NW 0410

SOIL & GROUNDWATER REMEDIATION SUMMARY

The Cleaners #1 (Woodmont Place)
26102 Pacific Highway South
Kent, Washington 98032

TIM JORVE

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EAI Job# JN-8392-2

Mr. Dale Myers
Voluntary Cleanup Program (VCP)
Department of Ecology - NW Regional Office
3190 - 160th Avenue SE
Bellevue, Washington 98008-5452

Subject: **Soil & Groundwater Remediation Summary**
The Cleaners #1 (Woodmont Place)
26102 Pacific Highway South
Kent, Washington 98032

Dear Mr. Myers:

Environmental Associates, Inc (EAI) has prepared this summary letter to document the extent of environmental assessment and remediation that has occurred on the above referenced property to date. Early phases of this project (prior to March 2000) are documented in reports prepared by EAI and others, as listed in the reference section at the end of this letter. Additional remedial activities and the results of continued quarterly groundwater monitoring from March 2000 through the end of 2005 are summarized exclusively in this letter report. This summary report has been prepared at the request of our client (Mr. Tim Jorve) in support for solicitation of a determination of "no further action" (NFA) from the Washington State Department of Ecology (WDOE).

Subject Property / Study Area Description

The subject property at 26102 Pacific Highway South in Kent, Washington, includes a 1983-vintage retail strip building, which encloses 12,740 square feet of space. The approximate location of the subject property is depicted on Plate 1, Vicinity / Topographic Map. Additionally, the general setting of the subject site in relation to surrounding land use is shown on Plate 2, Site Overview Map, both attached to this report. As depicted on Plate 2, the subject property is part of the larger Woodmont Place Shopping Center, which is anchored by Albertson's Grocery to the north of the subject property and Rite Aid to the south of the subject property.

As depicted on the remaining graphic Plates (3, 4, and 5) the study area for this project includes the interior of the Cleaners #1 (dry-cleaning tenant) as well as the asphalt-paved parking lot east of the retail strip building.

Previous Site Assessment Work by Others

In late August/early September of 1998, a preliminary subsurface investigation was completed by EMG, which included sampling of soil in interior spaces within the dry cleaner facility proximal to the dry cleaning machine, and sampling of soil and groundwater in exterior areas adjacent to the east wall (rear door) of the dry cleaner facility. Results of testing (as reported by EMG) of selected soil samples from the borings and of a groundwater "grab" sample from one of the exterior borings revealed that shallow groundwater at a locality near the "back door" (east wall) of the dry cleaner facility contained concentrations of PCE and trichloroethylene (TCE) in excess of the current Washington Department of Ecology (WDOE) Method-A cleanup levels for these contaminants in groundwater, and that soils at a locality near the back door (east wall) contained concentrations of PCE slightly exceeding the current Washington Department of Ecology (WDOE) Method-A cleanup level. Results of testing (as reported by EMG) of selected soil samples from interior-space borings proximal to the dry cleaner machine revealed trace concentrations of PCE less than the WDOE Method-A cleanup level for PCE in soil at that time (0.5 ppm).

Supplemental Site Assessment Work by Environmental Associates, Inc.

In an effort to further evaluate the extent (areal and vertical distribution) of the cleaning solvent contaminants at the site, Environmental Associates, Inc. (EAI) made six (6) borings (designated as B-1 through B-6) in September of 1998, and constructed groundwater monitoring wells in each of the borings (designated as MW-1 through MW-6 respectively). In addition, EAI made three (3) supplemental borings in interior areas of the dry cleaner, along with soil sampling. These locations are depicted on Plate 3.

Relying upon the results of laboratory testing of selected soil samples from the six (6) exterior borings and the three (3) interior borings, although trace concentrations of PCE were detected in several of the soil samples, no chlorinated solvents (including PCE and TCE) were detected at concentrations exceeding WDOE Method-A cleanup levels in effect at that time for these contaminants in soil.

In contrast, groundwater sampled from three (3) of the six groundwater monitoring wells (the three wells closest to the back-door area of the dry cleaner, designated as MW-1, MW-2, and MW-3) revealed concentrations of PCE in excess of the WDOE Method-A cleanup level for PCE in groundwater, with the highest concentration detected in groundwater sampled from the well closest to the back-door area (designated as MW-1) of the dry cleaner. PCE-degradation by-products TCE and (cis)1,2-dichloroethylene [also known as (cis) 1,2-DCE] were also detected in groundwater sampled from two (2) of the wells at concentrations exceeding the WDOE Method-A (for TCE) and Method B (for DCE) cleanup levels for these contaminants in groundwater, and the degradation by-

product vinyl chloride (VC) was also detected at a level exceeding the WDOE Method-A cleanup threshold in groundwater in one monitoring well (designated as MW-3) near the interpreted down-gradient hydrological margin ("toe") of the contaminant plume.

No concentrations of PCE or PCE-degradation by-products were detected in groundwater sampled from the three (3) wells (designated as MW-4, MW-5, and MW-6) at interpreted down-gradient "perimeter" localities further from the dry cleaner than wells MW-1, MW-2, and MW-3.

The above supplemental site assessment findings are presented in EAI's October 14, 1998, Supplemental Subsurface Sampling & Testing report.

Initial Hydrogen Releasing Compound (HRC) Injection

Following EAI's supplemental subsurface exploration the Client elected to pursue an independent cleanup action involving the application of hydrogen releasing compound (HRC), manufactured by Regenesis Bioremediation Products. The purpose of the HRC injection was to stimulate in-situ growth of anaerobic bacteria, hopefully resulting in an increase in the rate of degradation of PCE, as well as associated degradation by-products such as TCE and DCE, over what might otherwise be expected of naturally occurring degradation rates.

In December 1998, a total of 1140 pounds of HRC (114 gallons) was injected into the site subsurface via 55 Geoprobe boreholes. The injection procedure consisted of driving the hollow-stem Geoprobe rods to the desired maximum depth (approximately 16 to 18 feet below the ground surface) using a truck-mounted, direct-push hydraulic system, thus facilitating injection of HRC over the desired depth range (approximately 18 feet below the ground surface to approximately 6 feet below the ground surface for this site). The approximate locations of these injection points are depicted on Plate 4, attached.

Expanded details regarding the initial HRC injection can be found in EAI's March 10, 2000, Soil and Groundwater Remediation Interim Report.

Sanitary Sewer Repair and Limited Soil Excavation

Following the initial HRC injection for several months (January, February, and March of 1999), a large apparent increase in detected PCE concentrations (and PCE-degradation by-products) was noted in groundwater sampled from well MW-1 (Table 2). The increase in contaminant concentrations was noted to occur at approximately the same time period that the groundwater table was rising to its seasonal high elevation (caused by seasonal precipitation increases).

