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ECI Project No. 0422-03

September 5, 2012

Ron Eaton, Eaton Family LLC
C\o Linn Larson
Larson Commercial-Industrial Relaters
1201 Pacific Avenue, Suite 1400
Tacoma, WA 98402

Re: **Remedial Excavation Soil Sampling**
2119 Mildred Street
Fircrest, Washington 98466

Mr. Eaton:

EconCon, Inc., (ECI), per your request, completed soil sampling activities following the excavation of tetrachloroethylene (PCE) impacted soil on August 7th and 8th, 2012. The project was located at 2119 Mildred Street, Fircrest, Washington (the "Subject Property / Property"; Figures 1 and 2). This work was completed to supplement previous subsurface investigations where PCE impacted soil had been identified.

Background

Previous investigations identified perchloroethylene (PCE) exceeding the Washington State Administrative Code (WAC) 173-340 Model Toxic Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses (CUL) of 0.05 milligrams per kilogram (mg/kg) in four borings, B1:5', B13:7', B14:5' and B14:9' at concentrations ranging from 0.087 mg/kg to 0.23 mg/kg. These sample locations were in the same vicinity as the 2005 Kleinfelder sample locations (Limited Phase II Environmental Site Assessment & Supplemental Phase II Environmental Study – Kleinfelder 2005), near a Freeman Family (property owner through 2012) reported "drainage area" at the southeast corner of the building, extending to the southeast (Figure 3).

The extent of PCE impacted soil was delineated using Kleinfelder's 2005 data obtained from borings B79, B81, B82, B83 and B85, with samples reported below the laboratory method reporting level (MRL). Using the data collected by ECI and reported by Kleinfelder, the impacted area appears to be approximately 25 to 50 feet east-west by 50 to 100 feet north-south ranging from 4 to 10 feet below ground surface (bgs).

Contaminates of Concern

Previous investigation identified an area approximately 45 feet by 15 feet extending between 8 and 13 bgs. Soil was reported impacted with PCE at concentrations exceeding the MTCA Method-A (MTCA-A) Soil CUL (Focused Subsurface Investigation – ECI, March 2012).

Table 1: Primary Contaminate of Concern

MTCA Cleanup Regulation 173-340-900: Tables 740-1		
Primary Contaminant of Concern	**Analytical Method**	**Cleanup Levels (CUL) Soil**
Perchloroethylene (PCE)	EPA 8260C	0.05 mg/kg

Soil Excavation

Starting on the north, immediately north of ECI boring B14, soil was excavated and stockpiled adjacent to the excavation on ten millimeter plastic sheeting. Previous sampling by ECI and others provided a general excavation limit / boundary. Soil excavation continued at the direction of environmental professionals through the collection and onsite soil sample analysis.

Sample Collection & Analysis

Starting on the north and extending to the south, soil samples were collected at and approximate 10 foot interval along the excavation sidewalls and from the floor of the excavation. Nine soil samples were collected from the perimeter of the excavation at seven to nine feet bgs, and six from the floor of the excavation at elevations ranging from eleven to thirteen feet bgs.

Samples were collected by a properly trained environmental professional using industry standard sampling techniques, including Environmental Protection Agency (EPA) sampling method 5035. Select soil was gathered form the sample locations and placed into Labroatory provided, new analyte specific sample containers. Following collection, each sample was assigned a unique sample identification number and submitted to an onsite environmental laboratory for analysis. Each sample was analyzed for chlorinated volatile organic compounds by EPA Method 8260C.

Sample analysis reported each of the confirmation soil samples below the MTCA-A CUL for PCE. Two samples, B8-8-9 and B10-8-9' were each reported containing PCE at 0.021 and 0.027 mg/kg, exceeding the laboratory method reporting limit of 0.02 mg/kg. Additionally, five other volatile organic compounds were analyzed. Each sample was analyzed for Vinyl Chloride (VC), 1,1-Dichlorothene, trans-1,2-Dichloroethene, cis -1,2-Dichloroethene and Trichloroethene (TCE) and reported below the laboratory method reporting level or none-detect.

