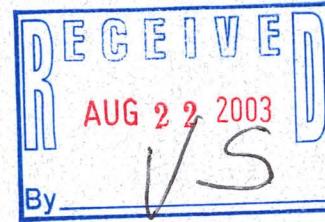




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August 21, 2003

Mr. Binyoti F. Amungwafor
Wisconsin Department of Natural Resources
2300 North Dr. Martin Luther King, Jr. Drive
Post Office Box 12436
Milwaukee, Wisconsin 53212-0436

Reference: *Site Investigation Status Update/Site Investigation Completion*
Decorah Shopping Center Annex
1011-1025 South Main Street
West Bend, Wisconsin
WDNR FID #: 267161400
WDNR BRRTS #: 02-67-151266

KEY ENGINEERING GROUP, LTD.
File No. 0702007

Dear Mr. Amungwafor:

The purpose of this letter is to provide the Wisconsin Department of Natural Resources (WDNR) with the results of recent soil, groundwater and soil vapor sample analytical results for the above referenced site and to document the completion of the site investigation (SI). This letter was prepared by Key Engineering Group, Ltd. (KEY) on behalf of Continental VI Fund Limited Partnership (Continental).

PROJECT BACKGROUND

The site history and previous site investigation activities are documented in the following KEY correspondence:

- *Site Investigation Work Plan*, February 3, 1998.
- *Changes to Site Investigation Work Plan*, March 24, 1998.
- *Off-Site Access Considerations*, August 10, 1998.
- *Project Status Update*, September 2, 1998.
- *Project Status Update*, November 16, 1998.
- *Site Investigation Report*, April 8, 1999.
- *Supplemental Case Closure Rationale*, July 22, 1999.
- *Supplemental Site Investigation Report*, January 18, 2000.
- *Project Status Update*, April 25, 2000.
- *Request for Case Closure*, January 9, 2001.
- *Response to WDNR Letter*, March 29, 2001.

Mr. Binyoti F. Amungwafor

August 21, 2003

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- *Response to WDNR Letter and Meeting Documentation*, April 3, 2001.
- *Additional Site Investigation Results*, May 29, 2001.
- *Project Status Update*, October 30, 2001.
- *Project Status Update*, April 11, 2002.
- *Conference Call Documentation*, May 13, 2002.
- *Soil Vapor Screening Work Plan*, March 4, 2003.
- *Project Status Update*, April 15, 2003.
- *Revised Site Investigation Work Scope*, May 2, 2003.
- *Soil Vapor Investigation Results*, August 11, 2003.

ADDITIONAL SOIL AND GROUNDWATER SITE INVESTIGATION RESULTS

The following activities have been conducted pursuant to KEY's May 2, 2003 *Revised Site Investigation Work Scope* and the WDNR's May 9, 2003 approval letter:

- June 3, 2003: Three soil borings (B-27, B-28 and B-29) were advanced in Birchwood Drive and converted to two groundwater monitoring wells (MW-22 and MW-23) and one piezometer (P-5). One soil sample was collected from soil borings B-27 and B-28 and submitted for laboratory analysis of volatile organic compounds (VOCs). Soil boring B-29 was installed adjacent to soil boring B-28 and was "blind drilled" to the depth of B-28 (approximately 25 feet below ground surface (bgs)). Soil boring B-29 was then advanced to a final depth of approximately 39.5 feet bgs with split-spoon samples collected at 2.5-foot intervals. The newly installed groundwater monitoring wells and piezometer were also surveyed relative to the existing groundwater monitoring well network.
- June 10, 2003: Depth to groundwater measurements were collected from each monitoring well/piezometer in the site groundwater monitoring well network. The newly installed monitoring wells and piezometer were developed and sampled for laboratory analysis of VOCs. Additionally, groundwater samples were collected from monitoring wells MW-1, MW-13 and MW-23 for field and laboratory analysis of natural attenuation indicator parameters, total iron, dissolved iron, total manganese, dissolved manganese, sulfate, nitrate, dissolved oxygen, specific conductivity, resistivity, salinity, oxidation-reduction potential and pH.

The monitoring well and piezometer locations are depicted on Figure 1. The soil boring logs, monitoring well construction forms and well development forms are included as Attachment 1. The additional site investigation procedures were conducted in general accordance with KEY's February 3, 1998 *Site Investigation Work Plan*.

The soil sample analytical results are summarized in Table 1, and the laboratory analytical report is included as Attachment 2. The soil sample analytical results indicated that no VOCs were detected at concentrations above laboratory detection limits in soil borings B-27 and B-28.

The depth to groundwater ranged from approximately 7 to 25 feet bgs. Groundwater elevation data is summarized on Table 2, and a groundwater elevation contour map from the June 2003 groundwater sampling event is depicted on Figure 1. Based on the groundwater elevation contour map, the site-specific groundwater flow direction is toward the northeast with an average gradient of approximately 0.008 feet per foot.

The groundwater sample analytical results are summarized in Table 3 and on Figure 3, and the laboratory analytical report is included as Attachment 3. The groundwater sample analytical results indicated that

tetrachloroethene (PCE) and trichloroethene (TCE) were not detected at concentrations above laboratory detection limits in MW-22, MW-23 and P-5 (the down gradient edge of the groundwater monitoring well network).

Natural attenuation indicator parameter data are summarized on Table 3. The natural attenuation indicator parameter data indicated that conditions within the groundwater contaminant plume are not favorable for anaerobic biodegradation.

SOIL VAPOR INVESTIGATION AND ANALYTICAL RESULTS

Soil vapor samples were collected from three soil probes (GP-23, GP-24 and GP-25) triangulated around the residence determined to be at the greatest risk from indoor intrusion of soil vapors (in the vicinity of the highest groundwater concentrations of PCE and TCE) on June 10, 2003. The soil probes were advanced to depths ranging from 7 to 9 feet bgs. Temporary vapor sampling wells were constructed and set at a final depth of approximately 1 foot above the groundwater level. The soil probe and vapor sampling well locations are depicted on Figure 1. The soil probe installations are documented on soil boring logs included as Attachment 4.

Composite soil vapor samples were collected from each temporary vapor well over a 6-hour time period utilizing a Summa canister. Collected soil vapor samples were submitted to Severn Trent Laboratories, Inc. (STL) for laboratory analysis of VOCs utilizing United States Environmental Protection Agency Method TO-15. The STL laboratory analytical report is included as Attachment 5.

The soil vapor sample analytical results indicated that PCE was detected at vapor well GP-24 and GP-25 at concentrations of 1.1 parts per billion volume (ppbv) and 1.2 ppbv, respectively. The vapor sample analytical results also indicated that TCE was detected at vapor well GP-24 and GP-25 at concentrations of 0.73 ppbv and 0.80 ppbv, respectively. No other compounds were detected at concentrations above laboratory detection limits at vapor wells GP-24 and GP-25. The soil vapor sample analytical results also indicated that no VOCs were detected above laboratory detection limits in vapor well GP-23.

The soil vapor sample analytical results for vapor wells GP-23 through GP-25 were evaluated utilizing the *Johnson and Ettinger (1991) Model for Subsurface Vapor Intrusion into Buildings* (JE Model). The JE Model indicated that the Incremental Risk Screening Factors for PCE and TCE in vapor wells GP-23 through GP-25 ranged from approximately 2 to 4 orders of magnitude below the established acceptable risk screening factor of 1×10^{-6} .

The soil vapor sample analytical results and JE Model results are summarized in Table 4. The JE Model calculation documentation is included as Attachment 6.

SITE INVESTIGATION CONCLUSIONS

Based on the results of the June 2003 groundwater sample analytical results, the degree and extent of the groundwater contaminant plume has been defined. The extent of the PCE groundwater contaminant plume is depicted on Figure 4. Additionally, sufficient evaluation of the risk of soil vapor intrusion into residences located within the groundwater contaminant plume has been conducted. Based on the results of the soil vapor evaluation, there is not a complete pathway for PCE and TCE vapor intrusion, and therefore, no significant human health risk present. Based on the previous SI results and the results of the June 2003 soil, groundwater and soil vapor sample analytical results, the degree and extent of contamination has been defined in accordance with NR 716, and the site investigation has been completed.

Mr. Binyoti F. Amungwafor
August 21, 2003
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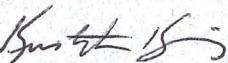
REMEDIAL ACTION OPTIONS EVALUATION

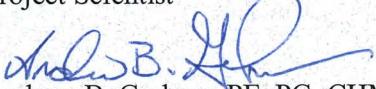
Remedial action options will be evaluated and proposed under separate cover.

Please contact KEY if you have any questions.

Sincerely,

KEY ENGINEERING GROUP, LTD.


Kristopher T. King
Project Scientist


Andrew B. Graham, PE, PG, CHMM
Senior Engineer

KTK/clh

Attachments:	Table 1	Summary of Soil Sample Analytical Results
	Table 2	Summary of Groundwater Elevation Data
	Table 3	Summary of Groundwater Sample Analytical Results
	Table 4	Summary of Soil Vapor Sample Analytical Results
	Figure 1	Site Vicinity Layout
	Figure 2	Groundwater Elevation Contour Map (June 10, 2003)
	Figure 3	Summary of Groundwater Sample Analytical Results
	Figure 4	PCE Isoconcentration Contour Map
	Attachment 1	Soil Boring Logs (Form 4400-122) Monitoring Well Construction Forms (Form 4400-113A) Monitoring Well Development Forms (Form 4400-113B)
	Attachment 2	Soil Sample Laboratory Analytical Report
	Attachment 3	Groundwater Sample Laboratory Analytical Report
	Attachment 4	Soil Vapor Investigation Boring Logs (Form 4400-122)
	Attachment 5	Soil Vapor Laboratory Analytical Report
	Attachment 6	Johnson & Ettinger Model Documentation

cc: Ms. Mary Mokwa, Continental VI Fund Limited Partnership
Mr. Donald P. Gallo, Reinhart, Boerner & Van Deuren, S.C.

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS

DECORAH SHOPPING CENTER ANNEX

1011-1025 South Main Street
West Bend, Wisconsin

	B-1	B-2	B-3	B-4	B-5	GP-7		GP-8		GP-9	GP-10		GP-11	GP-12	GP-13	GRCL
Depth (feet)	1-3	6-8	3.5-5.5	1-3	1-3	6-8	1-3	6-8	2-4	8-10	2-4	8-10	4-6	2-4	8-10	5-7
Date	4/1/98	4/1/98	4/1/98	4/1/98	4/1/98	4/1/98	4/1/98	4/1/98	10/23/98	10/23/98	9/3/99	9/3/99	9/3/99	9/3/99	9/3/99	7-9
PID (i.u.)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NE
Detected VOCs ($\mu\text{g}/\text{kg}$)																
1,2,3-Trichlorobenzene	30	34	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Trimethylbenzenes	99	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Naphthalene	51	36 (Q)	50	38 (Q)	42	<25	42	<25	<25	<25	<25	<25	<25	<25	<25	400 ¹
Xylenes	<50	35	<50	<50	<50	<50	<50	<50	<50	<50	<75	<75	<75	<75	<75	4,100
MTBE	<25	43	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NE
Tetrachloroethene	<25	<25	<25	<25	79	212	31	<25	<25	107	240	120	<25	87	1,400 ²	340
Benzene	<25	<25	<25	<25	<25	<25	<25	<25	28	<25	<25	<25	<25	<25	<25	60
Toluene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	1,500

Notes:

¹ - WDNR interim guidance

² - Site specific residual contaminant level based on the protection of groundwater (*Supplemental Site Investigation Report*, KEY, January 18, 2000)

Bold concentrations exceed NR 720 GRCL

GRCL - NR 720 generic residual contaminant level based on the protection of groundwater

i.u. - instrument units

MTBE - methyl tert-butyl ether

NE - not established

PID - photoionization detector

Q - concentration detected between laboratory limit of quantitation and limit of detection

$\mu\text{g}/\text{kg}$ - micrograms per kilogram

VOCs - volatile organic compounds

TABLE 1 (CONTINUED)

SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS

DECORAH SHOPPING CENTER ANNEX

1011-1025 South Main Street

West Bend, Wisconsin

	B-10	GP-14	GP-15	P-3	B-15	B-16	B-17	B-18	B-19	GP-16	GP-17	GP-18	GP-19	GP-20	GP-21	GP-22	GRCL
Depth (feet)	6-7.5	6-8	6-8	3.5-5	6-7.5	3.5-5.5	3.5-5.5	3.5-5.5	3.5-5.5	0-4	0-4	0-4	0-4	0-4	0-4	0-4	NE
Date	8/18/00	11/3/00	11/3/00	4/11/01	9/12/01	10/31/01	10/31/01	10/31/01	10/31/01	9/27/02	9/27/02	9/27/02	9/27/02	9/27/02	9/27/02	9/27/02	NE
PID (i.u.)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	NE
Detected VOCs ($\mu\text{g}/\text{kg}$)																	
1,2,3-Trichlorobenzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NE
Trimethylbenzenes	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NE
Naphthalene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	400
Xylenes	<75	<75	<75	<75	<75	<75	<75	<75	<75	<50	<50	<50	<50	<50	<50	<50	4,100
MTBE	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NE
Tetrachloroethene	<25	<25	<25	<25	<25	<25	<25	<25	<25	77	<25	32 Q	<25	<25	<25	<25	1839 ²
Benzene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	5.5
Toluene	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	1,500

Notes:

¹ - WDNR interim guidance² - Site specific residual contaminant level based on the protection of groundwater
(Supplemental Site Investigation Report, KEY, January 18, 2000)

Bold concentrations exceed NR 720 GRCL

GRCL - NR 720 generic residual contaminant level based on the protection of groundwater

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MTBE - methyl tert-butyl ether

NE - not established

PID - photoionization detector

Q - concentration detected between laboratory limit of quantitation and limit of detection

 $\mu\text{g}/\text{kg}$ - micrograms per kilogram

VOCs - volatile organic compounds

TABLE 1 (CONTINUED)
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS

DECORAH SHOPPING CENTER ANNEX
1011-1025 South Main Street
West Bend, Wisconsin

	B-20	B-21		B-22		B-23		B-24	B-25		B-26		B-27	B-28	GRCL
Depth (feet)	8.5-10.5	8.5-10.5	13.5-15.5	11-13	16-18	8.5-10.5	16-18	28-30	18.5-20.5	23.5-25.5	21-23	26-28	5-7	12.5-14.5	NE
Date	3/11/03	3/11/03	3/11/03	3/11/03	3/11/03	3/11/03	3/11/03	3/11/03	3/12/03	3/12/03	3/12/03	3/12/03	6/3/03	6/3/03	NE
PID (i.u.)	4	4	<1	5	3	<1	4	<1	<1	<1	<1	<1	<1	<1	NE
Detected VOCs ($\mu\text{g}/\text{kg}$)															
1,2,3-Trichlorobenzene	<27	<26	<30	<30	<32	<29	<30	<31	<27	<32	<26	<32	<27	<26	NE
Trimethylbenzenes	<54	<52	<60	<60	<64	<58	<60	<62	<54	<64	<52	<64	<54	<52	NE
Naphthalene	<27	<26	<30	<30	<32	<29	<30	<31	<27	<32	<26	<32	<27	<26	400 ¹
Xylenes	<38	<37	<42	<42	<44	<40	<41	<43	<38	<45	<37	<44	<38	<37	4,100
MTBE	<27	<26	<30	<30	<32	<29	<30	<31	<27	<32	<26	<32	<27	<26	NE
Tetrachloroethene	<27	<26	94	<30	<32	<29	86	<31	<27	69	<26	<32	<27	<26	1839 ²
Benzene	<27	<26	<30	<30	<32	<29	<30	<31	<27	<32	<26	<32	<27	<26	5.5
Toluene	67	52	<30	36	<32	<29	<30	74	<27	<32	<26	<32	<27	<26	1,500

Notes:

¹ - WDNR interim guidance

² - Site specific residual contaminant level based on the protection of groundwater
(Supplemental Site Investigation Report, KEY, January 18, 2000)

Bold concentrations exceed NR 720 GRCL

GRCL - NR 720 generic residual contaminant level based on the protection of groundwater

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MTBE - methyl tert-butyl ether

NE - not established

PID - photoionization detector

Q - concentration detected between laboratory limit of quantitation and limit of detection

$\mu\text{g}/\text{kg}$ - micrograms per kilogram

VOCs - volatile organic compounds

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA

DECORAH SHOPPING CENTER ANNEX
 1011-1025 South Main Street
 West Bend, Wisconsin

WELL NO.	TOP OF PVC ELEVATION (feet MSL)	DATE	DEPTH TO GROUNDWATER (feet)	GROUNDWATER ELEVATION (feet MSL)
MW-1	936.97	11/5/01	8.00	928.97
		11/15/01	8.27	928.70
		1/22/02	8.81	928.16
		3/19/03	9.29	927.68
		6/10/03	7.95	929.02
MW-2	936.23	11/5/01	6.64	929.59
		11/15/01	6.82	929.41
		1/22/02	7.19	929.04
		3/19/03	7.50	928.73
		6/10/03	6.45	929.78
MW-3	935.80	11/5/01	9.61	926.19
		11/15/01	9.76	926.04
		1/22/02	---	---
		3/19/03	10.39	925.41
		6/10/03	9.66	926.14
MW-4	935.66	11/5/01	9.88	925.78
		11/15/01	10.03	925.63
		1/22/02	10.35	925.31
		3/19/03	11.04	924.62
		6/10/03	10.22	925.44
MW-5	933.23	11/5/01	7.50	925.73
		11/15/01	7.65	925.58
		1/22/02	8.01	925.22
		3/19/03	8.63	924.60
		6/10/03	7.75	925.48
MW-6	935.83	11/5/01	9.24	926.59
		11/15/01	9.44	926.39
		1/22/02	9.77	926.06
		3/19/03	10.08	925.75
		6/10/03	9.30	926.53
MW-7	933.16	11/5/01	7.54	925.62
		11/15/01	7.68	925.48
		1/22/02	7.99	925.17
MW-8	932.27	11/5/01	7.07	925.20
		11/15/01	7.90	924.37
		1/22/02	7.58	924.69
		3/19/03	8.31	923.96
		6/10/03	7.36	924.91
MW-9	933.07	11/5/01	7.72	925.35
		11/15/01	7.88	925.19
		1/22/02	8.18	924.89
		3/19/03	8.93	924.14
		6/10/03	8.02	925.05
MW-10	932.84	11/5/01	7.47	925.37
		11/15/01	7.62	925.22
		1/22/02	7.96	924.88
		3/19/03	8.89	923.95
		6/10/03	7.87	924.97

Notes:

* - Monitoring well installed in connection with Matanaer Auto Service property
 Benchmark: hydrant rim nut at 851 South Main Street (937.34)
 MSL - mean sea level

