Dalton, Olmsted & Fuglevand, Inc. Environmental Consultants

10827 NE 68th Street., Suite B • Kirkland, Washington 98033 Telephone (425) 827-4588 (FAX 739-9885)

MEMORANDUM

TO:

Elaine Atkinson – Department of Ecology

FROM:

Matthew Dalton

DATE:

March 15, 2002

SUBJECT:

Ground-Water Monitoring

Bellefield Office Park, Bellevue, WA

REF. NO:

SPK-006 (transmm31502SPK006.doc)

Cc: Susan Ross – Equity Office (w/o enclosure)

Consistent with the requirements of the No Further Action (NFA) letter issued by the Washington State Department of Ecology (Ecology) dated November 1, 1996, we are submitting a summary of the results of ground-water monitoring completed in the period 1996 to 2001. The results are summarized in our report titled "Summary of Ground-Water Sampling Events Related to "No Further Action" Designation, Bellefield Office Park, dated February 4, 2002.

The enclosed report is updated with the results of sampling completed in May 2000 and June 2001. The results of earlier sampling were previously submitted to Ecology. With submittal of the enclosed report, the requirements of the NFA letter have been satisfied and no additional sampling is proposed.

Please call if you have any questions.

Matt Dalton

Enclosure

RECEIVED

MAR 1 9 2002

DEPT OF ECOLOGY

Dalton, Olmsted & Fuglevand, Inc. Environmental Consultants

10827 NE 68th St., Suite B • Kirkland, Washington 98033-4000 Telephone (425) 827-4588 (FAX 739-9885)

February 4, 2002

Susan Ross – Property Manager Equity Office c/o Bellefield Office Park 1150 114th Ave. SE Bellevue, WA 98004

Re: Sum

Summary of Ground-Water Sampling Events Related to "No Further Action" Designation Bellefield Office Park

Dear Ms. Ross:

This report presents the results of our ground-water sampling conducted from 1996 to 2001 at the Bellefield Office Park, Bellevue, Washington (Figure 1). Well locations are shown on Figure 2. The sampling was completed consistent with the Washington State Department of Ecology (Ecology) "No Further Action" (NFA) letter dated November 1, 1996. As stated in the letter:

"Confirmational monitoring of the permanent on-site wells should therefore occur semi-annually for an additional three year period, then annually for another two years, at which time Ecology will review the information to ensure continued protection of human health and the environment. All monitoring wells should be tested for TPH and total arsenic, lead and zinc. In addition, monitoring wells DW-2 and DW-5 should be analyzed for PAHs, while DW-3, DW-4, DW-5 and DW-6 should be tested for PCBs."

Ground-water sampling required by the NFA letter started in December 1996. The results of sampling completed in 1996 to 1999 are summarized in DOF (2000). This report is updated with the results of the annual sampling events completed in May 2000 and June 2001 (Table 1).

SAMPLING PROCEDURES AND FIELD MEASUREMENTS

Low flow/low turbidity sampling procedures were used to collect the ground-water samples. Purging and sampling were completed using a peristaltic pump with a discharge rate of approximately 0.5 liters per minute. During purging, field measurements were made for

Susan Ross – Equity Office Page 2 February 4, 2002

depth to water, temperature, pH, specific conductivity and turbidity. Ground-water samples were collected after at least three casing volumes had been removed from the wells and the field parameters stabilized to within 10%. The field measurements made immediately prior to sample collection are summarized in Table 1.

Samples were collected directly into containers provided by the receiving laboratory (North Creek Analytical Inc.) that, in turn, were placed into chilled coolers for transport to the laboratory. Samples were delivered to the laboratory on the same day or the day following collection. Standard chain-of-custody procedures were used to document sample handling.

GROUND-WATER QUALITY

In accordance with the requirements of the NFA letter, analyses were made for petroleum hydrocarbons (using Method WTPH-D-extended) and total arsenic, lead and zinc in samples from wells DW-1, DW-2, DW-3, DW-4/4(R), DW-5, and DW-6. Samples from DW-2 and DW-5 were also analyzed for polycyclic aromatic hydrocarbons (PAHs) and the samples from DW-3, DW-4(R), DW-5, AND DW-6 were analyzed for PCBs. The results of the ground-water quality analyses required by the NFA letter are summarized in attached Table 1. Laboratory data sheets for the May 2000 and June 2001 sampling rounds are presented in Attachments 1 and 2.

To provide perspective, the analytical results are compared to various potential environmental criteria. These criteria include federal drinking water maximum contaminant levels (EPA 2001a, 2001b), and Washington State drinking water/surface water cleanup criteria promulgated under the Model Toxics Control Act (Chapter 173-340 WAC) and Water Quality Standards for Surface Waters of the State of Washington (Chapter 173-201A).

Total Petroleum Hydrocarbons. In 2000 and 2001, diesel-range (C12 to C24) and heavy-oil range (>C24) hydrocarbons were not detected in any of the samples from wells DW-1, DW-3, DW-4(R), DW-5 and DW-6. The reporting limit for diesel range hydrocarbons was 0.25 mg/l and the reporting limit for heavy-oil range hydrocarbons was 0.75 mg/l. The results are generally consistent with the results of previous analyses.

Polychlorinated Biphenyls (PCBs). PCBs were not detected in any of the samples collected between 1996 and 2001.

Polynuclear Aromatic Hydrocarbons (PAHs). Samples from Wells DW-2 and DW-5 were analyzed for PAHs. PAHs were intermittently detected generally at concentrations less than 1 ug/l. A summary of the PAH analytes detected are listed in Table 2. Acenaphthene, fluorene, and phenanthrene were most commonly detected (in about one half the ground water samples). Benzo(b)fluoranthene, chrysene, dibenzo(ah)anthracene, and naphthalene were only detected in 1 of 15 ground water samples collected since the NFA designation was issued by Ecology.

Susan Ross – Equity Office Page 3 February 4, 2002

As shown in Table 2, the maximum concentrations of PAH compounds are generally below possible cleanup criteria. The single detections for benzo(b)fluoranthene and dibenzo(ah)anthracene are slightly above possible cleanup criteria, however, the detections were only in one well sample (DW2 in October 1997) and these compounds were not detected in five subsequent ground water samples collected in the period 1998 to 2001.

Total Metals. For the eight sampling rounds completed since the NFA letter, samples from wells DW-1 through DW-6 have been analyzed for total arsenic, lead, and zinc. The results are summarized in Table 1.

- Total arsenic was detected in 17 of 45 samples (Table 3). When detected, arsenic concentrations have generally been below 5 ug/l. Only two of the 45 sample analyses exceeded 5 ug/l. The highest concentration (10.1 ug/l) was measured in the November 1998 sample from well DW-1. As summarized in Table 3, most samples meet the MTCA Method A cleanup level (based on drinking water uses) of 5 ug/l and all sample concentrations are at or below the proposed federal drinking water maximum contaminant level (MCL) of 10 ug/l. Arsenic concentrations are also well below the surface water (freshwater) ambient chronic criterion of 190 ug/l based on comparison with Washington State Surface Water Standards (Chapter 173-201A WAC).
- Total lead concentrations have generally been measured below 5 ug/l in wells DW-3 to DW-6 since the NFA letter was issued in November 1999. More variable concentrations have been measured in wells DW-1 and DW-2. The highest lead concentration (316 ug/l) was measured in the November 1998 sample from well DW-1. This sample concentration is substantially higher than any other sample concentrations from DW-1 and is likely related to the higher turbidity of the sample as compared to the earlier analyses.

Samples from wells DW-3 to DW-6 meet existing drinking water criteria. Total lead concentrations marginally exceed the ambient criterion. However, the ambient criterion is based on dissolved lead concentrations. If dissolved lead concentrations had been analyzed, it is our opinion that the sample results would be below the ambient criteria.

As noted above, higher total lead concentrations were measured in samples from DW-1 and DW-2 as compared to the other wells. The sample results are above both the drinking water and ambient criteria. In our opinion, dissolved lead concentrations would meet drinking water standards and would likely approach or meet the ambient criterion.

• Total zinc was detected in 27 of 45 samples (Table 3). When detected, zinc concentrations have generally ranged between less than 20 ug/l to 47 ug/l. As with total arsenic and total lead, the highest zinc concentration (237 ug/l) was measured in the November 1998 sample from well DW-1. All sample concentrations are well below the

Susan Ross – Equity Office Page 4 February 4, 2002

MTCA Method B (4,800 ug/l) and secondary MCL (5,000 ug/l) criteria based on drinking water uses. Only one of the 45 sample analyses exceedes the surface water (freshwater) ambient chronic criterion of 114 ug/l based on comparison with the Washington State Surface Water Standards (Chapter 173-201A WAC).

CONCLUSION

In June 2001, the requirements of Ecology's November 1996 NFA letter were met. In our opinion, no additional monitoring is required to support the No Further Action designation for the Bellefield Office Park site.

CLOSING

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of Spieker Properties, Inc. unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for our client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

Angermany to the second

REFERENCES

Dalton, Olmsted & Fuglevand, Inc., 2000, Summary of 1999 Ground-Water Sampling Events, Bellefield Office Park, February 23, 2000.

Ecology (Washington State Department of Ecology), 1996a, Model Toxics Control Act, Cleanup Levels and Risk Calculations (CLARC II) Update, #94-145.

Ecology, 1996b, Ecology No Further Action Letter to Don Jefferson (Spieker Properties) for Bellefield Office Park, November 1, 1996.

EPA (U.S. Environmental Protection Agency), 2001a, Current Drinking Water Standards (www.epa.gov/safewater/mcl.html)

Susan Ross – Equity Office Page 5 February 4, 2002

EPA, 2001b, EPA to Implement 10ppb Standard for Arsenic in Drinking Water, EPA 815-F-01-010 (www.epa.gov/safewater/ars/ars-oct-factsheet.html)

Please call if you have any questions.

Sincerely

Dalton, Olmsted & Fuglevand, Inc.

