## LETTER OF TRANSMITTAL

<b>A</b> Northern Envir	<i>'onmental'''</i>	ATTENTION: Skip GI	or	The Son
Hydrologists • Er	ngineers • Geologists	RE: Analytical Service		2
Suite 210 Dire	Phone: 800-776-7140 ct Line: 262-643-9171			74
Mequon, Wisconsin 53092	FAX: 262-241-8222	 L	252010	000
TO: Mr. Skip Glor		WE ARE SENDING		
DeWitt Ross & Stevens,		Attached	Under separa	
13935 Bishop's Drive Su		☐ Shop drawings		
Brookfield, WI 53005		☐ Copy of letter	•	☐ Change orde
Soil, Soil Vapor, and Veg 1 Street, Racine, WI (WDN			ress Cleaners,	3941 North M
THESE ARE TRANSMITTED (see For approval  For your use  As requested For review and comment For bids due	<ul><li>□ No exceptions take</li><li>□ Make noted correct</li><li>□ Amend &amp; resubmit</li><li>□</li></ul>	ctions	copies for di	istribution
Skip,				
The summary report for the samplithe parties listed below. If you have Thanks			have also mailed	l copies to
COPY TO: file		SIGNED:	Mrs C.	Alk of
W Kemp Shope and Dr. Robert Thinhold	DNR) L James Mueller (S ecux (WDHFS) de, + Lardner)	.C. Johnson)	Christopher C.	Hatfield

DATE 8/1/07 PROJECT: ECI-01-2300-3057



12075 North Corporate Parkway, Suite 210 Mequon, WI 53092 (262) 241-3133 (800) 776-7140 Fax (262) 241-8222 www.northernenvironmental.com

August 1, 2007 (ECI 01-2300-3057)

Ehrlich Family Limited Partnership c/o Mr. Skip Glor DeWitt, Ross, & Stevens, S.C. 13935 Bishop's Drive, Suite 300 Brookfield, Wisconsin 53005-6605

RE: Soil, Soil Vapor, and Vegetable Tissue Sampling Results, Express Cleaners, 3941 North Main Street,

Racine, Wisconsin; WDNR BRRTS #02-52-547631

Dear Mr. Glor:

On July 19 and 20, 2007, Northern Environmental Technologies, Incorporated (Northern Environmental) performed soil, soil vapor, and vegetable tissue sampling at the S.C. Johnson & Sons, Incorporated (S.C. Johnson) property located at 3936 North Bay Drive, Racine, Wisconsin (the S.C. Johnson Property). The S.C. Johnson Property is currently used as a community garden. The sampling was completed to evaluate if chlorinated volatile organic compounds (CVOCs) from Express Cleaners, a dry cleaning business located at 3941 North Main Street, Racine, Wisconsin (the Site), had impacted the vegetable plant material and garden soil. This letter summarizes the sampling activities performed on the S.C. Johnson Property.

#### **BACKGROUND INFORMATION**

During March 2007, Northern Environmental initiated a site investigation workplan for the Site with approval of the Wisconsin Department of Natural Resources (WDNR). The Site is owned by the Ehrlich Family Limited Partnership (the Owner). The workplan included investigation of a CVOC release previously identified on the Site as part of a real estate transaction. The initial site investigation results indicated additional investigation was warranted east of the Site on the S.C. Johnson Property. Figure 1 shows the layout of the Site and adjacent properties.

When the Owner's representatives sought permission from S.C. Johnson to access the S.C. Johnson Property, S.C. Johnson informed the representatives about the gardens and requested that the Owner instruct Northern Environmental to modify its proposed off-site workplan to determine if CVOCs were present in the near-surface soils (root zones) and/or the edible portions of garden crops present in the garden. Based on S.C. Johnson's concerns for people that may work in the gardens or eat the vegetables grown there, very little time was available for the work to be completed.

Northern Environmental was conducting additional research seeking WDNR assistance to determine the appropriate sampling for assessing potential environmental health issues of CVOC contamination within a vegetable garden. Mr. Mark Drews of the WDNR stated that the WDNR had very limited experience in such matters and referred Northern Environmental to the Wisconsin Department of Health & Family Services (the DHFS). Mr. Henry Nehls-Loewe of the DHFS was contacted and, when asked the same questions about plant uptake and sampling methodology, replied that his research into this subject had not shown any substantive research into the effects of CVOCs on edible crops. He recommended we contact the contract analytical laboratories for advice.

Failing to obtain any pertinent reference or guidance from either the WDNR or DHFS, Northern Environmental conferred with the contract laboratory Environmental Chemistry Consulting Services, Incorporated (ECCS) and the Industrial Health & Safety Section of the Wisconsin State Lab of Hygiene (LOH). Neither ECCS nor LOH provided any recommended methodologies relative to the collection of plant tissues or soil gas. Both labs, when asked about their experiences in that regard, responded that they had very little if any experience with such sample collection. In addition, ECCS turned down the opportunity to analyze plant tissue samples, and LOH turned down the opportunity to analyze both plant tissue and soil gas. Northern Environmental was referred to Pace Laboratories (Pace) in Green Bay Wisconsin for obtaining plant tissue analyses. When Northern Environmental contacted Pace, we were informed of a sampling methodology previously used by several Pace clients for sampling vegetative tissues.

Completing this limited research, Northern Environmental submitted a workplan amendment to the WDNR together with a cost estimate to complete this assessment under the Wisconsin Dry Cleaners Environmental Remediation Fund. The workplan amendment was submitted on July 17, 2007 with a complete submittal containing a cost estimate submitted on July 19, 2007. The WDNR reviewed and approved the assessment workplan on July 19, 2007. A copy of that amendment and approval are included in Attachment A.

#### **INVESTIGATION METHODS**

On July 19, 2007, Northern Environmental collected soil samples from nine boreholes (BA1 through BA9) to depths of up to 2-feet below grade (fbg) using hand bucket auger soil sampling techniques. A Northern Environmental geologist maintained borehole logs, examined and described the soil field screened samples, and collected samples for laboratory analysis. Soil samples were collected from boreholes BA2 through BA9 within the root zone (6 to 8 inches below ground surface). Soil samples were also collected from all boreholes within underlying native material (approximately 18 to 24 inches below ground surface). All soil sampling equipment was decontaminated after each use with distilled water and Alconox<sup>TM</sup> cleaning agent followed by a double rinsed in distilled water. Each borehole was abandoned with native soil immediately after sampling was complete.

A portion of each soil sample was field screened for volatile organic compounds (VOCs) using a photoionization detector (PID). These samples were placed in a sealable 1-quart plastic bag. Care was taken to maintain a relatively constant soil volume to headspace volume ratio for all samples. The sealed headspace sample was agitated to break up soil clods before being left in a warm environment for at least 15 minutes to allow volatilization to occur. The PID probe was then carefully inserted into the plastic bag and the highest stable response was recorded. The PID used was a Thermo Environmental Instruments Model 580A Organic Vapor Meter equipped with a 10.6 eV lamp. Immediately upon collection, a portion of each soil sample was, placed into laboratory provided sample containers together with methanol preservative. Preserved samples were then placed in coolers packed with ice and submitted under chain-of-custody for analysis by ECCS. Soil samples and a methanol blank were laboratory analyzed for tetrachloroethene (PCE), trichloroethene (TCE), cis 1,2-dichloroethene (cis 1,2-DCE), and vinyl chloride by ECCS using method SW846 8260.

On July 20, 2007, soil vapor samples were collected from three boreholes using a ½ inch diameter auger bit and placing a temporary ¼-inch diameter nylon tubing fitted with an 8D silicone stopper filter at the end within each borehole. The boreholes were backfilled, sealed with native topsoil and covered with plastic before sampling. The nylon tubing was extended through the plastic to prevent ambient surface air affecting the collection of the soil gas. All sampling equipment was decontaminated before, during, and after each use. A vacuum pump was used to collect the soil vapor from each sampling point. New vinyl hoses were used at each sample location. Soil vapor samples were collected in Tedlar® bags. In addition, a vapor blank sample using laboratory provided "zero air" was collected to confirm that sampling equipment did not introduce contaminants to the air samples. Before collecting the vapor blank sample, the vacuum pump was run in ambient air for 15 minutes followed by 2 minutes using laboratory provided "zero air" to purge any residual contaminants within the pump. Soil vapor samples collected from soil vapor sampling points and the vapor blank sample were submitted under chain-of-

custody to ECCS and laboratory analyzed for PCE, TCE, cis 1,2-DCE, and vinyl chloride using method SW846 8260. Each soil vapor sample borehole was abandoned within native soil immediately after sampling was complete.

On July 20, 2007, Northern Environmental inspected the garden area before collecting any crop tissue samples. For every individual garden crop currently being cultivated, Northern Environmental collected two samples of those plant tissues typically consumed by the general public (i.e., tomatoes not vines or leaves, cucumbers not vine or leaves, and carrots not green tops). The first sample of each variety of garden crops was collected from the area of the garden nearest to Express Cleaners facilities. The second set of similar garden-variety crop was collected from the area of the garden furthest away from the Express Cleaners facilities. The plant tissue samples were collected whole and containerized in the smallest practical container, placed on ice and shipped to Pace Analytical Services, Incorporated for analytical testing. The collected garden crop tissue samples submitted to the laboratory under chain-of-custody and prepared and laboratory analyzed for PCE, TCE, cis 1,2-DCE, and vinyl chloride using methods SW846 5035 and SW846 8260B, respectively.

#### **FINDINGS**

#### <u>Soil</u>

Sediments encountered in the boreholes consisted of approximately 6 to 10 inches of silty sand with clay topsoil overlying 4 to 6 inches of silty clay with gravel, underlain by native silty sand. Clayey silt and/or silty sand layers were interbedded within the silty clay and appeared to be alluvial or lacustrine in origin. The depth to groundwater was noted at approximately 2 to 3 fbg in the monitoring wells at the Site.

The borehole identification, depth, and laboratory analytical parameters are presented in Table 1. Borehole locations are illustrated in Figure 2. Elevated PID responses (500 instrument units as isobutylene [iui]) and slight solvent odors were detected in the screened soil sample BA1-1. No elevated PID responses (i.e., greater than 8 iui) or unusual odors were detected in screened soil samples BA2 through BA9.

Soil sample analytical results are also summarized in Table 1. TCE, cis 1,2-DCE and vinyl chloride were not detected above laboratory detection limits in any of the boreholes or the methanol blank. PCE was not detected above the laboratory detection limits in the methanol blank or borehole BA8 and in root zone soil sample BA5-1 from borehole BA5 (Table 1). In borehole BA1, 130,000 micrograms per kilogram (µg/kg) of PCE was detected in native soil. PCE concentrations ranging from 33 to 1300 ug/kg were detected in the remaining boreholes. Laboratory reports and chain-of-custody records are included in Attachment B.

#### Soil Vapor

TCE, cis 1,2-DCE and vinyl chloride were not detected above laboratory detection limits in any of the vapor samples collected. PCE was detected in vapor samples collected from VP1, VP2, and VP3 at concentrations of 6300, 14, and 8.2 µg/l, respectively. A vapor blank sample contained 8.1 µg/l PCE. The PCE in the vapor blank sample may have resulted from residual TCE in the vacuum pump. Soil vapor monitoring results are summarized in Table 2. The laboratory reports are attached. Northern Environmental recently collected another zero-gas sample blank without the use of the vacuum pump used in the field. This additional gas sample is intended to determine whether the PCE found in the zero-gas field blank was actually in the gas or the result of cross contamination of the internal portions of the vacuum pump.

#### Vegetable Tissue

Thirty-two vegetable samples were laboratory analyzed fro PCE, TCE, cis-1,2-DCE and vinyl chloride. No laboratory analyzed compound concentrations were detected in the 32 vegetable tissue samples. Due to the

gummy consistency of the okra, the sample could not be analyzed. Vegetable tissue sample results are summarized in Table 3. The laboratory reports are attached.

#### **CONCLUSIONS AND RECOMMENDATIONS**

Based upon the soil and soil vapor sampling results, past activities at the Site have affected soil quality at the S.C. Johnson property. PCE released at the Site has migrated onto the S.C. Johnson Property. Further, the distribution of PCE observed in the shallow soil testing will result in Northern Environmental revising its current, submitted scope of work to seek approval of additional investigation to complete definition of the lateral and vertical extent of CVOCs in soil and groundwater.

CVOCs were not detected in laboratory analyzed vegetable tissue samples. As directed in the WDNR approval, Northern Environmental, on behalf of the Owner, is submitting this report and our findings to both Mr. Drews of the WDNR and Dr. Robert Thiboldeaux of DHFS. Both Northern Environmental and the Owner will rely on Dr. Thiboldeaux to render an expert opinion relative to the human health and safety related components of this assessment. Further, Northern Environmental does not intend to perform any additional shallow soil, soil gas, or plant tissue sampling work on the S.C. Johnson Property until it receives a directive from the state of Wisconsin that such work is required.

