STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

CERTIFIED MAIL

October 4, 2005

Mr. William R. Culloch Dasson
3 Kings Environmental
P.O. Box 280
Battle Ground, WA 98604

Re: Opinion under WAC 173-340-515(5) on Remedial Action(s) for the following Hazardous Waste Site:

- Name: Zahl Property
- Address: 4218 Pleasant Hill Road, Kelso, WA 98626
- Facility/Site No.: 4501326
- VCP No.: SWO705

Dear Mr. CullochDasson:

Thank you for submitting your site assessment report(s) for the Zahl Property (Site) for review by the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP). Ecology appreciates your initiative in pursuing this administrative option for cleaning up hazardous waste sites under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

This letter constitutes an advisory opinion regarding whether the remedial action performed is sufficient to meet the specific substantive requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release(s) at the Site:

- Petroleum Hydrocarbons in Soil and Groundwater;

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The state does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). The opinion is advisory only and not binding on Ecology.

Ecology's Toxics Cleanup Program has reviewed the following information regarding your remedial action(s):

1. January 7, 2003, Anderson Environmental Consulting, Sub-Surface Investigation –Zone and Extent Report, 4218 Pleasant Hill Road, Kelso, Washington 98632
2. January 10, 2003, Anderson Environmental Consulting, Underground Storage Tank Closure Report, 4218 Pleasant Hill Road, Kelso, Washington 98632
3. November 3, 2003, 3 Kings Environmental, Residential Property, 4218 Pleasant Hill Road, Kelso, Washington 98632
4. March 31, 2005, Wohlers Environmental, Phase II Environmental Site Assessment Report, 4218 Pleasant Hill Road, Kelso, Washington 98632

The reports listed above will be kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. Appointments can be made by calling the SWRO resource contact, Leslie Koziara, at (360) 407-6365.

The Site is defined by the extent of contamination caused by the following release(s):

- Petroleum Hydrocarbons in Soil;
- Petroleum Hydrocarbons in Groundwater.

The Site is more particularly described in Enclosure A to this letter, which includes a detailed Site diagram. The description of the Site is based solely on the information contained in the documents listed above.

Based on a review of the site assessment report(s) and supporting documentation listed above, **Ecology has determined that the remedial action described in the report <u>is not</u>**

sufficient to meet the specific substantive requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release(s) at the Site:

- Petroleum Hydrocarbons in Soil.
- Petroleum Hydrocarbons in Groundwater

Please provide Ecology with a site characterization and remediation work plan for addressing the above releases. Additional soil characterization is necessary to define the horizontal and vertical extent of petroleum contamination associated with each of the three former underground storage tanks at the site. Additional monitoring wells will also need to be installed at the site in order to define the groundwater flow direction, gradient, and extent of the groundwater contamination plume. Analyses parameters should be consistent with Table 830-1, WAC 173-340-900 and should include TPH-G, TPH-D, BTEX, fuel additives and blending compounds, and lead. Representative samples should also be obtained from the potable water supply well. Future soil and groundwater analyses parameters should be consistent with Table 830-1, WAC 173-340-900 It is also recommended that soil samples for analyses of volatile organic compounds be collected and prepared using EPA Method 5035A.

Please note that this letter does not provide an opinion on the sufficiency of any other remedial actions conducted at the Site or whether further remedial action is necessary to characterize and address all contamination at the Site. To obtain such an opinion, you must submit an independent remedial action report to Ecology upon completion of the cleanup action for the Site and request such an opinion under the VCP.

Please also note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

Again, Ecology appreciates your initiative in conducting an independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Site meet those requirements.

If you have any questions regarding this opinion, please contact me at (360) 407-6247 or via e-mail at stee461@ecy.wa.gov.

