

February 14, 2018

Town of Charlotte  
Attn: Lee Krohn, Acting ZA  
P.O. Box 119  
Charlotte, VT 05445

RE: Wastewater/Potable Water Permit Application  
Kessler Property, 1687 Church Hill Rd, Charlotte  
McCain Project No. 81216

Dear Lee,

Enclosed please find the following for the above referenced project:

- Fee check in the amount of \$250.00 (Minor Amendment);
- Wastewater System and Potable Water Supply Application;
- ANR Overshadowing Form #5;
- Water Test Results (A recent passing coliform test reported February 2, 2018 has been included in addition to the full Table A11-5 & A11-7 test results).

The purpose of this application is to convert the two-bedroom house and veterinary practice previously permitted under WW-4-0684 to a (2)-bedroom unit + (1)-bedroom unit with no veterinary practice. There are no proposed changes to the existing leachfield or water supply. A field inspection was conducted on August 14, 2017 and the leachfield was found to be functioning properly at the time of the visit. Water quality testing was performed for the existing well and are enclosed. As per Water Supply Rule 11.8.2.1, single-family residences with a one-bedroom apartment, where the average day demand is 540 gpd or less are exempt from requiring water storage for max day/instantaneous peak demand. Please be aware that the project site is within a one-mile radius of hazardous waste site 972189, which received SMAC designation, waste site 921348, which has received NFAP designation, and waste site 20043244, which has received MED designation.

**As per our prior conversations with the former ZA, the applicant is requesting that the permit is written to address the structure's conversion to a single-family 3-bedroom residence upon transfer of ownership.**

Please feel free to call with any questions you may have or if you need any additional information.

Sincerely,  
McCain Consulting, Inc.



Gunner McCain  
Enc.

# Drinking Water & Groundwater Protection Division - Permit Application

## Wastewater System & Potable Water Supply

**For Office Use Only:**

Application#	PIN#	Date Complete Application Received
<input type="text"/>	<input type="text"/>	<input type="text"/>

**General Information:**

**IMPORTANT:** This application form **IS NOT** intended to be printed and filled out by hand. Because of the dynamic nature of the form, it is required that the information be typed directly into the fields using a computer.

In most cases a licensed designer will be required for your project and to help complete this application form. There are also line-by-line instructions available to assist with completing this form: <http://dec.vermont.gov/sites/dec/files/dwgwp/wastewater/pdf/WWApplInstructionsRules.pdf>.

**NOTE:** We strongly suggest referring to the application instructions while completing this application form.

**A. Prior Permits**

1 Please enter any prior or related WW permit or Act 250 permit number(s) (if applicable)

WW-4-0684

**B. Project Name**

1 Please enter a name that can be used as a reference for the project

Kessler reallocation of flows for a proposed 2-Unit Residence

**C. Landowner Information****Landowner Name**

1 Legal Entity/Organization Name (if the Landowner is a legal entity or organization rather than a person)

2 Landowner First Name (and Middle Initial if appropriate)

Denise and Thomas

3 Landowner Last Name

Kessler

**Landowner Contact Information**

4 Mailing Address Line 1

585 Greenbush Road

5 Mailing Address Line 2

6 City

North Ferrisburgh

7 State/Province

VT

8 Country

United States

9 Zip/Postal Code

05473

10 Email Address

denisekessler1@gmail.com

11 Telephone

802-598-6267

**Landowner Certifying Official Information (if applicable)**

12 First Name (and MI if appropriate)

13 Last Name

14 Title

15 Email Address

16 Telephone

Add Another Landowner

**D. Primary Contact Information (if other than Landowner)**

1 First Name (and Middle Initial if appropriate)

Katelyn

2 Last Name

Ellermann

3 Company/Organization Name

Murphy Sullivan Kronk

4 Mailing Address Line 1

275 College Street

5 Mailing Address Line 2

6 City

Burlington

7 State/Province

VT

8 Country

United States

9 Zip/Postal Code

05401

10 Email Address

kellermann@mskvt.com

11 Telephone

802-861-7000

**E. Lot(s) Affected by this Project**

1 Please list any and all proposed lots or existing parcels that are directly affected by this project. If this application is an amendment to a previous project, please use consistent lot numbers.

