ENGINEERING ARCHITECTURE ENVIRONMENTAL PLANNING



ONE SYSTEMS DRIVE APPLETON, WI 54914 920-735-6900 FAX 920-830-6110

To: Tauren Beggs

RECEIVED

Date: March 23, 2016

Wisconsin DNR

MAR 3 1 2016

BRRTS 02-31-564071;

Address: 2984 Shawano Ave.

Project No

Project No.: OMNNI N2162C15

Green Bay, WI 54313-6727/I DNR - GREEN BAY

From: Don Brittnacher

Project: Allyn's LLC investigation

Last Dated	Item Description	Last Dated	Item Description
3/23/2016	Preliminary investigation report		

Dear Tauren,

I'm sending the preliminary investigation report for the site. The results of the investigation show that a release has occurred at the former dry cleaner, which ceased operations in 1981.

Chlorinated solvents are present in the groundwater in exceedance of enforcement standards. Clean endpoints were not found; the plume is not confined to the site.

The assets of the responsible party are limited, and this first mobilization was a hardship. I would like to meet with you to discuss options for continued investigation. Please give me a call when you have a chance. Thanks.

Don Brittnacher

Don Brettnecher

Preliminary Soil and Groundwater Investigation

at

Allyn's LLC Property (Former Algoma Cleaners) 111 Steele St. Algoma, Kewaunee County, WI

March 23, 2016

BRRTS #02-31-564071 OMNNI Project #N2162C15

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

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EXECUTIVE SUMMARY

OMNNI Associates has performed a preliminary subsurface investigation at the Allyn property located at 111 Steele St., Algoma, WI.

A dry-cleaning business operated at the site from 1948 until the early 1980's. A Phase I environmental site assessment identified a past discharge from the dry-cleaner unit at the site, and the former practice of outside storage of drums of dry-cleaning fluid. The dry-cleaner unit and outside drum storage area were located next to each other, separated by a building wall.

A Phase II boring investigation found chlorinated solvent contamination in the soil and groundwater at the site. The dry-cleaner room was inaccessible, but the boring placed in the drum storage area identified the area as a potential source of contamination.

The present project investigated the suspected source area, as well as upgradient and downgradient areas. Groundwater is approximately 19 feet below the ground surface, and flows to the northeast towards the Ahnapee River. The underlying soils are well-sorted sands with some gravel. Dolomite bedrock is located 25 feet below the site.

Tetrachloroethene was detected above the enforcement standard in each of the wells, at 310 ug/L in the drum storage area, and ranging from 39 ug/L – 54 ug/L in the other wells. The daughter products trichloroethene, cis-1,2-dichloroethene, and vinyl chloride were found in locations downgradient of the source area. The source of the contamination appears to be the drum storage/dry-cleaner room area.

The limits of groundwater contamination were not identified during the present investigation. Because of the proximity of the project area to the Ahnapee River and the porous nature of the intervening soils, the water table in the area is expected to undergo rapid elevation changes and mini-flow reversals as the river rises and falls. This flushing over the years has resulted in the present conditions.

Based on the field and laboratory results, additional investigation is necessary. Options for drilling are limited, due to the commercial buildings in the area, and the financial condition of the responsible party. OMNNI recommends that a meeting be held with the DNR to discuss further investigative options.

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 dry-cleaning business operated at the site from 1948 until approximately 1981. (See Site Detail Map, Appendix 1.) According to the owner, a spill occurred from the dry-cleaning unit, 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 this area, dry-cleaning fluids were stored in 55-gallon drums. The fluids were transferred to the inside dry-cleaning unit by hose through a hole in the building wall. Spills may have also occurred in the outside drum storage area.

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 building addition was subsequently constructed over this area. The 6,000-gallon tank was closed in place in 1998. Soil testing did not reveal contamination above DNR reporting levels.

As part of a Phase II environmental investigation in 2015, OMNNI installed a boring west of the building in the former drum storage area, and east of the building addition overlying the abandoned fuel oil tank. The dry-cleaner room was inaccessible. Temporary wells were installed in the borings.

Chlorinated solvents were found in the soil in the dry-cleaning fluid storage area, and in the groundwater in both locations. In the soil, tetrachloroethene, trichloroethene, and the trimethylbenzenes were detected above their respective groundwater pathway residual contaminant levels in the drum storage area. In the groundwater, tetrachloroethene and trichloroethene were detected above enforcement standards in both locations, and vinyl chloride was identified above the enforcement standard east of the building.

The DNR was notified, resulting in this investigation.

The following are the primary contacts for the project:

Client: Allyn's LLC, 111 Steele St., Algoma, WI 54201. Contact: John Emery, 2448

Robin Ln, Green Bay, WI 54303; (920) 360-5050; emery.ja@gmail.com.

Consultant: OMNNI Associates, One Systems Drive, Appleton, WI 54914. Contact: Don

Brittnacher; (920) 735-6900; don.brittnacher@omnni.com.

Driller: Horizon Construction and Exploration, 764 Tower Dr., Fredonia, WI 53024.

Contact: Adam Sweet; (262) 692-3347; adam@hcexploration.com.

Laboratory: Synergy Environmental Lab, 1990 Prospect Ct., Appleton, WI 54914. Contact:

Mike Ricker; (920) 830-2455; mrsynergy@wi.twcbc.com.

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 and prior investigations.

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 well-sorted sand to 25 feet below the ground surface, with minor amounts of gravel in the upper ten feet. Dolomite bedrock was encountered at 25 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 to be approximately 19 feet below the ground surface. The groundwater flow direction is assumed to be to the northeast toward the Ahnapee River, with an easterly component in the direction of river flow. Due to the high porosity of the soils in the area and the close proximity of the site to the river, it is likely that the groundwater flow direction reverses on a temporary basis when river levels rise due to high precipitation or snow melt events.

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

FIELD ACTIVITIES

On November 23, 2015, OMNNI coordinated the installation of four soil borings (B3 – B6) on the subject property. (See Site Detail Map, Appendix 1.)

Boring B3 was placed west of the building in the outside dry-cleaning fluid storage area, adjacent to the dry-cleaning room inside the building. Boring B4 was installed to the west-southwest of boring B3 in a location anticipated to be upgradient of boring B3. Boring B5 was placed east of the building in a location expected to be sidegradient or downgradient of the dry-cleaning fluid storage area, the dry-cleaning room, and the locations of the former fuel oil tanks. Boring B6 was installed east of the building and downgradient of those locations.

A 40-foot piezometer was planned in the dry-cleaning fluid storage area, but bedrock was encountered at 25 feet below the ground surface, which is the depth of the observation well borehole.

The four 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.) Boring B3 was blind drilled, as soils in close proximity were assessed during the earlier Phase II investigation.

Soil analytical samples were taken from each boring at the interval of strongest field evidence of contamination. Soil samples were taken from boring B4 from the 20 - 22.5 foot interval, from boring B5 from the 7.5 - 10 foot interval, and from boring B6 from the 20 - 22.5 foot interval. Since boring B3 was installed in the approximate area of boring B1, the suspected source area, which was placed during the earlier Phase II investigation, soil sampling was carried out in the 1.0 - 3.0 and 22.5 - 25 foot intervals in boring B3 to augment the earlier soil testing.

Soil samples were delivered to a certified laboratory for analysis of volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and total lead.

Permanent groundwater monitoring wells MW1 – MW4 were constructed in the borings to identify the extent of groundwater contamination. The monitoring wells were installed and developed according to ch. NR 141 Wis. Admin. Code requirements. (See monitoring well construction forms, Appendix 3.) Ten-foot screens were placed in the wells to intersect the water table at the site.

OMNNI surveyed the monitoring wells. Elevations are based on the USGS datum, and were surveyed to the nearest 0.01 foot. (See the groundwater monitoring well information form, Appendix 3.)

Monitoring well MW4 was developed on January 8, 2016. Due to an equipment malfunction, a second mobilization was made on February 16, 2016, to develop monitoring wells MW1 – MW3. (See the monitoring well development forms, Appendix 3.) Groundwater samples were obtained from the monitoring wells on February 24, 2016.

(See the well specific field sheets, Appendix 3.) The samples were analyzed for VOCs, PAHs, and dissolved lead.

FIELD AND ANALYTICAL RESULTS

The soils in borings B4 – B6 consisted mostly of well-sorted sand, with minor gravel concentrations in the upper ten feet. No petroleum odors or discoloration were observed. The only elevated headspace reading in these locations was detected in boring B5 in the 7.5 – 10 foot interval. (See soil boring logs for headspace data, Appendix 3.) No headspaces were observed above or below that interval in that boring. The cause of the headspace reading is unknown, as the sampled interval is ten feet above the water table at that location. Boring B3 was blind drilled.

Soil contamination was found in the borings. (See Table 1 – Summary of Laboratory Analysis, Soil Samples, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.) Tetrachloroethene was detected above the groundwater pathway residual contaminant level in borings B3, B4, and B5. Benzo(a)pyrene was detected above the non-industrial direct contact residual contaminant level (RCL), although the depth of the sample (20 – 22.5 feet) would preempt direct contact.

Groundwater contamination was found in the monitoring wells. (See Table 2 – Summary of Laboratory Analysis, Groundwater Samples, Appendix 2, and Laboratory Analysis Results and Chain of Custody Documentation, Appendix 5.) Tetrachloroethene was detected above the enforcement standard in each well. In monitoring well MW4, trichloroethene and vinyl chloride were also detected above enforcement standards, and cis-1,2-dichloroethene was found above the preventive action limit. In well MW3, trichloroethene was detected above the preventive action limit.

Laboratory analysis did not reveal other VOCs or dissolved lead in the groundwater at the site. PAHs were not found above preventive action limits in the groundwater.

The water table on-site was observed on February 24, 2016, to be 18.6 – 19.6 feet below the ground surface. (See Groundwater Elevation Map, Appendix 1.) The elevation of the water table was observed to vary slightly across the site, with no clear flow direction. The soils are sandy and the Ahnapee River is located 250 feet to the north, flowing in a southeasterly direction. Due to the high porosity of the soils in the area and the close proximity of the site to the river, it is likely that water table elevations in the project location respond fairly quickly to fluctuating river levels. The typical flow direction towards the river may reverse on a temporary basis when the river rises due to high precipitation or snowmelt events. Contamination may have impacted soils in areas that are normally upgradient of the expected source area.

POTENTIAL FOR VAPOR INTRUSION

The potential for vapor intrusion into buildings was not evaluated at this time, since the soil and groundwater investigation is not yet complete. Factors to be evaluated are solvent concentrations in the groundwater, building basement depths in relation to the depth to groundwater, and the nature of vapor movement in the intervening vadose zone. The 65-year period since dry-cleaning operations ceased would presage a stable or receding contaminant plume.

CONCLUSIONS AND RECOMMENDATIONS

A dry-cleaning business operated at the site from 1948 until the early 1980's. A Phase I environmental site assessment identified a past discharge from the dry-cleaner unit at the site, and the former practice of outside storage of drums of dry-cleaning fluid. The dry-cleaner unit and outside drum storage area were located next to each other, separated by a building wall.

A Phase II boring investigation found chlorinated solvent contamination in the soil and groundwater at the site. The dry-cleaner room was inaccessible, but the boring placed in the drum storage area identified the area as a potential source of contamination.

The present project investigated the suspected source area, as well as upgradient and downgradient areas. The project area is an old commercial district near the Ahnapee River. Groundwater is approximately 19 feet below the ground surface, and flows to the northeast towards the Ahnapee River. The underlying soils are well-sorted sands with some gravel. Dolomite bedrock is located 25 feet below the site.

Tetrachloroethene was detected above the enforcement standard in each of the wells, at 310 ug/L in the drum storage area, and ranging from 39 ug/L – 54 ug/L in the other wells. The daughter products trichloroethene, cis-1,2-dichloroethene, and vinyl chloride were found in locations downgradient of the source area. The source of the contamination appears to be the drum storage/dry-cleaner room area.

The limits of groundwater contamination were not identified during the present investigation. Because of the proximity of the project area to the Ahnapee River and the porous nature of the intervening soils, the water table in the area is expected to undergo rapid elevation changes and mini-flow reversals as the river rises and falls. This flushing over the years has resulted in the present conditions.

Based on the field and laboratory results, additional investigation is necessary. Options for drilling are limited, due to the commercial buildings in the area, and the financial condition of the responsible party. OMNNI recommends that a meeting be held with the DNR to discuss further investigative options.

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

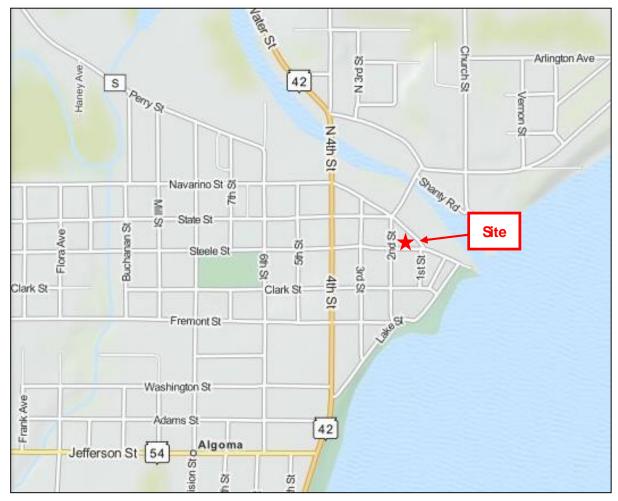
"I, Don Brittnacher, hereby certify that I am a hydrogeologist as that term is defined in s. NR
712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information
contained in this document is correct and the document was prepared in compliance
with all applicable requirements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

WAL GEORGE

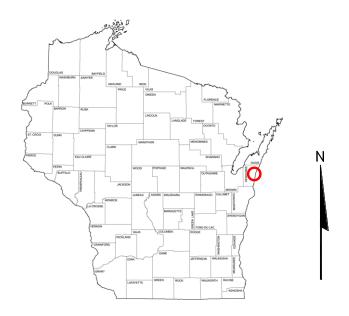
Don Brittnacher

(Professional Geologist)

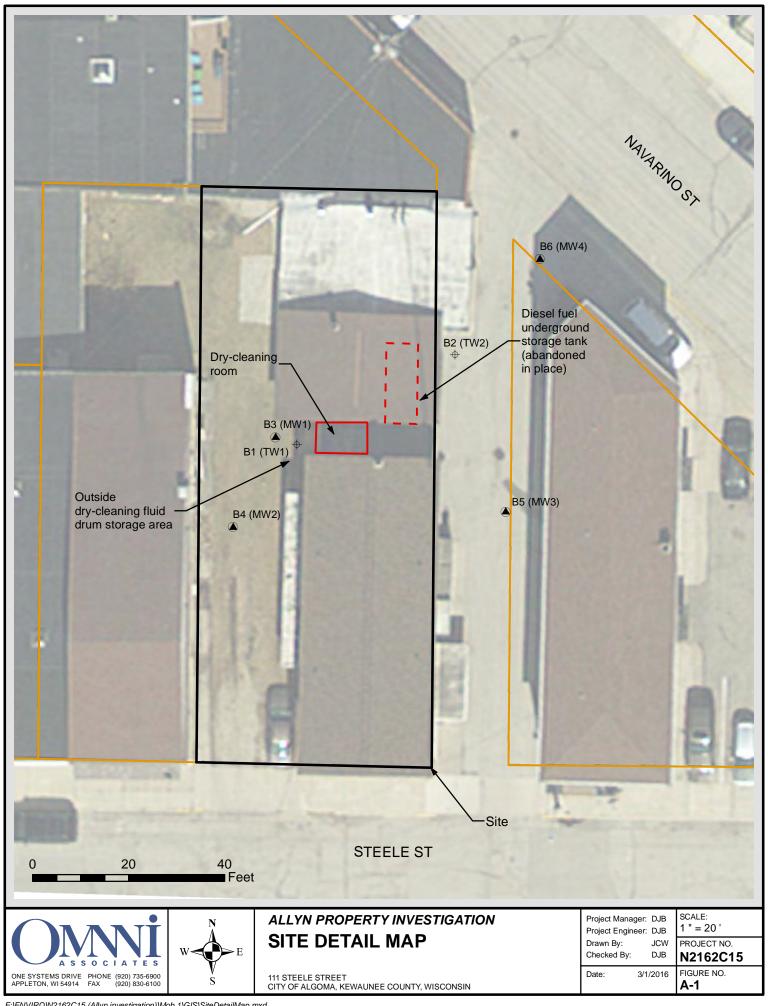
APPENDIX 1 FIGURES



Source: Mapquest, reviewed 3/1/2016.



Allyn's LLC Property 111 Steele St. Algoma, WI Project Number: N2162C15 Date: March 1, 2016 One Systems Drive, Appleton, Wisconsin 54914-1654 Phone: (920) 735-6900 Fax: (920) 830-6100



Topographic Map



Note: Contour interval is two feet.