Sincerely,

SSTeel

Steve Teel, LHG
Hydrogeologist
Toxics Cleanup Program
Southwest Regional Office

ST/ksc:SW0705 Opinion on Completed RA

Enclosures

Cc: Mr. Eric Zahl
Mr. Chris Wohlers, Wohlers Environmental
Mr. Brian Dedoncker, Clark County Health Department
Chuck Cline, Department of Ecology
Paul Turner, Department of Ecology
Bob Warren, Department of Ecology
Trish Akana, Department of Ecology, (SW0705)

ENCLOSURE A

The site is located in a rural residential area of Kelso, Washington, approximately 2,500 feet southeast of the Cowlitz River. Site use is residential. Onsite structures consist of a residence and potable well pump house.

Two gasoline underground storage tanks (10,000 gallon and 800 gallon) and one 800 gallon heating oil tank were removed from the property in December 2002. These gasoline USTs were reportedly installed in the 1920s or 1930s and had not been used for approximately 20 years. The 10,000 gallon gasoline underground storage tank (UST) was located northwest of the pump house and the 800 gallon UST was located on the south side of the pump house. The heating oil tank was located near the southeast corner of the residence. During the removal, evidence of petroleum contaminated soil was observed in the 800 gallon gasoline UST excavation and the 800 gallon heating oil excavation.

The following environmental concerns are present at the site:

Residual Soil Contamination:

10,000-Gallon Gasoline UST Excavation: Two soil samples were collected from the base of the excavation for analysis using the qualitative Washington State Hydrocarbon Identification (WTPH-HCID) Method. Both sample results were below the detection limit. Because the HCID Method is designed for screening purposes, additional confirmation soil samples should be analyzed for total petroleum hydrocarbons–gasoline range TPH-G using the quantitative NWTPH-Gx Method. Samples should be obtained from the vicinity of each excavation sidewall as well as the excavation bottom. Analyses for benzene, toluene, ethylbenzene, and total xylenes (BTEX), and lead should also be performed on all samples.

800-Gallon Gasoline UST Excavation: One soil sample was collected from the base of the excavation and analyzed for TPH-G; this sample showed a concentration of 9,430 mgkg, which exceeds the MTCA Method A Cleanup Level. Analyses results for TPH-G were also obtained from seven soil samples from seven direct push borings in December 2002 from the area surrounding the excavation at depths ranging from 16- to- 28 feet. Concentrations of TPH-G above the MTCA Method A Cleanup Level were observed in the sample from Boring 3 at a depth of 16 feet (2,800 mg/kg) and Boring 7 at a depth of 21 feet (440 mg/kg). In 2004, soil samples were collected from six additional direct push borings in the vicinity of this UST. Concentrations of TPH-G above the MTCA Method A Cleanup Level were observed in one or more samples from Well MW-1 and Borings DP-3, -4, and -5 at depths ranging from 10- to- 25 feet below ground surface (bgs). The maximum TPH-G concentration was from the 13 foot sample from Boring DP-3 (14,700 mg/kg). Two samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260 and two samples were

analyzed for BTEX by EPA Method 8021B. Concentrations of toluene (38.1 mg/kg), ethylbenzene (29.1 mg/kg), total xylenes (119.8 mg/kg) and naphthalene (10.9 mg/kg) from sample DP-4 at 13 feet and ethylbenzene (16.62 mg/kg) and total xylenes (102.39 mg/kg) from sample DP-3 at 15 feet exceeded the MTCA Method A Cleanup Level for Unrestricted Uses. Concentrations of toxicity characteristic leaching procedure (TCLP) lead were analyzed from one sample (DP-4 at 13 feet) and the result was below the laboratory reporting limit (0.1 mg/L). The extent of soil contamination from this UST has not been fully defined vertically or horizontally.