(a) Existing or Proposed Lot	(b) Lot Number	(c) SPAN	(d) Parcel ID	(e) Acres	X
Existing	M05B02L01	138-043-10760	00007-1687	0.74	
(f) Book Number (ref. 1)	(g) Page Number(s) (ref. 1)	(h) Book Number (ref. 2)	(i) Page Number(s) (ref. 2)	(j) Book Number (ref. 3)	(k) Page Number(s) (ref. 3)
78	212-213				
(l) Comments					

Add Another Lot

**F. Project Information**

## 1 Project Description

The purpose of this application is to convert the two bedroom house and veterinary practice previously permitted under WW-4-0684 to a 2-bedroom unit + 1-bedroom unit duplex with no veterinary practice. There are no proposed changes to the exiting leachfield or water supply. A field inspection was conducted on August 14, 2017 and the leachfield was found to be functioning properly at the time of the visit. The existing well was tested. The water testing results are enclosed. Please be aware that the project site is within a one mile radius of hazardous waste site 972189, which received SMAC designation, waste site 921348, which has received NFAP designation, and waste site 20043244, which has received MED designation.

2 Total Acreage of Property	3 Town (primary)	4 Town (secondary - if located in more than one town)
0.74	Charlotte	

## 5 Street Address (911 address if available, otherwise a brief description of the location)

1687 Church Hill Road

## 6 Center of property GPS coordinates - Enter the approximate center of the project coordinates using GPS set for NAD83 or as derived from a map (map must be based on NAD83).

(a) Latitude (in decimal degrees to five decimal places, ex. 44.38181°)	(b) Longitude (in decimal degrees to five decimal places, ex. -72.31392°)
44.19460	-73.14132

## 7 If someone from the Drinking Water &amp; Groundwater Protection Division's Regional Office has been to the property for a site visit, please indicate who visited the property and the date of the visit.

(a) Name of Staff Person	(b) Date of Visit (m/d/yyyy)

**G. Application Fee**

Please refer to the [Application Fee Schedule](#) prior to selecting the Application Fee Code for your project below.

1 Select Application Fee Code	2 Fee Amount Due
(ROMA) Minor Amendment	\$250.00

**H. Wastewater System and Water Supply Component Details****Component Information:**

**PLEASE READ:** The purpose of this section is to provide supplementary information for system components when there are proposed changes to existing conditions or previous permits. In the case that the application includes site plans, the component names on this worksheet must match those on the site plans. If there is a prior permit, the component names must be labeled consistent with plans from the prior permit(s). It is **\*required\*** that, at a minimum, the following component types must be included for each application: final disposal; pre-treatment (if applicable); building unit(s); water treatment (if applicable); and water source. To add components after the third entry, click the green button labeled "Add Another Component". You may also insert components between components you've already added by clicking the "Insert Component Between" button. For large projects with many components, you may consider using the "Show/Hide Component Set Separator" button to separate sets (or groups) of connected components by naming each set. For additional instructions, please review the appendix to the application instructions: <http://dec.vermont.gov/sites/dec/files/dwgwp/wastewater/pdf/WWApplInstructionsRules.pdf>.

**Component 1 Information**

Show/Hide Component Set Separator

Remove This Component

Component Group Type	(WW) Final Disposal	Component Type	In-ground
----------------------	---------------------	----------------	-----------

--Component 1 Details--

Component Name	Existing Leachfield		
Lot # Physical Location	1	Change Type	No Change
WW Design Flow	435	Changes	
I/A Dispersal Type		Comments	420 gpd for 2-bedroom unit + 1-bedroom unit plus 15 gpd previously permitted excess capacity.
Variance Requested	<input type="checkbox"/>		
Design Approach (select all that apply, press Ctrl and Click to select multiple)	Alternative Toilets Constructed Wetlands <b>Existing - Unknown</b> Filtrate Flow equalization No discharge (other than holding tank) Performance based Prescriptive Store and dose Subsurface drip distribution Time dosing Wastewater strength		
Manufacturer			
Model Name			
Model Number			
As-Built Latitude			
As-Built Longitude			

Insert Component Between

**Component 2 Information**

Show/Hide Component Set Separator

Remove This Component

Component Group Type	Building	Component Type	Building-Unit
----------------------	----------	----------------	---------------

