an ice chest and standard chain-of-custody procedures were observed during transport of the samples to the testing laboratory.

#### FIELD SCREENING OF SOIL SAMPLES

A GeoEngineers representative conducted field screening on soil samples obtained from the excavations. Field screening results are used as a general guideline to delineate areas of possible hydrocarbon contamination in soils. In addition, screening results are used to aid in the selection of soil samples for chemical analysis. The field screening methods used include: (1) visual examination and (2) sheen screening. Visual screening consists of inspecting the soil for stains indicative of hydrocarbon contamination. Sheen screening is a more sensitive screening method that has been effective in detecting hydrocarbon contamination at concentrations less than regulatory cleanup guidelines.

Sheen screening involves placing soil in a pan of water and observing the water surface for signs of sheen. Sheen classifications are as follows:

No Sheen (NS)	No visible sheen on water surface.
Slight Sheen (SS)	Light, colorless, dull sheen; spread is irregular, not

rapid; sheen dissipates rapidly.

Moderate Sheen (MS)	Light to heavy sheen; may have some
	color/iridescence; spread is irregular to flowing, may
	be rapid; few remaining areas of no sheen on water
	surface.
Heavy Sheen (HS)	Heavy sheen with color/iridescence; spread is rapid;
	entire water surface may be covered with sheen.

Field screening results are site-specific. The results vary with ambient air temperature, soil type, moisture and organic content, and type of contaminant present.



### APPENDIX B

### CHEMICAL ANALYTICAL DATA

#### APPENDIX B

### CHEMICAL ANALYTICAL DATA

#### SAMPLES

Chain-of-custody procedures were followed during the transport of the field samples to the accredited analytical laboratory. The samples were held in cold storage pending extraction and/or analysis. The analytical results and quality control records are included in this appendix.

### ANALYTICAL DATA REVIEW

The laboratory maintains an internal quality assurance program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries, and blank spike duplicate recoveries to evaluate the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The data quality goals were included in the laboratory reports. The laboratory compared each group of samples with the existing data quality goals and noted any exceptions in the laboratory report.

### DATA QUALITY EXCEPTION SUMMARY

No significant data quality exceptions were noted in the laboratory report or during our review. Based on our data quality review, it is our opinion that the analytical data are of acceptable quality for their intended use.



 Seattla
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244

 425.420.9200
 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

 509.924.9200
 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

 503.906.9200
 fax 503.906.9210

 Bend
 20332 Empire Avenue, Suite F-I, Bend, OR 97701-5711

 541.383.9310
 fax 541.382.7588

08 March 2002

Steve Helvey Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200 Tacoma, WA/USA 98402

RE: Former Auburn Subaru-Volkswagon

Enclosed are the results of analyses for samples received by the laboratory on 03/01/02 14:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A. W.

Scott A. Woerman Project Manager



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244

 425.420.9200
 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

 509.924.9200
 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

 503.906.9200
 fax 503.906.9210

 Bend
 20332 Empire Avenue, Suite F-I, Bend, OR 97701-5711

 541.383.9310
 fax 541.382.7588

Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200 Tacoma WA/USA, 98402 Project: Former Auburn Subaru-Volkswagon Project Number: 7618-002-02 Project Manager: Steve Helvey

**Reported:** 03/08/02 11:34

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	
N-1,2-Base	B2C0071-01	Soil	03/01/02 08:30	03/01/02 14:55	
N-5,6-Base	B2C0071-02	Soil	03/01/02 08:35	03/01/02 14:55	
N-1,2-6'	B2C0071-03	Soil	03/01/02 08:40	03/01/02 14:55	
N-3,4-Base	B2C0071-04	Soil	03/01/02 08:45	03/01/02 14:55	
N-3,4-6'	B2C0071-05	Soil	03/01/02 09:05	03/01/02 14:55	
N-5,6-6'	B2C0071-06	Soil	03/01/02 09:15	03/01/02 14:55	
S-1,2-6'	B2C0071-07	Soil	03/01/02 09:20	03/01/02 14:55	
S-5,6-6'	B2C0071-08	Soil	03/01/02 09:30	03/01/02 14:55	
S-3,4-6'	B2C0071-09	Soil	03/01/02 09:35	03/01/02 14:55	
S-7,8-5'	B2C0071-10	Soil	03/01/02 10:20	03/01/02 14:55	
N-7,8-5'	B2C0071-11	Soil	03/01/02 10:35	03/01/02 14:55	
S-7,8-Base	B2C0071-12	Soil	03/01/02 12:50	03/01/02 14:55	
W-7,8-5'	B2C0071-13	Soil	03/01/02 13:04	03/01/02 14:55	