TABLE 2 (CONTINUED)
SUMMARY OF GROUNDWATER ELEVATION DATA

DECORAH SHOPPING CENTER ANNEX
1011-1025 South Main Street
West Bend, Wisconsin

WELL NO.	TOP OF PVC ELEVATION (feet MSL)	DATE	DEPTH TO GROUNDWATER (feet)	GROUNDWATER ELEVATION (feet MSL)
MW-11	933.69	11/5/01	8.87	924.82
		11/15/01	—	—
		1/22/02	9.38	924.31
		3/19/03	10.38	923.31
		6/10/03	9.32	924.37
MW-12	932.27	11/5/01	7.02	925.25
		11/15/01	7.15	925.12
		1/22/02	7.46	924.81
		3/19/03	8.14	924.13
		6/10/03	7.24	925.03
MW-13	932.57	11/5/01	8.18	924.39
		11/15/01	8.00	924.57
		1/22/02	8.44	924.13
		3/19/03	9.50	923.07
		6/10/03	8.47	924.10
MW-14	932.75	11/5/01	11.15	921.60
		11/15/01	11.11	921.64
		1/22/02	11.44	921.31
		3/19/03	12.35	920.40
		6/10/03	11.84	920.91
MW-15	931.59	11/5/01	9.89	921.70
		11/15/01	9.94	921.65
		1/22/02	10.22	921.37
		3/19/03	11.06	920.53
		6/10/03	10.47	921.12
MW-16	933.20	3/19/03	10.53	922.67
		6/10/03	9.43	923.77
MW-17	933.87	3/19/03	11.33	922.54
		6/10/03	10.37	923.50
MW-18	935.10	3/19/03	14.83	920.27
		6/10/03	14.54	920.56
MW-19	934.28	3/19/03	13.60	920.68
		6/10/03	13.13	921.15
MW-20	939.35	3/19/03	20.92	918.43
		6/10/03	21.07	918.28
MW-21	943.45	3/19/03	24.95	918.50
		6/10/03	25.08	918.37
MW-22	924.45	6/10/03	9.96	914.49
MW-23	927.58	6/10/03	17.12	910.46
P-1	935.56	11/5/01	9.70	925.86
		11/15/01	9.84	925.72
		1/22/02	10.18	925.38
		3/19/03	10.93	924.63
		6/10/03	10.65	924.91
P-2	935.66	11/5/01	8.60	927.06
		11/15/01	9.23	926.43
		1/22/02	9.53	926.13
		3/19/03	9.84	925.82
		6/10/03	9.65	926.01
P-3	931.82	11/5/01	6.45	925.37
		11/15/01	6.55	925.27
		1/22/02	6.60	925.22
		3/19/03	7.44	924.38
		6/10/03	6.90	924.92
P-4	933.76	3/19/03	13.53	920.23
		6/10/03	13.16	920.60
P-5	927.59	6/10/03	17.83	909.76
MW-4 *	932.89	1/22/02	8.01	924.88
MW-7*	933.92	1/22/02	8.80	925.12

Notes:

* - Monitoring well installed in connection with Matanaer Auto Service property
Benchmark: hydrant rim nut at 851 South Main Street (937.34)
MSL - mean sea level

TABLE 3
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS

DECORAH SHOPPING CENTER ANNEX

1011-1025 South Main Street
West Bend, Wisconsin

	MW-1					MW-2				MW-3							NR 140			
	4/7/98	7/31/98	10/8/99	3/19/03	6/10/03	4/7/98	7/31/98	10/8/99	3/19/03	4/7/98	7/31/98	10/8/99	3/31/00	8/31/00	12/4/00	4/12/01	11/5/01	3/19/03	ES	PAL
Date																				
Detected VOCs ($\mu\text{g/l}$)																				
Trimethylbenzenes	<0.5	<0.5	<0.70	<0.50	—	0.3 (Q)	<0.5	<0.70	<0.50	0.2	<0.5	<0.70	<0.50	<0.50	<0.50	<0.50	<0.50	480	96	
Benzene	<0.2	<0.2	<0.25	<0.25	—	0.3 (Q)	0.2 (Q)	<0.25	<0.25	<0.2	<0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	5	0.5	
Toluene	<0.3	<0.3	<0.38	<0.25	—	<0.3	<0.3	<0.38	<0.25	<0.3	<0.3	<0.38	<0.22	<0.22	<0.22	<0.22	<0.22	1,000	200	
Ethylbenzene	<0.2	<0.2	<0.32	<0.50	—	0.3 (Q)	<0.2	<0.32	<0.50	<0.2	<0.2	<0.32	<0.12	<0.12	<0.12	<0.12	<0.12	700	140	
Xylenes	<0.6	<0.6	<1.04	<0.50	—	1.0 (Q)	<0.6	<1.04	<0.50	0.5 (Q)	<0.6	<1.04	<0.74	<0.74	<0.74	<0.74	<0.74	10,000	1,000	
MTBE	0.5 (Q)	<0.2	<0.21	<0.50	—	<0.2	<0.2	<0.21	<0.50	<0.2	<0.2	<0.21	<0.53	<0.53	<0.53	<0.53	<0.53	60	12	
Isopropylbenzene	<0.2	<0.2	<0.33	<0.25	—	0.4 (Q)	<0.2	<0.33	<0.25	<0.2	<0.2	<0.33	<0.15	<0.15	<0.15	<0.15	<0.15	NE	NE	
n-Butylbenzene	<0.2	<0.2	<0.43	<0.25	—	0.4 (Q)	<0.2	<0.43	<0.25	<0.2	<0.2	<0.43	<0.29	<0.29	<0.29	<0.29	<0.29	NE	NE	
n-Propylbenzene	<0.3	<0.3	<0.36	<0.50	—	0.3 (Q)	<0.3	<0.36	<0.50	<0.3	<0.3	<0.36	<0.18	<0.18	<0.18	<0.18	<0.18	NE	NE	
Naphthalene	<0.5	<0.5	<0.73	<0.25	—	0.7 (Q)	<0.5	<0.73	<0.25	0.7 (Q)	<0.5	<0.73	<0.68	<0.68	<0.68	<0.68	<0.68	40	8	
Chloroform	<0.30	<0.30	<0.26	<0.25	—	<0.30	<0.30	<0.26	<0.25	<0.30	<0.30	<0.26	<0.32	<0.32	<0.32	<0.32	<0.32	6	0.6	
Chloromethane	<0.8	<0.8	<0.29	<0.25	—	<0.8	<0.8	<0.29	<0.25	<0.8	<0.8	<0.29	<0.24	0.72 (Q)	<0.24	<0.24	<0.24	3	0.3	
cis-1,2-Dichloroethene	<0.2	<0.2	<0.34	<0.50	—	<0.2	<0.2	<0.34	<0.50	<0.2	<0.2	<0.34	<1	<1	<1	<1	<1	70	7	
trans-1,2-Dichloroethene	<0.20	<0.20	<0.46	<0.50	—	<0.20	<0.20	<0.46	<0.50	<0.20	<0.20	<0.46	<0.23	<0.23	<0.23	<0.23	<0.23	100	20	
Tetrachloroethene	<0.3	<0.3	<0.56	<0.50	—	<0.3	<0.3	<0.56	<0.50	<0.3	1.6	1.3 (Q)	0.43 (Q)	1.1	0.33 (Q)	0.33 (Q)	<0.25	<0.50	5	0.5
Trichloroethene	<0.2	<0.2	<0.39	<0.25	—	<0.2	<0.2	<0.39	<0.25	<0.2	<0.2	<0.39	<0.36	<0.36	<0.36	<0.36	<0.36	5	0.5	
Natural Attenuation Parameters																				
Nitrate (mg/l)	—	—	—	—	<0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Sulfate (mg/l)	—	—	—	—	49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dissolved Iron	—	—	—	—	<0.042	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total Iron	—	—	—	—	1.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dissolved Manganese	—	—	—	—	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total Manganese	—	—	—	—	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
D.O. (mg/l)	—	—	—	—	2.74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Specific Conductance ($\mu\text{S}/\text{cm}$)	—	—	—	—	7,411	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Resistivity ($\text{k}\Omega/\text{cm}$)	—	—	—	—	0.135	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Salinity (g/l)	—	—	—	—	4.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
pH (s.u.)	—	—	—	—	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
O.R.P. (mv)	—	—	—	—	351	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Notes:

Bold concentrations exceed NR 140 PAL

Shaded concentrations exceed NR 140 ES

D.O. - dissolved oxygen

ES - NR 140 enforcement standard

g/l - grams per liter

K Ω /cm - kilohms per centimeter

mg/l - milligrams per liter

MTBE - methyl tert-butyl ether

mv - millivolts

NE - not established

O.R.P. - oxygen reduction potential

PAL - NR 140 preventive action limit

Q - concentration detected between laboratory limit of quantitation and limit of detection

s.u. - standard units

$\mu\text{g/l}$ - micrograms per liter

$\mu\text{S}/\text{cm}$ - microsiemens per centimeter

VOCs - volatile organic compounds

TABLE 3 (CONTINUED)

SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS

DECORAH SHOPPING CENTER ANEX
1011-1025 South Main Street
West Bend, Wisconsin

Date	MW-4							MW-5							MW-6							NR 140					
	4/7/98	7/31/98	10/6/98	3/31/00	8/31/00	12/4/00	4/12/01	3/19/03	2/9/99	10/6/99	12/3/99	3/31/00	8/31/00	12/4/00	4/12/01	11/5/01	3/19/03	10/8/99	3/31/00	8/31/00	12/4/00	4/12/01	11/5/01	3/19/03	ES	PAL	
Detected VOCs ($\mu\text{g/l}$)																											
Trimethylbenzenes	<0.5	<0.5	<0.70	<0.50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.70	<0.70	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	6.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	490	96	
Benzene	<0.2	<0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.52 (Q)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	5	0.5	
Toluene	<0.3	<0.3	<0.38	<0.22	<0.22	<0.22	<0.22	<0.25	<0.3	<0.38	<0.38	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	1.2 (Q)	<0.22	<0.22	0.39 (Q)	<0.22	<0.25	1,000	200		
Ethylbenzene	<0.2	<0.2	<0.32	<0.12	<0.12	<0.12	<0.12	<0.50	<0.2	<0.32	<0.32	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	1.9	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	700	140	
Xylenes	<0.6	<0.6	<1.04	<0.74	<0.74	<0.74	<0.74	<0.50	<0.6	<1.04	<1.04	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	7.2	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	10,000	1,000	
MTBE	<0.2	<0.2	<0.21	<0.53	<0.53	<0.53	<0.53	<0.50	<0.2	<0.21	<0.21	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	60	12	
Isopropylbenzene	<0.2	<0.2	<0.33	<0.15	<0.15	<0.15	<0.15	<0.25	<0.2	<0.33	<0.33	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.33	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	NE	NE	
n-Butylbenzene	<0.2	<0.2	<0.43	<0.29	<0.29	<0.29	<0.29	<0.25	<0.2	<0.43	<0.43	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	0.49 (Q)	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	NE	NE	
n-Propylbenzene	<0.3	<0.3	<0.36	<0.18	<0.18	<0.18	<0.18	<0.50	<0.3	<0.36	<0.36	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	0.82 (Q)	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	NE	NE	
Naphthalene	<0.5	<0.5	<0.73	<0.68	<0.68	<0.68	<0.68	<0.68	<0.25	<0.5	<0.73	<0.73	<0.68	<0.68	<0.68	<0.68	<0.68	1.1 (Q)	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	40	8	
Chloroform	<0.30	<0.30	<0.26	<0.32	<0.32	<0.32	<0.32	<0.25	<0.30	<0.26	<0.26	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.25	<0.26	<0.32	<0.32	<0.32	<0.32	<0.32	6	0.6	
Chloromethane	<0.8	<0.8	<0.29	<0.24	0.8	0.49 (Q)	<0.24	<0.25	<0.8	<0.29	<0.29	<0.24	<0.24	11	<0.24	<0.24	<0.25	<0.29	0.48 (Q)	17	<0.24	<0.25	<0.24	<0.25	<0.24	3	0.3
cis-1,2-Dichloroethene	<0.2	<0.2	<0.34	<1	<1	<1	<1	<0.50	<0.2	<0.34	<0.34	<1	<1	<1	<1	<1	<1	0.38 (Q)	<1	<1	<1	<1	<1	<1	70	7	
trans-1,2-Dichloroethene	<0.20	<0.20	<0.46	<0.23	<0.23	<0.23	<0.23	<0.50	<0.20	<0.46	<0.46	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.50	<0.46	<0.23	<0.23	<0.23	<0.23	<0.50	100	20	
Tetrachloroethene	1.9	0.6 (Q)	<0.56	<0.25	<0.25	<0.25	<0.25	<0.50	2.5	13	4	12	12	16	14	1.4	4.1	3.4	2.5	3.2	3.8	1.8	1.7	5	0.5		
Trichloroethene	<0.2	<0.2	<0.39	<0.36	<0.36	<0.36	<0.36	<0.25	0.6	0.5 (Q)	0.9 (Q)	0.61 (Q)	1 (Q)	0.9 (Q)	0.46 (Q)	0.48 (Q)	0.53	<0.39	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	5	0.5	
Natural Attenuation Parameters																											
Nitrate (mg/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Sulfate (mg/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Dissolved Iron	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Total Iron	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Dissolved Manganese	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Total Manganese	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
D.O. (mg/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Specific Conductance (uS/cm)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Resistivity (K Ω /cm)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Salinity (g/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
pH (s.u.)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
O.R.P. (mv)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

Notes:

Bold concentrations exceed NR 140 PAL

Shaded concentrations exceed NR 140 ES

D.O. - dissolved oxygen

ES - NR 140 enforcement standard

g/l - grams per liter

K Ω /cm - kilohms per centimeter

mg/l - milligrams per liter

MTBE - methyl tert-butyl ether

mV - millivolts

NE - not established

O.R.P. - oxygen reduction potential

PAL - NR 140 preventive action limit

Q - concentration detected between laboratory limit of quantitation and limit of detection

s.u. - standard units

 $\mu\text{g/l}$ - micrograms per liter

uS/cm - microsiemens per centimeter

VOCs - volatile organic compounds

TABLE 3 (CONTINUED)

SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS

DECORAH SHOPPING CENTER ANNEX
1011-1025 South Main Street
West Bend, Wisconsin

	MW-7					MW-8					MW-9					MW-10					MW-11					NR 140	
	9/20/00	12/4/00	4/12/01	11/5/01	4/12/01	4/30/01	11/5/01	3/19/03	4/12/01	4/30/01	11/5/01	3/19/03	4/12/01	4/30/01	11/5/01	3/19/03	9/14/01	11/5/01	3/19/03	11/5/01	3/19/03	11/5/01	3/19/03	ES	PAL		
Dated VOCs ($\mu\text{g/l}$)																											
Trimethylbenzenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	480	96			
Benzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	5	0.5			
Toluene	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	1,000	200			
Ethylbenzene	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	700	140			
Xylenes	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	10,000	1,000			
MTBE	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	60	12		
Isopropylbenzene	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	NE	NE			
n-Butylbenzene	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	NE	NE			
n-Propylbenzene	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	NE	NE			
Naphthalene	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	40	8			
Chloroform	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	6	0.6			
Chloromethane	<0.24	0.55 (Q)	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	3	0.3			
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	70	7		
trans-1,2-Dichloroethene	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	100	20			
Tetrachloroethene	4.7	3.3	3.4	4.4	3.5	4.3	5.6	4.2	3.1	3.8	4.2	0.84	8.2	5	6.4	4.1	8.7	10	5.3	<0.25	<0.50	5	0.5				
Trichloroethene	2.4	2.3	2.2	3.2	1.1 (Q)	1.2 (Q)	2.3	1.2	3	1.6	8.9	11	1.9	0.76 (Q)	0.61 (Q)	0.53	2.8	1.5	1.3	<0.36	<0.25	5	0.5				
Natural Attenuation Parameters																											
Nitrate (mg/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Sulfate (mg/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Dissolved Iron	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Total Iron	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Dissolved Manganese	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Total Manganese	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
D.O. (mg/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Specific Conductance ($\mu\text{S}/\text{cm}$)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Resistivity ($\text{K}\Omega\text{/cm}$)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Salinity (g/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
pH (s.u.)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
O.R.P. (mv)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		

Notes:

Bold concentrations exceed NR 140 PAL

Shaded concentrations exceed NR 140 ES

D.O. - dissolved oxygen

ES - NR 140 enforcement standard

g/l - grams per liter

K $\Omega\text{/cm}$ - kilohms per centimeter

mg/l - milligrams per liter

MTBE - methyl tert-butyl ether

mv - millivolts

NE - not established

O.R.P. - oxygen reduction potential

PAL - NR 140 preventive action limit

Q - concentration detected between laboratory limit of quantitation and limit of detection

s.u. - standard units

 $\mu\text{g/l}$ - micrograms per liter $\mu\text{S}/\text{cm}$ - microsiemens per centimeter

VOCs - volatile organic compounds

TABLE 3 (CONTINUED)
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS

DECORAH SHOPPING CENTER ANNEX
1011-1025 South Main Street
West Bend, Wisconsin

	MW-13			MW-14			MW-15			MW-16	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23	NR 140	
	Date	11/5/01	3/19/03	6/10/03	11/5/01	3/19/03	11/5/01	3/19/03	3/19/03	3/19/03	3/19/03	3/19/03	3/19/03	3/19/03	3/19/03	6/10/03	6/10/03	ES	PAL
Detected VOCs ($\mu\text{g/l}$)																			
Trimethylbenzenes	<5.0	<0.50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	480	96	
Benzene	<2.5	<0.25	---	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	5	0.5	
Toluene	<2.2	<0.25	---	<0.22	<0.25	<0.22	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1,000	200	
Ethylbenzene	<1.2	<0.50	---	<0.12	<0.50	<0.12	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	700	140	
Xylenes	<7.4	<0.50	---	<0.74	<0.50	<0.74	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	10,000	1,000	
MTBE	<5.3	<0.50	---	<0.53	<0.50	<0.53	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	60	12	
Isopropylbenzene	<1.5	<0.25	---	<0.15	<0.25	<0.15	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NE	NE	
n-Butylbenzene	<2.9	<0.25	---	<0.29	<0.25	<0.29	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NE	NE	
n-Propylbenzene	<1.8	<0.50	---	<0.18	<0.50	<0.18	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NE	NE	
Naphthalene	<6.8	<0.25	---	<0.68	<0.25	<0.68	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	40	8	
Chloroform	<3.2	<0.25	---	<0.32	<0.25	0.77 (Q)	<0.25	<0.25	7.9	5.8	<0.25	2.1	<0.25	<0.25	<0.25	0.91	6	0.6	
Chloromethane	<2.4	<0.25	---	<0.24	<0.25	<0.24	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.63	3	0.3	
cis-1,2-Dichloroethene	<10	<0.50	---	<1	0.68	<1	<0.50	0.58	<0.50	<0.50	1.4	<0.50	<0.50	<0.50	<0.50	70	7		
trans-1,2-Dichloroethene	<2.3	<0.50	---	<0.23	<0.50	<0.23	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	100	20		
Tetrachloroethene	1,000	530	---	77	14	<0.25	<0.50	27	0.66	<0.50	59	50	3.0	<0.50	<0.50	5	0.5		
Trichloroethene	12	8.9	---	<0.36	0.45	<0.36	<0.25	6.7	<0.25	<0.25	2.0	<0.25	<0.25	<0.25	<0.25	5	0.5		
Natural Attenuation Parameters																			
Nitrate (mg/l)			<0.50														4.8	---	
Sulfate (mg/l)			56														32	---	
Dissolved Iron			<0.042														<0.042	---	
Total Iron			1.7														1.4	---	
Dissolved Manganese			0.071														0.014	---	
Total Manganese			0.14														0.13	---	
D.O. (mg/l)			3.07														6.53	---	
Specific Conductance ($\mu\text{s/cm}$)			5,372														1,934	---	
Resistivity ($\text{K}\Omega/\text{cm}$)			0.186														0.518	---	
Salinity (g/l)			2.96														1.03	---	
pH (s.u.)			7.10														7.40	---	
O.R.P. (mv)			352														355	---	

Notes:

