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700 Clearwater Lane Boise, ID 83712-7708 Mailing address: P.O. Box 8748 Boise, ID 83707-2748

Tel 208.345.5310 Fax 208.345.5315

CH2M HILL

June 30, 1997

CH2MHILL

141776.A1.01

Mr. Bill Winkle WESTCO, INC. 3430 Americana Terrace Boise, ID 83706

Dear Bill:

Subject: Summary of soil sampling activities at WESTCO's Nob Hill facility in Yakima, Washington

This letter presents the methodology and results of the soil sampling performed at the Nob Hill store in Yakima. The sampling was performed to screen the soils for Tetrachloroethene (PERC) at the rear (south side) of the building. The samples were collected on June 11, 1997, along with the quarterly groundwater sampling site visit to the WESTCO Summitview facility.

Soil Sample Collection Methods

The site was visited on June 11, 1997. Prior to sample collection, the site was visually observed for any evidence of ground disturbance, old excavations, and soil staining. The site appeared to be undisturbed with the exception of tire tracks. Volcanic ash from the 1980 Mount Saint Helens eruption was present at the surface, which suggests that the site has seen little disturbance in 17 years.

A scaled base map of the site that illustrates sample locations was prepared and is presented as part of this letter report. Ten sample locations were selected to cover the area of interest, while focusing on likely spill locations close to the existing building. Sampling locations were selected based on the assumption that any PERC releases into the soil would have occurred near the building. Samples NH-1 through NH-7 were placed on a grid in the open field behind the building. Samples NH-8 through NH-10 were located closer to the building. NH-8 was located adjacent to a fenced storage area near the building, NH-9 was located near the building itself and NH-10 was located where the runoff from the roof of the building discharged from the gutter. The soil at location NH-10 was wet due to runoff from the roof. Figure 1 shows the base map and sample locations.

Mr. Bill Winkle Page 2 June 30, 1997 141776.A1.01

The discrete soil samples were collected using a hand auger with a 6.5-inch long, 2.5-inch diameter bucket. Prior to augering, the upper two inches of soil, roots, and volcanic ash were scraped away to expose the native soil. The native soil at the site consisted of massive, light brown silt. A hole was augered to a depth of approximately six inches, and the soil from the auger bucket was placed into a labeled 4-ounce sample jar. The soil was packed tightly in the jar to ensure that no headspace was present. The samples were placed in a ice-filled cooler (with the groundwater samples from the Summitview store) and a Chain-of-custody form, and shipped via Federal Express to North Creek Analytical Laboratories in Bothell, Washington. The auger bucket and stem were decontaminated and rinsed with methanol and distilled water between each auger hole.

Sample Results and Discussion

The soil samples were analyzed for Halogenated Volatile Organics (VOC's) using EPA Method 8010B (modified). The sample results showed no detectable concentrations of volatiles. Attachment A contains the complete laboratory analysis forms for your review.

Recommendations

No PERC was detected in any of the soil samples collected as part of this investigation. Therefore, no additional sampling is recommended. It should also be noted that a vent for at least one underground storage tank was observed near the southwest corner of the building. This vent is probably for a heating oil tank(s). However, not knowing the history or past ownership of the building and how the tanks(s) may have been used, we suggest that WESTCO confirm the tank(s) have stored heating oil and were not used for PERC storage.

If you have any questions about this report please contact us at 345-5310. We appreciate the opportunity to assist WESTCO with this project.

Sincerely,

CH2M HILL

Greg Warren, P.G. Project Geologist

P. Dennis Smith Project Administrator

BOISE/Nob Hill Enclosure





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CH2M HILL BOISE BOTHELL = (206) 481-9200 = FAX 485-2992 SPOKANE = (509) 924-9200 = FAX 924-9290 PORTLAND = (503) 643-9200 = FAX 644-2202

CH2M Hill - Boise ID	Project:	Westco, Yakima	Sampled:	6/11/97
700 Clearwater lane	Project Number:	106062.Y4.04	Received:	6/12/97
Boise, ID 83712-7708	Project Manager:	Dennis Smith	Reported:	6/27/97 06:23

ANALYTICAL REPORT FOR SAMPLES:

85m			
Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
NH-I	B706270-01	Soil	6/11/97
NH-2	B706270-02	Soil	6/11/97
NH-3	B706270-03	Soil	6/11/97
NH-4	B706270-04	Soil	6/11/97
NH-5	B706270-05	Soil	6/11/97
NH-6	B706270-06	Soil	6/11/97
NH-7	B706270-07	Soil	6/11/97
<u> </u>	B706270-08	Soil	6/11/97
NH-9	B706270-09	Soil	6/11/97
NH-10	B706270-10	Soil	6/11/97

North Greek Analytical, Inc.

