

**GROUNDWATER QUARTERLY  
MONITORING REPORT  
MARCH 2001  
FORMER DRY CLEANING FACILITY  
SILVERDALE PLAZA  
SILVERDALE, WASHINGTON**

**PROJECT NO. 094-01015  
MARCH 28, 2002**

Prepared for:  
**MS. TAMRA GROH  
WESBILD SHOPPING CENTERS  
2600 SOUTHWEST BARTON STREET, D-10  
SEATTLE, WASHINGTON 98126**

Prepared by:  
**KRAZAN & ASSOCIATES, INC.  
20714 STATE HIGHWAY 305 NE, SUITE 3C  
POULSBO, WASHINGTON 98370  
(360) 598-2126**

March 28, 2002

Project No. 094-01015

Ms. Tamra Groh  
Wesbild Shopping Centers  
2600 Southwest Barton Street, D-10  
Seattle, Washington 98126

RE: Groundwater Quarterly Monitoring Report –March 2002  
Former Dry Cleaning Facility  
Silverdale Plaza  
Silverdale, Washington

Dear Ms. Groh:

This Groundwater Monitoring Report has been prepared by Krazan & Associates, Inc. (Krazan) for the former dry cleaning facility on the referenced property. The report describes the results of ongoing groundwater monitoring related to a release of perchloroethylene (PCE, also known as tetrachloroethylene) from the former dry cleaning facility. The property is located at 2912 NW Bucklin Hill Road, within the Silverdale Plaza complex in Silverdale, Washington (Figure 1). The work was conducted in general accordance with Krazan's June 12, 2001 proposal E01-020WAP.

#### **Site Location**

The site is located in the southwest quarter of Section 16, Township 25 North, Range 1 East, in Silverdale, Washington. The site is about 1000 feet north of the north end of Dyes Inlet (Puget Sound) at about elevation 25 feet.

#### **Project Background**

Groundwater monitoring was initiated on the site in June 1999 during a Phase II Environmental Site Assessment (Hart Crowser, 1999). Four monitoring wells were initially installed at the site (MW-1, -2, 3, and -4). Four additional wells (MW-5, -6, -7, and -8) were installed in April 2000 during a Remedial Investigation (Krazan, 2000). These investigations showed that the shallow perched aquifer had been impacted by PCE, which the data indicated had been released onto the ground surface at the rear (south side) of the former facility. A Remedial Action was conducted in October 2000 that consisted of the excavation and removal of 2,600 tons of PCE-contaminated soil. Four of the monitoring wells (MW-2, -3, -4, and -7) were removed with the surrounding soil as part of the excavation. Two monitoring wells (MW-9 and -10) were subsequently installed downgradient (west) of the excavation area. A Vapor Extraction/Air Sparging System was installed in November 2000 beneath the former dry cleaning building to address the PCE that had migrated beneath the foundation that could not be removed via the excavation.

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#### **Offices Serving The Western United States**

The excavation and Vapor Extraction System installation are described in an Interim Closure Report (Krazan, 2001). Initiation of Vapor Extraction began in January 2001. The locations of the six existing monitoring wells are shown on the attached Figure 3, from the Interim Closure Report.

### **Monitoring Program Modification**

The quarterly monitoring program was modified following the December 2001 sampling event. Because wells MW-1, MW-5, and MW-8 are located cross gradient to the remediation area and have exhibited no impact from the PCE, they have been dropped from the quarterly monitoring schedule. Well MW-8 will be monitored on an annual basis only. This modification was approved by the Department of Ecology.

### **Groundwater Sample Collection**

A set of groundwater samples was collected from the three downgradient monitoring wells on March 18, 2002 for analysis of Halogenated Volatile Organics. Prior to sampling, the static water level was measured using an electronic sounder with an accuracy of 0.01 foot. The sounder probe was decontaminated with a detergent solution and distilled water rinse prior to each well being measured. Each well was purged to remove stagnant water and allow the well to recover with fresh aquifer water. At least three well casing volumes were removed during the purging.

Each well was sampled using a new disposable bailer and clean twine. The water samples were collected in clean, laboratory-supplied, glass containers, filled directly from the bailer. Two 40-ml vials were filled for each sample.

