STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
TTY 711 or 800-833-6388 (For the Speech or Hearing Impaired)

CERTIFIED MAIL

February 28, 2006

Mr. Kevin Stormans
Stormans, Inc.
1932 East 4th Avenue
Olympia, WA 98506

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

- Name: Allison's Norge Village (a.k.a. Eastside Laundry)
- Address: 120 NE Turner Street (a.k.a. 116 NE Turner Street)
- Facility/Site No.: 14214153
- VCP No.: SWO370

Dear Mr. Stormans:

Thank you for submitting documents regarding your proposed cleanup action for the Allisons's Norge Village (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 your proposed cleanup action is likely to be sufficient to meet the substantive requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC. 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 proposed cleanup action and, as applicable, any remedial actions previously conducted at the Site:

- December 14, 2005, Farallon Consulting, L.L.C. Draft Cleanup Action Plan, Allison's Norge Village, 120 Northeast Turner Street, Olympia, Washington...

The report 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):

- Halogenated Volatile Organic Compounds in Soil
- Halogenated Volatile Organic Compounds in groundwater.

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

Based on a review of your proposed cleanup action and supporting documentation listed above, **Ecology has determined that the proposed cleanup action is not likely to be sufficient to meet the substantive requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the contamination at the Site.**

We support the use of soil vapor extraction (SVE) as an Interim Source Removal Action (ISRA). However, because the lateral extent and depth of soil contamination to the southwest, west, northwest, and north has not been determined and the groundwater flow direction, gradient, and plume extent has not been defined, it is our position that further characterization of the site is necessary before the final cleanup methodology can be chosen. Please see Enclosure A for a complete list of comments on the Draft Cleanup Action Plan.

In accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), data generated for Independent Remedial Actions shall be submitted in both a written and electronic format. Additional information regarding electronic format requirements, see the website http://www.ecy.wa.gov/eim. All laboratory analyses shall be performed by the State of Washington Certified Laboratory for each analytical method used.

However, please note that this opinion does not represent a determination by Ecology that no further remedial action will be required at the Site. To obtain such a determination, you

must submit an independent remedial action report to Ecology upon completion of the cleanup action 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 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:SW0370 Opinion on Proposed CA

Enclosures:

Cc: Mr. J. Riley Conkin, Principal Geologist, Farallon Consulting, L.L.C.
Ms. Carla Brock, Project Geologist, Farallon Consulting, L.L.C.,
Mr. Wilbur Allison, dba Allison's Norge Village Dry Cleaners, c/o Mr. David D. Cullen
Stormans Inc., Mr. Kevin Stormans, c/o Mr. Paul Carey, Betts Patterson & Mines P.S.
Gerald Tousley, Thurston County Health Department, Environmental Health Division
Chuck Cline, Department of Ecology
Robert Warren, Department of Ecology
Trish Akana, Department of Ecology (SW0370)

ENCLOSURE A

Site Description

The site is located on the southeast corner of the intersection of Turner Street and State Street in Olympia, Thurston County, Washington. The 0.37-acre parcel includes a single-story masonry building in the northwest corner; this building was built in the early 1960s. The remainder of the site is covered with asphalt. The building is divided into four suites that are currently occupied by (from north to south): Eastside Laundry (dry cleaning operations), a barbershop, an insurance broker, and Eastside Laundry (pick-up and drop-off only).

The site has been operated as a dry-cleaning business since the early 1960s. The building formerly contained eight coin-operated dry-cleaning machines along the southern wall of the northern suited which were supplied with tetrachloroethene (PCE) from an above-ground storage tank (AST) located inside the building. The coin-operated machines were removed in late 1990 and a single, dry-to-dry type commercial dry-cleaning machine was installed in its place. The AST was pumped-out in late 1990 and remains in place.

A Phase II Environmental Site Assessment conducted in March 2000 confirmed the presence of PCE soil concentrations that exceed the MTCA Method A Cleanup Level for Unrestricted Uses. A Site Hazard Assessment (SHA) was completed for the site and the ranking was determined to be a **3**.

