

Township of Hillsborough

COUNTY OF SOMERSET THE PETER J. BIONDI BUILDING 379 SOUTH BRANCH ROAD HILLSBOROUGH, NJ 08844 (908) 369-4313 www.hillsborough-nj.org

HILLSBOROUGH TOWNSHIP PRIVATE WELL TESTING ACT REPORT

Many residences in Hillsborough Township get their potable water from a private well. Historically, potable wells were only required to be tested for quality after the well was first drilled/installed. In 2002, New Jersey passed the Private Well Testing Act (PWTA), which made it a law that all potable wells must be tested for a wide range of possible contaminants at the time of sale of the property, or every 5 years if the property is being leased.

NJDEP estimates that since the PWTA began in 2002, 25% of the state's approximately 400,000 private domestic potable wells have been tested by the PWTA. While test results are required to be sent to NJDEP by the testing laboratory, specific results are not made available to anyone, including local health departments. Instead, NJDEP has developed an online map of NJ, where results of testing are available based on 2 mile square blocks (to access this map, go to

https://njdep.maps.arcgis.com/apps/MapSeries/index.html?appid=826ec9fae77543caa582a787 d5f088e7).

While testing results are only provided by 2 mile square blocks, this information is still very useful to both residents and government officials alike, as it can be used to determine what possible contaminants are most likely to be an issue in a particular area and who may be at risk for exposure.

IMPORTANCE OF REGULAR WELL TESTING

If you have a potable well, it is extremely important that you regularly have it tested for quality to ensure the water you are drinking and bathing in meets current standards. Even if you had your well tested in the past and no contaminants were found, it is advisable that you follow the recommended testing time frame (see section below titled "Recommended Testing Time Frame" below). The Hillsborough Health Department strongly recommends that anyone with a private well should have it tested annually for bacteria and nitrates, and at least periodically for the full range of contaminants required by the PWTA.

Also, please be aware that new contaminants have recently been added to the PWTA requirements. PFOA, PFOS, PFNA, PFAS, and SOC have all been added within the last few years. Please consider having your well tested for these chemicals.

HOW TO USE THIS REPORT

The included map of Hillsborough Township is divided into 2 square mile grids. While testing laboratories are required to submit the results of these tests to the New Jersey Department of Environmental Protection (NJDEP), NJDEP does not make publicly available any confidential information regarding the results of individual wells. Instead, they only provide general results based on areas within the municipality where the tests were conducted.

Locate the grid where your home is, and look at the corresponding data reported through testing by the PWTA. Results indicated in this report represent 1) the constituents tested (ex: nitrate, Arsenic, etc), 2) the percent of wells tested in that grid that exceeded, and 3) the total number of wells that have been tested in that grid under the PWTA. This information will be useful to you when trying to determine what you may want to have your well tested for. SPECIAL ATTENTION should be given to items noted in BOLD, as these figures represent exceedances of 10% or more of wells tested in that grid.

** PLEASE NOTE THAT THESE RESULTS ONLY REPRESENT A SAMPLING OF WELLS. Results of your well water may be significantly different than those listed.

Map of Hillsborough Township and Corresponding Grid Numbers



- *Note: the grids above indicate 2 mile by 2 mile.
- Please refer to the information following the grid number data for details on each contaminant.

**PLEASE NOTE:

- Data listed by the PWTA report, as well as this document, may significantly underestimate the presence of Gross Alpha, PFOA, PFOS, PFNA, PFAS, and SOC, as these contaminants have only recently been added to the PWTA testing requirements. Please take the limited sample size into consideration.

