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Mayor Yvonne Spicer
150 Concord Street
Framingham, MA 01702

November 27, 2019


RE: 45 NIXON ROAD – FRAMINGHAM, MASSACHUSETTS

Dear Mayor Yvonne Spicer,

Please find enclosed the necessary information provided by Northeast Geoscience, Inc. This includes the geotechnical consultant's response to the issues of the past meeting and the consultant's report on the well.

If you have any questions or concerns please give me a call.

Sincerely,



George F. Connors
Counselor At Law



November 27, 2019

Mr. George F. Connors, Counselor at Law
Connorstone Engineering, Inc.
10 SW Cutoff #7
Northborough, MA 01532

Re: Public Water Supply Supplemental Information
Maple Glen – 45 Nixon Road Framingham, MA

Dear Mr. Connors:

Northeast Geoscience, Inc. (NGI) is writing to provide information requested during your October 8, 2019 meeting with representatives of the City of Framingham regarding the public water supply for Maple Glen in Framingham, MA. Some of the information requested is included in the attached report titled *Hydrogeologic Study and Report on the Prolonged Pumping and Dry Weather Testing of Well PW-1, Proposed Residential Development at 45 Nixon Road, Framingham, MA* dated December 2017. Additional information will be presented in this letter.

Dry Weather Testing Results

A Dry Weather pumping test was conducted on PW-1 in September and October of 2017. The test was run at a constant flow rate of 4.5 gallons per minute (gpm) or 6,480 gallons per day (gpd) for a period of 48 hours. During the Dry Season Test, water levels were recorded in the pumping well, bedrock test wells PW-3 and PW-4 and in the bedrock well that serves the existing residence at 45 Nixon Road. The maximum water level drawdown values recorded prior to shutdown of the test were as follows: PW-1 = 230.06 ft, PW-3 = 41.38 ft, PW-4 0.47 ft, House Well = 1.08 ft. The maximum drawdown in the pumping well was 346 ft below ground leaving 247 ft of water above the pump set at a depth of 620 ft. The results of the test support the conclusion that PW-1 is capable of a sustained yield of at least 4.5 gpm or 6,480 gpd under dry conditions.

Projected Water Level Impacts on Existing Residential Wells

To evaluate potential water level impacts on existing residential wells in the neighborhood, NGI prepared a Distance Drawdown graph of water levels recorded during maximum drawdown conditions (Figure 10 in the Report). A modified version of Figure 10 is attached to this letter (Figure 10A). Lines representing projected water level drawdown at 1.5 gpm and 2.5 gpm have been added to Figure 10A. The Coordinates and slope of these lines were calculated assuming that the specific capacity of PW-1 is the same at 1.5 gpm and 2.5 gpm as at 4.5 gpm, and that the aquifer transmissivity is constant.

As shown on Figure 10A, no water level drawdown is anticipated at distances greater than 1,000 feet from PW-1. The residential well that serves 45 Nixon Road is 370 feet from PW-1 and experienced 1.08 feet of water level drawdown at 4.5 gpm. This had no measurable effect on well

yield. NGI does not anticipate significant water level impacts to any existing off-site residential wells as a result of operation of PW-1.

Effects of Climate Change on Future Yield of PW-1

The Intergovernmental Panel on Climate Change (IPCC) RCP8.5 (2018) report includes the following general statement regarding climate change effects on precipitation “On average, warming is expected to result in dry areas becoming drier and wet areas becoming wetter, especially in the mid and high-latitude areas.” The report predicts a 15% to 18% increase in annual precipitation in Massachusetts by 2100 for the higher end warming scenarios. Increases in annual precipitation would result in increased rates of aquifer recharge and presumably increased well yields.

Contact with City of Framingham Representatives

Section 4.2 and 4.3 of the attached report documents contact with City of Framingham Representatives regarding both the dry season testing and long-term pumping.

Drought Status During Dry Season Testing

A map of Massachusetts from the US Drought Monitor managed by USDA for October 3, 2017 is attached to this letter. This map shows Framingham classified as “Abnormally Dry” at the time of the dry season testing.

Water Use Data for Over 55 Active Adult Communities

Water use data from two over 55 Active Adult Communities in Central Massachusetts that are currently served by public water supplies are attached to this letter. These data were obtained from Annual Statistical Reports filed by the public water system certified operators with MassDEP as required for all public water systems. The Regency at Bolton (PWS ID No. 2034030) has a Title 5 flow estimate of 9,900 gpd. Actual flows for the period 2014 to 2018 average 5,449 gpd with average per capita flows of 37 gpd. Arbor Glen in Stow, MA (PWS ID No. 2286026) has a Title 5 flow estimate of 9,900 gpd/capita. Actual flows for the period 2014 to 2018 average 5,919 gpd with average per capita flows of 45 gpd/capita. Actual flow data for these developments are approximately 55% to 60% of Title 5 flow estimates, and this is typical for residential developments of this type. Actual flows in the proposed development are estimated to be 60% of 3,600 gpd or 2,160 gpd (1.5 gpm).

Is MassDEP Concerned with Aquifer Depletion

MassDEP has developed specific testing procedures for public water supply wells to establish that the wells have sufficient yield to serve proposed projects and to not experience water shortages or result in unacceptable impacts to existing water supplies in the area. The procedures are outlined in the Guidelines and Policies for Public Water Systems published by MassDEP. MassDEP approval of a water system, such as the system proposed for Maple Glen,

is only granted in cases where the testing meets MassDEP criteria indicating sufficient well yield.

Well Decommissioning

NGI recommends that PW-2 and PW-4 be decommissioned and that PW-3 remains as a potential future backup well for the project. NGI recommends that the well that serves 45 Nixon Road be maintained to supply water for outdoor water use at the site.

Discharge Location During Long Term Pumping

During the long-term pumping water was discharged to a location approximately 550 ft northwest of the well in the vicinity of the proposed septic leach field. This location was selected to be far from the pumping well to limit water re-circulation, and to be close to the proposed septic system leach field to simulate leaching of treated wastewater.

Impacts of Tree Removal on Well Yield

Trees consume water and promote increased rates of evapotranspiration. Removing trees from the Maple Glen site will reduce rates of evapotranspiration, but increase rates of runoff from the site. NGI anticipates no net change in groundwater recharge as a result of tree removal and no net effect on well yield.

Impacts of Blasting on Well Yield

Limited rock removal is proposed at the site during the site work phase of development. Rock removal will be accomplished using hammer drill and traditional blasting methods. No perchlorate will be used as a blasting agent. Seismic vibrations caused by blasting can, in rare cases, result in increased or decreased bedrock well yield. This typically occurs if blasting is conducted in close proximity to bedrock wells (within tens of feet) (Bender, 2006). The blasting proposed on the Maple Glen site is limited in extent and confined to portions of the site shown on the attached map. The blasting will take place 420 ft from PW-1, 325 feet from the well at 23 Dartmouth Drive, 350 ft from the well at 21 Dartmouth Drive and 450 ft from the well at 47 Nixon Road. Given these conservative setback distances and the limited extent of proposed blasting, NGI does not anticipate proposed blasting to affect bedrock well yields in the area.

Impacts of Wastewater Disposal on Existing Wells

NGI has evaluated potential impacts of treated wastewater disposal at the site on existing residential wells near the site. The proposed wastewater treatment system consists of a 12,000 gallon septic tank followed by a pump chamber. The pump chamber pressure doses to a Presby System leach field 50 ft by 60 ft in map view. The Title 5 flow estimate for the project is 3,600 gpd.

MassDEP recommends evaluating nitrate loading when considering potential wastewater impacts to private wells in nitrogen sensitive areas, such as areas served by private wells and

septic systems. Title 5 imposes a nitrogen loading limitation of 440 gpd per acre (defined as 40,000 ft²) design flow for systems serving new construction in nitrogen sensitive areas. The site is located on an 879,399 ft² parcel that would support a Title 5 flow of 9,673 gpd. Expressed another way, the proposed nitrogen loading rate is 164 gpd/acre or 37% of the allowed rate. Based on this analysis, NGI does not anticipate nitrate concentrations in residential wells in excess of the MCL of 10.0 mg/L.

Please do not hesitate to contact me with any questions.

Sincerely:

NORTHEAST GEOSCIENCE, INC.



Jay Billings

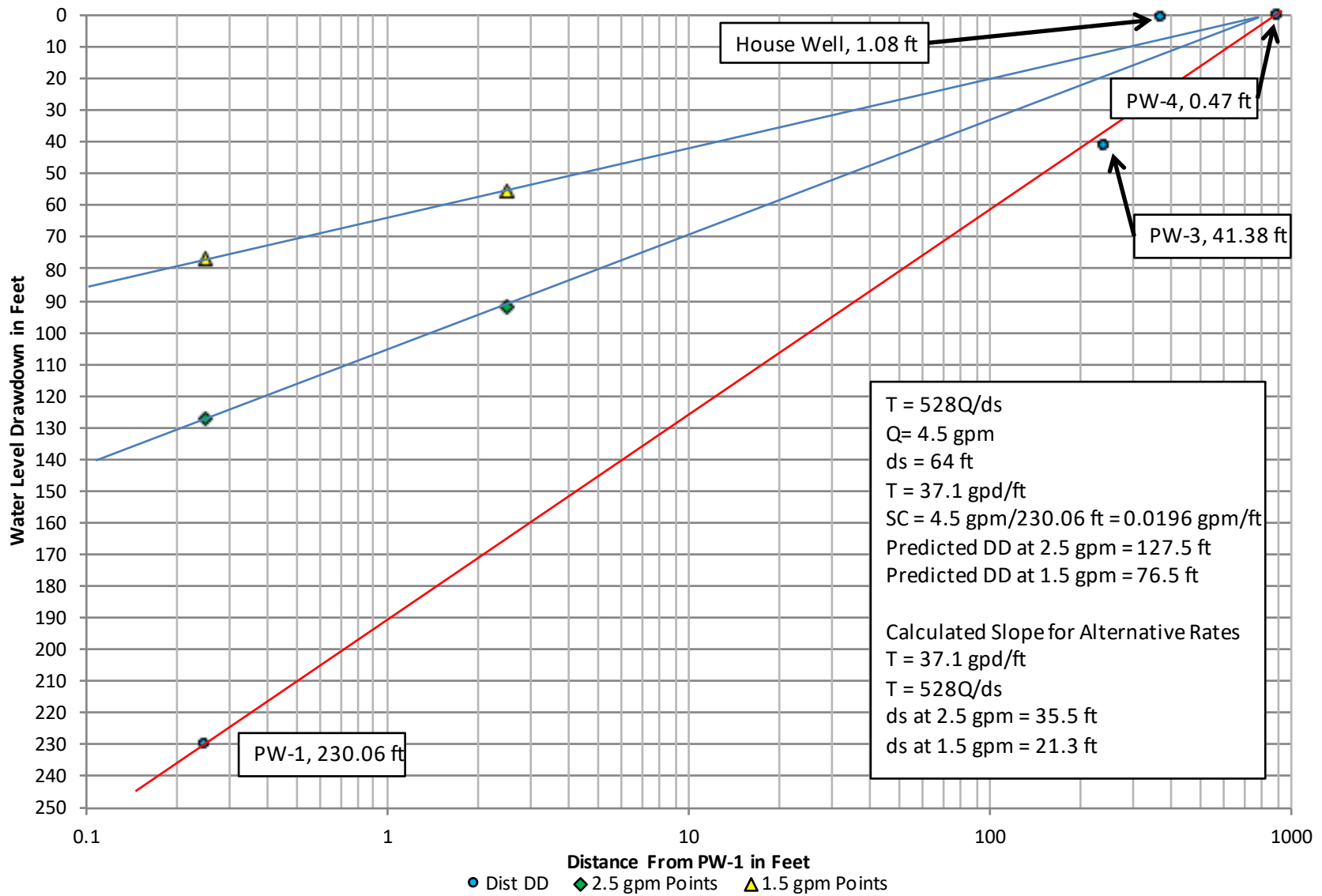
Hydrogeologist

Attachments Figure 10A – Distance Drawdown Analysis
Massachusetts Drought Status Map for October 3, 2017
Water Use Data for the Regency at Bolton and Arbor Glen in Stow
Blasting Area Map

References

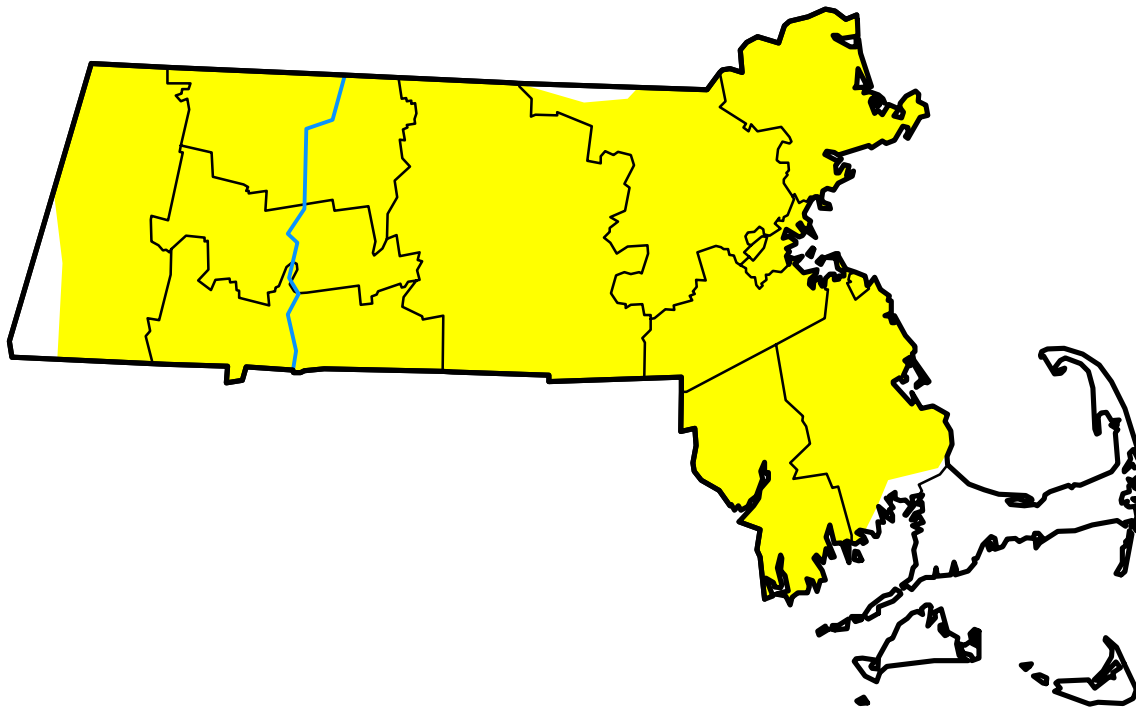
Bender, Wes. 2006. Blasting Near Water Wells. Primer 2006.

Figure 10A - Distance Drawdown Graph of Data Collected During Dry Period Testing - PW-1 Pumping 4.5 gpm



U.S. Drought Monitor Massachusetts

October 3, 2017
(Released Thursday, Oct. 5, 2017)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	9.87	90.13	0.00	0.00	0.00	0.00
Last Week <i>09-26-2017</i>	54.38	45.62	0.00	0.00	0.00	0.00
3 Months Ago <i>07-04-2017</i>	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year <i>01-03-2017</i>	0.70	99.30	98.09	69.13	8.59	0.00
Start of Water Year <i>09-26-2017</i>	54.38	45.62	0.00	0.00	0.00	0.00
One Year Ago <i>10-04-2016</i>	0.00	100.00	98.15	89.95	52.13	0.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Anthony Artusa
NOAA/NWS/NCEP/CPC



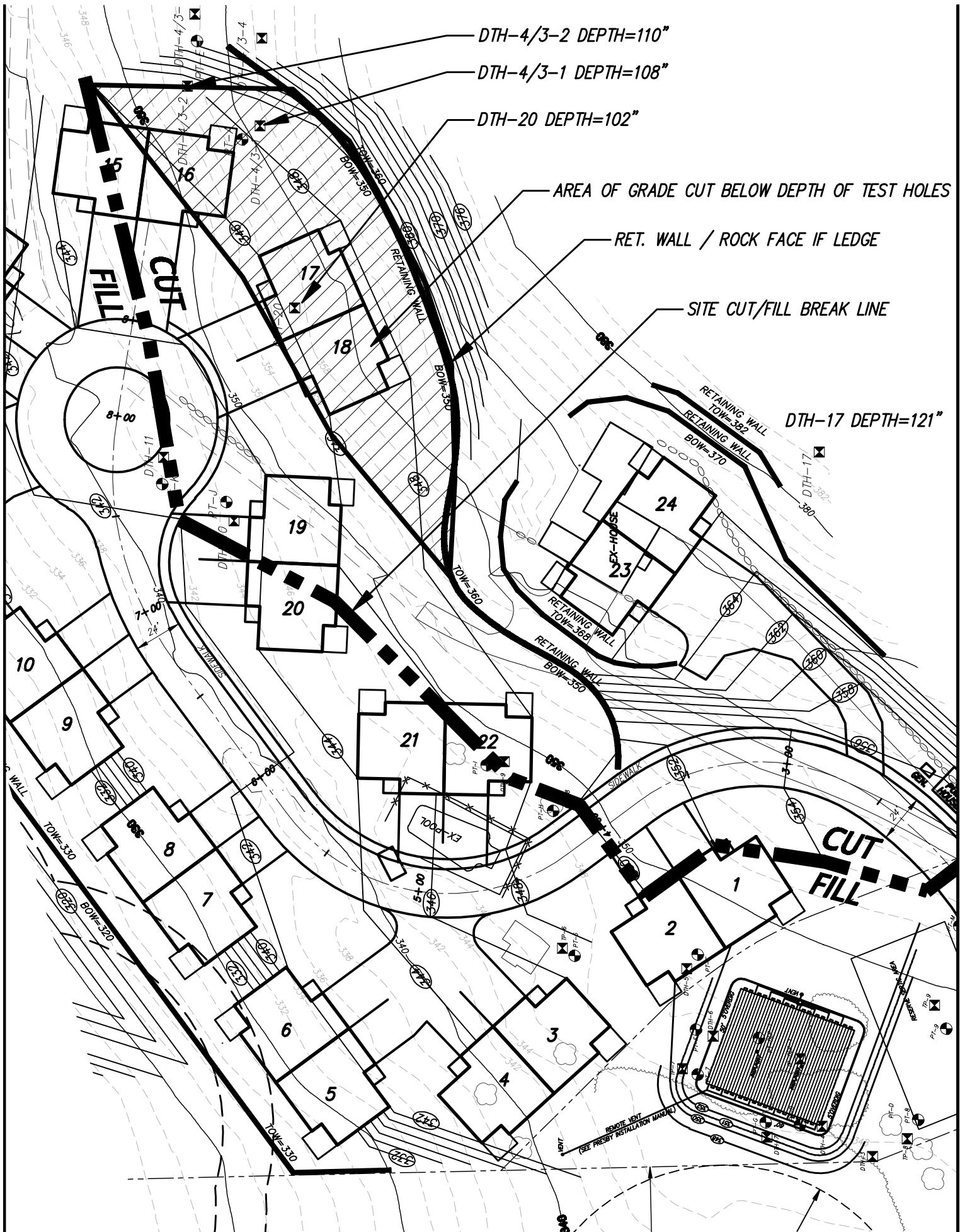
Water Use Data - Regency at Bolton

Year	Population	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	gpd	gpd/person
2014	148	193,650	126,820	137,870	138,570	172,950	142,140	173,510	139,480	136,030	191,160	146,180	153,050	1,851,410	5,072	34
2015	148	0	0	0	0	0	0	150,028	160,979	0	145,075	175,636	157,012	788,730	5,258	36
2016	148	0	140,800	139,200	145,200	205,800	163,300	166,500	208,200	167,000	145,700	217,300	194,000	1,893,000	5,186	38
2017	148	199,664	155,224	198,884	194,771	222,386	204,160	176,008	176,008	188,600	176,674	172,043	195,543	2,259,965	6,192	42
2018	148	168,223	135,063	154,143	155,000	182,057	180,614	188,786	169,850	155,050	166,100	167,500	198,743	2,021,129	5,537	37
															5,449	37

Water Use Data - Arbor Glen, Stow, MA

Year	Population	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	gpd	gpd/person
2014	132	173,439	137,753	161,139	168,340	178,589	207,715	213,423	222,874	197,064	187,449	175,986	195,158	2,218,929	6,079	46
2015	132	179,920	173,070	165,894	167,228	230,833	238,748	235,444	199,313	196,370	173,557	180,388	187,645	2,328,410	6,379	48
2016	132	182,688	157,798	167,762	187,483	180,530	211,570	199,338	148,414	115,545	182,127	160,302	168,932	2,062,489	5,651	43
2017	132	158,295	137,639	152,972	159,925	163,359	162,749	168,126	169,273	170,873	173,249	173,421	182,919	1,972,800	5,405	41
2018	132	176,300	144,263	160,141	159,134	165,595	178,310	220,636	207,837	207,667	249,137	166,828	183,523	2,219,371	6,080	46
															5,919	45

Values expressed in gallons



**HYDROGEOLOGIC STUDY AND REPORT ON PROLONGED PUMPING AND
DRY WEATHER TESTING OF WELL PW-1
PROPOSED RESIDENTIAL DEVELOPMENT AT 45 NIXON ROAD**

FRAMINGHAM, MASSACHUSETTS

DECEMBER 2017

PREPARED BY:

NORTHEAST GEOSCIENCE, INC.
97 WALNUT STREET
CLINTON, MASSACHUSETTS 01510
978-365-9045

PREPARED FOR:

SOUTH MIDDLESEX REALTY GROUP
665 COCHITUATE ROAD
FRAMINGHAM, MASSACHUSETTS 01701

NGI PROJECT No. 160603

QUALITY ASSURANCE/QUALITY CONTROL

The following personnel have reviewed this report for accuracy, content and quality of presentation:



Jay Billings
Project Manager

12-8-2017
Date



Joel Frisch
Hydrogeologist

12/8/17
Date

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1.0 INTRODUCTION

Northeast Geoscience, Inc. (NGI) has been contracted by the South Middlesex Realty Group, LLC to permit a water supply for a proposed residential development on a 33 acre parcel of land located at 45 Nixon Road in Framingham, Massachusetts. The proposed project consists of 30 age restricted two bedroom housing units served by a public water supply and common septic system permitted through the Massachusetts Department of Environmental Protection (MassDEP). The Title 5 flow estimate for the water and wastewater disposal systems is 4,500 gallons per day (gpd). The purpose of this report is to document the results of a 48-hour pumping test conducted on bedrock well PW-1 in September 2017, and to document prolonged pumping of PW-1 during 2017.

2.0 SITE DESCRIPTION

The property consists of three parcels of land off of Nixon Road with a combined area of 33 acres. Currently there is one single family residence on the northern most parcel, and it is served by a bedrock well (45 Nixon Road Well) and on-site septic system. Figure 1 is a map showing the site location and parcel boundaries. Figure 2 is a Site Plan showing parcel IDs, boundaries and existing and proposed site features. The land is in the Town of Framingham R-4 Residential Zoning District which requires one acre house lots. According to the Town of Framingham Engineering Department, the area within ½-mile of the site is not currently served by public sewer or public water. Properties in the vicinity of the site consist of light residential development served by individual wells and septic systems.

2.1 SITE HYDROLOGY

The site is located in the Sudbury River Basin and is drained by a small tributary to Baiting Brook which originates west of the site and drains south to the Sudbury River. North of the site there is an isolated wetland that drains to the north to tributaries of Hop Brook, which also discharges to the Sudbury River.

2.2 SITE GEOLOGY

Bedrock on the site is mapped as the Claypit Hill Formation (PzpCch) (Nelson, 1975) described as a dark grey fine to medium grained biotite-plagioclase-quartz gneiss estimated to be approximately 600 meters thick (See Figure 3 – Bedrock Geologic Map). NGI has observed bedrock outcrops of this unit on site. Drill cuttings logged during well installation are consistent with this description.

Surficial deposits on the site are mapped as glacial till of Pleistocene Age (Nelson, 1974) (See Figure 4 – Surficial Geologic Map). According to Nelson (1974) these deposits consist of light grey to greenish grey non-stratified, poorly sorted, heterogeneous mixture of boulders, cobbles, sand, silt and clay with variable thickness. A subsurface investigation of the property revealed the presence of this till unit over bedrock in most areas of the site. Stratified glacial outwash deposits consisting of medium to

coarse sand and gravel are present in the low elevation areas in the northern part of the site. The subsurface wastewater disposal system is proposed to be constructed in these deposits due their relatively high permeability.

2.3 SITE HYDROGEOLOGY

The surficial deposits on site have low permeability and thickness and do not constitute a productive aquifer. Bedrock underlying the surficial deposits forms a fractured bedrock aquifer. The bedrock has low primary porosity and permeability, and is capable of transmitting water only through fractures including joints and faults where secondary porosity and permeability have developed as a result of tectonic and other stresses. Wells constructed in the fractured rock aquifer are bedrock wells, where unconsolidated surficial deposits are sealed off with steel well casing, and water is derived from open borings into the rock. The yield of bedrock wells is dependent on the number of fractures encountered, the aperture of the fractures and degree to which they are interconnected. The presence of surficial aquifers and surface water bodies that can provide recharge to fractured rock aquifers also effect well yields.

2.4 EXISTING WELL DATA

There is a significant amount of information available on existing bedrock wells constructed in the fractured bedrock aquifer in the vicinity of the site. MassDEP maintains the SearchWell data base that includes driller's logs of existing private water supply wells. NGI compiled a data set of 72 existing bedrock wells in the vicinity of the site from the SearchWell data base and it is presented on Table 1. As shown on Table 1, the data base does not have street numbers for many of the wells and specific lot locations for these wells are difficult to determine. Table 1 includes wells on Nixon Road, Dartmouth Drive, Carter Drive, Wayside Inn Road, Doeskin Drive and Paramenter Road. Approximate locations of private wells with listed street numbers are shown on Figure 5. The depths of the wells in this data set range from 100 feet to 905 feet with a median depth of 353 feet. Well yields in this data set range from 0.25 gpm to 60 gpm with a median yield of 7 gpm. While the median yield is similar to the findings of Hansen and Simcox (1993), the greater median depth is an indirect indication that the fractured bedrock aquifer in this area has relatively low yield characteristics. This is consistent with anecdotal reports of well yield limitations in this area of Framingham (Cooper per com., 2004).

In addition to the data on existing wells in the area, four 6-inch diameter bedrock wells have been installed on the site by the development team. Logs of these wells are included in Appendix B. These wells were installed using air rotary drilling methods to depths ranging from 800 to 1,225 feet. Air lift development tests conducted on these wells has generated well yield estimates ranging from 0.0 gpm (PW-4) to 6.0 gpm (PW-1) as presented on Table 2. On site data indicate that the yield of the fractured rock aquifer on site is relatively low. This is interpreted to be a result of low fracture density and aperture, and the absence of productive unconsolidated aquifer or surface water bodies to provide recharge to the fractured rock aquifer.

The relatively low permeability of the fractured bedrock aquifer tends to increase the challenge of installing wells with favorable yield characteristics on the site. However, the low permeability and lack of a well interconnected fracture network also tends to limit impacts of on-site water withdrawals on existing off site wells.

3.0 WATER SUPPLY PERMITTING HISTORY

In 2003 a developer proposed a residential housing project on the site at 45 Nixon Road. The project consisted of a 24 unit residential housing project with a proposed Title 5 flow estimate and water demand of 8,640 gpd. The project was proposed to be served by a public water supply and a common septic system. The water supply well (PW-1) is a 6-inch diameter bedrock well installed in 2003 to a depth of 1,245 feet using air rotary drilling methods. The well was tested for yield and water quality according the Massachusetts Department of Environmental Protection (MassDEP) requirements for public water supplies. MassDEP approved the well as a public water supply with an approved withdrawal rate of 8,640 gallons per day (gpd) in a letter dated September 21, 2005 (See Appendix A). During the Planning Board review of the project, the Framingham Health Department expressed concerns about the yield of PW-1 and requested additional testing of PW-1 under dry conditions (late summer or fall) to further evaluate the well yield. Ultimately the project proposed in 2003 was denied by the Planning Board.

In 2014, South Middlesex Realty Group, LLC proposed a different residential housing project on the site. At that time the Framingham Planning board raised concerns about the impact of water withdrawals at the site on the yield of existing residential wells in the vicinity of the site. The 2017 well testing program at 45 Nixon Road was conducted to evaluate the yield of Well PW-1 under dry conditions and to evaluate potential impacts of long term withdrawals on existing residential wells in the vicinity of the site. The purpose of this report is to document this testing program.

3.1 MAGNITUDE OF THE CURRENTLY PROPOSED WITHDRAWAL

Based on Title 5 flow estimates, the currently proposed water withdrawal for the site is 4,500 gpd on a 33 acre parcel. This corresponds to a maximum anticipated withdrawal of 136.4 gpd/acre of the site. By comparison, a Title 5 flow estimate for a single family 4 bedroom residence is 440 gpd. Town of Framingham Zoning in this area allows for a single family residence on 1.0 acres of land resulting in a maximum anticipated withdrawal of 440 gpd/acre. Based on this analysis, the currently proposed maximum withdrawal rate for the site is approximately 30% of the maximum withdrawal rate allowed by current zoning. It is also important to note that both existing withdrawals in the vicinity of the site and proposed withdrawals are returned in wastewater disposal systems. Therefore, there is no net water withdrawal by the existing or proposed wells.

4.0 WELL TESTING

4.1 CONTACT WITH DEP

NGI worked with the Northeast Regional Office (NERO) of the Massachusetts Department of Environmental Protection (MassDEP) on the permitting of PW-1 as a Public Water Supply between 2003 and 2005. The results of a prolonged pumping test on PW-1 were presented to MassDEP in a report titled **Source Final Report for Proposed Bedrock Water Supply Well PW-1, Ford's Meadow, 45 Nixon Road, Framingham, MA** dated April, 2005. MassDEP approved PW-1 as a public water supply with an approved withdrawal rate of 8,640 gpd. However, the project was denied by the Planning Board in 2005.

In 2017 NGI contacted Mr. James Persky of MassDEP NERO to request advice on the remaining steps required to active PW-1 as a public water supply to serve the recently proposed project. On August 14, 2017 NGI submitted a letter to MassDEP with the results of water quality testing on PW-1 from 2017 requesting information on the regulatory status of the public water supply. Mr. Persky requested a site visit to discuss the project further. On October 23, 2017 NGI met Mr. Persky at the site and described the propose project and water system. Mr. Persky indicated that the approval of the public water supply for the site was still valid, but that a revised water system design sized for the new project would have to be submitted to MassDEP for approval.

4.2 CONTACT WITH FRAMINGHAM HEALTH DEPARTMENT

On November 14, 2016 NGI called Ms. Carol Bois at the Framingham Health Department to discuss proposed additional testing on PW-1. Ms. Bois referred NGI to Michael Blanchard at the Framingham Board of Health. On November 22, 2016 NGI e-mailed Mr. Blanchard requesting to be placed on the Framingham Board of Health meeting agenda to discuss proposed additional testing of PW-1. A copy of this e-mail is included in Appendix A of this report. NGI received no response to these requests. On December 6, 2016 NGI called Mr. Blanchard requesting the status of the meeting request. Mr. Blanchard indicated that the Board of Health was going to consult with legal counsel before setting up a meeting due to pending litigation on the project. No further direction was received from the Board of Health on this matter.

4.3 LONG TERM PUMPING OF PW-1

PW-1 is a 6-inch diameter bedrock well installed to a depth of 1,245 feet. A 3 h.p. 230V submersible pump is installed in the well to a depth of 620 feet. The discharge line on the pump is 1-inch diameter galvanized steel pipe fitted with a check valve just above the pump. The well is equipped with a 1-inch diameter stilling well to facilitate water level measurements. A 1-inch diameter ABS plastic discharge line was installed from the well to a location approximately 570 feet northeast of the well near the existing swimming pool (See Figure 2). A 1-inch diameter Badger totalizing flow meter was

installed on the discharge line to record flows, along with a gate valve and sample tap to control flow rates.

On January 5, 2017 NGI activated the submersible pump in PW-1 and recorded flows in a totalizing flow meter. The well was pumped continuously at an average flow rate of 4.7 gallons per minute for 214 days until September 5, 2017 at which time the pump was shutdown. The pump was shutdown to allow for water level recovery prior to the dry weather 48-hour testing. While pumping, water was discharged to a location approximately 570 feet northeast of the well in a wooded area. During the pumping period a total of 1.57 million gallons of water was pumped from PW-1. On October 31, 2017 the pump in PW-1 was turned on at an average flow rate of 4.6 gpm and is still pumping at this rate at the time of this report. Records of prolonged pumping are included in Appendix C.

