

SAMPLE COLLECTION AND CHAIN OF CUSTODY RECORD

NORTHERN LAKE SERVICE, INC.

CLIENT: City of Beloit
 ADDRESS: 555 Willowbrook Rd.
 CITY: Beloit WI STATE WI ZIP 53511
 PROJECT DESCRIPTION / NO. QUOTATION NO.
 DNR FID # DNR LICENSE #
 CONTACT: J. Valerios PHONE: 608-364-5127
 PURCHASE ORDER NO. FAX

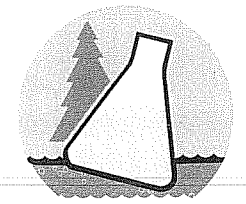
Wisconsin Lab Cert. No. 721026460
 WI DATCP 105-000330

Analytical Laboratory and Environmental Services
 400 North Lake Avenue • Crandon, WI 54520-1298
 Tel: (715) 478-2777 • Fax: (715) 478-3060

MATRIX:
 SW = surface water
 WW = waste water
 GW = ground water
 DW = drinking water
 TIS = tissue
 AIR = air
 SOIL = soil
 SED = sediment
 PROD = product
 SL = sludge
 OTHER

USE BOXES BELOW: Indicate Y or N if GW Sample is field filtered.
 Indicate G or C if WW Sample is Grab or Composite.

ANALYZE PER ORDER OF ANALYSIS	C	C	C	C	C	C	C											
	BVA	PAH	PCBS	Chlorinated Hydrocarbon	Phenol	Hexachlor	Metals											



No. 183257

ITEM NO.	NLS LAB. NO.	SAMPLE ID	COLLECTION		MATRIX (See above)	ANALYZE PER ORDER OF ANALYSIS												COLLECTION REMARKS (i.e. DNR Well ID #)	
			DATE	TIME		BVA	PAH	PCBS	Chlorinated Hydrocarbon	Phenol	Hexachlor	Metals							
1.	771330	Effluent	2-18-14	24hr	WW	2													
2.		Effluent	2-18	24hr	WW		2												
3.		Effluent	2-18	24hr	WW			2											
4.		Effluent	2-18	24hr	WW				2										
5.		Effluent	2-18	24hr	WW					2									
6.		Effluent	2-18	24hr	WW						3								
7.		Effluent	2-18	24hr	WW							1							
8.																			
9.																			
10.																			

COLLECTED BY (signature): <u>Michael Kelly</u>	CUSTODY SEAL NO. (IF ANY)	DATE/TIME: <u>2-19-14 0745</u>	REPORT TO
RELINQUISHED BY (signature)	RECEIVED BY (signature)	DATE/TIME	
DISPATCHED BY (signature)	METHOD OF TRANSPORT	DATE/TIME	
RECEIVED AT NLS BY (signature): <u>John Braun</u>	DATE/TIME: <u>2/20/14 10</u>	CONDITION: <u>OK</u>	INVOICE TO
COOLER #	REMARKS & OTHER INFORMATION		
PRESERVATIVE: NP = no preservative S = sulfuric acid	N = nitric acid Z = zinc acetate M = methanol	OH = sodium hydroxide HA = hydrochloric & ascorbic acid H = hydrochloric acid	WDNR FACILITY NUMBER E-MAIL ADDRESS

IMPORTANT:

1. TO MEET REGULATORY REQUIREMENTS, THIS FORM **MUST** BE COMPLETED IN DETAIL AND INCLUDED IN THE COOLER CONTAINING THE SAMPLES DESCRIBED.
2. PLEASE USE ONE LINE PER SAMPLE, **NOT** PER BOTTLE.
3. RETURN THIS FORM WITH SAMPLES - CLIENT MAY KEEP PINK COPY.
4. PARTIES COLLECTING SAMPLE, LISTED AS **REPORT TO** AND LISTED AS **INVOICE TO** AGREE TO STANDARD TERMS & CONDITIONS ON REVERSE.

SAMPLE COLLECTION AND CHAIN OF CUSTODY RECORD

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 ADDRESS **555 Willowbrook Rd**
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 PROJECT DESCRIPTION / NO. QUOTATION NO.
 DNR FID # DNR LICENSE #
 CONTACT **J. Valerius** PHONE **608 364-5727**
 PURCHASE ORDER NO. FAX

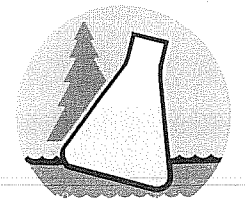
Wisconsin Lab Cert. No. 721026460
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 Indicate G or C if WW Sample is Grab or Composite.