HILLSBOROUGH TOWNSHIP DATA CUMULATIVE DATA: September 2002 through December 2022

% of Exceedances (# of wells tested)

| Municipality | Hillsborough Township, | Somerset County |
|--------------|------------------------|-----------------|
|--------------|------------------------|-----------------|

Nitrate 0.9% (1063 wells sampled)

Arsenic 21.4% (1063 wells sampled)

Iron 8.8% (1063 wells sampled)

Manganese 5.6% (1063 wells sampled)

Gross Alpha 6.7 (252 wells sampled)

Mercury Testing is not required under PWTA

VOC 1.2% (1063 wells sampled)

Fecal coliform or E. coli 3.0% (1063 wells sampled)

pH 7.0% (1063 wells sampled)

SOC 0% (189 wells sampled)

PFOA 12.7% (71 wells sampled)

PFOS 12.7% (71 wells sampled)

PFNA 1.4% (71 wells sampled)

PFAS 18.3% (71 wells sampled)

Uranium 0% (185 wells sampled)

** EXCEEDANCES OF HILLSBOROUGH TOWNSHIP CUMULATIVE ARE IN BOLD **

Grid Number 798 (*Grid includes property in an adjoining

municipality)

% of Exceedances (# of wells tested)

Nitrate 1.2% (168 wells sampled)

Arsenic 39.9% (168 wells sampled)

Iron 2.4% (168 wells sampled)

Manganese 1.8% (168 wells sampled)

Gross Alpha 6.1% (168 wells sampled)

Mercury Testing is not required in this grid

VOC 0.0% (168 wells sampled)

Fecal coliform or E. coli 0.6% (168 wells sampled)

pH 2.4% (168 wells sampled)

SOC 0% (34 wells sampled) PFOA 0% (< 10 wells sampled) **PFOS** 0% (< 10 wells sampled) PFNA 0% (< 10 wells sampled) **PFAS** 0% (< 10 wells sampled) Uranium 0% (34 wells sampled)

Grid Number 799 (*Grid includes property in an adjoining

municipality)

% of Exceedances (# of wells tested)

Nitrate 1.0% (197 wells sampled)

Arsenic 22.3% (197 wells sampled)

Iron 5.6% (197 wells sampled)

Manganese 1.0% (197 wells sampled)

Gross Alpha 4.1% (172 wells sampled)

| Mercury | Testing | is not required in this grid |
|---------------------------|-----------------------------------|--|
| VOC | 0.5% | (197 wells sampled) |
| Fecal coliform or E. coli | 0.6% | (197 wells sampled) |
| pH SOC PFOA PFOS | 1.5% 3.4% 9.1% 0% | (197 wells sampled) (29 wells sampled) (11 wells sampled) (11 wells sampled) |
| PFNA PFAS | 0% 9.1 % | (11 wells sampled) (29 wells sampled |

Grid Number 875 (*Grid includes property in an adjoining

municipality)

% of Exceedances (# of wells tested)

Nitrate 0.0% (73 wells sampled)

Arsenic 30.1% (73 wells sampled)

Iron 19.2% (73 wells sampled)

Manganese 37% (73 wells sampled)

Gross Alpha 21.1% (38 wells sampled)

Mercury Testing is not required in this grid

VOC 0% (73 wells sampled)
Fecal coliform or E. coli 2.7% (73 wells sampled)

pH 15.1% (73 wells sampled)

SOC 0% (< 10 wells sampled) **PFOA** 0% (< 10 wells sampled) **PFOS** 0% (< 10 wells sampled) **PFNA** 0% (< 10 wells sampled) **PFAS** (< 10 wells sampled) 0% Uranium 0% (< 10 wells sampled) Grid Number 876 (*Grid includes property in an adjoining

municipality)

% of Exceedances (# of wells tested)

Nitrate 3.1% (28 wells sampled)

Arsenic 18.8% (28 wells sampled)

Iron 31.3% (28 wells sampled)

Manganese 9.4% (28 wells sampled)

Gross Alpha Less than 10 wells sampled

Mercury Testing is not required in this grid

VOC 0.0% (28 wells sampled)

Fecal coliform or E.coli 12.5% (28 wells sampled)

pH 15.6% (28 wells sampled)

SOC 0% (< 10 wells sampled) PFOA 0% (< 10 wells sampled) 0% **PFOS** (< 10 wells sampled) **PFNA** 0% (< 10 wells sampled) **PFAS** 0% (< 10 wells sampled) (< 10 wells sampled) Uranium 0%

Grid Number 877

% of Exceedances (# of wells tested)

Nitrate 0.0% (54 wells sampled)

Arsenic 38.9% (54 wells sampled)

Iron 9.3% (54 wells sampled)

Manganese 5.6% (54 wells sampled)

