

August 11, 2015

VIA E-MAIL

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

RE: JULY 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”) at the Grand Traverse Town Center (“GTTC”) site in Acme Township, Grand Traverse County, Michigan.

Horizon conducts sampling in accordance with the *Acme Creek Interim Monitoring Plan* which was submitted to Acme Township on December 5, 2014. The interim monitoring program is intended to assess Acme Creek for sedimentation-related parameters during wet weather events until the site is stabilized. Samples are collected once a month at three locations within the Creek (one upstream of the GTTC site and two downstream, see enclosed Figure 1) during a qualifying wet weather event. Samples are field analyzed for turbidity and temperature and are also submitted for laboratory analysis of total suspended solids (“TSS”). The results presented below are from sampling completed during a rain event that deposited 0.65 inches of rain at the site between 1:30 am and 7:30 am on July 7, 2015. 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)	7/7/15	7:10 am	11.1	54	27.8
Downstream (at property line)	7/7/15	7:00 am	11.1	50	30.0
Downstream (at M-72)	7/7/15	8:50 am	11.0	55	36.0

Mr. John Iacoangeli

August 11, 2015

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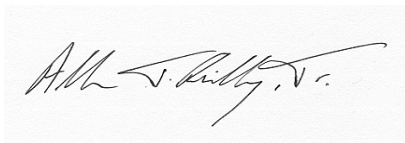
Field analyses for turbidity were completed using a Hach 2100P portable turbidimeter. Laboratory analytical reports of TSS results for these samples are presented as Attachment I.

Acme Creek was observed to be running slightly turbid during the sampling event. The turbidity was observed at both upstream and downstream sampling locations. The TSS level in Acme Creek was lower at the downstream property line location than at the upstream and downstream (at M-72) sampling locations. The turbidity was slightly higher at the both downstream locations than at the upstream sampling location. The higher TSS and turbidity levels at the downstream (at M-72) location were likely the result of the ongoing road construction work on M-72. Temperature was unchanged between the upstream and downstream location.

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

Sincerely,

HORIZON ENVIRONMENTAL

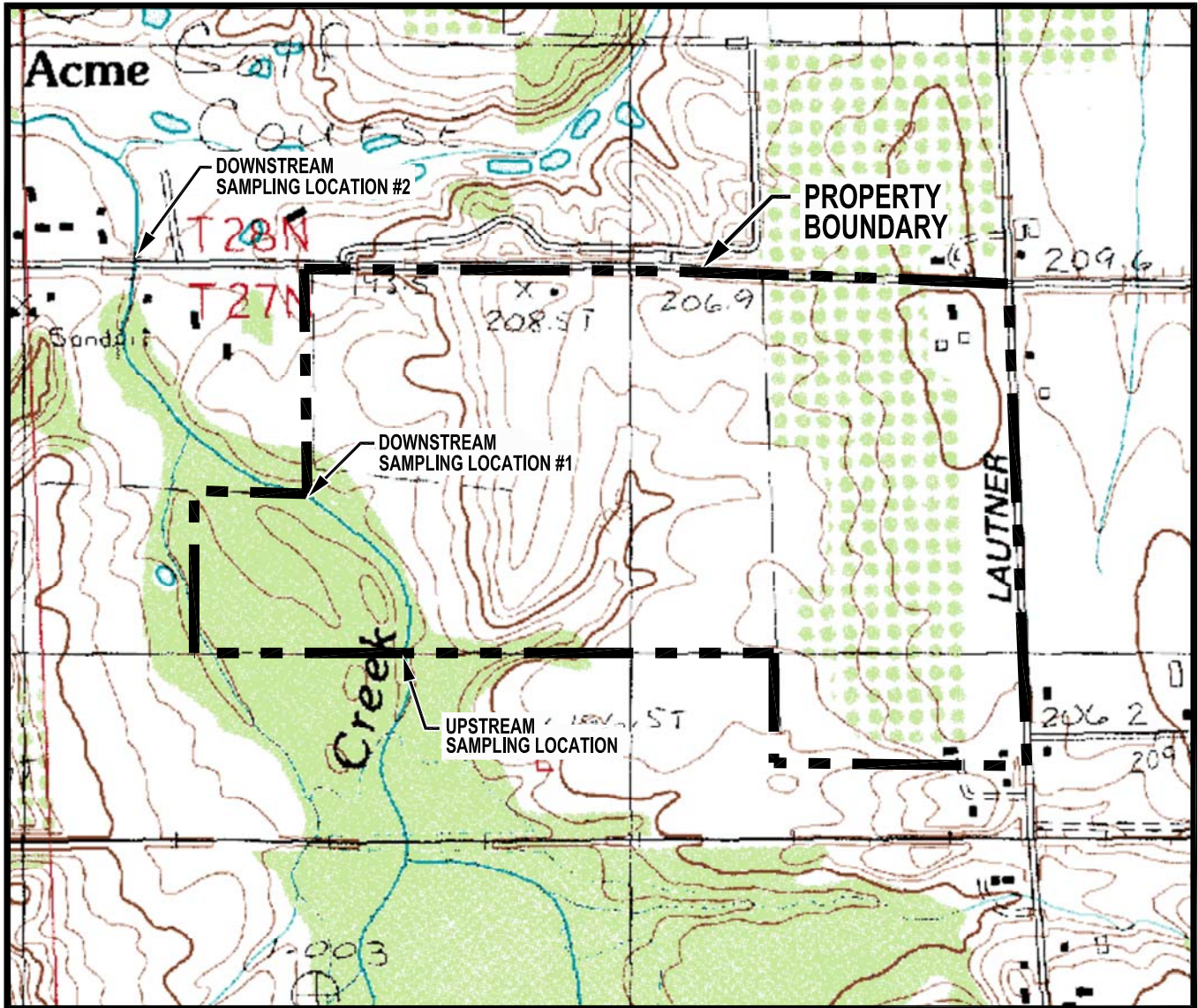
A handwritten signature in black ink, appearing to read "Allen J. Reilly, Jr.", is centered below the company name.

