

**Appendix I** Property Owner Questionnaires, Field Sampling Forms,  
and Calibration Logs – March and June through July  
2013

**PROPERTY OWNER QUESTIONNAIRE**  
**Site Specific Sampling**  
**Green Valley / Monrovia**  
**Frederick County, Maryland**

Sampling Appointment Setup

Property Address 3740 Blueberry Court  
 Property Owner Christine Miller  
 Date owner called to set appointment 6/24/2013  
 Name of person calling to set appointment Christine Miller  
 Date and time of sampling appointment 7/11/2013 8:30am

Can be filled out by MDE/CGS staff prior to or during the sampling appointment. Confirm answers as necessary at the property.

How many wells do you have supplying your house? 1  
 What is the well tag number(s)? FR-72-0717  
 Age of the well 41 years  
 Casing depth of the well 20 ft  
 Total depth of the well 240 ft  
 Well driller Easterday  
 Well completion report available? (attach copy if yes) Yes attached  
 When was your well pump last replaced? within last 3 to 5 years

Do you have any concerns with the amount of water your well provides?      yes       no  
 Has your well ever run dry?      yes       no  
 Do you have any taste and/or odor problems with your water?      yes       no

How old is your house? 41 years  
 Has the plumbing ever been remodeled/replaced?      yes       no

If yes, when? \_\_\_\_\_  
 What type of piping do you currently have in your house? (circle one)       copper      pvc      other \_\_\_\_\_

What is the brand of the faucet in your kitchen? Moer  
 What material is the faucet made of? ?  
 Do you know how old the faucet is? approximately 3 years

Do you have a pressure tank?       yes      no  
 If yes, where is it located? basement - replaced 3 to 5 years  
 What is the size or model/maker of your pressure tank? Util. Tech 100psi #316549-000

Do you have a water sediment filter?       yes      no  
 Do you have U.V. light?      yes       no  
 Do you have a carbon filtration water system?      yes       no  
 Do you have any other treatment devices on your water system?       yes      no  
 If yes, what kind? acid neutralizer, sediment filter  
 Where are the treatment devices located? basement

**PROPERTY OWNER QUESTIONNAIRE  
 Site Specific Sampling  
 Green Valley / Monrovia  
 Frederick County, Maryland**

Do you have a spigot or tap to take a water sample near your pressure tank?

yes  no

If yes, where is it located?

Is there a drain for the flushed water to run to and is that drain operational?

yes  no

Do you have your water regularly sampled?

yes  no

If yes, when was the last sample collection?

GES

If yes, will you provide copies of the sample results?

yes  no

Have you made any recent changes to your water system based on sample results (e.g. installed a treatment device)?

yes  no

Other comments.

**Signatures**

To the best of my knowledge, the above information is accurate.

MDE and/or CGS Personnel

Name Jim Richmond Signature  Date 7-11-2013

Property Owner

Name Christel Miller Signature  Date 7/11/13

May we take pictures of your plumbing and faucets?

initial   yes  no

FREDERICK COUNTY DEPARTMENT OF HEALTH  
12 East Church Street  
Winchester Hall  
Frederick, Maryland

to be completed by well driller. Copy to be sent to the Frederick County Health Department within fifteen (15) days after completion of drilling.

HEALTH DEPARTMENT COMPLETION CERTIFICATE FOR PRIVATE WELLS

Date 7-6-75

Owner of Property Spring Court, Co. Driller J. J. Estabrook

Address Northampton, Md. Address 11001 Spring Hill

Exact location of property where well was drilled Side of Spring Court

If Subdivision: Name Green Valley Block No. F Lot No. 36

Permit No. FR-72-0717 (This is the number issued by the Department of Geology.)

Construction and performance characteristics of well

(1) Diameter of largest bit 10"

(2) Ground water encountered at \_\_\_\_\_ ft.

(3) At what depth was first vein of water encountered 40 ft. Cased off: Yes \_\_\_ No \_\_\_

(4) Total depth of well 240 ft. Standing water level in well below ground surface when not pumping 30 ft.

(5) Casing: Diameter of casing 6 Length of metal casing 20  
Are casing joints water tight? Yes  No \_\_\_ How were these joints sealed  
by welding \_\_\_\_\_  
by treaded sleeve \_\_\_  
Finished casing terminates 2 ft. above ground level 18 ft. below ground level.

(6) Well cement grouted: Yes  No \_\_\_ To what depth 18 ft.  
(if answer to No. 6 is NO an acceptable explanation in detail is necessary \_\_\_\_\_)

(7) Yield of well: 3 gal. per min. No. of hours pump operated at this rate during test 1 hours \_\_\_\_\_ minutes.

(8) Log of materials encountered during drilling \_\_\_\_\_

I hereby certify that the above information concerning this well is true and correct.

J. J. Estabrook  
Well Driller  
Dept. of Geology, Mines and Water Resource  
License No. 42

**FIELD SAMPLING FORM**  
**Former Green Valley Citgo**  
**Green Valley / Monrovia , Frederick County, MD 21770**  
**MDE Case No. 2005-0834FR**

Date: 7/11/2013 Address: 3740 Blueberry Court  
 Arrival Time: 8:30 Monrovia, MD 21770  
 Departure Time: 14:00 CGS Staff: Lara Bennett and Devin Glancey  
 Property Owner: Roay + Christine Miller  
 When was the last time water was used? This morning prior to sampling  
 Where and what was the purpose of recent water use? Kitchen Sink + bathrooms - fill coffee pot + buckets  
 Is a totalizer meter present? N/A - No Meter present  
 If yes, what is the totalizer meter reading prior to sampling? N/A

**Sample Locations and IDs**

Sample Type	Sample ID	Location	Sample Time	Check to indicate sample collection			Enter reading		
				Total Lead / Chromium	Dissolved Lead / Chromium	Hexavalent Chromium	pH	Temperature (°C)	ORP (mV)
Point of Use	3740 Blueberry	POU <sup>Kitchen sink</sup>	8:46	X	X	X	4.91	15.77	312.7
PT#1	3740 Blueberry	PT1	9:06	X	X	X	5.10	15.58	275.5
PT#2	3740 Blueberry	PT2	9:21	X	X	X	5.25	14.52	276.2
PT#3	3740 Blueberry	PT3	9:28	X	X	X	5.08	14.75	280.7
PT#4	3740 Blueberry	PT4	9:38	X	X	X	5.20	14.55	277.2
Duplicate	3740 Blueberry	PT1DB	00:00	X	X	X	5.10	15.58	275.5
Field Blank	3740 Blueberry	FB	11:15	X	X	X	5.48	16.24	248.2

Point of Use Purge

Purge time begin: 8:35  
 Purge time end: 8:45

First Pressure Tank Purge

Purge time begin: 9:16  
 Purge time end: 9:17  
 Total gallons purged: 6 gallons

Second Pressure Tank Purge

Purge time begin: 9:25  
 Purge time end: 9:27  
 Total gallons purged: 9 gallons

Third Pressure Tank Purge

Purge time begin: 9:35  
 Purge time end: 9:36  
 Total gallons purged: 10 gallons

pH/Temperature/ORP Meter Calibration

Provide notes on calibration including date, time, standards used and results of calibration.

pH Calibration: Calibration Checked at 14:00 on 7/10/13  
All calibration levels are correct. Checked by CDG  
 ORP Calibration: Calibrated on 7/8/13 by CDG

Well Tag Number: FR-72-0717 (Tag not present on well)  
 Well Location: located behind the house near the parking area toward the north

\* No sediment sample collected. Little to no sediment present in purge water.\*

**FIELD SAMPLING FORM**  
**Former Green Valley Citgo**  
**Green Valley / Monrovia , Frederick County, MD 21770**  
**MDE Case No. 2005-0834FR**

Well Purge:

Purge time begin:

9:55

Purge time end:

13:45

Total gallons purged:

~ 910 (Estimated)

Well Depth:

240 ft RG

Well Diameter:

6 inches

One Well Volume (gallons):

293.8

Three Well Volumes (gallons):

881.4

For 3 well volumes, at a rate of 4gpm,

pumping must run ~ 220 minutes.  
 Comments: Approx. 73-74 mins btwn samples

Time	Pumping Rate (Gallons/Minute)	Temperature (°C)	pH	ORP (mV)	Comments
9:55	3.95	—	—	—	Water is clear
10:05	3.09	—	—	—	Adjusted pumping rate to 4 gpm
10:10	4.11	—	—	—	
10:20	4.00	—	—	—	Steady Flow
10:30	4.00	—	—	—	
10:40	4.00	—	—	—	
10:50	3.90	—	—	—	Increased flow rate to 4.5gpm
11:00	3.84	—	—	—	
11:05	4.60	—	—	—	
11:09	4.50	15.81	5.16	262.2	3740 Blueberry - WP1 sampled
11:20	4.60	—	—	—	FB collected at 11:15
11:25	4.00	—	—	—	Adjusted pumping rate to slower rate
11:35	3.90	—	—	—	
11:45	4.00	—	—	—	steady flow
11:55	4.00	—	—	—	
12:05	4.00	—	—	—	
12:15	3.90	—	—	—	
12:25	3.50	—	—	—	Increased rate slightly
12:30	4.34	—	—	—	
12:32	4.30	15.11	5.07	242.7	3740 Blueberry - WP2 sampled
12:40	4.30	—	—	—	
12:50	4.00	—	—	—	
13:00	4.25	—	—	—	Flow rate is steady
13:10	4.06	—	—	—	
13:20	4.05	—	—	—	
13:30	4.00	—	—	—	
13:40	4.00	—	—	—	
13:45	4.00	15.25	5.09	227.5	Stopped Purge after ~3 well volumes have been purged

**PROPERTY OWNER QUESTIONNAIRE**  
**Site Specific Sampling**  
**Green Valley / Monrovia**  
**Frederick County, Maryland**

**Sampling Appointment Setup**

Property Address 3991 Farm Lane  
 Property Owner Todd & Shelly Ploski  
 Date owner called to set appointment 6/13/2013  
 Name of person calling to set appointment Shelly Ploski  
 Date and time of sampling appointment 6/27/2013 8:00

Can be filled out by FCHD staff prior to or during the sampling appointment. Can be filled out with FCHD records or through interview with the property owner, or both. Confirm answers as necessary at the property.