Bold concentrations exceed NR 140 PAL

Shaded concentrations exceed NR 140 ES

D.O. - dissolved oxygen

ES - NR 140 enforcement standard

g/l - grams per liter

K Ω/cm - kilohms per centimeter

mg/l - milligrams per liter

MTBE - methyl tert-butyl ether

mv - millivolts

NE - not established

O.R.P. - oxygen reduction potential

PAL - NR 140 preventive action limit

Q - concentration detected between laboratory limit of quantitation and limit of detection

s.u. - standard units

$\mu\text{g/l}$ - micrograms per liter

$\mu\text{s/cm}$ - microsiemens per centimeter

VOCs - volatile organic compounds

TABLE 3 (CONTINUED)
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS

DECORAH SHOPPING CENTER ANNEX
1011-1025 South Main Street
West Bend, Wisconsin

Date	P-1							P-2							P-3			P-4		P-5		NR 140		
	4/7/98	7/31/98	10/8/99	3/31/00	8/31/00	12/4/00	4/12/01	3/19/03	10/8/99	3/31/00	8/31/00	12/4/00	4/12/01	3/19/03	4/12/01	11/5/01	3/19/03	3/19/03	6/10/03	ES	PAL			
Detected VOCs ($\mu\text{g/l}$)																								
Trimethylbenzenes	<0.5	<0.5	<0.70	<0.50	<0.50	<0.50	<0.50	8.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	480	96			
Benzene	<0.2	<0.2	<0.25	<0.25	<0.25	<0.25	<0.25	0.58 (Q)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	5	0.5			
Toluene	<0.3	<0.3	<0.38	<0.22	<0.22	<0.22	<0.22	<0.25	1.5	<0.22	<0.22	<0.22	<0.22	<0.25	0.31 (Q)	<0.22	<0.25	<0.25	<0.25	1,000	200			
Ethylbenzene	<0.2	<0.2	<0.32	<0.12	<0.12	<0.12	<0.12	<0.50	2.2	<0.12	<0.12	<0.12	<0.12	<0.50	<0.12	<0.12	<0.50	<0.50	<0.50	700	140			
Xylenes	<0.6	<0.6	<1.04	<0.74	<0.74	<0.74	<0.74	<0.50	8.7	<0.74	<0.74	<0.74	<0.74	<0.50	<0.74	<0.74	<0.50	<0.50	<0.50	10,000	1,000			
MTBE	<0.2	<0.2	<0.21	<0.53	<0.53	<0.53	<0.53	<0.50	<0.21	<0.53	<0.53	<0.53	<0.53	<0.50	<0.53	<0.53	<0.50	<0.50	<0.50	60	12			
Isopropylbenzene	<0.2	<0.2	<0.33	<0.15	<0.15	<0.15	<0.15	<0.25	0.35 (Q)	<0.15	<0.15	<0.15	<0.15	<0.25	<0.15	<0.15	<0.25	<0.25	<0.25	NE	NE			
n-Butylbenzene	<0.2	<0.2	<0.43	<0.29	<0.29	<0.29	<0.29	<0.25	<0.43	<0.29	<0.29	<0.29	<0.29	<0.25	<0.29	<0.29	<0.25	<0.25	<0.25	NE	NE			
n-Propylbenzene	<0.3	<0.3	<0.36	<0.18	<0.18	<0.18	<0.18	<0.50	0.88 (Q)	<0.18	<0.18	<0.18	<0.18	<0.50	<0.18	<0.18	<0.50	<0.50	<0.50	<0.50	NE	NE		
Naphthalene	<0.5	<0.5	<0.73	<0.68	<0.68	<0.68	<0.68	<0.25	0.86 (Q)	<0.68	<0.68	<0.68	<0.68	<0.25	<0.68	<0.68	<0.25	<0.25	<0.25	40	8			
Chloroform	<0.30	<0.30	<0.26	<0.32	<0.32	<0.32	<0.32	<0.25	<0.26	<0.32	<0.32	<0.32	<0.32	<0.25	<0.32	<0.32	<0.25	<0.25	<0.25	0.37	6	0.6		
Chloromethane	<0.8	<0.8	<0.29	<0.24	<0.24	<0.24	<0.24	<0.25	<0.29	<0.24	0.56 (Q)	<0.24	<0.24	<0.25	<0.24	<0.24	<0.25	<0.25	<0.25	3	0.3			
cis-1,2-Dichloroethene	<0.2	<0.2	<0.34	<1	<1	<1	<1	<0.50	0.34	<1	<1	<1	<1	<0.50	<1	<1	<0.50	<0.50	<0.50	70	7			
trans-1,2-Dichloroethene	<0.20	<0.20	<0.46	<0.23	<0.23	<0.23	<0.23	<0.23	<0.50	<0.46	<0.23	<0.23	<0.23	<0.23	<0.50	<0.23	<0.23	<0.50	<0.50	100	20			
Tetrachloroethene	<0.3	<0.3	<0.56	<0.25	<0.25	<0.25	<0.25	<0.50	0.56	<0.25	<0.25	<0.25	<0.25	<0.50	<0.25	<0.25	<0.50	<0.50	<0.50	5	0.5			
Trichloroethene	<0.2	<0.2	<0.39	<0.36	<0.36	<0.36	<0.36	<0.25	<0.39	<0.36	<0.36	<0.36	<0.36	<0.25	<0.36	<0.36	<0.25	<0.25	2.4	<0.25	5	0.5		
Natural Attenuation Parameters																								
Nitrate (mg/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Sulfate (mg/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dissolved Iron	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total Iron	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dissolved Manganese	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total Manganese	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
D.O. (mg/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Specific Conductance (uS/cm)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Resistivity (K Ω /cm)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Salinity (g/l)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
pH (s.u.)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
O.R.P. (mv)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

Bold concentrations exceed NR 140 PAL

Shaded concentrations exceed NR 140 ES

D.O. - dissolved oxygen

ES - NR 140 enforcement standard

g/l - grams per liter

K Ω /cm - kilohms per centimeter

mg/l - milligrams per liter

MTBE - methyl tert-butyl ether

mv - millivolts

NE - not established

O.R.P. - oxygen reduction potential

PAL - NR 140 preventive action limit

Q - concentration detected between laboratory limit of quantitation and limit of detection

s.u. - standard units

$\mu\text{g/l}$ - micrograms per liter

uS/cm - microsiemens per centimeter

VOCs - volatile organic compounds

TABLE 4
SUMMARY OF SOIL VAPOR SAMPLE ANALYTICAL RESULTS

DECORAH SHOPPING CENTER ANNEX

1011-1025 South Main Street
 West Bend, Wisconsin

PARAMETERS	SAMPLE IDENTIFICATION			EPA Soil Gas Screening Level* (1×10^{-6} Risk Factor)				
	GP-23	GP-24	GP-25					
Date Collected	6/10/2003	6/10/2003	6/10/2003					
Depth (feet bgs)	9	7	7					
Approximate Groundwater Depth (feet bgs) [#]	10	8	8					
Detected Soil Vapors (ppbv)				Attenuation Factor				
Tetrachloroethene	<0.50	1.1	1.2	2×10^{-3}	1×10^{-3}	7×10^{-4}	4×10^{-4}	2×10^{-4}
Trichloroethene	<0.50	0.73	0.80	60	120	170	300	600
Incremental Risk Screening Factor - PCE**	5.0×10^{-10}	2.2×10^{-9}	2.4×10^{-9}	2.1	4.1	5.9	10	21
Incremental Risk Screening Factor - TCE**	1.5×10^{-8}	4.4×10^{-8}	4.9×10^{-8}	NA	NA	NA	NA	NA

Notes:

* - From the U.S. Environmental Protection Agency's *Draft Guidance For Evaluating the Vapor Intrusion to Indoor Pathway From Groundwater and Soils*
 Table 3c-SG: Soil Gas Screening Levels for Scenario-Specific Vapor Attenuation Factors (α)

** - Calculated utilizing the Johnson and Ettinger (1991) Model for Subsurface Vapor Intrusion into Buildings

- groundwater level measured from the nearest site groundwater quality monitoring well

bgs - below ground surface

NA - not applicable

PCE - tetrachloroethene

ppbv - parts per billion volume

TCE - trichloroethene

INTERMEDIATE CALCULATIONS SHEET

Source-building separation,	Vadose zone soil porosity, L_T (cm)	Vadose zone effective total fluid saturation, θ_a^V (cm^3/cm^3)	Vadose zone intrinsic permeability, S_{te} (cm^3/cm^3)	Vadose zone soil relative air permeability, k_i (cm^2)	Vadose zone soil effective vapor permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
	13.36	1.346	0.045	5.93E-09	0.977	5.79E-09	4,000	4.30E+00	2.54E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} ($\text{atm}\cdot\text{m}^3/\text{mol}$)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} ($\text{g/cm}\cdot\text{s}$)	Vadose zone effective diffusion coefficient, $D_{eff,v}$ (cm^2/s)	Diffusion path length, L_d (cm)
1.80E+06	2.22E-04	200	8,557	4.78E-03	2.06E-01	1.75E-04	1.01E-01	13.36

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Pecllet number, $\exp(Pe)^{1/2}$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
200	4.30E+00	0.10	4.00E+00	1.01E-01	4.00E+02	2.69E+00	2.51E-04	1.08E-03

Unit risk factor, URF ($\mu\text{g}/\text{m}^3\cdot\text{yr}^{-1}$)	Reference conc., RfC (mg/m^3)
1.1E-04	4.0E-02

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical point, temperature, T_c (°K)	Unit risk factor, URF	Reference conc., RfC (μg/m ³) ⁻¹	Reference MW (mg/m ³)	Molecular weight, MW (g/mol)
7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	1.1E-04	4.0E-02	131.39	

END

SG-SCREEN
version 2.0; 04/0

Decorah Shopping Center Annex
TCE Soil Vapor Analysis
GP-25
DATA ENTRY SHEET

Reset to
Defaults

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	ENTER OR Soil gas conc., C_g (ppmv)	ENTER Chemical
79016	4.30E+00		Trichloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	213.36	10	SL	

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SL	1.62	1.449	0.103	

MORE
↓

ENTER Averaging time for carcinogens, AT_c (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

2.4E-09	NA
---------	----

MESSAGE SUMMARY BELOW:

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation,	Vadose zone soil air-filled porosity,	Vadose zone effective total fluid saturation,	Vadose zone soil intrinsic permeability,	Vadose zone soil relative air permeability,	Vadose zone soil effective vapor permeability,	Floor-wall seam perimeter,	Soil gas conc.	Bldg. ventilation rate,
L_T (cm)	θ_a^V (cm^3/cm^3)	S_{te} (cm^3/cm^3)	k_i (cm^2)	k_{rg} (cm^2)	k_v (cm^2)	X_{crack} (cm)	($\mu\text{g}/\text{m}^3$)	$Q_{building}$ (cm^3/s)
13.36	1.346	0.045	5.93E-09	0.977	5.79E-09	4,000	8.10E+00	2.54E+04

Area of enclosed space below grade,	Crack-to-total area ratio,	Crack depth below grade,	Enthalpy of vaporization at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Vapor viscosity at ave. soil temperature,	Vadose zone effective diffusion coefficient,	Diffusion path length,
A_B (cm^2)	η (unitless)	Z_{crack} (cm)	$\Delta H_{v,ts}$ (cal/mol)	H_{ts} (atm· m^3/mol)	H'_{ts} (unitless)	μ_{ts} ($\text{g}/\text{cm}\cdot\text{s}$)	$D^{eff}v$ (cm^2/s)	L_d (cm)
1.80E+06	2.22E-04	200	9,553	7.81E-03	3.36E-01	1.75E-04	9.22E-02	13.36

Convection path length,	Source vapor conc.,	Crack radius,	Average vapor flow rate into bldg.,	Crack effective diffusion coefficient,	Area of crack,	Exponent of equivalent foundation Peclet number,	Infinite source indoor attenuation coefficient,	Infinite source bldg. conc.,
L_p (cm)	C_{source} ($\mu\text{g}/\text{m}^3$)	r_{crack} (cm)	Q_{soil} (cm^3/s)	D^{crack} (cm^2/s)	A_{crack} (cm^2)	$\exp(Pe^f)$ (unitless)	α (unitless)	$C_{building}$ ($\mu\text{g}/\text{m}^3$)
200	8.10E+00	0.10	4.00E+00	9.22E-02	4.00E+02	2.96E+00	2.38E-04	1.93E-03

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ¹	Reference conc., RIC (mg/m^3)
---	---

3.0E-06	NA
---------	----

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D _a (cm ² /s)	Diffusivity in water, D _w (cm ² /s)	Henry's law constant at reference temperature, H (atm·m ³ /mol)	Henry's law constant reference temperature, T _R (°C)	Enthalpy of vaporization at the normal boiling point, ΔH _{v,b} (cal/mol)	Normal boiling point, T _B (°K)	Critical point, temperature, T _c (°K)	Unit risk factor, URF (μg/m ³) ¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	3.0E-06	0.0E+00	165.83

END

SG-SCREEN
version 2.0; 04/01

Decorah Shopping Center Annex
PCE Soil Vapor Analysis
GP-25
DATA ENTRY SHEET

Reset to
Defaults

Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	8.10E+00			Tetrachloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_f (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^3)
200	213.36	10	SL	

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, P_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SL	1.62	1.449	0.103	

MORE
↓

ENTER Averaging time for carcinogens, AT_c (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

4.4E-08	2.3E-05
---------	---------

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation,	Vadose zone soil air-filled porosity,	Vadose zone effective total fluid saturation,	Vadose zone soil intrinsic permeability,	Vadose zone soil relative air permeability,	Vadose zone soil effective vapor permeability,	Floor-wall seam perimeter,	Soil gas conc.	Bldg. ventilation rate,
L_T (cm)	θ_a^V (cm^3/cm^3)	S_{te} (cm^3/cm^3)	k_i (cm^2)	k_{rg} (cm^2)	k_v (cm^2)	X_{crack} (cm)	($\mu\text{g}/\text{m}^3$)	$Q_{building}$ (cm^3/s)
13.36	1.346	0.045	5.93E-09	0.977	5.79E-09	4,000	3.90E+00	2.54E+04

Area of enclosed space below grade,	Crack-to-total area ratio,	Crack depth below grade,	Enthalpy of vaporization at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Vapor viscosity at ave. soil temperature,	Vadose zone effective diffusion coefficient,	Diffusion path length,
A_B (cm^2)	η (unitless)	Z_{crack} (cm)	$\Delta H_{v,ts}$ (cal/mol)	H_{ts} ($\text{atm}\cdot\text{m}^3/\text{mol}$)	H'_{ts} (unitless)	μ_{ts} ($\text{g}/\text{cm}\cdot\text{s}$)	D^{eff}_v (cm^2/s)	L_d (cm)
1.80E+06	2.22E-04	200	8,557	4.78E-03	2.06E-01	1.75E-04	1.01E-01	13.36

Convection path length,	Source vapor conc.,	Crack radius,	Average vapor flow rate into bldg.,	Crack effective diffusion coefficient,	Area of crack,	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$	Infinite source indoor attenuation coefficient,	Infinite source bldg. conc.,
L_p (cm)	C_{source} ($\mu\text{g}/\text{m}^3$)	r_{crack} (cm)	Q_{soil} (cm^3/s)	D^{crack} (cm^2/s)	A_{crack} (cm^2)	(unitless)	α (unitless)	$C_{building}$ ($\mu\text{g}/\text{m}^3$)
200	3.90E+00	0.10	4.00E+00	1.01E-01	4.00E+02	2.69E+00	2.51E-04	9.78E-04

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m^3)
1.1E-04	4.0E-02

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D _a (cm ² /s)	Diffusivity in water, D _w (cm ² /s)	Henry's law constant	Henry's law constant	Enthalpy of vaporization at the normal boiling point,	Normal boiling point, T _B (°K)	Critical temperature, T _c (°K)	Unit risk factor, URF	Reference conc., RfC (µg/m ³) ⁻¹	Molecular weight, MW (g/mol)
		H (atm·m ³ /mol)	T _R (°C)	ΔH _{v,b} (cal/mol)	544.20	1.1E-04	4.0E-02	131.39	
7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36				

END

SG-SCREEN
Version 2.0; 04/01

Decorah Shopping Center Annex
TCE Soil Vapor Analysis
GP-24
DATA ENTRY SHEET

Reset to
Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	3.90E+00		Trichloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_f (15 or 200 cm)	ENTER Soil gas sampling depth L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	213.36	10	SL	

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SL	1.62	1.449	0.103	

MORE
↓

ENTER Averaging time for carcinogens, AT_c (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

2.2E-09	NA
---------	----

MESSAGE SUMMARY BELOW:

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation,	Vadose zone soil porosity,	Vadose zone effective total fluid saturation,	Vadose zone soil intrinsic permeability,	Vadose zone soil relative air permeability,	Vadose zone soil effective vapor permeability,	Floor-wall seam perimeter,	Soil gas conc.	Bldg. ventilation rate,
L_T (cm)	θ_a^v (cm ³ /cm ³)	S_{te} (cm ³ /cm ³)	k_i (cm ²)	k_{rg} (cm ²)	k_v (cm ²)	X_{crack} (cm)	($\mu\text{g}/\text{m}^3$)	$Q_{building}$ (cm ³ /s)
13.36	1.346	0.045	5.93E-09	0.977	5.79E-09	4,000	7.50E+00	2.54E+04

Area of enclosed space below grade,	Crack-to-total area ratio,	Crack depth below grade,	Enthalpy of vaporization at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Vapor viscosity at ave. soil temperature,	Vadose zone effective diffusion coefficient,	Diffusion path length,
A_B (cm ²)	η (unitless)	Z_{crack} (cm)	$\Delta H_{v,TS}$ (cal/mol)	H_{TS} (atm·m ³ /mol)	H'_{TS} (unitless)	μ_{TS} (g/cm·s)	$D_{eff,v}$ (cm ² /s)	L_d (cm)
1.80E+06	2.22E-04	200	9,553	7.81E-03	3.36E-01	1.75E-04	9.22E-02	13.36

Convection path length,	Source vapor conc.,	Crack radius,	Average vapor flow rate into bldg.,	Crack effective diffusion coefficient,	Area of crack,	Exponent of equivalent foundation Peclet number,	Infinite source indoor attenuation coefficient,	Infinite source bldg. conc.,
L_p (cm)	C_{source} ($\mu\text{g}/\text{m}^3$)	r_{crack} (cm)	Q_{soil} (cm ³ /s)	D_{crack} (cm ² /s)	A_{crack} (cm ²)	$\exp(Pe)^b$ (unitless)	α (unitless)	$C_{building}$ ($\mu\text{g}/\text{m}^3$)
200	7.50E+00	0.10	4.00E+00	9.22E-02	4.00E+02	2.96E+00	2.38E-04	1.78E-03

Unit risk factor, URF	Reference conc., Rfc
($\mu\text{g}/\text{m}^3$) ⁻¹	(mg/m ³)
3.0E-06	NA

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature,	Henry's law constant reference temperature,	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_b (°K)	Critical temperature, T_c (°K)	Unit risk factor, URF	Reference conc., RfC (μg/m ³) ⁻¹	Molecular weight, MW (mg/m ³)	Reference MW (g/mol)
		H (atm·m ³ /mol)	T_R (°C)							
7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	3.0E-06	0.0E+00	165.83	

END

SG-SCREEN
Version 2.0; 04/0

Decorah Shopping Center Annex
PCE Soil Vapor Analysis
GP-24
DATA ENTRY SHEET

Reset to
Defaults

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	7.50E+00		Tetrachloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_f (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	213.36	10	SL	

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, p_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SL	1.62	1.449	0.103	

MORE
↓

ENTER Averaging time for carcinogens, AT_c (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
<u>1.5E-08</u>	<u>8.1E-06</u>

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation,	Vadose zone soil air-filled porosity,	Vadose zone effective total fluid saturation,	Vadose zone soil intrinsic permeability,	Vadose zone soil relative air permeability,	Vadose zone soil effective vapor permeability,	Floor-wall seam perimeter,	Soil gas conc.	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
L_T (cm)	θ_a^V (cm ³ /cm ³)	S_{te} (cm ³ /cm ³)	k_i (cm ²)	k_{rg} (cm ²)	k_v (cm ²)	X_{crack} (cm)	($\mu\text{g}/\text{m}^3$)	
74.32	1.346	0.045	5.93E-09	0.977	5.79E-09	4,000	1.35E+00	2.54E+04

