George F.Connors Counselor At Law

10 Southwest Cutoff, Northboro, MA 01532 Zero Cranberry Lane, Hopkinton, MA 01748 Phone (508) 393-6055 • Fax (508) 393-5242 george@gfconnorslaw.com

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 Low





November 27, 2019

Water Supply and Environmental Consulting

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 1018 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 outline 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 filed. 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

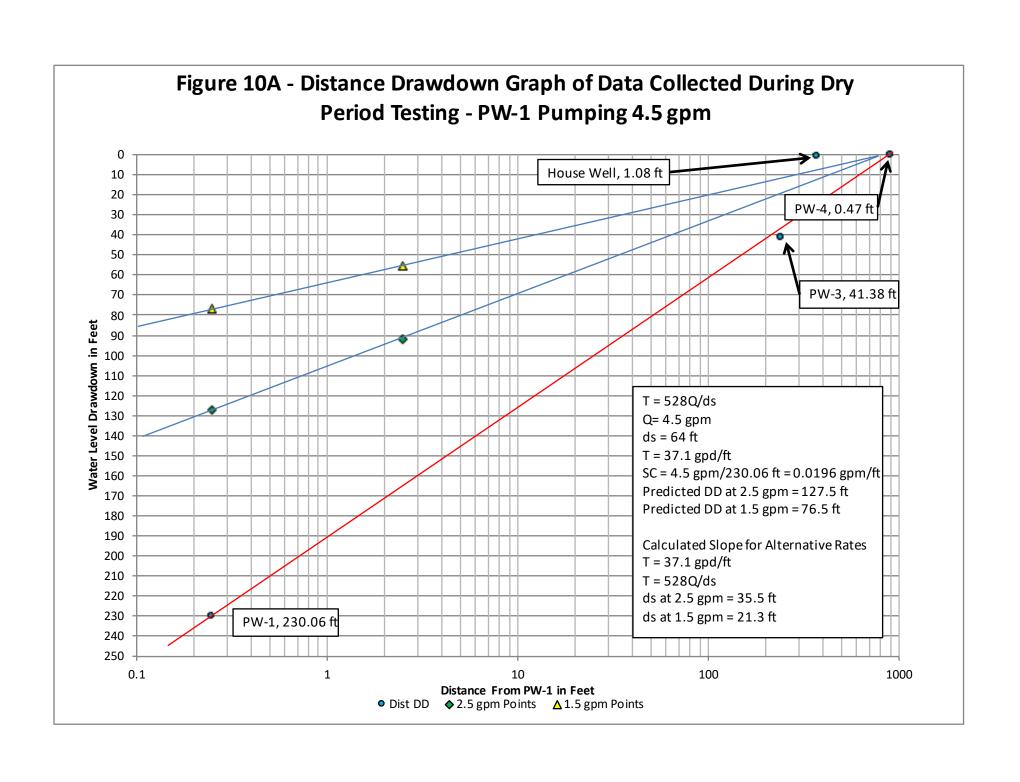
Massachusetts Drought Status Map for October 3, 2017

Water Use Data for the Regency at Bolton and Arbor Glen in Stow

Blasting Area Map

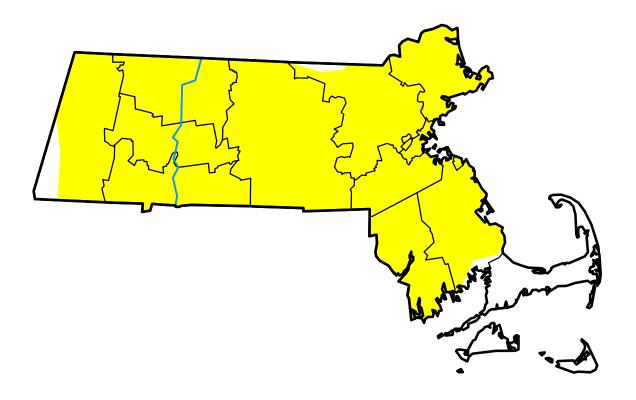
References

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



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 09-26-2017	54.38	45.62	0.00	0.00	0.00	0.00
3 Months Ago 07-04-2017	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-03-2017	0.70	99.30	98.09	69.13	8.59	0.00
Start of Water Year 09-26-2017	54.38	45.62	0.00	0.00	0.00	0.00
One Year Ago 10-04-2016	0.00	100.00	98.15	89.95	52.13	0.00

Intensity:

D0 Abnormally Dry
D1 Moderate 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

D2 Severe Drought









http://droughtmonitor.unl.edu/

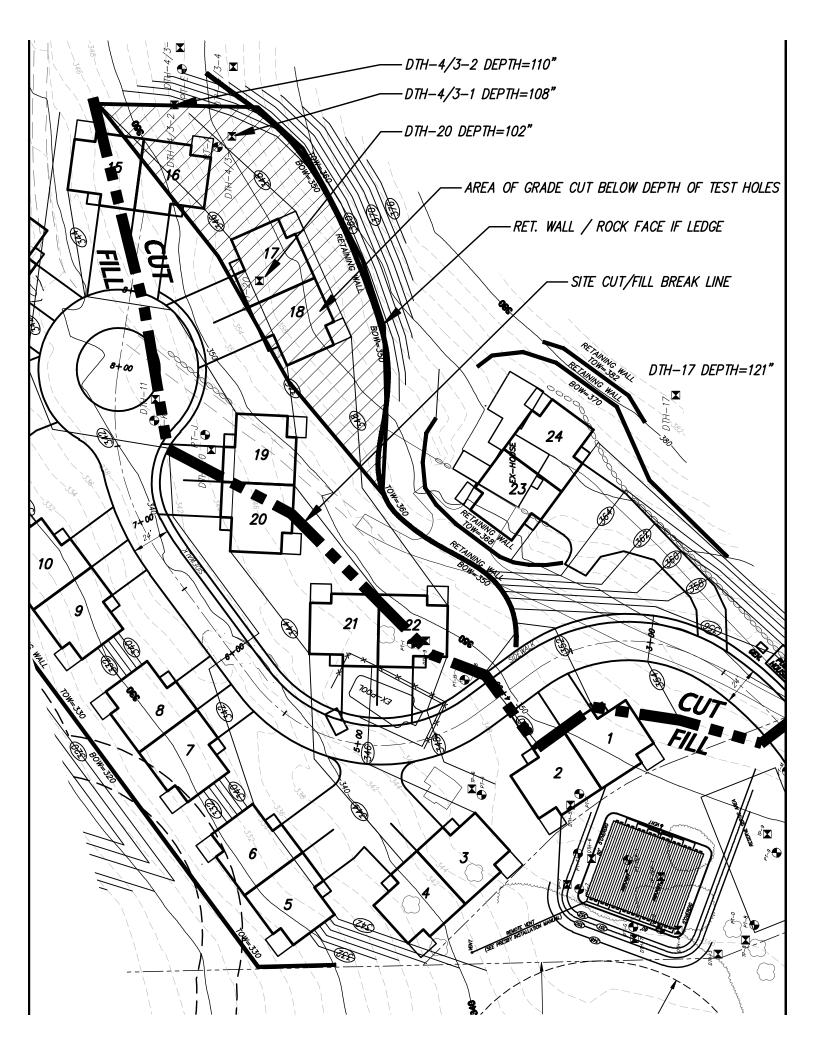
Water Use Data - Regency at Bolton

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

Date

Joel Frisch

Hydrogeologist

Date

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SITE DESCRIPTION	1
2.1	SITE HYDROLOGY	
2.2	SITE GEOLOGY	
2.3	SITE HYDROGEOLOGY	
2.4	EXISTING WELL DATA	
3.0	WATER SUPPLY PERMITTING HISTORY	
3.1	MAGNITUDE OF THE CURRENTLY PROPOSED WITHDRAWAL	
_	WELL TESTING	
4.0		
4.1	CONTACT WITH DEP	4
4.2	CONTACT WITH FRAMINGHAM HEALTH DEPARTMENT	4
4.3	LONG TERM PUMPING OF PW-1	4
4.4	WATER QUALITY TESTING DURING PROLONGED PUMPING	5
4.5	DRY CONDITION TESTING OF PW-1	5
5.0	CONCLUSIONS AND RECOMMENDATIONS	€

LIST OF TABLES

- Table 1 Private Well Records In the Vicinity of the Site
- Table 2 Summary of On-Site Bedrock Wells
- Table 3 Water Quality Data

LIST OF FIGURES

- Figure 1 Locus Map
- Figure 2 Site Plan
- Figure 3 Bedrock Geologic Map
- Figure 4 Surficial Geologic Map
- Figure 5 Private Well Location Map
- Figure 6 Graph of Discharge in the Sudbury River at Saxonville, MA
- Figure 7 Drought Status Map September 2017
- Figure 8 Linear Graph of Antecedent Water Level Data for PW-1
- Figure 9 Linear Graph of Time Drawdown Data Recorded During Dry Weather Testing
- Figure 10 Semi-log Graph of Distance Drawdown Water Level Data
- Figure 11 Semi-log Graph of Time Drawdown Data Recorded During Dry Weather Testing

LIST OF APPENDICIES

- Appendix A Correspondence
- Appendix B Water Level Data and Flow Records
- Appendix C Water Quality Data

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:

- 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.
- 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.
- 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.

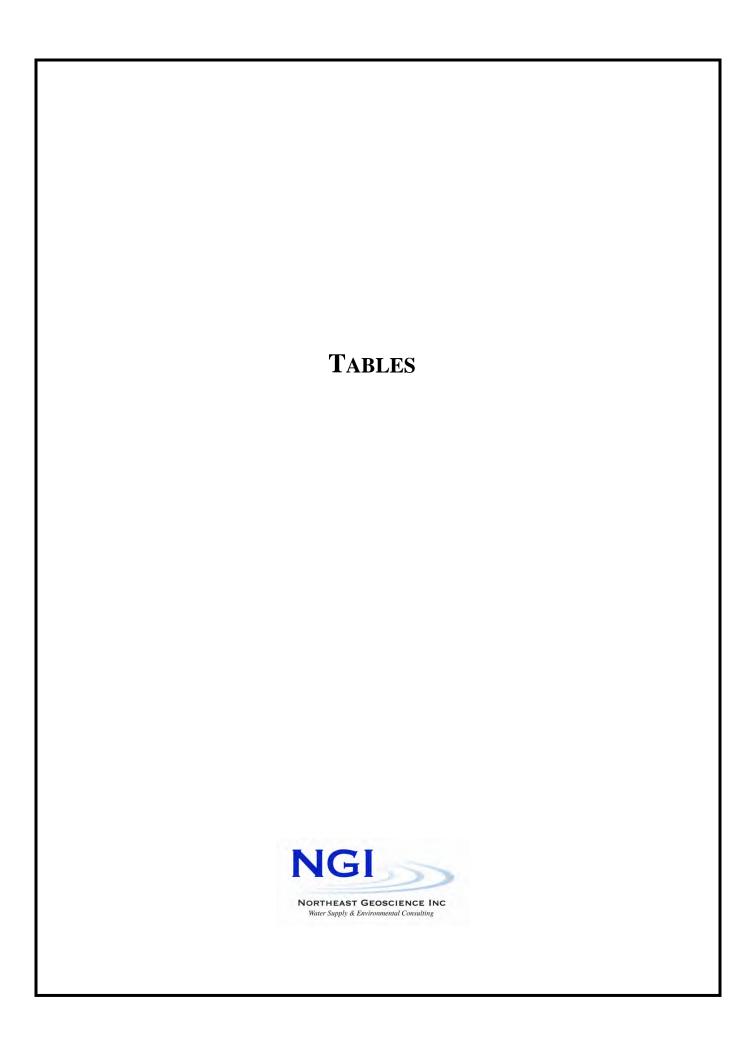


TABLE 1 Private Water Supply Well Log Summary MassDEP SearchWell Database Area Surrounding 45 Nixon Road, Framingham, Massachusetts

WELL ID	TOWN	STREET_NUMBER	STREET_NAME	DATE_COMPLETE	TOTAL DEPTH	DEPTH_TO_BEDROCK	WATER_LEVEL	YIELD GPM
5421	Framingham	OTKLET_NOMBER	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 305520	Framingham	8	Dartmouth Drive	10/13/1990 4/29/1985	345 200	17 45	10 15	5 5
305520	Framingham		Wayside Inn Road Carter Drive	6/14/1984	500		35	5 5
305535	Framingham Framingham		Wayside Inn Road	5/5/1984	180	8 67	၁ ၁	5 5
305537	Framingham		Wayside Inn Road	5/4/1984	180	67	20	5 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	007	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		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	0.5	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 4/6/2006	280 300	4	40	13 13
145572 5528	Framingham Framingham	99 32	Parmenter Street Wayside Inn Road	4/12/2000	300 280	12 4	25 40	13
305496	Framingham	22	Parmenter Road	4/12/1986	150	78	40	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

 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

		Initial	24 Hour	48 Hour	End Point	Update Sample]
PARAMETER	UNITS	12/15/2003	12/16/2003	12/17/2003	12/18/2003	2/8/2017	DEP MMCL
Microbiology							
Total Coliform	colonies/100mL	NS	Negative	NS	Negative	Absent	0
Inorganic Compounds		1	<u>, </u>		<u>. </u>		<u> </u>
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
Synthetic Organic Compoun	U						
Di(2-ethylhexyl)phthalate	ug/L	NS	NS	NS	1.7	<3	6
Volatile Organic Compound			145	145	1.7	<u> </u>	<u> </u>
Chloroform		NS	NS	NS	1.1	< 0.05	70***(t)
	ug/L	1/13	No	1/13	1.1	<0.03	70···(t)
Radionuclides	C1 7	1 270	270	270	0.04 / 1.0	1.0((0.5)	
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
Radium-228	pCi/L	NS	NS	NS	1.1(+/-0.6)	0.0(+/-0.8)	Ra-226 & 228)
Radon	pCi/L	NS	NS	NS	1,950(+/-50)	1,650(+/-76)	10,000***
Secondary Contaminants							
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**
Field Parameters							
Carbon Dioxide	mg/L	18	24	16	12	14	NAS
рН	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