Gendron, Project Manager

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.



CH2M Hill - Boise ID	Project: W	estco, Yakima	Sampled:	6/11/97	
700 Clearwater lane	Project Number: 10	06062.Y4.04	Received:	6/12/97	
Boise, ID 83712-7708	Project Manager: D	ennis Smith	Reported:	6/27/97 06:23	

Halogenated Volatile Organics by EPA Method 8010B (modified) North Creek Analytical - Bothell

	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
NH-1			B7062	70_01			Soil	
Bromodichloromethane	0670784	6/25/97	6/25/97	/0-01	0.0500	ND	<u>son</u> mg/kg dry	
Bromoform	"	11	"		0.0500	ND	mg/kg ury	
Bromomethane	89	**	*1		0.0500	ND	**	
Carbon tetrachloride	**	41			0.0500	ND	17	
Chlorobenzene	11	89			0.0500	ND	**	
Chloroethane	89		**		0.0500	ND	**	
Chloroform	"	п	58		0.0500	ND	н.	
Chloromethane	"		11		0.0500	ND	II.	
Dibromochloromethane	n	**	11		0.0500	ND		
1.2-Dichlorobenzene	67		u		0.0500	ND		
1,3-Dichlorobenzene	**		11		0.0500	ND		
1,4-Dichlorobenzene	60		н		0.0500	ND		
J-1-Dichloroethane	**	**	п		0.0500	ND		
Dichloroethane	**		11		0.0500	ND		
1.1-Dichloroethene	**	**	n		0.0500	ND	п	
cis-1,2-Dichloroethene			a.		0.0500	ND		
trans-1.2-Dichloroethene	н	"	**		0.0500	ND		
1,2-Dichloropropane	"	11	H		0.0500	ND		
cis-1,3-Dichloropropene	40	"	п		0.0500	ND	20	
trans-1,3-Dichloropropene	11	н	**		0.0500			8
Methylene chloride	11	н			0.500	ND		
1,1,2,2-Tetrachloroethane	ft	п	**		0.0500	ND ND		
Tetrachloroethene	n	n	н		0.0500		n	
1,1,1-Trichloroethane	"	11				ND		
1,1,2-Trichloroethane	41	н.,	0		0.0500	ND		
Trichloroethene		н			0.0500	ND		
Trichlorofluoromethane	u.	н			0.0500 0.0500	ND		
Vinyl chloride	"	es	**		0.0500	ND	11	
Surrogate: 4-BFB (ELCD)		"	"	50.0-150	0.0300	ND 123	%	
8				50.0-150		125	20	
<u>NH-2</u>			B70627	0-02			Soil	
Bromodichloromethane	0670784	6/25/97	6/25/97		0.0500	ND	mg/kg dry	
Bromoform	н	"	U.		0.0500	ND	"	
Bromomethane	**	**	"		0.0500	ND	t9	
Carbon tetrachloride	"	"	11		0.0500	ND	18	
Chlorobenzene	**		н		0.0500	ND		
Chloroethane		н	"		0.0500	ND		
Chloroform					0.0500	ND	н	
					0.0000			

North Creek Analytical, Inc.

*Refer to end of report for text of notes and definitions.

Kirk Gendron, Project Manager



CH2M Hill - Boise ID	Project:	Westco, Yakima	<u> </u>	111/0<i 4
700 Classes 1			Sampled:	6/11/97
700 Clearwater lane	Project Number:	106062.Y4.04	Received:	6/12/97
Boise, ID 83712-7708	Project Manager:	Dennis Smith		6/27/97 06:23
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Halogenated Volatile Organics by EPA Method 8010B (modified) North Creek Analytical - Bothell

