



State of Wisconsin \

DEPARTMENT OF NATURAL RESOURCES

5301 Rib Mountain Drive Wausau, Wisconsin 54401 TELEPHONE 715-359-4522 TELEFAX715-355-5253

George E. Meyer Secretary

February 10, 1994

NCD UID#: ERP

MR RICHARD J FREUND FREUND & ASSOCIATES INC 845 SO MAIN STREET SUITE 100 FOND DU LAC WI 54935

> SUBJECT: Case Closure Status for Proposed Walmart Store Eighth Street South, Wisconsin Rapids, Wisconsin

Dear Mr. Freund:

The North Central District Case Closure Committee has completed its review of the documentation for clean up of contamination of n-Butylbenzene at the proposed Walmart Store location at Eighth Street South in Wisconsin Rapids, Wisconsin.

FILE COPY

Based on the information provided to the Department by Nummelin Testing Services, the Department is not requiring that any further investigation and/or remediation be undertaken at this time. However, if at some time in the future, information is made available to the Department which indicates that additional investigation and/or remediation is warranted, the Department will require that the appropriate action be taken.

<u>Please note that this case closure is contingent upon proper documentation of</u> <u>soil treatment and disposal.</u> Please provide the documentation that this action has been completed, or have your consultant do so. The documentation can be sent to my attention at the above address.

If you have any questions, please contact me at 715/359-4522.

Sincerely, NORTH CENTRAL DISTRICT

Deborah S. Pingel Program Assistant Leaking Underground Storage Tank Program

cc: Connie Antonuk, Rhinelander

Nummelin Testing Services, Mr. Bruce Nummelin, 332 North Georgia Street, Stevens Point, Wisconsin 54481



State of Wisconsin Department of Natural Resources

ENTITY CONTACT REPORT FORM Form 4500-94 5-84

Name of Eatit		Talashawa N. J	
name of Entity	Tom Baror	347 - 7974	FID Number
Street or Route	Alinon Mallin Tanting	Date of Contact	Time of Contact
City, State, Zip	Code Code	Conferred With	District
Type of Contac			
	Conference Field Check Telephon	e Conversation 🗆 Other	
RE:	Walmart 4	Roppold Stor	re
	VIA and the the	and al the	2 la Sallina
	The property Was	part of Mel	WTO Salvage
	at one time	V	
	Morris Malcott,	INAD AM BUDA	01
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			19
			
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	Submitted By	Rilling	Date
		anceing	1/25/94
		/	(



Nummelin Testing Services 332 North Georgia Street - Stevens Point, Wisconsin 54481 Lab: (715) 341-7974 Fax: (715) 341-8654

3802 Packers Avenue - Madison, Wisconsin 53704 Lab: (608) 241-4346 Fax: (608) 241-4308

12/17/93

DNR North Central District 107 Sutlift Avenue P.O. Box 818 Rhinelander, WI 54501

Attention: Ms. Connie Antonuk

Re: Case Summary and Close-Out Form Proposed Wal-Mart Site Wisconsin Rapids, WI

Dear Ms. Antonuk:

Please find enclosed a copy of the Case Summary and Close-Out form for the proposed Wal-Mart site in Wisconsin Rapids.

If you have any questions please feel free to call me at 715-341-7974.

NUMMELIN TESTING SERVICES

Juce / Jummelin

Bruce Nummelin Director BS/SS 1054602A

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DNR PROJECT MANAGER: Ms_ Connie Antonuk CLOSURE PREPARED BY: Nummelin Testing Services DATE: 12-16-93

IF PREPARED BY NON-DEPARTMENT STAFF, PLEASE COMPLETE THE FOLLOWING INFORMATION.

Affiliation with respon	sible party:Consultant
Address:	332 N. Georgia Street
City:	Stevens Point State: W Lip,S440.
Phone Number	$\frac{715-341-7974}{10}$

GENERAL SITE INFORMATION:

Case/FID#/UID#:	
Site Name: Address: City:	Proposed Wal-Mart Site Eighth Street South Wisconsin Rapids State: WI Zip: _54494
Legal Description Tnshp/Vill/City County:	on: 1/4 <u>SW</u> , 1/4 <u>SE</u> , Sec <u>29</u> , Tn <u>22NR6E</u> (E) : <u>Wisconsin Rapids</u> Wood
Site Contact:	Mr. Richard J. Freund
Address: City: Phone Number	845 South Main Street, Suite 100 Fond du Lac State: WI Zip: 54935 414 - 921 - 3290
Date of Incident:	known Date Reported: Nov. 1993
Contamination Type (C	Seneral Description): <u>n-Butylbenzene</u>

12/93

GENERAL SITE INFORMATION (CONT'):	P.3/5
An a D have 1 and detected	
Amount Released: 24.1 ppb detected	
Department Permits Closed Out? Yes No Not Applicable	
Enforcement Actions Closed Out? Yes No Not Applicable	
Geologic Setting (General Description) Mapped as unpitted outwash	
Depth to Groundwater: More than 20 feet below ground surface	
Was Contamination Present In (Soils, Groundwater, Other) Before Remediation: Present in surface soil only	
	· ·
DEGREE OF CONTAMINATION FOR SOILS WAS SOIL CONTAMINATION PRESENT? YES_X NO_ (If no, continue to groundwater section	11)
Extent Defined (Yes, No): Yes an area 8 feet in diameter and 4 feet deep	
Analysis (Lab, Field, No Data): (If no data available, please explain)	
Number of Sample Points: 2 Number of Sampling Rounds: 1	
Background Levels: unknown	
Analysis Attached (Yes, No):	
Remedial Action Taken:	
Soil excavated from site, an area 12 feet in diameter and 7.5 feet deep was excavated.	-
Excavated Soils Final Disposal Method: Incineration	
Final Disposal Location: Eau Claire Black Top Company in Eau Claire, W	II
Soil Disposal Form Completed : Yes <u>x</u> , No. (PLEASE ATTACH COPY)	

Comment of the factors of the

Contaminant	Pre-remediation Sample Date	Highest Field Data Sample Date	Post Remediation Sample Date	Applicable Standards	Detection Limits
			annan an Annan Annan Anna Anna		
	,			:	

Comments:

DEGREE OF CONTAMINATION FOR GROUNDWATER

.

WAS GROUNDWATER CONTAMINATION PRESENT? YES____ NO X (If no, continue to next section)

Extent Defined (Yes, No):
Analysis (Lab, Field): (If no data available, please explain)
Groundwater Monitoring: Permanent Wells : Yes_, No_, #; Abandoned Yes_, No_, #, Forms submitted Yes_, No_, # Temporary Wells: Yes No, #; Abandoned Yes No_, #, Forms submitted Yes_, No, #
Number of Sampling Rounds:
Has groundwater analysis been attached? Yes, No,
Remedial Action Taken:
Remedial Action Completed: Yes_, No (If no, please provide documentation)
Has this site been remediated to current groundwater standards?: Yes_, No_ (If no, please provide documentation)

NCD Close-Out Form/pg. 3

GROUNDWATER (Complete below or attach data)

NOTE:	If analytical methods other than	those outlined in the current L.	UST Analytical Calderen a
	used, please note the information	1 below.	ensive renaryiogar condance are

Contaminant	Pre-remediation Sample Date	Highest Field Data Sample Date	Post Remediation Sample Date	Applicable Standards	Detection Limits
	N				

Comments:

fF

Please Attach the Following Information:

Location Map and Site Map Cross-section Map, If Applicable Map of Public/Private Wells Within 1,200 Foot Radius

Narrative Summary of Case: (attach additional sheets as needed)

 ALLIED
 715-835-4858

 FAX 715-835-2298
 FAX 715-835-2298

 BLACKTOP
 931 SHORT ST. P.O. BOX 356

 CORP
 EAU CLAIRE, WI 54702-0356

 DIVISION OF A.C.I. LTD.
 EAU CLAIRE ST. P.O. BOX 356

INVOICE

ORIGINAL INVOICE

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STEVENS POINT, WI 54481

Please pay from this invoice - statements will be sent at the end of each month requested.

A FINANCE CHARGE OF 11/2% PER MONTH (18% ANNUM) WILL B ADDED TO ALL ACCOUNTS OVER 30 DAYS.

TERMS	CUST ORDER NO.	CUSTOMER NO.	SHIP VIA	an Shee	SHIPP	ING DATE	INVOICE DATE	MINVOICE NO
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State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

North Central District Headquarters P. O. Box 818 Rhinelander, Wisconsin 54501 TELEPHONE 715-362-7616 TELEFAX 715-369-8932

George E. Meyer Secretary

December 9, 1993

#175

Richard J. Freund Freund & Associates, Inc. 845 South Main Street, Suite 100 Fond du Lac, WI 54935

> Subject: Phase I, II, and III Reports Proposed Wal-Mart Store, Wisconsin Rapids, WI

Dear Mr. Freund:

The Department has received the Environmental Study Phase I (September 21, 1993), the Phase II Investigation (August 8, 1993) and the Soil Remediation & Well Abandonment Phase III (August 8, 1993) reports for the proposed Wal-Mart Store in Wisconsin Rapids, Wisconsin. Due to our current caseload, the Department will not review the reports at this time.

At this point you may wish to review the enclosed North Central District Case Summary and Close-out Form. You may complete and submit this form to the Department for closure review by the Close-out Committee when data from the site assessment indicates that the environment has been restored to remedial action standards and no harmful effects from the discharge to the air, lands and waters of this site will occur.

Please be sure to provide the requested copies of analysis results, maps and summary narrative. A complete Close-out form with the proper attachments can expedite the closure process. As there are several committee members a properly completed Close-out form will fast track a case by avoiding time consuming file review. Incomplete forms will be returned.

If you have any questions, please call Andrea Billings at (715)369-8986.

Sincerely, NORTH CENTRAL DISTRICT

Andrea Billings Environmental Repair Program Assistant

Connie J. Antonuk, Unit Leader Environmental Repair Program

enc.

cc: Bruce Nummelin - Nummelin Testing Services File



SOIL REMEDIATION & WELL ABANDONMENT (PHASE III) PROPOSED WAL-MART SITE WISCONSIN RAPIDS, WI 12-01-93

TABLE OF CONTENTS

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LABORATORY RESULTS	4
WELL ABANDONMENT (Form 3300-5B)	5
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Nummelin Testing Services 332 North Georgia Street - Stevens Ivint, Wisconsin 54481 Lab. (715) 341-7974 Fax. (715) 341-8654

3802 Packers Avenue - Madison, Wisconsin 53704 Lab. (608) 241-4346 Fux. (608) 241-4308

11-15-93

Freund & Associates, Inc. 845 South Main Street Suite 100 Fond Du Lac, WI 54935

Attention: Mr. Richard J. Freund

Subject: Soil Remediation & Well Abandonment (Phase III) Proposed Walmart Store Wisconsin Rapids, WI

INTRODUCTION:

This report concludes the soil remediation and well abandonment at the subject site. This work was a result of the Phase II investigation reported on 9-21-93. The soil determined to be contaminated was excavated and will be incinerated. Soil samples were collected during the excavation with the laboratory results attached to this report. The two monitoring wells and the 6" private well have also been abandoned.