NGI interviewed the occupants of the house at 45 Nixon Road regarding the performance of the bedrock well that serves the residence. The well is approximately 370 feet northeast of PW-1 and it is equipped with a submersible pump. No issues with well performance or water availability have been experienced by the occupants of the residence.

On November 6, 2017 NGI contacted Mr. Jason Dodd of the Framingham Health Department and asked if the Health Department maintains a complaint log including well yield issues. Mr. Dodd indicated that a log was maintained. NGI requested a copy of the log for 2017 for the area near 45 Nixon Road. Mr. Dodd stated that there were no reports of well yield issues on Nixon Road or Dartmouth Circle during 2017.

4.4 WATER QUALITY TESTING DURING PROLONGED PUMPING

On February 8, 2017 NGI collected a set of water quality samples for laboratory analysis. The samples were collected from the smooth nose sample tap on the discharge line of the submersible pump at the wellhead located upstream of the flow control valve. The samples were collected in containers provided by the laboratory, placed on ice and delivered to Alpha Analytical Laboratories under a chain of custody to be analyzed by the laboratory. The list of analyses requested correspond to the parameters listed in Appendix A of the Guidelines and Policies for Public Water Systems (MassDEP, 2014).

The results of the laboratory analyses are presented in Table 3 and laboratory certificates of analysis are included in Appendix D. Table 3 includes Maximum Contaminant Levels, Secondary Standards and other applicable regulatory levels. As can be seen from Table 3 the water derived from PW-1 meets all applicable standards and is considered potable without water treatment.

4.5 DRY CONDITION TESTING OF PW-1

In response to concerns raised by the Framingham Health Department regarding the yield of PW-1 under dry conditions, NGI conducted a 48-hour pumping test on Well PW-1 in September, 2017.

Figure 6 is a graph of discharge data from the USGS gauging station on the Sudbury River at Saxonville, MA recorded in 2017. Discharge values for this location in 2017 range from a low of 5.6 cfs to a high of 804 cfs with an average value of 159 cfs. The time of the Dry Condition testing is indicated on the graph. Discharge in the river at the start of the test was 19.9 cfs which is a relatively low flow condition. As shown on Figure 3 the test was conducted during a period of low flow conditions in the Sudbury River. Figure 7 is a drought monitor map for September 26, 2017. As can be seen from this map, eastern Massachusetts was categorized as “abnormally dry”.

On September 5, 2017 the pump in PW-1 was shut down to allow for water level recovery. On September 26, 2017 NGI measured the depth to water in PW-1 at 66.45 feet below the top of the well casing. A data logger programed to record water levels every 10 minutes was installed in the well to record pre-test water level readings. Figure 8 is a graph of water levels recorded prior to the start of the pumping test, and shows that water levels were relatively stable prior to the start of the test. On September 29, 2017 the property owner arranged for the residence of the house at 45 Nixon Road to stay in hotel rooms for several nights and NGI turned off the power to the pump in the well that serves the residence at 9:20 AM.

At 11:00 AM the pump in PW-1 was turned on at a flow rate of 4.5 gpm (6,480 gpd). Water was pumped to the same location used for the prolonged pumping approximately 570 feet north of the well adjacent to the swimming pool. Flow was recorded on a 1-inch diameter totalizing flow meter. Water levels were recorded in PW-1, PW-3 and PW-4 using pressure transducers. Water levels in the well that serves the residence were measured manually. PW-1 was pumped continuously for 48 hours until October 1, 2017 at 11:00 AM at which time the pump was shut down and water level recovery was monitored.

Figure 9 is a linear graph of water level data recorded during the 48-hour test. The maximum water level drawdown recorded in PW-1 was 230.06 feet (296.51 feet below the top of casing) leaving 323.49 feet of water above the pump. The water level in PW-1 does not stabilize at the end of the test, but the rate of drawdown at the end of the test is relatively slow. Water level recovery following test shut down is incomplete with approximately six feet of residual drawdown after 48 hours or recovery. Maximum drawdown values recorded in the other wells are as follows: PW-3 – 41.38 feet, PW-4 – 0.47 feet, House Well – 1.14 feet. Figure 10 is a semi-log distance-drawdown graph of these data. The distance drawdown graph predicts no water level drawdown from PW-1 at a distance of approximately 900 feet at this flow rate. Figure 11 is a semi-log graph of the time drawdown data. This graph was used to project water level drawdown in PW-1 after 180 days of pumping. The projected water level drawdown after 180 days of pumping at 4.5 gpm is 280 feet or 346 feet below ground. Based on the results of this testing NGI concludes that the yield of PW-1 under dry conditions is 4.5 gpm.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this Hydrogeologic Study of the site located at 45 Nixon Road, NGI derives the following conclusions:

1. Unconsolidated deposits beneath the site consist of glacial till deposits of Pleistocene Age. The low permeability and thickness of these deposits means they are not favorable for water supply development. There are limited portions of the site underlain by glacial outwash deposits, the limited extent and thickness of these deposits makes them unfavorable for water supply development.
2. Bedrock beneath the site is biotite-plagioclase-quartz gneiss of the Clay Pit Hill Formation. This unit forms a fractured rock aquifer with relatively low permeability and yield characteristics.
3. 72 existing bedrock wells in the vicinity of the site have a median depth of 352.5 feet, which is relatively high when compared to a median bedrock well depth estimate for Massachusetts prepared by Hansen and Simcox (1993) of 170 feet. The median yield of these wells of 7.0 gpm corresponds the USGS median yield estimate of 7.0 gpm.
4. Four bedrock wells installed on site by the development team have depths ranging from 800 feet to 1,245 feet and preliminary driller's yield estimates ranging from 0.0 gpm to 10.0 gpm.
5. Data from existing bedrock wells in the vicinity of the site and the wells installed on site indicate that the fractured bedrock aquifer has relatively low porosity and permeability resulting in low well yields and challenges in water supply development on this site. These aquifer characteristics also tend to limit off site impacts (water level drawdown in existing bedrock wells) of withdrawals on the site.
6. Laboratory results of water samples from Well PW-1 collected in January 2017 confirm that the quality of water derived from Well PW-1 meets all applicable drinking water standards without treatment.
7. The magnitude of the proposed withdrawals is approximately 30% of withdrawals allowed by current zoning (440 gpd/acre).
8. Prolonged pumping of PW-1 was conducted to simulate or exceed maximum proposed withdrawals on the site. Water was discharged in a manner to simulate future on-site wastewater disposal practices. PW-1 was pumped for 217 days in 2017 at an average flow rate of 4.5 gpm. During this time the Framingham Department of Health received no complaints of well yield issues in the vicinity of the site. The residence of the house on site reported that the well that serves the house at 45 Nixon Road functioned properly.
9. A 48-hour dry period yield test conducted on PW-1 at an average flow rate of 4.5 gpm. Data collected during this test indicate that PW-1 is capable of pumping 4.5 gpm for 48-hours with 323 feet of available drawdown above the pump. A distance-drawdown analysis of water level data collected in four bedrock wells on site was conducted to project off-site water level impacts of the withdrawals on existing wells. This analysis results in projections

of 0.0 feet of water level drawdown at distances greater than 900 feet from PW-1. Based on this analysis no significant off-site water level or yield impacts to existing water supply wells are anticipated from the proposed withdrawals at the site.

10. NGI concludes that the development of PW-1 as a Public Water Supply to serve the project currently proposed for the site is viable. This conclusion is based on the interpretation that the yield and water quality characteristics of Well PW-1 are favorable, and that no off-site water level impacts are anticipated.
11. NGI concludes that the withdrawals will not affect water levels in wells off site due to the low volume nature of the withdrawals (4.5 gpm), the size of the site (33 acres) and the relatively low permeability of the fractured bedrock aquifer in the vicinity of the site. In addition no net withdrawals are proposed as all water pumped for the water system will be returned to the aquifer in the proposed wastewater disposal system. Finally, significant setbacks (>800 feet) exist between well PW-1 and the nearest off-site bedrock well.

Based on these conclusions, NGI offers the following recommendations:

1. Contract an engineer to design a water storage and distribution system for the property with PW-1 as the source of water. Provide backup water supply with water storage.
2. Submit the water system design to MassDEP for approval and request Framingham Department of Health approval of the system as a public water supply.

References Cited

Cooper, Robert, 2003. Personal communication during a site visit at Nixon Road on December 16, 2003

Hansen, Bruce P. and Simcox, Alison C. 1994. Yields of Bedrock Wells in Massachusetts. United States Geological Survey Water Resources Investigations Report 93-4115. Marlborough, MA

Nelson, Arthur E. 1974. Surficial Geologic Map of the Framingham Quadrangle, Middlesex and Worcester counties, Massachusetts. Geologic Quadrangle Map GQ-1176. United States Geological Survey, Washington, D. C.

Nelson, Arthur E. 1975. Bedrock Geologic Map of the Framingham Quadrangle, Middlesex and Worcester Counties, Massachusetts. Geologic Quadrangle Map GQ-1274. United States Geological Survey, Washington D. C.

TABLES



TABLE 1
Private Water Supply Well Log Summary
MassDEP SearchWell Database
Area Surrounding 45 Nixon Road, Framingham, Massachusetts

WELL_ID	TOWN	STREET_NUMBER	STREET_NAME	DATE_COMPLETE	TOTAL_DEPTH	DEPTH_TO_BEDROCK	WATER_LEVEL	YIELD_GPM
5421	Framingham		Carter Drive	1/19/2000	700	25	120	0.25
267297	Framingham	47	Nixon Road	10/28/2009	525	8	30	0.25
305479	Framingham		Doeskin Drive	6/21/1989	505	6	16	1
305559	Framingham		Nixon Road	7/1/1979	325	5		1
157335	Framingham	34	Nixon Road	5/12/2008	600	5	40	1.5
305549	Framingham		Carter Drive	4/1/1981	505	1		1.5
305536	Framingham		Carter Drive	4/1/1984	905	12		2
305245	Framingham	17	Nixon Road	10/17/1997	545	50	25	3
305540	Framingham		Nixon Road	6/1/1983	300	10	40	3
305541	Framingham		Carter Drive	12/1/1982	765	5		3
305544	Framingham		Carter Drive	7/1/1982	720	10		3
120558	Framingham	36	Wayside Inn Road	5/30/2003	800	20	23	4
305381	Framingham	40	Nixon Road	6/30/1992	600	12	20	4
305487	Framingham	1	Dartmouth Drive	8/21/1987	400	21	12	4
305553	Framingham		Carter Drive	1/1/1981	620	8		4
305554	Framingham		Carter Drive	1/1/1981	470	8		4
305556	Framingham		Carter Drive	12/1/1980	240	6		4
659	Framingham	78	Carter Road	11/8/2000	900	8	20	5
5426	Framingham	16	Nixon Road	10/13/1999	430	56	30	5
5428	Framingham	50	Carter Drive	9/20/1999	605	13	28	5
102968	Framingham		Dartmouth Drive	8/21/2001	555		5	5
126648	Framingham	55	Nixon Road	10/14/2003	500	20	20	5
131656	Framingham	Lot 2	Wayside Circle	10/4/2004	505	2	56	5
305363	Framingham	10	Wayside Inn Road	4/30/1993	325	55	18	5
305442	Framingham	8	Dartmouth Drive	10/13/1990	345	17	10	5
305520	Framingham		Wayside Inn Road	4/29/1985	200	45	15	5
305533	Framingham		Carter Drive	6/14/1984	500	8	35	5
305535	Framingham		Wayside Inn Road	5/5/1984	180	67		5
305537	Framingham		Wayside Inn Road	5/4/1984	180	67	20	5
305209	Framingham		Nixon Road	5/11/1998	365	20	9	6
305283	Framingham	60-A	Nixon Road	11/6/1996	360	25	20	6
305480	Framingham		Doeskin Drive	6/17/1989	405	8	20	6
305539	Framingham		Carter Drive	7/1/1983	600	4		6
305560	Framingham	25	Wayside Inn Road	11/29/1978		4	42	6
114219	Framingham	87	Doe Skin Drive	8/2/2003	600	7	70	7
305330	Framingham	64	Nixon Road	11/8/1994	305	6	15	7
305532	Framingham		Parmenter Road	7/14/1984	200	14	6	7
135431	Framingham	81	Carter Drive	10/25/2004	625	6	20	7.5
102967	Framingham		Dartmouth Drive	8/22/2001	455	4	5	8
305531	Framingham		Nixon Road	8/29/1984	225	10	6	8
305534	Framingham		Wayside Inn Road	5/8/1984	180	54	15	8
5525	Framingham	38	Wayside Inn Road	4/12/2000	680	20	10	10
102316	Framingham	39	Wayside Inn Road	5/1/2001	205	0	25	10
131657	Framingham	Lot 6	Wayside Circle	10/2/2004	305	27	20	10
305530	Framingham		Nixon Road	8/30/1984	167	10		10
665	Framingham	11	Dartmouth Drive	11/29/2000	150	9	4	12
120522	Framingham	30	Wayside Inn	5/9/2003	800	10	10	12
131655	Framingham	Lot 1	Wayside Circle	10/3/2004	505	9	20	12
143567	Framingham	4	Wayside Circle	9/16/2005	700	25	20	12
305205	Framingham	95	Parmenter Road	6/9/1998	220	25	5	12
305521	Framingham		Wayside Inn Road	4/28/1985	125	45	20	12
305562	Framingham	25	Wayside Inn Road	3/11/1976	130	13	20	12
5524	Framingham	32	Wayside Inn Road	4/12/2000	280	4	40	13
145572	Framingham	99	Parmenter Street	4/6/2006	300	12	25	13
5528	Framingham	32	Wayside Inn Road	4/12/2000	280	4	40	14
305496	Framingham	22	Parmenter Road	4/12/1986	150	78		15
305545	Framingham		Nixon Road	3/10/1982	200	15	10	15
130815	Framingham	Lot 23	Wayside Inn Road	3/12/2004	275	6	flows over	16
114205	Framingham	421	Wayside Inn Road	7/2/2002	280	5	15	20
114206	Framingham	26	Wayside Inn Road	7/2/2002	280	5	15	20
135310	Framingham	20	Nixon Road	8/22/2005	165	10	30	20
305349	Framingham	14	Doeskin Drive	11/9/1993	500	20	20	20
305350	Framingham		Wayside Inn Road	11/6/1993	205	15	10	20
305351	Framingham		Wayside Inn Road	11/4/1993	185	7	15	20
305490	Framingham		Parmenter Road	11/11/1986	450	0	40	20
305204	Framingham	12	Dartmouth Drive	6/10/1998	360	5	20	25
305210	Framingham		Nixon Road	5/8/1998	245	14	3	25
5419	Framingham	Lot 21	Nixon Road	7/19/2000	240	8	15	30
305546	Framingham		Nixon Road	3/5/1982	200	15	15	30
305495	Framingham		Nixon Road	8/2/1986	125	22		40
305332	Framingham	3	Doeskin Place	10/20/1994	555	5	20	50
305550	Framingham	98	Parmenter Road	3/1/1981	175	12		50
305528	Framingham		Parmenter Road	10/17/1984	100	35	10	60

Median	352.5	10	7
Average	397.3	17.0	11.6
Maximum	905	78	60
Minimum	100	0	0.25

Table 2
Well Construction Summary - 45 Nixon Road - Framingham, MA

Well ID	Driller	Date Completed	Diameter (in)	Depth to Rock (ft)	Casing (ft)	Total Depth (ft)	Rated Yield (gpm)
PW-1	Viera	7/2/03	6-inch	1	30	1,225	10
PW-2	Skillings	8/9/05	6-inch	10	43	1,447	2
PW-3	Skillings	8/30/05	6-inch	12	40	1,000	2
PW-4	Skillings	7/10/14	6-inch	45	128.5	1,280	0.5

Table 3
Water Quality Data - Bedrock Well PW-1
December 15, 2003 to December 18, 2003 and Update Sample
45 Nixon Road - Framingham, Massachusetts

PARAMETER	UNITS	Initial 12/15/2003	24 Hour 12/16/2003	48 Hour 12/17/2003	End Point 12/18/2003	Update Sample 2/8/2017	DEP MMCL
<i>Microbiology</i>							
Total Coliform	colonies/100mL	NS	Negative	NS	Negative	Absent	0
<i>Inorganic Compounds</i>							
Ammonia (as Nitrogen)	mg/L	NS	NS	NS	<0.075	NS	NAS
Antimony	mg/L	NS	NS	NS	<0.002	<0.004	0.006
Arsenic	mg/L	NS	NS	NS	<0.008	<0.001	0.01 [#]
Barium	mg/L	NS	NS	NS	0.01	0.0077	2
Beryllium	mg/L	NS	NS	NS	<0.001	<0.001	0.004
Cadmium	mg/L	NS	NS	NS	<0.001	<0.001	0.005
Chromium	mg/L	NS	NS	NS	<0.01	<0.001	0.1
Cyanide (Total)	mg/L	NS	NS	NS	<0.005	<0.005	0.2
Fluoride	mg/L	NS	NS	NS	0.48	0.39	4.0
Lead	mg/L	NS	NS	NS	<0.001	<0.0005	0.015*
Mercury	mg/L	NS	NS	NS	<0.0002	<0.0002	0.002
Nickel	mg/L	NS	NS	NS	<0.025	<0.002	0.1***
Nitrate	mg/L	NS	NS	NS	<0.10	<0.10	10
Nitrite	mg/L	NS	NS	NS	<0.05	<0.050	1
Selenium	mg/L	NS	NS	NS	<0.005	<0.002	0.05
Sodium	mg/L	NS	NS	NS	7.1	6.16	20***
Thallium	mg/L	NS	NS	NS	<0.001	<0.001	0.002
<i>Synthetic Organic Compounds (SOCs) - EPA Methods 504.1, 505, 515.3, 525.2, & 531.1</i>							
Di(2-ethylhexyl)phthalate	ug/L	NS	NS	NS	1.7	<3	6
<i>Volatile Organic Compounds (VOCs) - EPA Method 524.2</i>							
Chloroform	ug/L	NS	NS	NS	1.1	<0.05	70***(t)
<i>Radionuclides</i>							
Gross Alpha	pCi/L	NS	NS	NS	0.8(+/-1.3)	1.8(+/-0.7)	15
Gross Beta	pCi/L	NS	NS	NS	0.3(+/-1.8)	NS	50 [#]
Radium-226	pCi/L	NS	NS	NS	0.2(+/-0.4)	0.2(+/-0.2)	5 (Combination of Ra-226 & 228)
Radium-228	pCi/L	NS	NS	NS	1.1(+/-0.6)	0.0(+/-0.8)	
Radon	pCi/L	NS	NS	NS	1,950(+/-50)	1,650(+/-76)	10,000***
<i>Secondary Contaminants</i>							
Alkalinity, Total	mg/L CaCO ₃	31	68	66	63	52.3	NAS
Aluminum	mg/L	0.25	0.26	0.12	<0.10	<0.10	0.05 to 0.2**
Calcium	mg/L	9.5	21	20	19	15.5	NAS
Chloride	mg/L	3.1	3.6	4.4	3.6	2.56	250**
Color, Apparent	Color Units	6.0	7.0	6.0	6.0	6.0	15**
Copper	mg/L	0.03	0.002	0.03	0.001	<0.010	1**
Hardness	mg/L	30	67	64	60	49.1	NAS
Iron	mg/L	0.56	0.53	0.42	0.06	0.062	0.3**
Magnesium	mg/L	1.5	3.4	3.3	3.0	2.52	NAS
Manganese	mg/L	0.03	0.03	0.02	0.01	<0.01	0.05**
Odor	T.O.N	No Odor	No Odor	No Odor	No Odor	No Odor	NAS
Potassium	mg/L	<2.5	<2.5	<2.5	<2.5	<2.50	NAS
Silver	mg/L	<0.010	<0.010	<0.010	<0.010	<0.007	0.10**
Sulfate	mg/L	10	13	13	13	12.4	250**
Total Dissolved Solids	mg/L	40	78	88	80	81	500**
Turbidity	NTU	1.8	1.0	0.44	0.26	0.27	1 [^]
Perchlorate	ug/L	NS	NS	NS	NS	<0.050	2
Zinc	mg/L	4.8	0.90	0.76	0.59	0.213	5**
<i>Field Parameters</i>							
Carbon Dioxide	mg/L	18	24	16	12	14	NAS
pH	pH Units	6.16	7.09	7.13	7.67	7.30	6.5-8.5**
Specific Conductance	uS/cm	115	173	185	163	170	NAS
Temperature	°C	8.8	9.6	9.2	10.8	9.4	NAS

Notes:

<0.50 Not detected at or above method detection limit (MDL)

mg/L - milligrams per liter

NTU - Nephelometric Turbidity Units

ug/L - micrograms per liter

uS/cm - micro Siemens per centimeter

°C - degrees Celcius

T.O.N. - Threshold Odor Number

t - For non-chlorinated sources

pCi/L - picocuries per liter

exceeds applicable standard

ND - not detected

NS - Not sampled

MMCL - Massachusetts Maximum Contaminant Level (Spring 2004 Standards and Guidelines for Contaminants Found In Massachusetts Drinking Waters)

- Arsenic MMCL will be 0.01 mg/L as of 1/23/2006

NAS - No Applicable Groundwater Standard

* - Treatment Technique Action Level

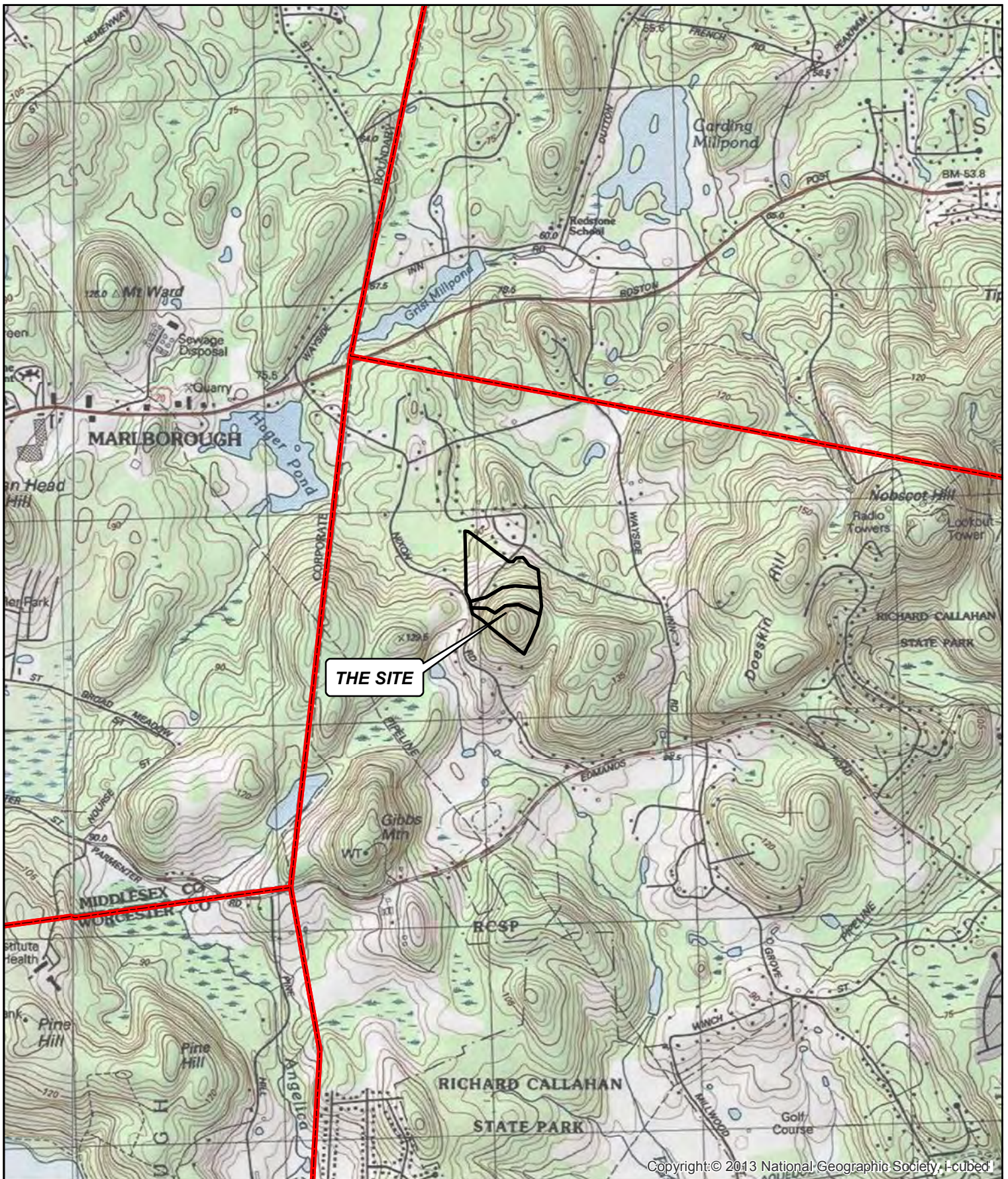
** - Massachusetts Secondary Maximum Contaminant Level (Spring 2004 Standards and Guidelines for Contaminants Found In Massachusetts Drinking Waters)

*** - Mass DEP Office of Research and Standards Drinking Water Guideline

% - Concentrations greater than 50 pCi/L triggers additional sampling

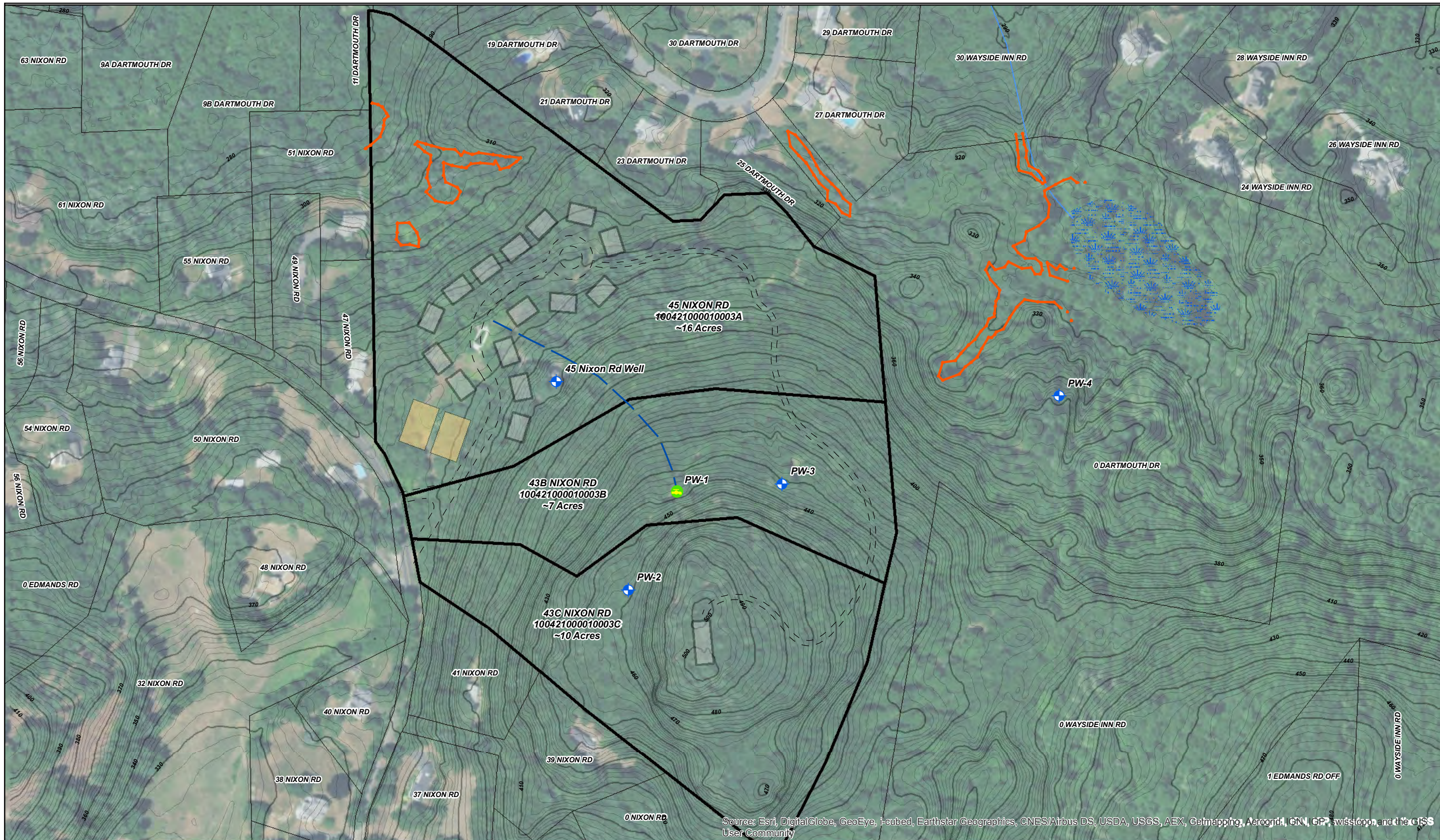
FIGURES





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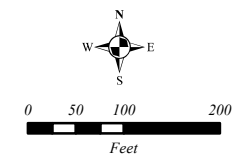




Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



- PROPOSED BUILDING
- PUMPING TEST DISCHARGE LINE
- PROPOSED ROAD/DRIVEWAY
- WETLANDS
- PARCEL BOUNDARIES
- OTHER PARCELS
- PROPOSED SEPTIC
- EXISTING PRIVATE BEDROCK WELL
- EXISTING PUBLIC WATER SUPPLY WELL
- TOPOGRAPHIC CONTOUR (feet)

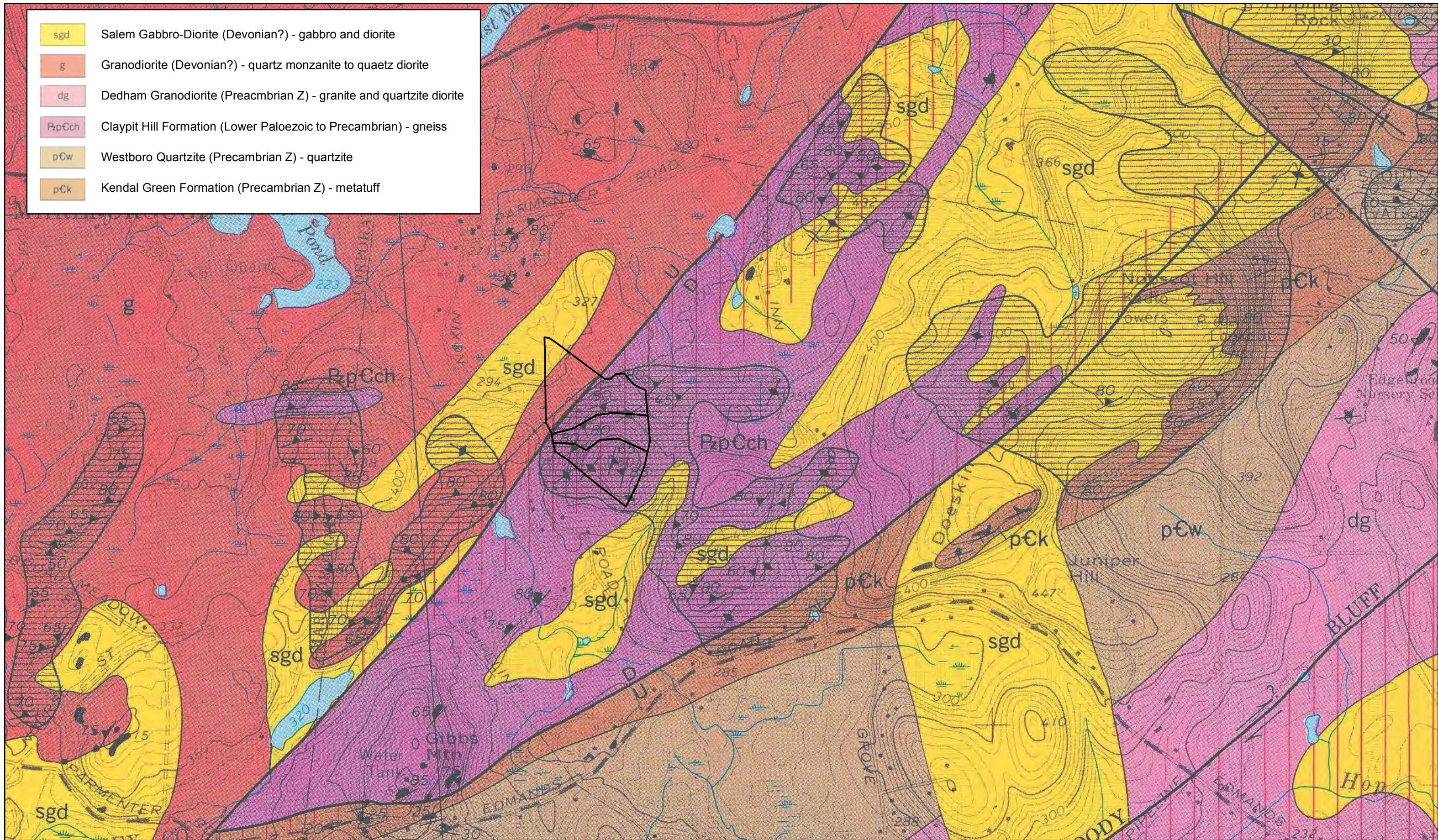


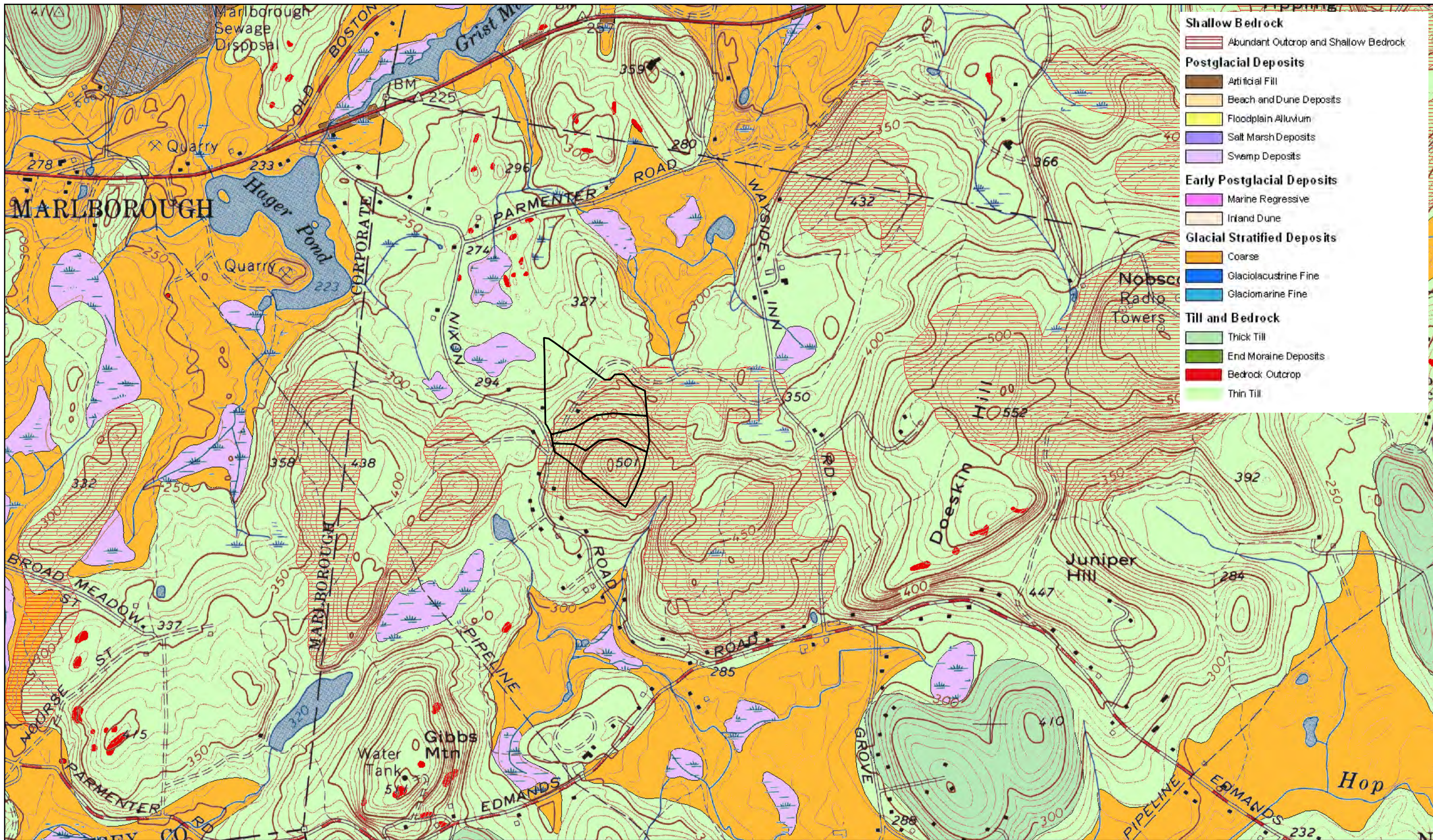
SITE MAP
45 NIXON ROAD
FRAMINGHAM, MASSACHUSETTS

NGI REF: Fig NixonRoad_Sitemap_11x17
Drafted By: JAF Date: 12/01/2017
Source: MassGIS, ArcGIS.com, Sub.Plans

FIGURE 2

- sgd Salem Gabbro-Diorite (Devonian?) - gabbro and diorite
- g Granodiorite (Devonian?) - quartz monzonite to quartz diorite
- dg Dedham Granodiorite (Precambrian Z) - granite and quartzite diorite
- PpCch Claypit Hill Formation (Lower Paleozoic to Precambrian) - gneiss
- pCw Westboro Quartzite (Precambrian Z) - quartzite
- pCk Kendal Green Formation (Precambrian Z) - metatuff





- Shallow Bedrock**
- Abundant Outcrop and Shallow Bedrock
- Postglacial Deposits**
- Artificial Fill
- Beach and Dune Deposits
- Floodplain Alluvium
- Salt Marsh Deposits
- Swamp Deposits
- Early Postglacial Deposits**
- Marine Regressive
- Inland Dune
- Glacial Stratified Deposits**
- Coarse
- Glaciolacustrine Fine
- Glaciomarine Fine
- Till and Bedrock**
- Thick Till
- End Moraine Deposits
- Bedrock Outcrop
- Thin Till

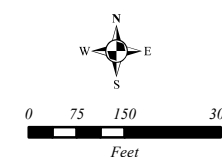
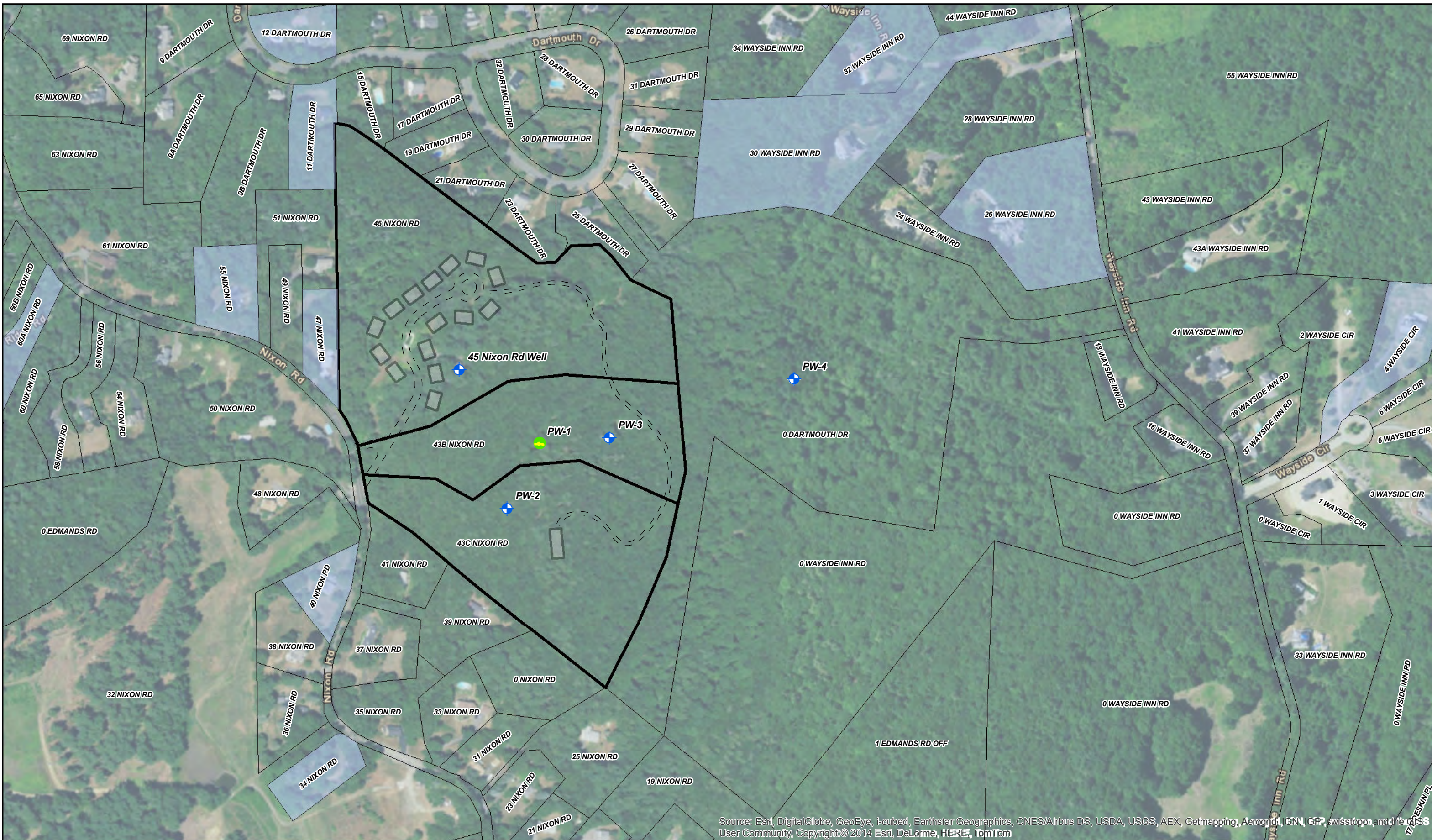
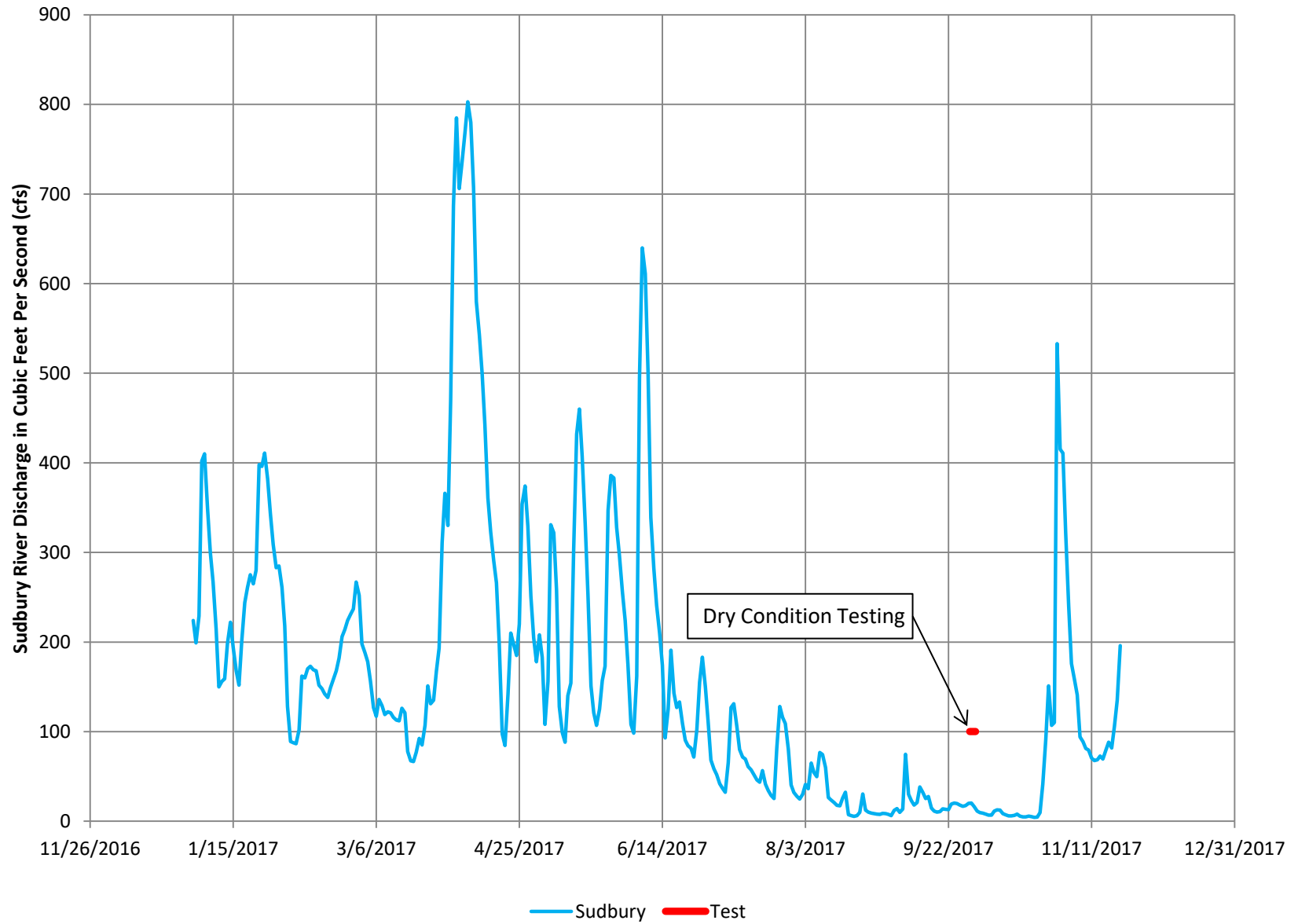


Figure 6 - Graph of Discharge in the Sudbury River at Saxonville, MA

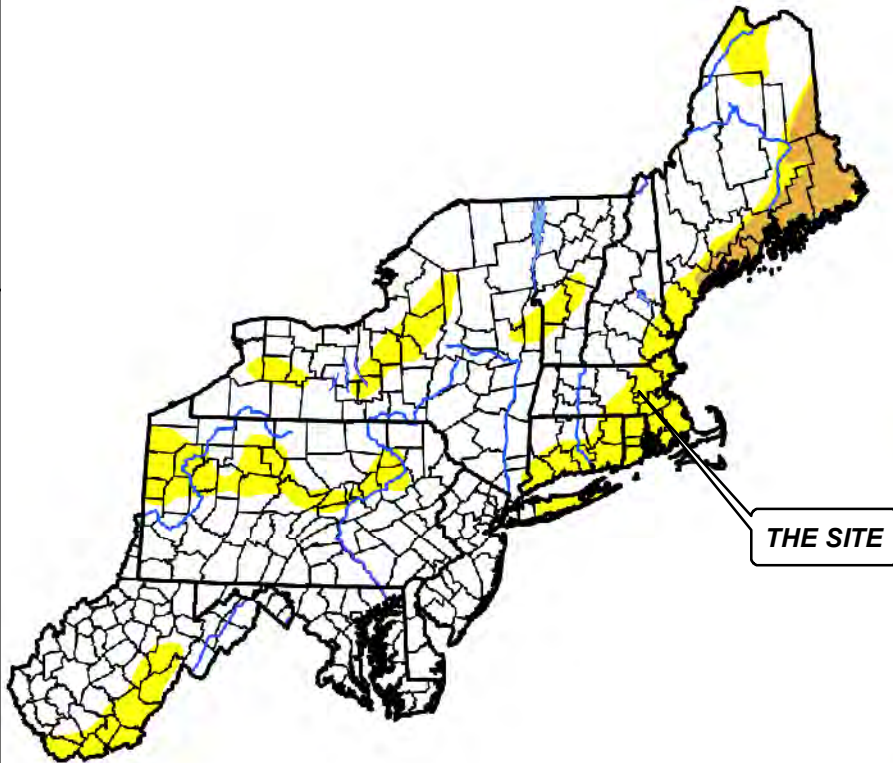


U.S. Drought Monitor Northeast

September 26, 2017
(Released Thursday, Sep. 28, 2017)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	77.60	22.40	3.93	0.00	0.00	0.00
Last Week 09-19-2017	90.34	9.66	3.93	0.00	0.00	0.00
3 Months Ago 06-27-2017	97.71	2.29	0.00	0.00	0.00	0.00
Start of Calendar Year 01-03-2017	30.54	69.46	43.67	11.68	1.39	0.00
Start of Water Year 09-27-2016	21.72	78.28	40.32	19.59	6.68	0.00
One Year Ago 09-27-2016	21.72	78.28	40.32	19.59	6.68	0.00



Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Brad Rippey
U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>

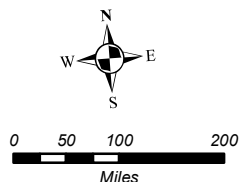


Figure 9 - Linear Graph of Water Level Data Recorded During Dry Period Testing - PW-1 Pumping 4.5 gpm

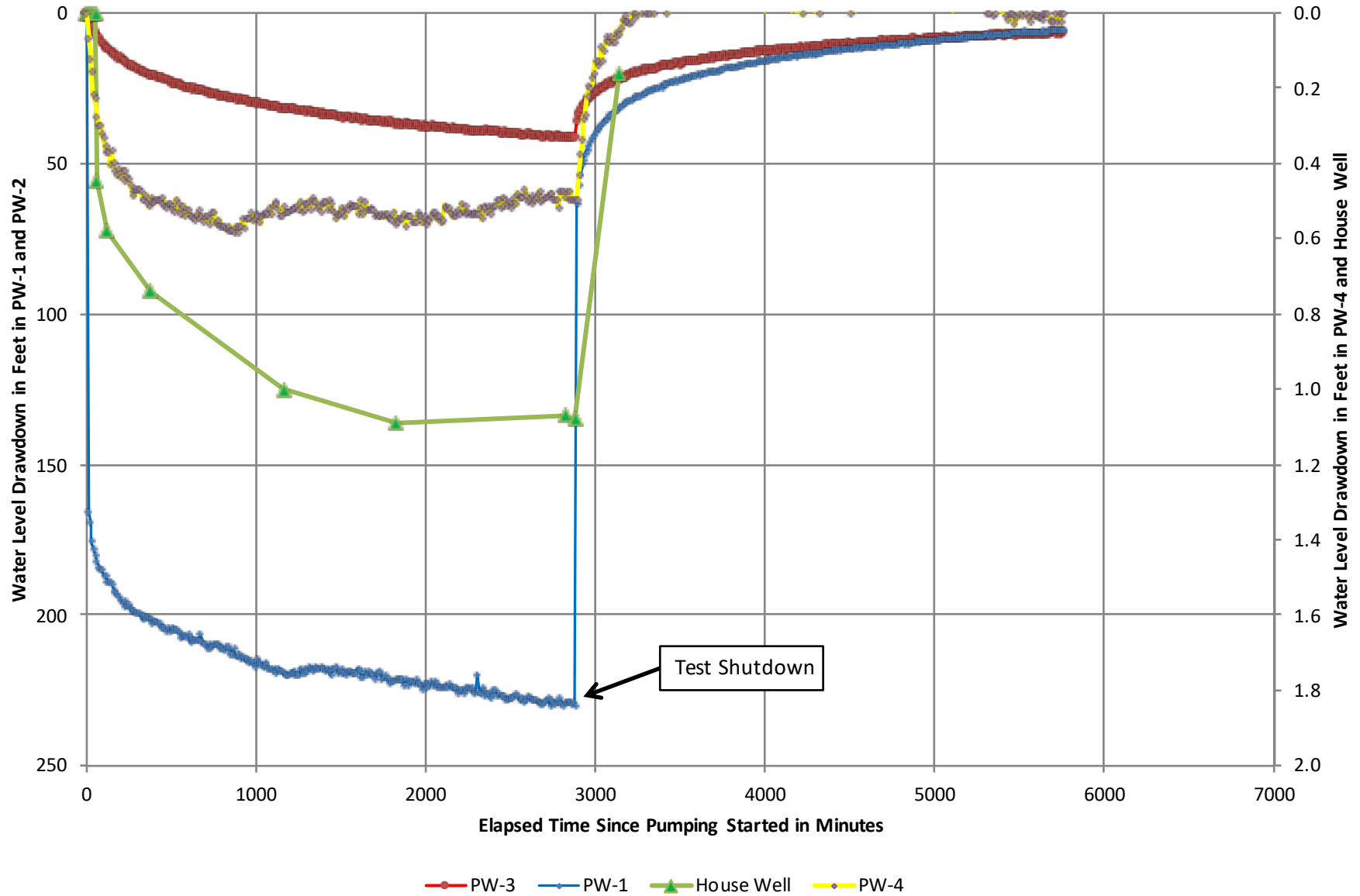
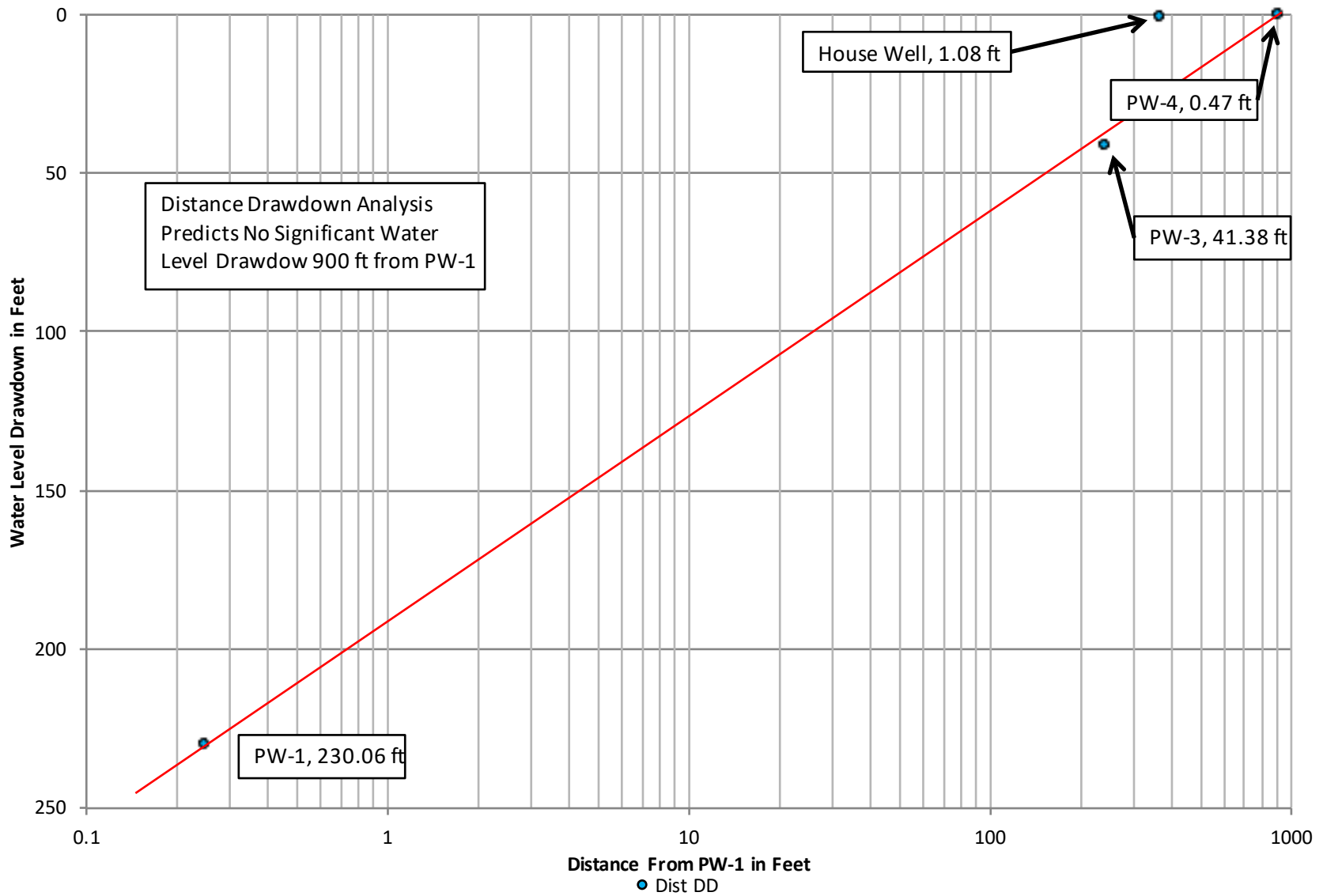
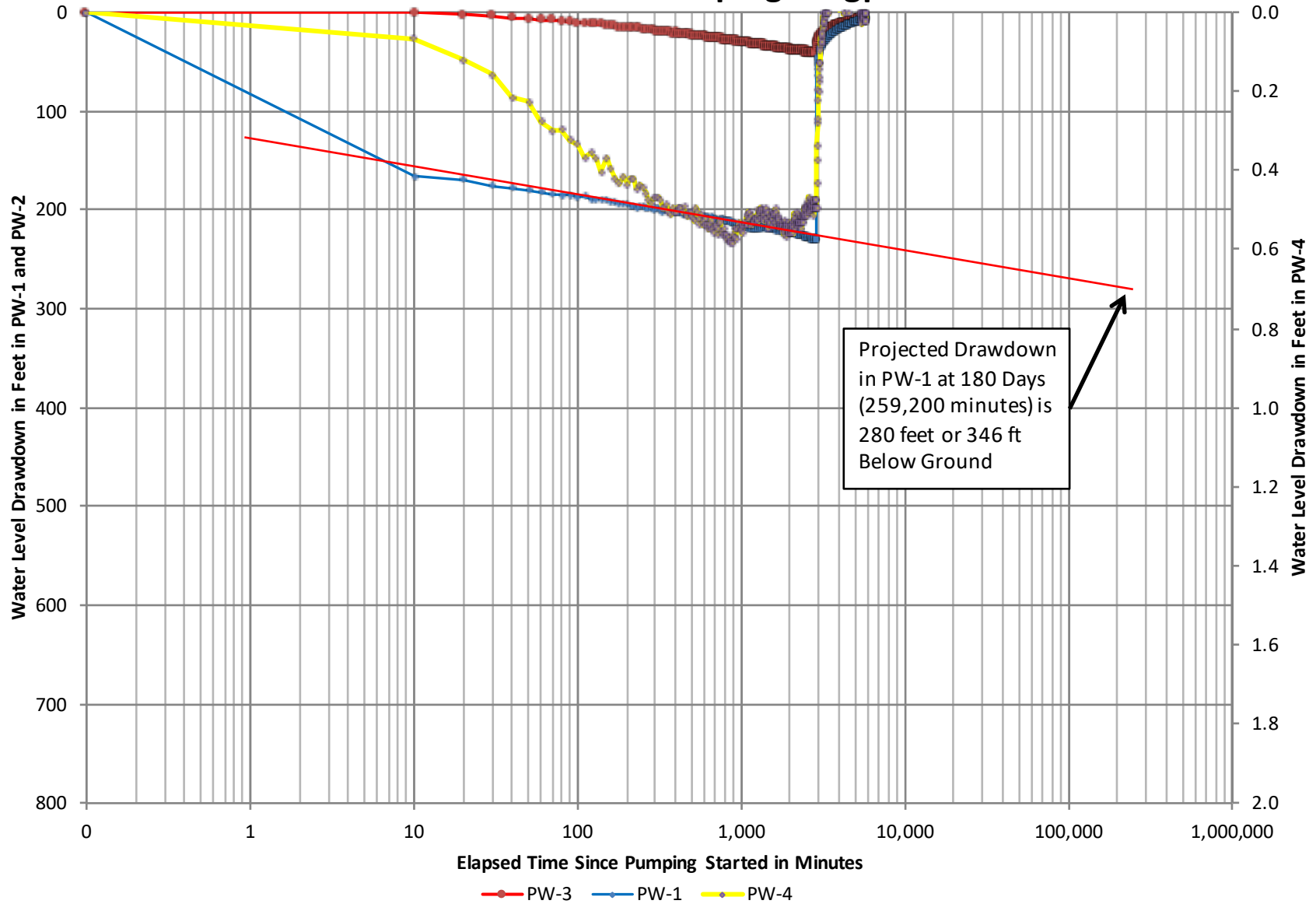


Figure 10 - Distance Drawdown Graph of Data Collected During Dry Period Testing - PW-1 Pumping 4.5 gpm

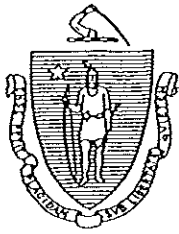


**Figure 11 - Semi-log Graph of Water Level Data Recorded During Dry
Period Test - PW-1 Pumping 4.5 gpm**



APPENDIX A





COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Metropolitan Boston – Northeast Regional Office

MITT ROMNEY
Governor

KERRY HEALEY
Lieutenant Governor

ELLEN ROY HERZFELDER
Secretary

ROBERT W. GOLLEDGE, Jr.
Commissioner

September 21, 2005

Stewart Mayer
Nexum Development Corporation
7 Central Street
Framingham, MA 01701

RE: City/Town: Framingham
PWS Name: Ford's Meadow
PWS- ID No.: Not Yet Assigned
Program: System Modifications
Action: Approval — Source Final
Report & To Construct Source
Ford's Meadow Bedrock Well PW-1
Transmittal No.: W047118

Dear Mr. Mayer:

Please find attached the following information:

Approval of the source final report for proposed bedrock well PW-1. Approval of permanent pumping facilities for Well PW-1, including disinfection treatment and an atmospheric storage tank.

Please note that the signature on this cover letter indicates formal issuance of the attached document. If you have any questions regarding this letter, please contact James Persky at (617) 654-6536.

Sincerely,

Eric Worrall
Deputy Regional Director
Bureau of Resource Protection

MM/jp

cc: DWP/Boston Office (no attachment)
Bruce Bouck, DEP, Drinking Water, Boston
Jay Billings, Northeast Geoscience, Inc., P.O. Box 655, Clinton, MA 01510
Jack Wattu, INVER Engineering, Inc., P.O. Box 27, Clinton, MA 01510
Robert Cooper, Framingham Health Dept., Memorial Building, Rm. 221, Framingham, MA 01702
Edward James, 21 Dartmouth Drive, Framingham, MA 01701

File Name: Y:\DWP Archive\NERO\Framingham-XXXXXXX-System Modifications-2005-09-21

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator, at (617) 556-1057. TDD Service (800) 298-2207.

One Winter St. Boston, MA 02108 • Phone (617) 654-6500 • Fax (617) 292-5850

DEP on the World Wide Web: <http://www.mass.gov/dep>

The radon level in PW-1 was 1,950 picocuries per liter (pCi/L). The U.S. Environmental Protection Agency (EPA) has proposed a radon Maximum Contaminant Level (MCL) of 4,000 pCi/L for states that have a multimedia mitigation program approved by EPA, and an MCL of 300 pCi/L for states that do not. DEP hopes to establish such a program in Massachusetts, as most public wells in the Commonwealth would not meet a 300 pCi/L standard.

The well will be equipped with a pitless adapter and a 3 horsepower, 7.5 gpm Webtrol Model 202S3025 submersible pump set at a depth of 675 feet. The well water will be pumped through a meter into a 23,000-gallon atmospheric storage tank. Three centrifugal booster pumps will be used to pump water from the storage tank into the distribution system. Primary disinfection treatment via sodium hypochlorite will be provided before the water enters the atmospheric storage tank. Booster chlorination will be provided following the tank as needed to provide a suitable chlorine residual, paced to a flow meter that measures the combined flow from the three booster pumps. A corporation cock will be provided in the pumping station so that corrosion control treatment can be provided should it become necessary in the future.

APPROVAL AND REQUIREMENTS

DEP hereby approves the pumping test final report for Well PW-1. DEP approves Well PW-1 for a pumping rate of 8,640 gpd (equivalent to 6.0 gpm); this is the maximum amount that may be withdrawn from the well in any 24-hour period. Based on the approved pumping rate, the **Zone I** protective radius for well PW-1 is 240 feet, and the **Interim Wellhead Protection Area** has a radius of 592 feet.

DEP hereby approves the design of the permanent pumping facilities, as set forth in the June 2005 submittal by Northeast Geoscience and amended in the August 31, 2005 addendum by INVER Engineering.

The approvals granted in this letter do not relieve the proponent of the requirement to obtain any other permit or approval necessary for establishing Well PW-1 as a permanent water source.

This New Source Approval is good for 5 years. If the proponent has not begun construction of the permanent pumping facilities within 5 years of the date of this letter, the approval will be considered to have lapsed. After that, DEP will require portions of the New Source Approval process to be conducted as it deems necessary before granting a new approval — this will likely include requirement of another pumping test to provide updated water quality data.

The following requirements must be met for DEP to approve use of Well PW-1 for public water supply:

1. **Changes/Modifications:** The facilities must be constructed as described in the June 2005 submittal by Northeast Geoscience, and amended in the August 31, 2005 addendum by

facility start-up, shutdown, and routine operation, and shall include copies of inspection checklists and equipment operating data. The public water supplier shall incorporate into the O&M Manual 1) a stand-alone schedule of inspections, testing and preventative maintenance recommendations for all of the components of the system; and 2) calibration curves for all chemical feed pumps. A copy of the O&M Manual shall be maintained at the facility and available for inspection at all times and shall be provided to DEP for its review and approval within 30 days after the final inspection. Thereafter, the public water system shall operate the facility in accordance with the approved procedures.

6. **Alarms & Emergency Response:** An emergency notification list shall be maintained at the facility in accordance with DEP Guidelines. *Alarms for the facility shall be monitored 24 hours per day.* A properly certified operator shall respond to all alarm conditions.
7. **Disinfection:** Water in the completed facility shall be absent of coliform bacteria prior to the facility being placed into service. Prior to being placed into service, the facility, including all pumps, piping, valves, and appurtenances, shall be disinfected in accordance with AWWA standards.
8. **Initial Sampling:** To determine adequate disinfection, a sample from the completed facility shall be analyzed for coliform bacteria. A sample shall also be collected for analysis of volatile organic compounds. The samples shall be collected in accordance with good operating practices and analyzed by a State certified laboratory. All lab reports shall be prepared on State approved forms. Copies of the laboratory analyses shall be provided to DEP for review and approval prior to the final inspection. No more than 24 hours prior to when the facility is to be placed into service, chlorine levels shall also be determined and submitted to DEP for its review and approval.
9. **Water Treatment Chemicals:**
 - a. **Chemicals:** All chemicals used in the drinking water shall be approved for use in Massachusetts and comply with NSF Standard 60 and AWWA specifications.
 - b. **Storage and Handling:** A properly certified operator shall be present when any deliveries of chemicals are made. Handling and storage of any chemical shall conform to the Guidelines. All recommended safety equipment, including aprons, rubber gloves, safety goggles or facemask, and an eyewash (which may be a portable type) shall be available at the facility at all times when chemical is present at the facility. All safety equipment shall be inspected and maintained. A copy of the MSDS for each chemical stored shall be available at all times at the facility.
 - c. **Chlorine Residual:** A minimum disinfectant residual of 0.2 mg/L entering the distribution system must be maintained.
 - d. **Laboratory Equipment:** The public water supplier shall have available laboratory equipment to monitor chemical residuals.

- e. Reporting: The public water supplier shall report all chemical use to DEP monthly as outlined in 310 CMR 22.15(4).
10. **Well Pump**: Pump manufacturers often sell repair kits that contain replacements for some of the pump components. DEP recommends that if a repair kit exists for the well pump, one be obtained.
11. **Business Plan**: The Water Supply Business Plan for the Ford's Meadow public water system must be completed and provided to DEP for review prior to the final inspection. If you have questions regarding the Business Plan, please contact William Zahoruiko at (617) 654-6539.
12. **Emergency Response Plan**: As part of the Business Plan, the applicant shall prepare an Emergency Response Plan. This shall include a phone and contact list as shown in Appendix A of DEP's *Handbook for Water Supply Emergencies*. The plan shall also include contingency plans to allow for continued operations of the water system in the event of failures of any or all of the equipment installed as part of this project. Thereafter, the public water supplier shall follow the Emergency Response Plan. *Handbook for Water Supply Emergencies*, which includes guidance on preparing a plan, is available on-line at:
- <http://www.mass.gov/dep/brp/dws/files/emerhdbk.doc>
13. **Zone I**: At present, Nexum Development Corporation is listed on the Business Plan as the public water supplier for Ford's Meadow. If a new entity, such as a water company or water trust, is created to operate the public water system, the Zone I for Well PW-1 must be placed under the ownership or control (via conservation restriction) of the water supplier entity.

Landscaping chemicals such as fertilizers and herbicides should not be applied within the Zone I, in order to protect the water quality of the well. Please make any contractors that will be doing cleanup work following construction aware of this.

14. **Maintenance of Records**: The public water supplier shall maintain a copy of this letter, and a copy of the approved plans and specifications, at the facility.

Subject: 45 Nixon Road - Framingham, MA
From: Jay Billings <jbillings@ngeo.net>
Date: 11/22/2016 12:23 PM
To: Michael Blanchard <mjb@framinghamma.gov>
CC: Rick Smith <ericonrick@gmail.com>

Dear Mr. Blanchard;

Northeast Geoscience, Inc. (NGI) is writing to request to be on the agenda of an upcoming Framingham Board of Health meeting to discuss design concepts of a proposed residential development at 45 Nixon Road in Framingham, MA. In 2003-2004 NGI worked for a developer on a proposed residential development at 45 Nixon Road. As part of that project, NGI installed, developed and permitted bedrock well PW-1 as a Public Water Supply to serve the project. The Massachusetts Department of Environmental Protection approved PW-1 as a Public Water Supply with an approved pumping rate of 8,640 gallons per day in a letter dated September 21, 2005. Following the approval, the Framingham Board of Health raised concerns about the yield of PW-1 to the Framingham Planning Board. Ultimately, the Board of Health concerns about well yield were cited by the Planning Board in their decision to deny the project.

Currently, another project proponent, Ericon, is contemplating a residential development on the property. Rick Smith of Ericon and I would like to meet with the Board of Health to discuss the Board's requirements for Public Water Supply testing on the project. The DEP has indicated that their approval of the Public Water Supply is still in effect, and that updated water quality testing and final inspection of the completed facility is all that they would require. Please let me know when the Board of Health is available to discuss this project. Thank you.

Jay Billings

--

Jay Billings
Northeast Geoscience, Inc.
97 Walnut Street
Clinton, MA 01510
(978) 365-9045
www.northeastgeoscience.com

—Attachments:—

MADEP Approval of PW-1 Nixon Rd Framingham.pdf

27 bytes



September 21, 2017

Mr. Samuel Wong
Framingham Health Department
150 Concord Street Room 221
Framingham, MA 01720

Re: Proposed Dry Season Well Testing
Bedrock Well PW-1
45 Nixon Road – Framingham, MA

Dear Mr. Wong:

Northeast Geoscience, Inc. (NGI) is writing to propose dry season well testing on the Public Water Supply at 45 Nixon Road in Framingham, MA. This well was approved as a Public Water Supply by the Massachusetts Department of Environmental Protection (MassDEP) in a letter dated September 21, 2005 for a withdrawal of 8,640 gallons per day (gpd). On June 13, 2013 the Framingham Planning Board issued conditional approval of a Definitive Subdivision Plan on the property. One of the conditions was to conduct pump tests on eight proposed residential wells in the subdivision during August or September to document well performance in a dry period. The applicant is now planning to use PW-1 as a public water supply to provide water service to the project. This letter provides procedures for dry period testing of PW-1.

PW-1 is a 6-inch diameter bedrock well installed to a depth of 1,225 feet in 2004. A 3.0 h.p. submersible pump is currently installed in the well to a depth of 600 feet. There are four other bedrock wells on the property including PW-2, PW-3, PW-4 and the well that serves the existing house at 45 Nixon Road. NGI proposes to collect pre-pumping test readings from PW-1 and the four other bedrock wells on the property (see Figure 1 for well locations). NGI will then pump PW-1 at a flow rate of 4.0 gallons per minute (gpm) or 5,760 gpd for a period of 48 hours and record the water level response in the pumping well and four other wells on site. Water will be discharged to a location approximately 300 feet north of PW-1. The results of the testing will be presented to the Health Department and Planning Board in a letter report following the testing. Currently the testing is scheduled to commence on September 29, 2017.

If you have any questions or would like to visit the site during the testing, please do not hesitate to contact me.

Sincerely,
NORTHEAST GEOSCIENCE, INC.

A handwritten signature in blue ink, appearing to read "Jay Billings".

Jay Billings
Hydrogeologist

cc: Framingham Planning Board
James Perskey – Massachusetts Department of Environmental Protection
Development Team



August 14, 2017

Mr. James Persky
Massachusetts Department of Environmental Protection – Northeast Region
205B Lowell Street
Wilmington, MA 01887

Re: Public Water Supply
45 Nixon Road
Framingham, MA

Dear Mr. Persky

Northeast Geoscience, Inc. (NGI) is working with South Middlesex Realty Group on a proposed residential development at 45 Nixon Road in Framingham, MA. NGI permitted a bedrock well (PW-1) as a Public Water Supply Well on that property and received MassDEP approval of the well and proposed water system design in a letter dated September 21, 2005. South Middlesex Realty Group would like to use well PW-1 as a source of supply for the proposed project. NGI has made them aware of the Zone I Protective Radius land use restrictions and the project has been designed accordingly.

On January 11, 2017 NGI activated the submersible pump in PW-1 and pumped the water to waste 300 feet north of the well. On February 8, 2017 NGI collected water quality samples for the parameters listed in Appendix A of the Guidelines and Policies for Public Water Systems and submitted them to Alpha Analytical in Westborough, MA for analysis. The results of these analyses are summarized on Table 1 along with the data from 2003 for comparative purposes. The laboratory Certificates of Analysis reported on State Forms are also attached.

The results of the testing show that the water from PW-1 meets applicable drinking water standards and is a suitable source of supply for the proposed project. South Middlesex Realty Group is preparing to approach the Framingham Town officials regarding the project, and has asked for written confirmation from MassDEP that the Public Water Supply approval is still valid. This could be in the form of an e-mail or letter.

Please feel free to contact me with any questions.

Sincerely,
NORTHEAST GEOSCIENCE, INC.

A handwritten signature in blue ink, appearing to read "Jay Billings".

Jay Billings
Hydrogeologist

Table 1
Updated Water Quality Data
Prolonged Pump Test - Bedrock Well PW-1
December 15, 2003 to December 18, 2003 and Update Sample
45 Nixon Road
Framingham, Massachusetts

PARAMETER	UNITS	Initial 12/15/2003	24 Hour 12/16/2003	48 Hour 12/17/2003	End Point 12/18/2003	Update Sample 2/8/2017	DEP MMCL
<i>Microbiology</i>							
Total Coliform	colonies/100mL	NS	Negative	NS	Negative	Absent	0
<i>Inorganic Compounds</i>							
Ammonia (as Nitrogen)	mg/L	NS	NS	NS	<0.075	NS	NAS
Antimony	mg/L	NS	NS	NS	<0.002	<0.004	0.006
Arsenic	mg/L	NS	NS	NS	<0.008	<0.001	0.01 [#]
Barium	mg/L	NS	NS	NS	0.01	0.0077	2
Beryllium	mg/L	NS	NS	NS	<0.001	<0.001	0.004
Cadmium	mg/L	NS	NS	NS	<0.001	<0.001	0.005
Chromium	mg/L	NS	NS	NS	<0.01	<0.001	0.1
Cyanide (Total)	mg/L	NS	NS	NS	<0.005	<0.005	0.2
Fluoride	mg/L	NS	NS	NS	0.48	0.39	4.0
Lead	mg/L	NS	NS	NS	<0.001	<0.0005	0.015*
Mercury	mg/L	NS	NS	NS	<0.0002	<0.0002	0.002
Nickel	mg/L	NS	NS	NS	<0.025	<0.002	0.1***
Nitrate	mg/L	NS	NS	NS	<0.10	<0.10	10
Nitrite	mg/L	NS	NS	NS	<0.05	<0.050	1
Selenium	mg/L	NS	NS	NS	<0.005	<0.002	0.05
Sodium	mg/L	NS	NS	NS	7.1	6.16	20***
Thallium	mg/L	NS	NS	NS	<0.001	<0.001	0.002
<i>Synthetic Organic Compounds (SOCs) - EPA Methods 504.1, 505, 515.3, 525.2, & 531.1</i>							
Di(2-ethylhexyl)phthalate	ug/L	NS	NS	NS	1.7	<3	6
<i>Volatile Organic Compounds (VOCs) - EPA Method 524.2</i>							
Chloroform	ug/L	NS	NS	NS	1.1	<0.05	70***(t)
<i>Radionuclides</i>							
Gross Alpha	pCi/L	NS	NS	NS	0.8(+/-1.3)	1.8(+/-0.7)	15
Gross Beta	pCi/L	NS	NS	NS	0.3(+/-1.8)	NS	50 [#]
Radium-226	pCi/L	NS	NS	NS	0.2(+/-0.4)	0.2(+/-0.2)	5 (Combination of Ra-226 & 228)
Radium-228	pCi/L	NS	NS	NS	1.1(+/-0.6)	0.0(+/-0.8)	
Radon	pCi/L	NS	NS	NS	1,950(+/-50)	1,650(+/-76)	10,000***

Table 1
Updated Water Quality Data
Prolonged Pump Test - Bedrock Well PW-1
December 15, 2003 to December 18, 2003 and Update Sample
45 Nixon Road
Framingham, Massachusetts

PARAMETER	UNITS	Initial 12/15/2003	24 Hour 12/16/2003	48 Hour 12/17/2003	End Point 12/18/2003	Update Sample 2/8/2017	DEP MMCL
<i>Secondary Contaminants</i>							
Alkalinity, Total	mg/L CaCO ₃	31	68	66	63	52.3	NAS
Aluminum	mg/L	0.25	0.26	0.12	<0.10	<0.10	0.05 to 0.2**
Calcium	mg/L	9.5	21	20	19	15.5	NAS
Chloride	mg/L	3.1	3.6	4.4	3.6	2.56	250**
Color, Apparent	Color Units	6.0	7.0	6.0	6.0	6.0	15**
Copper	mg/L	0.03	0.002	0.03	0.001	<0.010	1**
Hardness	mg/L	30	67	64	60	49.1	NAS
Iron	mg/L	0.56	0.53	0.42	0.06	0.062	0.3**
Magnesium	mg/L	1.5	3.4	3.3	3.0	2.52	NAS
Manganese	mg/L	0.03	0.03	0.02	0.01	<0.01	0.05**
Odor	T.O.N	No Odor	No Odor	No Odor	No Odor	No Odor	NAS
Potassium	mg/L	<2.5	<2.5	<2.5	<2.5	<2.50	NAS
Silver	mg/L	<0.010	<0.010	<0.010	<0.010	<0.007	0.10**
Sulfate	mg/L	10	13	13	13	12.4	250**
Total Dissolved Solids	mg/L	40	78	88	80	81	500**
Turbidity	NTU	1.8	1.0	0.44	0.26	0.27	1^
Perchlorate	ug/L	NS	NS	NS	NS	<0.050	2
Zinc	mg/L	4.8	0.90	0.76	0.59	0.213	5**
<i>Field Parameters</i>							
Carbon Dioxide	mg/L	18	24	16	12	14	NAS
pH	pH Units	6.16	7.09	7.13	7.67	7.30	6.5-8.5**
Specific Conductance	uS/cm	115	173	185	163	170	NAS
Temperature	°C	8.8	9.6	9.2	10.8	9.4	NAS

Notes:

mg/L - milligrams per liter
 NTU - Nephelometric Turbidity Units
 ug/L - micrograms per liter
 uS/cm - micro Siemens per centimeter
 °C - degrees Celcius
 T.O.N. - Threshold Odor Number
 t - For non-chlorinated sources
 pCi/L - picocuries per liter
 exceeds applicable standard
 ND - not detected

<0.50 Not detected at or above method detection limit (MDL)

NS - Not sampled

MMCL - Massachusetts Maximum Contaminant Level (Spring 2004 Standards and Guidelines for Contaminants Found In Massachusetts Drinking Waters)

- Arsenic MMCL will be 0.01 mg/L as of 1/23/2006

NAS - No Applicable Groundwater Standard

* - Treatment Technique Action Level

** - Massachusetts Secondary Maximum Contaminant Level (Spring 2004 Standards and Guidelines for Contaminants Found In Massachusetts Drinking Waters)

*** - Mass DEP Office of Research and Standards Drinking Water Guideline

% - Concentrations greater than 50 pCi/L triggers additional sampling

^ - For groundwater under the direct influence of surface water

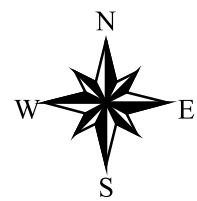
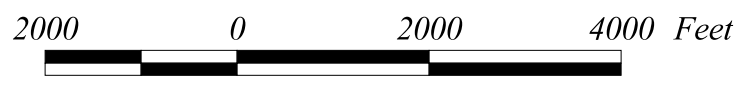
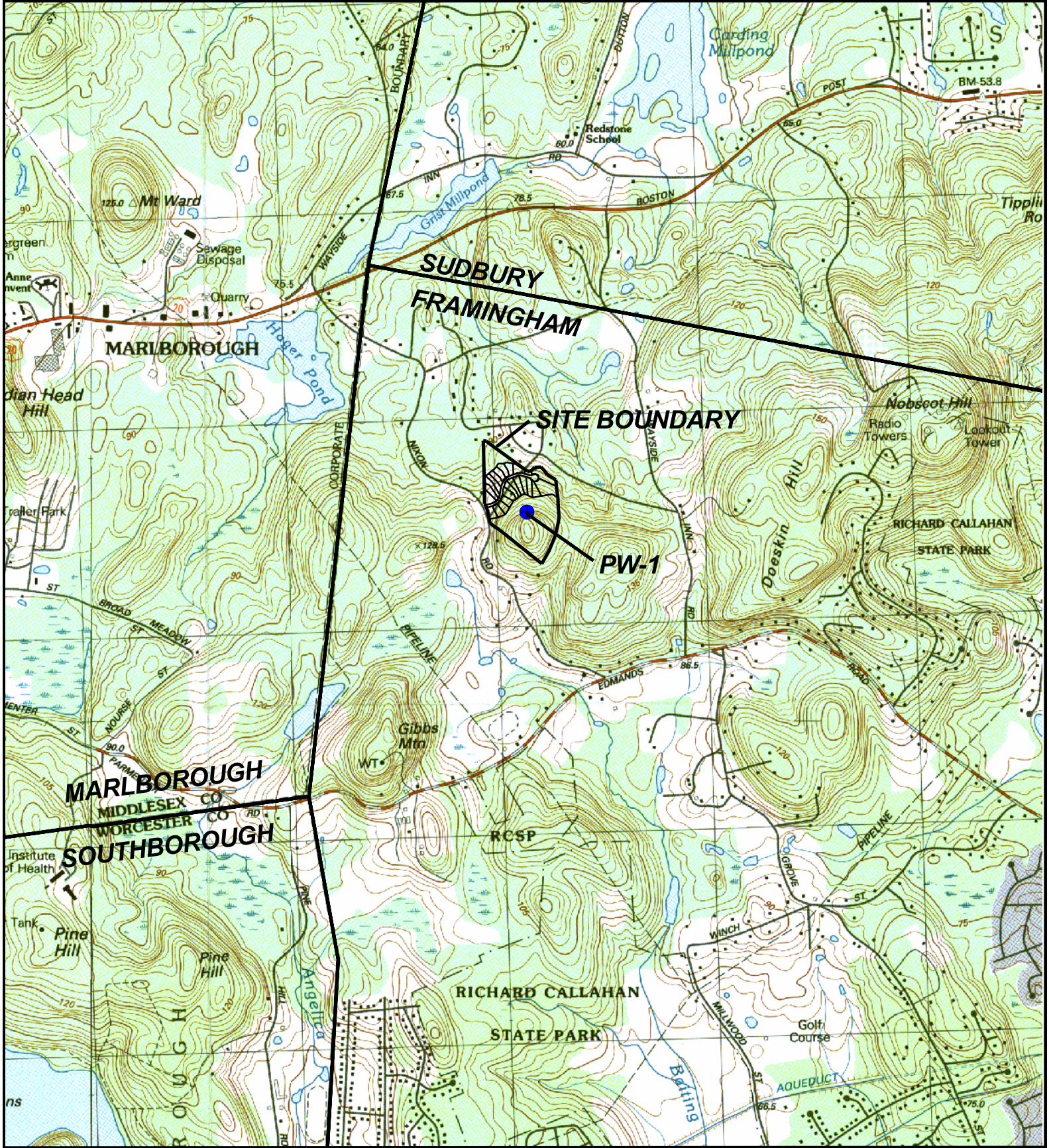


FIGURE 1
 LOCUS PLAN
 PROPOSED BEDROCK PUBLIC WATER SUPPLY PW-1
 FORD'S MEADOW
 45 NIXON ROAD
 FRAMINGHAM, MASSACHUSETTS

NGI REF: 030208.LOCUS MAP
 Drafted By: MJM | Date: 3/22/2005
 Source: USGS Topographic Quadrangles; MassGIS (2004); MacCarthy and Sullivan (2003)





Volatile Organic Contaminant Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: COM NTNC TNC

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information	Sample Acidified?	Date Collected	Collected By	
PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input checked="" type="checkbox"/>	2/8/2017	J.G.B.
Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:				
		(1) Reason for Resubmission		(2) Collection Date of Original Sample		
<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
SAMPLE NOTES – Such as, if a Manifold/Multiple sample, list the source(s) that were on-line during sample collection.						

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) **N**
 Analysis Lab MA Cert. #: **M-MA086** Analysis Lab Name: **Alpha Analytical**

Lab Method	Date Extracted (551.1 only)	Date Analyzed	Lab Sample ID#	LAB SAMPLE NOTES - Include information as to whether sample was diluted or additional contaminants detected.
524.2		2/10/2017	L1704085-01	
Was this Sample composited by the Lab?				
COMPOSITE SAMPLE NOTES - Please list the composited sources by DEP Source Code (XXXXXXX-XXX), up to five individual sources.				
Yes: <input type="checkbox"/> No: <input type="checkbox"/>				

CAS#	REGULATED VOC CONTAMINANT	Results µg/L	MCL µg/L	MDL µg/L
71-43-2	BENZENE	ND	5	0.50
56-23-5	CARBON TETRACHLORIDE	ND	5	0.50
75-35-4	1,1-DICHLOROETHYLENE	ND	7	0.50
107-06-02	1,2-DICHLOROETHANE	ND	5	0.50
106-46-7	PARA-DICHLOROBENZENE	ND	5	0.50
79-01-6	TRICHLOROETHYLENE (TCE)	ND	5	0.50
71-55-6	1,1,1-TRICHLOROETHANE	ND	200	0.50
75-01-4	VINYL CHLORIDE	ND	2	0.50
108-90-7	MONOCHLOROBENZENE	ND	100	0.50
95-50-1	O-DICHLOROBENZENE	ND	600	0.50
156-60-5	TRANS-1,2-DICHLOROETHYLENE	ND	100	0.50
156-59-2	CIS-1,2-DICHLOROETHYLENE	ND	70	0.50
78-87-5	1,2-DICHLOROPROPANE	ND	5	0.50
100-41-4	ETHYLBENZENE	ND	700	0.50
100-42-5	STYRENE	ND	100	0.50
127-18-4	TETRACHLOROETHYLENE (PCE)	ND	5	0.50
108-88-3	TOLUENE	ND	1000	0.50
1330-20-7	XYLENES (TOTAL)	ND	10000	0.50
75-09-2	DICHLOROMETHANE	ND	5	0.50
120-82-1	1,2,4-TRICHLOROBENZENE	ND	70	0.50
79-00-5	1,1,2-TRICHLOROETHANE	ND	5	0.50



Secondary Contaminant Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: **COM** **NTNC** **TNC**

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information	Date Collected	Collected By		
A	PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	2/8/2017	J.G.B.
B			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished		
	Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:			
			(1) Reason for Resubmission	(2) Collection Date of Original Sample		
A	<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
B	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list any sources that were on-line during sample collection).						
A						
B						

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) **N**
 Analysis Lab MA Cert. #: **M-MA086** Analysis Lab Name: **Alpha Analytical**

Compound	Results		SMCL	MDL (mg/L)	Lab Method	Date Analyzed	Lab Sample ID#
	A	B					
IRON (mg/L)	0.062		0.3	0.050	200.7	2/15/2017	L1704085-01
MANGANESE (mg/L)	ND		0.05*	0.010	200.7	2/15/2017	L1704085-01
ALKALINITY (mg/L as CaCO3)	52.3		None	2.00	2320B	2/9/2017	L1704085-01
CALCIUM (mg/L)	15.5		None	0.100	200.7	2/15/2017	L1704085-01
MAGNESIUM (mg/L)	2.52		None	0.100	200.7	2/15/2017	L1704085-01
HARDNESS (mg/L as CaCO3)	49.1		None	0.660	200.7	2/15/2017	L1704085-01
POTASSIUM (mg/L)	ND		None	2.50	200.7	2/15/2017	L1704085-01
TURBIDITY (NTU)	0.27		None	0.20	180.1	2/9/2017	L1704085-01
ALUMINUM (mg/L)	ND		0.2	0.100	200.7	2/15/2017	L1704085-01
CHLORIDE (mg/L)	2.56		250	0.500	300.0	2/10/2017	L1704085-01
COLOR (C.U.)	6.0		15	5.0	2120B	2/8/2017	L1704085-01
COPPER (mg/L)	ND		1	0.010	200.7	2/15/2017	L1704085-01
ODOR (T.O.N)	ND		3	1	2150B	2/8/2017	L1704085-01
pH	7.2		6.5-8.5	NA	4500H+-B	2/8/2017	L1704085-01
SILVER (mg/L)	ND		0.10	0.007	200.7	2/15/2017	L1704085-01
SULFATE (mg/L)	12.4		250	1.00	300.0	2/10/2017	L1704085-01
TDS (mg/L)	81.		500	10	2540C	2/9/2017	L1704085-01
ZINC (mg/L)	0.213		5	0.050	200.7	2/15/2017	L1704085-01

* EPA has established a lifetime Health Advisory (HA) for manganese at 0.3 mg/L and an acute HA at 1.0 mg/L.

LAB SAMPLE NOTES	
A	
B	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: Joseph Warkon
 Date: 2/17/2017

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date)	Review Comments	<input type="checkbox"/> WQTS Data Entered
<input type="checkbox"/> Accepted <input type="checkbox"/> Disapproved		



Inorganic Contaminant Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #:	<input type="text"/>	City / Town:	FRAMINGHAM
PWS Name:	Ford's Meadow	PWS Class:	COM <input checked="" type="checkbox"/> NTNC <input type="checkbox"/> TNC <input type="checkbox"/>

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information <small>*Please note all samples are considered representative of finished water if there is no treatment applied</small>	Date Collected	Collected By
PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle <input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	2/8/2017	J.G.B.
Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:		
		(1) Reason for Resubmission	(2) Collection Date of Original Sample	
<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction		
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).				

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #:	M-MA086	Primary Lab Name:	Alpha Analytical	Subcontracted? (Y/N)	N
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Contaminant	Result (mg/L)	MCL (mg/L)	MDL (mg/L)	Lab Method	Date Analyzed	Analysis Lab MA Cert #	Analysis Lab Name	Lab Sample ID#
ANTIMONY	ND	0.006	0.0040	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
ARSENIC	ND	0.010	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
BARIUM	0.0077	2	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
BERYLLIUM	ND	0.004	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
CADMIUM	ND	0.005	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
CHROMIUM	ND	0.1	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
CYANIDE	ND	0.2	0.005	4500CN-CE	2/13/2017	M-MA086	Alpha Analytical	L1704085-01
FLUORIDE ¹	0.39	4.0	0.20	4500F-C	2/8/2017	M-MA086	Alpha Analytical	L1704085-01
MERCURY ²	ND	0.002	0.0002	245.1	2/10/2017	M-MA086	Alpha Analytical	L1704085-01
NICKEL	ND	0.1*	0.0020	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
SELENIUM	ND	0.05	0.0020	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
SODIUM	6.16	20*	2.00	200.7	2/15/2017	M-MA086	Alpha Analytical	L1704085-01
THALLIUM	ND	0.002	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01

¹Fluoride also has a secondary MCL of 2.0 mg/L. Community water systems which exceed this limit must provide public notice pursuant to 310 CMR 22.16.
²Please note that if method 245.1 is used for mercury, only method revision 3.0 will be accepted by MA DEP.
 *No current MCL, however DEP Office of Research and Standards has established a guideline (ORSG) limit for this contaminant.

Was this Sample composited by the Lab?	COMPOSITE SAMPLE NOTES List the composited sources by DEP Source Code (XXXXXXX-XXX), up to five individual sources per sample.
Yes <input type="checkbox"/>	
LAB SAMPLE NOTES	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature:

Joseph Watkins

Date:

2/17/17

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date)	Review Comments	<input type="checkbox"/> WQTS Data Entered
<input type="checkbox"/> Accepted _____ <input type="checkbox"/> Disapproved		



Lead and Copper Analysis Report

I. PWS INFORMATION: Please refer to your DEP Lead & Copper sampling plan for approved sampling locations.

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: COM NTNC TNC

Routine or Special Samples	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:	
		(1) Reason for Resubmission	(2) Collection Date of Original Sample
<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction	

SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) **N**

Analyte	Action Level (mg/L)	Lab Method	MDL (mg/L)	Analysis Lab MA Cert.#	Analysis Lab Name
Lead:	0.015	200.7	0.0005	M-MA086	Alpha Analytical
Copper:	1.3	200.7	0.010	M-MA086	Alpha Analytical

LAB SAMPLE NOTES

DEP Approved Sample Location (See DEP approved LCR plan for sampling locations)		Collection Date	LEAD		COPPER		Lab Sample ID#
			Result (mg/L)	Date Analyzed	Result (mg/L)	Date Analyzed	
1	Pw-1	2/8/2017	ND	2/14/2017	ND	2/15/2017	L1704085-01
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Report SCHOOL RESULTS collected in accordance with 310 CMR 22.06B (7)(a)9 below. Do not use these school results in 90th percentile calculations.

1							
2							
3							
4							

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: Joseph Wackens
 Date: 2/17/2017

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

COM & NTNC Public Water Suppliers must submit Forms **LCR-D** or **LCR-E** with this form to the appropriate DEP Regional Office.

DEP REVIEW STATUS (Initial & Date)	Review Comments
<input type="checkbox"/> Accepted <input type="checkbox"/> Disapproved	



Perchlorate Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #:	<input type="text"/>	City / Town:	FRAMINGHAM
PWS Name:	Ford's Meadow	PWS Class:	COM <input checked="" type="checkbox"/> NTNC <input type="checkbox"/> TNC <input type="checkbox"/>

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information		Date Collected	Collected By
PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	2/8/2017	J.G.B.
Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:			
		(1) Reason for Resubmission		(2) Collection Date of Original Sample	
<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list any sources that were on-line during collection).					

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #:	M-MA086	Primary Lab Name:	Alpha Analytical	Subcontracted? (Y/N)	N
Analysis Lab MA Cert. #:	M-MA086	Analysis Lab Name:	Alpha Analytical		

CONTAMINANT	Result	UOM	MCL	MDL	MRL	Lab Method	Date Analyzed	Lab Sample ID#
PERCHLORATE	ND	µg/L	2.0	0.050	0.050	332.0	2/15/2017	L1704085-01
CONDUCTIVITY		umhos/cm	----					

Perchlorate analysis requires the use of a Massachusetts DEP approved laboratory.

Perchlorate concentrations between the Minimum Detection Limit (MDL) and the Minimum Reporting Level (MRL) must be reported as estimated (J) values (i.e. perchlorate is positively present but tentatively quantified).

All field samples analyzed with either EPA Method 314.0 or EPA Method 314.1 with measured native perchlorate concentrations between 0.8 µg/L and 2.0 µg/L must be retested with and without a perchlorate spike approximately equal to the native perchlorate concentration.

LAB SAMPLE NOTES

Reanalysis and Spike Recovery (required for results between 0.8 µg/L and 2.0 µg/L or samples subject to pretreatment in method EPA 314.0)

Compound	Result (µg/L)	MDL (µg/L)	MRL (µg/L)	Spike Concentration (µg/L)	Spike Recovery (%)	Lab Method	Date Analyzed
Perchlorate (reanalysis)							
Perchlorate (spike)							

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: Joseph Watkons
Date: 2/17/2017

If not submitting these results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & Date)	Review Comments	<input type="checkbox"/> WQTS Data Entered
<input type="checkbox"/> Accepted _____ <input type="checkbox"/> Disapproved _____		



Nitrite Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #:	<input type="text"/>	City / Town:	FRAMINGHAM
PWS Name:	Ford's Meadow	PWS Class:	COM <input checked="" type="checkbox"/> NTNC <input type="checkbox"/> TNC <input type="checkbox"/>

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information	Date Collected	Collected By		
A	PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	2/8/2017	J.G.B.
B			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished		
C			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished		
D			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished		
	Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:			
			(1) Reason for Resubmission	(2) Collection Date of Original Sample		
A	<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
B	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
C	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
D	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).						
A						
B						
C						
D						

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #:	M-MA086	Primary Lab Name:	Alpha Analytical	Subcontracted? (Y/N)	N
Analysis Lab MA Cert. #:	M-MA086	Analysis Lab Name:	Alpha Analytical		

	NITRITE Result (mg/L)	MCL (mg/L)	MDL (mg/L)	Lab Method	Date Analyzed	Lab Sample ID#
A	ND	1	0.050	353.2	2/8/2017	L1704085-01
B		1				
C		1				
D		1				

Finished water results equal to or exceeding 1/2 of the MCL (0.5 mg/L) triggers quarterly monitoring.
 Finished water results exceeding the MCL of 1 mg/L requires confirmation sampling within 24 hours.
 Notify MassDEP of any MCL exceedances.

	LAB SAMPLE NOTES
A	
B	
C	
D	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature:

Joseph Watkins

Date:

2/17/2017

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date)	Review Comments	<input type="checkbox"/> WQTS Data Entered
<input type="checkbox"/> Accepted _____ <input type="checkbox"/> Disapproved _____		



Nitrate Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: **COM** **NTNC** **TNC**

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information	Sample Acidified?	Date Collected	Collected By		
A	PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input type="checkbox"/>	2/8/2017	J.G.B.
B			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input type="checkbox"/>		
C			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input type="checkbox"/>		
D			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input type="checkbox"/>		
If Resubmitted Report, list below:							
	Routine or Special Sample	Original, Resubmitted or Confirmation Report	(1) Reason for Resubmission		(2) Collection Date of Original Sample		
A	<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
B	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
C	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
D	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).							
A							
B							
C							
D							

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) Y N
 Analysis Lab MA Cert. #: **M-MA086** Analysis Lab Name: **Alpha Analytical**

	NITRATE Result (mg/L)	MCL (mg/L)	MDL (mg/L)	Lab Method	Date Analyzed	Lab Sample ID#
A	ND	10	0.10	353.2	2/8/2017	L1704085-01
B		10				
C		10				
D		10				

Finished water results equal to or exceeding 1/2 of the MCL (5 mg/L) triggers quarterly monitoring.
 Finished water results exceeding the MCL of 10 mg/L requires confirmation sampling within 24 hours.
 Notify MassDEP of any MCL exceedances.

	LAB SAMPLE NOTES
A	
B	
C	
D	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature:

Joseph Watkins

Date:

2/17/2017

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date)	Review Comments	<input type="checkbox"/> WQTS Data Entered
<input type="checkbox"/> Accepted <input type="checkbox"/> Disapproved		



Radionuclide Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: **TBD** City / Town: **Framingham**
 Town: **Framingham** PWS Class: COM NTNC TNC

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information	Date Collected	Collected By
PW-1	Bedrock Well No. 1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	02/08/2017 JRB
Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:		
<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	(1) Reason for Resubmission <input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction	(2) Collection Date of Original Sample	
SAMPLE NOTES - (Such as, if a Manifold/Multiple sample, list any sources that were on-line line during sample collection). New Well				
New Source Approval				

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical, Inc.** Subcontracted? (Y/N) **Y**

Was this sample composited by the Lab? <input type="checkbox"/>	COMPOSITE SAMPLE NOTES List the composited source by DEP Source Code (XXXXXXX-XXX) and dates collected, up to four consecutive quarterly samples per single entry point.
LAB SAMPLE NOTES : Radon sample received after holding time had expired.	

Contaminant	RESULT	Std Dev (+/-)	MCL	MDL	Lab Method	Date Analyzed	Lab Sample ID#	Analysis Lab MA Cert#	Analysis Lab Name
GROSS ALPHA (pCi/L)	1.8	1.3		0.7	SM 7110B	03/01/2017	B13017-001	CO00008	Hazen Research
URANIUM - activity (pCi/L)									

Report Uranium result and MDL in (pCi/L) as analyzed, otherwise use formula to calculate [Uranium µg/L x 0.67 = Uranium pCi/L]. Check this box if result is calculated

ADJUSTED GROSS ALPHA (pCi/L)		-----		The MCL for Adjusted Gross Alpha (Gross Alpha minus Uranium) is 15 pCi/L. A gross alpha measurement may be substituted for the uranium analysis, if the gross alpha result is equal to or less than 15 pCi/L. If gross alpha exceeds 15 pCi/L, uranium must also be measured.					
------------------------------	--	-------	--	--	--	--	--	--	--

URANIUM - mass (µg/L)									
-----------------------	--	--	--	--	--	--	--	--	--

Report Uranium result and MDL in (µg/L) as analyzed, otherwise use formula to calculate [Uranium pCi/L / 0.67 = Uranium µg/L]. Check this box if result is calculated

RADIUM-226 (pCi/L)	0.2	0.2		0.1	SM 7500-Ra B	02/24/2017	B13017-001	CO00008	Hazen Research
RADIUM-228 (pCi/L)	0.0	0.8		0.8	EPA Ra-05	03/09/2017	B13017-001	CO00008	Hazen Research
COMBINED RADIUM (pCi/L)	0.2	----		The MCL for Combined Radium (Radium-226 plus Radium-228) is 5 pCi/L. A gross alpha measurement may be substituted for the radium-226 analysis, if the gross alpha result is equal to or less than 5 pCi/L. If gross alpha exceeds 5 pCi/L, radium-226 must also be measured.					

GROSS BETA (pCi/L)			*						
--------------------	--	--	---	--	--	--	--	--	--

*The MCL for gross beta is 4 mrem/year. If gross beta exceeds 50 pCi/L, analysis of the sample for Photon Activity shall be performed to identify the major radioactive constituents. Gross Beta testing is optional, unless specifically required by DEP.

RADON (pCi/L)	1650	76		33.7	SM 7500-Rn-B	02/14/2017	B13017-001	CO00008	Hazen Research
---------------	------	----	--	------	--------------	------------	------------	---------	----------------

**Radon testing is optional, unless specifically required by DEP. The MA guideline for Radon is 10,000 pCi/L. The EPA has proposed a radon MCL of 300 - 4000 pCi/L.

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.
 Primary Lab Director Signature: *Jessica Axen* Jessica Axen, Hazen Research, Inc.
 Date: 3/15/2017 03/15/2017

If not submitting these results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & Date)	Review Comments	<input type="checkbox"/> WQTS Data Entered
<input type="checkbox"/> Accepted _____ <input type="checkbox"/> Disapproved _____		



8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

CHAIN OF CUSTODY

PAGE 1 OF 1

Client Information

Client: Northeast Geosciences, Inc
Address: 97 Walnut St
Clinton, MA 01450
Phone: 978-265-9045
Email: bill@enggeo.net

Project Information

Project Name: Nixon Rd
Project Location: Framingham
Project #: _____
Project Manager: Jay Billig
ALPHA Quote #: _____

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)
Date Due: _____

Additional Project Information:

Date Rec'd in Lab: 2/17

Report Information - Data Deliverables

ADEX EMAIL

Same as Client info

PO #:

ALPHA Job #: L1704100

Billing Information

Regulatory Requirements & Project Information Requirements

- Yes No MA MCP Analytical Methods
- Yes No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
- Yes No GW1 Standards (Info Required for Metals & EPH with Targets)
- Yes No NPDES RGP
- Other State / Fed Program

Criteria

- VOC: 8260 624 5242
- SVOC: ABN PAH 50C
- METALS: MCP 13 MCP 14 RCP 15
- EPH: Ranges & Targets RCRAB PPT3
- VPH: Ranges & Targets Ranges Only
- TPH: Quant Only Fingerprint
- PCB PEST
- Total Chlorine, SOC, VOCs
- TOCS, Secondary Contaminants
- Appendix & Parameters

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler Initials
		Date	Time		
04100-01	PW-1	2-2-17	14:00	DW J68	

SAMPLE INFO
Filtration
 Field
 Lab to do
Preservation
 Lab to do

Sample Comments

TOTAL #

BOTTLES

- Container Type
- = Plastic
 - = Amber glass
 - = Glass
 - = Bacteria cup
 - = Cube
 - = Other
 - = Encore
 - = BOD Bottle

- Preservative
- A= None
 - B= HCl
 - C= HNO₃
 - D= H₂SO₄
 - E= NaOH
 - F= MeOH
 - G= NaHSO₄
 - H= Na₂S₂O₈
 - I= Ascorbic Acid
 - J= NH₄Cl
 - K= Zn Acetate
 - O= Other

Relinquished By: [Signature]

Date/Time

15:54 2-8-17

Received By: [Signature]

Date/Time

2/8/17 15:54

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO. 01-01 (rev. 12-Mar-2012)

CHAIN OF CUSTODY

ALPHA Job #: L1704100

Date Rec'd in Lab:

Report Information

Project Name: FAX EMAIL Same as Client info PO #:

Project Location: MA ADEX Add'l Deliverables

Client Information

Client: Alpha Analytical Lab
 Address: 8 Walkup Drive
 Westborough, Ma 01581
 Phone: 508-898-9220

Fax: Standard Rush (ONLY IF PRE-APPROVED)

Email: subreports@alphalab.com

Due Date: _____ Time: _____

Other Project Specific Requirements/Comments/Detection Limits:

Please reference Alpha Job # L1704100 on this report.

Regulatory Requirements/Report Limits

State/Fed Program: _____
 Criteria: _____

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

Are MCP Analytical Methods Required? Yes No

Are CT RCP (Reasonable Confidence Protocols) Required? Yes No

ANALYSIS

Sample ID: SUB-ALPHA

Container Type: V

Preservative: A

Collection Date: 2-8-17

Time: 14:00

Sample Matrix: DW

Sampler's Initials: _____

Turn-Around Time: _____

Alpha Lab ID (Lab Use Only): PW-1

Sample ID: SUB-RA228

Container Type: P

Preservative: C

Collection Date: _____

Time: _____

Sample Matrix: _____

Sampler's Initials: _____

Turn-Around Time: _____

Alpha Lab ID (Lab Use Only): _____

Sample ID: SUB-RA226

Container Type: P

Preservative: C

Collection Date: _____

Time: _____

Sample Matrix: _____

Sampler's Initials: _____

Turn-Around Time: _____

Alpha Lab ID (Lab Use Only): _____

Sample ID: SUB-RADON

Container Type: X

Preservative: C

Collection Date: _____

Time: _____

Sample Matrix: _____

Sampler's Initials: _____

Turn-Around Time: _____

Alpha Lab ID (Lab Use Only): _____

TO T A L # B O T T L E S 6

SAMPLE HANDLING
 Filtration
 Done
 Not Needed
 Lab to do
 Preservation
 Lab to do
 (Please specify below)

Sample Specific Comments

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO. 01-010 Rev. 30-3-07

Relinquished By: _____ Received By: _____

Date/Time

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguity is resolved. All samples submitted are subject to Alpha's Payment Terms.

APPENDIX B



	F	G	I	K	L	M	N	P	R	S	T	U	W	Y	Z
2	48 Hour Pumping Test at 4.5 gpm on PW-1 at 45 Nixon Road Framingham, MA														
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-3	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-4	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)
4	9/29/17 11:00	0.10	49.58	230.52	0.00	9/29/17 11:00	0.10	50.47	97.37	0.00	9/29/17 11:00	0.10	49.23	54.21801	0.00
5	9/29/17 11:10	10.10	49.58	64.61	165.91	9/29/17 11:10	10.10	50.47	97.33	0.05	9/29/17 11:10	10.00	48.87	54.151482	0.07
6	9/29/17 11:20	20.10	49.94	61.13	169.39	9/29/17 11:20	20.10	50.47	95.00	2.37	9/29/17 11:20	20.00	48.87	54.095811	0.12
7	9/29/17 11:30	30.10	50.11	55.08	175.44	9/29/17 11:30	30.10	50.47	93.51	3.87	9/29/17 11:30	30.00	48.87	54.060237	0.16
8	9/29/17 11:40	40.10	50.11	52.55	177.97	9/29/17 11:40	40.10	50.47	91.93	5.45	9/29/17 11:40	40.00	48.70	54.000639	0.22
9	9/29/17 11:50	50.10	50.29	50.70	179.82	9/29/17 11:50	50.10	50.47	90.84	6.53	9/29/17 11:50	50.00	48.70	53.990013	0.23
10	9/29/17 12:00	60.10	50.29	48.10	182.41	9/29/17 12:00	60.10	50.47	89.89	7.49	9/29/17 12:00	60.00	48.70	53.941503	0.28
11	9/29/17 12:10	70.10	50.29	46.37	184.15	9/29/17 12:10	70.10	50.47	89.14	8.23	9/29/17 12:10	70.00	48.87	53.91771	0.30
12	9/29/17 12:20	80.10	50.29	45.33	185.19	9/29/17 12:20	80.10	50.47	88.70	8.68	9/29/17 12:20	80.00	48.87	53.920251	0.30
13	9/29/17 12:30	90.10	50.29	45.76	184.76	9/29/17 12:30	90.10	50.47	87.73	9.65	9/29/17 12:30	90.00	48.87	53.895072	0.32
14	9/29/17 12:40	100.10	50.29	43.79	186.73	9/29/17 12:40	100.10	50.47	86.88	10.50	9/29/17 12:40	100.00	48.87	53.884446	0.33
15	9/29/17 12:50	110.10	50.29	43.85	186.66	9/29/17 12:50	110.10	50.47	86.37	11.00	9/29/17 12:50	110.00	48.70	53.848872	0.37
16	9/29/17 13:00	120.10	50.29	41.49	189.03	9/29/17 13:00	120.10	50.47	85.62	11.76	9/29/17 13:00	120.00	48.70	53.86227	0.36
17	9/29/17 13:10	130.10	50.29	41.48	189.04	9/29/17 13:10	130.10	50.47	85.24	12.13	9/29/17 13:10	130.00	48.70	53.848179	0.37
18	9/29/17 13:20	140.10	50.29	41.13	189.38	9/29/17 13:20	140.10	50.47	85.00	12.38	9/29/17 13:20	140.00	48.70	53.813298	0.40
19	9/29/17 13:30	150.10	50.29	40.91	189.61	9/29/17 13:30	150.10	50.47	84.27	13.10	9/29/17 13:30	150.00	48.70	53.850489	0.37
20	9/29/17 13:40	160.10	50.29	39.01	191.51	9/29/17 13:40	160.10	50.47	83.77	13.61	9/29/17 13:40	160.00	48.70	53.819766	0.40
21	9/29/17 13:50	170.10	50.29	37.81	192.71	9/29/17 13:50	170.10	50.47	83.09	14.28	9/29/17 13:50	170.00	48.70	53.795973	0.42
22	9/29/17 14:00	180.10	50.29	37.29	193.23	9/29/17 14:00	180.10	50.47	82.62	14.76	9/29/17 14:00	180.00	48.70	53.785116	0.43
23	9/29/17 14:10	190.10	50.29	36.59	193.93	9/29/17 14:10	190.10	50.47	81.99	15.38	9/29/17 14:10	190.00	48.70	53.801979	0.42
24	9/29/17 14:20	200.10	50.29	35.52	195.00	9/29/17 14:20	200.10	50.47	82.34	15.03	9/29/17 14:20	200.00	48.70	53.78142	0.44
25	9/29/17 14:30	210.10	50.29	34.88	195.64	9/29/17 14:30	210.10	50.47	81.64	15.73	9/29/17 14:30	210.00	48.70	53.798283	0.42
26	9/29/17 14:40	220.10	50.47	35.14	195.37	9/29/17 14:40	220.10	50.47	81.31	16.06	9/29/17 14:40	220.00	48.87	53.798283	0.42
27	9/29/17 14:50	230.10	50.47	33.08	197.43	9/29/17 14:50	230.10	50.47	81.31	16.06	9/29/17 14:50	230.00	48.87	53.770101	0.45
28	9/29/17 15:00	240.10	50.47	33.80	196.72	9/29/17 15:00	240.10	50.47	80.71	16.67	9/29/17 15:00	240.00	48.87	53.782575	0.44
29	9/29/17 15:10	250.10	50.47	33.69	196.83	9/29/17 15:10	250.10	50.47	80.15	17.22	9/29/17 15:10	250.00	48.87	53.775645	0.44
30	9/29/17 15:20	260.10	50.47	32.24	198.27	9/29/17 15:20	260.10	50.47	79.69	17.68	9/29/17 15:20	260.00	48.87	53.761554	0.46
31	9/29/17 15:30	270.10	50.47	31.74	198.78	9/29/17 15:30	270.10	50.47	79.52	17.85	9/29/17 15:30	270.00	48.87	53.740995	0.48
32	9/29/17 15:40	280.10	50.47	31.62	198.90	9/29/17 15:40	280.10	50.47	79.56	17.81	9/29/17 15:40	280.00	48.87	53.7306	0.49
33	9/29/17 15:50	290.10	50.47	31.21	199.31	9/29/17 15:50	290.10	50.47	78.90	18.47	9/29/17 15:50	290.00	48.87	53.747001	0.47
34	9/29/17 16:00	300.10	50.29	31.44	199.07	9/29/17 16:00	300.10	50.47	78.47	18.90	9/29/17 16:00	300.00	48.87	53.74677	0.47
35	9/29/17 16:10	310.10	50.29	31.47	199.05	9/29/17 16:10	310.10	50.47	78.41	18.96	9/29/17 16:10	310.00	48.87	53.750004	0.47
36	9/29/17 16:20	320.10	50.29	30.23	200.29	9/29/17 16:20	320.10	50.47	78.17	19.21	9/29/17 16:20	320.00	48.70	53.74215	0.48
37	9/29/17 16:30	330.10	50.29	28.98	201.54	9/29/17 16:30	330.10	50.47	78.04	19.34	9/29/17 16:30	330.00	48.87	53.722284	0.50
38	9/29/17 16:40	340.10	50.29	30.37	200.15	9/29/17 16:40	340.10	50.47	77.70	19.67	9/29/17 16:40	340.00	48.87	53.722284	0.50
39	9/29/17 16:50	350.10	50.29	30.06	200.46	9/29/17 16:50	350.10	50.47	77.23	20.15	9/29/17 16:50	350.00	48.87	53.732448	0.49
40	9/29/17 17:00	360.10	50.29	30.01	200.51	9/29/17 17:00	360.10	50.47	77.09	20.29	9/29/17 17:00	360.00	48.87	53.711427	0.51
41	9/29/17 17:10	370.10	50.29	28.86	201.66	9/29/17 17:10	370.10	50.47	76.79	20.59	9/29/17 17:10	370.00	48.87	53.704497	0.51
42	9/29/17 17:20	380.10	50.29	29.00	201.52	9/29/17 17:20	380.10	50.47	76.42	20.96	9/29/17 17:20	380.00	48.87	53.724363	0.49
43	9/29/17 17:30	390.10	50.29	27.94	202.58	9/29/17 17:30	390.10	50.47	76.32	21.06	9/29/17 17:30	390.00	48.70	53.713275	0.50
44	9/29/17 17:40	400.10	50.29	28.72	201.79	9/29/17 17:40	400.10	50.47	76.56	20.81	9/29/17 17:40	400.00	48.70	53.713275	0.50
45	9/29/17 17:50	410.10	50.29	28.67	201.84	9/29/17 17:50	410.10	50.47	76.35	21.02	9/29/17 17:50	410.00	48.70	53.722746	0.50
46	9/29/17 18:00	420.10	50.29	27.91	202.61	9/29/17 18:00	420.10	50.47	75.75	21.62	9/29/17 18:00	420.00	48.70	53.722746	0.50
47	9/29/17 18:10	430.10	50.29	27.59	202.93	9/29/17 18:10	430.10	50.47	75.47	21.90	9/29/17 18:10	430.00	48.70	53.722053	0.50
48	9/29/17 18:20	440.10	50.29	26.46	204.06	9/29/17 18:20	440.10	50.47	75.61	21.76	9/29/17 18:20	440.00	48.70	53.711427	0.51
49	9/29/17 18:30	450.10	50.29	26.51	204.01	9/29/17 18:30	450.10	50.47	75.43	21.94	9/29/17 18:30	450.00	48.70	53.725056	0.49
50	9/29/17 18:40	460.10	50.47	26.06	204.46	9/29/17 18:40	460.10	50.47	74.89	22.48	9/29/17 18:40	460.00	48.70	53.707038	0.51
51	9/29/17 18:50	470.10	50.47	25.23	205.29	9/29/17 18:50	470.10	50.47	74.80	22.58	9/29/17 18:50	470.00	48.70	53.700339	0.52
52	9/29/17 19:00	480.10	50.47	26.33	204.19	9/29/17 19:00	480.10	50.47	74.75	22.62	9/29/17 19:00	480.00	48.70	53.711196	0.51
53	9/29/17 19:10	490.10	50.47	25.03	205.48	9/29/17 19:10	490.10	50.47	74.46	22.91	9/29/17 19:10	490.00	48.70	53.711196	0.51
54	9/29/17 19:20	500.10	50.47	26.31	204.21	9/29/17 19:20	500.10	50.47	74.30	23.07	9/29/17 19:20	500.00	48.87	53.702418	0.52
55	9/29/17 19:30	510.10	50.47	25.66	204.86	9/29/17 19:30	510.10	50.47	73.97	23.41	9/29/17 19:30	510.00	48.87	53.695026	0.52
56	9/29/17 19:40	520.10	50.47	25.34	205.18	9/29/17 19:40	520.10	50.47	73.91	23.47	9/29/17 19:40	520.00	48.87	53.688789	0.53
57	9/29/17 19:50	530.10	50.47	25.76	204.76	9/29/17 19:50	530.10	50.47	73.73	23.64	9/29/17 19:50	530.00	48.87	53.722746	0.50
58	9/29/17 20:00	540.10	50.47	24.79	205.73	9/29/17 20:00	540.10	50.47	73.72	23.65	9/29/17 20:00	540.00	48.87	53.712582	0.51
59	9/29/17 20:10	550.10	50.47	24.47	206.05	9/29/17 20:10	550.10	50.47	73.61	23.76	9/29/17 20:10	550.00	48.87	53.694333	0.52
60	9/29/17 20:20	560.10	50.47	22.90	207.62	9/29/17 20:20	560.10	50.47	73.06	24.32	9/29/17 20:20	560.00	48.70	53.682783	0.54
61	9/29/17 20:30	570.10	50.47	23.65	206.87	9/29/17 20:30	570.10	50.47	73.10	24.28	9/29/17 20:30	570.00	48.87	53.706807	0.51
62	9/29/17 20:40	580.10	50.47	23.37	207.15	9/29/17 20:40	580.10	50.47	72.60	24.77	9/29/17 20:40	580.00	48.70	53.679087	0.54
63	9/29/17 20:50	590.10	50.47	23.02	207.50	9/29/17 20:50	590.10	50.47	72.47	24.90	9/29/17 20:50	590.00	48.70	53.692485	0.53
64	9/29/17 21:00	600.10	50.47	23.99	206.53	9/29/17 21:00	600.10	50.47	72.24	25.13	9/29/17 21:00	600.00	48.70	53.695719	0.52
65	9/29/17 21:10	610.10	50.47	21.42	209.09	9/29/17 21:10	610.10	50.47	72.26	25.11	9/29/17 21:10	610.00	48.87	53.679549	0.54
66	9/29/17 21:20	620.10	50.47	22.96	207.56	9/29/17 21:20	620.10	50.47	72.1						

	F	G	I	K	L	M	N	P	R	S	T	U	W	Y	Z
2	48 Hour Pumping Test at 4.5 gpm on PW-1 at 45 Nixon Road Framingham, MA														
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-3	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-4	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)
100	9/30/17 3:00	960.10	50.47	14.40	216.12	9/30/17 3:00	960.10	50.47	67.80	29.57	9/30/17 3:00	960.00	48.87	53.673774	0.54
101	9/30/17 3:10	970.10	50.47	15.37	215.15	9/30/17 3:10	970.10	50.47	67.79	29.58	9/30/17 3:10	970.00	48.70	53.688096	0.53
102	9/30/17 3:20	980.10	50.47	14.61	215.91	9/30/17 3:20	980.10	50.47	67.58	29.80	9/30/17 3:20	980.00	48.70	53.665689	0.55
103	9/30/17 3:30	990.10	50.47	13.64	216.88	9/30/17 3:30	990.10	50.47	67.60	29.77	9/30/17 3:30	990.00	48.70	53.671464	0.55
104	9/30/17 3:40	1000.10	50.47	14.68	215.84	9/30/17 3:40	1000.10	50.47	67.25	30.13	9/30/17 3:40	1000.00	48.70	53.680704	0.54
105	9/30/17 3:50	1010.10	50.47	15.91	214.60	9/30/17 3:50	1010.10	50.47	67.12	30.25	9/30/17 3:50	1010.00	48.70	53.67516	0.54
106	9/30/17 4:00	1020.10	50.47	14.51	216.01	9/30/17 4:00	1020.10	50.47	67.31	30.06	9/30/17 4:00	1020.00	48.70	53.658759	0.56
107	9/30/17 4:10	1030.10	50.47	14.15	216.36	9/30/17 4:10	1030.10	50.47	66.76	30.61	9/30/17 4:10	1030.00	48.70	53.680011	0.54
108	9/30/17 4:20	1040.10	50.47	13.18	217.33	9/30/17 4:20	1040.10	50.47	66.88	30.49	9/30/17 4:20	1040.00	48.70	53.681397	0.54
109	9/30/17 4:30	1050.10	50.47	14.41	216.11	9/30/17 4:30	1050.10	50.47	67.10	30.28	9/30/17 4:30	1050.00	48.70	53.685093	0.53
110	9/30/17 4:40	1060.10	50.47	14.10	216.41	9/30/17 4:40	1060.10	50.47	66.76	30.61	9/30/17 4:40	1060.00	48.87	53.686248	0.53
111	9/30/17 4:50	1070.10	50.47	12.46	218.05	9/30/17 4:50	1070.10	50.47	66.79	30.58	9/30/17 4:50	1070.00	48.70	53.68209	0.54
112	9/30/17 5:00	1080.10	50.47	12.93	217.59	9/30/17 5:00	1080.10	50.47	66.46	30.91	9/30/17 5:00	1080.00	48.87	53.700108	0.52
113	9/30/17 5:10	1090.10	50.47	12.90	217.62	9/30/17 5:10	1090.10	50.47	66.38	30.99	9/30/17 5:10	1090.00	48.70	53.68209	0.54
114	9/30/17 5:20	1100.10	50.47	12.11	218.41	9/30/17 5:20	1100.10	50.47	66.22	31.16	9/30/17 5:20	1100.00	48.70	53.705421	0.51
115	9/30/17 5:30	1110.10	50.47	12.83	217.69	9/30/17 5:30	1110.10	50.47	66.26	31.12	9/30/17 5:30	1110.00	48.87	53.713506	0.50
116	9/30/17 5:40	1120.10	50.47	10.98	219.54	9/30/17 5:40	1120.10	50.47	66.03	31.35	9/30/17 5:40	1120.00	48.87	53.710503	0.51
117	9/30/17 5:50	1130.10	50.47	12.93	217.59	9/30/17 5:50	1130.10	50.47	66.08	31.29	9/30/17 5:50	1130.00	48.70	53.696181	0.52
118	9/30/17 6:00	1140.10	50.29	11.64	218.87	9/30/17 6:00	1140.10	50.47	65.80	31.58	9/30/17 6:00	1140.00	48.70	53.679318	0.54
119	9/30/17 6:10	1150.10	50.29	12.22	218.30	9/30/17 6:10	1150.10	50.47	65.80	31.58	9/30/17 6:10	1150.00	48.70	53.679549	0.54
120	9/30/17 6:20	1160.10	50.29	10.99	219.53	9/30/17 6:20	1160.10	50.47	65.71	31.66	9/30/17 6:20	1160.00	48.70	53.703804	0.51
121	9/30/17 6:30	1170.10	50.29	10.44	220.08	9/30/17 6:30	1170.10	50.47	65.64	31.73	9/30/17 6:30	1170.00	48.70	53.686941	0.53
122	9/30/17 6:40	1180.10	50.29	10.32	220.20	9/30/17 6:40	1180.10	50.47	65.55	31.83	9/30/17 6:40	1180.00	48.70	53.690406	0.53
123	9/30/17 6:50	1190.10	50.29	10.58	219.93	9/30/17 6:50	1190.10	50.47	65.44	31.93	9/30/17 6:50	1190.00	48.87	53.688096	0.53
124	9/30/17 7:00	1200.10	50.29	10.98	219.54	9/30/17 7:00	1200.10	50.47	65.47	31.91	9/30/17 7:00	1200.00	48.87	53.691792	0.53
125	9/30/17 7:10	1210.10	50.29	11.57	218.95	9/30/17 7:10	1210.10	50.47	65.21	32.16	9/30/17 7:10	1210.00	48.87	53.695488	0.52
126	9/30/17 7:20	1220.10	50.29	12.05	218.47	9/30/17 7:20	1220.10	50.47	65.23	32.15	9/30/17 7:20	1220.00	48.70	53.698029	0.52
127	9/30/17 7:30	1230.10	50.29	10.71	219.80	9/30/17 7:30	1230.10	50.47	65.46	31.92	9/30/17 7:30	1230.00	48.70	53.698491	0.52
128	9/30/17 7:40	1240.10	50.29	10.45	220.07	9/30/17 7:40	1240.10	50.47	64.97	32.40	9/30/17 7:40	1240.00	48.87	53.703111	0.51
129	9/30/17 7:50	1250.10	50.29	10.56	219.96	9/30/17 7:50	1250.10	50.47	64.78	32.59	9/30/17 7:50	1250.00	48.87	53.692947	0.53
130	9/30/17 8:00	1260.10	50.29	12.93	217.59	9/30/17 8:00	1260.10	50.47	64.79	32.58	9/30/17 8:00	1260.00	48.87	53.717202	0.50
131	9/30/17 8:10	1270.10	50.29	11.47	219.05	9/30/17 8:10	1270.10	50.47	65.10	32.27	9/30/17 8:10	1270.00	48.70	53.68902	0.53
132	9/30/17 8:20	1280.10	50.29	12.45	218.07	9/30/17 8:20	1280.10	50.47	64.56	32.81	9/30/17 8:20	1280.00	48.70	53.696181	0.52
133	9/30/17 8:30	1290.10	50.29	11.06	219.46	9/30/17 8:30	1290.10	50.47	64.85	32.53	9/30/17 8:30	1290.00	48.70	53.712813	0.51
134	9/30/17 8:40	1300.10	50.29	12.12	218.40	9/30/17 8:40	1300.10	50.47	64.16	33.22	9/30/17 8:40	1300.00	48.70	53.712813	0.51
135	9/30/17 8:50	1310.10	50.29	13.34	217.17	9/30/17 8:50	1310.10	50.47	64.52	32.86	9/30/17 8:50	1310.00	48.70	53.716047	0.50
136	9/30/17 9:00	1320.10	50.29	12.64	217.87	9/30/17 9:00	1320.10	50.47	64.62	32.75	9/30/17 9:00	1320.00	48.70	53.696181	0.52
137	9/30/17 9:10	1330.10	50.29	12.66	217.86	9/30/17 9:10	1330.10	50.47	64.42	32.95	9/30/17 9:10	1330.00	48.87	53.724132	0.49
138	9/30/17 9:20	1340.10	50.29	11.82	218.70	9/30/17 9:20	1340.10	50.47	64.08	33.29	9/30/17 9:20	1340.00	48.70	53.716047	0.50
139	9/30/17 9:30	1350.10	50.29	13.33	217.18	9/30/17 9:30	1350.10	50.47	64.02	33.35	9/30/17 9:30	1350.00	48.87	53.717202	0.50
140	9/30/17 9:40	1360.10	50.29	12.70	217.82	9/30/17 9:40	1360.10	50.47	63.91	33.47	9/30/17 9:40	1360.00	48.87	53.696643	0.52
141	9/30/17 9:50	1370.10	50.29	12.54	217.98	9/30/17 9:50	1370.10	50.47	63.99	33.38	9/30/17 9:50	1370.00	48.70	53.706114	0.51
142	9/30/17 10:00	1380.10	50.29	13.12	217.40	9/30/17 10:00	1380.10	50.47	63.59	33.78	9/30/17 10:00	1380.00	48.70	53.68902	0.53
143	9/30/17 10:10	1390.10	50.29	12.71	217.81	9/30/17 10:10	1390.10	50.47	63.79	33.58	9/30/17 10:10	1390.00	48.70	53.709348	0.51
144	9/30/17 10:20	1400.10	50.29	12.66	217.85	9/30/17 10:20	1400.10	50.47	63.50	33.87	9/30/17 10:20	1400.00	48.87	53.717202	0.50
145	9/30/17 10:30	1410.10	50.29	11.63	218.88	9/30/17 10:30	1410.10	50.47	63.52	33.85	9/30/17 10:30	1410.00	48.87	53.713506	0.50
146	9/30/17 10:40	1420.10	50.29	12.98	217.54	9/30/17 10:40	1420.10	50.47	63.36	34.02	9/30/17 10:40	1420.00	48.87	53.696181	0.52
147	9/30/17 10:50	1430.10	50.29	11.92	218.60	9/30/17 10:50	1430.10	50.47	63.26	34.11	9/30/17 10:50	1430.00	48.87	53.720205	0.50
148	9/30/17 11:00	1440.10	50.29	10.40	220.12	9/30/17 11:00	1440.10	50.47	63.22	34.15	9/30/17 11:00	1440.00	48.70	53.71212	0.51
149	9/30/17 11:10	1450.10	50.29	12.54	217.97	9/30/17 11:10	1450.10	50.47	63.33	34.04	9/30/17 11:10	1450.00	48.70	53.691561	0.53
150	9/30/17 11:20	1460.10	50.29	12.86	217.66	9/30/17 11:20	1460.10	50.47	63.20	34.18	9/30/17 11:20	1460.00	48.70	53.687865	0.53
151	9/30/17 11:30	1470.10	50.29	13.39	217.12	9/30/17 11:30	1470.10	50.47	63.21	34.16	9/30/17 11:30	1470.00	48.87	53.671233	0.55
152	9/30/17 11:40	1480.10	50.29	11.48	219.03	9/30/17 11:40	1480.10	50.47	62.78	34.59	9/30/17 11:40	1480.00	48.87	53.680935	0.54
153	9/30/17 11:50	1490.10	50.29	11.80	218.71	9/30/17 11:50	1490.10	50.47	62.95	34.42	9/30/17 11:50	1490.00	48.87	53.680935	0.54
154	9/30/17 12:00	1500.10	50.29	12.61	217.90	9/30/17 12:00	1500.10	50.47	63.05	34.32	9/30/17 12:00	1500.00	48.87	53.701032	0.52
155	9/30/17 12:10	1510.10	50.29	11.49	219.03	9/30/17 12:10	1510.10	50.47	62.70	34.67	9/30/17 12:10	1510.00	48.87	53.686941	0.53
156	9/30/17 12:20	1520.10	50.29	11.22	219.30	9/30/17 12:20	1520.10	50.47	62.36	35.01	9/30/17 12:20	1520.00	48.70	53.675853	0.54
157	9/30/17 12:30	1530.10	50.29	10.76	219.75	9/30/17 12:30	1530.10	50.47	62.87	34.51	9/30/17 12:30	1530.00	48.87	53.697336	0.52
158	9/30/17 12:40	1540.10	50.29	11.97	218.55	9/30/17 12:40	1540.10	50.47	62.61	34.76	9/30/17 12:40	1540.00	48.87	53.693871	0.52
159	9/30/17 12:50	1550.10	50.29	11.88	218.64	9/30/17 12:50	1550.10	50.47	62.60	34.78	9/30/17 12:50	1550.00	48.70	53.70981	0.51
160	9/30/17 13:00	1560.10	50.29	11.12	219.40	9/30/17 13:00	1560.10	50.47	62.38	34.99	9/30/17 13:00	1560.00	48.70	53.706345	0.51
161	9/30/17 13:10	1570.10	50.29	11.13	219.39	9/30/17 13:10	1570.10	50.47	62.29	35.08	9/30/17 13:10				

	F	G	I	K	L	M	N	P	R	S	T	U	W	Y	Z
2	48 Hour Pumping Test at 4.5 gpm on PW-1 at 45 Nixon Road Framingham, MA														
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-3	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-4	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)
196	9/30/17 19:00	1920.10	50.47	8.73	221.79	9/30/17 19:00	1920.10	50.47	60.00	37.37	9/30/17 19:00	1920.00	48.87	53.661762	0.56
197	9/30/17 19:10	1930.10	50.47	7.74	222.78	9/30/17 19:10	1930.10	50.47	60.13	37.24	9/30/17 19:10	1930.00	48.70	53.660607	0.56
198	9/30/17 19:20	1940.10	50.47	9.15	221.37	9/30/17 19:20	1940.10	50.47	59.74	37.64	9/30/17 19:20	1940.00	48.70	53.661069	0.56
199	9/30/17 19:30	1950.10	50.47	7.58	222.94	9/30/17 19:30	1950.10	50.47	59.92	37.46	9/30/17 19:30	1950.00	48.87	53.685786	0.53
200	9/30/17 19:40	1960.10	50.47	7.60	222.92	9/30/17 19:40	1960.10	50.47	59.76	37.61	9/30/17 19:40	1960.00	48.70	53.674698	0.54
201	9/30/17 19:50	1970.10	50.47	7.33	223.18	9/30/17 19:50	1970.10	50.47	59.39	37.98	9/30/17 19:50	1970.00	48.87	53.675391	0.54
202	9/30/17 20:00	1980.10	50.47	6.05	224.47	9/30/17 20:00	1980.10	50.47	59.60	37.78	9/30/17 20:00	1980.00	48.87	53.658759	0.56
203	9/30/17 20:10	1990.10	50.47	7.65	222.87	9/30/17 20:10	1990.10	50.47	59.75	37.62	9/30/17 20:10	1990.00	48.70	53.674698	0.54
204	9/30/17 20:20	2000.10	50.47	8.10	222.41	9/30/17 20:20	2000.10	50.47	59.40	37.97	9/30/17 20:20	2000.00	48.70	53.664303	0.55
205	9/30/17 20:30	2010.10	50.47	6.69	223.83	9/30/17 20:30	2010.10	50.47	59.43	37.94	9/30/17 20:30	2010.00	48.70	53.657604	0.56
206	9/30/17 20:40	2020.10	50.47	6.99	223.53	9/30/17 20:40	2020.10	50.47	59.49	37.88	9/30/17 20:40	2020.00	48.70	53.667537	0.55
207	9/30/17 20:50	2030.10	50.47	8.30	222.22	9/30/17 20:50	2030.10	50.47	59.15	38.22	9/30/17 20:50	2030.00	48.70	53.677932	0.54
208	9/30/17 21:00	2040.10	50.47	7.40	223.12	9/30/17 21:00	2040.10	50.47	59.64	37.73	9/30/17 21:00	2040.00	48.70	53.688096	0.53
209	9/30/17 21:10	2050.10	50.47	8.28	222.24	9/30/17 21:10	2050.10	50.47	59.33	38.04	9/30/17 21:10	2050.00	48.70	53.688096	0.53
210	9/30/17 21:20	2060.10	50.47	6.76	223.76	9/30/17 21:20	2060.10	50.47	59.03	38.34	9/30/17 21:20	2060.00	48.70	53.671002	0.55
211	9/30/17 21:30	2070.10	50.47	7.64	222.88	9/30/17 21:30	2070.10	50.47	59.35	38.03	9/30/17 21:30	2070.00	48.70	53.674698	0.54
212	9/30/17 21:40	2080.10	50.47	6.66	223.86	9/30/17 21:40	2080.10	50.47	59.03	38.34	9/30/17 21:40	2080.00	48.70	53.674698	0.54
213	9/30/17 21:50	2090.10	50.47	6.77	223.75	9/30/17 21:50	2090.10	50.47	59.44	37.94	9/30/17 21:50	2090.00	48.87	53.658528	0.56
214	9/30/17 22:00	2100.10	50.47	6.60	223.92	9/30/17 22:00	2100.10	50.47	59.27	38.10	9/30/17 22:00	2100.00	48.87	53.668923	0.55
215	9/30/17 22:10	2110.10	50.47	7.02	223.50	9/30/17 22:10	2110.10	50.47	59.22	38.15	9/30/17 22:10	2110.00	48.87	53.706807	0.51
216	9/30/17 22:20	2120.10	50.47	6.20	224.32	9/30/17 22:20	2120.10	50.47	59.21	38.16	9/30/17 22:20	2120.00	48.87	53.696874	0.52
217	9/30/17 22:30	2130.10	50.47	6.55	223.97	9/30/17 22:30	2130.10	50.47	58.67	38.70	9/30/17 22:30	2130.00	48.87	53.693409	0.52
218	9/30/17 22:40	2140.10	50.47	7.83	222.69	9/30/17 22:40	2140.10	50.47	58.93	38.45	9/30/17 22:40	2140.00	48.87	53.697567	0.52
219	9/30/17 22:50	2150.10	50.47	6.46	224.06	9/30/17 22:50	2150.10	50.47	58.57	38.81	9/30/17 22:50	2150.00	48.70	53.683014	0.53
220	9/30/17 23:00	2160.10	50.47	6.25	224.27	9/30/17 23:00	2160.10	50.47	59.04	38.33	9/30/17 23:00	2160.00	48.70	53.676777	0.54
221	9/30/17 23:10	2170.10	50.47	5.65	224.87	9/30/17 23:10	2170.10	50.47	58.48	38.89	9/30/17 23:10	2170.00	48.70	53.680011	0.54
222	9/30/17 23:20	2180.10	50.47	6.62	223.90	9/30/17 23:20	2180.10	50.47	58.53	38.85	9/30/17 23:20	2180.00	48.70	53.687172	0.53
223	9/30/17 23:30	2190.10	50.47	4.42	226.10	9/30/17 23:30	2190.10	50.47	58.67	38.71	9/30/17 23:30	2190.00	48.87	53.691099	0.53
224	9/30/17 23:40	2200.10	50.47	5.85	224.67	9/30/17 23:40	2200.10	50.47	58.84	38.53	9/30/17 23:40	2200.00	48.87	53.684631	0.53
225	9/30/17 23:50	2210.10	50.47	5.73	224.79	9/30/17 23:50	2210.10	50.47	58.72	38.65	9/30/17 23:50	2210.00	48.87	53.711889	0.51
226	10/1/17 0:00	2220.10	50.47	4.70	225.82	10/1/17 0:00	2220.10	50.47	58.38	39.00	10/1/17 0:00	2220.00	48.70	53.687403	0.53
227	10/1/17 0:10	2230.10	50.47	6.16	224.36	10/1/17 0:10	2230.10	50.47	58.29	39.09	10/1/17 0:10	2230.00	48.70	53.704266	0.51
228	10/1/17 0:20	2240.10	50.47	5.90	224.62	10/1/17 0:20	2240.10	50.47	58.25	39.13	10/1/17 0:20	2240.00	48.70	53.680704	0.54
229	10/1/17 0:30	2250.10	50.47	6.73	223.79	10/1/17 0:30	2250.10	50.47	58.29	39.08	10/1/17 0:30	2250.00	48.87	53.688096	0.53
230	10/1/17 0:40	2260.10	50.47	5.78	224.74	10/1/17 0:40	2260.10	50.47	58.24	39.14	10/1/17 0:40	2260.00	48.70	53.684169	0.53
231	10/1/17 0:50	2270.10	50.47	6.58	223.94	10/1/17 0:50	2270.10	50.47	57.98	39.39	10/1/17 0:50	2270.00	48.70	53.684169	0.53
232	10/1/17 1:00	2280.10	50.47	4.90	225.62	10/1/17 1:00	2280.10	50.47	58.17	39.20	10/1/17 1:00	2280.00	48.70	53.687403	0.53
233	10/1/17 1:10	2290.10	50.47	4.47	226.04	10/1/17 1:10	2290.10	50.47	58.19	39.19	10/1/17 1:10	2290.00	48.70	53.684169	0.53
234	10/1/17 1:20	2300.10	50.47	10.83	219.68	10/1/17 1:20	2300.10	50.47	58.03	39.34	10/1/17 1:20	2300.00	48.70	53.684169	0.53
235	10/1/17 1:30	2310.10	50.47	4.79	225.73	10/1/17 1:30	2310.10	50.47	57.83	39.55	10/1/17 1:30	2310.00	48.70	53.6844	0.53
236	10/1/17 1:40	2320.10	50.47	4.32	226.20	10/1/17 1:40	2320.10	50.47	58.13	39.25	10/1/17 1:40	2320.00	48.70	53.701263	0.52
237	10/1/17 1:50	2330.10	50.47	6.33	224.18	10/1/17 1:50	2330.10	50.47	57.98	39.39	10/1/17 1:50	2330.00	48.70	53.671002	0.55
238	10/1/17 2:00	2340.10	50.47	5.42	225.09	10/1/17 2:00	2340.10	50.47	57.99	39.39	10/1/17 2:00	2340.00	48.87	53.702418	0.52
239	10/1/17 2:10	2350.10	50.47	3.98	226.54	10/1/17 2:10	2350.10	50.47	58.18	39.19	10/1/17 2:10	2350.00	48.70	53.698722	0.52
240	10/1/17 2:20	2360.10	50.47	4.59	225.92	10/1/17 2:20	2360.10	50.47	58.32	39.05	10/1/17 2:20	2360.00	48.87	53.686017	0.53
241	10/1/17 2:30	2370.10	50.47	4.26	226.26	10/1/17 2:30	2370.10	50.47	58.13	39.24	10/1/17 2:30	2370.00	48.70	53.702418	0.52
242	10/1/17 2:40	2380.10	50.47	2.96	227.56	10/1/17 2:40	2380.10	50.47	57.81	39.57	10/1/17 2:40	2380.00	48.70	53.685324	0.53
243	10/1/17 2:50	2390.10	50.47	4.55	225.96	10/1/17 2:50	2390.10	50.47	58.02	39.36	10/1/17 2:50	2390.00	48.70	53.699184	0.52
244	10/1/17 3:00	2400.10	50.47	5.68	224.84	10/1/17 3:00	2400.10	50.47	57.82	39.55	10/1/17 3:00	2400.00	48.87	53.706807	0.51
245	10/1/17 3:10	2410.10	50.47	5.57	224.94	10/1/17 3:10	2410.10	50.47	57.69	39.68	10/1/17 3:10	2410.00	48.87	53.706807	0.51
246	10/1/17 3:20	2420.10	50.47	3.63	226.88	10/1/17 3:20	2420.10	50.47	58.04	39.33	10/1/17 3:20	2420.00	48.87	53.720667	0.50
247	10/1/17 3:30	2430.10	50.47	4.22	226.30	10/1/17 3:30	2430.10	50.47	57.62	39.75	10/1/17 3:30	2430.00	48.87	53.720667	0.50
248	10/1/17 3:40	2440.10	50.47	3.94	226.58	10/1/17 3:40	2440.10	50.47	57.53	39.84	10/1/17 3:40	2440.00	48.87	53.700108	0.52
249	10/1/17 3:50	2450.10	50.47	3.94	226.58	10/1/17 3:50	2450.10	50.47	57.31	40.06	10/1/17 3:50	2450.00	48.87	53.727597	0.49
250	10/1/17 4:00	2460.10	50.47	3.44	227.08	10/1/17 4:00	2460.10	50.47	57.49	39.88	10/1/17 4:00	2460.00	48.87	53.703342	0.51
251	10/1/17 4:10	2470.10	50.47	2.12	228.40	10/1/17 4:10	2470.10	50.47	57.60	39.78	10/1/17 4:10	2470.00	48.87	53.720205	0.50
252	10/1/17 4:20	2480.10	50.47	2.01	228.50	10/1/17 4:20	2480.10	50.47	57.48	39.89	10/1/17 4:20	2480.00	48.87	53.706114	0.51
253	10/1/17 4:30	2490.10	50.47	3.23	227.29	10/1/17 4:30	2490.10	50.47	57.34	40.03	10/1/17 4:30	2490.00	48.70	53.715354	0.50
254	10/1/17 4:40	2500.10	50.47	2.78	227.73	10/1/17 4:40	2500.10	50.47	57.22	40.16	10/1/17 4:40	2500.00	48.70	53.711196	0.51
255	10/1/17 4:50	2510.10	50.47	3.13	227.39	10/1/17 4:50	2510.10	50.47	57.55	39.82	10/1/17 4:50	2510.00	48.87	53.701032	0.52
256	10/1/17 5:00	2520.10	50.47	3.80	226.71	10/1/17 5:00	2520.10	50.47	57.53	39.84	10/1/17 5:00	2520.00	48.87	53.727135	0.49
257	10/1/17 5:10	2530.10	50.47	4.22	226.30	10/1/17 5:10	2530.10	50.47	56.99	40.39	10/1/17 5:10	2530.00	4		

	F	G	I	K	L	M	N	P	R	S	T	U	W	Y	Z
2	48 Hour Pumping Test at 4.5 gpm on PW-1 at 45 Nixon Road Framingham, MA														
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-3	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-4	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)
292	10/1/17 11:00	2880.10	50.47	0.27	230.25	10/1/17 11:00	2880.10	50.47	55.62	41.76	10/1/17 11:00	2880.00	48.70	53.720205	0.50
293	10/1/17 11:10	2890.10	50.47	167.25	63.27	10/1/17 11:10	2890.10	50.47	61.18	36.20	10/1/17 11:10	2890.00	48.87	53.2224	0.50
294	10/1/17 11:20	2900.10	50.47	173.31	57.21	10/1/17 11:20	2900.10	50.47	63.37	34.01	10/1/17 11:20	2900.00	48.70	52.791123	0.43
295	10/1/17 11:30	2910.10	50.47	176.88	53.63	10/1/17 11:30	2910.10	50.47	64.26	33.12	10/1/17 11:30	2910.00	48.70	52.415517	0.38
296	10/1/17 11:40	2920.10	50.29	180.00	50.52	10/1/17 11:40	2920.10	50.47	65.42	31.95	10/1/17 11:40	2920.00	48.70	52.075485	0.34
297	10/1/17 11:50	2930.10	50.29	181.78	48.74	10/1/17 11:50	2930.10	50.47	66.51	30.87	10/1/17 11:50	2930.00	48.70	51.795051	0.28
298	10/1/17 12:00	2940.10	50.29	183.76	46.76	10/1/17 12:00	2940.10	50.47	67.17	30.20	10/1/17 12:00	2940.00	48.70	51.525243	0.27
299	10/1/17 12:10	2950.10	50.11	185.04	45.48	10/1/17 12:10	2950.10	50.47	68.04	29.34	10/1/17 12:10	2950.00	48.70	51.303945	0.22
300	10/1/17 12:20	2960.10	50.11	186.49	44.03	10/1/17 12:20	2960.10	50.47	68.61	28.76	10/1/17 12:20	2960.00	48.70	51.10644	0.20
301	10/1/17 12:30	2970.10	50.11	187.88	42.64	10/1/17 12:30	2970.10	50.47	69.22	28.15	10/1/17 12:30	2970.00	48.70	50.906394	0.20
302	10/1/17 12:40	2980.10	50.11	189.22	41.30	10/1/17 12:40	2980.10	50.47	69.57	27.80	10/1/17 12:40	2980.00	48.70	50.731527	0.17
303	10/1/17 12:50	2990.10	50.11	189.76	40.75	10/1/17 12:50	2990.10	50.47	70.20	27.17	10/1/17 12:50	2990.00	48.70	50.567286	0.16
304	10/1/17 13:00	3000.10	49.94	190.92	39.60	10/1/17 13:00	3000.10	50.47	71.07	26.31	10/1/17 13:00	3000.00	48.70	50.438619	0.13
305	10/1/17 13:10	3010.10	49.94	191.80	38.72	10/1/17 13:10	3010.10	50.47	70.95	26.43	10/1/17 13:10	3010.00	48.87	50.296554	0.14
306	10/1/17 13:20	3020.10	49.94	192.44	38.07	10/1/17 13:20	3020.10	50.47	71.40	25.97	10/1/17 13:20	3020.00	48.87	50.16858	0.13
307	10/1/17 13:30	3030.10	49.94	193.10	37.42	10/1/17 13:30	3030.10	50.47	72.08	25.30	10/1/17 13:30	3030.00	48.87	50.075487	0.09
308	10/1/17 13:40	3040.10	50.11	193.53	36.98	10/1/17 13:40	3040.10	50.47	72.62	24.75	10/1/17 13:40	3040.00	48.87	49.945203	0.13
309	10/1/17 13:50	3050.10	50.11	194.56	35.96	10/1/17 13:50	3050.10	50.47	72.66	24.71	10/1/17 13:50	3050.00	48.87	49.845642	0.10
310	10/1/17 14:00	3060.10	49.94	195.20	35.31	10/1/17 14:00	3060.10	50.47	72.88	24.49	10/1/17 14:00	3060.00	48.87	49.769874	0.08
311	10/1/17 14:10	3070.10	49.94	195.51	35.01	10/1/17 14:10	3070.10	50.47	73.42	23.95	10/1/17 14:10	3070.00	48.87	49.704963	0.06
312	10/1/17 14:20	3080.10	49.94	196.23	34.29	10/1/17 14:20	3080.10	50.47	73.96	23.41	10/1/17 14:20	3080.00	48.87	49.623189	0.08
313	10/1/17 14:30	3090.10	49.94	196.52	34.00	10/1/17 14:30	3090.10	50.47	74.22	23.15	10/1/17 14:30	3090.00	48.87	49.561974	0.06
314	10/1/17 14:40	3100.10	49.94	197.25	33.27	10/1/17 14:40	3100.10	50.47	74.05	23.32	10/1/17 14:40	3100.00	48.87	49.483896	0.08
315	10/1/17 14:50	3110.10	49.94	197.66	32.86	10/1/17 14:50	3110.10	50.47	74.63	22.75	10/1/17 14:50	3110.00	48.70	49.405818	0.08
316	10/1/17 15:00	3120.10	49.94	198.13	32.39	10/1/17 15:00	3120.10	50.47	74.77	22.60	10/1/17 15:00	3120.00	48.87	49.359922	0.05
317	10/1/17 15:10	3130.10	49.94	198.68	31.84	10/1/17 15:10	3130.10	50.47	74.94	22.44	10/1/17 15:10	3130.00	48.87	49.293552	0.06
318	10/1/17 15:20	3140.10	49.94	199.32	31.20	10/1/17 15:20	3140.10	50.47	74.99	22.38	10/1/17 15:20	3140.00	48.87	49.238112	0.06
319	10/1/17 15:30	3150.10	49.94	199.59	30.93	10/1/17 15:30	3150.10	50.47	75.32	22.05	10/1/17 15:30	3150.00	48.87	49.196763	0.04
320	10/1/17 15:40	3160.10	49.94	199.66	30.86	10/1/17 15:40	3160.10	50.47	75.81	21.56	10/1/17 15:40	3160.00	48.87	49.175973	0.02
321	10/1/17 15:50	3170.10	49.94	200.38	30.14	10/1/17 15:50	3170.10	50.47	76.00	21.38	10/1/17 15:50	3170.00	48.87	49.165578	0.01
322	10/1/17 16:00	3180.10	49.94	200.68	29.83	10/1/17 16:00	3180.10	50.47	76.09	21.29	10/1/17 16:00	3180.00	48.70	49.138782	0.03
323	10/1/17 16:10	3190.10	49.76	201.17	29.35	10/1/17 16:10	3190.10	50.47	76.26	21.11	10/1/17 16:10	3190.00	48.70	49.112217	0.03
324	10/1/17 16:20	3200.10	49.76	201.37	29.15	10/1/17 16:20	3200.10	50.47	76.65	20.72	10/1/17 16:20	3200.00	48.70	49.082418	0.03
325	10/1/17 16:30	3210.10	49.76	201.56	28.95	10/1/17 16:30	3210.10	50.47	76.95	20.42	10/1/17 16:30	3210.00	48.70	49.060473	0.02
326	10/1/17 16:40	3220.10	49.76	201.82	28.70	10/1/17 16:40	3220.10	50.47	76.95	20.42	10/1/17 16:40	3220.00	48.70	49.058394	0.00
327	10/1/17 16:50	3230.10	49.76	202.41	28.10	10/1/17 16:50	3230.10	50.47	77.24	20.13	10/1/17 16:50	3230.00	48.70	49.056315	0.00
328	10/1/17 17:00	3240.10	49.76	202.67	27.85	10/1/17 17:00	3240.10	50.47	77.67	19.70	10/1/17 17:00	3240.00	48.70	49.044072	0.01
329	10/1/17 17:10	3250.10	49.76	202.95	27.57	10/1/17 17:10	3250.10	50.47	77.28	20.10	10/1/17 17:10	3250.00	48.70	49.05285	-0.01
330	10/1/17 17:20	3260.10	49.76	202.79	27.72	10/1/17 17:20	3260.10	50.47	78.01	19.36	10/1/17 17:20	3260.00	48.70	49.068558	-0.02
331	10/1/17 17:30	3270.10	49.76	203.27	27.24	10/1/17 17:30	3270.10	50.47	78.05	19.32	10/1/17 17:30	3270.00	48.70	49.0644	0.00
332	10/1/17 17:40	3280.10	49.76	203.71	26.81	10/1/17 17:40	3280.10	50.47	78.17	19.20	10/1/17 17:40	3280.00	48.70	49.07133	-0.01
333	10/1/17 17:50	3290.10	49.76	203.97	26.55	10/1/17 17:50	3290.10	50.47	78.16	19.22	10/1/17 17:50	3290.00	48.87	49.07826	-0.01
334	10/1/17 18:00	3300.10	49.76	204.19	26.32	10/1/17 18:00	3300.10	50.47	78.36	19.02	10/1/17 18:00	3300.00	48.87	49.075719	0.00
335	10/1/17 18:10	3310.10	49.76	204.53	25.99	10/1/17 18:10	3310.10	50.47	78.57	18.80	10/1/17 18:10	3310.00	48.87	49.073178	0.00
336	10/1/17 18:20	3320.10	49.76	204.75	25.77	10/1/17 18:20	3320.10	50.47	78.22	19.15	10/1/17 18:20	3320.00	48.87	49.07133	0.00
337	10/1/17 18:30	3330.10	49.76	204.59	25.93	10/1/17 18:30	3330.10	50.47	78.47	18.91	10/1/17 18:30	3330.00	48.87	49.080108	-0.01
338	10/1/17 18:40	3340.10	49.76	205.14	25.37	10/1/17 18:40	3340.10	50.47	78.55	18.82	10/1/17 18:40	3340.00	48.87	49.075257	0.00
339	10/1/17 18:50	3350.10	49.76	205.32	25.20	10/1/17 18:50	3350.10	50.47	78.55	18.82	10/1/17 18:50	3350.00	48.70	49.088424	-0.01
340	10/1/17 19:00	3360.10	49.76	205.22	25.30	10/1/17 19:00	3360.10	50.47	78.80	18.57	10/1/17 19:00	3360.00	48.87	49.10829	-0.02
341	10/1/17 19:10	3370.10	49.76	205.81	24.71	10/1/17 19:10	3370.10	50.47	79.15	18.22	10/1/17 19:10	3370.00	48.70	49.117299	-0.01
342	10/1/17 19:20	3380.10	49.76	205.94	24.57	10/1/17 19:20	3380.10	50.47	78.86	18.51	10/1/17 19:20	3380.00	48.70	49.126308	-0.01
343	10/1/17 19:30	3390.10	49.76	205.72	24.79	10/1/17 19:30	3390.10	50.47	79.70	17.67	10/1/17 19:30	3390.00	48.70	49.144095	-0.02
344	10/1/17 19:40	3400.10	49.76	206.65	23.87	10/1/17 19:40	3400.10	50.47	79.69	17.68	10/1/17 19:40	3400.00	48.87	49.169274	-0.03
345	10/1/17 19:50	3410.10	49.76	206.60	23.92	10/1/17 19:50	3410.10	50.47	79.77	17.60	10/1/17 19:50	3410.00	48.87	49.20069	-0.03
346	10/1/17 20:00	3420.10	49.76	206.68	23.84	10/1/17 20:00	3420.10	50.47	79.84	17.54	10/1/17 20:00	3420.00	48.70	49.198149	0.00
347	10/1/17 20:10	3430.10	49.76	207.29	23.23	10/1/17 20:10	3430.10	50.47	79.73	17.64	10/1/17 20:10	3430.00	48.70	49.205772	-0.01
348	10/1/17 20:20	3440.10	49.76	207.26	23.26	10/1/17 20:20	3440.10	50.47	80.08	17.29	10/1/17 20:20	3440.00	48.87	49.21644	-0.03
349	10/1/17 20:30	3450.10	49.76	207.27	23.25	10/1/17 20:30	3450.10	50.47	79.91	17.46	10/1/17 20:30	3450.00	48.87	49.269066	-0.04
350	10/1/17 20:40	3460.10	49.76	207.79	22.72	10/1/17 20:40	3460.10	50.47	79.84	17.53	10/1/17 20:40	3460.00	48.70	49.282464	-0.01
351	10/1/17 20:50	3470.10	49.76	207.88	22.63	10/1/17 20:50	3470.10	50.47	80.29	17.08	10/1/17 20:50	3470.00	48.70	49.323582	-0.04
352	10/1/17 21:00	3480.10	49.76	207.73	22.79	10/1/17 21:00	3480.10	50.47	80.49	16.88	10/1/17 21:00	3480.00	48.87	49.351302	-0.03
353	10/1/17														

	F	G	I	K	L	M	N	P	R	S	T	U	W	Y	Z
2	48 Hour Pumping Test at 4.5 gpm on PW-1 at 45 Nixon Road Framingham, MA														
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-3	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-4	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)
388	10/2/17 3:00	3840.10	49.58	212.79	17.73	10/2/17 3:00	3840.10	50.47	83.41	13.96	10/2/17 3:00	3840.00	48.70	51.405816	-0.05
389	10/2/17 3:10	3850.10	49.58	213.13	17.39	10/2/17 3:10	3850.10	50.47	83.55	13.82	10/2/17 3:10	3850.00	48.87	51.452247	-0.05
390	10/2/17 3:20	3860.10	49.58	213.07	17.45	10/2/17 3:20	3860.10	50.47	83.43	13.94	10/2/17 3:20	3860.00	48.70	51.484356	-0.03
391	10/2/17 3:30	3870.10	49.58	213.29	17.22	10/2/17 3:30	3870.10	50.47	84.02	13.35	10/2/17 3:30	3870.00	48.87	51.538872	-0.05
392	10/2/17 3:40	3880.10	49.58	213.46	17.06	10/2/17 3:40	3880.10	50.47	84.02	13.35	10/2/17 3:40	3880.00	48.70	51.587613	-0.05
393	10/2/17 3:50	3890.10	49.58	213.38	17.14	10/2/17 3:50	3890.10	50.47	83.79	13.58	10/2/17 3:50	3890.00	48.70	51.627114	-0.04
394	10/2/17 4:00	3900.10	49.58	213.54	16.98	10/2/17 4:00	3900.10	50.47	83.92	13.46	10/2/17 4:00	3900.00	48.87	51.672159	-0.05
395	10/2/17 4:10	3910.10	49.58	213.61	16.91	10/2/17 4:10	3910.10	50.47	84.19	13.18	10/2/17 4:10	3910.00	48.87	51.733605	-0.06
396	10/2/17 4:20	3920.10	49.58	213.54	16.98	10/2/17 4:20	3920.10	50.47	84.27	13.10	10/2/17 4:20	3920.00	48.70	51.773799	-0.04
397	10/2/17 4:30	3930.10	49.58	213.78	16.74	10/2/17 4:30	3930.10	50.47	84.24	13.14	10/2/17 4:30	3930.00	48.70	51.812607	-0.04
398	10/2/17 4:40	3940.10	49.58	214.02	16.49	10/2/17 4:40	3940.10	50.47	84.17	13.20	10/2/17 4:40	3940.00	48.70	51.847719	-0.04
399	10/2/17 4:50	3950.10	49.58	214.23	16.29	10/2/17 4:50	3950.10	50.47	84.45	12.93	10/2/17 4:50	3950.00	48.70	51.881676	-0.03
400	10/2/17 5:00	3960.10	49.58	214.36	16.16	10/2/17 5:00	3960.10	50.47	84.65	12.72	10/2/17 5:00	3960.00	48.70	51.919791	-0.04
401	10/2/17 5:10	3970.10	49.58	214.29	16.23	10/2/17 5:10	3970.10	50.47	84.28	13.10	10/2/17 5:10	3970.00	48.70	51.939888	-0.02
402	10/2/17 5:20	3980.10	49.58	214.34	16.18	10/2/17 5:20	3980.10	50.47	84.62	12.75	10/2/17 5:20	3980.00	48.87	51.978003	-0.04
403	10/2/17 5:30	3990.10	49.58	214.58	15.94	10/2/17 5:30	3990.10	50.47	84.36	13.02	10/2/17 5:30	3990.00	48.87	51.992787	-0.01
404	10/2/17 5:40	4000.10	49.58	214.20	16.31	10/2/17 5:40	4000.10	50.47	84.35	13.02	10/2/17 5:40	4000.00	48.87	51.999486	-0.01
405	10/2/17 5:50	4010.10	49.58	214.75	15.77	10/2/17 5:50	4010.10	50.47	84.22	13.15	10/2/17 5:50	4010.00	48.70	52.009188	-0.01
406	10/2/17 6:00	4020.10	49.58	214.65	15.87	10/2/17 6:00	4020.10	50.47	84.91	12.46	10/2/17 6:00	4020.00	48.70	52.033212	-0.02
407	10/2/17 6:10	4030.10	49.58	214.85	15.67	10/2/17 6:10	4030.10	50.47	84.46	12.91	10/2/17 6:10	4030.00	48.87	52.074099	-0.04
408	10/2/17 6:20	4040.10	49.58	215.00	15.51	10/2/17 6:20	4040.10	50.47	84.98	12.40	10/2/17 6:20	4040.00	48.87	52.114755	-0.04
409	10/2/17 6:30	4050.10	49.58	215.11	15.40	10/2/17 6:30	4050.10	50.47	84.97	12.41	10/2/17 6:30	4050.00	48.87	52.131156	-0.02
410	10/2/17 6:40	4060.10	49.58	215.39	15.13	10/2/17 6:40	4060.10	50.47	84.88	12.50	10/2/17 6:40	4060.00	48.70	52.16442	-0.03
411	10/2/17 6:50	4070.10	49.58	215.44	15.08	10/2/17 6:50	4070.10	50.47	84.72	12.65	10/2/17 6:50	4070.00	48.70	52.194219	-0.03
412	10/2/17 7:00	4080.10	49.58	215.38	15.14	10/2/17 7:00	4080.10	50.47	85.12	12.26	10/2/17 7:00	4080.00	48.70	52.226328	-0.03
413	10/2/17 7:10	4090.10	49.58	215.48	15.04	10/2/17 7:10	4090.10	50.47	84.83	12.54	10/2/17 7:10	4090.00	48.70	52.254741	-0.03
414	10/2/17 7:20	4100.10	49.58	215.51	15.01	10/2/17 7:20	4100.10	50.47	85.22	12.16	10/2/17 7:20	4100.00	48.70	52.279458	-0.02
415	10/2/17 7:30	4110.10	49.58	215.51	15.01	10/2/17 7:30	4110.10	50.47	85.03	12.34	10/2/17 7:30	4110.00	48.70	52.301634	-0.02
416	10/2/17 7:40	4120.10	49.58	215.60	14.92	10/2/17 7:40	4120.10	50.47	84.90	12.47	10/2/17 7:40	4120.00	48.87	52.323448	-0.02
417	10/2/17 7:50	4130.10	49.58	215.81	14.71	10/2/17 7:50	4130.10	50.47	85.13	12.24	10/2/17 7:50	4130.00	48.70	52.340442	-0.02
418	10/2/17 8:00	4140.10	49.58	215.97	14.54	10/2/17 8:00	4140.10	50.47	85.21	12.16	10/2/17 8:00	4140.00	48.87	52.3677	-0.03
419	10/2/17 8:10	4150.10	49.58	216.06	14.45	10/2/17 8:10	4150.10	50.47	85.09	12.29	10/2/17 8:10	4150.00	48.87	52.370703	0.00
420	10/2/17 8:20	4160.10	49.58	216.16	14.36	10/2/17 8:20	4160.10	50.47	85.55	11.82	10/2/17 8:20	4160.00	48.70	52.401888	-0.03
421	10/2/17 8:30	4170.10	49.58	216.37	14.15	10/2/17 8:30	4170.10	50.47	85.55	11.82	10/2/17 8:30	4170.00	48.70	52.425912	-0.02
422	10/2/17 8:40	4180.10	49.58	216.10	14.42	10/2/17 8:40	4180.10	50.47	85.51	11.87	10/2/17 8:40	4180.00	48.70	52.433304	-0.01
423	10/2/17 8:50	4190.10	49.58	216.53	13.99	10/2/17 8:50	4190.10	50.47	85.51	11.86	10/2/17 8:50	4190.00	48.87	52.440696	-0.01
424	10/2/17 9:00	4200.10	49.58	216.30	14.22	10/2/17 9:00	4200.10	50.47	85.42	11.96	10/2/17 9:00	4200.00	48.87	52.444854	0.00
425	10/2/17 9:10	4210.10	49.58	216.43	14.09	10/2/17 9:10	4210.10	50.47	85.84	11.53	10/2/17 9:10	4210.00	48.87	52.468878	-0.02
426	10/2/17 9:20	4220.10	49.58	216.49	14.03	10/2/17 9:20	4220.10	50.47	85.53	11.85	10/2/17 9:20	4220.00	48.87	52.464951	0.00
427	10/2/17 9:30	4230.10	49.58	216.59	13.93	10/2/17 9:30	4230.10	50.47	85.65	11.73	10/2/17 9:30	4230.00	48.70	52.469109	0.00
428	10/2/17 9:40	4240.10	49.58	216.83	13.68	10/2/17 9:40	4240.10	50.47	85.66	11.71	10/2/17 9:40	4240.00	48.70	52.472112	0.00
429	10/2/17 9:50	4250.10	49.58	216.49	14.03	10/2/17 9:50	4250.10	50.47	86.06	11.31	10/2/17 9:50	4250.00	48.70	52.495674	-0.02
430	10/2/17 10:00	4260.10	49.58	216.95	13.57	10/2/17 10:00	4260.10	50.47	85.70	11.68	10/2/17 10:00	4260.00	48.87	52.509765	-0.01
431	10/2/17 10:10	4270.10	49.58	216.77	13.75	10/2/17 10:10	4270.10	50.47	85.83	11.55	10/2/17 10:10	4270.00	48.87	52.540495	-0.03
432	10/2/17 10:20	4280.10	49.58	217.07	13.45	10/2/17 10:20	4280.10	50.47	86.04	11.33	10/2/17 10:20	4280.00	48.87	52.551807	-0.01
433	10/2/17 10:30	4290.10	49.58	216.59	13.93	10/2/17 10:30	4290.10	50.47	86.03	11.34	10/2/17 10:30	4290.00	48.87	52.55481	0.00
434	10/2/17 10:40	4300.10	49.58	217.08	13.44	10/2/17 10:40	4300.10	50.47	86.04	11.33	10/2/17 10:40	4300.00	48.87	52.561509	-0.01
435	10/2/17 10:50	4310.10	49.58	217.29	13.23	10/2/17 10:50	4310.10	50.47	86.07	11.30	10/2/17 10:50	4310.00	48.70	52.585533	-0.02
436	10/2/17 11:00	4320.10	49.58	217.35	13.17	10/2/17 11:00	4320.10	50.47	86.15	11.22	10/2/17 11:00	4320.00	48.87	52.585533	0.00
437	10/2/17 11:10	4330.10	49.58	217.42	13.10	10/2/17 11:10	4330.10	50.47	86.02	11.35	10/2/17 11:10	4330.00	48.87	52.593618	-0.01
438	10/2/17 11:20	4340.10	49.58	217.65	12.86	10/2/17 11:20	4340.10	50.47	86.36	11.01	10/2/17 11:20	4340.00	48.70	52.622262	-0.03
439	10/2/17 11:30	4350.10	49.58	217.65	12.86	10/2/17 11:30	4350.10	50.47	86.27	11.10	10/2/17 11:30	4350.00	48.70	52.654602	-0.03
440	10/2/17 11:40	4360.10	49.58	217.53	12.99	10/2/17 11:40	4360.10	50.47	86.53	10.84	10/2/17 11:40	4360.00	48.87	52.703574	-0.05
441	10/2/17 11:50	4370.10	49.58	217.59	12.93	10/2/17 11:50	4370.10	50.47	86.45	10.92	10/2/17 11:50	4370.00	48.87	52.742844	-0.04
442	10/2/17 12:00	4380.10	49.58	217.78	12.74	10/2/17 12:00	4380.10	50.47	86.35	11.02	10/2/17 12:00	4380.00	48.87	52.782114	-0.04
443	10/2/17 12:10	4390.10	49.58	217.89	12.63	10/2/17 12:10	4390.10	50.47	86.47	10.90	10/2/17 12:10	4390.00	48.87	52.801287	-0.02
444	10/2/17 12:20	4400.10	49.58	217.97	12.55	10/2/17 12:20	4400.10	50.47	86.60	10.78	10/2/17 12:20	4400.00	48.87	52.834551	-0.03
445	10/2/17 12:30	4410.10	49.58	218.28	12.24	10/2/17 12:30	4410.10	50.47	86.55	10.82	10/2/17 12:30	4410.00	48.70	52.878903	-0.04
446	10/2/17 12:40	4420.10	49.58	217.89	12.63	10/2/17 12:40	4420.10	50.47	86.55	10.83	10/2/17 12:40	4420.00	48.70	52.901772	-0.02
447	10/2/17 12:50	4430.10	49.58	218.28	12.24	10/2/17 12:50	4430.10	50.47	86.57	10.80	10/2/17 12:50	4430.00	48.87	52.928106	-0.03
448	10/2/17 13:00	4440.10	49.58	218.07	12.45	10/2/17 13:00	4440.10	50.47	86.68	10.69	10/2/17 13:00	4440.00	48.70	52.938501	-0.01
449	10/2/17 13:10	4450.10	49.58	218.56	11.95	10/2/17 13:10	4450.10	50.47	86.49	10.88	10				

	F	G	I	K	L	M	N	P	R	S	T	U	W	Y	Z
2	48 Hour Pumping Test at 4.5 gpm on PW-1 at 45 Nixon Road Framingham, MA														
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-3	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	PW-4	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)
484	10/2/17 19:00	4800.10	49.58	220.33	10.19	10/2/17 19:00	4800.10	50.47	88.27	9.10	10/2/17 19:00	4800.00	48.70	54.230022	-0.04
485	10/2/17 19:10	4810.10	49.58	220.37	10.14	10/2/17 19:10	4810.10	50.47	88.17	9.20	10/2/17 19:10	4810.00	48.70	54.288465	-0.06
486	10/2/17 19:20	4820.10	49.58	220.21	10.31	10/2/17 19:20	4820.10	50.47	87.95	9.43	10/2/17 19:20	4820.00	48.70	54.348063	-0.06
487	10/2/17 19:30	4830.10	49.58	220.63	9.89	10/2/17 19:30	4830.10	50.47	88.24	9.13	10/2/17 19:30	4830.00	48.70	54.407199	-0.06
488	10/2/17 19:40	4840.10	49.58	220.17	10.35	10/2/17 19:40	4840.10	50.47	87.93	9.45	10/2/17 19:40	4840.00	48.70	54.441618	-0.03
489	10/2/17 19:50	4850.10	49.58	220.56	9.96	10/2/17 19:50	4850.10	50.47	87.98	9.39	10/2/17 19:50	4850.00	48.70	54.487125	-0.05
490	10/2/17 20:00	4860.10	49.58	220.53	9.99	10/2/17 20:00	4860.10	50.47	88.36	9.01	10/2/17 20:00	4860.00	48.70	54.531939	-0.04
491	10/2/17 20:10	4870.10	49.58	220.79	9.73	10/2/17 20:10	4870.10	50.47	88.50	8.88	10/2/17 20:10	4870.00	48.70	54.593385	-0.06
492	10/2/17 20:20	4880.10	49.58	220.71	9.81	10/2/17 20:20	4880.10	50.47	88.54	8.83	10/2/17 20:20	4880.00	48.87	54.638892	-0.05
493	10/2/17 20:30	4890.10	49.58	220.93	9.59	10/2/17 20:30	4890.10	50.47	88.44	8.94	10/2/17 20:30	4890.00	48.87	54.694794	-0.06
494	10/2/17 20:40	4900.10	49.58	220.96	9.56	10/2/17 20:40	4900.10	50.47	88.45	8.92	10/2/17 20:40	4900.00	48.87	54.757395	-0.06
495	10/2/17 20:50	4910.10	49.58	220.86	9.66	10/2/17 20:50	4910.10	50.47	88.39	8.98	10/2/17 20:50	4910.00	48.87	54.810063	-0.05
496	10/2/17 21:00	4920.10	49.58	221.04	9.48	10/2/17 21:00	4920.10	50.47	88.32	9.05	10/2/17 21:00	4920.00	48.87	54.852336	-0.04
497	10/2/17 21:10	4930.10	49.58	221.20	9.32	10/2/17 21:10	4930.10	50.47	88.43	8.94	10/2/17 21:10	4930.00	48.87	54.884445	-0.03
498	10/2/17 21:20	4940.10	49.58	221.08	9.44	10/2/17 21:20	4940.10	50.47	88.91	8.46	10/2/17 21:20	4940.00	48.70	54.916554	-0.03
499	10/2/17 21:30	4950.10	49.58	221.22	9.30	10/2/17 21:30	4950.10	50.47	88.44	8.93	10/2/17 21:30	4950.00	48.70	54.965757	-0.05
500	10/2/17 21:40	4960.10	49.58	221.09	9.43	10/2/17 21:40	4960.10	50.47	88.72	8.65	10/2/17 21:40	4960.00	48.70	55.011264	-0.05
501	10/2/17 21:50	4970.10	49.58	221.32	9.19	10/2/17 21:50	4970.10	50.47	88.57	8.81	10/2/17 21:50	4970.00	48.70	55.056771	-0.05
502	10/2/17 22:00	4980.10	49.58	221.10	9.42	10/2/17 22:00	4980.10	50.47	88.69	8.69	10/2/17 22:00	4980.00	48.87	55.118448	-0.06
503	10/2/17 22:10	4990.10	49.58	221.50	9.02	10/2/17 22:10	4990.10	50.47	88.53	8.85	10/2/17 22:10	4990.00	48.87	55.16973	-0.05
504	10/2/17 22:20	5000.10	49.58	221.08	9.44	10/2/17 22:20	5000.10	50.47	89.02	8.35	10/2/17 22:20	5000.00	48.87	55.183128	-0.01
505	10/2/17 22:30	5010.10	49.58	221.47	9.05	10/2/17 22:30	5010.10	50.47	88.81	8.56	10/2/17 22:30	5010.00	48.70	55.206459	-0.02
506	10/2/17 22:40	5020.10	49.58	221.48	9.03	10/2/17 22:40	5020.10	50.47	88.74	8.63	10/2/17 22:40	5020.00	48.70	55.233255	-0.03
507	10/2/17 22:50	5030.10	49.58	221.81	8.71	10/2/17 22:50	5030.10	50.47	88.98	8.40	10/2/17 22:50	5030.00	48.70	55.255893	-0.02
508	10/2/17 23:00	5040.10	49.58	221.79	8.73	10/2/17 23:00	5040.10	50.47	88.70	8.67	10/2/17 23:00	5040.00	48.87	55.293084	-0.04
509	10/2/17 23:10	5050.10	49.58	221.79	8.73	10/2/17 23:10	5050.10	50.47	88.80	8.58	10/2/17 23:10	5050.00	48.70	55.336512	-0.04
510	10/2/17 23:20	5060.10	49.58	221.73	8.79	10/2/17 23:20	5060.10	50.47	89.21	8.16	10/2/17 23:20	5060.00	48.70	55.376706	-0.04
511	10/2/17 23:30	5070.10	49.58	222.08	8.44	10/2/17 23:30	5070.10	50.47	88.79	8.58	10/2/17 23:30	5070.00	48.70	55.409739	-0.03
512	10/2/17 23:40	5080.10	49.58	221.81	8.71	10/2/17 23:40	5080.10	50.47	88.92	8.45	10/2/17 23:40	5080.00	48.70	55.438845	-0.03
513	10/2/17 23:50	5090.10	49.58	222.10	8.41	10/2/17 23:50	5090.10	50.47	89.00	8.38	10/2/17 23:50	5090.00	48.70	55.474419	-0.04
514	10/3/17 0:00	5100.10	49.58	222.13	8.38	10/3/17 0:00	5100.10	50.47	88.86	8.51	10/3/17 0:00	5100.00	48.70	55.482735	-0.01
515	10/3/17 0:10	5110.10	49.58	222.18	8.33	10/3/17 0:10	5110.10	50.47	89.10	8.28	10/3/17 0:10	5110.00	48.70	55.515537	-0.03
516	10/3/17 0:20	5120.10	49.58	221.79	8.73	10/3/17 0:20	5120.10	50.47	88.99	8.39	10/3/17 0:20	5120.00	48.70	55.531476	-0.02
517	10/3/17 0:30	5130.10	49.58	221.73	8.79	10/3/17 0:30	5130.10	50.47	89.02	8.36	10/3/17 0:30	5130.00	48.87	55.570977	-0.04
518	10/3/17 0:40	5140.10	49.58	222.37	8.15	10/3/17 0:40	5140.10	50.47	89.15	8.22	10/3/17 0:40	5140.00	48.70	55.603086	-0.03
519	10/3/17 0:50	5150.10	49.58	222.15	8.37	10/3/17 0:50	5150.10	50.47	89.07	8.30	10/3/17 0:50	5150.00	48.87	55.639122	-0.04
520	10/3/17 1:00	5160.10	49.58	222.29	8.22	10/3/17 1:00	5160.10	50.47	89.14	8.23	10/3/17 1:00	5160.00	48.70	55.675158	-0.04
521	10/3/17 1:10	5170.10	49.58	222.06	8.46	10/3/17 1:10	5170.10	50.47	89.34	8.03	10/3/17 1:10	5170.00	48.70	55.70796	-0.03
522	10/3/17 1:20	5180.10	49.58	222.07	8.45	10/3/17 1:20	5180.10	50.47	89.19	8.18	10/3/17 1:20	5180.00	48.70	55.743996	-0.04
523	10/3/17 1:30	5190.10	49.58	222.42	8.10	10/3/17 1:30	5190.10	50.47	89.31	8.06	10/3/17 1:30	5190.00	48.87	55.780032	-0.04
524	10/3/17 1:40	5200.10	49.58	222.32	8.19	10/3/17 1:40	5200.10	50.47	89.25	8.12	10/3/17 1:40	5200.00	48.87	55.815837	-0.04
525	10/3/17 1:50	5210.10	49.58	222.78	7.74	10/3/17 1:50	5210.10	50.47	89.25	8.12	10/3/17 1:50	5210.00	48.87	55.834779	-0.02
526	10/3/17 2:00	5220.10	49.58	222.46	8.06	10/3/17 2:00	5220.10	50.47	89.52	7.85	10/3/17 2:00	5220.00	48.87	55.858392	-0.05
527	10/3/17 2:10	5230.10	49.58	222.39	8.12	10/3/17 2:10	5230.10	50.47	89.73	7.64	10/3/17 2:10	5230.00	48.87	55.901769	-0.02
528	10/3/17 2:20	5240.10	49.58	222.57	7.95	10/3/17 2:20	5240.10	50.47	89.33	8.04	10/3/17 2:20	5240.00	48.87	55.923252	-0.02
529	10/3/17 2:30	5250.10	49.58	222.64	7.88	10/3/17 2:30	5250.10	50.47	89.28	8.10	10/3/17 2:30	5250.00	48.87	55.95744	-0.03
530	10/3/17 2:40	5260.10	49.58	222.71	7.81	10/3/17 2:40	5260.10	50.47	89.33	8.04	10/3/17 2:40	5260.00	48.87	55.975227	-0.02
531	10/3/17 2:50	5270.10	49.58	222.81	7.71	10/3/17 2:50	5270.10	50.47	89.63	7.74	10/3/17 2:50	5270.00	48.87	56.010108	-0.03
532	10/3/17 3:00	5280.10	49.58	222.72	7.80	10/3/17 3:00	5280.10	50.47	89.72	7.65	10/3/17 3:00	5280.00	48.70	56.031129	-0.02
533	10/3/17 3:10	5290.10	49.58	223.03	7.49	10/3/17 3:10	5290.10	50.47	89.63	7.75	10/3/17 3:10	5290.00	48.70	56.04527	-0.01
534	10/3/17 3:20	5300.10	49.58	223.11	7.40	10/3/17 3:20	5300.10	50.47	89.56	7.81	10/3/17 3:20	5300.00	48.87	56.057925	-0.01
535	10/3/17 3:30	5310.10	49.58	223.11	7.40	10/3/17 3:30	5310.10	50.47	89.63	7.74	10/3/17 3:30	5310.00	48.87	56.057463	0.00
536	10/3/17 3:40	5320.10	49.58	222.96	7.56	10/3/17 3:40	5320.10	50.47	89.65	7.72	10/3/17 3:40	5320.00	48.87	56.057001	0.00
537	10/3/17 3:50	5330.10	49.58	223.02	7.50	10/3/17 3:50	5330.10	50.47	89.86	7.52	10/3/17 3:50	5330.00	48.87	56.077098	-0.02
538	10/3/17 4:00	5340.10	49.58	222.97	7.55	10/3/17 4:00	5340.10	50.47	89.73	7.64	10/3/17 4:00	5340.00	48.87	56.069706	0.01
539	10/3/17 4:10	5350.10	49.58	223.07	7.45	10/3/17 4:10	5350.10	50.47	89.55	7.82	10/3/17 4:10	5350.00	48.87	56.086569	-0.02
540	10/3/17 4:20	5360.10	49.58	223.34	7.18	10/3/17 4:20	5360.10	50.47	89.90	7.47	10/3/17 4:20	5360.00	48.70	56.086569	0.00
541	10/3/17 4:30	5370.10	49.58	223.20	7.31	10/3/17 4:30	5370.10	50.47	89.93	7.44	10/3/17 4:30	5370.00	48.70	56.10066	-0.01
542	10/3/17 4:40	5380.10	49.58	223.59	6.93	10/3/17 4:40	5380.10	50.47	89.85	7.52	10/3/17 4:40	5380.00	48.70	56.105511	0.00
543	10/3/17 4:50	5390.10	49.58	223.41	7.11	10/3/17 4:50	5390.10	50.47	89.95	7.43	10/3/17 4:50	5390.00	48.70	56.11452	-0.01
544	10/3/17 5:00	5400.10	49.58	223.59	6.93	10/3/17 5:00	5400.10	50.47	89.49	7.89	10/3/17 5:00	5400.00	48.87	56.133693	-0.02
545	10/3/17 5:10	5410.10	49.58	223.68	6.84	10/3/17 5:10	5410.10	50.47	89.87	7.51	10/3/17 5:10	5410.00	48.87	56.126763	0.01
546	10/3/17 5:20	5													

Antecedent Water Level Readings

	PW-1		Elev
9/26/2017 16:00	14.57	33.66	405.21
9/26/2017 17:00	14.47	33.41	404.96
9/26/2017 18:00	14.51	33.51	405.06
9/26/2017 19:00	14.54	33.59	405.14
9/26/2017 20:00	14.55	33.62	405.17
9/26/2017 21:00	14.55	33.60	405.15
9/26/2017 22:00	14.55	33.62	405.17
9/26/2017 23:00	14.54	33.59	405.14
9/27/2017 0:00	14.54	33.59	405.14
9/27/2017 1:00	14.54	33.59	405.14
9/27/2017 2:00	14.54	33.58	405.13
9/27/2017 3:00	14.53	33.57	405.12
9/27/2017 4:00	14.53	33.56	405.11
9/27/2017 5:00	14.54	33.59	405.14
9/27/2017 6:00	14.54	33.58	405.13
9/27/2017 7:00	14.54	33.59	405.14
9/27/2017 8:00	14.53	33.55	405.10
9/27/2017 9:00	14.49	33.46	405.01
9/27/2017 10:00	14.49	33.47	405.02
9/27/2017 11:00	14.48	33.45	405.00
9/27/2017 12:00	14.47	33.43	404.98
9/27/2017 13:00	14.46	33.40	404.95
9/27/2017 14:00	14.45	33.38	404.93
9/27/2017 15:00	14.43	33.34	404.89
9/27/2017 16:00	14.42	33.32	404.87
9/27/2017 17:00	14.42	33.30	404.85
9/27/2017 18:00	14.41	33.28	404.83
9/27/2017 19:00	14.41	33.29	404.84
9/27/2017 20:00	14.42	33.31	404.86
9/27/2017 21:00	14.43	33.33	404.87
9/27/2017 22:00	14.42	33.30	404.85
9/27/2017 23:00	14.41	33.28	404.83
9/28/2017 0:00	14.40	33.26	404.81
9/28/2017 1:00	14.40	33.26	404.80
9/28/2017 2:00	14.38	33.21	404.76
9/28/2017 3:00	14.38	33.21	404.76
9/28/2017 4:00	14.38	33.22	404.76
9/28/2017 5:00	14.37	33.20	404.74
9/28/2017 6:00	14.37	33.20	404.74
9/28/2017 7:00	14.37	33.19	404.74
9/28/2017 8:00	14.38	33.21	404.76
9/28/2017 9:00	14.37	33.19	404.74
9/28/2017 10:00	14.38	33.22	404.77
9/28/2017 11:00	14.39	33.24	404.79
9/28/2017 12:00	14.38	33.23	404.78

Antecedent Water Level Readings

	PW-1		Elev
9/28/2017 13:00	14.39	33.23	404.78
9/28/2017 14:00	14.37	33.19	404.74
9/28/2017 15:00	14.38	33.21	404.76
9/28/2017 16:00	14.39	33.23	404.78
9/28/2017 17:00	14.40	33.25	404.80
9/28/2017 18:00	14.40	33.27	404.82
9/28/2017 19:00	14.42	33.30	404.85
9/28/2017 20:00	14.44	33.36	404.91
9/28/2017 21:00	14.45	33.38	404.93
9/28/2017 22:00	14.46	33.39	404.94
9/28/2017 23:00	14.47	33.43	404.98
9/29/2017 0:00	14.48	33.45	405.00
9/29/2017 1:00	14.48	33.44	404.99
9/29/2017 2:00	14.48	33.44	404.99
9/29/2017 3:00	14.49	33.47	405.02
9/29/2017 4:00	14.50	33.49	405.03
9/29/2017 5:00	14.51	33.52	405.07
9/29/2017 6:00	14.49	33.48	405.03
9/29/2017 7:00	14.51	33.52	405.07
9/29/2017 8:00	14.51	33.52	405.07
9/29/2017 9:00	14.52	33.54	405.09
9/29/2017 10:00	14.49	33.46	405.01

Dry Period Testing Field Log - PW-1
45 Nixon Road - Framingham, MA

Date	Time	ET (min)	Totalizer (ft3)	Totalizer (gal)	Flow Rate (gpm)	House Well DTW (ft)	DD (ft)
9/29/2017	10:17	0	3,565.1	26,666.9	0.0	24.93	0.00
	11:10	10	3,571.2	26,712.4	4.6	NR	NR
	11:20	20	3,577.3	26,757.3	4.5	NR	NR
	11:30	30	3,583.2	26,802.1	4.5	NR	NR
	11:40	40	3,589.1	26,846.1	4.4	NR	NR
	11:50	50	3,595.0	26,890.8	4.5	NR	NR
	12:00	60	3,601.1	26,936.0	4.5	25.38	0.45
	13:00	120	3,636.4	27,200.0	4.4	25.51	0.58
	17:15	375	3,789.7	28,347.0	4.5	25.67	0.74
9/30/2017	8:20	1160	4,324.5	32,347.0	4.4	25.93	1.00
	17:25	1825	4,652.5	34,800.6	4.5	26.02	1.09
10/1/2017	10:00	2820	5,254.3	39,302.3	4.5	26.00	1.07
	11:00	2880	5,289.9	39,568.7	4.4	26.01	1.08
	15:20	3140	5,289.9	39,568.7	0.0	25.09	0.16

NR - No Reading Taken

Long Term Pumping Log - PW-1 45 Nixon Road Framingham, MA

Date	Time	Totalizer (cf)	Totalizer (gal)	ET (Days)	ET (min)	Q (gpm)	DTW PW-1 (ft)	Notes
1/4/2017	15:15			0	0		66.45	Installed control box and activated 3 h.p. pump set at 620 feet
1/11/2017	16:00			7	10035		600.5	JGB and TJB on site to measure flow and water level, bottom of stilling well
2/8/2011	14:00			35	50325	5.50		JGB on site to collect water quality samples for full Appendix A parameters
3/17/2017	16:30			72	103755	5.00	600.5	JGB on site, flow rate measured at 5.0 gpm in 5 gallon bucket
5/31/2017	14:30			147	211635	5.00	600.5	JGB on site, flow rate measured at 5.0 gpm in a bucket
9/14/2017	15:15			263	378720		620	JGB on site, flow rate is 5.0 gpm but is cycling
9/15/2017	9:19	71.9	537.8	264	379804		620	Installed totalizing flow meter
9/17/2017	18:10	2011.0	15042.3	266	383215	4.25		JGB on site to check flow rate, 4.25 gpm in bucket
9/19/2017	17:20	3637.1	27205.1	268	386045	4.30	620	JGB on site to shut off PW-1 to recover for 48-hour dry period test
9/29/2017	11:00	3637.1	27205.1	278	399945	0.00		JGB and HS on site to start 48-hour test
10/1/2017	11:00	5363.2	40116.7	280	402825	4.48		JGB and HS on site to shut down test
10/23/2017	13:00	5363.2	40116.7	302	434745	0.00		JGB on site to meet Jim Persky, MassDEP
10/31/2017	16:38	5426.1	40587.2	310	446483	0.00	68.77	JGB on site to start pump
11/30/2017	8:10	29643.0	221729.6	340	489175	4.24	620	JGB on site to check flows, pump cycling

APPENDIX C





Volatile Organic Contaminant Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: COM NTNC TNC

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information	Sample Acidified?	Date Collected	Collected By	
PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input checked="" type="checkbox"/>	2/8/2017	J.G.B.
Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:				
		(1) Reason for Resubmission	(2) Collection Date of Original Sample			
<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
SAMPLE NOTES – Such as, if a Manifold/Multiple sample, list the source(s) that were on-line during sample collection.						

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) **N**
 Analysis Lab MA Cert. #: **M-MA086** Analysis Lab Name: **Alpha Analytical**

Lab Method	Date Extracted (551.1 only)	Date Analyzed	Lab Sample ID#	LAB SAMPLE NOTES - Include information as to whether sample was diluted or additional contaminants detected.
524.2		2/10/2017	L1704085-01	
Was this Sample composited by the Lab?	COMPOSITE SAMPLE NOTES - Please list the composited sources by DEP Source Code (XXXXXXX-XXX), up to five individual sources.			
Yes: <input type="checkbox"/> No: <input type="checkbox"/>				

CAS#	REGULATED VOC CONTAMINANT	Results µg/L	MCL µg/L	MDL µg/L
71-43-2	BENZENE	ND	5	0.50
56-23-5	CARBON TETRACHLORIDE	ND	5	0.50
75-35-4	1,1-DICHLOROETHYLENE	ND	7	0.50
107-06-02	1,2-DICHLOROETHANE	ND	5	0.50
106-46-7	PARA-DICHLOROBENZENE	ND	5	0.50
79-01-6	TRICHLOROETHYLENE (TCE)	ND	5	0.50
71-55-6	1,1,1-TRICHLOROETHANE	ND	200	0.50
75-01-4	VINYL CHLORIDE	ND	2	0.50
108-90-7	MONOCHLOROBENZENE	ND	100	0.50
95-50-1	O-DICHLOROBENZENE	ND	600	0.50
156-60-5	TRANS-1,2-DICHLOROETHYLENE	ND	100	0.50
156-59-2	CIS-1,2-DICHLOROETHYLENE	ND	70	0.50
78-87-5	1,2-DICHLOROPROPANE	ND	5	0.50
100-41-4	ETHYLBENZENE	ND	700	0.50
100-42-5	STYRENE	ND	100	0.50
127-18-4	TETRACHLOROETHYLENE (PCE)	ND	5	0.50
108-88-3	TOLUENE	ND	1000	0.50
1330-20-7	XYLENES (TOTAL)	ND	10000	0.50
75-09-2	DICHLOROMETHANE	ND	5	0.50
120-82-1	1,2,4-TRICHLOROBENZENE	ND	70	0.50
79-00-5	1,1,2-TRICHLOROETHANE	ND	5	0.50



Secondary Contaminant Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: **COM** **NTNC** **TNC**

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information	Date Collected	Collected By		
A	PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	2/8/2017	J.G.B.
B			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished		
	Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:			
			(1) Reason for Resubmission	(2) Collection Date of Original Sample		
A	<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
B	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list any sources that were on-line during sample collection).						
A						
B						

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) **N**
 Analysis Lab MA Cert. #: **M-MA086** Analysis Lab Name: **Alpha Analytical**

Compound	Results		SMCL	MDL (mg/L)	Lab Method	Date Analyzed	Lab Sample ID#
	A	B					
IRON (mg/L)	0.062		0.3	0.050	200.7	2/15/2017	L1704085-01
MANGANESE (mg/L)	ND		0.05*	0.010	200.7	2/15/2017	L1704085-01
ALKALINITY (mg/L as CaCO3)	52.3		None	2.00	2320B	2/9/2017	L1704085-01
CALCIUM (mg/L)	15.5		None	0.100	200.7	2/15/2017	L1704085-01
MAGNESIUM (mg/L)	2.52		None	0.100	200.7	2/15/2017	L1704085-01
HARDNESS (mg/L as CaCO3)	49.1		None	0.660	200.7	2/15/2017	L1704085-01
POTASSIUM (mg/L)	ND		None	2.50	200.7	2/15/2017	L1704085-01
TURBIDITY (NTU)	0.27		None	0.20	180.1	2/9/2017	L1704085-01
ALUMINUM (mg/L)	ND		0.2	0.100	200.7	2/15/2017	L1704085-01
CHLORIDE (mg/L)	2.56		250	0.500	300.0	2/10/2017	L1704085-01
COLOR (C.U.)	6.0		15	5.0	2120B	2/8/2017	L1704085-01
COPPER (mg/L)	ND		1	0.010	200.7	2/15/2017	L1704085-01
ODOR (T.O.N)	ND		3	1	2150B	2/8/2017	L1704085-01
pH	7.2		6.5-8.5	NA	4500H+-B	2/8/2017	L1704085-01
SILVER (mg/L)	ND		0.10	0.007	200.7	2/15/2017	L1704085-01
SULFATE (mg/L)	12.4		250	1.00	300.0	2/10/2017	L1704085-01
TDS (mg/L)	81.		500	10	2540C	2/9/2017	L1704085-01
ZINC (mg/L)	0.213		5	0.050	200.7	2/15/2017	L1704085-01

* EPA has established a lifetime Health Advisory (HA) for manganese at 0.3 mg/L and an acute HA at 1.0 mg/L.

