Phase II Subsurface Investigation

at

Allyn Property
111 Steele St.
Parcel 201-00330-0720 (a.k.a. 31-201-Y&S-32)
Algoma, Kewaunee County, WI

for

Kummer, Lambert, Fox & Glandt, LLP
927A South 8th Street
P.O. Box 1180
Manitowoc, WI 54221-1180

March 2, 2015

N2162B14

Don Brittnacher
OMNNI Associates
One Systems Dr.
Appleton, WI 54914

Ph.: 920/735-6900
Fax: 920/830-6100
Email: don.brittnacher@omnni.com

TABLE OF CONTENTS

LIST OF APPENDICES

EXECUTIVE SUMMARY

OMNNI Associates has completed a Phase II subsurface investigation at the Allyn property located at 111 Steele St., Algoma, WI. The project was intended to determine whether former dry-cleaning operations at the site may have impacted the environment. The building was constructed in 1948 as a dry-cleaning business, which operated until 1981. Dry-cleaning fluid was stored outside the building in drums, and transferred by hose into the dry-cleaning room. Historically, fuel oil was stored at the site in a 200-gallon aboveground tank and a 6,000-gallon underground tank.

The dry-cleaning room and former tank locations are inside the building and inaccessible. Borings/temporary wells were placed outside the building immediately west of the dry-cleaning room in the former dry-cleaning fluid storage area, and immediately east of the fuel oil underground storage tank, downgradient of the former tanks and dry-cleaning operations.

Chlorinated solvents were found in the soil in the dry-cleaning fluid storage area, and in the groundwater in both locations. Tetrachloroethene, trichloroethene, and the trimethylbenzenes were detected above their respective groundwater pathway residual contaminant levels in boring B1. Tetrachloroethene and trichloroethene were detected above enforcement standards in both locations, and vinyl chloride was identified above the enforcement standard in TW2, the downgradient location.

Based on the analytical data, OMNNI recommends that the release be reported to the DNR, and that the site be further investigated to determine the extent of the contamination.

INTRODUCTION/BACKGROUND

The subject property is located at 111 Steele St., Algoma, in the NW ¼ of the SW ¼ of section 26, T25N, R25E, Kewaunee County, WI. (See Site Location Map, Appendix 1.) The property consists of tax parcel 201-00330-0720 (a.k.a. 31-201-Y&S-32).

A Phase I environmental site assessment performed in 2014 identified that a dry-cleaning business operated at the site from 1948 until approximately 1981. (See Site Detail Map, Appendix 1.) According to the owner, Stoddard solvent was used as the dry-cleaning fluid. A spill occurred from the dry-cleaning unit's fluid tank, located below the unit, which was located in a room on the west side of the building. The concrete floor in the room is cracked and stained. Immediately outside the building to the west of the dry-cleaning room, dry-cleaning fluids were stored in 55-gallon drums during the years of dry-cleaning operations. The fluids were transferred to the inside dry-cleaning unit by hose through a hole in the building wall.

A 200-gallon fuel oil aboveground storage tank was used to fuel the site's boiler from 1948 until 1955. It was located outside and to the north of the original building section. The tank was replaced with a 6,000-gallon fuel oil underground storage tank, also located to the north of the original building section. A garage addition to the original building section was built over the top of the area. The 6,000-gallon tank was closed in place in 1998. Soil contamination was not present above DNR reporting levels.

Due to the inaccessibility of the dry-cleaning room and former tank locations, OMNNI proposed the installation of two borings outside the building to the west and east of the dry-cleaning room and former tank locations.

The following are the primary contacts for the project:

Client: Harmon Allyn, 111 Steele St., Algoma, WI 54201: (920) 487-5781. Contact: Atty. Terry Fox, Kummer, Lambert, Fox & Glandt, LLP, 927A South 8th Street, P.O. Box 1180, Manitowoc, WI 54221-1180; (920) 683-5499.

Consultant: OMNNI Associates, One Systems Drive, Appleton, WI 54914; (920) 735-6900. Contact: Don Brittnacher.

Driller: Horizon Construction and Exploration, 1402 7th Avenue, Grafton, WI 53024-2330; (262) 377-2896.

Laboratory: Synergy Environmental Lab, 1990 Prospect Ct., Appleton, WI 54914; (920) 830-2455.

GEOLOGY AND HYDROGEOLOGY

The geology and hydrogeology of the area were determined by studying existing geologic, topographic, hydrogeologic, and soil maps, and by obtaining information during the present investigation.

Based on maps and information included in "*Water Resources of Wisconsin – Lake Michigan Basin"* by E. L. Skinner and R. G. Borman (1973), the surface soils in the area consist of glacial till. Subsurface borings performed during the present investigation at the site revealed sand to 25 feet below the ground surface, with minor amounts of gravel in the upper ten feet. Dolomite bedrock is expected to be approximately 35 feet below the ground surface at the site.

The topography at the site is flat. (See Topographic Map, Appendix 1.) In the area, the topography slopes to the east-northeast to the Ahnapee River, located 250 feet from the subject property.

The depth to groundwater at the site was measured in the two temporary wells at approximately 19 feet below the ground surface. The shallow groundwater flow direction is assumed to be to the northeast toward the Ahnapee River, with an easterly component in the direction of river flow.

The soil at the site consists of Udorthents, which are disturbed urban soils.

FIELD ACTIVITIES

On February 12, 2015, OMNNI coordinated the installation of two geoprobe soil borings (B1 and B2) on the subject property. (See Site Detail Map, Appendix 1.) Boring B1 was placed west of the building in the outside dry-cleaning fluid storage area, immediately adjacent to the dry-cleaning room inside the building. Boring B2 was installed east of the building, immediately adjacent to the abandoned fuel oil underground storage tank, in a location anticipated to be downgradient of that tank, the former aboveground fuel oil tank, the dry-cleaning room, and the dry-cleaning fluid storage area.

The borings were installed to a depth of 25 feet. (See Soil Boring Log Information Forms, Appendix 3.) Groundwater was encountered at approximately 19 feet below the ground surface.

Soil samples were obtained continuously from the borings for field screening with a photoionization detector (PID). At each sampling interval, a representative portion of the

soil was also collected for possible laboratory analysis. (See Handbook of Field Procedures, Appendix 4.)

Soil analytical samples were taken from each boring at the interval of strongest field evidence of contamination. The soil sample was taken from the 22.5 – 25 foot sampling interval in boring B1, and from the 20 – 22.5 foot interval in boring B2. Soil samples were delivered to a certified laboratory for analysis of volatile organic compounds (VOCs), gasoline range organics (GRO), diesel range organics (DRO), and lead.

Temporary groundwater monitoring wells (TW1 and TW2) were installed in the borings. Groundwater samples were collected from the wells on the date of installation and analyzed for VOCs, polycyclic aromatic hydrocarbons (PAHs), and total lead.

The boreholes have not been abandoned pending potential future use.

FIELD AND ANALYTICAL RESULTS

The soil in the borings consisted mostly of sand, with minor gravel concentrations in the upper ten feet. A slight petroleum odor and light gray discoloration were observed in boring B1 in the 22.5 – 25 foot interval. No elevated headspace readings were detected in the boring. (See soil boring logs for headspace data, Appendix 3.) In boring B2, a slight petroleum odor and light gray discoloration, along with a headspace reading of 106 ppm, were observed in the 20 – 22.5 foot interval. No odors, discoloration or headspaces were observed above or below that interval.

Soil contamination was found in boring B1, placed in the outside storage area west of the building. Tetrachloroethene, trichloroethene, and the trimethylbenzenes were detected above their respective groundwater pathway residual contaminant levels (RCLs). (See Table 1 – Summary of Laboratory Analysis, Soil Samples, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.) Tetrachloroethene was also detected above the non-industrial direct contact RCL, although the depth of the sample would preempt direct contact.

Groundwater contamination was found in both boring locations. Tetrachloroethene and trichloroethene were detected above enforcement standards in both locations, and vinyl chloride was identified above the enforcement standard in TW2, the downgradient location. (See Table 2 – Summary of Laboratory Analysis, Groundwater Samples, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.) Lead was detected above the preventive action limit in both locations.

CONCLUSIONS AND RECOMMENDATIONS

This Phase II environmental site investigation was intended to determine whether former dry-cleaning operations at the site may have impacted the environment. The building was constructed in 1948 as a dry-cleaning business, which operated until 1981. Dry-cleaning fluid was stored outside the building in drums, and transferred by hose into the dry-cleaning room. Historically, fuel oil was stored at the site in a 200-gallon aboveground tank and a 6,000-gallon underground tank.

The dry-cleaning room and former tank locations are inside the building and inaccessible. Borings/temporary wells were placed outside the building immediately west of the dry-cleaning room in the former dry-cleaning fluid storage area, and immediately east of the

fuel oil underground storage tank, downgradient of the former tanks and dry-cleaning operations.

Chlorinated solvents were found in the soil in the dry-cleaning fluid storage area, and in the groundwater in both locations. Tetrachloroethene, trichloroethene, and the trimethylbenzenes were detected above their respective groundwater pathway residual contaminant levels in boring B1. Tetrachloroethene and trichloroethene were detected above enforcement standards in both locations, and vinyl chloride was identified above the enforcement standard in TW2, the downgradient location.

Based on the analytical data, OMNNI recommends that the release be reported to the DNR, and that the site be further investigated to determine the extent of the contamination.

STANDARD OF CARE

The conclusions presented in this investigation were arrived at using generally accepted hydrogeologic and engineering practices. The conclusions presented herein represent our professional opinions, based on the data collected at the time of the investigation, at the specific boring and sampling locations discussed in this report. Conditions at other locations on the property may be different than described in this investigation. The scope of this report is limited to the specific project and location described herein.