	Batch	Date	Date	Surrogate	Reporting	an a		
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
NILE D (and in the	-				n na shekara ka sa	n an		
<u>NH-2 (continued)</u>		1011500 000000 070	<u>B7062</u>	<u>70-02</u>			Soil	
Chloromethane	0670784	6/25/97	6/25/97		0.0500	ND	mg/kg dry	
Dibromochloromethane		n	14		0.0500	ND	89	
1,2-Dichlorobenzene	81	н	F 5		0.0500	ND	н	
1,3-Dichlorobenzene		IT	11		0.0500	ND	87 8	
1,4-Dichlorobenzene	11	89			0.0500	ND		
1,1-Dichloroethane	**	n	**		0.0500	ND		
1,2-Dichloroethane	II.		"		0.0500	ND	78	
1,1-Dichloroethene	11		59		0.0500	ND	**	
cis-1,2-Dichloroethene	**	п	**		0.0500	ND	11	
trans-1,2-Dichloroethene	**		17		0.0500	ND	н	
1,2-Dichloropropane	65	69	н		0.0500	ND	п	
cis-1,3-Dichloropropene	79	17	n		0.0500	ND	**	
trans-1,3-Dichloropropene	**		н		0.0500	ND	м	
()ylene chloride	**	"	н		0.500	ND	**	
1,1,2,2-Tetrachloroethane		n .	11		0.0500	ND		
Tetrachloroethene	"	11			0.0500	ND	**	
1,1,1-Trichloroethane	н	"	11		0.0500	ND	88	
1,1,2-Trichloroethane	"	"			0.0500	ND	**	
Trichloroethene	11	es	28		0.0500	ND		
Trichlorofluoromethane	t1		н		0.0500	ND	**	
Vinyl chloride		**			0.0500	ND		
Surrogate: 4-BFB (ELCD)	"	"	"	50.0-150	0.0500	112	%	
DIRE 2							<i>,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
NH-3			<u>B70627</u>	D-03			Soil	
Bromodichloromethane	0670784	6/25/97	6/25/97		0.0500	ND	mg/kg dry	
Bromoform	u.	81	11		0.0500	ND	"	
Bromomethane	**	**			0.0500	ND	n	
Carbon tetrachloride	11		**		0.0500	ND	11	
Chlorobenzene	**	н			0.0500	ND	89	
Chloroethane	**	••		a	0.0500	ND		
Chloroform	**		18		0.0500	ND	п	
Chloromethane	19	**	14		0.0500	ND	41	
Dibromochloromethane	**	11	11		0.0500	ND	н	
1,2-Dichlorobenzene	**	69	19		0.0500	ND		
1,3-Dichlorobenzene	"	"			0.0500	ND		
1,4-Dichlorobenzene	**	n	"		0.0500	ND	**	
1,1-Dichloroethane	**	"	17		0.0500	ND	11	
1,2-Dichloroethane	0		n		0.0500	ND	11	
- And					0.0500	ND		
And Angletical Las	and the support of th							

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18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132



CH2M Hill - Boise ID		
CITZINI TIIII - DOISC ID	Project: Westco, Yakima	Sampled: 6/11/97
700 Clearwater lane		Sampled. 0/11/9/
roo cical water falle	Project Number: 106062.Y4.04	Received: 6/12/97
Boise, ID 83712-7708		Received. 0/12/97
D0130, 1D 03/12-1/00	Project Manager: Dennis Smith	Reported: 6/27/97 06:23
		Reported. 0/2/19/ 08:23

Halogenated Volatile Organics by EPA Method 8010B (modified) North Creek Analytical - Bothell

Analyte	Batch	Date	Date	Surrogate	Reporting			
mary to	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes
NH-3 (continued)			B70627	/0_03			0."	
1,1-Dichloroethene	0670784	6/25/97	6/25/97	0.00	0.0500	ND	<u>Soil</u>	
cis-1,2-Dichloroethene	"	"	"			ND	mg/kg dry "	
rans-1,2-Dichloroethene	"	н	**		0.0500	ND		
,2-Dichloropropane		**			0.0500	ND		
sis-1,3-Dichloropropene	"	6 5		-	0.0500	ND	H	
rans-1,3-Dichloropropene	"				0.0500	ND		
Methylene chloride					0.0500	ND	"	
,1.2.2-Tetrachloroethane	14		11		0.500	ND		
etrachloroethene			59		0.0500	ND	17	
,1,1-Trichloroethane					0.0500	ND	**	
,1,2-Trichloroethane	79	"	"		0.0500	ND	н	
richloroethene	"		n		0.0500	ND	17	
richlorofluoromethane					0.0500	ND	**	
I chloride	n .		19		0.0500	ND	**	
urrogate: 4-BFB (ELCD)					0.0500	ND		
arogue. 4-Dr D (LLCD)		77	"	50.0-150		136	%	
<u>H-4</u>			B70627)-04			Soil	
romodichloromethane	0670784	6/25/97	6/25/97		0.0500	ND		
romoform	**	**	"		0.0500	ND	mg/kg dry "	
romomethane	**		11		0.0500			
arbon tetrachloride	11	11	11		0.0500	ND	#	
hlorobenzene	40	**	**		0.0500	ND	10	
hloroethane	**	н				ND	**	
hloroform		21			0.0500	ND		
hloromethane	n	11	11		0.0500	ND		
bromochloromethane		11	11		0.0500	ND	H	
2-Dichlorobenzene	11		11		0.0500	ND	**	
3-Dichlorobenzene	н	**	11		0.0500	ND	11	
4-Dichlorobenzene	14				0.0500	ND	**	
I-Dichloroethane	*1	**			0.0500	ND	**	
2-Dichloroethane					0.0500	ND	11	
I-Dichloroethene					0.0500	ND	"	
-1,2-Dichloroethene	*	n			0.0500	ND	н	
ns-1,2-Dichloroethene			n		0.0500	ND	0	
		**	**		0.0500	ND	"	
2-Dichloropropane		11	11		0.0500	ND	10	
-1,3-Dichloropropene	"		н.		0.0500	ND		
ns-1.3-Dichloropropene	n	f F	11		0.0500	ND		
ethylene chloride	11		17		0.500	ND		