ANALYZE PER ORDER OF ANALYSIS	TKW	CNT	Chromium	Hex	VOC	VOC													
	G	G	G	G	G														



No. 183256

ITEM NO.	NLS LAB. NO.	SAMPLE ID	COLLECTION		MATRIX (See above)	ANALYZE PER ORDER OF ANALYSIS														COLLECTION REMARKS (i.e. DNR Well ID #)																		
			DATE	TIME		TKW	CNT	Chromium	Hex	VOC	VOC																											
1.	77332	Effluent	2-19-14	0739	WW	1																																
2.		Effluent	2-19	0737	WW		1																															
3.		Effluent	2-19	0743	WW			1																														
4.		Effluent	2-19	0736	WW				2																													
5.		Trip Blank	2-19	0736	WW					1																												
6.																																						
7.																																						
8.																																						
9.																																						
10.	771332																																					

COLLECTED BY (signature) **Michael Kelly** CUSTODY SEAL NO. (IF ANY) DATE/TIME **2-19-14 0743**
 RELINQUISHED BY (signature) RECEIVED BY (signature) DATE/TIME
 DISPATCHED BY (signature) METHOD OF TRANSPORT DATE/TIME
 RECEIVED AT NLS BY (signature) **John Brown** DATE/TIME **2/20/14 10** CONDITION **Good** TEMP.
 COOLER # REMARKS & OTHER INFORMATION
 PRESERVATIVE: N = nitric acid OH = sodium hydroxide
 NP = no preservative Z = zinc acetate HA = hydrochloric & ascorbic acid
 S = sulfuric acid M = methanol H = hydrochloric acid
 WDNR FACILITY NUMBER E-MAIL ADDRESS

REPORT TO
 INVOICE TO

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11. Required Effluent Monitoring for Outfall 001

a. Permittees are required to monitor and record results in the attached Monitoring Grid for each substance listed for each municipal major outfall. If you test any parameter more frequently than indicated by the number of rows in the Grid, use the Additional Values Grid to report the results. See Table 1 of the instructions for appropriate sample types, recommended analytical methods and proper sample preservation and holding times. All samples should be representative of normal operating conditions.

b. You may not be required to provide monitoring results of this outfall discharge. Indicate if one of the following conditions apply, please show which one applies and leave all or parts of the monitoring table blank.

- I am required to provide monitoring results.
- I am NOT required to provide monitoring results because one of the following conditions apply.
 - I have two or more outfalls that discharge substantially identical wastewaters and I have received permission by contacting the responsible DNR staff person to only sample one of them. I am providing results for another substantially identical outfall.
 - This is a first-time permit application for a facility that does not yet have a discharge.
 - This outfall is no longer in use.
 - This outfall has a seasonal discharge that I was unable to sample prior to submitting the application. I will take the required samples once discharge resumes and send in the results as soon as possible.
 - I have received instructions in the application notification letter that I am exempt from certain standard monitoring requirements.
 - I have received instructions in the application notification letter that I may submit hard copies of the test results. I have attached them to the Certification Statement.

Code	Name	Sample Result	Units	QC Flag	LOD	LOQ	Analytical Method	Sample Collection Date	Sample Type	Lab ID
Common Pollutants										
330	Nitrogen, Nitrite + Nitrate Total		mg/L	<input type="checkbox"/>						
335	Nitrogen, Total Kjeldahl		mg/L	<input type="checkbox"/>						
338	Nitrogen, Total		mg/L	<input type="checkbox"/>						

Explanation of QC Flags

Metals, Cyanide, Hardness and Phenols										
31	Antimony, Total Recoverable (7440360)		ug/L	<input type="checkbox"/>						
35	Arsenic, Total Recoverable (7440-38-2)		ug/L	<input type="checkbox"/>						

Code	Name	Sample Result	Units	QC Flag	LOD	LOQ	Analytical Method	Sample Collection Date	Sample Type	Lab ID	
50	Beryllium, Total Recoverable (7440417)		ug/L	<input type="checkbox"/>							
127	Chromium +6 (18540-29-9)		ug/L	<input type="checkbox"/>							
155	Cyanide, Total (57-12-5)		ug/L	<input type="checkbox"/>							
152	Cyanide, Amenable (57-12-5)		ug/L	<input type="checkbox"/>							
423	Selenium, Total Recoverable (7782-49-2)		ug/L	<input type="checkbox"/>							
430	Silver, Total Recoverable (7440-22-4)		ug/L	<input type="checkbox"/>							
494	Thallium, Total Recoverable (7440-28-0)		ug/L	<input type="checkbox"/>							
231	Hardness, Total as CaCO3 (Submit a minimum of 4 sample results collected at 3 days apart.)		mg/L	<input type="checkbox"/>							
			mg/L	<input type="checkbox"/>							
			mg/L	<input type="checkbox"/>							
			mg/L	<input type="checkbox"/>							
382	Phenols, Total		ug/L	<input type="checkbox"/>							
Explanation of QC Flags											
<div style="border: 1px solid black; width: 100%; height: 100%;"></div>											
Volatile Organics											
6	Acrolein (107-02-8)		ug/L	<input type="checkbox"/>							
8	Acrylonitrile (107-13-1)		ug/L	<input type="checkbox"/>							
40	Benzene (71-43-2)		ug/L	<input type="checkbox"/>							
174	Dichlorobromo- methane (bromo- dichloromethane) (75-27-4)		ug/L	<input type="checkbox"/>							