APPENDIX 2

TABLES

Table 1 - Summary of Laboratory Analysis - Soil Samples

						Detec	ted VOCs (m	g/kg)						
Boring & Sample	Sample Date	Depth (feet)	tert-Burylbenzene	sec-Butylbenzene n-Butylbenzene		p-Isopropyltoluene	Tetrachloroethene	Toluene	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead (mg/kg)	DRO (mg/kg)	GRO (mg/kg)
Groundwate	r Pathway Ro	CLs	-	-	-	-	0.0045	1.1072	0.0036	1.3	821	27	-	-
Direct Contac	ct Non-Indus	strial RCLs	-	-	-	-	30.7	818	1.26	89.8 182		400	-	-
B1-10	02/12/15	22.5 - 25	0.36 "J"	1.72	8.0	7.0	106	0.33 "J"	0.46 "J"	6.0	4.5	5.92	5,040	2,980
B2-9	02/12/15	20 - 22.5	< 0.035	< 0.036	< 0.086	< 0.056	< 0.054	< 0.031	< 0.042	< 0.078	< 0.089	1.44	129	22.8
B3-1	11/23/15	1 - 3	< 0.035	< 0.036	< 0.086	< 0.056	0.087 "J"	< 0.031	< 0.042	< 0.078	< 0.089	6.13	NA	NA
B3-10	11/23/15	21 - 23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-9	11/23/15	20 - 22.5	< 0.035	< 0.036	< 0.086	< 0.056	0.108 "J"	< 0.031	< 0.042	< 0.078	< 0.089	2.46	NA	NA
B5-4	11/23/15	7.5 - 10	< 0.035	< 0.036	< 0.086	< 0.056	0.182	< 0.031	< 0.042	< 0.078	< 0.089	1.64 "J"	NA	NA
B6-9	11/23/15	20 - 22.5	< 0.035	< 0.036	< 0.086	< 0.056	< 0.054	< 0.031	< 0.042	< 0.078	< 0.089	2.16	NA	NA

								D	etected PA	Hs (mg/kg)						
Boring & Sample	Sample Date	Depth (feet)	Acenapthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene
Groundwater	r Pathway R0	CLs	-	197.7273	-	0.47	0.4793	-	0.1446	88.8778	14.8027	-	-	0.6582	-	54.1322
Direct Contac	ct Non-Indus	trial RCLs	3440	17200	0.148	0.015	0.148	-	14.8	2290	2290	15.6	229	5.15	-	1720
B1-10	02/12/15	22.5 - 25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B2-9	02/12/15	20 - 22.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B3-1	11/23/15	1 - 3	< 0.0201	< 0.0171	< 0.0191	< 0.0143	< 0.019	< 0.02	< 0.0192	< 0.0192	< 0.0184	< 0.0205	< 0.0199	< 0.0203	< 0.0198	< 0.0192
B3-10	11/23/15	21 - 23	0.0287 "J"	0.0257 "J"	< 0.0191	< 0.0143	< 0.019	< 0.02	< 0.0192	< 0.0192	0.053 "J"	0.061 "J"	0.107	0.053 "J"	0.145	< 0.0192
B4-9	11/23/15	20 - 22.5	< 0.0201	< 0.0171	< 0.0191	< 0.0143	< 0.019	< 0.02	< 0.0192	< 0.0192	< 0.0184	< 0.0205	< 0.0199	< 0.0203	< 0.0198	< 0.0192
B5-4	11/23/15	7.5 - 10	< 0.0201	< 0.0171	< 0.0191	< 0.0143	0.0209 "J"	0.041 "J"	< 0.0192	0.023 "J"	< 0.0184	< 0.0205	< 0.0199	< 0.0203	0.0231 "J"	0.0237 "J"
B6-9	11/23/15	20 - 22.5	< 0.0201	< 0.0171	0.0201 "J"	0.0214 "J"	0.0194 "J"	0.068	0.0235 "J"	0.023 "J"	< 0.0184	< 0.0205	< 0.0199	< 0.0203	< 0.0198	0.043 "J"

RCL = residual contaminant level

[&]quot;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 direct contact non-industrial RCL.

TABLE 2 SUMMARY OF LABORATORY ANALYSIS GROUNDWATER SAMPLES

PARAMETER (μg/L)	ES	PAL	TW1	TW2	MW1	MW2	MW3	MW4		
SAMPLE DATE			2/12	2/15	2/24/16					
DETECTED VOCs (ug/l)										
CIS-1,2-DICHLOROETHENE	70	7 142 32 9.6 "J"		9.6 "J"	< 0.45	24.8				
TETRACHLOROETHENE	5	0.5	1,280	35	310	39	54	44		
TRICHLOROETHENE	5	0.5	41 "J"	6.4 "J"	< 4.7	< 0.47	1.55	6.5		
1,2,4-TRIMETHYLBENZENE	480	0.0	< 80	24 "J"	< 16	< 1.6	< 1.6	< 1.6		
1,3,5-TRIMETHYLBENZENE	480	96	< 75	< 15	< 15	< 1.5	< 1.5	< 1.5		
VINYL CHLORIDE	0.2	0.02	< 8.5	30.5	< 1.7	< 0.17	< 0.17	23.2		
DETECTED PAHs (ug/l)										
ACENAPHTHENE	-	-	< 0.2	0.059 "J"	0.037 "J"	< 0.016	< 0.016	< 0.016		
ACENAPHTHLYNE	-	1	< 0.21	0.08	< 0.019	< 0.019	< 0.019	< 0.019		
BENZO(A)ANTHRACENE	-	-	< 0.19	0.019 "J"	< 0.017	< 0.017	< 0.017	< 0.017		
FLUORENE	400	80	0.249 "J"	0.033 "J"	0.038 "J"	< 0.021	< 0.021	< 0.021		
1-METHYLNAPHTHALENE	-	-	2.44	0.4	0.094	< 0.024	< 0.024	< 0.024		
2-METHYLNAPHTHALENE	-	-	4.3	0.078	0.033 "J"	< 0.024	< 0.024	0.027 "J"		
NAPHTHALENE	100	10	4.2	0.098	0.11	< 0.019	< 0.019	< 0.019		
PHENANTHRENE	-	ı	0.43 "J"	< 0.017	0.073	< 0.017	< 0.017	< 0.017		
LEAD (ug/l)	15	1.5	6.8	3.6	< 0.7*	< 0.7*	< 0.7*	< 0.7*		

ES = enforcement standard

PAL = preventive action limit

Note: Trichloroethene concentrations in TW1 and TW2 and cis-1,2-dichloroethene concentration in MW1 are not exceedances due to NR 140.14(b).

142 = sample concentration detected above the enforcement standard

6.8 = sample concentration detected above the preventive action limit

[&]quot;J" = Analyte detected between the limit of detection and the limit of quantification

^{*} filtered sample

APPENDIX 3

DNR FORMS

State	of	Wis	CO	กราก	
Depa	rtn	ent	of	Natural	Resources

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

				Rout	e To: Watershed/Wastew Remediation/Revel												
														Page	1	of_	2
)	Facility	y/Proje	ct Nar	ne /	<i>C</i>		Licens	e/Perm	it/Mor	itoring	Numl	er I	Boring	Numb			
	Boring	Drille	d By:	Name	of crew chief (first, last) a	nd Firm	Date D	rilling	Started		Surface Elevation				Drilling Method H S A Borehole Diameter		
		me: F	E /E 000		Last Name: Sweet		771	23	20	15							
	WIUn	Hol Lique W	Vell No	0.	DNR Well ID No. Well	Name	Final S	tatic V	Valer L	evel S							
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		f. 68 (ii)	ats	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Soil/Rock De						ų					_	
	Number and Type	yth Al	Blow Counts	Depth in Feet (Below ground surface)	And Geologic (Each Majo		CS	bic	_ E	PID/FID	ngth		9.=	Plasticity Index	۰	RQD/ Comments	
	Number and Type	Length Att. & Recovered (in)	Blow	26				U S	Graphic Log	Vel Diag	PID	Compressive Strength	Moisture Content	Liquid Limit	Plast	P 200	SQI Com
				E	Blind drilled												
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This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Page 2 of 2

Com					7							3e	_ oi _	9
Number and Type	Length Au. & do	ow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength		Liquid Limit	Plasticity all	8	RQD/ Comments
Z	고조	B			Ď	5 3	ŽÃ	PI	Sec	≊రి	:33	Pla	P 200	52
B3-6			13	И								,		
B3 -7			17 18											
B3-8			-18 -19 -20											
B3-9			-21 -22 -22											
83-10 * 10:50		- 1	23 24 25 26 27	EOB at 25 Ft. (Bedrock encountered	1.)									

State of Wis		
Department	of Natural	Resources

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

				Route	To:		astewater Wa Revelopment			ment										
						140110-0101014							_			Page	ı	of	2	
٠	Facility							L	icense	с/Рент	it/Mon	itoring	Numt	per I	Boring	Numb	_	01		
	Boring	Drille	d By:	Name	of cr	ew chief (first, l	ast) and Firm	D	ate D	rilling	Started	1 [Date D	rilling		B4 leted I	Orilling	Meth	od	
		me A			Last	Name: Sweet			771	23	20	- 1		23,3915 HSA						
	WI Un		Vell No	0.	DNR	Well ID No.	Well Name			tatic V	Valer L	evel 3		Surface Elevation				Borchole Diameter		
PM374											Feet M		ocal (Grid La	Feet Nocation		80 inches			
State Plane N, E S/C/N NW 1/4 of 5W1/4 of Section 26, T 25 N, R 25 EMM										et	0 '		Feet D S					D E		
	Facility	y ID		174 01	Julia	County		Cou	nty Co		Civil 1			Villag	e	<u> </u>		1 001		
0	Sample 8										Í	Algo	ma		Soil P	roper	ties			
														NC IV					•	
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surfi			ogic Origin For Major Unit			CS	hic	Tam Cram	PID/FID	Compressive Strength	Moisture Content	nid it	Plasticity Index	8	RQD/ Comments	
	S P	2 S	Blov	20						S O	Graphic Log	Well Diagram	PIO	Stre	SS SS SS SS SS SS SS SS SS SS SS SS SS	Liquid Limit	Plas	P 200	S S S S S S S S S S S S S S S S S S S	
				E	+01	PSOIL	d ± gravel													
B	4-1			E'	gra	ay sand &	d \$ gravel gravel						0		D					
				Ęą	_	own sand	-													
_				E		Sample														
				F 3	70	sampic														
B	4-2			E4									-		~					
				Ē,														=		
				E,	bro	own sand :	gravel										l			
N	11 2			E			•						0		M					
D	4-3			E,	1+.	brown sq	nd				100									
				<u> </u>	_	- 10														
				F 8	100	sample														
В	4-4			E 9									_							
_	,			Ė '																
				EK	1+.	brown s	and													
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Ų	/ -			E									0		M				- 17 - 17	
	7.1.			<u> </u>			£:					<u> </u>								
	Signati						form is true and		Firm						4					
		ス	on	Oh	M	nacher			1	CA	111	I A	550	C19	res					

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			_		-							<u> </u>	_ of _	d
San	nple										roper	tles		
Number and Type	Length Au. & d	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			E											
B4-6			13		i			0		M				
84-7			17	/				0		M				
B4-8			19					0		5/3	V a	F 18,	5'	
B4-9 * 2:50								0		W				
84-10			23 24 25					0		W				
			26	E08 at 25 ft.										
			-30 -31 -31 -32											

State	of	Wis	CO	nsin	
Depa	run	ent	of	Natural	Resources

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

			Kout	Remediation/Revelopment				<u> </u>								
1000													Page		of	2
Facilit	y/Proje			C		Licens	e/Pern	it/Mor	itorin	Numl	er I	Boring	Numb B 5	cr		
Boring	Drille	d By:	Name	of crew chief (first, last) and Firm Lest Name: Sweet		Date D	-			Date D	rilling			Drilling	Meth	od
	HOI	_		Last Name: Sweet		11,23,2015					231	20	13	HSA		
WI Ur	rique V	Vell No	D.	DNR Well ID No. Well Name		Final S	Static V	Valer L	evel			tion		Borehole Diameter 8.0 inches		
Local	13 Crid O	rigin	(es	stimated:) or Boring Location	<u> </u>	_ -		Feet M		Local (Grid L	Feet Nocation		8,	<u>U</u> in	ches
State Plane N, E S/C/N NW 1/4 of 5W1/4 of Section 26, T 25 N, R 25 EM						Lor	al	0 '			F	et 🖪			Feet	D E
Facilit		<u> </u>	1/4 01	County		ounty C		Civil '			Villag		3 _		racti	□ W
Sam	nle		2	Kewaunee		3_		,	Algo	ma		Soil F	mne	rtios		
3611		sti	Det surface	Soil/Rock Description							y .		·opc	003		
y Se	th Au	Cour	in F	And Geologic Origin For Each Major Unit	r		CS	jç	E.	윤	ig di	a te	₽	city		nents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)				US	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			E	asphelt												
B5-1			上,	base coarse								D				
024			E	dk. gray loamy sand w	1900	vel				0						
			E≀	and the second	J											
			E 3													
B5-2			Ē	brown sand						0		M				
DO -X			E٩							ľ		,				
			E 5	-											196	
			E													
B5-3			-6							0		M				
00-5			E,	It. tan sand & gravel n	nixt	ure					-					Ì
			<u> </u>	i "			1		İ							
			- 8	3												
B5-4			E,	tan sand w/gravel						31		M				
*			F													
11:40			Eκ	2												
			9													
B5-5			E"							0		M				
			E	It. grey sand												
I here	by ceri	ify th		information on this form is true a	nd cor	rect to	the be	st of n	ny kao	owledg	ge.					
Signature Don Brittnacher Firm O						Firm OMNNI Associates										

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Page 2 of 2

	Page 2 of 2										2			
San	nple									Soil F	roper	tles		
Number and Type	Length Au. & G	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	uscs	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			=	lt. brown sand										
B5-6			13		94			0		Μ		,		
B5-7			17					0		M				
B5-8		8	19					0		2/3	Zat	18'		
B5-9				no sample				0		W				
B5-10			23 24 24	brown Sand				0		W				
			26	EOB at 25ft.										
			-30 -31 -31 -32											

State of Wisconsin	
Department of Natura	Resources

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

			Route	e To:		astewater W Revelopment X		_	ment	Ц								
															Page	1	of .	2
Pacilit	y/Proje	ct Na	me					Licens	с/Реп	uit/Mor	nitoring	Numl	ber I		Numb			
Borin	Drille	1 S	Name	of cn	ew chief (first, l	ast) and Firm	-,	Date D	rilling	Starte	<u> </u>	Date D	rilling		B6	Drilling	Meth	md .
First N	lame: /	da	m	Last	Name: Sweet	r'				20						_	SA	•
Firm:	HOI vique V	1 20	24	DNR	Well ID No.	Well Name										Boreho		meter
P 1	43:	79	_			MW4			Feet MSL Feet MSL 8,0						O in			
Local State I	Grid O Plane _	rigin	(es	timate	d: 🗖) or Bor N,	ring Location E SA	C/N	L	al	0 '		Local (Grid La	cation				⊃ E
NW 1/4 of SW 1/4 of Section 26, T 25 N, R 25 EAR Long 0 '											æt 🗖			Feetl				
Facili	y ID				County	unee	C	ounty C	ode	Civil 7	Algo			e				
Sam			8		7,000	11/100								Soil F	rope	ties		
	d (ii)	ants	Foet			ck Description logic Origin For							ive					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface			Major Unit			CS	bic	II Tam	PID/FID	Strice Strice	Moisture Content	bid it	Plasticity Index		RQD/ Comments
N P	2 S	Blos	25						S O	Graphic Log	Well Diagram	M	Compressive Strength	Moi	Liquid Limit	Plas	P 200	S P P P P P P P P P P P P P P P P P P P
			F	7	halt													
B6-1			E	ba.	se coars	e						0		D				
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			Ė,	910	. 610009 3	4.701 W/J	•			1								
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			EL							1		0		M				
B6-3			E							1								
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B6-4			E9	17.	brown 50	and				1				'				
			Ė '							1								
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B6-5			F"									0		101			1	
			E															
						form is true and	con	rect to	the be	st of n	ny kno	owled	ge.			-		
Signa	nure X	m	BA	the	nacher			Firm	ON	141	71 A	550	cia	tes			-	

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Carr										-		c _ d	_of_	<u>~</u>
San	nple								<u> </u>	Soil F	roper	tles		
Number and Type	Length Au. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	uscs	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			E											
B6-6			13	H- gray sand	,			0		M				
			F.	le. I and									,	
86 -7			16	It. gray sand				0		M			9	
B 6 -8			19	1+. brown sand				0		E (Z)	Şat	18.51	9	
			- 1											
B6-9 ** 12:40			21 	It, gray sand				0		W				
12:40			-22	H. brown sand									1	
86-10			23 					0		V				
		- 1	26	FOB at 25ft.))))	
			= 28										9	
						9								
				4										ļ
	+		-30											
			-31								ļ			
			= "											
			- 32											