Table 2: Confirmation Soil Sampling Results

Sample Identification	Sample Depth	Analytical Method: EPA 8260C					
		Vinyl Chloride (VC)	1,1-Dichlorothene	trans-1,2-Dichloroethene	*cis* -1,2-Dichloroethene	Trichloroethene (TCE)	Tetrachloroethene (PCE)
		Analytical method reported in milligrams per kilograms (mg/Kg)					
S1:11-12'	11-12' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S2:11-12'	11-12' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S3:7-8'	7-8' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S4-7-8'	7-8' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S5:11-12'	11-12' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S6:7-8'	7-8' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S8:8-9'	8-9' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	0.021
S9:11-12'	11-12' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S10:8-9'	8-9' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	0.027
S11:8-9'	8-9' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S12:12-13'	12-13' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S13:7-8'	7-8' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S14:7-8'	7-8' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
S15:11-12'	11-12' bgs	<0.02	<0.05	<0.02	<0.02	<0.03	<0.02
Labroatory MRL		0.02	0.05	0.02	0.02	0.03	0.02
MTCA-A Cleanup Level		--	--	--	--	0.03	0.05

Sample reported in milligrams per kilogram (mg/kg), -- = No Method A CUL

Cleanup Levels

The Washington State Administrative Code (WAC) 173-340 – Model Toxic Control Act (MTCA) establishes administrative processes and standards to identify, investigate, and clean up facilities where hazardous substances have been identified. Specific CULs have been established to provide guidance during evaluation of potential hazardous materials impact to soil and groundwater. The most restrictive and common CULs are published in WAC 173-360-900 – Tables 740-1 - Method A Soil Cleanup Levels for Unrestricted and Uses (Attached).

Conclusions

Soil, previously identified as containing PCE at concentrations exceeding the MTCA-A CUL of 0.05 mg/kg was excavated and stockpiled on 10 millimeter plastic sheeting. Approximately 250 cubic yards of soil was excavated and stockpiled. Soil samples collected from the permitted and floor of the excavation area were each reported below the CUL for PCE.

Limitations

This report is the property of Ron Eaton, Eaton Family, LLC and his authorized representatives or affiliates and was prepared in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions. This report is intended for specific application to the property located at 2119 Mildred Street, Fircrest, Washington. No other warranty, expressed or implied, is made. The analyses and recommendations presented in this report are based upon data obtained from our review of available information at the time of preparing this report, our test borings drilled on the Site, or other noted data sources. Conditional changes may occur through time by natural or man-made process on this or adjacent properties.

We appreciate the opportunity to provide environmental consulting services to you on this project. If you have any questions or comments regarding this submittal please do not hesitate to contact us at (253) 238-9270.

Respectively Submitted,

Kaitlyn M. Allegretti
Environnemental Scientist

Stephen M. Spencer
Sr. Environnemental Scientist

Enclosures

Attachment A – Project Figures

- Figure 1 – Site Location Map
- Figure 2 – Site Topographic Map
- Figure 3 – Site Representation With ECI & Kleinfelder Boring Locations
- Figure 4 – Remedial Excavation Confirmation Sample Location Map

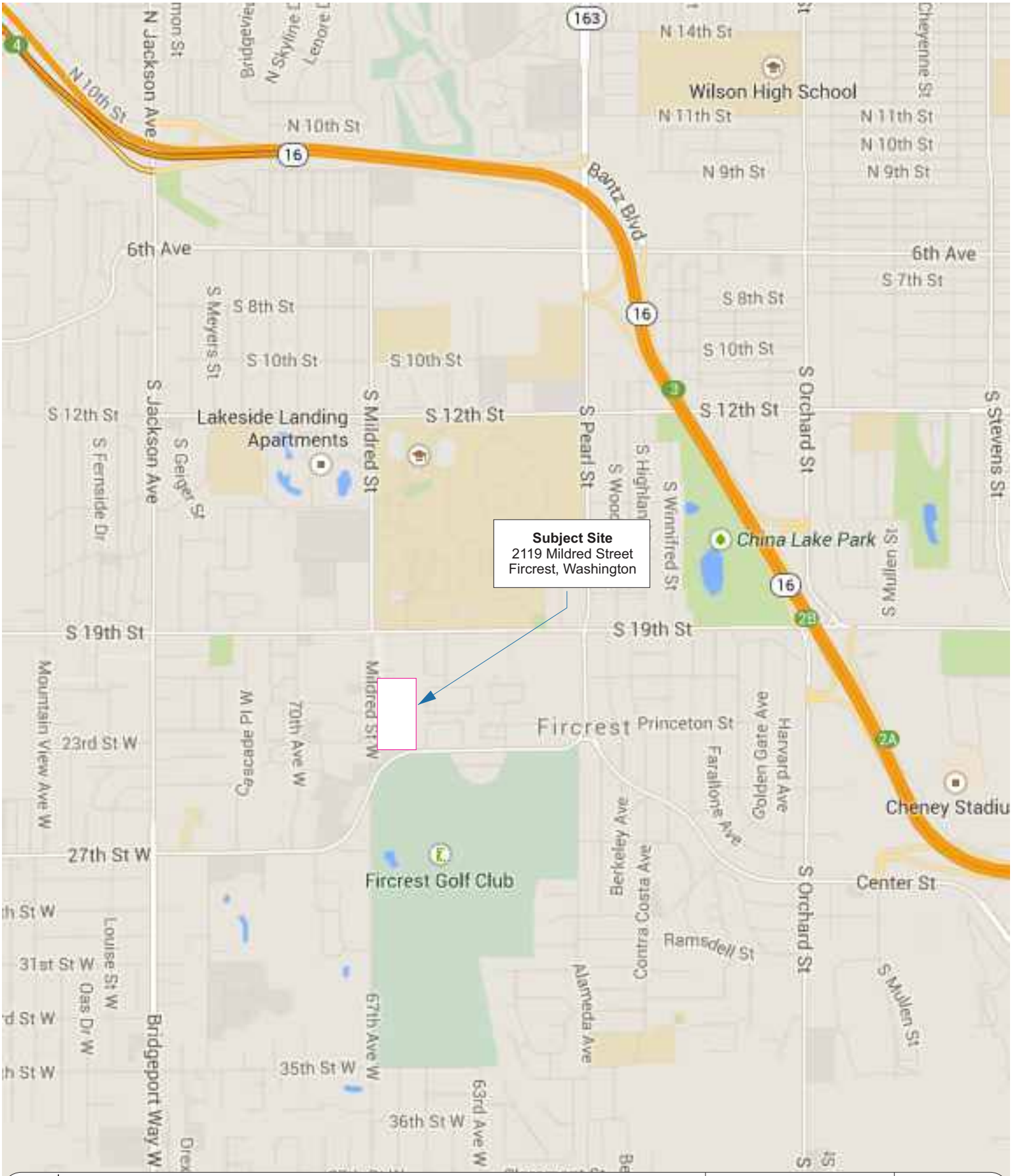
Attachment B – Project Analytical Results