**--Component 2 Details--**

Component Name	Proposed 2-bedroom unit + 1-bedroom unit		
Lot # Physical Location	1	Change Type	No Change
WW Permitted Flow	435	Changes	Convert 2-bedroom house with veterinary practice to a 2-bedroom unit + 1-bedroom unit with no veterinary clinic.
WS Permitted Flow	435	Comments	420 gpd for 2-bedroom unit + 1-bedroom unit, plus 15 gpd previously permitted excess capacity.
Flow Basis	Rule		

Insert Component Between

**Component 3 Information**

Show/Hide Component Set Separator

Remove This Component

Component Group Type	(WS) Source	Component Type	Potable
----------------------	-------------	----------------	---------

**--Component 3 Details--**

Component Name	Existing Well		
Lot # Physical Location	1	Change Type	No Change
Source Type	Drilled/Driven Well	Changes	
WS Design Flow	435	Comments	No proposed changes to existing flow. 420 gpd for (2)-bedroom unit + (1)-bedroom unit, plus 15 gpd previously permitted excess capacity.
Allocation Approval	<input type="checkbox"/>		
Construction Approval	<input type="checkbox"/>		
Variance Requested	<input type="checkbox"/>		
As-Built Latitude			
As-Built Longitude			

Insert Component Between

Add Another Component

**I. Project Plan Reference**

1 Please provide the following information for all water supply and wastewater system plans being submitted.

(a) Sheet#	(b) Title	(c) Plan Date	(d) Last Revision Date	
				X

Add Another Plan Reference

**J. Project Scoping Questions**

- 1 Does this project involve the replacement of a failed wastewater system?  Yes  No
- 2 Does this project involve the replacement of a failed water supply?  Yes  No
- 3 Does this project involve construction within the buffer for a Class 2 Wetland?  Yes  No
- 4 Does this project involve construction within a river corridor?  Yes  No
- 5 Is the property within 250 feet of the mean water level of lakes greater than 10 acres in size?  Yes  No
- 6 Will the project require a public water supply permit?  Yes  No
- 7 Is any portion of the proposed wastewater system located in a Water Source Protection Area (SPA) as designated by the Drinking Water & Groundwater Protection Division?  Yes  No
- 8 Does this project require an Underground Injection Control Permit?  Yes  No
- 9 Is this project located in a Class A Watershed?  Yes  No
- 10 If this project is in a Class A Watershed, does the design flow for the project exceed 1,000 gpd or is the project located on the same lot as other buildings, structures, or campgrounds where the total design flow for the lot is greater than 1,000 gpd?  Yes  No  NA
- 11 Are any of the proposed water sources located within 1 mile of a hazardous waste site as designated by the Waste Management & Prevention Division and identified on the Agency mapping website (if Yes, please submit additional information on the site)?  Yes  No
- 12 Does any building(s) on the property or the proposed project include any floor drains?  Yes  No
- 13 If there are existing floor drains, where do they discharge?
- 14 Does this project involve only a single family residence with no in-home business?  Yes  No

**K. Consultant/Designer Certification****Consultant/Designer Certification & Copyright License**

"I hereby certify that in the exercise of my reasonable professional judgment, the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules.

As the individual who prepared this application, including all documents that are marked as copyrighted, I hereby grant a non-exclusive, limited license to the State to allow the documents to be made available for public review and copying in order to properly implement and operate the permitting programs for Wastewater Systems and Potable Water Supplies, and for no other purposes. As a condition to this license, the State agrees that it will not make any changes to such documents, nor will the State delete any copyright notices on such documents."

WW/WS Designer

Consultant/Designer Role

Gunner McCain

Print Consultant/Designer Name

Consultant/Designer Signature

Signature Date

X

Add Second Consultant/Designer

**L. Signatures & Acknowledgements of Landowner(s)**

*This application must be signed by each Landowner listed on the property deed or by individuals with legal authority to sign on behalf of each Landowner. In order to insure compliance with the requirements of the regulations administered by the Department of Environmental Conservation, Drinking Water and Groundwater Protection Division, it may be necessary to visit the property. As this would involve a Department employee entering private property, we request your approval to do so.*

If we do visit your property, do you have any special instructions?