Matthew G. Dalton

Sr. Consulting Hydrogeologist

Attachments Table 1 - Summary of Water Quality Data

Table 2 – Summary of PAH Data

Table 3 – Summary of Total Metals Data

Figure 1 - Site Vicinity Map Figure 2 - Well Location Map

Attachment 1. Laboratory Data Sheets – May 2000 Attachment 2. Laboratory Data Sheets – June 2001

Ref: monrpt01.doc (SPK-006)

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1
Date	3/15/96	12/13/96	6/25/97	10/22/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Field Parameters			•						
Water Level (Ft - Top of PVC casing)	3.74	3.38	2.80	3.45	3.12	3.28	2.80	2.75	2.64
Volume Purged (Liters)	7	22	20	20	19	19	19	19	15
рН	6.3	6.3	6.1	6.1	5.9	6.0	6.4	6.1	6.1
Conductivity (umohos)	607	840	920	972	748	560	726	729	930
Temperature (C)	14	13	18	18	11.5	15.2	12	14	17
Turbidity (NTU)	3.1	1.5	1.0	1.8	1.9	6.5	2.1	2.5	1.4
Petroleum Hydrocarbons (mg/l)	l l								
Diesel Range (C12-C24)	<0.25	0.30	0.45	<0.25	<0.25	<0.25	0.31	<0.25	<0.25
Heavy Oil Range (>C24)	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
Polychlorinated Biphenyls (PCBs) - ug/l	i i								
PCB 1016	<0.1	*****	*****				*****		*****
PCB 1221	<0.1								
PCB 1232	<0.1	*****	*****		*****	*****	*****		
PCB 1242	<0.1	*****			*****	*****	****	*****	*****
PCB 1248	<0.1			*****	*****				
PCB 1254	<0.1		*****	****		*****	****		*****
PCB 1260	<0.1	*****	****		******		*****		
Polynuclear Aromatic Hydrocarbons (ug/l									
Acenaphthene			******		****		*****	****	
Anthracene					****				
Benzo(a)anthracene	*****		*****	*****	*****			*****	
Benzo(a)pyrene		*****	*****	*****	****	*****	****	****	*****
Benzo(b)fluoranthene					4444	40000	*****		
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene	eees						*****		****
Chrysene									
Dibenzo(a,h)anthracene	<u> </u>	****	****	puqua		*****	2000	****	
Fluroanthene		W		*****		*****		*****	*****
Fluorene							77777		
Indeno(1,2,3-cd)pyrene					*****			*****	*****
Naphthalene								****	
Phenanthrene							*****		
Pyrene							*****		*****

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1	DW-1
Date	3/15/96	12/13/96	6/25/97	10/22/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Total Metals (ug/l)			•						
Arsenic	<4	<4	<4	<4	2.8	10.1	3.3	3.6	2.8
Cadmium	<5						*****		
Chromium	<10							*****	*****
Copper	<30				*****			*****	
Iron	4000			44444	*****		*****		
Lead	7	28	19	4.3	37.9	316	67	43	24
Manganese	1100	*****	****					*****	*****
Mercury	<1	*****		*					
Nickel	<30	****	****		*****	*****	*****		
Zinc	<20	<20	<20	<20	19.4	237	47	38	26
Dissolved Metals (ug/l)									
Arsenic	<4				*****				
Cadmium	<5	Adona	*****	*****			v		
Chromium	<10	4	*****				*****		
Copper	<30	*****	*****						
Iron	4600						*****	*****	
Lead	2.1								
Manganese	1400							*****	
Mercury	<1			*****	*****		****		
Nickel	<30		*****	****			+===		
Zinc	<20				****				

Notes: ---- - not analyzed; < less than indicated value

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-2	DW-2	DW-2	DW-2	DW-2	DW-2	DW-2	DW-2	DW-2
Date	3/15/96	12/13/96	6/24/97	10/22/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Field Parameters	3/15/96	12/13/90	0/24/9/	10/22/9/	4123190	11/24/90	3/1//99	3/4/00	0///01
Water Level (Ft - Top of PVC casing)	2 10	2.95	1.18	2.45	1 45	2.61	1.15	1.15	1.06
I have the second of the secon	2.10 60	2.95	23	2.45	1.45 23	19	23	23	1.06
Volume Purged (Liters)			6.1	 					6.1
pH	6.2	6.0		5.9	6.0	5.7	6.6	6.2	
Conductivity (umohos)	440	555	687	624	581	318	601	604	714
Temperature (C)	11	12	16	17	11.5	13.5	11.5	12	13.5
Turbidity (NTU)	8.5	1.2	4.7	2.9	3.3	1.8	5.2	1.8	5.7
Petroleum Hydrocarbons (mg/l)									
Diesel Range (C12-C24)	<0.25	<0.25	0.29	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Heavy Oil Range (>C24)	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
Polychlorinated Biphenyls (PCBs) - ug/					T			<u> </u>	
PCB 1016	<0.1		*****	*****	*****			*****	
PCB 1221	<0.1			*****				*****	*****
PCB 1232	<0.1	*****	*****		*****		*****	****	
PCB 1242	<0.1								
PCB 1248	<0.1							*****	
PCB 1254	<0.1								
PCB 1260	<0.1	*****	****	****			****		
Polynuclear Aromatic Hydrocarbons (ug/l)									
Acenaphthene	danaa	<1.0	<5.0	<1.0	0.17	0.42	0.21	0.51	<5.0
Anthracene	4444	<1.0	<5.0	<1.0	<0.1	<0.1	<0.1	<0.1	<5.0
Benzo(a)anthracene		<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene		<0.1	<0.1	0.17	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	*******	<0.1	<0.1	0.22	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene		<0.1	<0.1	0.29	<0.1	<0.1	<0.1	<0.1	<0.2
Fluroanthene		<0.1	<0.1	<0.1	<0.3	<0.3	<0.3	<0.1	<0.1
Fluorene		<1.0	0.80	<1.0	0.13	0.38	0.21	0.46	<0.5
Indeno(1,2,3-cd)pyrene		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
Naphthalene	*****	<1.0	<5.0	<1.0	<0.3	<0.3	<0.3	0.65	<5.0
Phenanthrene		<1.0	<5.0	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5
Pyrene		<0.1	<0.1	<1.0	<0.3	<0.3	<0.3	<0.1	<0.1

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-2	DW-2	DW-2	DW-2	DW-2	DW-2	DW-2	DW-2	DW-2
Date	3/15/96	12/13/96	6/24/97	10/22/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Total Metals (ug/l)									
Arsenic	<4	<4	<4	<4	1.3	1,1	1.8	1.7	1.4
Cadmium	<5								
Chromium	<10			****	******	*****			
Copper	<30			74244	****				
Iron	19000	*****	*****						*****
Lead	14	3.6	24	3.4	24	2.7	26	25	12
Manganese	920	****					****		
Mercury	<1								
Nickel	<30	*****	****						
Zinc	41	<20	27	<20	41	20	20	31	21
Dissolved Metals (ug/l)									·
Arsenic	<4		*****						
Cadmium	<5	*****	*****		*****				
Chromium	<10	*****			****				
Copper	<30								
Iron	18000	****	*****						*****
Lead	2.6	*****							
Manganese	1100		*****		*****			*****	
Mercury	<1			w			*	~~~~	
Nickel	<30		Menda						
Zinc	<20	****	*****						

Notes:

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-3	DW-3	DW-3	DW-3	DW-3	DW-3	DW-3	DW-3	DW-3
Date	3/15/96	12/13/96	6/25/97	10/22/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Field Parameters							······	1	·····
Water Level (Ft - Top of PVC casing)	1.18	2.00	0.20	1.55	0.50	1.73	0.30	0.15	0.05
Volume Purged (Liters)	8	22	27	24	23	19	23	23	15
pH	6.2	6.2	6.0	6.0	5.9	5.7	6.5	6.1	5.9
Conductivity (umohos)	507	670	682	751	670	323	614	470	595
Temperature (C)	11	12	15	16	11.5	13	12	11.5	12.8
Turbidity (NTU)	1.6	1.3	0.8	0.8	1.5	1.0	1.8	2.1	1.9
Petroleum Hydrocarbons (mg/l)									
Diesel Range (C12-C24)	<0.25	0.38	0.34	<0.25	<0.25	<0.25	0.26	<0.25	<0.25
Heavy Oil Range (>C24)	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
Polychlorinated Biphenyls (PCBs) - ug/						1.44			
PCB 1016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
Polynuclear Aromatic Hydrocarbons (ug/l)								· · · · · · · · · · · · · · · · · · ·	
Acenaphthene									
Anthracene		****	****	*****				*****	
Benzo(a)anthracene		****		*****			*****		
Benzo(a)pyrene				*****	*****		++	*****	
Benzo(b)fluoranthene		*****	*****		*****		*****	*****	
Benzo(g,h,i)perylene					*****				
Benzo(k)fluoranthene				*****			*****		
Chrysene		******	22475		*****			****	
Dibenzo(a,h)anthracene				*****			*****		
Fluroanthene		*****	*****	*****	*****	######		*****	
Fluorene	******				*****	*****		****	
Indeno(1,2,3-cd)pyrene		*****							
Naphthalene		*****	*****						
Phenanthrene							*****		
Pyrene	<u> </u>		*****	*****					

TABLE 1 - Summary of Water Quality Data

	7,							 	
Constituents/Well Nos.	DW-3	DW-3	DW-3	DW-3	DW-3	DW-3	DW-3	DW-3	DW-3
Date	3/15/96	12/13/96	6/25/97	10/22/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Total Metals (ug/l)			•						
Arsenic	<4	8.0	<4	<4	2.0	2.1	2.8	2.4	2.2
Cadmium	<5	*****	*****		****			*****	
Chromium	<10			*****			****		
Copper	<30	*****		*****	*****	*****		*****	
Iron	13000	*****		*****			all de la la la la	weapp	
Lead	3.4	29.5	<2	2.0	2.0	2.2	1.6	2.9	1.7
Manganese	1600		******		- water	*****	PDEGE		
Mercury	<1		*****		*****				
Nickel	<30				****	*****		*****	
Zinc	<20	22.2	<20	<20	<10	24	17	29	<10
Dissolved Metals (ug/l)									
Arsenic	4.2	****			****	*****	*****		
Cadmium	<5			*****	*****				
Chromium .	<10		*****			*****		*****	*****
Copper	<30	*****	~~~~				*****		
Iron	13000	*****			*****	*****			
Lead	<2		*****	****				****	*****
Manganese	1800	*****	+	#####	*****		*****		
Mercury	<1			*****	******			*****	
Nickel	<30			*****	*****		*****	*****	
Zinc	<20					*****			

Notes: ---- - not analyzed; < less than indicated value

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-4	DW-4(R)	DW-4(R)	DW-4(R)	DW-4(R)	DW-4(R)	DW-4(R)	DW-4(R)
Date	3/15/96	6/25/97	10/21/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Field Parameters			•					
Water Level (Ft - Top of PVC casing)	1.74	0.90	2.22	1.21	2.41	0.80	0.72	0.52
Volume Purged (Liters)	8	23	22	23	19	23	23	15
pH	6.4	6.3	6.1	5.9	6.0	6.4	6.1	5.9
Conductivity (umohos)	648	724	530	510	403	395	412	422
Temperature (C)	11	15	16	11	13	11	11	11.8
Turbidity (NTU)	4.9	4.1	1.5	3.1	2.6	2.3	3.2	1.7
Petroleum Hydrocarbons (mg/l)								
Diesel Range (C12-C24)	<0.25	0.88	<0.25	<0.25	<0.25	0.30	<0.25	<0.25
Heavy Oil Range (>C24)	<0.75	0.83	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
Polychlorinated Biphenyls (PCBs) - ug/l								
PCB 1016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
Polynuclear Aromatic Hydrocarbons (ug/l)								
Acenaphthene								
Anthracene								4444
Benzo(a)anthracene							******	4444
Benzo(a)pyrene	*****							*****
Benzo(b)fluoranthene	*****	*****				20140		44444
Benzo(g,h,i)perylene				*****				
Benzo(k)fluoranthene	*****					*****		*****
Chrysene	*****	*****						*****
Dibenzo(a,h)anthracene	*****		*****			****		
Fluroanthene					*****			
Fluorene					*****		*****	****
Indeno(1,2,3-cd)pyrene						*****	*****	
Naphthalene			*****	*****		****	*****	
Phenanthrene	*****		*****					
Pyrene							*****	

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-4	DW-4(R)	DW-4(R)	DW-4(R)	DW-4(R)	DW-4(R)	DW-4(R)	DW-4(R)
Date	3/15/96	6/25/97	10/21/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Total Metals (ug/l)			•					
Arsenic	<4	<4	<4	<1	1.5	<1	<1	<1
Cadmium	<5	*****		****	*****		*****	****
Chromium	<10			******	*****			
Copper	<30				*****	*****		
Iron	9600		*****			******	*****	
Lead	<5	4.8	<2	2.9	1.6	4.6	3.6	1.1
Manganese	2500	*****	*****		*****	****	****	***********
Mercury	<1				*****	*****	*****	*****
Nickel	<30			*****	-400-		*****	****
Zinc	21	<20	<20	<10	14	10	27	<10
Dissolved Metals (ug/l)								
Arsenic	<4	*****	*****		*****	*****		
Cadmium	<5		*****		****		*****	****
Chromium	<10	*****	*****				*****	
Соррег	<30	*****						
Iron ·	10000	*****	*****	*****		*****	****	*****
Lead	<2	40-44	*****					
Manganese	3100			*****			*****	4
Mercury	<1	*****	. 44444			******	*****	
Nickel	<30		******	*****	*****	******		
Zinc	<20		*****	*****		*****		4444

Notes:

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-5	DW-5	DW-5	DW-5	DW-5	DW-5	DW-5	DW-5
Date	3/15/96	6/24/97	10/22/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Field Parameters	·		•				L	
Water Level (Ft - Top of PVC casing)	2.53	1.10	2.42	1.41	2.65	1.12	1.00	0.89
Volume Purged (Liters)	7	27	22	23	19	23	23	15
рН	6.4	6.0	6.0	5.9	6.0	6.4	6.0	6.0
Conductivity (umohos)	450	498	630	519	650	434	441	450
Temperature (C)	9.5	15	17	11.5	14.1	12	11.5	12.6
Turbidity (NTU)	3.4	1.1	1.6	3.0	2.4	1.2	3.0	3.2
Petroleum Hydrocarbons (mg/l)								
Diesel Range (C12-C24)	<0.25	0.40	<0.25	<0.25	<0.25	0.35	<0.25	<0.25
Heavy Oil Range (>C24)	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
Polychlorinated Biphenyls (PCBs) - ug/l								
PCB 1016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
Polynuclear Aromatic Hydrocarbons (ug/l)							•	
Acenaphthene	1.1	<5.0	1.5	1.0	0.86	1.17	1.3	<5.0
Anthracene	<1.0	<5.0	<1.0	<0.1	<0.1	<0.1	<0.1	<5.0
Benzo(a)anthracene	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
Fluroanthene	<0.1	<0.1	<0.1	<0.3	<0.3	<0.3	<0.1	<0.1
Fluorene	<1.0	0.66	<1.0	0.43	0.42	0.72	0.68	<0.5
Indeno(1,2,3-cd)pyrene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
Naphthalene	<1.0	<5.0	<1.0	<0.3	<0.3	<0.3	<0.1	<5.0
Phenanthrene	<1.0	<5.0	<1.0	0.26	0.21	0.57	0.47	<0.5
Pyrene	0.11	<0.1	<1.0	<0.3	<0.3	<0.3	<0.1	<0.1

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-5	DW-5	DW-5	DW-5	DW-5	DW-5	DW-5	DW-5
Date	3/15/96	6/24/97	10/22/97	4/23/98	11/24/98	5/17/99	5/4/00	6/7/01
Total Metals (ug/l)			•					
Arsenic	<4	<4	<4	<1	<1	<1	<1	<1
Cadmium	<5			49-91-10-91-10-				
Chromium	<10		*****					
Copper	<30							
Iron	23000							
Lead	5.8	2.6	2.4	3.8	3.2	4.5	3.2	4.1
Manganese	900							
Mercury	. <1		*****				*	
Nickel	<30						****	
Zinc	68	30	24	29	45	18.6	22	17
Dissolved Metals (ug/l)	100							
Arsenic	<4							
Cadmium	<5							
Chromium	<10			*****				
Copper	<30				*****		*****	
Iron	22000		*****	*****	*****		*****	
Lead	<2			*****		*****	*****	
Manganese	1100							
Mercury	<1	*****		*****	****			
Nickel	<30	****	*****	*****	*****	*****	4-4	
Zinc	44	*****	*****	44440	7000	*****		*****

Notes: ---- - not analyzed; < less than indicated value

<u></u>								
Constituents/Well Nos.	DW-6	DW-6	DW-6	DW-6	DW-6	DW-6	DW-6	DW-6
Date	3/15/96	6/24/97	10/21/97	4/23/98	11/24/98	5/14/99	5/4/00	6/7/01
Field Parameters			•					
Water Level (Ft - Top of PVC casing)	1.45	0.25	1.53	0.55	1.80	0.20	0.18	0.02
Volume Purged (Liters)	28	27	22	23	19	23	23	15
pH	6.4	6.1	6.1	6.0	6.0	6.5	6.2	5.8
Conductivity (umohos)	694	800	860	836	627	747	761	820
Temperature (C)	10	14	14.5	11.5	14	11.5	11	11
Turbidity (NTU)	4.8	4.5	3.0	8.8	2.5	5.4	3.5	1.9
Petroleum Hydrocarbons (mg/l)						**********************	······································	
Diesel Range (C12-C24)	<0.25	0.49	<0.25		<0.25	0.61	<0.25	<0.25
Heavy Oil Range (>C24)	<0.75	<0.75	<0.75	*****	<0.75	<0.75	<0.75	<0.75
Polychlorinated Biphenyls (PCBs) - ug/l					**************************************			
PCB 1016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5
Polynuclear Aromatic Hydrocarbons (ug/l)								
Acenaphthene	*****		****					
Anthracene					****		*****	*****
Benzo(a)anthracene	i 1					*****		*
Benzo(a)pyrene								****
Benzo(b)fluoranthene			*****	*****				
Benzo(g,h,i)perylene					*****			
Benzo(k)fluoranthene					****			
Chrysene			*****	*****				
Dibenzo(a,h)anthracene						*****	*****	*****
Fluroanthene				*****				
Fluorene	*****					****		
Indeno(1,2,3-cd)pyrene								
Naphthalene				*****				
Phenanthrene		~~~~						
Pyrene								

TABLE 1 - Summary of Water Quality Data

Constituents/Well Nos.	DW-6	DW-6	DW-6	DW-6	DW-6	DW-6	DW-6	DW-6
Date	3/15/96	6/24/97	10/21/97	4/23/98	11/24/98	5/14/99	5/4/00	6/7/01
Total Metals (ug/l)			•					
Arsenic	<4	<4	<4	1.2	1.6	1.2	1.7	1.4
Cadmium	<5			*****	*****	4444	****	
Chromium	<10		*****	*****				
Copper	<30			*****		****		
Iron	29000			*****		*****		
Lead	5.4	<2	2.7	4.6	2.0	3.2	1.6	<1
Manganese	1700			*****	*****		******	
Mercury	<1		*****				******	*****
Nickel	<30	*****	*****	****			*==+	core de la casa ago
Zinc	25	<20	<20	11	17	<10	<10	<10
Dissolved Metals (ug/l)								
Arsenic	<4	*****		****	****	****	20045	
Cadmium	<5		70000			*****	******	
Chromium	<10				*****			*****
Copper	<30	*****						*****
iron	27000			*****			*****	
Lead	<2			*****				
Manganese	1800			*****				
Mercury	<1	*****	*****		*****			
Nickel	<30							
Zinc	<20	****	*****					

Notes:

Well	Total Arsenic							
Number	Detection Frequency	Maximum Concentration (ug/l)						
DW-1	5/8	10.1						
DW-2	5/8	1.8						
DW-3	6/8	8						
DW-4	1/7	1.5						
DW-5	0/7	<1						
DW-6	5/7	1.7						

As Cleanup Criteria	Concentration (ug/l)
MTCA Method A(a)	5
Proposed MCL(b)	10
Ambient (c)	190

Well	Total Lead							
Number	Detection Frequency	Maximum Concentration (ug/l)						
DW-1	8/8	316						
DW-2	8/8	26						
DW-3	7/8	29.5						
DW-4	6/8	4.8						
DW-5	7/7	3.8						
DW-6	5/7	4.6						

Pb Cleanup Criteria	Concentration (ug/l)
MTCA Method A(a)	15
Primary MCL(b)	15
Ambient (c)	2.5

Well	Total Zinc							
Number	Detection Frequency	Maximum Concentration (ug/l)						
DW-1	、5/8	237						
DW-2	6/8	41						
DW-3	4/8	29						
DW-4	3/7	27						
DW-5	7/7	30						
DW-6	2/7	17						

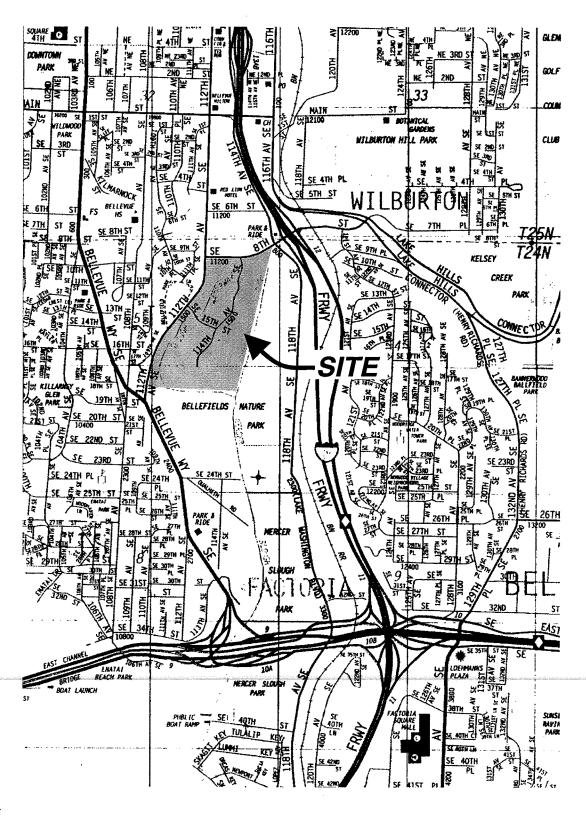
Zn Cleanup Criteria	Concentration (ug/l)
MTCA Method B(a)	4800
Secondary MCL(b)	5000
Ambient (c)	114

Notes: a) MTCA - Model Toxics Control Act - Chapter 173-340 WAC

(drinking water cleanup levels)

- b) MCL Drinking water Maximum Contaminant Level
- c) Washington State ambient (chronic) Surface Water Standards Chapter 173-201A WAC.