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Kirk Gendron, Project Manager

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CH2M Hill - Boise ID	D :	
	Project: Westco, Yakima	Sampled: 6/11/97
700 Clearwater lane	Project Number: 106062.Y4.04	Received: 6/12/97
Data 10 02712 7700		Received: 0/12/9/
Boise, ID 83712-7708	Project Manager: Dennis Smith	Reported: 6/27/97 06:23

Halogenated Volatile Organics by EPA Method 8010B (modified) North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting	Darrit	¥ 7 2.	
Lawrence in the second s	Number	richard	Analyzed	LIIIIIS	Limit	Result	Units	Notes'
<u>NH-4 (continued)</u>			B7062	70-04			Soil	
1,1,2,2-Tetrachloroethane	0670784	6/25/97	6/25/97		0.0500	ND	mg/kg dry	
Tetrachloroethene	**	19	"		0.0500	ND	"	
1,1.1-Trichloroethane	"	н	11		0.0500	ND	н	
1,1,2-Trichloroethane			**		0.0500	ND		
Trichloroethene	н	**	64		0.0500	ND	"	
Trichlorofluoromethane	ан. С				0.0500	ND		
Vinyl chloride		"			0.0500	ND	н	
Surrogate: 4-BFB (ELCD)	"	"	Ħ	50.0-150	0.0500	124	%	
NH-5			<u>B70627</u>	0.05			0.11	
Bromodichloromethane	0670784	6/25/97	6/25/97	0-03	0.0500	NIT	<u>Soil</u>	
Bromòform	"	11	"		0.0500	ND	mg/kg dry "	
Bromomethane	11	*1	*1		0.0500	ND		
on tetrachloride		п	**		0.0500	ND		
Chlorobenzene	**	12	11		0.0500	ND ND		
Chloroethane	47				0.0500		11	
Chloroform			69		0.0500	ND	"	
Chloromethane		10	a		0.0500	ND	e#	
Dibromochloromethane	12	10	12			ND		
1,2-Dichlorobenzene		**			0.0500	ND	**	
1.3-Dichlorobenzene		**			0.0500	ND	19	
1,4-Dichlorobenzene	**		11		0.0500	ND	**	
1,1-Dichloroethane	"	н	**		0.0500	ND	19	
1,2-Dichloroethane	n	11	11		0.0500	ND		
1,1-Dichloroethene	11	11			0.0500	ND		
cis-1,2-Dichloroethene		64			0.0500	ND		
trans-1,2-Dichloroethene	н		14		0.0500	ND		
1,2-Dichloropropane	**		**		0.0500	ND	0	
cis-1,3-Dichloropropene			"		0.0500	ND		
rans-1,3-Dichloropropene		н			0.0500	ND	"	
Methylene chloride					0.0500	ND		
1,1,2,2-Tetrachloroethane		**	**		0.500	ND		
Tetrachloroethene	"		11		0.0500	ND	н	
I, I, I-Trichloroethane	11	u	11		0.0500	ND		
1,1,2-Trichloroethane	"	n			0.0500	ND	10	
Frichloroethene	"	"	11		0.0500	ND	u	
frichlorofluoromethane	"				0.0500	ND	11	
/inyl chloride	и				0.0500	ND	88	
					0.0500	ND		

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Kirk Gendron. Project Manager

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CH2M Hill - Boise ID				
CHZIM HIII - HOISE ID	Project: Westco). Yakima	Sampled:	6/11/07
700 Clearwater lane	D 1 11 1 1000		Sampica.	0/11/7/
100 Clear water Tane	Project Number: 106062	2.Y4.04	Received:	6/12/97
Boise, ID 83712-7708	D. L. M. D. L	A	100001100.	0/12/7/
00130, 10 03712-7708	Project Manager: Dennis	Smith	Reported.	6/27/97 06:23
			reportedi	0121171 00.25

Halogenated Volatile Organics by EPA Method 8010B (modified) North Creek Analytical - Bothell