Gross Alpha Less than 15 wells sampled

Mercury Testing is not required in this grid

VOC 0.0% (54 wells sampled)

Fecal coliform or E. coli 3.7% (54 wells sampled)

pH 1.9% (54 wells sampled)

| SOC | 0% | (< 10 | wells sampled) |
|---------|----|-------|----------------|
| PFOA | 0% | (< 10 | wells sampled) |
| PFOS | 0% | (< 10 | wells sampled) |
| PFNA | 0% | (< 10 | wells sampled) |
| PFAS | 0% | (< 10 | wells sampled) |
| Uranium | 0% | (< 10 | wells sampled) |

| Grid Number | 878 |
|--------------------|--------------------------------------|
| | % of Exceedances (# of wells tested) |

| Nitrate | 0.8% | (133 wells sampled) |
|---------|-------|---------------------|
| Arsenic | 42.9% | (133 wells sampled) |

3.8% (133 wells sampled) Iron 4.4% (133 wells sampled) Manganese (49 wells sampled) Gross Alpha 6.1%

Testing is not required in this grid Mercury

(133 wells sampled) VOC 0.0%

Fecal coliform or E. coli 3.8% (133 wells sampled) (133 wells sampled) 6.1% рН

SOC 0% (< 10 wells sampled) **PFOA** (< 10 wells sampled) 0% (< 10 wells sampled) **PFOS** 0% (< 10 wells sampled) **PFNA** 0% **PFAS** 0% (< 10 wells sampled) (< 10 wells sampled) Uranium 0%

municipality)

% of Exceedances (# of wells tested)

Nitrate 0.0% (36 wells sampled)

Arsenic 40.0% (36 wells sampled)

Iron 33.3% (36 wells sampled)

Manganese 25% (36 wells sampled)

Gross Alpha Less than 10 wells sampled

Mercury Testing is not required in this grid

VOC 0.0% (36 wells sampled)

Fecal coliform or E. coli 2.8% (36 wells sampled)

pH 16.7% (36 wells sampled)

SOC 0% (< 10 wells sampled) **PFOA** 0% (< 10 wells sampled) **PFOS** 0% (< 10 wells sampled) **PFNA** 0% (< 10 wells sampled) **PFAS** 0% (< 10 wells sampled) Uranium 0% (< 10 wells sampled)

Grid Number 956

% of Exceedances (# of wells tested)

Nitrate 0.0% (50 wells sampled)

Arsenic 34% (50 wells sampled)

Iron 24% (50 wells sampled)

Manganese 20% (50 wells sampled)

Gross Alpha 18.8 (16 wells sampled)

Mercury Testing is not required in this grid

VOC 0.0% (50 wells sampled)
Fecal coliform or E. coli 0.0% (50 wells sampled)

| SOC | 0% | (14 wells sampled) |
|---------|----|----------------------|
| PFOA | 0% | (< 10 wells sampled) |
| PFOS | 0% | (< 10 wells sampled) |
| PFNA | 0% | (< 10 wells sampled) |
| PFAS | 0% | (< 10 wells sampled) |
| Uranium | 0% | (12 wells sampled) |

| Grid Number 957 | (*Grid includes property in an adjoining |
|-----------------|--|
|-----------------|--|

municipality)

% of Exceedances (# of wells tested)

| Nitrate | 0.0% | (112 wells sampled) |
|-------------|---------|-----------------------------|
| Arsenic | 19.6% | (112 wells sampled) |
| Iron | 3.6% | (112 wells sampled) |
| Manganese | 2.7% | (112 wells sampled) |
| Gross Alpha | 3.2% | (31 wells sampled) |
| Moroury | Tooting | is not required in this ari |

Mercury Testing is not required in this grid

VOC 3.7% (112 wells sampled)
Fecal coliform or E. coli 5.4% (112 wells sampled)
pH 5.4% (112 wells sampled)

SOC (28 wells sampled) 0% **PFOA** (< 10 wells sampled) 0% (< 10 wells sampled) **PFOS** 0% (< 10 wells sampled) **PFNA** 0% **PFAS** 0% (< 10 wells sampled) (28 wells sampled) Uranium 0%

Grid Number 958 (*Grid includes property in an adjoining

municipality)