LAB SAMPLE NOTES	
A	
B	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: Joseph Warkon
 Date: 2/17/2017

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date)	Review Comments	<input type="checkbox"/> WQTS Data Entered
<input type="checkbox"/> Accepted <input type="checkbox"/> Disapproved		



Inorganic Contaminant Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: COM NTNC TNC

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information <small>*Please note all samples are considered representative of finished water if there is no treatment applied</small>	Date Collected	Collected By
PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle <input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	2/8/2017	J.G.B.
Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:		
<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	(1) Reason for Resubmission	(2) Collection Date of Original Sample	
		<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction		
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).				

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) **N**

Contaminant	Result (mg/L)	MCL (mg/L)	MDL (mg/L)	Lab Method	Date Analyzed	Analysis Lab MA Cert #	Analysis Lab Name	Lab Sample ID#
ANTIMONY	ND	0.006	0.0040	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
ARSENIC	ND	0.010	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
BARIUM	0.0077	2	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
BERYLLIUM	ND	0.004	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
CADMIUM	ND	0.005	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
CHROMIUM	ND	0.1	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
CYANIDE	ND	0.2	0.005	4500CN-CE	2/13/2017	M-MA086	Alpha Analytical	L1704085-01
FLUORIDE ¹	0.39	4.0	0.20	4500F-C	2/8/2017	M-MA086	Alpha Analytical	L1704085-01
MERCURY ²	ND	0.002	0.0002	245.1	2/10/2017	M-MA086	Alpha Analytical	L1704085-01
NICKEL	ND	0.1*	0.0020	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
SELENIUM	ND	0.05	0.0020	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01
SODIUM	6.16	20*	2.00	200.7	2/15/2017	M-MA086	Alpha Analytical	L1704085-01
THALLIUM	ND	0.002	0.0010	200.8	2/14/2017	M-MA086	Alpha Analytical	L1704085-01

¹Fluoride also has a secondary MCL of 2.0 mg/L. Community water systems which exceed this limit must provide public notice pursuant to 310 CMR 22.16.
²Please note that if method 245.1 is used for mercury, only method revision 3.0 will be accepted by MA DEP.
 *No current MCL, however DEP Office of Research and Standards has established a guideline (ORSG) limit for this contaminant.

Was this Sample composited by the Lab? Yes <input type="checkbox"/>	COMPOSITE SAMPLE NOTES List the composited sources by DEP Source Code (XXXXXXX-XXX), up to five individual sources per sample.
LAB SAMPLE NOTES	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: *Joseph Watkins*Date: **2/17/17**

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date) <input type="checkbox"/> Accepted _____ <input type="checkbox"/> Disapproved	Review Comments	<input type="checkbox"/> WQTS Data Entered
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Lead and Copper Analysis Report

I. PWS INFORMATION: Please refer to your DEP Lead & Copper sampling plan for approved sampling locations.

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: COM NTNC TNC

Routine or Special Samples	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:	
		(1) Reason for Resubmission	(2) Collection Date of Original Sample
<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction	

SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) **N**

Analyte	Action Level (mg/L)	Lab Method	MDL (mg/L)	Analysis Lab MA Cert.#	Analysis Lab Name
Lead:	0.015	200.7	0.0005	M-MA086	Alpha Analytical
Copper:	1.3	200.7	0.010	M-MA086	Alpha Analytical

LAB SAMPLE NOTES

DEP Approved Sample Location (See DEP approved LCR plan for sampling locations)		Collection Date	LEAD		COPPER		Lab Sample ID#
			Result (mg/L)	Date Analyzed	Result (mg/L)	Date Analyzed	
1	Pw-1	2/8/2017	ND	2/14/2017	ND	2/15/2017	L1704085-01
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Report SCHOOL RESULTS collected in accordance with 310 CMR 22.06B (7)(a)9 below. Do not use these school results in 90th percentile calculations.

1							
2							
3							
4							

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: Joseph Wackens
 Date: 2/17/2017

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

COM & NTNC Public Water Suppliers must submit Forms **LCR-D** or **LCR-E** with this form to the appropriate DEP Regional Office.

DEP REVIEW STATUS (Initial & Date)	Review Comments
<input type="checkbox"/> Accepted <input type="checkbox"/> Disapproved	



Lead and Copper - 90th PERCENTILE COMPLIANCE Report

(For Systems Required to Collect More Than 5 Samples)

I. PWS INFORMATION: Please refer to your DEP Lead & Copper sampling plan for approved sampling locations.

PWS ID #: _____ City / Town: _____

PWS Name: _____ PWS Class: COM NTNC

Sampling Frequency: (choose one)	<input type="checkbox"/> FIRST SEMI-ANNUAL SAMPLING PERIOD	<input type="checkbox"/> REDUCED - EVERY THREE YEARS
	<input type="checkbox"/> SECOND SEMI-ANNUAL SAMPLING PERIOD	<input type="checkbox"/> LEAD SERVICE LINE (LSL) REPLACEMENT PROGRAM
	<input type="checkbox"/> REDUCED - ANNUAL	<input type="checkbox"/> DEMONSTRATION

Step 1: Place *lead* results in ascending order (from lowest to highest value) with lowest value at # 1, in the table below. Repeat for *copper* results. Please report results that are ND or less than (<) the laboratory's reported detection limit (MDL) as zero. Results at or above the laboratory's detection limit (MDL) but below 0.005 mg/L for lead or 0.05 mg/L for copper shall be reported as measured or may be reported as 0.0025 mg/L for lead or 0.025 mg/L for copper.

Step 2: Multiply the total number of samples collected by 0.9 (this is your 90th percentile sample number). Round to the nearest whole number, if necessary.

Step 3: Compare the sample result at the 90th percentile sample number against the corresponding action level. If the 90th percentile value is higher than the action level, then you have an exceedance and are required to contact MassDEP as soon as possible for information on compliance actions.

Note: Do not include school results on this form unless the PWS is a school.

LEAD RESULTS (mg/L)							
#	Results	#	Results	#	Results	#	Results
1*		16		31		46	
2		17		32		47	
3		18		33		48	
4		19		34		49	
5		20		35		50	
6		21		36		51	
7		22		37		52	
8		23		38		53	
9		24		39		54	
10		25		40		55	
11		26		41		56	
12		27		42		57	
13		28		43		58	
14		29		44		59	
15		30		45		60	

COPPER RESULTS (mg/L)							
#	Results	#	Results	#	Results	#	Results
1*		16		31		46	
2		17		32		47	
3		18		33		48	
4		19		34		49	
5		20		35		50	
6		21		36		51	
7		22		37		52	
8		23		38		53	
9		24		39		54	
10		25		40		55	
11		26		41		56	
12		27		42		57	
13		28		43		58	
14		29		44		59	
15		30		45		60	

***Lowest Value**

My system was required to collect: _____ lead and copper samples. My system collected: _____ lead and copper samples.

Total # of samples collected: _____ x 0.9 = _____ This number is my system's 90th percentile sample #.

Circle the 90th percentile sample # for both lead and copper in the table above, and enter the results in the appropriate spaces below.

_____ (Lead result at 90 th percentile sample#)	Compared to 0.015 mg/L (The lead action level)	_____ (Copper result at 90 th percentile sample#)	Compared to 1.3 mg/L (The copper action level)
--	--	--	--

II. CERTIFICATION:

Check and complete the correct statement for lead as determined by the above results. If you have an exceedance and you are a community system you must comply with the Consumer Confidence Rule (CCR) reporting requirements in accordance with 310 CMR 22.16A(4)(i)6.

- My system was **at or below** the lead action level.
- My system **exceeded** the lead action level and _____ sampling sites **exceeded** the lead action level.
(Insert # of samples)

Check and complete the correct statement for copper as determined from the above results. If you have an exceedance and you are a community system you must comply with the Consumer Confidence Rule (CCR) reporting requirements in accordance with 310 CMR 22.16A(4)(i)6.

- My system was **at or below** the copper action level.
- My system **exceeded** the copper action level and _____ sampling sites **exceeded** the copper action level.
(Insert # of samples)

My signature below indicates that all sampling sites on this report have been previously approved in writing by the DEP and that I have complied with 310 CMR 22.06B(7). I have also notified the owner of each sampling site of their sites' individual results. I certify under penalty of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best of my knowledge and belief.

Title Signature of PWS or Owner's Representative Date

**Lead and Copper - 90th PERCENTILE COMPLIANCE Report**

(For Systems Required to Collect 5 Samples)

I. PWS INFORMATION: Please refer to your DEP Lead & Copper sampling plan for approved sampling locations.

PWS ID #:

City / Town:

PWS Name:

PWS Class: COM NTNC

Sampling Frequency: (choose one)	<input type="checkbox"/> FIRST SEMI-ANNUAL SAMPLING PERIOD	<input type="checkbox"/> REDUCED - EVERY THREE YEARS
	<input type="checkbox"/> SECOND SEMI-ANNUAL SAMPLING PERIOD	<input type="checkbox"/> LEAD SERVICE LINE (LSL) REPLACEMENT PROGRAM
	<input type="checkbox"/> REDUCED - ANNUAL	<input type="checkbox"/> DEMONSTRATION

Step 1: Place *lead* results in ascending order (from lowest to highest value) with lowest value at # 1, in the table below. Repeat for copper results. Please report results that are ND or less than (<) the laboratory's reported detection limit (MDL) as zero. Results at or above the laboratory's detection limit (MDL) but below 0.005 mg/L for lead or 0.05 mg/L for copper shall be reported as measured or may be reported as 0.0025 mg/L for lead or 0.025 mg/L for copper.

Step 2: Take the average of the 4th and 5th highest sample results. This is your 90th percentile sample value.

Step 3: Compare the 90th percentile value against the corresponding action level. If the 90th percentile value is higher than the action level, then you have an exceedance and are required to contact MassDEP as soon as possible for information on compliance actions.

Note: If you collected more than 5 samples you must use the 90th Percentile Compliance Report form for more than 5 samples (Form LCR-D).

LEAD RESULTS (mg/L)	
#	All results for sampling period
1*	
2	
3	
4	
5	

COPPER RESULTS (mg/L)	
#	All results for sampling period
1*	
2	
3	
4	
5	

*Lowest Value

My system was required to collect **five** lead and copper samples. My system collected _____ lead and copper samples.

Circle 4th and 5th highest sample results above, then average the 4th and 5th highest sample results as follows:

$$\frac{(\text{Value of 4th highest result} + \text{Value of the 5th highest result})}{2} = 90^{\text{th}} \text{ Percentile Value}$$

_____ (Lead 90 th percentile value)	Compared to 0.015 mg/L (The lead action level)	_____ (Copper 90 th percentile value)	Compared to 1.3 mg/L (The copper action level)
---	--	---	--

II. CERTIFICATION:

Check and complete the correct statement for lead as determined by the above results. If you have an exceedance and you are a community system you must comply with the Consumer Confidence Rule (CCR) reporting requirements in accordance with 310 CMR 22.16A(4)(i)6.

- My system was **at or below** the lead action level.
- My system **exceeded** the lead action level _____ sampling sites **exceeded** the lead action level.
(Insert # of samples)

Check and complete the correct statement for copper as determined from the above results. If you have an exceedance and you are a community system you must comply with the Consumer Confidence Rule (CCR) reporting requirements in accordance with 310 CMR 22.16A(4)(i)6.

- My system was **at or below** the copper action level.
- My system **exceeded** the copper action level and _____ sampling sites **exceeded** the copper action level.
(Insert # of samples)

My signature below indicates that all sampling sites on this report have been previously approved in writing by the DEP and that I have complied with 310 CMR 22.06B(7). I have also notified the owner of each sampling site of their sites' individual results. I certify under penalty of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best of my knowledge and belief.

Title

Signature of PWS or Owner's Representative

Date

Please submit Form LCR-C along with this form.

Page _____ of _____



Perchlorate Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #:	<input type="text"/>	City / Town:	FRAMINGHAM
PWS Name:	Ford's Meadow	PWS Class:	COM <input checked="" type="checkbox"/> NTNC <input type="checkbox"/> TNC <input type="checkbox"/>

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information		Date Collected	Collected By
PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	2/8/2017	J.G.B.
Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:			
		(1) Reason for Resubmission		(2) Collection Date of Original Sample	
<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list any sources that were on-line during collection).					

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #:	M-MA086	Primary Lab Name:	Alpha Analytical	Subcontracted? (Y/N)	N
Analysis Lab MA Cert. #:	M-MA086	Analysis Lab Name:	Alpha Analytical		

CONTAMINANT	Result	UOM	MCL	MDL	MRL	Lab Method	Date Analyzed	Lab Sample ID#
PERCHLORATE	ND	µg/L	2.0	0.050	0.050	332.0	2/15/2017	L1704085-01
CONDUCTIVITY		umhos/cm	----					

Perchlorate analysis requires the use of a Massachusetts DEP approved laboratory.

Perchlorate concentrations between the Minimum Detection Limit (MDL) and the Minimum Reporting Level (MRL) must be reported as estimated (J) values (i.e. perchlorate is positively present but tentatively quantified).

All field samples analyzed with either EPA Method 314.0 or EPA Method 314.1 with measured native perchlorate concentrations between 0.8 µg/L and 2.0 µg/L must be retested with and without a perchlorate spike approximately equal to the native perchlorate concentration.

LAB SAMPLE NOTES

Reanalysis and Spike Recovery (required for results between 0.8 µg/L and 2.0 µg/L or samples subject to pretreatment in method EPA 314.0)

Compound	Result (µg/L)	MDL (µg/L)	MRL (µg/L)	Spike Concentration (µg/L)	Spike Recovery (%)	Lab Method	Date Analyzed
Perchlorate (reanalysis)							
Perchlorate (spike)							

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature:

Date:

2/17/2017

If not submitting these results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & Date)	Review Comments	<input type="checkbox"/> WQTS Data Entered
<input type="checkbox"/> Accepted _____ <input type="checkbox"/> Disapproved _____		



Nitrite Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: COM NTNC TNC

DEP LOCATION (LOC) ID#		DEP Location Name	Sample Information		Date Collected	Collected By
A	PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	2/8/2017	J.G.B.
B			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished		
C			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished		
D			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished		
	Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:			
			(1) Reason for Resubmission	(2) Collection Date of Original Sample		
A	<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
B	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
C	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
D	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction			
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).						
A						
B						
C						
D						

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) **N**
 Analysis Lab MA Cert. #: **M-MA086** Analysis Lab Name: **Alpha Analytical**

	NITRITE Result (mg/L)	MCL (mg/L)	MDL (mg/L)	Lab Method	Date Analyzed	Lab Sample ID#
A	ND	1	0.050	353.2	2/8/2017	L1704085-01
B		1				
C		1				
D		1				

Finished water results equal to or exceeding 1/2 of the MCL (0.5 mg/L) triggers quarterly monitoring.
 Finished water results exceeding the MCL of 1 mg/L requires confirmation sampling within 24 hours.
 Notify MassDEP of any MCL exceedances.

LAB SAMPLE NOTES	
A	
B	
C	
D	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: *Joseph Watkinson*

Date: **2/17/2017**

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date) <input type="checkbox"/> Accepted _____ <input type="checkbox"/> Disapproved _____	Review Comments	<input type="checkbox"/> WQTS Data Entered
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Nitrate Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: City / Town: **FRAMINGHAM**
 PWS Name: **Ford's Meadow** PWS Class: **COM** **NTNC** **TNC**

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information	Sample Acidified?	Date Collected	Collected By		
A	PW-1	Bedrock Well No.1	<input type="checkbox"/> (M)ultiple <input checked="" type="checkbox"/> (S)ingle	<input checked="" type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input type="checkbox"/>	2/8/2017	J.G.B.
B			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input type="checkbox"/>		
C			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input type="checkbox"/>		
D			<input type="checkbox"/> (M)ultiple <input type="checkbox"/> (S)ingle	<input type="checkbox"/> (R)aw <input type="checkbox"/> (F)inished	Yes <input type="checkbox"/>		
If Resubmitted Report, list below:							
	Routine or Special Sample	Original, Resubmitted or Confirmation Report	(1) Reason for Resubmission		(2) Collection Date of Original Sample		
A	<input type="checkbox"/> RS <input checked="" type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
B	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
C	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
D	<input type="checkbox"/> RS <input type="checkbox"/> SS	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Correction				
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).							
A							
B							
C							
D							

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: **M-MA086** Primary Lab Name: **Alpha Analytical** Subcontracted? (Y/N) **N**
 Analysis Lab MA Cert. #: **M-MA086** Analysis Lab Name: **Alpha Analytical**

NITRATE Result (mg/L)	MCL (mg/L)	MDL (mg/L)	Lab Method	Date Analyzed	Lab Sample ID#	
A	ND	10	0.10	353.2	2/8/2017	L1704085-01
B		10				
C		10				
D		10				

Finished water results equal to or exceeding 1/2 of the MCL (5 mg/L) triggers quarterly monitoring.
 Finished water results exceeding the MCL of 10 mg/L requires confirmation sampling within 24 hours.
 Notify MassDEP of any MCL exceedances.

LAB SAMPLE NOTES
A
B
C
D

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature:

Joseph Watkins

Date: 2/17/2017

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date)	Review Comments	<input type="checkbox"/> WQTS Data Entered
<input type="checkbox"/> Accepted <input type="checkbox"/> Disapproved		

GRANITE STATE ANALYTICAL SERVICES, LLC

22 Manchester Road, Unit 2, Derry, NH 03038

Phone (800) 699-9920

(603) 432-3044

Fax (603) 434-4837

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

CERTIFICATE OF ANALYSIS FOR DRINKING WATER

DATE PRINTED: 02/21/2017
 CLIENT NAME: Alpha Analytical
 CLIENT ADDRESS: 8 Walkup Dr.
 Westborough, MA 01581

SAMPLE ID#: 1702-00872-001
 SAMPLED BY: Alpha Analytical

SAMPLE ADDRESS: L1704101
 PW-1
 MA

LOCATION:

DATE AND TIME COLLECTED: 02/08/2017 2:00 PM
 DATE AND TIME RECEIVED: 02/10/2017 12:45 PM
 ANALYSIS PACKAGE: SOC GSA MA
 RECEIPT TEMPERATURE: ON ICE 2.7 CELSIUS
 CLIENT JOB # L1704101

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

Test Description	Results	Test Units	Pass /Fail	DQ Flag	RL	Limit	Method	Analyst	Date-Time Analyzed
1,2-Dibromo-3-chloropropane (DBCP)*	<0.02	ug/L	✓		0.02	0.2 ug/L	EPA 504.1	BM-NH	02/16/17 6:01 PM
Date Extracted	-					No Limit	EPA 504.1	BM-NH	02/16/17 11:13 AM
Ethylene Dibromide (EDB)*	<0.02	ug/L	✓		0.02	0.05 ug/L	EPA 504.1	BM-NH	02/16/17 6:01 PM
Aroclor 1016	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH	02/16/17 9:51 PM
Aroclor 1221	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH	02/16/17 9:51 PM
Aroclor 1232	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH	02/16/17 9:51 PM
Aroclor 1242	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH	02/16/17 9:51 PM
Aroclor 1248	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH	02/16/17 9:51 PM
Aroclor 1254	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH	02/16/17 9:51 PM
Aroclor 1260	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH	02/16/17 9:51 PM
Chlordane*	<0.2	ug/L	✓		0.2	2 ug/L	EPA 505	BM-NH	02/16/17 9:51 PM
Date Extracted	-					No Limit	EPA 505	BM-NH	02/16/17 11:13 AM
Toxaphene*	<1.0	ug/L	✓		1.0	3 ug/L	EPA 505	BM-NH	02/16/17 9:51 PM
2,4,5-TP (Silvex)*	<0.25	ug/L	✓		0.25	50 ug/L	EPA 515.3	BM-NH	02/17/17 9:08 PM
2,4-D*	<1	ug/L	✓		1	70 ug/L	EPA 515.3	BM-NH	02/17/17 9:08 PM
Dalapon*	<1	ug/L	✓		1	200 ug/L	EPA 515.3	BM-NH	02/17/17 9:08 PM
Date Extracted	-					No Limit	EPA 515.3	KV-NH	02/17/17 9:15 AM
Dicamba*	<0.18	ug/L			0.18	No Limit	EPA 515.3	BM-NH	02/17/17 9:08 PM
Dinoseb*	<0.5	ug/L	✓		0.5	7 ug/L	EPA 515.3	BM-NH	02/17/17 9:08 PM
Pentachlorophenol*	<0.1	ug/L	✓		0.1	1 ug/L	EPA 515.3	BM-NH	02/17/17 9:08 PM
Picloram*	<1.3	ug/L	✓		1.3	500 ug/L	EPA 515.3	BM-NH	02/17/17 9:08 PM
2,4-Dichlorophenylacetic acid	107	%				No Limit	EPA 515.3 - SS	BM-NH	02/17/17 9:08 PM
Alachlor*	<0.1	ug/L	✓		0.1	2 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Aldrin*	<0.1	ug/L			0.1	No Limit	EPA 525.2	DD-NH	02/14/17 4:08 PM
Atrazine*	<0.1	ug/L	✓		0.1	3 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Benzo(a)pyrene*	<0.1	ug/L	✓		0.1	0.2 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Butachlor*	<0.1	ug/L			0.1	No Limit	EPA 525.2	DD-NH	02/14/17 4:08 PM
Date Extracted	-					No Limit	EPA 525.2	KV-NH	02/13/17 9:43 AM
Di(2-ethylhexyl)adipate*	<0.6	ug/L	✓		0.6	400 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Di(2-ethylhexyl)phthalate*	<3	ug/L	✓		3	6 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Dieldrin*	<0.04	ug/L			0.04	No Limit	EPA 525.2	DD-NH	02/14/17 4:08 PM

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CERTIFICATE OF ANALYSIS FOR DRINKING WATER

DATE PRINTED: 02/21/2017
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 CLIENT ADDRESS: 8 Walkup Dr.
 Westborough, MA 01581

SAMPLE ID#: 1702-00872-001
 SAMPLED BY: Alpha Analytical

SAMPLE ADDRESS: L1704101
 PW-1
 MA

LOCATION:

DATE AND TIME COLLECTED: 02/08/2017 2:00 PM
 DATE AND TIME RECEIVED: 02/10/2017 12:45 PM
 ANALYSIS PACKAGE: SOC GSA MA
 RECEIPT TEMPERATURE: ON ICE 2.7 CELSIUS
 CLIENT JOB # L1704101

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

Test Description	Results	Test Units	Pass /Fail	DQ Flag	RL	Limit	Method	Analyst	Date-Time Analyzed
Endrin*	<0.1	ug/L	✓		0.1	2 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Heptachlor Epoxide*	<0.06	ug/L	✓		0.06	0.2 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Heptachlor*	<0.04	ug/L	✓		0.04	0.4 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Hexachlorobenzene*	<0.1	ug/L	✓		0.1	1 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Hexachlorocyclopentadiene*	<0.1	ug/L	✓		0.1	50 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Lindane*	<0.07	ug/L	✓		0.07	0.2 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Methoxychlor*	<0.1	ug/L	✓		0.1	40 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
Metolachlor*	<0.1	ug/L			0.1	No Limit	EPA 525.2	DD-NH	02/14/17 4:08 PM
Metribuzin*	<0.1	ug/L			0.1	No Limit	EPA 525.2	DD-NH	02/14/17 4:08 PM
Propachlor*	<0.1	ug/L			0.1	No Limit	EPA 525.2	DD-NH	02/14/17 4:08 PM
Simazine*	<0.1	ug/L	✓		0.1	4 ug/L	EPA 525.2	DD-NH	02/14/17 4:08 PM
1,3-Dimethyl-2-nitrobenzene	102	%				No Limit	EPA 525.2 - SS	DD-NH	02/14/17 4:08 PM
Perylene-d12	104	%				No Limit	EPA 525.2 - SS	DD-NH	02/14/17 4:08 PM
Pyrene-d10	93	%				No Limit	EPA 525.2 - SS	DD-NH	02/14/17 4:08 PM
Triphenylphosphate	107	%				No Limit	EPA 525.2 - SS	DD-NH	02/14/17 4:08 PM
3-Hydroxycarbofuran*	<1	ug/L			1	No Limit	EPA 531.1	BM-NH	02/15/17 8:07 PM
Aldicarb Sulfone*	<1	ug/L			1	No Limit	EPA 531.1	BM-NH	02/15/17 8:07 PM
Aldicarb Sulfoxide*	<1	ug/L			1	No Limit	EPA 531.1	BM-NH	02/15/17 8:07 PM
Aldicarb*	<1	ug/L			1	No Limit	EPA 531.1	BM-NH	02/15/17 8:07 PM
Carbaryl*	<1	ug/L			1	No Limit	EPA 531.1	BM-NH	02/15/17 8:07 PM
Carbofuran*	<0.9	ug/L	✓		0.9	40 ug/L	EPA 531.1	BM-NH	02/15/17 8:07 PM
Methiocarb*	<1	ug/L			1	No Limit	EPA 531.1	BM-NH	02/15/17 8:07 PM
Methomyl*	<1	ug/L			1	No Limit	EPA 531.1	BM-NH	02/15/17 8:07 PM
Oxamyl (Vydate)*	<1	ug/L	✓		1	200 ug/L	EPA 531.1	BM-NH	02/15/17 8:07 PM
Propoxur (Baygon)*	<1	ug/L			1	No Limit	EPA 531.1	BM-NH	02/15/17 8:07 PM

GRANITE STATE ANALYTICAL SERVICES, LLC

22 Manchester Road, Unit 2, Derry, NH 03038

Phone (800) 699-9920

(603) 432-3044

Fax (603) 434-4837

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






CERTIFICATE OF ANALYSIS FOR DRINKING WATER

DATE PRINTED: 02/21/2017
CLIENT NAME: Alpha Analytical
CLIENT ADDRESS: 8 Walkup Dr.
Westborough, MA 01581

SAMPLE ID#: 1702-00872-001
SAMPLED BY: Alpha Analytical

SAMPLE ADDRESS: L1704101
PW-1
MA

LOCATION:

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

DATE AND TIME COLLECTED: 02/08/2017 2:00 PM

DATE AND TIME RECEIVED: 02/10/2017 12:45 PM

ANALYSIS PACKAGE: SOC GSA MA

RECEIPT TEMPERATURE: ON ICE 2.7 CELSIUS

CLIENT JOB # L1704101

Test Description	Results	Test Units	Pass /Fail	DQ Flag	RL	Limit	Method	Analyst	Date-Time Analyzed
------------------	---------	------------	------------	---------	----	-------	--------	---------	--------------------

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

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

Data Qualifier (DQ) Flags: None

* MA Certified Analysis



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

This analysis meets Commonwealth of Massachusetts requirements except as noted.
State Certifications: | NH 1015 | MA M-NH003 | ME NH00003 | RI 101513 | VT VT-101507 |

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

CHAIN OF CUSTODY

PAGE 1 OF 1



Westborough, MA Mansfield, MA
 TEL: 508-898-9220 TEL: 508-822-9300
 FAX: 508-898-9193 FAX: 508-822-3288

Project Information

Project Name:

Project Location: MA

Project #:

Project Manager: Dave Sanford

ALPHA Quote #:

Turn-Around Time

Standard Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Client Information

Client: Alpha Analytical Lab

Address: 8 Walkup Drive

Westborough, Ma 01581

Phone: 508-898-9220

Fax:

Email: subreports@alphalab.com

These samples have been Previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Please reference Alpha Job # L1704101 on this report.

Date Rec'd in Lab:

ALPHA Job #: L1704101

Report Information Data Deliverables

FAX EMAIL
 ADEx Add'l Deliverables

Billing Information

Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program

Criteria

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

Yes No Are MCP Analytical Methods Required?
 Yes No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

Sample ID	504.1	505	515.3	531.1	525.2													
	X	X	X	X	X													

SAMPLE HANDLING
Filtration
 Done
 Not Needed
 Lab to do
Preservation
 Lab to do
(Please specify below)

TOTAL # BOTTLES

Sample Specific Comments

9

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
	PW-1	2-8-14	14:00	DW	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM N-1 01-01(0)
 (rev. 30-JUL-07)

Container Type	V	V	V	V	A	-	-	-	-	-	-	-	-	-
Preservative	H	H	H	P/H	N/B	-	-	-	-	-	-	-	-	-

Relinquished By:	Date/Time	Received By:	Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.



CHAIN OF CUSTODY

PAGE 1 OF 1

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300**Project Information**Project Name: Nixon Rd
Project Location: Framingham
Project #:
Project Manager: Jay Billings
ALPHA Quote #:Date Rec'd in Lab: 2/8/17ALPHA Job #: 1704101**Client Information**Client: Northeast Geoscience, Inc
Address: 97 Walnut St
Clinton, MA 01450
Phone: 978-365-9045
Email: jbillings@ngeo.net**Report Information - Data Deliverables** ADEX EMAIL**Billing Information** Same as Client info PO #:**Regulatory Requirements & Project Information Requirements** Yes No MA MCP Analytical Methods Yes No CT RCP Analytical Methods
 Yes No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
 Yes No GW1 Standards (Info Required for Metals & EPH with Targets)
 Yes No NPDES RGP
 Other State / Fed Program**Turn-Around Time** Standard RUSH (only confirmed if pre-approved!)

Date Due:

Additional Project Information:

ANALYSIS	Criteria
VOC: <input type="checkbox"/> 8280 <input type="checkbox"/> 624 <input checked="" type="checkbox"/> 824.2	
SVOC: <input type="checkbox"/> ABN <input type="checkbox"/> PAH <u>SOC</u>	
METALS: <input type="checkbox"/> MCP 13 <input type="checkbox"/> MCP 14 <input type="checkbox"/> RCP 15	
METALS: <input type="checkbox"/> RCRA5 <input type="checkbox"/> RCRA8 <input type="checkbox"/> PP13	
EPH: <input type="checkbox"/> Ranges & Targets <input type="checkbox"/> Ranges Only	
VPH: <input type="checkbox"/> Ranges & Targets <input type="checkbox"/> Ranges Only	
PCB <input type="checkbox"/> PEST	
TPH: <input type="checkbox"/> Quant Only <input type="checkbox"/> Fingerprint	
<u>Total Chlorine SOC, VOC</u>	
<u>TOCS, Secondary VOC</u>	
<u>Radioactivity Contam</u>	
<u>Appendix & Parameters</u>	

SAMPLE INFOFiltration
 Field
 Lab to do
Preservation
 Lab to do

Sample Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)

Sample ID

Collection

Sample Matrix

Sampler Initials

04101-01PW-12-8-17 14:00DW J63X XX X X X

- Container Type**
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
B= BOD Bottle
- Preservative**
A= None
B= HCl
C= HNO₃
D= H₂SO₄
E= NaOH
F= MeOH
G= NaHSO₄
H= Na₂S₂O₃
I= Ascorbic Acid
J= NH₄Cl
K= Zn Acetate
O= Other

Relinquished By:	Container Type	Preservative	Date/Time	Received By:	Date/Time
<u>[Signature]</u>			<u>15:54 2-8-17</u>	<u>[Signature]</u>	<u>2/8/17 15:54</u>

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.
FORM NO: 01-01 (rev. 12-Mar-2012)