*"By signing this application, I certify that I am a landowner listed on the property deed or that I have the legal authority to sign on behalf of the landowner. I understand that by signing this application I am granting permission for the Department employees to enter the property, during normal business hours, to insure compliance of the property with the applicable rules of the Department.*

*I also understand that I am not allowed to commence any site work or construction on this project without written approval from the Department of Environmental Conservation.*

*If my project utilizes an Innovative/Alternative System or Product, I have received a copy of the Drinking Water & Groundwater Protection Division's approval letter and agree to abide by the conditions of the approval.*

*I also certify that to the best of my knowledge and belief the information submitted above is true, accurate and complete."*

Denise Kessler  
Print Landowner Name

*Denise Kessler*  
Landowner Signature

2/10/18  
Signature Date

Thomas Kessler  
Print Landowner Name

*Thomas F. Kessler*  
Landowner Signature

2/10/18  
Signature Date

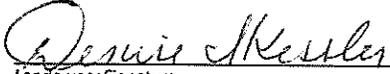
Add Landowner Signature Block

Department of Environmental Conservation  
Wastewater System & Potable Water Supply Permit Application

**ANR Form 5: Certification Statement for Wastewater System & Potable Water Supply Permits when there is no Required Notification of Overshadowed Property Owner(s)**

A person submitting an application to the Secretary for a Wastewater System and Potable Water Supply Permit shall use this statement whenever overshadowing notification of affected landowners is not required (see guidance and instructions for examples).

**Note:** When the property subject to the permit application is owned by more than one person, only one of the landowners must sign this certification statement even though all landowners must sign the permit application itself.

Landowner Certification		
<i>I hereby certify that "overshadowing" notification is not required either because there is an exemption to the notification requirement or there are no landowners whose property may be affected by the proposed water and wastewater systems.</i>		
 Landowner Signature	Denise Kessler Print Landowner Name	<u>2/10/18</u> Certification Date
1687 Church Hill Road Property Address or Property Tax ID#		



Denis Kessler  
585 Greenbush Road 100725  
North Ferrisburg, VT 05473

PROJECT: 1687 Churh Hill Rd Charlotte  
WORK ORDER: **1709-21718**  
DATE RECEIVED: September 13, 2017  
DATE REPORTED: September 26, 2017  
SAMPLER: Lane Kessler

VTP

### 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 Lebanon, NH 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

[www.endynelabs.com](http://www.endynelabs.com)



160 James Brown Dr., Williston, VT 05495  
Ph 802-879-4333 Fax 802-879-7103

56 Etna Road, Lebanon, NH 03766  
Ph 603-678-4891 Fax 603-678-4893



**Laboratory Report**

DATE REPORTED: 09/26/2017

CLIENT: Denis Kessler  
 PROJECT: 1687 Churh Hill Rd Charlotte

WORK ORDER: 1709-21718  
 DATE RECEIVED 09/13/2017

001	Site: Kitchen		Date Sampled: 9/13/17		Time: 10:50				
Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.		
Total Coliform	2.0	MPN/100mls	SM20 9223B(97)	9/13/17 14:55	W CM	A	AN1		
e. coli	< 1.0	MPN/100mls	SM20 9223B(04)	9/13/17 14:55	W CM	A	AN1		

002	Site: Kitchen		Date Sampled: 9/13/17		Time: 10:50				
Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.		
Chloride	2.4	mg/L	EPA 300.0	9/13/17	W CM	A			
Nitrate as N	< 0.020	mg/L	EPA 300.0	9/13/17 18:39	W CM	A			
Nitrite as N	< 0.020	mg/L	EPA 300.0	9/13/17 18:39	W CM	A			
Odor	4	TON @ 60C	SM20 2150B (97)	9/15/17 11:11	W JSS	A	E		
pH	7.65	SU at 23.1C	SM 4500-H B.(97)	9/15/17 16:53	W BDB	U			
Arsenic, Total	< 0.0010	mg/L	EPA 200.9	9/21/17	W FAA	A			
Iron, Total	0.27	mg/L	EPA 200.7	9/25/17	W MGT	A			
Manganese, Total	< 0.010	mg/L	EPA 200.7	9/25/17	W MGT	A			
Sodium, Total	44	mg/L	EPA 200.7	9/25/17	W MGT	A			

003	Site: Kitchen		Date Sampled: 9/13/17		Time: 10:50				
Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.		
Uranium	< 1	ug/L	EPA 200.8	9/18/17	SWSUB	A	SPG		

**Laboratory Report**

DATE REPORTED: 09/26/2017

CLIENT: Denis Kessler  
 PROJECT: 1687 Churh Hill Rd Charlotte

WORK ORDER: **1709-21718**  
 DATE RECEIVED 09/13/2017

Report Summary of Qualifiers and Notes

Samples received in this project required pH. The EPA hold time for this analysis is 15 minutes and should be performed at the time of collection. Analysis was performed as soon as possible upon arrival at the laboratory.