DISCUSSION:

On November 11, 1993, the soil determined to be contaminated was excavated and transported to the Eau Claire Blacktop Company located in Eau Claire, WI.. The area excavated was located 20'N & 75'W of the NW building corner of Bob's Cab. The area excavated was 12' in diameter and tapered to 7.5' deep. The total weight of soil excavated was determined to be 25.9 tons. The soil was loaded directly into dump trucks and hauled to Eau Claire, WI for treatment. We have been informed the soil will be incinerated next spring when the asphalt plant starts up again. Soil samples were collected during the excavation. Soil samples were taken from each side wall, except the west wall, and from the bottom of the excavation. The soil sampling equipment was washed with detergent water and rinsed with distilled water before and after each sampling. Split soil samples were taken from each location. One sample was submitted to the University of Wisconsin Trace Organics Lab for analysis. The other sample was placed in a glass jar, covered with aluminum foil, warmed and used to take field meter readings using a Photo-ionization Detector Meter (PID). One soil sample was also collected from the second truck loaded with contaminated soil. All five soil samples were submitted to the laboratory for volatile organic compounds (VOC's) analysis. The laboratory test results indicate no detect in each of the samples taken from the excavated area. The sample taken from the second truck loaded indicated the presence of n-butylbenzene. The soil sample locations, elevations and compounds detected are as follows:

SAMPLE #	LOCATION	ELEVATION	DETECTED
1	North Sidewall	6'8"	None
2	South Sidewall	6'8"	None
3	East Sidewall	6'8"	None
4	Bottom of Excav	. 7'6"	None
Truck	2nd Truck		l.6 ppb n-butylbenzene
Trip Blank	Lab Vial		None

COMPOUND

Also on November 11, 1993, the three on-site wells were abandoned. Two wells were PVC wells used for monitoring the groundwater and for sampling. The third well was a 6" Soil Remediation & Well Abandonment

diameter well used as a private well. The pump and wiring had been removed prior to our work.

Approximately 24" of soil was excavated from around the wells to remove the protector pipes and to check the annular space seal. It appears from the excavations that the annular space seal consists of granular bentonite. The well casings were cut off approximately 24" below the grounds surface. The well casings were then filled with 3/8" bentonite pellets. On November 12, 1993, the well casings were then checked for settlement and topped off with bentonite pellets. For further well abandonment information please refer to the Well Abandonment Forms 3300-5B attached to this report.

CONCLUSIONS:

Based on the test data the soil remediation and well closures have been completed. It is our opinion based on the laboratory test results no further remediation is necessary at this time.

CLOSING:

Please find enclosed the completed WDNR Well Abandonment Forms 3300-5B for each of the abandoned wells, the well location sketch and the laboratory test results.

Also, please find attached to this report the chain of custody sheet and signed application to treat contaminated soil.

A copy of this report will be sent to the Wisconsin Department of Natural Resources (WDNR) for there review. Soil Remediation & Well Abandonment

If you have any questions, please feel free to call our office.

NUMMELIN TESTING SERVICES

Bruce Aummelin Bruce Nummelin

Director BS/SS

xc: Sain & Associates - Mr. Weston Kenney WDNR - Mr. Fred Bailey - Ms. Connie Antonuk

PROPOSED WAL-MART SITE WISCONSIN RAPIDS, WI



Figure 1

WELL CLOSURE LOCATION SKETCH not to scale

NORTH

PROPOSED WALMART SITE

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KUHN AVENUE



State of Wisconsin Department of Natural Resources

APPLICATION TO TREAT OR DISPOSE OF PETROLEUM CONTAMINATED SOIL Form 4400-120

Sections I, II & IV must be filled out completely. Also, complete other sections that apply.

eturn completed forms to: L.U.S.T. Specialist at the appropriate District or Area Office.

I. SOURCE OF SOIL								
Freun	nd & Associat	es, Inc.		Site ID# (For DNR use only)				
Site Address Hwy	13 South			Contact Name Richard J	J. Freund			
ity, State, Zip Code Wisc	onsin Rapids	, WI 54494		Telephone Number (Include Are (414) 921	ea Code) 1-3290			
Section, Township and R SW, S	ange E,29,22N,6E			Facility Owner/Operator Signat	lure			
. CONTAMINATION	DETAILS							
Volume Soil (Cubic yard	1s) 25 cu.yd	s.		Certified DNR Lab Number	ID# 750040280			
ype of Petroleum Conta	amination (Circle on	c)	,	Lab Name				
Gasoline	2 Diesel Fuel	3 #2 Fu	el Oil	UWSP Environ Sampling Method (Brief descri	mental Task Force ption of method used to obtain r	epresentative		
4 Other				sample of soil) Split of	- Spoon	•		
ontaminant Concentrat	ion (Two representat	ive composito sa	mples for every					
_RUC cubic yards of soil, i	m ppm.) Ausen Lab		n mno#1 c#1					
Sample No		10,0325		Total Benzene In Soil To Be Re	emediated (Attach calculations)			
enzene				Total Amount of Petroleum Hy (Attach calculations)	drocrabons In Soil to Be Remed	liated		
Toluene	• • • • • • • •			Percent Soil Less Than 200 Me	esh or 74 Microns	, ,		
Ethylbenzene					······································			
'otal Xylenes				Soil Classification Type (Sand Sand (SP)	I, silt, clay, etc.)			
		· · ·		Anticipated Time Frame for Re	emediation			
Total Henothink Hydrid	axionixas Gasoline	0.0069	0.001	Start Date 11-10-93	End Date 11-11-93	5		
TOTAL VOC'S				intention of Fullyenzing Sill of	Ciay Julis			
Total Petroleum Hydroc	arbons as ruel Uil	TMENT	<u></u>					
Asphalt Plant/CM	WEXTON SOLL TREP	MINILIA I	(KAAA X HAA	WDNR Air Quality Permit Nu	umber WPDES Permit Num	ber		
Eau Clai	ire Asphalt C	orporation]					
Address D.O. D	-			s. 144.04 Plan Approval Numb	er or Equivalent			
P.O. BOX	x 320			(Sealed ponds according to NR 213)				
City, State, Zip Code H	Eau Claire, M	JI 54702-03	326	Distance to Nearest Residence/	Business			
(If portable, where w lant Number and Mode	rill plant be located)	R Facility Identi	fication Number	Burner Temperature During So Treatment	oil Soil Residence Time i During Treatment	in Burner		
ontact Name		TD# 010000	· · ·	Anticipated Date Treatment W	ill be Completed			
Louie	Thune			11-11-93				
Tide			(If stockpiled before being treated, all petroleum contaminated soil must be underlain and overlain by an impermeable membrane.)					
elephone Number (Incl	ude area code)			Final Disposition of Treated S	Soil (How used, specific location	n)		
(715)8	35-4858							
Site Telephone Number	(Include area code)							
NONE								

Section 1 continued.	Section 3 Continued
It soils will not be incorporated into asphalt, post burn soil testing is required.	Contact Name
composite soil samples are to be taken every 300 cubic verds of soil	
	DNR Area Investigator Contacted
Highest Emission of VOC's Intended to Occur	Name Mr. Tom Ponty
hourly* daily*	
Highest Emission of Benzene Intended to Occur	Dete
dailv* total*	11-11-93
* A thesh Calculations	
	Volume to Be Disposed Of
2. Volatilization of Contaminants In Soil (Passive Evaporation)	<u> </u>
Type of Impervious Surface	Amount Total VOCs*
	0.00020 105.
Curbing or Berms (Existing or proposed construction)	Amount Benzene* 0.0012 lbg
	0.0013 105.
Thickness of Soil Undergoing Remediation (As placed)	*Attach Calculations
There are a concert and the transmission of the burners	
	Attach Map Showing Location of Approved Landfill
Techniques to Cover During Inclement Weather	
	4. Soil Venting/Vacuum Extraction
Method of Turning or Mixing Soil	Responsible Party
Method of Field Sampling	Consultant Responsible for System
menter of the temperature	
Proposed Verification Method of Conteminent Content (1 sh sempling)	Size and Rating (In cfm) of Blower
Proposed Vernication method of Containmant Content (Lab sampling)	
·	Distance to Manual Devidence /Business
	Distance to mearest Residence/Busiliess
· · · ·	
	VOC Discharge Rate From Pilot Testing
Location and Size of Remediation Site	lbs/day at CFM
	Benzene Discharge Rate From Pilot Testing
Distance to Nearest Residence/Business	lbs/day at CFM
	Note: This option may need an air pollution control permit. Any exceedance
Hisbart Emission of VOC's Intended to Occur	of an emission limit will require the installation of an activated carbon unit
highest Emission of VOC's Intellided to Occur	or similar treatment system to strip VOCs from the blower discharge.
daily*	
Highest Emission of Benzene Intended to Occur	5. Other Method of Soil Hemediation
daily* total*	Please Describe the Method to Be Used
*Attach Calculations	
3 Disposal of Contaminated Soils at a Sanitary Landfill-NR 500	
Name	
Times Ma	
License No.	
Location	
IV. OWNER/OPERATOR OR CONSULTANT SUBMITTING REQUEST	
Company Name	Contact Name
Nummelin Testing Services	Bruce Nummelin
Address	Telephone Number (Include area code)
332 N. Georgia Street	(715) 341–7974
Cine State 7in Code	Simatura 1
Stovene Doint WT 5/121	July and the second
Decrema FOLICE ME J4401	1 June / fumme
LEAVE BLANK - DEPARTMENT O	F NATURAL RESOURCES USE ONLY
APPLICATION	
Concurrance	Consect Name
6-2 March 1	Date
AIT MADAGement	
Solid Weste	Date
	Dale
Comments:	

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Cation 1 continued	Section 2 Continued
Clion I continued.	Contact Name
Soils will need to be sampled for the same parameters listed in Item II. Two	Contact I value
composite soil samples are to be taken every 300 cubic yards of soil.	
hest Emission of VOC's Intended to Occur	DNK Area Investigator Confacted
hourly* daily*	Mane Mr. Tom Ponty
Highest Emission of Benzene Intended to Occur	
	Date 11-11-93
*Attach Calculations	Volume to Be Disposed Of
2. Volatilization of Contaminants In Soil (Passive Evaporation)	Cubic Yards
T pe of Impervious Surface	Amount Total VOCs*
	0.00028 105.
Curbing or Berms (Existing or proposed construction)	Amount Benzene* 0.0012 1hr
	0.0013 105.
T chases of Soil Undergoing Remediation (As placed)	*Attach Calculations
I Chiess of Soli Onder going Remediation (As praced)	
	Attach Map Showing Location of Approved Landfill
Techniques to Cover During Inclement Weather	
	4. Soil Venting/Vacuum Extraction
Method of Turning or Mixing Soil	Responsible Party
	· · ·
N thod of Field Sampling	Consultant Responsible for System
Proposed Verification Method of Contaminant Content (Lab sampling)	Size and Rating (In cfm) of Blower
	Distance to Nearest Residence/Business
······································	
	VOC Discharge Pate From Pilot Testing
	br/day at orbit
I cation and Size of Remediation Site	Its/day at CPM
	Benzene Discharge Rate From Pilot Testing
Distance to Nearest Residence/Business	IDS/DAY AL CFM
	Note: This option may need an air pollution control permit. Any exceedanc
1 thest Emission of VOC's Intended to Occur	of an emission limit will require the installation of an activated carbon unit
hourly* daily*	or similar treatment system to strip VOCs from the blower discharge.
Lighest Emission of Benzene Intended to Occur	5 Other Method of Soil Remediation
+latot +viab	Please Describe the Method to Be Used
* Attach Calculations	
2. Disparel of Conteminated Soils at a Sepitary Landfill-NB 500	
3. Disposal of Contaminated Soils at a Samilary Lanonin-141 500	
1 me	
License No.	
1 cation	
IT OWNER/OPERATOR OR CONSULTANT SUBMITTING REQUEST	
(mpany Name	Contact Name
Nummelin Testing Services	Bruce Nummelin
Address	Telephone Number (Include area code)
332 N. Georgia Street	(715) 341–7974
7	
Charles Lip Lode	oignature
SLEVENS POINC, WI 34401	1 June / fummerin
LEAVE BLANK + DEPARTMENT O	F NATURAL RESOURCES USE ONLY
APPLICATION	
Concurrance	Contact Name
Air Massament	Date
ANI MARTACIMITAL	L Q D
Solid Waste	Date
Solid Waste	Date
Solid Waste	Date Date
Solid Waste	Date Date
Solid Waste	Date
Solid Waste	Date
Comments:	DateDate

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APPLICATION TO TREAT OR DISPOSE OF PETROLEUM CONTAMINATED SOIL ASPHALT PLANT OR OTHER TYPE OF THERMAL TREATMENT UNIT Form 4400-149

This form is required by the Department of Natural Resources for leaking underground storage tank sites to ensure that petroleum contaminated soil is treated or disposed o; f in compliance with NR 500-540, NR 158, and NR 419, Wis. Adm. Code. Failure to comply with applicable statutes and administrative rules may lead to violations of subchapters III and IV of ch. 144 Wis. Stats. and may result in forfeitures of not less than \$10 or more than \$25,000 for each violation, pursuant to ss. 144.426(1), 144 74 (1), and 144.99, Wis. Stats, or fines of not less than \$100 or more than \$150,000 or imprisonment for not more than 10 years, or both, pursuant to s. 144.74 (2), Wis. Stats. Each day of a continuing violation constitutes a separate violation. Department approval of this form is required prior to site remediation, except for soils to be buried in landfills.

