

April 13, 2015

**VIA E-MAIL**

Mr. John Iacoangeli, Principal  
 Beckett & Raeder, Inc.  
 535 West William, Suite 101  
 Ann Arbor, MI 48013

**RE: MARCH 2015 RESULTS OF INTERIM ACME CREEK MONITORING AT GRAND TRAVERSE TOWN CENTER, ACME, MICHIGAN**

Dear Mr. Iacoangeli:

The purpose of this letter is to transmit the results of interim surface water monitoring of Acme Creek that was completed by Horizon Environmental Corporation (“Horizon”) on behalf of the Village at Grand Traverse, LLC (“VGT”), in relation to VGT’s development of the Grand Traverse Town Center (“GTTC”) site in Acme Township, Grand Traverse County, Michigan.

The surface water monitoring results presented here are from sampling completed on March 25, 2015, in accordance with the interim monitoring provisions of the Acme Creek Monitoring Plan, issued to Acme Township for review and consideration on December 5, 2014. Consistent with that plan, surface water samples were collected from Acme Creek at three locations: one upstream of the GTTC site and two downstream (see enclosed Figure 1). This rain event deposited 0.26 inches of rain at the site on March 25, 2015 between approximately 7:00 am and 11:00 am. Samples were field analyzed for turbidity and temperature and were also submitted for laboratory analysis of total suspended solids (“TSS”). The results of this sampling event are summarized as follows:

Acme Creek Sampling Location	Sample Date	Sample Time	Temp. (°C)	TSS (mg/L)	Turbidity (NTU)
Upstream (at property line)	3/25/15	9:40 am	4.2	<5.0	4.29
Downstream (at property line)	3/25/15	9:50 am	4.2	12	5.22
Downstream (at M-72)	3/25/15	10:15 am	3.9	14	4.84

Mr. John Iacoangeli

April 13, 2015

Page 2

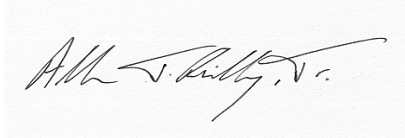
Field analyses for turbidity were completed using a Hach 2100P portable turbidimeter. Laboratory analytical reports of TSS results for these samples are presented as Attachment I.

During the March 25<sup>th</sup> sampling event, Acme Creek was observed to be visually clear at the time of sampling in all sampling locations. Temperature and turbidity levels in Acme Creek immediately downstream of the GTTC site are consistent with those observed immediately upstream of the GTTC site. Concentrations of TSS in Acme Creek during these sampling events were also generally consistent with TSS concentrations observed in the August 2012 baseline sampling event (11.2 mg/L and 4.4 mg/L upstream and downstream of the site, respectively).

If you have questions or require additional information regarding this sampling event, please contact me at 616.554.3210.