800-Gallon Heating Oil UST Excavation: Two soil samples were collected from the base of the excavation (5 foot depth) and analyzed for total petroleum hydrocarbons – diesel range (TPH-D); these samples had results of 36,300 and 23,900 mg/kg, respectively, both of which exceeds the MTCA Method A Cleanup Level for Unrestricted Uses. Analyses results for TPH-D were also obtained in 2002 from three hand auger borings on the north, south, and east side of the excavation at a depth of 13 feet; all three results were below the laboratory reporting limit. Field observations suggest that contamination extends from 6- to- 12 feet below ground surface (bgs). Two additional soil samples were also obtained in 2004 at depths of seven and ten feet beneath the former tank location. The seven foot sample was analyzed for TPH-D, BTEX, and polycyclic aromatic hydrocarbons (PAHs) and the ten foot sample was analyzed for TPH-D. The TPH-D value (15,200 mg/kg) from the seven foot sample exceeded the MTCA Method A Cleanup Level for Unrestricted Uses. The aerial extent of soil contamination has not been defined.

Groundwater: Two wells are present at the site, a potable water supply well (118 foot depth) and a groundwater monitoring well (MW-1) completed at a depth of 85 feet. Depth to water in the potable water well was approximately 77 feet bgs. Groundwater samples were obtained from the potable water well on October 27, 2003 for TPH-G and BTEX analyses and on November 24, 2004 for analysis of TPH-G, dissolved lead, and VOCs. Samples at both of the above sampling events were collected with no purging of the well bore. Results from the potable water well for all constituents were below the laboratory reporting limit except for toluene (1µg/L) in October 2003. However, because these samples were collected without purging, these results may not be representative of actual aquifer concentrations.

A groundwater sample was also collected from monitoring well MW-1 on December 2, 2004 for The TPH-G and VOC analyses. Concentrations of TPH-G (1,260 µg/L) and total xylenes (55 µg/L) exceeded the MTCA Method A Cleanup Level for Unrestricted Uses and benzene concentrations equaled the Cleanup Level (5 µg/L). Additional monitoring wells will need to be installed at the site in order to define the groundwater flow direction, gradient, and extent of the groundwater contamination plume. Analyses parameters should be consistent with Table 830-1, WAC 173-340-900 and should include TPH-G, TPH-D, BTEX, fuel additives and blending compounds, and lead. Representative samples should also be obtained from the potable water supply well.

No cleanup activities have been performed at the site except for the removal of the USTs. If residual soil contamination above the MTCA Method A Cleanup Level remains at the site at the conclusion of remedial activities, a restrictive covenant may need to be prepared.

ATTACHMENTS (from consultant report)
Figure 2 (Site Map)
Figure 3 (Soil Sample Locations)
Figure 4 (Groundwater Sample Locations)