DIRECTIONS: 1) Complete parts I and II. 2) Submit the application to the DNR project manager for approval. 3) Have the treatment facility complete part III of the approved form after the soil has been treated. 4) Return the ORIGINAL form to the DNR project manager. 5) Keep a copy for your files.

······································	ALL SITES MUST CC	COMPLETE PART L
Site/Facility Name Richard J.	Freund & Associates	Site I.D. # (for DNR use only)
Sile Address Highway 13	South	Contact Name Bruce Numelin
City, State, Zip Code Wisconsin The information on this form is accur Signature of Soil Generator	Rapids, WI 54494	1/4, 1/4, Section, Township, and Range SW, SE, 29, 22N, 6E Telephone Number (include area code)
Computing Firm		(715) 341-7974
Consuming Firm	Contact	Telephone Number
Numerin Testing S	Prvices Bruce Numme	Lin (715) 341–7974
40 Tons Tonscubi Type of Petroleum Contamination Gasoline Diesel Fuel/#2 F	c yards (circle one) (Circlc) : ucl Oil	Soil Type (USCS) <u>X</u> sand (SP, SW) silty/clayey sands (SM, SC) silt (ML, MH, OL) clay (Cl, CH, OH) gravel (GC, GM, GP, GW) pcat (PT)
Other		Distance to Nearest Residence/Business 75 feet
Contaminant concentration:		-
One screened sample for each 15 yds ³ registers contamination OR one labor soil shown to be contaminated during RESULTS OF BOTH FIELD SCREE ADDITION TO THE TPH AND BE laboratory samples on excavated soil for	and one laboratory analysis for ex- tatory analysis for each 100 yds ³ the site investigation/excavation or BNING AND LAB ANALYSES, NZENE INFORMATION REOP or PECFA claims.	ach 300 yds ³ of contaminated soil when the field instrument when the field instrument <i>does not register contamination</i> on atockpiling. PLEASE ATTACH A TABLE LISTING AND INCLUDE SUPPORTING LAB REPORTS, IN UESTED BELOW. NOTE: DILHR requires a minimum of 3
Total Benzene in soil to be remed	iated (attach calculations)	0.00113 ibs
REAL AND COMPANY REAL FOR STATE	Why in soil to be remediated (attach calculations 0,00028,15-
VOLATILE ORGANIC COMPOUNDS	VOC's	= 0.0014 +

11-04-1993 12:08PM FRUMINTS STEVENS PUT	NI WI 10 10351000 F.02
ATTACH EMISS	IONS CALCULATIONS
1,000,000) x (2,800 lbs/yd ³) x b = benzenc emission in lbs., which ight basis, and b = amount of contaminated soil in yds ³ . NO bestituting TPH concentration (ppm or mg/kg) for "a". It may	here a $=$ benzene concentration of soit sample in ppm or mg/kg dry TE: This calculation can also be used to estimate TPH emissions by also be used to calculate VOCs.
Part II: Prop.	osed Treatment Facility
ume of Plant Eau Claire Asphalt Corporation	Plant number and Model
intact Louie Thune	DNR Facility I.D. No.
idress P. O. Box 326, Eau Claire, WI r location of portable plant)	Distance to Nearest Residence/Business
LEAVE BLANK - DEPARTMENT	f of natural resources use only

Application Concurrence:	Date 11/04/93
Air Management	
Project Manager	
Comments:	
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC.	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC.	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards)
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC.	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Fransporter Name	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Fransporter Name Circle One: Roasted and Incorporated	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Fransporter Name Circle One: Roasted and Incorporated R Fotal Benzenc emissions in pounds for this batch (apply 50%)	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only destruction factor if no after burner is used)
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Fransporter Name Dircle One: Roasted and Incorporated Roasted and Incorporated R Fotal Benzenc emissions in pounds for this batch (apply 50% Benzene emissions to date for this plant (including this batch)	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only destruction factor if no after burner is used) for this calendar year
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Transporter Name Circle One: Roasted and Incorporated Roasted and Incorporated R Total Benzenc emissions in pounds for this batch (apply 50% Benzene emissions to date for this plant (including this batch) Signature of Treatment plant representative	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only destruction factor if no after burner is used) for this calendar year Telephone Number at Plant
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Transporter Name Circle One: Roasted and Incorporated Roasted and Incorporated R Total Benzene emissions in pounds for this batch (apply 50% Benzene emissions to date for this plant (including this batch) Signature of Treatment plant representative	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only destruction factor if no after burner is used) for this calendar year Telephone Number at Plant ILY FOR SOILS NOT INCORPORATED!
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Transporter Name Circle One: Roasted and Incorporated Roasted and Incorporated R Total Benzenc emissions in pounds for this batch (apply 50% Benzene emissions to date for this plant (including this batch) Signature of Treatment plant representative POST BURN SAMPLE RESULTS: COMPLETE ON	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only destruction factor if no after burner is used) for this calendar year Telephone Number at Plant RLY FOR SOILS NOT INCORPORATED!
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Transporter Name Circle One: Roasted and Incorporated Fotal Benzenc emissions in pounds for this batch (apply 50%) Benzene emissions to date for this plant (including this batch) Signature of Treatment plant representative POST BURN SAMPLE RESULTS: COMPLETE ON (One representative sample for each 100 cubic yards-not completed)	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only destruction factor if no after burner is used) for this calendar year Telephone Number at Plant ILY FOR SOILS NOT INCORPORATED! posites)
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Transporter Name Circle One: Roasted and Incorporated Fotal Benzene emissions in pounds for this batch (apply 50% Benzene emissions to date for this plant (including this batch) Signature of Treatment plant representative POST BURN SAMPLE RESULTS: COMPLETE ON (One representative sample for each 100 cubic yards-not complication of the sample Number	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only destruction factor if no after burner is used) for this calendar year Telephone Number at Plant ILY FOR SOILS NOT INCORPORATED! posites)
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Transporter Name Direle One: Roasted and Incorporated Fotal Benzene emissions in pounds for this batch (apply 50% Benzene emissions to date for this plant (including this batch) Signature of Treatment plant representative POST BURN SAMPLE RESULTS: COMPLETE ON (One representative sample for each 100 cubic yards-not complement for each 100 cubic yards-not c	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED _ Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only destruction factor if no after burner is used) for this calendar year Telephone Number at Plant ILY FOR SOILS NOT INCORPORATED! posites)
THIS SECTION TO BE COMPLETED BY THE ASPHA AFTER PROC. WDNR Air Pollution Control Permit Number Date of transport to plant Fransporter Name Circle One: Roasted and Incorporated Fotal Benzenc emissions in pounds for this batch (apply 50% Benzene emissions to date for this plant (including this batch) Signature of Treatment plant representative POST BURN SAMPLE RESULTS: COMPLETE ON (One representative sample for each 100 cubic yards-not complex to sample Number	LT/THERMAL UNIT PROCESSING THE CONTAMINATED SOIL ESSING IS COMPLETED Part III Actual Volume of Soil Treated (tons/cubic yards) Date of treatment Transporter License Number Roasted Only destruction factor if no after burner is used) for this calendar year Telephone Number at Plant ILY FOR SOILS NOT INCORPORATED! posites) COMMON FILL.

November 3, 1993 Proposed Walmart Site Wisconsin Rapids, WI HwY 13 South Estimated Quantity = 35 Tons

EMMISION CALCULATION SHEET

25 cu.yds. x <u>l.4 Tons</u> = 35 Tons cu.yds.

BENZENE

0.0325 x 2000 x 35 x 0.5 = 0.00113 lbs. 1,000,000

VOC's

 $\frac{0.0079}{1,000,000}$ x 2000 x 35 x 0.5 = 0.00028 lbs.



College of Natural Resources Environmental Task Force Lab Stevens Point, WI 54481-3897 (715) 346-3209

11/17/93

Bruce Nummelin Nummelin Testing Service 332 N. Georgia St. Stevens Point, WI 54481

Dear Bruce,

The enclosed results are for the set of VOC's received November 9 and November 11, 1993 from the Ellis Stone and Walmart site, project numbers #102.74 and #105.38, respectively. The samples were analyzed using a *Tekmar* LSC 2000/2016 purge and trap system and a *Varian* 3400 gas chromatograph equipped with a photoionization detector (PID) and a *Hall* electrolytic conductivity detector (HECD). The VOC's were analyzed in accordance with EPA method 8021 (P&T/GC/PID/HECD). These two detectors are linked in series. We use the PID to report aromatic and alkene analytes and the HECD to report halogenated analytes.

These samples were analyzed in accordance with the Environmental Task Force's quality control program and have met those requirements. Percent recoveries for matrix spikes are included for each batch of samples run. If you have any questions regarding these analyses, please call me at (715) 346-3753.

Sincerely,

John C. Zajakow Ski

John C. Zajakowski Environmental Task Force Trace Organics Lab--Assistant Manager

		CHAIN OF CU	JST	ODY/	ANA	LYSIS	S REO	<u>U</u>	EST	FOI	RM					COMPANY NAME:	
ENVIRONMENTAL TASK FORCE LABORATORY university of wisconsin/stevens point * stevens point, wisconsin 54481 * phone: (715)346-3753											NUMMELIN project no./client: 105.38 Si	1esTING AIN & Asso					
send N (SEND RESULTS TO: NUMMELIN TESTING 332 N. GeorgiA ST. STevens IOINT, WF S 54481								SAMPLING LOCATION: 4211 S: 8 SAMPLER: NTS - TZ	TH ST. 34BN							
DATE	TIME	SAMPLE ID/DESCRIPTION	1	NO. OF BO	TTLES	TOTAL	•TYPE				ANALY	SIS REC	UESTE	<u> </u>		REMARKS	LAB ID NUMBER
11-11	2:15	S-1	1			/	S	V									660-1
		5-2				1	5			<u> </u>	ļ						-2
		<u>S-3</u>	1				\overline{S}				<u> </u>						-5
<u> </u>		5-4	_/_			/		V								<u></u>	-9
	+	TRUCK SAMPLE				-	\mathbf{S}	V			1						
	₩	TRIP BLANK				/	H20			1							-0
сомме	NTS/SPECIAI	L INSTRUCTIONS:							*Sample S-Soil SE-Sedin SO-Solid	Type ent	SW-Surfz DW-Drink WW-Was GW-Grou	ice Water ing Weter tewater ndwater	H-Ha r A-Air O-Oil X-Ot	zardous her	: Liquid	Field Filtered: Date Received: Date Due: RUSH: (approved by lab)	
cus	TODY	TRANSFERS	<u></u>						<u></u>					s	hippi	ng Details-To Be Com,	pleted By ETF L(VLRとり 〜
F 1	Relinquish	ed by: Date BAKER 11-	:: 11-9-	Time: 3 <u> _2,`</u>	15	Recei WML	ved by:	Å	ŴŁ	Date 	:: 11/43	Time:	0	N S _ S	letho ampl ampl	d of Shipment: e Temperatures: e Condition:	<u>CE</u> (<u>C</u> €0
2.										_				_ '	wi. s	tate Identification No.	750040280
Rece	ived for	Laboratory by:								_		I				No. 0336	



College of Natural Resources Environmental Task Force Lab

Nummelin Testing Service	DATE SAMPLED	11/11/93
Walmart Site	DATE RECEIVED	11/11/93
Trip Blank	DATE ANALYZED	11/15/93
Groundwater	SAMPLE NUMBER	660-93-6
"On Ice"	PROJECT NUMBER	105.38
	Nummelin Testing Service Walmart Site Trip Blank Groundwater "On Ice"	Nummelin Testing ServiceDATE SAMPLEDWalmart SiteDATE RECEIVEDTrip BlankDATE ANALYZEDGroundwaterSAMPLE NUMBER"On Ice"PROJECT NUMBER

EPA METHOD 8021

Practical quantitation limits (ug/l) are indicated in brackets []. All concentrations are reported in parts per billion (ug/l).

Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	ND	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-lsopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	ND
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	ND
4-Chlorotoluene	[1.0]	ND	Totuene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	ND
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND			
Dichloromethane	[5.0]	ND			



College of Natural Resources Environmental Task Force Lab

SAMPLE SOURCE	Nummelin Testing Service	DATE SAMPLED	11/11/93
SAMPLE SITE	Walmart Site	DATE RECEIVED	11/11/93
SAMPLE NAME	Truck Sample	DATE ANALYZED	11/15/93
SAMPLE MATRIX	Soil	SAMPLE NUMBER	660-93-5
SAMPLE TEMP.	"On Ice"	PROJECT NUMBER	105.38

EPA METHOD 8021

Practical quantitation limits (ug/l) are indicated in brackets []. **All concentrations are reported in parts per billion (ug/kg)**.

Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	1.6	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-lsopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	ND
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	ND
4-Chlorotoluene	[1.0]	ND	Toluene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	ND
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND			
Dichloromethane	[5.0]	ND			



College of Natural Resources Environmental Task Force Lab

SAMPLE SOURCE	Nummelin Testing Service	DATE SAMPLED	11/11/93
SAMPLE SITE	Walmart Site	DATE RECEIVED	11/11/93
SAMPLE NAME	S#4 Bottom Excavation	DATE ANALYZED	11/15/93
SAMPLE MATRIX	Soil	SAMPLE NUMBER	660-93-4
SAMPLE TEMP.	"On Ice"	PROJECT NUMBER	105.38

EPA METHOD 8021

Practical quantitation limits (ug/l) are indicated in brackets []. **All concentrations are reported in parts per billion (ug/kg)**.

Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	ND	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-lsopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	ND
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	ND
4-Chlorotoluene	[1.0]	ND	Toluene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	ND
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND			
Dichloromethane	[5.0]	ND			



College of Natural Resources Environmental Task Force Lab

Nummelin Testing Service	DATE SAMPLED	11/11/93
Walmart Site	DATE RECEIVED	11/11/93
S#3 E. Sidewall	DATE ANALYZED	11/15/93
Soil	SAMPLE NUMBER	660-93-3
"On Ice"	PROJECT NUMBER	105.38
	Nummelin Testing Service Walmart Site S#3 E. Sidewall Soil "On Ice"	Nummelin Testing ServiceDATE SAMPLEDWalmart SiteDATE RECEIVEDS#3E. SidewallDATE ANALYZEDSoilSAMPLE NUMBER"On Ice"PROJECT NUMBER

EPA METHOD 8021

Practical quantitation limits (ug/l) are indicated in brackets []. All concentrations are reported in parts per billion (ug/kg).

Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	ND	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-lsopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	ND
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	ND
4-Chlorotoluene	[1.0]	ND	Toluene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	ND
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND			
Dichloromethane	[5.0]	ND			



College of Natural Resources Environmental Task Force Lab

Nummelin Testing Service	DATE SAMPLED	11/11/93
Walmart Site	DATE RECEIVED	11/11/93
S#2 S. Sidewall	DATE ANALYZED	11/15/93
Soil	SAMPLE NUMBER	660-93-2
"On Ice"	PROJECT NUMBER	105.38
	Nummelin Testing Service Walmart Site S#2 S. Sidewall Soil "On Ice"	Nummelin Testing ServiceDATE SAMPLEDWalmart SiteDATE RECEIVEDS#2S. SidewallDATE ANALYZEDSoilSAMPLE NUMBER"On Ice"PROJECT NUMBER

EPA METHOD 8021

Practical quantitation limits (ug/l) are indicated in brackets []. All concentrations are reported in parts per billion (ug/kg).

Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	ND	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-Isopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	ND
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	ND
4-Chlorotoluene	[1.0]	ND	Toluene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	ND
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND			
Dichloromethane	[5.0]	ND			



College of Natural Resources Environmental Task Force Lab

Nummelin Testing Service	DATE SAMPLED	11/11/93
Walmart Site	DATE RECEIVED	11/11/93
S#1 N. Sidewall	DATE ANALYZED	11/15/93
Soil	SAMPLE NUMBER	660-93-1
"On Ice"	PROJECT NUMBER	105.38
	Nummelin Testing Service Walmart Site S#1 N. Sidewall Soil "On Ice"	Nummelin Testing ServiceDATE SAMPLEDWalmart SiteDATE RECEIVEDS#1N. SidewallSoilSAMPLE NUMBER"On Ice"PROJECT NUMBER

EPA METHOD 8021

Practical quantitation limits (ug/l) are indicated in brackets []. All concentrations are reported in parts per billion (ug/kg).

Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	ND	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-lsopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	ND
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	ND
4-Chlorotoluene	[1.0]	ND	Toluene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	ND
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND			
Dichloromethane	[5.0]	ND			

State of Wisconsin Department of Natural Resources

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

D. GENERAL INFORMATION		(2) FACILII	Y NAME		
Well/Drillhole/Borehole	County Man 2	Original	Well Owner	(If Known)	
Location	wood		Livese	y Compan	у
	E E	Present \	Vell Owner	d T Ero	und
<u>SW 1/4 of 1/4 of Sec</u>	<u>29 ; T. 22 N; R. 6 W</u>	Class or	Douto	u b. Fre	
(If applicable)	Crid Number	Street of	845 S.	. Main St	-
Gov't Lot		City, Sta	ite. Zip Code		
Grid Location $f(\Pi, N, \Pi, S)$		J., 20	Fond I) Du Lac, M	VI 54935
Civil Town Name		Facility	Well No. and	/or Name (If Ap	plicable) WI Unique Well No.
Wisconsin Rapids,	WI		6" H20) Well	
Street Address of Well		Reason	For Abandon	ment	
4211 S. Eigth St			Site I	Developme	ent
City, Village		Date of .	Abandonmen	t da	1002
			Nover	nber II,	1993
WELL/DRILLHOLE/BOREHOLI	E INFORMATION	(A) Dapily to	Water (Feet		
3) Original Well/Drillhole/Borenold	3 Construction Completed On	Dumn &	Dining Rem	$\frac{25.5}{100}$	es 🗖 No 🦳 Not Applicable
(Date)		Liner(s)	Removed?	·····································	$res \square No \square Not Applicable$
Monitoring Well	Construction Report Available?	Screen R	temoved?	X X	es No Not Applicable
Water Well	Yes No	Casing I	eft in Place?	Y 🕅 Y	es No
Drillhole		If No, E	xplain		
Borehole	1				
•		Was Cas	ing Cut Off I	Below Surface?	
Construction Type:		Did Sea	arial Sattle A	fter 24 Hours?	
Drilled Drive	n (Sandpoint)	If Yes	Was Hole R	etopped?	
Other (Specify)					
Formation Type:		(5) Required	i Method of		
Vinconsolidated Formation	Bedrock	K Conc	luctor Pipe-C		onductor Pipe-Pumped
63.2	5 Gasing Diamater (ins.) 6"	(6) Sealing	Materials		For monitoring wells and
(From groundsurface)	Casing Diameter (ms.)	Neat	Cement Gro	ut	monitoring well boreholes onl
(From groundsurface)		Sand	-Cement (Co	oncrete) Grout	-
Casing Depth (ft.) 65.25	•	Con	crete		Bentonite Pellets
		Clay	-Sand Slurry		Granular Bentonite
Was Well Annular Space Groute	d? 🕅 Yes 🗌 No 🔲 Unknown	Bent	onite-Sand S	lurry	
If Yes, To What Depth?	Feet		ped Benton	ite	
(7)				No. Yards,	Mix Ratio or Mud Weight
Sealing Ma	Icrial Used	From (Ft.)	10 (FL)	or Volume	White Kallo of White Weight
3/8' Bentonite	Pellets	Surface	63.25	16	
				Sacks	
					l
(8) Comments:					
9) Name of Person or Firm Doing S	Sealing Work	(10)	FOR	DNR OR CO	UNTY USE ONLY
Nummelin Testin	g Services	Date	Received/In	spected	District/County
Signature of Person Doing Worl	11-15-93	Revi	ewer/Inspect	or	I
Street or Route	Telephone Number				
332 N. Georgia S	t. (715 341-7974	Folk	w-up Neces	sary	
City, State, Zip Code		1			
Stevens Point, W	I 54481				

State of Wisconsin Department of Natural Resources

332 N. Georgia St

City, State, Zip Code

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(I) GENERAL INFORMATION	(2) FACILITY NAME			
Well/Drillhole/Borehole County Wood	Original Well Owner (If Known)			
SW 1/4 of _SE 1/4 of Sec. 29 ; T. 22 N; R. 6 N (If applicable) Gov't Lot Grid Number	Present Well Owner Richard J. Freund Street or Route 845 S. Main St.			
Grid Location ft. N. S., ft. E. W. Civil Town Name Wisconsin Rapids, WI	City, State, Zip Code Fond Du Lac, WI 54935 Facility Well No. and/or Name (If Applicable) WI Unique Well No. LMW #2			
Street Address of Well 4211 S. Eigth St. City, Village	Reason For Abandonment Site Development Date of Abandonment			
WELL/DRILLHOLE/BOREHOLE INFORMATION (3) Original Well/Drillhole/Borehole Construction Completed On (Date)	 (4) Depth to Water (Feet) <u>26,25.</u> Pump & Piping Removed? Yes No X Not Applicable Liner(s) Removed? Yes No X Not Applicable Screen Removed? Yes No X Not Applicable Casing Left in Place? Yes No 			
 ☐ Borehole Construction Type: ☑ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (Specify) 	Was Casing Cut Off Below Surface? Yes No Did Sealing Material Rise to Surface? Yes No Did Material Settle After 24 Hours? Yes Yes If Yes, Was Hole Retopped? Yes No			
Formation Type: Unconsolidated Formation Bedrock Total Well Depth (ft.) 33.9' Casing Diameter (ins.) 2" (From groundsurface) 36.25'	 (5) Required Method of Placing Sealing Material Conductor Pipe-Gravity Conductor Pipe-Pumped Dump Bailer Other (Explain) (6) Sealing Materials For monitoring wells and Neat Cement Grout monitoring well boreholes on Sand-Cement (Concrete) Grout 			
Casing Depth (ft.)	Concrete X Bentonite Pellets Clay-Sand Slurry Bentonite-Sand Slurry Chipped Bentonite			
(7) Sealing Material Used	From (Ft.) To (Ft.) Sacks Sealant or Volume Mix Ratio or Mud Weight			
3/8"Bentonite Pellets	Surface 34.0' 1 sack			
(8) Comments:				
9) Name of Person or Firm Doing Scaling Work Nummelin Testing Services Signature of Person Doing Work Date Signed 11-15-93	(10) FOR DNR OR COUNTY USE ONLY Date Received/Inspected District/County Reviewer/Inspector Reviewer/Inspector			

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Follow-up Necessary

(715) 341-7974

WI 54481

Stevens Point,

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PHASE II INVESTIGATION PROPOSED WAL-MART SITE WICONSIN RAPIDS, WI 9-21-93
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4.	SOIL BORING LOGS	APPENDIX	Х
5.	RESUMES	APPENDIX	Y
6.	SITE LOCATION	APPENDIX	Z



Nummelin Testing Services 332 North Georgia Street - Stevens Point, Wisconsin 54481 Lab. (715) 341-7974 Fax. (715) 341-8654

3802 Packers Avenue - Madison, Wisconsin 53704 Lab. (608) 241-4346 Fax. (608) 241-4308

9/21/93

PHASE II - SUBSURFACE SOIL INVESTIGATION FOR POSSIBLE CONTAMINATION.

For: Sain Associates Suite 200 244 West Valley Avenue Birmingham, Alabama 35219-9953

Site: Proposed Wal-Mart Store Eight Avenue Wisconsin Rapids, WI

1. INTRODUCTION:

In August of 1993, an updated Phase I Environmental Study was performed on the proposed site. The updated study had three areas of concern, S-1, S-2 and S-3, which are found in figure 1 attached to this report. The updated study recommended these three areas of concern be investigated further for possible soil contamination. The updated study also recommended resampling the existing on-site 6" well to determine if benzene is present in the groundwater at this location. This phase II investigation was performed to address the recommendations made in the updated Phase I Environmental Study.

Nummelin Testing Services utilizes a phased approach in conducting environmental reconnaissance projects. The Phase I investigation is considered to be the lowest level normally required for checking prior site usage. The Phase II investigation is conducted to investigate areas of concern generated by the Phase I investigation. The Phase III investigation usually consists of determining the boundaries of the areas determined to be contaminated in the Phase II investigation and performing remediation.

The main focus of this report will concentrate on laboratory testing specifically directed toward identifying the

presence of hazardous materials in the soil samples collected during the soil boring operation and on the groundwater sample collected from the on-site well.

The updated Phase I Environmental Study was reported on August 8, 1993.

DISCUSSION:

On August 27, 1993, three soil borings were performed in accordance with ASTM Test Designation D1586. One soil boring was performed to a depth of 15' in each of the three areas of concern. Soil samples were collected using a split spoon sampler at 2 1/2' intervals. The soil samples collected were analyzed using a Photovac meter (PID). The soil samples submitted to the laboratory for analysis were split samples placed directly into vials with teflon covers. Two soil samples from TB-1 and two samples from TB-2 were submitted for VOC analysis. Two soil samples submitted from TB-3 were analyzed for pH and lead.

The soil samples tested with the Photovac meter were placed in glass jars and covered with aluminum foil, allowed to warm and then tested. All sampling equipment used for soil sample collection was washed with detergent water and rinsed with distilled water between each sample collection. The field test results of the soil samples are as follows:

SAMPLE	C	SAMPLE	*METER	
NUMBER	2	DEPTH	READING	(ppm)
TB-1:	S−1	2.0'	228	
TB-1;	S-6	14.5'	156	
TB-2:	S-1	2.0'	687	
TB-2;	S-6	14.5'	232	
TD-3	S-1	2 0'	108	
TB-3;	S-4	9.5'	132	

*Due to the instability of the field meter the readings may not be accurate and should be viewed as an indicator at best.

The laboratory test results indicate some compounds were detected in the soil samples submitted. They are as follows:

Sample <u>Number</u>	Compound <u>Detected</u>	Quantity (ppb)	ES** (ppb)	PAL** (ppb)
TB-1; S-1	Tetrachloroethene	1.0	1.0	0.1
TB-1; S-6	None Detected			
TB-2; S-1	n-Butylbenzene Naphthalene 1,3,5-Tri-	24.1 6.9	40.0	8.0
	methylbenzene	8.4		

TB-2; S-6 None Detected

ES= Enforcement Standard for Groundwater. PAL= Preventative Action Limit for Groundwater.

**No ES nor PAL have been established for soils, therefore the ES and PAL for groundwater have been used. The ES and PAL quantities list should be used as reference only and not as guidelines for action. The new NR 700 Wisconsin Administrative Code will establish soil guidelines however, NR 700 has not yet been completed.

The laboratory test results for the soil samples submitted from TB-3 are as follows:

Sample <u>Number</u>	Sample <u>Depth</u>	Laboratory <u>Lead</u>	Test Results <u>pH</u>
S-1	2'	5.5 ppm	4.55
S-4	9.5'	2.0 ppm	5.41

The test results from TB-3 indicate the surface soils have received some impact however, the lead levels detected do not vary significantly from normal backround levels. Also lead tends to be rather immobile in soil. Therefore, it is our opinion the impact does not warrant further investigation or action at this time.

The existing, on-site, 6" groundwater well that had prior benzene detection was also sampled. The well was developed by removing 10 times the well volume of water from the well. A bailer was then used to sample the well. The water sample was placed in a glass vial with zero head space. The water sample was then delivered to the University of Wisconsin-Stevens Point for analysis. The laboratory test results indicate no benzene to be present in the groundwater sample.

RECOMMENDATIONS:

Based on the laboratory test results it is our opinion no further action is necessary in the areas of TB-1 and TB-3. The laboratory test results for the groundwater sample obtained from the existing on-site well indicate no contamination to be present therefore, no further action is necessary in this area. However, the laboratory test results for the area of TB-2 indicates the surface soil has been impacted in this area. From visual observations it appears the area impacted is approximately 8.0' in diameter. We estimate the depth of impact to be approximately 4.0'. We recommend the soils in this area be remediated in an acceptable manor. A few methods of remediation are as follows:

- 1. Excavate and landfill contaminated soils. However, long term liability does exist with this method.
- 2. Excavate and incinerate contaminated soils.
- 3. On-site bioremediation of contaminated soil.

We also recommend the on-site wells be abondoned in accordance with WDNR (Wisconsin Department of Natural Resources) Codes 112, 140 & 141. If the existing wells have

been properly installed (Consult well installation records, not part of this report), then the wells can be abondoned by filling with a grout slurry mix and then cutting off the well casing below the existing grounds surface. If the well casings have not been properly installed then the well casings will have to be drilled out and the hole filled with an impermeable material, ie. grout, bentonite etc. The proper forms will also need to be filed with the WDNR on well abondonment (Form 3300).

CLOSING:

If you have any questions or if we can be of further assistance to you please feel free to call our office.

NUMMELIN TESTING SERVICES

Duce//Lummelin

Bruce Nummelin Soil Scientist

Clifton E.R. Lawson P.E.

PROPOSED WAL-MART SITE WISCONSIN RAPIDS, WI AREAS OF CONCERN



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CHAIN OF C	CUSTODY/	ANAL	YSIS REC	UEST	FOI	RM				COMPANY NAME:	
FAUVIDONIAGNITAL TASK FORCE LADORATORY							NUMMELIN /	BRITHS JEAN			
	ENVIRONMENTAL TASK FORCE LABORATORY							PROJECT NO./CLIENT:			
university of wisconsin/ste	vens point * ste	vens point,	wisconsin 5448	1 * phone:	(715)3	346-37	53			WALMART SITE	E
SEND RESULTS TO:	Bottle Size/Pre	servative	7							SAMPLING LOCATION:	
NUMMECIN TESTING SERVICES						J					
332 N. GEORGAN ST	In /			2	#	na	54			SAMPLER:	
STELENSPOINT, WI	883			12/2	R	l l	ま			Bruce Num	MELINO
DATE TIME SAMPLE ID/DESCRIPTION	NO. OF BO	TTLES	TOTAL •TYPE		_	ANALY	SIS REC	UESTED		REMARKS	LAB ID NUMBER
8/27 10:40 TB1 SI	1		'S	1							501-1
" 10:55 TB1, 56			S	1							- 2
11 11:20 TBZ, SI	i		S	1							-]
11 11:30 782, 56			S	1							-4
1. 9:30 TB3, SI	<u> / i _ </u>		S								-5
·· 9:40 TB3, 54		ļ	S		1						-6
8/27 12:59 S#1	· 3	<u> </u>	GW			ļ					-7
TRIP BLANK						1					-8
										- DIDNE WARK	
PHOTO VAC					1	1	7				
COMMENTS/SPECIAL INSTRUCTIONS:				*Sample	Туре	SW-Surfa	ce Water	H-Hazard	ious Liquid	Field Filtered:	
				S-Soil SE-Sedin	ient	DW-Drink WW-Wast	ing Water tewater	A-Air 0-Oil		Date Due:	
				SO-Solid		GW-Grou	ndwater	X-Other_		RUSH:	
								T		(approved by lab)	
CUSTODY TRANSFERS Shipping Details-To Be Completed By ETF											
Belinguished by: a Context Time: Dec VERED											
Bungling	ha 12:11	in the		th XIIE	1 8	1 27/9	ר קיי ר קיי		Sampl	e Temperatures: 0	<u>'````````````````````````````````````</u>
tottle fumme on	151 0.10	pm 1	www	· / · / Y (/ /		<u> </u>	X	1 ym	Sampi		
2	<u> </u>	I			_		I		WI. 5	State Identification No.	. 750040280
										N. 0210	
Received for Laboratory by:					_					<u>No. U318</u>)



College of Natural Resources Environmental Task Force Lab

09/07/93

Bruce Nummelin Nummelin Testing Service 332 Georgia Street N. Stevens Point, WI 54481

Dear Bruce,

The enclosed results are for the set of PVOC's received August 27, 1993 from the Lany Walmart site, project number unknown. The samples were analyzed using a *Tekmar* LSC 2000/2016 purge and trap system and a *Varian* 3400 gas chromatograph equipped with a photoionization detector (PID). The PVOC's were analyzed in accordance with EPA method 8020 (P&T/GC/PID).

These samples were analyzed in accordance with the Environmental Task Force's quality control program and have met those requirements. Percent recoveries for matrix spikes are included for each batch of samples run. If you have any questions regarding these analyses, please call me at (715) 346-3753.

Sincerely,

John Lapakow Sci

John C. Zajakowski Environmental Task Force Trace Organics Lab--Assistant Manager



College of Natural Resources Environmental Task Force Lab Stevens Point, WI 54481-3897 (715) 346-3209

Sample Source:	Nummelin Testing Service
Sample Name:	Walmart
Sample Matrix	Groundwater
Lab Number:	501-93
Date Analyzed:	August 31, 1993
Analyst:	John Zajakowski

Wisconsin Modified LUST Method Spike

	CALCULATED	SPIKED	PERCENT
ANALYTE	CONCENTRATION	CONCENTRATION	RECOVERY
Benzene	35.1	30.8	114.1%
Ethylybenzene	33.2	30.8	107.8%
Toluene	36.0	30.8	116.7%
m&p-Xylene	69.2	61,6	112.4%
o-Xylene	32.5	30.8	105.6%
Trimethylbenzene-1,3,5	32.0	30.8	103.9%
Trimethylbenzene-1,2,4	30.9	30.8	100.4%
Methyl t-Butyl Ether	29.6	30,8	96.3%

COMMENTS=> All concentrations are reported in ug/L (ppb).



College of Natural Resources Environmental Task Force Lab

SAMPLE SOURCE	Nummelin Testing Service	SAMPLE MATRIX	Groundwater
SAMPLE SITE	Walmart	SAMPLE TEMP.	"On Ice"
SAMPLE NAME	S#1	DATE SAMPLED	08/27/93
SAMPLE NO.	501-93-7	DATE RECEIVED	08/27/93
PROJECT NO.	Unknown	DATE ANALYZED	08/31/93

PETROLEUM VOLATILE ORGANIC REPORT

Practical quantitation limits (ug/L) are indicated in brackets []. All concentrations are listed in parts per billion (ug/L).

Benzene	[0.8]	ND
Ethylbenzene	[1.0]	ND
Methyl-t-butyl Ether	[1.0]	ND
Toluene	[1.0]	ND
1,2,4-Trimethylbenzene	[1.0]	ND
1,3,5-Trimethylbenzene	[1.0]	ND
o-Xylene	[2.0]	ND
m+p-Xylene	[2.0]	ND

ND = = > Not Detected COLUMN = = > Restek 502.2--105 meters DETECTOR = = > Photoionization Detector (PID) $PRESERVATIVE = = > 750 \mu L 1:1 HCL$ PQL = = > 3-5 times the MDL

NOTE = = > One unidentified compound is present.



College of Natural Resources Environmental Task Force Lab

SAMPLE SOURCE	Nummelin Testing Service	SAMPLE MATRIX	Groundwater
SAMPLE SITE	Walmart	SAMPLE TEMP.	"On Ice"
SAMPLE NAME	Trip Blank	DATE SAMPLED	08/27/93
SAMPLE NO.	501-93-8	DATE RECEIVED	08/27/93
PROJECT NO.	Unknown	DATE ANALYZED	08/31/93

PETROLEUM VOLATILE ORGANIC REPORT

Practical quantitation limits (ug/L) are indicated in brackets []. All concentrations are listed in parts per billion (ug/L).

Benzene	[0.8]	ND
Ethylbenzene	[1.0]	ND
Methyl-t-butyl Ether	[1.0]	ND
Toluene	[1.0]	ND
1,2,4-Trimethylbenzene	[1.0]	ND
1,3,5-Trimethylbenzene	[1.0]	ND
o-Xylene	[2.0]	ND
m+p-Xylene	[2.0]	ND

ND = = > Not Detected COLUMN = = > Restek 502.2--105 meters DETECTOR = > Photoionization Detector (PID) PRESERVATIVE = > 750uL 1:1 HCLPQL = = > 3-5 times the MDL

NOTE = = >



College of Natural Resources Environmental Task Force Lab

09/07/93

Bruce Nummelin Nummelin Testing Service 332 Georgia Street N. Stevens Point, WI 54481

Dear Bruce,

The enclosed results are for the set of VOC's received August 27, 1993 from the Lany Walmart site, project number unknown. The samples were analyzed using a *Tekmar* LSC 2000/2016 purge and trap system and a *Varian* 3400 gas chromatograph equipped with a photoionization detector (PID) and a *Hall* electrolytic conductivity detector (HECD). The VOC's were analyzed in accordance with EPA method 8021 (P&T/GC/PID/HECD). These two detectors are linked in series. We use the PID to report aromatic and alkene analytes and the HECD to report halogenated analytes.

These samples were analyzed in accordance with the Environmental Task Force's quality control program and have met those requirements. Percent recoveries for matrix spikes are included for each batch of samples run. If you have any questions regarding these analyses, please call me at (715) 346-3753.

Sincerely,

John Zapelan Xai

John C. Zajakowski Environmental Task Force Trace Organics Lab--Assistant Manager



College of Natural Resources Environmental Task Force Lab Stevens Point, WI 54481-3897 (715) 346-3209

Sample Source:Nummelin Testing ServiceSample Site:WalmartLab Number:501-93Date Analyzed:September 1, 1993Sample MatrixSoilAnalysist:John Zajakowski

EPA 8021-- Volatile Organic Compound Spike

	CALCULATED	SPIKED	PERCENT
ANALYTE	CONCENTRATION	CONCENTRATION	RECOVERY
Benzene	23.7	25.0	94.9%
Toluene	24.7	25.0	98.6%
Chlorobenzene	24.2	25.0	96.8%
Trichloroethene	22.6	25.0	90.5%
Dichloroethene-1,1	25.7	25.0	103.0%

Comments=>All concentration are reported in ug/L (ppb).



College of Natural Resources Environmental Task Force Lab

SAMPLE SOURCE	Nummelin Testing Service	DATE SAMPLED	08/27/93
SAMPLE SITE	Walmart Site	DATE RECEIVED	08/27/93
SAMPLE NAME	TB#1 S#1	DATE ANALYZED	09/01/93
SAMPLE MATRIX	Soil	SAMPLE NUMBER	501-93-1
SAMPLE TEMP.	"On Ice"	PROJECT NUMBER	Unknown

EPA METHOD 8021

Practical quantitation limits (ug/L) are indicated in brackets []. All concentrations are reported in parts per billion (ug/Kg).

Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	ND	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-Isopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	ND
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	1.0
4-Chlorotoluene	[1.0]	ND	Toluene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	ND
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND			
Dichloromethane	[5.0]	ND			

PQL=>3-5 Times the MDL ND=>Not Detected NOTE=>



College of Natural Resources Environmental Task Force Lab

Nummelin Testing Service	DATE SAMPLED	08/27/93
Walmart Site	DATE RECEIVED	08/27/93
TB#1 S#6	DATE ANALYZED	09/01/93
Soil	SAMPLE NUMBER	501-93-2
"On Ice"	PROJECT NUMBER	Unknown
	Nummelin Testing Service Walmart Site TB#1 S#6 Soil "On Ice"	Nummelin Testing ServiceDATE SAMPLEDWalmart SiteDATE RECEIVEDTB#1 S#6DATE ANALYZEDSoilSAMPLE NUMBER"On Ice"PROJECT NUMBER

EPA METHOD 8021

Practical quantitation limits (ug/L) are indicated in brackets []. All concentrations are reported in parts per billion (ug/Kg).

-					
Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	ND	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-Isopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	ND
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	ND
4-Chlorotoluene	[1.0]	ND	Toluene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	ND
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND	, , ,	• •	_
Dichloromethane	15.01	ND			

PQL=>3-5 Times the MDL ND=>Not Detected NOTE=>



College of Natural Resources Environmental Task Force Lab

SA	MPLE SOURCE	Nummelin Testing Service	DATE SAMPLED	08/27/93
SA	MPLE SITE	Walmart Site	DATE RECEIVED	08/27/93
SA	MPLE NAME	TB#2 S#1	DATE ANALYZED	09/01/93
SA	MPLE MATRIX	Soil	SAMPLE NUMBER	501-93-3
SA	MPLE TEMP.	"On Ice"	PROJECT NUMBER	Unknown

EPA METHOD 8021

Practical quantitation limits (ug/L) are indicated in brackets []. All concentrations are reported in parts per billion (ug/Kg).

Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	24.1	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-Isopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	6.9
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	ND
4-Chlorotoluene	[1.0]	ND	Toluene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	8.4
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND	· • •		
Dichloromethane	[5.0]	ND			

PQL = > 3-5 Times the MDL

ND=>Not Detected

NOTE => Heavier, unidentified petroleum compounds are present.



College of Natural Resources Environmental Task Force Lab

SAMPLE SOURCE	Nummelin Testing Service	DATE SAMPLED	08/27/93
SAMPLE SITE	Walmart Site	DATE RECEIVED	08/27/93
SAMPLE NAME	TB#2 S#6	DATE ANALYZED	09/01/93
SAMPLE MATRIX	Soil	SAMPLE NUMBER	501-93-4
SAMPLE TEMP.	"On Ice"	PROJECT NUMBER	Unknown

EPA METHOD 8021

Practical quantitation limits (ug/L) are indicated in brackets []. All concentrations are reported in parts per billion (ug/Kg).

Benzene	[0.8]	ND	1,2-Dichloropropane	[0.7]	ND
Bromobenzene	[1.0]	ND	1,3-Dichloropropane	[0.6]	ND
Bromochloromethane	[1.0]	ND	2,2-Dichloropropane	[2.0]	ND
Bromodichloromethane	[4.0]	ND	1,1-Dichloropropene	[1.0]	ND
Bromoform	[4.0]	ND	cis-1,3-Dichloropropene	[0.8]	ND
Bromomethane	[15.0]	ND	trans-1,3-Dichloropropene	[0.7]	ND
n-Butylbenzene	[1.0]	ND	Ethylbenzene	[1.0]	ND
sec-Butylbenzene	[2.0]	ND	Hexachlorobutadiene	[2.0]	ND
tert-Butylbenzene	[1.0]	ND	Isopropylbenzene	[1.0]	ND
Carbon Tetrachloride	[1.0]	ND	p-Isopropyltoluene	[1.0]	ND
Chlorobenzene	[2.0]	ND	Naphthalene	[2.0]	ND
Chloroethane	[8.0]	ND	n-Propylbenzene	[1.0]	ND
Chloroform	[3.0]	ND	1,1,1,2-Tetrachloroethane	[1.0]	ND
Chloromethane	[15.0]	ND	1,1,2,2-Tetrachloroethane	[2.0]	ND
2-Chlorotoluene	[1.0]	ND	Tetrachloroethene	[1.0]	ND
4-Chlorotoluene	[1.0]	ND	Toluene	[1.0]	ND
Dibromochloromethane	[5.0]	ND	1,2,3-Trichlorobenzene	[2.0]	ND
1,2-Dibromo-3-Chloropropane	[3.0]	ND	1,2,4-Trichlorobenzene	[2.0]	ND
1,2-Dibromoethane	[1.5]	ND	1,1,1-Trichloroethane	[2.0]	ND
Dibromomethane	[1.0]	ND	1,1,2-Trichloroethane	[1.0]	ND
1,2-Dichlorobenzene	[1.0]	ND	Trichloroethene	[1.0]	ND
1,3-Dichlorobenzene	[1.0]	ND	Trichlorofluoromethane	[15.0]	ND
1,4-Dichlorobenzene	[1.0]	ND	1,2,3-Trichloropropane	[2.0]	ND
Dichlorodifluoromethane	[15.0]	ND	1,2,4-Trimethylbenzene	[1.0]	ND
1,1-Dichloroethane	[0.8]	ND	1,3,5-Trimethylbenzene	[1.0]	ND
1,2-Dichloroethane	[0.9]	ND	Vinyl Chloride	[2.0]	ND
1,1-Dichloroethene	[1.0]	ND	o-Xylene/Styrene	[2.0]	ND
cis-1,2-Dichloroethene	[1.0]	ND	m+p-Xylene	[2.0]	ND
trans-1,2-Dichloroethene	[1.0]	ND			
Dichloromethane	[5.0]	ND			

PQL=>3-5 Times the MDL ND=>Not Detected NOTE=>

NUMMELIN TESTING SERVICES

PROJECT: Walmart-Wis. Rapids, WI PROJECT NO: 105.06 CLIENT: Sain & Associates DATE: September 14, 1993

BORING NO: TB-1 LOCATION: 5'N of NW corner of Bob's Cab GROUNDWATER: SURFACE ELEV:

SOIL CLASSIFICATION AND REMARKS	SAMP NO.	SAMPLE DEPTH	BLOW COUNTS	MOIST	LAB AND	RESULTS REMARKS
0.0'-1.0' Brown F-M sand w/ trace gravel	1	0.0'-2.0'	2,2,2,3	М		
1.0'-1.4' Black cinders (old fill)	2	2.5'-4.5'	2,3,3,3	м		
1.4'-1.8' Dark Brown F-M sand w/ trace silt	3	5.0'-7.0'	3,3,5,6	М		
1.8'-19.5' Brown F-M	4	7.5'-9.5'	3,4,5,6	М		
sand w/ occas, gravel becoming lighter and	5	10.0'-12.0'	2,3,3,5	М		
decreasing gravel with depth	6	12.5'-14.5'	4,5,5,7	м		
	7	15.0'-17.0'	5,6,8,9	М		
EOB	8	17.5'-19.5'	3,4,6,8	м		

SUBCONTRACTED BY: Environmental & Foundation Drilling DRILLING METHOD: 2.25 HSA WATER LEVEL MEASUREMENTS: Dry

SOIL BORING LOG

NUMMELIN TESTING SERVICES

PROJECT: Walmart-Wis. Rapids, WI PROJECT NO: 105.06 CLIENT: Sain & Associates DATE: September 14, 1993 BORING NO: TB-2 LOCATION: 204'N & 75#'W NW Corner of Bob's Cab GROUNDWATER: SURFACE ELEV:

SOIL CLASSIFICATION AND REMARKS	SAMP NO.	SAMPLE DEPTH	BLOW COUNTS	MOIST	LAB AND	RESULTS REMARKS
0.0'-1.0' Brown F-M sand w/ trace silt & occ. gravel	1	0.0'-2.0'	2,2,2,3	М		
	2	2.5'-4.5'	2,3,4,6	М		
	3	5.0'-7.0'	3,4,6,6	М		
1.0'-14.5' Brown F-M	4	7.5'-9.5'	2,3,4,5	М		
becoming lighter and	5	10.0'-12.0'	2,2,2,2	М		
with depth	6	12.5'-14.5'	2,3,4,5	М		
ЕОВ						

SUBCONTRACTED BY: Environmental & Foundation Drilling DRILLING METHOD: 2.25 HSA WATER LEVEL MEASUREMENTS: Dry

SOIL BORING LOG

NUMMELIN TESTING SERVICES

PROJECT: Walmart-Wis. Rapids, WI PROJECT NO: 105.06 CLIENT: Sain & Associates DATE: September 14, 1993

BORING NO: TB-3 LOCATION: NE corner of site @ 920 Kuhn address GROUNDWATER: SURFACE ELEV:

SOIL CLASSIFICATION AND REMARKS	SAMP NO.	SAMPLE DEPTH	BLOW COUNTS	MOIST	LAB AND	RESULTS REMARKS
0.0'5' Dk Brown F-M sand w/ trace silt &	1	0.0'-2.0'	2,2,2,3	М		
occ, graver	2	2.5'-4.5'	3,3,3,5	М		
	3	5.0'-7.0'	2,3,4,4	М		
1.0'-14.5' Brown F-M	4	7.5'-9.5'	4,5,5,7	М		
becoming lighter and no gravel with depth	5	10.0'-12.0'	3,4,3,4	М		
	6	12.5'-14.5'	2,2,2,3	м		
EOB						

SUBCONTRACTED BY: Environmental & Foundation Drilling DRILLING METHOD: 2.25 HSA WATER LEVEL MEASUREMENTS: Dry

SOIL BORING LOG

BRIEF SUMMARY RESUME CLIFTON E.R. LAWSON, PROFESSIONAL ENGINEER

BIRTHDAY: May 25, 1928

EDUCATION: BCE 1951 (Civil Engineering) and MS 1956 (Soils Engineering) from Cornell University, Ithaca, N.Y. in top quarter of class.

LICENSES, SOCIETIES, ETC.: Registered Professional Engineer, WI, IA, IL, IND, & MA. Member ASCE, WSPE, NSPE, ASTM, ASTM Committees D-18 & D-34. Part Time Instructor in extension and classroom courses at University of Wisconsin (Madison). Contributor to discussions ASTM and ASCE.

EXPERIENCE RECORD

1954-56 & 1956-58 with B.K. Hough, Consulting Engineer, Ithaca, N.Y. as graduate engineer performing soils engineering for airports, public and private buildings and earthen dams.

1956 (5 months) with Louis Berger and Associates, Harrisburg, Pa. as soils engineer in charge of field office for all roadway and bridge soils investigations for 30 miles of Illinois Tollway.

1958-63 with Wisconsin Department of Transportation, Madison, Wisconsin as Senior Soils Engineer, Central Office. In charge of all subsurface investigations and roadway soils studies for new work. Supervised 15 to 25 engineers and technicians. Prepared soils engineering reports. Developed techniques for pile load tests, seismic and resistivity explorations. Wrote much of the Wisconsin Highway Soils Manual. Trained engineers and technicians in testing and engineering procedures. Developed test boring equipment and techniques. Consultant to other State agencies.

1963-82 with Warzyn Engineering Inc., Madison, Wisconsin as Chief Soils Engineer. Also from 1974 to '82 as Chief Materials Engineer. Supervised 10 to 25 engineers, scientists, and technicians. Prepared soils engineering and materials engineering reports for all types of structures and civil engineering works, developed test techniques, trouble-shoot unusual problems with structures and soils, expert witness in these situations as well as gas explosions, construction materials problems (such as fatigue breaks, blasting vibrations, and floor covering failures). Developed and supervised special testing methods for physical and chemical characterization of solid wastes (such as power plant fly ash and scrubber sludge, paper mill sludge, and foundry waste). Supervised geotechnical investigations for industrial machinery and diagnosed sources of machine vibrations, developed foundation solutions. Expert witness for dredge problems. Siting studies of industrial and other facilities.

1982 to Present. Independent Consulting Engineer. Consulting engineering on Soils Engineering and Construction Materials related subjects for Contractors, Engineers, Architects and Owners of Real Estate. Expert Witness on materials and geotechnical problems. Summer School Instructor UW Madison "Advanced Highway Design and Construction". Pavement Analysis for evaluating and most economic upgrading. Contractor advice for poor construction sites. Bridge and building site investigations. Sewer and force main investigations. Construction material failure analyses. Laboratory testing of soils. Soil stability analyses for dikes, slopes, trench walls, and water retaining structures. Drainage studies for wet sites, such as lift stations, athletic fields, tennis courts, etc. Environmentally related engineering projects such as site evaluations for bank financing, underground storage tank site assessments.

4/91

BRUCE NUMMELIN BS/SS

OWNER

EXPERTISE: Soil Scientist, Materials Quality Control, Laboratory Analysis

CAREER EXPERIENCE:

Owner of Nummelin Testing Services

Laboratory Supervisor of Gremmer-Bablitch Consulting Engineers, Stevens Point, WI

Laboratory Supervisor of Soils & Engineering Services, Madison, WI

Accomplishments Include:

*Geotechnical investigation for proposed building sites; laboratory analysis of proposed clay borrow sites; laboratory analysis of clay liner at the Winnebago County Landfill; construction materials testing at several Wal-mart stores, Copps stores, Fleet Farm, Saint Michael's Hospital.

*Wide variety of construction materials testing for municipal utilities, waste water treatment facilities, airports, libraries, motels, athletic fields, schools, state facilities, roadways and bridges as well as private home sites.

*Environmental Monitoring- groundwater monitoring for Abbotsford and Medford, Wisconsin as well as Badger Disposal in Rio, Wisconsin.

PROFESSIONAL CREDENTIALS:

*Bachelor of Science, Soil Science, UW Madison *Environmental Studies Certificate, UW Madison *ACI Certification - Concrete Testing *Troxler Certification - Field Density Testing *Nuclear Regulatory Materials License Holder *State of Wisconsin Site Assessment Certification *Department of Transportation - Agg Tech I

PROFESSIONAL AFFILIATIONS:

*American Concrete Institute *WRMCA BRUCE NUMMELIN BS/SS

OWNER

EXPERTISE: Soil Scientist, Materials Quality Control, Laboratory Analysis

CAREER EXPERIENCE:

Owner of Nummelin Testing Services

Laboratory Supervisor of Gremmer-Bablitch Consulting Engineers, Stevens Point, WI

Laboratory Supervisor of Soils & Engineering Services, Madison, WI

Accomplishments Include:

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*Nuclear Regulatory Materials License Holder

*State of Wisconsin Site Assessment Certification

*Department of Transportation - Agg Tech I

PROFESSIONAL AFFILIATIONS:

*American Concrete Institute

***WRMCA**



ENVIRONMENTAL STUDY PHASE I-UPDATE

WAL-MART STORE WISCONSIN RAPIDS, WI AUGUST-8-93



Nummelin Testing Services 332 North Georgia Street - Stevens Point, Wisconsin 54481 Lab. (715) 341-7974 Fax. (715) 341-8654

3802 Packers Avenue - Madison, Wisconsin 53704 Lab: (608) 241-4346 Fax: (608) 241-4308

PHASE I - PRIOR USE DETERMINATION AND LEVEL I SITE SURVEY (UPDATE)

For: Sain Associates Suite 200 244 West Valley Avenue Birmingham, Alabama 35219-9953

Site: Proposed Walmart Store Eight Avenue Wisconsin Rapids, WI

1. INTRODUCTION:

In July, 1989, a Phase I Environmental Audit was conducted on this site by Foth & Van Dyke of Milwaukee, WI.. Based on the findings of the Phase I conducted at that time a Phase II was implemented in September, 1989.

This investigation and report was performed for the purpose of updating the Phase I Environmental Property Investigation conducted by Foth & Van Dyke in 1989. Since 1989 the site has been cleared of all buildings. Approximately three additional acres have also been included to the proposed site since 1989. The additional three acres will be added to the southeast corner of the original site. The Phase I Audit conducted in 1989 was conducted on approximately 20 acres, this update will encompass approximately 23 acres.

Nummelin Testing Services utilizes a phased approach in conducting environmental reconnaissance projects. The Phase I investigation is considered to be the lowest level normally required for checking prior site usage.

The main focus of this report will concentrate on site changes that have occurred since 1989 which may have potential for environmental impairment. If the result of this Phase I indicates there is the potential for contamination to exist, we will recommend that field and PHASE I - PRIOR USE DETERMINATION AND LEVEL I SITE SURVEY (UPDATE)

For: Sain Associates Suite 200 244 West Valley Avenue Birmingham, Alabama 35219-9953

Site: Proposed Walmart Store Eight Avenue Wisconsin Rapids, WI

1. INTRODUCTION:

In July, 1989, a Phase I Environmental Audit was conducted on this site by Foth & Van Dyke of Milwaukee, WI.. Based on the findings of the Phase I conducted at that time a Phase II was implemented in September, 1989.

This investigation and report was performed for the purpose of updating the Phase I Environmental Property Investigation conducted by Foth & Van Dyke in 1989. Since 1989 the site has been cleared of all buildings. Approximately three additional acres have also been included to the proposed site since 1989. The additional three acres will be added to the southeast corner of the original site. The Phase I Audit conducted in 1989 was conducted on approximately 20 acres, this update will encompass approximately 23 acres.

Nummelin Testing Services utilizes a phased approach in conducting environmental reconnaissance projects. The Phase I investigation is considered to be the lowest level normally required for checking prior site usage.

The main focus of this report will concentrate on site changes that have occurred since 1989 which may have potential for environmental impairment. If the result of this Phase I indicates there is the potential for contamination to exist, we will recommend that field and laboratory testing specifically directed toward identifying the presence of hazardous materials be conducted (Phase II). Additional phases may or may not be warranted based on the information obtained during the Phase I and II investigation.

This investigation made use of reference information available in various agencies, as well as local information from sources noted herein.

II. PROPERTY DESCRIPTION:

The property consists of approximately 23 acres and is located on Eight Street within part of the SW 1/4, SE 1/4, Section 29, T22N, R6E, Town of Grand Rapids, Wood County, Wisconsin. The site is bordered on the north by Kuhn Avenue, to the west by Eight Street, and to the south by Peterson Avenue (apparently Center Avenue is now Peterson Avenue). The site was at one time part of a auto salvage operation.

The property is currently an open field with typical small oak and pine trees, shrubs, and herbaceous vegetation with the exception of a metal building housing a Taxi Cab dispatch and vehicle maintenance building in the southeast corner of the proposed site.

Further site information can be reviewed in the prior Phase I and Phase II reports.

III. TITLE SEARCH OF PREVIOUS OWNERS:

The 20 acre parcel was purchased in 1989 by Livesey Company from Mr. Morris Walcott. Livesey remains the current owner.

The additional acreage to the southeast was purchased in 1964 by Mr. Morris Wolcott from Ms. Alice Peterson. The additional acreage is approximately 3 acres. This property was annexed to the city in 1990. Phase I update - Wal-Mart Site, Wisconsin Rapids

For property owners prior to 1989, please refer to the original Phase I report.

IV. SITE USE HISTORY:

A. <u>Historical aerial photography review:</u>

Please refer to the prior Phase I report.

B. <u>Review of maps:</u>

Maps reviewed include "Hydrogeology of Wood County, Wisconsin".

For additional map review please refer to the original Phase 1 conducted in 1989 by Foth & Van Dyke.

C. Interview with Owner of Bobs' Cab Company:

We interviewed Mr. Leo Dashner, the current owner operator of Bobs' Cab located in the southeast corner of the subject property. This is the same Bob's Cab that occupied the lot at 4211 south Eight Street from 1987 to 1990. Then in 1990 Bob's Cab moved to its present location. Mr. Dashner summarized the usage of the property occupied by his present cab service as follows. The present metal building is used as an office for the business and as a service garage for the cabs. He stated that he witnessed no environmentally questionable activities during his involvement on the site. He also stated that he was not aware of any hazardous spills on the site.

V. REGULATORY REVIEW:

Personnel at the Wisconsin Department of Natural Resources (WDNR) indicate that the Wisconsin DNR data bases for spills, hazardous waste, well contamination and similar problem sites are as complete or more so than US EPA records would be. Therefore, the Wisconsin DNR records were reviewed for possible environmental problems in the site vicinity. Wisconsin is generally more restrictive and

active in environmental awareness and enforcement than the The US EPA was not contacted. The DNR state wide US EPA. data base print out, obtained from the DNR North Central District Headquarters in Rhinelander, WI listing reported spills and environmental problem areas was reviewed. The Wood County Department of Health was also contacted. This department has a listing of all registered underground storage tanks either installed or removed. According to the Department of Health the listing shows no underground storage tanks having been installed or removed from this site. No other state or federal agency has a local office that would have pertinent information to this assessment that was not contacted in the original Phase 1 study.

- VI. REVIEW OF AVAILABLE SITE INFORMATION FOR ENVIRONMENTAL FACTORS:
- A. <u>Proximity to Hazardous Waste Sites:</u>

Please refer to the previous Phase I and Phase II reports.

- B. Spills Listed in Area:
 - 1. A 150 gallon fuel oil spill occurred at 3761 8th Street South, the responsible party was Rapids Energy located in Wisconsin Rapids, <u>no</u> action was required by the DNR.

No other spills in the immediate area are listed in the DNR's spills list.

C. <u>Geologic and Hydrogeologic Characteristics and</u> <u>Vulnerability:</u>

Regional ground water flow in central Wood County generally is from north to south flowing into the low-lying wetlands to the Southwest. The subject site is not likely to be adversely affected by groundwater flows into the site.

C. Environmentally Sensitive Areas:

The Ziebart under coating business located to the north of the subject sites northwest corner contains hazardous materials. However, they pose little or no threat to the project site.

Ferrell Gas Company located south of the subject sites southeast corner contains large amounts of liquid propane gas.

VII. SITE VISIT AND REPORT:

All structures of Area No. 1 at 4211 South Eight Street and Area No. 2 at 920 Kuhn Avenue have been removed. The septic systems at both Areas 1 and 2 have been removed by Bohn Trucking and Excavating, Inc.. According to Mr. Ron Bohn the septic systems were concrete. We were informed that the tanks were removed from the site and the holes backfilled with sand.

A metal building approximately 50' X 80' housing Bobs' Cab is located in the southeast corner of the subject site. This structure is constructed with a typical slab on grade. We toured the inside of the building and noted drain oil being stored in 55 gallon drums for recycling. A parts cleaning unit containing parts cleaning solution is regularly maintained by the supplier. The floor contains a floor trough type drain running east-west through the slab. We were informed that the floor drain empties into the onsite septic system. We were also informed that Bobs' Cab company is serviced by a 40' well and has a 1200 gallon concrete septic system at the north end of the building.

Walking around the building we noticed on the east and west sides what appears to be superficial oil spills typical of parked vehicles with small oil leaks. A circle containing no vegetation, approximately 3 1/2' in diameter, was noticed 78' west and 28' north of the cab buildings northwest corner. Petroleum odors were noted at this location. Weathered granite now covers this area. Evidence of no vegetation growth was also noticed just outside the buildings northwest corner. Odors similar to those rendered by a solvent were noted here.

During our walk of the site a small burn pile was noticed northwest of LMW 1. This pile contained porcelain light fixtures, burnt electric wire, insulation, plastic, and a broken porcelain toilet. Various metal parts and pieces were noted throughout the area. Small metal pieces were also noted near and within the old auto salvage area. No light fixtures containing ballasts were noted, nor any electrical transformers, or other material that could be environmental damaging.

In the former building area at 920 Kuhn Avenue three items of significance were noticed. The first being the presence of car battery parts in the soil. The second is an abandoned natural gas line protruding from the soil in the southeast corner of the building area. Third is a 30" metal casing that Mr. Morris Walcott, the former property owner, indicated may have been an old abandoned well that has been filled in with soil.

During the walk of the site no evidence of other environmental concerns such as electrical transformers, light ballasts, leaking pipes or material containing asbestos, were noted.

SUMMARY AND CONCLUSIONS:

Two areas with no vegetation growth and noticeable odors were noted near Bobs' Cab company (refer to the attached location sketch for locations). It is this writers opinion, that further investigation is warranted in both areas. The superficial oil spills on the east and west sides of the cab company are typical of parked vehicles with slow leaks and appear to be shallow in depth. This type of contamination poses little threat to the environment. The 920 Kuhn Avenue site is another area of environmental concern. Pieces of car batteries were found at the surface of the building area. Hand digging with a shovel several inches unearthed battery caps and pieces that appear to be from batteries. Battery acids and lead have the potential to contaminate both the soil and groundwater. It is this writers opinion that this area should also have further investigation.

The abandoned natural gas line in the southeast corner at 920 Kuhn Avenue poses no serious environmental threat, but should be properly removed.

Another area of environmental concern is the existing wells. The Phase I report dated July, 1989, makes reference to a private well locate south of the building at 4211 South Eight Street. However, the Phase II report dated September, 1989, makes reference to a private well located at 4213 South 13th Street with detection levels of 3.5 ppb of benzene. We were informed the WDNR conducted this investigation on June 3, 1987. This writer could not find an address of 4213 South 13th Street. Mr. Rick Panosh, of Foth & Van Dyke, was contacted in regard to the location of the private well found to contain Benzene. We were informed by Mr. Panosh the well is immediately to the Southwest of LMW 1 at 4211 8th Street. We were also informed by Mr. Panosh that the WDNR conducted the investigation that indicated the presence of 3.5 ppb benzene. Prior to the well closures, the well with the benzene detection needs to be sampled and the groundwater analyzed again for benzene. Based on the test results, well closures may then be addressed.

VIII. REPORT OF FINDINGS:

It is this writers opinion, there are several areas of this site that warrant additional investigations. Implementing a Phase II approach in the contaminated areas near Bobs' Cab company is of significant importance. A Phase II approach is needed to determine the extent of contamination. Also, Phase I update - Wal-Mart Site, Wisconsin Rapids

because the buildings floor drain empties into the septic system, this area also warrants further investigation.

The area at 920 Kuhn Avenue where the battery caps and parts were noted should have further investigation to determine the acid and lead levels.

Sampling of the groundwater at the well that had benzene detection in the Phase II conducted in September of 1989 will indicate the current level of benzene.

If you have any questions please feel free to call our office.

NUMMELIN TESTING SERVICES Thin, Clifton F. R. Lawson P.E.



1047001

PROPOSED WAL-MART SITE WISCONSIN RAPIDS, WI AREAS OF CONCERN


BRIEF SUMMARY RESUME CLIFTON E.R. LAWSON, PROFESSIONAL ENGINEER

BIRTHDAY: May 25, 1928

EDUCATION: BCE 1951 (Civil Engineering) and MS 1956 (Soils Engineering) from Cornell University, Ithaca, N.Y. in top quarter of class.

LICENSES, SOCIETIES, ETC.: Registered Professional Engineer, WI, IA, IL, IND, & MA. Member ASCE, WSPE, NSPE, ASTM, ASTM Committees D-18 & D-34. Part Time Instructor in extension and classroom courses at University of Wisconsin (Madison). Contributor to discussions ASTM and ASCE.

EXPERIENCE RECORD

1954-56 & 1956-58 with B.K. Hough, Consulting Engineer, Ithaca, N.Y. as graduate engineer performing soils engineering for airports, public and private buildings and earthen dams.

1956 (5 months) with Louis Berger and Associates, Harrisburg, Pa. as soils engineer in charge of field office for all roadway and bridge soils investigations for 30 miles of Illinois Tollway.

1958-63 with Wisconsin Department of Transportation, Madison, Wisconsin as Senior Soils Engineer, Central Office. In charge of all subsurface investigations and roadway soils studies for new work. Supervised 15 to 25 engineers and technicians. Prepared soils engineering reports. Developed techniques for pile load tests, seismic and resistivity explorations. Wrote much of the Wisconsin Highway Soils Manual. Trained engineers and technicians in testing and engineering procedures. Developed test boring equipment and techniques. Consultant to other State agencies.

1963-82 with Warzyn Engineering Inc., Madison, Wisconsin as Chief Soils Engineer. Also from 1974 to '82 as Chief Materials Engineer. Supervised 10 to 25 engineers, scientists, and technicians. Prepared soils engineering and materials engineering reports for all types of structures and civil engineering works, developed test techniques, trouble-shoot unusual problems with structures and soils, expert witness in these situations as well as gas explosions, construction materials problems (such as fatigue breaks, blasting vibrations, and floor covering failures). Developed and supervised special testing methods for physical and chemical characterization of solid wastes (such as power plant fly ash and scrubber sludge, paper mill sludge, and foundry waste). Supervised geotechnical investigations for industrial machinery and diagnosed sources of machine vibrations, developed foundation solutions. Expert witness for dredge problems. Siting studies of industrial and other facilities.

1982 to Present. Independent Consulting Engineer. Consulting engineering on Soils Engineering and Construction Materials related subjects for Contractors, Engineers, Architects and Owners of Real Estate. Expert Witness on materials and geotechnical problems. Summer School Instructor UW Madison "Advanced Highway Design and Construction". Pavement Analysis for evaluating and most economic upgrading. Contractor advice for poor construction sites. Bridge and building site investigations. Sewer and force main investigations. Construction material failure analyses. Laboratory testing of soils. Soil stability analyses for dikes, slopes, trench walls, and water retaining structures. Drainage studies for wet sites, such as lift stations, athletic fields, tennis courts, etc. Environmentally related engineering projects such as site evaluations for bank financing, underground storage tank site assessments.

4/91

BRUCE NUMMELIN BS/SS

OWNER

EXPERTISE: Soil Scientist, Materials Quality Control, Laboratory Analysis

CAREER EXPERIENCE:

Owner of Nummelin Testing Services

Laboratory Supervisor of Gremmer-Bablitch Consulting Engineers, Stevens Point, WI

Laboratory Supervisor of Soils & Engineering Services, Madison, WI

Accomplishments Include:

*Geotechnical investigation for proposed building sites; laboratory analysis of proposed clay borrow sites; laboratory analysis of clay liner at the Winnebago County Landfill; construction materials testing at several Wal-mart stores, Copps stores, Fleet Farm, Saint Michael's Hospital.

*Wide variety of construction materials testing for municipal utilities, waste water treatment facilities, airports, libraries, motels, athletic fields, schools, state facilities, roadways and bridges as well as private home sites.

*Environmental Monitoring- groundwater monitoring for Abbotsford and Medford, Wisconsin as well as Badger Disposal in Rio, Wisconsin.

PROFESSIONAL CREDENTIALS:

*Bachelor of Science, Soil Science, UW Madison *Environmental Studies Certificate, UW Madison *ACI Certification - Concrete Testing *Troxler Certification - Field Density Testing *Nuclear Regulatory Materials License Holder *State of Wisconsin Site Assessment Certification *Department of Transportation - Agg Tech I PROFESSIONAL AFFILIATIONS:

*American Concrete Institute *WRMCA

