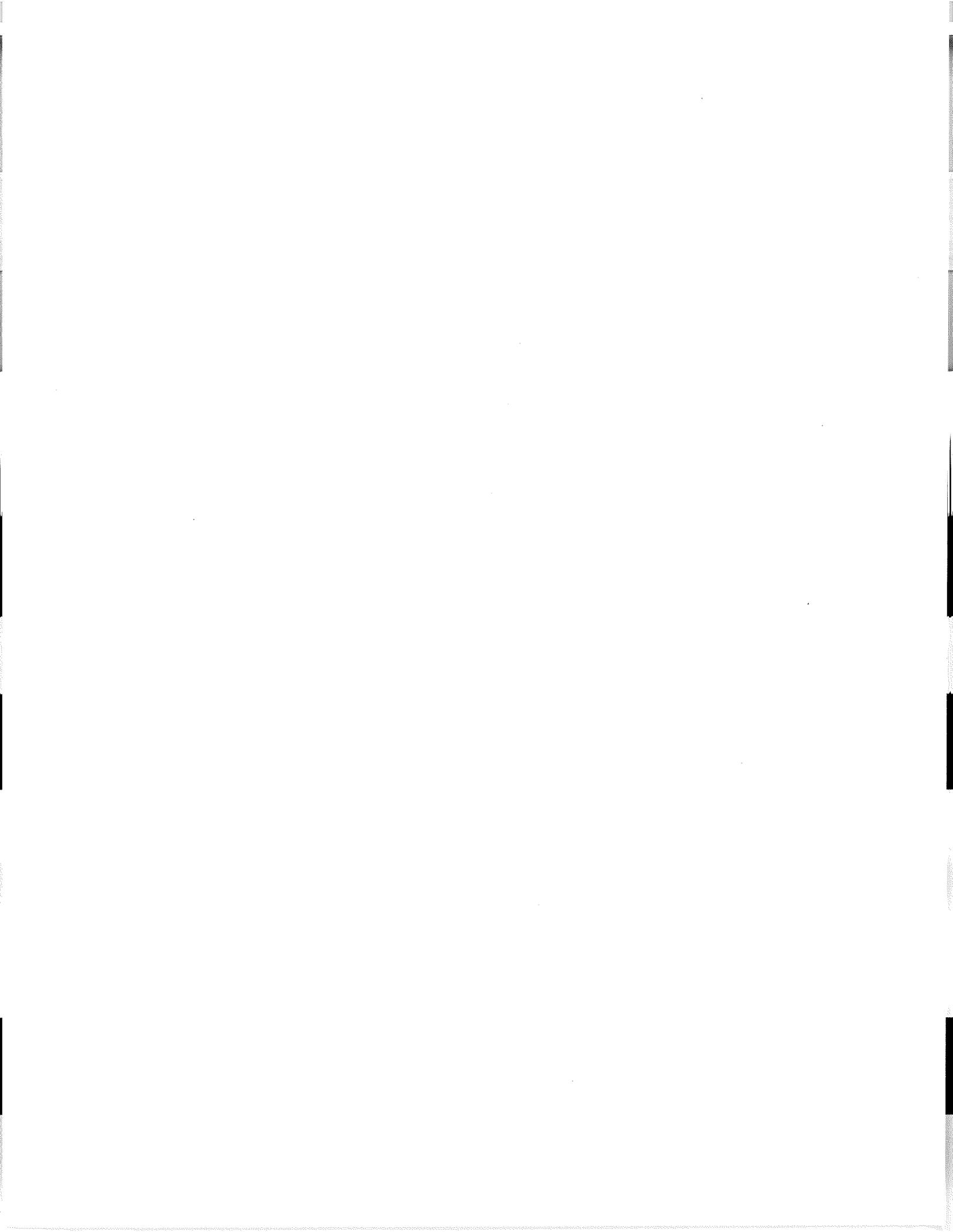


EXHIBIT H
LETTER FROM EHA TO ECOLOGY
ASSERTING
INNOCENT PURCHASER DEFENSE



FOSTER PEPPER & SHEFELMAN PLLC

ATTORNEYS AT LAW



Direct Phone
(206) 447-8940

Direct Facsimile
(206) 749-1914

E-Mail
DelaJ@foster.com

April 20, 2004

David South
Washington State Department of Ecology
3190 – 160th Avenue SE
Bellevue, WA 98008-5452

Re: Everett Housing Authority Property Ownership in ASARCO Everett
Study Area

Dear Dave:

As part of the Everett Housing Authority (“EHA”) application for a Prospective Purchaser Agreement Consent Decree, EHA is providing you with this letter describing EHA’s ownership of property within the ASARCO Everett Smelter area. Pursuant to RCW 70.105D.040(3)(b), EHA believes that, to the extent any of the property owned by EHA is part of the Everett ASARCO “Facility”, at the time of its purchases, EHA had no reason to know that any hazardous substance, the release or threatened release of which has resulted in or contributed to the need for remedial action, was released or disposed of on, in or at the property purchased by EHA. This letter describes the properties owned by EHA, and the inquiry undertaken by EHA in connection with the purchases.

1. Baker Heights Development, Baker View Apartments. The Baker Heights Development was purchased by EHA in 1951. It is located on the 1200 – 1400 blocks of Poplar, Larch, Hemlock and the west side of Pine, and includes 2605 15th Street. This development was built by EHA under the Federal Housing Program in 1943. Title was transferred to EHA in 1951. At the time EHA took title to the property, EHA had no knowledge or reason to believe that the property was potentially contaminated by the ASARCO Smelter operations. In 1951, standard practice did not include conducting “Phase I” environmental assessments or other due diligence activities. Because EHA could not have known that the site was potentially contaminated, EHA should not be treated as a liable party under MTCA based on its ownership of the Baker Heights development.

1111 THIRD
AVENUE
Suite 3400
SEATTLE
Washington
98101-3299

Telephone
(206)447-4400
Facsimile
(206)447-9700
Website
WWW.FOSTER.COM

ANCHORAGE
Alaska

PORTLAND
Oregon

SEATTLE
Washington

SPOKANE
Washington

2. Grandview Homes. The Grandview Homes property was purchased by EHA in 1951. The property is located on the 700 - 800 blocks of Linden, Locust and Pine. At the time EHA took title to the property, EHA had no knowledge or reason to believe that the property was potentially contaminated by the ASARCO Smelter operations. In 1951, standard practice did not include conducting "Phase I" environmental assessments or other due diligence activities. Because EHA could not have known that the site was potentially contaminated, EHA should not be treated as a liable party under MTCA based on its ownership of the Grandview Homes development.

3. Ballpark (abutting Wiggums Hollow Park). EHA took title to the Ballpark on the north side of 12th Street, opposite Larch Street, in 1951. At the time EHA took title to the property, EHA had no knowledge or reason to believe that the property was potentially contaminated by the ASARCO Smelter operations. In 1951, standard practice did not include conducting "Phase I" environmental assessments or other due diligence activities. Because EHA could not have known that the site was potentially contaminated, EHA should not be treated as a liable party under MTCA based on its ownership of the Ballpark.

4. 12 Pines. 12 Pines was purchased by EHA in 1999. The property is located at 2701 - 2741 12th Street. Prior to purchasing the 12 Pines project, EHA had sampling done of the soils throughout the site. A copy of the sampling results is attached as Exhibit A. Out of 150 samples, none tested at above applicable MTCA cleanup levels. EHA therefore undertook appropriate inquiry at the time of its acquisition, consistent with good commercial practice in order to minimize liability. Because the 12 Pines property is not contaminated, it cannot reasonably be argued that any hazardous substances were released or disposed of on or at the 12 Pines site, and EHA should not be treated as a liable party under MTCA based on its ownership of 12 Pines.

5. Pine Village. EHA purchased Pine Village in 2002. Pine Village is located at 2902 13th Street. Pine Village is further away from the ASARCO Smelter than the 12 Pines property mentioned above. EHA thus could reasonably determine that the Pine Village site was also not contaminated and not the source of a release or threatened release at the ASARCO Everett site. Phase II environmental testing on the Pine Village site, conducted by PBS Engineering, confirmed that the Pine Village site was also below Ecology-identified cleanup standards. A copy of the sampling results is attached as Exhibit B. Because the Pine Village property is not contaminated, it cannot reasonably be argued that any hazardous substances were released or disposed of on or at the Pine Village site, and EHA should not be treated as a liable party under MTCA based on its ownership of Pine Village.

EHA believes that its acquisition of housing projects in or adjacent to the Everett ASARCO site does not make EHA a liable party under MTCA for the Everett ASARCO site. EHA believes that, among other things, it qualifies for the defense provided for in 70.105D.040(3)(b).

April 20, 2004
Page 3

Please contact us if you have any questions.

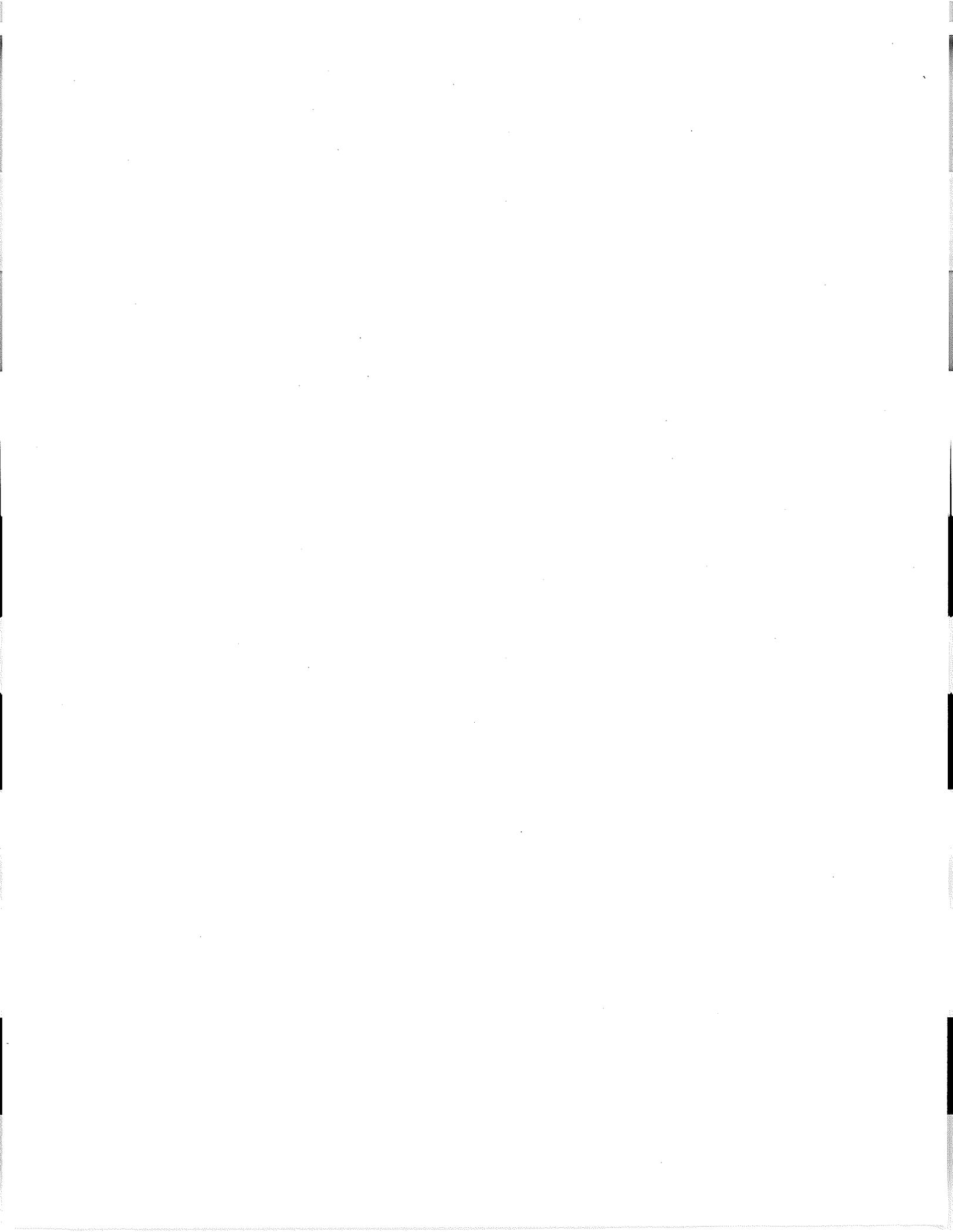
Sincerely,

A handwritten signature in black ink, appearing to be 'JED', written in a cursive style.

Joseph E. Delaney

JED:klh

cc: Bud Alkire
Darcy Walker





5219 North Shirley
Suite 100
Ruston, WA 98407
(253) 752-1470
FAX (253) 752-7663
www.hydrometrics.com

March 4, 1999

Bud Alkire, Director of Rentals
Everett Housing Authority
P.O. Box 1547
Everett, WA 98206

RE: Soil Sample Results For 12 Pines Apartments

Dear Bud:

I have attached a data validation summary for the samples collected at the properties near Poplar and 12th Street (12 Pines Apartments) as you requested. Earlier, you were notified that visual inspection of the data did not indicate any quality control violations for the arsenic results.

Upon completion of data validation, all quality control criteria were met except that four field duplicate samples were out of control limits for lead analyses. However, it is noted that both sample results (original and duplicate) for the four sites are well below the Method A residential cleanup level of 250 mg/kg (see page 2 of the attached memorandum).

If you have any questions, please call me.

Sincerely,

Hydrometrics, Inc.

Steve Thompson
Project Manager

cc: Tom Aldrich, Asarco

Attachment

MEMORANDUM

DATE: 3/3/99
TO: Steve Thompson
FROM: Clare Bridge
SUBJECT: Validation Summary for November 1998 Soil Data for Everett Housing Authority

XRF Analysis (Ruston Laboratory):

- A total of 185 samples were analyzed for total arsenic and total lead. Of these, 150 were original field samples, and 35 were field duplicates. Exceedances on field duplicates as described in the following bullet were the only quality control problems associated with the XRF analyses.
- Four of the 35 lead field duplicates were out of control limits. Lead results from all samples collected at the same site were flagged to indicate a possible lack of reproducibility. This resulted in a total of 40 flags, or approximately 22% of the lead results.

Confirmation Sample Analysis (Anarco's Technical Services Laboratory):

- A total of 7 samples were submitted for analysis by traditional wet chemistry methods in order to confirm the XRF results.
- There were no laboratory quality control problems associated with the confirmation sample analyses.
- The agreement between results obtained by the two analysis methods was excellent:
 - All arsenic results were reported as <18 ppm by both analysis methods.
 - All lead results were less than five times the reporting level of 20 ppm. For lead, results obtained by XRF and wet chemistry were compared using relative percent differences to determine the variability. In order to determine whether there was a bias between the methods, recovery rates were also calculated (XRF result divided by the wet chemistry result).
 - Relative percent differences between the XRF and wet chemistry methods were between 1 and 12 percent, with an average of 6 percent.
 - Recoveries were all between 94 and 112 percent. Two recoveries were less than 100 percent; 5 recoveries were greater than 100 percent.

Attachments: Quality Control Violations for Everett Housing Authority Nov. 1998 XRF Data
Summary of Sample and Quality Control Completeness for XRF Analyses
Database for Everett Housing Authority November 1998 XRF Data
Database for Everett Housing Authority November 1998 Confirmation Data

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Quality Control Violations for Everett Housing Authority, November 19098 XRF Data

The PB RPD was out of range for the field replicate EVT-9811-04-B, site 04. The original value was 90, the duplicate sample EVT-9811-04-BD value was < 20, and the RPD *OUT* $|70| > 40$. The following results for the site 04, sample date 11/17/98, and using the first 0 characters of the sample number have been flagged with 'UJ4,FLDUP' or 'J4,FLDDUP': EVT-9811-04-A, EVT-9811-04-AD, EVT-9811-04-B, EVT-9811-04-BD, EVT-9811-04-C, EVT-9811-04-CD, EVT-9811-04-D, EVT-9811-04-DD, EVT-9811-04-E, EVT-9811-04-ED

The PB RPD was out of range for the field replicate EVT-9811-06-A, site 06. The original value was 96, the duplicate sample EVT-9811-06-AD value was 53, and the RPD *OUT* $|43| > 40$. The following results for the site 06, sample date 11/17/98, and using the first 0 characters of the sample number have been flagged with 'UJ4,FLDUP' or 'J4,FLDDUP': EVT-9811-06-A, EVT-9811-06-AD, EVT-9811-06-B, EVT-9811-06-BD, EVT-9811-06-C, EVT-9811-06-CD, EVT-9811-06-D, EVT-9811-06-DD, EVT-9811-06-E, EVT-9811-06-ED

The PB RPD was out of range for the field replicate EVT-9811-18-A, site 18. The original value was < 20, the duplicate sample EVT-9811-18-AD value was 73, and the RPD *OUT* $|53| > 40$. The following results for the site 18, sample date 11/17/98, and using the first 0 characters of the sample number have been flagged with 'UJ4,FLDUP' or 'J4,FLDDUP': EVT-9811-18-A, EVT-9811-18-AD, EVT-9811-18-B, EVT-9811-18-BD, EVT-9811-18-C, EVT-9811-18-CD, EVT-9811-18-D, EVT-9811-18-DD, EVT-9811-18-E, EVT-9811-18-ED

The PB RPD was out of range for the field replicate EVT-9811-22-B, site 22. The original value was 69, the duplicate sample EVT-9811-22-BD value was < 20, and the RPD *OUT* $|49| > 40$. The following results for the site 22, sample date 11/17/98, and using the first 0 characters of the sample number have been flagged with 'UJ4,FLDUP' or 'J4,FLDDUP': EVT-9811-22-A, EVT-9811-22-AD, EVT-9811-22-B, EVT-9811-22-BD, EVT-9811-22-C, EVT-9811-22-CD, EVT-9811-22-D, EVT-9811-22-DD, EVT-9811-22-E, EVT-9811-22-ED

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**SUMMARY OF SAMPLE AND QUALITY CONTROL COMPLETENESS
FOR XRF ANALYSES
EVERETT HOUSING AUTHORITY
NOVEMBER 1998**

OVERALL COMPLETENESS

Parameter	# of Samples	# Not Rejected	% Not Rejected	# Without RPA Flags	% Without EPA Flags	# Without Freq Violation	% Without Freq Violation
Arsenic	185	185	100%	185	100%	185	100%
Lead	185	185	100%	145	78%	185	100%

LABORATORY DUPLICATES

Parameter	# of Samples	# Within CL	% Within CL	1/16 Required	Frequency % of QC
Arsenic	14	14	100%	12	117%
Lead	14	14	100%	12	117%

FIELD DUPLICATES

Parameter	# of Samples	# Within CL	% Within CL	1/20 Required	Frequency % of QC
Arsenic	35	35	100%	10	350%
Lead	35	30	86%	10	350%

LABORATORY CONTROL SAMPLES

Parameter	# of Samples	# Within CL	% Within CL	1/day Required	Frequency % of QC
Arsenic	4	4	100%	4	100%
Lead	4	4	100%	4	100%

CALIBRATION VERIFICATION

Parameter	# of Samples	# Within CL	% Within CL	1/32 Required	Frequency % of QC
Arsenic	15	15	100%	6	250%
Lead	15	15	100%	6	250%

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Database for Everett Housing Authority
November 1998 XRF Data

Sample Number	Lab Number		Arsenic	Lead
EVT-9811-01-A	98R-02779		18 U	96
EVT-9811-01-B	98R-02780		18 U	58
EVT-9811-01-C	98R-02781		18 U	57
EVT-9811-01-D	98R-02782		18 U	20 U
EVT-9811-01-E	98R-02783		18 U	20 U
EVT-9811-02-A	98R-02784		18 U	114
EVT-9811-02-B	98R-02785		18 U	54
EVT-9811-02-C	98R-02786		18 U	20 U
EVT-9811-02-D	98R-02787		18 U	20 U
EVT-9811-02-E	98R-02788		18 U	20 U
EVT-9811-03-A	98R-02789		18 U	67
EVT-9811-03-B	98R-02790		18 U	33
EVT-9811-03-C	98R-02791		18 U	20 U
EVT-9811-03-D	98R-02792		18 U	20 U
EVT-9811-03-E	98R-02793		18 U	20 U
EVT-9811-04-A	98R-02794		18 U	82 J4
EVT-9811-04-AD	98R-02799	Duplicate	18 U	101 J4
EVT-9811-04-B	98R-02795		18 U	90 J4
EVT-9811-04-BD	98R-02800	Duplicate	18 U	20 U,UJ4
EVT-9811-04-C	98R-02796		18 U	20 U,UJ4
EVT-9811-04-CD	98R-02801	Duplicate	18 U	20 U,UJ4
EVT-9811-04-D	98R-02797		18 U	20 U,UJ4
EVT-9811-04-DD	98R-02802	Duplicate	18 U	20 U,UJ4
EVT-9811-04-E	98R-02798		18 U	20 U,UJ4
EVT-9811-04-ED	98R-02803	Duplicate	18 U	20 U,UJ4
EVT-9811-05-A	98R-02804		18 U	44
EVT-9811-05-B	98R-02805		18 U	20 U
EVT-9811-05-C	98R-02806		18 U	20 U
EVT-9811-05-D	98R-02807		18 U	20 U
EVT-9811-05-E	98R-02808		18 U	22
EVT-9811-06-A	98R-02809		18 U	96 J4
EVT-9811-06-AD	98R-02814	Duplicate	18 U	53 J4
EVT-9811-06-B	98R-02810		18 U	20 U,UJ4
EVT-9811-06-BD	98R-02815	Duplicate	18 U	20 U,UJ4
EVT-9811-06-C	98R-02811		18 U	20 U,UJ4
EVT-9811-06-CD	98R-02816	Duplicate	18 U	20 U,UJ4
EVT-9811-06-D	98R-02812		18 U	20 J4
EVT-9811-06-DD	98R-02817	Duplicate	18 U	20 U,UJ4
EVT-9811-06-E	98R-02813		18 U	20 U,UJ4
EVT-9811-06-ED	98R-02818	Duplicate	18 U	20 U,UJ4
EVT-9811-07-A	98R-02819		18 U	74
EVT-9811-07-B	98R-02820		18 U	52

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Page 1

Database for Everett Housing Authority
November 1998 XRF Data

Sample Number	Lab Number		Arsenic	Lead
EVT-9811-07-C	98R-02821		18 U	38
EVT-9811-07-D	98R-02822		18 U	43
EVT-9811-07-E	98R-02823		18 U	20 U
EVT-9811-08-A	98R-02824		18 U	123
EVT-9811-08-B	98R-02825		18 U	103
EVT-9811-08-C	98R-02826		18 U	20 U
EVT-9811-08-D	98R-02827		18 U	20 U
EVT-9811-08-E	98R-02828		18 U	21
EVT-9811-09-A	98R-02829		18 U	20 U
EVT-9811-09-B	98R-02830		18 U	34
EVT-9811-09-C	98R-02831		18 U	45
EVT-9811-09-D	98R-02832		18 U	20 U
EVT-9811-09-E	98R-02833		18 U	20 U
EVT-9811-10-A	98R-02834		18 U	25
EVT-9811-10-B	98R-02835		18 U	25
EVT-9811-10-C	98R-02836		18 U	20 U
EVT-9811-10-D	98R-02837		18 U	33
EVT-9811-10-E	98R-02838		18 U	20 U
EVT-9811-11-A	98R-02839		18 U	94
EVT-9811-11-AD	98R-02844	Duplicate	18 U	76
EVT-9811-11-B	98R-02840		18 U	37
EVT-9811-11-BD	98R-02845	Duplicate	18 U	22
EVT-9811-11-C	98R-02841		18 U	25
EVT-9811-11-CD	98R-02846	Duplicate	18 U	29
EVT-9811-11-D	98R-02842		18 U	20 U
EVT-9811-11-DD	98R-02847	Duplicate	18 U	20 U
EVT-9811-11-F	98R-02843		18 U	20 U
EVT-9811-11-FD	98R-02848	Duplicate	18 U	20 U
EVT-9811-12-A	98R-02849		18 U	20 U
EVT-9811-12-B	98R-02850		18 U	20 U
EVT-9811-12-C	98R-02851		18 U	20 U
EVT-9811-12-D	98R-02852		18 U	20 U
EVT-9811-12-E	98R-02853		18 U	20 U
EVT-9811-13-A	98R-02854		18 U	49
EVT-9811-13-B	98R-02855		18 U	43
EVT-9811-13-C	98R-02856		18 U	20 U
EVT-9811-13-D	98R-02857		18 U	20 U
EVT-9811-13-E	98R-02858		18 U	20 U
EVT-9811-14-A	98R-02859		18 U	29
EVT-9811-14-B	98R-02860		18 U	20 U
EVT-9811-14-C	98R-02861		18 U	20 U
EVT-9811-14-D	98R-02862		18 U	20 U

Database for Everett Housing Authority
November 1998 XRF Data

Sample Number	Lab Number		Arsenic	Lead
EVT-9811-14-E	98R-02863		18 U	20 U
EVT-9811-15-A	98R-02864		18 U	28
EVT-9811-15-AD	98R-02869	Duplicate	18 U	36
EVT-9811-15-B	98R-02865		18 U	20 U
EVT-9811-15-BD	98R-02870	Duplicate	18 U	22
EVT-9811-15-C	98R-02866		18 U	20 U
EVT-9811-15-CD	98R-02871	Duplicate	18 U	20 U
EVT-9811-15-D	98R-02867		18 U	20 U
EVT-9811-15-DD	98R-02872	Duplicate	18 U	20 U
EVT-9811-15-E	98R-02868		18 U	20 U
EVT-9811-15-ED	98R-02873	Duplicate	18 U	20 U
EVT-9811-16-A	98R-02874		18 U	39
EVT-9811-16-B	98R-02875		18 U	20 U
EVT-9811-16-C	98R-02876		18 U	20 U
EVT-9811-16-D	98R-02877		18 U	20 U
EVT-9811-16-E	98R-02878		18 U	20 U
EVT-9811-17-A	98R-02879		18 U	104
EVT-9811-17-B	98R-02880		18 U	21
EVT-9811-17-C	98R-02881		18 U	20 U
EVT-9811-17-D	98R-02882		18 U	20 U
EVT-9811-17-E	98R-02883		18 U	20 U
EVT-9811-18-A	98R-02884		18 U	20 U,UJ4
EVT-9811-18-AD	98R-02889	Duplicate	18 U	73 J4
EVT-9811-18-B	98R-02885		18 U	20 U,UJ4
EVT-9811-18-BD	98R-02890	Duplicate	18 U	20 U,UJ4
EVT-9811-18-C	98R-02886		18 U	20 U,UJ4
EVT-9811-18-CD	98R-02891	Duplicate	18 U	20 U,UJ4
EVT-9811-18-D	98R-02887		18 U	20 U,UJ4
EVT-9811-18-DD	98R-02892	Duplicate	18 U	20 U,UJ4
EVT-9811-18-E	98R-02888		18 U	20 U,UJ4
EVT-9811-18-ED	98R-02893	Duplicate	18 U	20 U,UJ4
EVT-9811-19-A	98R-02894		18 U	68
EVT-9811-19-B	98R-02895		18 U	20 U
EVT-9811-19-C	98R-02896		18 U	20 U
EVT-9811-19-D	98R-02897		18 U	20 U
EVT-9811-19-E	98R-02898		18 U	20 U
EVT-9811-20-A	98R-02899		18 U	88
EVT-9811-20-B	98R-02900		18 U	41
EVT-9811-20-C	98R-02901		18 U	33
EVT-9811-20-D	98R-02902		18 U	41
EVT-9811-20-E	98R-02903		18 U	20
EVT-9811-21-A	98R-02904		18 U	76

Database for Everett Housing Authority
November 1998 XRF Data

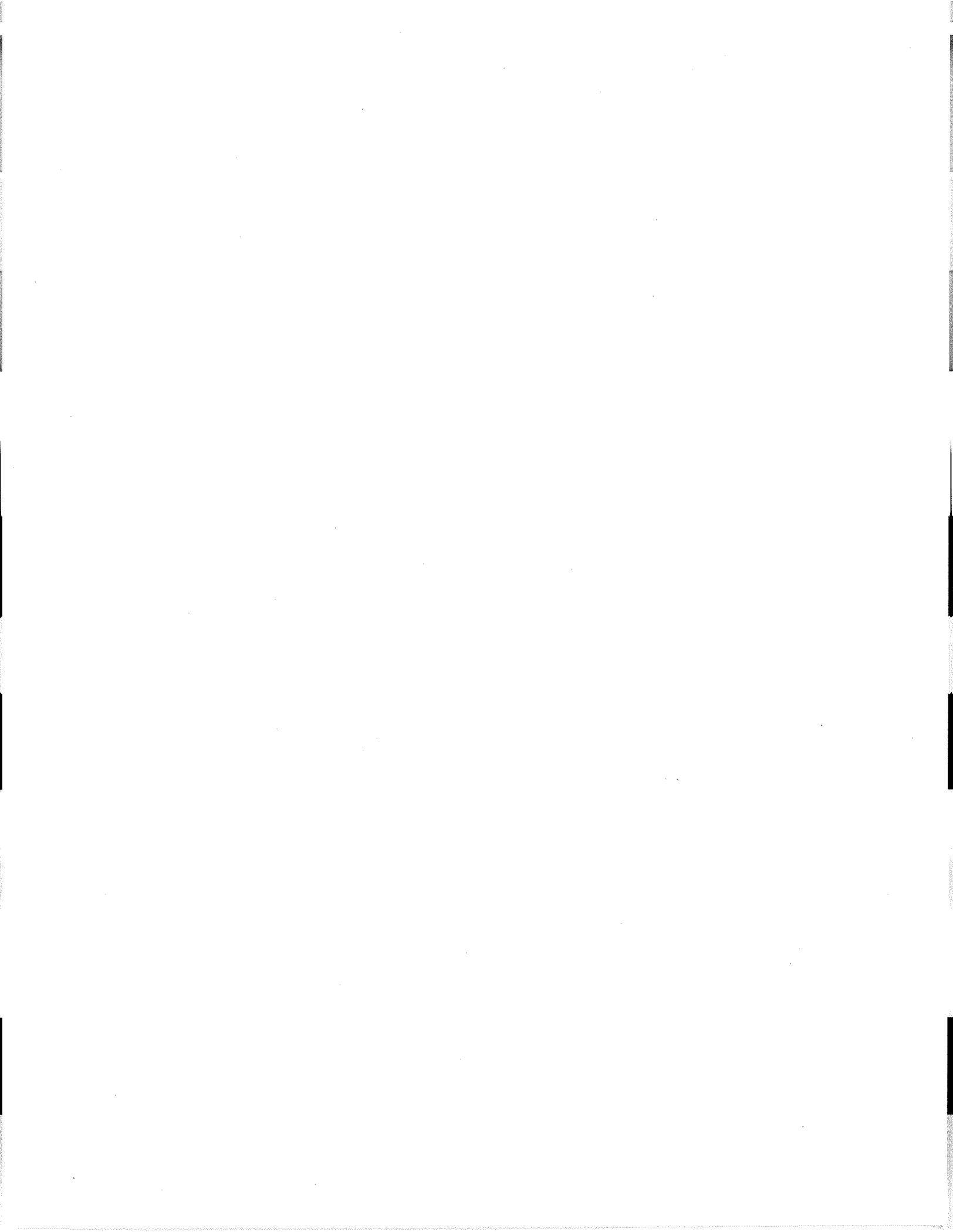
Sample Number	Lab Number		Arsenic	Lead
EVT-9811-21-B	98R-02905		18 U	25
EVT-9811-21-C	98R-02906		18 U	20 U
EVT-9811-21-D	98R-02907		18 U	20 U
EVT-9811-21-E	98R-02908		18 U	20 U
EVT-9811-22-A	98R-02909		18 U	57 J4
EVT-9811-22-AD	98R-02914	Duplicate	18 U	41 J4
EVT-9811-22-B	98R-02910		18 U	69 J4
EVT-9811-22-BD	98R-02915	Duplicate	18 U	20 U,UJ4
EVT-9811-22-C	98R-02911		18 U	20 U,UJ4
EVT-9811-22-CD	98R-02916	Duplicate	18 U	20 U,UJ4
EVT-9811-22-D	98R-02912		18 U	20 U,UJ4
EVT-9811-22-DD	98R-02917	Duplicate	18 U	20 U,UJ4
EVT-9811-22-E	98R-02913		18 U	20 U,UJ4
EVT-9811-22-ED	98R-02918	Duplicate	18 U	20 U,UJ4
EVT-9811-23-A	98R-02919		18 U	106
EVT-9811-23-B	98R-02920		18 U	118
EVT-9811-23-C	98R-02921		18 U	20 U
EVT-9811-23-D	98R-02922		18 U	20 U
EVT-9811-23-E	98R-02923		18 U	20 U
EVT-9811-24-A	98R-02924		18 U	37
EVT-9811-24-B	98R-02925		18 U	21
EVT-9811-24-C	98R-02926		18 U	20 U
EVT-9811-24-D	98R-02927		18 U	20 U
EVT-9811-24-E	98R-02928		18 U	33
EVT-9811-25-A	98R-02929		18 U	20 U
EVT-9811-25-AD	98R-02934	Duplicate	18 U	23
EVT-9811-25-B	98R-02930		18 U	22
EVT-9811-25-BD	98R-02935	Duplicate	18 U	22
EVT-9811-25-C	98R-02931		18 U	20 U
EVT-9811-25-CD	98R-02936	Duplicate	18 U	20 U
EVT-9811-25-D	98R-02932		18 U	20 U
EVT-9811-25-DD	98R-02937	Duplicate	18 U	20 U
EVT-9811-25-E	98R-02933		18 U	20 U
EVT-9811-25-ED	98R-02938	Duplicate	18 U	20 U
EVT-9811-26-A	98R-02939		18 U	28
EVT-9811-26-B	98R-02940		18	23
EVT-9811-26-C	98R-02941		18 U	20 U
EVT-9811-26-D	98R-02942		18 U	20 U
EVT-9811-26-E	98R-02943		18 U	147
EVT-9811-27-A	98R-02944		18 U	24
EVT-9811-27-B	98R-02945		18 U	20 U
EVT-9811-27-C	98R-02946		18 U	20 U

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**Database for Everett Housing Authority
November 1998 XRF Data**

<u>Sample Number</u>	<u>Lab Number</u>	<u>Arsenic</u>	<u>Lead</u>
EVT-9811-27-D	98R-02947	18 U	20 U
EVT-9811-27-B	98R-02948	18 U	20 U
EVT-9811-28-A	98R-02949	18 U	198
EVT-9811-28-B	98R-02950	18 U	121
EVT-9811-28-C	98R-02951	18 U	32
EVT-9811-28-D	98R-02952	18 U	25
EVT-9811-28-E	98R-02953	18 U	20 U
EVT-9811-29-A	98R-02954	18 U	54
EVT-9811-29-B	98R-02955	18 U	29
EVT-9811-29-C	98R-02956	18 U	24
EVT-9811-29-D	98R-02957	18 U	20 U
EVT-9811-29-E	98R-02958	18 U	20 U
EVT-9811-30-A	98R-02959	18 U	89
EVT-9811-30-B	98R-02960	18 U	20 U
EVT-9811-30-C	98R-02961	18 U	20 U
EVT-9811-30-D	98R-02962	18 U	20 U
EVT-9811-30-E	98R-02963	18 U	20 U





Phase Two Environmental Site Assessment of Shallow Soils

Pine Village
2902 13th Street
Everett, Washington

prepared for:
Everett Housing Authority
Everett, Washington

September 2003
Project #40488.000-02

130 Nickerson Street
Suite 107
Seattle, WA 98109
206.233.9639 M/F
206.762.4780 FAX

ENGINEERING AND ENVIRONMENTAL	www.pbseiv.com
-------------------------------	--

**PHASE TWO ENVIRONMENTAL ASSESSMENT
OF SHALLOW SOILS**

**Pine Village
2902 13th Street
Everett, Washington**

Prepared for

Everett Housing Authority

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Prepared by

**PBS Engineering and Environmental
130 Nickerson Street, Suite 107
Seattle, WA 98109**

September 2003

2902 13th Street, Everett, Washington

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PBS Engineering and Environmental
 40488.000-02

2902 13th Street, Everett, Washington

1.0 INTRODUCTION

PBS Environmental (PBS) completed a Phase Two Environmental Site Assessment of the property located at 2902 13th Street, Everett, Washington (Figure 1). The work was performed in accordance with the proposed scope of work dated August 25, 2003. The purpose of the study was to determine the concentrations arsenic in the soil on the subject property.

This report summarizes the results of the current investigation and outlines our current understanding of the site conditions.

1.1 Site Description

The subject property is located at 2902 13th Street in Everett, Washington. The site is in use as Pine Village Apartments owned by the Everett Housing Authority; and the apartment units are currently being renovated and sold as condominiums.

A Phase One Environmental Site Assessment completed for the subject property by PBS in August 2003 indicated that the subject property is within the study area and Community Protection Measures Boundary of the historic Everett Smelter Site, which operated between 1894 and 1912. The Everett Smelter Site is approximately $\frac{1}{4}$ mile north of the subject property. Some surrounding properties tested have exceeded Ecology's soil clean up level of 20 mg/kg for arsenic.

Based on the available information on the Everett Smelter Site and the data collected to-date from studies within the CPM Boundary, PBS considered this a *recognized environmental condition* and recommended that soil sampling be conducted in accordance with Ecology's recommended procedures to evaluate arsenic and lead concentrations on the subject property.

2.0 PURPOSE AND SCOPE

The purpose of this investigation was to identify potential areas of elevated concentrations of arsenic in selected areas of the complex. The scope of work consisted of the following:

- 1) Select six areas around the perimeter of the site and hand bore holes down to a depth of 24 inches below ground surface (bgs). Collect soil samples from each of the borings at 6-inch intervals and analyze each interval for arsenic concentration.
- 2) Complete a report to include a description of the field work, methods, observations, results of the analytical testing with laboratory reports and sample chain-of-custody documentation, and interpretation of the results.

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2902 13th Street, Everett, Washington

3.0 FIELD METHODS

On August 28, 2003, PBS completed the field sampling of soils on the subject property. The location of the soil sampling was determined with the assistance of Everett Housing Authority personnel (Figure 1). Each location was bored to a depth of 24 inches using a posthole digger. Each soil sample was taken as a composite between 6-inch intervals (0-6 inches, 6-12 inches, 12-18 inches, and 18-24 inches) starting from the bottom of each hole in order to eliminate sluff and possible cross-contamination from the upper intervals of the hole.

Each composite sample was placed into a 4-ounce sample jar and stored in a cooler with ice during field procedures until delivery to the project laboratory. All sampling equipment was decontaminated between each sampling interval using a detergent wash and distilled water rinse.

The samples were analyzed for arsenic in soils by Advanced Analytical Laboratory in Redmond, Washington.

Results of soil testing are discussed below, and are presented in Table 1.

4.0 FINDINGS

Eighteen (18) out of 24 soil samples analyzed by the laboratory contained detectable concentrations of arsenic at intervals ranging from 0-6 inches bgs to 18-24 inches bgs. The concentrations ranged from 2.1 mg/Kg to a maximum of 39 mg/Kg. The detected concentrations were below the Ecology cleanup level of 20 mg/Kg, with the one maximum concentration of 39 mg/Kg below the performance standard of 40 mg/Kg, based on a statistical evaluation developed in accordance with WAC 173-340-740, Compliance Monitoring in the MTCA Cleanup Regulation.

5.0 CONCLUSIONS

The shallow soils in the areas sampled were either non-detect or contained concentrations of arsenic below Ecology Method A Soil Cleanup Levels for Unrestricted (residential) Land Uses. The one sample that exceeded the cleanup level was within the performance standard, and therefore met the criteria for compliance monitoring. Based on these findings, no further investigation or remediation is recommended.

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2902 13th Street, Everett, Washington

6.0 LIMITATIONS

PBS has prepared this report for use by Everett Housing Authority. This report is not intended for use by others without the written consent of PBS Engineering and Environmental. Our interpretation of subsurface conditions in this study is based on field observations and analytical data from the indicated explorations. Other regulated substances may exist in portions of the site that were not explored or analyzed.

PBS ENGINEERING AND ENVIRONMENTAL

Harry Goren 9/12/03

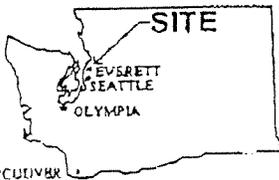
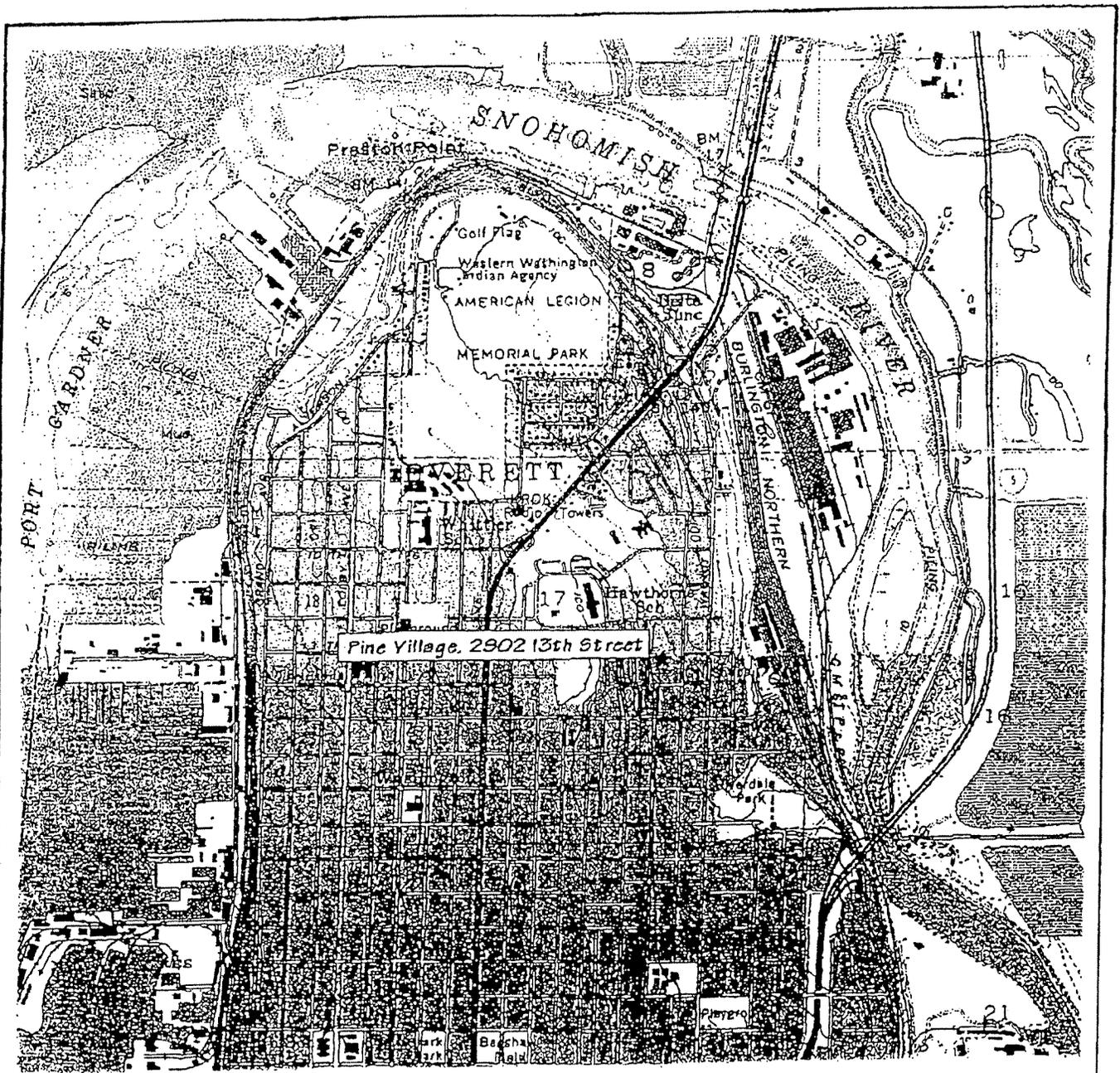
Harry Goren Date
Senior Project Manager

PBS Engineering and Environmental
40488.000-02

2902 13th Street, Everett, Washington

FIGURES

PBS Engineering and Environmental
40488.000-02



WASHINGTON



SOURCE: USGS MARYSVILLE QUADRANGLE, WA 1953
USGS EVERETT QUADRANGLE, WA 1956

Prepared for: EVERETT HOUSING AUTHORITY

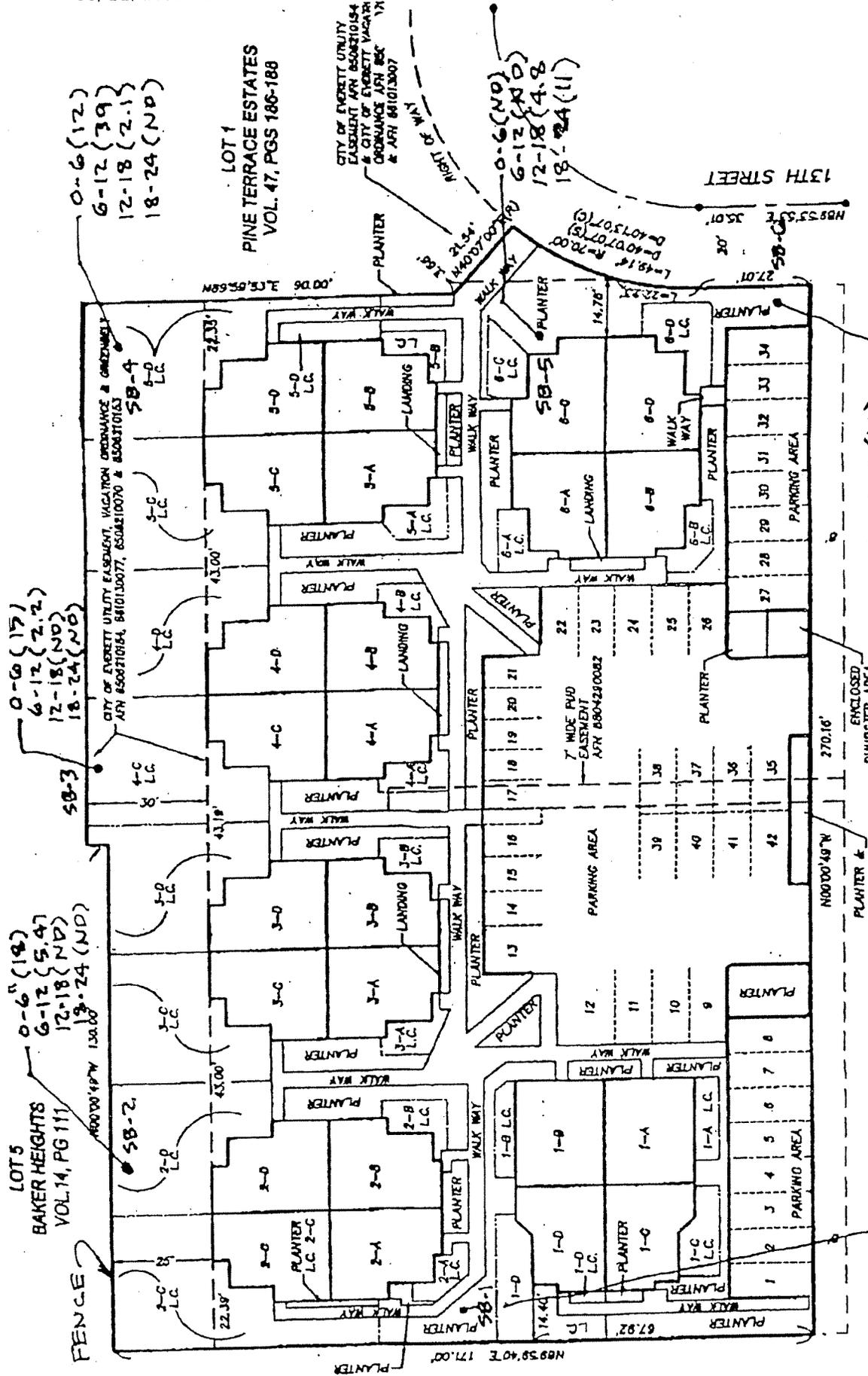


Project #: 40488.000
Date: AUGUST 2003

SITE LOCATION MAP
PINE VILLAGE
2902 13th STREET
EVERETT, WASHINGTON

FIGURE
1

L:\70143 11-07 P:\60000\10488\10488.DWG - 11/07/03



LOT 5
BAKER HEIGHTS
VOL. 14, PG 111

0-6 (18)
6-12 (5.4)
12-18 (ND)
18-24 (ND)

SB-2

0-6 (17)
6-12 (2.2)
12-18 (ND)
18-24 (ND)

SB-3

CITY OF EVERETT UTILITY EASEMENT, VACATION ORDINANCE & CONCERNABLES
APN 8506210164, 8410130077, 8506210070 & 8506210163

LOT 1
PINE TERRACE ESTATES
VOL. 47, PGS 186-188

CITY OF EVERETT UTILITY EASEMENT APN 8506210164 & CITY OF EVERETT VACATION ORDINANCE APN 8506210070 & APN 8410130077

0-6 (16)
6-12 (14)
12-18 (6.6)
18-24 (7.1)

FIG. 2 SITE PLAN

LEGEND

0-6 (2.3) ← ARSENIC CONCENTRATION (MG/KG) IN SOILS

SAMPLING INTERVAL (INCHES FROM GROUND) NO = NON-DETECT

0-6 (2.3)
6-12 (7.0)
12-18 (15)
18-24 (6.4)

2902 13th Avenue, Everett, Washington

TABLES

(SEE FIG. 2)

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2902 13th Street, Everett, Washington

**APPENDIX A
LABORATORY REPORTS AND SAMPLE CHAIN-OF-CUSTODY**

**PBS Engineering and Environmental
40488.000-02**

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: A30828-7
Client: PBS Environmental
Project Manager: Harry Goren
Client Project Name: Pine Village - Everett
Client Project Number: 40488.000, Task 02
Date received: 08/28/03

Analytical Results		MTH BLK	LCS	SB1 0-6	SB1 8-12	SB1 12-18
Metals (7010), mg/kg		Soil	Soil	Soil	Soil	Soil
Matrix	Soil					
Date extracted	Reporting	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Date analyzed	Limits	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Arsenic (As)	2.0	nd	78%	2.3	7.0	15

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

J - estimated value

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Advanced Analytical Laboratory
 (425) 497-0110, fax (425) 497-8089

AAL Job Number: A30828-7
 Client: PBS Environmental
 Project Manager: Harry Goren
 Client Project Name: Pine Village - Everett
 Client Project Number: 40488.000, Task 02
 Date received: 08/28/03

Analytical Results

Metals (7010), mg/kg		MTH BLK	SB1 18-24	SB2 0-6	SB2 6-12	SB2 12-18
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Date analyzed	Limits	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Arsenic (As)	2.0	nd	6.4	18	5.4	nd

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

J - estimated value

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Advanced Analytical Laboratory
 (425) 497-0110, fax (425) 497-8089

AAL Job Number: A30828-7
 Client: PBS Environmental
 Project Manager: Harry Goren
 Client Project Name: Pine Village - Everett
 Client Project Number: 40488.000. Task 02
 Date received: 08/28/03

Analytical Results							Dupl
Metals (7010), mg/kg		MTH BLK	SB2 18-24	SB3 0-6	SB3 6-12	SB3 6-12	
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	
Date extracted	Reporting	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03	
Date analyzed	Limits	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03	
Arsenic (As)	2.0	nd	nd	15	2.2	1.9	

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
 na - not analyzed
 J - estimated value
 Results reported on dry-weight basis
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%

Advanced Analytical Laboratory
 (425) 497-0110, fax (425) 497-8089

AAL Job Number: A30828-7
 Client: PBS Environmental
 Project Manager: Harry Goren
 Client Project Name: Pine Village - Everett
 Client Project Number: 40488.000, Task 02
 Date received: 08/28/03

Analytical Results

Metals (7010), mg/kg		MTH BLK	SB3 12-18	SB3 18-24	SB4 0-6	SB4 6-12
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Date analyzed	Limits	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Arsenic (As)	2.0	nd	nd	nd	12	39

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
 na - not analyzed
 J - estimated value
 Results reported on dry-weight basis
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: A30828-7
Client: PBS Environmental
Project Manager: Harry Goren
Client Project Name: Pine Village - Everett
Client Project Number: 40488.000, Task 02
Date received: 08/28/03

Analytical Results		MTH BLK	SB4 12-18	SB4 18-24	SB5 0-6	SB5 8-12
Metals (7010), mg/kg		Soil	Soil	Soil	Soil	Soil
Matrix	Soil					
Date extracted	Reporting	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Date analyzed	Limits	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Arsenic (As)	2.0	nd	2.1	nd	nd	nd

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

J - estimated value

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Advanced Analytical Laboratory
 (425) 497-0110, fax (425) 497-8089

AAL Job Number: A30828-7
 Client: PBS Environmental
 Project Manager: Harry Goren
 Client Project Name: Pine Village - Everett
 Client Project Number: 40488.000, Task 02
 Date received: 08/28/03

Analytical Results		Dupl				
Metals (7010), mg/kg		MTH BLK	SB5 12-18	SB5 18-24	SB5 18-24	SB6 0-6
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Date analyzed	Limits	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Arsenic (As)	2.0	nd	4.8	11	12	16

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
 na - not analyzed
 J - estimated value
 Results reported on dry-weight basis
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%

Advanced Analytical Laboratory
 (425) 497-0110, fax (425) 497-8089

AAL Job Number: A30828-7
 Client: PBS Environmental
 Project Manager: Harry Goren
 Client Project Name: Pine Village - Everett
 Client Project Number: 40488.000, Task 02
 Date received: 08/28/03

Analytical Results						Dupl
Metals (7010), mg/kg		MTH BLK	SB6 6-12	SB6 12-18	SB6 18-24	SB6 18-24
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Date analyzed	Limits	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
Arsenic (As)	2.0	nd	14	6.6	7.1	6.1

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

J - estimated value

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit: 30%

Chain of Custody Record

Page 1 of 2

ADVANCED ANALYTICAL

2821 152 Avenue NE
REDMOND, WA 98052
Phone: (425) 497-0110 Fax: (425) 497-8089
e-mail: aechemlab@yahoo.com

Client: PBS Environmental
Project Manager: Harry Doren
Address: 130 Nickerson Seattle

Project Name: Pine Village - Everett
Project Number: 40488.000 Task 02
Collector: Harry Doren

Phone: 206 253 9639 Fax: 762-4780

Date of collection: 8/28/03

Sample ID	Time	Matrix	Container type	B20 Vials	BTEX	BTEX-NMTH-GX	NMTH-GX	NMTH-GX	NMTH-GX	PCB 8082	PCB 8082	PCRA Metals	Lead	ARSENIC	Notes, comments	# of containers
1 SB-1-0-6	1345	S	404													
2 SB-1-6-12																
3 SB-1-12-18																
4 SB-1-18-24																
5 SB-2-0-6	1346															
6 SB-2-6-12																
7 SB-2-12-18																
8 SB-2-18-24																
9 SB-3-0-6	1410															
10 SB-3-6-12																
11 SB-3-12-18																
12 SB-3-18-24																
13 SB-4-0-6	1445															
14 SB-4-6-12																
15 SB-4-12-18																

Sample receipt info:
Total # of containers: _____
Condition (temp, °C) _____
Seals (Intact?, Y/N) _____
Comments: _____

Relinquished by:	Date/Time	Received by:	Date/Time
<u>Harry Doren</u>		<u>P. VANDER 8/28/03</u>	<u>16:50</u>
Relinquished by:	Date/Time	Received by:	Date/Time

Turnaround time:
Same day
24 hr
48 hr
Standard

Chain of Custody Record

ADVANCED ANALYTICAL

2821 152 Avenue NE
REDMOND, WA 98052
Phone: (425) 497-0110 Fax: (425) 497-8089
e-mail: aechemlab@yahoo.com

Client: PBS Environmental

Project Manager: Harry Bowen

Address: same

Project Name: Pine Village - Everett

Project Number: ~~40488.000~~ 40488.000

Collector: Harry Bowen

Date of collection: 8/28/03

Phone: same

Fax:

Sample ID	Time	Meltx	Container type	8260 Vials	80718 Vials	BTEX	BTEX-MNPHOX	MNTH-OX	MNTH-HClO	8270	8270 PH	PCB 8082	Pesticides 8081	RCRA & Metals	Lead	MXESLX	Notes, comments	# of containers
1 SB-A-18-24	1425	S	4oz															
2 SB-S-0-6	1440																	
3 SB-S-6-12																		
4 SB-S-12-18																		
5 SB-S-18-24	1500																	
6 SB-6-0-6																		
7 SB-6-6-12																		
8 SB-6-12-18																		
9 SB-6-18-24																		
10																		
11																		
12																		
13																		
14																		
15																		

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Relinquished by:

Date/Time

Received by:

Date/Time

Relinquished by:

Date/Time

Turnaround time:

Same day

24 hr

48 hr

Standard

Date/Time

Received by:

Date/Time

Received by:

Date/Time

8/28/03 16:30

N. Ward

8/28/03 16:30