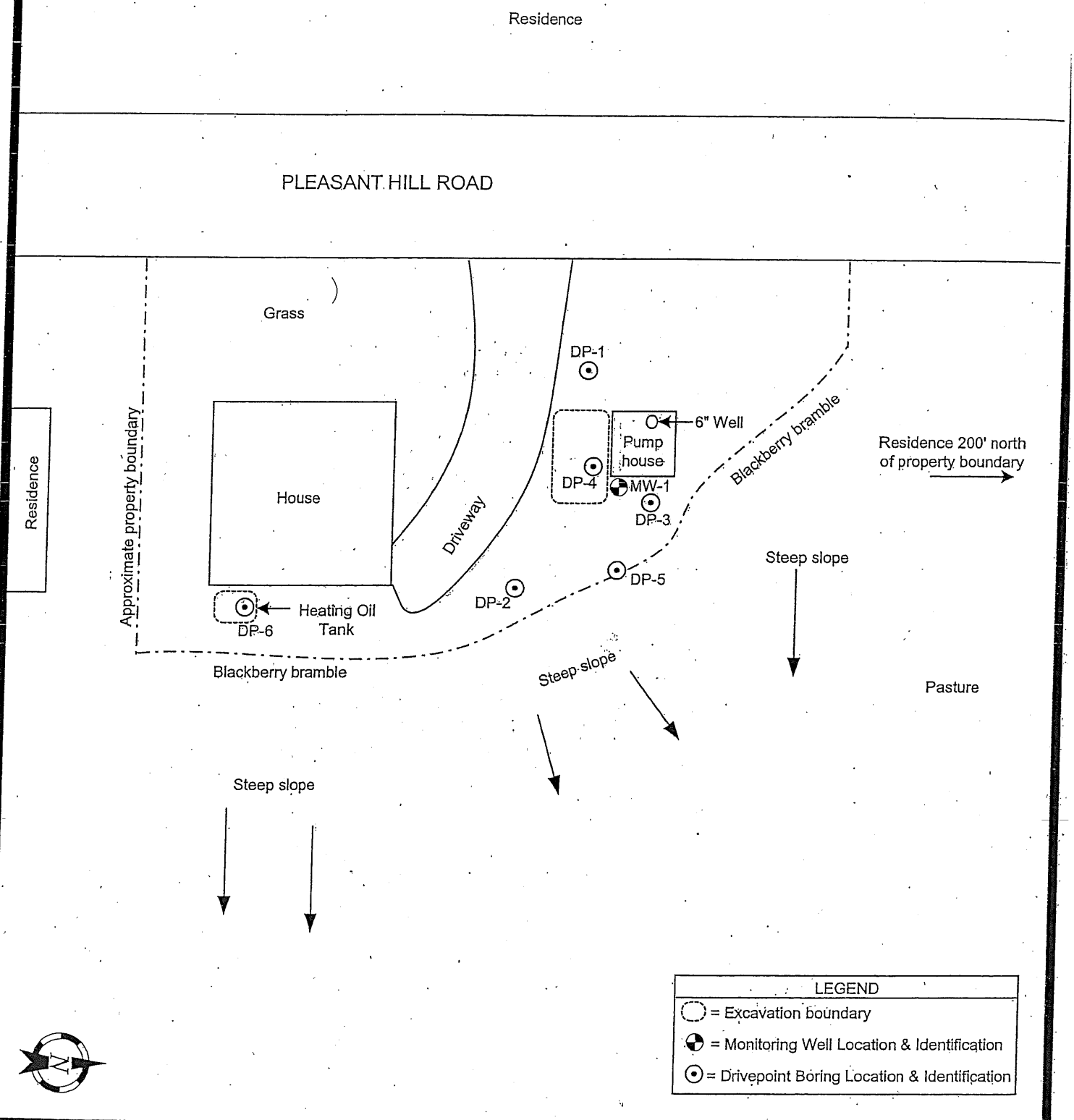

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FIGURE 2

SITE MAP

SAFECO/ZAHL PROPERTY
4218 PLEASANT HILL ROAD
KELSO, WASHINGTON

PROJECT NO.:	04-0130
DATE:	03/04/05