- Laboratory Analytical Results
- Sample Chain of Custody

Attachment A

Project Figures

Figure 1 – Site Location Map
Figure 2 – Site Topographic Map
Figure 3 – Site Representation With ECI & Kleinfelder Boring Locations
Figure 4 – Remedial Excavation Confirmation Sample Location Map



N
Not To Scale

Site Location Map
Remedial Excavation
2119 Mildred Street
Fircrest, Washington

Date:	April 2 , 2012
Completed By:	S.Spencer
Reviewed By.:	S.Spencer
Version:	ECI-001
Project No.:	0422-03

Figure No.: 01
Sheet 01 of 04

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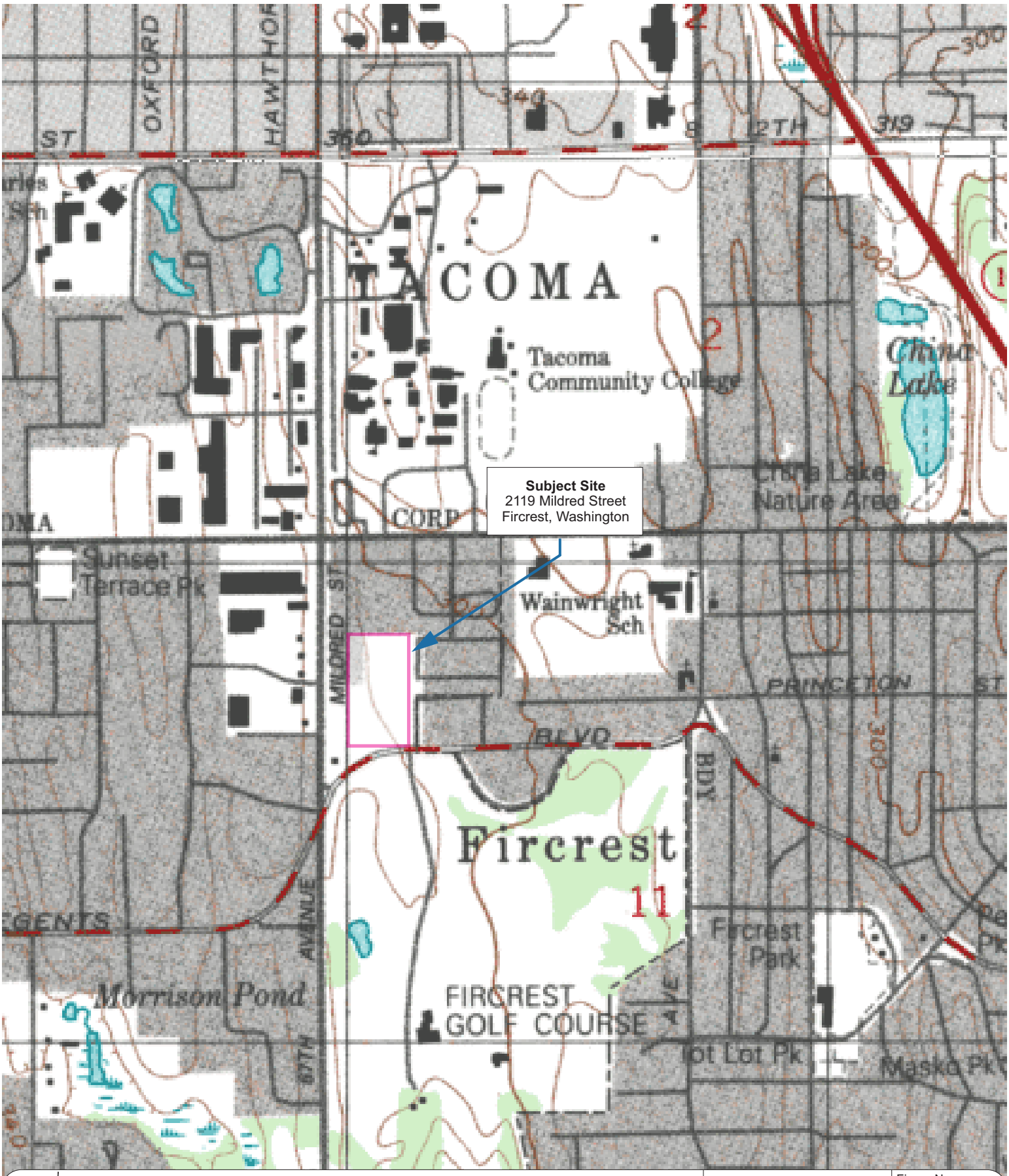