#### **DISCLAIMER**

Northern Environmental completed this work in general conformance with federal, state, and local requirements and made all appropriate inquiry consistent with good commercial or customary practice. The results provided in the report are based upon professional interpretation of the information available to Northern Environmental given the time and budget constraints of this project. Northern Environmental has assumed the information provided by the client and property owner and included in the report is factual, complete, and correct. Northern Environmental does not warrant that this report represents an exhaustive study of all possible environmental concerns associated with the Property. However, the items included in this report are believed to adequately address soil and groundwater quality at the Property, and the client's needs at this time.

Northern Environmental thanks you for the opportunity to provide the requested services. We trust this information meets your needs. If you have any questions, please contact our office at (262) 241-3133.

Sincerely.

Northern Environmental Technologies, Incorporated

John J. Timm Project Geologist

11/1/2016

Christopher C. Hatfield, PG

Project Geologist

JJT/lmh Attachments

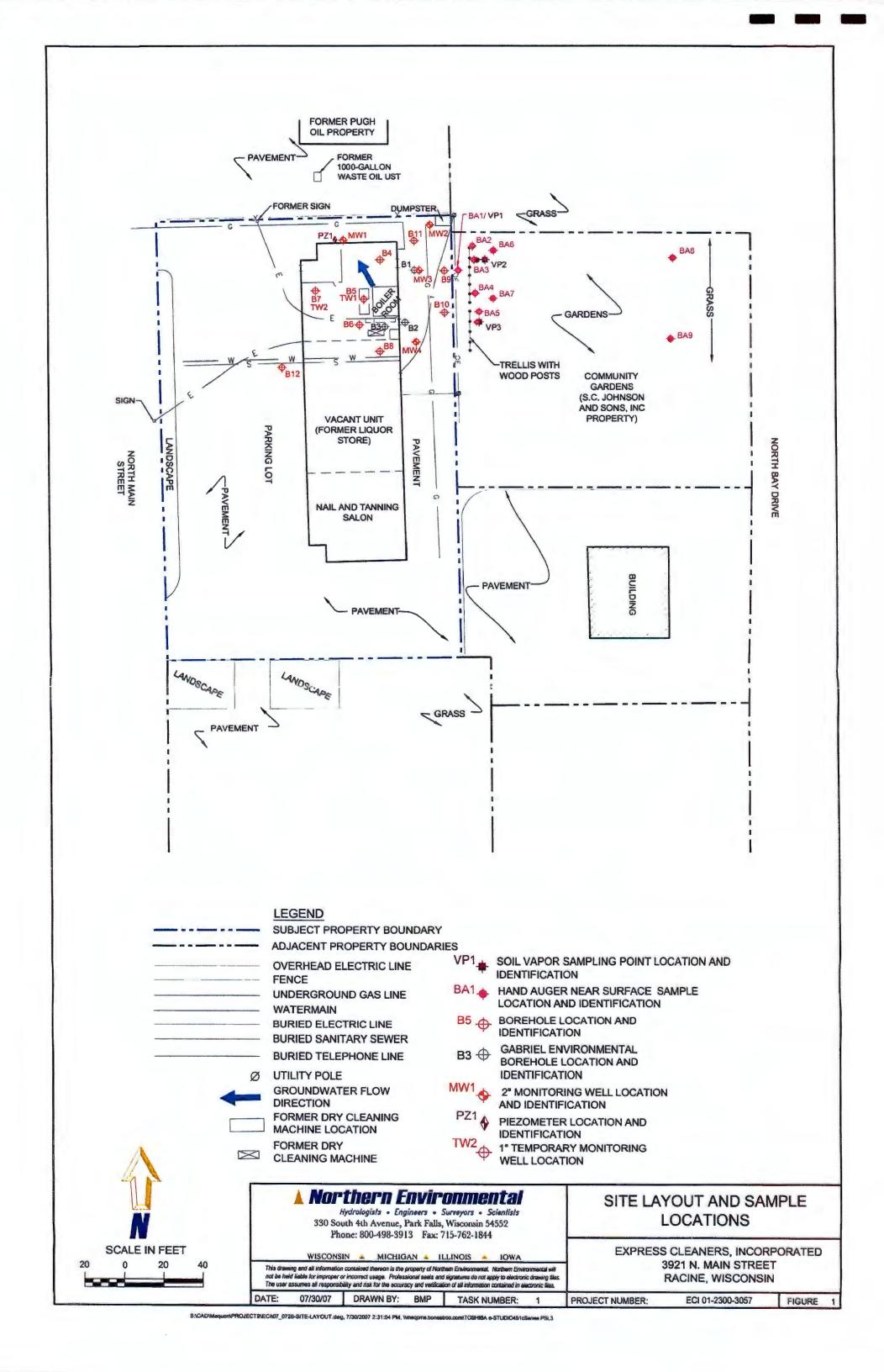


Table 1 Soil Sample Field Screening and Laboratory Analytical Results, Community Gardens, Racine, Wisconsin

D'out Tratact

Sample	Date	Depth	P	ID Information	n	Odor	Location	Description	Detected VOC (µg/kg)
Identification	Collected	(inches)	Time	Time	PID				Tetrachloroethene
			Collected	Read	Results		U. S. Environmental Protection Agency S	ite-Specific Soil Screening Levels	25
BA1 BA1-1	07/19/07	24	1320	1340	500	Slight	20 S, 31 E of the NE corner of building	Native silty sand, eolian	130,000
BAI-I	07/19/07	24	1320	1340	300	Silgit		Tuttve siny suita, contai	150,000
BA2							1 N, 1.5 E off the north 4x4 post		
BA2-1	07/19/07	6	1346	1406	3	None		Silty sand, clay, topsoil	650
BA2-2	07/19/07	24	1355	1415	4	None		Native silty sand	700
BA3							1 S, 2 E off the north second 4x4 post to south		
BA3-1	07/19/07	6	1410	1430	5	None	1 B, 2 B oil in Biolin 2000 in Person 10 200 in	Silty sand, some clay, topsoil	1200
BA3-2	07/19/07	24	1417	1437	8	None		Native silty sand	1300
BA4							0.5 N, 2 E off north 5th 4x4 post to south		
BA4-1	07/19/07	6	1430	1450	5	None		Silty sand, clay, topsoil	690
BA4-2	07/19/07	24	1447	1459	6	None		Native silty sand	1000
BA5							2 N, 2 E off fourth 4x4 post from the south		
BA5-1	07/19/07	6	1500	1520	4	None	21, 22 out to an in the poor to an inear to an in the poor to an in the poor to an in the poor to an i	Silty sand, clay, fill	<25
BA5-2	07/19/07	30	1505	1525	5	None		Native silty sand	43
BA6							0 N, 12 E off the second north 4x4 post		
BA6-1	07/19/07	6	1533	1553	4	None	•	Silty sand, fill	56
BA6-2	07/19/07	24	1545	1605	3	None		Native silty sand	74
BA7							2 S, 12 E off fifth north 4x4 post		
BA7-1	07/19/07	6	1600	1620	3	None	•	Silty sand, fill	84
BA7-2	07/19/07	24	1610	1630	4	None		Native silty sand	380
BA8							East edge of garden, north side 85 feet east		
BA8-1	07/19/07	6	1620	1360	4	None	,	Silty sand, clay	<25
BA8-2	07/19/07	18	1629	1645	4	None		Native silty sand	<25
BA9							East edge of garden, south side 85 feet		
BA9-1	07/19/07	6	1650	1710	4	None		Silty sand, clay, fill	33
BA9-2	07/19/07	24	1655	1715	5	None		Native silty sand	1200"J"

Notes:

PID = photoionization detector

VOC = volatile organic compounds

μg/kg = micrograms per kilogram

XXX = exceeds site-specific soil screening levels

PCE -o protection of general under = 4.1 ppb

2 holdin = 8ECppb

2 yearin = 1230ppb

Table 2 Soil Vapor Monitoring Analytical Results Community Gardens, Racine, Wisconsin

Sample	Date	Detected VOC (µg/l)
ID	Collected	Tetrachloroethene
Reporting 1	Detected Limit	0.5
VP1	07/20/07	6300
VP2	07/20/07	14
VP3	07/20/07	8.2

Notes:

VOC

= volatile organic compounds

μg/l

= micrograms per liter

**XXX** = exceeds

= exceeds detection limits

Table 3 Vegetable Tissue Sample Results, Community Gardens, Racine, Wisconsin

Plant Tissue	Collection	Location	LaboratoryAnal	ytical Results (mic	rograms per k	ilogram)
Sample ID	Date		cis-1,2-Di-	Tetra-	Trichloro-	Vinyl
		<u> </u>	chloroethene	chloroethene	ethene	Chloride
Peas	7/20/2007	Trellis	<1.5	<5.7	<3.3	<2.6
Tomato East	7/20/2007	Surface #38	<1.5	<5.8	<3.4	<2.7
Tomato West	7/20/2007	Surface East	<1.5	<5.3	<3.3	<2.6
Collard Greens W-11	7/20/2007	Raised Bed #11	<1.5	<5.7	<3.3	<2.7
Collard Greens E-25	7/20/2007	Raised Bed #25	<1.5	<5.7	<3.3	<2.7
Mustard W-10	7/20/2007	Raised Bed #10	<1.6	<5.9	<3.4	<2.7
Swiss Chard W-8	7/20/2007	Raised Bed #8	<1.5	<5.7	<3.3	<2.7
Beets W-7	7/20/2007	Raised Bed #7	<1.5	<5.7	<3.3	<2.6
Turnips W-17	7/20/2007	Raised Bed #17	<1.5	<5.7	<3.3	<2.6
Mustard E-20	7/20/2007	Raised Bed 20	<1.5	<5.7	<3.3	<2.7
Turnips E-28	. 7/20/2007	Raised Bed #28	<1.5	. <5.7	<3.3	<2.7
Turnip Green W-15	7/20/2007	Raised Bed #15	<1.5	<5.8	<3.4	<2.7
Dill W	7/20/2007	Trellis	<1.5	<5.7	<3.3	<2.7
Dill Blue Pots	7/20/2007	Blue Pots #29	<1.5	<5.7	<3.4	<2.7 .
Leek W	7/20/2007	Surface West	<1.5	<5.7	.<3.3	<2.7
Zucchini Blue	7/20/2007	Blue Tubs #40	<1.5	<5.7	<3.3	<2.7
Seed Onions E	7/20/2007	Surface East	<1.6	<6.0	<3.5	<2.8
Ruttabaga E	7/20/2007	Surface #36	<1.5	<5.7	<3.3	<2.7
Okra E	7/20/2007	Surface East		unable to analy	ze	
Carrots W-12	7/20/2007	Raised Bed #12	<1.5	<5.8	<3.4	<2.7
Carrots E-34	7/20/2007	Raised Bed #34	<1.5	<5.8	<3.4	<2.7
Kohl Rabi E-22	7/20/2007	Raised Bed #22	<1.6	<6.0	<3.5	<2.8
Kale W-4	7/20/2007	Raised Bed #4	<1.6	<5.9	<3.4	<2.7
Kale W-21	7/20/2007	Raised Bed #21	<1.5	<5.7	<3.3	<2.6
Rhubarb E	7/20/2007	Surface East	<1.5	<5.8	<3.4	<2.7
Pepper E-30	7/20/2007	Raised Bed #30	<1.6	<5.9	<3.4	<2.8
Red Onions W-9	7/20/2007	Raised Bed #9	<1.5	<5.7	<3.3	<2.7
Red Onions W21	7/20/2007	Raised Bed #21	<1.6	· <5.9	<3.5	<2.8
White Onions W	7/20/2007	Surface #37	<1.6	<5.9	<3.4	<2.7
White Onions E-26	7/20/2007	Raised Bed #26	<1.5	<5.6	<3.3	<2.6
Broccoli W-19	7/20/2007	Raised Bed #19	<1.5	<5.8	<3.4	<2.7
Broccoli E-23	7/20/2007	Raised Bed #23	<1.5	<5.8	<3.4	<2.7



## ATTACHMENTA COPY OF AMENDMENT AND APPROVAL



12075 North Corporate Parkway, Suite 210 Mequon, WI 53092 (262) 241-3133 (800) 776-7140 Fax (262) 241-8222 www.northernenvironmental.com

July 19, 2007 (ECI-01-2300-3057)

Ehrlich Family Limited Partnership c/o Mr. Skip Glor DeWitt, Ross, & Stevens, S.C. 13935 Bishop's Drive, Suite 300 Brookfield, Wisconsin 53005-6605

RE: Additional Site Investigation Workplan, Express Cleaners, 3941 North Main Street, Racine, Wisconsin; WDNR BRRTS #02-52-547631

Dear Mr. Glor:

During March 2007, Northern Environmental Technologies, Incorporated (Northern Environmental) initiated the Wisconsin Department of Natural Resources (WDNR) approved site investigation workplan for Express Cleaners, 3941 North Main Street, Racine, Wisconsin (the Site). The workplan was to investigate a spill of chlorinated volatile organic compounds release (CVOCs) previously identified on the referenced property above. The discovery of CVOCs was the result of samples collected and analyzed as part of a real estate transaction. The initial site investigation results indicate additional investigation is warranted east of the Site on the adjacent property located at 3936 North Bay Drive, Racine, Wisconsin. This adjacent property is owned by S.C. Johnson & Sons, Incorporated (S.C. Johnson Property) and is currently used as a community garden. This letter provides a sampling plan for assessing whether CVOCs are present in vegetable crops and soil in the gardens on the S.C. Johnson Property. Background information for the site investigation is included in Attachment A.