Analisa	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
<u>NH-5 (continued)</u>			D. #10.200					
Surrogate: 4-BFB (ELCD)	0670784	(125107	<u>B7062'</u>	And should be been seen as a second s			Soil	
Surroguie. 4-DI B (ELCD)	0070784	6/25/97	6/25/97	50.0-150		114	%	
<u>NH-6</u>			B70627	70-06			Seil	
Bromodichloromethane	0670784	6/25/97	6/25/97	0.00	0.0500	ND	<u>Soil</u>	
Bromoform	n	**	11		0.0500	ND	mg/kg dry "	
Bromomethane	n	п	"		0.0500	ND	17	
Carbon tetrachloride	"	11	99		0.0500	ND	**	
Chlorobenzene	"	"	Ħ		0.0500	ND		
Chloroethane	*1	**	70		0.0500	ND		
Chloroform	"	n			0.0500		"	
Chloromethane	"	**	н		0.0500	ND ND	11	
Dibromochloromethane	"		**		0.0500			
1-2-Dichlorobenzene	17	11	**		0.0500	ND	**	
Dichlorobenzene	50					ND		
1,4-Dichlorobenzene	"		99		0.0500	ND	ea	
1,1-Dichloroethane	17		u		0.0500	ND		
1,2-Dichloroethane	u		10		0.0500	ND		
1,1-Dichloroethene		**	**		0.0500	ND		
cis-1,2-Dichloroethene	"	n			0.0500	ND		
trans-1.2-Dichloroethene	11	**			0.0500	ND		
1,2-Dichloropropane	4	**	99		0.0500	ND		
cis-1,3-Dichloropropene	M		**		0.0500	ND	10 20	
trans-1,3-Dichloropropene	**	17	**		0.0500	ND		
Methylene chloride	**	11			0.0500	ND		
1,1,2,2-Tetrachloroethane		.01	н		0.500	ND	u	
Tetrachloroethene	79	15			0.0500	ND	н.,	
1,1,1-Trichloroethane			**		0.0500	ND	11	
1,1,2-Trichloroethane	**		u		0.0500	ND	"	
Trichloroethene	Ŧ		**		0.0500	ND	47	
Trichlorofluoromethane	11				0.0500	ND	**	
Vinyl chloride		**	**		0.0500	ND	"	
Surrogate: 4-BFB (ELCD)	"			50.0.150	0.0500	ND	**	
				50.0-150		113	%	
<u>NH-7</u>			B706270	-07			Seil	
Bromodichloromethane	0670784	6/25/97	6/25/97		0.0500	NID	<u>Soil</u>	
Bromoform	"	"	11		0.0500	ND	mg/kg dry "	
Bromomethane	**	**	n			ND		
Carbon tetrachloride	**		u		0.0500	ND		
					0.0500	ND	12	

North Greek Analytical, Inc.

Kirk Gendron, Project Manager

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CH2M Hill - Boise ID	Project: Westco, Yakima	Sampled: 6/11/97
700 Clearwater lane	Project Number: 106062.Y4.04	Received: 6/12/97
Boise, ID 83712-7708	Project Manager: Dennis Smith	Reported: 6/27/97 06:23

Halogenated Volatile Organics by EPA Method 8010B (modified) North Creek Analytical - Bothell

Amelia	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes
NH-7 (continued)			B7062	70-07			Soil	
Chlorobenzene	0670784	6/25/97	6/25/97	10-07	0.0500	ND		
Chloroethane	"	"	11		0.0500		mg/kg dry "	
Chloroform		**	**		0.0500	ND	11	
Chloromethane	**	**	**		0.0500	ND		
Dibromochloromethane	н	**	**		0.0500	ND ND	27	
1,2-Dichlorobenzene	**				0.0500	ND	"	
1,3-Dichlorobenzene	19		11		0.0500	ND		
1,4-Dichlorobenzene	"	"	18		0.0500	ND		
1,1-Dichloroethane	**	н			0.0500		**	
1,2-Dichloroethane	**	**			0.0500	ND ND	**	
1,1-Dichloroethene	**	**	88		0.0500		**	
cis-1,2-Dichloroethene		11	14			ND	48	
trans-1.2-Dichloroethene	11		11		0.0500	ND		
Dichloropropane	89	11	78		0.0500	ND	49	
cis-1,3-Dichloropropene	59		19		0.0500	ND		
trans-1.3-Dichloropropene	н				0.0500	ND		
Methylene chloride			19		0.0500 0.500	ND		
1,1,2,2-Tetrachloroethane						ND		
Tetrachloroethene	**		79		0.0500	ND		
1, 1, 1-Trichloroethane	"	**			0.0500	ND		
1,1,2-Trichloroethane	н	42	17		0.0500	ND	**	
Trichloroethene	14				0.0500	ND		
Trichlorofluoromethane	н	11	"		0.0500	ND	50	
Vinyl chloride	**		**		0.0500	ND	**	
Surrogate: 4-BFB (ELCD)	"	"	11	50.0-150	0.0500	ND		
				50.0-150		126	%	
<u>NH-8</u>			B70627	0-08			Soil	
Bromodichloromethane	0670784	6/25/97	6/26/97		0.0500	ND	mg/kg dry	
Bromoform	н	н., ", ",		к ^н т	0.0500	ND	"	
Bromomethane	м .	**			0.0500	ND	11	
Carbon tetrachloride	"	te	17		0.0500	ND	**	
Chlorobenzene	"	н.			0.0500	ND	**	
Chloroethane	**	11	n		0.0500	ND	**	
Chloroform	"	n	H		0.0500	ND	**	
Chloromethane	"	"	**		0.0500	ND	**	
Dibromochloromethane	11	н	63		0.0500	ND		
.2-Dichlorobenzene	**	**			0.0500	ND		
3-Dichlorobenzene	**	69	u.		0.0500	ND		