Code	Name	Sample Result	Units	QC Flag	LOD	LOQ	Analytical Method	Sample Collection Date	Sample Type	Lab ID
80	Bromoform (75-25-2)		ug/L	<input type="checkbox"/>						
93	Carbon tetrachloride (56-23-5)		ug/L	<input type="checkbox"/>						
113	Chlorobenzene (108-90-7)		ug/L	<input type="checkbox"/>						
115	Chlorodibromo-methane (124-48-1)		ug/L	<input type="checkbox"/>						
117	Chloroethane (75003)		ug/L	<input type="checkbox"/>						
118	Chloroform (67-66-3)		ug/L	<input type="checkbox"/>						
568	1,2-Dichloro- benzene		ug/L	<input type="checkbox"/>						
581	1,3-Dichloro- benzene (541731)		ug/L	<input type="checkbox"/>						
587	1,4-Dichloro- benzene (106-46-7)		ug/L	<input type="checkbox"/>						
556	1,1-Dichloro- ethane. (75-34-3)		ug/L	<input type="checkbox"/>						
570	1,2-Dichloro- ethane (107-06-2)		ug/L	<input type="checkbox"/>						
558	1,1-Dichloro- ethylene (75-35-4)		ug/L	<input type="checkbox"/>						
567	1,2-cis Dichloroethene (25323302)		ug/L	<input type="checkbox"/>						
576	1,2-trans Dichloroethylene (156-60-5)		ug/L	<input type="checkbox"/>						
573	1,2-Dichloropropane (78-87-5)		ug/L	<input type="checkbox"/>						
583	1,3-Dichloropropane (142289)		ug/L	<input type="checkbox"/>						
560	1,1-Dichloro- propylene (563-54-2)		ug/L	<input type="checkbox"/>						
580	1,3-cis Dichloropropylene (10061-01-5)		ug/L	<input type="checkbox"/>						

Code	Name	Sample Result	Units	QC Flag	LOD	LOQ	Analytical Method	Sample Collection Date	Sample Type	Lab ID
585	1,3-trans Dichloropropylene (10061-02-6)		ug/L	<input type="checkbox"/>						
598	2,3-Dichloropropylene (26952238)		ug/L	<input type="checkbox"/>						
200	Ethylbenzene (100414)		ug/L	<input type="checkbox"/>						
82	Methyl bromide (74839)		ug/L	<input type="checkbox"/>						
120	Chloromethane (74873)		ug/L	<input type="checkbox"/>						
285	Methylene chloride (75092)		ug/L	<input type="checkbox"/>						
565	1,1,2,2-Tetrachloro- ethane (79-34-5)		ug/L	<input type="checkbox"/>						
490	Tetrachloroethylene (127-18-4)		ug/L	<input type="checkbox"/>						
500	Toluene (108-88-3)		ug/L	<input type="checkbox"/>						
561	1,1,1-Trichloro- ethane (71-55-6)		ug/L	<input type="checkbox"/>						
563	1,1,2-Trichloro- ethane (79-00-5)		ug/L	<input type="checkbox"/>						
508	Trichloro- ethylene (79-01-6)		ug/L	<input type="checkbox"/>						
517	Vinyl chloride (75-01-4)		ug/L	<input type="checkbox"/>						
Explanation of QC Flags										
<div style="border: 1px solid black; width: 100%; height: 50px; margin: 0 auto;"></div>										
Acid Extractable Compounds (Phenols)										
592	2-Chlorophenol (95-57-8)		ug/L	<input type="checkbox"/>						
603	2,4-Dichlorophenol (120-83-2)		ug/L	<input type="checkbox"/>						

Code	Name	Sample Result	Units	QC Flag	LOD	LOQ	Analytical Method	Sample Collection Date	Sample Type	Lab ID
611	2,6-Dichlorophenol (87-65-0)		ug/L	<input type="checkbox"/>						
604	2,4-Dimethyl-phenol (105-67-9)		ug/L	<input type="checkbox"/>						
605	2,4-Dinitrophenol (51-28-5)		ug/L	<input type="checkbox"/>						
349	P-Chloro-m-Cresol (3-methyl-4-chlorophenol) (59-50-7)		ug/L	<input type="checkbox"/>						
593	2-Methyl-4,6- dinitrophenol (534521)		ug/L	<input type="checkbox"/>						
596	2-Nitrophenol (88-75-5)		ug/L	<input type="checkbox"/>						
624	4-Nitrophenol (100-02-7)		ug/L	<input type="checkbox"/>						
368	Pentachloro- phenol (87-86-5)		ug/L	<input type="checkbox"/>						
633	Phenol (108-95-2)		ug/L	<input type="checkbox"/>						
600	2,3,4,6-Tetrachloro- phenol (58-90-2)		ug/L	<input type="checkbox"/>						
607	2,4,5-Trichloro- phenol (95-95-4)		ug/L	<input type="checkbox"/>						
608	2,4,6-Trichloro- phenol (88-06-2)		ug/L	<input type="checkbox"/>						