Environmental Concerns

The following environmental concerns are present at the site:

Soil Contamination from Dry Cleaning Past Practices: Environmental investigations conducted to date have shown that PCE soil concentrations that exceed the MTCA Method A Cleanup Level for Unrestricted Uses. The maximum depth of contamination above the Cleanup Level ranges from approximately 35 feet below ground surface (bgs) in the eastern portion of the property to approximately 82 feet bgs below the dry-cleaning machines. The lateral extent and depth of soil contamination has been defined to the east, southeast, and south. ***However, the lateral extent and depth of soil contamination to the southwest, west, northwest, and north has not been determined.*** The maximum observed PCE soil concentration is 39.9 mg/kg from sample IB-2 (5-foot depth).

Groundwater: A total of three wells ("deep zone wells") monitor the regional groundwater table beneath the site (MW-2, -5, and -7); depth to water ranges from 76- to- 88-feet bgs. Local perched water was observed in several borings at depths of 5- to- 22 feet bgs at insufficient

quantities to collect groundwater samples. A deeper perched groundwater zone was encountered in well MW-1 at a depth of approximately 55 feet bgs. Well MW-1 monitors this perched aquifer zone. Groundwater flow gradient and direction have not been assessed. The direction of groundwater flow is presumed to be west-northwest toward Capital Lake and Budd Inlet. The closest water supply well is greater than 0.5 miles from the site.

Concentrations of PCE above the MTCA Method A Cleanup Level have been observed in all three deep zone wells (MW-2, -5, and -7) and the perched zone ("intermediate zone") monitoring well (MW-1). PCE is the only constituent that has been observed at concentrations above the Cleanup Level. Observed deep zone concentrations range from 7 µg/L (MW-7, December 2004) to 56 µg/L (MW-5, December 2004) and the December 2004 concentration in well MW-1 (perched zone) was 170 µg/L.

A Draft Cleanup Action Plan was submitted for review that selects soil vapor extraction (SVE) as the cleanup remedy. **We support the use of soil vapor extraction (SVE) as an Interim Source Removal Action (ISRA)**. However, because the lateral extent and depth of soil contamination to the southwest, west, northwest, and north has not been determined and the groundwater flow direction, gradient, and plume extent has not been defined, it is our position that further characterization of the site is necessary before the final cleanup methodology can be chosen.

We have the following additional comments on the Draft Cleanup Action Plan:

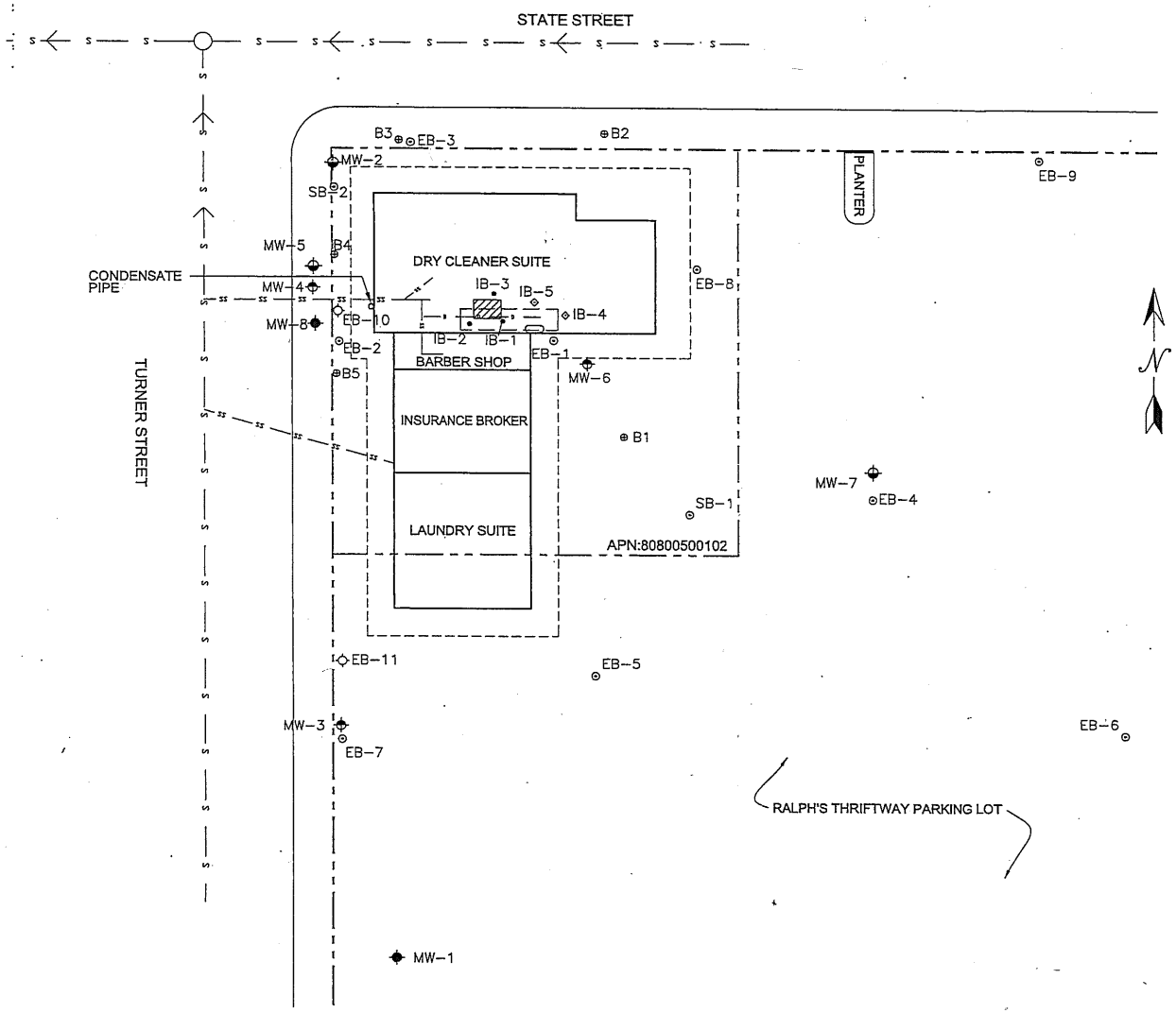
1) The Draft Cleanup Action Plan (CAP) stated that the low concentrations of PCE observed (in monitoring wells MW-2, -5, and -7) are not indicative of the presence of product-phase PCE or dense non-aqueous phase liquid (DNAPL). Therefore the plan concludes that the dissolved phase PCE plume "likely is limited to the upper 10 to 20 feet of the water-bearing zone". ***Additional evidence is needed to support this statement. The movement of dense non-aqueous phase liquids (DNAPL) is frequently unpredictable due to the influence of geologic heterogeneity. Therefore, additional soil and groundwater concentration data from the deeper portions and base of the aquifer should be collected, either from direct-push borings or new monitoring wells. If new monitoring wells are installed, screen lengths of 3-5 feet are preferred to reduce dilution of concentrations.***

2) The plan mentions that subsurface utilities can provide preferential transport pathways and that the previous investigation (pre-December 2004) did not assess all of these potential source areas. Although additional borings were installed in December 2004 and June 2005, is not clear that all potential preferential pathways have been investigated.

3) The plan references the USGS (1999) report which discusses local stratigraphy (e.g. Vashon Recessional Outwash, Vashon Till, Vashon Advance Outwash, etc.) as well as nearby wells (e.g. Del Knudson well) and the thickness of these units in nearby wells. However, there is no clear correlation made in the plan from the "intermediate zone" and "deep zone" to the above regional geologic units. It is recommended that the interrelationship between these stratigraphic units be more clearly defined or discussed in the plan.