### **Laboratory Analysis**

The groundwater samples were submitted to CCI Analytical Laboratories in Everett, Washington, for analysis of Halogenated Volatile Organics (the 8010 list) by EPA Method 8260A, in EPA Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846).

### **Environmental Monitoring Results**

No Halogenated Volatile Organics were detected in the groundwater from any of the monitoring wells. The accumulated groundwater sampling results to date have been tabulated sequentially for each monitoring well. These tables follow the text of this letter. The groundwater laboratory report and chain-of-custody form from this sampling event are attached to this letter.

### **Limitations**

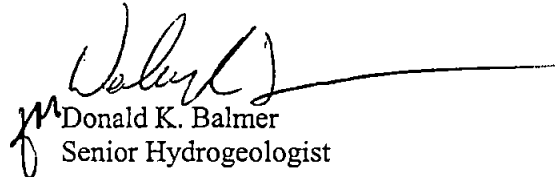
The findings of this report were based upon the results of field and laboratory investigations, coupled with the interpretation of surface and subsurface conditions associated with our water samples. Therefore, the data are accurate only to the degree implied by review of the data obtained and by professional interpretation.


A laboratory certified by the State of Washington, Department of Ecology, did the analytical testing. The results of the chemical testing are accurate only to the degree of care of ensuring the testing accuracy and the representative nature of the water samples obtained.

The findings presented herewith are based on professional interpretation using state of the art methods and equipment and a degree of conservatism deemed proper as of this report date. It is not warranted that such data cannot be superseded by future geotechnical, environmental, or technical developments.

We appreciate the opportunity to be of service. If you have any questions, please do not hesitate to contact our office at (360) 598-2126.

Respectfully submitted,  
KRAZAN & ASSOCIATES, INC.

  
Donald K. Balmer  
Senior Hydrogeologist

  
Shawn E. Williams  
Senior Environmental Geologist

DKB/SEW

Cc: Mr. Ruben Poplawski, Barclays Realty and Management Company

Attachments

**TABLE 1**  
**SUMMARY OF MW-1 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-1	7/2/99	2.5	<1.0	<1.0			
MW-1-GW-02	11/9/99	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1-GW-27	6/9/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1-GW-38	9/19/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
GW-MW-1-09	9/12/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW1-GW-015	12/17/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

**TABLE 2**  
**SUMMARY OF MW-2 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-2	7/2/99	3,400.	56.	<50.			
MW-2 GW-04	11/9/99	8,400.	330.	95.	<5.0	<5.0	<5.0
MW-2-GW-28	6/9/00	3,000.	78.	24.	<5.0	<5.0	<5.0
MW-2-GW-43	9/19/00	3,800.	110.	41.	<5.0	<5.0	<5.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

\*\* Removed as part of the excavation activities in October 2000.

**TABLE 3**  
**SUMMARY OF MW-3 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-3	7/2/99	6,700.	<200.	<200.			
MW-3-GW-03	11/9/99	33,000.	430.	230.	<200.	<200.	<200.
MW-3-GW-29	6/9/00	24,000.	220.	170.	<5.0	<5.0	<5.0
MW-3-GW-44	9/19/00	12,000.	210.	150.	<5.0	<5.0	<5.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

\* Duplicate sample

\*\* Removed as part of the excavation activities in October 2000.

**TABLE 4**  
**SUMMARY OF MW-4 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-4	7/2/99	150.	<1.0	<1.0			
MW-4-GW-05	11/9/99	1,100.	<5.	<5.	<5.0	<5.0	<5.0
MW-4-GW-30	6/9/00	1,500.	<5.0	<5.0	<5.0	<5.0	<5.0
MW-4-GW-42	9/19/00	2,700.	<5.0	<5.0	<5.0	<5.0	<5.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

\* Duplicate sample

\*\* Removed as part of the excavation activities in October 2000.