Explanation of QC Flags

Base/Neutral Compounds

4	Acenaphthylene (208-96-8)		ug/L	<input type="checkbox"/>						
42	Benzidine (92-87-5)		ug/L	<input type="checkbox"/>						

Code	Name	Sample Result	Units	QC Flag	LOD	LOQ	Analytical Method	Sample Collection Date	Sample Type	Lab ID
61	Bis(2-Chloroethoxy) methane (111-91-1)		ug/L	<input type="checkbox"/>						
62	Bis(2-Chloroethyl)ether (111-44-4)		ug/L	<input type="checkbox"/>						
63	Bis(2-Chloroisopropyl) ether (66-56-8)		ug/L	<input type="checkbox"/>						
64	Bis(2-Ethylhexyl) phthalate (117-81-7)		ug/L	<input type="checkbox"/>						
621	4-Bromophenyl-phenyl ether (101-55-3)		ug/L	<input type="checkbox"/>						
84	Butyl benzyl phthalate (85-68-7)		ug/L	<input type="checkbox"/>						
591	2-Chloronaphthalene (91-58-7)		ug/L	<input type="checkbox"/>						
622	4-Chloro-phenyl-phenyl ether (7005-72-3)		ug/L	<input type="checkbox"/>						
617	3,3'-Dichlorobenzidine (91-94-1)		ug/L	<input type="checkbox"/>						
178	Diethyl phthalate (84-66-2)		ug/L	<input type="checkbox"/>						
181	Dimethyl phthalate (131-11-3)		ug/L	<input type="checkbox"/>						
167	Di-n-butyl phthalate (dibutyl phthalate) (84-74-2)		ug/L	<input type="checkbox"/>						
606	2,4-Dinitro- toluene (121-14-2)		ug/L	<input type="checkbox"/>						
612	2,6-Dinitro- toluene (606-20-2)		ug/L	<input type="checkbox"/>						
169	Di-n-octyl phthalate (117-84-0)		ug/L	<input type="checkbox"/>						
574	1,2-Diphenylhydrazine (122-66-7)		ug/L	<input type="checkbox"/>						
240	Hexachloroethane (67721)		ug/L	<input type="checkbox"/>						
253	Isophorone (78-59-1)		ug/L	<input type="checkbox"/>						

Code	Name	Sample Result	Units	QC Flag	LOD	LOQ	Analytical Method	Sample Collection Date	Sample Type	Lab ID
298	N-Nitrosodi-n-butylamine (924-16-3)		ug/L	<input type="checkbox"/>						
301	N-Nitrosodiethylamine (55-18-5)		ug/L	<input type="checkbox"/>						
302	N-Nitrosodimethyl-amine (62-75-9)		ug/L	<input type="checkbox"/>						
304	N-Nitrosodiphenyl-amine (86-30-6)		ug/L	<input type="checkbox"/>						
299	N-Nitrosodi-n-propylamine (319-84-6)		ug/L	<input type="checkbox"/>						
306	N-Nitrosopyrrolidine (930-55-2)		ug/L	<input type="checkbox"/>						
307	Naphthalene (91-20-3)		ug/L	<input type="checkbox"/>						
317	Nitrobenzene (98953)		ug/L	<input type="checkbox"/>						
577	1,2,4-Trichloro- benzene (120-82-1)		ug/L	<input type="checkbox"/>						
234	Hexachlorobenzene (118-74-1)		ug/L	<input type="checkbox"/>						
236	Hexachlorobutadiene (87683)		ug/L	<input type="checkbox"/>						
238	Hexachlorocyclo-pentadiene (77-47-4)		ug/L	<input type="checkbox"/>						
367	Pentachloro- benzene (608-93-5)		ug/L	<input type="checkbox"/>						
579	1,2,4,5-Tetrachloro- benzene (95-94-3)		ug/L	<input type="checkbox"/>						
28	Anthracene (120-12-7)		ug/L	<input type="checkbox"/>						
43	Benzo(a)anthracene (56-55-3)		ug/L	<input type="checkbox"/>						
44	Benzo(a)pyrene (50-32-8)		ug/L	<input type="checkbox"/>						
45	Benzo(b)fluoranthene (205-99-2)		ug/L	<input type="checkbox"/>						

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46	Benzo(ghi)perylene (191-24-2)		ug/L	<input type="checkbox"/>						
47	Benzo(k)fluoranthene (207-08-9)		ug/L	<input type="checkbox"/>						
135	Chrysene (218-01-9)		ug/L	<input type="checkbox"/>						
172	Dibenzo(a,h)-anthracene (53-70-3)		ug/L	<input type="checkbox"/>						
213	Fluoranthene (206-44-0)		ug/L	<input type="checkbox"/>						
215	Fluorene (86-73-7)		ug/L	<input type="checkbox"/>						
244	Indeno(1,2,3-cd)-pyrene (193-39-5)		ug/L	<input type="checkbox"/>						
380	Phenanthrene (85-01-8)		ug/L	<input type="checkbox"/>						
403	Pyrene (129-00-0)		ug/L	<input type="checkbox"/>						

Explanation of QC Flags

Pesticides

16	Aldrin (309002)		ug/L	<input type="checkbox"/>						
56	BHC, alpha (319846)		ug/L	<input type="checkbox"/>						
51	BHC, beta (319-85-7)		ug/L	<input type="checkbox"/>						
57	BHC, delta (319868)		ug/L	<input type="checkbox"/>						
58	BHC, gamma (Lindane) (58899)		ug/L	<input type="checkbox"/>						
103	Chlordane (57-74-9)		ug/L	<input type="checkbox"/>						