Listed below are EPA Maximum Contaminant Levels (MCL) for commonly tested parameters. Exceedence of Primary Contaminant MCLs is deemed a significant health risk. Secondary Contaminant MCLs are standards that may have cosmetic or aesthetic concerns.

Primary Contaminant	MCL
Total Coliform	"Absent" 100mL or "< 1" MPN/100mL
e.coli	"Absent" 100mL or "< 1" MPN/100mL
Nitrate	less than 10 mg/L
Nitrite	less than 1.0 mg/L
Arsenic	less than 0.010 mg/L
Uranium	less than 0.020 mg/L (VT DEC Water Supply Standard)

Secondary Contaminant	MCL
Odor	less than 3 T.O.N. *
pH	between 6.5-8.5
Iron	less than 0.30 mg/L
Manganese	less than 0.05 mg/L
Sodium	less than 250 mg/L
Chloride	less than 250 mg/L

\* Threshold Odor Number

AN1: Please Note our coliform sample bottles have recently changed. EPA requirements for this analysis specify one inch of head space above the water level in the bottle to allow for adequate mixing of the sample prior to analysis. The water level should not be above the shoulder into the neck of the bottle (over the 120 mL line). Future accreditation criteria may require the analytical laboratory to reject any bacteria samples submitted in containers without sufficient head space.

O: Analysts describe the Odor as sulfur.

E: Sample was analyzed past Method specified holding time.

SPG: Analysis performed by subcontracted laboratory, Granite State. Results are presented here for your convenience. Refer to the complete subcontracted report, which has been appended to this report, for detailed information regarding this result.

# GRANITE STATE ANALYTICAL SERVICES, LLC

22 Manchester Road, Unit 2, Derry, NH 03038

Phone (800) 699-9920

(603) 432-3044

Fax (603) 434-4837

<http://www.granitestateanalytical.com/>

## CERTIFICATE OF ANALYSIS FOR DRINKING WATER

DATE PRINTED: 09/19/2017  
 CLIENT NAME: Endyne, Inc.  
 CLIENT ADDRESS: 160 James Brown Dr.  
 Williston, VT 05495

SAMPLE ID#: 1709-01788-001  
 SAMPLED BY: Client-Customer

SAMPLE ADDRESS: 1709-21718 003  
 VT

LOCATION: Kitchen

DATE AND TIME COLLECTED: 09/13/2017 10:50AM  
 DATE AND TIME RECEIVED: 09/15/2017 1:24PM  
 ANALYSIS PACKAGE: Uranium-GSA  
 RECEIPT TEMPERATURE: 22.6° CELSIUS  
 CLIENT JOB #

Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

Test Description	Results	Test Units	Pass /Fail	DQ Flag	RL	Limit	Method	Analyst	Date-Time Analyzed
Uranium*	<1	ug/L			1	30 ug/L	EPA 200.8	SR-NH	09/18/17 10:39PM
Uranium	<0.67	pCi/L			0.67	20 pCi/L	EPA 200.8 Calc.	SR-NH	09/18/17 10:39PM

The results presented in this report relate to the samples listed above in the condition in which they were received.

RL: "Reporting limit" means the lowest level of an analyte that can be accurately recovered from the matrix of interest.

Data Qualifier (DQ) Flags: None

\* NELAP Accredited Analysis



*Donald A. D'Anjou*

Donald A. D'Anjou, Ph. D.  
 Laboratory Director

This analysis meets NELAP requirements except as noted.