How many wells do you have supplying your house? 1 well  
 What is the well tag number(s)? FR-73-2663  
 Age of the well ~1964  
 Casing depth of the well Unknown  
 Total depth of the well 120  
 Well driller Unknown  
 Well completion report available? (attach copy if yes) Unknown  
 When was your well pump last replaced? Have not replaced - ~2 yrs ago replaced bladder (stopped working) property  
 Do you have any concerns with the amount of water your well provides? no  
 Has your well ever run dry? no  
 Do you have any taste and/or odor problems with your water? yes before you got a system yes no  
 How old is your house? 1964  
 Has the plumbing ever been remodeled/replaced? Added Carbon in 2009 yes no  
 If yes, when? Water softener was present when owners moved in 1994  
 What type of piping do you currently have in your house? (circle one) copper pvc other  
 What is the brand of the faucet in your kitchen? Unknown - see picture  
 What material is the faucet made of? Unknown - see picture  
 Do you know how old the faucet is? ~2 yrs old  
 Do you have a pressure tank? yes no  
 If yes, where is it located? It is located in basement  
 What is the size or model/maker of your pressure tank? 10 gallon Proflow Fiberglass Tank  
 Do you have a water sediment filter? yes no  
 Do you have U.V. light? yes no  
 Do you have a carbon filtration water system? 1 GAC tank yes no  
 Do you have any other treatment devices on your water system? yes no  
 If yes, what kind? Water softener & neutralizer  
 Where are the treatment devices located? Basement  
Added reverse osmosis last year (2012)

**PROPERTY OWNER QUESTIONNAIRE**  
**Site Specific Sampling**  
**Green Valley / Monrovia**  
**Frederick County, Maryland**

Do you have a spigot or tap to take a water sample near your pressure tank?

yes      no

If yes, where is it located?

At bottom of pressure tank

Is there a drain for the flushed water to run to and is that drain operational?

yes      no

in basement

Do you have a mop sink we can take a water sample from?

yes      no

~~Do you have a bathtub we can take a water sample from?~~

~~yes~~

~~no~~

Do you have your water regularly sampled?

yes

no

If yes, when was the last sample collection?

N/A

If yes, will you provide copies of the sample results?

yes

no

Have you made any recent changes to your water system based on sample results (e.g. installed a treatment device)?

yes      no

Had water sampled one time by owners

Other comments.

Added Reverse Osmosis System

**Signatures**

To the best of my knowledge, the above information is accurate.

CGS

Name Lara Bennett      Signature [Signature]      Date 6/22/2013

Property Owner

Name \_\_\_\_\_      Signature \_\_\_\_\_      Date \_\_\_\_\_

May we take pictures of your plumbing and faucets?

initial \_\_\_\_\_

yes      no

**FIELD SAMPLING FORM**  
**Former Green Valley Citgo**  
**Green Valley / Monrovia , Frederick County, MD 21770**  
**MDE Case No. 2005-0834FR**

Date: 6/22/13 Address: 3991 Farm Lane  
 Arrival Time: 7:55 Monrovia, MD  
 Departure Time: 10:30 CGS Staff: Lara Bennett & Matt Emery  
 Property Owner: Todd & Shelly Ploski  
 When was the last time water was used? Used to make coffee & brush teeth  
 Where and what was the purpose of recent water use? Kitchen sink & upstairs bathroom  
 Is a totalizer meter present? No meter present  
 If yes, what is the totalizer meter reading prior to sampling? N/A

Well Tag #: FR-73-2663 - Well is located on N side of house near carport

Sample Type	Sample ID	Location	Sample Time	Check to indicate sample collection				Enter reading		
				Total Lead / Chromium	Dissolved Lead / Chromium	Hexavalent Chromium	VOCs	pH	Temperature	ORP
PT #1	3991 Farm-PT1		8:25	X	X	X		4.39	16.00	224.4
PT #2	3991 Farm-PT2		8:36	X	X	X		5.40	14.64	233.0
PT #3	3991 Farm-PT3		8:47	X	X	X		5.53	15.09	297.1
PT #4	3991 Farm-PT4		8:53	X	X	X		5.65	14.76	304.2
Duplicate	3991 Farm-PT1DB		00:00	X	X	X		4.39	16.00	224.4
Field Blank	3991 Farm-FB		9:53	X	X	X		6.57	15.94	253.8

First Pressure Tank Purge  
 Purge time begin: 8:32  
 Purge time end: 8:34  
 Total gallons purged: 6 gallons

Second Pressure Tank Purge  
 Purge time begin: 8:40  
 Purge time end: 8:42  
 Total gallons purged: 7 gallons

Third Pressure Tank Purge  
 Purge time begin: 8:49  
 Purge time end: 8:50  
 Total gallons purged: 7 gallons

Point of Use Sample - Collected from Kitchen  
3991 Farm - POU  
 Purge start: 8:00  
 Purge stop: 8:10  
 Sampled at 8:12  
 Temp - 19.42°C  
 pH - 6.14  
 ORP - 302.2 mV

pH/Temperature/ORP Meter Calibration  
 Provide notes on calibration including date, time, standards used and results of calibration  
 pH Calibration: Calibrated on 6/21/13 - All parameters are correct  
 ORP Calibration: Calibration checked on 6/21/13 - Parameter within 0.5%

\*No sediment sample collected - not enough sediment present in purge water\*



**PROPERTY OWNER QUESTIONNAIRE**  
**Site Specific Sampling**  
**Green Valley / Monrovia**  
**Frederick County, Maryland**

Sampling Appointment Setup

Property Address 3998 Farm Lane  
 Property Owner Nicole Jones (301) 796-6062  
 Date owner called to set appointment 6/24/2013  
 Name of person calling to set appointment Nicole Jones  
 Date and time of sampling appointment 7/9/2013 8:30am

Can be filled out by MDE/CGS staff prior to or during the sampling appointment. Confirm answers as necessary at the property.

How many wells do you have supplying your house? 1  
 What is the well tag number(s)? FR-73-2623  
 Age of the well Installed on 7/23/1975  
 Casing depth of the well 6"  
 Total depth of the well 400 feet  
 Well driller \_\_\_\_\_  
 Well completion report available? (attach copy if yes) \_\_\_\_\_  
 When was your well pump last replaced? 1 mth ago

Do you have any concerns with the amount of water your well provides?      yes       no  
 Has your well ever run dry?      yes       no  
 Do you have any taste and/or odor problems with your water?      yes       no

How old is your house? 1975 or 1977  
 Has the plumbing ever been remodeled/replaced?      yes       no  
 If yes, when? \_\_\_\_\_

What type of piping do you currently have in your house? (circle one)       copper      pvc      other \_\_\_\_\_  
 What is the brand of the faucet in your kitchen? price pfister  
 What material is the faucet made of? plastic & metal

Do you have a pressure tank?       yes      no  
 If yes, where is it located? Basement

What is the size or model/maker of your pressure tank? Buron Group LLC 29710550

Do you have a water sediment filter?      yes      no  
 Do you have U.V. light?      yes       no  
 Do you have a carbon filtration water system?       yes      no  
 Do you have any other treatment devices on your water system?       yes      no

If yes, what kind? Acid Neutralizer/Softner  
 Where are the treatment devices located? Basement Laundry Room

Copper Piping  
Valley Water Treatment 717 485-0010

**PROPERTY OWNER QUESTIONNAIRE  
Site Specific Sampling  
Green Valley / Monrovia  
Frederick County, Maryland**

Do you have a spigot or tap to take a water sample near your pressure tank?

yes

no

If yes, where is it located?

Basement Laundry Room

Is there a drain for the flushed water to run to and is that drain operational?

yes

no

Do you have your water regularly sampled?

yes

no

If yes, when was the last sample collection?

If yes, will you provide copies of the sample results?

yes

no

Have you made any recent changes to your water system based on sample results (e.g. installed a treatment device)?

yes

no

Other comments.

Don't use the water, use bottled water.

**Signatures**

To the best of my knowledge, the above information is accurate.

MDE and/or CGS Personnel

Name Jim Richard

Signature [Signature]

Date 2/9/2013

Property Owner

Name Nicole Jones

Signature \_\_\_\_\_

Date 7/9/13

May we take pictures of your plumbing and faucets?

initial

nmj

yes

no

**FIELD SAMPLING FORM**  
**Former Green Valley Citgo**  
**Green Valley / Monrovia, Frederick County, MD 21770**  
**MDE Case No. 2005-0834FR**

Date: 7/9/2013 Address: 3998 Farm Lane  
 Arrival Time: 8:20 Monrovia, MD  
 Departure Time: 17:30 CGS Staff: Lara Bennett, Sean Daniel, Devin Glancey  
 Property Owner: Nicole Jones  
 When was the last time water was used? N/A  
 Where and what was the purpose of recent water use? N/A  
 Is a totalizer meter present? No meter present  
 If yes, what is the totalizer meter reading prior to sampling? N/A

**Sample Locations and IDs**

Sample Type	Sample ID	Location	Sample Time	Check to indicate sample collection			Enter reading		
				Total Lead / Chromium	Dissolved Lead / Chromium	Hexavalent Chromium	pH	Temperature (°C)	ORP (mV)
Point of Use	3998Farm-POU	Kitchen Sink	8:49	X	X	X	5.35	22.35	283.7
PT#1	3998Farm-PT1	Pressure Tank	9:05	X	X	X	3.80	17.81	365.1
PT#2	3998Farm-PT2	↓	9:27	X	X	X	5.27	15.87	309.0
PT#3	3998Farm-PT3		9:42	X	X	X	4.99	15.35	323.4
PT#4	3998Farm-PT4		9:53	X	X	X	4.89	15.19	335.1
Duplicate	3998Farm-PTIDF		Pressure Tank	00:00	X	X	X	3.80	17.81
Field Blank	3998Farm-FB	N/A	10:30	X	X	X	6.11	21.64	360.2

Point of Use Purge - Collected from Kitchen Sink Tap

Purge time begin: 8:38

Purge time end: 8:48

\* Carbon filter socket present at Kitchen Sink, but Ms. Jones does not use it.

First Pressure Tank Purge

Purge time begin: 9:20

Purge time end: 9:24

Total gallons purged: 13 gallons

Second Pressure Tank Purge

Purge time begin: 9:34

Purge time end: 9:37

Total gallons purged: 14 gallons

Third Pressure Tank Purge

Purge time begin: 9:47

Purge time end: 9:51

Total gallons purged: 14 gallons

pH/Temperature/ORP Meter Calibration

Provide notes on calibration including date, time, standards used and results of calibration.

pH Calibration: Calibrated 7/8/13 at 16:00 by CDG

ORP Calibration: Calibrated 7/8/13 at 16:00 by CDG

Well Tag Number: FR-73-2623

Well Location: Located in backyard in NW corner

→ Ms. Jones buys water to use for cooking \*

3998Farm-sed1 - Sediment  
 Sample collected at 10:00  
 from purge water

**FIELD SAMPLING FORM**  
**Former Green Valley Citgo**  
**Green Valley / Monrovia , Frederick County, MD 21770**  
**MDE Case No. 2005-0834FR**

Well Purge:  
Purge time begin: 10:07  
Purge time end: 11:05  
Total gallons purged: ~530 (Estimated)

Well Depth: 400 ft BG  
Well Diameter: 6 inches  
One Well Volume (gallons): 528.84  
Three Well Volumes (gallons): 1,586.52

Time	Pumping Rate (Gallons/Minute)	Temperature (° C)	pH	ORP (mV)	Comments
10:07	12.20	—	—	—	Flow rate is fast
10:14	11.54	—	—	—	Water is mostly clear
10:20	10.00	—	—	—	Flow rate is slowed by
10:22	9.88	—	—	—	closing PT valve slightly
10:25	9.38	—	—	—	Little sediment is visible
10:30	9.38	—	—	—	FB sample is collected
10:37	7.14	—	—	—	Flow rate is slowed by
10:40	8.11	—	—	—	closing PT valve again.
10:50	7.51	—	—	—	Flow rate is steady.
10:52	7.51	—	—	—	
11:05	0	—	—	—	Water suddenly stops; well has gone dry.
					Water is immediately shut off. CGS allows well to recharge for approx. 20mins.
11:25	0	—	—	—	Little water has filled the pressure tank so pump is shut off again for 15 additional minutes. PM is contacted to keep him informed of progress.
12:00	0	—	—	—	Pump is turned on again. Water does not fill PT. PM is called to access situation. Pump is shut off again for 30 more mins.
12:30	0	—	—	—	Pump is turned on again. No water is heard filling PT. No water drains from PT spiget. CGS personnel wait for PM to arrive in order to check electronics on pump.