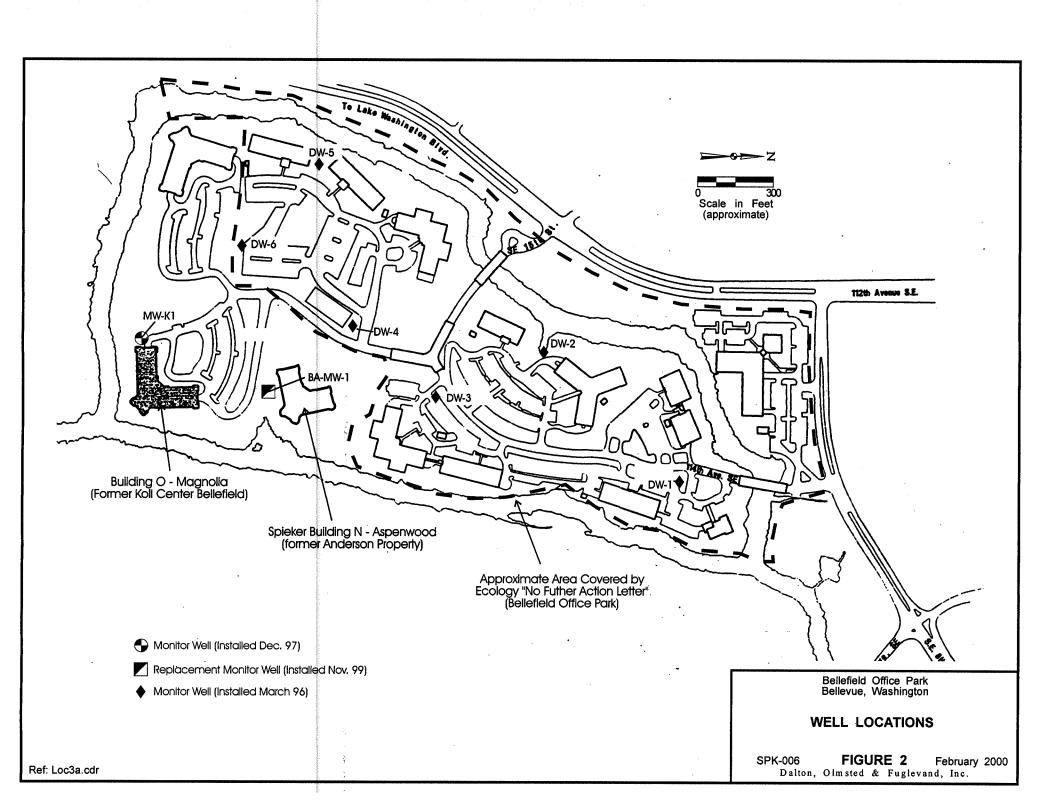
(Based on dissolved concentrations and water hardness of 100 mg/l)



Bellefield Office Park Bellevue Washington

VICINITY MAP

SPK-002 FIGURE 1 January 1998
Dalton, Olmsted & Fuglevand, Inc.



ATTACHMENT 1 LABORATORY DATA SHEETS BELLEFIELD OFFICE PARK MAY 2000 GROUND-WATER SAMPLING



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

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

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006

Project Manager: Matthew Dalton

Reported:

05/22/00 18:32

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C40) by WTPH-D (extended) North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
DW-6 (B0E0100-01) Water Sample	ed: 05/04/00 12:	45 Received	i: 05/05/00	12:50					
Diesel Range Hydrocarbons	ND	0.403	mg/l	1	0E08004	05/08/00	05/10/00	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	1.21	**	"		n	#	n	
Surrogate: 2-FBP	81.6 %	50-150			"	"	"	n	
DW-3 (B0E0100-02) Water Sample	ed: 05/04/00 10:	15 Received	1: 05/05/00	12:50					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	0E08004	05/08/00	05/10/00	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750		"	77	**	11	н	
Surrogate: 2-FBP	66.0 %	50-150			"	"	"	"	
DW-1 (B0E0100-03) Water Sample	ed: 05/05/00 11:	15 Received	1: 05/05/00	12:50					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	0E08004	05/08/00	05/10/00	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750	11	H	17	n	11	11	
Surrogate: 2-FBP	78.9 %	50-150			"	"	"	"	
DW-5 (B0E0100-04) Water Sample	ed: 05/04/00 12:	00 Received	1: 05/05/00	12:50					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	0E08004	05/08/00	05/10/00	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750	H	11	11	#	"	11	
Surrogate: 2-FBP	66.8 %	50-150			"	"	"	"	
DW-4 (B0E0100-05) Water Sample	ed: 05/04/00 13:	30 Received	1: 05/05/00	12:50					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	0E08004	05/08/00	05/10/00	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750		. 11	**	17	11	n	
Surrogate: 2-FBP	78.6 %	50-150			"	"	"	"	
DW-2 (B0E0100-06) Water Sample	ed: 05/04/00 11:	00 Received	1: 05/05/00	12:50					
Diesel Range Hydrocarbons	ND	0.250	mg/l	i	0E08004	05/08/00	05/10/00	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750	11	11	11	"	11	11	
Surrogate: 2-FBP	63.9 %	50-150				,			

North Creek Analytical - Bothell





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

541.383.9310 fax 541.382.7588

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006

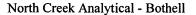
Project Manager: Matthew Dalton

Reported:

05/22/00 18:32

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C40) by WTPH-D (extended) North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BA-MW-1(R) (B0E0100-07) Water	Sampled: 05/0	4/00 14:00	Received:	05/05/00 12:	50		<u></u>		
Diesel Range Hydrocarbons	0.339	0.250	mg/l	1	0E08004	05/08/00	05/10/00	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750	H	"	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	"	11	n	
Surrogate: 2-FBP	82.6 %	50-150			"	"	"	"	
MW-K1 (B0E0100-08) Water Sa	mpled: 05/05/00 (9:45 Rece	ived: 05/05/	00 12:50				•	
Diesel Range Hydrocarbons	0.961	0.250	mg/l	1	0E08004	05/08/00	05/10/00	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750	n	"	17	n	19	Ħ	
Surrogate: 2-FBP	75.4 %	50-150			"	"	"	"	







18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508

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

Dalton, Olmsted and Fuglevand 11711 Northcreek Pkwy S, Ste # 101 Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006 Project Manager: Matthew Dalton

Reported: 05/22/00 18:32

Total Metals by EPA 6000/7000 Series Methods

North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW-6 (B0E0100-01) Water	Sampled: 05/04/00 12:4	45 Received	l: 05/05/00	12:50					
Arsenic	0.00172	0.00100	mg/l	1	0E10018	05/10/00	05/12/00	EPA 6020	
Lead	0.00164	0.00100	н	11	n	#	17	n	
Zinc	ND	0.0100	"	•	**	n	"	11	
DW-3 (B0E0100-02) Water	Sampled: 05/04/00 10:1	15 Received	: 05/05/00	12:50					
Arsenic	0.00238	0.00100	mg/l	1	0E10018	05/10/00	05/12/00	EPA 6020	
Lead	0.00289	0.00100	H	"	11	n	17	**	
Zinc	0.0290	0.0100	n	,	**	**	11	**	
DW-1 (B0E0100-03) Water	Sampled: 05/05/00 11:1	15 Received	1: 05/05/00	12:50					
Arsenic	0.00362	0.00100	mg/l	1	0E10018	05/10/00	05/12/00	EPA 6020	
Lead	0.0429	0.00100	"	11	"	n .	11	n	
Zinc	0.0384	0.0100	n	"	**	**	11	n	
DW-5 (B0E0100-04) Water	Sampled: 05/04/00 12:0	00 Received	: 05/05/00	12:50					
Arsenic	ND	0.00100	mg/l	1	0E10018	05/10/00	05/12/00	EPA 6020	
Lead	0.00317	0.00100	"	**	**	"	11	"	
Zinc	0.0220	0.0100	**	"	"	n	11	"	
DW-4 (B0E0100-05) Water	Sampled: 05/04/00 13:3	30 Received	l: 05/05/00	12:50					
Arsenic	ND	0.00100	mg/l	1	0E10018	05/10/00	05/12/00	EPA 6020	
Lead	0.00357	0.00100	n	*	"	Ħ	11	n	
Zinc	0.0271	0.0100	n	**	n	Ħ	11	n	
DW-2 (B0E0100-06) Water	Sampled: 05/04/00 11:0	00 Received	: 05/05/00	12:50					
Arsenic	0.00166	0.00100	mg/l	1	0E10018	05/10/00	05/12/00	EPA 6020	
Lead	0.0251	0.00100	**	n	**	Ħ	**	n	
Zinc	0.0308	0.0100		11	"	n	11	"	

North Creek Analytical - Bothell





18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508 Seattle

425.420.9200 fax 425.420.9210

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

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

503.906.9200 fax 503.906.9210 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006

Project Manager: Matthew Dalton

Reported:

05/22/00 18:32

Total Metals by EPA 6000/7000 Series Methods North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BA-MW-1(R) (B0E0100-07) Water	er Sampled: 05/0	4/00 14:00	Received:	05/05/00 12:	:50				
Arsenic	0.00280	0.00100	mg/l	1	0E10018	05/10/00	05/12/00	EPA 6020	
Lead	0.00597	0.00100	*	"	"	n	**	11	
Zinc	0.0101	0.0100	11	11	"	n	Ħ	H	
MW-K1 (B0E0100-08) Water S	ampled: 05/05/00 0	9:45 Rece	ived: 05/05	/00 12:50					
Arsenic	0.00208	0.00100	mg/l	1	0E10018	05/10/00	05/16/00	EPA 6020	
Lead	0.00767	0.00100	H	19	11	n	**	. "	
Zinc	ND	0.0100	**	**	**	n	"	n	



425.420.9200 fax 425.420.9210

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

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

Dalton, Olmsted and Fuglevand 11711 Northcreek Pkwy S, Ste # 101 Bothell WA, 98011 Project: Spieker Properties

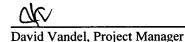
Project Number: SPK-006
Project Manager: Matthew Dalton

Reported: 05/22/00 18:32

Polychlorinated Biphenyls by EPA Method 8082 North Creek Analytical - Bothell

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	mpled: 05/04/00 12:45	Received	1: 05/05/00	12:50		<u> </u>			
Aroclor 1016	ND	0.100	ug/l	1	0E10002	05/10/00	05/13/00	EPA 8082	
Aroclor 1221	ND	0.100	"	11	"	11	п	"	
Aroclor 1232	ND ND	0.100	n	#	19	17	11	ti .	
Aroclor 1242	ND ND	0.100	11	n	n	"	11	11	
Aroclor 1248	ND	0.100	**	n	**	11	**	11	
Aroclor 1254	ND ND	0.100	**	**	**	11	#	19	
Aroclor 1260	ND	0.100	"	п	11	11	n	**	
Aroclor 1262	ND	0.100	n	19	"	**	11	и	
Aroclor 1268	ND	0.100	n	11	**	n	**	H	
		10-130				,,	,,	,,	
Surrogate: TCX	,2.0 ,0	10-130 10-130			,,	,,	"	"	S-04
Surrogate: Decachlorobiphenyl	35.0 % 4	10-130							3-04
DW-3 (B0E0100-02) Water Sa	mpled: 05/04/00 10:15	Received	1: 05/05/00	12:50					
Aroclor 1016	ND	0.100	ug/l	1	0E10002	05/10/00	05/13/00	EPA 8082	
Aroclor 1221	ND	0.100	n	n	"	. "	n	**	
Aroclor 1232	ND	0.100		n	"	Ħ	**	17	
Aroclor 1242	ND	0.100	**	n	"	"	39	11	
Aroclor 1248	ND	0.100	"	n	**	***	**	77	
Aroclor 1254	ND	0.100	"	n	"	11	n	11	
Aroclor 1260	ND	0.100	**	"	11	n	**	**	
Aroclor 1262	ND	0.100	**	**	n	11	11	Ħ	
Aroclor 1268	ND	0.100	n	Ħ	"		"		
Surrogate: TCX	85.8 % 4	10-130			"	"	<i>n</i>	"	
Surrogate: Decachlorobiphenyl	00.070	10-130			,,	**	"	"	