State of Wisconsin Department of Netural Resources Route to:	Vatershed/Wastewater Remediation/Redevelopment	Waste Man: ✓ Other □ _		MONITORING WELL CONSTRUC Form 4400-113A Rev. 7-98	CTION
	It and Cald I continue of Wall			Well Name	
Allyn's LLC	ft	□ N. □ S	fr. 🗠 🛱.	MWI	
Facility License, Permit or Monitoring No.				Wis. Unique Well No. DNR Well ID	No.
	Lat	Long		<u>PM313</u>	
Facility ID		N	ft. E. S/C/N	Date Well Installed 11/23/20	15
C 117 19	Section Location of Waste/So	ource	Ø €	m m d d y y	V Y
Type of Well	NW 1/4 of Sw 1/4 of Sec	c. 26 .T. 25	N, R. 25 0 W	Well Installed By: Name (first, last) as Adam Sweet	na rim
Well Code / / MW	Location of Well Relative to	Waste/Source	Gov. Lot Number	HAMM JURE!	
Distance from Waste/ Enf. Stds.		☐ Sidegradient		Horizon	
Source Oft. Apply	d Downgradient n				
A. Protective pipe, top elevation _ 60;	3:13ft.MSL		1. Cap and lock?	∑ Yes □	No
B. Well casing, top elevation 602	2. Offi MSL		Protective cover p a. Inside diameter		Sin.
600) . 34 ft. MSL		b. Length:	4.	911.
		200000000	c. Material:	Steel 🔀	0.4
D. Surface seal, bottom ft. MS	St. or _ QLS ft.	N. S.		Other 🗆	
12. USCS classification of soil near scree	n:	A Comment	d. Additional pro		-
	SW Ø SP	1/ /	If yes, describe	AND COMPANY	
	CL CH CH C		11 /03, 4030110	Bentonite 🗆	3 0
Bedrock	188		Surface scal:	Concrete □	2 22 2
13. Sieve analysis performed?	Yes ⊠ No			Other □	0.74 (44.1)
14. Drilling method used: Ro	tary 🗆 50		4 Material between	well casing and protective pipe:	-
Hollow Stem At	900	3 88 8	4. Machai Docwooli	Bentonite	3 0
	Other 🗆 🚉	3 ₩3		Other □	420000
			F A	0 1 101 10 1	
15. Drilling fluid used: Water □ 0 2	Air □ 01		5. Annular space se	nud weight Bentonite-sand slurry	
	None 🖾 99				
		\$ \$ \$\$		nud weight Bentonite slurry Bentonite cement grout	
16. Drilling additives used?	Yes ⊠ No	8 88		volume added for any of the above	1 20
		3 88	J.		0 1
Describe		3 💥	f. How installed:	Tremie pumped	
17. Source of water (attach analysis, if requ	uired):	8 IXX		Gravity 🗵	_ ~ ~
		3 💹	6. Bentonite scal:	a. Bentunite granules	
		9 ₩		3/8 in. □1/2 in. Bentonite chips 🖺	
E. Bentonite seal, top ft. MS	SLor 0,5ft.		в. штучт. ц	Other	500000
-	\ \		7 Fine sand materia	al: Manufacturer, product name & me	
F. Fine sand, top ft. MS	SL or _ 12 : 2ft.		a Sidle	The state of the s	(19:20)
C Fileson by MS	SL or _ 13, Oft.			1 14 1 5	Yes day
G. Filter pack, top ft. MS	FOL T 3.1 DIE		b. Volume added	**	
H. Screen joint, top ft. MS	SL or _ 15, Oft.		8. Filter pack mater	ial: Manufacturer, product name & mo	csh size
	5		b. Volume addo		
I. Well bottom ft. MS	SL or _ 25,0 n.		9. Well casing:	Flush threaded PVC schedule 40	
	2540	圖人		Flush threaded PVC schedule 80	
J. Filter pack, bottom ft. MS	SP OL TOTO II			Other □] [4
K. Borehole, bottom ft. MS	or 25 Ag.		10. Screen material:		23
K. Borehole, bottom ft. MS	2F 04 - 3 3 7 3 1 7		a. Screen type:	Factory cut	
8 12				Continuous slot	3 01
L. Borehole, diameter _ \$\mathscr{D}_{\text{in}}\$.			1 M - 5 - 1	Diedrich Other]]
M. O.D. well casing 2107 in.			b. Manufacturerc. Slot size:		2/_ in.
		/	d. Slotted length		0 . Oft.
N. I.D. well casing $1 = 93$ in.		1	11. Backfill material	(below filter pack): None Dither D	14
I hereby certify that the information on this	s form is true and correct to the	e hest of my kn	nwledge	Other L	
		io ocat of my kill	un icugo.		
Signature Da Brittmacher	Firm	UNI ASSO	ciates		

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin Department of Netural Resources Route to: V	Watershed/Wastewater	Waste Management	MONITORING WELL CONSTRUCTION
F	Remediation/Redevelopment	Other	Form 4400-113A Rev. 7-98
Facility/Project Name Allyn's LLC	Local Grid Location of Well	Sf. DE.	Well Name MW2
Facility License, Permit or Monitoring No.	Local Grid Origin (estima	ated: (1) or Well Location (1)	Wis. Unique Well No. DNR Well ID No.
	Lat	Longor	Dusta
Facility ID	St. Plancft. N		Date Well Installed 1/23/2015
	Section Location of Waste/Sou	arce	m m d d v v v v
Type of Well Code // MW	NW 1/4 of Siv 1/4 of Sec.	26,T. 25 N.R. 25	Well Installed By: Name (first, last) and Firm Adam Sweet
Well Code / / M W Distance from Waste/ Enf. Stds.	Location of Well Relative to V	Vaste/Source Gov. Lot Number 1 Sidegradient	Maga Jueel
Source 20 ft. Apply		Not Known	Horizon
A. Protective pipe, top elevation _ 60		1. Cap and lock?	∑ Yes □ No
100	2 , 08 ft. MSL	2. Protective cover	
2		a. Inside diamete	
C. Land surface elevation 600). 28 n. MSL	b. Length:	4_ 9 n.
D. Surface seal, bottom ft. MS	St. or _ Q15 ft.	c. Material:	Steel № 04 Other □ (1)
12. USCS classification of soil near scree	THE PROPERTY OF A STATE OF THE PROPERTY OF THE	d. Additional pro	
GP GM GC GW G	SW 🗵 SP 🗆	If yes, describ	300 St. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
SM SC ML MH C	CL CH CH	3. Surface scal:	Bentonite 🗆 30
N-0 enconcessor s-1	Yes XI No	3. 50. 100	Concrete 0 01
THE CONTRACT OF THE PRODUCTION OF THE CONTRACT	1 200	A Maradal batana	Other 🗆
14. Drilling method used: Ro Hollow Stem A	otary 50	4. Material between	n well casing and protective pipe: Bentonite 30
	Other 🗆 🔝		Other 🗆
		5. Annular space s	
15. Drilling fluid used: Water 0 2	Air □ 01		mud weight Bontonite-sand slurry 2 35
Drilling Mud 🗆 0 3	None 2 99	cLbs/gai	mud weight Bentonite slurry 31
16. Drilling additives used?	Yes ⊠ No	d % Bento	nite Bentonite-cement grout 🗆 50
_		KAMI J	3 volume added for any of the above
Describe		f. How installed	1: Tremie 🗆 0 1 Tremie pumped 🗆 0 2
17. Source of water (attach analysis, if req	uired):		Gravity 🖾 08
		6. Bentonite scal:	a. Bentunite granules 🔲 33
	1 1 50	b. □1/4 in. □	3/8 in. □ 1/2 in. Bentonite chips 🖼 3 2
E. Bentonite seal, top ft. MS	ST or DT 5 Ir	C	Other 🗆 🚚
F. Fine sand, top ft. MS	SL or _ 12 . Oft.	CDX	ial: Manufacturer, product name & mesh size
		a Sidle	7
G. Filter pack, top ft. MS	SL or _ 13_ Of.	b. Volume adde	
TI Committee to his	SI == 15 DA	8. Filter pack mate	rial: Manufacturer, product name & mesh size
H. Screen joint, top ft. MS	SL or _ 1 5 1 Oft.	a. Sidle b. Volume adde	
I. Well bottom ft. MS	SL or _ 25_0 n.	FE - 1	Flush threaded PVC schedule 40 🖼 23
		9. Well casing:	Flush threaded PVC schedule 80 24
J. Filter pack, bottom ft. MS	SL or _ 25,0 ft.	量	Other 🗆 🚅
	26 00	10. Screen material	PVC 50
K. Borehole, bottom ft. MS	ST or TSTOR	a. Screen type:	
L. Borehole, diameter _ \$_Q in.			Continuous slot 0 1
L Boleliole, dismeter _ y 1 y m.		b. Manufacturer	Diedrich Other
M. O.D. well easing 2107 in.		c. Slot size:	0. <u>b</u> [_in.
N. 1.D. well casing 1 = 93 in.		d. Slotted lengt	
N. I.D. well casing 1 = 93 in.		II. Backilli matena	ll (helow filter pack): None № 14 Other □ 🚉
I hereby certify that the information on this	s form is true and correct to the	best of my knowledge.	
Signature Da Brittmacher	IP.		
IIA Dhillandelook	- (7)M/k/	NI Associates	

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be

State of Wisconsin				MONITORING WELL CONSTRU	ICTION
Department of Natural Resources Route to: V	Watershed/Wastewater Remediation/Redevelopment			Form 4400-113A Rev. 7-98	JCTION
	Local Grid Location of Wel	□N.	. DE.	Well Name	
Allyn's LLC	ft.		ft. E. ft. W.	MW3	
Facility License, Permit or Monitoring No.	Lat, (est	Long.	Well Locationor	Wis. Unique Well No. DNR Well I PM378	D No.
Facility ID		N,	ft. E. S/C/N	Date Well Installed 1 / 23/20) 15
	Section Location of Waste/S			mmddyy	Y Y
Type of Well	NW 1/4 of SW 1/4 of S	ec. 26 .T. 25	N.R. 25 8 ₩	Well Installed By: Name (first, last)	and Firm
Well Code/_ / MW	Location of Well Relative to	o Waste/Source	Gov. Lot Number	Adam Sweet	
Distance from Waste/ Enf. Stds.		Sidegradient	The state of the s	Horizon	
Source 35 ft. Apply		□ Not Known			
A. Protective pipe, top elevation -29 .	9,83 ft. MSL -		1. Cap and lock?	. Ďa Yes [□ No
B. Well casing, top elevation 599	1 _ Q7 ft. MSL		2. Protective cover p	-	۸.
	•		a. Inside diameter		<u>.</u> Q in.
C. Land surface elevation 5 9 5	7 L 76 ft. MSL		b. Length:		<u>.</u> ⊉n.
D. Surface seal, bottom ft. MS	SLor 0,5 ft.		c. Material:	Steel	1045111
	1243053A31			Other	
12. USCS classification of soil near scree		1 18	d. Additional pro	-	□ No
GP GM GC GW G S			If yes, describe		
Bedrock			3. Surface scal:	Bentonite	
	Yes 🛭 No	XI XI \		Concrete	
		## ``		Other	
***************************************	tary 50		4. Material between	well casing and protective pipe:	
Hollow Stem A		₩ ₩		Bentonite	TOTAL STEEL
	Other 🗆 🕮	** **		Other	-) (0.00)
15. Drilling fluid used: Water □ 0 2	Air □ 01		Annular space se		
	None KI 99	2		nud weight Bentonite-sand slurry	
	TONE ISL	₩ ₩		nud weight Bentonite slurry	
16. Drilling additives used?	Yes ⊠ No		d % Benton	ite Bentonite-cement grout	□ 50
		* 		volume added for any of the above	
Describe		₩ ₩	f. How installed		
17. Source of water (attach analysis, if req	uired):	₩ ₩		Tremie pumped	
	· ·		6. Bentonite seal:	Gravity a. Bentonite granules	
		# 		3/8 in. □1/2 in. Bentonite chips	
E. Bentonite seal, top ft. MS	Stor 0.58	24 28 /	р, шт/чти. ш		
E. Belkoline seal, top	W. O D. T. S. T.	X X /	С	Other	
F. Fine sand, top ft. MS	SL or _ 12 . Oft.		7. Fine sand materi	al: Manufacturer, product name & m	icsh size
			a Sidle	√	
G. Filter pack, top ft. MS	SL or _ 13,00.		b. Volume added	1 1 1 -	This date:
O. I htel pack, top				ial: Manufacturer, product name & n	nach siza
H. Screen joint, top ft. MS	SLOT 15.0A	開閉ノ	a. Sidle		
11. Octobri Junit, toly			b. Volume addo		<u> 191</u>
I. Well bottom ft. M.	SL or _ 25,0 n.		9. Well casing:	Flush threaded PVC schedule 40	₩ 23
	- E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E		J. Won casing.	Flush threaded PVC schedule 80	
J. Filter pack, bottom ft. M	SL or 25,6 ft.			Other	15040
7			O. Screen material:		23.74
K. Borehole, bottom ft. MS	SL or 25, Oft.		a. Screen type:	Factory cut	<u>교</u> 의 Sec 11
St. * Indicated after after after after after after a			a. Gordan typo.	Continuous slot	
L. Borehole, diameter _ \$10 in.				Other	0 1
			b. Manufacturer	0 1 1 1	
M. O.D. well casing 2107 in.			c. Slot size:		<u>0</u> L_in.
Jisi was vaonig III.		/	d. Slotted length		10. Qn.
N. 1.D. well casing $1 = 93$ in.		,		(helow filter pack): None	
		•		Other	
I hereby certify that the information on thi	s form is true and correct to	the best of my kno	owledge.		الميد بند
Cionatura A	Eiem				
Don Brittmacher	. OM	INNI ASSO	ciates		

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and hureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin			,	MONITORING RELL CONSTRU	OTION
Department of Natural Resources Route to: V	Watershed/Wastewater Remediation/Redevelopment	Waste Mana Other		MONITORING WELL CONSTRUCT Form 4400-113A Rev. 7-98	JIION
	Local Grid Location of Well	1 NI	ПЕ	Well Name	
Allun's LLC	Local Grid Location of Well	js:		MW4	
Facility License, Permit or Monitoring No.	Local Grid Origin (estima	ated: 🗆) or Long	Well Location or	Wis. Unique Well No. DNR Well ID	No.
Facility ID	St. Plane ft. N	·,	ft. E. S/C/N	Date Well Installed 1/23/20	
Type of Well	Section Location of Waste/Sou	iroe	A. BE	m m d d y y Well Installed By: Name (first, last) a	
Well Code // MW	NW 1/4 of SW 1/4 of Sec.	26,T. 25	N, R < 3 W	Adam Sweet	
Distance from Waste/ Enf. Stds.	Location of Well Relative to V u Upgradient s	Vaste/Source I Sidegradient	Gov. Lot Number		_
Source 55 ft. Apply		Not Known		Horizon	
	9:57 ft. MSL		. Cap and lock?	⊠ Yes □	No
			. Protective cover p		
	7. 18ft. MSL		a. Inside diameter b. Length:	9.	Qin. On.
Designation of the Control of the Co	7 1 55 EL MSL	-	c. Material:	Steel 🗷	
D. Surface seal, bottom ft. MS	St. or _ QLS ft.	V	C. Marchat.	Other C	1.1.404
12. USCS classification of soil near scree		1,100	d. Additional pro		
	SW Ø SP		If yes, describe		, 110
	CL CH CH C			Bentonite C	1 30
Bedrock		3 3	. Surface scal:	Concrete	
13. Sieve analysis performed?	Yes ⊠ No			Other □	Line and
14. Drilling method used: Ro	stary 🗆 50	*** 4	. Material between	well casing and protective pipe:	had spay
Hollow Stem A	. 1000	**		Bentonite 🗆	3 0
	Other 🗆	**		Other C	
			. Annular space se	al: a. Granular/Chipped Bentonite	
15. Drilling fluid used: Water □ 0 2	Air 🗆 01	Some		and weight Bentonite-sand slurry	35
Drilling Mud 🗆 0 3	None 🗹 99	5361		nud weight Bentonite slurry	
16 10 201 - 14 20 - 14	V EN-		d % Benton	ite Bentonite-cement grout	
16. Drilling additives used?	Yes 🗷 No	**	e. 5 6995 FI	volume added for any of the above	
December			f. How installed:	Tremie [0 1
Describe	uised):			Tremie pumped	02
17. Source of water (attach analysis, if req	ulled).	*		Gravity 2	
		- P. C.	6. Bentonite scal:	a. Bentimite granules	_
5.34	0.50		b. □1/4 in. □	3/8 in. □ 1/2 in. Bentonite chips E	
E. Bentonite seal, top ft. MS	2r ot D15111		c	Other E	J
F. Fine sand, top ft. MS	SL or Q_25A. SL or _ 12.9A. SL or _ 13.0A.		7. Fine sand materia	al: Manufacturer, product name & mo	sh size
G. Filter pack, top ft. M	SL or _ 13.00.	3	b. Volume added	1 12 1 2	100
O. This pack, top				ial: Manufacturer, product name & m	och ciza
H. Screen joint, top ft. M	SL or _ 15, Oft.	-	a Sidle		Call Size
I. Well bottom ft. M	SL or _ 25,0 n.		b. Volume addo	d 7 6995 ft 3 Flush threaded PVC schedule 40 ft	23
J. Filter pack, bottom ft. M	SI 25 AB			Flush threaded PVC schedule 80	
J. Filter pack, bottom IL M	2r ot _ 70,01r		0. Screen material:	PVC Other D	20.00
K. Borehole, bottom	SL or _ 35, Qft.	'	a. Screen type:	Factory cut 5	
L. Borehole, diameter _ \$_ O in.				Continuous slot	-
			b. Manufacturer	Diedrich Other	4.5
M. O.D. well casing 2107 in.			c. Slot size: d. Slotted length	0. 9	<u>6</u>
N. I.D. well casing 1.293 in.		1		(helow filter pack): None	14
I hereby certify that the information on thi	Communication and the state of the	hast of mar lan-	mladaa	Other [
	Firm	best of my kno	wieuge.		
Signature Da. Brittmacher	LIM	WI Asso	ristos		