**FIELD SAMPLING FORM**  
**Former Green Valley Citgo**  
**Green Valley / Monrovia, Frederick County, MD 21770**  
**MDE Case No. 2005-0834FR**

Field Notes:

12:55 PM (Sean Daniel) arrives on-site and access well electronic box and circuits with a volt reader. Pump appears to have the correct amount of power, PM discusses problem with home owner (Nicole Jones). Ms. Jones informs CGS that the well has gone dry before when they used to top off the pool. The well would usually recharge within an hour to an hour and a half. The pump in the well has been replaced twice since the Jones moved in 2002. The original pump was a 3/4 horsepower pump. The Jones replaced it with a 1 horsepower pump. The current well pump was installed on June 4<sup>th</sup>, 2013 (~approx. 1 month ago) after the previous pump burned out. The pump was set at 200 and some feet in the well. Pump is again shut off. Water Doctor is contacted for advise.

13:00/13:30/14:15 Pump is turned on and the PT is checked for water. Each time a small amount of water fills the PT but quickly stops. Each time the pump is shut off and the well is left to recharge. PM calls Water Doctor to make an emergency visit.

15:00 Pump is turned on again. A bit more water fills the PT. CGS is able to collect a sample (3998 Farm-WPI) at 15:05. Temperature - 19.74°C / ORP - 285.5mV / pH - 5.31

The valve after the PT is double checked to make sure it is closed and that the water collected for the sample is not backwash from the house. The pressure tank (PT) still will not fill. The pump is shut off until Water Doctor arrives.

15:15

16:30 Water Doctor arrives at the site. Ted from Water Doctor access the pump and the well. Ted notes that the pump should be working based on the volt readings. The decision is made to let the well recharge overnight and see if there is water in the AM. If there is still no water, Water Doctor will pull the pump in the morning.

17:30 All personnel off-site.

**FIELD SAMPLING FORM**  
**Former Green Valley Citgo (11712 Serene Court)**  
**Green Valley / Monrovia, Frederick County, MD 21770**  
**MDE Case No. 2005-0834FR**

Date: 3/12/13  
 Arrival Time: 10:00  
 Departure Time: 12:50  
 CGS Staff: Matt Emery, Sean Daniel, Lara Bennett  
 Property Owner: Benjamin Gray and Heather Gray  
 When was the last time water was used? All morning  
 Where and what was the purpose of recent water use? Kitchen sink, showers, etc.  
 Is a totalizer meter present? No totalizer meter present  
 If yes, what is the totalizer meter reading prior to sampling? N/A

**Sample Locations and IDs**

ORP/pH Meter: Oakton pH 310 Series

Sample Type	Sample ID	Location	Sample Time	Check to indicate sample collection				Enter reading		
				Total Lead / Chromium	Dissolved Lead / Chromium	Hexavalent Chromium	VOCs	pH	Temperature	ORP
Trip Blank	11712 Serene-TB	Office	8:15				X	N/A	N/A	N/A
First Draw	11712 Serene-PT1	Site	10:25	X	X	X	X	5.75	19.4	138.1
Second Draw	11712 Serene-PT2	Site	11:10	X	X	X	X	5.50	18.5	141.0
Third Draw	11712 Serene-PT3	Site	11:33	X	X	X	X	5.47	18.1	130.8
Fourth Draw	11712 Serene-PT4	Site	11:55	X	X	X	X	5.44	17.8	126.4
Duplicate	11712 Serene-PT1DB	Site	10:00	X	X	X	X	5.75	19.4	138.1
Field Blank	11712 Serene-FB	Site	12:22	X	X	X	X	8.59	16.5	73.8

**First Pressure Tank Purge**

Purge time begin: 10:59  
 Purge time end: 11:01  
 Total gallons purged: ~15 gallons

Before pump is shut off - pressure tank has a pressure of 39 PSI. Pump is shut off. Water is continuously clear during purge. Pressure tank was less than 20 PSI following initial purge.

**Second Pressure Tank Purge**

Purge time begin: 11:22  
 Purge time end: 11:27  
 Total gallons purged: ~12 gallons

Before pump is shut off, pressure tank has a pressure of 38 PSI. Pump is shut off. Purge water begins clear. Water is light gray/gray and contains black silt towards the end of purging. Pressure after purge is 5 PSI.

**Third Pressure Tank Purge**

Purge time begin: 11:46  
 Purge time end: 11:51  
 Total gallons purged: ~11.5-12 gallons

Before pump is shut off, pressure tank has a pressure of 38 PSI. Pump is shut off, purge water is clear in beginning. Water contains black colored silt towards the end of purging. Pressure after purge is 5 PSI.

**pH/Temperature/ORP Meter Calibration**

Provide notes on calibration including date, time, standards used and results of calibration

Pressure tank is restored to 40 PSI after tank is refilled.

pH Calibration: Meter was pre-calibrated by FEL. Field calibration check at 12:10 pm.  
 ORP Calibration: Meter was pre-calibrated by FEL. Field Calibration check at 12:10 pm.

pH calcheck: -10pH → read 10.12 pH    ORP-235.0 mV  
 -4pH → read 4.08pH  
 -7pH → read 7.11pH

FIELD SAMPLING FORM  
Former Green Valley Citgo (11712 Serene Court)  
Green Valley / Monrovia, Frederick County, MD 21770  
MDE Case No. 2005-0834FR

Additional Field Notes

- 10:00 CGS arrives on-site. Mr. Gray (property owner) shows CGS the circuit breaker with the well pump. Pressure tank is located in basement closest. The inline valve (located after the sediment filter) is shut off. The well pump electricity (breaker) is also shut off. Mr. Gray indicated that the water may become cloudy/silty after the pump has been shut-off for a while. CGS will check water condition prior to leaving.
- 10:25 Collected first draw sample from pressure tank (11712 Serene-PT1). Duplicate sample is collected. Dissolved Lead/Chromium are field filtered for each sample collected. Following sampling, a hose is connected to the spigot (located at the bottom of the pressure tank) and run to the adjacent bathroom shower drain for purging.
- 10:59 Began 1<sup>st</sup> purge of pressure tank. Water appears clear with no odors present. (Please see p. 1 for purge volumes, time and tank pressure readings).
- 11:01 All water is drained from pressure tank. The well pump is turned back on. \*Note - pressure tank gauge is half filled with water and is likely not working properly\*. The pressure tank re-fills.
- 11:10 Second sample is collected from the spigot at the bottom of the pressure tank.
- 11:22 After the 2nd sample is collected, CGS reconnects the hose and begins the 2nd purging of the pressure tank (once the power to the pump is again shut off.) Gray/black silt is noted in the purge water towards the end of purging.
- 11:27 The power is restored to the well pump. The pressure tank is refilled.
- 11:33 The third sample is collected from the pressure tank spigot. Power is again shut off.
- 11:46-11:51 The final (third) purge of the pressure tank is conducted. An increase in silt is noted. 11:55 The fourth sample is collected once the pressure tank is refilled.
- 12:15-12:30 Pressure tank is continuously purged with the pump running. A hose is attached to the spigot at the bottom of the pressure tank and run out through the back door. The well pump cycled at least 10 times during purging event.
- 12:22 While the pressure tank is cycling (to ensure the water is returned to service w/out sediment), the field blank sample is collected using lab-grade distilled water.
- Pressure Tank Information  
Pressure tank information: ProFlo manufactured by AMTROL  
James Mattee - Plumbing & Heating (301) 831-9626  
Date code - 36611645 / Model #: PF-32 / Date of manufacture 06/13/2005  
Max pressure 100 PSI /
- 12:30 The basement is cleaned up. The purging is concluded. Mr. Gray is shown the area around the pressure tank to insure it is cleaned to his liking. Mr. Gray is satisfied with the area.

FIELD SAMPLING FORM  
Former Green Valley Citgo (11712 Serene Court)  
Green Valley / Monrovia , Frederick County, MD 21770  
MDE Case No. 2005-0834FR

Additional Field Notes

The in-line valve is re-opened to return the water system to normal service. The basement bathroom sink and shower are run for a few minutes to check everything is working properly and to remove any remaining sediment from purging. All equipment is loaded into the truck.

12:50 All personnel off-site.



(FEI)

**FIELD ENVIRONMENTAL INSTRUMENTS, INC.**

**www.fieldenvironmental.com**

301 Brushton Avenue  
Suite A  
Pittsburgh PA 15221  
800-393-4009 Toll Free  
(412) 436-2600 Local  
(412) 436-2618 Fax

**pH/Con/Temp Meter Calibration Certificate**

Cal Standard	Lot #	Expiration	Pre Cal Reading	Acceptable Range
PH 4 @ 25 <sup>C</sup>	B319-15	11/19/2014	3.89	(3.85 - 4.15)
		Post-Cal	4.02	

Cal Standard	Lot #	Expiration	Pre Cal Reading	Acceptable Range
PH 7 @ 25 <sup>C</sup>	B314-14	11/14/2014	7.23	(6.85 - 7.15)
		Post-Cal	7.01	

Cal Standard	Lot #	Expiration	Pre Cal Reading	Acceptable Range
PH 10 @ 25 <sup>C</sup>	B296-17	10/23/2013	10.13	(9.85 - 10.15)
		Post-Cal	9.98	

Cal Standard	Lot #	Expiration	Reading umho/cm	Acceptable Range
Conductivity	B250-08	9/7/2014		(1394 - 1423) ▼
		Post-Cal		

Check Standard	Temp ©	Relative Reading	Acceptable Range
ORP	26.0	237.0	(+/- 20mV)

\*Solutions provided by LabChem (412-826-5230)

Model	Oakton pH/ORP 310 ▼
Cable Length	▼
S/N	
Barcode	U46882X
Order #	217857

Calibrated By Terrance Collington ▼

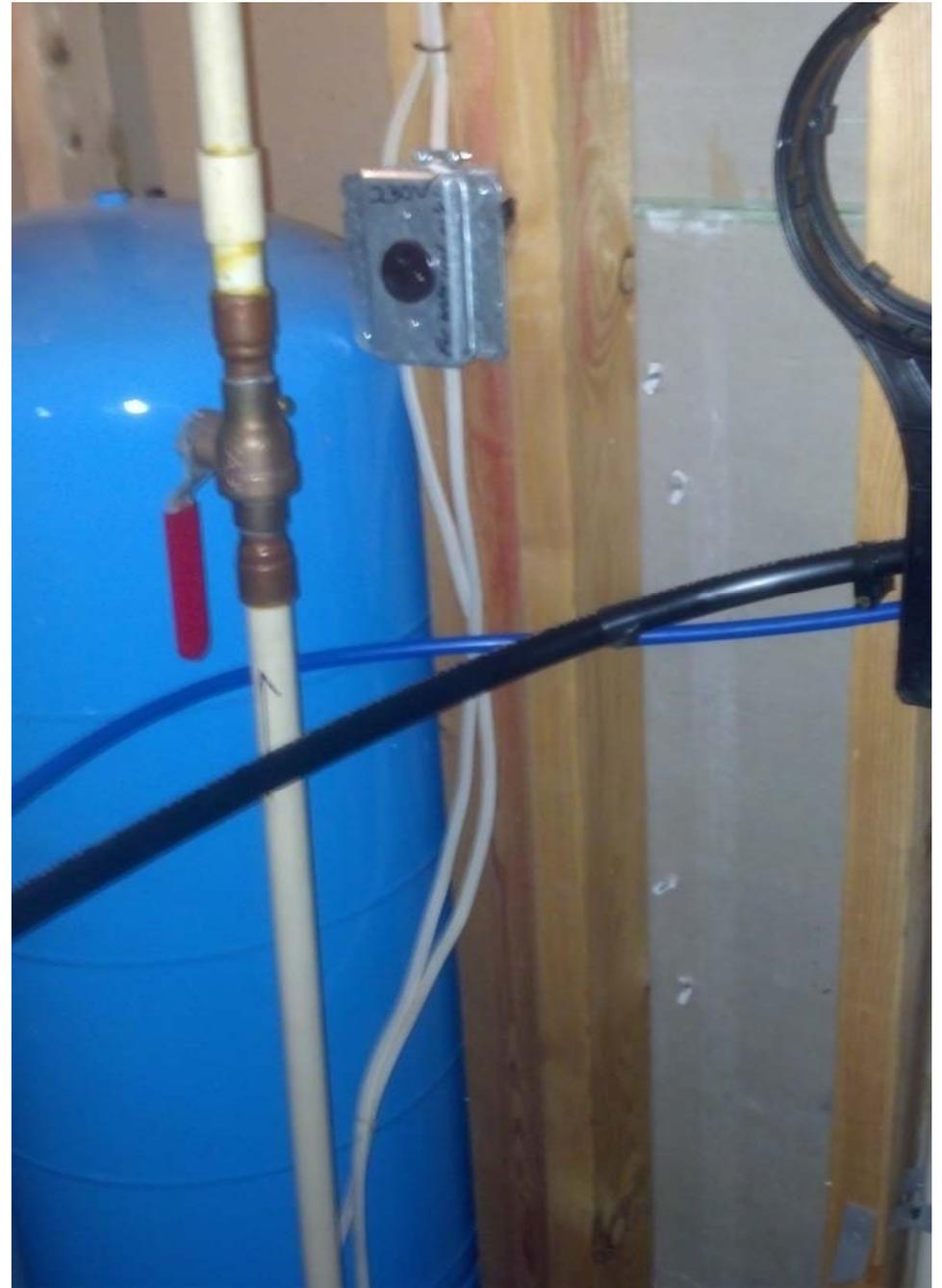
Date of Calibration 3/1/2013

All calibrations performed by FEI conform to manufacturer's specifications. Please report any issues within 24 hours of receiving equipment.

All calibration solutions used are traceable to NIST. Additional documentation is available upon request.



Shut-off valve behind pressure tank.

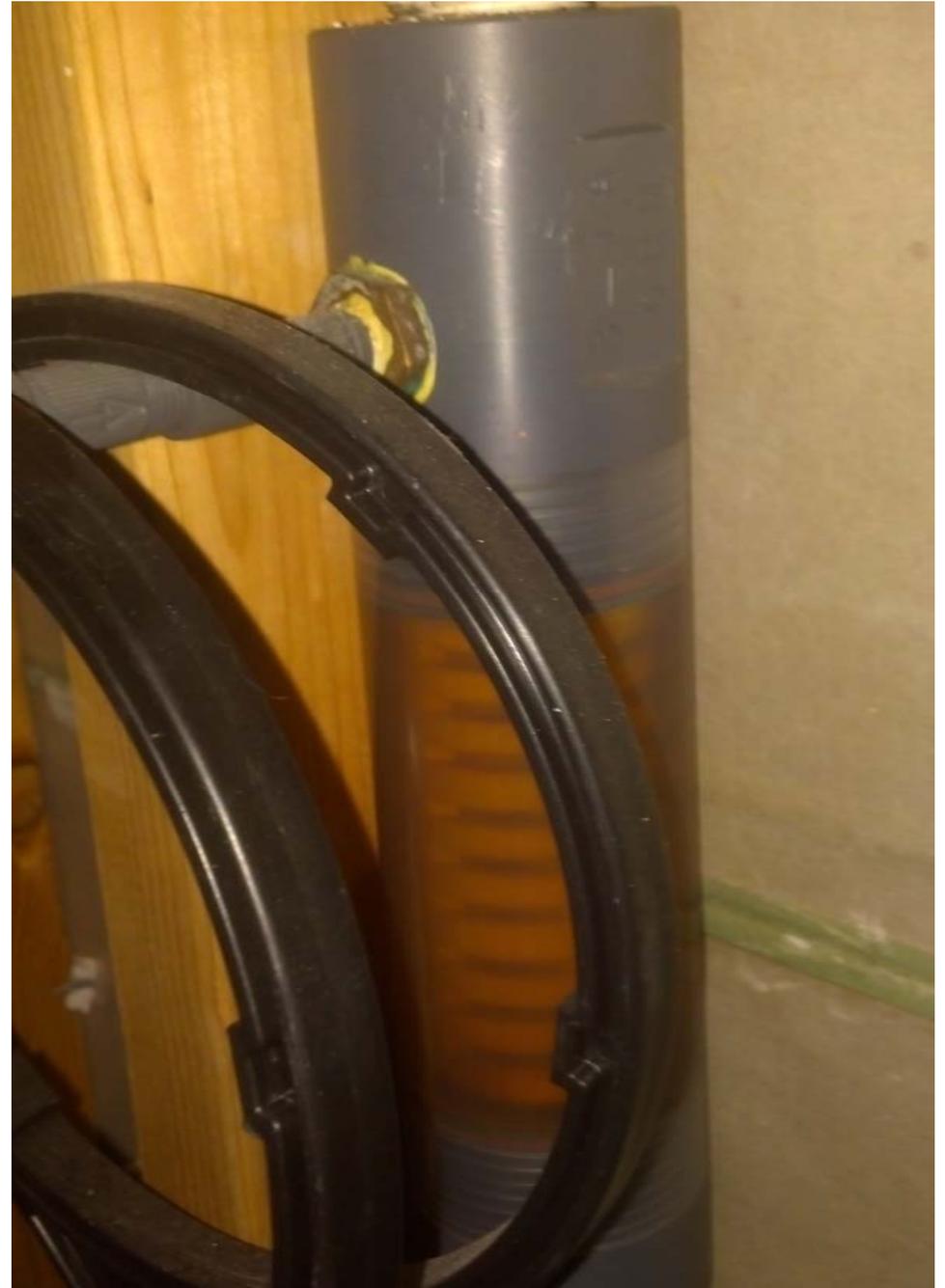


Rear of pressure tank.

Pipe from well emerges  
from wood framing here.



Inline strainer/filter (located prior to pressure tank)



Close-up of strainer/filter.



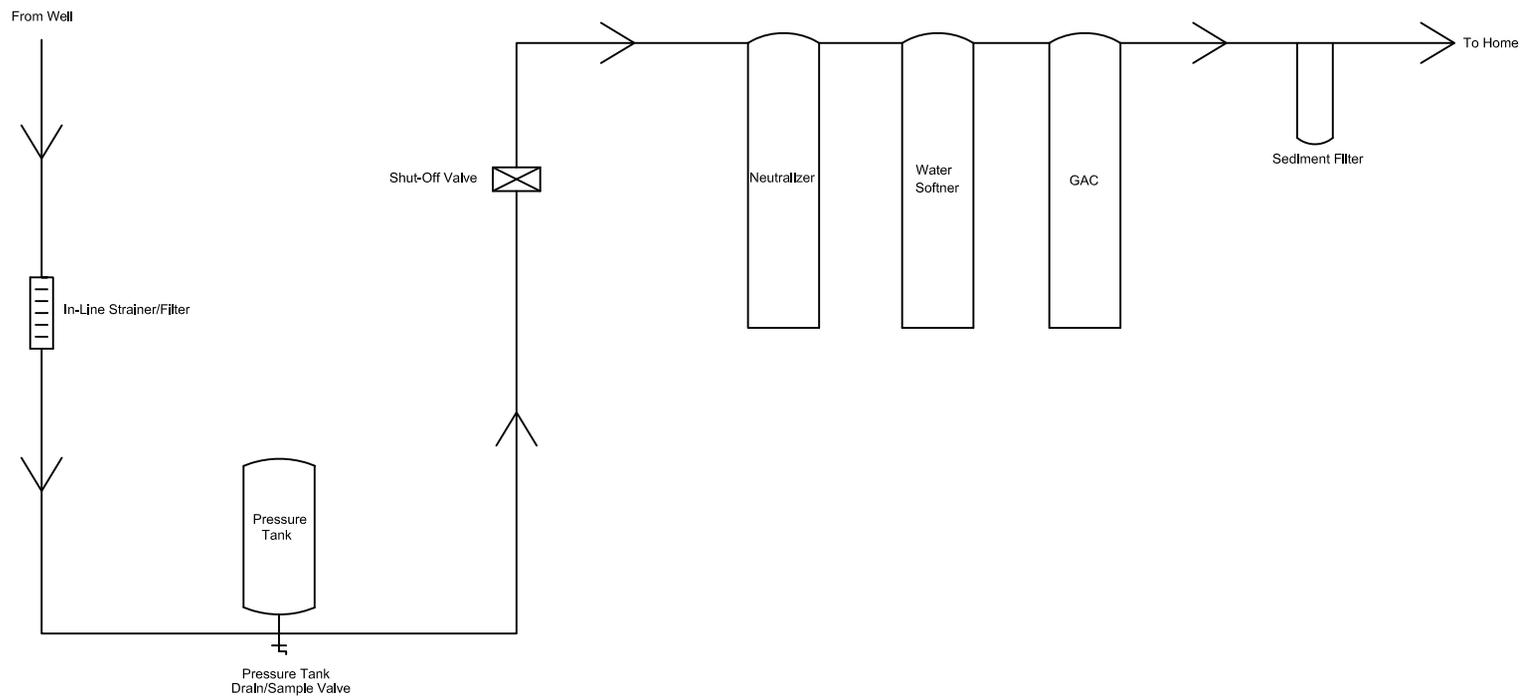
Sample collection from pressure tank drain.



Water from pressure tank drain cycle #2.