Area of enclosed space below grade,	Crack-to-total area ratio,	Crack depth below grade,	Enthalpy of vaporization at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Vapor viscosity at ave. soil temperature,	Vadose zone effective diffusion coefficient,	Diffusion path length, L_d
A_B (cm ²)	η (unitless)	Z_{crack} (cm)	$\Delta H_{v,ts}$ (cal/mol)	H_{ts} (atm·m ⁻³ /mol)	H'_{ts} (unitless)	μ_{ts} (g/cm·s)	$D_{eff,v}$ (cm ² /s)	
1.80E+06	2.22E-04	200	8,557	4.78E-03	2.06E-01	1.75E-04	1.01E-01	74.32

Convection path length,	Source vapor conc., C_{source} (µg/m ³)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Pelet number, $\exp(Pe^l)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ (µg/m ³)
200	1.35E+00	0.10	4.00E+00	1.01E-01	4.00E+02	2.69E+00	2.50E-04	3.38E-04

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RfC (mg/m^3)
1.1E-04	4.0E-02

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D _a (cm ² /s)	Diffusivity in water, D _w (cm ² /s)	Henry's law constant at reference temperature, H (atm·m ³ /mol)	Henry's law constant reference temperature, T _R (°C)	Enthalpy of vaporization at the normal boiling point, ΔH _{v,b} (cal/mol)	Normal boiling point, T _B (°K)	Critical temperature, T _c (°K)	Unit risk factor, URF	Reference conc., RfC (µg/m ³) ⁻¹	Molecular weight, MW (g/mol)
7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	1.1E-04	4.0E-02	131.39

END

SG-SCREEN
Version 2.0; 04/0

Decorah Shopping Center Annex
TCE Soil Vapor Analysis
GP-23
DATA ENTRY SHEET

Reset to
Defaults

Soil Gas Concentration Data		
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	ENTER Soil gas conc., C_g (ppmv)
		Chemical
79016	1.35E+00	Trichloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
			OR	
200	274.32	10	SL	

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SL	1.62	1.449	0.103	

MORE
↓

ENTER Averaging time for carcinogens, AT_c (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

5.0E-10	NA
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MESSAGE SUMMARY BELOW:

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation,	Vadose zone soil air-filled porosity,	Vadose zone effective total fluid saturation,	Vadose zone soil intrinsic permeability,	Vadose zone soil relative air permeability,	Vadose zone soil effective vapor permeability,	Floor-wall seam perimeter,	Soil gas conc.	Bldg. ventilation rate,
L_T (cm)	θ_a^V (cm^3/cm^3)	S_{te} (cm^3/cm^3)	k_i (cm^2)	k_{rg} (cm^2)	k_v (cm^2)	X_{crack} (cm)	($\mu\text{g}/\text{m}^3$)	$Q_{building}$ (cm^3/s)
74.32	1.346	0.045	5.93E-09	0.977	5.79E-09	4,000	1.70E+00	2.54E+04

Area of enclosed space below grade,	Crack-to-total area ratio,	Crack depth below grade,	Enthalpy of vaporization at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Henry's law constant at ave. soil temperature,	Vapor viscosity at ave. soil temperature,	Vadose zone effective diffusion coefficient,	Diffusion path length,
A_B (cm^2)	η (unitless)	Z_{crack} (cm)	$\Delta H_{v,ts}$ (cal/mol)	H_{ts} ($\text{atm}\cdot\text{m}^3/\text{mol}$)	H'_{ts} (unitless)	μ_{ts} ($\text{g}/\text{cm}\cdot\text{s}$)	$D_{eff,v}$ (cm^2/s)	L_d (cm)
1.80E+06	2.22E-04	200	9.553	7.81E-03	3.36E-01	1.75E-04	9.22E-02	74.32

Convection path length,	Source vapor conc.,	Crack radius,	Average vapor flow rate into bldg.,	Crack effective diffusion coefficient,	Area of crack,	Exponent of equivalent foundation Peclet number, $\exp(\text{Pe}^f)$	Infinite source indoor attenuation coefficient, α	Infinite source bldg. conc., $C_{building}$
L_p (cm)	C_{source} ($\mu\text{g}/\text{m}^3$)	r_{crack} (cm)	Q_{soil} (cm^3/s)	D^{crack} (cm^2/s)	A_{crack} (cm^2)	(unitless)	(unitless)	($\mu\text{g}/\text{m}^3$)
200	1.70E+00	0.10	4.00E+00	9.22E-02	4.00E+02	2.96E+00	2.37E-04	4.03E-04

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RIC (mg/m^3)
3.0E-06	NA

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D _a (cm ² /s)	Diffusivity in water, D _w (cm ² /s)	Henry's law constant at reference temperature, H (atm·m ³ /mol)	Henry's law constant reference temperature, T _R (°C)	Enthalpy of vaporization at the normal boiling point, ΔH _{v,b} (cal/mol)	Normal boiling point, T _B (°K)	Critical temperature, T _c (°K)	Unit risk factor, URF	Reference conc., RfC (μg/m ³) ⁻¹	Reference MW (mg/m ³)	Molecular weight, MW (g/mol)
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7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	3.0E-06	0.0E+00	165.83
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END

SG-SCREEN
ersion 2.0; 04/0

Decorah Shopping Center Annex
PCE Soil Vapor Analysis
GP-23
DATA ENTRY SHEET

Reset to
Defaults

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	1.70E+00		Tetrachloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_f (15 or 200 cm)	ENTER Soil gas sampling depth L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	274.32	10	SL	

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unit/less)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SL	1.62	1.449	0.103	

MORE
↓

ENTER Averaging time for carcinogens, AT_c (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

ATTACHMENT 6

STL Burlington

TARGET COMPOUNDS

Client Name:

Client SDG: vcxito15

Lab Smp Id: 6406

Sample Location:

Sample Point:

Sample Date:

Date Received:

Sample Matrix: AIR

Quant Type: ISTD

Analysis Type: VOA

Level: LOW

Data Type: MS DATA

Operator: WRD

Misc Info: 6406;0411Y2;.4;500MLS

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/KG) ppbv

Q

75-27-4-----	Bromodichloromethane	0.20	U
10061-01-5-----	cis-1,3-Dichloropropene	0.20	U
108-10-1-----	Methyl Isobutyl Ketone	0.20	U
108-88-3-----	Toluene	0.20	U
10061-02-6-----	trans-1,3-Dichloropropene	0.20	U
79-00-5-----	1,1,2-Trichloroethane	0.20	U
127-18-4-----	Tetrachloroethene	0.20	U
591-78-6-----	Methyl Butyl Ketone	0.20	U
124-48-1-----	Dibromochloromethane	0.20	U
106-93-4-----	1,2-Dibromoethane	0.20	U
108-90-7-----	Chlorobenzene	0.20	U
100-41-4-----	Ethylbenzene	0.20	U
1330-20-7-----	Xylene (m,p)	0.20	U
95-47-6-----	Xylene (o)	0.20	U
100-42-5-----	Styrene	0.20	U
75-25-2-----	Bromoform	0.20	U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.20	U
622-96-8-----	4-Ethyltoluene	0.20	U
108-67-8-----	1,3,5-Trimethylbenzene	0.20	U
95-49-8-----	2-Chlorotoluene	0.20	U
95-63-6-----	1,2,4-Trimethylbenzene	0.20	U
541-73-1-----	1,3-Dichlorobenzene	0.20	U
106-46-7-----	1,4-Dichlorobenzene	0.20	U
95-50-1-----	1,2-Dichlorobenzene	0.20	U
120-82-1-----	1,2,4-Trichlorobenzene	0.20	U
87-68-3-----	Hexachlorobutadiene	0.20	U
=====			

STL Burlington

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 6406
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: VOA
Data Type: MS DATA
Misc Info: 6406;0411Y2;.4;500MLS

Client SDG: vcxito15
Sample Point:
Date Received:
Quant Type: ISTD
Level: LOW
Operator: WRD

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv Q

75-71-8-----	Dichlorodifluoromethane	0.20	U
76-14-2-----	1,2-Dichlorotetrafluoroethane	0.20	U
74-87-3-----	Chloromethane	0.20	U
75-01-4-----	Vinyl Chloride	0.20	U
106-99-0-----	1,3-Butadiene	0.20	U
74-83-9-----	Bromomethane	0.20	U
75-00-3-----	Chloroethane	0.20	U
593-60-2-----	Bromoethene	0.20	U
75-69-4-----	Trichlorofluoromethane	0.20	U
76-13-1-----	Freon TF	0.20	U
75-35-4-----	1,1-Dichloroethene	0.20	U
67-64-1-----	Acetone	2.0	U
75-15-0-----	Carbon Disulfide	0.20	U
67-63-0-----	Isopropyl Alcohol	2.0	U
107-05-1-----	3-Chloropropene	0.20	U
75-09-2-----	Methylene Chloride	0.20	U
1634-04-4-----	Methyl tert-Butyl Ether	0.20	U
156-60-5-----	trans-1,2-Dichloroethene	0.20	U
110-54-3-----	n-Hexane	0.20	U
75-34-3-----	1,1-Dichloroethane	0.20	U
156-59-2-----	cis-1,2-Dichloroethene	0.20	U
78-93-3-----	Methyl Ethyl Ketone	0.20	U
67-66-3-----	Chloroform	0.20	U
109-99-9-----	Tetrahydrofuran	2.0	U
71-55-6-----	1,1,1-Trichloroethane	0.20	U
110-82-7-----	Cyclohexane	0.20	U
56-23-5-----	Carbon Tetrachloride	0.20	U
540-84-1-----	2,2,4-Trimethylpentane	0.20	U
71-43-2-----	Benzene	0.20	U
107-06-2-----	1,2-Dichloroethane	0.20	U
142-82-5-----	n-Heptane	0.20	U
79-01-6-----	Trichloroethene	0.20	U
80-62-6-----	Methyl Methacrylate	0.20	U
78-87-5-----	1,2-Dichloropropane	0.20	U
123-91-1-----	1,4-Dioxane	2.0	U

STL-Burlington
Air Canister Certification Checklist

Batch ID: V CXI 4/11/03

Batch Canister: 6406

Analyst: WWD

Runlog Pages

BFB Report

CCV Report

Blank Report

Clean Can Report

Dirty Can Report

Certified Canisters:

1. 6409

2. 6215 ✓

3. 6247

4. 6435

5. 6221 ✓

6. 6356

7. 6420

8. 6406

Comments:

STL Burlington

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 6206
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: VOA
Data Type: MS DATA
Misc Info: 6206;0414Y3;.4;500MLS

Client SDG: vcxkto15
Sample Point:
Date Received:
Quant Type: ISTD
Level: LOW
Operator: WRD

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ppbv	Q
75-27-4-----	Bromodichloromethane	0.20	U
10061-01-5-----	cis-1,3-Dichloropropene	0.20	U
108-10-1-----	Methyl Isobutyl Ketone	0.20	U
108-88-3-----	Toluene	0.20	U
10061-02-6-----	trans-1,3-Dichloropropene	0.20	U
79-00-5-----	1,1,2-Trichloroethane	0.20	U
127-18-4-----	Tetrachloroethene	0.20	U
591-78-6-----	Methyl Butyl Ketone	0.20	U
124-48-1-----	Dibromochloromethane	0.20	U
106-93-4-----	1,2-Dibromoethane	0.20	U
108-90-7-----	Chlorobenzene	0.20	U
100-41-4-----	Ethylbenzene	0.20	U
1330-20-7-----	Xylene (m,p)	0.20	U
95-47-6-----	Xylene (o)	0.20	U
100-42-5-----	Styrene	0.20	U
75-25-2-----	Bromoform	0.20	U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.20	U
622-96-8-----	4-Ethyltoluene	0.20	U
108-67-8-----	1,3,5-Trimethylbenzene	0.20	U
95-49-8-----	2-Chlorotoluene	0.20	U
95-63-6-----	1,2,4-Trimethylbenzene	0.20	U
541-73-1-----	1,3-Dichlorobenzene	0.20	U
106-46-7-----	1,4-Dichlorobenzene	0.20	U
95-50-1-----	1,2-Dichlorobenzene	0.20	U
120-82-1-----	1,2,4-Trichlorobenzene	0.20	U
87-68-3-----	Hexachlorobutadiene	0.20	U
=====			

STL Burlington

TARGET COMPOUNDS

Client Name: Client SDG: vcxkto15
Lab Smp Id: 6206
Sample Location: Sample Point:
Sample Date: Date Received:
Sample Matrix: AIR Quant Type: ISTD
Analysis Type: VOA Level: LOW
Data Type: MS DATA Operator: WRD
Misc Info: 6206;0414Y3;.4;500MLS

CONCENTRATION UNITS:
CAS NO. COMPOUND (ug/L or ug/KG) ppbv Q

75-71-8-----	Dichlorodifluoromethane	0.20	U
76-14-2-----	1,2-Dichlorotetrafluoroethane	0.20	U
74-87-3-----	Chloromethane	0.20	U
75-01-4-----	Vinyl Chloride	0.20	U
106-99-0-----	1,3-Butadiene	0.20	U
74-83-9-----	Bromomethane	0.20	U
75-00-3-----	Chloroethane	0.20	U
593-60-2-----	Bromoethene	0.20	U
75-69-4-----	Trichlorofluoromethane	0.20	U
76-13-1-----	Freon TF	0.20	U
75-35-4-----	1,1-Dichloroethene	0.20	U
67-64-1-----	Acetone	2.0	U
75-15-0-----	Carbon Disulfide	0.20	U
67-63-0-----	Isopropyl Alcohol	2.0	U
107-05-1-----	3-Chloropropene	0.20	U
75-09-2-----	Methylene Chloride	0.20	U
1634-04-4-----	Methyl tert-Butyl Ether	0.20	U
156-60-5-----	trans-1,2-Dichloroethene	0.20	U
110-54-3-----	n-Hexane	0.20	U
75-34-3-----	1,1-Dichloroethane	0.20	U
156-59-2-----	cis-1,2-Dichloroethene	0.20	U
78-93-3-----	Methyl Ethyl Ketone	0.20	U
67-66-3-----	Chloroform	0.20	U
109-99-9-----	Tetrahydrofuran	2.0	U
71-55-6-----	1,1,1-Trichloroethane	0.20	U
110-82-7-----	Cyclohexane	0.20	U
56-23-5-----	Carbon Tetrachloride	0.20	U
540-84-1-----	2,2,4-Trimethylpentane	0.20	U
71-43-2-----	Benzene	0.20	U
107-06-2-----	1,2-Dichloroethane	0.20	U
142-82-5-----	n-Heptane	0.20	U
79-01-6-----	Trichloroethene	0.20	U
80-62-6-----	Methyl Methacrylate	0.20	U
78-87-5-----	1,2-Dichloropropane	0.20	U
123-91-1-----	1,4-Dioxane	2.0	U

STL-Burlington
Air Canister Certification Checklist

Batch ID: VCXK 4/14/03
Batch Canister: 6206
Analyst: WJD

Runlog Pages

BFB Report

CCV Report

Blank Report

Clean Can Report

Dirty Can Report

Certified Canisters:

1. 6254

2. 6206

3. 6329

4. 6266✓

5. 6301

6. 6327

7. 6249

8. 6212

Comments:

Report to: Company: Key Engineering Group, Ltd. Address: 11100 4215 Commerce Court Cedartown, WI 55012 Contact: Kris King Phone: (262) 375-4755 Fax: (262) 375-9680 Contract/ Quote: Dated 2/12/93		Invoice to: Company: _____ Address: _____ Contact: SANE Phone: _____ Fax: _____		ANALYSIS REQUESTED 10/14 VOA A/G 250 P/O 1 Lt. ml	Lab Use Only Due Date: Temp. of coolers when received (C°): 1 2 3 4 5 Custody Seal N / Y Intact N / Y Screened For Radioactivity <input type="checkbox"/>																
Sampler's Name <i>Kris King</i>												Sampler's Signature <i>John H.</i>									
Proj. No. 0702007-12		Project Name Department Shopping Center Annex				No./Type of Containers ²		Lab/Sample ID (Lab Use Only) 00100													
Matrix	Date	Time	C o m p		G r a b	Identifying Marks of Sample(s)		VOA	A/G 1 Lt.	250 ml	P/O										
Water	1/12/93	1:00P				GP-23															
Water	1/12/93	3:00P				GP-34															
Water	1/12/93	3:45P				GP-25															
Relinquished by: (Signature) <i>J. H.</i>					Date	Time	Received by: (Signature) <i>STL</i>		Date	Time	Remarks Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.										
Relinquished by: (Signature)					Date	Time	Received by: (Signature)		Date	Time											
Relinquished by: (Signature)					Date	Time	Received by: (Signature)		Date	Time											
¹ Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil ² Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other <i>Severn Trent</i>																STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248					

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

ABLKE1

Lab Name: STL BURLINGTON Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 94201

Lab File ID: DCB001B Lab Sample ID: ABLKE1

Date Analyzed: 06/19/03 Time Analyzed: 1604

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: V

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01 E1LCS	E1LCS	DC010BQ	1429
02 E1LCSD	E1LCSD	DC011BQD	1514
03 GP-23	530979	530979	0009
04 GP-24	530980	530980	0053
05 GP-25	530981	530981	0137
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

COMMENTS:

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 94201

Matrix Spike - Sample No.: E1LCS

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Vinyl Chloride	10		8.9	89	70-130
1,1-Dichloroethene	10		9.1	91	70-130
cis-1,2-Dichloroethene	10		9.1	91	70-130
1,1,1-Trichloroethane	10		9.3	93	70-130
Trichloroethene	10		9.1	91	70-130
Tetrachloroethene	10		9.6	96	70-130
trans-1,2-Dichloroethene	10		8.9	89	70-130

COMPOUND	SPIKE ADDED (ppbv)	LCSD CONCENTRATION (ppbv)	LCSD % REC #	% RPD #	QC LIMITS RPD	REC.
Vinyl Chloride	10	8.4	84	6	40	70-130
1,1-Dichloroethene	10	8.8	88	3	40	70-130
cis-1,2-Dichloroethene	10	8.9	89	2	40	70-130
1,1,1-Trichloroethane	10	9.4	94	1	40	70-130
Trichloroethene	10	9.1	91	0	40	70-130
Tetrachloroethene	10	9.6	96	0	40	70-130
trans-1,2-Dichloroethene	10	8.6	86	3	40	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 7 outside limits

Spike Recovery: 0 out of 14 outside limits

COMMENTS: _____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E1LCSD

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 94201

Matrix: (soil/water) AIR Lab Sample ID: E1LCSD

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: DC011BQD

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/19/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV

Q

CAS NO.	COMPOUND		
75-01-4-----	Vinyl Chloride	8.4	_____
75-35-4-----	1,1-Dichloroethene	8.8	_____
156-59-2-----	cis-1,2-Dichloroethene	8.9	_____
71-55-6-----	1,1,1-Trichloroethane	9.4	_____
79-01-6-----	Trichloroethene	9.1	_____
127-18-4-----	Tetrachloroethene	9.6	_____
156-60-5-----	trans-1,2-Dichloroethene	8.6	_____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E1LCS

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 94201

Matrix: (soil/water) AIR

Lab Sample ID: E1LCS

Sample wt/vol: 200.0 (g/mL) ML

Lab File ID: DC010BQ

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 06/19/03

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
---------	----------	--	---

75-01-4-----	Vinyl Chloride	8.9	
75-35-4-----	1,1-Dichloroethene	9.1	
156-59-2-----	cis-1,2-Dichloroethene	9.1	
71-55-6-----	1,1,1-Trichloroethane	9.3	
79-01-6-----	Trichloroethene	9.1	
127-18-4-----	Tetrachloroethene	9.6	
156-60-5-----	trans-1,2-Dichloroethene	8.9	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLKE1

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 94201

Matrix: (soil/water) AIR Lab Sample ID: ABLKE1

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: DCB001B

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/19/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV Q

CAS NO.	COMPOUND		
75-01-4-----	Vinyl Chloride	0.50	U
75-35-4-----	1,1-Dichloroethene	0.50	U
156-59-2-----	cis-1,2-Dichloroethene	0.50	U
71-55-6-----	1,1,1-Trichloroethane	0.50	U
79-01-6-----	Trichloroethene	0.50	U
127-18-4-----	Tetrachloroethene	0.50	U
156-60-5-----	trans-1,2-Dichloroethene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

KEYENG SAMPLE NO.

