

# Wisconsin Department of Natural Resources

## Laboratory Report

10/04/2016

Lab: 113133790

Sample: 272979001

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**Laboratory:** Wisconsin State Laboratory of Hygiene

DNR ID 113133790

2601 Agriculture Dr

Madison

WI 53718

Phone : 800-442-4618

Fax Phone : 608-224-6213

**Sample:**

Field #: 001

Sample #: 272979001

Collection Start: 08/18/2016 10:40 am

Collection End: 08/18/2016 10:45 am

Collected by: JASON LOWERY

Waterbody/Outfall Id:

ID #: 268134130

ID Point #: 001

County: Waukesha

Account #: RR049

Sample Location: BARRETT LANDFILL 21001 W COFFEE RD, NEW BERLIN

Sample Description: LEACHATE STORAGE TANK/BAILER-GRAB

Sample Source: Other Waste

Sample Depth: 10F

Date Reported: 10/04/2016

Sample Status: CORRECTED

Project No:

Sample Reason: Confirmation

Comment: CHLORIDE ADDED AS PER RON ARNESON., Analyzed past the 24 hours holding time: Method SM4500-H+B/SW846 9040C analyzed on 08/19/16 1530, This sample was tested for twenty-six (26) metals using a qualitative technique. This technique is intended to be a screening tool to provide a general profile of the sample for a suite of metals and minerals. The concentration of these metals and minerals should be considered an approximation., Sample split and preserved in lab for VOC test request., Analyzed past the 28 days holding time: Method SM4500-CL-E analyzed on 09/27/16 0917

**Analyses and Results:**

Analysis Method		Analysis Date	Lab Comment			
<b>EPA1664</b>		<b>09/15/2016</b>				
Code	Description	Result	Units	LOD	Report Limit	LOQ
<b>552</b>	<b>OIL &amp; GREASE, HEXANE EXTRACTABLE MATERIAL (HEM)</b>	<b>2.44</b>	<b>MG/L</b>	<b>1.9</b>		<b>5.0</b>

Analysis Method		Analysis Date	Lab Comment			
<b>SM4500-CL-E</b>		<b>09/27/2016</b>	<b>Analyzed past the 28 days holding time.</b>			
Code	Description	Result	Units	LOD	Report Limit	LOQ
<b>940</b>	<b>CHLORIDE</b>	<b>1730</b>	<b>MG/L</b>	<b>100</b>		<b>320</b>

Analysis Method		Analysis Date	Lab Comment			
<b>EPA 350.1</b>		<b>09/13/2016</b>				
Code	Description	Result	Units	LOD	Report Limit	LOQ
<b>608</b>	<b>NITROGEN NH3-N DISS</b>	<b>877</b>	<b>MG/L</b>	<b>30.0</b>		<b>96.0</b>

Analysis Method		Analysis Date	Lab Comment			
<b>EPA 200.7</b>		<b>08/30/2016</b>				
Code	Description	Result	Units	LOD	Report Limit	LOQ
<b>99427</b>	<b>BORON TOTAL REC</b>	<b>58800</b>	<b>ug/L</b>	<b>1000</b>		<b>3000</b>
<b>50245</b>	<b>POTASSIUM TOTAL</b>	<b>197</b>	<b>MG/L</b>	<b>10.0</b>		<b>30.0</b>

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<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
	<b>RECOVERABLE</b>					
<b>923</b>	<b>SODIUM TOTAL RECOVERABLE</b>	<b>2850</b>	MG/L	10.0		30.0