Without the benefit of laboratory data from earlier seasonal water table elevation changes (i.e Winter/Spring of 1997/1998), no definitive conclusions could be drawn as to the cause (or causes) of the contaminant increases noted at MW-1. In an effort to evaluate potential causes of the noted contaminant increase, sampling of sewer effluent being discharged from the dry cleaner facility to the sanitary sewer system was initiated. Results of sewer effluent sampling and testing revealed concentrations of PCE being discharged from the dry cleaner facility at levels in excess of the WDOE Method-A cleanup level for groundwater.

A subsequent video survey of the sewer system on March 24, 1999 revealed at least two (2) areas of potential leakage of the sanitary sewer system into the site subsurface, including a section of cast iron sewer pipe extending approximately 14 feet east from the east wall of the dry-cleaner facility and proximal to groundwater monitoring well MW-1, and another locality positioned approximately 45 feet east-southeast from the dry cleaner facility.

In an effort to prevent further releases of PCE to the site subsurface through the leaking sewer pipe, portions of the sewer pipeline were excavated and repaired in April, 1999. During and following sewer pipe repair work, approximately 80 cubic yards (120 tons) of soils containing low levels of PCE (less than the 0.5 parts per million or "ppm" WDOE Method-A cleanup level at that time) were excavated from the area adjacent to the east wall of the dry cleaner facility, and transported by truck to TPS Technologies, Inc. Tacoma, Washington facility for thermal desorption treatment. Soils were excavated to a maximum depth of approximately 12 feet below the ground surface. The approximate areal extent of excavation is depicted on Plate 4, attached.

Following soil removal, remaining in-place soils were sampled from the excavation floor and sidewalls, and selected samples were submitted for laboratory testing. Laboratory testing of the selected soil samples, suggested that the remaining in-place soils were compliant with the WDOE Method-A cleanup levels for PCE and PCE-degradation by-products in effect at that time.

Following excavation of soil and sewer pipe repair at the two (2) previously discussed localities, and prior to back-filling, approximately 15 gallons (150 lbs.) of HRC were applied to the floor of the excavation located adjacent to the dry cleaner facility east wall, and approximately 3 gallons (30 lbs.) of HRC were applied directly to the floor of the smaller excavation area located further to the east.

Additional details regarding the sewer repair and limited soil excavation can be found in EAI's March 10, 2000, Soil and Groundwater Remediation Interim Report.

HRC Re-Injection

Following the repair of the sewer and limited PCE-impacted soil excavation, residual contaminant concentrations in the groundwater declined rapidly (Table 2 & Charts 2, and 3). However, beginning in early 2000, rebounding of contaminant concentrations appeared to be occurring. EAI suspected that residual concentrations of PCE within the soil underlying the dry-cleaner may have been contributing to the apparent rebounding of contaminant concentrations in the groundwater. Consumption and diminished "strength" of the initial HRC injection was also suspected to be contributing to the rebounding.

In July 2000, approximately 51 gallons or HRC and 18 gallons of HRC-Primer were re-injected in the study area to bolster and maintain the enhanced anaerobic bio-remediation. The additional HRC was injected through 9 interior borings within the dry cleaners lease space and 17 exterior borings in the parking lot east of the cleaners. The approximate locations of the HRC re-injection borings are depicted on Plate 5, attached to this report.

Quarterly Groundwater Monitoring

Regularly scheduled sampling and laboratory testing of groundwater samples from the six (6) subject property groundwater monitoring wells occurred between September 1998 through October 2005. Monitoring wells MW-1 through MW-3, within the "core" of the study area were sampled during each scheduled event. The remaining down-gradient monitoring wells were sampled on a less frequent basis, as contaminants have never been detected at those sampling locations. Tables 1 and 2 attached, present water table elevations and contaminant concentrations for each sampling event.

Over the duration of the quarterly monitoring, the groundwater flow direction in the study area appears to have remained fairly constant towards the southeast. Chart 1, in Appendix-A presents a hydrograph for water table elevations measured within the core study area (MW-1, MW-2 and MW-3). An examination of the hydrograph suggests a fairly consistent cyclical rise and fall of the water table of approximately 3 to 4 feet between the wet and dry parts of the year.

By the conclusion of the October 2005 sampling event, all (6) six groundwater monitoring wells had demonstrated at least four (4) consecutive quarters of groundwater compliance for PCE, and its degradation products (notably TCE, cis-DCE, and vinyl chloride).

The highest and most persistent concentrations of chlorinated VOCs were present in the groundwater at MW-1 and MW-3. Charts 2 and 3 present a graphical representation of contaminant trends at MW-1 and MW-3 over the length of study. The tabled laboratory data for the remaining monitoring wells are presented in Table 2. The following sections present a brief summary discussion regarding contaminant trends over the duration of the remedial action.

PCE and TCE Concentration Trends

A review of Chart 2 (MW-1) shows a fairly steady decline in PCE and TCE concentrations with some periodic cyclical rebounding, which may have been due in part to seasonal effects, such as rise and fall of the water table. Groundwater at MW-1 had achieved compliance with regard to PCE and TCE by the spring of 2001 and has remained in compliance for those compounds over the remaining 16 consecutive sampling events ending in October 2005.

At MW-3 as depicted on Chart 3, concentrations of PCE and TCE declined to concentrations below WDOE target compliance levels within the first year following the initial injection of HRC and have also remained in compliance for PCE / TCE over the remainder of the study.

Concentrations of PCE were present at MW-2 during the early stages of groundwater monitoring in 1998 through June 1999. Since June 1999, PCE has not been detected in the groundwater at MW-2. TCE has never been detected in the groundwater at MW-2. Additionally, neither PCE nor TCE have ever been detected in any of the remaining down-gradient monitoring wells (MW-4, MW-5, MW-6).

Cis-DCE and Vinyl Chloride Concentration Trends

The anaerobic bio-degradation of PCE and TCE resulted in a corresponding increase in concentration of cis-DCE and vinyl chloride in the groundwater, particularly at MW-1 and MW-3. At MW-1 and as depicted on Chart 2, the concentration trends for cis-DCE and vinyl chloride also declined with time. By the spring of 2001, the concentrations of cis-DCE at all monitoring well locations were in compliance with WDOE target levels and have remained so through the end of monitoring in October 2005.

Acknowledging the very low WDOE target compliance level for vinyl chloride (0.2 parts per billion [ppb]), vinyl chloride was the last contaminant to achieve at least four (4) consecutive quarters of groundwater compliance within the study area. At the conclusion of the October 2005 sampling event, monitoring wells MW-1 and MW-3 (the only locations where vinyl chloride had been detected) had demonstrated four (4) and (5) consecutive quarters of groundwater compliance, respectively, for vinyl chloride.