GP-25

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 94201

Matrix: (soil/water) AIR Lab Sample ID: 530981

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 530981

Level: (low/med) LOW Date Received: 06/13/03

% Moisture: not dec. Date Analyzed: 06/20/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) PPBV

Q

CAS NO.	COMPOUND			
75-01-4-----	Vinyl Chloride	0.50	U	
75-35-4-----	1,1-Dichloroethene	0.50	U	
156-59-2-----	cis-1,2-Dichloroethene	0.50	U	
71-55-6-----	1,1,1-Trichloroethane	0.50	U	
79-01-6-----	Trichloroethene	0.80		
127-18-4-----	Tetrachloroethene	1.2		
156-60-5-----	trans-1,2-Dichloroethene	0.50	U	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

KEYENG SAMPLE NO.

GP-24

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 94201

Matrix: (soil/water) AIR Lab Sample ID: 530980

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 530980

Level: (low/med) LOW Date Received: 06/13/03

% Moisture: not dec. Date Analyzed: 06/20/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) PPBV

Q

CAS NO.	COMPOUND		
75-01-4-----	Vinyl Chloride	0.50	U
75-35-4-----	1,1-Dichloroethene	0.50	U
156-59-2-----	cis-1,2-Dichloroethene	0.50	U
71-55-6-----	1,1,1-Trichloroethane	0.50	U
79-01-6-----	Trichloroethene	0.73	_____
127-18-4-----	Tetrachloroethene	1.1	_____
156-60-5-----	trans-1,2-Dichloroethene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

KEYENG SAMPLE NO.

GP-23

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 94201

Matrix: (soil/water) AIR

Lab Sample ID: 530979

Sample wt/vol:

200.0 (g/mL) ML

Lab File ID: 530979

Level: (low/med) LOW

Date Received: 06/13/03

% Moisture: not dec. _____

Date Analyzed: 06/20/03

GC Column: RTX-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
---------	----------	--	---

75-01-4-----	Vinyl Chloride	0.50	U
75-35-4-----	1,1-Dichloroethene	0.50	U
156-59-2-----	cis-1,2-Dichloroethene	0.50	U
71-55-6-----	1,1,1-Trichloroethane	0.50	U
79-01-6-----	Trichloroethene	0.50	U
127-18-4-----	Tetrachloroethene	0.50	U
156-60-5-----	trans-1,2-Dichloroethene	0.50	U



The following Qualifiers may be used when reporting any Organic parameters analyzed by Gas Chromatography/mass Spectrometry (GCMS). Any additional qualifiers used in the reports will be described in the case narrative. These flags are based on the EPA Contract Laboratory Program statement of work.

GC/MS Qualifiers

- A- The reported Tentatively Identified Compound (TIC) is a suspected Aldol-condensation product.
- B- The reported analyte was detected in the associated method blank as well as the sample.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. This flag alerts data users that any discrepancies between the concentrations reported for the dilutions may be due to dilution of the sample or extract. It additionally indicates that spike recoveries may have been diluted below quantifiable levels.
- E- Compound quantitation is above the instrument's calibration range for this analysis.
- J - Indicates an estimated value. This flag is used when the result is less than the reporting limit, but > ½ reporting limit.
- U- Indicates compound was analyzed for but not detected above the reporting limit.
- N- Indicates presumptive evidence of a compound. Used for TICs where the identification is based on a mass spectral library search.
- X,Y,Z - Laboratory defined flags. These flags must be fully described, and such description attached to the Sample Data Summary Package and the case Narrative. Begin by using "X" and go on to "Y" as necessary. These flags may also be used to combine several flags, as needed.

**TO-14/15
Result Summary**

CLIENT SAMPLE NO.

E1LCSD

Lab Name: STL Burlington

SDG Number: 94201

Lab Sample No.: E1LCSD

Case Number:

Date Analyzed: 06/19/2003

Sample Matrix: AIR

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Vinyl Chloride	75-01-4	8.4		0.50	21		1.3
1,1-Dichloroethene	75-35-4	8.8		0.50	35		2.0
cis-1,2-Dichloroethene	156-59-2	8.9		0.50	35		2.0
1,1,1-Trichloroethane	71-55-6	9.4		0.50	51		2.7
Trichloroethene	79-01-6	9.1		0.50	49		2.7
Tetrachloroethene	127-18-4	9.6		0.50	65		3.4
trans-1,2-Dichloroethene	156-60-5	8.6		0.50	34		2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

E1LCS

Lab Name: STL Burlington

SDG Number: 94201

Case Number:

Sample Matrix: AIR

Lab Sample No.: E1LCS

Date Analyzed: 06/19/2003

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Vinyl Chloride	75-01-4	8.9		0.50	23		1.3
1,1-Dichloroethene	75-35-4	9.1		0.50	36		2.0
cis-1,2-Dichloroethene	156-59-2	9.1		0.50	36		2.0
1,1,1-Trichloroethane	71-55-6	9.3		0.50	51		2.7
Trichloroethene	79-01-6	9.1		0.50	49		2.7
Tetrachloroethene	127-18-4	9.6		0.50	65		3.4
trans-1,2-Dichloroethene	156-60-5	8.9		0.50	35		2.0

**TO-14/15
Result Summary**

CLIENT SAMPLE NO.

ABLKE1

Lab Name: STL Burlington

SDG Number: 94201

Case Number:

Sample Matrix: AIR

Lab Sample No.: ABLKE1

Date Analyzed: 06/19/2003

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

GP-25

Lab Name: STL Burlington

SDG Number: 94201

Case Number:

Sample Matrix: Air

Lab Sample No.: 530981

Date Analyzed: 06/20/2003

Date Received: 06/13/2003

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Trichloroethene	79-01-6	0.80		0.50	4.3		2.7
Tetrachloroethene	127-18-4	1.2		0.50	8.1		3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0

**TO-14/15
Result Summary**

CLIENT SAMPLE NO.

GP-24

Lab Name: STL Burlington

SDG Number: 94201

Case Number:

Sample Matrix: Air

Lab Sample No.: 530980

Date Analyzed: 06/20/2003

Date Received: 06/13/2003

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Trichloroethene	79-01-6	0.73		0.50	3.9		2.7
Tetrachloroethene	127-18-4	1.1		0.50	7.5		3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0

**TO-14/15
Result Summary**

CLIENT SAMPLE NO.

GP-23

Lab Name: STL Burlington

SDG Number: 94201

Lab Sample No.: 530979

Case Number:

Date Analyzed: 06/20/2003

Sample Matrix: Air

Date Received: 06/13/2003

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0

Mr. Chris King
June 26, 2003
Page 2 of 2

I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The release of the data contained in this hardcopy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael F. Wheeler" followed by "for".

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure



STL

June 26, 2003

Mr. Chris King
Key Engineering
W66n215 Commerce Court
Cederburg, WI 53012

Re: Laboratory Project No. 23000
Case No. 23000; SDG: 94201

Dear Mr. King:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on June 13, 2003. Laboratory numbers have been assigned and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 06/13/03 ETR No: 94201			
530979	GP-23	06/10/03	Air
530980	GP-24	06/10/03	Air
530981	GP-25	06/10/03	Air

Method TO15 – Volatile Organics:

Please note that no exceptions to the method prescribed quality control criteria were observed during the analyses of the samples in this delivery group.

Client specified matrix spike/matrix spike duplicate samples were not analyzed or requested with the above samples. However, routine method quality control analyses were performed.

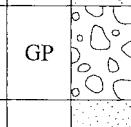
If there are any questions regarding this submittal, please contact Ron Pentkowski at (802) 655-1203.

This report shall not be reproduced, except in full, without the written approval of the laboratory. This report is sequentially numbered starting with page 0001 and ending with page 0034.

ATTACHMENT 5

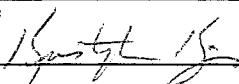
Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Page 1 of 1

Facility/Project Name Decorah Shopping Center Annex			License/Permit/Monitoring Number -		Boring Number GP-25							
Boring Drilled By: Name of crew chief (first, last) and Firm Dave Paulson Soil Essentials			Date Drilling Started 6/10/2003	Date Drilling Completed 6/10/2003	Drilling Method Direct Push							
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2.0 inches							
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>			Local Grid Location									
State Plane SW 1/2 of NW 1/4 of Section 24, T 11 N, R 19 E			Lat 44° 15' 00"	Long 90° 15' 00"	□ N Feet □ S Feet □ W							
Facility ID		County Washington	County Code 67	Civil Town/City/ or Village West Bend								
Sample		Soil/Rock Description And Geologic Origin For Each Major Unit			Soil Properties			Pocket Penetrometer				
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	U S C S	Graphic Log	Well Diagram	PID/FID		Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index
1 SS	48 48		1	GP			△1					
			2				△1					
2 SS	36 36		3									
			4									
			5									
			6									
			7									
End of soil boring at 7'												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature



Firm **KEY ENGINEERING GROUP, LTD.**
W66 N215 COMMERCE CT. CEDARBURG, WI 53012

Tel: (262) 375-4750
Fax: (262) 375-9680

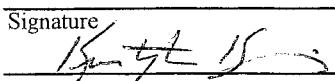
This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Page 1 of 1

Facility/Project Name Decorah Shopping Center Annex			License/Permit/Monitoring Number -		Boring Number GP-24									
Boring Drilled By: Name of crew chief (first, last) and Firm Dave Paulson Soil Essentials			Date Drilling Started 6/10/2003	Date Drilling Completed 6/10/2003	Drilling Method Direct Push									
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2.0 inches									
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane SW 1/2 of NW 1/4 of Section 24, T 11 N, R 19 E			Lat ° ' " Long ° ' "	Local Grid Location □ N Feet □ S Feet □ W										
Facility ID		County Washington	County Code 67	Civil Town/City/ or Village West Bend										
Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		U S C S	Graphic Log	Well Diagram	Soil Properties				P 200	Pocket Penetrometer
				PID/FID	Standard Penetration				Moisture Content	Liquid Limit	Plasticity Index			
1 SS	48 42		1 2 3 4 5 6 7	TOPSOIL Dark brown, fine to medium SAND with trace gravel		SP			≤1					
2 SS	36 32			End of soil boring at 7'					≤1					

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature


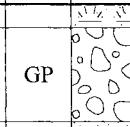
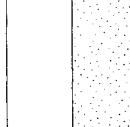
Firm **KEY ENGINEERING GROUP, LTD.**
W66 N215 COMMERCE CT. CEDARBURG, WI 53012

Tel: (262) 375-4750
Fax: (262) 375-9680

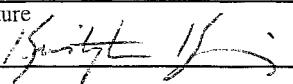
This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Page 1 of 1

Facility/Project Name Decorah Shopping Center Annex			License/Permit/Monitoring Number -		Boring Number GP-23							
Boring Drilled By: Name of crew chief (first, last) and Firm Dave Paulson Soil Essentials			Date Drilling Started 6/10/2003	Date Drilling Completed 6/10/2003	Drilling Method Direct Push							
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2.0 inches							
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane SW 1/2 of NW 1/4 of Section 24, T 11 N, R 19 E			Lat ° ' " Long ° ' "	Local Grid Location N S/C/N Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W								
Facility ID		County Washington	County Code 67	Civil Town/City/ or Village West Bend								
Sample Number and Type	Length Att. & Recovered (in)	Blow Counts Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	Soil Properties					P 200 Pocket Penetrometer
							PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	
1 SS	48 40	1 2 3 4 5 6 7 8 9	TOPSOIL Brown, fine to medium SAND and GRAVEL (fill)	GP		<1						
2 SS	48 42	1 2 3 4 5 6 7 8 9	Brown, fine to medium SAND with trace silt	SP		<1						
3 SS	12 12	1 2 3 4 5 6 7 8 9	End of soil boring at 9'			<1						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm **KEY ENGINEERING GROUP, LTD.**
W66 N215 COMMERCE CT. CEDARBURG, WI 53012 Tel: (262) 375-4750
Fax: (262) 375-9680

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

ATTACHMENT 4

Client Name Key Engineering Group Ltd. Client #: WT45150

Address: W66 N215 Commerce Ct.

City/State/Zip Code: Cedarburg, WI 53012

Project Manager: Kris King

Telephone Number: (62) 375-4750 Fax: (62) 375-9680

Sampler Name: (Print Name) Todd McQuiston

Sampler Signature: Todd McQuiston

Project Name: Decorah Shopping Center Annex

Project #: 0702007

Site/Location ID: West Bend State: WI

Report To: Kris King

Invoice To: Key Engineering Group Ltd.

Quote #: POM

TAT <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (surcharges may apply)	Date Sampled	Time Sampled	G = Grab, C = Composite Field Filtered	Matrix	Preservation & # of Containers						Analyze For:						QC Deliverables None Level 2 (Batch QC) Level 3 Level 4 Other: _____	REMARKS					
					SL - Sludge	DW - Drinking Water	GW - Groundwater	S - Soil/Solid W/W - Wastewater	Specify Other	HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)	VOC	Total Iron	Dissolved Iron	Total Manganese	Dissolved Manganese	Scalants	Nitrate
mw-22	6/10/03	11:30 AM	N	GW	3											X							
mw-23		2:15 PM	Y		2	3										1	X	X	X	X	X	X	X
P-5		11:15	N			3											X						
mw-1		3:45	Y		2											1	X	X	X	X	X	X	X
mw-13		11:30	Y		2											1	X	X	X	X	X	X	X
DUP			N		V	3											X						
Trip Blank		V			Blank	1											X						

Special Instructions: WT left message Kris King 6-10-03 re missed holds nos
Analyze at no charge w/turn 11/20/03

Todd McQuiston Relinquished By: Cal B Date: 6/11 Time: 01:55

Cal B Relinquished By: Cal B Date: 6/11 Time: 14:30 Received By: Cal B

Cal B Relinquished By: Cal B Date: 6/11 Time: 15:10 Received By: Cal B

LABORATORY COMMENTS:

Init Lab Temp:

46

Rec Lab Temp:

Custody Seals: Y N N/A
Bottles Supplied by Test America: Y N

Method of Shipment: TA

26/12/03

QUALITY CONTROL REPORT BLANKS

06/20/2003

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

Job No: 03.05172
Account No: 45150

Page 18 of 18

Job Description: 0702007 Decorah Shopping Center Annex

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
p-Isopropyltoluene		5050	<0.25	0.25	0.83	ug/L
Methylene Chloride		5050	<1.0	1.0	3.3	ug/L
Methyl-t-butyl ether		5050	<0.50	0.50	1.7	ug/L
Naphthalene		5050	<0.25	0.25	0.83	ug/L
n-Propylbenzene		5050	<0.50	0.50	1.7	ug/L
Styrene		5050	<0.25	0.25	0.83	ug/L
1,1,1,2-Tetrachloroethane		5050	<0.25	0.25	0.83	ug/L
1,1,2,2-Tetrachloroethane		5050	<0.25	0.25	0.83	ug/L
Tetrachloroethene		5050	<0.50	0.50	1.7	ug/L
Toluene		5050	<0.25	0.25	0.83	ug/L
1,2,3-Trichlorobenzene		5050	<0.25	0.25	0.83	ug/L
1,2,4-Trichlorobenzene		5050	<0.25	0.25	0.83	ug/L
1,1,1-Trichloroethane		5050	<0.50	0.50	1.7	ug/L
1,1,2-Trichloroethane		5050	<0.25	0.25	0.83	ug/L
Trichloroethene		5050	<0.25	0.25	0.83	ug/L
Trichlorofluoromethane		5050	<0.50	0.50	1.7	ug/L
1,2,3-Trichloropropane		5050	<0.50	0.50	1.7	ug/L
1,2,4-Trimethylbenzene		5050	<0.25	0.25	0.83	ug/L
1,3,5-Trimethylbenzene		5050	<0.25	0.25	0.83	ug/L
Vinyl Chloride		5050	<0.50	0.50	1.7	ug/L
Xylenes, Total		5050	<0.50	0.50	1.7	ug/L
Surr: Dibromofluoromethane		5050	100.8		88-112	%
Surr: Toluene-d8		5050	100.4		89-112	%
Surr: Bromofluorobenzene		5050	98.0		90-114	%

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT BLANKS

06/20/2003

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

Job No: 03.05172
Account No: 45150

Page 17 of 18

Job Description: 0702007 Decorah Shopping Center Annex

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Bromochloromethane		5050	<0.50	0.50	1.7	ug/L
Bromodichloromethane		5050	<0.25	0.25	0.83	ug/L
Bromoform		5050	<0.25	0.25	0.83	ug/L
Bromomethane		5050	<0.25	0.25	0.83	ug/L
n-Butylbenzene		5050	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		5050	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		5050	<0.25	0.25	0.83	ug/L
Carbon Tetrachloride		5050	<0.50	0.50	1.7	ug/L
Chlorobenzene		5050	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		5050	<0.25	0.25	0.83	ug/L
Chloroethane		5050	<1.0	1.0	3.3	ug/L
Chloroform		5050	<0.25	0.25	0.83	ug/L
Chloromethane		5050	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		5050	<0.50	0.50	1.7	ug/L
4-Chlorotoluene		5050	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		5050	<0.50	0.50	1.7	ug/L
1,2-Dibromoethane (EDB)		5050	<0.25	0.25	0.83	ug/L
Dibromomethane		5050	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		5050	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		5050	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		5050	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		5050	<0.50	0.50	1.7	ug/L
1,1-Dichloroethane		5050	<0.50	0.50	1.7	ug/L
1,2-Dichloroethane		5050	<0.50	0.50	1.7	ug/L
1,1-Dichloroethene		5050	<0.50	0.50	1.7	ug/L
cis-1,2-Dichloroethene		5050	<0.50	0.50	1.7	ug/L
trans-1,2-Dichloroethene		5050	<0.50	0.50	1.7	ug/L
1,2-Dichloropropane		5050	<0.50	0.50	1.7	ug/L
1,3-Dichloropropane		5050	<0.25	0.25	0.83	ug/L
2,2-Dichloropropane		5050	<0.50	0.50	1.7	ug/L
1,1-Dichloropropene		5050	<0.50	0.50	1.7	ug/L
cis-1,3-Dichloropropene		5050	<0.25	0.25	0.83	ug/L
trans-1,3-Dichloropropene		5050	<0.25	0.25	0.83	ug/L
Di-isopropyl ether		5050	<0.50	0.50	1.7	ug/L
Ethylbenzene		5050	<0.50	0.50	1.7	ug/L
Hexachlorobutadiene		5050	<0.50	0.50	1.7	ug/L
Isopropylbenzene		5050	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT BLANKS