Sediment from pressure tank drain cycles #2 and #3



Drawn By:	Date:
Matt Emery	03/14/13
Job #:	Proj. Manager:
CG-12-0788.04	Sean Daniel



5405 Twin Knolls Road, Suite 1  
 Columbia, Md 21045  
 Phone (410) 740-1911  
 Fax (410) 740-3299

Plumbing Diagram  
 Monrovia BP / Former Green Valley Citgo (05-0834FR)  
 11712 Serene Ct.  
 Monrovia, MD

**PROPERTY OWNER QUESTIONNAIRE**  
**Site Specific Sampling**  
**Green Valley / Monrovia**  
**Frederick County, Maryland**

**Sampling Appointment Setup**

Property Address 11713 Serene Court  
 Property Owner Ann - Marie Luciano /  
Chris Hull  
 Date owner called to set appointment \_\_\_\_\_  
 Name of person calling to set appointment \_\_\_\_\_  
 Date and time of sampling appointment \_\_\_\_\_

Can be filled out by FCHD staff prior to or during the sampling appointment. Can be filled out with FCHD records or through interview with the property owner, or both. Confirm answers as necessary at the property.

How many wells do you have supplying your house? 1 (second well not used)  
 What is the well tag number(s)? \_\_\_\_\_  
 Age of the well \_\_\_\_\_  
 Casing depth of the well \_\_\_\_\_  
 Total depth of the well \_\_\_\_\_  
 Well driller \_\_\_\_\_  
 Well completion report available? (attach copy if yes) \_\_\_\_\_  
 When was your well pump last replaced? April 2012

Do you have any concerns with the amount of water your well provides?      yes       no  
 Has your well ever run dry?      yes       no  
 Do you have any taste and/or odor problems with your water?      yes       no

How old is your house? 1997  
 Has the plumbing ever been remodeled/replaced?      yes       no  
 If yes, when? \_\_\_\_\_

What type of piping do you currently have in your house? (circle one)      copper       pvc      other \_\_\_\_\_  
 What is the brand of the faucet in your kitchen? Kinetic water filter (reverse osmosis)

What material is the faucet made of? \_\_\_\_\_  
 Do you know how old the faucet is? October 2012 (8 mos. old)  
 Do you have a pressure tank?       yes      recently replaced (Mar-Apr 2013)  
 If yes, where is it located? basement

What is the size or model/maker of your pressure tank? 150 PSI well (vho) / Amtrol  
 Do you have a water sediment filter?       yes      no  
 Do you have U.V. light?      yes       no  
 Do you have a carbon filtration water system?      yes      no  
 Do you have any other treatment devices on your water system?       yes      no

If yes, what kind? yes, rain soft, reverse osmosis  
 Where are the treatment devices located? Rain soft - basement  
Reverse osmosis faucets at each sink

*Fiberglass Tank*

*Fiberglass*

**PROPERTY OWNER QUESTIONNAIRE**  
**Site Specific Sampling**  
**Green Valley / Monrovia**  
**Frederick County, Maryland**

Do you have a spigot or tap to take a water sample near your pressure tank?

If yes, where is it located?

yes  no  
after pressure tank

Is there a drain for the flushed water to run to and is that drain operational?

yes  no  
mop sink

Do you have a mop sink we can take a water sample from?

yes  no  
N/A

Do you have a bathtub we can take a water sample from?

yes  no  
N/A

Do you have your water regularly sampled?

If yes, when was the last sample collection?

yes  no  
September 2012

If yes, will you provide copies of the sample results?

yes  no  
already provided to Aniscilla Carroll

Have you made any recent changes to your water system based on sample results (e.g. installed a treatment device)?

I purchased from Martin Water a carbon filtration system + reverse osmosis filters to filter the water for the entire house at a cost of \$8,000 + \$1,500 for testing.

yes  no

Other comments:

**Signatures**

To the best of my knowledge, the above information is accurate.

**MDE**

Name Jim Richmond Signature \_\_\_\_\_ Date \_\_\_\_\_

Property Owner

Name Ann-Marie Luciano Signature [Signature] Date 6/21/13

May we take pictures of your plumbing and faucets? yes initial AM  yes  no

# SEPTIC SYSTEM SPECIFICATIONS

SEXTON CONTRACTORS

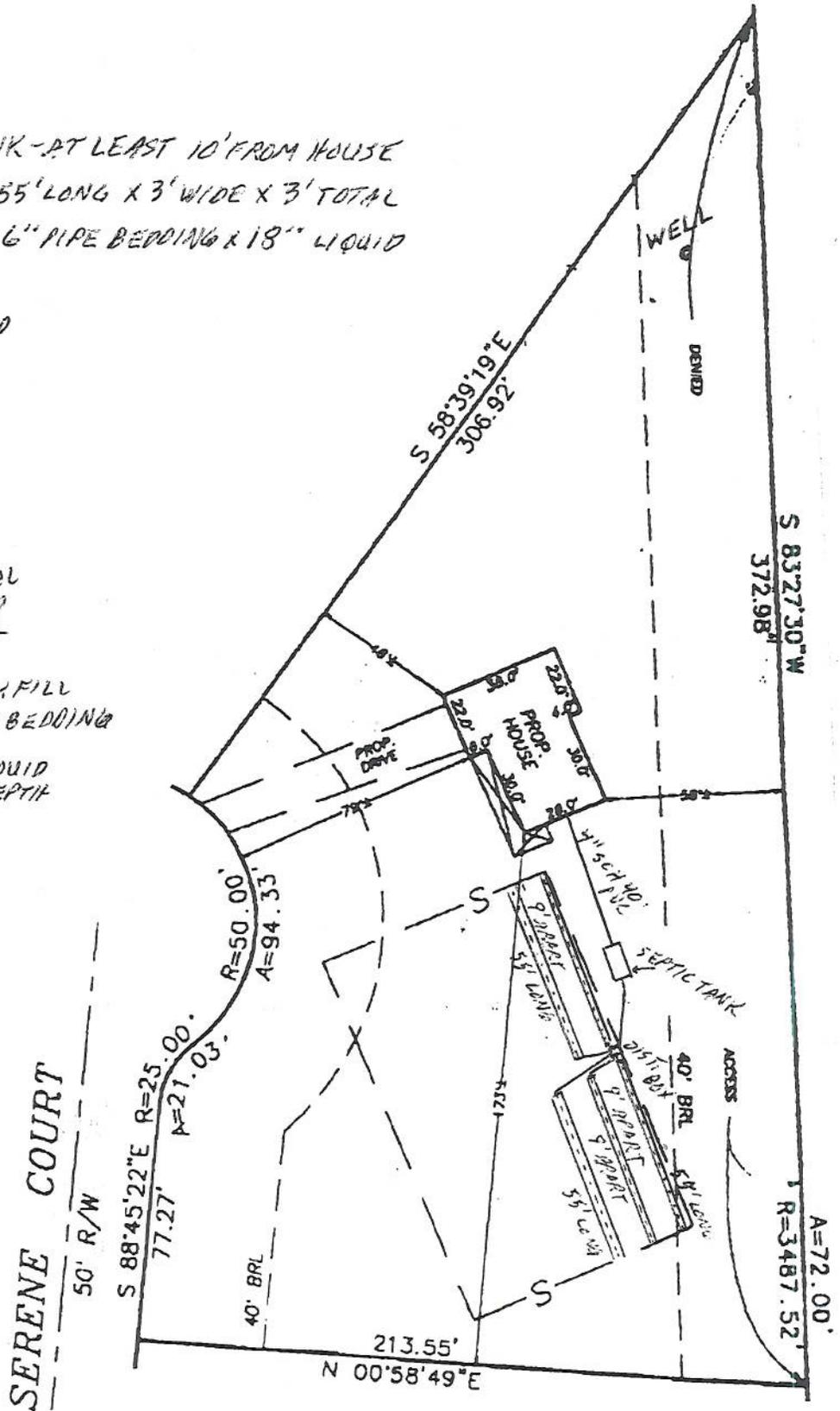
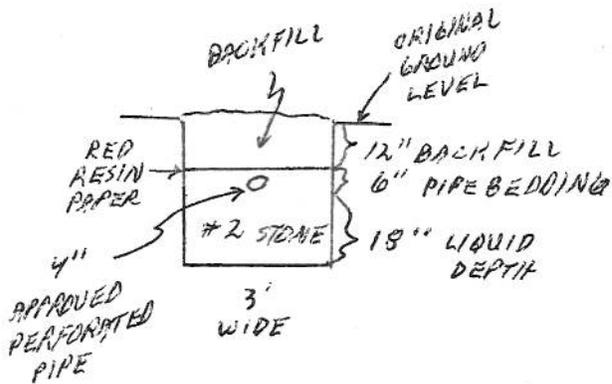
LOT 9 SECTION III TRANQUILITY

SERENE COURT

PERMIT B9701311

## REQUIREMENTS

- 1000 GALLON SEPTIC TANK - AT LEAST 10' FROM HOUSE
- 5 TRENCHES EACH TO BE 55' LONG X 3' WIDE X 3' TOTAL DEPTH (12" BACKFILL - 6" PIPE BEDDING X 18" LIQUID DEPTH) 9' APART
- DISTRIBUTION BOX REQUIRED

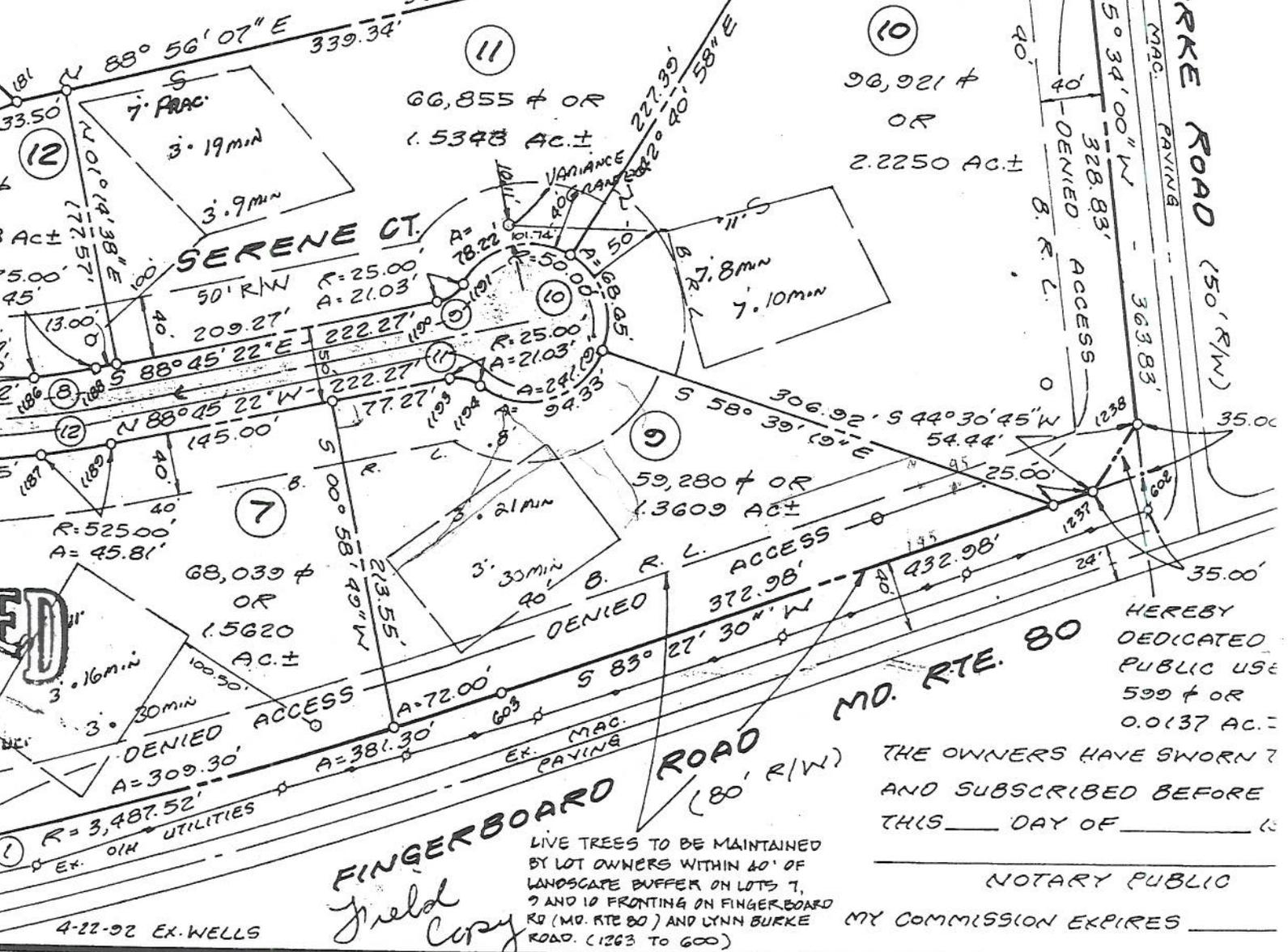


Well information on attached.

TRANQUILITY

LOT 7  
19 Pg. 38

EX. P.B. 31 Pg. 9  
SEPTIC



HEREBY  
DEDICATED  
PUBLIC USE  
599 ± OR  
0.0137 AC. ±

THE OWNERS HAVE SWORN  
AND SUBSCRIBED BEFORE  
THIS \_\_\_ DAY OF \_\_\_

NOTARY PUBLIC

MY COMMISSION EXPIRES

LIVE TREES TO BE MAINTAINED  
BY LOT OWNERS WITHIN 40' OF  
LANDSCAPE BUFFER ON LOTS 7,  
9 AND 10 FRONTING ON FINGERBOARD  
RD (MD. RTE 80) AND LYNN BURKE  
ROAD. (1263 TO 600)

4-22-92 EX. WELLS

DATE	REVISIONS
10-1-90	PER COMMENTS
5-13-91	REMOVE LOT 19
3-16-91	SEPTIC LOT 12
9/3/91	PER COMMENTS
11/19/91	LOT 12-SEPTIC
2/11/92	PER COMMENTS
6/4/92	WELL, LOT 11

S-789

FINAL PLAT

LOTS 7, 9 THRU 13, 15 THRU 17, OUTLOT A, SECTION 11

TRANQUILITY

SITUATED ON LYNN BURKE RD. AND FINGERBOARD RD. (MD. RTE  
NEW MARKET ELECTION DISTRICT NO 9  
FREDERICK COUNTY, MARYLAND

SCALE:  
1" = 100'



VANMAR  
ASSOCIATES INC.  
Engineers • Surveyors • Planners  
310 South Main Street, Mount Airy, Maryland 21771  
(301) 829-2890 (301) 831-5015 (301) 549-2751

JULY,  
1990

RECEIVED  
JUL 12 1992  
PLANNING DEPT.



FREDERICK COUNTY HEALTH DEPARTMENT WELL PERMIT

Applicant or Owner Sexton Contractors Driller Easterday *mail to*

Street or R.F.D. 8701 Rocky Ridge Rd - Rocky Ridge, MD 21778

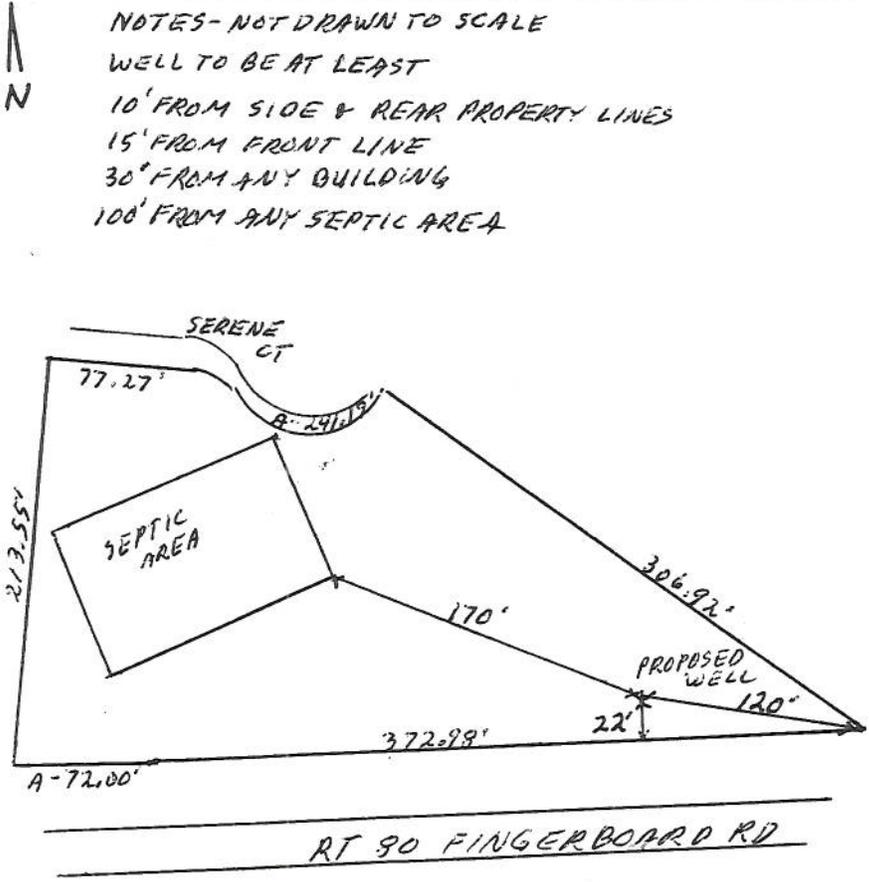
Location of Property Off of Fingerboard Rd.

If Subdivision: (Name) Tranquility Sub. Tax Map 97/99 Parcel 22  
 Block or Section 3 Lot 9  
 Area of Lot 59,290 or Acres 1.3609 Well To Furnish water to: Home  Farm   
 Public or Industrial   
 Private Water Co.  Commercial  Test Well  Heat Pump

This application is made with the understanding that the well will be drilled only at the place designated by the Health Department and as shown in the sketch below..A completion certificate of this well must be filed by the driller, at the Health Department, within forty-five (45) days after completion of drilling. All well drilling operations will be carried out in accordance with regulations of the State Department of Health. Drilling at any other location, other than shown on sketch, VOIDS this approval certificate.

Barbara Sexton Signature of Applicant Date 1-21-92  
 Owner  Contractor  Well Driller  Agent

TO BE COMPLETED BY HEALTH DEPARTMENT North Grid 550 East Grid 0728



**NOTICE - READ CAREFULLY**  
 The applicant for this permit is herewith advised that the property to be served by this system is in an area shown to be in the State Dept. of Health Comprehensive Water Control Program. This system for which this permit is issued is of a temporary nature and the applicant is advised that if the Department is required to acquire additional property and when it becomes available it will be property.

**VOID**  
7-31-92

The property described above has been inspected and the well site approved as shown.

Date of Approval JAN 22, 1992 Sanitarian David H. Hattell

B 1 **5382** SEQUENCE NO. (DP USE ONLY)  
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND  
APPLICATION FOR PERMIT TO DRILL WELL  
please print or type

STATE PERMIT NUMBER  
**TR-95-4517**  
fill in this form completely

**OWNER INFORMATION**  
Date Received (APA) **7/7/92**  
Last Name **SEXTON** Owner **WALTER** First Name **TRACY**  
Street or RFD **2701 BUCKY HOLLOW RD**  
Town **MIDDLE** State **72** Zip **21777**

**LOCATION OF WELL**  
County **FREDERICK**  
Subdivision **TRINQUILITY**  
Section **2** Lot **7**  
Nearest Town **GREENVALE**  
Miles from town **1** MI

**DRILLER INFORMATION**  
Driller's Name **George P. Easterday** License No. **40**  
Firm Name **L. Franklin Easterday, Inc.**  
Address **9265 Brown Church Rd. Mt. Airy, MD 21771**  
Signature **George P. Easterday** Date **1/24/92**

**DIRECTION OF WELL FROM TOWN (CIRCLE BOX)**  
NORTH (N) EAST (E) SOUTH (S) WEST (W)  
WELL DIRECTION: **E**  
NEAR WHAT ROAD **MD RT 20**  
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
NORTH (N) EAST (E) SOUTH (S) WEST (W)  
DISTANCE FROM ROAD **22** FT

**WELL INFORMATION**  
APPROX. PUMPING RATE (GAL. PER MIN.) **5**  
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) **500**

**USE FOR WATER (CIRCLE APPROPRIATE BOX)**  
 HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)  
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)  
 INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)  
 PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)  
 TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

**NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL**  
COUNTY NAME **FREDERICK** COUNTY NO. **92-31**  
STATE SIGNATURE \_\_\_\_\_ DATE ISSUED **1/27/92**  
CO SIGNATURE \_\_\_\_\_ EXP. DATE **7-31-92**  
NORTH GRID **55000** EAST GRID **0728000**

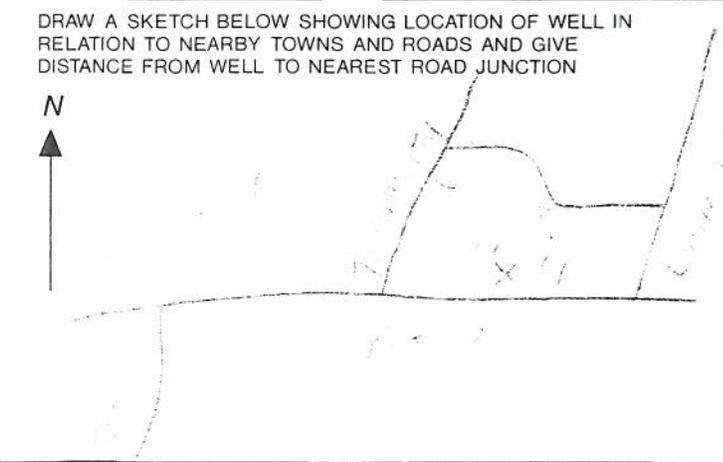
APPROXIMATE DEPTH OF WELL **300** FEET

APPROXIMATE DIAMETER OF WELL **6** INCH

**METHOD OF DRILLING (circle one)**  
 BORED (or Augered)  JETTED  Jetted & DRIVEN  
 AIR-ROTary  AIR-PERCussion  ROTARY (Hydraulic Rotary)  
 CABLE  REVerse-ROTary  DRive-POINT  
other \_\_\_\_\_

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X  
SOURCES OF DRILLING WATER  
1. **well**  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
WRITE THE BOX NUMBER FROM THE MAP HERE  
N **720**  
E **950**

**REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)**  
 THIS WELL WILL NOT REPLACE AN EXISTING WELL  
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED  
 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY  
 THIS WELL WILL DEEPEM AN EXISTING WELL  
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) \_\_\_\_\_



**Not to be filled in by driller (OEP USE ONLY)**  
APPROP. PERMIT NUMBER \_\_\_\_\_  
FORCE \_\_\_\_\_ PERMIT No. \_\_\_\_\_  
WRITE INITIALS IN BOX

SPECIAL CONDITIONS

9268

SEQUENCE NO. (DENY USE ONLY)

# STATE OF MARYLAND WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY  
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN  
45 DAYS AFTER WELL IS COMPLETED.