SCALE:	1" = 30'
FILE:	FG040130
DRAWN BY:	KB

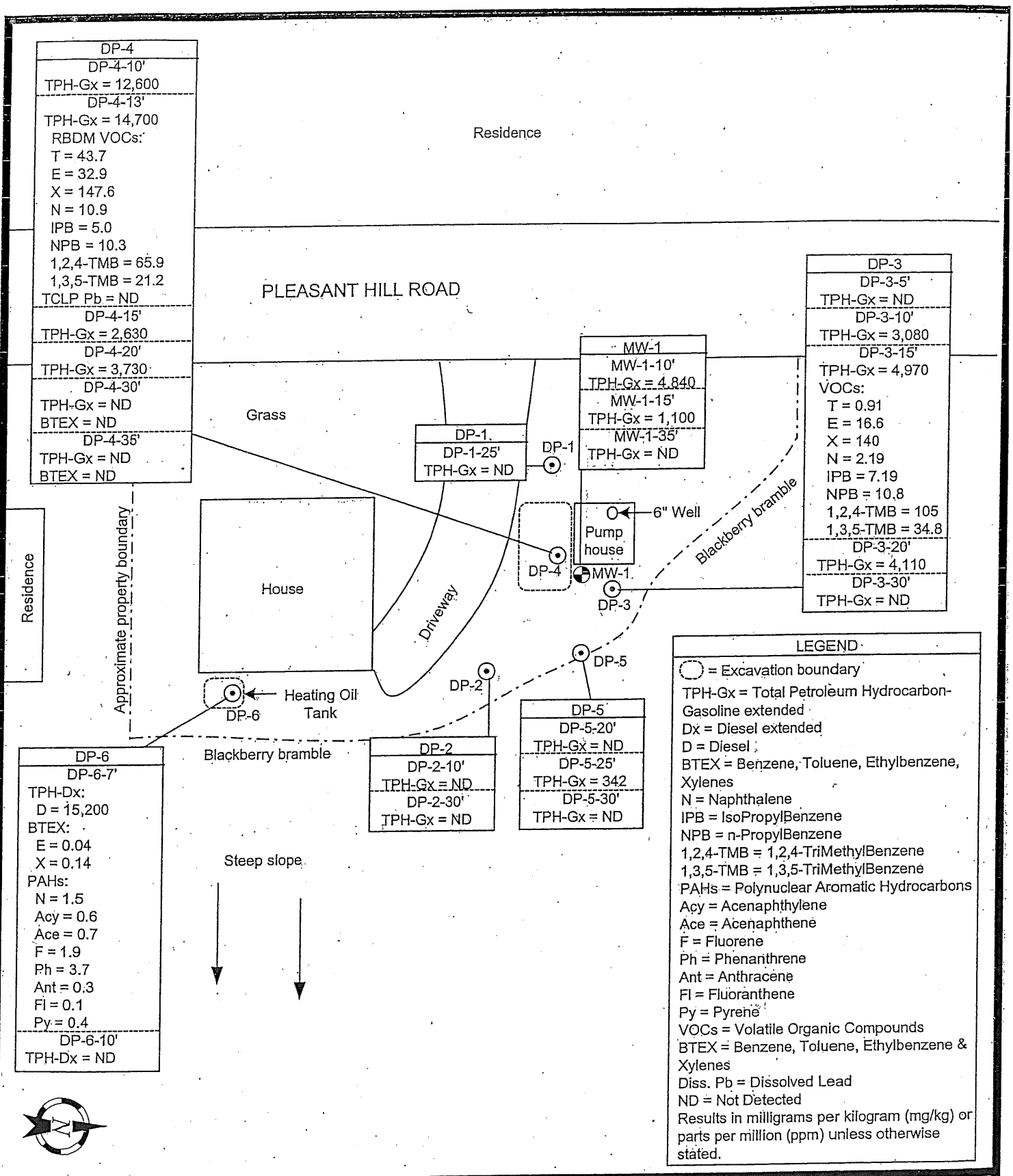

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FIGURE 3

SOIL SAMPLE LOCATION & ANALYTICAL RESULTS MAP

SAFECO/ZAHL PROPERTY