06/20/2003

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

Job No: 03.05172
Account No: 45150

Page 16 of 18

Job Description: 0702007 Decorah Shopping Center Annex

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
trans-1,2-Dichloroethene	5046	<0.50	0.50	1.7		ug/L
1,2-Dichloropropane	5046	<0.50	0.50	1.7		ug/L
1,3-Dichloropropane	5046	<0.25	0.25	0.83		ug/L
1,1-Dichloropropene	5046	<0.50	0.50	1.7		ug/L
cis-1,3-Dichloropropene	5046	<0.25	0.25	0.83		ug/L
trans-1,3-Dichloropropene	5046	<0.25	0.25	0.83		ug/L
Di-isopropyl ether	5046	<0.50	0.50	1.7		ug/L
Ethylbenzene	5046	<0.50	0.50	1.7		ug/L
Hexachlorobutadiene	5046	<0.50	0.50	1.7		ug/L
Isopropylbenzene	5046	<0.25	0.25	0.83		ug/L
p-Isopropyltoluene	5046	<0.25	0.25	0.83		ug/L
Methylene Chloride	5046	<1.0	1.0	3.3		ug/L
Methyl-t-butyl ether	5046	<0.50	0.50	1.7		ug/L
Naphthalene	5046	<0.25	0.25	0.83		ug/L
n-Propylbenzene	5046	<0.50	0.50	1.7		ug/L
Styrene	5046	<0.25	0.25	0.83		ug/L
1,1,1,2-Tetrachloroethane	5046	<0.25	0.25	0.83		ug/L
1,1,2,2-Tetrachloroethane	5046	<0.25	0.25	0.83		ug/L
Tetrachloroethene	5046	<0.50	0.50	1.7		ug/L
Toluene	5046	<0.25	0.25	0.83		ug/L
1,2,3-Trichlorobenzene	5046	<0.25	0.25	0.83		ug/L
1,2,4-Trichlorobenzene	5046	<0.25	0.25	0.83		ug/L
1,1,1-Trichloroethane	5046	<0.50	0.50	1.7		ug/L
1,1,2-Trichloroethane	5046	<0.25	0.25	0.83		ug/L
Trichloroethene	5046	<0.25	0.25	0.83		ug/L
Trichlorofluoromethane	5046	<0.50	0.50	1.7		ug/L
1,2,3-Trichloropropane	5046	<0.50	0.50	1.7		ug/L
1,2,4-Trimethylbenzene	5046	<0.25	0.25	0.83		ug/L
1,3,5-Trimethylbenzene	5046	<0.25	0.25	0.83		ug/L
Vinyl Chloride	5046	<0.50	0.50	1.7		ug/L
Xylenes, Total	5046	<0.50	0.50	1.7		ug/L
Surr: Dibromofluoromethane	5046	100.8		88-112		%
Surr: Toluene-d8	5046	99.8		89-112		%
Surr: Bromofluorobenzene	5046	97.2		90-114		%
VOC - AQUEOUS - EPA 8260B						
Benzene	5050	<0.25	0.25	0.83		ug/L
Bromobenzene	5050	<0.25	0.25	0.83		ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT BLANKS

06/20/2003

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

Job No: 03.05172
Account No: 45150

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Job Description: 0702007 Decorah Shopping Center Annex

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
N-Nitrate		2181	<0.50	0.50	1.5	mg/L
Sulfate, IC		1528	<2.0	2.0	6.7	mg/L
Iron, AA	2686	2096	<0.042	0.042	0.14	mg/L
Iron, AA		2098	<0.042	0.042	0.14	mg/L
Iron, AA		2101	<0.042	0.042	0.14	mg/L
Iron, Dissolved		2099	<0.042	0.042	0.14	mg/L
Manganese, AA	2686	1351	<0.0018	0.0018	0.0063	mg/L
Manganese, AA		1354	<0.0018	0.0018	0.0063	mg/L
VOC - AQUEOUS - EPA 8260B						
Benzene		5046	<0.25	0.25	0.83	ug/L
Bromobenzene		5046	<0.25	0.25	0.83	ug/L
Bromochloromethane		5046	<0.50	0.50	1.7	ug/L
Bromodichloromethane		5046	<0.25	0.25	0.83	ug/L
Bromoform		5046	<0.25	0.25	0.83	ug/L
Bromomethane		5046	<0.25	0.25	0.83	ug/L
n-Butylbenzene		5046	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		5046	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		5046	<0.25	0.25	0.83	ug/L
Carbon Tetrachloride		5046	<0.50	0.50	1.7	ug/L
Chlorobenzene		5046	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		5046	<0.25	0.25	0.83	ug/L
Chloroethane		5046	<1.0	1.0	3.3	ug/L
Chloroform		5046	<0.25	0.25	0.83	ug/L
Chloromethane		5046	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		5046	<0.50	0.50	1.7	ug/L
4-Chlorotoluene		5046	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		5046	<0.50	0.50	1.7	ug/L
1,2-Dibromoethane (EDB)		5046	<0.25	0.25	0.83	ug/L
Dibromomethane		5046	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		5046	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		5046	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		5046	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		5046	<0.50	0.50	1.7	ug/L
1,1-Dichloroethane		5046	<0.50	0.50	1.7	ug/L
1,2-Dichloroethane		5046	<0.50	0.50	1.7	ug/L
1,1-Dichloroethene		5046	<0.50	0.50	1.7	ug/L
cis-1,2-Dichloroethene		5046	<0.50	0.50	1.7	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/20/2003
 Job No: 03.05172
 Sample No: 527760
 Account No: 45150
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JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: Trip Blank
 West Bend, WI
 Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 UNKNOWN Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date		Prep/Run
						Analyzed	Analyst	
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Methylene Chloride	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5050
Methyl-t-butyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
n-Propylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Tetrachloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Toluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,1,1-Trichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Trichlorofluoromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2,3-Trichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2,4-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,3,5-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Vinyl Chloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Xylenes, Total	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Surr: Dibromofluoromethane	100	%		88-112	SW 8260B	06/19/2003	mae	5050
Surr: Toluene-d8	101	%		89-112	SW 8260B	06/19/2003	mae	5050
Surr: Bromofluorobenzene	98	%		90-114	SW 8260B	06/19/2003	mae	5050

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/20/2003
 Job No: 03.05172
 Sample No: 527760
 Account No: 45150
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JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: Trip Blank
 West Bend, WI
 Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 UNKNOWN

Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Analyst	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B								
Benzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Carbon Tetrachloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Chloroethane	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5050
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
2-Chlorotoluene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,2-Dibromo-3-Chloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Dichlorodifluoromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,1-Dichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2-Dichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,1-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
cis-1,2-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
trans-1,2-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2-Dichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
2,2-Dichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,1-Dichloropropene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Di-isopropyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Ethylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Hexachlorobutadiene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/20/2003
 Job No: 03.05172
 Sample No: 527759
 Account No: 45150
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JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: Dup
 West Bend, WI
 Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 UNKNOWN Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date		Prep/Run
						Analyzed	Analyst	
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Methylene Chloride	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5050
Methyl-t-butyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
n-Propylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Tetrachloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Toluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,1,1-Trichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Trichlorofluoromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2,3-Trichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2,4-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,3,5-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Vinyl Chloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Xylenes, Total	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Surr: Dibromofluoromethane	101	%		88-112	SW 8260B	06/19/2003	mae	5050
Surr: Toluene-d8	100	%		89-112	SW 8260B	06/19/2003	mae	5050
Surr: Bromofluorobenzene	98	%		90-114	SW 8260B	06/19/2003	mae	5050

ANALYTICAL REPORT

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

06/20/2003
Job No: 03.05172
Sample No: 527759
Account No: 45150
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JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: Dup
West Bend, WI
Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 UNKNOWN Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Analyst	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B								
Benzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Carbon Tetrachloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Chloroethane	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5050
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Chloromethane	0.50	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
2-Chlorotoluene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,2-Dibromo-3-Chloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Dichlorodifluoromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,1-Dichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2-Dichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,1-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
cis-1,2-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
trans-1,2-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,2-Dichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
2,2-Dichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
1,1-Dichloropropene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5050
Di-isopropyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Ethylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050
Hexachlorobutadiene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5050

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/20/2003
 Job No: 03.05172
 Sample No: 527758
 Account No: 45150
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JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: MW-13

West Bend, WI
 Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 11:30

Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date		Analyst	Prep/Run Batch
						Analyzed	Analyst		
N-Nitrate	<0.50	mg/L	0.50	1.5	EPA 300.0	06/18/2003	tds		2181
Sulfate, IC	56	mg/L	2.0	6.7	EPA 300.0	06/19/2003	tds		1528
Iron, AA	1.7	mg/L	0.042	0.14	EPA 236.1	06/19/2003	gaf	2686	2101
Iron, Dissolved	<0.042	mg/L	0.042	0.14	EPA 236.1	06/17/2003	gaf		2099
Manganese, AA	0.14	mg/L	0.0018	0.0063	EPA 243.1	06/19/2003	gaf	2686	1354
Manganese, Dissolved	0.071	mg/L	0.0018	0.0063	EPA 243.1	06/19/2003	gaf		1354

ANALYTICAL REPORT

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

06/20/2003
Job No: 03.05172
Sample No: 527757
Account No: 45150
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JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: MW-1

West Bend, WI
Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 15:45

Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date		Prep/Run
						Analyzed	Analyst	
N-Nitrate	<0.50	mg/L	0.50	1.5	EPA 300.0	06/18/2003	tds	2181
Sulfate, IC	49	mg/L	2.0	6.7	EPA 300.0	06/19/2003	tds	1528
Iron, AA	1.8	mg/L	0.042	0.14	EPA 236.1	06/19/2003	gaf	2686 2101
Iron, Dissolved	<0.042	mg/L	0.042	0.14	EPA 236.1	06/17/2003	gaf	2099
Manganese, AA	0.33	mg/L	0.0018	0.0063	EPA 243.1	06/19/2003	gaf	2686 1354
Manganese, Dissolved	0.32	mg/L	0.0018	0.0063	EPA 243.1	06/19/2003	gaf	1354

ANALYTICAL REPORT

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

06/20/2003
Job No: 03.05172
Sample No: 527756
Account No: 45150
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JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: P-5
West Bend, WI
Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 13:15

Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Analyst	Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Methylene Chloride	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5046
Methyl-t-butyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
n-Propylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Tetrachloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Toluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,1,1-Trichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Trichlorofluoromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2,3-Trichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2,4-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,3,5-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Vinyl Chloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Xylenes, Total	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Surr: Dibromofluoromethane	100	%		88-112	SW 8260B	06/19/2003	mae	5046
Surr: Toluene-d8	101	%		89-112	SW 8260B	06/19/2003	mae	5046
Surr: Bromofluorobenzene	98	%		90-114	SW 8260B	06/19/2003	mae	5046

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/20/2003
 Job No: 03.05172
 Sample No: 527756
 Account No: 45150
 Page 7 of 18

JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: P-5
 West Bend, WI
 Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 13:15

Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Analyst	Batch
VOC - AQUEOUS - EPA 8260B								
Benzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Bromo-chloromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Bromo-dichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Bromo-methane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Carbon Tetrachloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Chloro-benzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Chloro-dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Chloro-ethane	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5046
Chloroform	0.37	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Chloro-methane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
2-Chloro-toluene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
4-Chloro-toluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2-Dibromo-3-Chloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Dibromo-methane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2-Dichloro-benzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,3-Dichloro-benzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,4-Dichloro-benzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Dichloro-di-fluoro-methane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,1-Dichloro-ethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2-Dichloro-ethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,1-Dichloro-ethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
cis-1,2-Dichloro-ethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
trans-1,2-Dichloro-ethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2-Dichloro-propane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,3-Dichloro-propane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
2,2-Dichloro-propane	C <0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,1-Dichloro-propene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
cis-1,3-Dichloro-propene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
trans-1,3-Dichloro-propene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Di-isopropyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Ethylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Hexachloro-butadiene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046

ANALYTICAL REPORT

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

06/20/2003
Job No: 03.05172
Sample No: 527755
Account No: 45150
Page 6 of 18

JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: MW-23

West Bend, WI
Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 14:15

Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Analyst	Prep/Run Batch
1,1-Dichloropropene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Di-isopropyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Ethylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Hexachlorobutadiene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Methylene Chloride	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5046
Methyl-t-butyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
n-Propylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Tetrachloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Toluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,1,1-Trichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Trichlorofluoromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2,3-Trichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2,4-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,3,5-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Vinyl Chloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Xylenes, Total	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Surr: Dibromofluoromethane	99	%		88-112	SW 8260B	06/19/2003	mae	5046
Surr: Toluene-d8	100	%		89-112	SW 8260B	06/19/2003	mae	5046
Surr: Bromofluorobenzene	98	%		90-114	SW 8260B	06/19/2003	mae	5046

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/20/2003
 Job No: 03.05172
 Sample No: 527755
 Account No: 45150
 Page 5 of 18

JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: MW-23

West Bend, WI
 Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 14:15 Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Analyst	Prep/Run Batch	
N-Nitrate	4.8	mg/L	0.50	1.5	EPA 300.0	06/18/2003	tds	2181	
Sulfate, IC	32	mg/L	2.0	6.7	EPA 300.0	06/19/2003	tds	1528	
Iron, AA	1.4	mg/L	0.042	0.14	EPA 236.1	06/17/2003	gaf	2686 2098	
Iron, Dissolved	<0.042	mg/L	0.042	0.14	EPA 236.1	06/17/2003	gaf	2098	
Manganese, AA	0.13	mg/L	0.0018	0.0063	EPA 243.1	06/19/2003	gaf	2686 1354	
Manganese, Dissolved	0.014	mg/L	0.0018	0.0063	EPA 243.1	06/19/2003	gaf	1354	
VOC - AQUEOUS - EPA 8260B									
Benzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Bromochloromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Carbon Tetrachloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Chloroethane	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5046	
Chloroform	0.91	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Chloromethane	0.63	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
2-Chlorotoluene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
1,2-Dibromo-3-Chloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
Dichlorodifluoromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
1,1-Dichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
1,2-Dichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
1,1-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
cis-1,2-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
trans-1,2-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
1,2-Dichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046	
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046	
2,2-Dichloropropane	C	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/20/2003
 Job No: 03.05172
 Sample No: 527754
 Account No: 45150
 Page 4 of 18

JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: MW-22

West Bend, WI
 Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 11:30

Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Analyst	Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Methylene Chloride	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5046
Methyl-t-butyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
n-Propylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Tetrachloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Toluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,1,1-Trichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Trichlorofluoromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2,3-Trichloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2,4-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,3,5-Trimethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Vinyl Chloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Xylenes, Total	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Surr: Dibromofluoromethane	99	%		88-112	SW 8260B	06/19/2003	mae	5046
Surr: Toluene-d8	100	%		89-112	SW 8260B	06/19/2003	mae	5046
Surr: Bromofluorobenzene	98	%		90-114	SW 8260B	06/19/2003	mae	5046

ANALYTICAL REPORT

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

06/20/2003
Job No: 03.05172
Sample No: 527754
Account No: 45150
Page 3 of 18

JOB DESCRIPTION: 0702007 Decorah Shopping Center Annex

PROJECT DESCRIPTION: Groundwater Analysis

SAMPLE DESCRIPTION: MW-22

West Bend, WI
Rec'd at 4 degrees C

Date/Time Taken: 06/10/2003 11:30

Date Received: 06/11/2003

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Analyst	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B								
Benzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Carbon Tetrachloride	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Chloroethane	<1.0	ug/L	1.0	3.3	SW 8260B	06/19/2003	mae	5046
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
2-Chlorotoluene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2-Dibromo-3-Chloropropane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Dichlorodifluoromethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,1-Dichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2-Dichloroethane	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,1-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
cis-1,2-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
trans-1,2-Dichloroethene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,2-Dichloropropene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
2,2-Dichloropropene	C <0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
1,1-Dichloropropene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	06/19/2003	mae	5046
Di-isopropyl ether	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Ethylbenzene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046
Hexachlorobutadiene	<0.50	ug/L	0.50	1.7	SW 8260B	06/19/2003	mae	5046

KEY ENGINEERING GROUP LTD
Job No: 03.05172

06/20/2003
Page 2 of 18

KEY TO DATA FLAGS

The attached sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
B = Blank is contaminated
C = Standard outside of control limits
D = Diluted for analysis
E = TCLP extraction outside of method required temperature range
F = Sample filtered in lab
G = Received past hold time
H = Late eluting hydrocarbons present
I = Improperly handled sample
J = Estimated concentration
L = Common lab solvent and contaminant
M = Matrix interference
P = Improperly preserved sample
Q = Result confirmed via re-analysis
S = Sediment present
T = Does not match typical pattern
W = BOD re-set due to missed dilution
X = Unidentified compound(s) present
Z = Internal standard outside limits
* = See Case Narrative

KEY TO ANALYST INITIALS

The attached sample(s) may have been analyzed by another certified laboratory. If a number appears in the Analyst Initials field, the following are the appropriate certifications (if the lab code does not appear below, that means that WDNR certification is not required for the work performed):

Lab Code	Certification Number
008	WDNR - 999766900
009	WDNR - 241293690
020	WDNR - 999447680
030	ILNELAC - 100230; WDNR - 998294430
060	ILNELAC - 100221; WDNR - 999447130
070	IA - 007; ILNELAC - 000668; MDH - 019-999-319; WDNR - 999917270
130	WDNR - 632021390
147	WDNR - 721026460
300	FLNELAC - 87358; IA - 131; MDH - 047-999-345; WDNR - 998020430
400	WDNR - 113133790
510	WDNR - 241249360
520	WDNR - 999518190; ILNELAC - 100439
700	WDNR - 113289110

TestAmerica Watertown WDNR - 128053530; IDNR - 294; MDH - 055-999-366; ND - R-046

For questions regarding this report, please contact Dan Milewsky or Warren Topel.

ANALYTICAL REPORT

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

06/20/2003

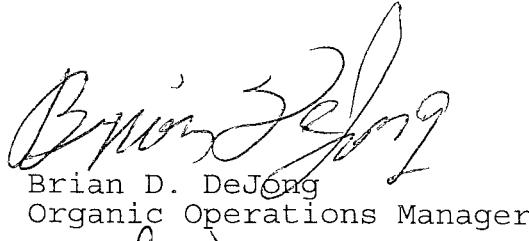
Job No: 03.05172

Page 1 of 18

The following samples were received by TestAmerica for analysis:

0702007 Decorah Shopping Center Annex

Sample Number	Sample Description	Date Taken	Date Received
527754	MW-22	06/10/2003	06/11/2003
527755	MW-23	06/10/2003	06/11/2003
527756	P-5	06/10/2003	06/11/2003
527757	MW-1	06/10/2003	06/11/2003
527758	MW-13	06/10/2003	06/11/2003
527759	Dup	06/10/2003	06/11/2003
527760	Trip Blank	06/10/2003	06/11/2003



Brian D. DeJong
Organic Operations Manager

ATTACHMENT 3

TestAmerica
INCORPORATED

Watertown Division
602 Commerce Drive
Watertown, WI 53094

Phone 920-261-1660 or 800-833-7036
Fax 920-261-8120

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring

Client Name Key Engineering Group Ltd Client #: WT45150

Address: W66 N215 Commerce Ct.