#### WORKPLAN FOR INVESTIGATION ON S.C. JOHNSON PROPERTY

#### Near-Surface Soil Sampling (root zone)

Northern Environmental will collect eight near-surface composite soil samples (6 to 8 inches below ground surface) in the locations shown on the attached Figure 1. The objective for collecting these samples is to assess the imported garden soil fill being used as the root zone for the crops for the presence or absence of CVOCs. At each of the eight locations, the entire root zone depth of imported garden soil fill will be sampled. Soil collection and screening will begin at the surface of the soil in which the crop is planted, such as the top of the raised bed for any crop planted in a raised bed. Undoubtedly, some roots will be left in the soil, but the intent would be to verify that there is a significant mass of roots at the depth to be sampled. The sampling depth will be adjusted, if needed, to most represent soil within the root zone in proximity to the sample location.

Six of the soil samples will be collected in the western-most 15 feet of garden area on the S.C. Johnson Property. Two soil samples will be collected near the eastern edge of the S.C. Johnson property gardens. The soil samples will be collected using a hand bucket auger. All soil sampling equipment will be decontaminated after each use with distilled water and Alconox<sup>TM</sup> cleaning agent and double rinsed in distilled water. Each sampling point will composite the entire length of corresponding root zone imported garden soil before extracting samples. At each near surface imported garden soil sampling location a portion of each composite

sample will be field screened using a PID. A second portion of the same composite imported garden soil sample will immediately be placed in the appropriate laboratory containers, preserved with methanol, and placed on ice for shipment to ECCS Laboratory in Madison, Wisconsin, a WDNR-certified laboratory. Soil samples will be laboratory analyzed for tetrachloroethene (PCE), trichloroethene (TCE), cis 1,2-dichloroethene (cis 1,2-DCE), and vinyl chloride using EPA Method 8260B. A methanol blank will also be laboratory analyzed for PCE, TCE, cis 1,2-DCE and vinyl chloride.

#### **Underlying Native Soil Sample**

At each of the eight sampling locations for imported garden soil fill, Northern Environmental will continue to extract fill soil until the underlying silty sand (presumed as native material) is located. A second soil sample of the native silty sand from just below the interface with the overlying imported garden fill soil will be collected from each location. The processing, screening, preservation and analysis of these native silty sand samples will be performed identical to those procedures described in detail above. A ninth native soil sample will be collected from the nearest unpaved location to the previous B9 borehole. This additional sample will be collected in the top two feet of soil in the area of previously recorded high concentration of contamination. This additional sample will be taken to confirm the continued presence of such contamination in proximity to the garden area. At the time of this assessment.

#### Near-Surface Soil Vapor Sampling (root zone or tilled zone)

Northern Environmental will collect two soil vapor samples using a hand held sampling pump and Tedlar bag method at the locations shown in Figure 1. The vapor sample points will be constructed by boring an approximately 6- to 8-inch deep approximately 1-inch diameter borehole using hand tools. All equipment will be decontaminated before, during, and after use. A sample tube with a porous filter to prevent soil from entering the sample tubing will be placed within the borehole. The borehole will be backfilled with native topsoil before sampling. In addition, one air sample using laboratory provided "zero" will be collected to confirm that sampling equipment is not introducing contaminants to the air samples. Samples will be analyzed for PCE, TCE, cis 1,2-DCE, and vinyl chloride by ECCS Laboratory.

#### Vegetable Matter Sampling

The community garden has been used to grow a large variety of varying types of garden crops. While we are aware of the variety of possible crops that may be present in the garden, there is no specific detail available as to what crops are being grown this year. Consequently, Northern Environmental will inspect the garden area before collecting any crop tissue samples. For every individual garden crop currently being cultivated, Northern Environmental will collect two samples of those plant tissues typically consumed by the general public (i.e., tomatoes not vines or leaves, cucumbers not vine or leaves, and carrots not green tops). The first sample of each variety of garden crop will be collected from the area of the garden nearest to Express Cleaners facilities. The second set of similar garden variety crop will be collected from the area of the garden furthest away from the Express Cleaners facilities. All plant tissue samples will be collected whole and containerized in the smallest practical container, placed on ice and shipped to Pace Laboratories, Inc. in Green Bay Wisconsin for analytical testing. All collected garden crop tissue samples submitted to the laboratory will be tested for PCE, TCE, cis 1,2-DCE, and vinyl chloride by a WDNR-certified laboratory.

#### **Report Results**

Sample results will be available approximately 1-week after collection. If requested, verbal laboratory analysis results will be provided to S.C. Johnson representatives when they are available. Northern Environmental will tabulate and summarize the results in a letter report. The results will be reported to S.C. Johnson representatives. The sample results will be compared to the soil screening levels used for the site investigation

to determine if a health risk is present. The results of soil vapor sampling will be compared to OSHA Permissible Exposure Limits for each detected CVOC to determine if there is a potential health risk by inhalation during gardening activities.

We appreciate your cooperation in this matter. Please contact us if you have any questions or comments.

Sincerely,

Northern Environmental Technologies, Incorporated

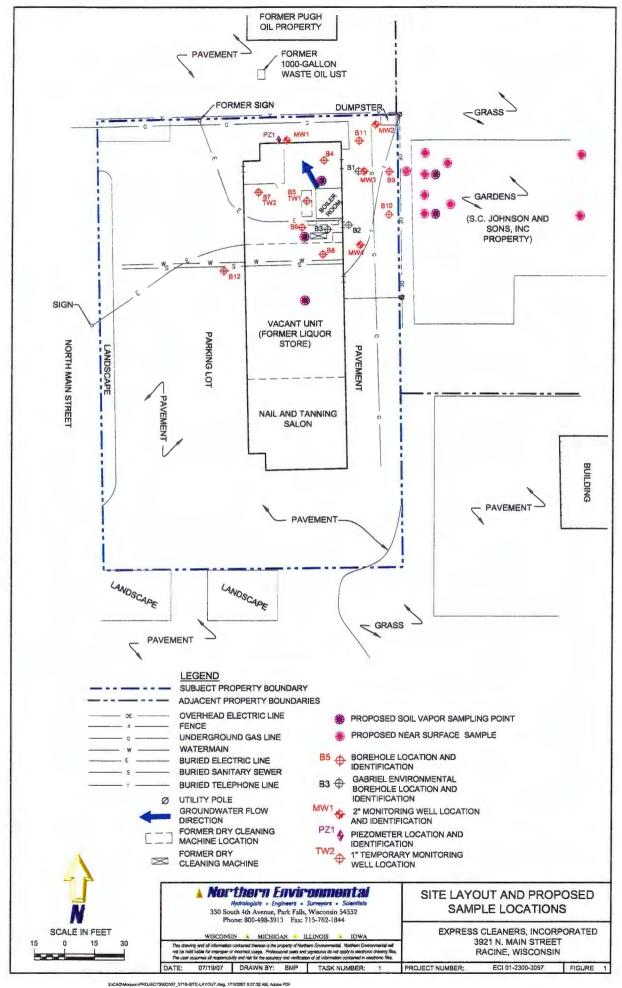
Christopher C. Hatfield, PG

Registered Geologist

Stuart J. Gross, PC

District Director

CCH/lmh Attachments





# ATTACHMENT A BACKGROUND INFORMATION

Site Investigation Workplan - Ehrlich Family Ltd Partnership

July 19, 2007

#### **BACKGROUND INFORMATION**

The Erhlich Family Limited Partnership owns a small shopping center comprised of three building units located at 3921-3941 North Main Street. The northern-most building unit (3941 North Main Street) historically operated as a dry cleaning facility, and the current tenant is Express Dry Cleaners, Inc. (Express Cleaners). Phase I and II environmental site assessments (ESAs) were completed by Gabriel Environmental Services (Gabriel) during March and April 2006 as part of due diligence associated with the potential sale of the property (Gabriel, 2006a and 2006b). The Phase II ESA included the completion of three soil boreholes near the dry cleaning establishment. Two of the boreholes were completed east of the Site building in the area behind Express Cleaners. The remaining borehole was completed inside Express Cleaners. Concentrations of chlorinated volatile organic compounds (CVOCs), primarily tetrachloroethene (PCE) and its breakdown products trichloroethene (TCE) and cis 1,2-dichloroethene (cis 1,2-DCE), were detected in each of the boreholes. Gabriel concluded that used PCE and filters stored in 55-gallon drums and PCE stored within the building had been released to soil at the Site.

The results of the Phase II ESA were reported to the Wisconsin Department of Natural Resources (WDNR) who subsequently requested a site investigation and appropriate remedial action be performed. During March 2007, Northern Environmental Technologies, Incorporated (Northern Environmental) completed the WDNR approved site investigation workplan (Northern Environmental, 2007).

In accordance with the site investigation workplan, Northern Environmental documented the installation of nine boreholes, four water table monitoring wells, one piezometer (PZ1), and two temporary monitoring wells on March 27, 28, and 29, 2007. Soils encountered at the Site consisted of approximately 4 to 6 feet of silty sand fill and/or sand dune deposits underlain by silty clay till. Groundwater was encountered in the water table monitoring wells approximately 2 to 4 feet below grade (fbg). Groundwater was observed to generally flow north-northwest across the Site.

Based on field screening and laboratory results, released chlorinated volatile organic compounds (CVOCs) likely originated from multiple source areas. The primary source areas of tetrachloroethene (PCE) contamination appear to be a former solvent storage area as reported in the Gabriel ESAs located along the east side of the Express Cleaners unit and the area beneath the former dry cleaning machine. Spillage/leakage within the building likely migrated into soil through cracks or seams in the concrete floor. Spillage/leakage outside along the east side of the building likely originated from poor housekeeping practices. Dry cleaning solvents spilled outside may have drained east across the asphalt pavement and into surface soil along the eastern Site boundary. Breakdown products of PCE (trichloroethene, cis 1,2-dichloroethene, and trans 1,2-dichloroethene) were also detected in the soil samples. The greatest breakdown product concentrations were found along the eastern property boundary (B9). Breakdown products were also detected at elevated concentrations beneath the Site building. The presence of breakdown product concentrations suggests released PCE occurred throughout the history of dry cleaning activities at the Site.

Soil contamination extends up to 14 fbg (8 feet into silty clay till) in the source area, but does not appear to extend more than a few feet into silty clay till away from the source area. The vertical extent of released CVOCs in soil has been determined. However, the horizontal extent of CVOCs in soil has not been determined and likely extends off site to the north and east.

CVOCs in groundwater are present beneath Express Cleaners and north and east of the Site building. Breakdown products of PCE (trichloroethene and cis 1,2-dichloroethene) were also detected in groundwater.



Hydralogists • Engineers • Surveyors • Scientists

Site Investigation Workplan - Ehrlich Family Ltd Partnership

July 19, 2007

Elevated concentrations of breakdown products in groundwater suggest that PCE releases occurred throughout the history of dry cleaning activities at the Site.

The upgradient (southeastern) extent of contamination in groundwater (MW4) has been defined. However, CVOC-contaminated shallow groundwater likely extends off site to the north and east. CVOCs were not detected in groundwater from the deeper silty clay till aquifer (PZ1). The extremely low hydraulic conductivity of the silty clay till is limiting the downward migration of contaminants in groundwater. Therefore, the vertical extent of CVOCs in groundwater has been defined.

During June 2007, Northern Environmental submitted a workplan to the WDNR for additional investigation required to define the extent of released CVOCs. During July 2007, the adjacent property owner (S.C. Johnson & Son, Incorporated) east of the Site was informed of possible CVOC contamination extending into a vegetable garden on their property and to request property access to continue to determine the extent of CVOCs.