4) The Quality Assurance Project Plan (Section 3.2.3) should state the frequency that duplicate samples will be collected.

ATTACHMENTS (from consultant report)
Figures 2, 3, 4, and 9



LEGEND

MW-4	SHALLOW ZONE SVE WELL
MW-8	INTERMEDIATE ZONE SVE WELL
MW-7	DEEP ZONE GROUNDWATER MONITORING WELL
B1	SOIL PROBE (SALTBUSH, 2000)
EB-11	EXTERIOR BORING (FARALLON 2004)
EB-8	EXTERIOR BORING (G-LOGICS, INC., 2001)
IB-1	INTERIOR BORING (G-LOGICS, INC., 2001)
IB-4	INTERIOR BORING (FARALLON 2004)
	DRY CLEANING MACHINE
	165-GALLON ABOVE-GROUND STORAGE TANK
	FORMER COIN-OPERATED DRY CLEANING AREA
	PROPERTY BOUNDARY
	ROOF LINE
	FLOOR DRAIN
S	SANITARY SEWER MAIN
	SIDE SEWER
SVE	SOIL VAPOR EXTRACTION
APN:80800500102	ASSESSORS PARCEL NUMBER

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE
2. SOURCE MAP: G-LOGICS, INC.

0 30

APPROXIMATE SCALE IN FEET

DRAFT

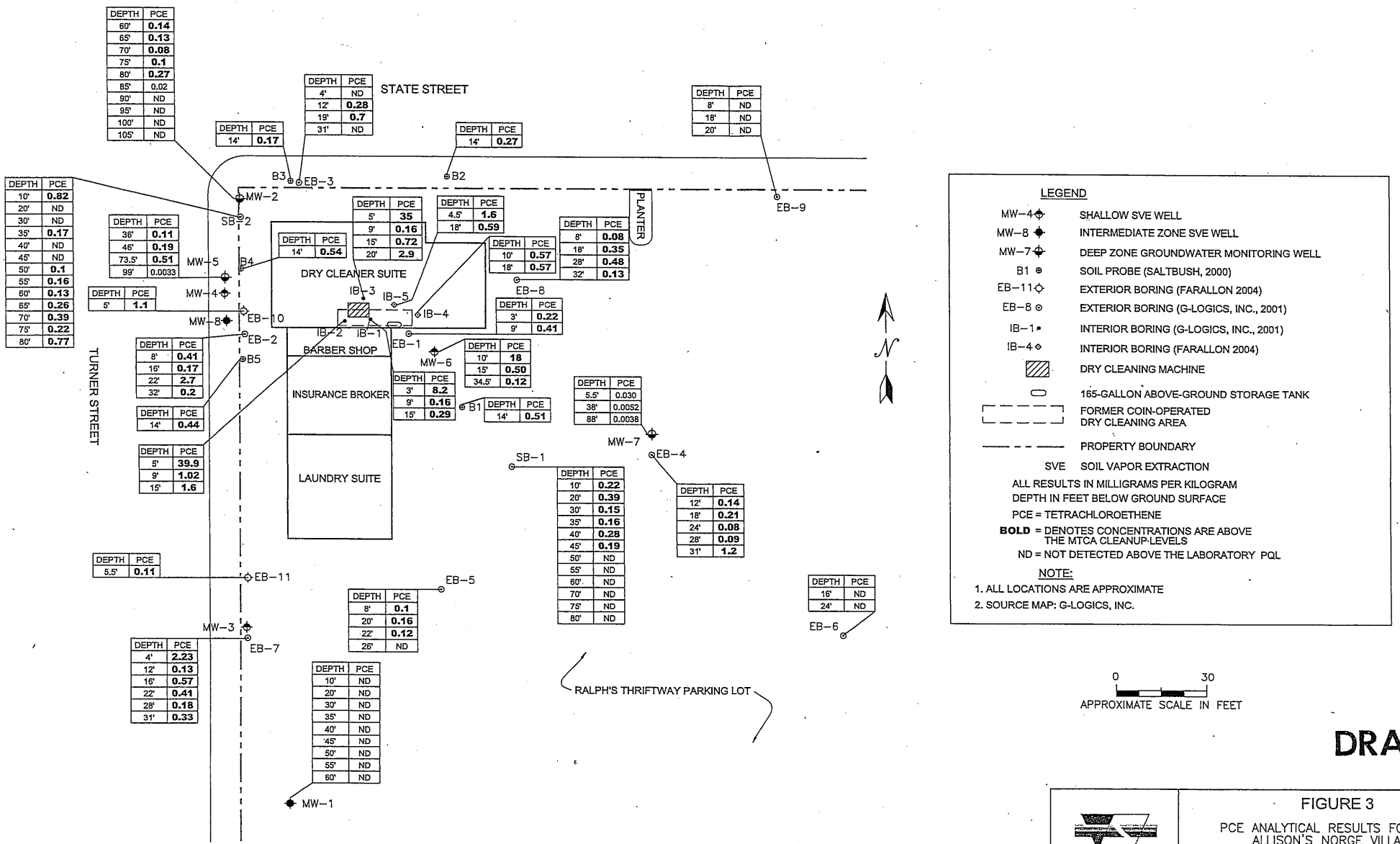
FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