Prepared By: Don Brittnacher

Don Brittnacher, P.G., P.E,
Hydrogeologist, Engineer

"I, Don Brittnacher, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

Don Brittnacher _____ .

(Professional Geologist) **(P.G. Number)**

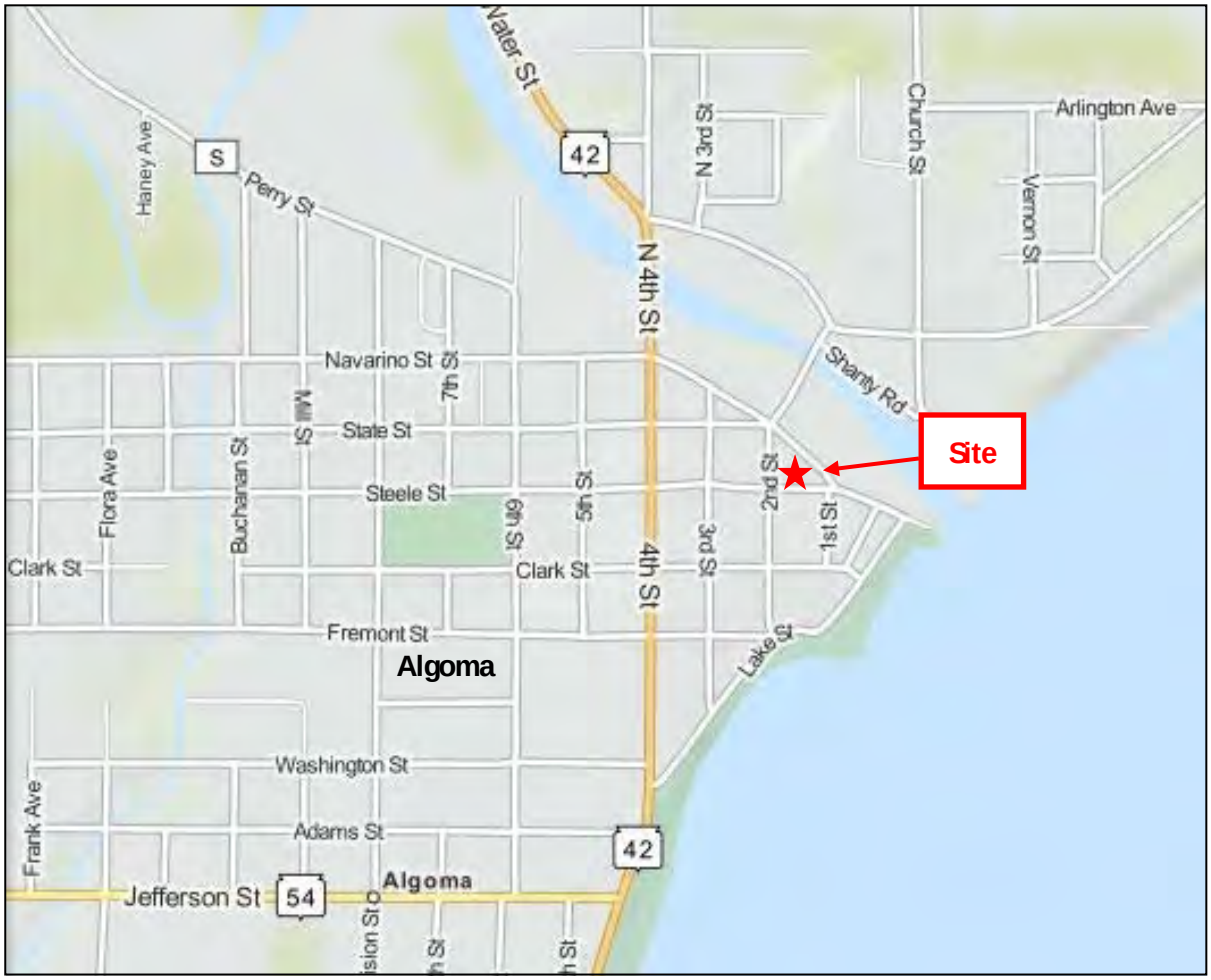
I, Don Brittnacher, certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

Don Brittnacher _____ .

(Professional Engineer) **(P.E. Number)**

APPENDIX 1

FIGURES

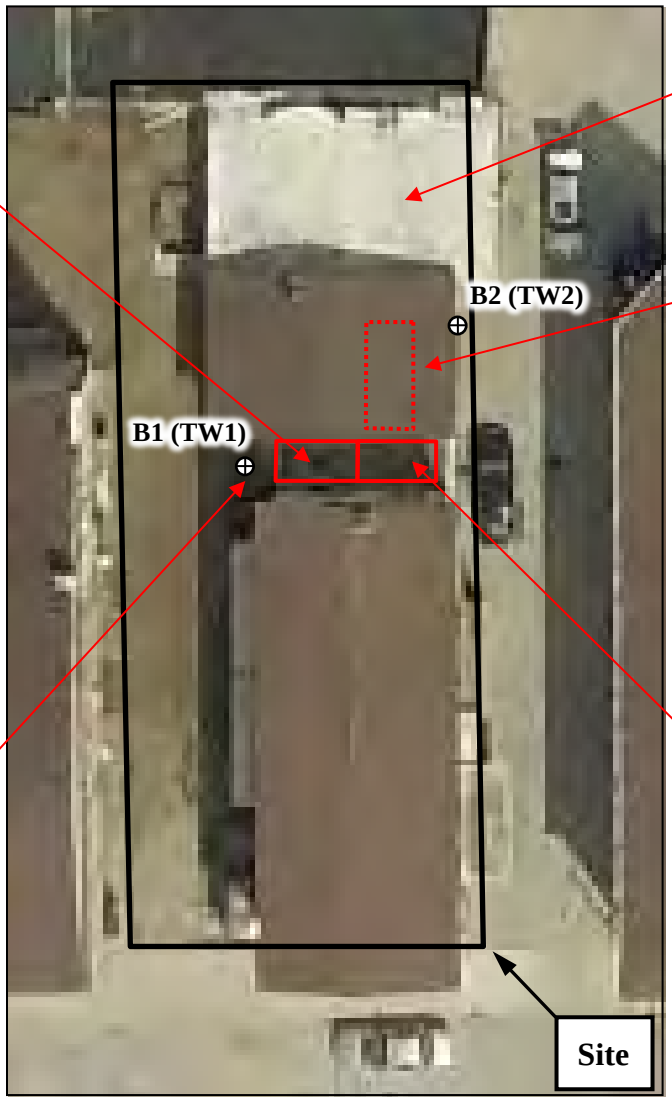


Source: Mapquest, reviewed 2/13/2015.

N

Site Location Map	
Allyn Property 111 Steele St. Algoma, WI	
OMNI ASSOCIATES	Project Number: N2162B14
	Date: February 13, 2015
One Systems Drive, Appleton, Wisconsin 54914-1654 Phone: (920) 735-6900 Fax: (920) 830-6100	

Site Detail Map



Topographic Map

Note: Contour interval is two feet.

APPENDIX 2

TABLES

Table 1 - Summary of Laboratory Analysis - Soil Samples

Boring & Sample	Sample Date	Depth (feet)	PID (iui)	DRO (mg/kg)	GRO (mg/kg)	Detected VOCs (mg/kg)									Lead (mg/kg)
						tert-Burylbenzene	sec-Butylbenzene	n-Butylbenzene	p-Isopropyltoluene	Tetrachloroethene	Toluene	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	
Groundwater Pathway RCLs				-	-	-	-	-	-	0.0045	1.1072	0.0036	1.3821		27
Direct Contact Non-Industrial RCLs				-	-	-	-	-	-	30.7	818	1.26	89.8	182	400
B1-1	02/12/15	0 - 2.5	0												
B1-2		2.5 - 5	0												
B1-3		5 - 7.5	0												
B1-4		7.5 - 10	0												
B1-5		10 - 12.5	0												
B1-6		12.5 - 15	0												
B1-7		15 - 17.5	0												
B1-8		17.5 - 20	0												
B1-9		20 - 22.5	0												
B1-10		22.5 - 25	0	5,040	2,980	0.36 "J"	1.72	8.0	7.0	**106**	0.33 "J"	***0.46 "J"***	***6.0***	***4.5***	5.92
B2-1	02/12/15	0 - 2.5	0												
B2-2		2.5 - 5	0												
B2-3		5 - 7.5	0												
B2-4		7.5 - 10	0												
B2-5		10 - 12.5	0												
B2-6		12.5 - 15	10.7												
B2-7		15 - 17.5	5.9												
B2-8		17.5 - 20	10.7												
B2-9		20 - 22.5	106	129	22.8	< 0.035	< 0.036	< 0.086	< 0.056	< 0.054	< 0.031	< 0.042	< 0.078	< 0.089	1.44
B2-10		22.5 - 25	0												

RCL = residual contaminant level

"J" = Analyte detected between the limit of detection and the limit of quantification

6.0 = detected above the groundwater pathway RCL.

106 = detected above the groundwater pathway and non-industrial direct contact RCLs.

(Note that sample was taken 22.5 - 25 feet below the ground surface.)