% of Exceedances (# of wells tested)

Nitrate 0.0% (125 wells sampled)

Arsenic 36.8% (125 wells sampled)

Iron 4.0% (125 wells sampled)

Manganese 0.8% (125 wells sampled)

Gross Alpha 3.7% (12 wells sampled)

Mercury Testing is not required in this grid

VOC 4.0% (125 wells sampled)

Fecal coliform or E. coli 2.4% (125 wells sampled)

pH 0.8% (125 wells sampled)

SOC 0% (12 wells sampled) PFOA 0% (12 wells sampled) **PFOS** 0% (12 wells sampled) **PFNA** 0% (12 wells sampled) **PFAS** 0% (12 wells sampled) Uranium 0% (23 wells sampled)

Grid Number 1107 (*Grid includes property in an adjoining

municipality)

% of Exceedances (# of wells tested)

Nitrate 1.3% (224 wells sampled)

Arsenic 13.8% (224 wells sampled)

Iron 5.4% (224 wells sampled)

Manganese 6.3% (224 wells sampled)

Gross Alpha 6.7 (45 wells sampled)

Mercury Testing is not required in this grid

VOC 0.4% (224 wells sampled)

Fecal coliform or E. coli 1.8% (224 wells sampled)

pH 1.3% (224 wells sampled)

SOC 0% (26 wells sampled)

| PFOA | 27.3% | (11 wells sampled) |
|---------|-------|--------------------|
| PFOS | 0% | (11 wells sampled) |
| PFNA | 0% | (11 wells sampled) |
| PFAS | 27.3% | (11 wells sampled) |
| Uranium | 0% | (11 wells sampled) |

| Grid Number | 1,111 | | |
|---------------------------|----------------------------|--|--|
| | % of Ex | cceedances (# of wells tested) | |
| Nitrate | 0.0% | (33 wells sampled) | |
| Arsenic | 0.0% | (33 wells sampled) | |
| Iron | 6.9% | (33 wells sampled) | |
| Manganese | 3.4% | (33 wells sampled) | |
| Gross Alpha | Less than 10 wells sampled | | |
| Mercury | Testing | not required in this grid | |
| VOC | 6.1% | (33 wells sampled) | |
| Fecal coliform or E. coli | 0.0% | (33 wells sampled) | |
| рН | 6.1% | (33 wells sampled) | |
| SOC PFOA PFOS | 0% 0% 0% | <pre>(< 10 wells sampled) (< 10 wells sampled) (< 10 wells sampled)</pre> | |
| PFNA | 0% | (< 10 wells sampled) | |
| PFAS | 0% | (< 10 wells sampled) | |
| Uranium | 0% | (< 10 wells sampled) | |

| Grid Number | 1,033 | |
|-------------|---------|-------------------------------|
| | % of Ex | ceedances (# of wells tested) |
| Nitrate | 0.0% | (76 wells sampled) |
| Arsenic | 13.2% | (76 wells sampled) |
| Iron | 15.8% | (76 wells sampled) |
| Manganese | 7.9% | (76 wells sampled) |

| 6.7% | (15 wells sampled) |
|---------|---------------------------------------|
| Testing | is not required in this grid |
| 0.0% | (76 wells sampled) |
| 6.2% | (76 wells sampled) |
| 7.9% | (76 wells sampled) |
| | |
| 0% | (13 wells sampled) |
| 0% | (< 10 wells sampled) |
| 0% | (< 10 wells sampled) |
| 0% | (< 10 wells sampled) |
| 0% | (< 10 wells sampled) |
| 0% | (13 wells sampled) |
| | Testing 0.0% 6.2% 7.9% 0% 0% 0% 0% 0% |

| Grid Number | 1,034 |
|-------------|-------|
|-------------|-------|

| | % of Ex | ceedances (# of wells tested) |
|---------------------------|---------|-------------------------------|
| Nitrate | 0.0% | (152 wells sampled) |
| Arsenic | 21.1% | (152 wells sampled) |
| Iron | 7.9% | (152 wells sampled) |
| Manganese | 4.6% | (152 wells sampled) |
| Gross Alpha | 5.0 | (40 wells sampled) |
| Mercury | Testing | is not required in this grid |
| VOC | 0.0% | (152 wells sampled) |
| Fecal coliform or E. coli | 2.0% | (152 wells sampled) |
| рН | 7.9% | (152 wells sampled) |
| SOC | 0% | (27 wells sampled) |
| PFOA | 0% | (13 wells sampled) |
| PFOS | 7.7% | (13 wells sampled) |
| PFNA | 0% | (13 wells sampled) |
| PFAS | 7.7% | (13 wells sampled) |
| Uranium | 0% | (20 wells sampled) |