 $T.O.N. \hbox{ - Threshold Odor Number}$

t - For non-chlorniated 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

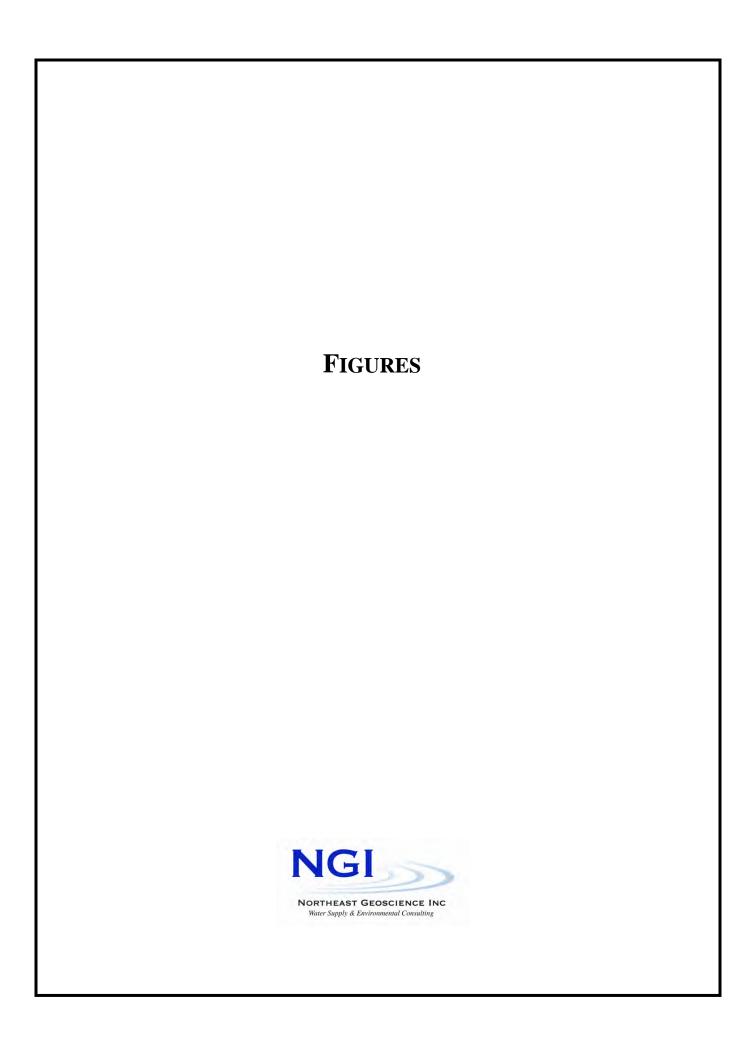
NAS - No Applicable Groundwater Standard

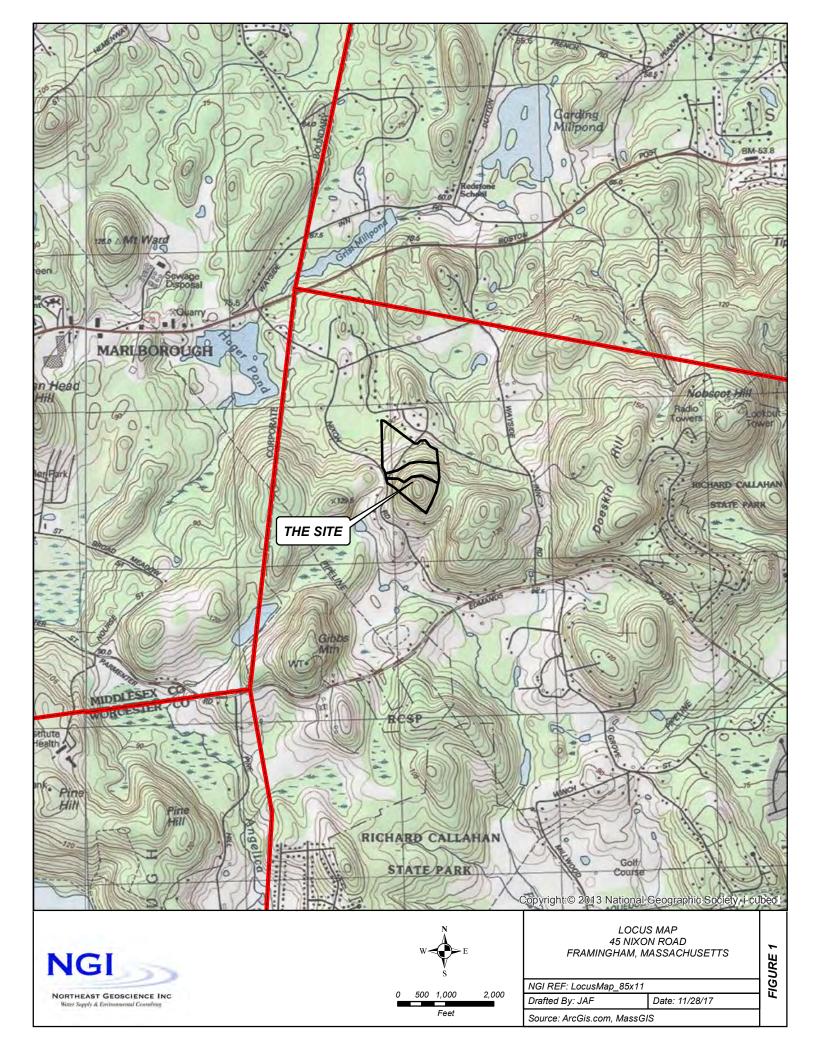
* - Treatment Technique Action Level

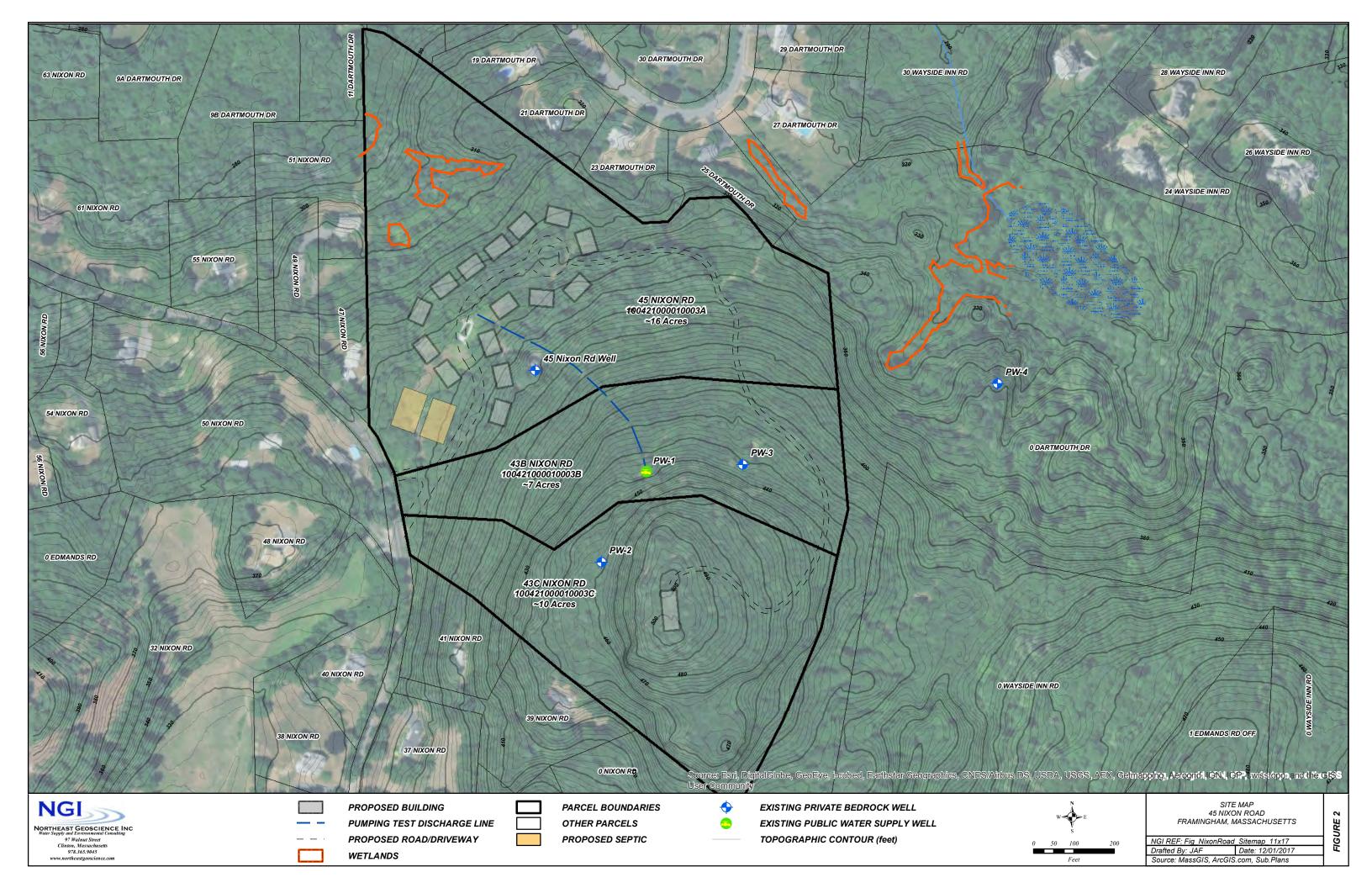
** - Massachusetts Secondary Maximum Contaminant Level (Spring 2004 Standards and Guidelines for Contaminants Found In Massachusetts Drinking Waters)

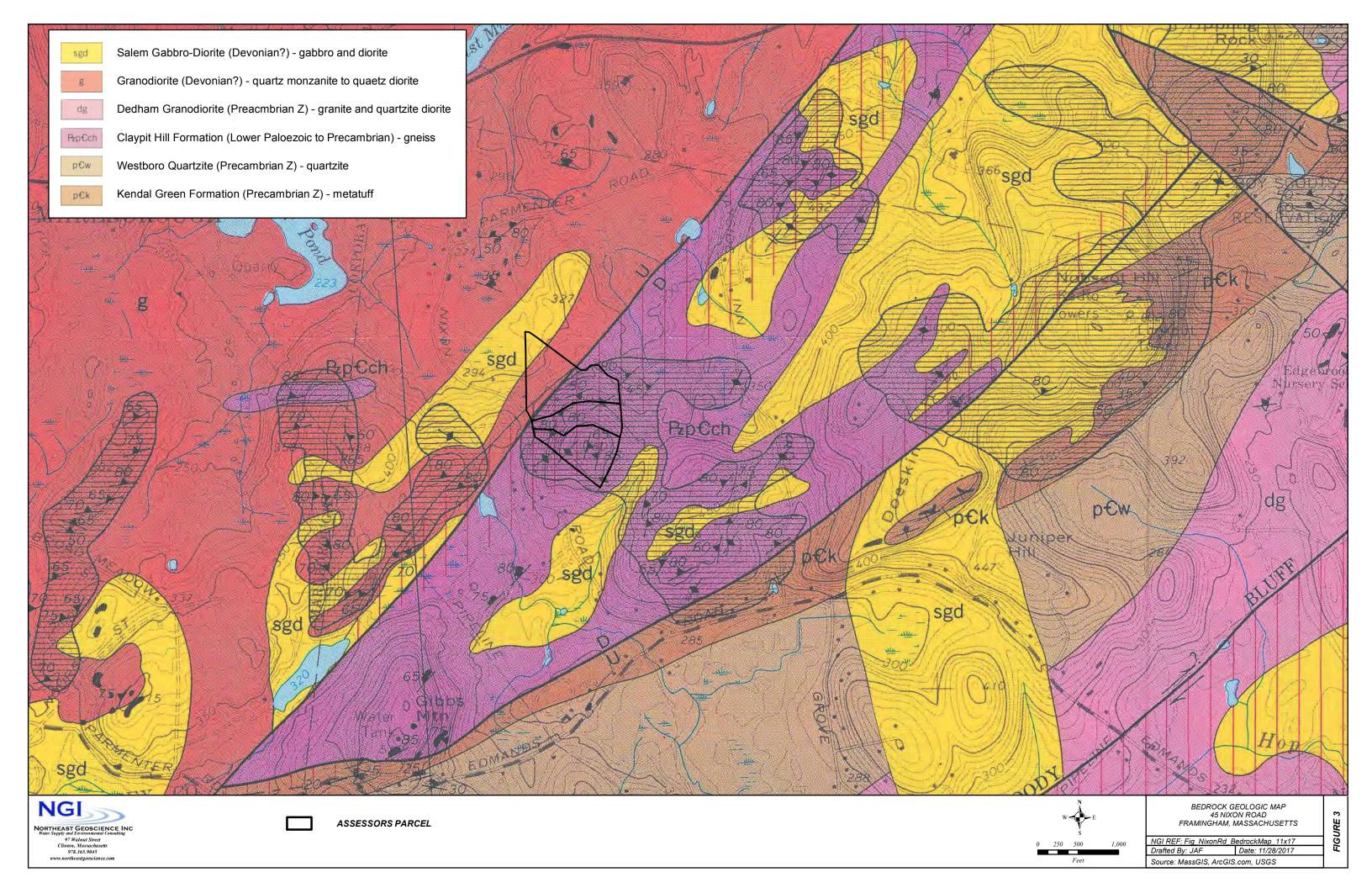
***- Mass DEP Office of Research and Standards Drinking Water Guideline

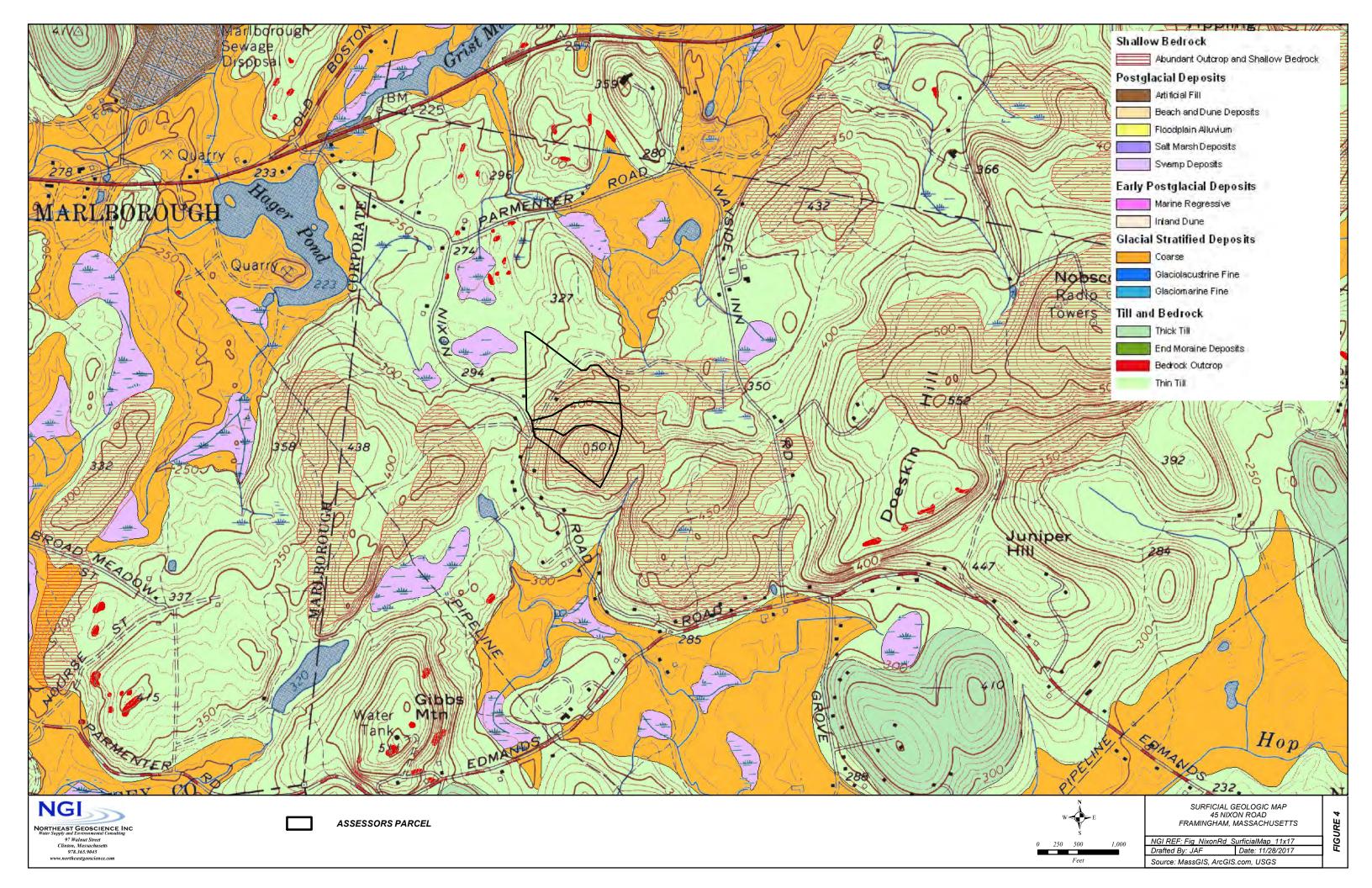
% - Concentrations greater than 50 pCi/L triggers additional sampling