FIGURE 2

SITE PLAN
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: DFW | Checked By: RC | Date: 11/7/05 | Disk Reference: 663010



DEPTH	PCE
60'	**0.14**
65'	**0.13**
70'	**0.08**
75'	**0.1**
80'	**0.27**
85'	0.02
90'	ND
95'	ND
100'	ND
105'	ND

DEPTH	PCE
4'	ND
12'	**0.28**
19'	**0.7**
31'	ND

DEPTH	PCE
14'	**0.17**

DEPTH	PCE
14'	**0.27**

DEPTH	PCE
8'	ND
18'	ND
20'	ND

DEPTH	PCE
10'	**0.82**
20'	ND
30'	ND
35'	**0.17**
40'	ND
45'	ND
50'	**0.1**
55'	**0.16**
60'	**0.13**
65'	**0.26**
70'	**0.39**
75'	**0.22**
80'	**0.77**

DEPTH	PCE
36'	**0.11**
46'	**0.19**
73.5'	**0.51**
99'	0.0033

DEPTH	PCE
14'	**0.54**

DEPTH	PCE
5'	**35**
9'	**0.16**
15'	**0.72**
20'	**2.9**

DEPTH	PCE
4.5'	**1.6**
18'	**0.59**

DEPTH	PCE
8'	**0.08**
18'	**0.35**
28'	**0.48**
32'	**0.13**

DEPTH	PCE
10'	**0.57**
18'	**0.57**

DEPTH	PCE
5'	**1.1**

DEPTH	PCE
3'	**0.22**
9'	**0.41**

DEPTH	PCE
8'	**0.41**
16'	**0.17**
22'	**2.7**
32'	**0.2**

DEPTH	PCE
10'	**18**
15'	**0.50**
34.5'	**0.12**

DEPTH	PCE
3'	**8.2**
9'	**0.16**
15'	**0.29**

DEPTH	PCE
14'	**0.51**

DEPTH	PCE
5.5'	0.030
38'	0.0052
88'	0.0038

DEPTH	PCE
14'	**0.44**

DEPTH	PCE
5'	**39.9**
9'	**1.02**
15'	**1.6**

DEPTH	PCE
10'	**0.22**
20'	**0.39**
30'	**0.15**
35'	**0.16**
40'	**0.28**
45'	**0.19**
50'	ND
55'	ND
60'	ND
70'	ND
75'	ND
80'	ND