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1.3-Dichlorobenzene

Kirk Gendron, Project Manager

*Refer to end of report for text of notes and definitions.

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ND

0.0500



CH2M Hill - Boise ID	Project:	Westco, Yakima	Sampled:	6/11/97
700 Clearwater lane	Project Number:	106062.Y4.04	Received:	6/12/97
Boise, ID 83712-7708	Project Manager:	Dennis Smith	Reported:	6/27/97 06:23

Halogenated Volatile Organics by EPA Method 8010B (modified) North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
[/maryic	Number	Trepared	Tillalyzeu	Linns		Result	01110	110105
NH-8 (continued)			B7062	70-08			Soil	
1.4-Dichlorobenzene	0670784	6/25/97	6/26/97		0.0500	ND	mg/kg dry	
1,1-Dichloroethane	"	**			0.0500	ND		
1.2-Dichloroethane	"	n			0.0500	ND		
1.1-Dichloroethene	**	"	u		0.0500	ND	**	
cis-1,2-Dichloroethene	**	н	11		0.0500	ND	19	
trans-1.2-Dichloroethene		**			0.0500	ND	и	
1.2-Dichloropropane	"	17			0.0500	ND	**	
cis-1,3-Dichloropropene	**	n	19		0.0500	ND	**	
trans-1,3-Dichloropropene	97	н	**		0.0500	ND	и	
Methylene chloride	**	н			0.500	ND		
1,1,2,2-Tetrachloroethane	91	89			0.0500	ND	н	
Tetrachloroethene		**	10		0.0500	ND	"	
J		п	10		0.0500	ND	**	
-Trichloroethane	**				0.0500	ND		
Trichloroethene	н	**	T0		0.0500	ND	n	
Trichlorofluoromethane	"	11	"		0.0500	ND	81	
Vinyl chloride	"				0.0500	ND	14	
Surrogate: 4-BFB (ELCD)	"	"		50.0-150		113	%	
<u>NH-9</u>			B7062	<u>70-09</u>			Soil	
Bromodichloromethane	0670784	6/25/97	6/26/97		0.0500	ND	mg/kg dry	
Bromoform	"		u		0.0500	ND	"	
Bromomethane	99	**			0.0500	ND	п	
Carbon tetrachloride	**	11	**		0.0500	ND	н	
Chlorobenzene	н	68			0.0500	ND	29	
Chloroethane	"	••			0.0500	ND		
Chloroform	**	11	**		0.0500	ND		
Chloromethane	11	**			0.0500	ND	н	
Dibromochloromethane	11	11	11		0.0500	ND	н	
1,2-Dichlorobenzene	"		**		0.0500	ND	"	
1,3-Dichlorobenzene	н	**			0.0500	ND		
1,4-Dichlorobenzene	"	"	"		0.0500	ND		
1,1-Dichloroethane	11	"	н		0.0500	ND		
1,2-Dichloroethane	"		н		0.0500	ND	**	
1,1-Dichloroethene	**	"	n		0.0500	ND		
cis-1,2-Dichloroethene	81	61	**		0.0500	ND		
trans-1,2-Dichloroethene			п		0.0500	ND	р	
1.2-Dichloropropane	"	"	"		0.0500	ND		
r de la companya de l						-		

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Kirk Gendron, Project Manager

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CH2M Hill - Boise ID	Project: West	co, Yakima	Sampled:	6/11/97
700 Clearwater lane	Project Number: 1060	62.Y4.04	Received:	6/12/97
Boise, ID 83712-7708	Project Manager: Denn	is Smith	Reported:	6/27/97 06:23