1 2 3 4 5 6  
(THIS NUMBER IS TO BE PUNCHED  
IN COLS. 3-6 ON ALL CARDS)

COUNTY  
NUMBER

ST/CO USE ONLY  
DATE Received

DATE WELL COMPLETED

Depth of Well  
22 400 26  
(TO NEAREST FOOT)

PERMIT NO.  
FROM "PERMIT TO DRILL WELL"  
72-10-111

OWNER last name first name TOWN  
STREET OR RFD  
SUBDIVISION SECTION LOT

**WELL LOG**  
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		Check if water bearing
	FROM	TO	
Top soil	0	2	
Clay	2	4	
Shaley	4	12	
Brown slate	12	36	
GRAY slate	36	52	
Brown slate	52	60	✓
GRAY slate	60	107	
Flint	107	108	
GRAY slate	108	400	

**GROUTING RECORD**

WELL HAS BEEN GROUTED (Circle Appropriate Box)  Y  N

TYPE OF GROUTING MATERIAL

CEMENT:  CM  BENTONITE CLAY  BC

NO. OF BAGS 49 NO. OF POUNDS 700

GALLONS OF WATER 40

DEPTH OF GROUT SEAL (to nearest foot)  
from 0 ft. to 35 ft.

**CASING RECORD**

casing types insert appropriate code below

ST  CO  
STEEL CONCRETE

PL  OT  
PLASTIC OTHER

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch) Total depth of main casing (nearest foot)

ST  6  70

**OTHER CASING (if used)**

diameter depth (feet)  
inch from to

**SCREEN RECORD**

screen type or open hole insert appropriate code below

ST  BR  HO  
STEEL BRASS OPEN HOLE

PL  OT  
PLASTIC OTHER

**SCREEN**

DEPTH (nearest ft.)

1 HO 38 400

2

3

SLOT SIZE 1 2 3

DIAMETER OF SCREEN (NEAREST INCH)  
from 56 to 60

**C 3**

**PUMPING TEST**

HOURS PUMPED (nearest hour) 6

PUMPING RATE (gal. per min. to nearest gal.) 2

METHOD USED TO MEASURE PUMPING RATE Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING 30

WHEN PUMPING 200

TYPE OF PUMP USED (for test)

A air  P piston  T turbine

C centrifugal  R rotary  O other (describe below)

J jet  S submersible

**PUMP INSTALLED**

DRILLER WILL INSTALL PUMP YES  NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

+ above } LAND SURFACE

- below } 2 (nearest foot)

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO. 40

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) 70 72

W Q 74 75 76

TELESCOPE CASING LOG INDICATOR OTHER DATA

**LOCATION OF WELL ON LOT**

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

FIELD DATA SHEET  
HYDROGEOLOGIC AREA WELL YIELD TEST

MARYLAND WELL PERMIT NO. FR-88-2817 ELECTION DISTRICT \_\_\_\_\_  
 LOCATION OF PROPERTY (road) md Rt 80  
 SUBDIVISION Tranquility LOT 9 BLOCK \_\_\_\_\_ SEC. \_\_\_\_\_  
 WELL DRILLER Kesterday OWNER Sexton Cont  
 DEPTH OF WELL 400 1+5pm  
 DISTANCE OF MEASURING POINT (M.P.) ABOVE GROUND 2'  
 STATIC WATER LEVEL (S.W.L.) BELOW M.P. 50'

I. HIGH RATE PUMPING--RESERVOIR DRAWDOWN

TIME PUMP STARTED 7:45 PUMPING RATE 10 G.P.M.  
 TOTAL TIME 30 min TO REACH PUMPING WATER LEVEL 199 FT. BELOW M.P.

II. RECOVERY PUMP TEST DATA- OBSERVATIONS TO BE RECORDED EVERY 15 MINUTES

TIME	WATER LEVEL BELOW M.P.	PUMPING RATE Time to fill   gal. bucket	FLOW METER READING (if used)	CALCULATED FLOW GPM
8:15	199'	40 sec		1.5
8:30	199	40	Pump 320	1.5
8:45	199	40		1.5
9:00	199	40		1.5
9:15	199	40		1.5
9:30	199	40	Truck	1.5
9:45	199	40		1.5
10:00	199	40		1.5
10:15	199	40		1.5
10:30	199	40		1.5
10:45	199	40		1.5
11:00	199	40		1.5
11:15	199	40		1.5
11:30	197	40		1.5
11:45	199	40		1.5
12:00	199	40		1.5
12:15	199	40		1.5
12:30	199	40		1.5
12:45	197	40		1.5
1:00	199	40		1.5
1:15	199	40		1.5
1:30	200	40		1.5
1:45	200	40		1.5
2:00	200	40		1.5
2:15	200	40		1.5



R9110438  
80-

County Well Permit No. 97-433

### FREDERICK COUNTY HEALTH DEPARTMENT WELL PERMIT

Applicant or Owner Barbara Sexton Driller Enterday

Street or R.F.D. Lot 9 11713 Serene Ct.

Location of Property monrovia md 21778

Tax Map 97 Parcel 157  
Block or Section III Lot 9

If Subdivision: (Name) Tranquility

Area of Lot \_\_\_\_\_ or Acres 1.3609 Well To Furnish water to: Home  Farm \_\_\_\_\_

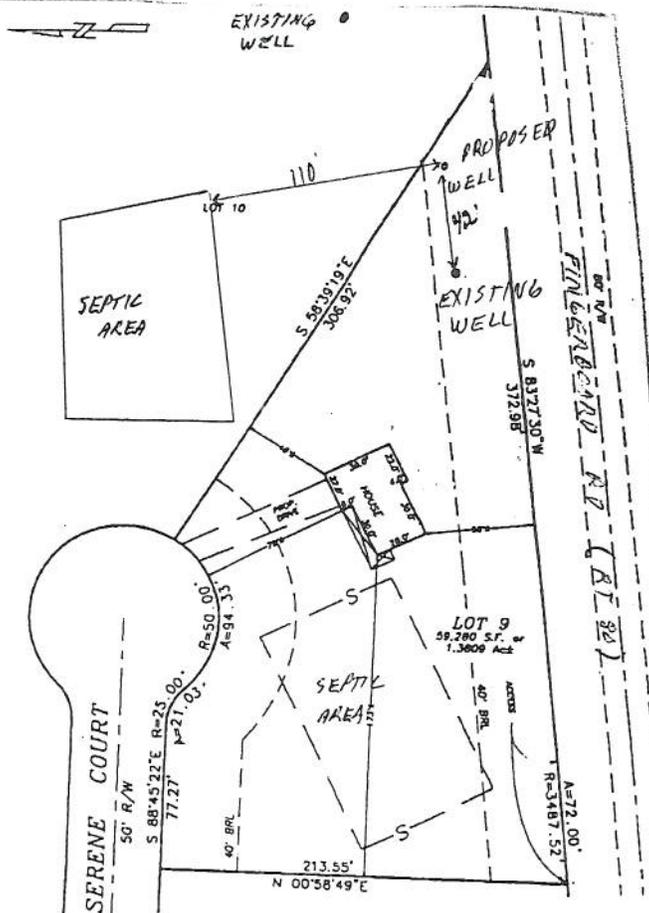
Public or Private Water Co. \_\_\_\_\_ Industrial Commercial \_\_\_\_\_ Test Well \_\_\_\_\_ Heat Pump \_\_\_\_\_

This application is made with the understanding that the well will be drilled **only** at the place designated by the Health Department and as shown in the sketch below. A completion certificate of this well must be filed by the driller, at the Health Department, within forty-five (45) days after completion of drilling. All well drilling operations will be carried out in accordance with regulations of the State Department of Health. Drilling at any other location, other than shown on sketch, **VOIDS** this approval certificate.

Barbara Sexton Signature of Applicant 10/27/97 Date

Owner \_\_\_\_\_ Contractor \_\_\_\_\_ Well Driller \_\_\_\_\_ Agent \_\_\_\_\_

TO BE COMPLETED BY HEALTH DEPARTMENT North Grid 550 East Grid 0728



NOTES - NOT DRAWN TO SCALE  
 WELL TO BE AT LEAST  
 10' FROM SIDED & REAR PROPERTY LINES  
 15' FROM FRONT LINE  
 30' FROM ANY BUILDING  
 100' FROM ANY SEPTIC AREA

**NOTICE-READ CAREFULLY**  
 The applicant for this permit is herewith advised that the property to be served by this system is in an area shown to be in the Frederick County Comprehensive Water and Sewerage Plan. The system for which this permit is issued is of a temporary nature and the applicant is herewith advised that it must be disconnected and connected to any such future community system if and when it becomes available to serve the property.

**VOID**  
 AFTER THIS DATE  
4-30-98

The property described above has been inspected and the well site approved as shown.