<i>Analysis Method</i>		<i>Analysis Date</i>		<i>Lab Comment</i>		
<b>EPA 200.7</b>		<b>08/30/2016</b>				
<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
<b>1104</b>	<b>ALUMINUM,TOTAL RECOVERABLE</b>	<b>77.3</b>	ug/L	10.0		30.0
<b>1268</b>	<b>ANTIMONY TOTAL REC</b>	<b>ND</b>	ug/L	5.00		16.0
<b>978</b>	<b>ARSENIC TOTAL RECOVERABLE</b>	<b>20.9</b>	ug/L	5.00		16.0
<b>1009</b>	<b>BARIUM TOTAL RECOVERABLE</b>	<b>745</b>	ug/L	1.00		3.00
<b>998</b>	<b>BERYLLIUM TOTAL REC</b>	<b>ND</b>	ug/L	0.500		1.60
<b>1113</b>	<b>CADMIUM TOTAL RECOVERABLE</b>	<b>ND</b>	ug/L	1.00		3.00
<b>918</b>	<b>CALCIUM TOTAL RECOVERABLE</b>	<b>7.38</b>	MG/L	0.100		0.300
<b>1118</b>	<b>CHROMIUM TOTAL RECOVERABLE</b>	<b>1510</b>	ug/L	1.00		3.00
<b>979</b>	<b>COBALT TOTAL RECOVERABLE</b>	<b>8.48</b>	ug/L	1.00		3.00
<b>1119</b>	<b>COPPER TOT REC</b>	<b>8.25</b>	ug/L	5.00		15.0
<b>980</b>	<b>IRON TOTAL RECOVERABLE</b>	<b>1.81</b>	MG/L	0.100		0.300
<b>1114</b>	<b>LEAD TOTAL REC</b>	<b>ND</b>	ug/L	3.00		10.0
<b>921</b>	<b>MAGNESIUM TOTAL RECOVERABLE</b>	<b>32.1</b>	MG/L	0.100		0.300
<b>1123</b>	<b>MANGANESE, TOTAL RECOVERABLE</b>	<b>3.87</b>	ug/L	1.00		3.00
<b>99428</b>	<b>MOLYBDENUM TOTAL REC</b>	<b>169</b>	ug/L	3.00		10.0
<b>1074</b>	<b>NICKEL, TOTAL RECOVERABLE</b>	<b>483</b>	ug/L	2.00		6.00
<b>981</b>	<b>SELENIUM TOTAL RECOVERABLE</b>	<b>ND</b>	ug/L	10.0		30.0
<b>1079</b>	<b>SILVER TOT REC</b>	<b>50.0</b>	ug/L	2.00		6.00
<b>1084</b>	<b>STRONTIUM TOTAL REC</b>	<b>355</b>	ug/L	1.00		3.00
<b>982</b>	<b>THALLIUM TOTAL REC</b>	<b>ND</b>	ug/L	5.00		16.0
<b>1152</b>	<b>TITANIUM TOTAL</b>	<b>128</b>	ug/L	2.00		6.00
<b>985</b>	<b>VANADIUM TOTAL REC</b>	<b>52.0</b>	ug/L	1.00		3.00
<b>1094</b>	<b>ZINC TOTAL REC</b>	<b>61.6</b>	ug/L	5.00		15.0

<i>Analysis Method</i>		<i>Analysis Date</i>		<i>Lab Comment</i>		
<b>EPA 8260B in Water</b>		<b>08/26/2016</b>				
<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>

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<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
<b>81552</b>	<b>ACETONE</b>	<b>400</b>	ug/L	60		190

<i>Analysis Method</i>	<i>Analysis Date</i>	<i>Lab Comment</i>
<b>EPA 8260B in Water</b>	<b>08/26/2016</b>	<b>All LOD's increased by 8x. Unable to reach method limits due to sample matrix.</b>

<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
<b>77562</b>	<b>1,1,1,2-TETRACHLOROETHANE</b>	<b>ND</b>	ug/L	4.0		13
<b>34506</b>	<b>1,1,1-TRICHLOROETHANE</b>	<b>ND</b>	ug/L	4.0		13
<b>34516</b>	<b>1,1,2,2-TETRACHLOROETHANE</b>	<b>ND</b>	ug/L	4.0		13
<b>34511</b>	<b>1,1,2-TRICHLOROETHANE</b>	<b>ND</b>	ug/L	4.0		13
<b>34496</b>	<b>1,1-DICHLOROETHANE</b>	<b>ND</b>	ug/L	2.4		7.6
<b>34501</b>	<b>1,1-DICHLOROETHYLENE</b>	<b>ND</b>	ug/L	4.0		13
<b>77168</b>	<b>1,1-DICHLOROPROPENE</b>	<b>ND</b>	ug/L	4.0		13
<b>77613</b>	<b>1,2,3-TRICHLOROBENZENE</b>	<b>ND</b>	ug/L	4.0		13
<b>77443</b>	<b>1,2,3-TRICHLOROPROPANE</b>	<b>ND</b>	ug/L	8.0		26
<b>34551</b>	<b>1,2,4-TRICHLOROBENZENE</b>	<b>ND</b>	ug/L	4.0		13
<b>77222</b>	<b>1,2,4-TRIMETHYLBENZENE</b>	<b>10</b>	ug/L	1.6		5.1
<b>38437</b>	<b>1,2-DIBROMO-3- CHLOROPROPANE</b>	<b>ND</b>	ug/L	8.0		26
<b>77651</b>	<b>1,2-DIBROMOETHANE</b>	<b>ND</b>	ug/L	4.0		13
<b>34536</b>	<b>1,2-DICHLOROBENZENE</b>	<b>ND</b>	ug/L	2.0		6.4
<b>34531</b>	<b>1,2-DICHLOROETHANE</b>	<b>ND</b>	ug/L	4.0		13
<b>77093</b>	<b>1,2-DICHLOROETHYLENE CIS</b>	<b>ND</b>	ug/L	2.4		7.6
<b>34546</b>	<b>1,2-DICHLOROETHYLENE TRANS</b>	<b>ND</b>	ug/L	4.0		13
<b>34541</b>	<b>1,2-DICHLOROPROPANE</b>	<b>ND</b>	ug/L	4.0		13
<b>77226</b>	<b>1,3,5-TRIMETHYLBENZENE</b>	<b>ND</b>	ug/L	1.6		5.1
<b>34566</b>	<b>1,3-DICHLOROBENZENE</b>	<b>ND</b>	ug/L	2.0		6.4
<b>77173</b>	<b>1,3-DICHLOROPROPANE</b>	<b>ND</b>	ug/L	2.4		7.6
<b>34704</b>	<b>1,3-DICHLOROPROPENE-CIS</b>	<b>ND</b>	ug/L	2.4		7.6
<b>34699</b>	<b>1,3-DICHLOROPROPENE-TRANS</b>	<b>ND</b>	ug/L	4.0		13
<b>34571</b>	<b>1,4-DICHLOROBENZENE</b>	<b>ND</b>	ug/L	2.0		6.4
<b>77170</b>	<b>2,2-DICHLOROPROPANE</b>	<b>ND</b>	ug/L	4.0		13
<b>77275</b>	<b>2-CHLOROTOLUENE</b>	<b>ND</b>	ug/L	2.4		7.6
<b>34030</b>	<b>BENZENE</b>	<b>6.7</b>	ug/L	2.4		7.6
<b>81555</b>	<b>BROMOBENZENE</b>	<b>ND</b>	ug/L	4.0		13