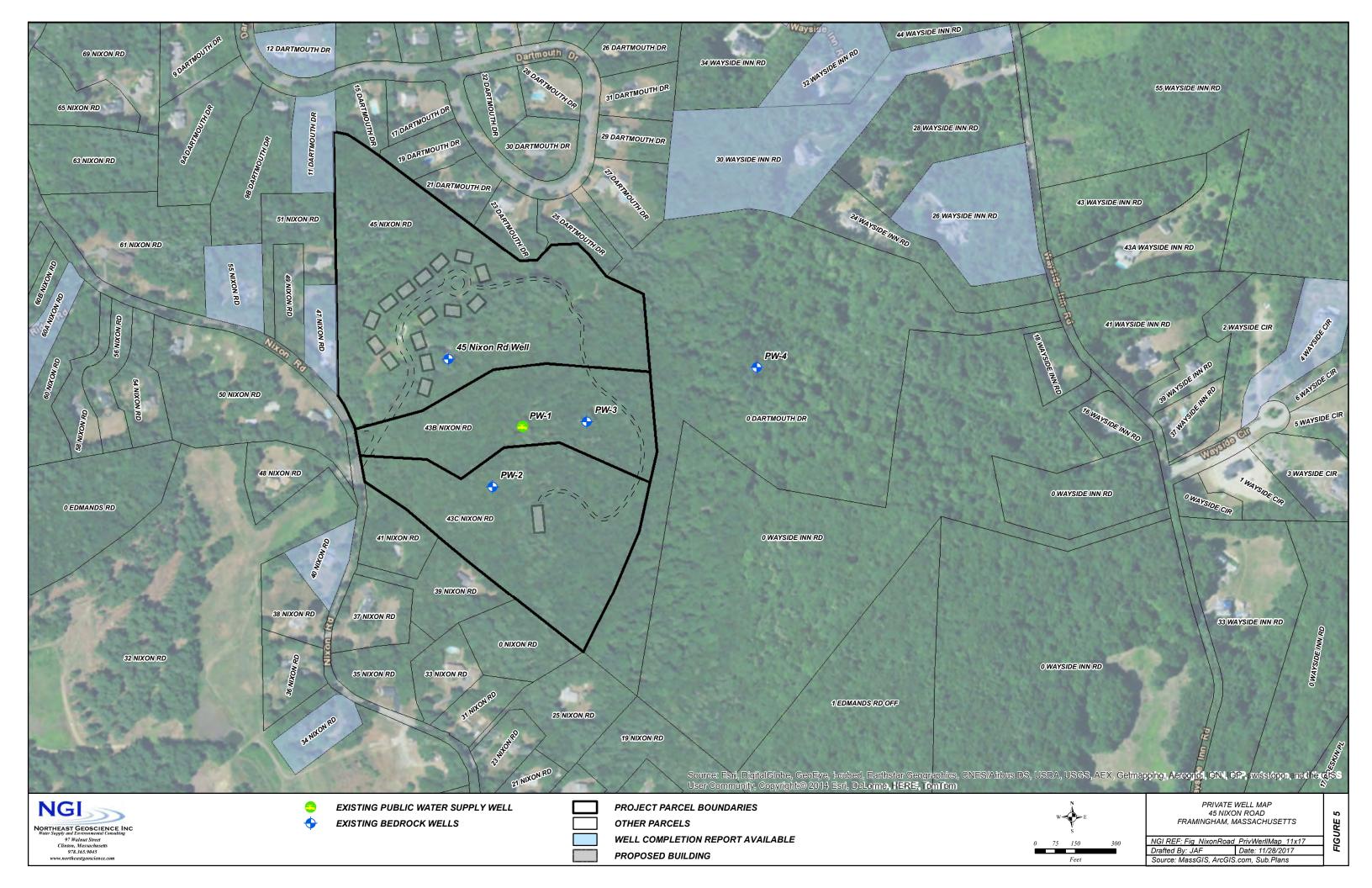


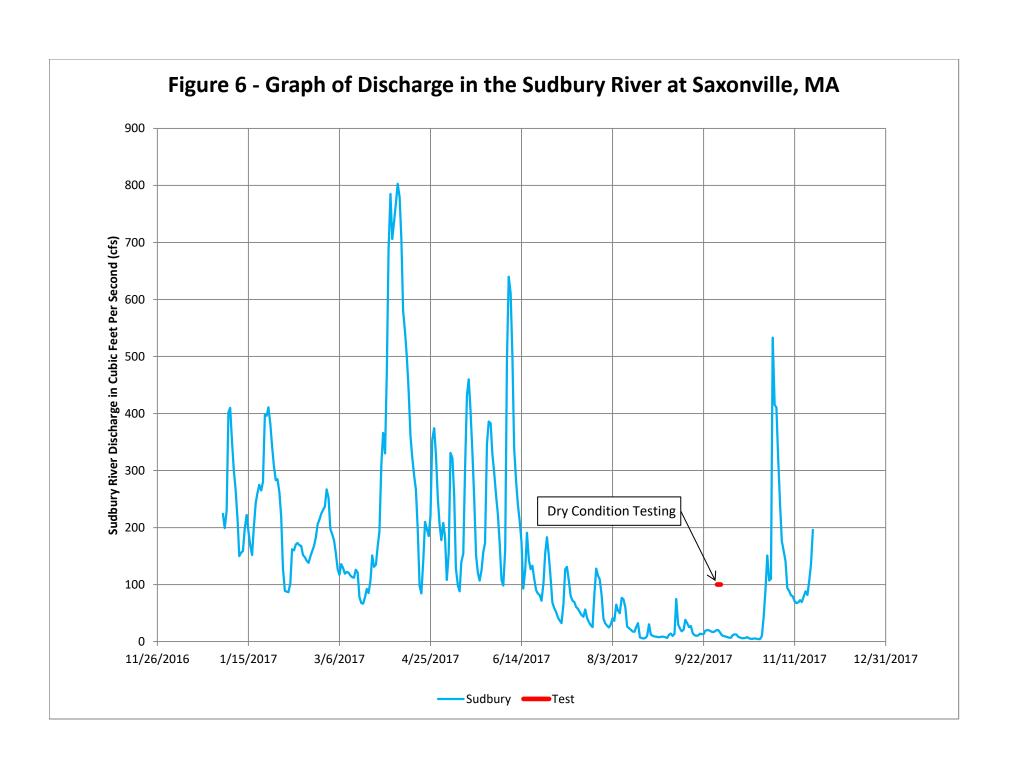












U.S. Drought Monitor Northeast

THE SITE

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 01-93-2017	30,54	69.46	43.67	11.58	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