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

. No

Scott A. Woerman, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network \*a



 
 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

 Bend
 20332 Empire Avenue, Suite F-I, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200

Tacoma WA/USA, 98402

Project: Former Auburn Subaru-Volkswagon

Project Number: 7618-002-02 Project Manager: Steve Helvey 03

Reported: 03/08/02 11:34

### Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Anaryzeu	Method	Inotes
N-1.2-Basc (B2C0071-01) Soil	Sampled: 03/01/02	08:30 Recei	ved: 03/01/0	2 14:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	11	Ш	u	"	II	н	
Surrogate: 2-FBP	83.5%	50-150			ft	lt	If	ft	
Surrogate: Octacosane	92.8 %	50-150			lt	lf	11	ft	
N-5,6-Base (B2C007I-02) Soil	Sampled: 03/01/02	08:35 Recei	ved: 03/01/0	2 14:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	П	п	n	U		П	
Surrogate: 2-FBP	91.2%	50-150			"	"	"	11	
Surrogate: Octacosane	92.5 %	50-150			"	"	••	п	
N-1,2-6' (B2C0071-03) Soil Sail	ampled: 03/01/02 08:	40 Received	l: 03/01/02 1	4:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	Ш	н	lt	"	П	11	
Surrogate: 2-FBP	78.9%	50-150			"	"	н	ft	
Surrogate: Octacosane	85.7%	50-150			"	"	н	It	
N-3,4-Base (B2C0071-04) Soil	Sampled: 03/01/02	)8:45 Recei	ved: 03/01/02	2 14:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	J	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	tl	н	н	11	11	н	
Surrogate: 2-FBP	86.4%	50-150			11	fI	11	n	
Surrogate: Octacosane	87.8 %	50-150			11	fI	fl	n	
Surrogator o cracosante									
	ampled: 03/01/02 09:	05 Received	l: 03/01/02 1	4:55					
	ampled: 03/01/02 09: ND	05 Received 10.0	l: 03/01/02 1 mg/kg dry	<b>4:55</b>	2C05023	03/05/02	03/07/02	NWTPH-Dx	
N-3,4-6' (B2C0071-05) Soil Sa	•				2C05023 "	03/05/02 II	03/07/02 "	NWTPH-Dx "	
N-3,4-6' (B2C0071-05) Soil Sa Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1					

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Scott A. Woerman, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network



Seattle	11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
	425.420.9200 fax 425.420.9210
Spokane	East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
	509.924.9200 fax 509.924.9290
Portland	9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
	503.906.9200 fax 503.906.9210
Bend	20332 Empire Avenue, Suite F-I, Bend, OR 97701-5711
	541.383.9310 fax 541.382.7588

Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200 Tacoma WA/USA, 98402 Project: Former Auburn Subaru-Volkswagon Project Number; 7618-002-02 Project Manager: Steve Helvey

Reported: 03/08/02 11:34

### Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up North Creek Analytical - Bothell