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77297	BROMOCHLOROMETHANE	ND	ug/L	4.0		13
32101	BROMODICHLOROMETHANE	ND	ug/L	4.0		13
32104	BROMOFORM	ND	ug/L	8.0		26
34413	BROMOMETHANE	ND	ug/L	4.0		13
77350	BUTYLBENZENE SEC	ND	ug/L	1.6		5.1
77353	BUTYLBENZENE TERT	ND	ug/L	4.0		13
77041	CARBON DISULFIDE	ND	ug/L	2.4		7.6
	Comment: The Lower QC limit for the calibration check is exceeded.   The lab matrix spike does not meet the lower QC limit.					
32102	CARBON TETRACHLORIDE	ND	ug/L	4.0		13
34301	CHLOROBENZENE	ND	ug/L	2.0		6.4
34311	CHLOROETHANE	ND	ug/L	4.0		13
32106	CHLOROFORM	ND	ug/L	2.0		6.4
34418	CHLOROMETHANE	ND	ug/L	8.0		26
32105	DIBROMOCHLOROMETHANE	ND	ug/L	4.0		13
77596	DIBROMOMETHANE	ND	ug/L	4.0		13
34668	DICHLORODIFLUOROMETHANE	ND	ug/L	4.0		13
81577	DIISOPROPYL ETHER	ND	ug/L	2.0		6.4
34371	ETHYLBENZENE	15	ug/L	1.6		5.1
34391	HEXACHLOROBUTADIENE	ND	ug/L	4.0		13
81590	HEXANE, MIXTURE OF ISOMERS	ND	ug/L	4.0		13
77223	ISOPROPYLBENZENE	ND	ug/L	1.6		5.1
85795	M/P-XYLENE	20	ug/L	3.2		10
81595	METHYL ETHYL KETONE	91	ug/L	24		76
78133	METHYL ISOBUTYL KETONE (MIBK)	67	ug/L	16		51
78032	METHYL TERT BUTYL ETHER	ND	ug/L	2.4		7.6
34423	METHYLENE CHLORIDE	ND	ug/L	4.0		13
77342	N-BUTYLBENZENE	ND	ug/L	1.6		5.1
77224	N-PROPYLBENZENE	ND	ug/L	1.6		5.1
34696	NAPHTHALENE	12	ug/L	2.4		7.6
77135	O-XYLENE	11	ug/L	2.4		7.6
77277	P-CHLOROTOLUENE	ND	ug/L	2.4		7.6
77356	P-ISOPROPYLTOLUENE	ND	ug/L	1.6		5.1
77128	STYRENE	ND	ug/L	2.0		6.4