D3 Extreme Drought

D1 Moderate Drought

D4 Exceptional Drought

D2 Severe 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



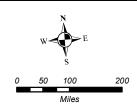






http://droughtmonitor.unl.edu/



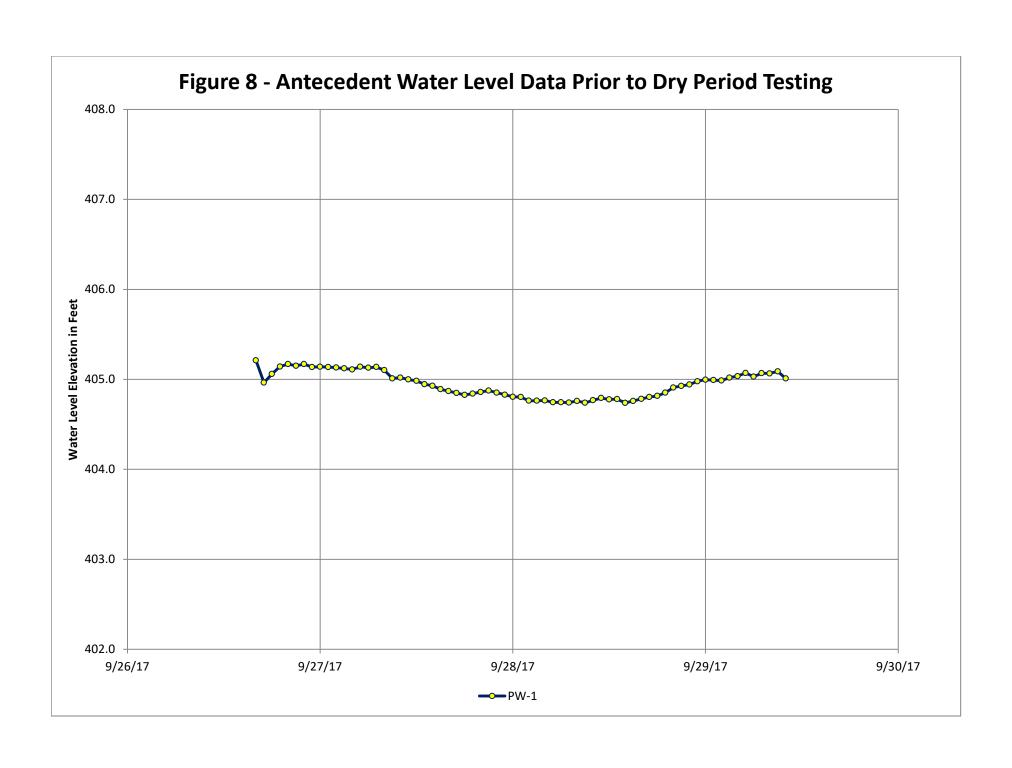


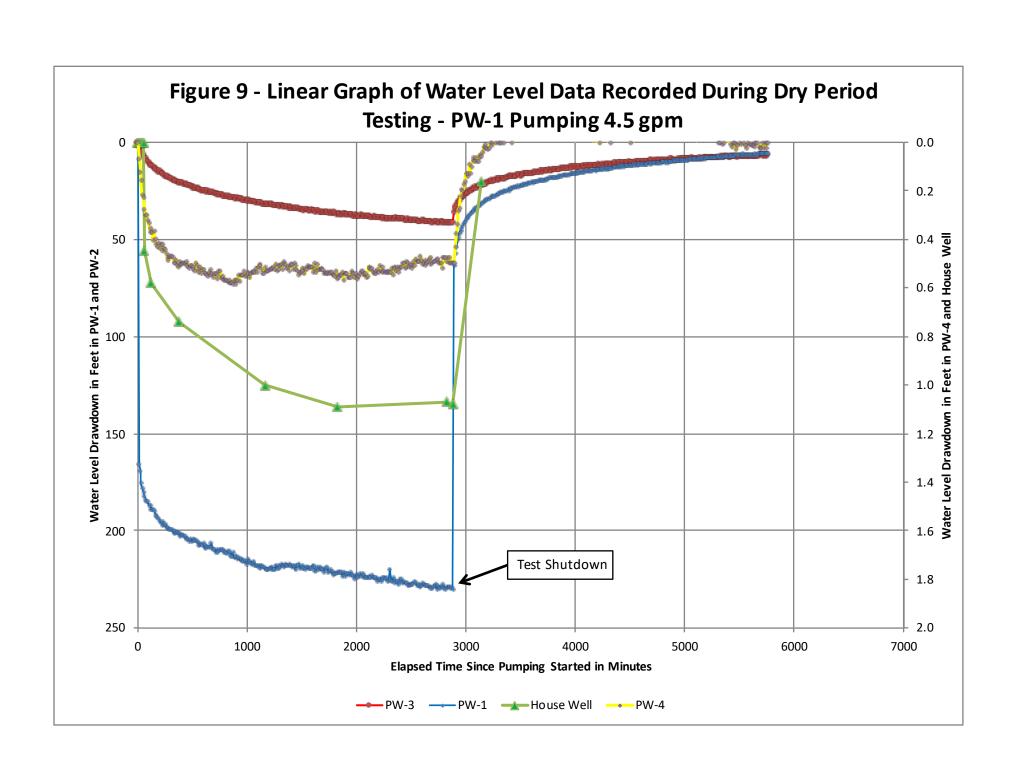
DROUGHT MAP 45 NIXON ROAD FRAMINGHAM, MASSACHUSETTS

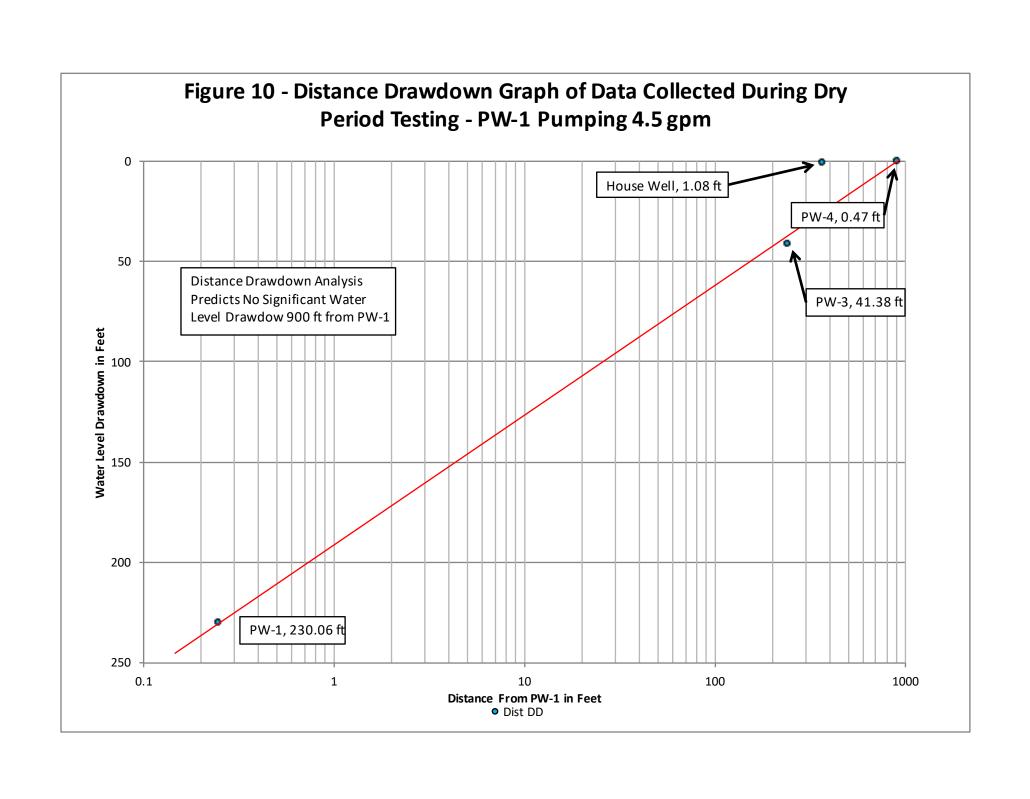
NGI REF: DroughtMap_85x11

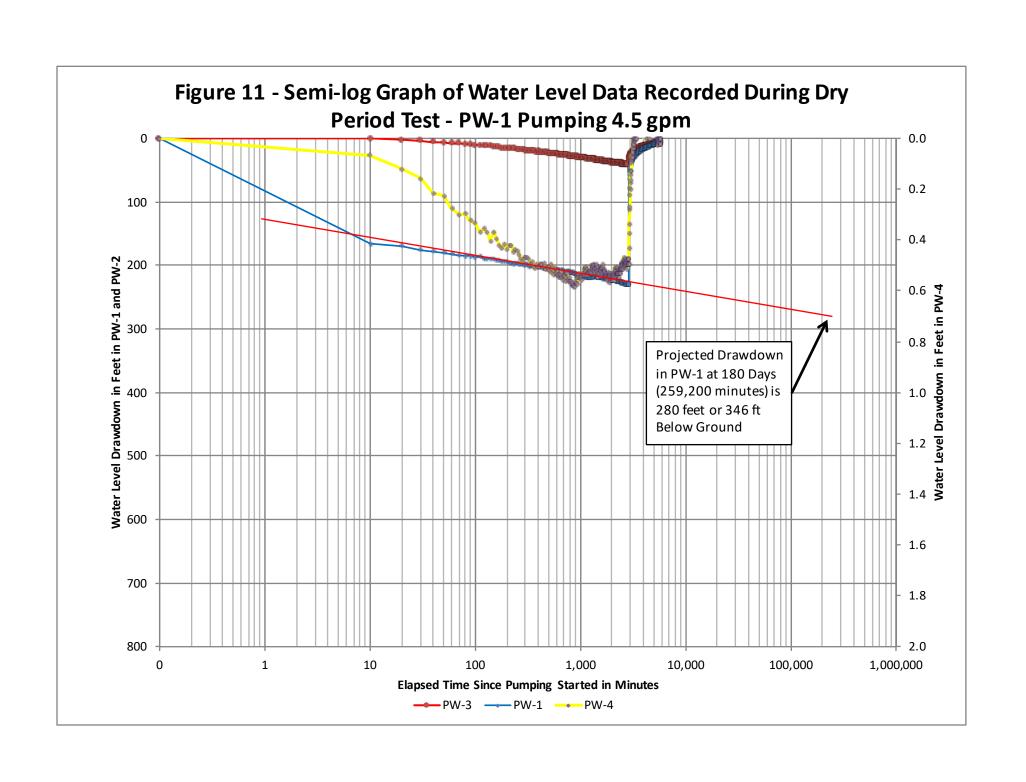
Drafted By: JAF Date: 11/28/17

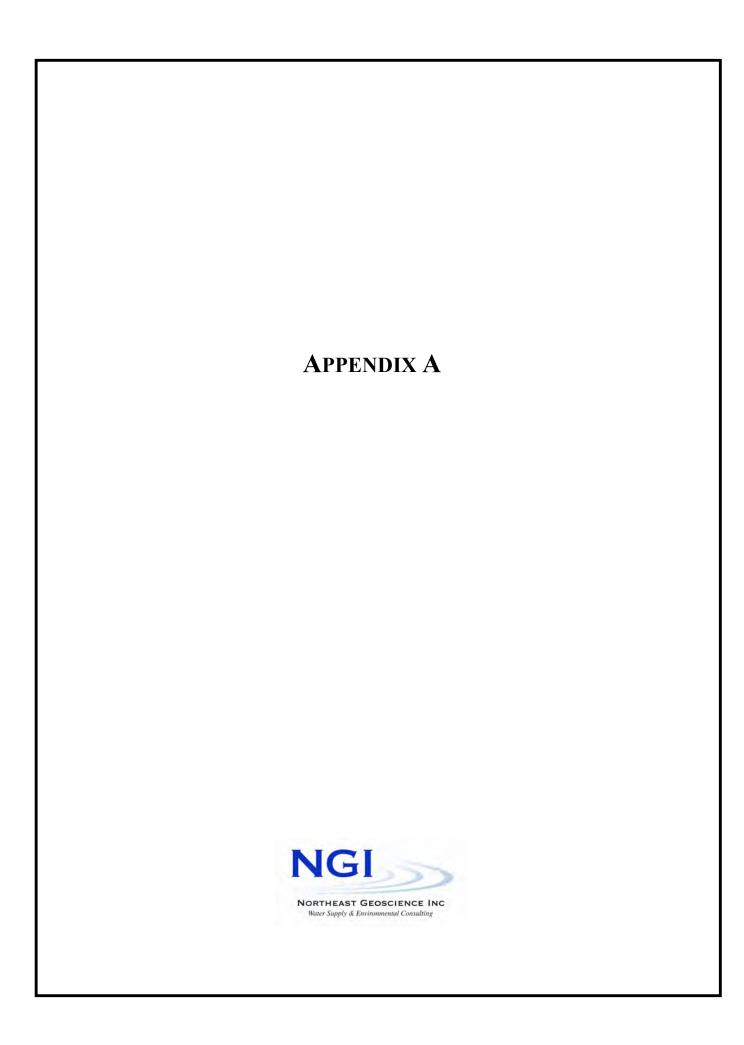
Source: ArcGis.com, MassGIS













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: Action:

System Modifications

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 issnance 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

- 2 -

City/Town: Framingham PWS: Ford's Meadow PWS ID: Not Yet Assigned

Source Final Report Bedrock Well PW-1 September 21, 2005

DESCRIPTION OF PROJECT

The Massachusetts Department of Environmental Protection (DEP), Drinking Water Program (DWP), has reviewed a June 2005 submittal by Northeast Geoscience, Inc., that presents the results of a prolonged pumping test of a bedrock well for the proposed Ford's Meadow housing development, and plans for construction of permanent pumping, treatment, and storage facilities. The project is located off of Nixon Road in Framingham. The project is presently proposed to include 24 housing units and a total of 78 bedrooms. The Title 5 design flow estimate for the project is 8,580 gallons per day (gpd). DEP approved the well site and pumping test design on December 8, 2003. DEP met with Northeast Geoscience and INVER Engineering, Inc., on August 24, 2005 to discuss the proposed design for the water supply facilities. Based on DEP's comments at this meeting, INVER submitted an August 31, 2005 addendum that provided clarifications and modifications to the design.

Bedrock well PW-1 is six inches in diameter and 1,225 feet deep. The well was drilled in June-July 2003 and hydrofractured in August 2003. Well PW-1 is grouted to a depth of 30 feet, of which 28 feet is competent bedrock.

A pumping test of Well PW-1 was conducted from December 15 to December 19, 2003. The well was pumped at a rate of 11 gallons per minute (gpm) at the start of the test. During the test, the pumping rate was dropped to 8.9 gpm. DEP's stabilization criterion for a bedrock well that pumps less than 100,000 gpd is that a semi-logarithmic plot of time vs. drawdown, when extrapolated to 180 days, must result in 10% of the water column (or minimally 15 feet) remaining above the top of the pump. Well PW-1 stabilized at the 8.9 gpm pumping rate, provided that the pump setting is lowered from the current 609 feet to 675 feet to leave a sufficient water column over the pump.

For bedrock wells, the approvable pumping rate is the rate at which the well achieves stabilization, multiplied by a safety factor of 0.75. In accordance with DEP guidelines, Well PW-1 is therefore approvable for up to 6.68 gpm, which is equivalent to 9,620 gpd. Northeast Geoscience has requested an approved pumping rate of 6.0 gpm (8,640 gpd).

Samples collected during the pumping test indicate that the well water is generally of good quality. The well water is moderately hard, with a hardness of 64 mg/L. The iron concentration in the well water dropped from 0.56 milligrams per liter (mg/L) at the start of the test to 0.06 mg/L at the end. The pH at the end of the test was 7.67.

Chloroform was found in the well at 1.1 micrograms per liter ($\mu g/L$); chloroform is a common byproduct of chlorination, and the detection is likely due to shock chlorination of the well. The synthetic organic compound di(2-ethylhexyl)phthalate (DEHP) was detected in the well at the end of the pumping test at a concentration of 1.7 $\mu g/L$. The Maximum Contaminant Level for DEHP is 6 $\mu g/L$. Detections of DEHP are frequently caused by laboratory contamination because the solvent used in the analytical process leaches DEHP from the lab technicians' rubber gloves. It is very possible that the DEHP entered the sample during the sample collection or analytical process and does not reflect actual groundwater contamination.

City/Town: Framingham PWS: Ford's Meadow PWS ID: Not Yet Assigned

Source Final Report Bedrock Well PW-1 September 21, 2005

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

City/Town: Framingham PWS: Ford's Meadow PWS ID: Not Yet Assigned

-4-

Source Final Report Bedrock Well PW-1 September 21, 2005

INVER Engineering. If there are any changes made to the approved plans or specifications, the proponent must obtain the prior written approval of DEP. Any such changes made without prior approval shall constitute a violation of the "Regulations" which may result in legal actions by DEP including revocation of this permit, criminal prosecution, court imposed penalties or civil administrative penalties assessed by DEP.

2. Certified Operator: The Ford's Meadow water system has been classified by DEP as a Very Small Community Public Water System and in accordance with 310 CMR 22.11B, the Drinking Water Regulations of Massachusetts, this Public Water Supply System shall be managed, operated, and maintained by a Certified Massachusetts Drinking Water Operator who shall hold at a minimum a Very Small System (VSS) Drinking Water License.

If you hire a contract operator to run the water system, you must submit a Certified Operator Compliance Notice to DEP. The blank form for this notice, along with a list of the typical duties and responsibilities for the Certified Operator of a small community system with disinfection treatment, are available on-line at:

http://www.mass.gov/dpl/boards/dw/forms/dwdepcmp.pdf

- 3. **Distribution System:** The design for the Ford's Meadow water distribution system, including hydrants, valves, etc., has not yet been finalized and was therefore not available for DEP to review. The design of the distribution system will therefore have to be submitted to DEP, for review and approval prior to construction, as a separate permit application. Two copies of the design must be submitted, along with a DEP transmittal form and an application for DEP Permit Category BRPWS33 (Modify Distribution System, Fewer than 3300 People). This application will be subject to a permit fee.
- 4. Final Inspection: DEP will not grant final authorization to operate any of the facilities until after DEP has determined that the facilities comply with the Massachusetts Drinking Water Regulations and Guidelines and the applicant has complied with all requirements of this approval. After completion of all water system construction, a Request for Final Inspection shall be submitted to this office in accordance with DWP Policy 88-19 and the Guidelines. The request shall include a Determination of Compliance prepared by the consulting engineer that certifies that the work was completed in accordance with DEP's approval. DEP will notify the applicant to arrange a final inspection. A copy of the license of the Certified Operator who will be responsible for the operation and maintenance of the Ford's Meadow public water supply system shall be available for DEP review at the time of inspection. Well PW-1 may not be placed on-line until DEP has conducted this final inspection of the finished pumping facilities and granted final approval for the well to be pumped into the distribution system.
- 5. Operation & Maintenance: An Operations and Maintenance Manual (O&M Manual) shall be prepared for the facility, as required by DEP Guidelines. The O&M Manual shall conform to DWP Policy 93-02. The operating procedures shall include instructions for

TO STAND MADOUR A STANDBOOK OF JOHN VVVVVV C. C. L. M. PERSEN BROKEN BY

- 5 -

City/Town: Framingham PWS: Ford's Meadow PWS ID: Not Yet Assigned

Source Final Report Bedrock Well PW-1 September 21, 2005

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. <u>Chemicals</u>: 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. <u>Chlorine Residual</u>: A minimum disinfectant residual of 0.2 mg/L entering the distribution system must be maintained.
- d. <u>Laboratory Equipment</u>: The public water supplier shall have available laboratory equipment to monitor chemical residuals.

City/Town: Framingham PWS: Ford's Meadow

PWS ID: Not Yet Assigned

-6-

Source Final Report Bedrock Well PW-1 September 21, 2005

- 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

_ ^	tto	nnn	nn	to.
-	lla		101	ts:

MADEP Approval of PW-1 Nixon Rd Framingham.pdf

27 bytes



Water Supply and Environmental Consulting

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.

Jay Billings Hydrogeologist

cc: Framingham Planning Board

James Perskey – Massachusetts Department of Environmental Protection

Development Team



Water Supply and Environmental Consulting

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.

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

		Initial	24 Hour	48 Hour	End Point	Update Sample	
PARAMETER	UNITS	12/15/2003	12/16/2003	12/17/2003	12/18/2003	2/8/2017	DEP MMCL
Microbiology							
Total Coliform	colonies/100mL	NS	Negative	NS	Negative	Absent	0
Inorganic Compounds							
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
Synthetic Organic Compounds (SOCs) - EPA Methods .	504.1, 505, 515.3, 525.2	2, & 531.1					
Di(2-ethylhexyl)phthalate	ug/L	NS	NS	NS	1.7	<3	6
Volatile Organic Compounds (VOCs) - EPA Method 52	4.2						
Chloroform	ug/L	NS	NS	NS	1.1	< 0.05	70***(t)
Radionuclides							
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
Radium-228	pCi/L	NS	NS	NS	1.1(+/-0.6)	0.0(+/-0.8)	Ra-226 & 228)
Radon	pCi/L	NS	NS	NS	1,950(+/-50)	1,650(+/-76)	10,000***

Northeast Geoscience Inc.