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewat	ter 🔲	Waste Management			
Remediation/Redeve	lopment 🔀	Other			
Facility/Project Name C	ounty Name	v	Well Name		
Allyns LLC	Keway	nee	Mu		
Facility License, Permit or Monitoring Number C	ounty Code	Wis. Unique Well Num		DNR We	II ID Number
	31	<u>PM3</u>	13_		
1. Can this well be purged dry?	No No	11. Depth to Water	Before Dev	elopment	After Development
2. Well development method		(from top of	21	28 ft.	21.38 ft.
surged with bailer and bailed 4 1		well casing)			
surged with bailer and pumped 6 1					
surged with block and bailed 4 2		Date b.	02116	6/20	16 02 16 2016 y y m m d d y y y y
surged with block and pumped \(\square 62		i	m m d d	ууу	y m m d d y y y y
surged with block, bailed and pumped 70			111	a.m.	12:38 x p.m.
compressed air		Time c.	1 2:11	p.m.	<u> 1 ∠: 38 ⊠ p.m.</u>
bailed only		10 5-411			
pumped only		12. Sediment in well bottom		inches	inches
pumped slowly 5 0		1 12 12 12 12 12 12 12 12 12 12 12 12 12	Clear II 1	0	Clear 20
Other			Clear □ 1 Turbid⊠ 1		Turbid □ 25
3. Time spent developing well2	<i>(</i>		Describe)		(Describe)
				brown	
4. Depth of well (from top of well casising) -25	ft.		J		
		1			
5. Inside diameter of well	3 in.				
6. Volume of water in filter pack and well	a				
casing2.	1 gal.	F		4 41 1	
7. Volume of water removed from well 5 6	() asl	Fill in if drilling fluids	were used as	nd well is a	at solid waste facility:
7. Volume of water removed from well	<u>♥</u> gai.	14 Total avenueded		ma/l	mg/l
8. Volume of water added (if any)	oal.	solids		· — mg/i	
	— 5				
9. Source of water added		15. COD		mg/l	mg/l
		16. Well developed by:	Name (first, l	ast) and Fire	n 0 '1/- 1
10. Analysis performed on water added?	□ No	First Name: Don	1	Last Nam	e: Brittnacher
(If yes, attach results)		Firm: OMNN	11 Ass	ocia	tos
17. Additional comments on development:		Firm: 07-11010	رد ۱۱	0014	100
17. Additional confinents on development:					
Name and Address of Facility Contact /Owner/Responsible P	arty	71 1 10 10 1			
First 1 last A			the above inf	formation i	is true and correct to the best
Name: Harmon Name: Allyn		of my knowledge.			
Facility/Firm: Allen's LLC		Signature: Wox	Brit	track	er
Street: 111 Steele St.		Print Name: Do n	, Brit	tnach	ier
City/State/Zip: Algoma, W1 5420)	Firm: OMI	NNL A	ssoci	ates
4		I .			

MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater		Waste Management
Remediation/Redevelop	ment 🔀	Other
Facility/Project Name Cour	nty Name	Well Name
Allyn's LLC K	eway	nee MW2
Facility License, Permit or Monitoring Number Cour	nty Code	Wis. Unique Well Number DNR Well ID Number
	31	PM374_
1. Can this well be purged dry? 2. Well development method		Before Development After Development 11. Depth to Water (from top of well casing) Before Development After Development
surged with bailer and bailed		Date b. 02/16/2016 02/16/2016
compressed air		Time c. \(\begin{align*} \leq & \leq
3. Time spent developing well4 on		(Describe) (Describe) Light brown
4. Depth of well (from top of well casisng) 2 5		<u> </u>
5. Inside diameter of well	in.	
6. Volume of water in filter pack and well casing		Fill in if drilling fluids were used and well is at solid waste facility:
7. Volume of water removed from well		14. Total suspended mg/l mg/l solids
9. Source of water added		15. COD mg/l mg/l 16. Well developed by: Name (first, last) and Firm
10. Analysis performed on water added?	□ No	First Name: Don Last Name: Brittnacher Firm: OMNNI Associates
17. Additional comments on development:		
Name and Address of Facility Contact/Owner/Responsible Part First Name: Harman Name: Allyn	у	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm: Allyn's LLC		Signature: Don Brittmacher
Street: 111 Steele St.		Print Name: Don Brittnacher
City/State/Zip: Algoma, W1 54201		Firm: OMNNI Associates

MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater	Waste Management
Remediation/Redevelopm	ent Other
Facility/Project Name County	Name Well Name
Allyn's LLC Ke	ewaynee MW3
Facility License, Permit or Monitoring Number County	y Code Wis. Unique Well Number DNR Well ID Number
	<u>PM378</u>
1. Can this well be purged dry? 2. Well development method surged with bailer and bailed	No Before Development After Development 11. Depth to Water (from top of well casing) Before Development After Development a
surged with bailer and pumped	Date b. 0 2 1 1 6 1 2 0 1 6 0 2 1 1 6 1 2 0 1 Time c. 10: 30 p.m. 12. Sediment in well bottom 13. Water clarity Clear 10 Clear 20
3. Time spent developing well55 min	light brown
4. Depth of well (from top of well casisng) 2 5 ft.	<u> </u>
5. Inside diameter of well	
6. Volume of water in filter pack and well casing	Fill in if drilling fluids were used and well is at solid waste facility: al. 14. Total suspended mg/l mg/l
9. Source of water added	
(If yes, attach results)	No First Name: Don Last Name: Brittnacher Firm: OMNNI Associates
17. Additional comments on development:	
Name and Address of Facility Contact / Owner/Responsible Party First Name: Harmon Name: Allyn	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm: Allyn's LLC	Signature: Won Brittnacher
Street: 111 Steele St.	Print Name: Don Brittnacher
City/State/Zip: Algoma, W1 54201	Firm: OMNNI Associates

MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

Route to: Watershed/Wastew	ater	Waste Manag	ement [
Remediation/Rede	velopment 🔀	Other				
	County Name			Well Name		
Allyn's LLC	Keway	nee		Mi	N4	
Facility License, Permit or Monitoring Number	County Code	Wis. Unique V		mber	DNR Wel	l ID Number
	31		PM3	74_		
	w/			D C D		10 0 1
1. Can this well be purged dry?	No No	11. Depth to	Water	Before Dev	elopment	After Development
2. Well development method		(from top o	of .	17	886	
surged with bailer and bailed 4	1	well casing			<u> </u>	
surged with bailer and pumped 6						
surged with block and bailed 4		Date		DIIAS	11201	60110812011
surged with block and pumped 6		· · · · · · · · · · · · · · · · · · ·	,	m m d d	1 y y y	6 0 11 0 81 2 0 1 1 y m m d d y y y
surged with block, bailed and pumped						
compressed air	0	Time		<u>. []: 0:</u>	<u>5</u> □ p.m.	1 1: 45 □ p.m.
bailed only						
pumped only	1	12. Sediment i	n well		inches	inches
pumped slowly	0	bottom				
Other 🗆 💆	-	13. Water clari	ity	Clear 1 1 Turbid 2 1		Clear 20 Turbid □ 25
3. Time spent developing well				(Describe)		(Describe)
3. Time spent developing well	Omin.	1				(Describe)
4. Depth of well (from top of well casisng) 2 5	ft.			J		
4. Dopin of weat (none top of weat casing)	. —					
5. Inside diameter of well	1 3 in.			-		
6. Volume of water in filter pack and well						
casing <u>3</u>	. <u>6</u> gal.					
		Fill in if drilling	ng fluid	s were used a	nd well is a	t solid waste facility:
7. Volume of water removed from well	. <u>O</u> gal.					
9 V-1		14. Total susp	ended		mg/l	mg/l
8. Volume of water added (if any)	gal.	SOLIGS				
9. Source of water added		15. COD			mg/l	mg/l
	-				o/-	
		16. Well devel	oped by	: Name (first,	last) and Firm	- 111
10. Analysis performed on water added?	s 🗆 No	First Name:	Do	n	Last Name	Brittnacher
(If yes, attach results)		1			*	
		Firm: O	INI	UI ASS	000191	163
17. Additional comments on development:						
		,				
Name and Address of Facility Contact/Owner/Responsible	Party	I hereby cer	tify that	the above in	formation is	s true and correct to the best
First Name: Harmon Name: Allyn		of my know	ledge.			
,			0	77	i. /	1
Facility/Firm: Allyn's LLC		Signature:	No	n Orit	trach	el
and the same of th			~	D '1	1 /	
Street: 111 Steele St.		Print Name:_	100	n Brit	tnach	er
City/State/Zip: Algoma, W/ 542	01	Firm:	ON	INNI /	ssocie	rtes

GROUNDWATER MONITORING WELL INFORMATION FORM Chapter 281 and 289, Wis. Stats. Form 4400-89 Rev. 7-98

Rev. 7-98

	Facility A	Name	LLC		Facili	ty ID Number	Licens	e, Perm	it or Monitoria	ng No. Date	124	/13	Comple	ted By (Name a	acher,	OMA	INI A	5500	iat	es	
	WI Unique	Well	DNR Well ID		Dir N E V			Casing	Eleva Top of Well Casing	dions Ground	Refe	rence		Depths Initial Groundwater	Well	Screen	Well	Well	Enf.	Grad-	Distance
	Well No			Well Location	++					Surface		Site Datum (V)			Depth	Length			П		to Waste
PM	373	MWI		489366.4		11/23/15	2	PVC	602,05	600,34	/		15'	19.56	251	101	ll/mw	А	~	IN	0'
PM	374	MWZ		489347,7 291697.8		11/23/15	2	Pvc	602.08	400,28	1		151	18.96	25'	10'	ll/mw	A	1	υ	20'
PM	378	Миз		489,350,8 291754,7	X X	11/23/15							151	18.81'	25'	10'	ll/mw	A	~	3	351
PM	379	Mwy		4 89403.5 2 91 761.8		11/23/15	2	PVC	599,18	599,55	~		151	18,55'	251	10'	W/mw	A	1	D	551
					H																
					H																
,					H												X				
•					H													A. S.			
,					H																
9																					
•	Location	Coordina	les Are:	Kewannee	CoG	rid Origin Location	on: (Check is	f estimated:)		I R	emarks:								
	!	te Plane C Northe Centra Southe	rn I	Local Gri System	Lı	ıt•			-			"or					-				_
					St.	. Planc	1	IL N.		n. e. s/0	U/N Z	one									

Completion of this form is mandatory under s. NR 507.14 and NR 110.25 Wis. Adm. Code. Failure to file this form may result in forfeiture of not less than \$10 nor more than \$5,000 for each day of violation. Personally identifiable information provided is intended to be used by the Department for the purposes related to the waste management program.

Well Specific Field Sheets

Facility Name: Allyn's LLC

Date: February 24, 2016
Weather Conditions: 33° F, 25 mph wind
Person(s) Sampling: Don Brittnacher

Sampling Equipment: Enviroline disposable bailers, Solonist 101 water level meter, peristaltic pump-micro

purge, DO probe, pH/Conductivity (Oakton pH/Con. 10 meter).

Well Name	MW1	MW2	MW3	MW4				
WI Unique Well No.	PM373	PM374	PM378	PM379				
Top of PVC Casing Elevation (MSL)	602.05	602.08	599.07	599.18				
Ground Surface Elevation (MSL)	600.34	600.28	599.76	599.55				
Depth to Bottom of Well (ft)	13.50	13.50	13.50	13.50				
Screen Top (MSL)	598.55	598.58	595.57	595.68				
Screen Bottom (MSL)	588.55	588.58	585.57	585.68				
Screen Length (ft)	10	10	10	10				
Water Elevation (MSL)	580.78	581.31	580.94	581.00				
Water Elevation (ft from ground surface)	19.56	18.96	18.81	18.55				
Measured Depth to Water (ft)	21.27	20.77	18.13	18.18				
Micro Purge Pump Setting	3.0	3.0	3.0	3.0				
Time Purging Begun	1:05	12:30	11:01	10:15				
Time Purging Completed	1:20	12:45	11:16	10:30				
Amount Purged (gal)	2.0	2.0	2.0	2.0				
Purged Dry? (Y/N)	N	N	N	N				
Temperature (°C)	9.2	9.1	10.7	10.6				
Conductivity (µS)	497	1771	1924	1169				
pH (std. units)	7.28	7.47	7.35	7.21				
Dissolved Oxygen (mg/L)	probe not working							
ORP (mV)	-	-	-	_				
Color (Y/N)	N	N	N	N				
Odor (Y/N)	Y, very slight	N	N	N				
Turbidity (Y/N)	N	N	N	N				
Sampling Parameters		VOCs. F	PAHs, Pb					
Sample field filtered? (Y/N)	Y - Pb; N - VOCs, PAHs							
Time Sample Withdrawn	1:22	12:47	11:18	10:32				
Well secured? (Y/N)	Υ	Υ	Υ	Υ				

APPENDIX 4 HANDBOOK OF FIELD PROCEDURES

HANDBOOK OF FIELD PROCEDURES

TABLE OF CONTENTS

Personnel Qualifications	1
Soil Boring Installation Procedures	2
Soil Sampling Procedures	3
Monitoring Well Installation and Development Procedures	4
Groundwater Sampling Procedures and Volatile Organic Compound (VOC) Sampling Notes	5
Decontamination Procedures	7 7
Table 1 – Soil Sample Preparation Guide*	9
Table 2 – Soil Sample Analysis Guide for Petroleum Contamination	10
Table 3 – Groundwater Sample Preparation Guide*	11

PERSONNEL QUALIFICATIONS

	Completed 40-hour hazardous waste training.						
	Bachelors Degree in Electrical Engineering from University of Wisconsin-Milwaukee.						
Brian D. Wayner:	Masters Degree in Environmental Engineering from University of New Haven.						
	PECFA Consultant Registration #47551.						
	Licensed Professional Engineer (no. 35304), State of Wisconsin						
	Completed 40-hour hazardous waste training.						
Don Brittnacher:	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.						
	Completed 40-hour hazardous waste training.						
Jason C. Weis:	Bachelors Degree in Civil Engineering from University of Wisconsin-Platteville.						
Case ii G. VVoid.	Masters Degree in Environmental Engineering from University of Wyoming.						
	Licensed Professional Engineer (no. 36681), State of Wisconsin						
	Completed 40-hour hazardous waste training.						
Deanna L. Drum:	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, <u>Soil Sampling Requirements for LUST Site Investigations and Excavations</u> and chapter COMM 10, <u>Flammable and Combustible Liquids</u>, 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, <u>Interim Guidance On Natural Attenuation For Petroleum Releases</u>, 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 41 –55 °F 56 –69 °F > 70 °F	40 minutes 20 minutes 10 minutes 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.
 - 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:
 - 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.
 - 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

<u>Sampling Field Manual</u>, Publ. DG-038 96, September 1996 and WDNR's <u>Groundwater Sampling Desk Reference</u>, 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