Grid Number 1,035 (*Grid includes property in an

adjoining municipality)

% of Exceedances (# of wells tested)

Nitrate 7.8% (115 wells sampled)

Arsenic 28.7% (115 wells sampled)

Iron 3.5% (115 wells sampled)

Manganese 0.9% (115 wells sampled)

Gross Alpha 3.3% (30 wells sampled)

Mercury Testing is not required in this grid

VOC 0.0% (115 wells sampled)

Fecal coliform or E. coli 1.7% (115 wells sampled)

pH 2.6% (115 wells sampled)

 SOC
 0%
 (< 10 wells sampled)</td>

 PFOA
 0%
 (< 10 wells sampled)</td>

 PFOS
 0%
 (< 10 wells sampled)</td>

 PFNA
 0%
 (< 10 wells sampled)</td>

 PFAS
 0%
 (< 10 wells sampled)</td>

Uranium 0% (22 wells sampled)

Grid Number 1,108 (*Grid includes property in an

adjoining municipality)

% of Exceedances (# of wells tested)

Nitrate 0.0% (42 wells sampled)

Arsenic 4.8% (42 wells sampled)

Iron 4.8% (42 wells sampled)

Manganese 11.9% (42 wells sampled)

Gross Alpha 0.0% (12 wells sampled)

Mercury Testing is not required in this grid

VOC 0.0% (42 wells sampled)

Fecal coliform or E. coli 0.0% (42 wells sampled)

| рН | 0.0% | (42 wells sampled) |
|---------|------|----------------------|
| SOC | 0% | (< 10 wells sampled) |
| PFOA | 0% | (< 10 wells sampled) |
| PFOS | 0% | (< 10 wells sampled) |
| PFNA | 0% | (< 10 wells sampled) |
| PFAS | 0% | (< 10 wells sampled) |
| Uranium | 0% | (< 10 wells sampled) |

| Grid Number | 1,109 | |
|---------------------------|---------|--------------------------------|
| | % of Ex | cceedances (# of wells tested) |
| Nitrate | 0.0% | (103 wells sampled) |
| Arsenic | 0.0% | (103 wells sampled) |
| Iron | 1.0% | (103 wells sampled) |
| Manganese | 2.9% | (103 wells sampled) |
| Gross Alpha | 14.3% | (21 wells sampled) |
| Mercury | Testing | is not required in this grid |
| VOC | 1.0% | (103 wells sampled) |
| Fecal coliform or E. coli | 1.0% | (103 wells sampled) |
| рН | 1.0% | (103 wells sampled) |
| SOC | 0% | (< 10 wells sampled) |
| PFOA | 0% | (< 10 wells sampled) |
| PFOS | 0% | (< 10 wells sampled) |
| PFNA | 0% | (< 10 wells sampled) |
| PFAS | 0% | (< 10 wells sampled) |
| Uranium | 0% | (17 wells sampled) |

Grid Number 1,110

% of Exceedances (# of wells tested)

Nitrate 0.0% (42 wells sampled)
Arsenic 2.4% (42 wells sampled)
Iron 7.1% (42 wells sampled)
Manganese 4.8% (42 wells sampled)

Gross Alpha Less than 10 wells sampled

Mercury Testing is not required in this grid

VOC 0.0% (42 wells sampled)
Fecal coliform or E. coli 0% (42 wells sampled)
pH 4.8% (42 wells sampled)

0% SOC (< 10 wells sampled) **PFOA** 0% (< 10 wells sampled) **PFOS** 0% (< 10 wells sampled) **PFNA** 0% (< 10 wells sampled) **PFAS** 0% (< 10 wells sampled) Uranium 0% (< 10 wells sampled)