Project #030208

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

		Initial	24 Hour	48 Hour	End Point	Update Sample	
PARAMETER	UNITS	12/15/2003	12/16/2003	12/17/2003	12/18/2003	2/8/2017	DEP MMCL
Secondary Contaminants							
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	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**
Field Parameters							
Carbon Dioxide	mg/L	18	24	16	12	14	NAS
рН	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-chlorniated 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

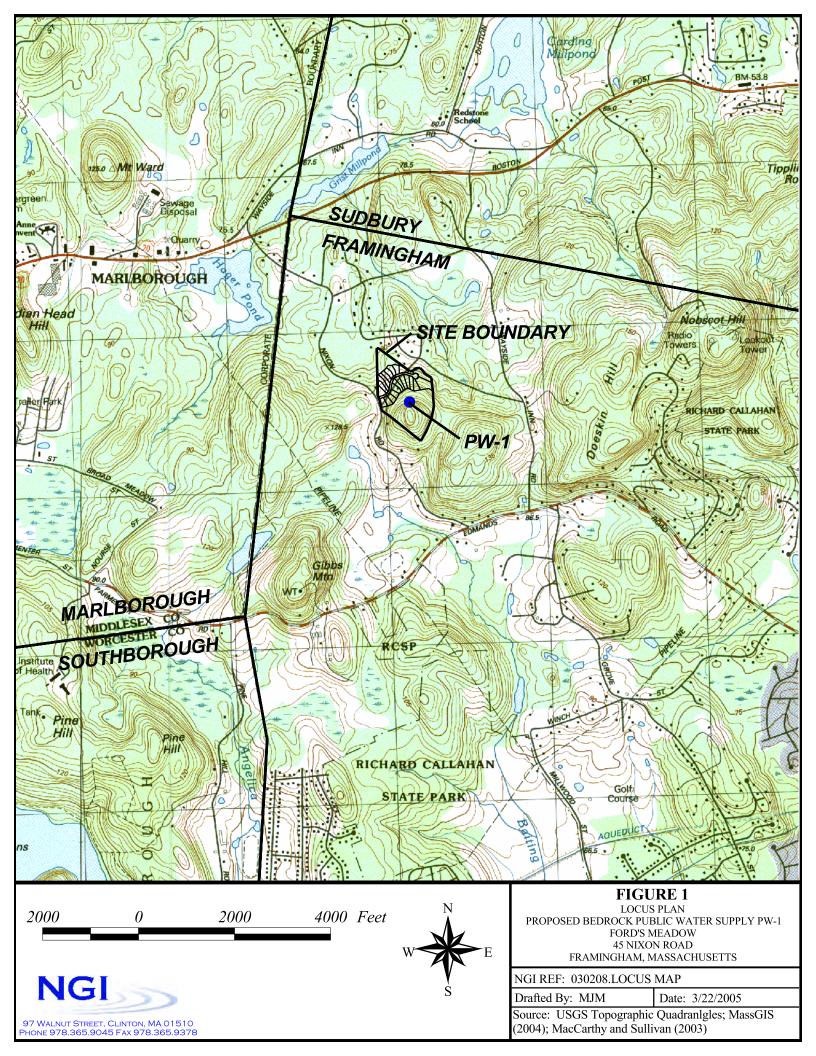
** - Massachusetts Secondary Maximum Contaminant Level (Spring 2004 Standards and Guidelines for Contaminants Found In Massachusetts Drinking Waters)

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

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

 $\ensuremath{^{\Lambda}}$ - For groundwater under the direct influence of surface water

NORTHEAST GEOSCIENCE INC.
Project #030208







Volatile Organic Contaminant Report

VOC

Page 1 of 2

I. PWS INFOR	MATION:	Please refer t	your DEP Water (Quality Sam	oling Sch	edul	e (WQSS) to he	lp complete	this form		
PWS ID #:				С	ity / Tow	n:	FRAMINGHA	M			
PWS Name:	Ford	d's Meadow					PWS C	class: CC	M 🖂 NTN	C TNC	
DEP LOCATION (LOC) ID#		DEP Lo	Sample I	Information Sample Acidified			Date Collected	Collected By			
PW-1	Bedrock	Well No.1		☐ (M)ulti 図 (S)ing			Yes ⊠	2/8/2017	J.G.B.		
Routine or		Original, Resubi				If Resubmitted Report, list below:					
Special Sample		Confirmation	Report	(1)	Reason for	Res	ubmission	(2) C	(2) Collection Date of Original Sample		
☐ RS 🖾 SS	☑ Origin	nal 🗌 Resubmitte	d Confirmation	Resample	e 🗌 Reanal	ysis [Report Correction	on			
SAMPLE NOTES – Such as, if a Manifold/Multiple sample, list the source(s) that were on-line during sample collection.											
II. ANALYTICA	AL LABOR	RATORY INFO	RMATION:								
Primary Lab MA	A Cert. #:	M-MA086	Primary Lab Nam	e: Alpha Ai	nalytical				Subcontract	ted? (Y/N) N	
Analysis Lab M	A Cert. #:	M-MA086	Analysis Lab Nam	e: Alpha Ai	nalytical						
Lab Meth	od	Date Extracte (551.1 only)	Date Analyzed	Lab Samp			SAMPLE NOTES ed or additional cor			ether sample was	
524.2			2/10/2017	L170408	5-01						
Was this Sample composited by the Lab?				se list the comp	posited sour	ces b	by DEP Source Co	de (XXXXXX	-XXX), up to five	e individual sources.	
Yes:□ N	lo:□										

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	ND 70		
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	



N.

Volatile Organic Contaminant Report

Page 2 of 2

PWS ID#:	Lab Sample ID#:	L1704085-01
	'	21701005 01

CAS#	UNREGULATED VOC CONTAMINANTS	Results μg/L	MDL μg/L
67-66-3	CHLOROFORM*	ND	0.50
75-27-4	BROMODICHLOROMETHANE	ND	0.50
124-48-1	CHLORODIBROMOMETHANE	ND	0.50
75-25-2	BROMOFORM	ND	0.50
541-73-1	M-DICHLOROBENZENE	ND	0.50
74-95-3	DIBROMOMETHANE	ND	0.50
563-58-6	1,1-DICHLOROPROPENE	ND	0.50
75-34-3	1,1-DICHLOROETHANE*	ND	0.50
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	0.50
142-28-9	1,3-DICHLOROPROPANE	ND	0.50
74-87-3	CHLOROMETHANE	ND	0.50
74-83-9	BROMOMETHANE*	ND	0.50
96-18-4	1,2,3-TRICHLOROPROPANE	ND	0.50
630-20-6	1,1,1,2-TETRACHLOROETHANE	ND	0.50
75-00-3	CHLOROETHANE	ND	0.50
594-20-7	2,2-DICHLOROPROPANE	ND	0.50
95-49-8	O-CHLOROTOLUENE	ND	0.50
106-43-4	P-CHLOROTOLUENE	ND	0.50
108-86-1	BROMOBENZENE	ND	0.50
542-75-6	1,3-DICHLOROPROPENE*	ND	0.50
95-63-6	1,2,4-TRIMETHYLBENZENE	ND	0.50
87-61-6	1,2,3-TRICHLOROBENZENE	ND	0.50
103-65-1	N-PROPYLBENZENE	ND	0.50
104-51-8	N-BUTYLBENZENE	ND	0.50
91-20-3	NAPHTHALENE*	ND	0.50
87-68-3	HEXACHLOROBUTADIENE	ND	0.50
108-67-8	1,3,5-TRIMETHYLBENZENE	ND	0.50
99-87-6	P-ISOPROPYLTOLUENE	ND	0.50
98-82-8	ISOPROPYLBENZENE	ND	0.50
98-06-6	TERT-BUTYLBENZENE	ND	0.50
135-98-8	SEC-BUTYLBENZENE	ND	0.50
75-69-4	FLUOROTRICHLOROMETHANE	ND	0.50
75-71-8	DICHLORODIFLUOROMETHANE*	ND	0.50
74-97-5	BROMOCHLOROMETHANE	ND	0.50
1634-04-4	METHYL TERTIARY BUTYL ETHER (MTBE)# [*]	ND	0.50

CAS#	ADDITIONAL UNREGULATED and/or NON-TARGET VOC CONTAMINANTS (Report if analyzed or otherwise detected)	Results μg/L	MDL μg/L
109-99-9	TETRAHYDROFURAN (THF)*		
75-65-0	TERT-BUTYL ALCOHOL (TBA)*		
994-05-8	TERT-AMYL METHYL ETHER (TAME)*		
637-92-3	ETHYL TERTIARY BUTYL ETHER (ETBE)		
108-20-3	DI-ISOPROPYL ETHER (DIPE)		
67-64-1	ACETONE*		
76-13-1	FREON 113*		
78-93-3	METHYL ETHYL KETONE (MEK)*		
108-10-1	METHYL-ISOBUTYL KETONE (MIBK)*		
]	

[☐] Check this box if attaching lab report to show additional VOC results/contaminants tested.

^{*}Required * DEP ORSG limit established

Surrogate Name	% Recovery (70 – 130%)				
1,2-Dichlorobenzene-d4	100				
4-Bromofluorobenzene	96				

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:

re: fosepl Weathers
te: 2/17/2017

In accordance with 310 CMR 22.15(2), if mailing paper reports, <u>TWO</u> copies of this report must be received by your MassDEP Regional Office 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	□wqts
☐ Accepted ☐ Disapproved	Comments	Data Entered





Secondary Contaminant Report

I. P	I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form																
PW	/S ID #:						Cit	y / Town:	FRA	MI	NGHA	M					
PW	/S Name:	Fo	rd's Mea	dow				<u> </u>		P۱	WS CI	ass:	CON	I 🛛 NT	NC	☐ TNC ☐	
I	DEP LOCATION (LOC) ID#			D	EP Location N	Name			Sample In					ate ected		Collected By	
Α	PW-1		Bedrock	k Well N	lo.1			☐ (M)ultiple ☐ (R)aw ☐ (S)ingle ☐ (F)inished					2/8/	2017	J.G.	В.	
В								☐ (M)			☐ (R)aw ☐ (F)inis						
	Routine or Special Samp	ıla.	C		Resubmitted o ation Report	r		(1) Reason				ted Rep	····r	t below:	- D-	to of Original Com	
Α	□ RS ⊠ S		⊠ Origina		ıbmitted ☐ Co	nfirmation	□ Resa	mple \square Rea				rrection	(2	Conectio	п Ба	te of Original Sam	pie
В	□RS □S	-			ıbmitted ☐ Co			mple 🔲 Rea									
	SAMPLE NOTE	ES - (Such as, if a	a Manifold	/Multiple samp	le, list any sou	urces that	were on-line	during s	amp	le collec	tion).					
Α																	
В																	
11 /	ANALYTICAL	ΙΔΙ	BORATO	RY INF	ORMATION	۱.											
	mary Lab MA C			-MA086	1	٠. ، Lab Name	· Alpha	a Analytical						Subcor	ntrac	ted? (Y/N)	N
	alysis Lab MA			-MA086]]	s Lab Name		a Analytical						- Gubooi			
	-			Resi	ults		MDI	-				5					
	Compound			A	В	SMCL	MDL (mg/L)		Lab Meth	od		Dat Analy			Lat	Sample ID#	
IRO	N (mg/L)		0.	.062		0.3	0.050		200.7			2/15/2	2017		L	1704085-01	
MAI	MANGANESE (mg/L)		ı	ND		0.05*	0.010		200.7			2/15/2	2017		L	1704085-01	
ALK	(ALINITY (mg/L as	TY (mg/L as CaCO3) 52.3 None 2.00			2320E	3		2/9/20	017		L	1704085-01					
CAL	LCIUM (mg/L)		1	15.5	None 0.100 200.7 2/15		2/15/2	2017		L	1704085-01						
MA	GNESIUM (mg/L)		2	2.52		None	0.100	200.7 2/15/2		2/15/2	2017	/17 L1		1704085-01			
HAF	RDNESS (mg/L as	CaCC	03) 4	19.1		None	0.660		200.7			2/15/2	2017 L1704085-		1704085-01		
POT	TASSIUM (mg/L)		1	ND		None	2.50		200.7			2/15/2	2017 L1704085-01		1704085-01		
TUF	RBIDITY (NTU)		0).27		None	0.20		180.1			2/9/20	017		L	1704085-01	
ALU	JMINUM (mg/L)		1	ND		0.2	0.100		200.7			2/15/2	2017		L	1704085-01	
CHL	LORIDE (mg/L)		2	2.56		250	0.500		300.0			2/10/2	2017		L	1704085-01	
COI	LOR (C.U.)		•	6.0		15	5.0		2120E	3		2/8/20	017		L	1704085-01	
COI	PPER (mg/L)		1	ND		1	0.010		200.7			2/15/2	2017		L	1704085-01	
ODO	OR (T.O.N)		1	ND		3	1		2150E	3		2/8/20	017		L	1704085-01	
рН				7.2		6.5-8.5	NA		4500H+	-B		2/8/20	017		L	1704085-01	
SIL	VER (mg/L)			ND		0.10	0.007		200.7			2/15/2	2017		L	1704085-01	
SUL	_FATE (mg/L)			12.4		250	1.00		300.0			2/10/2	2017		L	1704085-01	
TDS	6 (mg/L)			81.		500	10		25400			2/9/20			L	1704085-01	
	C (mg/L)			.213		5	0.050		200.7			2/15/2	2017		L	1704085-01	
* EF	PA has established			h Advisory	(HA) for mang	anese at 0.3 i	mg/L and	an acute HA	at 1.0 m	g/L.							
Α	LAB SAMPLE	NOTE	:8														
B																	
pers	I certify u son authorized to tained herein is tru	fill ou		and the i	nformation			Prima	ry Lab D	Direc	ctor Si	gnature	e:	Josep	L	Vackons	
	ent of my knowledg		in and and	22,51010	2 3.70 2001							Date	e:	0	2/	17/2017	
end	ccordance with 31 of the month in w EP) deadline is th	vhich t	the results a	are receive												han 10 days after the ctronic reporting	he
DEI	P REVIEW STA	ATUS	(Initial & I	Date)		R	eview									☐ WQTS Data	
	Accepted		☐ Disa	approved	ı		ments									Entered	



Massachuseus Departure Inorganic Contaminant Report

I. PWS INFOR	MATION: Plea	ase refer	to your DEI	P Water C	Quality Sa	mpling Sched	ule	(WQSS) to he	lp complete this	form	
PWS ID #:					-	City / Town	: T	FRAMINGHA	\M		
PWS Name:	Ford's Me	eadow						PWS (Class: COM	NTNC	□ TNC □
DEP LOCATION (LOC) ID#		DEP L	ocation Nam	е		*Please note all	sampl f finis	ormation les are considered hed water if there	Date Collected	Co	ollected By
PW-1	Bedrock Wel	ll No.1				☐ (M)ultiple ☐ (S)ingle	☐ (M)ultiple ☐ (R)aw ☐ (S)ingle ☐ (F)inished			J.G.B.	
Routine or		inal, Resul				If Resubmitted Report, list below:					
Special Sample ☐ RS ☐ SS	☑ Original □	nfirmation	-	nation	+_	(1) Reason for R				ion Date of 0	Original Sample
					<u> </u>	nple Reanalys		<u> </u>	OII		
SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).											
	AL LABORATO	ORY INF	ORMATIO	N:							
Primary Lab M	A Cert. #: M-M	1A086	Primary L	.ab Name	: Alpha	Analytical			Su	bcontracte	ed? (Y/N) N
Contaminant	Result (mg/L)	MCL (mg/L)	MDL (mg/L)	Lab M	ethod	Date Analyzed		nalysis Lab MA Cert #	Analysis Lab N	ame	Lab Sample ID#
ANTIMONY	ND	0.006	0.0040	200	0.8	2/14/2017	N	И-MA086	Alpha Analytic	al	L1704085-01
ARSENIC	ND	0.010	0.0010	200	0.8	2/14/2017	N	И-MA086	Alpha Analytic	al	L1704085-01
BARIUM	0.0077	2	0.0010	200	0.8	2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01
BERYLLIUM	ND	0.004	0.0010	200.8		2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01
CADMIUM	ND	0.005	0.0010	200.8		2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01
CHROMIUM	ND	0.1	0.0010	200.8		2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01
CYANIDE	ND	0.2	0.005	4500CN-CE		2/13/2017	N	И-МА086	Alpha Analytic	al	L1704085-01
FLUORIDE ¹	0.39	4.0	0.20	4500	F-C	2/8/2017	N	И-МА086	Alpha Analytic	al	L1704085-01
MERCURY ²	ND	0.002	0.0002	245	5.1	2/10/2017	N	M-MA086	Alpha Analytical		L1704085-01
NICKEL	ND	0.1*	0.0020	200	0.8	2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01
SELENIUM	ND	0.05	0.0020	200		2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01
SODIUM	6.16	20*	2.00	200		2/15/2017		M-MA086	Alpha Analytic	-	L1704085-01
THALLIUM	ND	0.002	0.0010	200		2/14/2017		M-MA086	Alpha Analytic		L1704085-01
² Please note that it	a secondary MCL of f method 245.1 is u nowever DEP Office	sed for me	cury, only me	thod revisi	on 3.0 will b	e accepted by M	A DÉ	P	tice pursuant to 310) GIVIR 22. 16.	•
Was this Samp by the	le composited Lab?		SITE SAMPL ne composite		by DEP So	ource Code (XX)	(XX)	(X-XXX), up to f	ive individual sour	ces per sam	ıple.
Yes											
LAB SAMPLE N	NOTES	-									
	fy under penalties ut this form and th				Р	rimary Lab [Dire	ctor Signatu	ire: Josep	l Waa	kins
	complete to the be							Da	ite:	2/17/1	17
end of the month in		are receive							DEP Regional Office er is sooner. Please		
DEP REVIEW S	TATUS (Initial &	Date)			Reviev	N					□wqts
☐ Accepted		Disapprov	ed		Comment						Data Entered

Page _____ of ____



I. PWS INFO	PMATI <i>(</i>	Э М•	Place re	ofor to s	our F	DED I and	& ርሳ	nnor samnlii	na nlan	for approve	d can	anling lo	cations	•			
PWS ID #:		JI4.	r lease re		oui L	JEF Leau	a 00		Town				Cations).			
PWS Name:	F	ord'	's Meado	<u></u>				Oity /	101111	_			COM		ITNC		· 🗆
1 WO Hame.		T															
Routine or Spec	ial Sample	es		riginal, I Confirm		mitted or Report) Reaso	n for Resubmi		tted Repo			n Date	of Origin:	al Sample
□ RS [☑ Original	I ☐ Resi	ubmitte	ed 🔲 Confir	mation	•	•	eanalysis 🗌 Re		orrection	(=) ==			o. og	• • • • • • • • • • • • • • • • • •
SAMPLE NOTES		as, if	a Manifold/	Multiple	ample	, list the sou	urces 1	that were on-line	e during	sample collection	on).	<u></u>					
II. ANALYTIC	CAL LAI	BOF	RATORY	INFOF	MAT	ION:											
Primary Lab N	IA Cert.	#:	M-MA086	Р	rimar	y Lab Nar	ne:	Alpha Analyti	cal				Su	bcont	racted	I? (Y/N)	N
Analyte	Action	Leve	el (mg/L)	L	ab Me	thod	N	IDL (mg/L)	Analy	sis Lab MA Ce	rt.#		A	nalysis	s Lab N	lame	
Lead:	(0.01	5		200.	.7		0.0005		M-MA086				Alpha	Analyti	cal	
Copper:		1.3			200.	.7		0.010		M-MA086				Alpha	Analyti	cal	
LAB SAMPLE N	OTES																
						r		r			r						
DEP A (See DEP appr			nple Loca		ne)	Collection	n Date	De suit (man	LEAD		D		OPPER			Lab Sa	mple ID#
1 Pw-1	oveu LCR	piai	i ioi sampiin	ig locatio	115)	2/8/20	117	Result (mg	/L) D	2/14/2017	Res	ult (mg/L)		e Anal /15/20	-	1 170	4085-01
2						2/0/20	717	IND		2/14/2017		110		113/20	, 1 ,	L170-	+000-01
3																	
4																	
5																	
6																	
7																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16									-								
17									+				+				
19																	
20																	
Repo	ort SCHOC	DL RI	ESULTS coll	lected in	accord	lance with 3	10 CN	1R 22.06B (7)(a)	9 below	Do not use the	se sch	ool results	in 90 th p	ercent	ile calcu	ulations.	
1																	
2																	
3								1									
4	naltica -f'	lov. 11	not I am the	nores =	uth = ::'	rod to	<u>.</u>	<u> </u>			<u> </u>		0	1.1.	- 0	_	
I certify under pe fill out this form	and the i	inforn	nation conta	ained he	rein is	true,	Prim	ary Lab Dir	ector	Signature: Date:		()	fosepl	_ Wa 117/2			
accurate and cor In accordance wi	•			•	•		onies	of this report m	ust he re		МассГ)FP Regio				10 dave	after the
end of the month (eDEP) deadline	in which to	he re	esults are red above.	ceived <u>or</u>	no lat	er than 10 c	lays a	fter the end of th	he monit	oring period, wh	icheve	er is soone	r. Pleas	se note	: Electro	onic repor	ting
DEP REVIEW S				Water S	upplie	rs must sub	mit Fo	rms LCR-D or L	.CR-E w	th this form to the	ne app	ropriate DI	₌P Regi	onal Of	tice.		
☐ Accepted	771 OG (IIII		ג Date) Disapprove	d			Co	mments									



LCR-D

Page _____ of ___

Lead and Copper - 90th PERCENTILE COMPLIANCE Report (For Systems Required to Collect More Than 5 Samples)

I. PWS INFORMA	TION: Please	refer to you	r DEP Lead	& Copper s	amp	oling p	lan for a	approved	sampling lo	ocatio	ns.		
PWS ID #:					Ci	ity / T	own:						
PWS Name:								P	WS Class:	CO	M 🗌 NTN	IC 🗆	
Sampling	☐ FIRST SEM	/II-ANNUAL SA	MPLING PE	RIOD				REDU	CED - EVERY	THRE	E YEARS		
Frequency:	☐ SECOND S	SEMI-ANNUAL	SAMPLING I	PERIOD				☐ LEAD	SERVICE LIN	E (LSL	REPLACEME	NT PRO	GRAM
(choose one)	REDUCED	– ANNUAL						☐ DEMO	NSTRATION				
Step 1: Place lead re Please report results limit (MDL) but below mg/L for copper. Step 2: Multiply the tnecessary. Step 3: Compare the than the action level.	s that are ND or v 0.005 mg/L for total number of s e sample result a	less than (<) lead or 0.05 samples colle	the laborato mg/L for cop cted by 0.9 ercentile san	ry's reported oper shall be in (this is your 9)	deterepo	ection I orted as percer inst the	imit (MDI s measur itile samp e corresp	_) as zero red or mar ole number onding ac	Results at control by be reported er). Round to ction level. If	or abor I as 0.0 the n	ve the laborate 0025 mg/L for earest whole oth percentile	number	etection r 0.025 r, if s higher
Note: Do not include	school results	on this form u	nless the P	WS is a school	ol.								
	LEAD RESU	II TS (ma/l)					C	OPPER RE	SULT	rs (ma/L)		
# Results	# Results	# Resi		Results		#	Result		Results	#	Results	#	Results
1* 1	6	31	46			1*		16		31		46	
2 1	17	32	47			2		17		32		47	
3 1	18	33	48			3		18		33		48	
4 1	9	34	49			4		19		34		49	
5 2	20	35	50			5		20		35		50	
6 2	21	36	51			6		21		36		51	
7 2	22	37	52			7		22		37		52	
	23	38	53			8		23		38		53	
	24	39	54			9		24		39		54	
-	25	40	55			10		25		40		55	
	26	41	56 57			11		26		41 42		56 57	
	28	43	58			13		28		43		58	
-	29	44	59			14		29		44		59	
	30	45	60			15		30		45		60	
*Lowest Value													
My system was r Total # of s Circle the 90 th perc	samples collec	ted:	x 0.9			_ Th	nis numb	per is my	system's 9	-	– ercentile sar	nple #	
		Comp	ared to 0.0)15 mg/L							Compared	to 1.3	mg/L
(Lead result at 90th per	centile sample#)	(T	he lead action	level)		(Coppe	r result at	90 th perce	ntile sample#)		(The coppe	r action	level)
II. CERTIFICATIO	N:												
Check and complete you must comply with My system		Confidence	Rule (CCR)	reporting req								munity	system
☐ My systen	n exceeded th	e lead actio	n level and	b				samplin	g sites exc o	eeded	the lead a	ction le	evel.
Check and complete system you must cor				rmined from	the		results. I						unity
-	n was at or be				-								
☐ My systen	n exceeded th	e copper ac	ction level	and				samplin	g sites exc o	eeded	the copper	action	ı level.
My signature below indi I have also notified the c information contained h	owner of each san	npling site of the	eir sites' indiv	e been previous idual results. I d	sly a certii	fy unde	d in writing r penalty c						
Tit	le .			Signature of PV	NS	or Owne	r's Renres	sentative				Date	



LCR-E

Lead and Copper - 90th PERCENTILE COMPLIANCE Report (For Systems Required to Collect 5 Samples)

	TION: Please refer to v		mpling plan to	or approved sampling lo	ocations.
PWS ID #:			City / Town:	approvou oupg	
PWS Name:				PWS Class:	COM NTNC
Sampling	☐ FIRST SEMI-ANNUAL S	SAMPLING PERIOD		☐ REDUCED - EVERY	THREE YEARS
Frequency:	☐ SECOND SEMI-ANNUA	AL SAMPLING PERIOD		☐ LEAD SERVICE LINE	(LSL) REPLACEMENT PROGRAM
(choose one)	☐ REDUCED – ANNUAL			☐ DEMONSTRATION	
Please report results limit (MDL) but below mg/L for copper. Step 2: Take the ave Step 3: Compare the have an exceedance	that are ND or less than (- 0.005 mg/L for lead or 0.0 rrage of the 4 th and 5 th high 90th percentile value aga and are required to conta	<) the laboratory's reported d 15 mg/L for copper shall be re- nest sample results. This is year	etection limit (Meteorited as measons our 90th percent level. If the 90 sible for information level in	IDL) as zero. Results at control or may be reported tile sample value. In percentile value is high attornion on compliance action.	
	· · ·			<u> </u>	<u> </u>
#	All regults for compling po		44		SULTS (mg/L)
1*	All results for sampling pe	SHOU	# All result 1* 2 3	Ali results to	or sampling period
2			-		
3			3		
4			4		
5			5		
*Lowest Value	and to collect five	lead and copper samp	daa Murayat	omo a alla ata d	lead and copper samples.
Circle 4° and 5° 1	,	ts above, then average sighest result + Value of the		<u> </u>	
(Lead 90 th percent		pared to 0.015 mg/L The lead action level)	(Copper 9	0 th percentile value)	Compared to <u>1.3 mg/L</u> (The copper action level)
II. CERTIFICATIO	N:				
Check and comp		manut for load on datam			
you are a commi	unity system you mus 310 CMR 22.16A(4)(st comply with the Cons			u have an exceedance and eporting requirements in
you are a common accordance with		st comply with the Cons (i)6. he lead action level. d action level	sumer Confid	dence Rule (CCR) r	
you are a comminaccordance with My system My system Check and compand you are a commination	310 CMR 22.16A(4)(stem was at or below to stem exceeded the lead olete the correct state	st comply with the Cons (i)6. he lead action level. d action level (Insert # of ment for copper as det must comply with the	sumer Confidence samples) ermined fron	dence Rule (CCR) responsible repling sites exceeded in the above results.	eporting requirements in
you are a comming accordance with My system My system My system Check and compand you are a coaccordance with	310 CMR 22.16A(4)(stem was at or below to stem exceeded the lead ollete the correct state ammunity system you	st comply with the Cons (i)6. he lead action level. d action level (Insert # of ment for copper as det must comply with the (i)6.	sumer Confidence samples) ermined fron	dence Rule (CCR) responsible repling sites exceeded in the above results.	eporting requirements in I the lead action level. If you have an exceedance
you are a comming accordance with My system	310 CMR 22.16A(4)(stem was at or below to stem exceeded the lead ollete the correct state immunity system you 310 CMR 22.16A(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(st comply with the Cons (i)6. he lead action level. d action level (Insert # of ment for copper as det must comply with the (i)6. he copper action level.	sumer Confidence samples) ermined fron	npling sites exceeded to the above results. Tonfidence Rule (CC	eporting requirements in I the lead action level. If you have an exceedance
you are a comming accordance with My system My system My system My system My signature below if 310 CMR 22.06B(7).	310 CMR 22.16A(4)(stem was at or below to stem exceeded the lead of the lead o	st comply with the Cons (i)6. he lead action level. d action level (Insert # of ment for copper as det must comply with the (i)6. he copper action level. oper action level and (Insert # of ment for copper as det must comply with the (i)6. he copper action level. oper action level and (Insert # of	samples) ermined from Consumer C sert # of samples) n previously ap, f their sites' indi	npling sites exceeded n the above results. confidence Rule (CC) sampling sites exce	I the lead action level. If you have an exceedance CR) reporting requirements in
you are a comming accordance with My system My system My system My system My signature below if 310 CMR 22.06B(7).	310 CMR 22.16A(4)(stem was at or below to stem exceeded the lead plete the correct state or stem was at or below to stem was at or below to stem was at or below to stem exceeded the copardicates that all sampling of the or fill out this form and the infill out this form and th	st comply with the Cons (i)6. he lead action level. d action level (Insert # of ment for copper as det must comply with the (i)6. he copper action level. oper action level and (Insert # of (Insert #	samples) ermined from Consumer C sert # of samples) n previously ap, f their sites' indi	mpling sites exceeded in the above results. onfidence Rule (CC) sampling sites exceeded in the above results. onfidence Rule (CC) sampling sites exceeded in writing by the best and complete to the best initial and complete to the best initial sites and complete to the sites and complete to	If you have an exceedance CR) reporting requirements in eleded the copper action level.

Massachusetts Department of Environmental Protection - Drinking Water Program BACTERIOLOGICAL REPORT

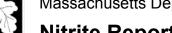
I. PWS	SINFORM	MATION:	Refer to your Mas	sDEP Colifo	m Sampli	ng Plan to	help co	mplete the	e PWS In	formation ar	nd Mass[DEP App	proved S	Sample	e Site Information s	sections below.
PWS	ID #:		PWS Name:	FORD'S	/IEADOW				City/To	wn:	FRA	MINGH	AM		Class: COM 🖂 N	NTNC TNC
II. ANA	ALYTICA	L INFOR	MATION: Refer to	your MassDl	EP state la	ab certifica	ate for pr	oper Lab	MA Cert.	# and certifi	ied metho	ods.				
Prim	ary Lab N	/IA Cert.#	#: M-MA086	Primary La	b Name:	Alpha A	nalytical							Subco	ontracted? (Y/N):	N
Anal	ysis Lab	MA Cert.	#: M-MA086	Analysis La	b Name:	Alpha A	nalytical									
☑ Origin	nal Report	Resub	mitted Report Con	firmation Rep	ort (1) F	Reason for I	Resubmis	sion: Res	sample 🔲 R	teanalysis □ R	Report Corre	ection	(2) Colle	ection D	ate of Original Sample	:
To	otal Colifo	rm	E.coli		Enteroco	occi		ecal Colifo		H	НРС				Lab Sample Not	es
(TC) Metho	od	(EC) Method		(ET) Met	hod	(FC) Metho	d ^{2B}	M	ethod					
	9223B		9223B	.		1		1	1						ı	1
Mass Sample	DEP Appr Location	oved San	nple Site Information	10 "	EC 4,5	ET ^{4,5}	FC ^{2B,4}	Chlorine Result ^{2A}	HPC Result ^{2A}	COLLEC	TION	Δ	NALYSIS		COLLECTED	LAB SAMPLE
Type ^{1,3}	Code #1	Approv	red SAMPLE LOCATION	N ¹ Result	Result	Result	Result	mg/L	#cfu/mL	DATE	TIME	DAT	E 1	TIME	ВҮ	ID#
	PW-1	Bedrock	Well No.1	A	Α					2/8/2017	14:00	2/9/20	017 0)5:30	J.G.B.	L1704085-01
											1					
											1					
											1					
			, and Approved Sample									1	<u> </u>		I	1
			s shall be taken at the sa tribution Sample, RO-Ori													d SWTR sources only.
4 Report	as #/100mL	., P (present	t), A (absent), or Too Nu	merous To Cour	nt: TNTC-I (in	valid) or TN	TC-P (pres	ent). Notify I	MassDEP of	f any <i>E.coli</i> or e	enterococci	positive re	sults by th	e end of		
			repeat samples within 24												nth in which the results	are received or no
			of the monitoring period,	· [· · · · · / · · ·]				.,,				,				<u> </u>
			nat I am the person authorplete to the best extent o			the informat	ion contain	ned		ry Authorize		n	1	1,1	2/17/1	17
	sDEP Revi					eview Com	nments:		Signat	ure and Date	ź	400	ept	Wa	ikins 2111	





Perchlorate Report

I. PWS INFORM	ATION: Please ref	er to your DE	P Wate	r Quality	/ Sampling	Schedu	ıle (WQSS	S) to help	comp	lete this for	m	
PWS ID #:					Cit	y / Tow	n: FRA	MINGH	AM			
PWS Name:	Ford's Mea	adow						PWS (Class:	сом 🛚	NTNC	□ TNC □
DEP LOCATION (LOC) ID#	N	DEP Loca	tion Nan	ne		,	Sample Info	ormation		Date Collect	ed	Collected By
PW-1	Bedrock W	ell No.1				☐ (M) ☑ (S)i	a.c.p.o	⊠ (R)aw □ (F)inisl		2/8/2017	J.0	G.B.
Routine or Special Sample		ginal, Resubmi onfirmation Re			(1) Reason	If R		ed Repo	rt, list below: (2) Collection	on Date o	f Original Sample
□ RS ⊠ SS	G ⊠ Original [Resubmitted	☐ Confir	mation	Resamp	ole 🗌 Rea	ınalysis 🔲 I	Report Co	rrection			
SAMPLE NOTES - (Such as, if a Manifold/M	ultiple sample, l	ist any so	ources that	t were on-lin	e during co	ollection).					
II ANALYTICAL	LABORATORY I	NEORMATIO	N·									
Primary Lab MA		Primary	_	mo: A	lnho Anol	rution1				Subs	ontracto	ed? (Y/N) N
Primary Lab MAC	Jeit. #. Mi-MAU00		Lau Nai	ine. A	lpha Anal	yucai				Subc	Ontracte	:u? (1/N) [N
Analysis Lab MA	Cert. #: M-MA086	Analysis	Lab Naı	me: A	lpha Anal	ytical						
CONTAMINANT	Result	UOM	MCL	MDI	L	MRL	Lab Me	ethod	Date	Analyzed	s	Lab Sample ID#
PERCHLORATE	ND	μg/L	2.0	0.05	0 0	.050	332	2.0	2/1	5/2017	L1	704085-01
CONDUCTIVITY		umhos/cm										
Perchlorate analysis i	requires the use of a Ma	ssachusetts DE	P approv	ed laborat	tory.			<u> </u>				
	ations between the Minir tentatively quantified).	mum Detection	Limit (MD	L) and the	Minimum R	eporting L	evel (MRL)	must be re	eported a	as estimated (J) values	(i.e. perchlorate is
	yzed with either EPA Me nout a perchlorate spike							concentrat	tions bety	ween 0.8 µg/L	and 2.0 μ	g/L must be
LAB SAMPLE NOTE	:0											
LAB SAMPLE NOTE	.5											
Reanalysis and S	Spike Recovery (reg	uired for res	ults bet	ween 0.8	B ug/L and	2.0 ug/L	or sampl	les subie	ect to p	retreatment	in meth	od EPA 314.0)
Compound	Result	MDL		//RL	Spi Concen	ke	Spik Recov	ie	<u> </u>	b Method		Date Analyzed
Compound	(µg/L)	(µg/L)	(h	ıg/L)	(µg		(%)	-	La	D WELLIOU		ate Analyzeu
Perchlorate (reanalysis)												
Perchlorate (spike)												
										1000	1999	•
authorized to fill out	under penalties of lat this form and the inform	nation containe	d herein		Primar	y Lab D	irector S	•		1/		ikons
true, accurate and co	mplete to the best exten	t of my knowled	ige.					Dat	te:	2	2/17/20	17
		se results electronically, mail <u>TWO</u> copies of this report to your DEP Regional Office no later than 10 days after the en which you received this report <u>or</u> no later than 10 days after the end of the reporting period, whichever is sooner.								nd of the month		
DEP REVIEW STA	ATUS (Initial & Date)	•		Re	eview							□WQTS
Accepted	Disapp	roved		Comn	nents							Data Entered



Nitrite	Re	ро	rt
----------------	----	----	----

☐ Disapproved_

☐ Accepted

I. P	WS INFORMA	TION: Pleas	se refer to your DEP	Water Qua	lity Sampling So	hedule (WQSS) to help comple	ete this form	
PW	'S ID #:				City / Tow	n: FRAMING	SHAM		
PW	S Name:	Ford's Mea	adow			PW	S Class: CC	M 🛛 NTNC	☐ TNC ☐
Г	EP LOCATION (LOC) ID#		DEP Location	on Name		Sample Ir	formation	Date Collected	Collected By
Α	PW-1	Bedrock	Well No.1			☐ (M)ultiple ☑ (S)ingle		2/8/2017	J.G.B.
В						☐ (M)ultiple ☐ (S)ingle	(R)aw (F)inished		
С						☐ (M)ultiple ☐ (S)ingle	(R)aw (F)inished		
D						(M)ultiple (S)ingle	(R)aw (F)inished		
	Routine or Special Sample	O	Priginal, Resubmitted of Confirmation Report	or	(1) Reas	If Res	ubmitted Report,		of Original Sample
Α	□RS ⊠SS	☑ Origina	I ☐ Resubmitted ☐ Co	onfirmation	☐ Resample ☐ R		,	-,	or original campio
В	□RS □SS	☐ Origina	I ☐ Resubmitted ☐ Co	onfirmation	☐ Resample ☐ R	eanalysis Repo	ort Correction		
С	□RS □SS	☐ Origina	I ☐ Resubmitted ☐ Co	onfirmation	☐ Resample ☐ R	•			
D	□RS □SS	☐ Origina	I ☐ Resubmitted ☐ Co	onfirmation	☐ Resample ☐ R	eanalysis Repo	ort Correction		
	SAMPLE NOTES	- (Such as, if a	Manifold/Multiple samp	le, list the sou	rces that were on-li	ne during sample of	collection).		
Α									
В									
С									
D									
	MALVICALI	ADODATO	DV INCODMATIO	\1-					
			RY INFORMATION		Aluba Anabatiaal				N
	nary Lab MA Ce		1 1 1 1 1 1 1 L L L		Alpha Analytical			Subcontracte	d? (Y/N) N
Ana	llysis Lab MA Ce	ert. M-MA	Analysis Lal	b Name:	Alpha Analytical				
	NITRITE Result (mg/L)	MCL (mg/L)	MDL (mg/L)		Lab Method		Date Analyzed	,	Lab Sample ID#
Α	ND	1	0.050		353.2		2/8/2017	L	1704085-01
В		1							
С		1							
D		1							
Finis		xceeding the M	eding ½ of the MCL (0.5 CL of 1 mg/L requires co ces.					·	
	LAB SAMPLE NO	OTES							
LAB SAMPLE NOTES A B C D I certify under penalties of law that I am the person Primary Lab Director Signature: Joseph Warkons									
	orized to fill out this	form and the i	of law that I am the information contained he extent of my knowledge	erein is	Primary Lab	Director Sig	nature:	05epl Wa 2/17/2	
In a									
end		CMR 22.15(2), ch the results ar	if mailing paper reports, re received <u>or</u> no later th						
end (eDI	of the month in whic	CMR 22.15(2), ch the results ar same as above.	re received <u>or</u> no later th						



Nitrate Report

I. P	WS INFORMAT	ION: Please	refer to your DEP V	Vater Qualit	y Samı	oling Schedule	(WQ	SS) to help	compl	ete tl	his form	
PW	'S ID #:				С	ity / Town:	FRA	MINGHAI	М			
PW	'S Name:	Ford's Mea	ndow					PWS CI	ass:	CON	M ⊠ NTNC	☐ TNC ☐
	DEP LOCATION (LOC) ID#		DEP Location Nan	ne		Sample Inf	forma	tion	Sampl Acidifie		Date Collected	Collected By
Α	PW-1	Bedrock	Well No.1			☐ (M)ultiple ☑ (S)ingle		(R)aw (F)inished	Yes [.	2/8/2017	J.G.B.
В						☐ (M)ultiple ☐ (S)ingle		(R)aw (F)inished	Yes [
С						☐ (M)ultiple ☐ (S)ingle		(R)aw (F)inished	Yes [
D						☐ (M)ultiple ☐ (S)ingle		(R)aw (F)inished	Yes [
	Routine or Special Sample	0	riginal, Resubmitted or Confirmation Report	r		(1) Reason for		Resubmitte omission	d Report	·····		of Original Sample
Α	□ RS 🖾 SS	☑ Origina	I ☐ Resubmitted ☐ Cor	nfirmation	☐ Res	sample Reanaly	/sis 🗆	Report Cor	rection			
В	□RS □SS	☐ Origina	I ☐ Resubmitted ☐ Cor	nfirmation	☐ Res	sample Reanaly	/sis 🗆	Report Cor	rection			
С	□RS □SS	☐ Origina	I ☐ Resubmitted ☐ Cor	nfirmation	Res	sample Reanaly	/sis 🗆	Report Cor	rection			
D	□RS □SS	☐ Origina	I ☐ Resubmitted ☐ Cor	nfirmation	Res	sample Reanaly	/sis 🗆	Report Cor	rection			
	SAMPLE NOTES -	- (Such as, if a I	Manifold/Multiple sample	, list the sourc	es that v	vere on-line during	samp	le collection).			
Α												
В												
С												
D												
II. A	NALYTICAL LA	ABORATOR	Y INFORMATION:									
Prir	nary Lab MA Cert	#: M-MA	.086 Primary Lal	b Name:	Alpha A	nalytical					Subcontracte	d? (Y/N) N
Ana	ılysis Lab MA Cei	rt. #: M-MA	Analysis La	b Name:	Alpha A	nalytical						
	NITRATE Result (mg/L)	MCL (mg/L)	MDL (mg/L)		Lab M	ethod		Date	Analyzed	I	Sa	Lab mple ID#
Α	ND	10	0.10		35	3.2		2/8	3/2017		L17	704085-01
В		10										
С		10										
D		10										
Finis		ceeding the MC	ling $\frac{1}{2}$ of the MCL (5 mg/L of 10 mg/L requires coes.								•	
	LAB SAMPLE NO	TES										
Α												
В												
С												
D											ine a no	0
	orized to fill out this	form and the i	f law that I am the information contained he extent of my knowledge.		Pri	mary Lab Dire	ector	Signatu Da		Jo	2/17/20	
end		n the results are	mailing paper reports, <u>T</u> received <u>or</u> no later thar									
_	P REVIEW STATU		ite)	R	Review							□wQTS
	\ccontod	□ Die	annroyed		ments							Data Entered

ALPHA	CHAIN O				PAGE	_ OF	Date	Rec'd i	in Lab:	2/	8/17	2		ALP	HA Jo	ob #: [117	04085
8 Walkup Drive Westboro, MA	320 Forbes Blvd		t Informa				Rep	ort Inf	ormat	ion - D	ata Del	iverat	oles	Billi	ng Info	ormatio	on	
Tel: 508-898-9	220 Tel: 508-822-9300	Project	Name: N	ixon	Rd		ΠA		-	□ ЕМА				_		Client inf		#:
Client Information		Project	Location:	Framin	, hem					uiremei			ject l	nforma	tion R	Require	ments	
Client: No Ahea	st Georgiana Inc	Project	#:		۵		☐ Yes	□ No	MA Mo Matrix	CP Analy Spike R	rtical Me equired	ethods on this	SDG?	(Regu	Yes 🗆	No CT	RCP Ar	nalytical Methods
Address: 97 W	alast St	Project	Manager:	Jay 3	Min's		☐ Yes	□ No	GW1 S	Standard	s (Info I	Require	d for N	1etals &	EPH w	ith Targ	ets)	,
Clinta	MA 01450	ALPHA	Quote #:		8					S RGP Progran	1				Criter	ria		
Phone: 978 - 3	365-9045	Turn-	Around Ti	me				1	1	75/	m/_	1.7		10	5	7 /	7	
Additional P	roject Information:	Date		RUSH (only	confirmed if pre-s	approved!)	D8260 C ANALYSIS	WETAL DABN DES 10 524.2	METALS: DINCP 13 DINCE	EPH. DRanges & Tarm.	D PCB C Targets D Ranges Only	TPH: DQuant Only	S/ DFingerprint	5 Elene 10	Radin Ambas	- feametry	P.	AMPLE INFO iltration Field Lab to do reservation Lab to do
ALPHA Lab ID (Lab Use Only)	Sample ID		Colle	ection	Sample Matrix	Sampler	, o o	META!	METAL	EPH: D	D PCB	Hali	10/a/		ed .	11		Lab to do
-5/	PW-1		2-8-17	14:00	DW	J63	X					7	X	X	X		Oamp	e Comments
Container Type P= Plastic A= Amber glass V= Vial G= Glass B= Bacteria cup C= Cube O= Other E= Encore D= BOD Bottle	Preservative A= None B= HCI C= HNO ₃ D= H ₂ SO ₄ E= NaOH F= MeOH H= Na ₂ S ₂ O ₃ I= Ascorbic Acid J= NH ₄ CI K= Zn Acetate O= Other	Relinqui	shed By:		Pre	iner Type eservative f/Time	2-17	Re	eceived	By:		1	Date/T	ime 5'.54	Alph	amples a's Term reverse	ns and C	d are subject to onditions.