Γ		Reporting							]
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-5,6-6' (B2C0071-06) Soil	Sampled; 03/01/02 09:	15 Received	d: 03/01/02 1	4:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbor	ns ND	25.0	11		H C	11	ា	н	
Surrogate: 2-FBP	83.3 %	50-150			11	11	lt	If	
Surrogate: Octacosane	84.6%	50-150			Ш	11	11	11	
<u>S-1,2-6' (B2C007I-07) Soil</u>	Sampled: 03/01/02 09:2	20 Received	1: 03/01/02 1	4:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbor	ns ND	25.0	"		"		II	<u>U</u> -	
Surrogate: 2-FBP	80.3 %	50-150			lt	н	w	11	
Surrogate: Octacosane	88.8%	50-150			fI	М	lf	Ш	
S-5,6-6* (B2C0071-08) Soil	Sampled: 03/01/02 09:3	30 Received	1: 03/01/02 1	4:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbor	ns ND	25.0	ш	<b>u</b>	11	II	"	n	
Surrogate: 2-FBP	78.5%	50-150			п	W	"	"	
Surrogate: Octacosane	76.4%	50-150			п	н	in a second s	"	
<u>S-3,4-6' (B2C007I-09) Soil</u>	Sampled: 03/01/02 09:3	35 Received	1: 03/01/02 1	4:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbon	ns ND	25.0		ч	2		"	н	
Surrogate: 2-FBP	81.6%	50-150			H	u	11	ft	
Surrogate: Octacosane	89.1 %	50-150			Ш	11	11	Ш	
S-7,8-5' (B2C0071-10) Soil	Sampled: 03/01/02 10:2	20 Received	1: 03/01/02 1	4:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	Ι	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbo	ons 32,2	25.0		н	II	Π	II	U.	
Surrogate: 2-FBP	77.3 %>	50-150			lt	11	w	w	
Surrogate: Octacosane	77.4 %>	50-150			Ш	11	lt	lt	

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

No

Scott A. Woerman, Project Manager

North Creek Analytical, Inc. Environmental Laboratorv Network

Paze - ?



 
 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

 Bend
 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200 Tacoma WA/USA, 98402 Project: Former Auburn Subaru-Volkswagon Project Number: 7618-002-02

Reported:

Project Manager: Steve Helvey

03/08/02 11:34

### Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up North Creek Analytical - Bothell

		ion on	Jok I mary		Jounen				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-7,8-5' (B2C0071-11) Soil Sampled	: 03/01/02 10:	35 Received	d: 03/01/02 1	4:55					
Diesel Range Hydrocarbons	13.6	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	D-09
Lube Oil Range Hydrocarbons	31.7	25.0	n	្មា	п	II	II	11	
Surrogate: 2-FBP	84.2 %	50-150			ft	п	П	11	
Surrogate: Octacosane	94.0%	50-150			It	It	Ш	"	
S-7,8-Base (B2C0071-12) Soil Sampl	ed: 03/01/02 1	2:50 Recei	ved: 03/01/02	2 14:55					
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	н	II	II	•i	II	
Surrogate: 2-FBP	86.6%	50-150			11	Ш	Ш	it	
Surrogate: Octacosane	87.2 %	50-150			п	П	Ш	"	
<u>W-7,8-5* (B2C0071-13) Soil</u> Sampled	d: 03/01/02 13	04 Receive	d: 03/01/02 1	4:55					
Diesel Range Hydrocarbons	58.3	10.0	mg/kg dry	1	2C05023	03/05/02	03/07/02	NWTPH-Dx	D-09
Lube Oil Range Hydrocarbons	118	25.0	Ш	II	II	11		"	
Surrogate: 2-FBP	76.6%	50-150			tt	н	Ш	Ш	
Surrogate: Octacosane	88.7%	50-150			11	It	It	It	

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jev

Scott A. Woerman, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network <sup>a</sup>

• <sup>a</sup>S<sup>e</sup> 4 Oi 9



 
 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

 Bend
 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200 Tacoma WA/USA, 98402 Project: Former Auburn Subaru-Volkswagon Project Number: 7618-002-02