Grid Number 1,181 (*Grid includes property in an

adjoining municipality)

% of Exceedances (# of wells tested)

Nitrate 1.2% (246 wells sampled)

Arsenic 32.1% (246 wells sampled)

Iron 9.3% (246 wells sampled)

Manganese 7.3% (246 wells sampled)

Gross Alpha 6.5% (46 wells sampled)

Mercury Testing is not required in this grid

VOC 0.0% (246 wells sampled) Fecal coliform or E. coli 2.9% (246 wells sampled) 5.7% (246 wells sampled) рН 0% SOC (39 wells sampled) **PFOA** 15.4% (13 wells sampled) **PFOS** 15.4% (13 wells sampled)

PFNA 0% (13 wells sampled)
PFAS 23.1% (13 wells sampled)
Uranium 0% (36 wells sampled)

Grid Number 1,182

% of Exceedances (# of wells tested)

Nitrate 0.0% (53 wells sampled)
Arsenic 9.5% (53 wells sampled)
Iron 11.9% (53 wells sampled)
Manganese 2.4% (53 wells sampled)
Gross Alpha Less than 10 wells sampled

Mercury Testing is not required in this grid

VOC 7.1% (53 wells sampled)
Fecal coliform or E. coli 16.7% (53 wells sampled)
pH 28.6% (53 wells sampled)

SOC < 10 wells sampled
PFOS < 10 wells sampled
PFNA < 10 wells sampled
PFAS < 10 wells sampled
Uranium 0 (16 wells sampled)

Grid Number 1,183

Uranium

% of Exceedances (# of wells tested)

Nitrate 0.0% (117 wells sampled)

Arsenic 14.7% (117 wells sampled)

Iron 8.5% (117 wells sampled)

Manganese 5.1% (117 wells sampled)

Gross Alpha 0 (22 wells sampled)

Mercury Testing is not required in this grid

VOC 0.9% (117 wells sampled) Fecal coliform or E. coli 3.4% (117 wells sampled) 6.0% рН (117 wells sampled) SOC 0% (15 wells sampled) PFOA 0% (< 10 wells sampled) **PFOS** (< 10 wells sampled) 0% PFNA 0% (< 10 wells sampled) **PFAS** 0% (< 10 wells sampled)

0%

Grid Number 1,184 (*Grid includes property in an

adjoining municipality)

% of Exceedances (# of wells tested)

(15 wells sampled)

Nitrate 0.0% (35 wells sampled)
Arsenic 6.3% (35 wells sampled)
Iron 11.4% (35 wells sampled)
Manganese 17.1% (35 wells sampled)

Gross Alpha Less than 10 wells sampled

Mercury Testing is not required in this grid

VOC 14.3% (35 wells sampled)

Fecal coliform or E. coli 2.9% (35 wells sampled)

pH 11.4% (35 wells sampled)

SOC 0% (< 10 wells sampled)

| PFOA | 0% | (< 10 | wells sampled) |
|---------|----|-------|----------------|
| PFOS | 0% | (< 10 | wells sampled) |
| PFNA | 0% | (< 10 | wells sampled) |
| PFAS | 0% | (< 10 | wells sampled) |
| Uranium | 0% | (< 10 | wells sampled) |

Grid Number 1,185 (*Grid includes property in an

adjoining municipality)

% of Exceedances (# of wells tested)

Nitrate 0.0% (22 wells sampled)
Arsenic 0.0% (22 wells sampled)
Iron 4.5% (22 wells sampled)
Manganese 0.0% (22 wells sampled)
Gross Alpha Less than 10 wells sampled

Mercury Testing is not required in this grid

VOC 0.0% (22 wells sampled)
Fecal coliform or E. coli 4.5% (22 wells sampled)
pH 0.0% (22 wells sampled)

SOC 0% (< 10 wells sampled) PFOA 0% (< 10 wells sampled) **PFOS** (< 10 wells sampled) 0% **PFNA** 0% (< 10 wells sampled) **PFAS** 0% (< 10 wells sampled) Uranium 0% (< 10 wells sampled)

Grid Number 1,254 (*Grid includes property in an

adjoining municipality)