Summary Discussion

Relying upon the results of soil and groundwater sampling and laboratory testing to date, it would appear that the independent remedial actions implemented on the subject property have been successful in achieving sustained compliance with the WDOE's target compliance levels for unrestricted land use. Acknowledging this achievement, the client has authorized EAI to submit this summary report along with copies of previous relevant environmental reports to the WDOE for a formal review within the Voluntary Cleanup Program (VCP) for a determination of "no further action" (NFA).

Additional details regarding the information presented in this summary can be found in the accompanying reports provided for the WDOE's review. If you have any questions regarding the work completed to date, or if we may be of additional assistance with the VCP review process, please do not hesitate to contact us.

Respectfully submitted,
Environmental Associates, Inc.

for

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References

Environmental Associates, Inc. (EAI), October 14, 1998, Supplemental Subsurface Sampling and Testing, The Cleaners #1 (Woodmont Place), 26112 Pacific Highway South, Kent, Washington.

EAI, March 10, 2000, Soil and Groundwater Remediation Interim Report, The Cleaners #1 (Woodmont Place), 26102 Pacific Highway South, Kent, Washington.

EMG, September 15, 1998, Phase II Environmental Assessment, Woodmont Place Shopping Center, 26112 Pacific Highway South, Kent, Washington.

Attachments

Table 1: Water Table Survey
Table 2: Volatile Organic Compounds - Groundwater

Plate 1: Vicinity / Topographic Map
Plate 2: Site Overview Map
Plate 3: Site Exploration Map
Plate 4: HRC Initial Injection / Sewer Excavation Map
Plate 5: HRC Re-Application Plan

Appendix-A - Charts

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TABLE 1

Water Table Survey (feet)

TOC Elevation-> Date Measured	MW-1 269.55	MW-2 270.00	MW-3 268.86
09/23/98	261.53	261.52	261.50
12/14/98	263.66	263.07	262.21
01/14/99	263.85	263.96	260.56
02/16/99	264.59	264.45	263.60
03/16/99	264.81	264.58	260.62
05/19/99	265.71	265.13	264.33
06/30/99	264.13	264.03	263.46
07/28/99	263.55	263.18	262.60
09/16/99	262.41	262.28	261.42
11/09/99	262.30	261.44	261.23
01/19/00	265.40	264.00	264.45
05/17/00	264.60	264.18	264.04
08/18/00	262.88	262.35	262.25
09/26/00	261.96	260.95	260.67
10/26/00	262.40	261.86	261.36
12/06/00	263.21	262.99	262.26
02/14/01	264.25	263.97	263.38
04/16/01	264.60	264.00	263.82
06/26/01	263.67	263.69	262.93
09/20/01	261.90	261.88	260.99
12/17/01	262.80	262.54	261.60
03/20/02	265.77	265.18	264.29
06/11/02	263.41	263.46	261.82
09/19/02	262.25	262.19	261.56
01/27/03	264.98	264.93	264.35
07/16/03	262.41	262.07	261.26
11/07/03	263.49	263.15	262.21
02/26/04	265.57	265.05	264.16
06/01/04			
10/27/04			
01/31/05			
06/16/05			
10/03/05			

Notes:

(1) M.P. denotes the measuring point for each well (top edge of the PVC well casing, north side).

(2) Reference elevation datum chosen as the M.P. of MW-1 and assigned an arbitrary elevation of 40.00 feet.

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TABLE 2 - Volatile Organic Compounds (VOCs) - Groundwater
All results and limits in parts per billion (ppb)

Monitoring Well	Sample Date	Tetrachloroethane (PCE)	Trichloroethene (TCE)	(cis) 1,2,-Dichloroethene	(trans) 1,2,-Dichloroethene	Vinyl Chloride
MW-1						
HRC-Injection (12/18/98)	12/14/98	**551**	**139**	**522**	5.4	**<1**
	01/14/99	**40,800**	**235**	**914**	5.2	**<1**
	02/16/99	**67,400**	**796**	**965**	2.9	**<1**
	03/16/99	**60,900**	**1,630**	**1,360**	3.4	**<1**
Sewer Repair (4/22/99)	05/19/99	**34,800**	**11,700**	**1,140**	<10	**<10**
	06/30/99	**2,790**	**3,990**	**987**	<25	**<25**
	07/28/99	**1,150**	**2,620**	**4,770**	<25	**<25**
	09/16/99	**559**	**1,020**	**9,310**	<25	**<25**
	11/09/99	**259**	**404**	**9,940**	<50	**<50**
	01/19/00	**368**	**224**	**951**	<5	**29**
	05/17/00	**611**	**360**	**973**	3.8	**424**
HRC-Reinjection (07/21/00)	08/18/00	**110**	**95**	**1,200**	<20	**980**
	09/26/00	**63**	**30**	**910**	<20	**960**
	10/26/00	**32**	**<20**	**430**	<20	**500**
	12/06/00	**34**	**17**	**530**	5.4	**690**
	02/14/01	**22**	**17**	**460**	5.3	**930**
	04/16/01	3.9	3.5	**290**	3.0	**930**
	06/26/01	<2	<2	**90**	<2	**420**
	09/20/01	0.71	0.66	26	1.1	**360**
	12/17/01	1.6	2.2	37	1.2	**48**
	03/20/02	1.5	3.2	44	0.85	**13**
	06/11/02	0.29	0.30	2.3	0.48	**31**
	09/19/02	0.64	1.2	14	<0.2	**0.27**
	01/27/03	0.83	1.4	16	0.25	**1.6**
	07/16/03	<0.2	<0.2	0.9	<0.2	**0.89**
	11/07/03	<0.2	<0.2	2.7	0.40	**6.1**
	02/26/04	<0.2	<0.2	0.41	<0.2	**0.4**
	06/01/04	<0.2	<0.2	0.24	<0.2	**0.29**
	10/27/04	<0.2	<0.2	<0.2	<0.2	<0.2
	01/31/05	<0.2	<0.2	<0.2	<0.2	<0.2
	06/16/05	<0.2	<0.2	<0.2	<0.2	<0.2
	10/03/05	<0.2	<0.2	<0.2	<0.2	<0.2

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All results and limits in parts per billion (ppb)