North Creek Analytical - Bothell





 Seattle
 18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508 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

Dalton, Olmsted and Fuglevand 11711 Northcreek Pkwy S, Ste # 101 Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006 Project Manager: Matthew Dalton

Reported: 05/22/00 18:32

Polychlorinated Biphenyls by EPA Method 8082 North Creek Analytical - Bothell

Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW-5 (B0E0100-04) Water	Sampled: 05/04/00 12:00	Received	1: 05/05/00	12:50					
Aroclor 1016	ND	0.100	ug/l	1	0E10002	05/10/00	05/13/00	EPA 8082	
Aroclor 1221	ND	0.100	n		11	77		**	
Aroclor 1232	ND	0.100	"	**	#	**		**	
Aroclor 1242	ND	0.100	**	**	**	**	**	11	
Aroclor 1248	ND	0.100	n	11	#	11	79	**	
Aroclor 1254	ND	0.100	n	11	17	11	11	n	
Aroclor 1260	ND	0.100	n	#	Ħ	11	11	n	
Aroclor 1262	ND	0.100	**	**	17	n	11	n	
Aroclor 1268	ND	0.100	**	n	**	**	**	"	
Surrogate: TCX	87.8 % 4	0-130			"	"	"	"	
Surrogate: Decachlorobipheny	d 35.7 % 4	0-130			n	"	"	"	S-04
DW-4 (B0E0100-05) Water	Sampled: 05/04/00 13:30	Received	i: 05/05/00	12:50				·	
Aroclor 1016	ND	0.100	ug/l	1	0E10002	05/10/00	05/13/00	EPA 8082	
Aroclor 1221	ND	0.100	n	11	"	"	**	19	
Aroclor 1232	ND	0.100	"	11	**	**	•	"	
Aroclor 1242	ND	0.100	11	**	"	11	**	11	
Aroclor 1248	ND	0.100	"	"	"	"	**	"	
Aroclor 1254	ND	0.100	11	Ħ	**	"	,	H	
Aroclor 1260	ND	0.100	"	*	"	n	•	"	
Aroclor 1262	ND	0.100	"	n	"	11	•	**	
Aroclor 1268	ND	0.100	10	H	n	H	11	H	
Surrogate: TCX	72.6 % 4	10-130			"	"	"	"	
Surrogate: Decachlorobipheny	vl 51.2 % 4	10-130			"	"	"	"	

North Creek Analytical - Bothell





18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508

425.420.9200 fax 425.420.9210

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

509.924.9200 fax 509.924.9290

9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

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

Dalton, Olmsted and Fuglevand 11711 Northcreek Pkwy S, Ste # 101 Bothell WA, 98011

Project: Spieker Properties

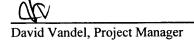
Project Number: SPK-006 Project Manager: Matthew Dalton

Reported: 05/22/00 18:32

Polychlorinated Biphenyls by EPA Method 8082 North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BA-MW-1(R) (B0E0100-07) Water	Sampled: 05/0	4/00 14:00	Received:	05/05/00 12:	50				· · · · · · · · · · · · · · · · · · ·
Aroclor 1016	ND	0.100	ug/l	1	0E10002	05/10/00	05/13/00	EPA 8082	
Aroclor 1221	ND	0.100	"	11	17	"	Ħ	n	
Aroclor 1232	ND	0.100	**	**	*	Ħ	n	n	
Aroclor 1242	ND	0.100	"	"	**	H	**	n	
Aroclor 1248	ND	0.100	"	11	"	n	**	tt.	
Aroclor 1254	ND	0.100	19	17	"	**	"	n	
Aroclor 1260	ND	0.100	n	**	"	"	11	**	
Aroclor 1262	ND	0.100	n	n	"	Ħ	11	11	
Aroclor 1268	ND	0.100	n	n	**	17	11	17	
Surrogate: TCX	82.6 %	40-130			"	"	"	"	
Surrogate: Decachlorobiphenyl	51.1 %	40-130			"	"	"	"	
MW-K1 (B0E0100-08) Water San	mpled: 05/05/00 (9:45 Rece	ived: 05/05	/00 12:50					
Aroclor 1016	ND	0.100	ug/l	1	0E10002	05/10/00	05/13/00	EPA 8082	
Aroclor 1221	ND	0.100	"	11	n	"	Ħ	"	
Aroclor 1232	ND	0.100	"	"	**	H	Ħ	11	
Aroclor 1242	ND	0.100	11	**	•	**	"	*	
Aroclor 1248	ND	0.100	11	n	**	н	n	11	
Aroclor 1254	ND	0.100	11	"	**	**	"	Ħ	
Aroclor 1260	ND	0.100	11	"	11	n	"	**	
Aroclor 1262	ND	0.100	**	•	**	11	**	#	
Aroclor 1268	ND	0.100	n	ıı ı	11	"		11	
Surrogate: TCX	80.4 %	40-130			"	"	"	"	
Surrogate: Decachlorobiphenyl	34.8 %	40-130			"	"	"	"	S-04

North Creek Analytical - Bothell





425.420.9200 fax 425.420.9210 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 Spokane

509.924.9200 fax 509.924.9290 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006

Project Manager: Matthew Dalton

Reported:

05/22/00 18:32

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
DW-5 (B0E0100-04) Water	Sampled: 05/04/00 12:	00 Received	l: 05/05/00	12:50					
Acenaphthene	1.30	0.100	ug/l	1	0E08007	05/08/00	05/10/00	GCMS-SIM	
Acenaphthylene	ND	0.100	**	n	**	n	**	"	
Anthracene	ND	0.100	**	n		**	**	**	
Benzo (a) anthracene	ND	0.100	n	**	n	"	**		
Benzo (a) pyrene	ND	0.100	**	n	"	"	**	n	
Benzo (b) fluoranthene	ND	0.100	n	99	**	Ħ	. 11	11	
Benzo (ghi) perylene	ND	0.100	"	"	"	**	**	11	
Benzo (k) fluoranthene	ND	0.100	**	n	**	**	Ħ	11	
Chrysene	ND	0.100	11	*	11	"	n	11	
Dibenz (a,h) anthracene	ND	0.100	"	n	*	. 11	11	tt .	
Fluoranthene	ND	0.100	11	n	n	n	17	11	
Fluorene	0.679	0.100	"	11	n	n	11	n	
Indeno (1,2,3-cd) pyrene	ND	0.100	"	n	n	"	**	Ħ	
Naphthalene	ND	0.100	11	Ħ	"	**	**	n	
Phenanthrene	0.472	0.100	n	n	n	n	11	n	
Pyrene	ND	0.100	**	11	**	n	11	n	
Surrogate: 2-FBP	48.3 %	30-150			,,	"	"	"	
Surrogate: Nitrobenzene-d5	40.5 %	30-150			"	"	"	<i>n</i>	
Surrogate: p-Terphenyl-d14	57.8 %	30-150			"	"	"	"	
DW-2 (B0E0100-06) Water	Sampled: 05/04/00 11:	00 Received	l: 05/05/00	12:50					
						05/00/00	0.5/1.0/00		
Acenaphthene	0.512	0.100	ug/l	1	0E08007	05/08/00	05/10/00	GCMS-SIM	
Acenaphthene Acenaphthylene	0.512 ND	0.100 0.100	ug/l	1	0E08007	05/08/00	05/10/00	GCMS-SIM	
-									
Acenaphthylene	ND	0.100	11	n	"		"		
Acenaphthylene Anthracene Benzo (a) anthracene	ND ND	0.100 0.100	"	n	"	"	Ħ		
Acenaphthylene Anthracene	ND ND ND	0.100 0.100 0.100	"	n	11	n n	17 17		
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene	ND ND ND ND	0.100 0.100 0.100 0.100	19 11 11	n n n	" "	11 11 11	11 11	11 11 11	
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene	ND ND ND ND ND	0.100 0.100 0.100 0.100 0.100	11 11 11	n n n	11 11 11 11	" " " "	" " " "	11 11 11	n da
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene	ND ND ND ND ND	0.100 0.100 0.100 0.100 0.100 0.100	" " " " "	n n n n	11 11 11 11	n n n n	n n n	17 17 17 17	i i in hanganga iku ga
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene	ND ND ND ND ND ND	0.100 0.100 0.100 0.100 0.100 0.100 0.100	n n n n	n n n n	11 11 11 11	" " " " " "	n n n n	17 17 17 17	
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene	ND ND ND ND ND ND ND	0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11	" " " " " " " " " "	11 11 11 11 11	n n n n	19 19 19 19 19	
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene	ND N	0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11	11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11	n n n	19 19 19 19 19	
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene	ND N	0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	11 11 11 11 11 11 11 11 11 11 11 11 11	17 17 17 17 17 17 17 17	11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11 11 11 11 11	19 19 19 19 19	
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene	ND ND ND ND ND ND ND ND ND ND	0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	11 11 11 11 11 11 11 11 11 11 11 11 11	17 17 17 17 17 17 17 17	11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11 11	n n n n n n n n n n n n n n n n n n n	19 19 19 19 19	
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluorene Indeno (1,2,3-cd) pyrene Naphthalene	ND ND ND ND ND ND ND ND ND ND	0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11 11 11 11 11	19 19 19 19 19	. Tanàng ang a
Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene	ND ND ND ND ND ND ND ND ND ND ND ND ND	0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	11 11 11 11 11 11 11 11 11 11 11 11 11	17 17 17 17 17 17 17 17 17 17 17 17 17 1	11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 11 11 11 11 11 11 11 11 11 11 11	19 19 19 19 19 19 19 19 19	

North Creek Analytical - Bothell





 Seattle
 18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508 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

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006 Project Manager: Matthew Dalton