City/State/Zip Code: 11013 Cedarburg, WI 53012

Project Manager: Kris King

Telephone Number: (262) 375-4750 Fax: (262) 375-9680

Sampler Name: (Print Name) Edd McQuistan

Sampler Signature: Edd McQuistan

Project Name: Decorah Shopping Center Annex

Project #: 0702007 BG13

Site/Location ID: West Bend State: WI

Report To: Kris King

Invoice To: Key Engineering Group Ltd

Quote #: 03050

PO#:

TEST	Standard	Rush (surcharges may apply)	Date Sampled	Time Sampled	G = Grab, C = Composite Field Filtered	Matrix	Preservation & # of Containers		Analyze For:										QC Deliverables	REMARKS	
							SL - Sludge	DW - Drinking Water	S - Soil/Solid	Other	HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)	VAC	do Sol 1. cf		
B-27 (5-7')	6-3-03	9:00	G	N	S				1	1	X	X									
B-28 (125-145')	6-3-03	11:00	G	N	S				1	1	X	X									
Top Blank					Blanks				1		X										

Special Instructions:

LABORATORY COMMENTS:

Init Lab Temp:

Rec Lab Temp:

50

Relinquished By: <u>J. M.</u>	Date: <u>6/4</u>	Time: <u>14:40</u>	Received By: <u>CAB</u>	Date: <u>6/4</u>	Time: <u>10:37</u>	Custody Seals: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A	
Relinquished By: <u>C. G.</u>	Date: <u>6/4</u>	Time: <u>14:40</u>	Received By: <u>CAB</u>	Date: <u>6/4</u>	Time: <u>15:13</u>	Bottles Supplied by Test America: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Method of Shipment: <u>TA</u>	

a 6/5/03

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/13/2003
 Job No: 03.04901
 Sample No: 526749
 Account No: 45150
 Page 8 of 8

JOB DESCRIPTION: 0702007 BG13 Decorah Shopping Center

PROJECT DESCRIPTION: Soil Analysis

SAMPLE DESCRIPTION: Trip Blank
 West Bend, WI
 Rec'd at 5 degrees C

Date/Time Taken: 06/03/2003 UNKNOWN Date Received: 06/04/2003

Parameter	Results	Units	Reporting		Method	Date Analyzed	Prep/Run	
			Limit				Analyst	Batch
Isopropylbenzene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
p-Isopropyltoluene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
Methylene Chloride	<50	ug/kg	50		SW 8260B	06/09/2003	pju	2370
Methyl-t-butyl ether	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
Naphthalene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
n-Propylbenzene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
Styrene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
1,1,1,2-Tetrachloroethane	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
1,1,2,2-Tetrachloroethane	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
Tetrachloroethene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
Toluene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
1,2,3-Trichlorobenzene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
1,2,4-Trichlorobenzene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
1,1,1-Trichloroethane	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
1,1,2-Trichloroethane	<35	ug/kg	35		SW 8260B	06/09/2003	pju	2370
Trichloroethene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
Trichlorofluoromethane	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
1,2,3-Trichloropropane	<100	ug/kg	100		SW 8260B	06/09/2003	pju	2370
1,2,4-Trimethylbenzene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
1,3,5-Trimethylbenzene	<25	ug/kg	25		SW 8260B	06/09/2003	pju	2370
Vinyl Chloride	<35	ug/kg	35		SW 8260B	06/09/2003	pju	2370
Xylenes, Total	<35	ug/kg	35		SW 8260B	06/09/2003	pju	2370
Surr: Dibromofluoromethane	95	%	87-111		SW 8260B	06/09/2003	pju	2370
Surr: Toluene-d8	95	%	88-110		SW 8260B	06/09/2003	pju	2370
Surr: Bromofluorobenzene	104	%	90-108		SW 8260B	06/09/2003	pju	2370

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/13/2003
 Job No: 03.04901
 Sample No: 526749
 Account No: 45150
 Page 7 of 8

JOB DESCRIPTION: 0702007 BG13 Decorah Shopping Center

PROJECT DESCRIPTION: Soil Analysis

SAMPLE DESCRIPTION: Trip Blank
 West Bend, WI
 Rec'd at 5 degrees C

Date/Time Taken: 06/03/2003 UNKNOWN

Date Received: 06/04/2003

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Date Analyst	Prep/Run Batch
VOC - METHANOL - 8260B							
Benzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Bromobenzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Bromochloromethane	<35	ug/kg	35	SW 8260B	06/09/2003	pju	2370
Bromodichloromethane	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Bromoform	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Bromomethane	<100	ug/kg	100	SW 8260B	06/09/2003	pju	2370
n-Butylbenzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
sec-Butylbenzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
tert-Butylbenzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Carbon Tetrachloride	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Chlorobenzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Chlorodibromomethane	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Chloroethane	<50	ug/kg	50	SW 8260B	06/09/2003	pju	2370
Chloroform	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Chloromethane	<50	ug/kg	50	SW 8260B	06/09/2003	pju	2370
2-Chlorotoluene	<50	ug/kg	50	SW 8260B	06/09/2003	pju	2370
4-Chlorotoluene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,2-Dibromo-3-Chloropropane	<50	ug/kg	50	SW 8260B	06/09/2003	pju	2370
1,2-Dibromoethane (EDB)	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Dibromomethane	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,2-Dichlorobenzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,3-Dichlorobenzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,4-Dichlorobenzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Dichlorodifluoromethane	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,1-Dichloroethane	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,2-Dichloroethane	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,1-Dichloroethene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
cis-1,2-Dichloroethene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
trans-1,2-Dichloroethene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,2-Dichloropropane	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,3-Dichloropropane	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
2,2-Dichloropropane	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
1,1-Dichloropropene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
cis-1,3-Dichloropropene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
trans-1,3-Dichloropropene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Di-isopropyl ether	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Ethylbenzene	<25	ug/kg	25	SW 8260B	06/09/2003	pju	2370
Hexachlorobutadiene	<35	ug/kg	35	SW 8260B	06/09/2003	pju	2370

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/13/2003
 Job No: 03.04901
 Sample No: 526748
 Account No: 45150
 Page 6 of 8

JOB DESCRIPTION: 0702007 BG13 Decorah Shopping Center

PROJECT DESCRIPTION: Soil Analysis

SAMPLE DESCRIPTION: B-28 12.5-14.5'

West Bend, WI
 Rec'd at 5 degrees C

Date/Time Taken: 06/03/2003 11:00

Date Received: 06/04/2003

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Analyst	Prep/Run Batch
Hexachlorobutadiene	<37	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Isopropylbenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
p-Isopropyltoluene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Methylene Chloride	<53	ug/kg	50	SW 8260B	06/10/2003	pju	2372
Methyl-t-butyl ether	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Naphthalene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
n-Propylbenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Styrene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1,1,2-Tetrachloroethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1,2,2-Tetrachloroethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Tetrachloroethene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Toluene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2,3-Trichlorobenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2,4-Trichlorobenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1,1-Trichloroethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1,2-Trichloroethane	<37	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Trichloroethene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Trichlorofluoromethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2,3-Trichloropropane	<105	ug/kg	100	SW 8260B	06/10/2003	pju	2372
1,2,4-Trimethylbenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,3,5-Trimethylbenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Vinyl Chloride	<37	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Xylenes, Total	<37	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Surr: Dibromofluoromethane	95	%	87-111	SW 8260B	06/10/2003	pju	2372
Surr: Toluene-d8	96	%	88-110	SW 8260B	06/10/2003	pju	2372
Surr: Bromofluorobenzene	102	%	90-108	SW 8260B	06/10/2003	pju	2372

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/13/2003
 Job No: 03.04901
 Sample No: 526748
 Account No: 45150
 Page 5 of 8

JOB DESCRIPTION: 0702007 BG13 Decorah Shopping Center

PROJECT DESCRIPTION: Soil Analysis

SAMPLE DESCRIPTION: B-28 12.5-14.5'

West Bend, WI
 Rec'd at 5 degrees C

Date/Time Taken: 06/03/2003 11:00 Date Received: 06/04/2003

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Analyst	Prep/Run Batch
Solids, Total	95.0	%	n/a	SW 5035	06/12/2003	kee	5166
VOC - METHANOL - 8260B							
Benzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Bromobenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Bromochloromethane	<37	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Bromodichloromethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Bromoform	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Bromomethane	<105	ug/kg	100	SW 8260B	06/10/2003	pju	2372
n-Butylbenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
sec-Butylbenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
tert-Butylbenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Carbon Tetrachloride	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Chlorobenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Chlorodibromomethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Chloroethane	<53	ug/kg	50	SW 8260B	06/10/2003	pju	2372
Chloroform	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Chloromethane	<53	ug/kg	50	SW 8260B	06/10/2003	pju	2372
2-Chlorotoluene	<53	ug/kg	50	SW 8260B	06/10/2003	pju	2372
4-Chlorotoluene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2-Dibromo-3-Chloropropane	<53	ug/kg	50	SW 8260B	06/10/2003	pju	2372
1,2-Dibromoethane (EDB)	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Dibromomethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2-Dichlorobenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,3-Dichlorobenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,4-Dichlorobenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Dichlorodifluoromethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1-Dichloroethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2-Dichloroethane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1-Dichloroethene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
cis-1,2-Dichloroethene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
trans-1,2-Dichloroethene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2-Dichloropropane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,3-Dichloropropane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
2,2-Dichloropropane	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1-Dichloropropene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
cis-1,3-Dichloropropene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
trans-1,3-Dichloropropene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Di-isopropyl ether	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Ethylbenzene	<26	ug/kg	25	SW 8260B	06/10/2003	pju	2372

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/13/2003
 Job No: 03.04901
 Sample No: 526747
 Account No: 45150
 Page 4 of 8

JOB DESCRIPTION: 0702007 BG13 Decorah Shopping Center

PROJECT DESCRIPTION: Soil Analysis

SAMPLE DESCRIPTION: B-27 5-7'
 West Bend, WI
 Rec'd at 5 degrees C

Date/Time Taken: 06/03/2003 09:00

Date Received: 06/04/2003

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Analyst	Prep/Run Batch
Hexachlorobutadiene	<38	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Isopropylbenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
p-Isopropyltoluene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Methylene Chloride	<55	ug/kg	50	SW 8260B	06/10/2003	pju	2372
Methyl-t-butyl ether	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Naphthalene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
n-Propylbenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Styrene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1,1,2-Tetrachloroethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1,2,2-Tetrachloroethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Tetrachloroethene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Toluene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2,3-Trichlorobenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2,4-Trichlorobenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1,1-Trichloroethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1,2-Trichloroethane	<38	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Trichloroethene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Trichlorofluoromethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2,3-Trichloropropane	<109	ug/kg	100	SW 8260B	06/10/2003	pju	2372
1,2,4-Trimethylbenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,3,5-Trimethylbenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Vinyl Chloride	<38	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Xylenes, Total	<38	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Surr: Dibromofluoromethane	99	%	87-111	SW 8260B	06/10/2003	pju	2372
Surr: Toluene-d8	96	%	88-110	SW 8260B	06/10/2003	pju	2372
Surr: Bromofluorobenzene	104	%	90-108	SW 8260B	06/10/2003	pju	2372

ANALYTICAL REPORT

Kris King
 KEY ENGINEERING GROUP LTD
 W66 N215 Commerce Court
 Cedarburg, WI 53012

06/13/2003
 Job No: 03.04901
 Sample No: 526747
 Account No: 45150
 Page 3 of 8

JOB DESCRIPTION: 0702007 BG13 Decorah Shopping Center

PROJECT DESCRIPTION: Soil Analysis

SAMPLE DESCRIPTION: B-27 5-7'
 West Bend, WI
 Rec'd at 5 degrees C

Date/Time Taken: 06/03/2003 09:00 Date Received: 06/04/2003

Parameter	Results	Units	Reporting Limit	Method	Date Analyzed	Analyst	Prep/Run Batch
Solids, Total	91.4	%	n/a	SW 5035	06/12/2003	kee	5166
VOC - METHANOL - 8260B							
Benzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Bromobenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Bromochloromethane	<38	ug/kg	35	SW 8260B	06/10/2003	pju	2372
Bromodichloromethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Bromoform	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Bromomethane	<109	ug/kg	100	SW 8260B	06/10/2003	pju	2372
n-Butylbenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
sec-Butylbenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
tert-Butylbenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Carbon Tetrachloride	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Chlorobenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Chlorodibromomethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Chloroethane	<55	ug/kg	50	SW 8260B	06/10/2003	pju	2372
Chloroform	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Chloromethane	<55	ug/kg	50	SW 8260B	06/10/2003	pju	2372
2-Chlorotoluene	<55	ug/kg	50	SW 8260B	06/10/2003	pju	2372
4-Chlorotoluene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2-Dibromo-3-Chloropropane	<55	ug/kg	50	SW 8260B	06/10/2003	pju	2372
1,2-Dibromoethane (EDB)	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Dibromomethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2-Dichlorobenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,3-Dichlorobenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,4-Dichlorobenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Dichlorodifluoromethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1-Dichloroethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2-Dichloroethane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1-Dichloroethene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
cis-1,2-Dichloroethene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
trans-1,2-Dichloroethene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,2-Dichloropropane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,3-Dichloropropane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
2,2-Dichloropropane	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
1,1-Dichloropropene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
cis-1,3-Dichloropropene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
trans-1,3-Dichloropropene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Di-isopropyl ether	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372
Ethylbenzene	<27	ug/kg	25	SW 8260B	06/10/2003	pju	2372

KEY ENGINEERING GROUP LTD
Job No: 03.04901

06/13/2003
Page 2 of 8

KEY TO DATA FLAGS

The attached sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
B = Blank is contaminated
C = Standard outside of control limits
D = Diluted for analysis
E = TCLP extraction outside of method required temperature range
F = Sample filtered in lab
G = Received past hold time
H = Late eluting hydrocarbons present
I = Improperly handled sample
J = Estimated concentration
L = Common lab solvent and contaminant
M = Matrix interference
P = Improperly preserved sample
Q = Result confirmed via re-analysis
S = Sediment present
T = Does not match typical pattern
W = BOD re-set due to missed dilution
X = Unidentified compound(s) present
Z = Internal standard outside limits
* = See Case Narrative

KEY TO ANALYST INITIALS

The attached sample(s) may have been analyzed by another certified laboratory. If a number appears in the Analyst Initials field, the following are the appropriate certifications (if the lab code does not appear below, that means that WDNR certification is not required for the work performed):

Lab Code	Certification Number
008	WDNR - 999766900
009	WDNR - 241293690
020	WDNR - 999447680
030	ILNELAC - 100230; WDNR - 998294430
060	ILNELAC - 100221; WDNR - 999447130
070	IA - 007; ILNELAC - 000668; MDH - 019-999-319; WDNR - 999917270
130	WDNR - 632021390
147	WDNR - 721026460
300	FLNELAC - 87358; IA - 131; MDH - 047-999-345; WDNR - 998020430
400	WDNR - 113133790
510	WDNR - 241249360
520	WDNR - 999518190; ILNELAC - 100439
700	WDNR - 113289110

TestAmerica Watertown WDNR - 128053530; IDNR - 294; MDH - 055-999-366; ND - R-046

For questions regarding this report, please contact Dan Milewsky or Warren Topel.

ANALYTICAL REPORT

Kris King
KEY ENGINEERING GROUP LTD
W66 N215 Commerce Court
Cedarburg, WI 53012

06/13/2003

Job No: 03.04901

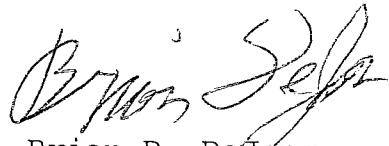
Page 1 of 8

The following samples were received by TestAmerica for analysis:

0702007 BG13 Decorah Shopping Center

Sample Number	Sample Description	Date Taken	Date Received
526747	B-27 5-7'	06/03/2003	06/04/2003
526748	B-28 12.5-14.5'	06/03/2003	06/04/2003
526749	Trip Blank	06/03/2003	06/04/2003

Soil results reported
on a dry weight basis.



Brian D. DeJong
Organic Operations Manager

ATTACHMENT 2

Route To:		Watershed/Wastewater <input type="checkbox"/>	Waste Management <input type="checkbox"/>
		Remediation/Redevelopment <input type="checkbox"/>	Other <input type="checkbox"/>
Facility/Project Name <u>Decorah Shopping Center Annex</u>	County <u>Washington</u>	Well Name <u>P-5</u>	
Facility License, Permit or Monitoring Number <u>-</u>	County Code <u>67</u>	Wis. Unique Well Number <u>OW689</u>	DNR Well Number
1. Can this well be purged dry?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Before Development After Development
2. Well development method: surged with bailer and bailed surged with bailer and pumped surged with block and bailed surged with block and pumped surged with block, bailed, and pumped compressed air bailed only pumped only pumped slowly other _____	<input type="checkbox"/> 41 <input type="checkbox"/> 61 <input type="checkbox"/> 42 <input type="checkbox"/> 62 <input type="checkbox"/> 70 <input type="checkbox"/> 20 <input type="checkbox"/> 10 <input checked="" type="checkbox"/> 51 <input type="checkbox"/> 50 <input type="checkbox"/>		11. Depth to Water (from top of well casing) Date a. 17.83 ft. 19.40 ft. Time b. 6/10/2003 6/10/2003 c. 11:50 <input type="checkbox"/> p.m. 01:15 <input checked="" type="checkbox"/> p.m.
3. Time spent developing well	85 min.		12. Sediment in well bottom 33.1 inches 0.0 inches
4. Depth of well (from top of well casing)	37.0 ft.		13. Water clarity Clear <input type="checkbox"/> 10 Clear <input checked="" type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 15 Turbid <input type="checkbox"/> 25 (Describe) (Describe)
5. Inside diameter of well	2.00 in.		14. Total suspended solids mg/l 15. COD mg/l
6. Volume of water in filter pack and well casing	17.7 gal.		Fill in if drilling fluids were used and well is at solid waste facility:
7. Volume of water removed from well	30.0 gal.		16. Well developed by: Person's Name and Firm
8. Volume of water added (if any)	gal.		Todd E. McQuistion Key Engineering Group, Ltd.
9. Source of water added _____			
10. Analysis performed on water added? (If yes, attach results)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
17. Additional comments on development:			

Facility Address or Owner/Responsible Party Address	I hereby certify that the above information is true and correct to the best of my knowledge.
Name: _____	
Firm: <u>Continental VI Fund Limited Partnership</u>	Signature: <u>Todd E. McQuistion</u>
Street: <u>10850 West Park Place, 6th Floor</u>	Print Name: <u>Todd E. McQuistion</u>
City/State/Zip: <u>Menomonee Falls, Wisconsin 53052</u>	Firm: <u>KEY ENGINEERING GROUP, LTD.</u>

NOTE: See instructions for more information including a list of county codes and well type codes.

<u>Route To:</u>	Watershed/Wastewater <input type="checkbox"/>	Waste Management <input type="checkbox"/>
	Remediation/Redevelopment <input type="checkbox"/>	Other <input type="checkbox"/>
Facility/Project Name Decorah Shopping Center Annex	County Washington	Well Name MW-23
Facility License, Permit or Monitoring Number -	County Code 67	Wis. Unique Well Number OW688
1. Can this well be purged dry? 2. Well development method: surged with bailer and bailed surged with bailer and pumped surged with block and bailed surged with block and pumped surged with block, bailed, and pumped compressed air bailed only pumped only pumped slowly other _____	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 4 1 <input type="checkbox"/> 6 1 <input type="checkbox"/> 4 2 <input type="checkbox"/> 6 2 <input type="checkbox"/> 7 0 <input type="checkbox"/> 2 0 <input type="checkbox"/> 1 0 <input checked="" type="checkbox"/> 5 1 <input type="checkbox"/> 5 0 <input type="checkbox"/> _____	Before Development After Development 11. Depth to Water (from top of well casing) a. 17.12 ft. 17.08 ft. Date b. 6/10/2003 6/10/2003 Time c. <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m. <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m. 12. Sediment in well bottom 2.2 inches 0.0 inches 13. Water clarity Clear <input type="checkbox"/> 1 0 Clear <input checked="" type="checkbox"/> 2 0 Turbid <input checked="" type="checkbox"/> 1 5 Turbid <input type="checkbox"/> 2 5 (Describe) (Describe)
3. Time spent developing well	30 min.	
4. Depth of well (from top of well casing)	21.2 ft.	
5. Inside diameter of well	2.00 in.	
6. Volume of water in filter pack and well casing	3.8 gal.	
7. Volume of water removed from well	12.0 gal.	Fill in if drilling fluids were used and well is at solid waste facility:
8. Volume of water added (if any)	gal.	14. Total suspended solids mg/l
9. Source of water added _____		15. COD mg/l
10. Analysis performed on water added? (If yes, attach results)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	16. Well developed by: Person's Name and Firm Todd E. McQuistion Key Engineering Group, Ltd.
17. Additional comments on development:		

Facility Address or Owner/Responsible Party Address	I hereby certify that the above information is true and correct to the best of my knowledge.
Name: _____	
Firm: <u>Continental VI Fund Limited Partnership</u>	Signature: <u>Todd E. McQuistion</u>
Street: <u>10850 West Park Place, 6th Floor</u>	Print Name: <u>Todd E. McQuistion</u>
City/State/Zip: <u>Menomonee Falls, Wisconsin 53052</u>	Firm: <u>KEY ENGINEERING GROUP, LTD.</u>

NOTE: See instructions for more information including a list of county codes and well type codes.