N
Not To Scale

Site Topographic Map
Remedial Excavation
2119 Mildred Street
Fircrest, Washington

Date:	April 2 , 2012
Completed By:	S.Spencer
Reviewed By.:	S.Spencer
Version:	ECI-001
Project No.:	0422-03

Figure No.: 01
Sheet 02 of 04

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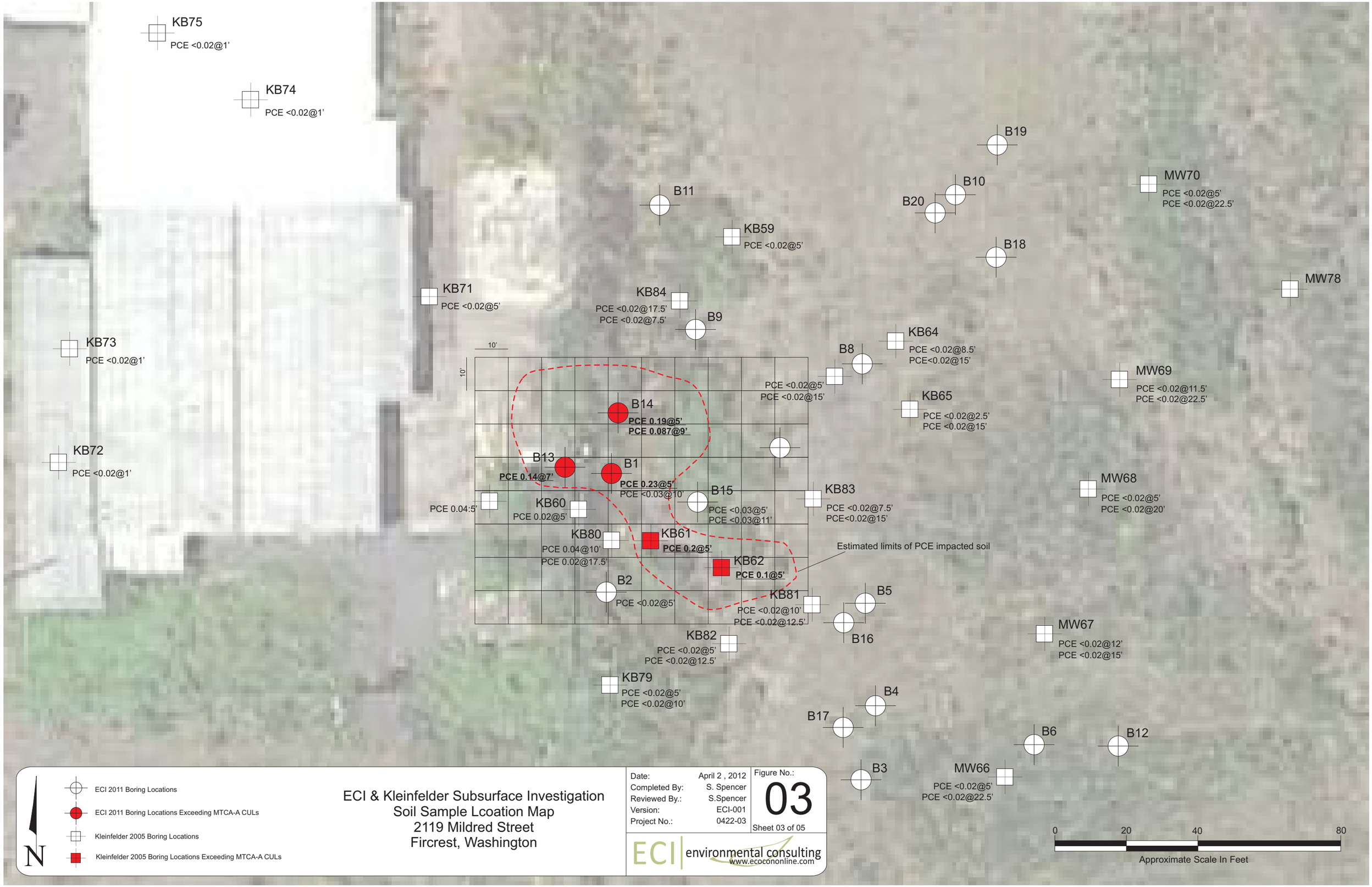