Date of Approval 10-27-97 Sanitarian David Hatala

B 1 5314  
1 2 3 6  
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND  
PERMIT TO DRILL WELL  
please print or type

STATE PERMIT NUMBER

FA - 9V - 0639  
70 fill in this form completely 79

Date Received (APA) 10 27 97  
8 MM DD YY 13  
OWNER INFORMATION RN 7236  
15 Last Name Sexton Cont Owner First Name 34  
36 Street or RFD 8701-a Rocky Ridge Rd 55  
57 Town Rocky Ridge, Md. 21778 State 72 Zip 76

B 3 LOCATION OF WELL  
8 COUNTY Fred 21  
23 SUBDIVISION Tranquility 42  
SECTION 3 44 46 LOT 9 48 50  
52 NEAREST TOWN Greenvalley 71  
MILES FROM TOWN (enter 0 if in town) 73 76 77 78

DRILLER INFORMATION  
76 Driller's Name George F. Easterday M D License No. 040 81  
Firm Name L. Franklin Easterday, Inc.  
Address 8266 Brown Church Rd., MT. Airy, Md. 21771  
Signature Date 10/23/97

B 4  
1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)  
11 11713 Serene Ct 30  
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
34 30 37  
DISTANCE FROM ROAD ENTER FT OR MI 38 39  
TAX MAP: 97 BLK: PARCEL 157

B 2 WELL INFORMATION  
1 2 APPROX. PUMPING RATE 5  
(GAL. PER MIN.) 8 12  
AVERAGE DAILY QUANTITY NEEDED 500  
(GAL. PER DAY) 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)  
 HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)  
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)  
22  INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)  
 PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE APPROVAL)  
 TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

NOT TO BE FILLED IN BY DRILLER  
HEALTH DEPARTMENT APPROVAL  
COUNTY NAME FREDERICK COUNTY NO. 97433  
STATE SIGNATURE INSERT S  
DATE ISSUED 10 27 97 41  
43 MM DD YY 48 CO SIGNATURE EXP. DATE 4-30-99  
NORTH GRID 550 000 EAST GRID 0728 000  
50 55 57 63

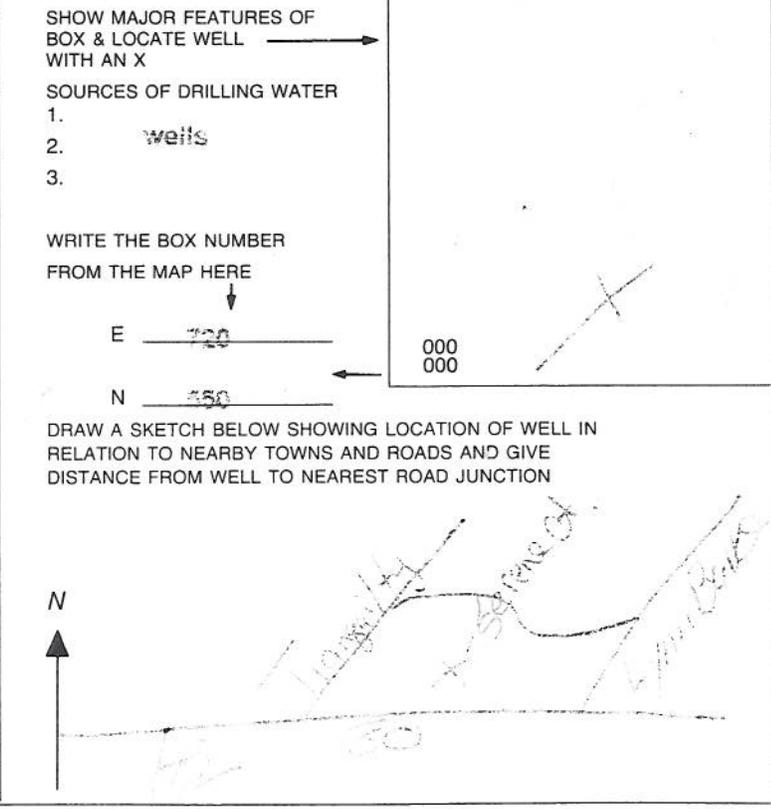
APPROXIMATE DEPTH OF WELL 300 FEET  
24 28  
APPROXIMATE DIAMETER OF WELL 3 INCH NEAREST INCH

METHOD OF DRILLING (circle one)  
30 BORED (or Augered) JETTED Jetted & DRIVEN  
AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)  
37 CABLE REVerse-ROTary DRive-POINT  
other

REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)  
 THIS WELL WILL NOT REPLACE AN EXISTING WELL  
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED  
39  THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS-A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS  
 THIS WELL WILL DEEPEIN AN EXISTING WELL  
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)  
APPROP. PERMIT NUMBER 54 GAP 63  
WRITE INITIALS IN BOX PERMIT No. 53 - 01 - 9230  
67 68 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS  
NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED -





# Frederick County Health Department

JAMES E. BOWES, M.D., M.P.H.  
Health Officer, Frederick County

ENVIRONMENTAL HEALTH SERVICES  
350 Montevue Lane  
Frederick, Maryland 21702  
Telephone: 301-694-1719

February 10, 1998

## STATE OF MARYLAND

Department of the Environment

### CERTIFICATE OF POTABILITY

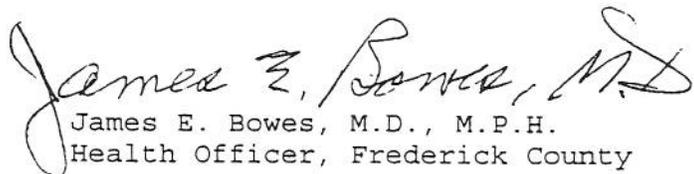
Becky Peterson  
11713 Serene Court  
Monrovia, MD 21770

RE: Tranquility  
Lot 9, Sec III

A water supply system has been installed under Well Construction Permit Number FR-94-0639 at the above noted location. The Health Department in accordance with COMAR 26.04.04, "Well Regulations" has conducted an evaluation of this system and has tested the water produced by the well to determine if it meets the standards set for the following parameters; coliform bacteria, nitrates and turbidity. The results of these testing analyses indicate that the water does meet the applicable standards set for these parameters and has satisfied the review requirements of this office.

The well driller's signature on the completion report is his certification that well construction as performed under his supervision conforms to State requirements.

Under authority delegated by the Secretary of Department of the Environment, as Approving Authority for Frederick County, my signature or that of my designee represents the approval of the State of Maryland.

  
James E. Bowes, M.D., M.P.H.  
Health Officer, Frederick County



**FIELD SAMPLING FORM**  
**Former Green Valley Citgo**  
**Green Valley / Monrovia , Frederick County, MD 21770**  
**MDE Case No. 2005-0834FR**

Date: 6/21/13 Address: 11713 Serene Court  
 Arrival Time: 09:00 Monrovia, MD  
 Departure Time: 15:15 CGS Staff: Matt Emery and Lara Bennett  
 Property Owner: Ann Marie Luciano  
 When was the last time water was used? N/A  
 Where and what was the purpose of recent water use? N/A  
 Is a totalizer meter present? No  
 If yes, what is the totalizer meter reading prior to sampling? N/A

**Sample Locations and IDs**

Well Tag # : FR-94-0639 - Well located in backyard on SE side of property

Sample Type	Sample ID	Location	Sample Time	Check to indicate sample collection				Enter reading		
				Total Lead / Chromium	Dissolved Lead / Chromium	Hexavalent Chromium	VOCs	pH	Temperature	(mV) ORP
<del>Trip Blank</del>										
PT #1	11713Serene-PT1		10:03	X	X	X		5.51	14.74	129.7
PT #2	11713Serene-PT2		10:26	X	X	X		5.30	14.96	144.0
PT #3	11713Serene-PT3		10:39	X	X	X		5.27	14.47	153.3
PT #4	11713Serene-PT4		11:00	X	X	X		5.30	14.50	149.5
Duplicate	11713Serene-PT1DB		00:00	X	X	X		5.51	14.74	129.7
Field Blank	11713Serene-FB		14:10	X	X	X				

First Pressure Tank Purge

Purge time begin: 10:20  
 Purge time end: 10:22  
 Total gallons purged: 5 gallons

Second Pressure Tank Purge

Purge time begin: 10:34  
 Purge time end: 10:36  
 Total gallons purged: 9 gallons

Third Pressure Tank Purge

Purge time begin: 10:55  
 Purge time end: 10:57  
 Total gallons purged: 10 gallons

11713Serene - POU 6/21/13 9:41

Purge Time begin: 9:20  
 Purge Time end: 9:30

reverse ←  
 - Sampled from osmosis  
 filtered kitchen sink faucet  
 as directed by Jim Richmond  
 (ran water from regular kitchen sink for 10 minutes, then purged R-O faucet for 4 minutes)  
 ↳ water stopped allowed time to recharge  
 Temp - 19.76 °C / ORP - 211.2 mV  
 pH - 5.89

pH/Temperature/ORP Meter Calibration

Provide notes on calibration including date, time, standards used and results of calibration

pH Calibration: Recalibrated at 8:00 am 6/21/13  
 ORP Calibration: Calibration checked in AM 6/21/13 - Parameter within 0.5%

11713Serene - PT Sediment 11:05 6/21/13 → Not submitted to lab; not enough sediment to analyze

Old Well Tag # : FR-88-2317 → old well located behind house in front of shed  
 p. 1 of 2

**FIELD SAMPLING FORM**  
**Former Green Valley Citgo**  
**Green Valley / Monrovia , Frederick County, MD 21770**  
**MDE Case No. 2005-0834FR**  
**11713 Serene Court - 3 hour Purge**

Well Purge:

Purge time begin:

11:45

Well Depth: 400 Feet

Purge time end:

14:54

Well Diameter: 6 inches

Total gallons purged:  
 (Estimated)

~1,500 gallons

Well Volume: 514.15 gallons  
 3 Well Volumes: 1,542.45 gallons

Time	Pumping Rate (Gallons/Minute)	pH	(°C) Temp	(mV) ORP	Comments
11:45	9.5				Began Purge
12:00	8.3				
12:15	8.1				
12:30	7.1				
12:45	7.46	4.96	14.41	239.5	11713 Serene - WP1
13:00	6.38				
13:15	6.52				
13:30	6.33				
13:45	7.1	5.53	15.64	138.6	11713 Serene - WP2
14:00	6.67				
14:15	6.67				
14:30	6.67				
14:45	6.67	5.34	15.69	-120.8	11713 Serene - WP3
14:54	6.67				Stopped Purge



A stainless steel pull-down kitchen faucet with a high-arc spout, mounted on a granite countertop. The faucet handle is on the left side.

Softsoap antibacterial hand soap. The bottle is orange and clear, with a pump dispenser. The label includes the text "Softsoap antibacterial" and "50% MORE".

Ajax disinfectant. The bottle is clear with a blue label and a blue cap. The label includes the text "Ajax disinfectant".

A rectangular sponge with a green top layer and a yellow bottom layer, resting on a red and black patterned mat on the countertop.

A small brush with a black handle and a white bristle head, resting on the countertop next to the sponge.

A white plastic dish rack with an orange lid, containing several dishes, located to the right of the sink.



**WELLXTROL**  
100 gal. Tuff-Kote HD

**W.R.F. & SON**  
WATER FILTERS & SUPPLIES  
10000 S. GARDEN AVENUE  
GARDEN CITY, CA 92345  
TEL: (951) 646-1111  
WWW.WRFANDSON.COM

**WARNING**  
FOR SAFE INSTALLATION & OPERATION...  
FOR YOUR SAFETY...  
CAUTION: Before you...  
DANGER: Hot surfaces...  
CAUTION: Risk of electric...  
The tank must be full of water...  
WATER LEAKAGE: If you...  
CALIFORNIA PROP65 NOTICE  
This product may contain...  
CAUTION: If the water heater...  
The manufacturer is not responsible...





EverKleen  
ENERGYGUIDE

WARNING  
DO NOT

WARNING



**EverKleen**  
Self-Cleaning Water Heaters

**ENERGYGUIDE**  
First Year  
Compare the Energy Cost of this Water Heater with Others Before You Buy.