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<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
<b>34475</b>	<b>TETRACHLOROETHYLENE</b>	<b>ND</b>	ug/L	4.0		13
<b>81607</b>	<b>TETRAHYDROFURAN</b>	<b>170</b>	ug/L	16		51
<b>34010</b>	<b>TOLUENE</b>	<b>20</b>	ug/L	2.0		6.4
<b>39180</b>	<b>TRICHLOROETHYLENE</b>	<b>ND</b>	ug/L	4.0		13
<b>34488</b>	<b>TRICHLOROFLUOROMETHANE</b>	<b>ND</b>	ug/L	4.0		13
<b>81611</b>	<b>TRICHLOROTRIFLUOROETHANE</b>	<b>ND</b>	ug/L	4.0		13
<b>39175</b>	<b>VINYL CHLORIDE</b>	<b>ND</b>	ug/L	1.6		5.1

<i>Analysis Method</i>	<i>Analysis Date</i>	<i>Lab Comment</i>
<b>EPA 365.1</b>	<b>09/13/2016</b>	

  

<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
<b>665</b>	<b>PHOSPHORUS TOTAL</b>	<b>1.48</b>	MG/L	0.0250		0.0800

<i>Analysis Method</i>	<i>Analysis Date</i>	<i>Lab Comment</i>
<b>SM4500-H+B/SW846 9040C</b>	<b>08/19/2016</b>	<b>Analyzed past the 24 hours holding time.</b>

  

<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
<b>99955</b>	<b>PH, LAB, LIQUID WASTE</b>	<b>8.46</b>	SU	1.00		1.00
<b>99505</b>	<b>TEMPERATURE, DURING PH MEASUREMENT</b>	<b>21.8</b>	C			

<i>Analysis Method</i>	<i>Analysis Date</i>	<i>Lab Comment</i>
<b>EPA 245.1</b>	<b>08/26/2016</b>	

  

<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
<b>71900</b>	<b>MERCURY TOTAL</b>	<b>ND</b>	ug/L	0.15		0.40

<i>Analysis Method</i>	<i>Analysis Date</i>	<i>Lab Comment</i>
<b>ASTM D1252-95B</b>	<b>09/20/2016</b>	

  

<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
<b>340</b>	<b>COD HI LEVEL</b>	<b>3580</b>	MG/L	42.5		134.5

<i>Analysis Method</i>	<i>Analysis Date</i>	<i>Lab Comment</i>
<b>SW846 Method 8270D PAH in W</b>	<b>08/29/2016</b>	

  

<i>Code</i>	<i>Description</i>	<i>Result</i>	<i>Units</i>	<i>LOD</i>	<i>Report Limit</i>	<i>LOQ</i>
<b>77418</b>	<b>1-METHYLNAPHTHALENE</b>	<b>ND</b>	ug/L	1.1		3.5
<b>78820</b>	<b>2,7-DIMETHYL NAPHTHALENE</b>	<b>ND</b>	ug/L	1.1		3.5
<b>77416</b>	<b>2-METHYLNAPHTHALENE</b>	<b>ND</b>	ug/L	1.1		3.5
<b>34205</b>	<b>ACENAPHTHENE</b>	<b>ND</b>	ug/L	1.1		3.5
<b>34200</b>	<b>ACENAPHTHYLENE</b>	<b>ND</b>	ug/L	1.1		3.5

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34220	ANTHRACENE	ND	ug/L	1.1		3.5
34526	BENZO (A) ANTHRACENE	ND	ug/L	1.5		4.8
34247	BENZO (A) PYRENE	ND	ug/L	1.5		4.8
34230	BENZO (B) FLUORANTHENE	ND	ug/L	1.5		4.8
34521	BENZO (G H I) PERLYENE	ND	ug/L	1.5		4.8
34242	BENZO (K) FLUORANTHENE	ND	ug/L	1.5		4.8
77802	BENZO(E)PYRENE	ND	ug/L	1.5		4.8
34320	CHRYSENE	ND	ug/L	1.5		4.8
98306	CORONENE	ND	ug/L	6.0		18
34556	DIBENZO (A H) ANTHRACENE	ND	ug/L	2.5		7.8
34376	FLUORANTHENE	ND	ug/L	1.1		3.5
34381	FLUORENE	ND	ug/L	1.1		3.5
34403	INDENO (1,2,3-C D) PYRENE	ND	ug/L	2.5		7.8
34696	NAPHTHALENE	3.2	ug/L	1.1		3.5
	<i>Comment: The lab matrix spike does not meet the lower QC limit.</i>					
34461	PHENANTHRENE	ND	ug/L	1.1		3.5
34469	PYRENE	ND	ug/L	1.1		3.5
85787	RETENE	ND	ug/L	1.1		3.5