Sincerely,

HORIZON ENVIRONMENTAL

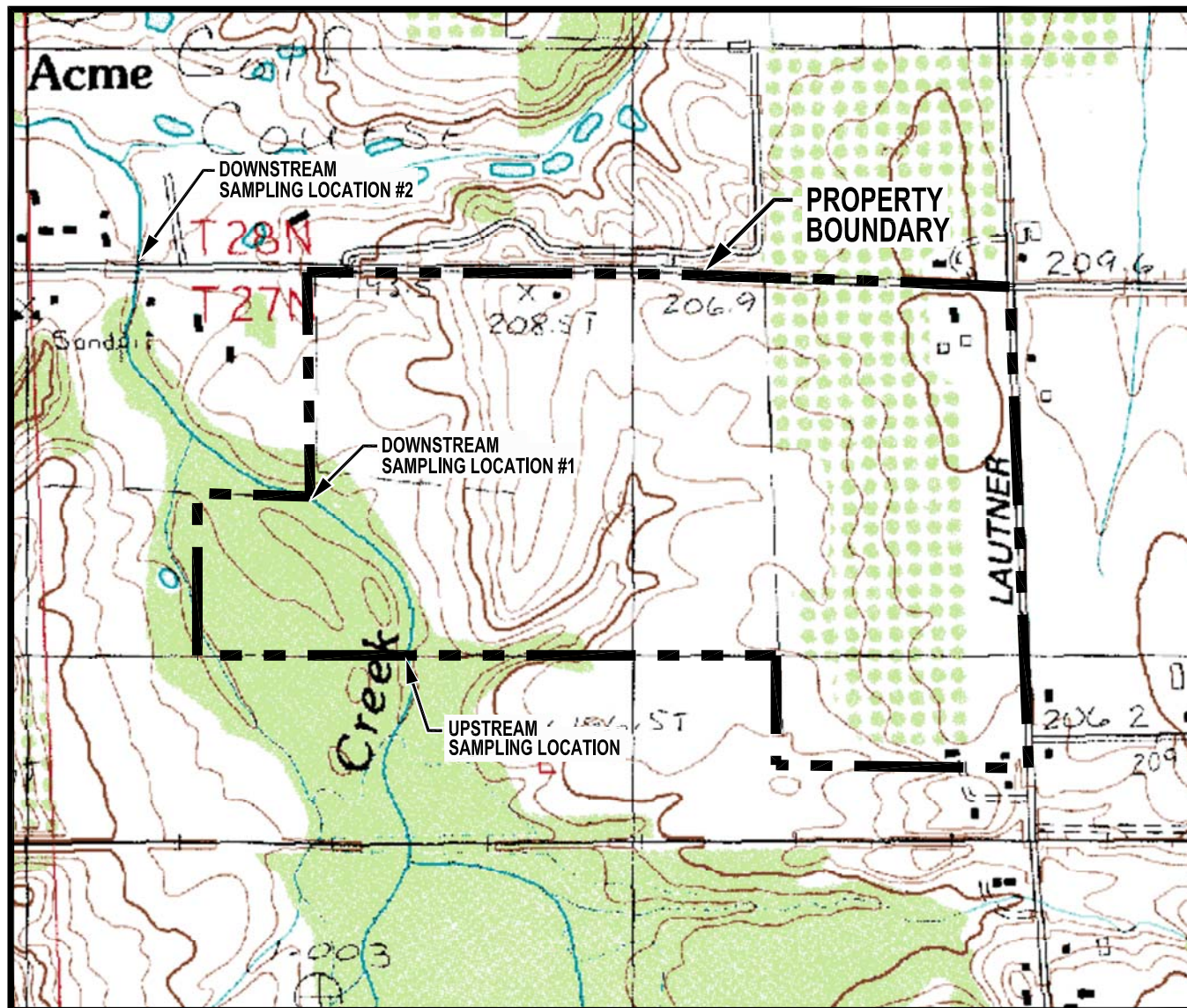
A handwritten signature in black ink, appearing to read "Allen J. Reilly, Jr.", is centered within a light gray rectangular box.

Allen J. Reilly, Jr.

Director, Environmental Risk Management

cc: J. Zollinger, Acme Township  
S. Schooler, VGT LLC  
S. Smith, VGT LLC  
K. Petterson, Smith & Johnson  
D. Donohue, Warner Norcross & Judd

enclosures



TAKEN FROM 7.5 MINUTE SERIES TOPOGRAPHIC MAP  
GRAWN QUADRANGLE PHOTOREVISED 1983  
NOT TO SCALE



Acme Township  
Grand Traverse County, MI



North

**HORIZON ENVIRONMENTAL**

Village at Grand Traverse  
Acme Township, Grand Traverse County, Michigan

SITE LOCATION MAP

PROJECT NUMBER:  
WNU-1401

FIGURE:

**1**

DECEMBER 2014

***ATTACHMENT I***

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***LABORATORY ANALYTICAL RESULTS OF  
MARCH 2015 SURFACE WATER SAMPLING***



**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: HORIZON ENVIRONMENTAL  
Name:  
ClientProj: WNJ-1401  
GTA ProjNo: 032515-8

Site Addr: VGT

Sampled By: MIKE POTTER/HORIZON  
Date Rec: 3/25/2015  
Time Rec: 3:50 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	ACME UPSTREAM	3/25/2015	9:40 AM	WATER
2	ACME DOWNSTREAM 1	3/25/2015	9:50 AM	WATER
3	ACME DOWNSTREAM 2	3/25/2015	10:15 AM	WATER

ELECTRONIC SIGNITURE REPORT. This is a final report for the following pages of data for the samples specified above. All analysis was performed by the methods stated and all quality control measures required were completed. All quality control information is available upon request.