Monitoring Well	Sample Date	Tetrachloroethane (PCE)	Trichloroethene (TCE)	(cis) 1,2,-Dichloroethene	(trans) 1,2,-Dichloroethene	Vinyl Chloride
MW-2						
HRC-Injection (12/18/98)	12/14/98	**10.8**	<1	<1	<1	<1
	01/14/99	1.4	<1	<1	<1	<1
	02/16/99	1.3	<1	<1	<1	<1
	03/16/99	**7.2**	<1	<1	<1	<1
Sewer Repair (4/22/99)	05/19/99	2.3	<1	<1	<1	<1
	06/30/99	2.8	<1	<1	<1	<1
	07/28/99	<1	<1	<1	<1	<1
	09/16/99	<1	<1	5.1	<1	<1
	11/09/99	<1	<1	1.8	<1	<1
	01/19/00	<1	<1	7.6	<1	<1
	05/17/00	<1	<1	3.5	<1	<1
HRC-Reinjection (07/21/00)	08/18/00	<0.2	<0.2	<0.2	<0.2	<0.2
	09/26/00	<0.2	<0.2	<0.2	<0.2	<0.2
	10/26/00	<0.2	<0.2	<0.2	<0.2	<0.2
	12/06/00	<0.2	<0.2	0.22	<0.2	<0.2
	02/14/01	<0.2	<0.2	0.36	<0.2	<0.2
	04/16/01	<0.2	<0.2	<0.2	<0.2	<0.2
	06/26/01	<0.2	<0.2	<0.2	<0.2	<0.2
	09/20/01	<0.2	<0.2	0.3	<0.2	<0.2
	12/17/01	<0.2	<0.2	<0.2	<0.2	<0.2
	03/20/02	<0.2	<0.2	<0.2	<0.2	<0.2
	06/11/02	<0.2	<0.2	<0.2	<0.2	<0.2
	09/19/02	---	---	---	---	---
	01/27/03	<0.2	<0.2	<0.2	<0.2	<0.2
	07/16/03	---	---	---	---	---
	11/07/03	<0.2	<0.2	<0.2	<0.2	<0.2
	02/26/04	<0.2	<0.2	<0.2	<0.2	<0.2
	06/01/04	<0.2	<0.2	<0.2	<0.2	<0.2
	10/27/04	<0.2	<0.2	<0.2	<0.2	<0.2
	01/31/05	<0.2	<0.2	<0.2	<0.2	<0.2
	06/16/05	<0.2	<0.2	<0.2	<0.2	<0.2
	10/03/05	<0.2	<0.2	<0.2	<0.2	<0.2

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TABLE 2 - Volatile Organic Compounds (VOCs) - Groundwater
All results and limits in parts per billion (ppb)

Monitoring Well	Sample Date	Tetrachloroethane (PCE)	Trichloroethene (TCE)	(cis) 1,2,-Dichloroethene	(trans) 1,2,-Dichloroethene	Vinyl Chloride
MW-3						
HRC-Injection (12/18/98)	12/14/98	**60.6**	**35.1**	**360**	<1	**57.4**
	01/14/99	**58.9**	**31.0**	**295**	1.8	**27.0**
	02/16/99	**57.7**	**23.2**	**188**	<1	**13.5**
	03/16/99	**44.2**	**16.6**	**115**	<1	**10.6**
Sewer Repair (4/22/99)	05/19/99	3.4	**11.5**	**89.4**	<1	**7.5**
	06/30/99	<1	<1	**138**	<1	**53.4**
	07/28/99	<1	<1	**91.3**	<1	**137**
	09/16/99	<1	<1	43.8	2.3	**220**
	11/09/99	<1	<1	13	1.5	**174**
	01/19/00	<1	<1	9.2	<1	**58.8**
	05/17/00	<1	<1	1.2	<1	**45**
HRC-Reinjection (07/21/00)	08/18/00	<2	<2	19	<2	**48**
	09/26/00	<0.2	<0.2	36	1.6	**82**
	10/26/00	<0.2	3.5	24	1.2	**66**
	12/06/00	<0.2	0.41	15	1.4	**67**
	02/14/01	<0.2	0.51	11	0.87	**38**
	04/16/01	<0.2	0.42	4.9	0.59	**20**
	06/26/01	<0.2	0.45	11	1.1	**42**
	09/20/01	<0.2	3.7	47	1.7	**110**
	12/17/01	<0.2	0.26	2.2	<0.2	**0.77**
	03/20/02	<0.2	0.33	1.3	<0.2	**0.53**
	06/11/02	<0.2	0.26	2.2	0.26	**2.4**
	09/19/02	0.62	1.2	15	0.27	**0.32**
	01/27/03	0.28	0.5	6.4	<0.2	**0.42**
	07/16/03	<0.2	<0.2	0.46	<0.2	**0.46**
	11/07/03	<0.2	<0.2	1.5	0.36	**3.2**
	02/26/04	<0.2	<0.2	<0.2	<0.2	**0.26**
	06/01/04	<0.2	<0.2	<0.2	<0.2	<0.2
	10/27/04	<0.2	<0.2	<0.2	<0.2	<0.2
	01/31/05	<0.2	<0.2	<0.2	<0.2	<0.2
	06/16/05	<0.2	<0.2	<0.2	<0.2	<0.2
	10/03/05	<0.2	<0.2	<0.2	<0.2	<0.2

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TABLE 2 - Volatile Organic Compounds (VOCs) - Groundwater
All results and limits in parts per billion (ppb)

Monitoring Well	Sample Date	Tetrachloroethane (PCE)	Trichloroethene (TCE)	(cis) 1,2,-Dichloroethene	(trans) 1,2,-Dichloroethene	Vinyl Chloride
MW-4						
	09/23/98	<1	<1	<1	<1	<1
	09/17/99	<1	<1	<1	<1	<1
	01/19/00	<1	<0.2	<0.2	<0.2	<0.2
	03/20/02	<0.2	<0.2	<0.2	<0.2	<0.2
	01/27/03	<0.2	<0.2	<0.2	<0.2	<0.2
	11/07/03	<0.2	<0.2	<0.2	<0.2	<0.2
	06/01/04	<0.2	<0.2	<0.2	<0.2	<0.2
	01/31/05	<0.2	<0.2	<0.2	<0.2	<0.2
	06/16/05	<0.2	<0.2	<0.2	<0.2	<0.2
	10/03/05	<0.2	<0.2	<0.2	<0.2	<0.2
MW-5						
	09/23/98	<1	<1	<1	<1	<1
	09/17/99	<1	<1	<1	<1	<1
	01/19/00	<1	<0.2	<0.2	<0.2	<0.2
	01/31/05	<0.2	<0.2	<0.2	<0.2	<0.2
	10/03/05	<0.2	<0.2	<0.2	<0.2	<0.2

