Dalton, Olmsted & Fuglevand, Inc. *Environmental Consultants*

11711 Northcreek Parkway S., Suite D101 • Bothell, Washington 98011
Telephone (206) 486-7905 (FAX 486-7651)

MEMORANDUM

TO: Nadine Romero - Department of Ecology

FROM: Matthew Dalton - Dalton, Olmsted & Fuglevand, Inc.
Stuart Triolo - Weyerhaeuser Company

DATE: November 22, 1995

SUBJECT: Results of Soil Sampling
Remediation Areas RA10-2 and RA8-3
Weyerhaeuser East Site, Everett, Washington

REF. NO: WEY-011 (soil.doc)

This memorandum presents the results of the soil sampling completed in remediation areas RA10-2 and RA8-3 delineated in our earlier memoranda (DOF 1995a and 1995b). The purpose of the sampling was to collect data as follows:

- Area RA10-2 - To assess the extent of soil which may exceed 50 mg/kg PCBs; and
- Area RA8-3 - To assess the extent of soil which may exceed 100 mg/kg pentachlorophenol.

SAMPLING AND ANALYSIS PROGRAM

The samples were collected on October 3, 1995 by Matthew Dalton of Dalton, Olmsted and Fuglevand, Inc. Stuart Triolo (Weyerhaeuser), Nadine Romero (Ecology), and Paul Skyllingstad (Ecology) observed the sampling.

To facilitate sampling, shallow test pits were excavated, generally to the water table, using a backhoe provided by Olympus Environmental. A geologic log was prepared for each pit using ASTM D2488 as a general guide.

Soil samples were obtained from the sidewalls of the pits using individual stainless steel sampling spoons. The samples were placed in glass containers provided by the receiving laboratory. The samples were transported to North Creek Analytical of Bothell, Washington in chilled coolers using standard chain-of-custody procedures.

Soil samples from Area RA10-2 were analyzed for PCBs using EPA Method 8081. Soil samples collected from Area RA8-3 were analyzed for total petroleum hydrocarbons using Washington State Method WTPH-D(extended) and pentachlorophenol (EPA Method 8040). An acid wash/silica gel cleanup procedure was used to prepare the samples for analysis of petroleum hydrocarbons.

North Creek Analytical completed the analyses. The results are summarized in Tables 1 and 2. Laboratory data sheets are included as Attachment A.

RESULTS OF SAMPLING

Area 10-2

Geologic Observations: Seven test pits (TP10-2-1 to TP10-2-7) were excavated in the RA10-2 area (Figure 1). Excavation depths ranged between approximately 2-feet to 3-feet. Typically a surface layer of vegetation and wood debris 0.5-feet to 1-feet was found to overlie a brown to gray, fine to medium SAND. The water table was encountered at a depth of approximately 2-feet in most of the pits. Heavy timbers were encountered in several of the pits. An old water line (4" diameter metal pipe) was discovered at location TP10-2-6.

PCB Analyses: The RA10-2 area is thought to be the former site of a PCB containing electrical transformer. Soil samples were obtained from the top of the Sand deposits which underlie the vegetation/wood debris. A concentration of 87 mg/kg (Aroclor 1260) was measured in a previously collected soil sample (A10-05) by EMCON (1995). PCBs were not detected above a reporting limit of 0.05U mg/kg in 6 of the 7 samples collected as part of the current work (Table 1 and Figure 1). A PCB concentration of 0.063 mg/kg (also Aroclor 1260) was measured in a sample from location TP10-2-7.

Area 8-3

Geologic Observations: Eight test pits (TP8-3-1 to TP8-3-8) were excavated in the RA8-3 area (Figures 2 to 5). Excavation depths ranged between approximately 4-feet to 5-feet. Typically paving materials (asphalt and subbase) 0.5-feet to 1-feet were found to overlie a 1-feet thick blackish layer composed of SAND with gravel which in turn overlies a brown, fine to medium SAND. At locations RA8-3-5 and -6 a gray CLAY was observed in the bottom of the pits at depths of between 4-feet and 5-feet. At several locations an oily-scum was observed to be present on the water table. The water table was encountered at a depth of approximately 4-feet in most of the pits.

Soil Quality Analyses: The RA8-3 area is thought to be the former site of a wood treating shed where apparently pentachlorophenol was used for sap stain prevention. Soil samples were obtained from the blackish sand layer (designated with an "A" in Table 2)

and from the underlying brown sand layer (designated with a "B" in Table 2). Selected samples were analyzed for petroleum hydrocarbons (WTPH-D, extended) and pentachlorophenol. The results are summarized in Table 2. The results are also shown on Figures 2 to 5, along with the results of analyses completed by EMCON (1995).

REFERENCES

DOF (Dalton, Olmsted & Fuglevand, Inc.), 1995a, Draft Technical Memorandum titled " Potential Remediation Areas", Weyerhaeuser East Site, Everett, Washington, August 9, 1995.

DOF (Dalton, Olmsted & Fuglevand, Inc.), 1995b, Draft Technical Memorandum titled " Remediation Alternatives and Estimated Costs", Weyerhaeuser East Site, Everett, Washington, November 1, 1995.

EMCON, 1995, Operable Unit Summary Report, Weyerhaeuser Everett East Site, March 17, 1995.

CLOSING

The services described in this report were performed consistent with generally accepted professional consulting principals and practices. No other warranty, expressed or implied is made. These services were performed consistent with our agreement with Weyerhaeuser. This report is solely for the use and information of Weyerhaeuser 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 our services were performed and are intended only for the 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 our services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

Dalton, Olmsted & Fuglevand, Inc.

Matthew G. Dalton
Sr. Consulting Hydrogeologist

Attachments Tables 1 and 2
Figures 1 to 5
Attachment A - Laboratory Data Sheets

TABLE 1 - Summary of Soil Quality Data RA10-2

Weyerhaeuser East Site
Everett, Washington

Location	Depth (ft)	PCBs (mg/kg)	Material Type
TP10-2-1	0.8-1.2	0.05	Brown to gray, fine to medium Sand
TP10-2-2	0.8-1.2	0.05	Brown to gray, fine to medium Sand
TP10-2-3	1.0-1.5	0.05	Brown to gray, fine to medium Sand
TP10-2-4	1.0-1.5	0.05	Brown to gray, fine to medium Sand
TP10-2-5	1.0-1.5	0.05	Brown to gray, fine to medium Sand
TP10-2-6	0.8-1.2	0.05	Brown to gray, fine to medium Sand
TP10-2-7	0.8-1.2	0.063	Brown to gray, fine to medium Sand

TABLE 2 - Summary of Soil Quality Data - RA8-3

Weyerhaeuser East Site
Everett, Washington

			Total Petroleum Hydrocarbons (mg/kg)(1)		Pentachlorophenol	
Location	Sample No.	Depth (ft)	Diesel Range	Heavy Oil Range	(mg/kg)(2)	Material Type
TP8-3-1	RA8-3-1A	1-2	600(D4)	920	11	Black, Sand w/ gravel & wood
TP8-3-1	RA8-3-1B	2.5-3	6000(D4)	6800	200	Brown, fine to medium Sand
TP8-3-2	RA8-3-2B	2.2-2.7	*	*	0.038	Brown, fine to medium Sand
TP8-3-3	RA8-3-3A	1.5-2.5	4200(D4)	8000	560	Black, Sand w/ gravel
TP8-3-3	RA8-3-3B	2.5-3.5	5900(D4)	16000	730	Brown, fine to medium Sand
TP8-3-4	RA8-3-4A	1-1.8	24000(D4)	26000	1400	Black, Sand w/ gravel
TP8-3-4	RA8-3-4B	1.8-2.3	5100(D4)	4100	440	Brown, fine to medium Sand
TP8-3-5	RA8-3-5B	1.3-2.3	<20	<50	0.081	Brown, fine to medium Sand
TP8-3-6	RA8-3-6A	0.9-1.3	*	*	0.89	Black, Sand w/ gravel
TP8-3-6	RA8-3-6B	1.3-2.3	<20	<50	0.057	Brown, fine to medium Sand
TP8-3-7	RA8-3-7B	1.4-2.4	<20	<50	0.058	Brown, fine to medium Sand
TP8-3-8	RA8-3-8B	1.5-2.5	<20	<50	<0.015	Brown, fine to medium Sand

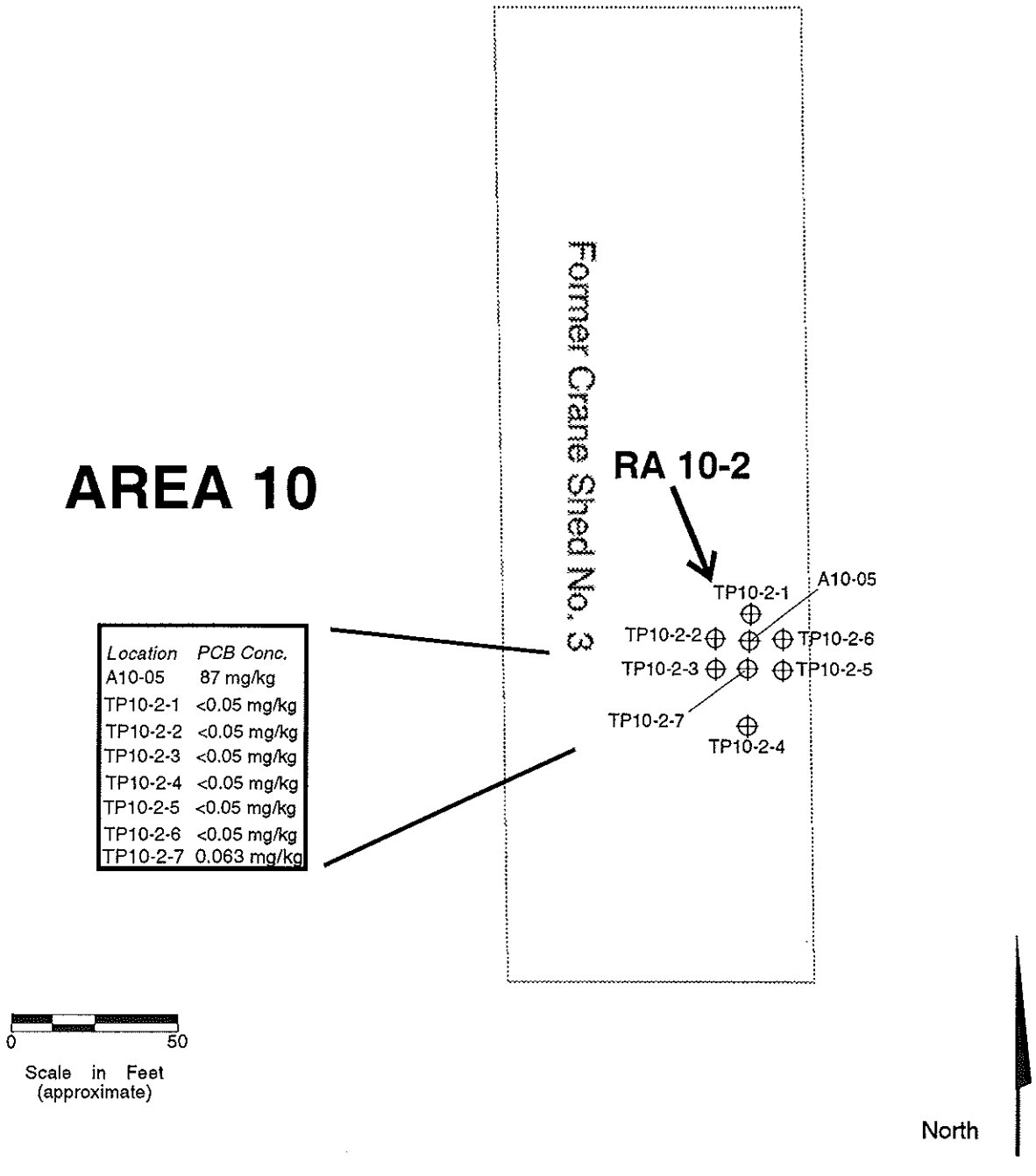
Notes: < - Not detected at the indicated reporting limit

(1) - WTPH-DX with silica gel cleanup

(2) - EPA Method 8040

D4 - The analytical laboratory reports that the indicated samples are composed of a complex mixture of diesel range and heavy oil range hydrocarbons.

* - Sample collected but not analyzed



Legend

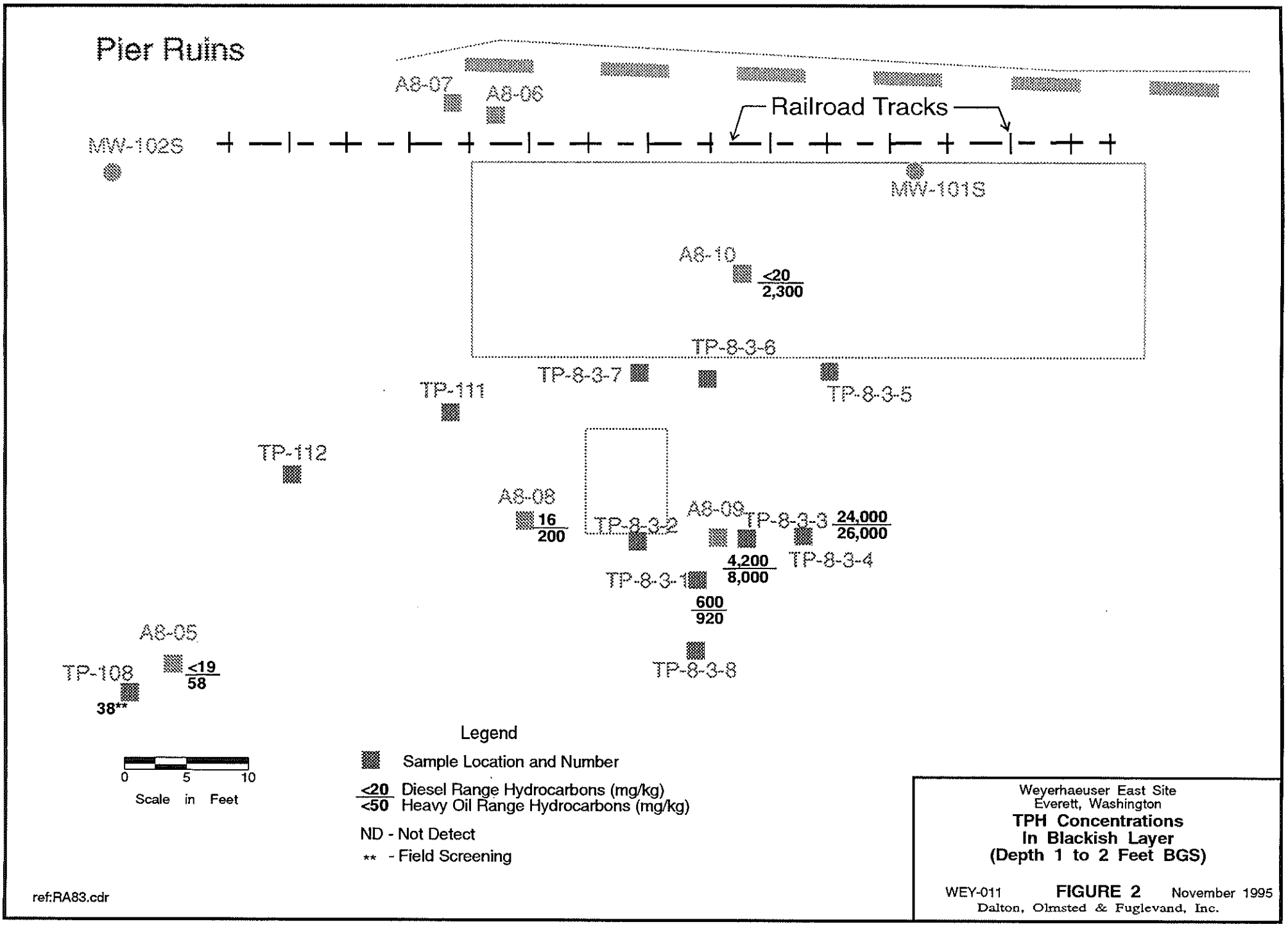
⊕ Soil Sample Location
TP10-2-1 and number

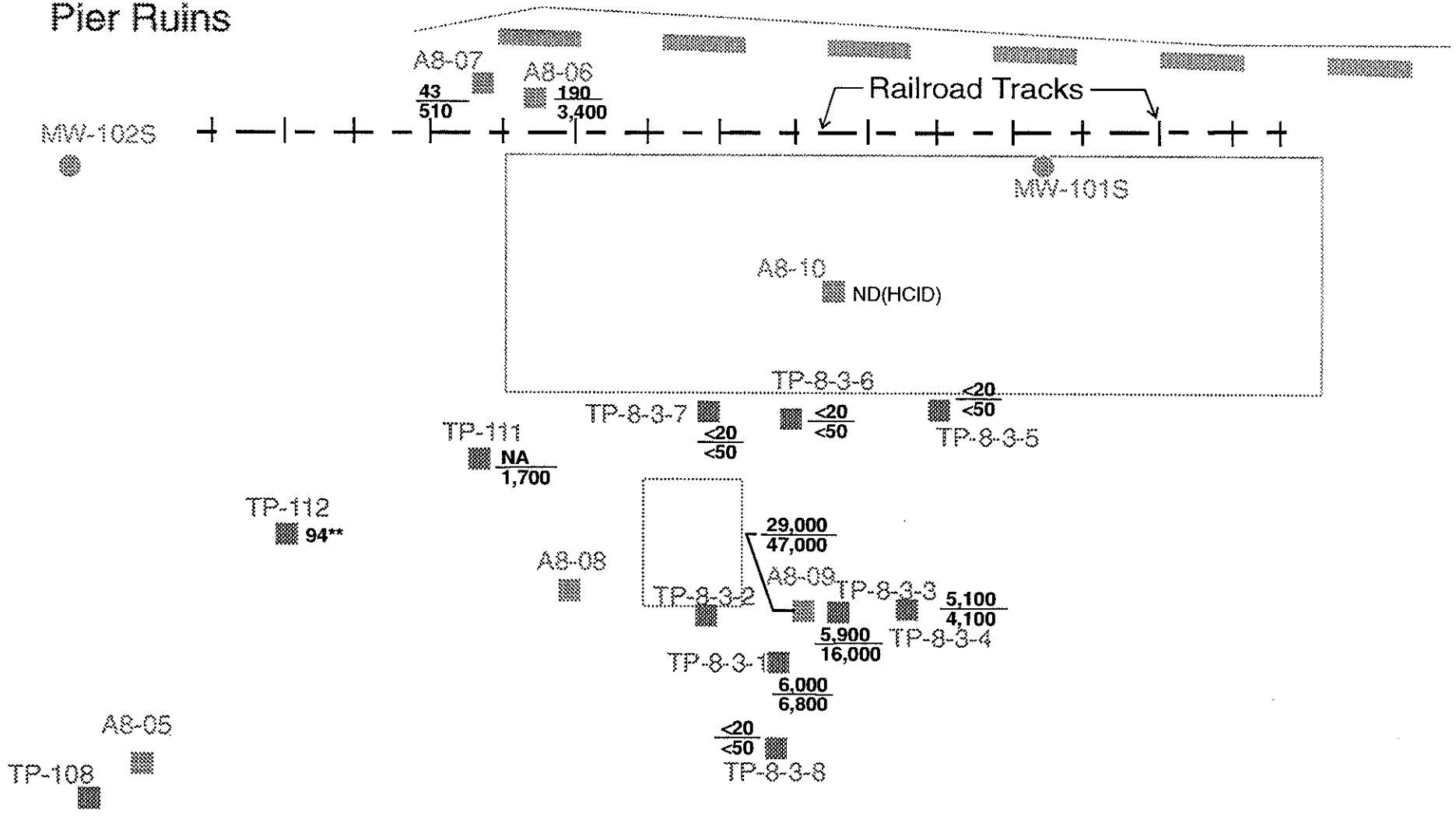
Weyerhaeuser East Site
Everett, Washington

PCB Sampling Data
Remediation Area RA10-2

WEY-011 **FIGURE 1** November 1995
Dalton, Olmsted & Fuglevand, Inc.

ref: soil10-2.cdr


Pier Ruins
A8-07
A8-06
Railroad Tracks
MW-102S
MW-101S
A8-10
<20
2,300
TP-8-3-6
TP-8-3-7
TP-8-3-5
TP-111
TP-112
A8-08
16
200
TP-8-3-2
A8-09
TP-8-3-3
24,000
26,000
4,200
8,000
TP-8-3-4
TP-8-3-1
600
920
TP-8-3-8
A8-05
<19
58
TP-108
38**
0
5
10
Scale in Feet
Legend
Sample Location and Number
<20 Diesel Range Hydrocarbons (mg/kg)
<50 Heavy Oil Range Hydrocarbons (mg/kg)
ND - Not Detect
** - Field Screening
ref:RA83.cdr
Weyerhaeuser East Site
Everett, Washington
TPH Concentrations
In Blackish Layer
(Depth 1 to 2 Feet BGS)
WEY-011
FIGURE 2
November 1995
Dalton, Olmsted & Fuglevand, Inc.



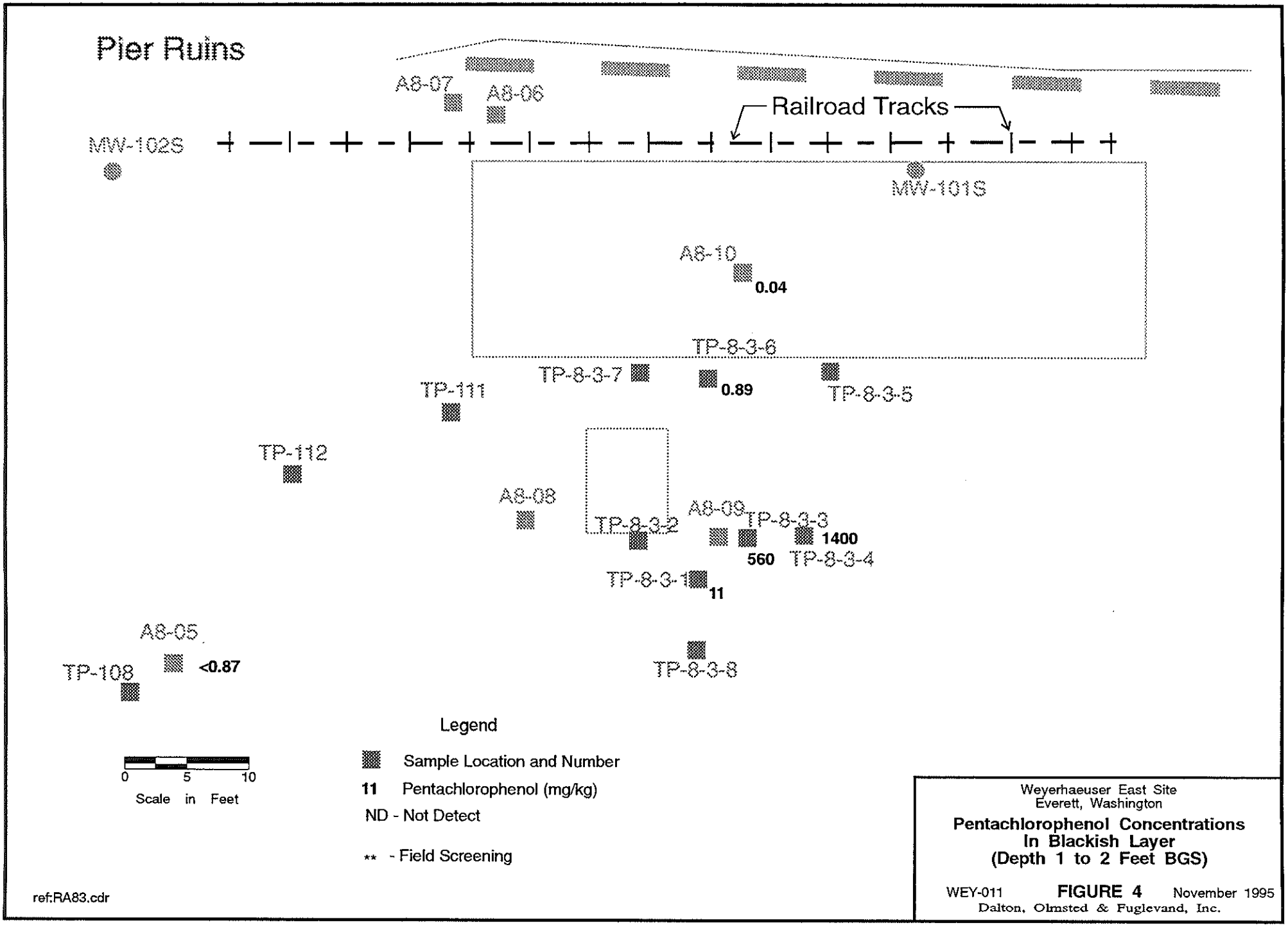
ref:RA83.cdr

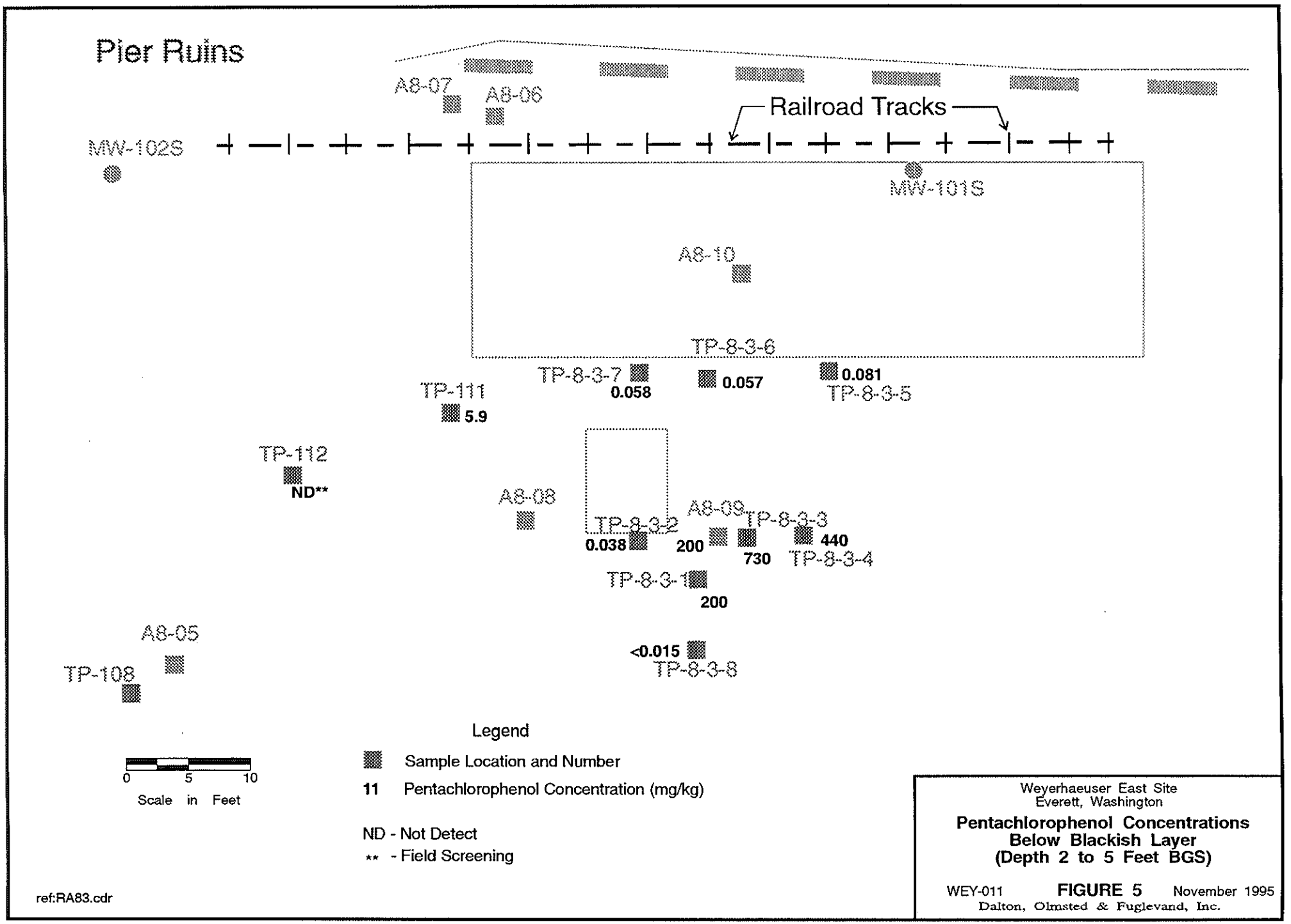
Weyerhaeuser East Site
Everett, Washington

TPH Concentrations Below Blackish Layer (Depth 2 to 5 Feet BGS)

WEY-011 **FIGURE 3** November 1995

Dalton, Olmsted & Fuglevand, Inc.


Pier Ruins
A8-07
A8-06
Railroad Tracks
MW-102S
MW-101S
A8-10
0.04
TP-8-3-6
TP-8-3-7
0.89
TP-8-3-5
TP-111
TP-112
A8-08
A8-09
TP-8-3-2
TP-8-3-3
1400
560
TP-8-3-4
TP-8-3-1
11
A8-05
<0.87
TP-108
TP-8-3-8
Legend
Sample Location and Number
11 Pentachlorophenol (mg/kg)
ND - Not Detect
** - Field Screening
0 5 10
Scale in Feet
ref:RA83.cdr
Weyerhaeuser East Site
Everett, Washington
Pentachlorophenol Concentrations
In Blackish Layer
(Depth 1 to 2 Feet BGS)
WEY-011
FIGURE 4
November 1995
Dalton, Olmsted & Fuglevand, Inc.


Pier Ruins
A8-07
A8-06
Railroad Tracks
MW-102S
MW-101S
A8-10
TP-8-3-6
TP-8-3-7
0.058
0.057
0.081
TP-8-3-5
TP-111
5.9
TP-112
ND**
A8-08
A8-09
TP-8-3-2
0.038
200
TP-8-3-3
440
730
TP-8-3-4
TP-8-3-1
200
A8-05
TP-108
<0.015
TP-8-3-8
Legend
Sample Location and Number
11 Pentachlorophenol Concentration (mg/kg)
ND - Not Detect
** - Field Screening
0 5 10
Scale in Feet
ref:RA83.cdr
Weyerhaeuser East Site
Everett, Washington
Pentachlorophenol Concentrations
Below Blackish Layer
(Depth 2 to 5 Feet BGS)
WEY-011
FIGURE 5
November 1995
Dalton, Olmsted & Fuglevand, Inc.

ATTACHMENT A
LABORATORY DATA SHEETS

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Project Name:	Weyerhaeuser East Site	
19017 120th Avenue NE, #107	Client Project :	#WEY-001-01	
Bothell, WA 98011			Received: Oct 4, 1995
Attention: Matt Dalton	NCA Project #:	B510087	Reported: Nov 15, 1995

PROJECT SUMMARY PAGE

Laboratory Sample Number	Sample Description	Sample Matrix	Date Sampled
B510087-01	TP10-2-1	Soil	10/3/95
B510087-02	TP10-2-2	Soil	10/3/95
B510087-03	TP10-2-3	Soil	10/3/95
B510087-04	TP10-2-4	Soil	10/3/95
B510087-05	TP10-2-5	Soil	10/3/95
B510087-06	TP10-2-6	Soil	10/3/95
B510087-07	TP10-2-7	Soil	10/3/95
B510087-08	RA8-3-1A	Soil	10/3/95
B510087-09	RA8-3-1B	Soil	10/3/95
B510087-10	RA8-3-2A	Soil	10/3/95
B510087-11	RA8-3-2B	Soil	10/3/95

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.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Project Name:	Weyerhaeuser East Site	
19017 120th Avenue NE, #107	Client Project :	#WEY-001-01	
Bothell, WA 98011			Received: Oct 4, 1995
Attention: Matt Dalton	NCA Project #:	B510087	Reported: Nov 15, 1995

PROJECT SUMMARY PAGE

Laboratory Sample Number	Sample Description	Sample Matrix	Date Sampled
B510087-12	RA8-3-3A	Soil	10/3/95
B510087-13	RA8-3-3B	Soil	10/3/95
B510087-14	RA8-3-4A	Soil	10/3/95
B510087-15	RA8-3-4B	Soil	10/3/95
B510087-16	RA8-3-5A	Soil	10/3/95
B510087-17	RA8-3-5B	Soil	10/3/95
B510087-18	RA8-3-6A	Soil	10/3/95
B510087-19	RA8-3-6B	Soil	10/3/95
B510087-20	RA8-3-7A	Soil	10/3/95
B510087-21	RA8-3-7B	Soil	10/3/95
B510087-22	RA8-3-8A	Soil	10/3/95

NORTH CREEK ANALYTICAL Inc.

Laura Dutton

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Project Name:	Weyerhaeuser East Site	
19017 120th Avenue NE, #107	Client Project :	#WEY-001-01	
Bothell, WA 98011			Received: Oct 4, 1995
Attention: Matt Dalton	NCA Project #:	B510087	Reported: Nov 15, 1995

PROJECT SUMMARY PAGE

Laboratory Sample Number	Sample Description	Sample Matrix	Date Sampled
B510087-23	RA8-3-8B	Soil	10/3/95

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.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.
19017 120th Avenue NE, #107
Bothell, WA 98011
Attention: Matt Dalton

Client Project ID: Weyerhaeuser East Site
Sample Matrix: Soil
First Sample #: B510087-01

Received: Oct 4, 1995
Reported: Oct 18, 1995

TOTAL SOLIDS & MOISTURE CONTENT REPORT

Sample Number	Sample Description	Total Solids %	Moisture Content %
B510087-01	TP10-2-1	90	10
B510087-02	TP10-2-2	88	12
B510087-03	TP10-2-3	90	10
B510087-04	TP10-2-4	94	6.0
B510087-05	TP10-2-5	93	7.0
B510087-06	TP10-2-6	91	9.0
B510087-07	TP10-2-7	94	6.0
B510087-08	RA8-3-1A	87	13
B510087-09	RA8-3-1B	96	4.0
B510087-11	RA8-3-2B	96	4.0
B510087-12	RA8-3-3A	88	12

The enclosed analytical results for soils, sediments and sludges have been converted to a DRY WEIGHT reporting basis.
To attain the wet weight "as received" equivalent, multiply the dry weight result by the decimal fraction of percent Total Solids.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.
19017 120th Avenue NE, #107
Bothell, WA 98011
Attention: Matt Dalton

Client Project ID: Weyerhaeuser East Site
Sample Matrix: Soil
First Sample #: B510087-13

Received: Oct 4, 1995
Reported: Oct 18, 1995

TOTAL SOLIDS & MOISTURE CONTENT REPORT

Sample Number	Sample Description	Total Solids %	Moisture Content %
B510087-13	RA8-3-3B	94	6.0
B510087-14	RA8-3-4A	81	19
B510087-15	RA8-3-4B	96	4.0
B510087-17	RA8-3-5B	91	9.0
B510087-18	RA8-4-6A	94	6.0
B510087-19	RA8-4-6B	96	4.0
B510087-21	RA8-3-7B	97	3.0
B510087-23	RA8-3-8B	96	4.0

The enclosed analytical results for soils, sediments and sludges have been converted to a DRY WEIGHT reporting basis.
To attain the wet weight "as received" equivalent, multiply the dry weight result by the decimal fraction of percent Total Solids.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Matrix:	Soil	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	WTPH-D Extended	Extracted:	Oct 10, 1995
Attention: Matt Dalton	First Sample #:	B510087-08	Analyzed:	Oct 14-16, 1995
			Reported:	Oct 18, 1995

TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE EXTENDED w/SILICA GEL

Sample Number	Sample Description	Diesel Result mg/kg (ppm)	Heavy Oil Result mg/kg (ppm)	Surrogate Recovery %
B510087-08	RA8-3-1A	600 D-4	920	83
B510087-09	RA8-3-1B	6,000 D-4	6,800	Diluted Out
B510087-12	RA8-3-3A	4,200 D-4	8,000	Diluted Out
B510087-13	RA8-3-3B	5,900 D-4	16,000	Diluted Out
B510087-14	RA8-3-4A	24,000 D-4	26,000	Diluted Out
B510087-15	RA8-3-4B	5,100 D-4	4,100	Diluted Out
B510087-17	RA8-3-5B	N.D.	N.D.	72
B510087-19	RA8-3-6B	N.D.	N.D.	73
B510087-21	RA8-3-7B	N.D.	N.D.	69
B510087-23	RA8-3-8B	N.D.	N.D.	74
Reporting Limit:		**20**	**50**	

2-Fluorobiphenyl Surrogate Recovery Control Limits are 50 - 150%.
Extractable Hydrocarbons are quantitated as Diesel Range Organics (C12 - C24) and Heavy Oil Range Organics (>C24).
Analytes reported as N.D. were not detected above the stated Reporting Limit. The results reported above are on a dry weight basis.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

HYDROCARBON ANALYSIS FOOTNOTES

2/94, Rev. 3

VOLATILE HYDROCARBONS - GASOLINE RANGE ORGANICS

G 1 This sample appears to contain extractable diesel range organics.

G 2 The chromatogram for this sample does not resemble a typical gasoline pattern. Please refer to the sample chromatogram.

G 3 The total hydrocarbon result in this sample is primarily due to an individual compound(s) eluting in the volatile hydrocarbon range. Identification and quantitation by EPA 8010, 8021 or 8240 is recommended.

G 4 This sample contains compound(s) not identified as Benzene, Toluene, Ethyl benzene or Xylene.

G 5 This sample appears to contain or be saturated with gasoline product.

EXTRACTABLE HYDROCARBONS - DIESEL RANGE ORGANICS

D 1 This sample appears to contain volatile gasoline range organics.

D 2 The hydrocarbons present in this sample resemble heavy, non-resolvable oil range organics. Quantitation by TPH-Diesel Extended or TPH 418.1 is recommended.

D 3 The hydrocarbon concentration result in this sample is partially due to an individual peak(s) eluting in the diesel / motor oil carbon range.

D 4 The hydrocarbons present in this sample are a complex mixture of diesel range and heavy oil range organics.

D 5 The hydrocarbon result shown is an estimated (greater than) value due to the high concentration. Reanalysis is being performed to yield a quantitative result. An amended report will follow.

D 6 The sample chromatographic pattern does not resemble the fuel standard used for quantitation. A fuel fingerprint is advised.

D 7 This sample appears to contain or be saturated with diesel product.

Oils and Lubricants

[----------]

TRPH 418.1

Diesel & Fuel Oils

[----------]

Extractable Hydrocarbons (TPH-D)

Gasoline

[----------]

Volatile Hydrocarbons (TPH-G)

HYDROCARBON BOILING POINT RANGE

LOW LOW TO MEDIUM MEDIUM MEDIUM TO HIGH VERY HIGH

CARBON RANGE:

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31+

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	
19017 120th Avenue NE, #107	Sample Matrix:	Method Blank	
Bothell, WA 98011	Analysis Method:	WTPH-D Extended	Extracted: Oct 10, 1995
Attention: Matt Dalton	First Sample #:	BLK101095	Analyzed: Oct 14-16, 1995
			Reported: Oct 18, 1995

TOTAL PETROLEUM HYDROCARBONS - DIESEL RANGE EXTENDED w/SILICA GEL

Sample Number	Sample Description	Diesel Result mg/kg (ppm)	Heavy Oil Result mg/kg (ppm)	Surrogate Recovery %
BLK101095	Method Blank	N.D.	N.D.	70

Reporting Limit:	20	50

2-Fluorobiphenyl Surrogate Recovery Control Limits are 50 - 150%.
Extractable Hydrocarbons are quantitated as Diesel Range Organics (C12 - C24) and Heavy Oil Range Organics (>C24).
Analytes reported as N.D. were not detected above the stated Reporting Limit. The results reported above are on a dry weight basis.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID: Weyerhaeuser East Site	Analyst: T. Fitzgibbon
19017 120th Avenue NE, #107	Sample Matrix: Soil	
Bothell, WA 98011	Analysis Method: WTPH-D	Extracted: Oct 10, 1995
Attention: Matt Dalton	Units: mg/kg (ppm)	Analyzed: Oct 14-16, 1995
		Reported: Oct 18, 1995

HYDROCARBON QUALITY CONTROL DATA REPORT

ACCURACY ASSESSMENT
Laboratory Control Sample

Diesel

Spike Conc. Added:	68
Spike Result:	65
% Recovery:	96
Upper Control Limit %:	125
Lower Control Limit %:	72

PRECISION ASSESSMENT
Sample Duplicate

Diesel Range Hydrocarbons

Sample Number:	B510087-13
Original Result:	5,900
Duplicate Result:	6,100
Relative % Difference:	3.3
Maximum RPD:	42

NORTH CREEK ANALYTICAL Inc

Laura Dutton
Project Manager

$$\text{\% Recovery:} \quad \frac{\text{Spike Result}}{\text{Spike Concentration Added}} \times 100$$

$$\text{Relative \% Difference:} \quad \frac{\text{Original Result - Duplicate Result}}{(\text{Original Result + Duplicate Result}) / 2} \times 100$$

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Descript:	Soil, TP10-2-1	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	EPA 8081	Extracted:	Oct 6, 1995
Attention: Matt Dalton	Sample Number:	B510087-01	Analyzed:	Oct 11, 1995
			Reported:	Oct 18, 1995

POLYCHLORINATED BIPHENYLS

Analyte	Reporting Limit µg/kg (ppb)	Sample Results µg/kg (ppb)
PCB 1016	50	N.D.
PCB 1221	50	N.D.
PCB 1232	50	N.D.
PCB 1242	50	N.D.
PCB 1248	50	N.D.
PCB 1254	50	N.D.
PCB 1260	50	N.D.

Tetrachloro-m-xylene Surrogate Recovery, %: 108
Surrogate Recovery Control Limits are 36 - 121 %.
The results reported above are on a dry weight basis.
Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Descript:	Soil, TP10-2-2	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	EPA 8081	Extracted:	Oct 6, 1995
Attention: Matt Dalton	Sample Number:	B510087-02	Analyzed:	Oct 11, 1995
			Reported:	Oct 18, 1995

POLYCHLORINATED BIPHENYLS

Analyte	Reporting Limit µg/kg (ppb)	Sample Results µg/kg (ppb)
PCB 1016	50	N.D.
PCB 1221	50	N.D.
PCB 1232	50	N.D.
PCB 1242	50	N.D.
PCB 1248	50	N.D.
PCB 1254	50	N.D.
PCB 1260	50	N.D.

Tetrachloro-m-xylene Surrogate Recovery, %: 93
Surrogate Recovery Control Limits are 36 - 121 %.
The results reported above are on a dry weight basis.
Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Descript:	Soil, TP10-2-3	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	EPA 8081	Extracted:	Oct 6, 1995
Attention: Matt Dalton	Sample Number:	B510087-03	Analyzed:	Oct 7, 1995
			Reported:	Oct 18, 1995

POLYCHLORINATED BIPHENYLS

Analyte	Reporting Limit µg/kg (ppb)	Sample Results µg/kg (ppb)
PCB 1016	50	N.D.
PCB 1221	50	N.D.
PCB 1232	50	N.D.
PCB 1242	50	N.D.
PCB 1248	50	N.D.
PCB 1254	50	N.D.
PCB 1260	50	N.D.

Tetrachloro-m-xylene Surrogate Recovery, %: 83
Surrogate Recovery Control Limits are 36 - 121 %.
The results reported above are on a dry weight basis.
Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Descript:	Soil, TP10-2-4	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	EPA 8081	Extracted:	Oct 6, 1995
Attention: Matt Dalton	Sample Number:	B510087-04	Analyzed:	Oct 11, 1995
			Reported:	Oct 18, 1995

POLYCHLORINATED BIPHENYLS

Analyte	Reporting Limit µg/kg (ppb)	Sample Results µg/kg (ppb)
PCB 1016	50	N.D.
PCB 1221	50	N.D.
PCB 1232	50	N.D.
PCB 1242	50	N.D.
PCB 1248	50	N.D.
PCB 1254	50	N.D.
PCB 1260	50	N.D.

Tetrachloro-m-xylene Surrogate Recovery, %: 87
Surrogate Recovery Control Limits are 36 - 121 %.
The results reported above are on a dry weight basis.
Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Descript:	Soil, TP10-2-5	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	EPA 8081	Extracted:	Oct 6, 1995
Attention: Matt Dalton	Sample Number:	B510087-05	Analyzed:	Oct 11, 1995
			Reported:	Oct 18, 1995

POLYCHLORINATED BIPHENYLS

Analyte	Reporting Limit µg/kg (ppb)	Sample Results µg/kg (ppb)
PCB 1016	50	N.D.
PCB 1221	50	N.D.
PCB 1232	50	N.D.
PCB 1242	50	N.D.
PCB 1248	50	N.D.
PCB 1254	50	N.D.
PCB 1260	50	N.D.

Tetrachloro-m-xylene Surrogate Recovery, %: 67
Surrogate Recovery Control Limits are 36 - 121 %.
The results reported above are on a dry weight basis.
Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Descript:	Soil, TP10-2-6	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	EPA 8081	Extracted:	Oct 6, 1995
Attention: Matt Dalton	Sample Number:	B510087-06	Analyzed:	Oct 11, 1995
			Reported:	Oct 18, 1995

POLYCHLORINATED BIPHENYLS

Analyte	Reporting Limit µg/kg (ppb)	Sample Results µg/kg (ppb)
PCB 1016	50	N.D.
PCB 1221	50	N.D.
PCB 1232	50	N.D.
PCB 1242	50	N.D.
PCB 1248	50	N.D.
PCB 1254	50	N.D.
PCB 1260	50	N.D.

Tetrachloro-m-xylene Surrogate Recovery, %: 89
Surrogate Recovery Control Limits are 36 - 121 %.
The results reported above are on a dry weight basis.
Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Descript:	Soil, TP10-2-7	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	EPA 8081	Extracted:	Oct 6, 1995
Attention: Matt Dalton	Sample Number:	B510087-07	Analyzed:	Oct 11, 1995
			Reported:	Oct 18, 1995

POLYCHLORINATED BIPHENYLS

Analyte	Reporting Limit µg/kg (ppb)	Sample Results µg/kg (ppb)
PCB 1016	50	N.D.
PCB 1221	50	N.D.
PCB 1232	50	N.D.
PCB 1242	50	N.D.
PCB 1248	50	N.D.
PCB 1254	50	N.D.
PCB 1260	**50**	**63**

Tetrachloro-m-xylene Surrogate Recovery, %: 89
Surrogate Recovery Control Limits are 36 - 121 %.
The results reported above are on a dry weight basis.
Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site		
19017 120th Avenue NE, #107	Sample Descript:	Method Blank		
Bothell, WA 98011	Analysis Method:	EPA 8081	Extracted:	Oct 6, 1995
Attention: Matt Dalton	Sample Number:	BLK100695	Analyzed:	Oct 7, 1995
			Reported:	Oct 18, 1995

POLYCHLORINATED BIPHENYLS

Analyte	Reporting Limit µg/kg (ppb)	Sample Results µg/kg (ppb)
PCB 1016	50	N.D.
PCB 1221	50	N.D.
PCB 1232	50	N.D.
PCB 1242	50	N.D.
PCB 1248	50	N.D.
PCB 1254	50	N.D.
PCB 1260	50	N.D.

Tetrachloro-m-xylene Surrogate Recovery, %: 81
Surrogate Recovery Control Limits are 36 - 121 %.
The results reported above are on a dry weight basis.
Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton
Project Manager

510087.DOF <16>

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Analyst: N. Shen
19017 120th Avenue NE, #107	Sample Matrix:	Soil	
Bothell, WA 98011	Analysis Method:	EPA 8080	Extracted: Oct 6, 1995
Attention: Matt Dalton	Units:	µg/kg (ppb)	Analyzed: Oct 7, 1995
	QC Sample #:	B510087-03	Reported: Oct 18, 1995

MATRIX SPIKE QUALITY CONTROL DATA REPORT

ANALYTE	Aroclor 1260
Sample Result:	N.D.
Spike Conc. Added:	333
Spike Result:	306
Spike % Recovery:	92%
Spike Dup. Result:	309
Spike Duplicate % Recovery:	93%
Upper Control Limit %:	140
Lower Control Limit %:	42
Relative % Difference:	1.0%
Maximum RPD:	18

NORTH CREEK ANALYTICAL Inc.

Laura Dutton
Project Manager

$$\text{\% Recovery:} \quad \frac{\text{Spike Result - Sample Result}}{\text{Spike Conc. Added}} \times 100$$

$$\text{Relative \% Difference:} \quad \frac{\text{Spike Result - Spike Dup. Result}}{\text{(Spike Result + Spike Dup. Result) / 2}} \times 100$$

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Matrix:	Soil	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	EPA 8040	Extracted:	Oct 10, 1995
Attention: Matt Dalton	First Sample #:	B510087-08	Analyzed:	Oct 26-27, 1995
			Reported:	Oct 31, 1995

LABORATORY ANALYSIS FOR: PENTACHLOROPHENOL

Sample Number	Sample Description	Reporting Limit µg/kg (ppb)	Sample Result µg/kg (ppb)
B510087-08	RA8-3-1A	150	11,000
B510087-09	RA8-3-1B	7,500	200,000
B510087-11	RA8-3-2B	10	38
B510087-12	RA8-3-3A	7,500	560,000
B510087-13	RA8-3-3B	7,500	730,000
B510087-14	RA8-3-4A	7,500	1,400,000
B510087-15	RA8-3-4B	7,500	440,000
B510087-17	RA8-3-5B	15	81
B510087-18	RA8-3-6A	10	890
B510087-19	RA8-3-6B	15	57
B510087-21	RA8-3-7B	15	58

Analytes reported as N.D. were not detected above the stated Reporting Limit.
The results reported above are on a dry weight basis.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-9508 (206) 481-9200 • FAX 485-2992
East 11115 Montgomery, Suite B • Spokane, WA 99206-4776 (509) 924-9200 • FAX 924-9290
9405 S.W. Nimbus Avenue • Beaverton, OR 97008-7132 (503) 643-9200 • FAX 644-2202

Dalton, Olmsted & Fuglevand, Inc.	Client Project ID:	Weyerhaeuser East Site	Sampled:	Oct 3, 1995
19017 120th Avenue NE, #107	Sample Matrix:	Soil	Received:	Oct 4, 1995
Bothell, WA 98011	Analysis Method:	EPA 8040	Extracted:	Oct 10, 1995
Attention: Matt Dalton	First Sample #:	B510087-23	Analyzed:	Oct 26-27, 1995
			Reported:	Oct 31, 1995

LABORATORY ANALYSIS FOR: PENTACHLOROPHENOL

Sample Number	Sample Description	Reporting Limit µg/kg (ppb)	Sample Result µg/kg (ppb)
B510087-23	RA8-3-8B	15	N.D.
BLK101095	Method Blank	15	N.D.

Analytes reported as N.D. were not detected above the stated Reporting Limit.
The results reported above are on a dry weight basis.

NORTH CREEK ANALYTICAL Inc.

Laura Dutton
Project Manager

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

CHAIN OF CUSTODY REPORT Work Order #:

CLIENT: DALTON, Olmsted & Fuglevand
ADDRESS: 19017 120th Ave NE Suite 107 Bothell WA 98011
PHONE: 483-6502 FAX: 483-7651
PROJECT NAME: Weyerhaeuser East Site
PROJECT NUMBER: Wey-011-01
SAMPLED BY: MGD

REPORT TO: DOF
ATTENTION: MATT DALTON
BILLING TO: DOF
P.O. NUMBER:
NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [10] 5 3 2 1
Fuels & Hydrocarbon Analyses: 5 3 2 1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

NCA SAMPLE NUMBER	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	Analysis Request: PCB-8081	Pentachlorophenol 8040	WTPH-DX w/ silica gel cleanup - I need specific procedures prior to running samples.	MATRIX (W, S, O)	# OF CONTAINERS	COMMENTS & PRESERVATIVES USED
B510087-01	1. TP10-2-1	10/3/95-AM	X			S	1	
-02	2. TP10-2-2		X			S	1	
-03	3. TP10-2-3		X			S	1	
-04	4. TP10-2-4		X			S	1	
-05	5. TP10-2-5		X			S	1	
-06	6. TP10-2-6		X			S	1	
-07	7. TP10-2-7		X			S	1	
-08	8. RAB-3-1a	10/3/95		X	X	S	1	
-09	9. RAB-3-1b	"		X	X	S	1	
-10	10. RAB-3-2a	"				S	1	Hold.

RELINQUISHED BY: [signature] DATE: 10/4/95
PRINT NAME: DOF MATT DALTON FIRM: TIME: 1:20
RECEIVED BY: Dana Heinz DATE: 10/4/95
PRINT NAME: DANA HEINZ FIRM: NCA TIME: 1320

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:
RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

COC Rev 7 8/95

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

CHAIN OF CUSTODY REPORT Work Order #:

CLIENT: DALTON, Olmsted & Fuglevand
ADDRESS: 19017 120th Ave NE Suite 107 Bothell WA 98011
PHONE: 483-6502 FAX: 483-7651

REPORT TO: DOE
ATTENTION: MATT DALTON
BILLING TO: DOE
P.O. NUMBER:
NCA QUOTE #: 8040 Pentachlorophenol; NWTPH-DX w/ silica gel cleanup

PROJECT NAME: Weyerhaeuser East Site
PROJECT NUMBER: Wey-011-01
SAMPLED BY: MGD

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [X] 10 [ ] 5 [ ] 3 [ ] 2 [ ] 1
Fuels & Hydrocarbon Analyses: [ ] 5 [ ] 3 [ ] 2 [ ] 1
[ ] OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

NCA SAMPLE NUMBER	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	Pentachlorophenol	NWTPH-DX w/ silica gel cleanup	MATRIX (W, S, O)	# OF CONTAINERS	COMMENTS & PRESERVATIVES USED
B510087-11	1. RAB-3-2b	10/3/95	X		S	1	
-12	2. RAB-3-3a		X	X		1	
-13	3. RAB-3-3b.		X	X		1	
-14	4. RAB-3-4a		X	X		1	
-15	5. RAB-3-4b		X	X		1	
-16	6. RAB-3-5a					1	Hold
-17	7. RAB-3-5b		X	X		1	
-18	8. RAB-3-6a		X			1	
-19	9. RAB-3-6b		X	X		1	
-20	10. RAB-3-7a					1	Hold

RELINQUISHED BY: Matt Dalton DATE: 10/4/95
PRINT NAME: MATT DALTON FIRM: DOE TIME: 1:20

RECEIVED BY: Dana Heinz DATE: 10/5/95
PRINT NAME: DANA HEINZ FIRM: NCA TIME: 1320

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

Rev 7 8/95

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: DALTON, Olmsted & Fuglevand
ADDRESS: 19017 120th Ave NE
Suite 107
Bothell WA 98011
PHONE: 483-6502 FAX: 483-~~65~~7651

REPORT TO: DOF
ATTENTION: MATT DALTON
BILLING TO: DOF
P.O. NUMBER:
NCA QUOTE #: per telephone 8040 WTPH-DX w/ silica gel cleanup

PROJECT NAME: Wey. East Site
PROJECT NUMBER: Wey-011-01
SAMPLED BY: MGO

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: [10] [5] [3] [2] [1]

Fuels & Hydrocarbon Analyses: [5] [3] [2] [1]

[OTHER] Specify:

** Turnaround Requests less than standard may incur Rush Charges.*

NCA SAMPLE NUMBER	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	Analysis Request: per telephone 8040 WTPH-DX w/ silica gel cleanup									MATRIX (W, S, O)	# OF CONTAINERS	COMMENTS & PRESERVATIVES USED
BS0087-21	1. NAB-3-7b	10/3/95	X	X								S	1	
-22	2. NAB-3-8a	"										S	1	Hold
-23	3. NAB-3-8b	"	X	X								S	1	
	4.													
	5.													
	6.													
	7.													
	8.													
	9.													
	10.													

RELINQUISHED BY: Matthew Dalton DATE: 10/4/95
PRINT NAME: MATT DALTON FIRM: DOF TIME: 1:20

RECEIVED BY: Dana Heins DATE: 10/4/95
PRINT NAME: DANA HEINS FIRM: NCA TIME: 1320

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS: