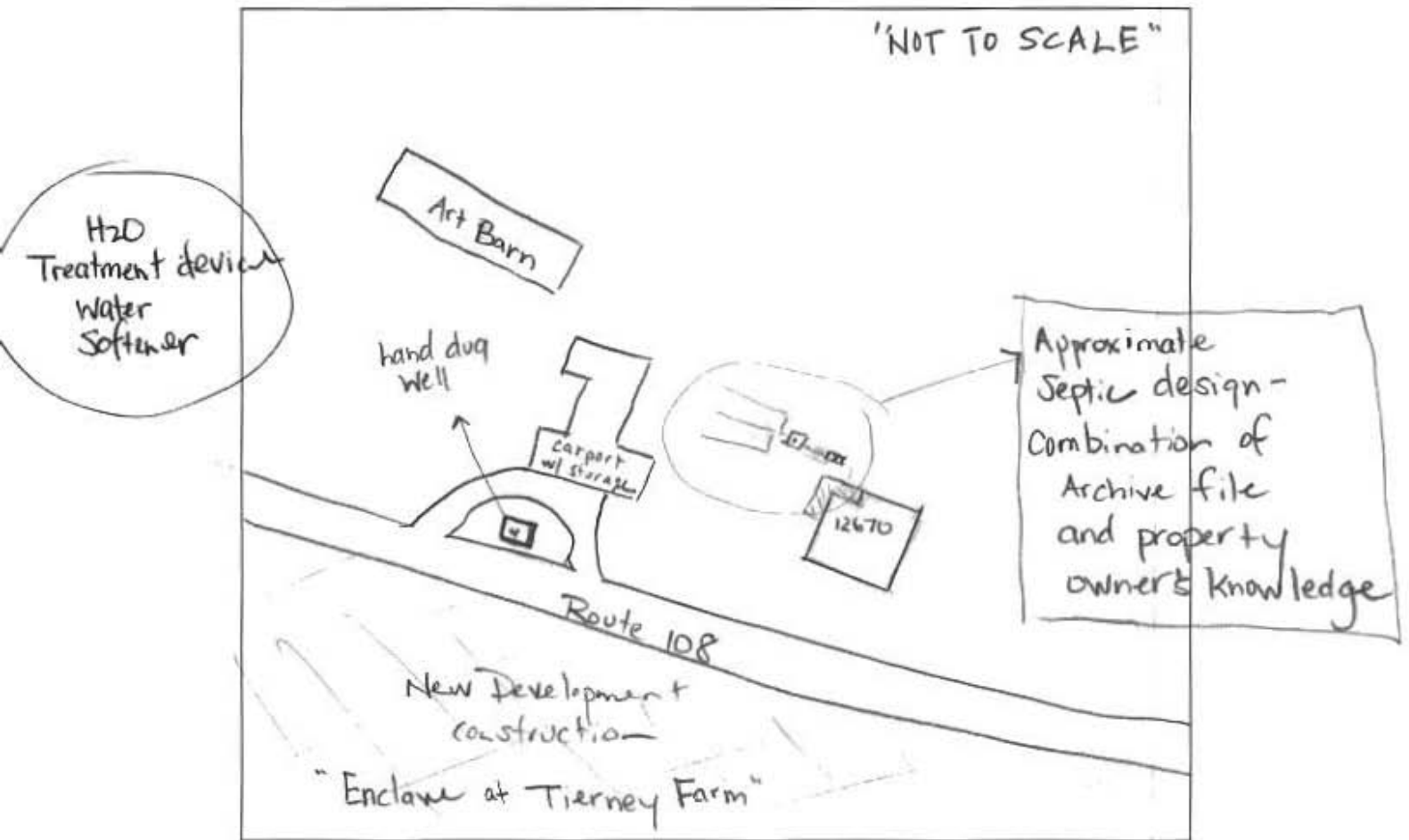


SITE INSPECTION SHEET

OWNER: Dennis & Lori Keilholtz PHONE #: 301-854-0220
ADDRESS: 12670 Route 108 CONTRACTOR: -
Clarksville, MD. 21029 WELL TAG #: no tag- hand dug well
SUBDIVISION: - LOT: - COUNTY #: -
PROPOSAL: (map. 34, Grid 18, Parcel 87)

LOCATION DIAGRAM



COMMENTS: Site inspection completed related to property
owner complaint regarding construction of new development
across Route 108.

Property owner states that septic system is a septic tank w/ a
drywell and 3 trenches.

DATE: 4/17/18 INSPECTOR: R. Rappaport

Note: owner wants to retain the hand dug well

Construction blasting engineer to set up seismograph @ well to measure impact of blasting



12670 Rt. 108 4/17/18 - R. Rappaport



Septic cleanouts

12670 Rt. 108 4/17/18 R. Rappaport



11-11

Wolf, Kevin

From: Davis, Michael J
Sent: Tuesday, April 17, 2018 8:00 AM
To: Wolf, Kevin
Subject: RE: wells

Send someone out to GPS the well and take some pictures. If it truly is a potable artesian well, blasting may affect it. Be sure to ask what the well is being used for and if there are other wells on the property.

From: Wolf, Kevin
Sent: Monday, April 16, 2018 3:47 PM
To: Davis, Michael J
Subject: FW: wells

Apparently this came in to me via email...

From: Jones, Derrick
Sent: Monday, April 16, 2018 12:34 PM
To: Wolf, Kevin
Cc: Williams, Jeffrey
Subject: wells

Kevin,

Mr. Dennis Keilholtz telephoned my office this morning regarding "rock blasting" that he said is occurring at the Enclave at River Hill development site in Clarksville MD. This project is located at the corner of Route 108 and Guilford Rd. in Clarksville.

He says that he resides directly across MD Route 108 from where this blasting is occurring (his address is 12670 Route 108). He said that the blasting was so severe that he felt his house vibrate and he is concerned about how the blasting may affect the water supply in his artisan well.

If possible, could you please reach out to Mr. Keilholtz to listen to the concerns he has about his well? I'm not sure if there is anything environmental health can help him with, but I told him that I would ask your office.

I have already been in touch with Beazer Homes (the builder at the Enclave at River Hill), and they will have the rock blasting contractor contact Mr. Keilholtz.

Mr. Keilholtz phone number is: 301-854-0220.

Thanks.

Derrick Jones
Dept. of Planning and Zoning
Division of Land Development
Phone: 410-313-4330

FILE INQUIRY NOTES

12670 Rt., 108

DATE	RESULTS OF REVIEW FOR FILE
4/17/18	Spoke w/ Mrs. Keilholtz via phone. Explained that Rock blasting across the street from house concerned may be affecting her well. She said the well is buried under driveway, hand dug. I told her we would come out to her property to assess the site in relation to the blast zone. (RM)
4/17/18	Site visit, met w/ homeowners, got permission to do water sample & GPS well (to be completed 4/18/18). (RM) Initial site inspection completed, see photos & site inspection sheet (RM)
4/18/18	bacteria & nitrate water samples taken & well was gps'd. (RM)
4/19/18	bacteria sample @ 1 coliform - must retest before well chlorination completed.
4/23/18	nitrate sample rec'd @ 7.21 mg N/L - satisfactory. (RM)
4/24/18	Bacteria retest completed (RM)
4/24/18	
4/27/18	Notified property owners that water supply is safe at this time. Explained that a hand dug well is the most unsanitary type of well. Advised the Keilholtz to bring well up to COMAR standards (RM)
5/1/18	Water letter sent w/ water sample originals

Maura J. Rossman, M.D., Health Officer

May 1, 2018

Mr. & Mrs. Keilholtz
12670 Route 108
Clarksville, MD 21029

RE: Water Sample Results

Dear Mr. & Mrs. Keilholtz,

Water sampling was done at your home on April 18 and April 24, 2018 in response to your concerns related to the new subdivision being built across Route 108 near your property.

I've reviewed the results with you on the phone and the samples drawn from the second floor bathroom produced results with low levels of coliform. The results from the first floor bathroom and the basement washtub were free of coliform and E.coli bacteria. Chemical results from April 18, 2018 indicate that the nitrate level was within the limits recommended by the Environmental Protection Agency. As I stated on the phone, please monitor your water quality and if anything changes feel free to contact me with questions or concerns.

Copies of the test results are enclosed for your records. If you have any further questions, you may contact me at 410-313-1781 or rrappaport@howardcountymd.gov.

Respectfully,



Ryan Rappaport, L.E.H.S.
Community Hygiene Program

Enclosure

Cc: file

SEND REPORT TO: R. Rappaport
 Howard County Health Department
 Bureau of Environmental Health
 8930 Stanford Blvd.
 PHONE NO.:
 Columbia, Maryland 21045

State of Maryland
 DHMH - Laboratories Administration
 DIVISION OF ENVIRONMENTAL SCIENCES
 1770 Ashland Avenue, Baltimore, MD 21205
 Robert A. Myers, Ph.D. Director

mailed: 4/19/18
 Faxed: 4/19/2018

MICROBIOLOGICAL ANALYSIS OF DRINKING WATER

Category Code: 4F Invoice No.: _____ Lab No.: 000602

FIELD RECORD

Sample Type:
 Community
 Transient
 Non-Transient
 Private
 Repeat Sample
 C.O.P
 Bottled Water
 OTHER:

Source Address: D. Keitholtz, 12670 Rt. 108, Clarksville, MD 21029
 Sampling Site: 2nd floor Bathroom Bottle No.: HC12670
 Ice: Yes No Treated: Yes No County: Howard
 Date Collected: 4/18/18 Time Collected: 9:00 am pm
 Collector Name: R. Rappaport Collector ID No.: 4655 RR
 Collector Tel. No.: 410-313-1781 PWS ID No.:

Test Requested:
 Quantitative: Colilert-QT P/A: Colilert
 Heterotrophic Plate Count SimPlate
 Multiple Tube Fermentation: MTF
 Quantitative: Enterolert
 Other:

County: 13 Plant No. Sampling Station
 pH: 8.0 Res.Cl: 6 Free: 0 Total:

Remarks: _____

LABORATORY RECORD (DHMH Use Only)

Test Method(s): (check all that apply)
 SM 9223 Colilert SM 9223 Colilert-QT SM 9223 Colilert-18
 SM 9221B (MTF) SM 9221B, F (MTF) SM 9223 Colisure
 SM 9215B (HPC) Enterolert ASTM D6503-99 SimPlate
 Other:

Temperature Control: 33 °C Thiosulfate: Present Absent Undetermined

P/A Test

100 mL Sample	(+/-)
Total Coliforms	
<i>E. coli</i>	
Enterococci	

Quantitative Test

Dilution: 1:10 1:100 1:1000

100 mL Sample	# Positive wells	MPN/100 mL
Total Coliforms	1	1
<i>E. coli</i>	0	<1
Enterococci		

Heterotrophic Plate Count
 Incubated 24, 48, 72hr @ 35°C

Plate A:
 Plate B:

CFU/mL
 MPN/mL

APR 18 '18 AM 2:01
 Received
 APR 18 '18 PM 3:35
 Placed in Incubator
 APR 19 '18 AM 10:23
 Results Read/Reported

Presumptive MTF Test

mL of Sample	10 mL				
Gas/24h					
Gas/48h					

Confirmed MTF Test

mL of Sample	10 mL				
Total Coliforms					
<i>E. coli</i>					

RECEIVED
 Average: _____ CFU/mL
 MPN/mL

APR 23 2018
 HOWARD COUNTY HEALTH DEPT.
 COMMUNITY HYGIENE PROGRAM

MTF Results

No. of Positive (+)	MPN/100 mL	Recorded Value

Specialized Testing Results:

Analyst: R. Rappaport 4-19-18 Reviewed by/Date: R. Jones 4/19/18
 Remarks: _____
 Laboratory: Central Lab (443) 681-3960 ESRL (410) 219-9005 WMRL (301) 759-5115

This report shall not be reproduced except in full without the written approval of the laboratory. Results only valid for sample received.



State of Maryland
Department of Health
Laboratories Administration
Division of Environmental Sciences
INORGANICS ANALYTICAL LABORATORY
1770 Ashland Avenue, Baltimore, Maryland 21205
Robert Myers, Ph.D., Director



Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH
8930 STANFORD BLVD
COLUMBIA, MD 21045

Lab Project NoE18003733 Date Coll. 04/18/2018 Date Received 04/18/2018 Submitted By: R. Rappaport

Field ID: HC 12670
Lab No.: E18003733001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Nitrate + Nitrite, as N	EPA 353.2	7.21	mg N/L	04/19/2018

Comments:

Approved by: *Shabana Aneli*

Approval date: 04/20/2018

*The following methods are included in our A2LA Scope of Accreditation: EPA150.1, EPA 353.2, EPA 375.2, SM4500F C, SM 4500-CN G & QCM-CN, QCM-CN.