**Kirk L. Chase**

Digitally signed by Kirk L. Chase  
DN: cn=Kirk L. Chase, o=Grand Traverse Analytical,  
ou=Head Chemist, email=kirk@gtanalytical.com, c=US  
Date: 2015.03.27 15:02:17 -04'00'

Kirk L. Chase/Chemist  
Grand Traverse Analytical  
830 Robinwood Court  
Traverse City, MI 49686  
Ph: 231-929-0905  
Fx: 231-929-0894  
Cell: 231-590-0291  
kirk@gtanalytical.com

COMPANY: HORIZON ENVIRONMENTAL  
PROJECT NO: WNJ-1401  
LOCATION: VGT  
MI  
SAMPLED BY: MIKE POTTER/HORIZON

GTA PROJECT NO: 032515-8  
GTA SAMPLE NO: 1  
DATE SAMPLED: 3/25/2015  
TIME SAMPLED: 9:40 AM  
DATE RECEIVED: 3/25/2015  
TIME RECEIVED: 3:50 PM

**SAMPLE RESULTS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: ACME UPSTREAM						
	TOTAL SUSPENDED SOLIDS SM2540D	ND	5.0	mg/L (PPM)	TR	3/27/2015	WATER

ND = NOT DETECTED, RESULT < LOD  
LOD = LIMIT OF DETECTION  
s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HORIZON ENVIRONMENTAL  
 PROJECT NO: WNJ-1401  
 LOCATION: VGT

GTA PROJECT NO: 032515-8  
 GTA SAMPLE NO: 2  
 DATE SAMPLED: 3/25/2015  
 TIME SAMPLED: 9:50 AM  
 DATE RECEIVED: 3/25/2015  
 TIME RECEIVED: 3:50 PM

MI  
 SAMPLED BY: MIKE POTTER/HORIZON

**SAMPLE RESULTS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: ACME DOWNSTREAM 1						
	TOTAL SUSPENDED SOLIDS SM2540D	12	5.0	mg/L (PPM)	TR	3/27/2015	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: HORIZON ENVIRONMENTAL  
 PROJECT NO: WNJ-1401  
 LOCATION: VGT

GTA PROJECT NO: 032515-8  
 GTA SAMPLE NO: 3

DATE SAMPLED: 3/25/2015  
 TIME SAMPLED: 10:15 AM  
 DATE RECEIVED: 3/25/2015  
 TIME RECEIVED: 3:50 PM

MI  
 SAMPLED BY: MIKE POTTER/HORIZON

**SAMPLE RESULTS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: ACME DOWNSTREAM 2						
	TOTAL SUSPENDED SOLIDS SM2540D	14	5.0	mg/L (PPM)	TR	3/27/2015	WATER

ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION  
 s.u. = STANDARD pH UNITS REPORTED AT 25 C



**CHAIN OF CUSTODY**

PROJECT NUMBER <i>WNT-1401</i>	SITE NAME/ADDRESS <i>VGT</i>	COMPANY/NAME <i>Horizon Environmental</i>
SAMPLED BY <i>Mike Potter</i>	COMPANY	GTA PROJECT # <i>032515-8</i>

**SAMPLE INFORMATION**

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
<i>1</i>	<i>Acme upstream</i>	<i>3-25-15</i>	<i>0940</i>	<i>W</i>	<i>TSS</i>
<i>2</i>	<i>Acme Downstream 1</i>	<i>↓</i>	<i>0950</i>	<i>W</i>	<i>TSS</i>
<i>3</i>	<i>Acme Downstream 2</i>	<i>↓</i>	<i>1015</i>	<i>W</i>	<i>TSS</i>

<b>BILL TO:</b>	<b>REPORT TO:</b>
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<b>RELEASED BY</b> <i>M. Potter</i>	<b>DATE/TIME</b> <i>3-25-15 1550</i>	<b>RECEIVED BY</b> <i>L. Curt</i>	<b>DATE/TIME</b> <i>3-25-15 350</i>
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REQUESTED TAT  STANDARD  1 BUSINESS DAY  2 BUSINESS DAYS  3 BUSINESS DAYS