### State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor Scott Hassett, Secretary Gloria L. McCutcheon, Regional Director Southeast Region Headquarters 2300 N. Dr. Martin Luther King, Jr. Drive Milwaukee, Wisconsin 53212-0436 Telephone 414-263-8500 FAX 414-263-8716 TTY 414-263-8713

July 19, 2007

Ehrlich Family Limited Partnership c/o Mr. William Scott Dewitt, Ross & Steves, S.C. 13935 Bishop Drive, Suite 300 Brookfield, WI 53005 File Ref:

FID# 252010000

BRRTS# 02-52-547631

EL1-3057

Subject:

Conditional Approval for DERF Work Plan for

Limited Off-site Investigation, Express Dry Cleaners, 3941 N. Main St., Racine

Dear Mr. Scott,

In March 2007, the Wisconsin Department of Natural Resources (WDNR) approved the consultant selection and initial site investigation bid costs for the DERF project at Express Dry Cleaners in Racine. Early this month, a status report and work plan for additional site investigation (dated June 26, 2007) was submitted for our review. On July 17, 2007, your firm contacted us to request an expedited review of a portion of the work contained in the June 26<sup>th</sup> proposal. That work would be conducted on the adjacent property to the east of Express Cleaners, owned by S.C. Johnson & Sons, and used as a community garden. The request for an expedited review is to allow this part of the work to be done quickly to address concerns of the property owner and garden users about whether contaminants have migrated into shallow soils and plants within the community garden area. Your consultant, Northern Environmental submitted a separate scope of work and cost estimate for these activities today (July 19, 2007).

In Mark Drews' absence, I am providing a conditional approval of your work plan and cost estimate, so that we will have something to compare the reimbursement application to, should the work items be determined to be eligible. However, it will be necessary to provide additional justification, once the results of this proposed sampling are obtained, to explain how this sampling contributes to the site investigation, and to show that it doesn't result in significant unnecessary additional cost, given the specific comments provided below. With this condition of approval, and based on the information provided, the WDNR therefore approves the July 19, 2007 scope of work and cost estimate for an accelerated limited off-site investigation. Specific comments are provided here:

- 1. Near Surface (root zone) soil sampling. The proposal calls for soil samples to be collected from the root zone (estimated to be 6 to 8 inches below the surface). The soil column will be sampled using a hand-driven bucket auger soil sampler, and sub-samples from this zone will be collected for laboratory analysis from the depths of interest. The samples should be collected with as little disturbance as possible, without extensive compositing, in order to minimize volatilization of the compounds of interest. The WDNR may require additional discrete sampling of soil in this area and depth interval to complete the site investigation.
- 2. <u>Underlying native soil samples</u>. The proposal calls for collection of soil samples from the uppermost 2 to 3 inches of the original soil materials (prior to importing soil for the garden). The proposed sampling technique is the same as for the near surface soil samples. It is likely that additional sampling at this depth and deeper will be required to complete the subsequent site investigation.
- 3. Near surface soil vapor sampling. Northern plans to collect 2 soil vapor samples from the 6 to 8 inch depth zone. The purpose for these samples was not specified in the work plan, but relayed verbally as



- a means of determining the potential for inhalation risk to people digging and planting in the community garden. The WDNR does not normally recommend collecting soil vapor samples from within 5 feet of the ground surface, due to the high potential for mixing with air from above ground. It will be your responsibility to explain how these samples are necessary and appropriate for assessing the inhalation pathway risk to people working in the garden area on this site, in order to have the costs deemed eligible for reimbursement through DERF.
- 4. <u>Vegetable matter sampling</u>. The proposal calls for collection of the edible portions of the different types of plants grown nearest to the Express Cleaners property. The WDNR has not established sampling or sample preparation protocol for this type of sample. Please provide detailed documentation of the sample collection and shipment procedures and have Pace Laboratories provide detailed documentation on the pre-analysis sample handling and preparation.
- 5. Please work with the Wisconsin Department of Health and Family Services regarding the interpretation of soil vapor and plant material sample results, and comparison to appropriate exposure criteria. Dr. Robert Thiboldeaux has agreed to be the contact for this project at WDHFS. He can be reached at (608) 267-6844.
- 6. This work plan does not satisfy the requirement to complete the investigation of the degree and extent of soil and groundwater contamination on this parcel. Your consultant's work plan of June 26, 2007 included three standard deeper soil borings and one groundwater monitor well on this parcel, in addition to other work items on the drycleaner property and the property identified as "former Pugh Oil property". Additional work may be required, based upon the results of the off-site work.
- 7. Your consultant intends to submit a revised work plan for the rest of the site investigation, in order to reconcile costs and work items affected by breaking out the limited off-site garden area assessment work. The results of this limited off-site investigation, and the justifications requested above, should be provided with the revised work plan and cost estimate.
- 8. Please notify Mark Drews of the analytical results when you receive them.

Cost approved for this scope of work is \$12,414.00. The total cost approved to date for this site is \$33,967.00.

Please be aware that you are required to comply with <u>all</u> applicable statutes and administrative rules including the NR 700 series, Wisconsin Administrative Code, hazardous waste management and wastewater discharges. This approval does not guarantee the reimbursement of costs under the Dry Cleaner Environmental Response Program. Final determination regarding the eligibility of costs for reimbursement will be made at the time of claim review. If you have any questions regarding the content of this letter, please contact Mark Drews at (262) 574-2146.

Sincerely.

Pamela A. Mylotta, Hydrogeologist Remediation & Redevelopment Program Southeast Region, Milwaukee Service Center

cc: Christopher Hatfield – Northern Environmental Robert Thiboldeaux – WDHFS Patricia Nagai – Racine County – UW Extension Mark Drews – WDNR/WSC Jeff Soellner – CF/8, GEF 2, Madison



#### ATTACHMENT B

## LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Date Analyzed:

Concentration:

Project Number:

ECI-01-2300-3057

07/24/07

Project Location:

Racine, Wisconsin

Sample ID:

BA 1-1

ug/kg, dry weight basis

Date Collected:

07/19/07

100

Sample Type:

Soil

Dilution Factor: Lab Sample Number: 42470

Solids, Total:

87.5%

Compound	Reporting <u>Limit</u>		Sample <u>Result</u>
Vinyl Chloride	25	<	2500
c-1,2-Dichloroethene	25	<	2500
Trichloroethene	25	<	2500
Tetrachloroethene	25		130000
Dibromofluorobenzene			97.4%
Toluene-D8			102%
4-Bromofluorobenzene			98.9%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/24/07

Project Location:

Racine, Wisconsin

Concentration:

Sample ID:

BA 2-1

Dilution Factor:

ug/kg, dry weight basis

Date Collected:

07/19/07

1

Sample Type:

Soil

Solids, Total:

85.0%

Lab Sample Number:	42471
--------------------	-------

Compound	Reporting <u>Limit</u>		ample <u>Result</u>
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25		650
Dibromofluorobenzene			102%
Toluene-D8			101%
4-Bromofluorobenzene			102%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number: ECI-01-2300-3057 Date Analyzed: 07/24/07

Project Location: Racine, Wisconsin Concentration: ug/kg, dry weight basis

Sample ID: BA 2-2 Dilution Factor: 1
Date Collected: 07/19/07 Lab Sample Number: 42472

Sample Type: Soil Solids, Total: 88.3%

Compound	Reporting <u>Limit</u>		Sample Result
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25		700
Dibromofluorobenzene			101%
Toluene-D8			101%
4-Bromofluorobenzene			98.2%

Method Reference: Modified 8260 WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/24/07

Project Location:

Racine, Wisconsin

Concentration:

ug/kg, dry weight basis

Sample ID:

BA 3-1

Dilution Factor:

Date Collected:

07/19/07

Lab Sample Number:

42473

Sample Type:

Soil

Solids, Total:

86.5%

Compound	Reporting <u>Limit</u>		Sample Result
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25		1200
Dibromofluorobenzene			106%
Toluene-D8			98.8%
4-Bromofluorobenzene			102%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number: Date Analyzed: ECI-01-2300-3057 07/24/07

Concentration: Project Location: Racine, Wisconsin ug/kg, dry weight basis

Dilution Factor: Sample ID: BA 3-2 Date Collected: 07/19/07 Lab Sample Number: 42474

Soil

87.5%

Reporting Sample Compound **Limit** Result Vinyl Chloride 25 < 25 c-1,2-Dichloroethene 25 < 25 25 25 < 25 1300 105%

Trichloroethene Tetrachloroethene Dibromofluorobenzene Toluene-D8 101% 4-Bromofluorobenzene 101%

Method Reference: Modified 8260 WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Sample Type:

Solids, Total:

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/24/07

Project Location:

Racine, Wisconsin

Concentration:

ug/kg, dry weight basis

Sample ID:

BA 4-1

Dilution Factor:

Date Collected:

07/19/07

Lab Sample Number:

42475

Sample Type:

Soil

Solids, Total:

82.9%

Compound	Reporting <u>Limit</u>		ample Result
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25		690
Dibromofluorobenzene			107%
Toluene-D8			101%
4-Bromofluorobenzene			103%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number: ECI-01-2300-3057 Date Analyzed: 07/24/07

Project Location: Racine, Wisconsin Concentration: ug/kg, dry weight basis

Sample ID: BA 4-2 Dilution Factor: 1
Date Collected: 07/19/07 Lab Sample Number: 42476

Sample Type: Soil Solids, Total: 87.0%

Compound	Reporting <u>Limit</u>		Sample <u>Result</u>
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25		1000
Dibromofluorobenzene			<b>106%</b>
Toluene-D8			101%
4-Bromofluorobenzene			99.6%

Method Reference: Modified 8260 WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/24/07

Project Location:

Racine, Wisconsin

Concentration:

ug/kg, dry weight basis

Sample ID:

BA 5-1

Lab Sample Number:

Date Collected:

07/19/07

Dilution Factor:

42477

Sample Type:

Soil

Solids, Total:

83.9%

Compound	Reporting <u>Limit</u>		ample Result
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25	<	25
Dibromofluorobenzene			109%
Toluene-D8			102%
4-Bromofluorobenzene			105%

Method Reference: Modified 8260 WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number: ECI-01-2300-3057 Date Analyzed: 07/24/07

Project Location: Racine, Wisconsin Concentration: ug/kg, dry weight basis

Sample ID: BA 5-2 Dilution Factor: 1
Date Collected: 07/19/07 Lab Sample Number: 42478

Sample Type: Soil Solids, Total: 84.7%

Compound	Reporting <u>Limit</u>		ample <u>Result</u>
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25		43
Dibromofluorobenzene			103%
Toluene-D8			99.4%
4-Bromofluorobenzene			99.6%

Method Reference: Modified 8260 WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/24/07

1

42479

Project Location:

Racine, Wisconsin

Concentration:

ug/kg, dry weight basis

Sample ID:

BA 6-1

Dilution Factor:

Date Collected:

07/19/07

Lab Sample Number:

Sample Type:

Soil

Solids, Total:

75.6%

Compound	Reporting <u>Limit</u>	Sample <u>Result</u>
Vinyl Chloride	25	< 25
c-1,2-Dichloroethene	25	< 25
Trichloroethene	25	< 25
Tetrachloroethene	25	56
Dibromofluorobenzene		110%
Toluene-D8		102%
4-Bromofluorobenzene		104%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Date Analyzed:

Concentration:

Project Number:

ECI-01-2300-3057

07/24/07

Project Location:

Racine, Wisconsin

Sample ID:

ug/kg, dry weight basis

BA 6-2

Date Collected:

07/19/07

Dilution Factor:

Sample Type: Solids, Total:

Soil 86.6% Lab Sample Number:

42480

Compound		
Vinyl Chlor	i	

Toluene-D8

Vinyl Chloride c-1,2-Dichloroethene

Trichloroethene

Tetrachloroethene Dibromofluorobenzene

4-Bromofluorobenzene

Reporting Sample Limit Result

25 < 25

25 < 25 25 25 <

25 74

102% 101%

99.6%

Method Reference: Modified 8260 WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

07/24/07

Project Number: ECI-01-2300-3057 Date Analyzed:

Project Location: Racine, Wisconsin Concentration: ug/kg, dry weight basis

Sample ID: BA 7-1 Dilution Factor: 1
Date Collected: 07/19/07 Lab Sample Number: 42481

Sample Type: Soil
Solids, Total: 78.2%

Compound	Reporting <u>Limit</u>	Sample <u>Result</u>	
Vinyl Chloride	25	< 25	
c-1,2-Dichloroethene	25	< 25	
Trichloroethene	25	< 25	
Tetrachloroethene	25	84	
Dibromofluorobenzene		112%	
Toluene-D8		99.8%	
4-Bromofluorobenzene		105%	