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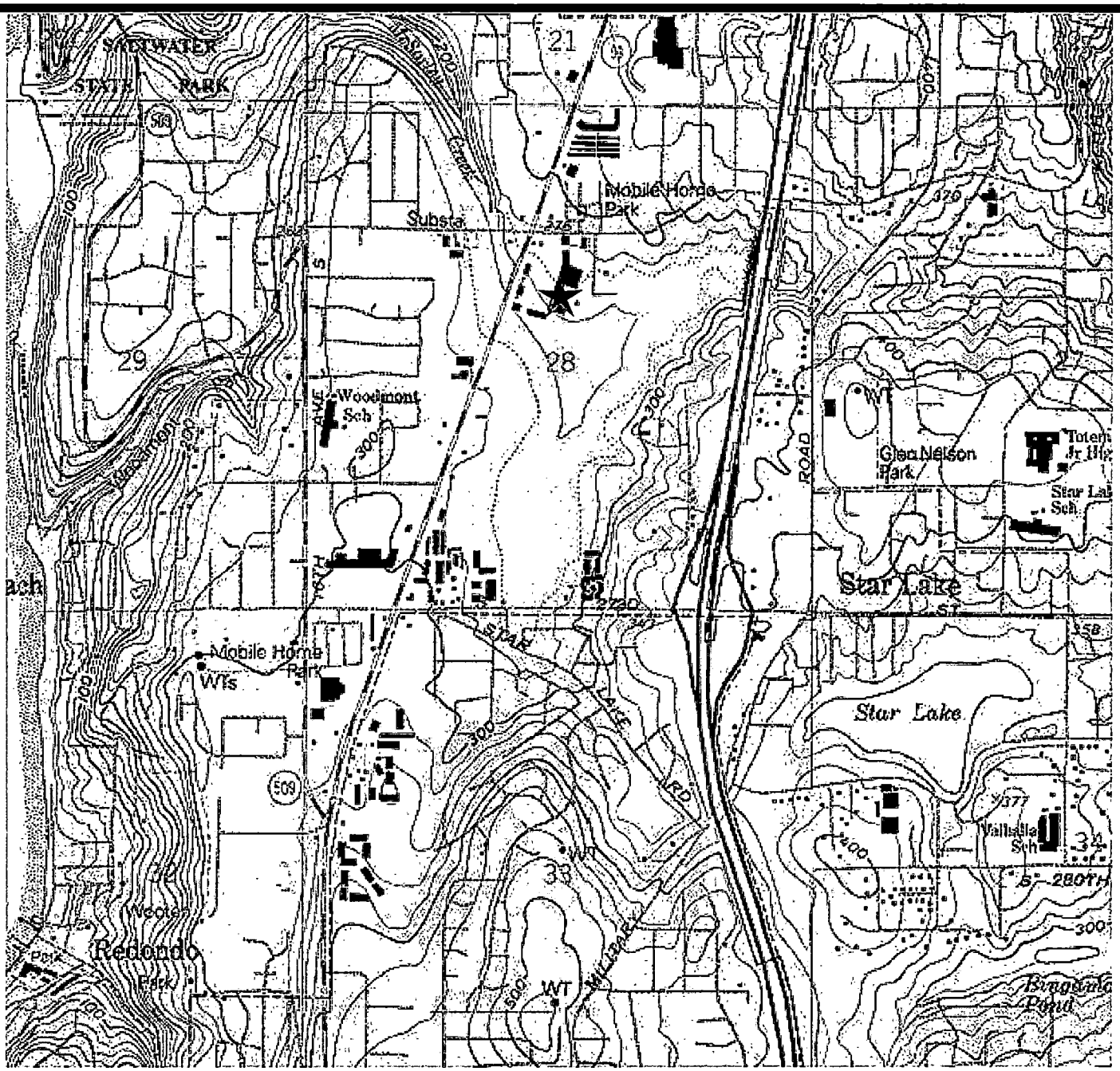
TABLE 2 - Volatile Organic Compounds (VOCs) - Groundwater
All results and limits in parts per billion (ppb)

Monitoring Well	Sample Date	Tetrachloroethane (PCE)	Trichloroethene (TCE)	(cis) 1,2,-Dichloroethene	(trans) 1,2,-Dichloroethene	Vinyl Chloride
MW-6						
	09/23/98	<1	<1	<1	<1	<1
	09/17/99	<1	<1	<1	<1	<1
	01/19/00	<1	<0.2	<0.2	<0.2	<0.2
	09/26/00	<0.2	<0.2	<0.2	<0.2	<0.2
	04/16/01	<0.2	<0.2	<0.2	<0.2	<0.2
	12/17/01	<0.2	<0.2	<0.2	<0.2	<0.2
	03/20/02	<0.2	<0.2	<0.2	<0.2	<0.2
	01/27/03	<0.2	<0.2	<0.2	<0.2	<0.2
	11/07/03	<0.2	<0.2	<0.2	<0.2	<0.2
	06/01/04	<0.2	<0.2	<0.2	<0.2	<0.2
	10/27/04	<0.2	<0.2	<0.2	<0.2	<0.2
	01/31/05	<0.2	<0.2	<0.2	<0.2	<0.2
	06/16/05	<0.2	<0.2	<0.2	<0.2	<0.2
	10/03/05	<0.2	<0.2	<0.2	<0.2	<0.2
WDOE Cleanp Level[3]		5(A)	5(A)	80 (B)	160 (B)	0.2 (A)

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- Applicable Method (A) or (B) compliance levels based upon the target compliance levels in effect (WAC 173-340) at the time cleanup action was initiated at the subject property, as approved by the WDOE.

Bold and Italics denotes concentrations above MTCA Method A groundwater cleanup levels.



USGS: 7.5 Minute Quadrangle: Poverty Bay, Washington
Contour Interval: 20 feet

Scale

0 — *1/2 Mile* — *1*

N

★ **Subject Property Location**

Inferred groundwater flow direction based upon the local topographical gradient in the vicinity of the subject property.