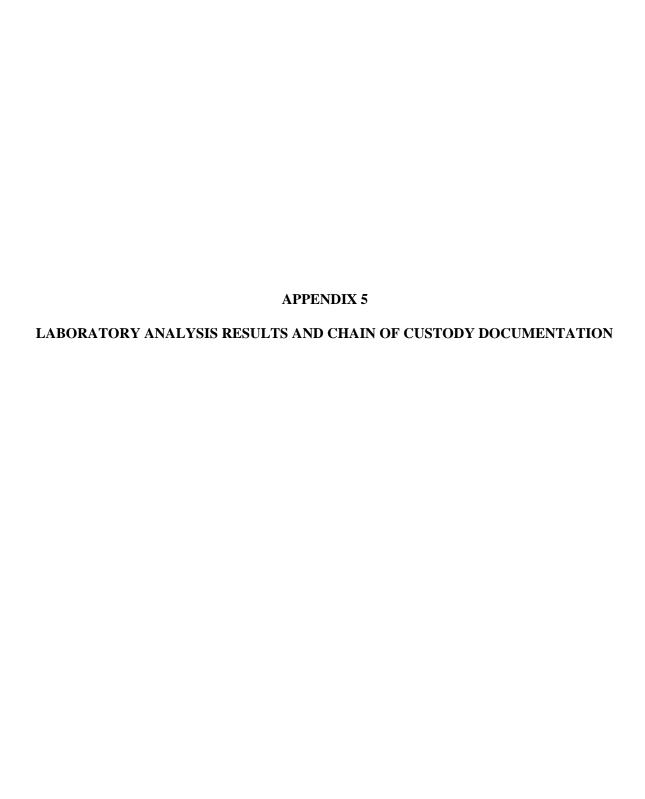
PETROLEUM SUBSTANCE	CLOSURE ASSESSMENT	SOLID WASTE PRO./LANDFILLS	SITE INVESTIGATIONS
Gasoline Aviation Fuel	GRO	Free Liquids GRO Benzene Haz. Waste Det.	GRO PVOC/VOC Pb
Diesel Jet Fuel No.'s 1, 2, 4 Fuel Oil	DRO	Free Liquids GRO Benzene Haz. Waste Det.	DRO PVOC PAH
Crude Oil Lubricat. Oil No. 6 Fuel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



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

Report Date 15-Dec-15

Project Name ALLYN, ALGOMA Invoice # E30088

Project # N2162C15

Lab Code 5030088A
Sample ID B3-1
Sample Matrix Soil

-	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.1	%			1	5021		11/25/2015	DJL	1
Inorganic										
Metals										
Lead, Total	6.13	/IZ -	0.52	1.72	2	6010B		12/2/2015	CWT	1 49
· · · · · · · · · · · · · · · · · · ·	0.13	mg/Kg	0.52	1.72	2	0010B		12/2/2015	CWI	1 49
Organic										
PAH SIM										
Acenaphthene	< 0.0201	mg/kg	0.0201	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Acenaphthylene	< 0.0198	mg/kg	0.0198	0.062	1	M8270C	12/1/2015	12/2/2015	MDK	1
Anthracene	< 0.0171	mg/kg	0.0171	0.054	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)anthracene	< 0.0191	mg/kg	0.0191	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)pyrene	< 0.0143	mg/kg	0.0143	0.045	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(b)fluoranthene	< 0.019	mg/kg	0.019	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(g,h,i)perylene	< 0.02	mg/kg	0.02	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(k)fluoranthene	< 0.0174	mg/kg	0.0174	0.055	1	M8270C	12/1/2015	12/2/2015	MDK	1
Chrysene	< 0.0192	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Dibenzo(a,h)anthracene	< 0.015	mg/kg	0.015	0.047	1	M8270C	12/1/2015	12/2/2015	MDK	1
Fluoranthene	< 0.0192	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Fluorene	< 0.0184	mg/kg	0.0184	0.058	1	M8270C	12/1/2015	12/2/2015	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.0165	mg/kg	0.0165	0.052	1	M8270C	12/1/2015	12/2/2015	MDK	1
1-Methyl naphthalene	< 0.0205	mg/kg	0.0205	0.065	1	M8270C	12/1/2015	12/2/2015	MDK	1
2-Methyl naphthalene	< 0.0199	mg/kg	0.0199	0.063	1	M8270C	12/1/2015	12/2/2015	MDK	1
Naphthalene	< 0.0203	mg/kg	0.0203	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Phenanthrene	< 0.0198	mg/kg	0.0198	0.063	1	M8270C	12/1/2015	12/2/2015	MDK	1
Pyrene	< 0.0192	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		12/1/2015	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		12/1/2015	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		12/1/2015	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		12/1/2015	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		12/1/2015	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		12/1/2015	CJR	1

Project Name ALLYN, ALGOMA

Project # N2162C15

Lab Code 5030088A Sample ID B3-1 Sample Matrix Soil

•	Result	Unit	LOD	LOQ Dil]	Method	Ext Date	Run Date	Analyst	Code
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27 1	1	8260B		12/1/2015	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067 1	1	8260B		12/1/2015	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		12/1/2015	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14 1	1	8260B		12/1/2015	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081 1	1	8260B		12/1/2015	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78 1	1	8260B		12/1/2015	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093 1	1	8260B		12/1/2015	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1 1	1	8260B		12/1/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		12/1/2015	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098 1	1	8260B		12/1/2015	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096 1	1	8260B		12/1/2015	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097 1	1	8260B		12/1/2015	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12 1	1	8260B		12/1/2015	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14 1	1	8260B		12/1/2015	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096 1	1	8260B		12/1/2015	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079 1	1	8260B		12/1/2015	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093 1	1	8260B		12/1/2015	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068 1	1	8260B		12/1/2015	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076 1	1	8260B		12/1/2015	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078 1	1	8260B		12/1/2015	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33 1	1	8260B		12/1/2015	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097 1	1	8260B		12/1/2015	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04 1	1	8260B		12/1/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11 1	1	8260B		12/1/2015	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086 1	1	8260B		12/1/2015	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		12/1/2015	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12 1	1	8260B		12/1/2015	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18 1	1	8260B		12/1/2015	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		12/1/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		12/1/2015	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28 1	1	8260B		12/1/2015	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11 1	1	8260B		12/1/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04 1	1	8260B		12/1/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093 1	1	8260B		12/1/2015	CJR	1
Tetrachloroethene	0.087 "J"	mg/kg	0.054	0.17 1	1	8260B		12/1/2015	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099 1	1	8260B		12/1/2015	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085			8260B		12/1/2015	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38 1		8260B		12/1/2015	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04			8260B		12/1/2015	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11 1	1	8260B		12/1/2015	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042			8260B		12/1/2015	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06			8260B		12/1/2015	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25		8260B		12/1/2015	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28 1		8260B		12/1/2015	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01			8260B		12/1/2015	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07			8260B		12/1/2015	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092		8260B		12/1/2015	CJR	1
SUR - 4-Bromofluorobenzene	102	Rec %		1		8260B		12/1/2015	CJR	1
SUR - Dibromofluoromethane	100	Rec %		1		8260B		12/1/2015	CJR	1
SUR - Toluene-d8	93	Rec %		1	1	8260B		12/1/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %		1	1	8260B		12/1/2015	CJR	1

Project Name ALLYN, ALGOMA Invoice # E30088

Proiect # N2162C15

Lab Code 5030088B

Lab Code 5030088 Sample ID B3-10 Sample Matrix Soil

•	Result	Unit	LOD	LOQ D	il	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.7	%			1	5021		11/25/2015	DJL	1
Organic										
PAH SIM										
Acenaphthene	0.0287 "J"	mg/kg	0.0201	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Acenaphthylene	< 0.0198	mg/kg	0.0198	0.062	1	M8270C	12/1/2015	12/2/2015	MDK	1
Anthracene	0.0257 "J"	mg/kg	0.0171	0.054	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)anthracene	< 0.0191	mg/kg	0.0191	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)pyrene	< 0.0143	mg/kg	0.0143	0.045	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(b)fluoranthene	< 0.019	mg/kg	0.019	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(g,h,i)perylene	< 0.02	mg/kg	0.02	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(k)fluoranthene	< 0.0174	mg/kg	0.0174	0.055	1	M8270C	12/1/2015	12/2/2015	MDK	1
Chrysene	< 0.0192	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Dibenzo(a,h)anthracene	< 0.015	mg/kg	0.015	0.047	1	M8270C	12/1/2015	12/2/2015	MDK	1
Fluoranthene	< 0.0192	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Fluorene	0.053 "J"	mg/kg	0.0184	0.058	1	M8270C	12/1/2015	12/2/2015	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.0165	mg/kg	0.0165	0.052	1	M8270C	12/1/2015	12/2/2015	MDK	1
1-Methyl naphthalene	0.061 "J"	mg/kg	0.0205	0.065	1	M8270C	12/1/2015	12/2/2015	MDK	1
2-Methyl naphthalene	0.107	mg/kg	0.0199	0.063	1	M8270C	12/1/2015	12/2/2015	MDK	1
Naphthalene	0.053 "J"	mg/kg	0.0203	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Phenanthrene	0.145	mg/kg	0.0198	0.063	1	M8270C	12/1/2015	12/2/2015	MDK	1
Pyrene	< 0.0192	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1

Project Name ALLYN, ALGOMA

Proiect # N2162C15

Lab Code5030088CSample IDB4-9Sample MatrixSoil

Sample Date	11/23/2015										
		Result	Unit	LOD	LOQ I	Dil	Method	Ext Date	Run Date	Analyst	Code
General											
General											
Solids Percent		87.4	%			1	5021		11/25/2015	DJL	1
Inorganic											
Metals											
Lead, Total		2.46	mg/Kg	0.52	1.72	2	6010B		12/2/2015	CWT	1 49
<i>,</i>		2.40	mg/Kg	0.52	1.72	2	оотов		12/2/2013	CWI	1 49
Organic											
PAH SIM											
Acenaphthene		< 0.0201	mg/kg	0.0201	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Acenaphthylene		< 0.0198	mg/kg	0.0198		1	M8270C	12/1/2015	12/2/2015	MDK	1
Anthracene		< 0.0171	mg/kg	0.0171	0.054	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)anthracene	e	< 0.0191	mg/kg	0.0191	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)pyrene		< 0.0143	mg/kg	0.0143		1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(b)fluoranthe		< 0.019	mg/kg	0.019		1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(g,h,i)peryler Benzo(k)fluoranthe		< 0.02 < 0.0174	mg/kg mg/kg	0.02		1 1	M8270C M8270C	12/1/2015 12/1/2015	12/2/2015 12/2/2015	MDK MDK	1 1
Chrysene	ine	< 0.0174	mg/kg	0.0174		1	M8270C M8270C	12/1/2015	12/2/2015	MDK	1
Dibenzo(a,h)anthra	cene	< 0.0152	mg/kg	0.0152		1	M8270C	12/1/2015	12/2/2015	MDK	1
Fluoranthene		< 0.0192	mg/kg	0.0192		1	M8270C	12/1/2015	12/2/2015	MDK	1
Fluorene		< 0.0184	mg/kg	0.0184		1	M8270C	12/1/2015	12/2/2015	MDK	1
Indeno(1,2,3-cd)py	rene	< 0.0165	mg/kg	0.0165	0.052	1	M8270C	12/1/2015	12/2/2015	MDK	1
1-Methyl naphthale		< 0.0205	mg/kg	0.0205	0.065	1	M8270C	12/1/2015	12/2/2015	MDK	1
2-Methyl naphthale	ene	< 0.0199	mg/kg	0.0199	0.063	1	M8270C	12/1/2015	12/2/2015	MDK	1
Naphthalene		< 0.0203	mg/kg	0.0203		1	M8270C	12/1/2015	12/2/2015	MDK	1
Phenanthrene		< 0.0198	mg/kg	0.0198		1	M8270C	12/1/2015	12/2/2015	MDK	1
Pyrene		< 0.0192	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
VOC's											
Benzene		< 0.016	mg/kg	0.016	0.049	1	8260B		12/1/2015	CJR	1
Bromobenzene		< 0.039	mg/kg	0.039	0.12	1	8260B		12/1/2015	CJR	1
Bromodichlorometh	hane	< 0.015	mg/kg	0.015		1	8260B		12/1/2015	CJR	1
Bromoform		< 0.023	mg/kg	0.023		1	8260B		12/1/2015	CJR	1
tert-Butylbenzene		< 0.035	mg/kg	0.035		1	8260B		12/1/2015	CJR	1
sec-Butylbenzene		< 0.036	mg/kg	0.036		1	8260B		12/1/2015	CJR	1
n-Butylbenzene Carbon Tetrachloric	1.	< 0.086	mg/kg	0.086		1	8260B		12/1/2015	CJR	1
Chlorobenzene	ue	< 0.021 < 0.039	mg/kg	0.021 0.039	0.067 0.12	1 1	8260B 8260B		12/1/2015 12/1/2015	CJR CJR	1 1
Chloroethane		< 0.039	mg/kg mg/kg	0.039		1	8260B		12/1/2015	CJR	1
Chloroform		< 0.026	mg/kg	0.026		1	8260B		12/1/2015	CJR	1
Chloromethane		< 0.25	mg/kg	0.25		1	8260B		12/1/2015	CJR	1
2-Chlorotoluene		< 0.029	mg/kg	0.029		1	8260B		12/1/2015	CJR	1
4-Chlorotoluene		< 0.032	mg/kg	0.032		1	8260B		12/1/2015	CJR	1
1,2-Dibromo-3-chlo	oropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		12/1/2015	CJR	1
Dibromochloromet	hane	< 0.031	mg/kg	0.031	0.098	1	8260B		12/1/2015	CJR	1
1,4-Dichlorobenzer		< 0.03	mg/kg	0.03		1	8260B		12/1/2015	CJR	1
1,3-Dichlorobenzer		< 0.03	mg/kg	0.03		1	8260B		12/1/2015	CJR	1
1,2-Dichlorobenzer		< 0.039	mg/kg	0.039		1	8260B		12/1/2015	CJR	1
Dichlorodifluorome		< 0.043	mg/kg	0.043		1	8260B		12/1/2015	CJR	1
1,2-Dichloroethane		< 0.03	mg/kg	0.03		1	8260B		12/1/2015	CJR	1
1,1-Dichloroethane		< 0.025	mg/kg	0.025		1	8260B		12/1/2015	CJR	1
1,1-Dichloroethene cis-1,2-Dichloroeth		< 0.029 < 0.021	mg/kg mg/kg	0.029 0.021	0.093 0.068	1 1	8260B 8260B		12/1/2015 12/1/2015	CJR CJR	1 1
trans-1,2-Dichloroe		< 0.021	mg/kg	0.021		1	8260B		12/1/2015	CJR CJR	1
1,2-Dichloropropar		< 0.024	mg/kg	0.024		1	8260B		12/1/2015	CJR	1
2,2-Dichloropropar		< 0.1	mg/kg	0.1	0.33	1	8260B		12/1/2015	CJR	1
1,3-Dichloropropar		< 0.031	mg/kg	0.031		1	8260B		12/1/2015	CJR	1
Di-isopropyl ether		< 0.012	mg/kg	0.012		1	8260B		12/1/2015	CJR	1
EDB (1,2-Dibromo	ethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		12/1/2015	CJR	1

Project Name ALLYN, ALGOMA Invoice # E30088

Project # N2162C15

Lab Code5030088CSample IDB4-9Sample MatrixSoil

	Result	Unit	LOD	LOQ I)il	Method	Ext Date	Run Date	Analyst	Code
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		12/1/2015	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		12/1/2015	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		12/1/2015	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		12/1/2015	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		12/1/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		12/1/2015	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		12/1/2015	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		12/1/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		12/1/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		12/1/2015	CJR	1
Tetrachloroethene	0.108 "J"	mg/kg	0.054	0.17	1	8260B		12/1/2015	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		12/1/2015	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		12/1/2015	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		12/1/2015	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		12/1/2015	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		12/1/2015	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		12/1/2015	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		12/1/2015	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		12/1/2015	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		12/1/2015	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		12/1/2015	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		12/1/2015	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		12/1/2015	CJR	1
SUR - 4-Bromofluorobenzene	109	Rec %			1	8260B		12/1/2015	CJR	1
SUR - Dibromofluoromethane	104	Rec %			1	8260B		12/1/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	91	Rec %			1	8260B		12/1/2015	CJR	1
SUR - Toluene-d8	96	Rec %			1	8260B		12/1/2015	CJR	1