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6190 and arrange for return or destruction.

8930 Stanford Blvd.
Columbia, Maryland 21045

MICROBIOLOGICAL ANALYSIS OF DRINKING WATER

Category Code: 4F Invoice No.: _____ Lab No.: 10075

FIELD RECORD

Sample Type:
 Community
 Transient
 Non-Transient
 Private
 Repeat Sample
 C.O.P
 Bottled Water
 OTHER:

Source Address: D. Keilholtze 12670 R+108 Clarksville MD 21029
 Sampling Site: 2nd floor bathroom ^{bath-tub} ~~toilet~~ Bottle No.: HC12670-1
 Ice: Yes No Treated: Yes No County: Howard
 Date Collected: 4/24/18 Time Collected: 8:00 am pm
 Collector Name: R. Reppert Collector ID No.: 465522
 Collector Tel. No.: 410-313-1781 PWS ID No.: _____

Test Requested:
 Quantitative: Colilert-QT P/A: Colilert
 Heterotrophic Plate Count SimPlate
 Multiple Tube Fermentation: MTF
 Quantitative: Enterolert
 Other: _____

County: 13 Plant No.: _____ Sampling Station: _____
 pH: 7.3 Res.Cl: 0 Free: 0 Total: _____

Remarks: _____

LABORATORY RECORD (DHMH Use Only)

Test Method(s): (check all that apply)
 SM 9223 Colilert SM 9223 Colilert-QT SM 9223 Colilert-18
 SM 9221B (MTF) SM 9221B, F (MTF) SM 9223 Colisure
 SM 9215B (HPC) Enterolert ASTM D6503-99 SimPlate
 Other: _____

Temperature Control: 15 4.3 °C
 Thiosulfate: Present Absent Undetermined

P/A Test

100 mL Sample	(+/-)
Total Coliforms	
<i>E. coli</i>	
Enterococci	

Quantitative Test
 Dilution: 1:10 1:100 1:1000

100 mL Sample	# Positive wells	MPN/100 mL
Total Coliforms	1	1
<i>E. coli</i>	0	< 1
Enterococci		

Heterotrophic Plate Count
 Incubated 24, 48, 72hr @ 35°C

Plate A: _____
 Plate B: _____

Average: APR 30 2018 CFU/mL
 MPN/mL

APR 24 '18 PM 1:37 KS
 Received KS
 APR 24 '18 PM 1:57
 Placed in Incubator FJ
 APR 25 '18 AM 8:07
 Results Read/Reported

Presumptive MTF Test

mL of Sample	10 mL
Gas/24h	
Gas/48h	

Confirmed MTF Test

mL of Sample	10 mL
Total Coliforms	
<i>E. coli</i>	

HOWARD COUNTY HEALTH DEPT.
 COMMUNITY HYGIENE PROGRAM

MTF Results

No. of Positive (+)	MPN/100 mL	Recorded Value

Specialized Testing Results: _____

Analyst: K. Jones Reviewed by/Date: J. Plager 4-25-18
 Remarks: _____ Fax Email Phone

Laboratory: Central Lab (443) 681-3960 ESRL (410) 219-9005 WMRL (301) 759-5115
 This report shall not be reproduced except in full without the written approval of the laboratory. Results only valid for sample received.

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, Maryland 21045
Category Code: 11

MICROBIOLOGICAL ANALYSIS OF DRINKING WATER

Results to R. Rappaport
308761

Invoice No.:

Lab No.:

FIELD RECORD

Sample Type:
 Community
 Transient
 Non-Transient
 Private
 Repeat Sample
 C.O.P
 Bottled Water
 OTHER:

Source Address: D. Keilholz 12670 Rt. 108 Clarksville MD 21029
 Sampling Site: 1st floor bathroom Bottle No.: HC-12670-2
 Ice: Yes No Treated: Yes No County: Howard
 Date Collected: 4/24/18 Time Collected: 8:00 am pm
 Collector Name: R. Rappaport Collector ID No.: 465520
 Collector Tel. No.: 410-313-1781 PWS ID No.:

Test Requested:
 Quantitative: Colilert-QT P/A: Colilert
 Heterotrophic Plate Count SimPlate
 Multiple Tube Fermentation: MTF
 Quantitative: Enterolert
 Other:

County: 13 Plant No. Sampling Station
 pH: 7.3 Res.Cl: 0 Free: 0 Total:

Remarks:

LABORATORY RECORD (DHMH Use Only)

Test Method(s): (check all that apply)
 SM 9223 Colilert SM 9223 Colilert-QT SM 9223 Colilert-18
 SM 9221B (MTF) SM 9221B, F (MTF) SM 9223 Colisure
 SM 9215B (HPC) Enterolert ASTM D6503-99 SimPlate
 Other:

Temperature Control: 15 Thiosulfate: Present
41.3 °C Absent Undetermined

P/A Test

100 mL Sample	(+/-)
Total Coliforms	
E. coli	
Enterococci	

Quantitative Test
 Dilution: 1:10 1:100 1:1000

100 mL Sample	# Positive wells	MPN/100 mL
Total Coliforms	<u>0</u>	<u><1</u>
E. coli	<u>0</u>	<u><1</u>
Enterococci	<u>0</u>	<u><1</u>

Heterotrophic Plate Count
 Incubated 24, 48, 72hr @ 35°C

Plate A:
 Plate B:

RECEIVED
 Average: CFU/mL
 MPN/mL
APR 30 2018

APR 24 '18 PM 1:37 KJ
 Received
 APR 24 '18 PM 1:57 KJ
 Placed in Incubator KJ
 APR 25 '18 AM 8:07

Results Read/Reported

Presumptive MTF Test
 mL of Sample 10 mL
 Gas/24h
 Gas/48h

Confirmed MTF Test
 mL of Sample 10 mL
 Total Coliforms
 E. coli

HOWARD COUNTY HEALTH DEPT.
 COMMUNITY HYGIENE PROGRAM

MTF Results

No. of Positive (+)	MPN/100 mL	Recorded Value

Specialized Testing Results:

Analyst: Rappaport Reviewed by/Date: L. Payne 4-25-18
 Remarks: Fax Email Phone

Laboratory: Central Lab (443) 681-3960 ESRL (410) 219-9005 WMRL (301) 759-5115

This report shall not be reproduced except in full without the written approval of the laboratory. Results only valid for sample received.

Howard County Health Department
Bureau of Environmental Health
8830 St. Annapolis Blvd.
Columbia, Maryland 21045
Category Code: 44

DIVISION OF ENVIRONMENTAL SCIENCES
1770 Ashland Avenue, Baltimore, MD 21205
Robert A. Myers, Ph.D. Director

MICROBIOLOGICAL ANALYSIS OF DRINKING WATER

Results to R. Rappaport
308750

Invoice No.:

Lab No.:

FIELD RECORD

- Sample Type:**
- Community
 - Transient
 - Non-Transient
 - Private
 - Repeat Sample
 - C.O.P
 - Bottled Water
 - OTHER:

Source Address: A Keilholtze 12670 R 108, Clarksville, MD 21029
 Sampling Site: basement laundry sink Bottle No.: HC12670-3
 Ice: Yes No Treated: Yes No County: Howard
 Date Collected: 4/24/18 Time Collected: 9:00 am pm
 Collector Name: R. Rappaport Collector ID No.: 4655RR
 Collector Tel. No.: 410-313-1781 PWS ID No.:

- Test Requested:**
- Quantitative: Colilert-QT P/A: Colilert
 - Heterotrophic Plate Count SimPlate
 - Multiple Tube Fermentation: MTF
 - Quantitative: Enterolert
 - Other:
- Remarks:

13 County	Plant No.	Sampling Station
7.3 pH	0 Res.Cl:	0 Free
	Total	

LABORATORY RECORD (DHMH Use Only)

- Test Method(s):** (check all that apply)
- SM 9223 Colilert SM 9223 Colilert-QT SM 9223 Colilert-18
 - SM 9221B (MTF) SM 9221B, F (MTF) SM 9223 Colisure
 - SM 9215B (HPC) Enterolert ASTM D6503-99 SimPlate
 - Other:

Temperature Control: 43 °C 15

Thiosulfate:

- Present
- Absent
- Undetermined

P/A Test

100 mL Sample	(+/-)
Total Coliforms	
<i>E. coli</i>	
Enterococci	

Quantitative Test

Dilution: 1:10 1:100 1:1000

100 mL Sample	# Positive wells	MPN/100 mL
Total Coliforms	0	< 1
<i>E. coli</i>	0	< 1
Enterococci		

Heterotrophic Plate Count

Incubated 24, 48, 72hr @ 35°C

Plate A:

Plate B:

Average: **RECEIVED** CFU/mL
MPN/mL

APR 24 '18 PM 1:37 KS

Received KS

APR 24 '18 PM 1:57

Placed in Incubator KS

APR 25 '18 PM 3:07

Results Read/Reported

Presumptive MTF Test

mL of Sample	10 mL
Gas/24h	
Gas/48h	

Confirmed MTF Test

mL of Sample	10 mL
Total Coliforms	
<i>E. coli</i>	

APR 30 2018

HOWARD COUNTY HEALTH DEPT
COMMUNITY HYGIENE PROGRAM

MTF Results

No. of Positive (+)	MPN/100 mL	Recorded Value

Specialized Testing Results:

Analyst: K. Jones Reviewed by/Date: R. P. [unclear] 4-25-18

Remarks: Fax Email Phone

Laboratory: Central Lab (443) 681-3960 ESRL (410) 219-9005 WMRL (301) 759-5115

This report shall not be reproduced except in full without the written approval of the laboratory. Results only valid for sample received.

12/5/75
file app'd.

PERMIT

22462
P 22862
A _____

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH

HOWARD COUNTY

ELLICOTT CITY

DISTRICT 5

DATE 11/6/75

INDEXED

Exp, Inc. IS PERMITTED TO INSTALL ALTER

ADDRESS 206 Old Padonia Road, Cockeysville, Maryland 21030 PHONE 666-1444

A SEWAGE DISPOSAL SYSTEM LOCATED AT _____

SUBDIVISION _____ ROAD 12670 Route 108 LOT _____

PROPERTY OWNER Douglas Keilholtz

ADDRESS 12670 Route 108, Clarkeville, Md.

SPECIFICATIONS REPAIR - 4 bedrooms

DRAIN FIELD _____ DEPTH _____ FEET, BOTTOM AREA _____ SQ. FT.

SEEPAGE PITS _____ ABSORBENT SIDE-WALL AREA _____ SQ. FT.

SEPTIC TANK CAPACITY 1,250 GALLONS

FOR GARBAGE GRINDER, INCREASE DISPOSAL AREA 22% & TANK CAPACITY 80%.

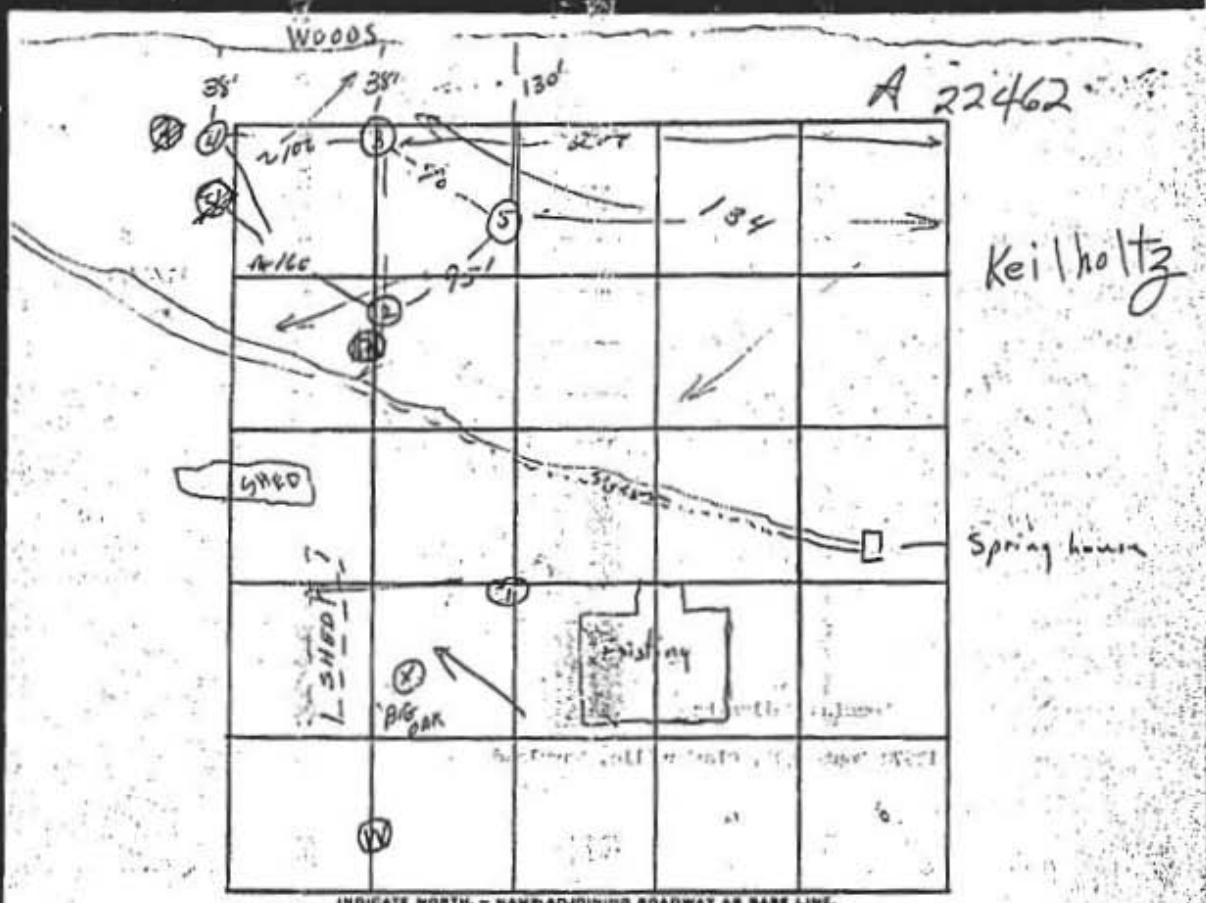
OTHER REPAIR - Sanitarian please write in specifications.

PLANS APPROVED BY P. F. Wine/Moorefield DATE 11/6/75

FILL SEPTIC TANK AND DISTRIBUTION BOX WITH WATER BEFORE CALLING FOR AN INSPECTION. COVER NO WORK UNTIL INSPECTED AND APPROVED.

NEITHER THE HOWARD COUNTY COMMISSIONERS NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

22462



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.
 12670 RT 188

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME	
			START	STOP	START	STOP		
11/25/75	1	7	1:50	1:55	1:55	2:03	8	
	1-A	12 1/2	1:16	1:22	1:22	1:34	12	
	2	6	2:22	2:24	2:24	2:27	3	
	2-A	12	2:55	2:56	2:56	2:58	2	
	3	5	2:31	2:33	2:33	2:37	4	
	* 3-A	12 1/2	2:41	NO PERC	NO PERC	3:00		
	4	4	3:03	3:05	3:05	3:10	5	
	4-A	12 1/2	3:09	3:11	3:11	3:13	2	
	3-B	10	3:17	3:19	3:19	3:26	7	
	5	13	Vertical; sim to 2					

L = 10 min
 115 #/BR
 + 20% = 23/4
 ↓
 140 #/BR

REMARKS
 1 - sandy sp 6 1/2 - 12 1/2
 2 - gravel type (flint) in sand after 6'; hard toward bottom
 3 - sandy fl. 5"
 TYPE OF SOIL 4 - similar 3'
 5 - sim to #2, not w much flint
 TESTED BY WWS
 ALSO PRESENT:



HOWARD COUNTY HEALTH DEPARTMENT

Joyce M. Boyd, M.D., County Health Officer

Reply to:

July 16, 1990

Mrs. Susan Kielholtz
12670 Route 108
Clarksville, MD 21029

RE: Water Sample Analyses

Dear Mrs. Kielholtz:

In response to concerns of petroleum odors and in order to better characterize the effectiveness of the neutralizer system, sampling of your well water supply was conducted May 29, 1990 for Volatile Organic Compounds (VOC) and several chemical parameters. Samples were collected at the well (pre-treatment) and from the kitchen sink (post-treatment).

Copies of all sample analyses are enclosed for your information.

Test results from both VOC samples did not reveal the presence of any VOC's to the limit of detection. These types of chemicals would be a likely source for the type of odor(s) reported. The absence of any detectable VOC's should rule this out as a source of odors and/or film on the water (at least at the time of sampling).

A comparison of pre and post-treatment chemical sample analysis have several parameters worth further discussion. Of particular interest (and the focal point of our conversations) is the elevated levels of sodium in both samples. As already discussed, explanations exist to justify these levels. However, levels in excess of 20 parts per million (ppm) are a potential concern with individuals with high blood pressure. Switching to bottled water (as you've already done) will eliminate the water source of sodium and hopefully, have a positive impact on the blood pressure concerns.

The pre-treatment test result for pH (6.5) is a typical value found in area groundwater. Generally, when in combination with soft water, a corrosive condition (in the presence of copper piping) will result. The presence of copper (.13 ppm) reflects on-going corrosion of your piping.

Bureau of Environmental Health

3525 Ellicott Mills Drive Ellicott City, Maryland 21043-4544

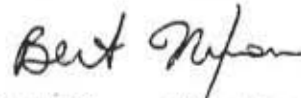
Director 461-9956 Water and Sewerage, Permits 461-9933 Community Environmental Health 461-9944
Technical Services 461-9955

The post-treatment pH value (7.2) though more in line with reducing water corrosivity, has not by itself eliminated the presence of copper (0.9ppm). Additionally, the apparent high loading rate of sodium from the neutralizer, and total lack of calcium in the post sample (<1.0 ppm) have not enhanced, but rather hindered the water chemistry balance. In particular, the lack of calcium has in effect reduced the likelihood of internal pipe scaling, which in concert with a more normal pH (such as 7.2) and appropriate hardness should be more effective in correcting the on-going corrosion (shown by a lack of copper in the water). Again, this should prove more successful than just pumping lots of sodium into the water to increase (normalize) pH.

In closing, it seems that increasing/supplementing the calcium and reducing the sodium input should impart some improved health benefits and hopefully, a more stable water chemistry. Keep in mind that each such system (i.e., overall water quality) is unique and it may take several rate adjustments and time to find a combination of the aforementioned parameters that will address both problems.

If you should have any questions, you may contact me at 461-9955 between 8:30 a.m. and 4:30 p.m.

Very truly yours,



Bert Nixon, Director
Technical Services Program

BN:vf

IMPORTANT MESSAGE

TO Bert

DATE 5/25/90 TIME 10:17 A.M.
P.M.


WHILE YOU WERE OUT

M Susan Keilholtz

OF 12670 Route 108
Clarksville, Mo.
Area Code & Exchange 854-0220

TELEPHONED	<input checked="" type="checkbox"/>	PLEASE CALL	<input checked="" type="checkbox"/>
CALLED TO SEE YOU	<input type="checkbox"/>	WILL CALL AGAIN	<input type="checkbox"/>
WANTS TO SEE YOU	<input type="checkbox"/>	URGENT	<input type="checkbox"/>
RETURNED YOUR CALL			

Message Waste water tested.
Has a farm and house
Water has petroleum
smell. It is 1/2
mile away from EXXON
Operator Station which is

 on other side of road.
Call first before

coming to take a
sample as she has
dogs.

Well very close to road
{ speckled - film on water
↑
(petroleum smell)

930 - 11 am -

Culligan (mentholizer)

Stan
glasses
pull in
drive
+ foot
down

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston St.
P.O. Box 2355, Baltimore, Maryland 21203
J. Michael Joseph, Ph.D., Director

Lab No. Date Received

CO11780 30 8

Do not write above this line.

WATER ANALYSIS

Bottle Number: H-KEIL-3 Name: KEILHOLTZ, SUSAN

Data Category Code:

County: HOWARD

Source of Sample: 12670 ROUTE 08 CLARKSVILLE
Street Town or City

Collector: B NIXON 4619955
(Include telephone Number)

Sample Types (Circle):
 Drinking Water
 Landfill
 Stream
 Other

Community (Public Treated)
 Non-Community (Pub. Untreated)
 Private
 Other

Source (Raw Water)
Distribution (Treated)
MCL

Emergency
 Routine
Recheck

Remarks: FROM STAND PIPE PUMP OFF PIT WELL (PRE TREATMENT)

13
County

Plant No.

Sampling Station

052990
Date Collected

Date & Time are Required for Valid Samples

1050
Time

Iced
 Acid

Type of Acid:

Field Data:
pH*

Chlorine Residual
Free

Total

Specific Conductance

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
pH*	00403	6.5	Arsenic	01002	
Alkalinity (Total)	00410	118	Barium	01007	
pH*, Ca CO ₂ SAT.	70311	116	Cadmium	01027	
Alkalinity, Ca CO ₂ SAT.	74023	83	Chromium	01034	
Hardness	00900	151	Lead	01051	
Ammonia-N	00608		Mercury	71900	
Nitrate-Nitrate N	00630	4.2	Selenium	01147	
Nitrite N	00615		Silver	01077	
MBAS	38260				
Chloride	00940	112	Aluminum	01105	
Fluoride	00951		Calcium	00916	37.9
Color*	00081		Copper	01042	0.13
Turbidity*	00076		Iron	01045	<0.05
Conductance*, SPEC	00095		Magnesium	00927	
Sulfate	00945		Manganese	01055	
Total Solids	00500		Nickel	01067	
Dissolved Solids	70300		Potassium	00937	
			Sodium	00929	321
			Zinc	01092	

*Results reported in units, all others in milligrams per liter (ppm)

Date Received: _____ Date Reported: 6/20/90 Chemist: DJ

DHMH 90-A 588

SUBMITTER'S COPY

50M

Date Received: _____ Date Reported: _____

DHMH 90-A 588

SUBMITTER'S COPY

50M

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston St.
P.O. Box 2355, Baltimore, Maryland 21203
J. Meisen Joseph, Ph.D., Director

Lab No. Date Received

CO 11781 30 8

WATER ANALYSIS

Do not write above this line.

Bottle Number: H-KEIL-4 Name: KEILHOLTZ, SUSAN

Data Category Code

County: HOWARD

Source of Sample: 12670 ROUTE 108 CLARKSVILLE
Street Town or City

Collector: B. NIXON 461-9955
(include telephone Number)

Sample Types (Circle):
 Drinking Water
 Landfill
 Stream
 Other

Community (Public Treated)
 Non-Community (Pub. Untreated)
 Private
 Other

Source (Raw Water)
 Distribution (Treated)
 MCL

Emergency
 Routine
 Recheck

Remarks: KITCHEN SINK (AFTER TREATMENT)

13

052990

Date & Time are Required for Valid Samples

1100

Type of Acid:

County

Plant No.

Sampling Station

Date Collected

Time

Iced

Acid

Field Data:

pH*

Chlorine Residual

Free

Total

Specific Conductance

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
<input checked="" type="checkbox"/> pH*	00403	7.2	Arsenic	01002	
<input checked="" type="checkbox"/> Alkalinity (Total)	00410	91	Barium	01007	
<input checked="" type="checkbox"/> pH*, Ca CO ₃ SAT.	70311	7.9	Cadmium	01027	
<input checked="" type="checkbox"/> Alkalinity, Ca CO ₃ SAT.	74023	145	Chromium	01034	
<input checked="" type="checkbox"/> Hardness	00900		Lead	01051	
Ammonia-N	00608		Mercury	71900	
Nitrate-Nitrate N	00630		Selenium	01147	
Nitrite N	00615		Silver	01077	
MBAS	38260				
<input checked="" type="checkbox"/> Chloride	00940	112	Aluminum	01105	
Fluoride	00951		<input checked="" type="checkbox"/> Calcium	00916	410
Color*	00081		<input checked="" type="checkbox"/> Copper	01042	909
Turbidity*	00076		Iron	01045	
Conductance*, SPEC	00095		Magnesium	00927	
Sulfate	00945		Manganese	01055	
Total Solids	00500		Nickel	01067	
Dissolved Solids	70300		Potassium	00937	
			<input checked="" type="checkbox"/> Sodium	00929	11303
			Zinc	01082	

*Results reported in units, all others in milligrams per liter (ppm)

Date Received

Date Reported

JUN 28 1990

Chemist

Asoka I. Katumaluwa

DHMH 90-A 5/88

SUBMITTER'S COPY

SOM

5/25/90

Spoke w/ Susan Kerhally @ sampling request. Well is located approx 10' from Route 103. Recently had hand pump installed to use for horses. Some water supply services the house. ~~Her~~

Her daughter has complained of odor from water (similar to kerosene) & has reportedly seen a film on water surface.

Additionally, have treatment system for copper piping (presumably a neutralizer) which uses sodium. Her husband now has reported high blood pressure.

Agreed to sample for VOC & chemical parameters.

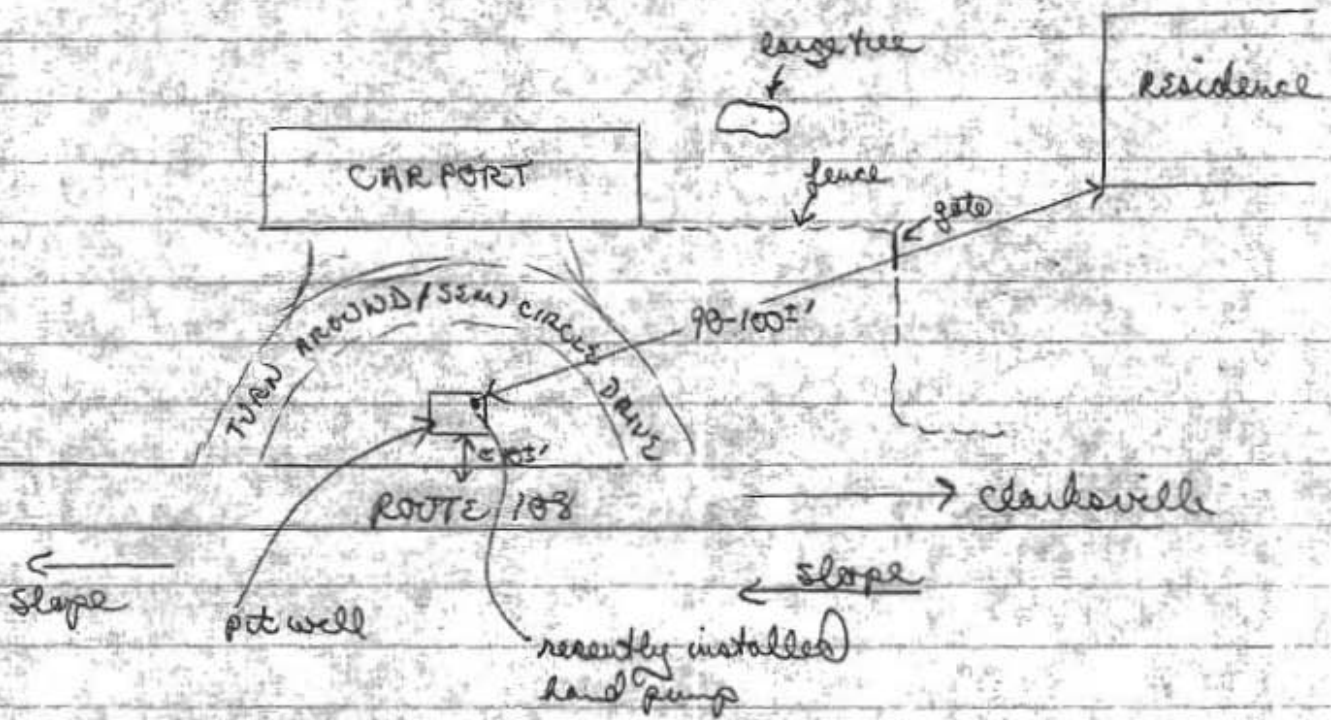
5/29/90 $\approx 10^{30}$ AM

Visited site for sampling. Well is indeed close to road. A concrete surface covering w/ wooden cap covers well opening. Well appears more like old, hand dug well - 3-4' round opening all the way down to the water ($\approx 25-30'$). Recently installed wooden planks directly over subsurface opening & pressure tank w/in pit area.

Recently (w/in past 2-3 months) a hand crank pump was installed through concrete surface pad. Water was run a few minutes for this & both a VOC & chemical sample were taken (pre-treatment for the chemical)

A second set were taken from Kitchen faucet
(post treatment)

Letter / follow up pending results



SEND REPORT TO:

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LAB NO. 90-1355

Laboratories Administration
201 W. Preston Street
P.O. Box 2355, Baltimore, Maryland 21203
J. Mehsen Joseph, Ph.D., Director

GAS CHROMATOGRAPHY-MASS SPECTROMETRY LABORATORY
SDWA ANALYSIS REPORT FORM

COLLECTOR: B NIXON 1105 5/29/90 (HOWARD) SAMPLE SOURCE: 12670 ROUTE 108 KITCHEN FAUCET
BOTTLE NUMBER: H-K511-7 PRESERVATION USED: 1+1 HCL
PWSID #: _____ SYSTEM NAME: KEILHOLTZ, SUSAN

CHAIN OF CUSTODY: FROM: B NIXON 1105 5/29/90 TO: B BANES 1300 5/29/90
FROM: B BANES 1300 5/29/90 TO: _____
FROM: _____ TO: _____

REMARKS: PLEASE RUN FULL SCAN; REPORTED PETROLEUM SPOR/FILM

CONTAMINANT	EPACONT ID	MCL	ACTUAL LEVEL (ppb)	CONTAMINANT	EPACONT ID	ACTUAL LEVEL (ppb)
TRIALOMETHANES						
Chloroform	2941		<1	Dibromomethane	2408	N.A.
Bromodichloromethane	2943			p-Xylene	2962	<1
Dibromochloromethane	2944			o-Xylene	2967	
Bromoform	2942			m-Xylene	2965	
TOTAL THMs	2950	100		1,1-Dichloropropene	2410	N.H.
REGULATED						
Benzene	2990	5	<1	trans-1,3-Dichloropropene	2224	
Carbon Tetrachloride	2982	5	N.D.	cis-1,3-Dichloropropene	2413	
p-Dichlorobenzene	2969	75	<1	1,1,2,2-Tetrachloroethane	2988	
1,1-Dichloroethene	2977	7		1,3-Dichloropropane	2412	
1,2-Dichloroethane	2980	5		2,2-Dichloropropane	2416	
1,1,1-Trichloroethane	2981	200		o-Chlorotoluene	2965	
Trichloroethene	2984	2		p-Chlorotoluene	2966	
Vinyl Chloride	2976	75	N.D.	Bromobenzene	2963	
UNREGULATED						
*trans-1,2-Dichloroethene	2979	100	<1	1,2,4-Trimethylbenzene	2418	
*cis-1,2-Dichloroethene	2380	70		1,2,4-Trichlorobenzene	2376	
*1,2-Dichlorobenzene	2968	600		1,2,3-Trichlorobenzene	2420	
*1,2-Dichloropropane	2983	5		n-Propylbenzene	2998	
*Tetrachloroethene	2987	5		n-Butylbenzene	2422	
*Chlorobenzene	2989	100		Naphthalene	2248	
*Toluene	2991	2000		Hexachlorobutadiene	2246	
*Ethylbenzene	2992	700		Isopropylbenzene	2994	
*Total Xylenes	2955	10000	<2	1,2,3-Trichloropropane	2414	
*Styrene	2996	5/100	NA	1,2-Dibromo-3-Chloropropane	2931	
Chloromethane	2210		N.D.	1,2,5-Trimethylbenzene	2424	
Bromomethane	2214			p-Isopropyltoluene	2030	
Dichlorodifluoromethane	2212			tert-Butylbenzene	2426	
Chloroethane	2216			sec-Butylbenzene	2428	
Trichlorofluoromethane	2218			Bromochloromethane	2430	
1,1-Dichloroethane	2978		<1	Dichloromethane	2964	
m-Dichlorobenzene	2967			1,1,2-Trichloroethane	2985	
Methylene Chloride	2964			1,1,1,2-Tetrachloroethane	2986	

* PROPOSED MCLs

DATE RECEIVED: 5-29-90 DATE ANALYZED: 5-30-90 CHEMIST: J. Collins

ppb — parts per billion (micrograms per liter)
MCL — maximum contaminant level
ND — not detected
NA — not analyzed

DHMH 4362 2/00

SUBMITTER'S COPY

SEND REPORT TO:

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LAB NO. 90-1355

Laboratories Administration
201 W. Preston Street
P.O. Box 2355, Baltimore, Maryland 21203
J. Mehsen Joseph, Ph.D., Director

GAS CHROMATOGRAPHY-MASS SPECTROMETRY LABORATORY
SDWA-ANALYSIS REPORT FORM

COLLECTOR: B NIXON 1045 5/29/90 SAMPLE SOURCE: 12670 ROUTE 108 PUMP OFF PIT WELL
 BOTTLE NUMBER: H-K21L-1 (HAWARD) PRESERVATION USED: 1+1 HCL
 PWSID #: _____ SYSTEM NAME: KELKOLTZ, SUSAN

CHAIN OF CUSTODY: FROM: B NIXON 1045 5/29/90 TO: B BAWES 1300 5/29/90
 FROM: B BAWES 1300 5/29/90 TO: _____
 FROM: _____ TO: _____

REMARKS: PLEASE RUN FULL SCAN; REPORTED PETROLEUM ODOR/FILM

CONTAMINANT	EPACONT ID	MCL	ACTUAL LEVEL (ppb)	CONTAMINANT	EPACONT ID	ACTUAL LEVEL (ppb)
TRIHALOMETHANES						
Chloroform	2941		<1	Dibromomethane	2408	NA
Bromodichloromethane	2943		↓	p-Xylene	2962	<1
Dibromochloromethane	2944		↓	o-Xylene	2997	↓
Bromoform	2942		↓	m-Xylene	2995	↓
TOTAL THMs	2950	100		1,1-Dichloropropane	2410	NA
REGULATED				trans-1,3-Dichloropropane	2224	
Benzene	2990	5	<1	cis-1,3-Dichloropropane	2413	
Carbon Tetrachloride	2982	5	ND	1,1,2,2-Tetrachloroethane	2988	
p-Dichlorobenzene	2969	75	<1	1,3-Dichloropropane	2412	
1,1-Dichloroethane	2977	7	↓	2,2-Dichloropropane	2416	
1,2-Dichloroethane	2980	5	↓	o-Chlorotoluene	2965	
1,1,1-Trichloroethane	2981	200	↓	p-Chlorotoluene	2966	
Trichloroethene	2984	2	↓	Bromobenzene	2993	
Vinyl Chloride	2976	75	ND	1,2,4-Trimethylbenzene	2418	
UNREGULATED				1,2,4-Trichlorobenzene	2378	
*trans-1,2-Dichloroethene	2979	100	<1	1,2,3-Trichlorobenzene	2420	
*cis-1,2-Dichloroethene	2380	70	↓	n-Propylbenzene	2998	
*1,2-Dichlorobenzene	2968	600	↓	n-Butylbenzene	2422	
*1,2-Dichloropropane	2983	5	↓	Naphthalene	2248	
*Tetrachloroethane	2987	5	↓	Hexachlorobutadiene	2246	
*Chlorobenzene	2989	100	↓	Isopropylbenzene	2994	
*Toluene	2991	2000	↓	1,2,3-Trichloropropane	2414	
*Ethylbenzene	2992	700	↓	1,2-Dibromo-3-Chloropropane	2931	
*Total Xylenes	2955	10000	<2	1,2,5-Trimethylbenzene	2434	
*Styrene	2996	5100	NA	p-Isopropyltoluene	2030	
Chloromethane	2210		ND	tert-Butylbenzene	2426	
Bromomethane	2214		↓	sec-Butylbenzene	2428	
Dichlorodifluoromethane	2212		↓	Bromochloromethane	2430	
Chloroethane	2216		↓	Dichloromethane	2964	
Trichlorofluoromethane	2218		↓	1,1,2-Trichloroethane	2985	
1,1-Dichloroethane	2978		<1	1,1,1,2-Tetrachloroethane	2986	↓
m-Dichlorobenzene	2967		↓			
Methylene Chloride	2964		↓			

* PROPOSED MCLs

DATE RECEIVED: 5-29-90 DATE ANALYZED: 5-30-90 CHEMIST: Rossier

ppb — parts per billion (micrograms per liter)
 MCL — maximum contaminant level
 ND — not detected
 NA — not analyzed

DHMH 4362 2/90

SUBMITTER'S COPY

7/2/90

Rec'd call from Mrs. Keilholtz inquiring @ sample results

3¹⁵ p

Returned her call & discussed latest sample results. Concentrated upon the Na+Cl values. Her husband last winter developed high blood pressure. These values are higher (32 pp - 112 pp) than may normally be expected. Additionally, she mentioned a spring that surfaces near her property that the county now salts heavily during the winter. This likely is the source of Na/Cl. She may consider using bottled water. Levels at the Tap may even be higher since they have a treatment system which utilizes Na⁺ for neutralizing the H₂O. Still awaiting those results.

7/12/90

Rec'd call. Told her I now had all the lab results & would be sending her a letter shortly along w/ the results