Halogenated Volatile Organics by EPA Method 8010B (modified) North Creek Analytical - Bothell

r	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
	dan da manana seria da manana ana ana		and the second secon	an a		and a subscription of a subscription of the subscription of		
NH-9 (continued)			<u>B7062</u>	70-09			Soil	
cis-1,3-Dichloropropene	0670784	6/25/97	6/26/97		0.0500	ND	mg/kg dry	
trans-1,3-Dichloropropene	ч	11	**		0.0500	ND	**	
Methylene chloride	**	21			0.500	ND	**	
1,1,2,2-Tetrachloroethane	89	"	71		0.0500	ND	59	
Tetrachloroethene			4e		0.0500	ND	88	
1,1,1-Trichloroethane		н	н		0.0500	ND	67	
1,1,2-Trichloroethane		11			0.0500	ND	11	
Trichloroethene	.11	u.	11		0.0500	ND	99 9	
Trichlorofluoromethane	**	u	11		0.0500	ND	н	
Vinyl chloride	11	11	**		0.0500	ND	W.	
Surrogate: 4-BFB (ELCD)		"	"	50.0-150		127	%	
<u>Nui-10</u>			B7062	70-10			Soil	
hodichloromethane	0670784	6/25/97	6/26/97		0.0500	ND	mg/kg dry	
Bromoform	**		"		0.0500	ND		
Bromomethane	**	88	.8		0.0500	ND	n	
Carbon tetrachloride	**		11		0.0500	ND	f #	
Chlorobenzene	**	19	10		0.0500	ND	79	
Chloroethane		18	11		0.0500	ND	19	
Chloroform	"	47	*1		0.0500	ND	17	
Chloromethane	88	н	11		0.0500	ND	"	
Dibromochloromethane	42	10	**		0.0500	ND	н	
1,2-Dichlorobenzene		14	**		0.0500	ND	98	
1,3-Dichlorobenzene	"	H	11		0.0500	ND	87	
1,4-Dichlorobenzene	41		19	•	0.0500	ND		8
1,1-Dichloroethane	**	"			0.0500	ND	**	
1,2-Dichioroethane			11		0.0500	ND	n	
1.1-Dichloroethene	18	II.	11		0.0500	ND	н	
cis-1,2-Dichloroethene	ч	59	*1	•	0.0500	ND	11	
trans-1,2-Dichloroethene			89		0.0500	ND	"	
1,2-Dichloropropane	11	14			0.0500	ND	н	
cis-1,3-Dichloropropene		"	**		0.0500	ND	**	
trans-1,3-Dichloropropene	82	н	11		0.0500	ND	89	
Methylene chloride	"	**	69		0.500	ND	п	
1,1,2,2-Tetrachloroethane		a	11		0.0500	ND	11	
Tetrachloroethene	"		11		0.0500	ND	**	
1,1,1-Trichloroethane		11	"		0.0500	ND	89 8	
1.1.2-Trichloroethane	n	11	"		0.0500	ND	**	
					3.0000			

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CH2M Hill - Boise ID	Project:	Westco, Yakima	Sampled:	6/11/97
700 Clearwater lane	Project Number:	106062.Y4.04	Received:	6/12/97
Boise. ID 83712-7708	Project Manager:	Dennis Smith	Reported:	6/27/97 06:23

Halogenated Volatile Organics by EPA Method 8010B (modified) North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
NH-10 (continued)			B7062	70-10			Soil	
Trichloroethene	0670784	6/25/97	6/26/97		0.0500	ND	mg/kg dry	
Trichlorofluoromethane		81	11		0.0500	ND	89	
Vinyl chloride	н	"	14		0.0500	ND	"	
Surrogate: 4-BFB (ELCD)	"	"	"	50.0-150		119	%	

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CH2M Hill - Boise ID	Project: Westco, Yakima	Sampled: 6/11/97
700 Clearwater lane	Project Number: 106062.Y4.04	Received: 6/12/97
Boise, ID 83712-7708	Project Manager: Dennis Smith	Reported: 6/27/97 06:23

Dry Weight Determination North Creek Analytical - Bothell

Sample Name	Lab ID	Matrix	Result	Units
NH-1	B706270-01	Soil	89.9	%
NH-2	B706270-02	Soil	87.0	%
NH-3	B706270-03	Soil	91.9	%
NH-4	B706270-04	Soil	88.8	%
NH-5	B706270-05	Soil	91.6	%
NH-6	B706270-06	Soil	89.5	%
NH-7	B706270-07	Soil	90.6	%
8	B706270-08	Soil	87.7	%
NH-9	B706270-09	Soil	88.3	%
NH-10	B706270-10	Soil	82.9	%

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CH2M Hill - Boise ID	Project: We	estco, Yakima	Sampled:	6/11/97
700 Clearwater lane	Project Number: 10	6062.Y4.04	Received:	6/12/97
Boise, ID 83712-7708	Project Manager: De	nnis Smith	Reported:	6/27/97 06:23