4218 PLEASANT HILL ROAD
KELSO, WASHINGTON

PROJECT NO.:	04-0130
DATE:	04/01/05
SCALE:	1" = 30'
FILE:	FG040130
DRAWN BY:	KB

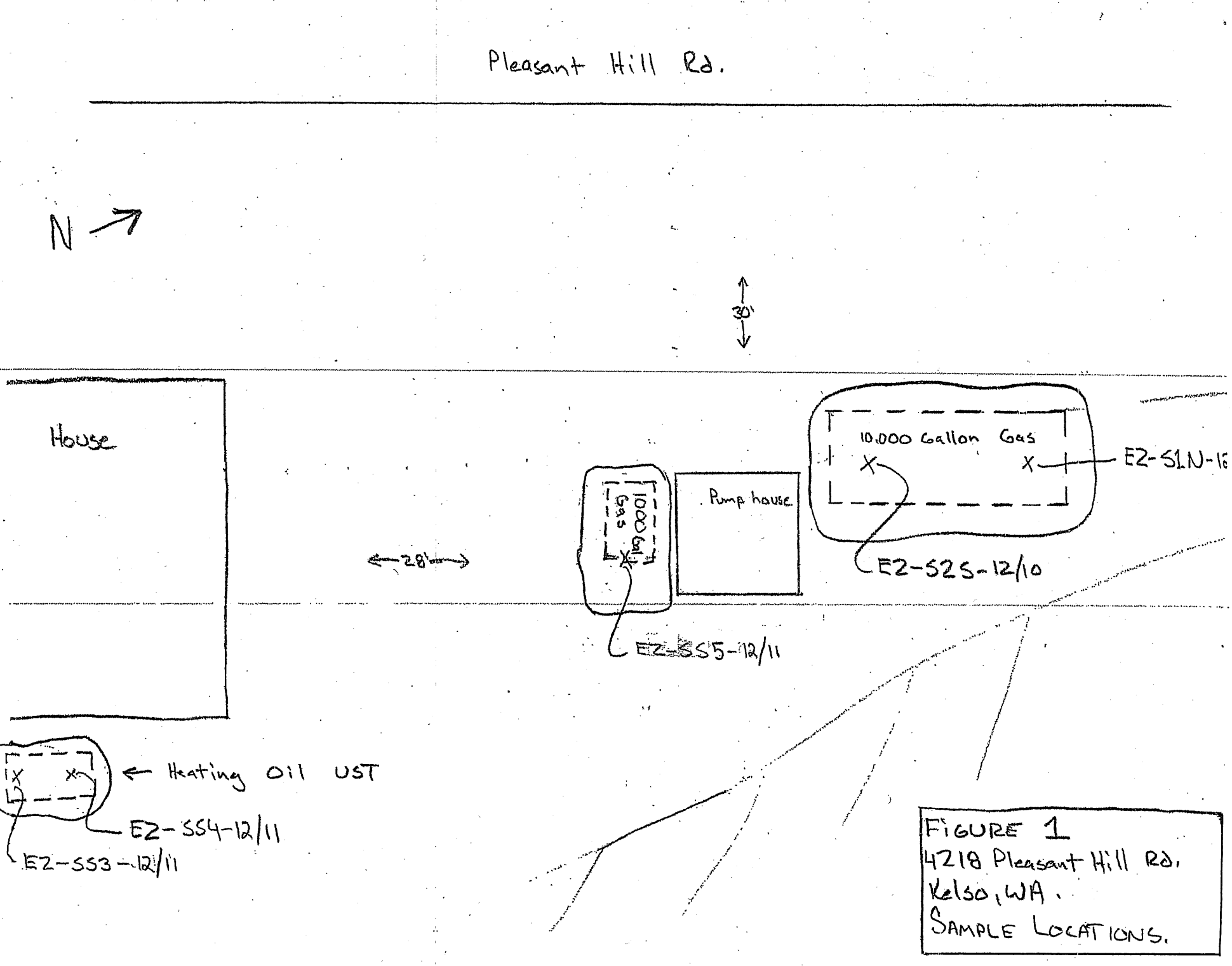

FIGURE 1
4218 Pleasant Hill Rd.
Kelso, WA.
SAMPLE LOCATIONS.