Reported: 05/22/00 18:32

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW-2 (B0E0100-06) Water Sam	pled: 05/04/00 11:0	0 Received	l: 05/05/00	12:50					
Surrogate: Nitrobenzene-d5	42.4 %	30-150			0E08007	05/08/00	05/10/00	GCMS-SIM	
Surrogate: p-Terphenyl-d14	58.6 %	30-150			"	"	"	"	
BA-MW-1(R) (B0E0100-07) Water	er Sampled: 05/04	I/00 14:00 I	Received: (05/05/00 12:	50		,		
Acenaphthene	0.584	0.100	ug/l	- 1	0E08007	05/08/00	05/10/00	GCMS-SIM	
Acenaphthylene	ND	0.100		11	n	"	**	"	
Anthracene	ND	0.100	11	Ħ	11	11	11	#	
Benzo (a) anthracene	ND	0.100	"	n	19	**	17	**	
Benzo (a) pyrene	ND	0.100	n	"	"	"	**	W .	
Benzo (b) fluoranthene	ND	0.100	19	17	11	11	"	n	
Benzo (ghi) perylene	ND	0.100	n	"	"	n	"	"	
Benzo (k) fluoranthene	ND	0.100	**	11	"	11	**	"	
Chrysene	ND	0.100	17	**	**	"	**	"	
Dibenz (a,h) anthracene	ND	0.100	15	11	"	"	**	11	
Fluoranthene	ND	0.100	11	11	**	11	**	Ħ	
Fluorene	0.320	0.100	11	, 11	"	**	•	"	
Indeno (1,2,3-cd) pyrene	ND	0.100	"	**	"	"	•	n	
Naphthalene	0.396	0.100	11	n	11	17	"	11	
Phenanthrene	ND	0.100	11	"	*1	"		**	
Pyrene	ND	0.100	Ħ	11	11			"	
Surrogate: 2-FBP	47.6 %	30-150			"	n	"	"	
Surrogate: Nitrobenzene-d5	44.8 %	30-150			"	"	"	"	
Surrogate: p-Terphenyl-d14	57.3 %	30-150			"	"	"	n	
MW-K1 (B0E0100-08) Water S	ampled: 05/05/00 0	9:45 Recei	ved: 05/05	/00 12:50					
Acenaphthene	2.39	0.100	ug/l	1	0E08007	05/08/00	05/10/00	GCMS-SIM	
Acenaphthylene	ND	0.100	11	"	"	H	n	"	
Anthracene	0.398	0.100	W	***	## 				
Benzo (a) anthracene	ND	0.100	11	n	17	"	n	"	
Benzo (a) pyrene	ND	0.100	"	"	n	11	Ħ	"	
Benzo (b) fluoranthene	ND	0.100	11	"	,,	11	11	"	
Benzo (ghi) perylene	ND	0.100	#	"	"	n	"	"	
Benzo (k) fluoranthene	ND	0.100	**	11	**	n	"	"	
Chrysene	ND	0.100	**	n	**	"		"	
Dibenz (a,h) anthracene	ND	0.100	17	11	H	17	"	n .	
Fluoranthene	0.398	0.100	11	n	19	Ħ	**		
Fluorene	2.01	0.100	"	**	Ħ	11	17	n	
Indeno (1,2,3-cd) pyrene	ND	0.100		11	**	.,	,,	**	

North Creek Analytical - Bothell





425.420.9200 fax 425.420.9210

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

509.924.9200 fax 509.924.9290

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

503.906.9200 fax 503.906.9210

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

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006

Project Manager: Matthew Dalton

Reported:

05/22/00 18:32

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-K1 (B0E0100-08) Water	Sampled: 05/05/00 0	9:45 Receiv	ed: 05/05/	/00 12:50					
Naphthalene	7.14	0.100	ug/l	1	0E08007	05/08/00	05/10/00	GCMS-SIM	
Phenanthrene	2.88	0.100	11	11	Ħ	"	**	19	
Pyrene	0.322	0.100	"	**	"	"	**	**	
Surrogate: 2-FBP	63.8 %	30-150			n	"	"	"	
Surrogate: Nitrobenzene-d5	47.1 %	30-150			n	n	"	"	
Surrogate: p-Terphenyl-d14	58.8 %	30-150			"	"	"	"	

North Creek Analytical - Bothell





425.420.9200 fax 425.420.9210

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

509.924.9200 fax 509.924.9290

ortland 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

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006

Project Manager: Matthew Dalton

Reported:

05/22/00 18:32

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C40) by WTPH-D (extended) - Quality Control North Creek Analytical - Bothell

	ì	Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0E08004: Prepared 05/08/00	Using El	PA 3520C/0	600 Series							
Blank (0E08004-BLK1)					·			PRODUCT		
Diesel Range Hydrocarbons	ND	0.250	mg/l							
Heavy Oil Range Hydrocarbons	ND	0.750	**							
Surrogate: 2-FBP	0.231		"	0.320		72.2	50-150			
LCS (0E08004-BS1)										
Diesel Range Hydrocarbons	1.35	0.250	mg/l	2.00		67.5	60-140			
Surrogate: 2-FBP	0.289		"	0.320		90.3	50-150			
Duplicate (0E08004-DUP1)					Source: B	30E0100-0) 1			
Diesel Range Hydrocarbons	ND	0.575	mg/l		ND			0.255	44	
Heavy Oil Range Hydrocarbons	ND	1.72	37		ND				44	
Surrogate: 2-FBP	0.576		"	0.736		78.3	50-150			

North Creek Analytical - Bothell





425.420.9200 fax 425.420.9210

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

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

503.906.9200 fax 503.906.9210

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

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101 Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006 Project Manager: Matthew Dalton

Reported: 05/22/00 18:32

Total Metals by EPA 6000/7000 Series Methods - Quality Control North Creek Analytical - Bothell

		Reporting		Spike	Source		%REC		RPD	N-4	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0E10018:	Prepared 05/10/00	Using E	PA 3020A						_		
Blank (0E10018-BL)	(1)										
Arsenic		ND	0.00100	mg/l							
Lead		ND	0.00100	11							
Zinc		ND	0.0100	n							
LCS (0E10018-BS1)											
Arsenic		0.187	0.00100	mg/l	0.200		93.5	80-120			
Lead		0.193	0.00100	n	0.200		96.5	80-120			
Zinc		0.211	0.0100	**	0.200		105	80-120			
Matrix Spike (0E100	18-MS1)					Source: E	BOE0100-	04			
Arsenic		0.201	0.00100	mg/l	0.200	ND	100	75-125			
Lead		0.208	0.00100	11	0.200	0.00317	102	75-125			
Zinc		0.230	0.0100	н	0.200	0.0220	104	75-125			
Matrix Spike Dup (0	E10018-MSD1)					Source: I	B0E0100-	04			
Arsenic		0.194	0.00100	mg/l	0.200	ND	96.7	75-125	3.54	20	
Lead		0.199	0.00100	"	0.200	0.00317	97.9	75-125	4.42	20	
Zinc		0.212	0.0100	**	0.200	0.0220	95.0	75-125	8.14	20	

North Creek Analytical - Bothell



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

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

Dalton, Olmsted and Fuglevand 11711 Northcreek Pkwy S, Ste # 101 Bothell WA, 98011 Project: Spieker Properties

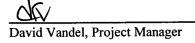
Project Number: SPK-006
Project Manager: Matthew Dalton

Reported: 05/22/00 18:32

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control North Creek Analytical - Bothell

			Reporting	Reporting				%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0E10002:	Prepared 05/10/00	Using E	PA 3520C/	600 Series							
Blank (0E10002-BL	K1)										
Aroclor 1016		ND	0.100	ug/l							
Aroclor 1221		ND	0.100	17							
Aroclor 1232		ND	0.100	"							
Aroclor 1242		ND	0.100	n							
Aroclor 1248		ND	0.100	Ħ							
Aroclor 1254		ND	0.100	H				•			
Aroclor 1260		ND	0.100	,,							
Aroclor 1262		ND	0.100	*							
Aroclor 1268		ND	0.100	H							
Surrogate: TCX		0.133		n	0.200		66.5	40-130			
Surrogate: Decachloro	biphenyl	0.134		"	0.200		67.0	40-130			
LCS (0E10002-BS1)										
Aroclor 1260		7.49	0.100	ug/l	10.0		74.9	33-122			
Surrogate: TCX		0.146		"	0.200		73.0	40-130			
Surrogate: Decachloro	biphenyl	0.165		"	0.200		82.5	40-130			
LCS Dup (0E10002	-BSD1)									~···	
Aroclor 1260		6.80	0.100	ug/l	10.0		68.0	33-122	9.66	21	
Surrogate: TCX		0.145		"	0.200		72.5	40-130	•		
Surrogate: Decachloro	obiphenyl	0.157		"	0.200		78.5	40-130			

North Creek Analytical - Bothell





425.420.9200 fax 425.420.9210

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

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

503.906.9200 fax 503.906.9210

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

541.383.9310 fax 541.382.7588

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

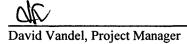
Project Number: SPK-006 Project Manager: Matthew Dalton Reported:

05/22/00 18:32

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

Analyte		Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<u> </u>	Prepared 05/08/00			600 Series							
Blank (0E08007-BLF											
Acenaphthene		ND	0.100	ug/l					,		
Acenaphthylene		ND	0.100	"							
Anthracene		ND	0.100	*							
Benzo (a) anthracene		ND	0.100	17							
Benzo (a) pyrene		ND	0.100	n							
Benzo (b) fluoranthene		ND	0.100	n							
Benzo (ghi) perylene		ND	0.100	"							
Benzo (k) fluoranthene		ND	0.100	11							
Chrysene		ND	0.100	n							
Dibenz (a,h) anthracene		ND	0.100	n							
Fluoranthene		ND	0.100	n							
Fluorene		ND	0.100	n							
Indeno (1,2,3-cd) pyrene		ND	0.100	n							
Naphthalene		ND	0.100	17							
Phenanthrene		ND	0.100	11							
Pyrene		ND	0.100	17							
Surrogate: 2-FBP		22.5		"	50.0		45.0	30-150			
Surrogate: Nitrobenzene	-d5	18.1		"	50.0		36.2	30-150			
Surrogate: p-Terphenyl-	d14	28.3		"	50.0		56.6	30-150			
LCS (0E08007-BS1)											
Chrysene		8.20	0.100	ug/l	10.0		82.0	50-150			
Fluorene		8.14	0.100	n	10.0		81.4	50-150			
Indeno (1,2,3-cd) pyrene		5.60	0.100	"	10.0		56.0	50-150			
Surrogate: 2-FBP		26.7			50.0	o takikan kalalanan	53.4	30-150	<u> </u>		
Surrogate: Nitrobenzene	e-d5	21.2		"	50.0		42.4	30-150			
Surrogate: p-Terphenyl-	d14	37.9		"	50.0		75.8	30-150			

North Creek Analytical - Bothell





Seattle 18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508

425.420.9200 fax 425.420.9210

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

509.924.9200 fax 509.924.9290

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

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

Dalton, Olmsted and Fuglevand

11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006

Project Manager: Matthew Dalton

Reported:

05/22/00 18:32

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control North Creek Analytical - Bothell

	l	Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0E08007: Prepared 05/08/00	Using El	PA 3520C/	600 Series							
LCS Dup (0E08007-BSD1)										·
Chrysene	7.40	0.100	ug/l	10.0		74.0	50-150	10.3	25	
Fluorene	7.44	0.100	"	10.0		74.4	50-150	8.99	25	
Indeno (1,2,3-cd) pyrene	6.42	0.100	11	10.0		64.2	50-150	13.6	25	
Surrogate: 2-FBP	25.2		"	50.0		50.4	30-150			
Surrogate: Nitrobenzene-d5	20.0		"	50.0		40.0	30-150			
Surrogate: p-Terphenyl-d14	37.9		n	50.0		<i>75.8</i>	30-150			