Project Name ALLYN, ALGOMA

Proiect # N2162C15

Lab Code5030088DSample IDB5-4Sample MatrixSoil

Sample Date	11/23/2015										
		Result	Unit	LOD	LOQ I	Dil	Method	Ext Date	Run Date	Analyst	Code
General					_					2	
General											
Solids Percent		95.7	%			1	5021		11/25/2015	DJL	1
Inorganic											
Metals											
Lead, Total		1.64 "J"	mg/Kg	0.52	1.72	2	6010B		12/2/2015	CWT	1 49
<i>,</i>		1.04 J	mg/Kg	0.52	1.72	2	0010B		12/2/2013	CWI	1 49
Organic											
PAH SIM											
Acenaphthene		< 0.0201	mg/kg	0.0201	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Acenaphthylene		< 0.0198	mg/kg	0.0198	0.062	1	M8270C	12/1/2015	12/2/2015	MDK	1
Anthracene		< 0.0171	mg/kg	0.0171	0.054	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)anthracene	e	< 0.0191	mg/kg	0.0191	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)pyrene		< 0.0143	mg/kg	0.0143	0.045	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(b)fluoranthe Benzo(g,h,i)peryler		0.0209 "J" 0.041 "J"	mg/kg	0.019	0.061 0.064	1 1	M8270C M8270C	12/1/2015 12/1/2015	12/2/2015 12/2/2015	MDK MDK	1 1
Benzo(k)fluoranthe		< 0.0174	mg/kg mg/kg	0.02	0.055	1	M8270C M8270C	12/1/2015	12/2/2015	MDK	1
Chrysene	inc	< 0.0174	mg/kg	0.0174	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Dibenzo(a,h)anthra	cene	< 0.0152	mg/kg	0.015	0.047	1	M8270C	12/1/2015	12/2/2015	MDK	1
Fluoranthene		0.023 "J"	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Fluorene		< 0.0184	mg/kg	0.0184	0.058	1	M8270C	12/1/2015	12/2/2015	MDK	1
Indeno(1,2,3-cd)py	rene	< 0.0165	mg/kg	0.0165	0.052	1	M8270C	12/1/2015	12/2/2015	MDK	1
1-Methyl naphthale	ene	< 0.0205	mg/kg	0.0205	0.065	1	M8270C	12/1/2015	12/2/2015	MDK	1
2-Methyl naphthale	ene	< 0.0199	mg/kg	0.0199	0.063	1	M8270C	12/1/2015	12/2/2015	MDK	1
Naphthalene		< 0.0203	mg/kg	0.0203	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Phenanthrene		0.0231 "J"	mg/kg	0.0198	0.063	1	M8270C	12/1/2015	12/2/2015	MDK	1
Pyrene		0.0237 "J"	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
VOC's											
Benzene		< 0.016	mg/kg	0.016	0.049	1	8260B		12/1/2015	CJR	1
Bromobenzene		< 0.039	mg/kg	0.039	0.12	1	8260B		12/1/2015	CJR	1
Bromodichloromet	hane	< 0.015	mg/kg	0.015	0.048	1	8260B		12/1/2015	CJR	1
Bromoform		< 0.023	mg/kg	0.023	0.073	1	8260B		12/1/2015	CJR	1
tert-Butylbenzene		< 0.035	mg/kg	0.035	0.11	1	8260B		12/1/2015	CJR	1
sec-Butylbenzene		< 0.036	mg/kg	0.036	0.11	1	8260B		12/1/2015	CJR	1
n-Butylbenzene Carbon Tetrachlorie	da	< 0.086 < 0.021	mg/kg	0.086 0.021	0.27 0.067	1 1	8260B 8260B		12/1/2015 12/1/2015	CJR CJR	1 1
Chlorobenzene	ue	< 0.021	mg/kg mg/kg	0.021	0.007	1	8260B		12/1/2015	CJR	1
Chloroethane		< 0.045	mg/kg	0.035	0.12	1	8260B		12/1/2015	CJR	1
Chloroform		< 0.026	mg/kg	0.026	0.081	1	8260B		12/1/2015	CJR	1
Chloromethane		< 0.25	mg/kg	0.25	0.78	1	8260B		12/1/2015	CJR	1
2-Chlorotoluene		< 0.029	mg/kg	0.029	0.093	1	8260B		12/1/2015	CJR	1
4-Chlorotoluene		< 0.032	mg/kg	0.032	0.1	1	8260B		12/1/2015	CJR	1
1,2-Dibromo-3-chlo	oropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		12/1/2015	CJR	1
Dibromochloromet		< 0.031	mg/kg	0.031	0.098	1	8260B		12/1/2015	CJR	1
1,4-Dichlorobenzer		< 0.03	mg/kg	0.03	0.096	1	8260B		12/1/2015	CJR	1
1,3-Dichlorobenzer		< 0.03	mg/kg	0.03	0.097	1	8260B		12/1/2015	CJR	1
1,2-Dichlorobenzer		< 0.039	mg/kg	0.039	0.12	1	8260B		12/1/2015	CJR	1
Dichlorodifluorome		< 0.043	mg/kg	0.043	0.14	1	8260B		12/1/2015	CJR	1
1,2-Dichloroethane 1,1-Dichloroethane		< 0.03 < 0.025	mg/kg	0.03 0.025	0.096 0.079	1 1	8260B 8260B		12/1/2015 12/1/2015	CJR CJR	1 1
1,1-Dichloroethene		< 0.023	mg/kg mg/kg	0.023	0.079	1	8260B		12/1/2015	CJR	1
cis-1,2-Dichloroeth		< 0.029	mg/kg	0.029	0.093	1	8260B		12/1/2015	CJR	1
trans-1,2-Dichloroe		< 0.021	mg/kg	0.021	0.076	1	8260B		12/1/2015	CJR	1
1,2-Dichloropropar		< 0.025	mg/kg	0.025	0.078	1	8260B		12/1/2015	CJR	1
2,2-Dichloropropar		< 0.1	mg/kg	0.1	0.33	1	8260B		12/1/2015	CJR	1
1,3-Dichloropropar		< 0.031	mg/kg	0.031	0.097	1	8260B		12/1/2015	CJR	1
Di-isopropyl ether		< 0.012	mg/kg	0.012	0.04	1	8260B		12/1/2015	CJR	1
EDB (1,2-Dibromo	ethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		12/1/2015	CJR	1

Project Name ALLYN, ALGOMA Invoice # E30088

Proiect # N2162C15

Lab Code5030088DSample IDB5-4Sample MatrixSoil

	Result	Unit	LOD	LOQ D)il	Method	Ext Date	Run Date	Analyst	Code
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		12/1/2015	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		12/1/2015	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		12/1/2015	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		12/1/2015	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		12/1/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		12/1/2015	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		12/1/2015	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		12/1/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		12/1/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		12/1/2015	CJR	1
Tetrachloroethene	0.182	mg/kg	0.054	0.17	1	8260B		12/1/2015	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		12/1/2015	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		12/1/2015	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		12/1/2015	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		12/1/2015	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		12/1/2015	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		12/1/2015	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		12/1/2015	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		12/1/2015	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		12/1/2015	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		12/1/2015	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		12/1/2015	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		12/1/2015	CJR	1
SUR - 4-Bromofluorobenzene	104	Rec %			1	8260B		12/1/2015	CJR	1
SUR - Dibromofluoromethane	104	Rec %			1	8260B		12/1/2015	CJR	1
SUR - Toluene-d8	93	Rec %			1	8260B		12/1/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %			1	8260B		12/1/2015	CJR	1

Project Name ALLYN, ALGOMA

Proiect # N2162C15

Lab Code5030088ESample IDB6-9Sample MatrixSoil

Sample Date	11/23/2015										
		Result	Unit	LOD	LOQ I	Dil	Method	Ext Date	Run Date	Analyst	Code
General					_					2	
General											
Solids Percent		90.2	%			1	5021		11/25/2015	DJL	1
Inorganic											
Metals											
Lead, Total		2.16	ma/Va	0.52	1.72	2	6010B		12/2/2015	CWT	1 49
<i>,</i>		2.10	mg/Kg	0.52	1.72	2	0010B		12/2/2013	CWI	1 49
Organic											
PAH SIM											
Acenaphthene		< 0.0201	mg/kg	0.0201	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Acenaphthylene		< 0.0198	mg/kg	0.0198	0.062	1	M8270C	12/1/2015	12/2/2015	MDK	1
Anthracene		< 0.0171	mg/kg	0.0171	0.054	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)anthracene	e	0.0201 "J"	mg/kg	0.0191	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(a)pyrene		0.0214 "J"	mg/kg	0.0143		1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(b)fluoranthe		0.0194 "J"	mg/kg	0.019		1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(g,h,i)peryler		0.068	mg/kg	0.02		1	M8270C	12/1/2015	12/2/2015	MDK	1
Benzo(k)fluoranthe Chrysene	ene	< 0.0174 0.0235 "J"	mg/kg mg/kg	0.0174 0.0192		1 1	M8270C M8270C	12/1/2015 12/1/2015	12/2/2015 12/2/2015	MDK MDK	1 1
Dibenzo(a,h)anthra	cene	< 0.015	mg/kg	0.0192		1	M8270C M8270C	12/1/2015	12/2/2015	MDK	1
Fluoranthene	cene	< 0.019	mg/kg	0.013		1	M8270C M8270C	12/1/2015	12/2/2015	MDK	1
Fluorene		< 0.0184	mg/kg	0.0184		1	M8270C	12/1/2015	12/2/2015	MDK	1
Indeno(1,2,3-cd)py	rene	< 0.0165	mg/kg	0.0165		1	M8270C	12/1/2015	12/2/2015	MDK	1
1-Methyl naphthale		< 0.0205	mg/kg	0.0205		1	M8270C	12/1/2015	12/2/2015	MDK	1
2-Methyl naphthale		< 0.0199	mg/kg	0.0199	0.063	1	M8270C	12/1/2015	12/2/2015	MDK	1
Naphthalene		< 0.0203	mg/kg	0.0203	0.064	1	M8270C	12/1/2015	12/2/2015	MDK	1
Phenanthrene		< 0.0198	mg/kg	0.0198	0.063	1	M8270C	12/1/2015	12/2/2015	MDK	1
Pyrene		0.043 "J"	mg/kg	0.0192	0.061	1	M8270C	12/1/2015	12/2/2015	MDK	1
VOC's											
Benzene		< 0.016	mg/kg	0.016	0.049	1	8260B		12/1/2015	CJR	1
Bromobenzene		< 0.039	mg/kg	0.039	0.12	1	8260B		12/1/2015	CJR	1
Bromodichloromet	hane	< 0.015	mg/kg	0.015	0.048	1	8260B		12/1/2015	CJR	1
Bromoform		< 0.023	mg/kg	0.023	0.073	1	8260B		12/1/2015	CJR	1
tert-Butylbenzene		< 0.035	mg/kg	0.035	0.11	1	8260B		12/1/2015	CJR	1
sec-Butylbenzene		< 0.036	mg/kg	0.036		1	8260B		12/1/2015	CJR	1
n-Butylbenzene	_	< 0.086	mg/kg	0.086		1	8260B		12/1/2015	CJR	1
Carbon Tetrachlori	de	< 0.021	mg/kg	0.021	0.067	1	8260B		12/1/2015	CJR	1
Chlorobenzene		< 0.039	mg/kg	0.039		1	8260B		12/1/2015	CJR	1
Chloroethane Chloroform		< 0.045 < 0.026	mg/kg	0.045		1 1	8260B		12/1/2015 12/1/2015	CJR CJR	1
Chloromethane		< 0.026	mg/kg mg/kg	0.026 0.25		1	8260B 8260B		12/1/2015	CJR	1 1
2-Chlorotoluene		< 0.029	mg/kg	0.029		1	8260B		12/1/2015	CJR	1
4-Chlorotoluene		< 0.032	mg/kg	0.032		1	8260B		12/1/2015	CJR	1
1,2-Dibromo-3-chlo	oropropane	< 0.078	mg/kg	0.078		1	8260B		12/1/2015	CJR	1
Dibromochloromet		< 0.031	mg/kg	0.031		1	8260B		12/1/2015	CJR	1
1,4-Dichlorobenzer	ne	< 0.03	mg/kg	0.03	0.096	1	8260B		12/1/2015	CJR	1
1,3-Dichlorobenzer	ne	< 0.03	mg/kg	0.03	0.097	1	8260B		12/1/2015	CJR	1
1,2-Dichlorobenzer	ne	< 0.039	mg/kg	0.039	0.12	1	8260B		12/1/2015	CJR	1
Dichlorodifluorome	ethane	< 0.043	mg/kg	0.043		1	8260B		12/1/2015	CJR	1
1,2-Dichloroethane		< 0.03	mg/kg	0.03		1	8260B		12/1/2015	CJR	1
1,1-Dichloroethane		< 0.025	mg/kg	0.025		1	8260B		12/1/2015	CJR	1
1,1-Dichloroethene		< 0.029	mg/kg	0.029		1	8260B		12/1/2015	CJR	1
cis-1,2-Dichloroeth		< 0.021	mg/kg	0.021	0.068	1	8260B		12/1/2015	CJR	1
trans-1,2-Dichloroe		< 0.024	mg/kg	0.024		1	8260B		12/1/2015	CJR	1
1,2-Dichloropropar		< 0.025 < 0.1	mg/kg	0.025		1	8260B 8260B		12/1/2015	CJR	1 1
2,2-Dichloropropar 1,3-Dichloropropar		< 0.1 < 0.031	mg/kg	0.1 0.031	0.33 0.097	1 1	8260B 8260B		12/1/2015 12/1/2015	CJR CJR	1
Di-isopropyl ether		< 0.031	mg/kg mg/kg	0.031		1	8260B		12/1/2015	CJR	1
EDB (1,2-Dibromo	ethane)	< 0.012	mg/kg	0.012		1	8260B		12/1/2015	CJR	1
LDD (1,2 D1010III0	-caratro,	. 0.033	1115/ KG	0.055	0.11	1	5200 D		12, 1, 2013	C514	•

Project Name ALLYN, ALGOMA Invoice # E30088

Project # N2162C15

Lab Code 5030088E

Sample ID B6-9

Sample Matrix Soil

Sample Matrix Soil **Sample Date** 11/23/2015

	Result	Unit	LOD	LOQ I	Dil	Method	Ext Date	Run Date	Analyst	Code
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		12/1/2015	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		12/1/2015	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		12/1/2015	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		12/1/2015	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		12/1/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		12/1/2015	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		12/1/2015	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		12/1/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		12/1/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		12/1/2015	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		12/1/2015	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		12/1/2015	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		12/1/2015	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		12/1/2015	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		12/1/2015	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		12/1/2015	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		12/1/2015	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		12/1/2015	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		12/1/2015	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		12/1/2015	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		12/1/2015	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		12/1/2015	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		12/1/2015	CJR	1
SUR - Toluene-d8	92	Rec %			1	8260B		12/1/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	103	Rec %			1	8260B		12/1/2015	CJR	1
SUR - 4-Bromofluorobenzene	105	Rec %			1	8260B		12/1/2015	CJR	1
SUR - Dibromofluoromethane	103	Rec %			1	8260B		12/1/2015	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.
49	Sample diluted to compensate for matrix interference.
	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.

Muchaelylal

Authorized Signature

Synergy

Chain # Nº 279

Page L of t

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Rush Analysis Date Required (Rushes accepted only with prior authorization)

X Normal Turn Around

ing Request

1990 Prospect Ct. • Appleton, WI 54914

920-830-2455 • FAX 920-733-0631

Lab I.D. # Quote No.: Account No. :

Environmental Lab, Inc. N2162C15 Project #:

Don Brittnacher

Sampler: (signature) Project (Name / Location): Allyn, Algoma **Analysis Requested** Other Analysis Reports To: Don Brittnacher Harmon Allyn, clo John Emery Invoice To: OMNNI Associates Company Company TOTAL SUSPENDED SOLIDS One Systems Dr. Address PVOC + NAPHTHALENE City State Zip Appleton, WI 54914 VOC DW (EPA 542.2) City State Zip NITRATE/NITRITE 735-6900 VOC (EPA 8260) Phone GRO (Mod GRO PAH (EPA 8270) DRO (Mod DRO **B-RCRA METAL** PID/ 830-6100 PVOC (EPA FAX FAX SULFATE FID Sample Filtered Collection No. of LEAD Lab LD. Type Preservation Sample I.D. Comp Grab Date Time Y/N Containers (Matrix)* 11-23 10:00 503008811 B3-1 0 3 X none 2 B3-10 0 X 10:50 3 B4-9 5 0 X X X 2:50 0 X 3 5 X 85-4 11:40 0 X X X 86-9 S 12:40 茶 2 X 8000 3

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

No B7 sample was taken.