TABLE 2
SUMMARY OF LABORATORY ANALYSIS
GROUNDWATER SAMPLES

PARAMETER (µg/L)	ES	PAL	TW1	TW2
SAMPLE DATE			2/12/15	
DETECTED VOCs (ug/l)				
CIS-1,2-DICHLOROETHENE	-	-	142	32
TETRACHLOROETHENE	5	0.5	**1,280**	**35**
TRICHLOROETHENE	5	0.5	**41 "J"**	**6.4 "J"**
1,2,4-TRIMETHYLBENZENE	480	96	< 80	24 "J"
1,3,5-TRIMETHYLBENZENE			< 75	< 15
VINYL CHLORIDE	0.2	0.02	< 8.5	**30.5**
DETECTED PAHs (ug/l)				
ACENAPHTHENE	-	-	< 0.2	0.059 "J"
ACENAPHTHLYNE	-	-	< 0.21	0.08
BENZO(A)ANTHRACENE	-	-	< 0.19	0.019 "J"
FLUORENE	400	80	0.249 "J"	0.033 "J"
1-METHYLNAPHTHALENE	-	-	2.44	0.4
2-METHYLNAPHTHALENE	-	-	4.3	0.078
NAPHTHALENE	100	10	4.2	0.098
PHENANTHRENE	-	-	0.43 "J"	< 0.017
LEAD (ug/l)	15	1.5	***6.8***	***3.6***

ES = enforcement standard
PAL = preventive action limit
"J" = Analyte detected between the limit of detection and the limit of quantification
1,280 = sample concentration detected above the enforcement standard
6.8 = sample concentration detected above the preventive action limit

APPENDIX 3

DNR FORMS

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Allyn	_ _ _ _ _ _ _	B1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: Last Name: Firm: Horizon	2 1 12 2015	2 1 12 2015	direct push

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _ _ _ _	_ _ _ _	TW1	_____ Feet MSL	_____ Feet MSL	2 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E S/C/N | Lat ° ' " | Long ° ' "
NW 1/4 of SW 1/4 of Section 26, T 25 N, R 25 E/W
Local Grid Location ☐ N ☐ E _____ Feet ☐ S _____ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Kewaunee	3 1	Algoma

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (after ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
B1-1			1	lk brown topsoil				0		d				
			2											
			3	no sample										
B1-2			4					-		-				
			5											
B1-3			6	tan sand & gravel				0		m				
			7											
			8	lt. brown sand						m				
B1-4			9					0						
			10											
B1-5			11	4				0		m				
			12											

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

Signature: Dan Brettnacher | Firm: OMNNI Associates

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
B1-6			13–14					0		m				
B1-7			15	v. lt. gray sand				0		m				
			16	lt brown. sand										
B1-8			17–19					0		M W				
B1-9			20–21					0		W				
B1-10 * 10:19			22	lt gray sand				0		W				slight odor
			23–24	brown sand										
B-11			25–27											
B-12			28–29											
B-13			30–32											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☒ Other ☐ _____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Allyn		B2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: Last Name: Firm: Horizon	2/12/2015	2/12/2015	direct push

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		TW2	Feet MSL	Feet MSL	2 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E S/C/N
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E
Feet ☐ S Feet ☐ W

NW 1/4 of SW 1/4 of Section 26, T 25 N, R 25 E/W

Facility ID	County	County Code	Civil Town/City/ or Village
	Kewaunee	31	Algoma

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (After ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				asphalt										
B2-1			1	base course				0		d				
			2	brown sand & gravel										
B2-2			3					0		d				
			4											
B2-3			5											
			6					0		d				
B2-4			7											
			8	lt brown sand & gravel				0		d				
B2-5			9											
			10											
			11	lt. brown sand				0		m				
			12											

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

Signature	Firm
Dan Brettnacher	OMNNI Associates

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			13											
B2-6			14	"				10.7	M					
			15											
B2-7			16	lt brown sand & gravel				5.9	M					
			17	lt. brown sand										
B2-8			18					10.7	M					
			19	v. lt. gray sand					W at 19'					
			20	lt brown sand										
B2-9 * 11.08			21					106	W					slight odor
			22	lt gray sand										
			23											
B2-10			24	lt brown sand				0	W					
			25											
B -11			26											
			27											
B -12			28											
			29											
B -13			30											
			31											
			32											

APPENDIX 4

HANDBOOK OF FIELD PROCEDURES

HANDBOOK OF FIELD PROCEDURES

TABLE OF CONTENTS

PERSONNEL QUALIFICATIONS

Brian D. Wayner:	Completed 40-hour hazardous waste training. Bachelors Degree in Electrical Engineering from University of Wisconsin-Milwaukee. Masters Degree in Environmental Engineering from University of New Haven. PECFA Consultant Registration #47551. Licensed Professional Engineer (no. 35304), State of Wisconsin
Don Brittnacher:	Completed 40-hour hazardous waste training. Bachelors Degree in Geology from University of Notre Dame. Masters Degree in Environmental Health Engineering from University of Notre Dame. Licensed Professional Geologist (no. 462), State of Wisconsin Licensed Professional Engineer (no. 30286), State of Wisconsin PECFA Consultant Registration/Certified Site Assessor-42127.
Jason C. Weis:	Completed 40-hour hazardous waste training. Bachelors Degree in Civil Engineering from University of Wisconsin-Platteville. Masters Degree in Environmental Engineering from University of Wyoming. Licensed Professional Engineer (no. 36681), State of Wisconsin
Deanna L. Drum:	Completed 40-hour hazardous waste training. Associate Degree in Mechanical Design, Fox Valley Technical College.

SOIL BORING INSTALLATION PROCEDURES

A number of different drilling and Geoprobing®firms are used for environmental investigations. Borings intended to be converted to monitoring wells are advanced using 7 5/8" outside diameter (O.D.) x 4.5" inside diameter (I.D.) hollow stem augers or 6.25" O.D. solid stem augers powered by a truck-mounted drill rig. If bedrock drilling is required, borings are advanced using either air or mud-rotary drilling techniques. Soil borings not intended for monitoring wells are typically advanced using 4" O.D. solid stem augers. The Geoprobe®typically advances a 2" diameter hole. All soil borings that are not converted to permanent or temporary groundwater monitoring wells are properly abandoned per chapter NR 141, Wisconsin Administrative Code.

Samples are typically obtained from each boring at 2.5' intervals by split-spoon sampling according to American Society for Testing and Materials (ASTM) Standard D 1586. A portion of each sample is screened with a photoionization detector (PID). At each sampling interval, a representative portion of the soil is also collected for possible laboratory analysis. Soil samples are chosen from each boring for laboratory analysis based on headspace screening data, and visual and olfactory observations. In general, the sample from each boring that exhibits the highest PID reading is chosen for analysis. See the Soil Sampling Procedures below for further information pertaining to field headspace analysis and sample collection procedures.

SOIL SAMPLING PROCEDURES

All soil sampling is performed in accordance with the Wisconsin Department of Natural Resources (WDNR) publication PUBL-SW-127, Soil Sampling Requirements for LUST Site Investigations and Excavations and chapter COMM 10, Flammable and Combustible Liquids, Wis. Adm. Code. The soil samples are collected and analyzed in accordance with methods described in Table C-3 in Appendix C of WDNR PUBL-RR-614, Interim Guidance On Natural Attenuation For Petroleum Releases, 1999. Our standard instruments and sample collection procedures are as follows:

1. Soil samples are collected from a split-spoon sampler or a polyethylene tube during environmental drilling.

2. Sample collector wears new latex exam gloves when collecting samples to decrease the risk of personal exposure and cross contamination.

3. A portion of the sample is collected in a sampling syringe and placed in an appropriate container (see Table 1), immediately placed on ice, and later delivered to a WDNR-certified laboratory for analysis. This procedure is discussed in more detail later in this report.

4. The remaining portion of the sample is placed in a clean 4 oz. jar (approx. half-filled), and sealed with aluminum foil and a teflon-lined lid. The headspace sample is then agitated for a minimum of 30 seconds and allowed to equilibrate. Minimum equilibration time will correspond to the following specifications:

Minimum Sample Headspace Equilibration Time

Ambient Outside Air Temperature at the Time of Sample Collection:	Minimum Amount of Time Sample Must equilibrate at 70° F or Greater Temperature:
< 40 ° F	40 minutes
41 – 55 ° F	20 minutes
56 – 69 °F	10 minutes
> 70 °F	5 minutes

Instrument Specifications

When the sample has completed equilibration, it is promptly field analyzed with a portable PID. OMNNI uses either a Photovac Inc. Microtip HL-200 or ML-1000 or a Thermo Environmental Instruments Model 580A organic vapor monitor (OVM), both equipped with an 11.2 ev lamp. A background reading is first taken. The PID probe is then inserted into the jar through a single hole in the aluminum foil. The instrument reading is measured at one-half the distance between the foil seal and the sample surface. The measured reading is then recorded.

Isobutylene at a concentration of 100 ppm is used for field calibration gas. The PID meter is field calibrated at the following times:

- At the beginning of each day
- After any significant change in temperature or humidity
- Every three hours
- After any repairs to the instrument are performed

All samples are returned to the laboratory as soon as possible, usually the day the sample was collected. All samples are returned to the laboratory under chain-of-custody protocol, using form #4400-151. Time of sample collection and sample PID reading are listed. Care is taken to ensure that the chain-of-custody form is properly and fully completed before submitting to the laboratory. The samples are sent to a laboratory certified by the WDNR.

Table 2 on page 9 outlines the required WDNR laboratory analysis for specific contaminants. Soil analyses, other than those in Table 2, will be conducted in accordance with methods approved by the WDNR.

MONITORING WELL INSTALLATION AND DEVELOPMENT PROCEDURES

The permanent monitoring wells are typically constructed of two-inch, schedule 40, flush-thread polyvinyl chloride (PVC) casings and slotted well screens. Temporary wells are constructed of one-inch diameter, schedule 40 PVC casings and slotted screens. Prior to use, well parts are individually wrapped in plastic.