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VICINITY / TOPOGRAPHIC MAP

The Cleaners #1 Site
26102 Pacific Highway South
Kent, Washington

Job Number:	*Date:*		*Plate:*
JN-8392-2	October 2006		1

Approximate border of Subject Property

Inferred groundwater flow direction

N

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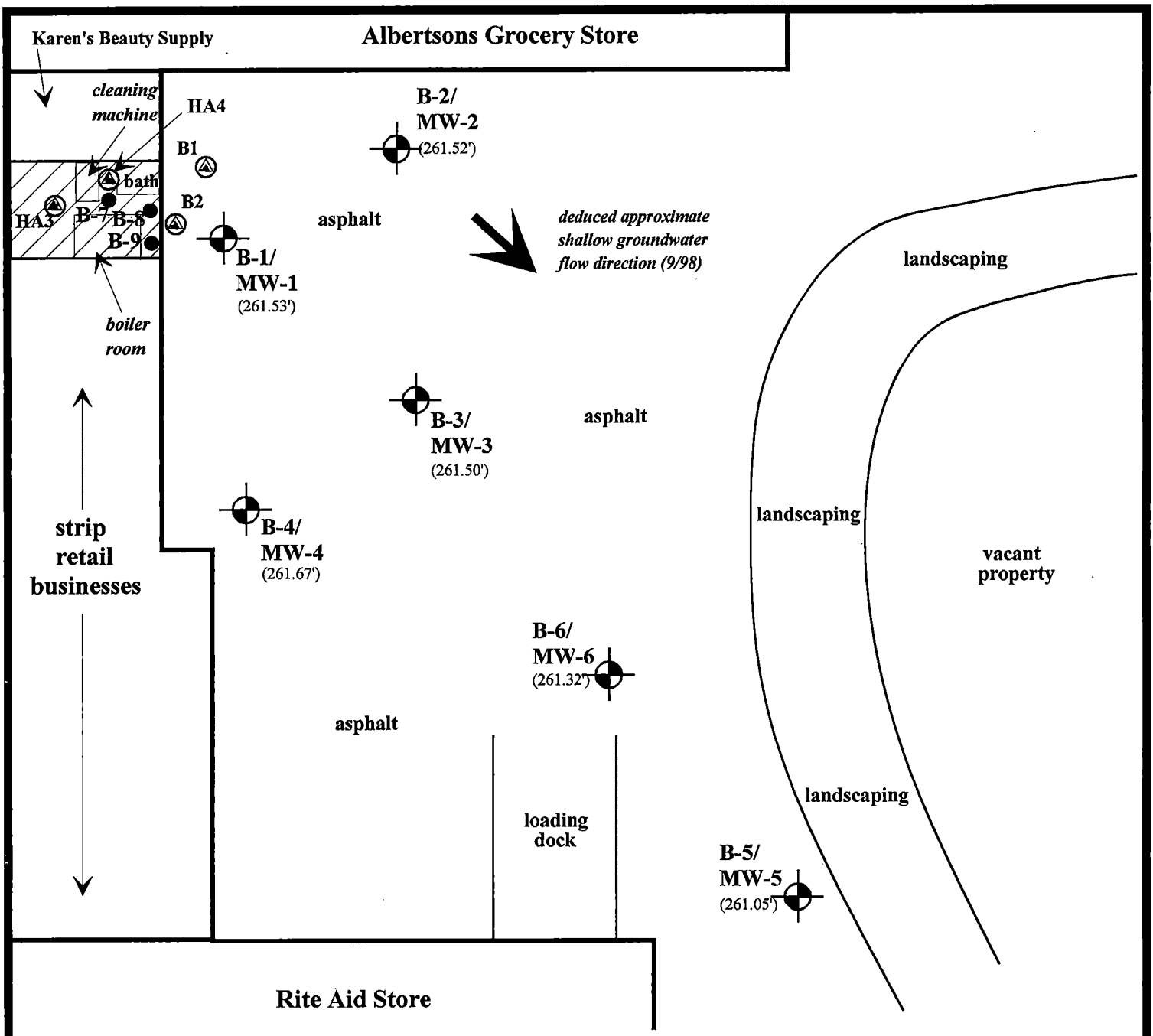
SITE OVERVIEW MAP

The Cleaners #1 Site
26102 Pacific Highway South
Kent, Washington

Job Number:	*Date:*	*Scale:*	*Plate:*
JN-8392-2	October 2006		2



B1 = Approximate location of boring by others (EMG) on 8-31-98.

B-7 = Approximate location of interior-space boring by EAI on 9-28-98.

B-1/ MW-1 (261.53') = Approximate location of exterior borings/monitoring wells by EAI on 9-21 & 22-98; relative elevation of water table on 9-23-98 in parenthesis.

NORTH

Scale: 1 inch = 30 feet

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SITE EXPLORATION MAP

The Cleaners #1 Site
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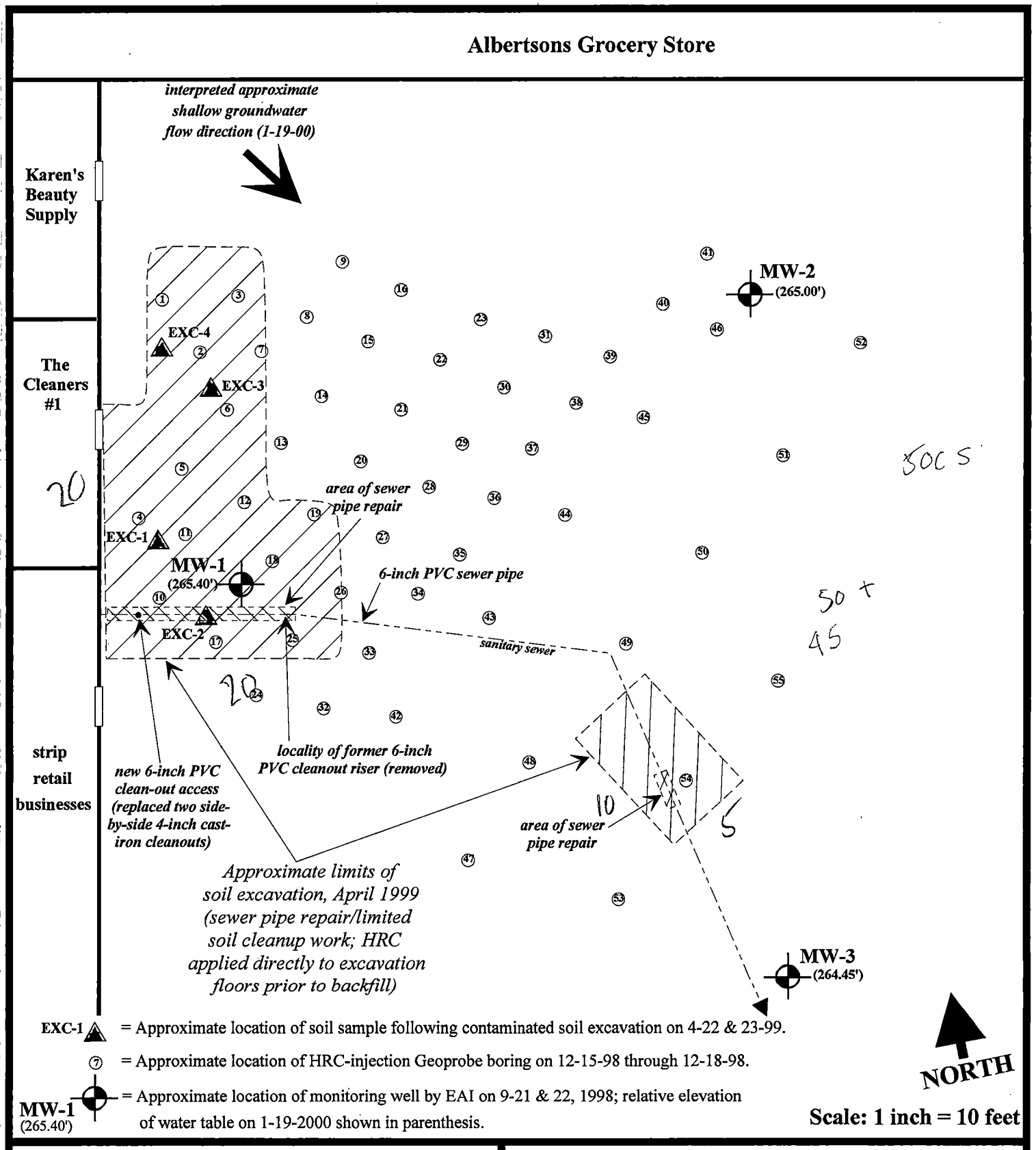
Kent, Washington