Reported: 03/08/02 11:34

Project Manager: Steve Helvey

### Physical Parameters by APHA/ASTM/EPA Methods

North	Creek	Analytical	-	Bothell	
-------	-------	------------	---	---------	--

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-1,2-Base (B2C0071-01) Soil Sample	ed: 03/01/02 08:	30 Receiv	ed: 03/01/	02 14:55					
Dry Weight	77.3	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
N-5,6-Base (B2C0071-02) Soil Sample	ed: 03/01/02 08:	35 Receiv	ed: 03/01/	02 14:55					
Dry Weight	73.2	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
<u>N-1,2-6' (B2C0071-03) Soil</u> Sampled:	03/01/02 08:40	Received	: 03/01/02	14:55					
Dry Weight	72.6	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
N-3,4-Base (B2C0071-04) Soil Sample	ed: 03/01/02 08:4	45 Receiv	ed: 03/01/	02 14:55					
Dry Weight	72.3	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
N-3,4-6' (B2C0071-05) Soil Sampled:	03/01/02 09:05	Received:	03/01/02	14:55					
Dry Weight	70.8	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
<u>N-5,6-6' (B2C0071-06) Soil</u> Sampled:	03/01/02 09:15	Received:	03/01/02	14:55					
Dry Weight	69.3	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
S-1,2-6' (B2C0071-07) Soil Sampled:	03/01/02 09:20	<b>Received:</b>	03/01/02	14:55					
Dry Weight	69.0	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
S-5,6-6' (B2C0071-08) Soil Sampled:	03/01/02 09:30	<b>Received:</b>	03/01/02 1	4:55					
Dry Weight	74.0	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
S-3,4-6' (B2C0071-09) Soil Sampled:	03/01/02 09:35	<b>Received:</b>	03/01/02 1	4:55					
Dry Weight	71.4	1.00	%	1	2C05014	03/05/02	03/06/02	BSDPSPL003R07	

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

. In ل

Scott A. Woerman, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network Page 5 Oi 9



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244

 425.420.9200
 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

 509.924.9200
 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

 503.906.9200
 fax 503.906.9210

 Bend
 20332 Empire Avenue, Suite F-I, Bend, OR 97701-5711

 541.383.9310
 fax 541.382.7588

Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200 Tacoma WA/USA, 98402 Project: Former Auburn Subaru-Volkswagon Project Number: 7618-002-02

Reported:

Project Manager: Steve Helvey

03/08/02 11:34

### Physical Parameters by APHA/ASTM/EPA Methods North Creek Analytical - Bothell

				•					
	Ι	Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
S-7,8-5' (B2C0071-10) Soil	Sampled: 03/01/02 10:20	Received	: 03/01/02	14:55					
Dry Weight	83.4	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
N-7,8-5' (B2C0071-11) Soil	Sampled: 03/01/02 10:35	Received	1: 03/01/02	214:55					
Dry Weight	79.8	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
S-7,8-Base (B2C0071-12) So	il Sampled: 03/01/02 12:5	50 Receiv	ed: 03/01	/02 14:55					
Dry Weight	70.3	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	
W-7,8-5' (B2C0071-13) Soil	Sampled: 03/01/02 13:04	Received	d: 03/01/0	2 14:55					
Dry Weight	75.4	1.00	%	1	2C05014	03/05/02	03/06/02	BSOPSPL003R07	

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Wev-

Scott A. Woerman, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network

Page o 019



 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244

 425.420.9200
 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

 509.924.9200
 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

 503.906.9200
 fax 503.906.9210

 Bend
 20332 Empire Avenue, Suite F-I, Bend, OR 97701-5711

 541.383.9310
 fax 541.382.7588

Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200 Tacoma WA/USA, 98402 Project: Former Auburn Subaru-Volkswagon Project Number: 7618-002-02 Project Manager: Steve Helvey

Reported:

03/08/02 11:34

### Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up - Quality Control North Creek Analytical - Bothell

	1		ok i mary		Jounen					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2C05023: Prepared 03/05/02	Using E	EPA 3550B								
Blank (2C05023-BLK1)										
Diesel Range Hydrocarbons	ND	10.0	mg/kg							
Lube Oil Range Hydrocarbons	ND	25.0	Π							
Surrogate: 2-FBP	9.15		11	10.7		85.5	50-150			
Surrogate: Octacosane	10.2		П	10.7		95.3	50-150			
LCS (2C05023-BS1)										
Diesel Range Hydrocarbons	58.7	10.0	mg/kg	66.7		88.0	50-150			
Surrogate: 2-FBP	10.1		W	10.7		94.4	50-150			
LCS Dup (2C05023-BSD1)										
Diesel Range Hydrocarbons	59.2	10.0	mg/kg	66.7		88.8	50-150	0.848	50	
Surrogate: 2-FBP	9.88		«	10.7		92.3	50-150		12	
Duplicate (2C05023-DUP1)					Source: H	B2C0071-	02			
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry		ND				50	
Lube Oil Range Hydrocarbons	ND	25.0	«		ND				50	
Surrogate: 2-FBP	13.7		Н	14.5		94.5	50-150			
Surrogate: Octacosane	13.7		11	14.5		94.5	50-150			