DEPTH	PCE
12'	**0.14**
18'	**0.21**
24'	**0.08**
28'	**0.09**
31'	**1.2**

DEPTH	PCE
5.5'	**0.11**

DEPTH	PCE
8'	**0.1**
20'	**0.16**
22'	**0.12**
26'	ND

DEPTH	PCE
16'	ND
24'	ND

DEPTH	PCE
4'	**2.23**
12'	**0.13**
16'	**0.57**
22'	**0.41**
28'	**0.18**
31'	**0.33**

DEPTH	PCE
10'	ND
20'	ND
30'	ND
35'	ND
40'	ND
45'	ND
50'	ND
55'	ND
60'	ND

LEGEND

- MW-4 — SHALLOW SVE WELL
- MW-8 — INTERMEDIATE ZONE SVE WELL
- MW-7 — DEEP ZONE GROUNDWATER MONITORING WELL
- B1 — SOIL PROBE (SALTBUSH, 2000)
- EB-11 — EXTERIOR BORING (FARALLON 2004)
- EB-8 — EXTERIOR BORING (G-LOGICS, INC., 2001)
- IB-1 — INTERIOR BORING (G-LOGICS, INC., 2001)
- IB-4 — INTERIOR BORING (FARALLON 2004)
- DRY CLEANING MACHINE
- 165-GALLON ABOVE-GROUND STORAGE TANK
- FORMER COIN-OPERATED DRY CLEANING AREA
- PROPERTY BOUNDARY
- SVE — SOIL VAPOR EXTRACTION

ALL RESULTS IN MILLIGRAMS PER KILOGRAM
DEPTH IN FEET BELOW GROUND SURFACE
PCE = TETRACHLOROETHENE
BOLD = DENOTES CONCENTRATIONS ARE ABOVE THE MTCA CLEANUP LEVELS
ND = NOT DETECTED ABOVE THE LABORATORY PQL

NOTE:
1. ALL LOCATIONS ARE APPROXIMATE
2. SOURCE MAP: G-LOGICS, INC.

DRAFT

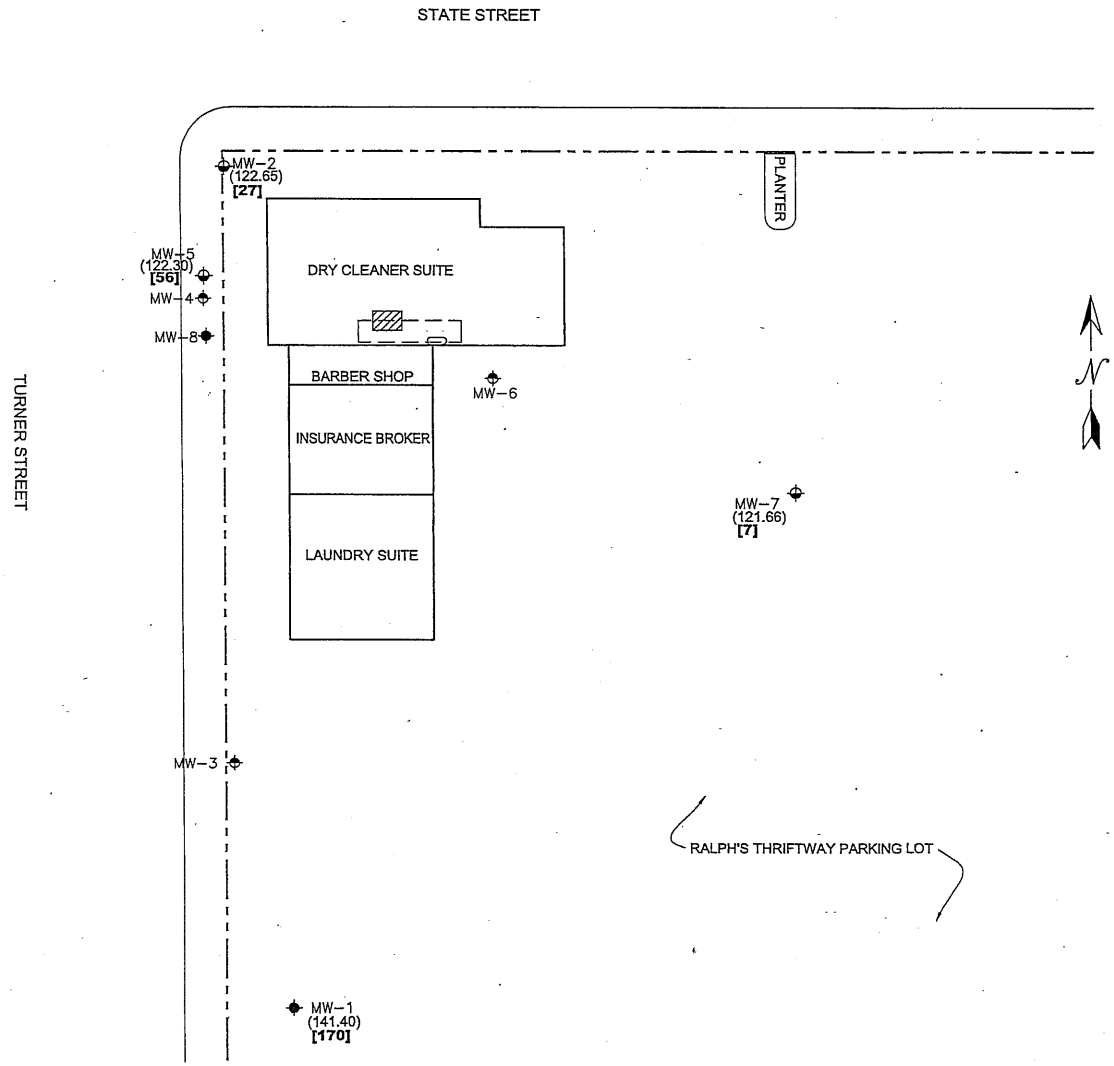
FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