Permanent wells are installed and developed according to chapter NR 141, Wis. Adm. Code. The monitoring wells are installed with five to fifteen-foot screens which are placed in the borings to intersect the water table. Piezometers are installed with five-foot screens sealed beneath the water table. Filter pack and annular space seal material are installed by gravity as the augers are withdrawn from the hole. Wells are cut to the required height using a PVC pipe cutter.

An as-constructed well and boring survey is performed by OMNNI once field work is complete. Elevations are either based on a local datum of 100 feet, or a United States Geological Survey (USGS) elevation, assigned to a mark on a reference point located at the site. Ground elevation is surveyed to the nearest 0.1 foot, and the top of the well casing to the nearest 0.01 foot.

A horizontal grid system is established at the site with the origin of the grid set on the reference point. Wells and borings are located with respect to this grid system.

To properly develop each permanent monitoring well, water is removed until a consistent water quality is obtained. This is done by removing 10 times the water volume in the well and filter pack, removing water until it is free of sediment, or removing the water until the well is purged dry. Water is removed from the wells by bailing the water with as little agitation as possible. If the water level is unaffected by bailing and large amounts of water are to be removed, the well is developed by using the surge and purge method with a centrifugal pump. No water is added to the well during development. Temporary wells may be developed by allowing the peristaltic pump to run until the water is as clear as possible.

The development water is drummed, pending the results of analytical testing. If the well is suspected to be clean and small volumes of water are to be removed, the water may be spread on pavement to volatilize any possible contaminants. If the water is contaminated, it is properly disposed.

GROUNDWATER SAMPLING PROCEDURES AND VOLATILE ORGANIC COMPOUND (VOC) SAMPLING NOTES

A. Devices used to measure water elevation, purge wells and retrieve samples:

1. Groundwater levels are measured with a fiberglass reel tape with a weighted stainless steel "sounder" at the end.

2. In wells that have free product on top of the water surface, depth to water and depth to product are measured with a fiberglass reel tape with an interface probe at the end.

3. Wells are purged and samples are collected by one of the following methods:

   a) Wells are purged with a disposable bailer.

   b) Alternate purging and sampling equipment consisting of a peristaltic groundwater sampling pump.

B. Procedures for calculating purge volumes, purging wells and sampling:

1. Wells are normally sampled starting from the upgradient area and progressing toward the downgradient area of the site. When the degree of contamination is known, least contaminated wells are sampled first, the more contaminated wells sampled last.

2. All the wells are opened before the depth to groundwater is determined to allow groundwater to equilibrate.

3. Wells are purged with a bailer by removing four water volumes within a casing or all the water until the well runs dry. When using a peristaltic pump, water is removed for 10 to 20 minutes.

4. Once all the wells have been purged, the samples are drawn using equipment mentioned above. (See Table 3 - Water Sample Preparation Guide)

5. Sample odor, turbidity, temperature, conductivity, dissolved oxygen (DO) and pH are determined on the unfiltered portions of the sample and recorded on the well specific field sheet.

6. When the sample requires filtering, the sample is filtered with a hand pump or an in-line pump (as soon after collection as possible).

7. Quality Assurance/Quality Control Samples

a) Trip and field blanks each consist of three new 40 milliliter (ml) vials filled with deionized water. These are sent to the laboratory for petroleum volatile organic compound (PVOC) or VOC analysis.

b) One field blank should be analyzed for every 10 samples collected. At least one trip blank is taken per site visit. Trip blanks are poured, labeled, and sealed, then taken out in the field. Field blanks are poured, labeled, and sealed at the site. Trip blanks are kept with all samples collected until reaching the field. If there is a possibility for field cross-contamination of samples, field blanks may be taken at the sample collector's discretion.

c) One temperature blank may be collected per batch of samples.

d) One duplicate sample may be collected with every 10 samples.

8. Samples are refrigerated, then transported to a WDNR-certified laboratory for testing as soon as possible.

9. A chain-of-custody form is filled out, listing all samples collected, requested laboratory analysis, date and time of collection, and the name of the sample collector. This document remains with the samples at all times and bears the names of all persons handling the samples until they are received at the laboratory.

C. Procedures for cleaning equipment:

1. In the field, sampling equipment is rinsed with a 10% methanol solution and then flushed three times with deionized water between each well sampled.

2. Equipment that is still contaminated after field cleaning will be rinsed with tap water, washed off with detergent, rinsed with a 10% methanol solution, and flushed three times with deionized water.

D. Transporting samples to laboratory:

1. Filtered, preserved, labeled, and sealed samples are placed on ice and transported to the laboratory for analysis as soon as possible.

2. The laboratory will be notified by the sample collector when courier service is required.

E. The above procedures constitute normal groundwater sampling procedures for permanent groundwater monitoring wells. Modifications to each of the outlined items may be applicable for site specific conditions or special volatile organic sampling considerations. Methods used are consistent with WDNR's Groundwater

Sampling Field Manual, Publ. DG-038 96, September 1996 and WDNR's Groundwater Sampling Desk Reference, Publ. DG-037 96, September 1996.

DECONTAMINATION PROCEDURES

Decontamination is the process of removing and/or neutralizing contaminants that may have accumulated on personnel protective equipment (PPE) and equipment. Proper decontamination is a critical element in the control of hazards which helps ensure the health and safety of workers. Proper decontamination also contains the contamination to the site, thus preventing further environmental problems.

Drilling

The following decontamination procedures should be used when completing borings, installing monitoring wells, and/or installing remediation systems.

A. Between samples, the split spoon will be cleaned in a multiple rinse, surfactant solution (soap and water or Alconox solution.)

B. The sample will be collected while wearing new latex exam gloves.

C. The surface upon which the sample is collected is cleaned between samples.

D. The latex exam gloves are changed between samples.

E. Soil which has accumulated around the boring will either be stockpiled or drummed. If the soil is stockpiled, it will be placed on and covered with plastic. The stockpiled or drummed soil will later be disposed in compliance with the WDNR regulations.

F. Upon completion of the boring, the augers will be decontaminated by drilling contractors before they are used again. The following procedures will be followed when decontaminating drilling equipment:

1. A decontamination basin lined with plastic is set up near the work area.

2. All contaminated equipment is placed in the decontamination basin.

3. A pressurized steam cleaner is used to clean all contaminated equipment.

4. Following steam cleaning, the auger is removed from the decontamination basin.

5. Upon completion of the job, the accumulated water in the decontamination basin is pumped out and placed in a drum. Wash water used for cleaning the split spoons is also added to the drum. The drum will be disposed in

compliance with all regulatory agencies. The plastic used in the decontamination basin is disposed in compliance with all regulatory agencies.

TABLE 1 – SOIL SAMPLE PREPARATION GUIDE*

TEST	CONTAINER SIZE**	SAMPLE SIZE	PRESERVATIVE	HOLDING TIME
GRO Gasoline Range Organics	2 oz. wide mouth glass jar or 40 ml vial (2 per sample)	25 g – jar 13 g – vial	25 ml Methanol (purge & trap grade) – jar none required – vial	4 days
DRO Diesel Range Organics	2 oz. wide mouth glass jar or 40 ml vial (2 per sample)	25 g – jar 13 g – vial	None	4 days
Total Lead/ or all RCRA Metals	4 oz. wide mouth plastic jar (2 per sample)	4 oz.	None	6 months
VOC / PVOC Volatile Organic Compounds	2 oz. wide mouth glass jar or 40 ml vial (2 per sample)	25 g – jar 13 g – vial	25 ml Methanol (purge & trap grade) – jar none required – vial	4 days preserved , 48 hours non-preserved
PCB Polychlorinated Biphenyls	4 oz. wide mouth glass jar (2 per sample)	4 oz.	None	14 days
PAH Polynuclear Aromatic Hydrocarbons	4 oz. wide mouth glass jar (2 per sample)	4 oz.	None	14 days

* All samples will be sealed, labeled, and placed on ice immediately after collection.

** To ensure a proper seal between the sample container and the cap, no soil shall remain on the jar or cap threads. When samples are collected with the syringe, a 40 ml vial is used and the sample is preserved by the laboratory.

TABLE 2 – SOIL SAMPLE ANALYSIS GUIDE FOR PETROLEUM CONTAMINATION

PETROLEUM SUBSTANCE	CLOSURE ASSESSMENT	SOLID WASTE PRO./LANDFILLS	SITE INVESTIGATIONS
Gasoline Aviation Fuel	GRO	Free Liquids GRO Benzene Haz. Waste Det.	GRO PVOC/VOC Pb
Diesel Jet Fuel No.'s 1, 2, 4 Fuel Oil	DRO	Free Liquids GRO Benzene Haz. Waste Det.	DRO PVOC PAH
Crude Oil Lubricat. Oil No. 6 Fuel Oil	DRO	Free Liquids DRO Haz. Waste Det.	DRO PAH
Unknown Petroleum	GRO and DRO	Free Liquids GRO and DRO Pb, Cd, CN, S Haz Waste Det.	GRO and DRO VOC/PVOC PAH Pb, Cd
Waste Oil	DRO	Free Liquids DRO VOC Pb, Cd, CN, S Haz. Waste Det.	DRO VOC/PVOC PAH PCB Pb, Cd

TABLE 3 – GROUNDWATER SAMPLE PREPARATION GUIDE*

TEST	SAMPLE SIZE / CONTAINER	PRESERVATIVE	HOLDING TIME
VOC / PVOC Volatile Organic Compounds	3 - 40 ml vials filled with no headspace	0.5 ml of 1:1 HC1	14 days
DRO Diesel Range Organics	1 - 1 liter amber glass bottles	5 ml of 1:1 HC1	7 days
GRO Gasoline Range Organics	3 - 40 ml vials filled with no headspace	0.5 ml of 1:1 HC1	14 days
PAH Polynuclear Aromatic Hydrocarbons	1 - 1 liter amber glass bottles	None	7 days
PCB Polychlorinated Biphenyls	1 - 1 liter amber glass bottle	None	7 days
LEAD / RCRA metals * *	1 - 250 ml plastic bottle	2 ml of HNO_3 or to a pH of < 2	6 months

* All samples will be sealed, labeled, and placed on ice immediately after collection.

* * When testing for dissolved metals, the sample will be field filtered before preservation.

APPENDIX 5

LABORATORY ANALYSIS RESULTS AND CHAIN OF CUSTODY DOCUMENTATION

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

DON BRITTNACHER
OMNNI ASSOCIATES INC
ONE SYSTEMS DRIVE
APPLETON WI 54914-1654

Report Date *26-Feb-15*

Project Name ALLYN'S, ALGOMA **Invoice #** E28489
Project # N2162B14

Lab Code 5028489A
Sample ID B1-10
Sample Matrix Soil
Sample Date 2/12/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	83.8	%			1	5021		2/13/2015	LPA	1
Inorganic										
Metals										
Lead, Total	5.92	mg/Kg	0.3	0.96	1	6010B		2/24/2015	CWT	1
Organic										
General										
Diesel Range Organics	5040	mg/kg	14.3	45.4	10	DRO95		2/24/2015	MDK	1 54
Gasoline Range Organics	2980	mg/kg	18	58	10	GRO95/8021		2/17/2015	CJR	1
VOC's										
Benzene	< 0.16	mg/kg	0.16	0.49	10	8260B		2/16/2015	CJR	1
Bromobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		2/16/2015	CJR	1
Bromodichloromethane	< 0.15	mg/kg	0.15	0.48	10	8260B		2/16/2015	CJR	1
Bromoform	< 0.23	mg/kg	0.23	0.73	10	8260B		2/16/2015	CJR	1
tert-Butylbenzene	0.36 "J"	mg/kg	0.35	1.1	10	8260B		2/16/2015	CJR	1
sec-Butylbenzene	1.72	mg/kg	0.36	1.1	10	8260B		2/16/2015	CJR	1
n-Butylbenzene	8.0	mg/kg	0.86	2.7	10	8260B		2/16/2015	CJR	1
Carbon Tetrachloride	< 0.21	mg/kg	0.21	0.67	10	8260B		2/16/2015	CJR	1
Chlorobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		2/16/2015	CJR	1
Chloroethane	< 0.45	mg/kg	0.45	1.4	10	8260B		2/16/2015	CJR	1
Chloroform	< 0.26	mg/kg	0.26	0.81	10	8260B		2/16/2015	CJR	1
Chloromethane	< 2.5	mg/kg	2.5	7.8	10	8260B		2/16/2015	CJR	1
2-Chlorotoluene	< 0.29	mg/kg	0.29	0.93	10	8260B		2/16/2015	CJR	1
4-Chlorotoluene	< 0.32	mg/kg	0.32	1	10	8260B		2/16/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 0.78	mg/kg	0.78	2.5	10	8260B		2/16/2015	CJR	1
Dibromochloromethane	< 0.31	mg/kg	0.31	0.98	10	8260B		2/16/2015	CJR	1
1,4-Dichlorobenzene	< 0.3	mg/kg	0.3	0.96	10	8260B		2/16/2015	CJR	1
1,3-Dichlorobenzene	< 0.3	mg/kg	0.3	0.97	10	8260B		2/16/2015	CJR	1
1,2-Dichlorobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		2/16/2015	CJR	1
Dichlorodifluoromethane	< 0.43	mg/kg	0.43	1.4	10	8260B		2/16/2015	CJR	1
1,2-Dichloroethane	< 0.3	mg/kg	0.3	0.96	10	8260B		2/16/2015	CJR	1
1,1-Dichloroethane	< 0.25	mg/kg	0.25	0.79	10	8260B		2/16/2015	CJR	1

Project Name ALLYN'S, ALGOMA **Invoice #** E28489
Project # N2162B14

Lab Code 5028489A
Sample ID B1-10
Sample Matrix Soil
Sample Date 2/12/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,1-Dichloroethene	< 0.29	mg/kg	0.29	0.93	10	8260B		2/16/2015	CJR	1
cis-1,2-Dichloroethene	< 0.21	mg/kg	0.21	0.68	10	8260B		2/16/2015	CJR	1
trans-1,2-Dichloroethene	< 0.24	mg/kg	0.24	0.76	10	8260B		2/16/2015	CJR	1
1,2-Dichloropropane	< 0.25	mg/kg	0.25	0.78	10	8260B		2/16/2015	CJR	1
2,2-Dichloropropane	< 1	mg/kg	1	3.3	10	8260B		2/16/2015	CJR	8
1,3-Dichloropropane	< 0.31	mg/kg	0.31	0.97	10	8260B		2/16/2015	CJR	1
Di-isopropyl ether	< 0.12	mg/kg	0.12	0.4	10	8260B		2/16/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.35	mg/kg	0.35	1.1	10	8260B		2/16/2015	CJR	1
Ethylbenzene	< 0.27	mg/kg	0.27	0.86	10	8260B		2/16/2015	CJR	1
Hexachlorobutadiene	< 1.1	mg/kg	1.1	3.6	10	8260B		2/16/2015	CJR	1
Isopropylbenzene	< 0.37	mg/kg	0.37	1.2	10	8260B		2/16/2015	CJR	1
p-Isopropyltoluene	7.0	mg/kg	0.56	1.8	10	8260B		2/16/2015	CJR	1
Methylene chloride	< 2.2	mg/kg	2.2	7	10	8260B		2/16/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.25	mg/kg	0.25	0.78	10	8260B		2/16/2015	CJR	1
Naphthalene	< 0.87	mg/kg	0.87	2.8	10	8260B		2/16/2015	CJR	1
n-Propylbenzene	< 0.35	mg/kg	0.35	1.1	10	8260B		2/16/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.13	mg/kg	0.13	0.4	10	8260B		2/16/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.29	mg/kg	0.29	0.93	10	8260B		2/16/2015	CJR	1
Tetrachloroethene	106	mg/kg	0.54	1.7	10	8260B		2/16/2015	CJR	1
Toluene	0.33 "J"	mg/kg	0.31	0.99	10	8260B		2/16/2015	CJR	1
1,2,4-Trichlorobenzene	< 0.85	mg/kg	0.85	2.7	10	8260B		2/16/2015	CJR	1
1,2,3-Trichlorobenzene	< 1.2	mg/kg	1.2	3.8	10	8260B		2/16/2015	CJR	1
1,1,1-Trichloroethane	< 0.4	mg/kg	0.4	1.3	10	8260B		2/16/2015	CJR	1
1,1,2-Trichloroethane	< 0.33	mg/kg	0.33	1.1	10	8260B		2/16/2015	CJR	1
Trichloroethene (TCE)	0.46 "J"	mg/kg	0.42	1.3	10	8260B		2/16/2015	CJR	1
Trichlorofluoromethane	< 0.6	mg/kg	0.6	1.9	10	8260B		2/16/2015	CJR	1
1,2,4-Trimethylbenzene	6.0	mg/kg	0.78	2.5	10	8260B		2/16/2015	CJR	1
1,3,5-Trimethylbenzene	4.5	mg/kg	0.89	2.8	10	8260B		2/16/2015	CJR	1
Vinyl Chloride	< 0.1	mg/kg	0.1	0.31	10	8260B		2/16/2015	CJR	1
m&p-Xylene	< 0.7	mg/kg	0.7	2.2	10	8260B		2/16/2015	CJR	1
o-Xylene	< 0.29	mg/kg	0.29	0.92	10	8260B		2/16/2015	CJR	1
SUR - Toluene-d8	94	Rec %			10	8260B		2/16/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	108	Rec %			10	8260B		2/16/2015	CJR	1
SUR - 4-Bromofluorobenzene	118	Rec %			10	8260B		2/16/2015	CJR	1
SUR - Dibromofluoromethane	106	Rec %			10	8260B		2/16/2015	CJR	1

Project Name ALLYN'S, ALGOMA **Invoice #** E28489
Project # N2162B14

Lab Code 5028489B
Sample ID B2-9
Sample Matrix Soil
Sample Date 2/12/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.6	%			1	5021		2/13/2015	LPA	1
Inorganic										
Metals										
Lead, Total	1.44	mg/Kg	0.3	0.96	1	6010B		2/24/2015	CWT	1
Organic										
General										
Diesel Range Organics	129	mg/kg	1.43	4.54	1	DRO95		2/24/2015	MDK	1
Gasoline Range Organics	22.8	mg/kg	1.8	5.8	1	GRO95/8021		2/17/2015	CJR	1
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		2/16/2015	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		2/16/2015	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		2/16/2015	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		2/16/2015	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		2/16/2015	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		2/16/2015	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		2/16/2015	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		2/16/2015	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		2/16/2015	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		2/16/2015	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		2/16/2015	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		2/16/2015	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		2/16/2015	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/16/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		2/16/2015	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		2/16/2015	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		2/16/2015	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		2/16/2015	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		2/16/2015	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		2/16/2015	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		2/16/2015	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/16/2015	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		2/16/2015	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		2/16/2015	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		2/16/2015	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		2/16/2015	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		2/16/2015	CJR	8
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		2/16/2015	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		2/16/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		2/16/2015	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		2/16/2015	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		2/16/2015	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/16/2015	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		2/16/2015	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		2/16/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		2/16/2015	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		2/16/2015	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		2/16/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		2/16/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		2/16/2015	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		2/16/2015	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		2/16/2015	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		2/16/2015	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		2/16/2015	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		2/16/2015	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		2/16/2015	CJR	1