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629	4,4'-DDT (50-29-3)		ug/L	<input type="checkbox"/>						
628	4,4'-DDE (72-55-9)		ug/L	<input type="checkbox"/>						
627	4,4'-DDD (72-54-8)		ug/L	<input type="checkbox"/>						
176	Dieldrin (60-57-1)		ug/L	<input type="checkbox"/>						
194	Endosulfan alpha (959-98-8)		ug/L	<input type="checkbox"/>						
195	Endosulfan beta (33213-65-9)		ug/L	<input type="checkbox"/>						
196	Endosulfan sulfate (1031-07-8)		ug/L	<input type="checkbox"/>						
197	Endrin (72-20-8)		ug/L	<input type="checkbox"/>						
198	Endrin aldehyde (7421934)		ug/L	<input type="checkbox"/>						
232	Heptachlor (76-44-8)		ug/L	<input type="checkbox"/>						
233	Heptachlorepoide (1024-57-3)		ug/L	<input type="checkbox"/>						
506	Toxaphene (8001-35-2)		ug/L	<input type="checkbox"/>						
353	PCB 1016 (12674-11-2)		ug/L	<input type="checkbox"/>						
355	PCB 1221 (11104282)		ug/L	<input type="checkbox"/>						
356	PCB 1232 (2921-88-2)		ug/L	<input type="checkbox"/>						
357	PCB 1242 (53469-21-9)		ug/L	<input type="checkbox"/>						
359	PCB 1248 (12672-29-6)		ug/L	<input type="checkbox"/>						
361	PCB 1254 (11097-69-1)		ug/L	<input type="checkbox"/>						

Code	Name	Sample Result	Units	QC Flag	LOD	LOQ	Analytical Method	Sample Collection Date	Sample Type	Lab ID
363	PCB 1260 (11096-82-5)		ug/L	<input type="checkbox"/>						
Explanation of QC Flags										

ANALYTICAL REPORT

Client: **Beloit DPW**
Attn: Cheryl Simplot
2400 Springbrook Road
Beloit, WI 53511

NLS Project: **213459**

NLS Customer: **89834**

Fax: 608 364 2879 Phone: 608 364 5722

Project: **Wastewater**

Effluent, Comp NLS ID: 771330

COC: 183257 Matrix: WW

Collected: 02/18/14 00:00 Received: 02/20/14

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Antimony, tot. recoverable as Sb by ICP-MS	[0.28]	ug/L	1	0.25*	0.50*	03/04/14	EPA 200.8, Rev 5.4	721026460
Arsenic, tot. recoverable as As by ICP-MS	ND	ug/L	1	1.0*	2.0*	03/04/14	EPA 200.8, Rev 5.4	721026460
Beryllium, tot. recoverable as Be by ICP	ND	ug/L	1	0.17	0.50	02/21/14	EPA 200.7, Rev 4.4	721026460
Hardness, tot. recoverable, (calc/unfilt/icp)	370	mg/L	1	1.0*	2.0*	02/21/14	EPA 200.7, Rev 4.4	721026460
Phenols (distillation)	ND	mg/L	1	0.065	0.21	03/10/14	SW846 9065	721026460
Selenium, tot. recoverable as Se by ICP-MS	ND	ug/L	1	2.0*	4.0*	03/04/14	EPA 200.8, Rev 5.4	721026460
Silver, tot. recoverable as Ag by ICP	ND	ug/L	1	0.28	0.89	02/21/14	EPA 200.7, Rev 4.4	721026460
Thallium, tot. recoverable as Tl by ICP-MS	ND	ug/L	1	0.25*	0.50*	03/04/14	EPA 200.8, Rev 5.4	721026460
Metals digestion - tot. recov.ICP	yes					02/20/14	EPA 200.7M	721026460
Metals digestion - tot. recov. ICP-MS	yes					02/25/14	EPA 200.8M, Rev 5.4	721026460
Organochlorine Pesticides by EPA 8081/PCBs by EPA 8082	see attached					03/12/14	SW846 8081/8082	721026460
Chlorinated Hydrocarbons (water) by EPA 8121	see attached					03/07/14	SW846 8121	632021390
Organics Extraction (Water) for Organochlorine Pesticides/PCBs	yes					02/21/14	SW846 3510C	721026460
Organics Extraction (Chlorinated Hydrocarbons)	yes					02/24/14	SW846 8121	632021390
8270 Acid/Base Extraction by 3510C	yes					02/25/14	SW846 3510C	721026460
Semi-Volatiles (water) by EPA Method 8270C	see attached					02/27/14	SW846 8270C	721026460
PAH (water) by EPA Method 8270C - SIM	see attached					02/28/14	SW846 8270C	721026460
Organics Extraction PAH (water) EPA 8270C - SIM	yes					02/24/14	EPA 8270C	721026460

Effluent, Grab NLS ID: 771331

COC: 183257 Matrix: WW

Collected: 02/19/14 07:36 Received: 02/20/14

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Cyanide, amen. to chlorine	[0.0090]	mg/L	1	0.0050	0.015	02/25/14	SM 4500CN-G 20ed	721026460
Cyanide, tot. (distilled) as CN	[0.0090]	mg/L	1	0.0050	0.015	02/25/14	SM 4500CN-E 20ed	721026460
Nitrogen, NO2 + NO3 as N (unfiltered)	19	mg/L	10	0.25	0.75	02/24/14	SM 4500NO3-F 20ed	721026460
Nitrogen, Kjeldahl as N (unfiltered)	1.7	mg/L	1	0.12	0.35	02/25/14	EPA 351.2	721026460
Nitrogen, tot. as N (unfiltered)	21	mg/L	1	0.12	0.35	02/25/14	calculation	721026460
VOCs (water) by EPA Method 8260B	see attached					02/26/14	SW846 8260	721026460

Trip Blank NLS ID: 771332

COC: 183257 Matrix: TB

Collected: 02/18/14 00:00 Received: 02/20/14

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA Method 8260B	see attached					02/26/14	SW846 8260	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution.