Job Number:	Date:	Logged by:	Plate:
JN 8392	Oct. 1998		3



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HRC INITIAL INJECTION / SEWER EXCAVATION MAP

The Cleaners #1
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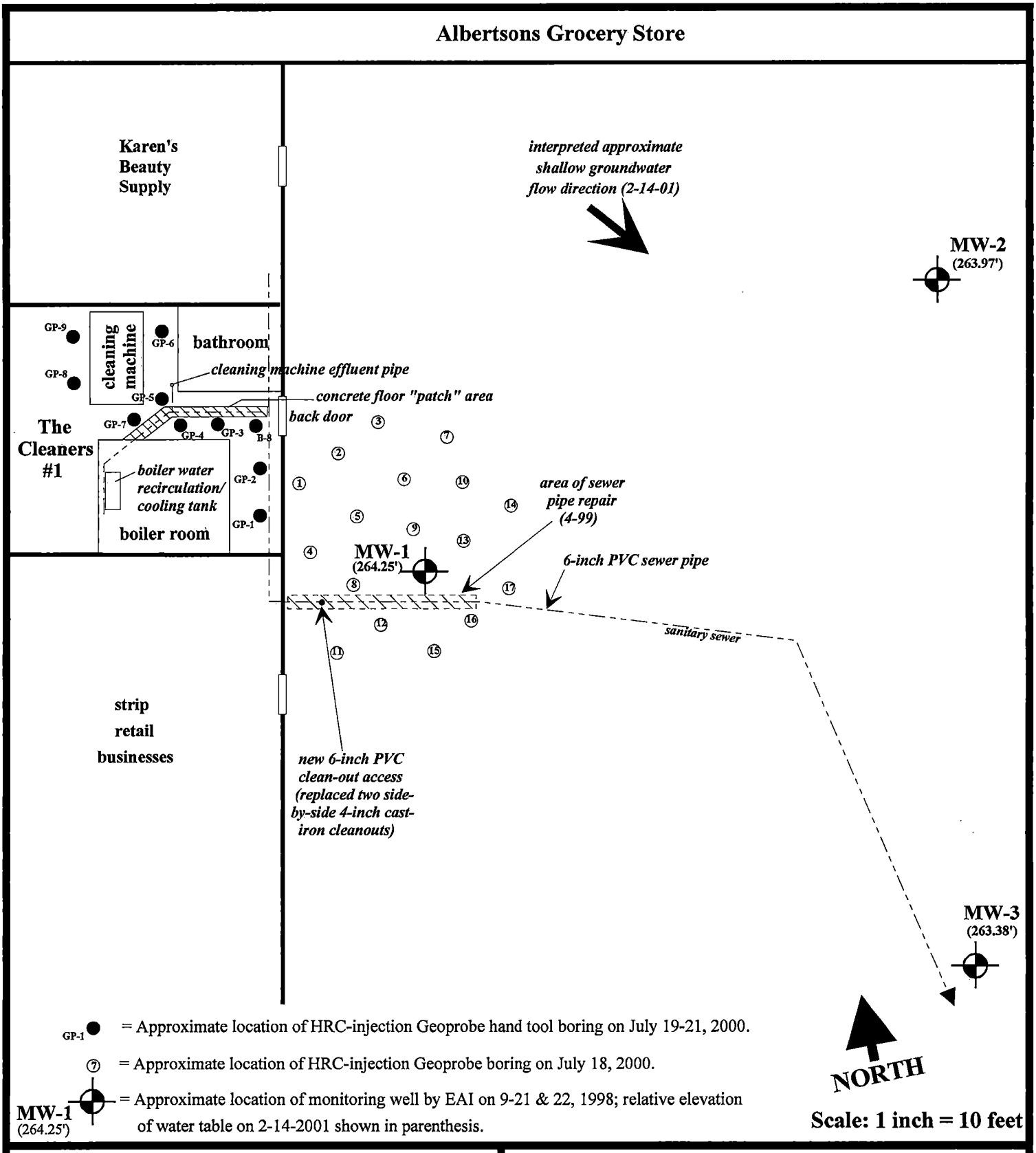
Kent, Washington

Job Number:	Date:	Logged by:	Plate:
JN 8392-1	Mar. 2000		4



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HRC RE-APPLICATION PLAN

The Cleaners #1
26102 Pacific Highway South
Kent, Washington

Job Number:	Date:	Logged by:	Plate:
JN 8392-X	Mar. 2001		5

APPENDIX-A

Charts

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Chart 1: Water Table Hydrograph