**TABLE 5**  
**SUMMARY OF MW-5 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-5-GW-23	4/5/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-5-GW-31	6/9/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-5-GW-45	9/19/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
GW-MW-5-14	9/12/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW5-GW-016	12/17/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

**TABLE 6**  
**SUMMARY OF MW-6 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-6-GW-24	4/5/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-6-GW-32	6/9/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-6-GW-39	9/19/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
GW-MW-6-12	9/12/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW6-GW-017	12/17/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW6-GW-022	3/18/02	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

**TABLE 7  
 SUMMARY OF MW-7 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-7-GW-25	4/5/00	330.	<5.0	<5.0	<5.0	<5.0	<5.0
MW-7-GW-33	6/9/00	2,000.	29.	10.	<5.0	<5.0	<5.0
MW-7-GW-35*	6/9/00	1,900.	31.	12.	<5.0	<5.0	<5.0
MW-7-GW-40	9/19/00	2,200.	62.	16.	<5.0	<5.0	<5.0
MW-7-GW-41*	9/19/00	2,100.	44.	11.	<5.0	<5.0	<5.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

\* Duplicate sample

\*\* Removed as part of the excavation activities in October 2000.

**TABLE 8  
 SUMMARY OF MW-8 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-8-GW-26	4/5/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-8-GW-34	6/9/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-8-GW-46	9/19/00	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
GW-MW-8-13	9/12/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW8-GW-018	12/17/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

**TABLE 9  
 SUMMARY OF MW-9 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

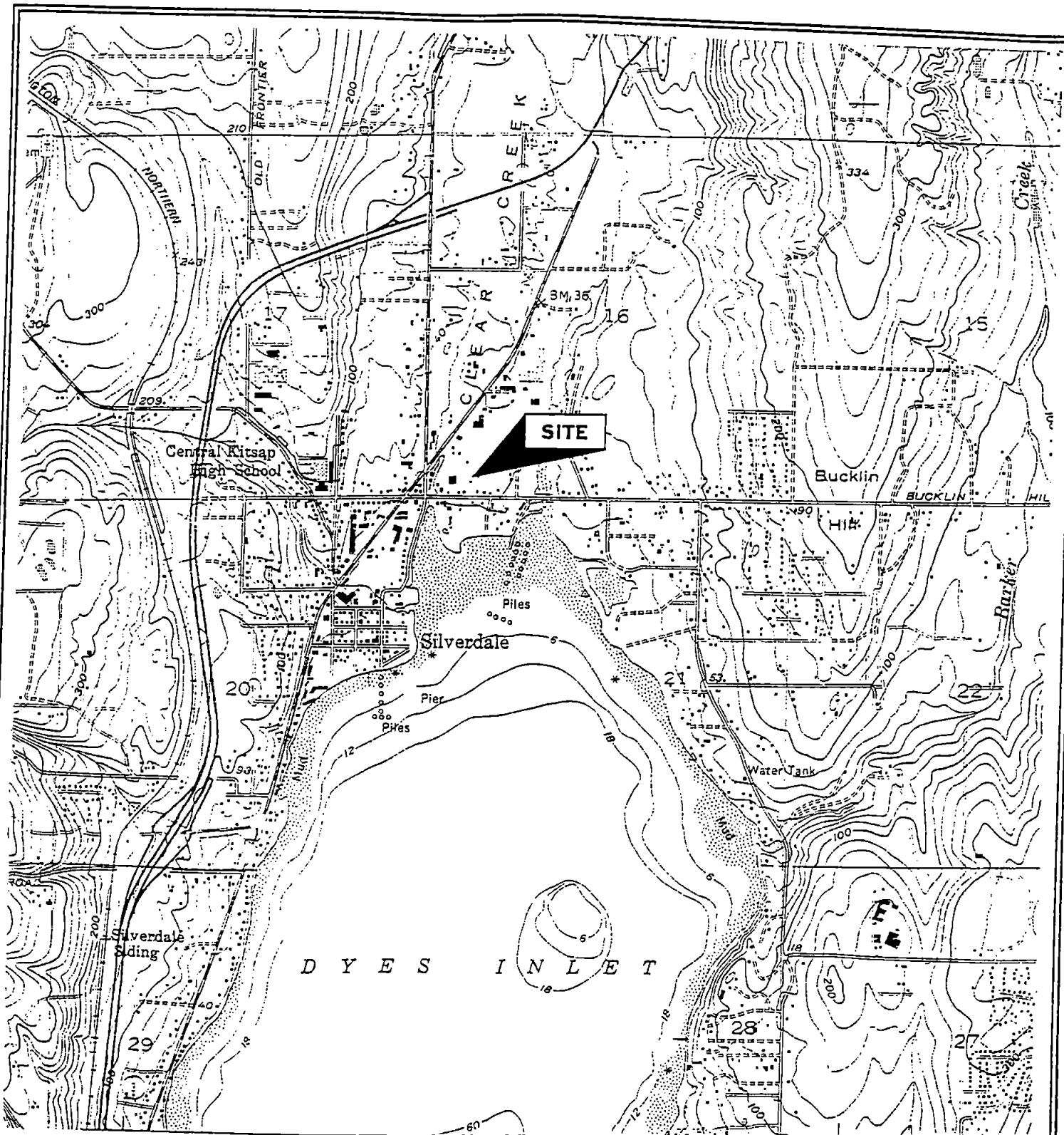
Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-9-GW-07	6/19/01	<5.0	<5.0	NA	NA	NA	NA
GW-MW-9-11	9/12/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW9-GW-019	12/17/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW9-GW-023	3/18/02	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW9-GW-024	3/18/02	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