FIGURE 3

PCE ANALYTICAL RESULTS FOR SOIL
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: DFW | Checked By: RC | Date: 11/2/05 | Disk Reference: 663010



LEGEND

MW-4	SHALLOW ZONE SVE WELL
MW-8	INTERMEDIATE ZONE SVE WELL
MW-7	DEEP ZONE GROUNDWATER MONITORING WELL
	DRY CLEANING MACHINE
	165-GALLON ABOVE-GROUND STORAGE TANK
	FORMER COIN-OPERATED DRY CLEANING AREA
	PROPERTY BOUNDARY
SVE	SOIL VAPOR EXTRACTION
(141.40)	GROUNDWATER ELEVATION IN FEET (6/23/05)

ALL RESULTS IN MICROGRAMS PER LITER

[56] TETRACHLOROETHENE (PCE) IN GROUNDWATER

BOLD DENOTES CONCENTRATIONS ARE ABOVE THE MTCA CLEANUP LEVELS

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE
2. SOURCE MAP: G-LOGICS, INC.

0 30

APPROXIMATE SCALE IN FEET

DRAFT

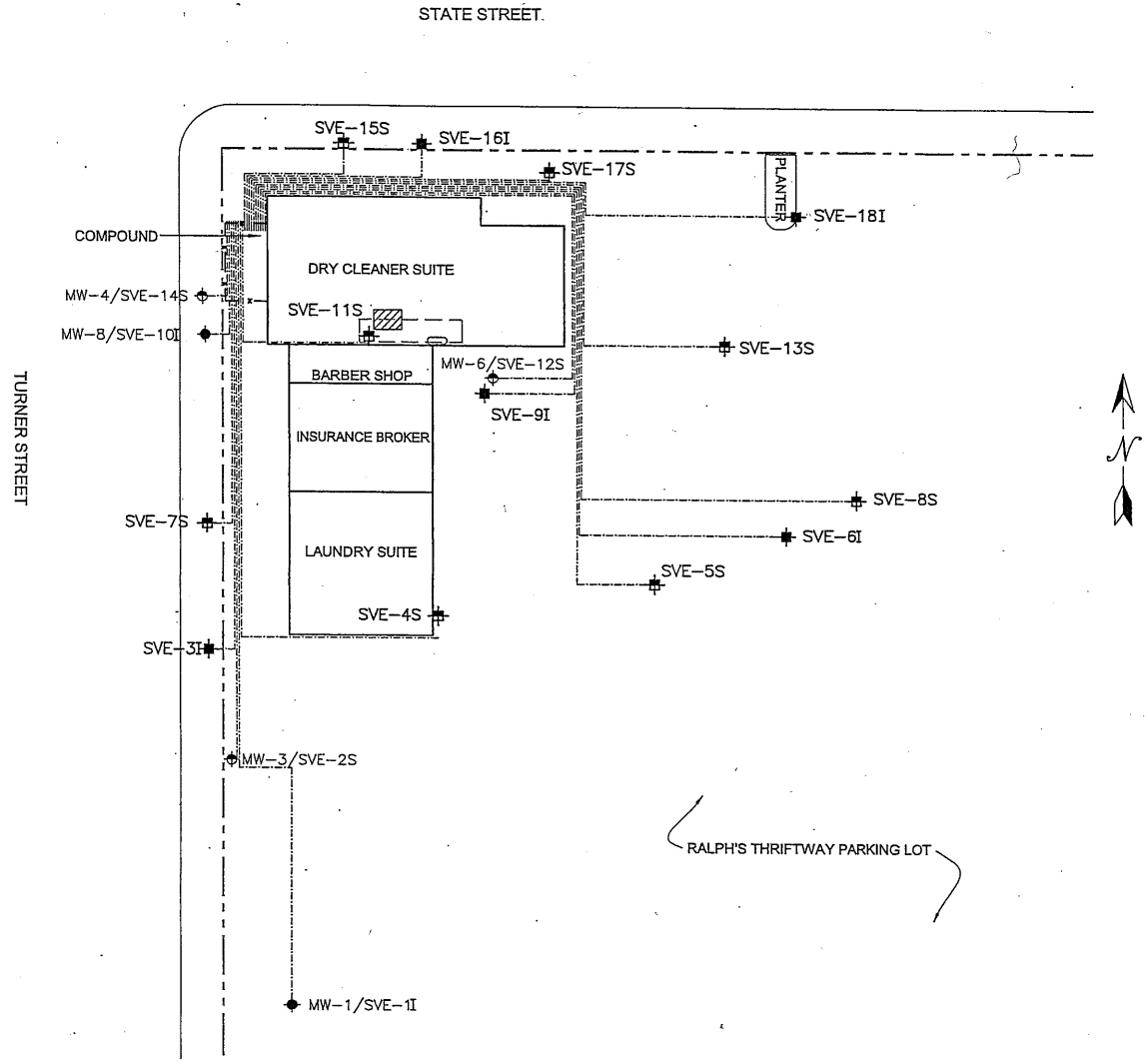
FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

FIGURE 4

PCE ANALYTICAL RESULTS FOR GROUNDWATEI
(DECEMBER 2004)
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: DEW | Checked By: RC | Date: 11/7/05 | Disk Reference: 663010



LEGEND

MW–4/SVE–14S	EXISTING SHALLOW ZONE SVE WELL
SVE–8S	PROPOSED SHALLOW ZONE SVE WELL
MW–1/SVE–1	EXISTING INTERMEDIATE ZONE SVE WELL
SVE–16I	PROPOSED INTERMEDIATE ZONE SVE WELL
	DRY CLEANING MACHINE
	165-GALLON ABOVE-GROUND STORAGE TANK
	FORMER COIN-OPERATED DRY CLEANING AREA
	SOIL VAPOR EXTRACTION LINE
	PROPERTY BOUNDARY
SVE	SOIL VAPOR EXTRACTION

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE
2. SOURCE MAP: G-LOGICS, INC.

0 30

APPROXIMATE SCALE IN FEET

DRAFT

FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

FIGURE 9

REMEDIAL SYSTEM DESIGN LAYOUT
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663–010