LOD = Limit of Detection LOQ = Limit of Quantitation ND = Not Detected (< LOD) 1000 ug/L = 1 mg/L
 DWB = Dry Weight Basis NA = Not Applicable %DWB = (mg/kg DWB) / 10000
 MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:



Authorized by:
 R. T. Krueger
 President

ANALYTICAL RESULTS: Polynuclear Aromatic Hydrocarbons by EPA 8270C SIM

Customer: Beloit DPW/Water Resources Division NLS Project: 213459

Project Description: Wastewater

Project Title: Template: 8270PAHW Printed: 03/17/2014 17:04

Sample: 771330 Effluent, Comp Collected: 02/18/14 Analyzed: 02/28/14 - Analytes: 18

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	Note
Acenaphthene	ND	ug/L	1	0.022	0.075	
Acenaphthylene	ND	ug/L	1	0.021	0.071	
Anthracene	ND	ug/L	1	0.020	0.068	
Benzo (a) anthracene	ND	ug/L	1	0.042	0.14	
Benzo (a) pyrene	ND	ug/L	1	0.014	0.047	
Benzo (b) fluoranthene	ND	ug/L	1	0.051	0.17	
Benzo (g,h,i) perylene	ND	ug/L	1	0.053	0.18	
Benzo (k) fluoranthene	ND	ug/L	1	0.062	0.21	
Chrysene	ND	ug/L	1	0.056	0.19	
Dibenzo (a,h) anthracene	ND	ug/L	1	0.046	0.15	
Fluoranthene	ND	ug/L	1	0.028	0.095	
Fluorene	ND	ug/L	1	0.019	0.065	
Indeno (1,2,3-cd) pyrene	ND	ug/L	1	0.048	0.16	
Methyl-1-Naphthalene	ND	ug/L	1	0.024	0.082	
Methyl-2-Naphthalene	ND	ug/L	1	0.023	0.078	
Naphthalene	ND	ug/L	1	0.027	0.089	
Phenanthrene	ND	ug/L	1	0.024	0.079	
Pyrene	ND	ug/L	1	0.028	0.095	
Terphenyl-d14 (SURR)	36%					SR S
Nitrobenzene-d5 (SURR)	74%					S
2-Fluorobiphenyl (SURR)	72%					S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

SR = Surrogate recovery was outside QC limits.

Terphenyl-d14 recovered below QC limits.

ANALYTICAL RESULTS: Semi-Volatile Organic Compounds by EPA 8270C - Water

Customer: Beloit DPW/Water Resources Division NLS Project: 213459

Project Description: Wastewater

Project Title: Template: 8270WPDES Printed: 03/17/2014 17:04

Sample: 771330 Effluent, Comp Collected: 02/18/14 Analyzed: 02/27/14 - Analytes: 44

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
2-Chlorophenol	ND	ug/L	1	0.77	2.6	
2,4-Dichlorophenol	ND	ug/L	1	0.52	1.8	
2,6-Dichlorophenol	ND	ug/L	1	0.91	3.0	
2,4-Dimethylphenol	ND	ug/L	1	0.72	2.6	
2,4-Dinitrophenol	ND	ug/L	1	0.92	3.1	CC
4-Chloro-3-methylphenol	ND	ug/L	1	1.3	4.7	
4,6-Dinitro-2-methylphenol	ND	ug/L	1	0.99	3.3	
2-Nitrophenol	ND	ug/L	1	0.56	1.8	
4-Nitrophenol	ND	ug/L	1	0.51	1.8	
Pentachlorophenol	ND	ug/L	1	1.2	3.7	
Phenol	ND	ug/L	1	1.4	5.2	
2,3,4,6-Tetrachlorophenol	ND	ug/L	1	1.0	3.4	
2,4,5-Trichlorophenol	ND	ug/L	1	0.89	3.0	
2,4,6-Trichlorophenol	ND	ug/L	1	0.72	2.4	
Acenaphthene	ND	ug/L	1	0.56	1.9	
Acenaphthylene	ND	ug/L	1	0.87	2.9	
Benzidine	ND	ug/L	1	5.0	10	
Bis(2-chloroethoxy)methane	ND	ug/L	1	0.79	2.6	
Bis(2-chloroethyl)ether	ND	ug/L	1	0.71	2.4	
Bis(2-chloroisopropyl)ether	ND	ug/L	1	1.0	3.3	
Bis(2-ethylhexyl)phthalate	[2.3]	ug/L	1	0.99	3.3	
4-Bromophenyl-phenylether	ND	ug/L	1	0.51	1.7	
Butylbenzylphthalate	ND	ug/L	1	0.89	3.0	
2-Chloronaphthalene	ND	ug/L	1	0.72	2.4	
4-Chlorophenyl-phenylether	ND	ug/L	1	0.69	2.2	
3,3'-Dichlorobenzidine	ND	ug/L	1	0.85	2.8	
Diethylphthalate	ND	ug/L	1	0.60	2.0	
Dimethylphthalate	ND	ug/L	1	0.65	2.2	
Di-n-butylphthalate	ND	ug/L	1	0.69	2.3	
2,4-Dinitrotoluene	ND	ug/L	1	0.95	3.2	
2,6-Dinitrotoluene	ND	ug/L	1	0.68	2.3	
Di-n-octylphthalate	ND	ug/L	1	0.77	2.6	
1,2-Diphenylhydrazine (as Azobenzene)	ND	ug/L	1	0.88	2.9	
Hexachloroethane	ND	ug/L	1	1.1	3.8	
Isophorone	ND	ug/L	1	0.65	2.2	
n-Nitrosodi-n-butylamine	ND	ug/L	1	0.99	3.3	
n-Nitrosodiethylamine	ND	ug/L	1	0.97	3.3	
n-nitrosodimethylamine	ND	ug/L	1	0.71	2.4	
N-Nitrosodiphenylamine	ND	ug/L	1	1.7	5.7	
n-Nitroso-di-n-propylamine	ND	ug/L	1	0.54	1.8	
n-Nitrosopyrrolidine	ND	ug/L	1	0.53	1.8	
Naphthalene	ND	ug/L	1	0.66	2.2	
Nitrobenzene	ND	ug/L	1	0.60	2.0	
1,2,4-Trichlorobenzene	ND	ug/L	1	0.73	2.4	
2-Fluorophenol (SURR)	37%					S
Phenol-d5 (SURR)	26%					S
Nitrobenzene-d5 (SURR)	69%					S
2-Fluorobiphenyl (SURR)	72%					S
2,4,6-Tribromophenol (SURR)	82%					S
Terphenyl-d14 (SURR)	44%					S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.
 CC = Continuing calibration verification standard recovery was outside QC limits.