Project Name ALLYN'S, ALGOMA **Invoice #** E28489
Project # N2162B14

Lab Code 5028489B
Sample ID B2-9
Sample Matrix Soil
Sample Date 2/12/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		2/16/2015	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		2/16/2015	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		2/16/2015	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		2/16/2015	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		2/16/2015	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		2/16/2015	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		2/16/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	109	Rec %			1	8260B		2/16/2015	CJR	1
SUR - 4-Bromofluorobenzene	87	Rec %			1	8260B		2/16/2015	CJR	1
SUR - Dibromofluoromethane	103	Rec %			1	8260B		2/16/2015	CJR	1
SUR - Toluene-d8	94	Rec %			1	8260B		2/16/2015	CJR	1

Project Name ALLYN'S, ALGOMA **Invoice #** E28489
Project # N2162B14

Lab Code 5028489C
Sample ID TRIP
Sample Matrix Water
Sample Date 2/12/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		2/17/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		2/17/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		2/17/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		2/17/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		2/17/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		2/17/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		2/17/2015	CJR	1
Carbon Tetrachloride	< 0.65	ug/l	0.65	2.1	1	8260B		2/17/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		2/17/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		2/17/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		2/17/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		2/17/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		2/17/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		2/17/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		2/17/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		2/17/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		2/17/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		2/17/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		2/17/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		2/17/2015	CJR	1
1,2-Dichloroethane	< 0.54	ug/l	0.54	1.7	1	8260B		2/17/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		2/17/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		2/17/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		2/17/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		2/17/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		2/17/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		2/17/2015	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		2/17/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		2/17/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		2/17/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		2/17/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		2/17/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		2/17/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		2/17/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		2/17/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		2/17/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		2/17/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		2/17/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		2/17/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		2/17/2015	CJR	1
Tetrachloroethene	< 0.74	ug/l	0.74	2.4	1	8260B		2/17/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		2/17/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		2/17/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		2/17/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		2/17/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		2/17/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		2/17/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		2/17/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		2/17/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		2/17/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		2/17/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		2/17/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		2/17/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		2/17/2015	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			1	8260B		2/17/2015	CJR	1
SUR - Dibromofluoromethane	100	REC %			1	8260B		2/17/2015	CJR	1
SUR - Toluene-d8	93	REC %			1	8260B		2/17/2015	CJR	1

Project Name ALLYN'S, ALGOMA **Invoice #** E28489
Project # N2162B14

Lab Code 5028489D
Sample ID TW1
Sample Matrix Water
Sample Date 2/12/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Lead, Total	6.8	ug/L	0.7	2.5	1	7421		2/17/2015	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.2	ug/l	0.2	0.64	10	M8270D	2/19/2015	2/20/2015	MDK	1
Acenaphthylene	< 0.21	ug/l	0.21	0.68	10	M8270D	2/19/2015	2/20/2015	MDK	1
Anthracene	< 0.2	ug/l	0.2	0.64	10	M8270D	2/19/2015	2/20/2015	MDK	1
Benzo(a)anthracene	< 0.19	ug/l	0.19	0.62	10	M8270D	2/19/2015	2/20/2015	MDK	1
Benzo(a)pyrene	< 0.19	ug/l	0.19	0.62	10	M8270D	2/19/2015	2/20/2015	MDK	1
Benzo(b)fluoranthene	< 0.19	ug/l	0.19	0.62	10	M8270D	2/19/2015	2/20/2015	MDK	1
Benzo(g,h,i)perylene	< 0.24	ug/l	0.24	0.78	10	M8270D	2/19/2015	2/20/2015	MDK	1
Benzo(k)fluoranthene	< 0.18	ug/l	0.18	0.57	10	M8270D	2/19/2015	2/20/2015	MDK	1
Chrysene	< 0.17	ug/l	0.17	0.54	10	M8270D	2/19/2015	2/20/2015	MDK	1
Dibenzo(a,h)anthracene	< 0.25	ug/l	0.25	0.81	10	M8270D	2/19/2015	2/20/2015	MDK	1
Fluoranthene	< 0.18	ug/l	0.18	0.57	10	M8270D	2/19/2015	2/20/2015	MDK	1
Fluorene	0.249 "J"	ug/l	0.17	0.54	10	M8270D	2/19/2015	2/20/2015	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.18	ug/l	0.18	0.57	10	M8270D	2/19/2015	2/20/2015	MDK	1
1-Methyl naphthalene	2.44	ug/l	0.18	0.57	10	M8270D	2/19/2015	2/20/2015	MDK	1
2-Methyl naphthalene	4.3	ug/l	0.17	0.54	10	M8270D	2/19/2015	2/20/2015	MDK	1
Naphthalene	4.2	ug/l	0.18	0.57	10	M8270D	2/19/2015	2/20/2015	MDK	1
Phenanthrene	0.43 "J"	ug/l	0.17	0.54	10	M8270D	2/19/2015	2/20/2015	MDK	1
Pyrene	< 0.18	ug/l	0.18	0.57	10	M8270D	2/19/2015	2/20/2015	MDK	1
VOC's										
Benzene	< 22	ug/l	22	70	50	8260B		2/17/2015	CJR	1
Bromobenzene	< 24	ug/l	24	75	50	8260B		2/17/2015	CJR	1
Bromodichloromethane	< 23	ug/l	23	75	50	8260B		2/17/2015	CJR	1
Bromoform	< 23	ug/l	23	75	50	8260B		2/17/2015	CJR	1
tert-Butylbenzene	< 55	ug/l	55	170	50	8260B		2/17/2015	CJR	1
sec-Butylbenzene	< 60	ug/l	60	190	50	8260B		2/17/2015	CJR	1
n-Butylbenzene	< 50	ug/l	50	165	50	8260B		2/17/2015	CJR	1
Carbon Tetrachloride	< 32.5	ug/l	32.5	105	50	8260B		2/17/2015	CJR	1
Chlorobenzene	< 23	ug/l	23	70	50	8260B		2/17/2015	CJR	1
Chloroethane	< 32.5	ug/l	32.5	105	50	8260B		2/17/2015	CJR	1
Chloroform	< 21.5	ug/l	21.5	70	50	8260B		2/17/2015	CJR	1
Chloromethane	< 95	ug/l	95	300	50	8260B		2/17/2015	CJR	1
2-Chlorotoluene	< 20	ug/l	20	65	50	8260B		2/17/2015	CJR	1
4-Chlorotoluene	< 31.5	ug/l	31.5	100	50	8260B		2/17/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 70	ug/l	70	225	50	8260B		2/17/2015	CJR	1
Dibromochloromethane	< 22.5	ug/l	22.5	70	50	8260B		2/17/2015	CJR	1
1,4-Dichlorobenzene	< 24.5	ug/l	24.5	80	50	8260B		2/17/2015	CJR	1
1,3-Dichlorobenzene	< 26	ug/l	26	80	50	8260B		2/17/2015	CJR	1
1,2-Dichlorobenzene	< 23	ug/l	23	75	50	8260B		2/17/2015	CJR	1
Dichlorodifluoromethane	< 43.5	ug/l	43.5	140	50	8260B		2/17/2015	CJR	1
1,2-Dichloroethane	< 27	ug/l	27	85	50	8260B		2/17/2015	CJR	1
1,1-Dichloroethane	< 55	ug/l	55	180	50	8260B		2/17/2015	CJR	1
1,1-Dichloroethene	< 32.5	ug/l	32.5	105	50	8260B		2/17/2015	CJR	1
cis-1,2-Dichloroethene	142	ug/l	22.5	70	50	8260B		2/17/2015	CJR	1
trans-1,2-Dichloroethene	< 27	ug/l	27	85	50	8260B		2/17/2015	CJR	1
1,2-Dichloropropane	< 21.5	ug/l	21.5	68.5	50	8260B		2/17/2015	CJR	1
2,2-Dichloropropane	< 155	ug/l	155	490	50	8260B		2/17/2015	CJR	1
1,3-Dichloropropane	< 21	ug/l	21	65	50	8260B		2/17/2015	CJR	1
Di-isopropyl ether	< 22	ug/l	22	70	50	8260B		2/17/2015	CJR	1
EDB (1,2-Dibromoethane)	< 31.5	ug/l	31.5	100	50	8260B		2/17/2015	CJR	1
Ethylbenzene	< 35.5	ug/l	35.5	115	50	8260B		2/17/2015	CJR	1
Hexachlorobutadiene	< 110	ug/l	110	355	50	8260B		2/17/2015	CJR	1
Isopropylbenzene	< 41	ug/l	41	130	50	8260B		2/17/2015	CJR	1
p-Isopropyltoluene	< 55	ug/l	55	175	50	8260B		2/17/2015	CJR	1