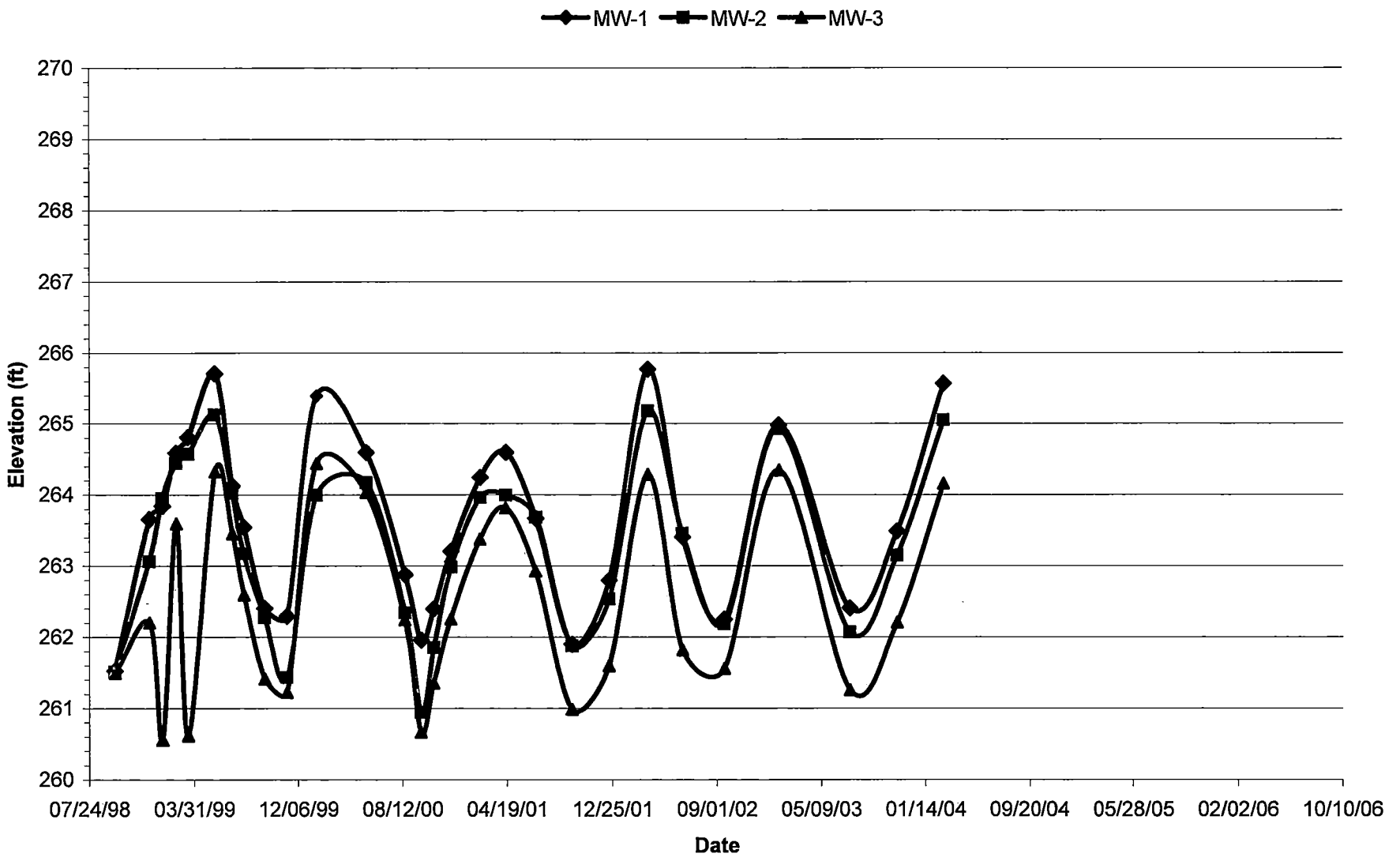

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Chart-2: MW1 VOC Trends

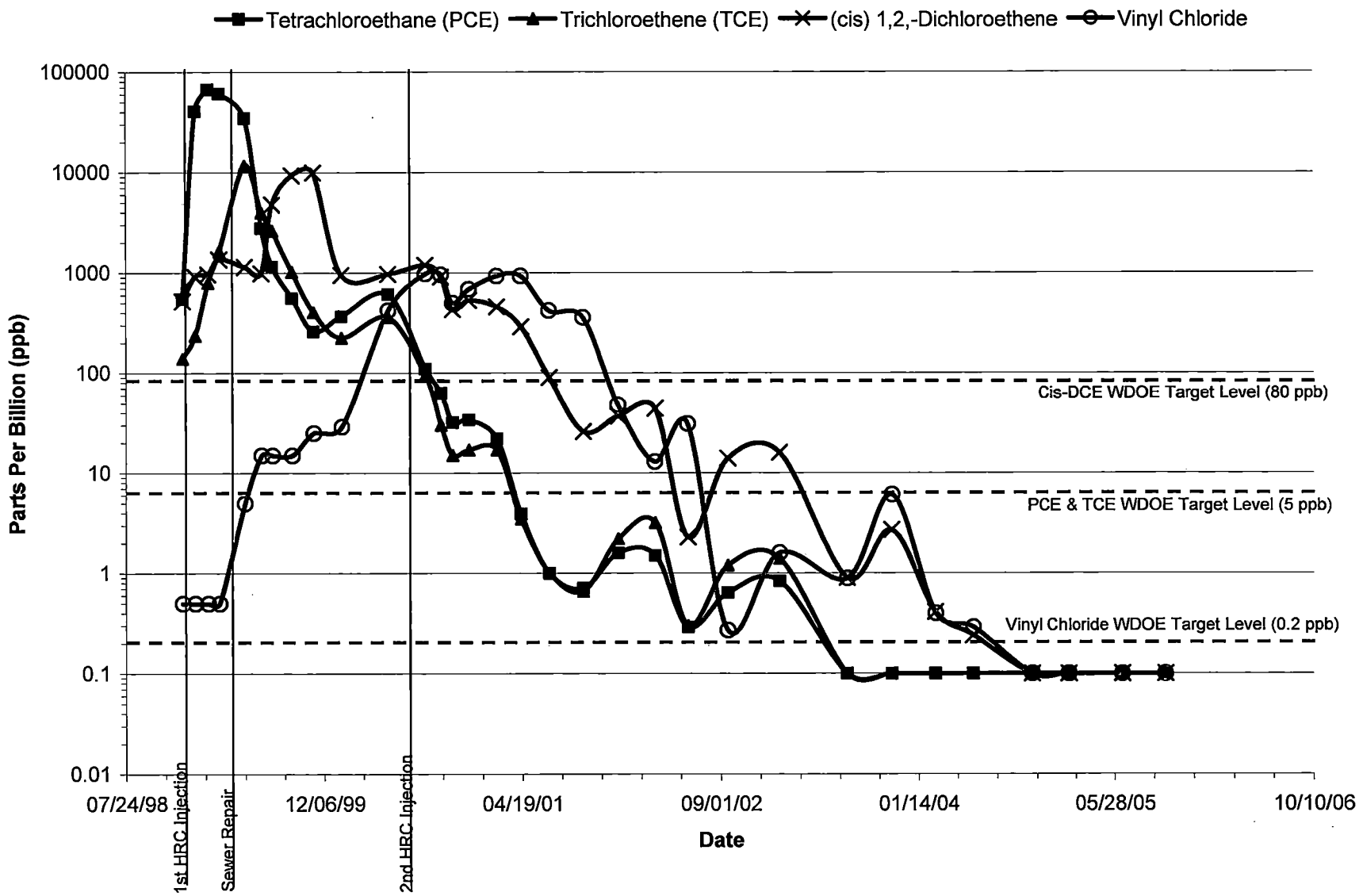

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Chart 3: MW-3 VOC Trends