State Certifications: | NH 1015 | MA M-NH003 | ME NH00003 | RI 101513 | VT VT-101507 |

This certificate shall not be reproduced, except in full, without the written approval of Granite State Analytical Services, LLC



**Residential Testing Chain of Custody**

1709-21718



1709-21718

Denis Kessler  
1687 Church Hill Rd Charlotte

Customer Name: Denise Kessler Email/Fax: denisekessler1@gmail.com  
 Address: 585 Greenbush Rd Phone Number: 802-598-6267  
 City: N. Ferrisburgh State: VT Zip: 05473 Sampler: Lane

Project Description or  
 911 Designated Sample Address: 1687 Church Hill Rd  
 City: Charlotte State: VT Zip: 05445

Source: Spring  Well  Surface Water  Unknown   
 Was the water chlorinated within the past two weeks?  Y /  N If so, Chlorine Residual? \_\_\_\_\_  
 First Draw Sample: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 ) (Lead-Copper Only ex: Kitchen.)  
 Flush Sample: Kitchen Date: 9/13/17 Time: 10:50  
 (Kitchen, bathroom, etc.)  
 Additional Sample: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

**Analyses Requested (Please circle) Parameters available by group or individually.**

Metals samples must be preserved with acid for 24 hours prior to analysis

<b>Bacteriological</b> Total Coliform/e. coli \$22 HPC \$55	<b>Radiological</b> Gross Alpha* \$60 Uranium* \$50 Radium 226/228* \$175	<b>FHA/VA Kit \$75</b> Total Coliform / e. coli, Nitrate, Nitrite, First Draw Lead	<b>Kit C \$140</b> Arsenic, Chloride, Copper, Iron, Lead, Manganese, Sodium, Nitrate, Nitrite, Hardness, Uranium*, Fluoride
<b>Anions \$15-20/each</b> Nitrate, Nitrite, Fluoride, Chloride, Bromide, Sulfate, o-Phosphate	<b>Organics</b> VOC (EPA 524) \$125 Diesel Range Organics \$75 PCBs \$125 Pesticides \$150 Herbicides \$150	<b>Table A11-5 &amp; A11-7 \$175</b> Total Coliform / e. coli, Nitrate, Nitrite, Arsenic, Chloride, Iron, Manganese, Sodium, Odor, pH, Uranium*	<b>Water Conditioning Package \$65</b> Alkalinity, pH, Chloride, Sulfate, Calcium, Barium, Magnesium, Sodium, Potassium, Hardness
<b>Metals \$12-\$35/each</b> Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Molybdenum Potassium Nickel Selenium Silver Sodium Thallium Vanadium Zinc		<b>Common Health Risk \$120</b> Total Coliform / e. coli Nitrate, Nitrite, Fluoride, Arsenic, First Draw Lead, Gross Alpha*	<b>Common Aesthetics \$60</b> pH, Chloride, Hardness, Calcium, Magnesium, Sodium, Iron, Manganese
<b>Physical Properties</b> Alkalinity (no headspace), Conductivity, Langelier's Corrosivity, pH, TDS, Turbidity, UV Trans	<b>Other (please indicate)</b>	<b>Comprehensive Package \$200</b> Total Coliform / e. coli, pH, Conductivity, Total Hardness, Alkalinity, Chloride, Fluoride, Nitrate, Nitrite, Sulfate, Arsenic, Iron, Manganese, Lead (First Draw), Copper, Potassium, Sodium, Gross Alpha*	

\*Indicates parameter will be sub-contracted to an outside certified laboratory.

Relinquished By: Lane Kessler Date/Time: 9/13/17 - 11:30  
 Received By: Aileen Komey Date/Time: 9/13/17 @ 11:35  
 Temp Check: 6.2 on ice Delivered by: \_\_\_\_\_  
 Amt. Paid: 175.00 Cash \_\_\_\_\_ Check # \_\_\_\_\_ Credit Card 8807



Laboratory Report

Denise Kessler  
 585 Greenbush Road  
 North Ferrisburg, VT 05473  
 100725

PROJECT: 1687 Church Hill Road  
 WORK ORDER: **1801-02112**  
 DATE RECEIVED: January 30, 2018  
 DATE REPORTED: February 02, 2018  
 SAMPLER: Denise

VTP

- 001 Site: Kitchen Date Sampled: 1/30/18 Time: 8:55

Property Address (911): 1687 Church Hill Road Charlotte VT

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	Qualifiers
Total Coliform	< 1.0	MPN/100mls	SM20 9223B(97)	1/30/18 12:58	W AKJ	
e. coli	< 1.0	MPN/100mls	SM20 9223B(04)	1/30/18 12:58	W AKJ	

The Federal SDWA considers this water bacteriologically **Acceptable** for consumption.