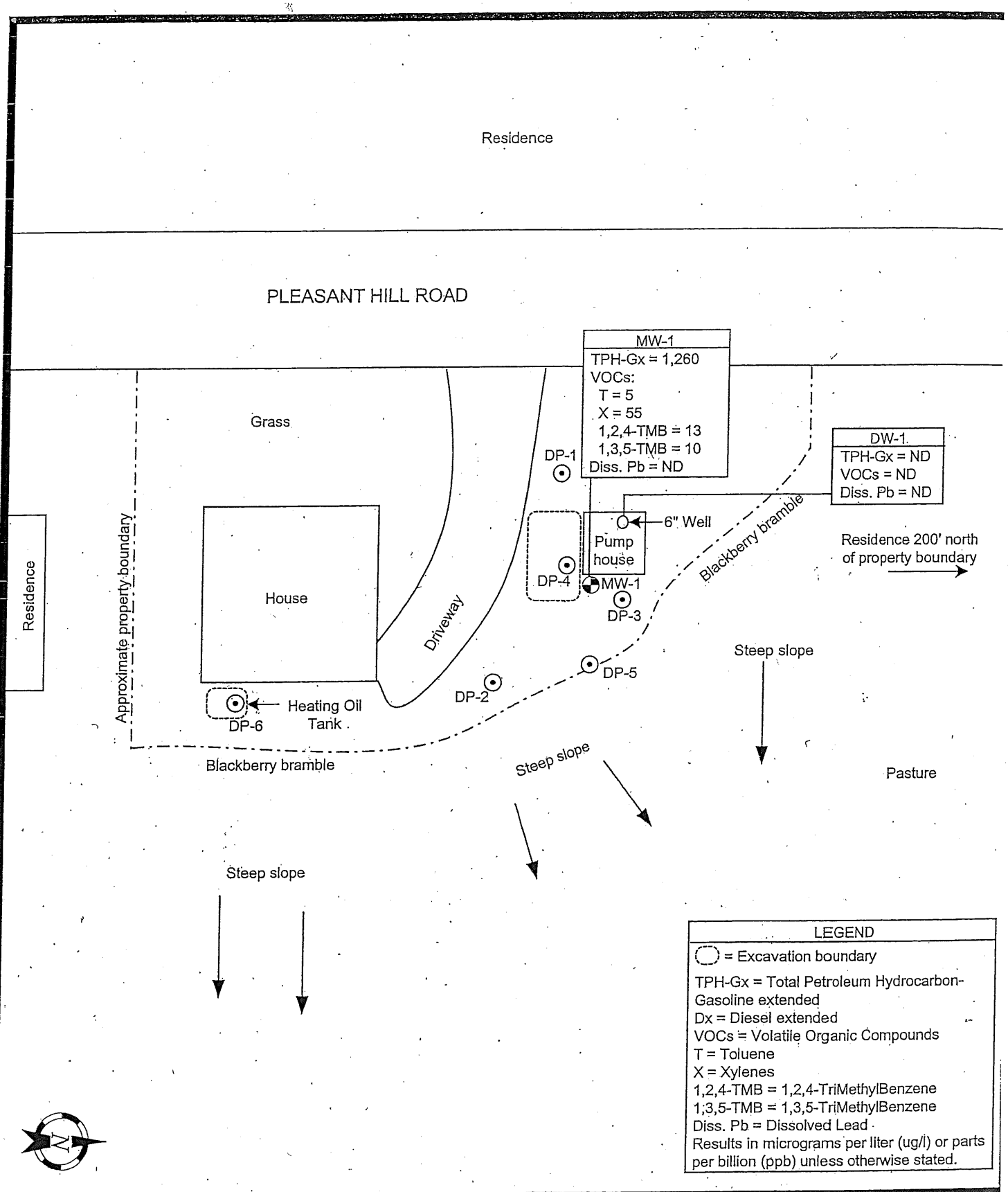

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FIGURE 4

GROUNDWATER SAMPLE LOCATION & ANALYTICAL RESULTS MAP

SAFECO/ZAHL PROPERTY
4218 PLEASANT HILL ROAD
KELSO, WASHINGTON

PROJECT NO.:	04-0130
DATE:	12/09/04
SCALE:	1" = 30'
FILE:	FG040130
DRAWN BY:	KB