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Wcy-

Scott A. Woerman, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network Pa



 
 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

 Bend
 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200 Tacoma WA/USA, 98402 Project: Former Auburn Subaru-Volkswagon Project Number: 7618-002-02 Project Manager: Steve Helvey

Reported: 03/08/02 11:34

### Physical Parameters by APHA/ASTM/EPA Methods - Quality Control North Creek Analytical - Bothell

		110		K Miai	yticai - L	Jounen					
			Reporting		Spike	Source		%REC		RPD	Andrea States and States
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2C05014:	Prepared 03/05/02	Using Dr	y Weight								
Blank (2C05014-BI	<u></u>										
Dry Weight		99.8	1.00	%							

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

J. No

Scott A. Woerman, Project Manager

North Creek Analytical, Inc. Environmental Laboratorv Network

 $\frac{c}{*a}8^{e}0$ 



 
 Seattle
 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 425.420.9200 fax 425.420.9210

 Spokane
 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

 Portland
 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

 Bend
 20332 Empire Avenue, Suite F-I, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Geo Engineers - Tacoma 1101 Fawcett Ave, Suite 200 Tacoma WA/USA, 98402

Project: Former Auburn Subaru-Volkswagon Project Number: 7618-002-02 Reported: Project Manager: Steve Helvey 03/08/02 11:34

#### Notes and Definitions

- D-09 Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Non

Scott A. Woerman, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network

Page 9 ot 9



11720 North Creek Pkwy N. Suite 400. Bothell, WA 98011-B2+4 East 11115 Montgomery. Suite B, Spokane, WA 99206-4776 9405 S.W. Nimbus Avenue. Beaverton. OR 97008-7132 20332 Empire Avenue. Suite F-I. Bend. OR 97701-5711 
 (425) 420-9200
 FAX 420-9210