ECI & Kleinfelder Subsurface Investigation
Soil Sample Lcoation Map
2119 Mildred Street
Fircrest, Washington

Date:	April 2 , 2012
Completed By:	S. Spencer
Reviewed By.:	S.Spencer
Version:	ECI-001
Project No.:	0422-03

Figure No.: 03

Sheet 03 of 05

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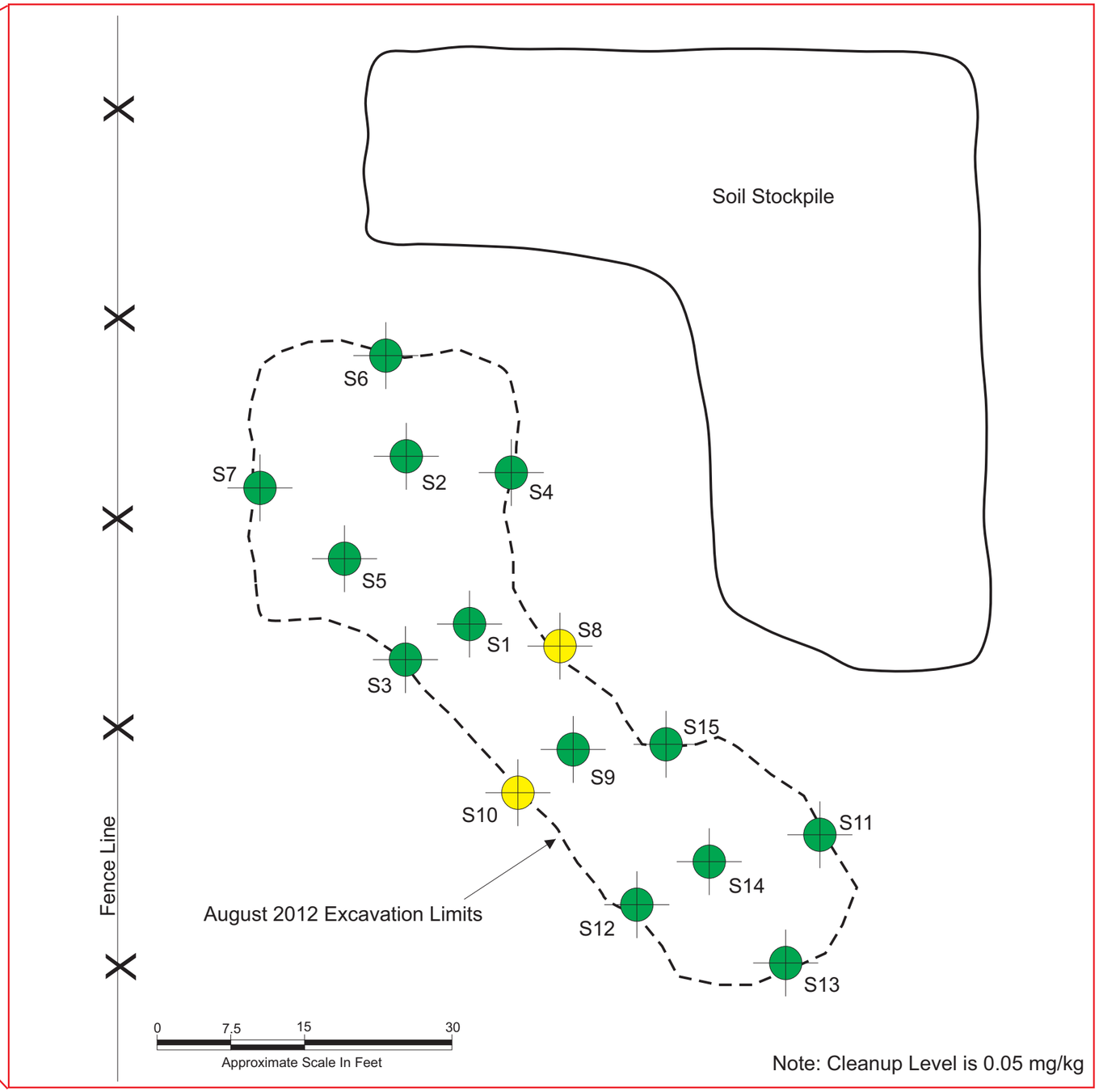