Method Reference: Modified 8260 WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/24/07

Project Location:

Racine, Wisconsin

Concentration:

ug/kg, dry weight basis

Sample ID:

BA 7-2

Dilution Factor:

Date Collected: Sample Type:

07/19/07

Lab Sample Number:

42482

Soil

Solids, Total:

85.7%

Compound	Reporting <u>Limit</u>		Sample <u>Result</u>
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25		380
Dibromofluorobenzene			104%
Toluene-D8			102%
4-Bromofluorobenzene			99.2%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/24/07

Project Location:

Racine, Wisconsin

Concentration:

ug/kg, dry weight basis

Sample ID:

BA 8-1

Lab Sample Number:

Date Collected:

07/19/07

Dilution Factor:

42483

Sample Type:

Soil

Solids, Total:

87.2%

Compound	Reporting <u>Limit</u>		ample Result
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25	<	25
Dibromofluorobenzene			112%
Toluene-D8			99.0%
4-Bromofluorobenzene			104%

Method Reference: Modified 8260 WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/24/07

Project Location:

Racine, Wisconsin

Concentration:

ug/kg, dry weight basis

Sample ID:

BA 8-2

Dilution Factor:

Lab Sample Number:

Date Collected:

07/19/07

42484

Sample Type:

Soil

Solids, Total:

87.6%

Compound	Reporting <u>Limit</u>		ample <u>Result</u>
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25	<	25
Dibromofluorobenzene			105%
Toluene-D8			101%
4-Bromofluorobenzene			101%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number: ECI-01-2300-3057 Date Analyzed: 07/24/07

Project Location: Racine, Wisconsin Concentration: ug/kg, dry weight basis

Sample ID: BA 9-1 Dilution Factor: 1
Date Collected: 07/19/07 Lab Sample Number: 42485

Sample Type: Soil Solids, Total: 83.6%

Compound	Reporting <u>Limit</u>		ample <u>Result</u>
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25		33
Dibromofluorobenzene			109%
Toluene-D8			102%
4-Bromofluorobenzene			102%

Method Reference: Modified 8260 WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number: ECI-01-2300-3057 Date Analyzed: 07/24/07

Project Location: Racine, Wisconsin Concentration: ug/kg, dry weight basis

Sample ID: BA 9-2 Dilution Factor: 1
Date Collected: 07/19/07 Lab Sample Number: 42486

Sample Type: Soil Solids, Total: 85.7%

Compound	Reporting <u>Limit</u>		Sample <u>Result</u>	
Vinyl Chloride	25	<	25	
c-1,2-Dichloroethene	25	<	25	
Trichloroethene	25	<	25	
Tetrachloroethene	25		1200	M
Dibromofluorobenzene			104%	
Toluene-D8			<b>102%</b>	
4-Bromofluorobenzene			100%	

M = Matrix Spike and/or Matrix Spike Duplicate recovery was outside acceptance limits.

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, W! 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/24/07

Project Location:

Racine, Wisconsin

Concentration:

Sample ID:

Blank

Dilution Factor:

ug/kg, as is basis

Date Collected:

07/19/07

Lab Sample Number:

42487

Sample Type:

Soil

Compound	Reporting <u>Limit</u>		ample Result
Vinyl Chloride	25	<	25
c-1,2-Dichloroethene	25	<	25
Trichloroethene	25	<	25
Tetrachloroethene	25	<	25
Dibromofluorobenzene			92.4%
Toluene-D8			105%
4-Bromofluorobenzene			100%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number: Date Analyzed: 07/23/07 ECI-01-2300-3057 Project Location: Racine, Wisconsin Concentration: ug/L Sample ID: Dilution Factor: 1000 VP1 Date Collected: 07/20/07 Lab Sample Number: 42467

Sample Type: Air

Compound	Reporting Detection <u>Limit</u>	Quantitation <u>Limit</u>		Sample <u>Result</u>
Vinyl Chloride	0.50	1.7	<	500
c-1,2-Dichloroethene	0.50	1.7	<	500
Trichloroethene	0.50	1.7	<	500
Tetrachloroethene	0.50	1.7		6300
Dibromofluorobenzene				101%
Toluene-D8				98.6%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:ECI-01-2300-3057Date Analyzed:07/23/07Project Location:Racine, WisconsinConcentration:ug/LSample ID:VP2Dilution Factor:1Date Collected:07/20/07Lab Sample Number:42468

Sample Type: Air

Compound	Reporting Detection <u>Limit</u>	Quantitation <u>Limit</u>		Sample <u>Result</u>
Vinyl Chloride	0.50	1.7	<	0.50
c-1,2-Dichloroethene	0.50	1.7	<	0.50
Trichloroethene	0.50	1.7	<	0.50
Tetrachloroethene	0.50	1.7		14
Dibromofluorobenzene				104%
Toluene-D8				102%

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed: 07/23/07 Concentration:

Lab Sample Number:

**Project Location:** 

Racine, Wisconsin

ug/L

42469

Sample ID: Date Collected:

VP3 07/20/07 Dilution Factor: 1

Sample Type:

Air

Reporting Quantitation **Detection** Sample Compound Limit **Limit** Result Vinyl Chloride 0.50 0.50 1.7 < c-1,2-Dichloroethene 0.50 1.7 < 0.50 Trichloroethene 0.50 0.50 1.7 8.2 Tetrachloroethene 0.50 1.7 99.4% Dibromofluorobenzene 106% Toluene-D8

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

Project Number:

ECI-01-2300-3057

Date Analyzed:

07/23/07

Project Location:

Racine, Wisconsin

07/20/07

Concentration:

ug/L

Sample ID: Date Collected: ZG

Dilution Factor:

Sample Type:

Air

Lab Sample Number:

42488

Reporting

Detection <u>Limit</u>	Quantitation <u>Limit</u>	,	Sample <u>Result</u>	
0.50	1.7	<	0.50	$\mathbf{M}$
0.50	1.7	<	0.50	
0.50	1.7	<	0.50	
0.50	1.7		8.1	$\mathbf{M}$
			99.4%	
			102%	
	Detection <u>Limit</u> 0.50  0.50  0.50	Detection         Quantitation           Limit         Limit           0.50         1.7           0.50         1.7           0.50         1.7           0.50         1.7	Detection Limit         Quantitation Limit           0.50         1.7         <	Detection Limit         Quantitation Limit         Sample Result           0.50         1.7         < 0.50

M = Matrix Spike and/or Matrix Spike Duplicate recovery was outside acceptance limits.

Method Reference: Modified 8260

WI Lab Certification #113289110

E.C.C.S. 2525 Advance Road Madison, WI 53718 Phone: (608)221-8700 Fax: (608)221-4889

Approved by:

## ▲ Northern Environmental\*

### **CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS**

Hydrologists • Engineers • Surveyors • Scientists

•	Check office	e originating reque	est L	Green 920-55 FAX 9 12075 Meque 262-2	ircle Drive n Bay, WI 54304 92-8400 120-592-8444 N. Corporate Pkwy, S. on, WI 53092 41-3133 162-241-8222	te 210	Pa 71 Fa 12 Wa 92	0 South 4 5-762-15 X 715-76 03 Storbe aupun, W 10-324-86 X 920-32	WI 54552 44 2-1844 eck Drive 1 53963			North 847-5 FAX	Acader brook, 562-85 847-56 West U hfield, 186-13 715-48	IL 60 77 22-855 pham WI 54	062 2 Street 449	ı	[	Ci   31   Fi   15   Li	349 So edar F 19-365 AX 315 5851 S ansing 17-702 AX 511	Rapids 5-0466 9-365- 6. U.S. 6. MI 4 2-0470	27 - 18906	2404	0, Sui	ite 318		.3	2			
	Project No	E(1-01	- 238	k No:	57		Laborate		Ecc	5	777484				tegrity						ing la	b								
	Project Lo (city)	cation: RAC	INE			1	Wiscons Certifica	sin DNR tion #:							f shipr Tempe		•			°C	Refrig	erato	r No.							
	Project Ma	anager: CHR	is H	ATFIEL	-0	1	Laborate	ory ct:	Thris	A									ANA					TED						
Ī	Sampler: (name)	JOHN	Time	11115		1	Price Qu			-/-	2.11		(pg	(po	6	(0;	_	_	_				4							
ŀ	Sampler:	A 1	)mi				TL	IRNARO	DUND T	IME R	EQUIR	ED	Meth	Meth	802	9 805	8021					SCE	110							
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-		01/	2010	1		_	_				1		Mod	Mod	PA M	PAM	A Me	PAH (EPA Method	Pb (EPA Method			3	1							
	Reports to Sent to:	Corre		thold			Date N		-1	27	101		S.	N.	X (E	C (E	EP CE	(EP)	EPA	4	47	5	12							
	Lab ID No.	Sample No.	Date	ection Time	No. of Containe Size & Type	rs,	Water	Description Soil	Other		Preserva	ative	DRC	GR	BEI	M	Š	PA	Pb	5	1	Ü	7.							
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### Northern Environmental\*

Company

#### CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

Time:

Hydrologists • Engineers • Surveyors • Scientists Check office originating request 954 Circle Drive 330 South 4th Avenue 647 Academy Drive 3349 Southgate Court SW #102 Green Bay, WI 54304 Park Falls, WI 54552 Northbrook, IL 60062 Cedar Rapids, IA 52404 920-592-8400 715-762-1544 847-562-8577 319-365-0466 FAX 847-562-8552 FAX 920-592-8444 Fax 715-762-1844 FAX 319-365-0464 12075 N. Corporate Pkwy, Ste 210 1203 Storbeck Drive 203 West Upham Street 15851 S. U.S. 27 - Blg. 30, Suite 318 Meauon, WI 53092 Waupun, WI 53963 Marshfield, WI 54449 Lansing, MI 48906 1610.32 262-241-3133 920-324-8600 715-486-1300 517-702-0470 FAX 262-241-8222 FAX 920-324-3023 FAX 715-486-1313 FAX 517-702-0477 Project No: Sample Integrity - To be completed by receiving lab ECI-01-2300-3057 Laboratory: ECLS Seal intact upon receipt \_\_\_\_\_ yes \_\_\_\_ no Wisconsin DNR Certification #: Project Location: (city) Method of shipment Contents Temperature °C Refrigerator No. Project Manager: Laboratory ANALYSES REQUESTED Contact: Sampler: Price Quote: DRO (WI Modified Method) GRO (WI Modified Method) PVOC (EPA Method 8020) BETX (EPA Method 8020) (name) VOC (EPA Method 8021) TURNAROUND TIME REQUIRED Sampler: (Signature) PAH (EPA Method Sampling Date(s) Pb (EPA Method Reports to be Sent to: Date Needed No. of Containers, Size & Type Description Collection Lab ID No. Sample No. Preservative Water Other Soil Date Time -40 mg 2402 1320 168 1346 14)0 1417 1430 1447 500 1505 1533 Comments: Packed for Shipping by mice Shipment Date: Relinquished By: Date: Relinquished By: Date: Relinquished By Company: Time: Time: Time: Company: Company Date: Received By: Received By: Date:

Company:

Time:

Company:

### **▲ Northern Environmental**\*

### **CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS**

Page 2 of 2No: 23080

Hydrologists • Engineers • Surveyors • Scientists

Hydrologists • Engineers • Surveyors • Scie	INTISTS	•				
Green 920-5	Circle Drive on Bay, WI 54304 192-8400 120-592-8444	330 South 4th Avenue Park Falls, WI 54552 715-762-1544 Fax 715-762-1844	North 847-5	Academy Drive brook, IL 60062 62-8577 847-562-8552	3349 Southgate Court SW #102 Cedar Rapids, IA 52404 319-365-0466 FAX 319-365-0464	
Mequ 262-2	5 N. Corporate Pkwy, Ste 210 on, WI 53092 141-3133 262-241-8222	1203 Storbeck Drive Waupun, Wi 53963 920-324-8600 FAX 920-324-3023	Marsa 715-4	Vest Upham Street hfield, WI 54449 186-1300 715-486-1313	15851 S. U.S. 27 - Big. 30, Suite 318 Lansing, MI 48906 517-702-0470 FAX 517-702-0477	3ン
Project No: ECI-01- 2300- 305		Laboratory: ECC5		Seal intact upon receipt	completed by receiving lab	
Project Location: RACINE	į.	Wisconsin DNR Certification #:		Method of shipment Contents Temperature	°C Refrigerator No.	. ,
Project Manager: CHRIS HATFIEL	0	Laboratory Chris			ANALYSES REQUESTED	
Sampler: (name) John Timm		Disc Out	••	TO TO S. S.		
Sampler:		TURNAROUND TIME	E REQUIRED	fetho fetho 8020 8020	4 W	
(Signature)			A	ed N ind ithod		
Sampling Date(s): 0 7/20/07		Normal N	Rush	A Met	Meth Meth	
Reports to be Sent to: Chais Harhald		Date Needed 7/27	רטן	WI N WI N (EPA (EPA	S A M A M A M A M A M A M A M A M A M A	
Lab Sample No. Collection	No. of Containers,	Description	Preservative	DRO (WI Modified Method) GRO (WI Modified Method) BETX (EPA Method 8020) PVOC (EPA Method 8020)	Pah (EPa Method Po (E	
		Water Soil Other	14			
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RH87 BLANK	1-40m2		<u> </u>	<del> </del>		
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Received By:	Pate/21/07	Received By:		Date:	Received By:	Date:
Company: Ecc >	Time &	Company:		Time:	Company:	Time:
	<del> </del>					



1241 Bellevue Street, Suite 9 Green Bay, WI 54302 920-469-2436, Fax: 920-469-8827

#### Analytical Report Number: 886372

Client: NORTHERN ENVIRONMENTAL

Lab Contact: Laurie Woelfel

Project Name: RACINE

Project Number: EC1-01-2300-305

Lab Sample Number	Field ID	Matrix	Collection Date
886372-001	PEAS	BIOTA	07/20/07
886372-002	TOMATO EAST	BIOTA	07/20/07
886372-003	TOMATO WEST	BIOTA	07/20/07

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

#### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



Approval Signature

7/26/0

Page 1 of

Date

### **Analytical Report Number: 886372**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC1-01-2300-305

Field ID: PEAS

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST						Prep Date/Time: 07/24/0	7 7:53 PM AI	ni By: TLT
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	•
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 10:42 AM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 10:42 AM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 10:42 AM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.6	2.6	8.8		1	ug/Kg	07/24/07 10:42 AM	SW846 5035	SW846 8260B
Surrogate .		LCL	UCL						
4-Bromofluorobenzene	95	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	106	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	99	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

#### Analytical Report Number: 886372

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC1-01-2300-305

Field ID: TOMATO

Matrix Type : BIOTA

Collection Date: 07/20/07 Report Date: 07/25/07

<b>VOLATILES - SPECIAL</b>	LIST			Prep Date/Time: 07/24/07 7:53 PM Ani By: TLT							
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Ani Date/Time	Prep Method	Anl Method		
cis-1,2-Dichloroethene	< 1.5	1.5	5.1		1	ug/Kg	07/24/07 11:06 AM	SW846 5035	SW846 8260B		
Tetrachloroethene	< 5.8	5.8	19		1	ug/Kg	07/24/07 11:06 AM	SW846 5035	SW846 8260B		
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/24/07 11:06 AM	SW846 5035	SW846 8260B		
Vinyl Chloride	< 2.7	2.7	9.0		1	ug/Kg	07/24/07 11:06 AM	SW846 5035	SW846 8260B		
Surrogate		LCL	UCL								
4-Bromofluorobenzene	93	42	125		1	%	07/24/07	SW846 5035	SW846 8260E		
Toluene-d8	108	54	150		1	%	07/24/07	SW846 5035	SW846 8260E		
Dibromofluoromethane	99	68	125		1	%	07/24/07	SW846 5035	SW846 8260B		

**Analytical Report Number: 886372** 

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC1-01-2300-305

Field ID: TOMATO WEST

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST						Prep Date/Time: 07/24/0	7 7:53 PM Ar	ol By: TLT
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 11:29 AM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.6	5.6	19		1	ug/Kg	07/24/07 11:29 AM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 11:29 AM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.6	2.6	8.7		1	ug/Kg	07/24/07 11:29 AM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	94	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	109	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	99	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

### **Qualifier Codes**

Flag A	<del></del>	Explanation  Analytic is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
3	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
3	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
3	Ail	Elevated detection limit.
)	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
•	Organic	Analyte concentration exceeds calibration range.
•	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
	Organic	Surrogate results outside control criteria.
}	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
ł	All	Preservation, extraction or analysis performed past holding time.
ŀF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
(	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
	All	Elevated detection limit due to low sample volume.
I	Organic	Sample pH was greater than 2
	All	Spiked sample recovery not within control limits.
	Organic	Sample received overweight.
	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
	All	The analyte was not detected at or above the reporting limit.
	All	Sample received with headspace.
,	All	A second aliquot of sample was analyzed from a container with headspace.
	Ail	See Sample Narrative.
	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
	All	Laboratory Control Spike recovery not within control limits.
	All	Precision not within control limits.
	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
	Ali	The analyte was not detected at or above the reporting limit.
	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

### Analysis Summary by Laboratory

1241 Bellevue Street Green Bay, WI 54302

Test Group Name	886372-001	886372-002	886372-003	
BIOTA PREP	В	В	В	
VOLATILES - SPECIAL LIST	G	G	G	

l	Code	WI Certification
	В	Not Certified
İ	G	405132750
ı		

#### Sample Condition Upon Receipt

Pace Analytical Client Name	: NORTHERN GNV. Project # 82	36372
Courier: Fed Ex UPS USPS Clie Tracking #:	nt L Commercial L Pace Other	
Custody Seal on Cooler/Box Present:  yes	no Seals intact:  yes no	
Packing Material: Bubble Wrap Bubble	Bags None Other 210/ock	
Thermometer Used N/A	Type of Ice: Wet Blue None Samples on ice, cooling	
Cooler Temperature 201	Biological Tissue is Frozen: Yes No Date and Initials of contents:	person examining
Temp should be above freezing to 6°C	Comments:	THO V
Chain of Custody Present:	Yes ONO ON/A 1.	
Chain of Custody Filled Out:	ØYes □No □N/A 2.	
Chain of Custody Relinquished:	ØYes □No □N/A 3.	
Sampler Name & Signature on COC:	ØYes DNo DN/A 4.	
Samples Arrived within Hold Time:	Dres Ono On/A 5.	
Short Hold Time Analysis (<72hr):	□Yes ☑No □N/A 6.	
Rush Turn Around Time Requested:	ØYes □No □N/A 7. 7/2 7	
Sufficient Volume:	ØYes □No □N/A 8.	
Correct Containers Used:	OYes ZNO ONA 9.	
-Pace Containers Used:	□Yes □No □N/A	
Containers Intact:	ØYes □No □N/A 10.	
Filtered volume received for Dissolved tests	□Yes □No 1N/A 11.	
Sample Labels match COC:	12. SEE BELOW	
-Includes date/time/ID/Analysis Matrix:	Biote	
All containers needing preservation have been checked.	□Yes □No ØNA 13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No □MA	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	Initial when	
Samples checked for dechlorination:	□Yes □No □N/A 14.	
Headspace in VOA Vials ( >6mm):	□Yes □No □N/A 15.	
Trip Blank Present:	□Yes □No ØNJA 16.	
Trip Blank Custody Seals Present	□Yes □No ZIN/A	
Pace Trip Blank Lot # (if purchased):	·	
Client Notification/ Resolution:	Field Data Required?	Y / N
Person Contacted:	Date/Time:	
Comments/ Resolution:  AODED "TOMATOE WEST"	o roc. There are 2 tomatoe S	amples
with GAST +WEST on	Samples - COC DOES NOT IDENTIF	ey au
9AST of WEST		
	15 7/21 67	
Project Mahager Review:	i Date: 7/23	In

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e out of hold, incorrect preservative, out of temp, incorrect containers)

### Northern Environmental\*

Time:

Company:

Time:

Company:

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS Hydrologists • Engineers • Surveyors • Scientists Check office originating request 954 Circle Drive 330 South 4th Avenue 647 Academy Drive 3349 Southgate Court SW #102 Green Bay, WI 54304 Park Falls, WI 54552 Northbrook, IL 60062 Cedar Rapids, IA 52404 920-592-9400 715-762-1544 847-562-8577 319-365-0466 FAX 920-592-8444 Fax 715-762-1844 FAX 847-562-8552 FAX 319-365-0464 203 West Upham Street 12075 N. Corporate Pkwy, Ste 210 1203 Storbeck Drive 15851 S. U.S. 27 - Big. 30, Suite 318 Meguon, WI 53092 Marshfield, WI 54449 Waupun, WI 53963 Lansing, MI 48906 262-241-3133 920-324-8600 715-486-1300 517-702-0470 FAX 920-324-3023 FAX 262-241-8222 FAX 715-486-1313 FAX 517-702-0477 Project No: E(1-0)- 2305-3057 Laboratory: Sample Integrity - To be completed by receiving lab Seal intact upon receipt ves no Wisconsin DNR Certification #: Method of shipment Project Location: Contents Temperature °C Refrigerator No. Project Manager: Laboratory Contact: **ANALYSES REQUESTED** Sampler: Price Quote: De comil DRO (WI Modified Method) GRO (WI Modified Method) BETX (EPA Method 8020) PVOC (EPA Method 8020) VOC (EPA Method 8021) TURNAROUND TIME REQUIRED Sampler: (Signature) PAH (EPA Method Sampling Date(s Reports to be Date Needed No. of Containers, Size & Type Collection Description | Soil Sample No. Preservative Lab ID No. Water Other Date Time 1900 TOMATOS 003 POTMATORS \* ADDED TO 00LB4 Comments: Relinquished By: Date: Relinquished By: Date: Time: Company: Time: ヹゔゝ Received By: Date: Received By: Date:



1241 Bellevue Street, Suite 9 Green Bay, WI 54302 920-469-2436, Fax: 920-469-8827

#### **Analytical Report Number: 886374**

Client: NORTHERN ENVIRONMENTAL

Lab Contact: Laurie Woelfel

Project Name: RACINE

Project Number: EC101-2300-3057

Lab Sample Number	Field ID	Matrix	Collection Date	Lab Sample Number	Field ID	Matrix	Collection Date
886374-001	COLLARD GREENS W-11	ВІОТА	07/20/07	886374-022	RHUBARB E	BIOTA	07/20/07
886374-002	COLLARD GREENS E-25	BIOTA	07/20/07	886374-023	PEPPER E-30	BIOTA	07/20/07
886374-003	MUSTARD W-10	BIOTA	07/20/07	886374-024	RED ONIONS W-9	BIOTA	07/20/07
886374-004	SWISS CHARD W-8	BIOTA	07/20/07	886374-025	RED ONIONS W-21	BIOTA	07/20/07
886374-005	BEETS W-7	BIOTA	07/20/07	886374-026	WHITE ONIONS W	BIOTA	07/20/07
886374-006	TURNIPS W-17	BIOTA	07/20/07	886374-027	WHITE ONIONS E-26	BIOTA	07/20/07
886374-007	MUSTARD E-20	BIOTA	07/20/07	886374-028	BROCCOLI W-19	BIOTA	07/20/07
886374-008	TURNIPS E-28	BIOTA	07/20/07	886374-029	BROCCOLI E-23	BIOTA	07/20/07
886374-009	TURNIP GREEN W-15	BIOTA	07/20/07				
886374-010	DILL W	BIOTA	07/20/07				
886374-011	DILL BLUE POTS	BIOTA	07/20/07				
886374-012	LEEK W	BIOTA	07/20/07				
886374-013	ZUCCHINI BLUE	BIOTA	07/20/07				
886374-014	SEED ONIONS E	BIOTA	07/20/07	•			
886374-015	RUTTABAGA E	BIOTA	07/20/07				
886374-016	OKRA E	BIOTA	07/20/07				
886374-017	CARROTS W-12	BIOTA	07/20/07				
886374-018	CARROTS E-34	BIOTA	07/20/07				
886374-019	KOHLORABI E-22	BIOTA	07/20/07				
886374-020	KALE W-4	BIOTA	07/20/07				
886374-021	KALE W-21	BIOTA	07/20/07				

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

#### REPORT OF LABORATORY ANALYSIS

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**Approval Signature** 

Date

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### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: COLLARD GREENS W-11

Matrix Type: BIOTA

Collection Date: 07/20/07 Report Date: 07/25/07

<b>VOLATILES - SPECIAL</b>	LIST						Prep Date/Time: 07/24/07 7:53 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method		
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 11:53 AM	SW846 5035	SW846 8260B		
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 11:53 AM	SW846 5035	SW846 8260B		
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 11:53 AM	SW846 5035	SW846 8260B		
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 11:53 AM	SW846 5035	SW846 8260B		
Surrogate		LCL	ŲCL								
4-Bromofluorobenzene	86	42	125		1	%	07/24/07	SW846 5035	SW846 8260B		
Toluene-d8	110	54	150		1	%	07/24/07	SW846 5035	SW846 8260B		
Dibromofluoromethane	100	68	125		1	%	07/24/07	SW846 5035	SW846 8260B		

### Analytical Report Number: 886374

1241 Bellevue Street Green Bay, Wi 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name : RACINE

Project Number: EC101-2300-3057

Field ID: COLLARD GREENS E-25

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST						Prep Date/Time: 07/24/07 7:53 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method		
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 10:19 AM	SW846 5035	SW846 8260B		
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 10:19 AM	SW846 5035	SW846 8260B		
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 10:19 AM	SW846 5035	SW846 8260B		
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 10:19 AM	SW846 5035	SW846 8260B		
Surrogate		LCL	UCL								
4-Bromofluorobenzene	89	42	125		1	%	07/24/07	SW846 5035	SW846 8260B		
Toluene-d8	108	54	150		1	%	07/24/07	SW846 5035	SW846 8260B		
Dibromofluoromethane	101	68	125		1	%	07/24/07	SW846 5035	SW846 8260B		

### Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: MUSTARD W-10

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

<b>VOLATILES - SPECIAL</b>	LIST						Prep Date/Time: 07/24/07 7:53 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method		
cis-1,2-Dichloroethene	< 1.6	1.6	5.2		1	ug/Kg	07/24/07 12:16 PM	SW846 5035	SW846 8260B		
Tetrachloroethene	< 5.9	5.9	20		1	ug/Kg	07/24/07 12:16 PM	SW846 5035	SW846 8260B		
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/24/07 12:16 PM	SW846 5035	SW846 8260B		
Vinyl Chloride	< 2.7	2.7	9.1		1	ug/Kg	07/24/07 12:16 PM	SW846 5035	SW846 8260B		
Surrogate		LCL	UCL								
4-Bromofluorobenzene	110	42	125		1	%	07/24/07	SW846 5035	SW846 8260B		
Toluene-d8	106	54	150		1	%	07/24/07	SW846 5035	SW846 8260B		
Dibromofluoromethane	97	68	125		1	%	07/24/07	SW846 5035	SW846 8260B		

Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: SWISS CHARD W-8

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 7:53 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 12:39 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 12:39 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 12:39 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 12:39 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCŁ						
4-Bromofluorobenzene	97	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	110	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	98	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: BEETS W-7

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST						Prep Date/Time: 07/24/0	7:53 PM A	nl By: TLT
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 1:03 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 1:03 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 1:03 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.6	2.6	8.8		1	ug/Kg	07/24/07 1:03 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	100	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	108	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	101	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

#### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Matrix Type: BIOTA
Collection Date: 07/20/07

Project Name: RACINE
Project Number: EC101-2300-3057
Field ID: TURNIPS W-17

Lab Sample Number: 886374-006

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST						Prep Date/Time: 07/24/07 7:53 PM Anl By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Ani Date/Time	Prep Method	Ani Method		
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 1:26 PM	SW846 5035	SW846 8260B		
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 1:26 PM	SW846 5035	SW846 8260B		
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 1:26 PM	SW846 5035	SW846 8260B		
Vinyl Chloride	< 2.6	2.6	8.8		1	ug/Kg	07/24/07 1:26 PM	SW846 5035	SW846 8260B		
Surrogate		LCL	UCL								
4-Bromofluorobenzene	97	42	125		1	%	07/24/07	SW846 5035	SW846 8260B		
Toluene-d8	105	54	150		1	%	07/24/07	SW846 5035	SW846 8260B		
Dibromofluoromethane	99	68	125		1	%	07/24/07	SW846 5035	SW846 8260B		

### Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: MUSTARD E-20

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST						Prep Date/Time: 07/24/07 7:53 PM Anl By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Ani Date/Time	Prep Method	Anl Method		
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 1:49 PM	SW846 5035	SW846 8260B		
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 1:49 PM	SW846 5035	SW846 8260B		
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 1:49 PM	SW846 5035	SW846 8260B		
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 1:49 PM	SW846 5035	SW846 8260B		
Surrogate		LCL	UCL								
4-Bromofluorobenzene	101	42	125		1	%	07/24/07	SW846 5035	SW846 8260E		
Toluene-d8	112	54	150		1	%	07/24/07	SW846 5035	SW846 8260E		
Dibromofluoromethane	102	68	125		1	%	07/24/07	SW846 5035	SW846 8260B		

Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: TURNIPS E-28

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07 Lab Sample Number: 886374-008

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 7:53 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0	•	1	ug/Kg	07/24/07 2:13 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 2:13 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 2:13 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 2:13 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	96	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	107	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	100	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: TURNIP GREEN W-15

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 7:53 PM Anl By: TLT				
Analyte	Resuit	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.1		1	ug/Kg	07/24/07 2:36 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.8	5.8	19		1	ug/Kg	07/24/07 2:36 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/24/07 2:36 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	9.0		1	ug/Kg	07/24/07 2:36 PM	SW846 5035	SW846 8260B
Surrogate		LÇL	UCL						
4-Bromofluorobenzene	94	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	110	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	100	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

### Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Matrix Type: BIOTA
Collection Date: 07/20/07

Project Name: RACINE
Project Number: EC101-2300-3057

Report Date: 07/25/07

Field ID: DILLW

VOLATILES - SPECIAL	LIST			Prep Date/Time: 07/24/07 8:29 PM Anl By: TLT					
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 6:11 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 6:11 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 6:11 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 6:11 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	94	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	116	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	101	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: DILL BLUE POTS

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST			Prep Date/Time: 07/24/07 8:29 PM Anl By: TLT					
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.1		1	ug/Kg	07/24/07 6:35 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.8	5.8	19		1	ug/Kg	07/24/07 6:35 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/24/07 6:35 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	9.0		1	ug/Kg	07/24/07 6:35 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	92	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	112	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	97	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: LEEK W

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Ani Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 6:58 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 6:58 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	<b>1</b> 1		1	ug/Kg	07/24/07 6:58 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 6:58 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	94	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	103	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	80	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: ZUCCHINI BLUE

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST						Prep Date/Time: 07/24/07 8:29 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Ani Date/Time	Prep Method	Ani Method		
cis-1,2-Dichloroethene	< 1.5	1.5	5.0	_	1	ug/Kg	07/24/07 7:21 PM	SW846 5035	SW846 8260B		
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 7:21 PM	SW846 5035	SW846 8260B		
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 7:21 PM	SW846 5035	SW846 8260B		
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 7:21 PM	SW846 5035	SW846 8260B		
Surrogate		LCL	UCL								
4-Bromofluorobenzene	96	42	125		1	%	07/24/07	SW846 5035	SW846 8260B		
Toluene-d8	106	54	150		1	%	07/24/07	SW846 5035	SW846 8260B		
Dibromofluoromethane	96	68	125		1	%	07/24/07	SW846 5035	SW846 8260B		

### Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: SEED ONIONS E

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Anl By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.6	1.6	5.3		1	ug/Kg	07/24/07 7:45 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 6.0	6.0	20		1	ug/Kg	07/24/07 7:45 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.5	3.5	12		1	ug/Kg	07/24/07 7:45 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.8	2.8	9.3		1	ug/Kg	07/24/07 7:45 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	91	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	103	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	93	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

**Analytical Report Number: 886374** 

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: RUTTABAGA E

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07 Lab Sample Number: 886374-015

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 8:08 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 8:08 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 8:08 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 8:08 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	94	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	107	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	94	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: OKRA E

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

Lab Sample Number: 886374-016

Sample was prepped + analysis was ortherepted

Sample matrix prevented analysis from being completed and uported.

Cannot analyse okra - sample was "gunmy" after being prepped.

Chromatogram only showed "gurmy" un reliable peaks.

#### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: CARROTS W-12

Matrix Type: BIOTA

Collection Date: 07/20/07 Report Date: 07/25/07

VOLATILES - SPECIAL	LIST						Prep Date/Time: 07/24/0	7 8-29 PM A	ni By: TLT
							•		•
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.1		1	ug/Kg	07/24/07 8:55 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.8	5.8	19		1	ug/Kg	07/24/07 8:55 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/24/07 8:55 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	9.0		1	ug/Kg	07/24/07 8:55 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	90	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	111	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	87	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: CARROTS E-34

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST			Prep Date/Time: 07/24/07 8:29 PM Ani By: TLT					
Analyte .	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.1		1	ug/Kg	07/24/07 9:18 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.8	5.8	19		1	ug/Kg	07/24/07 9:18 PM ·	SW846 5035	SW846 8260B
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/24/07 9:18 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	9.0		1	ug/Kg	07/24/07 9:18 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	87	42	125	· .	1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	111	54	150		1	%	07 <i>/</i> 24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	87	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: KOHLORABI E-22

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Anl By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.6	1.6	5.3		1	ug/Kg	07/24/07 9:41 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 6.0	6.0	20		1	ug/Kg	07/24/07 9:41 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.5	3.5	12		1	ug/Kg	07/24/07 9:41 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.8	2.8	9.3		1	ug/Kg	07/24/07 9:41 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	94	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	107	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	89	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

Analytical Report Number: 886374

1241 Bellevue Street Green Bay, Wt 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Matrix Type: BIOTA
Collection Date: 07/20/07
Report Date: 07/25/07

Project Name: RACINE
Project Number: EC101-2300-3057
Field ID: KALE W-4

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.6	1.6	5.2		1	ug/Kg	07/24/07 10:05 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.9	5.9	20		1	ug/Kg	07/24/07 10:05 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/24/07 10:05 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	9.1		1	ug/Kg	07/24/07 10:05 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	85	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	117	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	90	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

### Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: KALE W-21

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Anl By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 10:28 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 10:28 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 10:28 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.6	2.6	8.8		1	ug/Kg	07/24/07 10:28 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	86	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	117	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	92	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

#### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: RHUBARB E

Matrix Type: BIOTA

Collection Date: 07/20/07

**Report Date:** 07/25/07 **Lab Sample Number:** 886374-022

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Anl By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.1		1	ug/Kg	07/24/07 10:52 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.8	5.8	19		1	ug/Kg	07/24/07 10:52 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/24/07 10:52 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	9.0		1	ug/Kg	07/24/07 10:52 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	93	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	108	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	91	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

#### Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: PEPPER E-30

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Anl By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.6	1.6	5.2		1	ug/Kg	07/24/07 11:15 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.9	5.9	20		1	ug/Kg	07/24/07 11:15 PM	SW846 5035	SW846 8260B
Trichloroethene .	< 3.5	3.5	12		1	ug/Kg	07/24/07 11:15 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.8	2.8	9.2		1	ug/Kg	07/24/07 11:15 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	88	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	108	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	90	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

#### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: RED ONIONS W-9

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07 Lab Sample Number: 886374-024

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/24/07 11:38 PM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.7	5.7	19		1	ug/Kg	07/24/07 11:38 PM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/24/07 11:38 PM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	8.9		1	ug/Kg	07/24/07 11:38 PM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	94	42	125		1	%	07/24/07	SW846 5035	SW846 8260B
Toluene-d8	106	54	150		1	%	07/24/07	SW846 5035	SW846 8260B
Dibromofluoromethane	90	68	125		1	%	07/24/07	SW846 5035	SW846 8260B

#### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: RED ONIONS W-21

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Anl By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.6	1.6	5.2		1	ug/Kg	07/25/07 12:02 AM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.9	5.9	20		1	ug/Kg	07/25/07 12:02 AM	SW846 5035	SW846 8260B
Trichloroethene	< 3.5	3.5	12		1	ug/Kg	07/25/07 12:02 AM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.8	2.8	9.2		1	ug/Kg	07/25/07 12:02 AM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	93	42	125		1	%	07/25/07	SW846 5035	SW846 8260B
Toluene-d8	106	54	150		1	%	07/25/07	SW846 5035	SW846 8260B
Dibromofluoromethane	88	68	125		1	%	07/25/07	SW846 5035	SW846 8260B

#### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Matrix Type: BIOTA
Collection Date: 07/20/07

Project Name: RACINE
Project Number: EC101-2300-3057

Report Date: 07/25/07

Field ID: WHITE ONIONS W

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Ani Method
cis-1,2-Dichloroethene	< 1.6	1.6	5.2		1	ug/Kg	07/25/07 12:25 AM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.9	5.9	20		1	ug/Kg	07/25/07 12:25 AM	SW846 5035	SW846 8260B
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/25/07 12:25 AM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	9.1		1	ug/Kg	07/25/07 12:25 AM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	92	42	125		1	%	07/25/07	SW846 5035	SW846 8260B
Toluene-d8	106	54	150		1	%	07 <i>1</i> 25/07	SW846 5035	SW846 8260B
Dibromofluoromethane	89	68	125		1	%	07/25/07	SW846 5035	SW846 8260B

#### Analytical Report Number: 886374

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: WHITE ONIONS E-26

Matrix Type: BIOTA

Collection Date: 07/20/07

Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Anl By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.0		1	ug/Kg	07/25/07 12:48 AM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.6	5.6	19		1	ug/Kg	07/25/07 12:48 AM	SW846 5035	SW846 8260B
Trichloroethene	< 3.3	3.3	11		1	ug/Kg	07/25/07 12:48 AM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.6	2.6	8.7		1	ug/Kg	07/25/07 12:48 AM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	94	42	125		1	%	07/25/07	SW846 5035	SW846 8260B
Toluene-d8	104	54	150		1	%	07/25/07	SW846 5035	SW846 8260B
Dibromofluoromethane	88	68	125		1	%	07/25/07	SW846 5035	SW846 8260B

#### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Matrix Type: BIOTA
Collection Date: 07/20/07

Project Name: RACINE

Report Date: 07/25/07

Project Number: EC101-2300-3057 Field ID: BROCCOLI W-19

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.1		1	ug/Kg	07/25/07 1:12 AM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.8	5.8	19		1	ug/Kg	07/25/07 1:12 AM	SW846 5035	SW846 8260B
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/25/07 1:12 AM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	9.0		1	ug/Kg	07/25/07 1:12 AM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	82	42	125		1	%	07/25/07	SW846 5035	SW846 8260B
Toluene-d8	114	54	150		1	%	07/25/07	SW846 5035	SW846 8260B
Dibromofluoromethane	90	68	125		1	%	07/25/07	SW846 5035	SW846 8260B

#### **Analytical Report Number: 886374**

1241 Bellevue Street Green Bay, WI 54302 920-469-2436

Client: NORTHERN ENVIRONMENTAL

Project Name: RACINE

Project Number: EC101-2300-3057

Field ID: BROCCOLI E-23

Matrix Type: BIOTA

Collection Date: 07/20/07 Report Date: 07/25/07

VOLATILES - SPECIAL	LIST				Prep Date/Time: 07/24/07 8:29 PM Ani By: TLT				
Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code Anl Date/Time	Prep Method	Anl Method
cis-1,2-Dichloroethene	< 1.5	1.5	5.1		1	ug/Kg	07/25/07 1:35 AM	SW846 5035	SW846 8260B
Tetrachloroethene	< 5.8	5.8	19		1	ug/Kg	07/25/07 1:35 AM	SW846 5035	SW846 8260B
Trichloroethene	< 3.4	3.4	11		1	ug/Kg	07/25/07 1:35 AM	SW846 5035	SW846 8260B
Vinyl Chloride	< 2.7	2.7	9.0		1	ug/Kg	07/25/07 1:35 AM	SW846 5035	SW846 8260B
Surrogate		LCL	UCL						
4-Bromofluorobenzene	85	42	125		1	%	07/25/07	SW846 5035	SW846 8260B
Toluene-d8	112	54	150		1	%	07/25/07	SW846 5035	SW846 8260B
Dibromofluoromethane	90	68	125		1	%	07/25/07	SW846 5035	SW846 8260B

Inorganic

		Explanation
Α	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
В	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
В	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
2	All	Elevated detection limit.
)	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
Ξ	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
Ξ	Organic	Analyte concentration exceeds calibration range.
=	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte habeen confirmed by and reported from an alternate method.
:	Organic	Surrogate results outside control criteria.
3	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
1	All	Preservation, extraction or analysis performed past holding time.
łF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
	Ali	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
	All	Elevated detection limit due to low sample volume.
	Organic	Sample pH was greater than 2
	All	Spiked sample recovery not within control limits.
)	Organic	Sample received overweight.
	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
!	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
}	All	The analyte was not detected at or above the reporting limit.
	All	Sample received with headspace.
•	Ail	A second aliquot of sample was analyzed from a container with headspace.
	All	See Sample Narrative.
	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
	All .	Laboratory Control Spike recovery not within control limits.
	All	Precision not within control limits.
	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
	All	The analyte was not detected at or above the reporting limit.
	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
	Inorgania	Comple was respined with insufficient proposition. Asid was added either at the time of respirit or at the time of severi-

Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Page 32

Pace Analytical Services, Inc.		₹	Analysis Summary by Laboratory	,si	S	E	Ĕ	<u> </u>	by	Ę,	poq	ate	č.						1241 3ree	Bell n Ba	evue Iy, V	1241 Bellevue Street Green Bay, WI 54302	eet 302		
Test Group Name	886374-001	886374-002	886374-004 886374-003	886374-005	886374-006	886374-007	886374-008	886374-009	886374-010	886374-011	886374-012	886374-013	886374-014	886374-016 886374-015	886374-017	886374-018	886374-019	886374-020	886374-021	886374-022	886374-023	886374-024	886374-025	886374-026	
BIOTA PREP	æ	В	В	B B	8	8	œ,	8	8	В	8	В	8	В	8 8	. B	89	8	8	В	В	В	æ	В	
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Test Group Name	886374-028 886374-027	886374-029	000274 000																						
BIOTA PREP	<u>a</u>	8	В																						
VOLATILES - SPECIAL LIST	ပ	ပ	ပ																						

Code WI Certification

B Not Certified

G 405132750

#### Sample Condition Upon Receipt

Pace Analytical Client Name	NORTHERN ENV Project # 886376	4
Courier: Fed Ex UPS USPS Clien	The state of the s	
Tracking #: Custody Seal on Cooler/Box Present: yes	no Seals intact: yes no	
Packing Material: Bubble Wrap Bubble	Bags None Other 2010CL	
Thermometer Used	Type of ice: (Wet) Blue None Samples on ice, cooling process has	s begun
Cooler Temperature NOS	Biological Tissue is Frozen: Yes No. Date and Initials of person exa	mining
Temp should be above freezing to 6°C	Comments:	71BV
Chain of Custody Present:	EYes ONO ONA 1.	
Chain of Custody Filled Out:	ØYes □No □N/A 2.	
Chain of Custody Relinquished:	ÆYes, □No □N/A 3.	
Sampler Name & Signature on COC:	ØYes ONO ON/A 4.	
Samples Arrived within Hold Time:	Øyes □No □N/A 5.	
Short Hold Time Analysis (<72hr):	□Yes □No □N/A 6.	
Rush Turn Around Time Requested:	ØYes □No □NA 7.7/27	
Sufficient Volume:	Dies Ono Ona 8.	
Correct Containers Used:	□Yes □No □N/A 9.	
-Pace Containers Used:	□Yes □No □N/A	
Containers Intact:	ØYes □No □N/A 10.	
Filtered volume received for Dissolved tests	□Yes □No □N/A 11.	
Sample Labels match COC:	BIOTE 12 MBSING 1 PEQ POOS W4	
-Includes date/time/ID/Analysis Matrix:	Dioty NS 7	12/10
All containers needing preservation have been checked.	□Yes □No □404 13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No □N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	Initial when Lot # of added  Completed preservative	
Samples checked for dechlorination:	□Yes □No □N/A 14.	
Headspace in VOA Vials ( >6mm):	□Yes □No □XVA 15.	
Trip Blank Present:	□Yes □No □MB 16.	
Trip Blank Custody Seals Present	□Yes □No ☑N/A	İ
Pace Trip Blank Lot # (if purchased):		l
Client Notification/ Resolution:	Field Data Required? Y /	N
		14
Person Contacted:  Comments/ Resolution:		
Project Mahager Review:	1 /e v Date: 7/23/0	

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e out of hold, incorrect preservative, out of temp, incorrect containers)

### **▲ Northern Environmental**\*

### **CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS**

Page	of 3	7
No. 23	076	دندل

Hydrologists • Engineers • Surveyors • Scientists

Green 920-59 FAX 92 12075 I Mequo 262-24	rcie Drive Bay, WI 54304 2-8400 10-592-8444 N. Corporate Pkwy, Ste 210 n, WI 53092 11-3133 32-241-8222	330 South 4th Park Falls, WI 715-762-1544 Fax 715-762-1  1203 Storbeck Waupun, WI 5: 920-324-8600 FAX 920-324-3	54552 North. 847-5 1844 FAX 8  & Drive 203 V 3963 Marst 715-4	cademy Drive brook, IL 60062 62-8577 47-562-8552 /est Upham Street fileld, WI 54449 86-1300 115-486-1313	3349 Southgate Court SW #102 Cedar Rapids, IA 52404 319-365-0466 FAX 319-365-0464  15851 S. U.S. 27 - Blg. 30, Sulte 318 Lansing, MI 48906 517-702-0470 FAX 517-702-0477							
Project No: ECI-01-2 Task No: 305 Project Location: CIVE Project Manager: CHRIS HATFI Sampler: (name) JOHN TIMM Sampler: (signature) Sampling Date(s): 7/20/07 Reports to be Sent to: Chni Hartid Lab Sample No. Date Time  Dol Pe-Pus W 7/20  OSE Collair Grees No. 1000 BEETS W-1  OOD BEETS W-1  OOD TURNIPS E-28  OOD TURNIPS GREEN  IMPORTANTE GREEN  Shipment Date: 7/20/07	No. of Containers, Size & Type  I plastic bug  Comments:	Laboratory: PAR Wisconsin DNR Certification #:  Laboratory Contact: Price Quote:  TURNAROU  Norm:  Date Needed  Description	CE Analytical		completed by receiving lab yes no  C Refrigerator No.  ANALYSES REQUESTED	886374						
Reliaduished By:	Date: 1/21/27	Relinquished By	<b>γ</b> :	Date:	Relinquished By:	Date:						
COMPANY: NETI	Time:	Company:		Time:	Company:	Time:						
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### **CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS**

Page 2 of 3

Avdrologists • Engineers • Surveyors • Scientists

920-59, FAX 92 12075 N Mequoi 262-24	rcle Drive Bay, WI 54304 2-8400 10-592-8444 N. Corporate Pkwy, Ste 21 n, WI 53092 1-3133 12-241-8222	☐ 330 South 4th Avenue Park Falls, WI 54552 715-762-1544 Fax 715-762-1844  0 ☐ 1203 Storbeck Drive Waupun, WI 53963 920-324-8600 FAX 920-324-3023	North 847-1 FAX 1 203 N Mars 715-4	Academy Drive hbrook, IL 60062 562-8577 847-562-8552 West Upham Street hfield, WI 54449 486-1300 715-486-1313	3349 Southgate Court SW #102 Cedar Rapids, IA 52404 319-365-0466 FAX 319-365-0464  15851 S. U.S. 27 - Big. 30, Suite 318 Lansing, MI 48906 517-702-0470 FAX 517-702-0477	
Project No: ECI-OI- Zask No: -30 Project Location: RACINE Project Manager: CHRIS HATFIEL	57	Wisconsin DNR Certification #:	nalytical	Sample Integrity - To I Seal Intact upon recei Method of shipment Contents Temperature	C Refrigerator No.	
Sampler: (name)  Sampler: (Signature)  Sampling Date(s): 7/20/07  Reports to be Sent to: Chr'x Hatteld  Lab Sample No. Date Time	No. of Containers, Size & Type	Laboratory Contact:  Price Quote:  Price Quote:  TURNAROUND TIME R  Normal  Date Needed  Description Water   Soil   Other	REQUIRED	DRO (WI Modified Method) GRO (WI Modified Method) BETX (EPA Method 8020) PVOC (EPA Method 8020)	VOC (EPA Method 8021) PAH (EPA Method Pb (EPA Method ) TCE PCE C15   3-0CE C15   3-0CE VINY Ch   67M	886374
DILL W 1/78  OFF DILL BLUE FOTS  DILL BLUE FOTS  DITT LEEK W  OFF SEED ONIANS E  OFF CARROTTS W-12  OFF CARROTTS W-12  OFF CARROTTS E-34  CHARLOGABLE -22-  RETERING Shipping by  AND HOMEN ACTION  Shipment Date:  7/20/07	Comments:			Inplock		
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Company:	1/U/07 Time: 1000	Company		7/2/07	Company:	Time:

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### **CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS**

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	Project Manager: CHR15	HATFIE	19	Laborator Contact	Lori						ANA	LYSE	S R	EQI	JES1	TED					
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	Sampler: (Signature)			TUF	RNAHOUND TIM	4	M Wed	od 80	Pod 8	g 19	_		1	8	1						
	Sampling Date(s):	,		<u> </u>	Normal Normal	Rush	Modifie	Modifie A Met	A Met	Metho	lethod			4	S						
	Reports to be Sent to:	Hold		Date Nee		7/07	DRO (WI Modified Method)	GRO (WI Modified Method) BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EFA Method	(EPA Method	4	14) 2)	71	Z.		<b>%</b> 5	56	37	4	
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