ANALYTICAL RESULTS: Pesticides by Method 8081 and PCBs by Method 8082

Customer: Beloit DPW/Water Resources Division NLS Project: 213459

Project Description: Wastewater

Project Title: Template: OCPCBW Printed: 03/17/2014 17:04

Sample: 771330 Effluent, Comp Collected: 02/18/14 Analyzed: 03/12/14 - Analytes: 26

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Aldrin	ND	ug/L	1	0.0019	0.0065	
Alpha-BHC	ND	ug/L	1	0.0024	0.0079	
Beta-BHC	ND	ug/L	1	0.0019	0.0063	
Delta-BHC	ND	ug/L	1	0.0018	0.0061	
Gamma-BHC	ND	ug/L	1	0.0018	0.0058	
Chlordane	ND	ug/L	1	0.013	0.043	
4,4'-DDD	ND	ug/L	1	0.0022	0.0072	
4,4'-DDE	ND	ug/L	1	0.0016	0.0054	
4,4'-DDT	ND	ug/L	1	0.0015	0.0050	CC
Dieldrin	ND	ug/L	1	0.0018	0.0061	
Endosulfan I	ND	ug/L	1	0.0019	0.0063	
Endosulfan II	ND	ug/L	1	0.0023	0.0077	
Endosulfan Sulfate	ND	ug/L	1	0.0031	0.010	
Endrin	ND	ug/L	1	0.0017	0.0058	
Endrin Aldehyde	ND	ug/L	1	0.0027	0.0089	
Heptachlor	ND	ug/L	1	0.0019	0.0063	
Heptachlor Epoxide	ND	ug/L	1	0.0020	0.0066	
Methoxychlor	ND	ug/L	1	0.0033	0.011	
Toxaphene	ND	ug/L	1	0.18	0.58	
PCB-1016	ND	ug/L	1	0.023	0.077	
PCB-1221	ND	ug/L	1	0.060	0.20	
PCB-1232	ND	ug/L	1	0.037	0.12	
PCB-1242	ND	ug/L	1	0.040	0.13	
PCB-1248	ND	ug/L	1	0.045	0.15	
PCB-1254	ND	ug/L	1	0.026	0.086	
PCB-1260	ND	ug/L	1	0.034	0.11	
DBC (SURR)	80%					S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

CL = The extract was subjected to florisil cleanup before analysis.

CC = Continuing calibration verification standard recovery was outside QC limits.

4,4'-DDT recovery 82%

ANALYTICAL RESULTS: WPDES List by EPA 8260 - Water - (Saturn 2000)

Page 1 of 2

Customer: Beloit DPW/Water Resources Division NLS Project: 213459

Project Description: Wastewater

Project Title: Template: SATWPDES Printed: 03/17/2014 17:04

Sample: 771331 Effluent, Grab Collected: 02/19/14 Analyzed: 02/26/14 - Analytes: 35