EPA Coliform Acceptance Criteria MCL

Total Coliform < 1.0 MPN/100ml or Absent  
 e. coli < 1.0 MPN/100ml or Absent

The column heading "Lab" denotes the laboratory facility where the testing was performed. "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037. This analysis meets NELAC requirements except as noted. Test results are representative of the samples as they were received at the laboratory

Reviewed by:

Harry B. Locker, Ph.D.  
 Laboratory Director

www.endynelabs.com



160 James Brown Dr., Williston, VT 05495  
 Ph 802-879-4333 Fax 802-879-7103

56 Etna Road, Lebanon, NH 03766  
 Ph 603-678-4891 Fax 603-678-4893





1801-02112



Denise Kessler  
1687 Church Hill Road

**Residential Testing Chain of Custody**

Customer Name: Denise Kessler  
 Address: 585 Greenbush rd.  
 City: N. Ferrisburgh State: VT Zip: 05473

Email/Fax: denisekessler1@gmail.com  
 Phone Number: 802-598-6267  
 Sampler: D/Kessler

**Project Description or**

911 Designated Sample Address: 1687 Church Hill rd  
 City: Charlotte State: VT Zip: 05445<sup>2</sup>

Source: Spring  Well  Surface Water  Unknown   
 Was the water chlorinated within the past two weeks?  Y  N

If so, Chlorine Residual? \_\_\_\_\_

First Draw Sample: \_\_\_\_\_  
 ) (Lead-Copper Only ex: Kitchen.)

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Flush Sample: (Kitchen, bathroom, etc.)

Date: 1/30/18 Time: 8:55

Additional Sample: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

**Analyses Requested (Please circle) Parameters available by group or individually.**

Metals samples must be preserved with acid for 24 hours prior to analysis

<b>Bacteriological</b> Total Coliform/e. coli <u>\$22</u> HPC <u>\$55</u>	<b>Radiological</b> Gross Alpha* \$60 Uranium* \$50 Radium 226/228* \$175	<b>FHA/VA Kit \$75</b> Total Coliform / e. coli, Nitrate, Nitrite, First Draw Lead	<b>Kit C \$140</b> Arsenic, Chloride, Copper, Iron, Lead, Manganese, Sodium, Nitrate, Nitrite, Hardness, Uranium*, Fluoride
<b>Anions \$15-20/each</b> Nitrate, Nitrite, Fluoride, Chloride, Bromide, Sulfate, o-Phosphate	<b>Organics</b> VOC (EPA 524) \$125 Diesel Range Organics \$75 PCBs \$125 Pesticides \$150 Herbicides \$150	<b>Table A11-5 &amp; A11-7 \$175</b> Total Coliform / e. coli, Nitrate, Nitrite, Arsenic, Chloride, Iron, Manganese, Sodium, Odor, pH, Uranium*	<b>Water Conditioning Package \$65</b> Alkalinity, pH, Chloride, Sulfate, Calcium, Barium, Magnesium, Sodium, Potassium, Hardness
<b>Metals \$12-\$35/each</b> Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Molybdenum Potassium Nickel Selenium Silver Sodium Thallium Vanadium Zinc	<b>Common Health Risk \$120</b> Total Coliform / e. coli Nitrate, Nitrite, Fluoride, Arsenic, First Draw Lead, Gross Alpha*	<b>Common Aesthetics \$60</b> pH, Chloride, Hardness, Calcium, Magnesium, Sodium, Iron, Manganese	
<b>Physical Properties</b> Alkalinity (no headspace), Conductivity, Langelier's Corrosivity, pH, TDS, Turbidity, UV Trans	<b>Other (please indicate)</b>	<b>Comprehensive Package \$200</b> Total Coliform / e. coli, pH, Conductivity, Total Hardness, Alkalinity, Chloride, Fluoride, Nitrate, Nitrite, Sulfate, Arsenic, Iron, Manganese, Lead (First Draw), Copper, Potassium, Sodium, Gross Alpha*	

<sup>2</sup>Indicates parameter will be sub-contracted to an outside certified laboratory.

Relinquished By: Denise Kessler

Date/Time: 1/30/18 @ 9:32

Received By: Alice Toomey

Date/Time: 1/30/18 @ 9:32

Temp Check: 8.9

Delivered by: Client

Amt. Paid: 22.00 Cash \_\_\_\_\_ Check # \_\_\_\_\_ Credit Card 1925