 (509) 924-9200
 FAX 924-9290

 (503) 906-92(8)
 FAX '8)6-9210

 (541) 383-9310
 FAX 382-7588

### CHAIN OF CUSTODY REPORT

## Work Order #: B21M71

CLIENT: Z. r r							INVOICE TO:										TURNAROUND REQUEST in Business Days*				
REPORT TO: \$k uc JO? '■)															Organic ⊲fehiurganic Analyses						
ADDRESS: Hol 5 fewent Z-4-						Same									lidl_zJLdLdijJl_dljJld						
Taicon, wit gry yo 2																	5				
							P.O. NUMBER:										sTD. Pelnilcuni 1lydr <x:arlk>n Analyses</x:arlk>				
PJIONE: FAX: PROJECTNAME: Autour SsHVI*, JULISUAGE J.							REQUES1EDANALYSES										Z		c Specify		
PROJECTNUMBER: T 618- oon o-u																OTHER					
SAMPI.ED BY:			: ::											1	~	"litiiiun'unil ReqKrMs /<•>.» Ih«n Miindanl may imnr Rnxli Chamcs.					
CLIENTSAMPLE	SAMPLING		-					22								MATRIX	#OF	10		NCA WO	
IDENTIFICATION	DATE/TIME		, TY									'				(W.S.0)	CONT.	CON	IMENTS	ID	
i. N-12-Base	3/01/02	2/810	J															11		2/	
2. N - 2- 1 - Dase	3/_1/c2 / i'ss															~	2			02	
31,1 • L'	l/e. l/e i																			0Ô	
4. N * 3// •' i3n se	4	g 'l<	1													10				01	
5. N -VI -(*'		1 0 5	(			5														oi	
> 2 - 5,6-6.1		£?/J>	Å											_						<u>_/)&amp;</u>	
∑ - <u>1,2-6'</u> ∑ ∑ <u>≈6-13-</u>		Wo	Ĺ_																	—jiZ—	
AL-H		_0 '15<->	-X_					_								<u> </u>				J&	
* 0 + 3.4 - la'		0915	А								-								i i	oi	
10.S - 7.S ∎-< '		/(?√<-'	x											8			2			Ø	
n. M' - 5 '		/ojy	λ	-																il	
12. S - 7, y - (Me		/ojy   1250  - <u>2</u> 04	X						2						2			а. <sup>18</sup>		M	
13.to-7, -J''	. L	1304						83									Q			J3	
14.				2										F	evit	edCha	nofi	Dusto	dv	100	
15. 1									12		3		2	1<_							
RELINQUISHED BY:			12			DATE:	5-4//	z-	RECEF	ED B	D		05	5	et i		•		DA	te: β//Az_	
PRINT NAME: 5 T Ma it and FIRM: (Z£						TIME:	i 45_	5	PRINT	PRINTNAME: PRANU "7bNTT.						FIRM: NEA TIME: 1455					
RE1.INU 'ISHED BY:						DATE:			RECb	RECbiXgDJJ									DA	TE:	
PRINT NAME:	RINT NAME: FIRM:				TIME:			PRINT	PRINTNAME:						FIRM:						
ADDITIONM.REMARKS:	ADDITIONM.REMARKS:																				
<. <xri:<sup>V.'"N</xri:<sup>								2											1.J  P	ACE OF	



### APPENDIX C

### **REPORT LIMITATIONS AND GUIDELINES FOR USE**

File No. 7618-002-02

### APPENDIX C

### **REPORT LIMITATIONS AND GUIDELINES FOR USE<sup>1</sup>**

This appendix provides information to help you manage your risks with respect to the use of this report.

## ENVIRONMENTAL SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES, PERSONS AND PROJECTS

This report has been prepared for use by the ICM Group and Aubum Subaru-Volkswagen. This report is not intended for use by others, and the information contained herein is not applicable to other sites.

GeoEngineers structures our services to meet the specific needs of our clients. For example, an environmental site assessment study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and project site. No one except the ICM Group and Aubum Subaru-Volkswagen should rely on this environmental report without first conferring with GeoEngineers. This report should not be applied for any purpose or project except the one originally contemplated.

### THIS ENVIRONMENTAL REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

This report has been prepared for part of the Aubum Subaru-Volkswagen facility located in Aubum, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, do not rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

If important changes are made after the date of this report, GeoEngineers should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

#### **RELIANCE CONDITIONS FOR THIRD PARTIES**

If a lending agency or other parties intend to place legal reliance on the product of our services, we require that those parties indicate in writing their acknowledgement that the scope of services provided, and the general conditions under which the services were rendered including the limitation of professional liability, are understood and accepted by them. This is to provide

<sup>&</sup>lt;sup>1</sup> Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.org.

our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions.

### ENVIRONMENTAL REGULATIONS ARE ALWAYS EVOLVING

Some substances may be present in the site vicinity in quantities or under conditions that may have led, or may lead, to contamination of the subject site, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substance, change or if more stringent environmental standards are developed in the future.

## UNCERTAINTY MAY REMAIN EVEN AFTER THIS PHASE OF THE PROJECT IS COMPLETED

No environmental report can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely-spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

### SUBSURFACE CONDITIONS CAN CHANGE

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or ground water fluctuations. Always contact GeoEngineers before applying this report to determine if it is still applicable.

### MOST ENVIRONMENTAL FINDINGS ARE PROFESSIONAL OPINIONS

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the site. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ - sometimes significantly - from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

### **READ THESE PROVISIONS CLOSELY**

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or site.

# GEOTECHNICAL, GEOLOGIC AND GEOENVIRONMENTAL REPORTS SHOULD NOT BE INTERCHANGED

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding a specific project.