<u>Route To:</u>		Watershed/Wastewater <input type="checkbox"/>	Waste Management <input type="checkbox"/>																															
		Remediation/Redevelopment <input type="checkbox"/>	Other <input type="checkbox"/>																															
Facility/Project Name Decorah Shopping Center Annex	County Washington	Well Name MW-22																																
Facility License, Permit or Monitoring Number -	County Code 67	Wis. Unique Well Number OW687	DNR Well Number																															
1. Can this well be purged dry? 2. Well development method: surged with bailer and bailed surged with bailer and pumped surged with block and bailed surged with block and pumped surged with block, bailed, and pumped compressed air bailed only pumped only pumped slowly other _____	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 4 1 <input type="checkbox"/> 6 1 <input type="checkbox"/> 4 2 <input type="checkbox"/> 6 2 <input type="checkbox"/> 7 0 <input type="checkbox"/> 2 0 <input type="checkbox"/> 1 0 <input checked="" type="checkbox"/> 5 1 <input type="checkbox"/> 5 0 <input type="checkbox"/> 8 0	<table border="1"> <thead> <tr> <th colspan="2"></th> <th>Before Development</th> <th>After Development</th> </tr> </thead> <tbody> <tr> <td>11. Depth to Water (from top of well casing)</td> <td>a.</td> <td>9.96 ft.</td> <td>11.52 ft.</td> </tr> <tr> <td>Date</td> <td>b.</td> <td>6/10/2003</td> <td>6/10/2003</td> </tr> <tr> <td>Time</td> <td>c.</td> <td>10:45 <input type="checkbox"/> p.m.</td> <td><input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m. 11:30 <input type="checkbox"/> p.m.</td> </tr> <tr> <td>12. Sediment in well bottom</td> <td></td> <td>0.0 inches</td> <td>0.0 inches</td> </tr> <tr> <td>13. Water clarity</td> <td>Clear <input type="checkbox"/> 1 0 Turbid <input checked="" type="checkbox"/> 1 5 (Describe)</td> <td>Clear <input checked="" type="checkbox"/> 2 0 Turbid <input type="checkbox"/> 2 5 (Describe)</td> </tr> <tr> <td>14. Total suspended solids</td> <td>mg/l</td> <td>mg/l</td> </tr> <tr> <td>15. COD</td> <td>mg/l</td> <td>mg/l</td> </tr> <tr> <td>16. Well developed by: Person's Name and Firm Todd E. McQuistion Key Engineering Group, Ltd.</td> <td></td> </tr> </tbody> </table>				Before Development	After Development	11. Depth to Water (from top of well casing)	a.	9.96 ft.	11.52 ft.	Date	b.	6/10/2003	6/10/2003	Time	c.	10:45 <input type="checkbox"/> p.m.	<input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m. 11:30 <input type="checkbox"/> p.m.	12. Sediment in well bottom		0.0 inches	0.0 inches	13. Water clarity	Clear <input type="checkbox"/> 1 0 Turbid <input checked="" type="checkbox"/> 1 5 (Describe)	Clear <input checked="" type="checkbox"/> 2 0 Turbid <input type="checkbox"/> 2 5 (Describe)	14. Total suspended solids	mg/l	mg/l	15. COD	mg/l	mg/l	16. Well developed by: Person's Name and Firm Todd E. McQuistion Key Engineering Group, Ltd.	
		Before Development	After Development																															
11. Depth to Water (from top of well casing)	a.	9.96 ft.	11.52 ft.																															
Date	b.	6/10/2003	6/10/2003																															
Time	c.	10:45 <input type="checkbox"/> p.m.	<input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m. 11:30 <input type="checkbox"/> p.m.																															
12. Sediment in well bottom		0.0 inches	0.0 inches																															
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9. Source of water added	_____																																	
10. Analysis performed on water added? (If yes, attach results)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																	
17. Additional comments on development:																																		

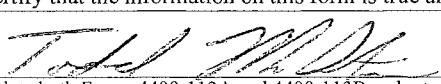
Facility Address or Owner/Responsible Party Address Name: _____ Firm: <u>Continental VI Fund Limited Partnership</u> Street: <u>10850 West Park Place, 6th Floor</u> City/State/Zip: <u>Menomonee Falls, Wisconsin 53052</u>	I hereby certify that the above information is true and correct to the best of my knowledge. Signature: <u>Todd E. McQuistion</u> Print Name: <u>Todd E. McQuistion</u> Firm: <u>KEY ENGINEERING GROUP, LTD.</u>
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NOTE: See instructions for more information including a list of county codes and well type codes.

Facility/Project Name Decorah Shopping Center Annex		Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name P-5
Facility License, Permit or Monitoring No. -		Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/> Lat. _____ ° _____ ' " Long. _____ ° _____ ' " or	Wis. Unique Well No. <input type="checkbox"/> DNR Well Number OW689
Facility ID		St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed 06/03/2003
Type of Well		Section Location of Waste/Source SW 1/4 of NW 1/4 of Sec. 24, T. 11 N, R. 19 <input checked="" type="checkbox"/> E Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) Todd E. McQuistion
Distance from Waste/ Source	Enf. Stds. ft. Apply <input type="checkbox"/>	Gov. Lot Number	Key Engineering Group, Ltd.

A. Protective pipe, top elevation	ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	ft. MSL	2. Protective cover pipe: a. Inside diameter: 9.0 in. b. Length: 1.0 ft. c. Material: Steel <input checked="" type="checkbox"/> 0.4 Other <input type="checkbox"/>
C. Land surface elevation	ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom	ft. MSL or _____ ft.	3. Surface seal: Bentonite <input type="checkbox"/> 3.0 Concrete <input checked="" type="checkbox"/> 0.1 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input checked="" type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 3.0 Other <input type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 3.3 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 3.1 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 5.0 e. _____ Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8
14. Drilling method used: Rotary <input type="checkbox"/> 5.0 Hollow Stem Auger <input checked="" type="checkbox"/> 4.1 Other <input type="checkbox"/>		6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3.3 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3.2 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 9.9		7. Fine sand material: Manufacturer, product name & mesh size a. Badger Mining #40-60 50 Lbs.
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		8. Filter pack material: Manufacturer, product name & mesh size a. Badger Mining Silica #20-40 200 Lbs.
Describe _____		9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/>
17. Source of water (attach analysis, if required):		10. Screen material: PVC a. Screen Type: Factory cut <input checked="" type="checkbox"/> 1.1 Continuous slot <input type="checkbox"/> 0.1 Other <input type="checkbox"/>
E. Bentonite seal, top	ft. MSL or 1.0 ft.	b. Manufacturer Timco c. Slot size: 0.010 in. d. Slotted length: 10.0 ft.
F. Fine sand, top	ft. MSL or 31.0 ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 1.4 Other <input type="checkbox"/>
G. Filter pack, top	ft. MSL or 32.0 ft.	
H. Screen joint, top	ft. MSL or 33.0 ft.	
I. Well bottom	ft. MSL or 38.0 ft.	
J. Filter pack, bottom	ft. MSL or 39.5 ft.	
K. Borehole, bottom	ft. MSL or 39.5 ft.	
L. Borehole, diameter	8.3 in.	
M. O.D. well casing	2.37 in.	
N. I.D. well casing	2.04 in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 

Firm **KEY ENGINEERING GROUP, LTD.**

W66 N215 COMMERCE CT. CEDARBURG, WI 53012

Tel: (262) 375-4750

Fax: (262) 375-9680

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Route To: Watershed/Wastewater Remediation/Redevelopment Waste Management Other

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name Decorah Shopping Center Annex		Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name MW-23
Facility License, Permit or Monitoring No.		Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/> Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. <input type="checkbox"/> DNR Well Number OW688
Facility ID		St. Plane ft. N. ft. E. S/C/N	Date Well Installed 06/03/2003
Type of Well Well Code 11/mw		Section Location of Waste/Source SW 1/4 of NW 1/4 of Sec. 24, T. 11 N.R. 19 <input checked="" type="checkbox"/> E Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) Todd E. McQuistion
Distance from Waste/ Source ft.	Enf. Stds. Apply <input type="checkbox"/>	Gov. Lot Number	Key Engineering Group, Ltd.

A. Protective pipe, top elevation	ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	ft. MSL	2. Protective cover pipe: a. Inside diameter: 9.0 in. b. Length: 1.0 ft.
C. Land surface elevation	ft. MSL	c. Material: Steel <input checked="" type="checkbox"/> 0.4 Other <input type="checkbox"/>
D. Surface seal, bottom	ft. MSL or ft.	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
12. USCS classification of soil near screen:		3. Surface seal: Bentonite <input type="checkbox"/> 3.0 Concrete <input checked="" type="checkbox"/> 0.1 Other <input type="checkbox"/>
GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input checked="" type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 3.0 Other <input type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 3.3 b. ____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. ____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 3.1 d. ____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 5.0 e. ____ Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8
14. Drilling method used: Rotary <input type="checkbox"/> 5.0 Hollow Stem Auger <input checked="" type="checkbox"/> 4.1 Other <input type="checkbox"/>		6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3.3 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3.2 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 9.9		7. Fine sand material: Manufacturer, product name & mesh size a. _____ Badger Mining #40-60 50 Lbs. b. Volume added _____ ft ³
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		8. Filter pack material: Manufacturer, product name & mesh size a. _____ Badger Mining Silica #20-40 250 Lbs. b. Volume added _____ ft ³
Describe _____		9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/>
17. Source of water (attach analysis, if required):		10. Screen material: PVC a. Screen Type: Factory cut <input checked="" type="checkbox"/> 1.1 Continuous slot <input type="checkbox"/> 0.1 Other <input type="checkbox"/>
E. Bentonite seal, top	ft. MSL or 1.0 ft.	b. Manufacturer Timco <input type="checkbox"/> 0.010 in.
F. Fine sand, top	ft. MSL or 10.0 ft.	c. Slot size: 10.0 ft.
G. Filter pack, top	ft. MSL or 11.0 ft.	d. Slotted length:
H. Screen joint, top	ft. MSL or 12.0 ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 1.4 Other <input type="checkbox"/>
I. Well bottom	ft. MSL or 22.0 ft.	
J. Filter pack, bottom	ft. MSL or 24.5 ft.	
K. Borehole, bottom	ft. MSL or 24.5 ft.	
L. Borehole, diameter	8.3 in.	
M. O.D. well casing	2.37 in.	
N. I.D. well casing	2.04 in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm KEY ENGINEERING GROUP, LTD.

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Route To:

Watershed/Wastewater
Remediation/Redevelopment

Waste Management
Other

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name Decorah Shopping Center Annex	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name MW-22
Facility License, Permit or Monitoring No. -	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/> Lat. <input type="checkbox"/> ° <input type="checkbox"/> ' Long. <input type="checkbox"/> ° <input type="checkbox"/> ' " or	Wis. Unique Well No. DNR Well Number OW687
Facility ID	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed 06/03/2003
Type of Well Well Code 11/mw	Section Location of Waste/Source SW 1/4 of NW 1/4 of Sec. 24, T. 11 N, R. 19 <input type="checkbox"/> E	Well Installed By: (Person's Name and Firm) Todd E. McQuistion
Distance from Waste/ Source ft. <input type="checkbox"/> Enf. Stds. Apply <input type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number
		Key Engineering Group, Ltd.

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation _____ ft. MSL	2. Protective cover pipe: a. Inside diameter: 9.0 in. b. Length: 1.0 ft. c. Material: Steel <input checked="" type="checkbox"/> 0.4 Other <input type="checkbox"/>
C. Land surface elevation _____ ft. MSL	d. Additional protection? If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or _____ ft.	3. Surface seal: Bentonite <input type="checkbox"/> 3.0 Concrete <input checked="" type="checkbox"/> 0.1 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input checked="" type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 3.0 Other <input type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 3.3 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 3.1 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 5.0 e. _____ Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8
14. Drilling method used: Rotary <input type="checkbox"/> 5.0 Hollow Stem Auger <input checked="" type="checkbox"/> 4.1 Other <input type="checkbox"/>	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3.3 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3.2 c. _____ Holeplug <input type="checkbox"/> Other <input checked="" type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 9.9	7. Fine sand material: Manufacturer, product name & mesh size a. _____ Badger Mining #40-60 50 Lbs. <input type="checkbox"/> b. Volume added _____ ft ³
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	8. Filter pack material: Manufacturer, product name & mesh size a. _____ Badger Mining Silica #20-40 250 Lbs. <input type="checkbox"/> b. Volume added _____ ft ³
Describe _____	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/>
17. Source of water (attach analysis, if required):	10. Screen material: PVC a. Screen Type: Factory cut <input checked="" type="checkbox"/> 1.1 Continuous slot <input type="checkbox"/> 0.1 Other <input type="checkbox"/>
E. Bentonite seal, top _____ ft. MSL or _____ 1.0 ft.	b. Manufacturer Timco c. Slot size: 0.010 in. d. Slotted length: 10.0 ft.
F. Fine sand, top _____ ft. MSL or _____ 2.0 ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 1.4 Other <input type="checkbox"/>
G. Filter pack, top _____ ft. MSL or _____ 3.0 ft.	
H. Screen joint, top _____ ft. MSL or _____ 4.0 ft.	
I. Well bottom _____ ft. MSL or _____ 14.0 ft.	
J. Filter pack, bottom _____ ft. MSL or _____ 14.5 ft.	
K. Borehole, bottom _____ ft. MSL or _____ 14.5 ft.	
L. Borehole, diameter 8.3 in.	
M. O.D. well casing 2.37 in.	
N. I.D. well casing 2.04 in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 

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Boring Number B-29

Use only as an attachment to Form 4400-122.

Page 3 of 3

Boring Number B-29

Use only as an attachment to Form 4400-122.

Page 2 of 3

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	Soil Properties					
								PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200
1 SS	24 18	6 7 7 8	13 14 15 16 17 18 19 20 21 22 23 24 25 26	Blind Drilled									
AUGER 2 SS	24 18	6 5 5 6 6	27 28 29 30 31 32	Light brown, medium dense, silty, fine to medium SAND, wet	SP			<1	15				
AUGER 3 SS	24 18	4 6 7 7	30 31 32	Light gray, medium dense, SILT with trace fine sand	ML			<1	12				

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Page 1 of 3

Facility/Project Name Decorah Shopping Center Annex			License/Permit/Monitoring Number -		Boring Number B-29			
Boring Drilled By: Name of crew chief (first, last) and Firm Craig Environmental Drilling Services			Date Drilling Started 6/3/2003	Date Drilling Completed 6/3/2003	Drilling Method HSA			
WI Unique Well No. OW689	DNR Well ID No. P-5	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 8.3 inches			
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>			Local Grid Location					
State Plane SW 1/4 of N, E S/C/N NW 1/4 of Section 24, T 11 N, R 19 E			Lat ° ' "	Long ° ' "	<input type="checkbox"/> N Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W			
Facility ID		County Washington	County Code 67	Civil Town/City/ or Village West Bend				
Sample		Soil/Rock Description And Geologic Origin For Each Major Unit			Soil Properties			Pocket Penrometer P 200
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	U S C S	Graphic Log	Well Diagram	PID/FID	
AUGE	300		Blind Drilled					
			1					
			2					
			3					
			4					
			5					
			6					
			7					
			8					
			9					
			10					
			11					
			12					

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

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Boring Number B-28

Use only as an attachment to Form 4400-122.

Page 2 of 2

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Page 1 of 2

Facility/Project Name Decorah Shopping Center Annex				License/Permit/Monitoring Number -			Boring Number B-28							
Boring Drilled By: Name of crew chief (first, last) and Firm Craig Environmental Drilling Services				Date Drilling Started 6/3/2003	Date Drilling Completed 6/3/2003	Drilling Method HSA								
WI Unique Well No. OW688	DNR Well ID No. MW-23	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 8.3 inches									
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>				Local Grid Location										
State Plane SW 1/2 of NW 1/4 of Section 24, T 11 N, R 19 E				Lat ° ' "	Long ° ' "	N <input type="checkbox"/>	E <input type="checkbox"/>							
County Washington		County Code 67	Civil Town/City/ or Village West Bend											
Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties				Pocket Penetrometer
Number and Type	Length Att. & Recovered (in)									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	
AUGER 1 SS	24 18	2 2 2 2 1	2 2 2 2 1	ASPHALT, sand and gravel Light brown, loose, fine to medium SAND with trace silt (fill)		SP			<1	4				
AUGER 2 SS	24 16	3 3 3 3	3 3 3 3	Light brown, loose, silty, fine to medium SAND with trace clay		SP			<1	6				
AUGER 3 SS	24 18	2 3 4 4	2 3 4 4	Reddish-brown, loose, silty, fine to medium SAND		SP			<1*	8				
AUGER 4 SS	24 18	1 2 1 2	1 2 1 2	Light brown, loose, fine to medium SAND		SP			<1	3				
AUGER 5 SS	24 20	2 2 2 3	2 2 2 3			SP			<1	5				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 

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Boring Number B-27

Use only as an attachment to Form 4400-122.

Page 2 of 2

Sample		Soil/Rock Description And Geologic Origin For Each Major Unit				Soil Properties							
Number and Type	Length Att & Recovered (in)	Blow Counts	Depth In Feet	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	Pocket Penetrometer
AUGER 6 SS	6 24 20	3 3 4 5	13 14	Light brown, loose, fine SAND with trace silt End of soil boring at 14.5' *Sample submitted for laboratory analysis	SP			9					

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Page 1 of 2

Facility/Project Name Decorah Shopping Center Annex			License/Permit/Monitoring Number -		Boring Number B-27							
Boring Drilled By: Name of crew chief (first, last) and Firm Craig Environmental Drilling Services			Date Drilling Started 6/3/2003	Date Drilling Completed 6/3/2003	Drilling Method HSA							
WI Unique Well No. OW687	DNR Well ID No. MW-22	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 8.3 inches							
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>			Local Grid Location									
State Plane SW 1/4 of NW 1/4 of Section 24, T 11 N, R 19 E			Lat <input type="text"/> ° <input type="text"/> ' <input type="text"/> "	Long <input type="text"/> ° <input type="text"/> ' <input type="text"/> "	□ N Feet □ S Feet □ W							
Facility ID		County Washington	County Code 67	Civil Town/City/ or Village West Bend								
Sample Number and Type	Length Att. & Recovered (in)	Blow Counts Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties				P 200 Pocket Penetrometer
								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	
1 SS	24 16	2 1 2 2	ASPHALT and gravel Light reddish-brown, loose, silty fine SAND	SP			≤1	4				
AUGER 2 SS	24 20	3 3 3 3	Light reddish-brown, medium stiff, clayey SILT	ML			≤1	6				
AUGER 3 SS	24 18	2 3 3 4	Light brown, loose, fine SAND with trace silt	SP			≤1*	7				
AUGER 4 SS	24 20	3 3 4 4		SP			≤1	8				
AUGER 5 SS	24 18	3 4 4 5					≤1	9				
		11										
		12										

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ATTACHMENT 1

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

4.9E-08	2.6E-05
---------	---------

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END