



Marion Cross School	
41 Lebanon Street	100362
Hanover, NH 03755	
Atten: Jonathan Brush	

PROJECT: Marion Cross School, Norwich  
WORK ORDER: 0903-03895  
DATE RECEIVED: March 26, 2009  
DATE REPORTED: April 03, 2009  
SAMPLER: JB

### Laboratory Report

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Randolph, VT facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.  
Laboratory Director

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**Laboratory Report**

DATE REPORTED: 04/03/2009

CLIENT: Marion Cross School  
 PROJECT: Marion Cross School, Norwich

WORK ORDER: 0903-03895  
 DATE RECEIVED 03/26/2009

001 Site: Test Pt. #1 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	> 940	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
e. coli	< 0.39	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	< 0.06	mg/Kg, dry	EPA 9056	3/28/09 5:49	W CM	U	
Phosphorus, Total	310	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

002 Site: Test Pt. #2 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	> 2600	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
e. coli	< 1.1	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	< 0.20	mg/Kg, dry	EPA 9056	3/28/09 6:09	W CM	U	
Phosphorus, Total	440	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

003 Site: Test Pt. #3 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	> 1200	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
e. coli	< 0.48	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	2.4	mg/Kg, dry	EPA 9056	3/28/09 10:28	W CM	U	
Phosphorus, Total	210	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

004 Site: Test Pt. #4 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	> 1300	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
e. coli	< 0.54	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	0.93	mg/Kg, dry	EPA 9056	3/28/09 6:29	W CM	U	
Phosphorus, Total	350	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

005 Site: Test Pt. #5 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	Indeterminate	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN2
e. coli	< 0.22	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	0.08	mg/Kg, dry	EPA 9056	3/28/09 6:49	W CM	U	
Phosphorus, Total	300	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

006 Site: Test Pt. #6 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
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006 Site: Test Pt. #6 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	< 50	MPN/100ml	SM18 9223B	3/26/09 20:10	W KMB	N	LV
e. coli	< 50	MPN/100ml	SM18 9223B	3/26/09 20:10	W KMB	N	LV
Nitrate as N	< 0.20	mg/L	EPA 300.0	3/26/09 16:24	W KMB	A	
Phosphorus, Total	0.36	mg/L	EPA 365.1	4/2/09	W KJS	A	

007 Site: Test Pt. #7 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	< 50	MPN/100ml	SM18 9223B	3/26/09 20:10	W KMB	N	LV
e. coli	< 50	MPN/100ml	SM18 9223B	3/26/09 20:10	W KMB	N	LV
Nitrate as N	< 0.20	mg/L	EPA 300.0	3/26/09 16:44	W KMB	A	
Phosphorus, Total	2.0	mg/L	EPA 365.1	4/2/09	W KJS	A	

008 Site: Test Pt. #8 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	> 970	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	ANI
e. coli	< 0.40	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	ANI
Nitrate as N	0.62	mg/Kg, dry	EPA 9056	3/28/09 7:09	W CM	U	
Phosphorus, Total	240	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

009 Site: Test Pt. #9 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	> 420	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	ANI
e. coli	0.35 *	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	ANI
Nitrate as N	< 0.06	mg/Kg, dry	EPA 9056	3/28/09 7:00	W CM	U	
Phosphorus, Total	280	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

010 Site: Test Pt. #10 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
Total Coliform	> 470	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	ANI
e. coli	< 0.19	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	ANI
Nitrate as N	0.14	mg/Kg, dry	EPA 9056	3/28/09 8:09	W CM	U	
Phosphorus, Total	220	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

011 Site: Test Pt. #11 Date Sampled: 3/26/09 Time: 10:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
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011 Site: Test Pt. #11 Date Sampled: 3/26/09 Time: 10:00

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Analysis Date/Time</u>	<u>Lab/Tech</u>	<u>NELAC</u>	<u>Qual.</u>
Total Coliform	> 990	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
e. coli	< 0.41	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	7.1	mg/Kg, dry	EPA 9056	3/28/09 8:29	W CM	U	
Phosphorus, Total	280	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

012 Site: Test Pt. #12 Date Sampled: 3/26/09 Time: 10:00

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Analysis Date/Time</u>	<u>Lab/Tech</u>	<u>NELAC</u>	<u>Qual.</u>
Total Coliform	350	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
e. coli	< 0.35	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	8.9	mg/Kg, dry	EPA 9056	3/28/09 9:09	W CM	U	
Phosphorus, Total	400	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

013 Site: Test Pt. #13 Date Sampled: 3/26/09 Time: 10:00

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Analysis Date/Time</u>	<u>Lab/Tech</u>	<u>NELAC</u>	<u>Qual.</u>
Total Coliform	Indeterminate	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN2
e. coli	< 0.40	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	4.5	mg/Kg, dry	EPA 9056	3/28/09 9:28	W CM	U	
Phosphorus, Total	290	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

014 Site: Test Pt. #14 Date Sampled: 3/26/09 Time: 10:00

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Analysis Date/Time</u>	<u>Lab/Tech</u>	<u>NELAC</u>	<u>Qual.</u>
Total Coliform	> 1000	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
e. coli	< 0.41	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	0.64	mg/Kg, dry	EPA 9056	3/28/09 10:48	W CM	U	
Phosphorus, Total	430	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

015 Site: Test Pt. #15 Date Sampled: 3/26/09 Time: 10:00

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Analysis Date/Time</u>	<u>Lab/Tech</u>	<u>NELAC</u>	<u>Qual.</u>
Total Coliform	270	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
e. coli	< 0.38	MPN/g, dry	SM18 9223B	3/26/09 20:10	W KMB	N	AN1
Nitrate as N	0.29	mg/Kg, dry	EPA 9056	3/28/09 11:28	W CM	U	
Phosphorus, Total	400	mg/Kg, dry	EPA 365.1	4/2/09	W KJS	U	

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Report Summary of Qualifiers and Notes

LV: Limited sample volume resulted in increased quantitation limits.

AN1: Method 9223B is not an approved method for the detection of Coliform and E. coli bacteria in solid matrices. These results serve as a screen for the level of contamination potentially present in the sample. Varying detection limits are due to the mass of sample prepared for analysis and the amount of moisture in the sample.

AN2: Total coliform data is not available for this sample due to interference from the dark background color and sediment. (positive color development indicative of Total coliform bacteria could not be determined).