North Creek Analytical - Bothell





Seattle 18939 120th Avenue NE, Suite 101, Bothell, WA 98011-9508

425.420.9200 fax 425.420.9210

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

509.924.9200 fax 509.924.9290

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

503.906.9200 fax 503.906.9210

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

Dalton, Olmsted and Fuglevand 11711 Northcreek Pkwy S, Ste # 101

Bothell WA, 98011

Project: Spieker Properties

Project Number: SPK-006

Project Manager: Matthew Dalton

Reported: 05/22/00 18:32

Notes and Definitions

The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. S-04

Analyte DETECTED DET

Analyte NOT DETECTED at or above the reporting limit ND

NR Not Reported

Sample results reported on a dry weight basis dry

Relative Percent Difference **RPD**

North Creek Analytical - Bothell



ATTACHMENT 2 LABORATORY DATA SHEETS BELLEFIELD OFFICE PARK JUNE 2001 GROUND-WATER SAMPLING



541.383.9310 fax 541.382.7588

22 June, 2001

Matthew Dalton Dalton, Olmsted and Fuglevand 10827 NE 68th Street Suite B Kirkland, WA 98033

RE: Bellfield Office Park

Enclosed are the results of analyses for samples received by the laboratory on 06/08/01 14:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



 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

Portland

Dalton, Olmsted and Fuglevand

Project: Bellfield Office Park

10827 NE 68th Street Suite B Kirkland WA, 98033

Project Number: HEW-020 Project Manager: Matthew Dalton

Reported: 06/22/01 11:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DW-1	B1F0182-01	Water	06/07/01 17:30	06/08/01 14:35
DW-2	B1F0182-02	Water	06/08/01 09:30	06/08/01 14:35
DW-3	B1F0182-03	Water	06/07/01 14:30	06/08/01 14:35
DW-4	B1F0182-04	Water	06/08/01 08:30	06/08/01 14:35
DW-5	B1F0182-05	Water	06/07/01 13:30	06/08/01 14:35
DW-6	B1F0182-06	Water	06/08/01 07:30	06/08/01 14:35
BA-MW-1(R)	B1F0182-07	Water	06/07/01 16:30	06/08/01 14:35
MW-K1	B1F0182-08	Water	06/07/01 15:30	06/08/01 14:35

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.



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

425.420.9200 fax 425.420.9210 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290 Spokane

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

503.906.9200 fax 503.906.9210

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

Dalton, Olmsted and Fuglevand

10827 NE 68th Street Suite B Kirkland WA, 98033

Project: Bellfield Office Park

Project Number: HEW-020

Project Manager: Matthew Dalton

Reported:

06/22/01 11:41

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C36 by WTPH-D (extended) with Silica Gel Clean-up North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
DW-1 (B1F0182-01) Water	Sampled: 06/07/01 17:3	0 Received	: 06/08/01	14:35					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	1F09004	06/09/01	06/13/01	WTPH-D	
Heavy Oil Range Hydrocarbon	ns ND	0.750	"	**	**	**	"	**	
Surrogate: 2-FBP	61.6 %	50-150			"	"	"	"	
Surrogate: Octacosane	76.5 %	50-150			"	n	"	"	
DW-2 (B1F0182-02) Water	Sampled: 06/08/01 09:3	0 Received	: 06/08/01	14:35					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	1F09004	06/09/01	06/13/01	WTPH-D	
Heavy Oil Range Hydrocarbon	ns ND	0.750	"	**	**	11	**	n	
Surrogate: 2-FBP	72.5 %	50-150			"	"	"	"	
Surrogate: Octacosane	94.4 %	50-150			<i>"</i> .	"	"	"	
DW-3 (B1F0182-03) Water	Sampled: 06/07/01 14:3	0 Received	: 06/08/01	14:35					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	1F09004	06/09/01	06/13/01	WTPH-D	
Heavy Oil Range Hydrocarbon	ns ND	0.750	**	,,	11	"	**	77	
Surrogate: 2-FBP	68.1 %	50-150			"	n	"	"	
Surrogate: Octacosane	92.8 %	50-150			n	n	"	"	
DW-4 (B1F0182-04) Water	Sampled: 06/08/01 08:3	0 Received	: 06/08/01	14:35					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	1F09004	06/09/01	06/13/01	WTPH-D	
Heavy Oil Range Hydrocarbon	ns ND	0.750		"	"	**	"	"	
Surrogate: 2-FBP	63.8 %	50-150			"	"	"	"	
Surrogate: Octacosane	78.5 %	50-150			"	"	"	"	
DW-5 (B1F0182-05) Water	Sampled: 06/07/01 13:3	0 Received	: 06/08/01	14:35					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	1F09004	06/09/01	06/13/01	WTPH-D	
Heavy Oil Range Hydrocarbon	ns ND	0.750	"	"	"	."	"	"	
Surrogate: 2-FBP	67.9 %	50-150	•		"	"	"	"	
Surrogate: Octacosane	89.5 %	50-150		an anti-s to second or the	**	"	<i>"</i>	<i>"</i>	an an ann an tao

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.



11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 425.420.9200 fax 425.420.9210 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Spokane

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

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

541.383.9310 fax 541.382.7588

Dalton, Olmsted and Fuglevand 10827 NE 68th Street Suite B

Kirkland WA, 98033

Project: Bellfield Office Park

Project Number: HEW-020

Reported:

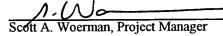
06/22/01 11:41

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C36 by WTPH-D (extended) with Silica Gel Clean-up North Creek Analytical - Bothell

Project Manager: Matthew Dalton

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW-6 (B1F0182-06) Water Sam	pled: 06/08/01 07:	30 Receive	d: 06/08/01	14:35					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	1F09004	06/09/01	06/13/01	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750	11	**	"	"	**	"	
Surrogate: 2-FBP	65.3 %	50-150			"	"	"	"	
Surrogate: Octacosane	82.5 %	50-150			"	"	#	II*	
BA-MW-1(R) (B1F0182-07) Wate	r Sampled: 06/0	7/01 16:30	Received:	06/08/01 14:	:35				
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	1F09004	06/09/01	06/13/01	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750	"	11	**	11	11	17	
Surrogate: 2-FBP	66.6 %	50-150	,		"	"	"	"	
Surrogate: Octacosane	82.3 %	50-150			"	"	"	"	
MW-K1 (B1F0182-08) Water Sa	mpled: 06/07/01	15:30 Rece	ived: 06/08/	01 14:35					
Diesel Range Hydrocarbons	ND	0.250	mg/l	1	1F09004	06/09/01	06/13/01	WTPH-D	
Heavy Oil Range Hydrocarbons	ND	0.750	11	"	H	"	**	11	
Surrogate: 2-FBP	63.7 %	50-150			"	"	"	"	
Surrogate: Octacosane	81.4 %	50-150			"	"	n	n	

North Creek Analytical - Bothell





Dalton, Olmsted and Fuglevand

10827 NE 68th Street Suite B

Kirkland WA, 98033

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 425.420.9200 fax 425.420.9210 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Spokane

Portland

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

Project: Bellfield Office Park Project Number: HEW-020

Project Manager: Matthew Dalton

Reported:

06/22/01 11:41

Total Metals by EPA 6000/7000 Series Methods North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
DW-1 (B1F0182-01) Water	Sampled: 06/07/01 17:30	Received	: 06/08/01	14:35					
Arsenic	0.00284	0.00100	mg/l	1	1F14030	06/14/01	06/15/01	EPA 6020	
Lead	0.0240	0.00100	"	"	**	"	n	"	
Zinc	0.0258	0.0100	17	11	"	"	11	"	
DW-2 (B1F0182-02) Water	Sampled: 06/08/01 09:30	Received	06/08/01	14:35					
Arsenic	0.00139	0.00100	mg/l	1	1F14030	06/14/01	06/15/01	EPA 6020	
Lead	0.0123	0.00100	n	17	"	"	**	**	
Zinc	0.0212	0.0100	17	11	**	#	- 11	"	
DW-3 (B1F0182-03) Water	Sampled: 06/07/01 14:30	Received	06/08/01	14:35					
Arsenic	0.00217	0.00100	mg/l	1	1F14030	06/14/01	06/15/01	EPA 6020	
Lead	0.00166	0.00100	"	"	"	**	31	**	
Zinc	ND	0.0100	"	"	**	*	n	n	
DW-4 (B1F0182-04) Water	Sampled: 06/08/01 08:30	Received	: 06/08/01	14:35					
Arsenic	ND	0.00100	mg/l	1	1F14030	06/14/01	06/15/01	EPA 6020	
Lead	0.00109	0.00100	"	"	11	**	"	37	
Zinc	ND	0.0100	"	"	11	11	"	78	
DW-5 (B1F0182-05) Water	Sampled: 06/07/01 13:30	Received:	06/08/01	14:35					
Arsenic	ND	0.00100	mg/l	1	1F14030	06/14/01	06/15/01	EPA 6020	
Lead	0.00410	0.00100	11	**	11	11	n	n,	
Zinc	0.0167	0.0100	"	11	,,	**	11	Ħ	
DW-6 (B1F0182-06) Water	Sampled: 06/08/01 07:30	Received:	06/08/01	14:35					
Arsenic	0.00135	0.00100	mg/l	1	1F14030	06/14/01	06/15/01	EPA 6020	
Lead	ND	0.00100	11	11	n	19	**	n	
Zinc	ND	0.0100	,,	**	**	**	**	**	

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

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

Spokane 509.924.9200 fax 509.924.9290

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

Dalton, Olmsted and Fuglevand

10827 NE 68th Street Suite B Kirkland WA, 98033

Project: Bellfield Office Park

Project Number: HEW-020 Project Manager: Matthew Dalton Reported:

06/22/01 11:41

Polynuclear Aromatic Compounds per EPA Method 8310 North Creek Analytical - Portland