\* Duplicate sample

**TABLE 10**  
**SUMMARY OF MW-10 GROUNDWATER HALOGENATED VOLATILE ORGANIC ANALYSES**

Sample No.	Date	Perchloro-ethylene (µg/l)	Trichloro-ethene (µg/l)	Cis-1,2-Dichloro-ethene (µg/l)	Trans-1,2-Dichloro-ethene	1,1-Dichloro-ethene	Vinyl Chloride
MW-10-GW-08	6/19/01	<5.0	<5.0	NA	NA	NA	NA
GW-MW-10-10	9/12/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW10-GW-020	12/17/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW10-GW-021*	12/17/01	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW10-GW-025	3/18/02	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<b>MTCA Method A Cleanup Levels in µg/l.</b>		<b>5.0</b>	<b>5.0</b>				<b>0.2</b>

\* Duplicate sample



Note: Map adapted from USGS 7.5 Poulsbo, WA. Quadrangle dated 1953 and revised 1981.

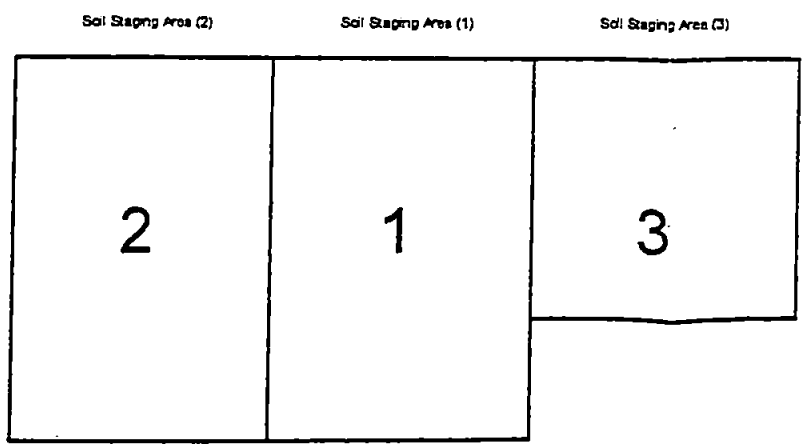
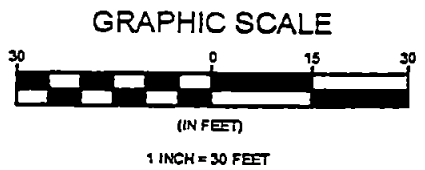
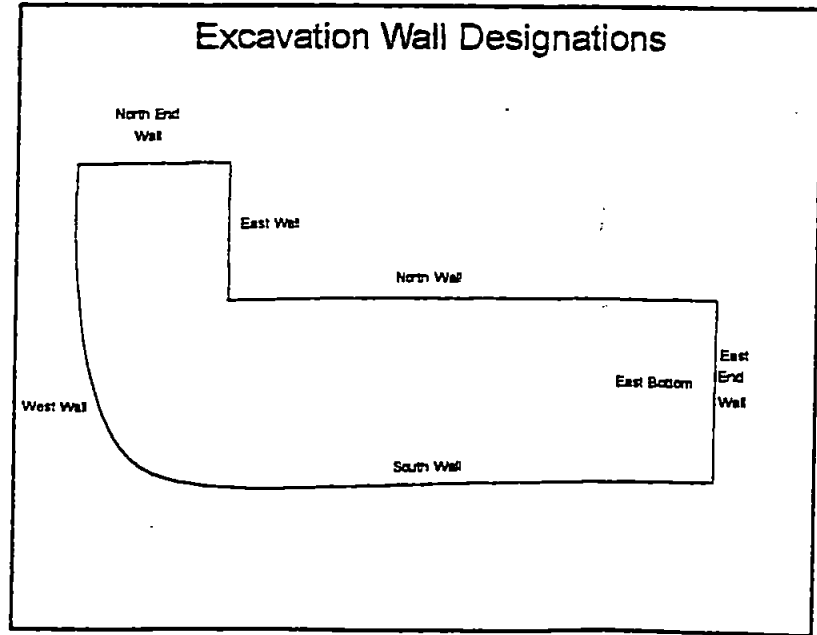
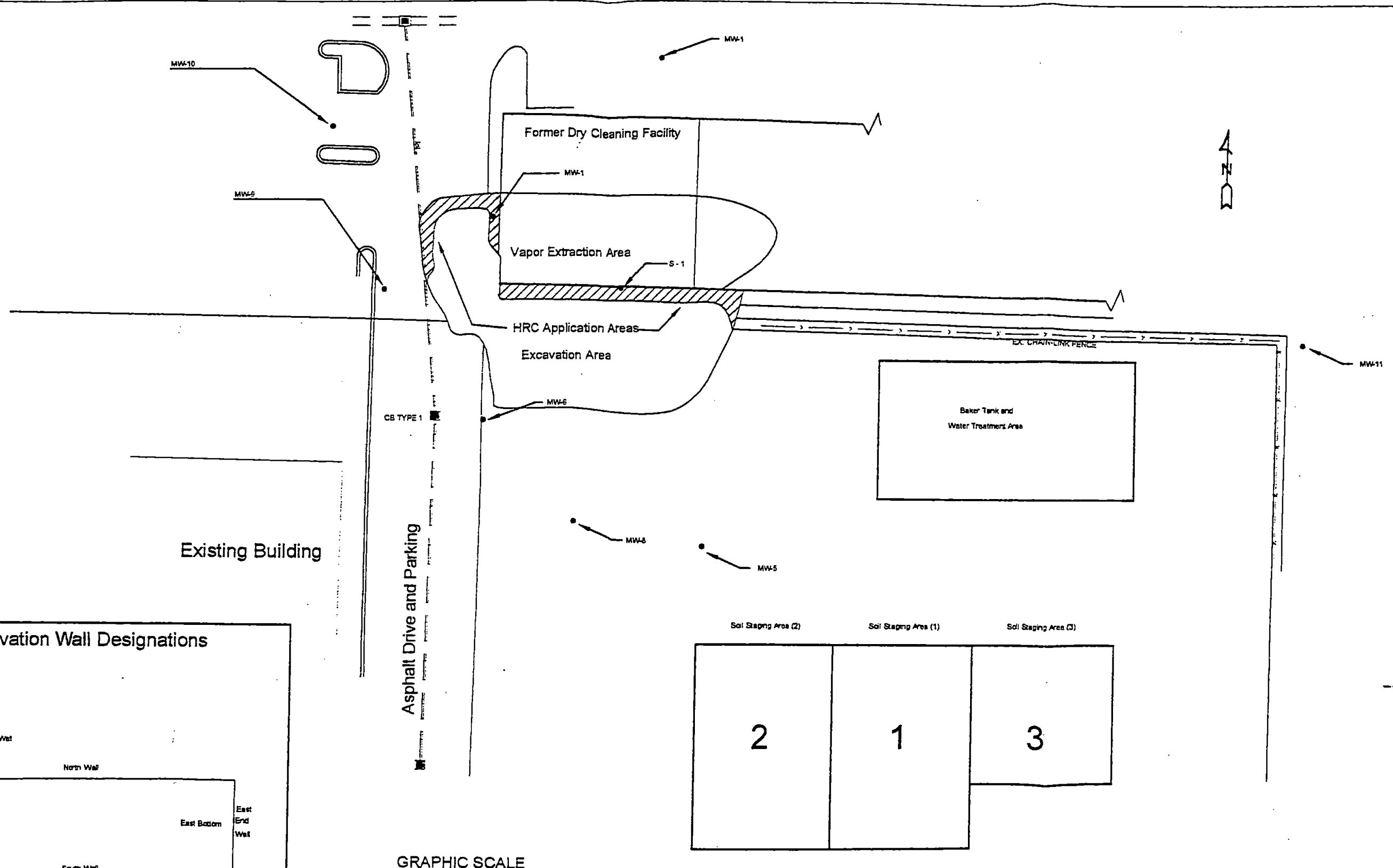
**Krazan & Associates, Inc.**