Allen J. Reilly, Jr.

Director, Environmental Risk Management

cc: J. Zollinger, Acme Township
S. Schooler, VGT
S. Smith, VGT
E. Ritchie, Team Elmer's
S. Folkersma, Team Elmer's
D. Donohue, Warner Norcross & Judd

enclosures



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



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

***LABORATORY ANALYTICAL RESULTS OF
JULY 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: 070715-3

Site Addr: VGT

Sampled By: MIKE POTTER/HORIZON
Date Rec: 7/7/2015
Time Rec: 11:40 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	UPSTREAM	7/7/2015	7:10 AM	WATER
2	DOWN STREAM 1	7/7/2015	7:00 AM	WATER
3	DOWN STREAM 2	7/7/2015	8:50 AM	WATER

ELECTRONIC SIGNATURE 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: 2015.07.14 14:24:24 -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

GTA PROJECT NO: 070715-3
 GTA SAMPLE NO: 1

DATE SAMPLED: 7/7/2015
 TIME SAMPLED: 7:10 AM
 DATE RECEIVED: 7/7/2015
 TIME RECEIVED: 11:40 AM

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: UPSTREAM						
	TOTAL SUSPENDED SOLIDS SM2540D	54	5.0	mg/L (PPM)	TR	7/10/2015	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: 070715-3
 GTA SAMPLE NO: 2

DATE SAMPLED: 7/7/2015
 TIME SAMPLED: 7:00 AM
 DATE RECEIVED: 7/7/2015
 TIME RECEIVED: 11:40 AM

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:	DOWN STREAM 1						
	TOTAL SUSPENDED SOLIDS SM2540D	50	5.0	mg/L (PPM)	TR	7/10/2015	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: 070715-3
 GTA SAMPLE NO: 3

DATE SAMPLED: 7/7/2015
 TIME SAMPLED: 8:50 AM
 DATE RECEIVED: 7/7/2015
 TIME RECEIVED: 11:40 AM

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:	DOWN STREAM 2						
	TOTAL SUSPENDED SOLIDS SM2540D	55	5.0	mg/L (PPM)	TR	7/10/2015	WATER

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