Halogenated Volatile Organics by EPA Method 8010B (modified)/Quality Control North Creek Analytical - Bothell

	Date	Spike	Sample	QC		eporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes
Batch: 0670784	Date Prepa	red: 6/25/	97		Extractio	n Method: Me	OH Fytr	action		
Blank	0670784-BI				DATIACTIO	in Mictilou. Mic	UII DAU	action		
Bromodichloromethane	6/25/97			ND	mg/kg dry	0.0500				
Bromoform	Ħ			ND	"	0.0500				
Bromomethane	**			ND	"	0.0500				
Carbon tetrachloride	99			ND	99	0.0500				
Chlorobenzene				ND		0.0500				
Chloroethane				ND	89	0.0500				
Chloroform				ND	98	0.0500				
Chloromethane	**			ND	00	0.0500				
Dibromochloromethane	"			ND	п	0.0500				
1,2-Dichlorobenzene				ND	*1	0.0500				
1,3-Dichlorobenzene	19			ND		0.0500				
1-4-Dichlorobenzene	11			ND		0.0500				
Dichloroethane	**			ND	12	0.0500				
1.2-Dichloroethane				ND		0.0500				
1,1-Dichloroethene	**			ND	17	0.0500				
cis-1,2-Dichloroethene	"			ND	99	0.0500				
trans-1,2-Dichloroethene	**			ND	11	0.0500				
1,2-Dichloropropane	**			ND		0.0500				
cis-1,3-Dichloropropene	и			ND	н	0.0500				
trans-1,3-Dichloropropene	и			ND	10	0.0500				
Methylene chloride	**			ND		0.500				
1,1,2,2-Tetrachloroethane	"			ND	n	0.0500				
Tetrachloroethene	**			ND	11	0.0500				
1,1,1-Trichloroethane	41			ND	98	0.0500				
1,1,2-Trichloroethane	**			ND	91	0.0500				
Trichloroethene	11			ND	**	0.0500				
Trichlorofluoromethane	"			ND		0.0500				
Vinyl chloride				ND	11	0.0500				
Surrogate: 4-BFB (ELCD)	11	2.00		2.55	11	50.0-150	127			
LCS	0670784-BS	1								
Chlorobenzene	6/26/97	1.00		1.03	ma/ka d-	60.0.140	102			
1,1-Dichloroethene	H	1.00			mg/kg dry "		103			
Trichloroethene				1.20	11	60.0-140	120			
	"	1.00		1.12	"	60.0-140	112			
Surrogate: 4-BFB (ELCD)		2.00		2.41	r/	50.0-150	121			

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*Refer to end of report for text of notes and definitions.

Kirk Gendron, Project Manager



CH2M Hill - Boise ID	Project: Westco, Yakima	Sampled: 6/11/97
700 Clearwater lane	Project Number: 106062.Y4.04	Received: 6/12/97
Boise, ID 83712-7708	Project Manager: Dennis Smith	Reported: 6/27/97 06:23

Halogenated Volatile Organics by EPA Method 8010B (modified)/Quality Control North Creek Analytical - Bothell

	Date	Spike	Sample	QC	R	eporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Matrix Spike	0670784-MS	<u>1</u>	8706270-10							
Chlorobenzene	6/26/97	1.21	ND	1.08	mg/kg dr	y 60.0-140	89.3			
1,1-Dichloroethene	**	1.21	ND	1.11		60.0-140	91.7			
Trichloroethene	n	1.21	ND	1.09	11	60.0-140	90.1			
Surrogate: 4-BFB (ELCD)	"	2.41		2.51	"	50.0-150	104			
Matrix Spike Dup	<u>0670784-MS</u>	<u>D1</u> <u>B</u>	8706270-10							
Chlorobenzene	6/26/97	1.21	ND	1.08	mg/kg dr	y 60.0-140	89.3	30.0	0	
1,1-Dichloroethene		1.21	ND	1.06	11	60.0-140	87.6	30.0	4.57	
Trichloroethene	**	1.21	ND	1.15	"	60.0-140	95.0	30.0	5.29	
Surrogate: 4-BFB (ELCD)	"	2.41		2.49	"	50.0-150	103			

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CH2M Hill - Boise ID	Project:	Westco, Yakima	Sampled:	6/11/97
700 Clearwater lane	Project Number:	106062.Y4.04	Received:	6/12/97
Boise, ID 83712-7708	Project Manager:	Dennis Smith	Reported:	6/27/97 06:23

Notes and Definitions

P	
#	Note
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
Recov.	Recovery
RPD	Relative Percent Difference

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