N

Explanation

Soil sample locations reporter below laboratory reporting levels and below MTCA-A Cleanup Levels (CUL)

Soil sample locations reported above laboratory reporting levels of 0.02 mg/kg but below the CUL of 0.05 mg/kg

PCE Soil Sample Location Map
Remedial Excavation
2119 Mildred Street
Fircrest, Washington

Date:	April 2 , 2012
Completed By:	S. Spencer
Reviewed By.:	S.Spencer
Version:	ECI-001
Project No.:	0422-03

Figure No.: 04

Sheet 04 of 05

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Photograph 01: Excavation area - View east

Photograph 02: Excavation of soil

Photograph 03: Soil sample collection - EPA Method 5035

Photograph 04: Excavation area - View West

Photograph 05: Continued excavation of soil

Photograph 06: Soil Stockpile - View South

N

Not To Scale

Project Photographs
Remedial Excavation
2119 Mildred Street
Fircrest, Washington

Date:	April 2 , 2012
Completed By:	S.Spencer
Reviewed By.:	S.Spencer
Version:	ECI-001
Project No.:	0422-03

Figure No.: 05

Sheet 05 of 05

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Attachment B

Project Analytical Restyles

Laboratory Analytical Results
Sample Chain Of Custody

Libby Environmental, Inc.

Chain of Custody Record

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 8-8-12 Page: 1 of 2

Client: ECT

Project Manager: Stephen Spencer

Address: 1913 Forest

Project Name: 0404-02 FREEMAN / EATON SUBSURFACE INVESTIGATION

Phone: 253-921-7059 Fax: 253-369-6228

Location: 2119 MILDRED City: ~~TACOMA~~ FIRCREST 98466

Client Project # 0404-02

Collector: K. ALLEGRETTI / (503) 459-1058 Date of Collection: 8-8-12

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx Ext.	PAH 8270	PCB's 8082	MTCA 5 Metals	PCE		Field Notes
1 S1-~~15~~ 11-12'	~~15~~	8:50	Dirt	Voa											✓			11'-12'
2 S2-~~12~~ 11-12'	~~12~~	9:00	Dirt	Voa											✓			11-12'
3 S3-7'-8'	7'-8'	9:09	Soil	Voa											✓			
4 S4-7'-8'	7'-8'	9:13	Soil	Voa											✓			
5 S5-11-12	11'-12'	9:20	Soil	Voa											✓			
6 S6-7-8	7'-8'	9:30	Soil	Voa											✓			
7 S7-7-8	7'-8'	9:38	Soil	Voa											✓			~~DUP~~ ~~Hold~~
8 S8-8'-9'	8'-9'	10:34	Soil	Voa											✓			
9 S9-11-12'	11-12	10:42	Soil	Voa											✓			
10 S10-8-9'	8-9	10:50	soil	VOA											✓			
11 S11-8-9	8'-9'	2:07	Soil	Voa											✓			
12 S12-18-13	12'-13'	2:10	Soil	Voa											✓			
13 S13-7-8	7-8	2:15	Soil	Voa											✓			
14 S14-7-8	7-8'	3:45	soil	VOA											✓			
15 S15-11-12	11-12'	3:55	Soil	VOA											✓			
16 SP1	NA	2:35	Soil	VOA											✓			~~HOLD~~ NORMAL TAT
17 SP2	NA	2:37	Soil	VOA											✓			Standard Turnaround
18 SP3	NA	2:39	Soil	VOA											✓			