Sample Integrity - To be completed by receiving lab. Method of Shipment:	Relinquished By: (sign) Brittmacher	Time	Date	Received By: (sign)	Time	Date
Temp. of Temp. Blank °C On Ice: XCooler seal intact upon receipt: X Yes No	Received in Laboratory By:	12		Time: //s 12	Date:	12115

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 01-Mar-16

Project Name ALLYNS, ALGOMA Invoice # E30553

Project # N2162C15 5030553A Lab Code **TRIP** Sample ID Sample Matrix Water **Sample Date** 2/24/2016

•	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		2/26/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		2/26/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		2/26/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		2/26/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		2/26/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		2/26/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		2/26/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		2/26/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		2/26/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		2/26/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		2/26/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		2/26/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		2/26/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		2/26/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		2/26/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		2/26/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		2/26/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		2/26/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		2/26/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		2/26/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		2/26/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		2/26/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		2/26/2016	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		2/26/2016	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		2/26/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		2/26/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		2/26/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		2/26/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		2/26/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		2/26/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		2/26/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		2/26/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		2/26/2016	CJR	1

Project Name ALLYNS, ALGOMA

Proiect # N2162C15

Lab Code5030553ASample IDTRIPSample MatrixWaterSample Date2/24/2016

	Result	Unit	LOD	LOQ D	il	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		2/26/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		2/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		2/26/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		2/26/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		2/26/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		2/26/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		2/26/2016	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		2/26/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		2/26/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		2/26/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		2/26/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		2/26/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		2/26/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		2/26/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		2/26/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		2/26/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		2/26/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		2/26/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		2/26/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		2/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B		2/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B		2/26/2016	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		2/26/2016	CJR	1
SUR - Toluene-d8	98	REC %			1	8260B		2/26/2016	CJR	1

Project Name ALLYNS, ALGOMA

Proiect # N2162C15

Lab Code5030553BSample IDMW1Sample MatrixWaterSample Date2/24/2016

Sample Date	2/24/2016										
		Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorgania										J	
Inorganic											
Metals											
Lead, Dissolved		< 0.7	ug/L	0.7	2.5	1	7421		2/26/2016	CWT	1
Organic											
PAH SIM											
Acenaphthene		0.037 "J"	ug/l	0.016	0.05	1	M8270C	2/29/2016	4/29/2016	MDK	1
Acenaphthylene		< 0.019	ug/l	0.010		1	M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Anthracene		< 0.019	ug/l	0.019		1	M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(a)anthracen	e	< 0.017	ug/l	0.017		1	M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(a)pyrene		< 0.021	ug/l	0.021	0.067	1	M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(b)fluoranthe	ene	< 0.018	ug/l	0.018	0.058	1	M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(g,h,i)peryle	ne	< 0.025	ug/l	0.025	0.081	1	M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(k)fluoranthe	ene	< 0.016	ug/l	0.016		1	M8270C	2/29/2016	4/29/2016	MDK	1
Chrysene		< 0.02	ug/l	0.02		1	M8270C	2/29/2016	4/29/2016	MDK	1
Dibenzo(a,h)anthra	acene	< 0.025	ug/l	0.025		1	M8270C	2/29/2016	4/29/2016	MDK	1
Fluoranthene		< 0.017	ug/l	0.017		1	M8270C	2/29/2016	4/29/2016	MDK	1
Fluorene		0.038 "J"	ug/l	0.021		1	M8270C	2/29/2016	4/29/2016	MDK	1
Indeno(1,2,3-cd)py		< 0.023	ug/l	0.023		1	M8270C	2/29/2016	4/29/2016	MDK	1
1-Methyl naphthal 2-Methyl naphthal		0.094 0.033 "J"	ug/l	0.024 0.024		1	M8270C M8270C	2/29/2016 2/29/2016	4/29/2016 4/29/2016	MDK MDK	1 1
Naphthalene	ene	0.033 3	ug/l ug/l	0.024		1	M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Phenanthrene		0.073	ug/l	0.017		1	M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Pyrene		< 0.02	ug/l	0.02		1	M8270C	2/29/2016	4/29/2016	MDK	1
VOC's											
Benzene		< 4.4	a/1	4.4	1.4	10	8260B		2/26/2016	CJR	1
Bromobenzene		< 4.4 < 4.8	ug/l ug/l	4.4		10 10	8260B 8260B		2/26/2016 2/26/2016	CJR CJR	1
Bromodichloromet	thane	< 4.6	ug/l ug/l	4.6		10	8260B		2/26/2016	CJR	1
Bromoform	inane	< 4.6	ug/l	4.6		10	8260B		2/26/2016	CJR	1
tert-Butylbenzene		< 11	ug/l	11		10	8260B		2/26/2016	CJR	1
sec-Butylbenzene		< 12	ug/l	12		10	8260B		2/26/2016	CJR	1
n-Butylbenzene		< 10	ug/l	10		10	8260B		2/26/2016	CJR	1
Carbon Tetrachlori	ide	< 5.1	ug/l	5.1	16	10	8260B		2/26/2016	CJR	1
Chlorobenzene		< 4.6	ug/l	4.6	14	10	8260B		2/26/2016	CJR	1
Chloroethane		< 6.5	ug/l	6.5	21	10	8260B		2/26/2016	CJR	1
Chloroform		< 4.3	ug/l	4.3		10	8260B		2/26/2016	CJR	1
Chloromethane		< 19	ug/l	19		10	8260B		2/26/2016	CJR	1
2-Chlorotoluene		< 4	ug/l	4		10	8260B		2/26/2016	CJR	1
4-Chlorotoluene	•	< 6.3	ug/l	6.3		10	8260B		2/26/2016	CJR	1
1,2-Dibromo-3-chl Dibromochlorome		< 14 < 4.5	ug/l	14 4.5		10 10	8260B 8260B		2/26/2016 2/26/2016	CJR	1
1,4-Dichlorobenze		< 4.5 < 4.9	ug/l ug/l	4.3		10	8260B		2/26/2016	CJR CJR	1
1,3-Dichlorobenze		< 5.2	ug/l	5.2		10	8260B		2/26/2016	CJR	1
1,2-Dichlorobenze		< 4.6	ug/l	4.6		10	8260B		2/26/2016	CJR	1
Dichlorodifluorom		< 8.7	ug/l	8.7		10	8260B		2/26/2016	CJR	1
1,2-Dichloroethane		< 4.8	ug/l	4.8		10	8260B		2/26/2016	CJR	1
1,1-Dichloroethane	e	< 11	ug/l	11	36	10	8260B		2/26/2016	CJR	1
1,1-Dichloroethene	e	< 6.5	ug/l	6.5	21	10	8260B		2/26/2016	CJR	1
cis-1,2-Dichloroetl	hene	9.6 " J "	ug/l	4.5	14	10	8260B		2/26/2016	CJR	1
trans-1,2-Dichloro	ethene	< 5.4	ug/l	5.4		10	8260B		2/26/2016	CJR	1
1,2-Dichloropropa		< 4.3	ug/l	4.3		10	8260B		2/26/2016	CJR	1
2,2-Dichloropropa		< 31	ug/l	31		10	8260B		2/26/2016	CJR	1
1,3-Dichloropropa		< 4.2	ug/l	4.2		10	8260B		2/26/2016	CJR	1
Di-isopropyl ether		< 4.4	ug/l	4.4		10	8260B		2/26/2016	CJR	1
EDB (1,2-Dibromo	betnane)	< 6.3	ug/l	6.3		10	8260B		2/26/2016	CJR	1
Ethylbenzene Hexachlorobutadie	ene	< 7.1 < 22	ug/l	7.1 22		10 10	8260B 8260B		2/26/2016 2/26/2016	CJR CJR	1 1
Isopropylbenzene	.110	< 22 < 8.2	ug/l ug/l	8.2		10	8260B 8260B		2/26/2016	CJR CJR	1
p-Isopropyltoluene		< 11	ug/l ug/l	11		10	8260B		2/26/2016	CJR	1
p isopropyriordene		. 11	ug/1	11	33	10	3200D		2,20,2010	C514	•

Project Name ALLYNS, ALGOMA

Project # N2162C15

Lab Code5030553BSample IDMW1Sample MatrixWaterSample Date2/24/2016

	Result	Unit	LOD	LOQ I	Dil	Method	Ext Date	Run Date	Analyst	Code
Methylene chloride	< 13	ug/l	13	42	10	8260B		2/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 11	ug/l	11	37	10	8260B		2/26/2016	CJR	1
Naphthalene	< 16	ug/l	16	52	10	8260B		2/26/2016	CJR	1
n-Propylbenzene	< 7.7	ug/l	7.7	24	10	8260B		2/26/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 5.2	ug/l	5.2	17	10	8260B		2/26/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 4.8	ug/l	4.8	15	10	8260B		2/26/2016	CJR	1
Tetrachloroethene	310	ug/l	4.9	15	10	8260B		2/26/2016	CJR	1
Toluene	< 4.4	ug/l	4.4	14	10	8260B		2/26/2016	CJR	1
1,2,4-Trichlorobenzene	< 17	ug/l	17	56	10	8260B		2/26/2016	CJR	1
1,2,3-Trichlorobenzene	< 27	ug/l	27	86	10	8260B		2/26/2016	CJR	1
1,1,1-Trichloroethane	< 8.4	ug/l	8.4	27	10	8260B		2/26/2016	CJR	1
1,1,2-Trichloroethane	< 4.8	ug/l	4.8	15.2	10	8260B		2/26/2016	CJR	1
Trichloroethene (TCE)	< 4.7	ug/l	4.7	15	10	8260B		2/26/2016	CJR	1
Trichlorofluoromethane	< 8.7	ug/l	8.7	28	10	8260B		2/26/2016	CJR	1
1,2,4-Trimethylbenzene	< 16	ug/l	16	50	10	8260B		2/26/2016	CJR	1
1,3,5-Trimethylbenzene	< 15	ug/l	15	48	10	8260B		2/26/2016	CJR	1
Vinyl Chloride	< 1.7	ug/l	1.7	5.4	10	8260B		2/26/2016	CJR	1
m&p-Xylene	< 22	ug/l	22	69	10	8260B		2/26/2016	CJR	1
o-Xylene	< 9	ug/l	9	29	10	8260B		2/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			10	8260B		2/26/2016	CJR	1
SUR - Dibromofluoromethane	100	REC %			10	8260B		2/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	99	REC %			10	8260B		2/26/2016	CJR	1
SUR - Toluene-d8	100	REC %			10	8260B		2/26/2016	CJR	1

Project Name ALLYNS, ALGOMA

Proiect # N2162C15

Lab Code5030553CSample IDMW2Sample MatrixWaterSample Date2/24/2016

Sample Date	2/24/2016										
		Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic											
_											
Metals											
Lead, Dissolved		< 0.7	ug/L	0.7	2.5	5 1	7421		2/26/2016	CWT	1
Organic											
PAH SIM											
Acenaphthene		< 0.016	ng/1	0.016	0.05	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Acenaphthylene		< 0.019	ug/l ug/l	0.010			M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Anthracene		< 0.019	ug/l	0.019			M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(a)anthracen	e	< 0.017	ug/l	0.017			M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(a)pyrene	C	< 0.021	ug/l	0.017			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(b)fluoranthe	ene	< 0.018	ug/l	0.018			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(g,h,i)perylei		< 0.025	ug/l	0.025			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(k)fluoranthe		< 0.016	ug/l	0.016			M8270C	2/29/2016	4/29/2016	MDK	1
Chrysene		< 0.02	ug/l	0.02			M8270C	2/29/2016	4/29/2016	MDK	1
Dibenzo(a,h)anthra	acene	< 0.025	ug/l	0.025			M8270C	2/29/2016	4/29/2016	MDK	1
Fluoranthene		< 0.017	ug/l	0.017		3 1	M8270C	2/29/2016	4/29/2016	MDK	1
Fluorene		< 0.021	ug/l	0.021	0.066	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Indeno(1,2,3-cd)py	rene	< 0.023	ug/l	0.023	0.074	1 1	M8270C	2/29/2016	4/29/2016	MDK	1
1-Methyl naphthale	ene	< 0.024	ug/l	0.024	0.076	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
2-Methyl naphthale	ene	< 0.024	ug/l	0.024	0.075	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Naphthalene		< 0.019	ug/l	0.019	0.0	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Phenanthrene		< 0.017	ug/l	0.017	0.055	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Pyrene		< 0.02	ug/l	0.02	0.063	3 1	M8270C	2/29/2016	4/29/2016	MDK	1
VOC's											
Benzene		< 0.44	ug/l	0.44	1.4	1 1	8260B		2/26/2016	CJR	1
Bromobenzene		< 0.48	ug/l	0.48			8260B		2/26/2016	CJR	1
Bromodichloromet	hane	< 0.46	ug/l	0.46			8260B		2/26/2016	CJR	1
Bromoform		< 0.46	ug/l	0.46			8260B		2/26/2016	CJR	1
tert-Butylbenzene		< 1.1	ug/l	1.1			8260B		2/26/2016	CJR	1
sec-Butylbenzene		< 1.2	ug/l	1.2	3.8	3 1	8260B		2/26/2016	CJR	1
n-Butylbenzene		< 1	ug/l	1	3.3	3 1	8260B		2/26/2016	CJR	1
Carbon Tetrachlori	de	< 0.51	ug/l	0.51	1.0	5 1	8260B		2/26/2016	CJR	1
Chlorobenzene		< 0.46	ug/l	0.46	1.4	1	8260B		2/26/2016	CJR	1
Chloroethane		< 0.65	ug/l	0.65	2.	1	8260B		2/26/2016	CJR	1
Chloroform		< 0.43	ug/l	0.43	1.4	1	8260B		2/26/2016	CJR	1
Chloromethane		< 1.9	ug/l	1.9	' (5 1	8260B		2/26/2016	CJR	1
2-Chlorotoluene		< 0.4	ug/l	0.4	1.3	3 1	8260B		2/26/2016	CJR	1
4-Chlorotoluene		< 0.63	ug/l	0.63		2 1	8260B		2/26/2016	CJR	1
1,2-Dibromo-3-chl	oropropane	< 1.4	ug/l	1.4	4.5	5 1			2/26/2016	CJR	1
Dibromochloromet		< 0.45	ug/l	0.45		1	8260B		2/26/2016	CJR	1
1,4-Dichlorobenzer		< 0.49	ug/l	0.49			8260B		2/26/2016	CJR	1
1,3-Dichlorobenzer		< 0.52	ug/l	0.52			8260B		2/26/2016	CJR	1
1,2-Dichlorobenzer		< 0.46	ug/l	0.46			8260B		2/26/2016	CJR	1
Dichlorodifluorom		< 0.87	ug/l	0.87			8260B		2/26/2016	CJR	1
1,2-Dichloroethane		< 0.48	ug/l	0.48			8260B		2/26/2016	CJR	1
1,1-Dichloroethane		< 1.1	ug/l	1.1			8260B		2/26/2016	CJR	1
1,1-Dichloroethene		< 0.65	ug/l	0.65			8260B		2/26/2016	CJR	1
cis-1,2-Dichloroeth		< 0.45	ug/l	0.45			8260B		2/26/2016	CJR	1
trans-1,2-Dichloroe		< 0.54	ug/l	0.54			8260B 8260B		2/26/2016	CJR	1
1,2-Dichloropropar 2,2-Dichloropropar		< 0.43 < 3.1	ug/l	0.43			8260B		2/26/2016	CJR	1
1,3-Dichloropropai		< 0.42	ug/l ug/l	0.42			8260B		2/26/2016 2/26/2016	CJR CJR	1 1
Di-isopropyl ether	iic	< 0.42 < 0.44	ug/l ug/l	0.42			8260B		2/26/2016	CJR	1
EDB (1,2-Dibromo	oethane)	< 0.63	ug/l	0.44			8260B		2/26/2016	CJR	1
Ethylbenzene	.c.mano,	< 0.71	ug/l	0.03			8260B		2/26/2016	CJR	1
Hexachlorobutadie	ne	< 2.2	ug/l	2.2			8260B		2/26/2016	CJR	1
Isopropylbenzene	-	< 0.82	ug/l	0.82			8260B		2/26/2016	CJR	1
p-Isopropyltoluene		< 1.1	ug/l	1.1			8260B		2/26/2016	CJR	1
1 1 17						_					

Project Name ALLYNS, ALGOMA

Proiect # N2162C15

Lab Code5030553CSample IDMW2Sample MatrixWaterSample Date2/24/2016

	Result	Unit	LOD I	OQ D	il	Method	Ext Date	Run Date	Analyst	Code
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		2/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		2/26/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		2/26/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		2/26/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		2/26/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		2/26/2016	CJR	1
Tetrachloroethene	39	ug/l	0.49	1.5	1	8260B		2/26/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		2/26/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		2/26/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		2/26/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		2/26/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		2/26/2016	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		2/26/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		2/26/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		2/26/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		2/26/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		2/26/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		2/26/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		2/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	105	REC %			1	8260B		2/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	96	REC %			1	8260B		2/26/2016	CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B		2/26/2016	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		2/26/2016	CJR	1