Project Name ALLYN'S, ALGOMA **Invoice #** E28489
Project # N2162B14

Lab Code 5028489D
Sample ID TW1
Sample Matrix Water
Sample Date 2/12/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Methylene chloride	< 65	ug/l	65	210	50	8260B		2/17/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 55	ug/l	55	185	50	8260B		2/17/2015	CJR	1
Naphthalene	< 80	ug/l	80	260	50	8260B		2/17/2015	CJR	1
n-Propylbenzene	< 38.5	ug/l	38.5	120	50	8260B		2/17/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 26	ug/l	26	85	50	8260B		2/17/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 24	ug/l	24	75	50	8260B		2/17/2015	CJR	1
Tetrachloroethene	1280	ug/l	37	120	50	8260B		2/17/2015	CJR	1
Toluene	< 22	ug/l	22	70	50	8260B		2/17/2015	CJR	1
1,2,4-Trichlorobenzene	< 85	ug/l	85	280	50	8260B		2/17/2015	CJR	1
1,2,3-Trichlorobenzene	< 135	ug/l	135	430	50	8260B		2/17/2015	CJR	1
1,1,1-Trichloroethane	< 42	ug/l	42	135	50	8260B		2/17/2015	CJR	1
1,1,2-Trichloroethane	< 24	ug/l	24	76	50	8260B		2/17/2015	CJR	1
Trichloroethene (TCE)	41 "J"	ug/l	23.5	75	50	8260B		2/17/2015	CJR	1
Trichlorofluoromethane	< 43.5	ug/l	43.5	140	50	8260B		2/17/2015	CJR	1
1,2,4-Trimethylbenzene	< 80	ug/l	80	250	50	8260B		2/17/2015	CJR	1
1,3,5-Trimethylbenzene	< 75	ug/l	75	240	50	8260B		2/17/2015	CJR	1
Vinyl Chloride	< 8.5	ug/l	8.5	27	50	8260B		2/17/2015	CJR	1
m&p-Xylene	< 110	ug/l	110	345	50	8260B		2/17/2015	CJR	1
o-Xylene	< 45	ug/l	45	145	50	8260B		2/17/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	105	REC %			50	8260B		2/17/2015	CJR	1
SUR - 4-Bromofluorobenzene	109	REC %			50	8260B		2/17/2015	CJR	1
SUR - Dibromofluoromethane	104	REC %			50	8260B		2/17/2015	CJR	1
SUR - Toluene-d8	94	REC %			50	8260B		2/17/2015	CJR	1

Project Name ALLYN'S, ALGOMA **Invoice #** E28489
Project # N2162B14

Lab Code 5028489E
Sample ID TW2
Sample Matrix Water
Sample Date 2/12/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Lead, Total	3.6	ug/L	0.7	2.5	1	7421		2/17/2015	CWT	1
Organic										
PAH SIM										
Acenaphthene	0.059 "J"	ug/l	0.02	0.064	1	M8270D	2/19/2015	2/20/2015	MDK	1
Acenaphthylene	0.08	ug/l	0.021	0.068	1	M8270D	2/19/2015	2/20/2015	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270D	2/19/2015	2/20/2015	MDK	1
Benzo(a)anthracene	0.019 "J"	ug/l	0.019	0.062	1	M8270D	2/19/2015	2/20/2015	MDK	3
Benzo(a)pyrene	< 0.019	ug/l	0.019	0.062	1	M8270D	2/19/2015	2/20/2015	MDK	1
Benzo(b)fluoranthene	< 0.019	ug/l	0.019	0.062	1	M8270D	2/19/2015	2/20/2015	MDK	1
Benzo(g,h,i)perylene	< 0.024	ug/l	0.024	0.078	1	M8270D	2/19/2015	2/20/2015	MDK	1
Benzo(k)fluoranthene	< 0.018	ug/l	0.018	0.057	1	M8270D	2/19/2015	2/20/2015	MDK	1
Chrysene	< 0.017	ug/l	0.017	0.054	1	M8270D	2/19/2015	2/20/2015	MDK	1
Dibenzo(a,h)anthracene	< 0.025	ug/l	0.025	0.081	1	M8270D	2/19/2015	2/20/2015	MDK	1
Fluoranthene	< 0.018	ug/l	0.018	0.057	1	M8270D	2/19/2015	2/20/2015	MDK	1
Fluorene	0.033 "J"	ug/l	0.017	0.054	1	M8270D	2/19/2015	2/20/2015	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.018	ug/l	0.018	0.057	1	M8270D	2/19/2015	2/20/2015	MDK	1
1-Methyl naphthalene	0.4	ug/l	0.018	0.057	1	M8270D	2/19/2015	2/20/2015	MDK	1
2-Methyl naphthalene	0.078	ug/l	0.017	0.054	1	M8270D	2/19/2015	2/20/2015	MDK	1
Naphthalene	0.098	ug/l	0.018	0.057	1	M8270D	2/19/2015	2/20/2015	MDK	1
Phenanthrene	< 0.017	ug/l	0.017	0.054	1	M8270D	2/19/2015	2/20/2015	MDK	1
Pyrene	< 0.018	ug/l	0.018	0.057	1	M8270D	2/19/2015	2/20/2015	MDK	1
VOC's										
Benzene	< 4.4	ug/l	4.4	14	10	8260B		2/17/2015	CJR	1
Bromobenzene	< 4.8	ug/l	4.8	15	10	8260B		2/17/2015	CJR	1
Bromodichloromethane	< 4.6	ug/l	4.6	15	10	8260B		2/17/2015	CJR	1
Bromoform	< 4.6	ug/l	4.6	15	10	8260B		2/17/2015	CJR	1
tert-Butylbenzene	< 11	ug/l	11	34	10	8260B		2/17/2015	CJR	1
sec-Butylbenzene	< 12	ug/l	12	38	10	8260B		2/17/2015	CJR	1
n-Butylbenzene	< 10	ug/l	10	33	10	8260B		2/17/2015	CJR	1
Carbon Tetrachloride	< 6.5	ug/l	6.5	21	10	8260B		2/17/2015	CJR	1
Chlorobenzene	< 4.6	ug/l	4.6	14	10	8260B		2/17/2015	CJR	1
Chloroethane	< 6.5	ug/l	6.5	21	10	8260B		2/17/2015	CJR	1
Chloroform	< 4.3	ug/l	4.3	14	10	8260B		2/17/2015	CJR	1
Chloromethane	< 19	ug/l	19	60	10	8260B		2/17/2015	CJR	1
2-Chlorotoluene	< 4	ug/l	4	13	10	8260B		2/17/2015	CJR	1
4-Chlorotoluene	< 6.3	ug/l	6.3	20	10	8260B		2/17/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 14	ug/l	14	45	10	8260B		2/17/2015	CJR	1
Dibromochloromethane	< 4.5	ug/l	4.5	14	10	8260B		2/17/2015	CJR	1
1,4-Dichlorobenzene	< 4.9	ug/l	4.9	16	10	8260B		2/17/2015	CJR	1
1,3-Dichlorobenzene	< 5.2	ug/l	5.2	16	10	8260B		2/17/2015	CJR	1
1,2-Dichlorobenzene	< 4.6	ug/l	4.6	15	10	8260B		2/17/2015	CJR	1
Dichlorodifluoromethane	< 8.7	ug/l	8.7	28	10	8260B		2/17/2015	CJR	1
1,2-Dichloroethane	< 5.4	ug/l	5.4	17	10	8260B		2/17/2015	CJR	1
1,1-Dichloroethane	< 11	ug/l	11	36	10	8260B		2/17/2015	CJR	1
1,1-Dichloroethene	< 6.5	ug/l	6.5	21	10	8260B		2/17/2015	CJR	1
cis-1,2-Dichloroethene	32	ug/l	4.5	14	10	8260B		2/17/2015	CJR	1
trans-1,2-Dichloroethene	< 5.4	ug/l	5.4	17	10	8260B		2/17/2015	CJR	1
1,2-Dichloropropane	< 4.3	ug/l	4.3	13.7	10	8260B		2/17/2015	CJR	1
2,2-Dichloropropane	< 31	ug/l	31	98	10	8260B		2/17/2015	CJR	1
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	10	8260B		2/17/2015	CJR	1
Di-isopropyl ether	< 4.4	ug/l	4.4	14	10	8260B		2/17/2015	CJR	1
EDB (1,2-Dibromoethane)	< 6.3	ug/l	6.3	20	10	8260B		2/17/2015	CJR	1
Ethylbenzene	< 7.1	ug/l	7.1	23	10	8260B		2/17/2015	CJR	1
Hexachlorobutadiene	< 22	ug/l	22	71	10	8260B		2/17/2015	CJR	1
Isopropylbenzene	< 8.2	ug/l	8.2	26	10	8260B		2/17/2015	CJR	1
p-Isopropyltoluene	< 11	ug/l	11	35	10	8260B		2/17/2015	CJR	1

Project Name ALLYN'S, ALGOMA **Invoice #** E28489
Project # N2162B14

Lab Code 5028489E
Sample ID TW2
Sample Matrix Water
Sample Date 2/12/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Methylene chloride	< 13	ug/l	13	42	10	8260B		2/17/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 11	ug/l	11	37	10	8260B		2/17/2015	CJR	1
Naphthalene	< 16	ug/l	16	52	10	8260B		2/17/2015	CJR	1
n-Propylbenzene	< 7.7	ug/l	7.7	24	10	8260B		2/17/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 5.2	ug/l	5.2	17	10	8260B		2/17/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 4.8	ug/l	4.8	15	10	8260B		2/17/2015	CJR	1
Tetrachloroethene	35	ug/l	7.4	24	10	8260B		2/17/2015	CJR	1
Toluene	< 4.4	ug/l	4.4	14	10	8260B		2/17/2015	CJR	1
1,2,4-Trichlorobenzene	< 17	ug/l	17	56	10	8260B		2/17/2015	CJR	1
1,2,3-Trichlorobenzene	< 27	ug/l	27	86	10	8260B		2/17/2015	CJR	1
1,1,1-Trichloroethane	< 8.4	ug/l	8.4	27	10	8260B		2/17/2015	CJR	1
1,1,2-Trichloroethane	< 4.8	ug/l	4.8	15.2	10	8260B		2/17/2015	CJR	1
Trichloroethene (TCE)	6.4 "J"	ug/l	4.7	15	10	8260B		2/17/2015	CJR	1
Trichlorofluoromethane	< 8.7	ug/l	8.7	28	10	8260B		2/17/2015	CJR	1
1,2,4-Trimethylbenzene	24 "J"	ug/l	16	50	10	8260B		2/17/2015	CJR	1
1,3,5-Trimethylbenzene	< 15	ug/l	15	48	10	8260B		2/17/2015	CJR	1
Vinyl Chloride	30.5	ug/l	1.7	5.4	10	8260B		2/17/2015	CJR	1
m&p-Xylene	< 22	ug/l	22	69	10	8260B		2/17/2015	CJR	1
o-Xylene	< 9	ug/l	9	29	10	8260B		2/17/2015	CJR	1
SUR - Toluene-d8	96	REC %			10	8260B		2/17/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	114	REC %			10	8260B		2/17/2015	CJR	1
SUR - 4-Bromofluorobenzene	112	REC %			10	8260B		2/17/2015	CJR	1
SUR - Dibromofluoromethane	104	REC %			10	8260B		2/17/2015	CJR	1

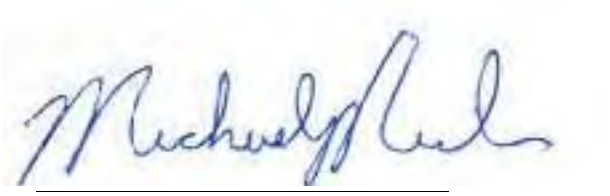
"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
3	The matrix spike not within established limits.
8	Closing calibration standard not within established limits.
54	Possible gasoline contamination indicated outside DRO window.