% of Exceedances (# of wells tested)

Nitrate 0.0% (30 wells sampled)

Arsenic 13.3% (30 wells sampled)

Iron 6.7% (30 wells sampled)

| Manganese | 3.3% | (30 wells sampled) | |
|---------------------------|--------------------------------------|----------------------|--|
| Gross Alpha | Less tha | n 10 wells sampled | |
| Mercury | Testing is not required in this grid | | |
| VOC | 0.0% | (30 wells sampled) | |
| Fecal coliform or E. coli | 10.0% | (30 wells sampled) | |
| рН | 3.3% | (30 wells sampled) | |
| SOC | 0% | (< 10 wells sampled) | |
| PFOA | 0% | (< 10 wells sampled) | |
| PFOS | 0% | (< 10 wells sampled) | |
| PFNA | 0% | (< 10 wells sampled) | |
| PFAS | 0% | (< 10 wells sampled) | |
| Uranium | 0% | (< 10 wells sampled) | |
| | | | |

Grid Number 1,255 (*Grid includes property in an

adjoining municipality)

% of Exceedances (# of wells tested)

| Nitrate | 2.4% | (85 wells sampled) |
|---------------------------|-----------|-----------------------------|
| Arsenic | 18.8% | (85 wells sampled) |
| Iron | 11.8% | (85 wells sampled) |
| Manganese | 5.9% | (85 wells sampled) |
| Gross Alpha | Less tha | in 10 wells sampled |
| Mercury | Testing i | s not required in this grid |
| VOC | 0.0% | (85 wells sampled) |
| Fecal coliform or E. coli | 3.5% | (85 wells sampled) |
| рН | 21.2% | (85 wells sampled) |
| SOC | 0% | (13 wells sampled) |
| PFOA | 0% | (< 10 wells sampled) |
| PFOS | 0% | (< 10 wells sampled) |
| PFNA | 0% | (< 10 wells sampled) |
| PFAS | 0% | (< 10 wells sampled) |
| Uranium | 0% | (13 wells sampled) |

RECOMMENDED TESTING TIME FRAME

Below is a list of recommended testing, and the frequency of when it should be done. Please note, these are minimum recommendations, and do not account for all possible types of contamination. For a complete list of contaminants required to be tested for, see https://www.nj.gov/dep/dsr/pwta/.

| CONTAMINANT | TESTING FREQUENCY |
|-------------------------|-------------------|
| Nitrate | Every other year |
| Arsenic | At least once |
| Iron | Every 5 years |
| Manganese | Every 5 years |
| Gross Alpha | At least once |
| Mercury | At least once |
| VOC | At least once |
| Fecal Coliform / E.coli | Every year |
| рН | Every year |
| Lead | Every 5 years |
| PFOA, PFAS, PFNA | Every 5 years |
| SOC | Every 5 years |

SOURCES OF CONTAMINATION, HEALTH IMPACTS, & REMEDIATION

As can be seen from the above noted data, the most commonly exceeded parameter in Hillsborough Township is Arsenic. Since arsenic in drinking water has significant potential health impacts, it would be strongly recommended for residents with wells to test for arsenic, even if the specific grid they live in did not show a significant percent of exceedances.

Additionally, it should be noted that new testing parameters have been included in PWTA requirements. These include SOC, PFOA, PFOS, PFNA, PFAS, and Uranium. If you have not had your well tested since, it did not include

*The following is not a complete list of potential health impacts or remediation.

The Environmental Protection Agency (EPA) standards for drinking water fall under two different categories: Primary and Secondary Standards. Primary Standards are based on health considerations and are designed to protect people from three classes of pollutants: pathogens, radioactive elements and toxic chemicals. Secondary Standards are based on taste, odor, color, corrosivity, foaming and staining properties of water.

Below is a list of basic information regarding the reported contaminants, including common remediation for each. For more information, please refer to NJDEP

Arsenic (Primary Standard)

- Source: Naturally occuring in rock.
- Potential Health Impacts: Can increase your risk of cancer, diabetes, and cardiovascular disease.
- Recommended testing frequency: At least once.
- Remediation: Distillation; Granular Ferric Adsorption.