Project Name ALLYNS, ALGOMA

Proiect # N2162C15

Lab Code5030553DSample IDMW3Sample MatrixWaterSample Date2/24/2016

Sample Date	2/24/2016										
		Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic											
_											
Metals											
Lead, Dissolved		< 0.7	ug/L	0.7	2.5	5 1	7421		2/26/2016	CWT	1
Organic											
PAH SIM											
Acenaphthene		< 0.016	ng/1	0.016	0.05	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Acenaphthylene		< 0.019	ug/l ug/l	0.010			M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Anthracene		< 0.019	ug/l	0.019			M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(a)anthracen	e	< 0.017	ug/l	0.017			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(a)pyrene	C	< 0.021	ug/l	0.017			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(b)fluoranthe	ene	< 0.018	ug/l	0.018			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(g,h,i)perylei		< 0.025	ug/l	0.025			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(k)fluoranthe		< 0.016	ug/l	0.016			M8270C	2/29/2016	4/29/2016	MDK	1
Chrysene		< 0.02	ug/l	0.02			M8270C	2/29/2016	4/29/2016	MDK	1
Dibenzo(a,h)anthra	acene	< 0.025	ug/l	0.025			M8270C	2/29/2016	4/29/2016	MDK	1
Fluoranthene		< 0.017	ug/l	0.017		3 1	M8270C	2/29/2016	4/29/2016	MDK	1
Fluorene		< 0.021	ug/l	0.021	0.066	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Indeno(1,2,3-cd)py	rene	< 0.023	ug/l	0.023	0.074	4 1	M8270C	2/29/2016	4/29/2016	MDK	1
1-Methyl naphthale	ene	< 0.024	ug/l	0.024	0.076	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
2-Methyl naphthale	ene	< 0.024	ug/l	0.024	0.075	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Naphthalene		< 0.019	ug/l	0.019	0.0	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Phenanthrene		< 0.017	ug/l	0.017	0.055	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Pyrene		< 0.02	ug/l	0.02	0.063	3 1	M8270C	2/29/2016	4/29/2016	MDK	1
VOC's											
Benzene		< 0.44	ug/l	0.44	1.4	4 1	8260B		2/26/2016	CJR	1
Bromobenzene		< 0.48	ug/l	0.48			8260B		2/26/2016	CJR	1
Bromodichloromet	hane	< 0.46	ug/l	0.46			8260B		2/26/2016	CJR	1
Bromoform		< 0.46	ug/l	0.46			8260B		2/26/2016	CJR	1
tert-Butylbenzene		< 1.1	ug/l	1.1			8260B		2/26/2016	CJR	1
sec-Butylbenzene		< 1.2	ug/l	1.2			8260B		2/26/2016	CJR	1
n-Butylbenzene		< 1	ug/l	1			8260B		2/26/2016	CJR	1
Carbon Tetrachlori	de	< 0.51	ug/l	0.51	1.0	5 1	8260B		2/26/2016	CJR	1
Chlorobenzene		< 0.46	ug/l	0.46	1.4	4 1	8260B		2/26/2016	CJR	1
Chloroethane		< 0.65	ug/l	0.65	2.	1 1	8260B		2/26/2016	CJR	1
Chloroform		< 0.43	ug/l	0.43	1.4	4 1	8260B		2/26/2016	CJR	1
Chloromethane		< 1.9	ug/l	1.9	' (5 1	8260B		2/26/2016	CJR	1
2-Chlorotoluene		< 0.4	ug/l	0.4	1.3	3 1	8260B		2/26/2016	CJR	1
4-Chlorotoluene		< 0.63	ug/l	0.63	1	2 1	8260B		2/26/2016	CJR	1
1,2-Dibromo-3-chl	oropropane	< 1.4	ug/l	1.4	4.5	5 1	8260B		2/26/2016	CJR	1
Dibromochloromet	hane	< 0.45	ug/l	0.45	1.4	4 1	8260B		2/26/2016	CJR	1
1,4-Dichlorobenzer		< 0.49	ug/l	0.49			8260B		2/26/2016	CJR	1
1,3-Dichlorobenzer		< 0.52	ug/l	0.52			8260B		2/26/2016	CJR	1
1,2-Dichlorobenzer		< 0.46	ug/l	0.46			8260B		2/26/2016	CJR	1
Dichlorodifluorom		< 0.87	ug/l	0.87			8260B		2/26/2016	CJR	1
1,2-Dichloroethane		< 0.48	ug/l	0.48			8260B		2/26/2016	CJR	1
1,1-Dichloroethane		< 1.1	ug/l	1.1			8260B		2/26/2016	CJR	1
1,1-Dichloroethene		< 0.65	ug/l	0.65			8260B		2/26/2016	CJR	1
cis-1,2-Dichloroeth		< 0.45	ug/l	0.45			8260B		2/26/2016	CJR	1
trans-1,2-Dichloroe		< 0.54	ug/l	0.54			8260B		2/26/2016	CJR	1
1,2-Dichloropropar		< 0.43	ug/l	0.43			8260B		2/26/2016	CJR	1
2,2-Dichloropropar		< 3.1	ug/l	3.1			8260B 8260B		2/26/2016	CJR	1
1,3-Dichloropropar	ne	< 0.42	ug/l	0.42			8260B 8260B		2/26/2016	CJR	1
Di-isopropyl ether EDB (1,2-Dibromo	oathana)	< 0.44 < 0.63	ug/l	0.44 0.63		4 1 2 1	8260B 8260B		2/26/2016 2/26/2016	CJR CJR	1
Ethylbenzene	emane)	< 0.63 < 0.71	ug/l	0.63			8260B 8260B		2/26/2016	CJR CJR	1 1
Hexachlorobutadie	ne	< 0.71	ug/l ug/l	2.2			8260B		2/26/2016	CJR	1
Isopropylbenzene	110	< 0.82	ug/l ug/l	0.82			8260B		2/26/2016	CJR CJR	1
p-Isopropyltoluene		< 1.1	ug/l	1.1			8260B		2/26/2016	CJR	1
p 255propyhoraene		. 111	46.1	1.1	3		02000		2,20,2010		•

Project Name ALLYNS, ALGOMA

Proiect # N2162C15

Lab Code5030553DSample IDMW3Sample MatrixWaterSample Date2/24/2016

	Result	Unit	LOD I	LOQ D	il	Method	Ext Date	Run Date	Analyst	Code
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		2/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		2/26/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		2/26/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		2/26/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		2/26/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		2/26/2016	CJR	1
Tetrachloroethene	54	ug/l	0.49	1.5	1	8260B		2/26/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		2/26/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		2/26/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		2/26/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		2/26/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		2/26/2016	CJR	1
Trichloroethene (TCE)	1.55	ug/l	0.47	1.5	1	8260B		2/26/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		2/26/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		2/26/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		2/26/2016	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		2/26/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		2/26/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		2/26/2016	CJR	1
SUR - Toluene-d8	102	REC %			1	8260B		2/26/2016	CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B		2/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	102	REC %			1	8260B		2/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	95	REC %			1	8260B		2/26/2016	CJR	1

Project Name ALLYNS, ALGOMA

Proiect # N2162C15

Lab Code5030553ESample IDMW4Sample MatrixWaterSample Date2/24/2016

Sample Date	2/24/2016										
		Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic											
-											
Metals											
Lead, Dissolved		< 0.7	ug/L	0.7	2.5	5 1	7421		2/26/2016	CWT	1
Organic											
PAH SIM											
Acenaphthene		< 0.016	na/1	0.016	0.05	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Acenaphthylene		< 0.016	ug/l ug/l	0.016			M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Anthracene		< 0.019	ug/l ug/l	0.019			M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(a)anthracene		< 0.017	ug/l	0.017			M8270C M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(a)pyrene		< 0.021	ug/l	0.017			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(b)fluoranthe	ne	< 0.018	ug/l	0.018			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(g,h,i)perylen		< 0.025	ug/l	0.025			M8270C	2/29/2016	4/29/2016	MDK	1
Benzo(k)fluoranthe		< 0.016	ug/l	0.016			M8270C	2/29/2016	4/29/2016	MDK	1
Chrysene		< 0.02	ug/l	0.02			M8270C	2/29/2016	4/29/2016	MDK	1
Dibenzo(a,h)anthra	cene	< 0.025	ug/l	0.025			M8270C	2/29/2016	4/29/2016	MDK	1
Fluoranthene		< 0.017	ug/l	0.017		3 1	M8270C	2/29/2016	4/29/2016	MDK	1
Fluorene		< 0.021	ug/l	0.021	0.066	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Indeno(1,2,3-cd)pyr	rene	< 0.023	ug/l	0.023	0.074	1 1	M8270C	2/29/2016	4/29/2016	MDK	1
1-Methyl naphthale	ne	< 0.024	ug/l	0.024	0.076	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
2-Methyl naphthale	ne	0.027 "J"	ug/l	0.024	0.075	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Naphthalene		< 0.019	ug/l	0.019	0.0	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Phenanthrene		< 0.017	ug/l	0.017	0.055	5 1	M8270C	2/29/2016	4/29/2016	MDK	1
Pyrene		< 0.02	ug/l	0.02	0.063	3 1	M8270C	2/29/2016	4/29/2016	MDK	1
VOC's											
Benzene		< 0.44	ug/l	0.44	1.4	1 1	8260B		2/26/2016	CJR	1
Bromobenzene		< 0.48	ug/l	0.48			8260B		2/26/2016	CJR	1
Bromodichlorometh	nane	< 0.46	ug/l	0.46			8260B		2/26/2016	CJR	1
Bromoform		< 0.46	ug/l	0.46			8260B		2/26/2016	CJR	1
tert-Butylbenzene		< 1.1	ug/l	1.1			8260B		2/26/2016	CJR	1
sec-Butylbenzene		< 1.2	ug/l	1.2			8260B		2/26/2016	CJR	1
n-Butylbenzene		< 1	ug/l	1			8260B		2/26/2016	CJR	1
Carbon Tetrachlorio	de	< 0.51	ug/l	0.51	1.0	5 1	8260B		2/26/2016	CJR	1
Chlorobenzene		< 0.46	ug/l	0.46	1.4	1	8260B		2/26/2016	CJR	1
Chloroethane		< 0.65	ug/l	0.65	2.	1	8260B		2/26/2016	CJR	1
Chloroform		< 0.43	ug/l	0.43	1.4	1	8260B		2/26/2016	CJR	1
Chloromethane		< 1.9	ug/l	1.9	' (5 1	8260B		2/26/2016	CJR	1
2-Chlorotoluene		< 0.4	ug/l	0.4	1.3	3 1	8260B		2/26/2016	CJR	1
4-Chlorotoluene		< 0.63	ug/l	0.63	1	2 1	8260B		2/26/2016	CJR	1
1,2-Dibromo-3-chlo	oropropane	< 1.4	ug/l	1.4	4.5	5 1	8260B		2/26/2016	CJR	1
Dibromochlorometh		< 0.45	ug/l	0.45		1	8260B		2/26/2016	CJR	1
1,4-Dichlorobenzen		< 0.49	ug/l	0.49			8260B		2/26/2016	CJR	1
1,3-Dichlorobenzen		< 0.52	ug/l	0.52			8260B		2/26/2016	CJR	1
1,2-Dichlorobenzen		< 0.46	ug/l	0.46			8260B		2/26/2016	CJR	1
Dichlorodifluorome		< 0.87	ug/l	0.87			8260B		2/26/2016	CJR	1
1,2-Dichloroethane		< 0.48	ug/l	0.48			8260B		2/26/2016	CJR	1
1,1-Dichloroethane		< 1.1	ug/l	1.1			8260B		2/26/2016	CJR	1
1,1-Dichloroethene		0.76 "J"	ug/l	0.65			8260B		2/26/2016	CJR	1
cis-1,2-Dichloroeth		24.8	ug/l	0.45			8260B		2/26/2016	CJR	1
trans-1,2-Dichloroe		< 0.54	ug/l	0.54			8260B		2/26/2016	CJR	1
1,2-Dichloropropan		< 0.43	ug/l	0.43			8260B		2/26/2016	CJR	1
2,2-Dichloropropan		< 3.1 < 0.42	ug/l	3.1 0.42			8260B 8260B		2/26/2016	CJR	1
1,3-Dichloropropan	ie.		ug/l				8260B 8260B		2/26/2016	CJR	1
Di-isopropyl ether EDB (1,2-Dibromo	athana)	< 0.44 < 0.63	ug/l	0.44 0.63			8260B 8260B		2/26/2016 2/26/2016	CJR CJR	1 1
Ethylbenzene	cinanc)	< 0.63	ug/l ug/l	0.03			8260B 8260B		2/26/2016	CJR	1
Hexachlorobutadier	ne.	< 0.71	ug/l ug/l	2.2			8260B 8260B		2/26/2016	CJR	1
Isopropylbenzene		< 0.82	ug/l ug/l	0.82			8260B		2/26/2016	CJR	1
p-Isopropyltoluene		< 1.1	ug/l	1.1			8260B		2/26/2016	CJR	1
r spropynomene			~-6/·1	1.1	J.,				_, _0, _010		

Project Name ALLYNS, ALGOMA Invoice # E30553

Proiect # N2162C15

Lab Code 5030553E
Sample ID MW4
Sample Matrix Water
Sample Date 2/24/2016

	Resu	lt	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Methylene chloride		< 1.3	ug/l	1.3	4.2	1	8260B		2/26/2016	CJR	1
Methyl tert-butyl ether (MTBE)		< 1.1	ug/l	1.1	3.7	1	8260B		2/26/2016	CJR	1
Naphthalene		< 1.6	ug/l	1.6	5.2	1	8260B		2/26/2016	CJR	1
n-Propylbenzene		< 0.77	ug/l	0.77	2.4	. 1	8260B		2/26/2016	CJR	1
1,1,2,2-Tetrachloroethane		< 0.52	ug/l	0.52	1.7	1	8260B		2/26/2016	CJR	1
1,1,1,2-Tetrachloroethane		< 0.48	ug/l	0.48	1.5	1	8260B		2/26/2016	CJR	1
Tetrachloroethene	44		ug/l	0.49	1.5	1	8260B		2/26/2016	CJR	1
Toluene		< 0.44	ug/l	0.44	1.4	. 1	8260B		2/26/2016	CJR	1
1,2,4-Trichlorobenzene		< 1.7	ug/l	1.7	5.6	1	8260B		2/26/2016	CJR	1
1,2,3-Trichlorobenzene		< 2.7	ug/l	2.7	8.6	1	8260B		2/26/2016	CJR	1
1,1,1-Trichloroethane		< 0.84	ug/l	0.84	2.7	1	8260B		2/26/2016	CJR	1
1,1,2-Trichloroethane		< 0.48	ug/l	0.48	1.52	1	8260B		2/26/2016	CJR	1
Trichloroethene (TCE)	6.5		ug/l	0.47	1.5	1	8260B		2/26/2016	CJR	1
Trichlorofluoromethane		< 0.87	ug/l	0.87	2.8	1	8260B		2/26/2016	CJR	1
1,2,4-Trimethylbenzene		< 1.6	ug/l	1.6	5	1	8260B		2/26/2016	CJR	1
1,3,5-Trimethylbenzene		< 1.5	ug/l	1.5	4.8	1	8260B		2/26/2016	CJR	1
Vinyl Chloride	23.2		ug/l	0.17	0.54	. 1	8260B		2/26/2016	CJR	1
m&p-Xylene		< 2.2	ug/l	2.2	6.9	1	8260B		2/26/2016	CJR	1
o-Xylene		< 0.9	ug/l	0.9	2.9	1	8260B		2/26/2016	CJR	1
SUR - Toluene-d8	102		REC %			1	8260B		2/26/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	101		REC %			1	8260B		2/26/2016	CJR	1
SUR - 4-Bromofluorobenzene	101		REC %			1	8260B		2/26/2016	CJR	1
SUR - Dibromofluoromethane	99		REC %			1	8260B		2/26/2016	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.

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.

Michaelyllul

Authorized Signature

Quote No.:

Lab I.D. #

Account No. :

Project #: N2162C15

Synergy

Chain # Nº 279

Page	L of L	
i ago		

Environmental Lab, Inc.

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

Sample	Handling	Request

Rush Analysis Date Required (Rushes accepted only with prior authorization)

X Normal Turn Around

Sampler: (signature)	Won Gret	traci	her				92	0-830-2455	• FAX 920-7	33~	063	1				L	Normal Tulli Alburid					u			
Project (Name / Loc	ation): Ally	15 A	laon	na							1	nal	/sis	Rec	ues	ited	1					Ot	ther Ar	nalysi	s
Reports To: Don	Britthach	er	9	Invo	ice To:	Harm	ion Allyn	1								T	T								
Company OM	NNI Asso	ciate	5	Con	npany													8					14		
Address One				Add	ress	-ser	d to 0	MNNI-		-						1	w	SOLIDS							
City State Zip A	pleton W	1 54	1914	City	State Z					Sep 95	Sep 95)			П		17	EN								
Phone 735-	6900			Pho	ne						GRO S	RITE		(02		021)	Ē	END	A 542	(09	ALS				
FAX 830-	- Maria Mari	20.		FAX		·				OHO DO	od GF	TIME	REAS	A 82		PA 8	+ NAPHTHALENE	SUSPENDED	(FP	A 82	MET		М		PID/ FID
Lab I.D.	Sample I.D.		ection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mc	GRO (Mod	LEAD NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC+	TOTAL SI		VOC (EPA 8260)	8-RCRA METALS			1	110
503 0553	TRIP	1-34	8:30		X	N	3	TRIP	HCI											X					
B	MWI	1	1.22		X) VOCs/	5	GW	VOC5-HCL	_		X		X			4		1	X					
C	MWZ	1	12:47		X	PAH-	5	qW	4 Ph- HNO			(-	X			4			X					
D	MW3		11:18		X	NG:	5	GN	PAH-NONE		_	K		X		_	_			X					
٤	MWY	1	10:32		X	JPb-Y	5	GW				(×			+			X					
												-	-				+								
			- 0				-					I					1		I						
Comments/Speci	al Instructions (*	Specify	ground	water '	'GW", I	Orinking V	Vater "DW", V	Vaste Water	"WW", Soil "S"	, Air	r "A"	Oil,	Sluc	ige (etc.)										

Sample Integrity - To be completed by receiving lab. Method of Shipment:	Relinquished By: (sign) Don Grittnacles	Time	Date	Received By: (sign)	Time	Date
Temp. of Temp. Blank °C On Ice: Cooler seal intact upon receipt: Yes No	Received in Laboratory By:			Time: / C! >	Date:	2/24/6