Relinquished by:	Date / Time	Received by:	Date / Time
Kathy Allegretti	8/8/12 4:00 pm	Paul Burke	8/8/12 4:00

Sample Receipt:

Good Condition?	
Cold?	
Seals Intact?	
Total Number of Containers	

Remarks:

EIM PLEASE

☺

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

Chain of Custody Record

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 8/8/12 Page: 2 of 2

Client: ECI

Project Manager: Stephen Spencer

Address: ~~1913 Fawcett Ave~~ P.O. Box 153, Fox Isl.

Project Name: 0404-02 Freeman/Eaton Subsurface Investigation

Phone: 253-921-7059 Fax: 253-369-6228

Location: 2119 MILDRED City:

Client Project # 0404-02

Collector: K. Allegretti Date of Collection: 8/8/12

	Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx Ext.	PAH 8270	PCB's 8082	MTCA 5 Metals	PCE			Field Notes
1	SP-4	N/A	2:42	soil	VOA												X			~~HOLD~~ NORMAL TAT
2	SP-5	N/A	2:45	soil	VOA												X			~~HOLD~~ ↓
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				

Relinquished by:	Date / Time	Received by:	Date / Time
Kathy Allegretti	8/8/12 4:00 PM	Paul Bunge	8/8/12 4:00 pm
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt:

Good Condition?	
Cold?	
Seals Intact?	
Total Number of Containers	

Remarks:

FEDEX PLEASE!!

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
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FAX: (360) 352-4154
Email: libbyenv@aol.com

FREEMAN PROJECT
ECI
Fircrest, Washington
Libby Project # L120808-10
Client Project # 0404-02

Specific Halogenated and Aromatic Hydrocarbons by EPA 8260C in Soil

Sample Description		Method Blank	S1-11-12	S2-11-12	S3-7-8	S4-7-8	S4-7-8 Dup
Date Sampled		n/a	8/8/12	8/8/12	8/8/12	8/8/12	8/8/12
Date Analyzed	PQL (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)
Vinyl Chloride (VC)	0.02	nd	nd	nd	nd	nd	nd
1,1-Dichlorothene	0.05	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
cis -1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
Trichloroethene (TCE)	0.03	nd	nd	nd	nd	nd	nd
Tetrachloroethene (PCE)	0.02	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		97	85	98	87	88	91
1,2-Dichloroethane-d4		103	81	101	75	104	101
Toluene-d8		92	91	94	110	91	96
4-Bromofluorobenzene		91	85	90	84	90	93

"nd" Indicates not detected at listed detection limi
"int" Indicates that interference prevents determinatio

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

FREEMAN PROJECT
ECI
Fircrest, Washington
Libby Project # L120808-10
Client Project # 0404-02

Specific Halogenated and Aromatic Hydrocarbons by EPA 8260C in Soil

Sample Description		S5-11-12	S6-7-8	S7-7-8	S8-8-9	S9-11-12	S10-8-9
Date Sampled		8/8/12	8/8/12	8/8/12	8/8/12	8/8/12	8/8/12
Date Analyzed	PQL (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)
Vinyl Chloride (VC)	0.02	nd	nd	nd	nd	nd	nd
1,1-Dichlorothene	0.05	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
cis -1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
Trichloroethene (TCE)	0.03	nd	nd	nd	nd	nd	nd
Tetrachloroethene (PCE)	0.02	nd	nd	nd	0.021	nd	0.027
Surrogate Recovery							
Dibromofluoromethane		89	76	85	89	85	77
1,2-Dichloroethane-d4		93	71	82	91	87	66
Toluene-d8		95	94	93	94	93	108
4-Bromofluorobenzene		88	86	91	93	89	78

"nd" Indicates not detected at listed detection limi
"int" Indicates that interference prevents determinatio

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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FREEMAN PROJECT
ECI
Fircrest, Washington
Libby Project # L120808-10
Client Project # 0404-02

Specific Halogenated and Aromatic Hydrocarbons by EPA 8260C in Soil

Sample Description		S11-8-9	S12-12-13	S13-7-8	S13-7-8 Dup	S14-7-8	S15-11-12
Date Sampled		8/8/12	8/8/12	8/8/12	8/8/12	8/8/12	8/8/12
Date Analyzed	PQL (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)
Vinyl Chloride (VC)	0.02	nd	nd	nd	nd	nd	nd
1,1-Dichlorothene	0.05	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
cis -1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
Trichloroethene (TCE)	0.03	nd	nd	nd	nd	nd	nd
Tetrachloroethene (PCE)	0.02	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		89	74	91	89	84	90
1,2-Dichloroethane-d4		95	70	95	97	90	98
Toluene-d8		90	94	94	89	92	88
4-Bromofluorobenzene		92	91	91	93	95	95