Fecal Coliform / e.Coli (Primary Standard)

- Source: found in the stomach of warm blooded animals, as well as human and animal waste. Old wells with no or limited casing, or wells that do not have casing extending above-grade are easily contaminated.
- Potential Health Impacts: Gastro-intestinal problems, dysentery.
- Recommended testing frequency: Every year.
- Remediation: Chlorination; UV light; microbial purifier.

Nitrate (Primary Standard)

- Source: Naturally occurring, but is also from human sources such as septic systems.

- Potential Health Impacts: Impairs ability of blood to carry oxygen. Especially dangerous to babies, can cause "blue baby syndrome".
- Recommended testing frequency: Every other year.
- Remediation: Reverse Osmosis.

Gross Alpha (combined measurement of radioactivity from Radium & Uranium; Primary Standard)

- Source: Naturally occurring from decay of rock.
- Potential Health Impacts: increased risk of cancer, kidney damage, etc.
- Recommended testing frequency: At least once.
- Remediation: Ion exchange system; reverse osmosis.

VOC (Volatile Organic Chemicals; Primary Standard)

- Source: Gasoline, solvents, degreasers
- Potential Health Impacts: Can cause cancer, damage to the central nervous system & liver.
- Recommended testing frequency: at least once.
- Remediation: Activated carbon filtration: Reverse osmosis.

Manganese (Secondary Standard)

- Source: Naturally occurring in rock.
- *Potential Health Impacts:* can cause problems with memory, attention, learning problems in babies.
- Recommended testing frequency: Every 5 years.
- Remediation: Ion exchange.

Iron (Secondary Standard)

- Source: Naturally occuring in soil / rock.
- Potential Health Impacts: Usually does not present a health risk at levels occurring in wells. Some harmful bacteria require iron to grow, so iron in water can make it more difficult to get rid of bacteria.
- Recommended testing frequency: Every 5 years.
- Remediation: Air Stripping (packed tower aeration) with filtration; Ion exchange.

pH (Secondary Standard)

- Source: naturally occurring.
- Potential Health Impacts: pH is generally considered an aesthetic concern, rather than a health concern. High pH in water is more likely to leach metals, such as lead, into the water.
- Recommended testing frequency: every year.
- Remediation: acid neutralizing filter; water softener.

SOC

- Source: man-made synthetic organic compounds
- Includes solvents, degreasers, and fumigants

PFOA, PFOS, PFNA, PFAS

- Source: man-made
- Referred to as "forever chemicals"
- Used as water and oil repellent

LIST OF CERTIFIED LABS

Below is a list of some of the water testing laboratories which practice in the area. This listing is for informational use only, and does not represent a specific Health Department endorsement. In addition, there should not be any implications derived from the order in which firms are listed. Lastly, more certified labs can be found online.

| RAdata, Inc. | (973) 927-7303 | www.radata.com |
|-----------------------------------|------------------|------------------------------|
| South Jersey Water Testing | (866) 875 - 3506 | www.Sjwatertest.com |
| Eurofins QC Laboratories | (215) 355-3900 | www.eurofinsus.com/qc |
| CRC Services, LLC | (732) 548-7363 | |
| NJ Analytical Laboratories | (609) 737-3477 | www.njal.com |
| All - State Well Testing Services | (908) 835-2510 | www.all-statewelltesting.com |
| Garden State Laboratories | (800) 273-8901 | www.gslabs.com |

^{**} THE HILLSBOROUGH HEALTH DEPARTMENT, ALONG WITH RARITAN HEADWATERS, WILL BE CO-HOSTING WELL TESTING EVENTS AT THE HILLSBOROUGH MUNICIPAL BUILDING EACH YEAR. IF YOU HAVE A PRIVATE WELL AND WOULD LIKE TO HAVE IT TESTED, PLEASE CONTACT THE HILLSBOROUGH HEALTH DEPARTMENT TO CHECK FOR AN UPCOMING EVENT.

For the complete Hillsborough Township PWTA report (2002-2018), please contact Mike Carr at mcarr@hillsborough-nj.org, or (908) 369 - 5652.

For the NJDEP PWTA site, see https://www.state.nj.us/dep/watersupply/pw_pwta.html