CWT denotes sub contract lab - Certification #445126660

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



CHAIN OF STODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # No 279

Page 1 of 1

Sample Handling Request
____ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #

Account No. : | Quote No.:

Project #: N2162B14

Sampler: (signature) Don Brittnacher

Project (Name / Location): Allyn's, Algoma

Reports To: Don Brittnacher	Invoice To: OMNNI
Company OMNNI Associates	Company
Address One Systems Dr.	Address
City State Zip Appleton, WI 54914	City State Zip
Phone 735-6900	Phone
FAX 830-6100	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	dry wt.	PID/ FID
S0298[illegible]A	B1-10	2/12/15	10:19		X	N	4	S	none	X	X	X										X		X	0
B	B2-9	↓	11:08		X	N	4	S	[illegible]	X	X	X										X		X	106
C	TRIP		9:00		X	N	3	TRIP	HCL													X			
D	TW1		11:58		X	N	5	GW	VOCs - HCl			X			X							X			0
E	TW2	↓	12:17		X	N	5	GW	PAH - none			X			X							X			106
									Pb - HNO_3																

Analysis Requested | Other Analysis

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Client
Temp. of Temp. Blank ___ °C On Ice: X
Cooler seal intact upon receipt: X Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Don Brittnacher					

Received in Laboratory By: [signature] Time: 16:30 Date: 2/12/15

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Notification For Hazardous Substance Discharge (Non-Emergency Only)

Form 4400-225 (09/13) Page 1 of 2

Emergency Discharges / Spills should be reported via the 24-Hour Hotline: 1-800-943-0003

Notice: Hazardous substance discharges must be reported immediately according to s. 292.11 Wis. Stats. Non-emergency hazardous substance discharges may be reported by telefaxing or e-mailing a completed report to the Department, or calling or visiting a Department office in person. If you choose to notify the Department by telefax or by email, you should use this form to be sure that all necessary information is included. However, use of this form is not mandatory. Under s. 292.99, Wis. Stats., the penalty for violating the reporting requirements of ch. 292 Wis. Stats., shall be no less than $10 nor more than $5000 for each violation. Each day of continued violation is a separate offense. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than program administration. However, information submitted on this form may also be made available to requesters under Wisconsin's Open Records Law (ss. 19.31 – 19.39, Wis. Stats.).

Confirmatory laboratory data should be included with this form, to assist the DNR in processing this Hazardous Substance Release Notification.

Complete this form. **TYPE or PRINT LEGIBLY.** NOTIFY appropriate DNR region (see next page) **IMMEDIATELY** upon discovery of a potential release from **(check one)**:

- ☐ Underground Petroleum Storage Tank System (additional information may be required for Item 6 below)
- ☐ Aboveground Petroleum Storage Tank System
- ☒ Dry Cleaner Facility
- ☐ Other - Describe: _____

ATTN DNR: **R & R Program Associate** Date DNR Notified: 08/05/2015

1. Discharge Reported By

Name	Firm	Phone No. (include area code)
Don Brittnacher	OMNNI Associates	(920) 735-6900

Mailing Address	Email Address
One Systems Dr., Appleton, WI 54914	don.brittnacher@omnni.com

2. Site Information

Name of site at which discharge occurred. Include local name of site/business, not responsible party name, unless a residence/vacant property. Allyn property

Location: Include street address, not PO Box. If no street address, describe as precisely as possible, i.e., 1/4 mile NW of CTHs 60 & 123 on E side of CTH 60. 111 Steele St.

Municipality: (City, Village, Township) Specify municipality in which the site is located, not mailing address/city.
Algoma

County:	Legal Description:	WTM:
Kewaunee	NW 1/4 SW 1/4 Sec 26 Tn 25N Range 25 ◉ E ○ W	X 723460 Y 462716

3. Responsible Party (RP) and/or RP Representative

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

Harmon Allyn

☐ Reported in compliance with s. 292.11(2), Wis. Stats., by a local government exempt from liability under s. 292.11(9)(e), Wis. Stats. For more information see http://dnr.wi.gov/topic/Brownfields/Liability.html.

Contact Person Name (if different)	Phone Number	Email Address
Harmon Allyn, c/o John Emery	(920) 360-5050	emery.ja@gmail.com

Mailing Address	City	State	ZIP Code
2448 Robi Ln.	Green Bay	WI	54303

Property owner if Different From RP: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

Contact Person Name (if different)	Phone Number	Email Address
Harmon Allyn, c/o John Emery	(920) 360-5050	emery.ja@gmail.com

Mailing Address	City	State	ZIP Code
2448 Robin Ln.	Green Bay	WI	54303

(continued)

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Notification For Hazardous Substance Discharge (Non-Emergency Only)

4. Hazardous Substance Information

Identify hazardous substance discharged (check all that apply):

- [X] VOC's
- [X] PAH's
- [ ] Metals (specify): _____
  - [ ] Arsenic
  - [ ] Chromium
  - [ ] Cyanide
  - [X] Lead
  - [ ] PCB's
- [ ] Diesel
- [X] Fuel Oil
- [ ] Gasoline
- [ ] Hydraulic Oil
- [ ] Jet Fuel
- [ ] Mineral Oil
- [ ] Waste Oil
- [ ] Petroleum-Unknown Type
- [X] PERC (Dry Cleaners)
- [ ] RCRA Hazardous Waste
- [ ] Leachate
- [ ] Fertilizer
- [ ] Pesticide/Herbicide/Insecticide(s)
- [ ] Other (specify): _____
- [ ] Unknown

5. Impacts to the Environment Information

Enter "K" for known/confirmed or "P" for potential for all that apply.

- ___ Air Contamination
- ___ Co-Contamination (Petroleum & Non-Petroleum)
- ___ Contamination Within 1 Meter of Bedrock
- ___ Contaminated Private Well
- ___ Contaminated Public Well
- ___ Contamination in Fractured Bedrock
- ___ Sanitary Sewer Contamination
- ___ Contamination in Right of Way
- ___ Fire Explosion Threat
- ___ Free Product
- K Groundwater Contamination
- P Off-Site Contamination
- ___ Other (specify): _____
- K Soil Contamination
- ___ Storm Sewer
- ___ Surface Water Contamination
- ___ Within 100 ft of Private Well
- ___ Within 1000 ft of Public Well

Contamination was discovered as a result of:

- [ ] Tank closure assessment — Date: _____
- [X] Site assessment — Date: 03/02/2015
- [ ] Other - Describe: _____ — Date: _____

Lab results: [ ] Lab results will be faxed upon receipt [X] Lab results are attached

Additional Comments: Include a brief description of immediate actions taken to halt the release and contain or cleanup hazardous substances that have been discharged.

Phase II subsurface investigation report will be electronically submitted.

6. Federal Energy Act Requirements (Section 9002(d) of the Solid Waste Disposal Act (SWDA))

For all confirmed releases from UST's occurring after 9/30/2007 please provide the following information:

[ ] Does not apply.

Source

- [X] Tank
- [ ] Piping
- [ ] Dispenser
- [ ] Submersible Turbine Pump
- [ ] Delivery Problem
- [ ] Other (specify): _____

Cause

- [ ] Spill
- [ ] Overfill
- [ ] Corrosion
- [ ] Physical or Mechanical Damage
- [ ] Installation Problem
- [ ] Other (does not fit any of above)
- [X] Unknown

Contact information to report non-emergency releases in DNR's five regions are as follows:

Northeast Region (FAX: 920-662-5197); Attention -- R&R Program Associate: DNRRRNER@wisconsin.gov

Brown, Calumet, Door, Fond du Lac **(except City of Waupun - see South Central Region)**, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, Waushara, Winnebago counties

Northern Region (FAX: 715-623-6773); Attention -- R&R Program Associate: DNRRRNOR@wisconsin.gov

Ashland, Barron, Bayfield, Burnett, Douglas, Forest, Florence, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn counties

South Central Region (FAX: 608-273-5610); Attention -- R&R Program Associate: DNRRRSCR@wisconsin.gov

Columbia, Dane, Dodge, Fond du Lac **(City of Waupun only)**, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk, Walworth counties

Southeast Region (FAX: 414-263-8550); Attention -- R&R Program Associate: DNRRRSER@wisconsin.gov

Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha counties

West Central Region (FAX: 715-839-6076); Attention -- R&R Program Associate: DNRRRWCR@wisconsin.gov

Adams, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, Juneau, LaCrosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood counties