20714 STATE ROUTE 305 SUITE 3C  
 POULSBO, WA 98370  
 360-598-2126

**FIGURE 1-VICINITY MAP**

Location: Silverdale, Washington  
 Job No. : 094-01015  
 Client: Wesbild Shopping Center  
 Date: 1-5-02





## Remediation Activity Location Map

SILVERDALE PLAZA

Figure 2

See Scale	Job Number: 094-01015	Drawn By: WRJ
Date: Jan 5, 2002	<b>Krazan</b> & ASSOCIATES, INC.	Revised By: WRJ
		Revision: 3
		Drawing Type: Site Map

Note: Drawing based on design plans provided by Map Ltd, Aug 2001



CERTIFICATE OF ANALYSIS

CLIENT: KRAZAN & ASSOCIATES, INC.  
20714 STATE HWY 305 NE SUITE 3C  
POULSBO, WA 98370

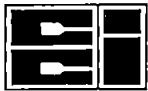
DATE: 3/25/02  
CCIL JOB #: 203097  
CCIL SAMPLE #: 1  
DATE RECEIVED: 3/20/02  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SHAWN WILLIAMS

CLIENT PROJECT ID: 094-01015  
CLIENT SAMPLE ID: SP-MW6-GW-022 3/18/02 1215

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSTS	ANALYSTS
				DATE	BY
DICHLORODIFLUOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
VINYL CHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRICHLOROFUOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
METHYLENE CHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRANS-1,2-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CIS-1,2-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
2,2-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOCHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROFORM	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,1-TRICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CARBON TETRACHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
DIBROMOMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMODICHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRANS-1,3-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CIS-1,3-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,2-TRICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,3-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TETRACHLOROETHYLENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
DIBROMOCHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DIBROMOETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOFORM	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,2,2-TETRACHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2,3-TRICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
2-CHLOROTOLUENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL



CERTIFICATE OF ANALYSIS

CLIENT: KRAZAN & ASSOCIATES, INC.  
20714 STATE HWY 305 NE SUITE 3C  
POULSBO, WA 98370

DATE: 3/25/02  
CCIL JOB #: 203097  
CCIL SAMPLE #: 1  
DATE RECEIVED: 3/20/02  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SHAWN WILLIAMS

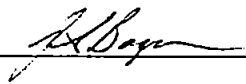
CLIENT PROJECT ID: 094-01015  
CLIENT SAMPLE ID: SP-MW6-GW-022 3/18/02 1215

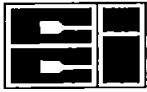
DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
4-CHLOROTOLUENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,3-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,4-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DIBROMO 3-CHLOROPROPANE	EPA-8260	ND(<10)	UG/L	3/22/02	RAL
1,2,4-TRICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
HEXACHLORO1,3-BUTADIENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2,3-TRICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL

\* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 



CERTIFICATE OF ANALYSIS

CLIENT: KRAZAN & ASSOCIATES, INC.  
20714 STATE HWY 305 NE SUITE 3C  
POULSBO, WA 98370

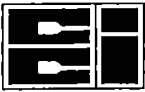
DATE: 3/25/02  
CCIL JOB #: 203097  
CCIL SAMPLE #: 2  
DATE RECEIVED: 3/20/02  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SHAWN WILLIAMS

CLIENT PROJECT ID: 094-01015  
CLIENT SAMPLE ID: SP-MW9-GW-023 3/18/02 1250

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
DICHLORODIFLUOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
VINYL CHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRICHLOROFLUOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
METHYLENE CHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRANS-1,2-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CIS-1,2-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
2,2-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOCHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROFORM	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,1-TRICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CARBON TETRACHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
DIBROMOMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMODICHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRANS-1,3-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CIS-1,3-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,2-TRICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,3-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TETRACHLOROETHYLENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
DIBROMOCHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DIBROMOETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOFORM	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,2,2-TETRACHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2,3-TRICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
2-CHLOROTOLUENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL



CERTIFICATE OF ANALYSIS

CLIENT: KRAZAN & ASSOCIATES, INC.  
20714 STATE HWY 305 NE SUITE 3C  
POULSBO, WA 98370

DATE: 3/25/02  
CCIL JOB #: 203097  
CCIL SAMPLE #: 2  
DATE RECEIVED: 3/20/02  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SHAWN WILLIAMS

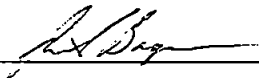
CLIENT PROJECT ID: 094-01015  
CLIENT SAMPLE ID: SP-MW9-GW-023 3/18/02 1250

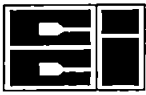
DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
4-CHLOROTOLUENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,3-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,4-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DIBROMO 3-CHLOROPROPANE	EPA-8260	ND(<10)	UG/L	3/22/02	RAL
1,2,4-TRICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
HEXACHLORO1,3-BUTADIENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2,3-TRICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL

\* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 



CERTIFICATE OF ANALYSIS

CLIENT: KRAZAN & ASSOCIATES, INC.  
20714 STATE HWY 305 NE SUITE 3C  
POULSBO, WA 98370

DATE: 3/25/02  
CCIL JOB #: 203097  
CCIL SAMPLE #: 3  
DATE RECEIVED: 3/20/02  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SHAWN WILLIAMS

CLIENT PROJECT ID: 094-01015  
CLIENT SAMPLE ID: SP-MW9-GW-024 3/18/02 1255

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
DICHLORODIFLUOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
VINYL CHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRICHLOROFLUOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
METHYLENE CHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRANS-1,2-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CIS-1,2-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
2,2-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOCHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROFORM	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,1-TRICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CARBON TETRACHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
DIBROMOMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMODICHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRANS-1,3-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CIS-1,3-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,2-TRICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,3-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TETRACHLOROETHYLENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
DIBROMOCHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DIBROMOETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOFORM	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,2,2-TETRACHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2,3-TRICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
2-CHLOROTOLUENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL



CERTIFICATE OF ANALYSIS

CLIENT: KRAZAN & ASSOCIATES, INC.  
20714 STATE HWY 305 NE SUITE 3C  
POULSBO, WA 98370

DATE: 3/25/02  
CCIL JOB #: 203097  
CCIL SAMPLE #: 3  
DATE RECEIVED: 3/20/02  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SHAWN WILLIAMS


CLIENT PROJECT ID: 094-01015  
CLIENT SAMPLE ID: SP-MW9-GW-024 3/18/02 1255

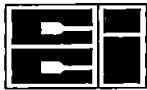
DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
4-CHLOROTOLUENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,3-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,4-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DIBROMO 3-CHLOROPROPANE	EPA-8260	ND(<10)	UG/L	3/22/02	RAL
1,2,4-TRICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
HEXACHLORO1,3-BUTADIENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2,3-TRICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL

\* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 



CERTIFICATE OF ANALYSIS

CLIENT: KRAZAN & ASSOCIATES, INC.  
20714 STATE HWY 305 NE SUITE 3C  
POULSBO, WA 98370

DATE: 3/25/02  
CCIL JOB #: 203097  
CCIL SAMPLE #: 4  
DATE RECEIVED: 3/20/02  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SHAWN WILLIAMS

CLIENT PROJECT ID: 094-01015  
CLIENT SAMPLE ID: SP-MW10-GW-025 3/18/02 1340

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
DICHLORODIFLUOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
VINYL CHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRICHLOROFLUOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
METHYLENE CHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRANS-1,2-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CIS-1,2-DICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
2,2-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOCHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROFORM	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,1-TRICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CARBON TETRACHLORIDE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRICHLOROETHENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
DIBROMOMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMODICHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TRANS-1,3-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CIS-1,3-DICHLOROPROPENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,2-TRICHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,3-DICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
TETRACHLOROETHYLENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
DIBROMOCHLOROMETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DIBROMOETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
CHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOFORM	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,1,2,2-TETRACHLOROETHANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2,3-TRICHLOROPROPANE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
BROMOBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
2-CHLOROTOLUENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL



CERTIFICATE OF ANALYSIS

CLIENT: KRAZAN & ASSOCIATES, INC.  
20714 STATE HWY 305 NE SUITE 3C  
POULSBO, WA 98370

DATE: 3/25/02  
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CCIL SAMPLE #: 4  
DATE RECEIVED: 3/20/02  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SHAWN WILLIAMS

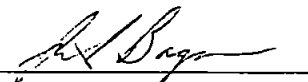
CLIENT PROJECT ID: 094-01015  
CLIENT SAMPLE ID: SP-MW10-GW-025 3/18/02 1340

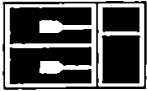
DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS	ANALYSIS
				DATE	BY
4-CHLOROTOLUENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,3-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,4-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2-DIBROMO 3-CHLOROPROPANE	EPA-8260	ND(<10)	UG/L	3/22/02	RAL
1,2,4-TRICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
HEXACHLORO1,3-BUTADIENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL
1,2,3-TRICHLOROBENZENE	EPA-8260	ND(<2)	UG/L	3/22/02	RAL

\* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

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APPROVED BY: 



CERTIFICATE OF ANALYSIS

CLIENT: KRAZAN & ASSOCIATES, INC.  
20714 STATE HWY 305 NE SUITE 3C  
POULSBO, WA 98370

DATE: 3/25/02  
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DATE RECEIVED: 3/20/02  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SHAWN WILLIAMS

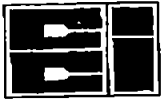
CLIENT PROJECT ID: 094-01015

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
203097-01	EPA-8260	1,2-DCE-d4	97
203097-01	EPA-8260	4-BFB	98
203097-02	EPA-8260	1,2-DCE-d4	103
203097-02	EPA-8260	4-BFB	93
203097-03	EPA-8260	1,2-DCE-d4	109
203097-03	EPA-8260	4-BFB	89
203097-04	EPA-8260	1,2-DCE-d4	106
203097-04	EPA-8260	4-BFB	97

APPROVED BY: 



CCI Analytical Laboratories, Inc.  
 8620 Holly Drive  
 Everett, WA 98208  
 Phone (425) 356-2600  
 (206) 292-9059 Seattle  
 (425) 356-2626 Fax

# Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

**203097**

Date 3/18/02 Page 1 Of 1

T-818 P.003/003 F-157

4239562626

From-CCI Analytical Laboratories, Inc

Apr-01-02 02:58pm

PROJECT ID: 094-01015  
 REPORT TO COMPANY: Krazan & Associates  
 PROJECT MANAGER: Shawn Williams  
 ADDRESS: 20714 State Hwy 305 NE Suite 3C  
Poulsbo WA 98370  
 PHONE: 360-598-2126 FAX: 360-598-2127  
 INVOICE TO COMPANY: same  
 ATTENTION:  
 ADDRESS:

ANALYSIS REQUESTED					OTHER (Specify)										
NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 <input type="checkbox"/> 602 <input type="checkbox"/>	EPA 8010 <input checked="" type="checkbox"/> 601 <input type="checkbox"/> <u>by method 8260</u>	EPA 8260 <input type="checkbox"/> 624 <input type="checkbox"/>	EPA 8270 <input type="checkbox"/> 625 <input type="checkbox"/>	EPA 8081/6082 <input type="checkbox"/> 608 <input type="checkbox"/> PCB only <input type="checkbox"/> Pest only <input type="checkbox"/>	TAL <input type="checkbox"/>	RCRA <input type="checkbox"/>	Metals Priority Pollutant <input type="checkbox"/>	Metals Other (Specify)	TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
					X									2	
					X									2	
					X									2	
					X									2	

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Donald K Balun Krazan 3/20/02  
 Received By: [Signature] CLEAR 3/20/02 11:05  
 2. Relinquished By: \_\_\_\_\_  
 Received By: \_\_\_\_\_

TURNAROUND REQUESTED in Business Days\*

Organic, Metals & Inorganic Analysis

5  3  2  1  SAVE DAY

Fuels & Hydrocarbon Analysis

5  3  1  SAVE DAY

OTHER:

Specify: \_\_\_\_\_

\* Turnaround request less than standard may incur rush charges

Received: 4/1/02 3:31PM; 4239562626