		Reporting	** .						
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW-2 (B1F0182-02) Water	Sampled: 06/08/01 09:30	Received	l: 06/08/01	14:35					
Acenaphthene	ND	5.00	ug/l	1	1060421	06/13/01	06/19/01	EPA 8310	
Acenaphthylene	ND	5.00	"	"	"	**	Ħ	**	
Anthracene	ND	5.00	"	"	17	**	"	**	
Benzo (a) anthracene	ND	0.100	"	"	17	H	**	**	
Benzo (a) pyrene	ND	0.100	"	"	11	11	"	**	
Benzo (b) fluoranthene	ND	0.100	"	"	11	"	**	"	
Benzo (ghi) perylene	ND	0.100	n	11	11	17	n	"	
Benzo (k) fluoranthene	ND	0.100	"	n	n	"	"	"	
Chrysene	ND	0.100	"	"	11	H	**	n	
Dibenzo (a,h) anthracene	ND	0.200	11	**	11	17	. 11	n	
Fluoranthene	ND	0.100	**	W	11	"	11	n	
Fluorene	ND	0.500	Ħ	**	n	н	"	n	
Indeno (1,2,3-cd) pyrene	ND	0.200	n	"	n	"	"	n ·	
Naphthalene	ND	5.00	"	"	**	"	"	11	
Phenanthrene	ND	0.500	"	"	17	"	"	11	
Pyrene	ND	0.100	"	11	11	"	**	**	
Surrogate: 2-Fluorobiphenyl	54.2 % 3	4-112			"	"	"	"	
DW-5 (B1F0182-05) Water	Sampled: 06/07/01 13:30	Received	l: 06/08/01	14:35					
Acenaphthene	ND	5.00	ug/l	1	1060421	06/13/01	06/19/01	EPA 8310	
Acenaphthylene	ND	5.00	"	"	17	**	**	"	
Anthracene	ND	5.00	"	"	17	**	**		
Benzo (a) anthracene	ND	0.100	**	n	19	**	"	"	
Benzo (a) pyrene	ND	0.100	"	H	**	**	11	**	
Benzo (b) fluoranthene	ND	0.100	"	H	"	"	H		
Benzo (ghi) perylene	ND	0.100	"	**	11	**	n	**	
Benzo (k) fluoranthene	ND	0.100	**	**	Ħ	"	"	**	
Chrysene	ND	0.100	uu	n					
Dibenzo (a,h) anthracene	ND	0.200	"	"	11	"	11	**	
Fluoranthene	ND	0.100	"	"	**	"	"	**	
Fluorene	ND	0.500	11	11	11	**	"	**	
Indeno (1,2,3-cd) pyrene	ND	0.200	n	**	**	11	11	"	
Naphthalene	ND	5.00	11	"	17	"	n	**	
Phenanthrene	ND	0.500	**	**	**	*	"	**	
Pyrene	ND	0.100	**	*	"	н	n	"	
Surrogate: 2-Fluorobiphenyl	41.6% 3	4-112			,,	"	"	"	

North Creek Analytical - Bothell



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

425.420.9200 fax 425.420.9210

423-420-9200 Tax 423-420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509-924-9200 Fax 509-924-9290
9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503-906-9200 Fax 503-906-9210
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 Spokane

Portland

541.383.9310 fax 541.382.7588

Dalton, Olmsted and Fuglevand

10827 NE 68th Street Suite B Kirkland WA, 98033

Project: Bellfield Office Park

Project Number: HEW-020 Project Manager: Matthew Dalton

Reported: 06/22/01 11:41

Polynuclear Aromatic Compounds per EPA Method 8310 North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BA-MW-1(R) (B1F0182-07) Water	Sampled: 06/0	7/01 16:30	Received: (06/08/01 14:	35			*************************************	
Acenaphthene	ND	5.00	ug/l	1	1060421	06/13/01	06/19/01	EPA 8310	
Acenaphthylene	ND	5.00	"	**	**	"	**	"	
Anthracene	ND	5.00	n	n	**	57	"	**	
Benzo (a) anthracene	ND	0.100	11	n	*	"	11	"	
Benzo (a) pyrene	ND	0.100	"	n	17	n	11	**	
Benzo (b) fluoranthene	ND	0.100	11	"	Ħ	n	"	"	
Benzo (ghi) perylene	ND	0.100	"	**	"	11	"	**	
Benzo (k) fluoranthene	ND	0.100	11	"	"	"	"	"	
Chrysene	ND	0.100	· ·	n	**	"	n	**	
Dibenzo (a,h) anthracene	ND	0.200	**	**	**	**	n	**	
Fluoranthene	ND	0.100	11	"	"	"	n	11	
Fluorene	ND	0.500	**	"	11	11	**	11	
Indeno (1,2,3-cd) pyrene	ND	0.200	**	11	**	"	"	H	
Naphthalene	ND	5.00	"	17	**	71	**	**	
Phenanthrene	ND	0.500	"	**	**	Ħ	**	**	
Pyrene	ND	0.100	**	**	11	n	n	Ħ	
Surrogate: 2-Fluorobiphenyl	46.2 %	34-112		 	"	"	"	"	
MW-K1 (B1F0182-08) Water Sam	pled: 06/07/01 1	5:30 Rece	ived: 06/08/	01 14:35					
Acenaphthene	ND	5.00	ug/l	1	1060421	06/13/01	06/19/01	EPA 8310	
Acenaphthylene	ND	5.00	17	"	"	**	"	11	
Anthracene	ND	5.00	**	"	**	**	"	**	
Benzo (a) anthracene	ND	0.100	**	"	**	**	"	**	
Benzo (a) pyrene	ND	0.100	Ħ	**	**	11	**	n	
Benzo (b) fluoranthene	ND	0.100	11	**	19	**	**	11	
Benzo (ghi) perylene	ND	0.100	"	n	77	**	**	•	
Benzo (k) fluoranthene	ND	0.100	**	11	**	**	**	"	
Chrysene	ND ND	0.100						d	Leavenment
Dibenzo (a,h) anthracene	ND	0.200	"	**	**	11	**	n	
Fluoranthene	0.251	0.100	**	"	"	,,	"	"	
Fluorene	1.02	0.500	**	**	,,	**	11	**	
Indeno (1,2,3-cd) pyrene	ND	0.200	"	**	**	11	11		
Naphthalene	ND	5.00	n	"		**	**	n	
Phenanthrene	1.70	0.500	"	11	**	••	**	"	
Pyrene	0.211	0.100	**	"	11	"	"	**	
Surrogate: 2-Fluorobiphenyl	57.1 %	34-112			"	"	"	"	

North Creek Analytical - Bothell

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



11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 425.420.9200 fax 425.420.9210 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290 Seattle

Spokane

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

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

Dalton, Olmsted and Fuglevand

10827 NE 68th Street Suite B Kirkland WA, 98033

Project: Bellfield Office Park

Project Number: HEW-020 Project Manager: Matthew Dalton Reported:

06/22/01 11:41

Polynuclear Aromatic Compounds per EPA Method 8310 - Quality Control North Creek Analytical - Portland

			Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1060421:	Prepared 06/13/01	Using EP	PA 3520/60	0 Series			_			*	W 1
Blank (1060421-BI	LK1)										
Acenaphthene		ND	5.00	ug/l		•					
Acenaphthylene		ND	5.00	**							
Anthracene		ND	5.00	,,							
Benzo (a) anthracene		ND	0.100	**							
Benzo (a) pyrene		ND	0.100	"							
Benzo (b) fluoranthene	e	ND	0.100	**							
Benzo (ghi) perylene		ND	0.100	u							
Benzo (k) fluoranthene	•	ND	0.100	**							
Chrysene		ND	0.100	**							
Dibenzo (a,h) anthrace	ne	ND	0.200	**							
Fluoranthene		ND	0.100	"							
Fluorene		ND	0.500	H							
Indeno (1,2,3-cd) pyre:	ne	ND	0.200	**							
Naphthalene		ND	5.00	**							
Phenanthrene		ND	0.500	19					-		
Pyrene		ND	0.100	**							
Surrogate: 2-Fluorobij	phenyl	9.31		"	25.0		37.2	34-112			
LCS (1060421-BS1)										
Acenaphthylene		6.89	5.00	ug/l	10.0		68.9	36-125			
Benzo (k) fluoranthene	•	0.452	0.100	11	0.500		90.4	67-118			
Pyrene		0.400	0.100	**	0.500		80.0	59-128			
Surrogate: 2-Fluorobij	phenyl	15.1		"	25.0		60.4	34-112			
LCS Dup (1060421	-BSD1)										
Acenaphthylene		6.42	5.00	ug/l	10.0		64.2	36-125	7.06	50	
Benzo (k) fluoranthene	;	0.446	0.100	**	0.500		89.2	67-118	1.34	50	
Ругепе		0.383	0.100	"	0.500		76.6	59-128	4.34	50	
Surrogate: 2-Fluorobij	phenyl	14.5		"	25.0		58.0	34-112			

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.



BIF018Z

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132

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

 (425) 420-9200
 FAX 420-9210

 (509) 924-9200
 FAX 924-9290

 (503) 906-9200
 FAX 906-9210

(541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #:

		<u> </u>											110			•								
CLIENT: DACTON OL	MSTED 4 1	TUGLEUM	N			INVOICE TO: QOF										TURNAROUND REQUEST in Business Days*								
REPORT TO: MATT ON								u							1	_,	—, ┌──┐	nic & Ino	rganic Analyses	· 	·			
ADDRESS:	CION															~ ~	7 5	4	3 2		< 1			
															\ \(\sigma_{S}^{\text{*}}	STD. Petroleum Hydrocarbon Analyses								
PHONE:		FAX:				P.O. N	IUMBE	R:							5 4 3 2 1 <1									
PROJECT NAME: BULLFIE	10 animer	PANK	<u></u>	,			REQUESTED ANALYSES							_	ST			Please Specify	,					
PROJECT NUMBER: HEW -			3	8	නී												ОТН	ER _			_			
SAMPLED BY: Us COOPI	<u> </u>		文学	PAHS 8310	8	16 Zv										*Turnare	ound Requests	t less than s	standard may incu	r Rush Cha	trges.			
CLIENT SAMPLE	SAMP	LING	Ho	书	8	5,0									MA	TRIX	# OF				NCA WO			
IDENTIFICATION	DATE/	TIME	W7PH-0x W/Sh. CEMMO	\$	Plas	\$									(W,	S, O)	CONT.		COMMENTS	;	ID			
1. DW-1	6/7/01	1730	X			X									\	W	2	BIF	F018Z.	-	01			
2. OW-Z	6/8/01	0930	X	X		X											3				SO			
3. DW-3	6/7/01	1430	X		X	X											3		-		03			
4. DW-4	6/8/01	0630	X		X	X											3				04			
5. OU-5	6/7/01	1330	X	X	X	X											4				20			
6. DW-6	6/8/01	<i>6730</i>	X		X	X											3				a			
7. BA-MW-1/R)	6/7/01	1630	乂	X	X	X								:			4				07			
8. MW-KI	47/01	1530	X	X	X	X									1	/	4				08			
9.	V																							
10.																								
11.		·																-						
12.										-									• 4					
13.											-		S	amples v	vere no	ot @2	6C Up	on Re	3Ceibr					
14.																								
15.													1											
RELINQUISHED BY:			مر				6/8/		RECEI	VED BY	:	=2_	J		í			100			8-8-01			
PRINT NAME: A COOPE		FIRM: 1	20X				143		PRINT	NAME:	· · · · · · · · · · · · · · · · · · ·	<u>3.</u>	aka	<u>uravicl</u>	<u> </u>	FIRM:	^	U CA		TIME:	1435			
RELINQUISHED BY:						DATE:			j	VED BY	:									DATE:				
PRINT NAME: ADDITIONAL REMARKS:		FIRM:				TIME:			PRINT	NAME:						FIRM:			T	TIME:				
ADDITIONAL REMARKS:																	7,	1	TEMP:					