"nd" Indicates not detected at listed detection limi
"int" Indicates that interference prevents determinatio

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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Email: libbyenv@aol.com

FREEMAN PROJECT
ECI
Fircrest, Washington
Libby Project # L120808-10
Client Project # 0404-02

QA/QC Data - EPA 8260C Analyses

Sample Identification: S2-11-12							
	Matrix Spike			Matrix Spike Dup			RPD
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	
1,1-Dichloroethene	0.50	0.64	128	0.50	0.64	128	0.0
Chlorobenzene	0.50	0.48	96	0.50	0.49	98	2.1
Trichloroethene (TCE)	0.50	0.50	100	0.50	0.51	102	2.0
Surrogate Recovery							
Dibromofluoromethane			90			90	
1,2-Dichloroethane-d4			90			109	
Toluene-d8			94			89	
4-Bromofluorobenzene			86			94	

Laboratory Control Sample			
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)
1,1-Dichloroethene	0.50	0.58	116
Chlorobenzene	0.50	0.62	124
Trichloroethene (TCE)	0.50	0.54	108
Surrogate Recovery			
Dibromofluoromethane			85
1,2-Dichloroethane-d4			82
Toluene-d8			87
4-Bromofluorobenzene			88

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

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Olympia, WA 98506
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FAX: (360) 352-4154
Email: libbyenv@aol.com

FREEMAN PROJECT
ECI
Fircrest, Washington
Libby Project # L120808-10
Client Project # 0404-02

Specific Halogenated and Aromatic Hydrocarbons by EPA 8260C in Soil

Sample Description		Method Blank	SP1	SP2	SP3	SP3 Dup	SP4
Date Sampled		n/a	8/8/12	8/8/12	8/8/12	8/8/12	8/8/12
Date Analyzed	PQL (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)	8/8/12 (mg/kg)
Vinyl Chloride (VC)	0.02	nd	nd	nd	nd	nd	nd
1,1-Dichlorothene	0.05	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
cis -1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
Trichloroethene (TCE)	0.03	nd	nd	nd	nd	nd	nd
Tetrachloroethene (PCE)	0.02	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		99	87	98	77	95	88
1,2-Dichloroethane-d4		109	87	99	68	118	92
Toluene-d8		90	91	94	102	90	92
4-Bromofluorobenzene		92	87	89	78	95	90

"nd" Indicates not detected at listed detection limi
"int" Indicates that interference prevents determinatio

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

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FREEMAN PROJECT
ECI
Fircrest, Washington
Libby Project # L120808-10
Client Project # 0404-02

Specific Halogenated and Aromatic Hydrocarbons by EPA 8260C in Soil

Sample Description		SP5
Date Sampled		8/8/12
Date Analyzed	PQL (mg/kg)	8/8/12 (mg/kg)
Vinyl Chloride (VC)	0.02	nd
1,1-Dichlorothene	0.05	nd
trans-1,2-Dichloroethene	0.02	nd
cis-1,2-Dichloroethene	0.02	nd
Trichloroethene (TCE)	0.03	nd
Tetrachloroethene (PCE)	0.02	nd
Surrogate Recovery		
Dibromofluoromethane		89
1,2-Dichloroethane-d4		91
Toluene-d8		92
4-Bromofluorobenzene		90

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QA/QC Data - EPA 8260C Analyses

Sample Identification: SP1							
	Matrix Spike			Matrix Spike Dup			RPD
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	
1,1-Dichloroethene	0.50	0.58	116	0.50	0.63	126	8.3
Chlorobenzene	0.50	0.46	92	0.50	0.46	92	0.0
Trichloroethene (TCE)	0.50	0.63	126	0.50	0.56	112	11.8
Surrogate Recovery							
Dibromofluoromethane			80			82	
1,2-Dichloroethane-d4			65			76	
Toluene-d8			109			87	
4-Bromofluorobenzene			78			86	

Laboratory Control Sample			
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)
1,1-Dichloroethene	0.50	0.6	118
Chlorobenzene	0.50	0.4	88
Trichloroethene (TCE)	0.50	0.5	98
Surrogate Recovery			
Dibromofluoromethane			91
1,2-Dichloroethane-d4			94
Toluene-d8			90
4-Bromofluorobenzene			90

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke