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STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

**CERTIFIED MAIL**

7008 2810 0001 3940 9655

June 3, 2009

Ms. Jody Bower  
914 "F" Street  
Port Townsend, WA 98368

**Re: No Further Action at the following Site:**

- **Site Name:** Bower Home Port Townsend
- **Site Address:** 914 "F" Street, Port Townsend
- **Facility/Site No.:** 4516080
- **VCP Project No.:** SW0546

Dear Ms. Bower:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Bower Home Heating Oil Spill (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

**Issue Presented and Opinion**

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Is further remedial action necessary to clean up contamination at the Site?

**NO. Ecology has determined that no further remedial action is necessary to clean up contamination at the Site.**

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.



### **Description of the Site**

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This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- Petroleum hydrocarbons and associated constituents into the Soil.

**Enclosure A** includes a detailed description and diagram of the Site, as currently known to Ecology.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

### **Basis for the Opinion**

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This opinion is based on the information contained in the following documents:

1. DLH Environmental Consulting, **Soil Sampling Activities, 914 "F" Street/Port Townsend, Project #63150**, November 20, 2003.
2. Whitman Environmental Sciences, **Calculation of Method B Soil Cleanup Levels, Jody Bower Property, 914 F Street, Port Townsend, WA 98368**, February 11, 2008.
3. DLH Environmental Consulting, **Final Soil Removal and Soil Activities, Jody Bower, 914 "F" Street. Port Townsend, WA 98368**, February 15, 2008.
4. DLH Environmental Consulting, "Letter Addendum, Jody Bower Residence, 914 "F" Street, Port Townsend, Washington 98368", May 1, 2008.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

## **Analysis of the Cleanup**

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Ecology has concluded that **no further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

**1. Characterization of the Site.**

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A**.

**2. Establishment of cleanup standards.**

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

*The cleanup levels established for this Site are Method A soil cleanup levels for Unrestricted Land Use.*

*Standard points of compliance have been established for the Site. The point of compliance for protection of ground water is established in the soils throughout the Site. For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance is established in the soils throughout the Site from the ground surface to 15 feet below ground surface (ft bgs). In addition, the point of compliance for the ground water is established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the Site.*

*Contaminants remaining on the Site occur approximately 12 to 15 ft below the level of the basement floor. This depth is approximately 4 to 6 ft lower than the average grade of the ground surface. Therefore, residual contamination is present approximately 16 to 21 ft bgs. (See photograph of Site)*

**3. Selection of cleanup action.**

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

*The cleanup option selected was excavation using motorized equipment and hand tools.*

#### **4. Cleanup.**

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site.

*Soil contaminated with diesel-range petroleum hydrocarbons was excavated from the land surface to a depth accessible adjacent the residence of Ms. Jody Bower. All contamination that could be removed was excavated so as not impact the integrity of the residence.*

### **Post-Cleanup Controls and Monitoring**

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Post-cleanup controls and monitoring are remedial actions performed after the cleanup to maintain compliance with cleanup standards. This opinion is dependent on the continued performance and effectiveness of the following:

#### **1. Compliance with institutional controls.**

Institutional controls prohibit or limit activities that may interfere with the integrity of engineered controls or result in exposure to hazardous substances. The following institutional control is necessary at the Site:

- Restriction on land use.

To implement that control, an Environmental Covenant has been recorded on the following parcel of real property in Jefferson County:

- 985500104.

Ecology approved the recorded Covenant. A copy of the Covenant is included in **Enclosure B.**

### **Periodic Review of Post-Cleanup Conditions**

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Ecology will conduct periodic reviews of post-cleanup conditions at the Site to ensure that they remain protective of human health and the environment. If Ecology determines, based on a periodic review, that further remedial action is necessary at the Site, then Ecology will withdraw this opinion.

### **Listing of the Site**

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Based on this opinion, Ecology will remove the Site from our Confirmed and Suspected Contaminated Sites List.

### **Limitations of the Opinion**

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**1. Opinion does not settle liability with the state.**

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

**2. Opinion does not constitute a determination of substantial equivalence.**

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

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June 3, 2009  
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**3. State is immune from liability.**

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. See RCW 70.105D.030(1)(i).

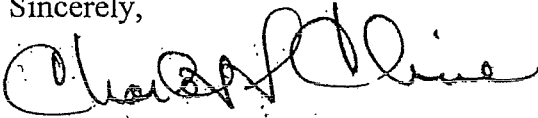
**Termination of Agreement**

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Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (#SW0546).

For more information about the VCP and the cleanup process, please visit our web site: [www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm](http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm). If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (360) 407-6267 or e-mail at [chcl461@ecy.wa.gov](mailto:chcl461@ecy.wa.gov).

Sincerely,



Charles S. Cline  
SWRO Toxics Cleanup Program

CSC/ksc:JodyBowerSite NFA SW0546 w/rc

Enclosures (2): A – Description and Diagrams of the Site  
B – Environmental Covenant for Institutional Controls

cc: Ms. Donna L. Hewitt, L.G., DLH Environmental Consulting  
Mr. Alan Gardner, Jefferson County Public Health Dept.  
Ms. Fern Svendsen, Ecology  
Mr. Scott Rose, Ecology  
Ms. Dolores Mitchell, Ecology w/o enclosures

**Enclosure A**

**Description and Diagrams of the Site**

## Site Description

This is a residence, located at 914 F Street, Port Townsend, Jefferson County, State of Washington (Figure 1). The Jody Bower residence is located in a residential area on a hillside on the northeast corner of F Street and Beech Street. Figure 2 shows the parcel location. Figure 3 shows the location of the Site and the general topography present in this area. On October 25, 2003, a corrosion/equipment failure on the residential 250-gallon above ground storage tank (AST) caused a release of approximately 180-190 gallons of oil. The tank had been last filled on October 6, 2003. About 40 gallons of oil were recovered from this tank at this time. There are no wells or streams in the immediate area of the spill and no standing liquids. The fuel had saturated the soil. Pacific Environmental (Bremerton, Washington) was retained by Ms. Jody Bower, the property owner. On October 31, 2003, approximately two to three yards of soil were excavated from the area where diesel oil had been spilled. The excavation was conducted to about 6 feet below ground surface (ft bgs), until further digging could not be done without affecting the foundation of the house.

In April 2007, additional sub-surface soil samples were collected for laboratory analysis following excavation and removal of additional soils. The results indicated that diesel-impacted soils still remained at depth. PESCO Environmental Services Company (PESCO) excavated approximately 40 yards of soil and transferred the soil for final disposal to the Olympic View Landfill (Waste Manifest No. 100199WA).

Based on final confirmational laboratory results, diesel-range impacted soils still remain at depths greater than 15 ft bgs. These soils cannot be removed due to close proximity to the house foundation (Figure 4). As a result of this concern, a sample was collected to be analyzed by Ecology Model Toxics Control Act (MTCA) Method B procedures for a Site-specific evaluation. Whitman Environmental Sciences (WES) conducted all of the required modeling to fulfill the Method B process. Based on the Method B study, cleanup levels were set at 3,247 milligrams per kilogram (mg/kg). This cleanup level was based on the direct contact pathway. However, some soils at a depth of 15 ft bgs still persisted above this Method B cleanup level (Table 1). It was decided to leave these petroleum-impacted soils in place at this depth. Based on the land surface datum from which the depth measurements were made, it was determined following the initial investigation that all the sidewall samples and the bottom sample analyzed on October 25, 2007 were collected at actual depths that exceeded 15 ft bgs.

The second bottom sample collected at a depth greater than 15 ft bgs was collected and submitted to the laboratory on November 8, 2007. This sample was analyzed using the Volatile Petroleum Hydrocarbon (VPH) and Extractable Petroleum Hydrocarbon (EPH) Methods, and the Environmental Protection Agency (EPA) 8260B Method and 8270C Selective Ion Method (SIM). The total petroleum hydrocarbon concentration for this sample exceeded the direct contact cleanup level of 3,247 mg/kg. The summed fractionated result was 6,767.55 mg/kg. However, the analyzed concentration was



considered protective of ground water, based on the Method B four-phase model analysis for the ground-water pathway. Ecology ran the model and a concentration of 20,000 mg/kg would have been protective of the ground-water pathway. Residual saturation would be a concern at concentrations greater than 2,000 mg/kg in gravels. However, the residual contamination is located in silts and residual saturation should not be an issue at concentrations below 20,000 mg/kg. In addition, the Site is located on a hillside at approximately 50 ft above mean sea level (Figure 3) and the nearest identified residential wells are located at the locations shown in Figure 5. Therefore, because the contamination present in the soil is less than the cleanup level from the land surface to the MTCA point of compliance (15 ft bgs) for the direct contact pathway, the direct contact pathway is not a concern. However, because contamination is present in the vicinity of the house at elevated concentrations, an environmental covenant will be required, and a no-further-action (NFA) letter can be issued.

## Site Diagrams

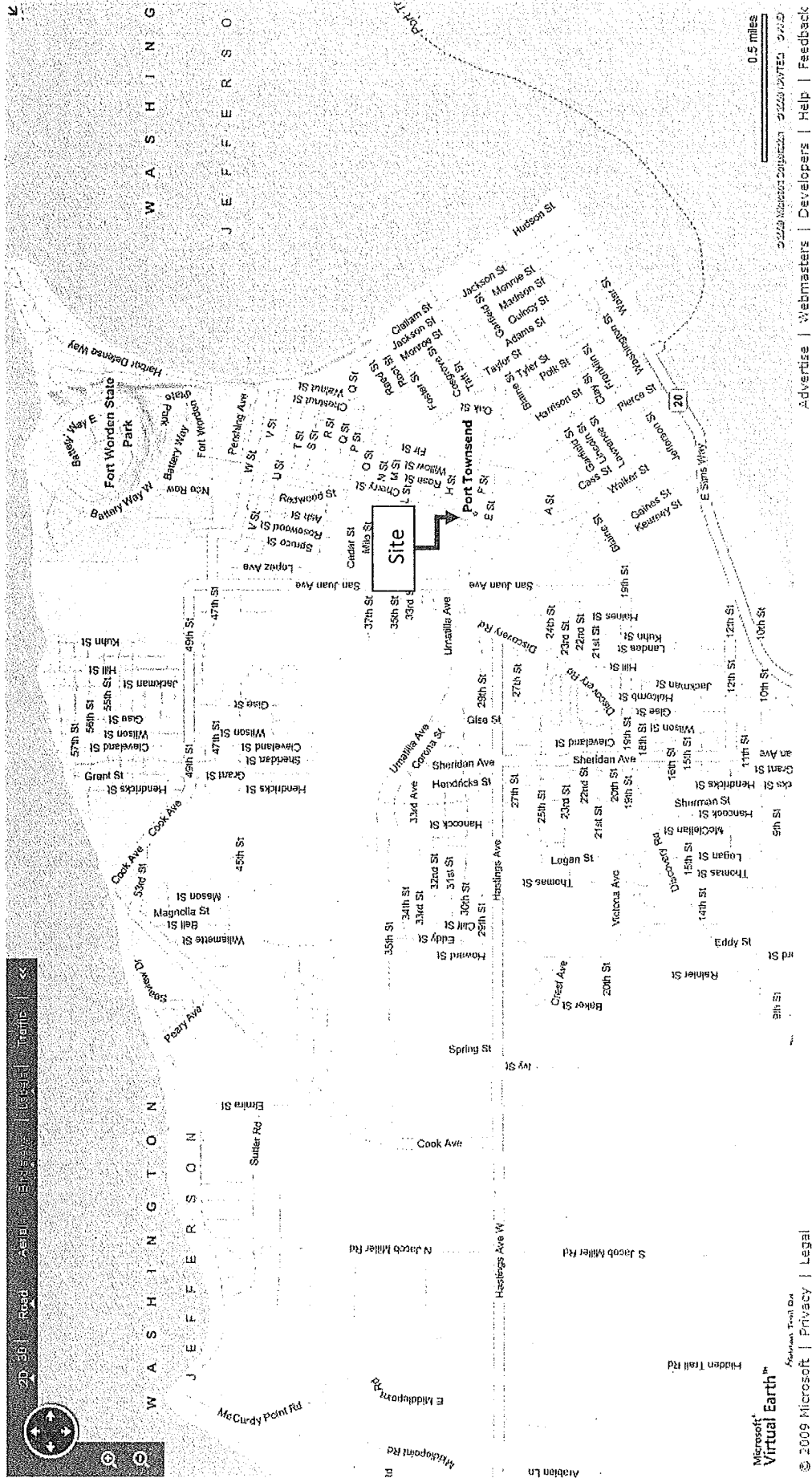


Figure 1 – Jody Bower Residence  
914 “F” Street, Port Townsend



Figure 2 - Jody Bower Residence  
914 "F" Street, Port Townsend

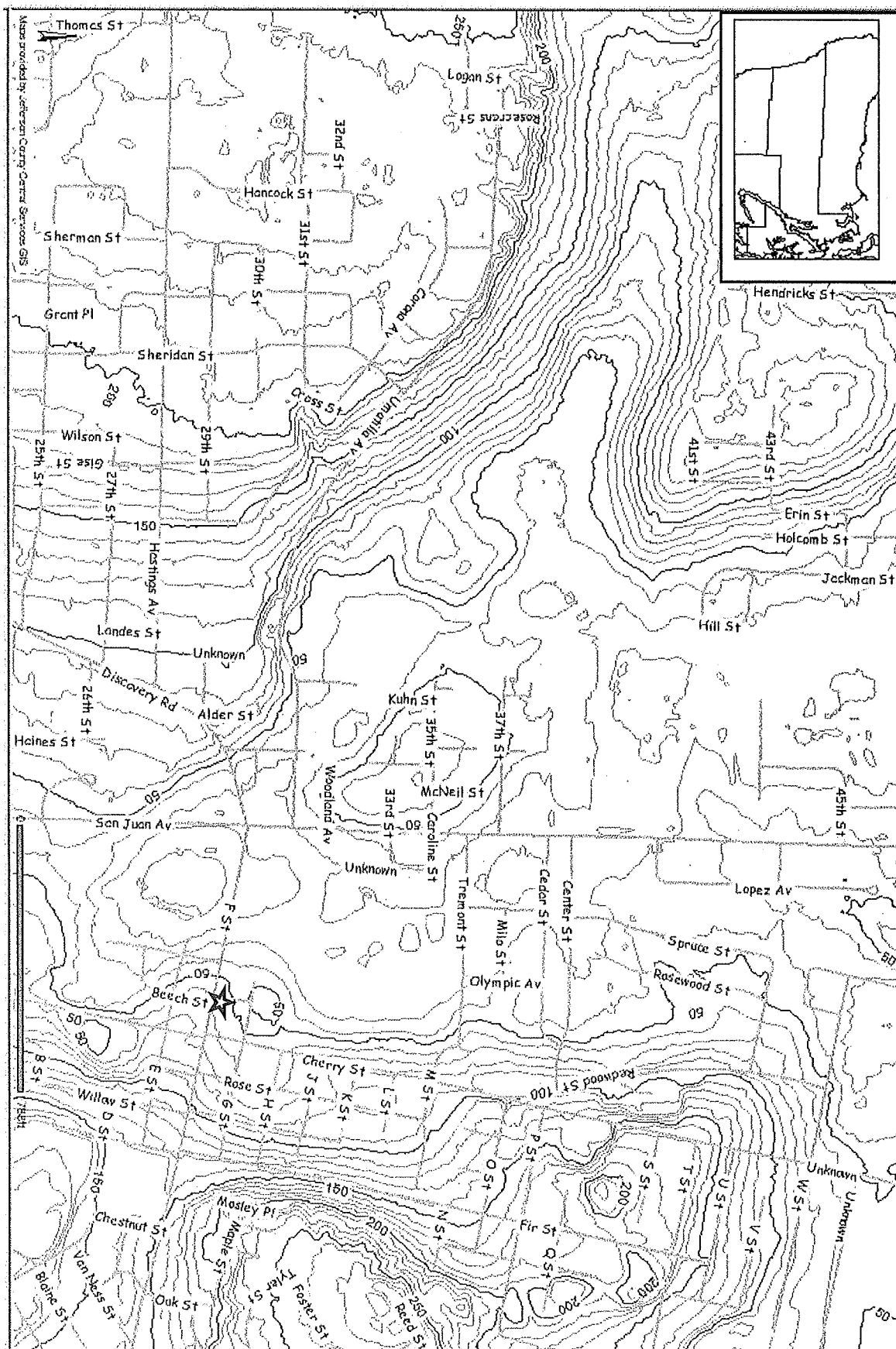
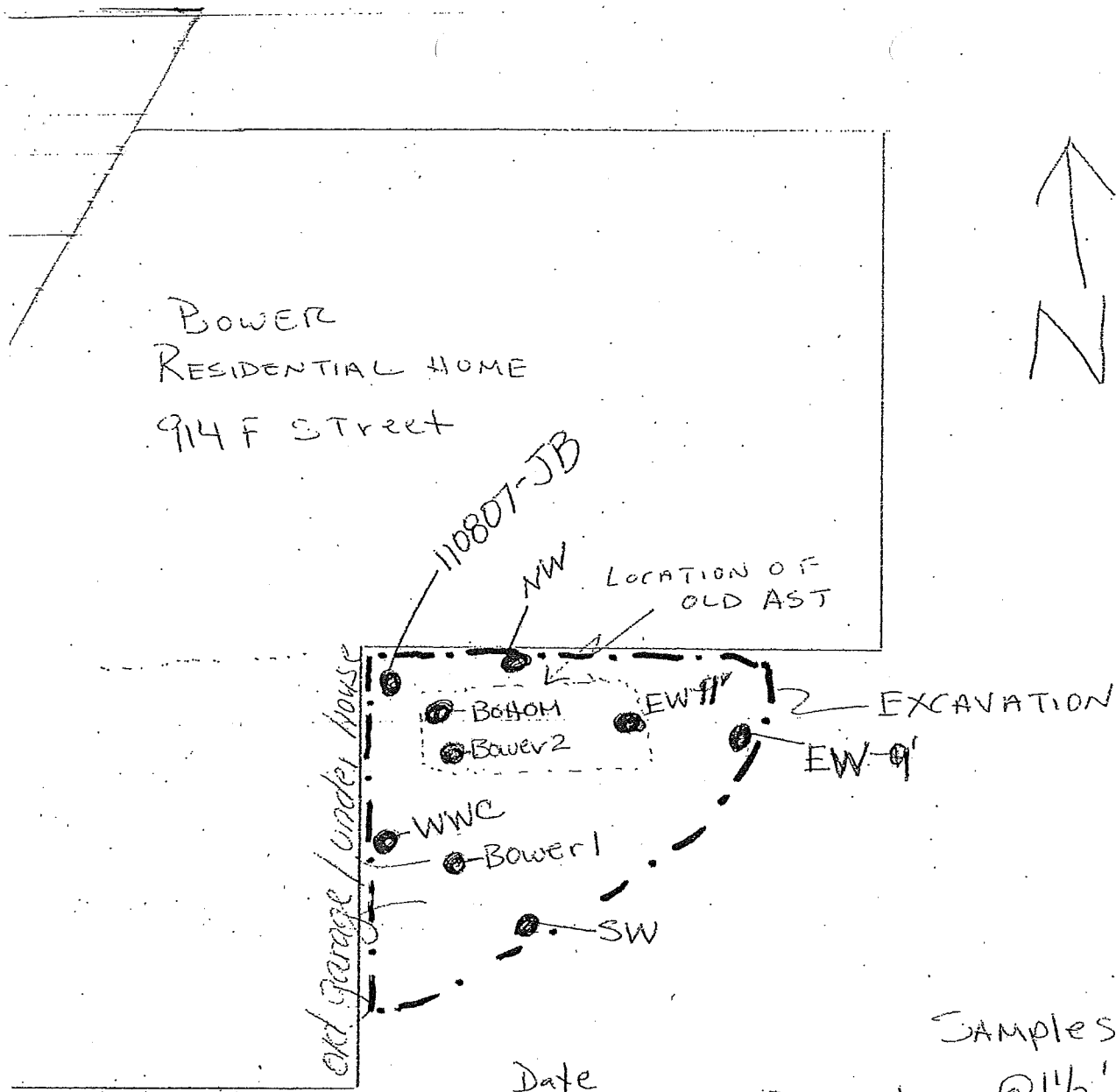


Figure 3 - Jody Bower Residence  
914 "F" Street, Port Townsend



Date		Samples	
4/2007	Bower 1	@ 1 1/2'	
	Bower 2	@ 3 1/2'	
10/2007	SW	9' 6"	
	NW	11' 5"	> 15' bgs
	EW	11'	> 15' bgs
	WWC	11'	> 15' bgs
	Bottom	11' 2"	> 15' bgs
	EW	9' 4"	
12/2007	110807-JB	~ 14' 8"	> 15' bgs
	(FOR EPH-VPH) Deepest Sample		

FIGURE 4



Parcels-H is now the Active Layer

Well Location Property Boundaries

Figure 5 - Jody Bower Residence  
914 "F" Street, Port Townsend

## ENVIRONMENTAL CHEMISTS

Date of Report: 04/04/07  
Date Received: 03/28/07  
Project: Bower, F&BI 703294  
Date Extracted: 03/29/07  
Date Analyzed: 03/30/07

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> (% Recovery) (Limit 53-144)
Bower-1 703294-01	10,000	<250	100
Bower-2 703294-02	12,000	270 x	103
Method Blank	<50	<250	88

x - The pattern of peaks present is not indicative of motor oil. The result is due to overlap from the diesel range.



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/29/07  
Date Received: 10/24/07  
Project: Jody Bower, F&BI 710317  
Date Extracted: 10/25/07  
Date Analyzed: 10/25/07

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
SW-9'6" 710317-01	<50	<250	102
NW-11'5" 710317-02	4,600	<250	94
EW-11' 710317-03	<50	<250	93
WW-@11' 710317-04	4,500	<250	98
Bottom-11'2" 710317-05	5,000	<250	99
Method Blank	<50	<250	98

**Enclosure B**

**Environmental Covenants  
for Institutional Controls**

**543869**

Jefferson County Aud JODY BOWER

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06/11/2009 09:44A  
COV 46.00**RECEIVED****MAY 27 2009**Washington State  
Department of Ecology**Restrictive (Environmental) Covenant**

After Recording Return to:

Chuck Cline  
Department of Ecology  
Southwest Region  
P.O. Box 47775  
Olympia WA 98504-7775

Grantor: Jody Bower  
Grantee: State of Washington, Department of Ecology  
Legal: 914 F Street, Port Townsend WA 98358  
B.S. Petty Grove's Addition: Block 1, lots 7 & 8  
Tax Parcel Nos.: 985500104

Grantor, Jody Bower, hereby binds Grantor, its successors and assigns to the land use restrictions identified herein and grants such other rights under this environmental covenant (hereafter "Covenant") made this 27th day of April, 2009 in favor of the State of Washington Department of Ecology (Ecology). Ecology shall have full right of enforcement of the rights conveyed under this Covenant pursuant to the Model Toxics Control Act, RCW 70.105D.030(1)(g), and the Uniform Environmental Covenants Act, 2007 Wash. Laws ch. 104, sec. 12.

This Declaration of Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by Jody Bower, her successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

A remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Covenant. The Remedial Action conducted at the property is described in the following document[s]:

- Report of Cleanup Activities at 914 F Street by DLH Environmental Consulting, February 15, 2008.
- Calculation of Method B Cleanup Levels for Jody Bower Property by Whitman Environmental Sciences, February 11, 2008.

**543869**

Jefferson County Aud JODY BOWER

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These documents are on file at Ecology's Southwest Regional Office.

This Covenant is required because the Remedial Action resulted in residual concentrations of diesel-range petroleum hydrocarbons (heating oil), which exceed the Model Toxics Control Act Method B Cleanup Level(s) for Soil established under WAC 173-340-740.

The undersigned, Jody Bower, is the fee owner of real property (hereafter "Property") in the County of Jefferson, State of Washington, that is subject to this Covenant. The Property is legally described as follows:

914 F Street, Port Townsend WA 98368

Lots 7 and 8, of Block 1 of B.S. Pettygrove's Addition to Port Townsend, as per Plat recorded in Volume 2 of Plats, Page 94, Records of Jefferson County, Washington.

Jody Bower makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1. Soil contaminated with diesel-range petroleum hydrocarbons was removed from the residential property owned by Ms. Bower. A leak from an old aboveground heating oil tank caused the contamination. A cleanup occurred that involved the removal of contaminated soil and testing of remaining soils. A limited quantity of heating oil contaminants remain on a portion of the property located near the basement door of the house on the north side. Such contaminants occur approximately 12 to 15 feet below the ground surface below the level of the basement floor, which lies 4 to 6 feet lower than the average grade of the surrounding grounds. The residual contaminants on the property pose no threat to groundwater, surface water, or neighboring properties.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited. No groundwater may be taken for any use from the Property. (Note: City of Port Townsend laws forbid installation of wells on residential property.)



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Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

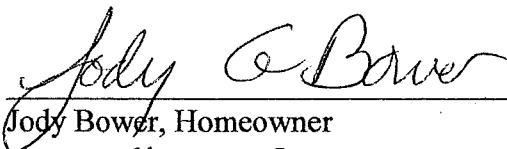
Section 4. The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

  
Jody Bower, Homeowner

Dated: May 26, 2009



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Jefferson County Aud JODY BOWER

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STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

Rebecca S. Lawson

Rebecca S. Lawson, PE, LHG  
SWRO Section Manager, Toxics Cleanup Program

Dated: 6/3/09



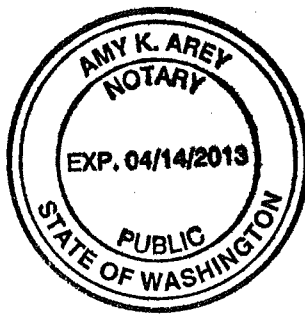
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Jefferson County Aud JODY BOWER

STATE OF WACOUNTY OF Jefferson

On this 21<sup>st</sup> day of May, 2009, I certify that Jody Bower personally appeared before me, and acknowledged that she is the individual described herein and who executed the within and foregoing instrument and signed the same at her free and voluntary act and deed for the uses and purposes therein mentioned.



Notary Public in and for the State of  
Washington, located at Port Townsend.  
My appointment expires 4/14/2013.

RECEIVED

JUN 15 2009

Washington State  
Department of Ecology