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Acrolein	ND	ug/L	1	2.9	10	
Acrylonitrile	ND	ug/L	1	0.63	2.2	
Benzene	ND	ug/L	1	0.13	0.47	
Bromodichloromethane	ND	ug/L	1	0.23	0.80	
Bromoform	ND	ug/L	1	0.20	0.69	
Carbon Tetrachloride	ND	ug/L	1	0.24	0.84	
Chlorobenzene	ND	ug/L	1	0.15	0.51	
Dibromochloromethane	ND	ug/L	1	0.18	0.63	
Chloroethane	ND	ug/L	1	1.2	4.2	
Chloroform	[0.23]	ug/L	1	0.13	0.45	MD
1,2-Dichlorobenzene	ND	ug/L	1	0.29	1.0	
1,3-Dichlorobenzene	ND	ug/L	1	0.25	0.88	
1,4-Dichlorobenzene	[0.33]	ug/L	1	0.14	0.50	
1,1-Dichloroethane	ND	ug/L	1	0.13	0.45	
1,2-Dichloroethane	ND	ug/L	1	0.24	0.86	
1,1-Dichloroethene	ND	ug/L	1	0.29	1.0	
cis-1,2-Dichloroethene	ND	ug/L	1	0.10	0.35	
trans-1,2-Dichloroethene	ND	ug/L	1	0.32	1.1	
1,2-Dichloropropane	ND	ug/L	1	0.17	0.62	
1,3-Dichloropropane	ND	ug/L	1	0.16	0.57	
1,1-Dichloropropene	ND	ug/L	1	0.27	0.96	
cis-1,3-Dichloropropene	ND	ug/L	1	0.25	0.84	
trans-1,3-Dichloropropene	ND	ug/L	1	0.14	0.47	
2,3-Dichloro-1-propene	ND	ug/L	1	0.11	0.37	
Ethylbenzene	ND	ug/L	1	0.25	0.86	
Bromomethane	ND	ug/L	1	0.26	0.93	
Chloromethane	ND	ug/L	1	0.29	1.0	
Methylene chloride	ND	ug/L	1	0.40	1.2	
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.30	1.1	
Tetrachloroethene	ND	ug/L	1	0.22	0.77	
Toluene	0.89	ug/L	1	0.16	0.58	
1,1,1-Trichloroethane	ND	ug/L	1	0.15	0.54	
1,1,2-Trichloroethane	ND	ug/L	1	0.18	0.60	
Trichloroethene	ND	ug/L	1	0.27	0.97	
Vinyl chloride	ND	ug/L	1	0.17	0.59	
Dibromofluoromethane (SURR)	107%					S
Toluene-d8 (SURR)	115%					S
1-Bromo-4-Fluorobenzene (SURR)	113%					S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

MD = Matrix spike and matrix spike duplicate relative percent difference exceeded QC limits.

Customer: Beloit DPW/Water Resources Division NLS Project: 213459

Project Description: Wastewater

Project Title: Template: SATWPDES Printed: 03/17/2014 17:04

Sample: 771332 Trip Blank Collected: 02/18/14 Analyzed: 02/26/14 - Analytes: 35

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Acrolein	ND	ug/L	1	2.9	10	
Acrylonitrile	ND	ug/L	1	0.63	2.2	
Benzene	ND	ug/L	1	0.13	0.47	
Bromodichloromethane	ND	ug/L	1	0.23	0.80	
Bromoform	ND	ug/L	1	0.20	0.69	
Carbon Tetrachloride	ND	ug/L	1	0.24	0.84	
Chlorobenzene	ND	ug/L	1	0.15	0.51	
Dibromochloromethane	ND	ug/L	1	0.18	0.63	
Chloroethane	ND	ug/L	1	1.2	4.2	
Chloroform	ND	ug/L	1	0.13	0.45	
1,2-Dichlorobenzene	ND	ug/L	1	0.29	1.0	
1,3-Dichlorobenzene	ND	ug/L	1	0.25	0.88	
1,4-Dichlorobenzene	ND	ug/L	1	0.14	0.50	
1,1-Dichloroethane	ND	ug/L	1	0.13	0.45	
1,2-Dichloroethane	ND	ug/L	1	0.24	0.86	
1,1-Dichloroethene	ND	ug/L	1	0.29	1.0	
cis-1,2-Dichloroethene	ND	ug/L	1	0.10	0.35	
trans-1,2-Dichloroethene	ND	ug/L	1	0.32	1.1	
1,2-Dichloropropane	ND	ug/L	1	0.17	0.62	
1,3-Dichloropropane	ND	ug/L	1	0.16	0.57	
1,1-Dichloropropene	ND	ug/L	1	0.27	0.96	
cis-1,3-Dichloropropene	ND	ug/L	1	0.25	0.84	
trans-1,3-Dichloropropene	ND	ug/L	1	0.14	0.47	
2,3-Dichloro-1-propene	ND	ug/L	1	0.11	0.37	
Ethylbenzene	ND	ug/L	1	0.25	0.86	
Bromomethane	ND	ug/L	1	0.26	0.93	
Chloromethane	ND	ug/L	1	0.29	1.0	
Methylene chloride	ND	ug/L	1	0.40	1.2	
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.30	1.1	
Tetrachloroethene	ND	ug/L	1	0.22	0.77	
Toluene	ND	ug/L	1	0.16	0.58	
1,1,1-Trichloroethane	ND	ug/L	1	0.15	0.54	
1,1,2-Trichloroethane	ND	ug/L	1	0.18	0.60	
Trichloroethene	ND	ug/L	1	0.27	0.97	
Vinyl chloride	ND	ug/L	1	0.17	0.59	
Dibromofluoromethane (SURR)	113%					S
Toluene-d8 (SURR)	120%					S
1-Bromo-4-Fluorobenzene (SURR)	106%					S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