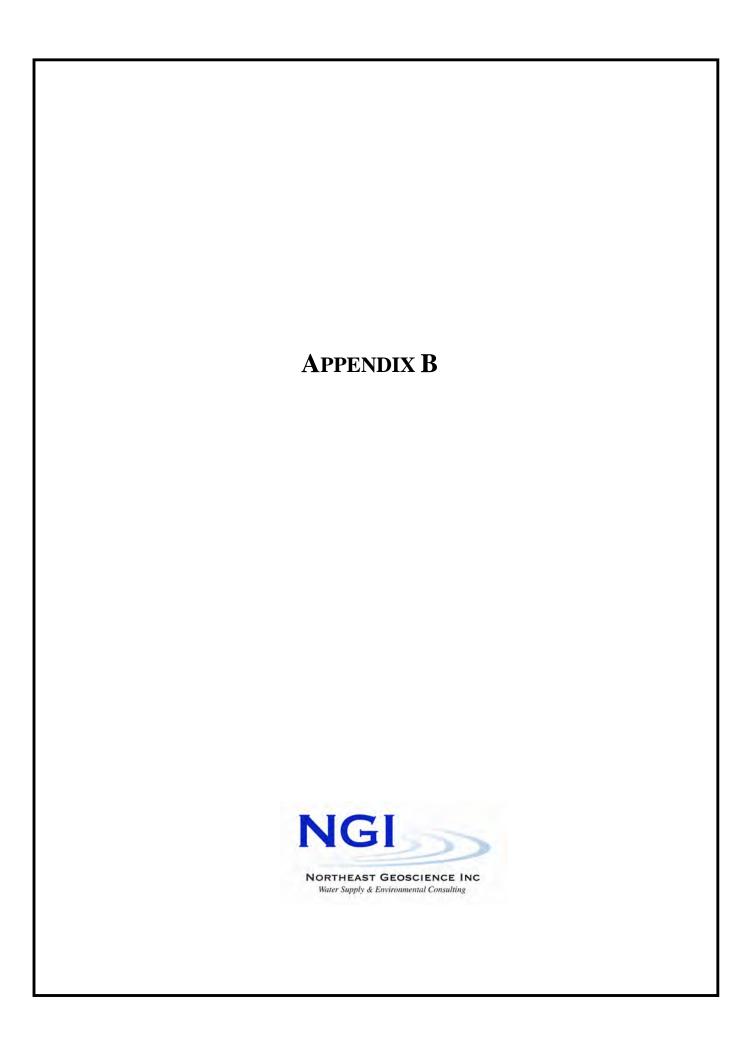
Radionuclide Report

PWS ID #:	TE	3D				Ci	ty / Town:	Fra	mingha	m			
Town	Fra	mingham							PWS	Class:	COM 🛛 I	NTN	TNC [
DEP LOCATION (LOC) ID#		DE	P Location I	Vame			San	nple Inf	ormation		Date Collected	T	Collected By
PW-1	Bedroc	k Well No.	1			[☐ (M)uitiple ☑ (S)ingle		⊠ (R)aw □ (F)inis		02/08/2017	JF	RB
Routine or Special Sample			Resubmitted ation Report			(1)	Reason for I	The second second	THE PROPERTY AND ADDRESS.	A contract that the party	, list below:	into of	Original Sample
□ RS ⊠ SS	□ or	iginal 🗆 Resu	ibmitted 🗆 C	onfirmat	ion		sample Re	analysi		rt	(z) conection b	ate of	Original Sample
SAMPLE NOTES -	(Such as,	if a Manifold/N	fultiple sampl	le, list an	y source	s that were or	Corre	ing sam	ple collect	ion). New W	/ell		
New Source A									1	23,220,1			
II. ANALYTICA	L LABO	RATORY I	NFORMA	TION:									
Primary Lab MA		M-MA086		y Lab I	Name:	Alpha Anal	ytical, inc.				Subcontr	acted	17 (Y/N) Y
Was this sam composited by th		List the comentry point.	TE SAMPLE I	NOTES ce by DE	P Sourc	e Code (XXX)	(XXX-XXX) a	nd date	s collected	l, up to four	consecutive qua	rterly s	samples per single
												-	
LAB SAMPLE NOT	ES : Rade	on sample re	ceived after	holding	time had	d expired.							
Contaminar	nt	RESULT	Std Dev (+/-)	MCL	MDL	Lab	Viethod		Date lalyzed	Lab Sample	Analysis ID# MA Ce		Analysis Lat
ROSS ALPHA		1.8	1,3		0.7	SM	7110B	03/0	01/2017	B13017-	001 CO000	800	Hazen Researc
IRANIUM – activity oCi/L)	,												
Report Uranium resu	it and MDL	in (pCI/L) as	analyzed, oth	nerwise (ise form	ula to calculate	Uranium µg	g/L x 0.0	37 = Uranii	um pCl/L].	Check this box if	result	is calculated [7]
ADJUSTED GROSS pCI/L)	- W. (100 mm)		-inc		The M	CL for Adjuste	d Gross Alph urement may	a (Gros	s Alpha m	inus Uranium	The second second second second	irnee :	alpha raeull ie
RANIUM – mass ig/L)													
eport Uranium resu	It and MDL	in (μg/L) as a	nalyzed, othe	rwise us	i e formul	a to calculate	[Uranium pC	/L / 0.6	7 = Uraniu	m µg/L]. Ct	neck this box if re	sult is	calculated
ADIUM-226		0.2	0.2		0.1		00-Ra B		24/2017	B13017			Velement
ADIUM-228		0.0	0.8		0.8	1 2 2 6	Ra-05	-	9/2017	B13017	CAT 0.77	17 4	Hazen Research
OCI/L) OMBINED RADI OCI/L)	UM	0.2	****		A gross	CL for Combin s alpha measu	ed Radium (R	Radium- be subs	226 plus F	the radium-2	is 5 pCi/l	e aros	es alpha recult le
ROSS BETA				*	- 4		y pone. II git	oas aipi	a exceeds	s o poirc, ra	dium-220 must a	iso de	measured.
he MCL for gross b instituents. Gross E	eta is 4 mre Beta testing	em/year, If gro Is optional, ur	ess beta exce nless specific	eds 50 p	Ci/L, and	I alysis of the sa DEP.	mple for Pho	ton Acti	vity shall b	e performed	to identify the m	najor r	adioactive
ADON Ci/L)		1650	76		33.7	SM 750	0-Rn-B	02/14	1/2017	B13017-00	01 CO0000	08	Hazen Research
Radon testing is opt	ional, unles	s specifically	required by E	EP. The	e MA gui	deline for Rad	on is 10,000 p	pCI/L. T	he EPA ha	as proposed	a radon MCL of	300 -	4000 nCi/l
ertify under penaltie	s of law the	at I am the per	rson authoriza	ed to		ary Lab D		_	// .	17			lazen Research, Inc.
out this form and th curate and complete	e informati	on contained i	herein is true.	77,00	2.000	.,		Dai	1	15/201	20115100		nean resesson, Inc.
not submitting the	ese result: In which y	s electronica ou received	lly, mail <u>TW</u> this report o	/O copi	es of thi ter than	is report to y 10 days afte	our DEP Re or the end of	inional	Office	Inter than	10 days after chever is soone	the e	nd of the month
P REVIEW STA				V-0-04		Review	1		C.S. III.S P	- in-my mills		a.	DWOTS
Accepted		Disappro	ved			Comments							☐ WQTS Data Entered

ALPHA Job #: L/70 4/00 Billing Information D Same as Client info Po #: Ormation Regulrements D Yes D No CT RCP Analytical Methods Required for MCP Inorganics) tals & EPH with Targets Criteria	Filtration ☐ Field ☐ Lab to do Preservation ☐ Lab to do Sample Comments	All samples submitted are subject to
Deliverables Billing Information Best Project Information Requirements Wethods Ores In No CT RCP And On this SDG2 (Required for MCP Inorganics) Criteria Criteria Criteria Criteria Criteria	X TOLS CALLED X	Date/Time All sample
Tiliformation - Data Tiliformation - Data	METALS: UMCP 13 METALS: URangos & Targ EPH: URangos & Targ METALS: URCP 13	Received By: D
PAGE OF T	Sample Sampler Matrix Initials	Container Type Preservative Date/Time
Fortes Bind Sold Sect Information Froject Uniormation Project Name: NIXan (2d Project Name: NIXan (2d Project Name) Froject Manager: Say Silling ALPHAQuote #: Turn-Around Time 1926, 11x1 AS ALPHAQuote #: Date Due: Trination: Date Due:	Collection Date Time 2-2-17 14:26	Relinquisped By:
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Sample ID	Preservative A= None B= HCI C= HNO, C= HNO, C= HNO, C= NO,
Client Plant Information Address: 37 Welling Phone: 978-565- Email: 27 Julius Phone: 978-565- Email: 27 Julius Phone: 978-565-	ALPHA Lab ID (Lab Use Only) SHOD	Container Type Press Passic A Amber glass A Glass Glass B P P P P P P P P P P P P P P P P P P P

SUB UPS: HAZEN, CO @M

Project Information Project Name: Projec		CHAIN OF CUSTODY		-		,					
Project Information			PAGE 1 0F 1	nan	e Kecdini	ap.			ALPHA	Job #: L	1704100
Project Name: Project Name	ANALYTICAL	Project Information		Re	port Info	rmatio	n Data D	eliverables		Informati	on
Project tocation. MA Project tocation. MA		Project Name:			FAX			IL Defiverables	Same	as Client in	fo PO#.
Broject ## Project ## Project ## Project ## Project ## Project ## Project ## Project ## Project ## Project ## Project ## Project ## Project ## Project Proj	Client Information	Project Location: MA		Rec	gulatory	Requir	ements/F	eport Limi	S		
Standard Times Standard Times Standard Times Standard Times Standard Times Standard Times Standard Standard Times Turn-Around Times Standard Standard Standard Times Turn-Around Times Times: Times: Times: Standard Standard Standard Standard Standard Times Times: Standard Standard Standard Standard Standard Standard Times Times: Standard S	Client. Alpha Analytical Lab	Project #.		otati	e/Fed Prog	ram			Criteria		
109ct Specific Requirements/Comments/Detection Limits: Sample ID	Address: 8 Walkup Drive		, å.	MC	P PRES	UMPTIN	E CERTA	INTY-CT R	EASONAE	SI F CON	EIDENCE PROTOC
Spandard Turn-Around Turne	Westborough, Ma 01581				sa	° N	¥	e MCP Analytic	al Methods R	equired?	HELMOLD INCIDE
Standard Due Date: Time:	Phone: 508-898-9220	Turn-Around Time			les	S □		e CT RCP (Re	asonable Con	fidence Prote	ools) Required?
Physical Engine Data	Fax:		STANDORDA SIGN SINCE		ALYSIS	-					
Part Secrific Requirements/Comments	Email: subreports@alphalab.com	1	THE PROPERTY OF THE PROPERTY O	8							Filtration
Sample ID Samp	These samples have been Previously analyzed by Alpha										☐ Done ☐ Not Needed
PW-1 Sample D	Other Project Specific Requirements/Commen Please reference Alpha Job # L1704100 on this rep	nts/Detection Limits: port.									☐ Lab to do Preservation ☐ Lab to do
Sample ID Sample ID Collection Sample				No	-						(Please specify below)
PW-1 Dete Time Metrix Initials Hearth Metrix Metri											
NSWER QUESTIONS ABOVE! NSWER QUESTIONS ABOVE! CONTAINER TYPE OF CT RCP? REGINALISHED By: Date: Time	(Lab Use Only)	Ттте	-	- 44							Sample Specific
NSWER QUESTIONS ABOVE! OUR PROJECT Relinquished By: Received By: Date/Time	PW-1	T	Total Control		+						Comments
NSWER QUESTIONS ABOVE! NSWER QUESTIONS ABOVE! OUR PROJECT Relinquished By: Relinquished By: Our PROJECT Relinquished By: Date:Time Received By: Date:Time Receive		1	DW	X		X					
NSWER QUESTIONS ABOVE! NSWER QUESTIONS ABOVE! NSWER QUESTIONS ABOVE! Container Type V P P P C C C C C C C C C C C C C C C C											
NSWER QUESTIONS ABOVE! NSWER QUESTIONS ABOVE! NSWER QUESTIONS ABOVE! Container Type V P P C C C C C C C C											
NSWER QUESTIONS ABOVE! NSWER QUESTIONS ABOVE! Container Type \(V \) P \(P \) P \(V \) C \(C \) C \(V \) C \(V \) C \(C \) C \(V \) C \(V \) C \(C \) C \(V \) C \(-						
NSWER QUESTIONS ABOVE! NSWER QUESTIONS ABOVE! OUR PROJECT Relinquished By: Date/Time Received By: Date/Time Received By: Date/Time Received By: Date/Time											
NSWER QUESTIONS ABOVE! Container Type V P P											
Container Type V P P C C C C C C C C											
CP or CT RCP? Relinquished By: CP or CT RCP? Relinquished By: CP or CT RCP? Acceived By: Date/Time Received By: Date/Time Received By: Date/Time	LEASE ANSWER QUESTIONS ABOVE		- 1		-						
UR PROJECT Relinquished By: Date/Time Received By: Date/Time			Container Type	>	-	<u>a</u>					
CP or CT RCP? Relinquished By: Date/Time Received By: Date/Time D	FOTI ODD BLOX 9					O	, ,			r	and completely Samples can
CP of CI RCP?	S TOOK PROJECT	Relinquish	ed By:	Date	a/Time		Recei	ved By:	D	ate/Time	turnaround ame clock will not
	MA MCP of CT RCP?										submitted are subject to
											Sittle Stabilities Calific



	F	G	I	К	L	M	N	P	R	S	Т	U	W	Y	Z
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	48 F DD (ft)	lour Pumping Test at PW-3	t 4.5 gpm on ET (min)	PW-1 at 45 T (deg F)	Nixon Road Fram FT (H2O) corr	DD (ft)	A 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 9/29/17 11:20	10.10 20.10	49.58 49.94	64.61 61.13	165.91 169.39	9/29/17 11:10 9/29/17 11:20	10.10 20.10	50.47 50.47	97.33 95.00	0.05 2.37	9/29/17 11:10 9/29/17 11:20	10.00 20.00	48.87 48.87	54.151482 54.095811	0.07
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 10	9/29/17 11:50 9/29/17 12:00	50.10 60.10	50.29 50.29	50.70 48.10	179.82 182.41	9/29/17 11:50 9/29/17 12:00	50.10 60.10	50.47 50.47	90.84 89.89	6.53 7.49	9/29/17 11:50 9/29/17 12:00	50.00 60.00	48.70 48.70	53.990013 53.941503	0.23
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 14	9/29/17 12:30 9/29/17 12:40	90.10 100.10	50.29 50.29	45.76 43.79	184.76 186.73	9/29/17 12:30 9/29/17 12:40	90.10 100.10	50.47 50.47	87.73 86.88	9.65 10.50	9/29/17 12:30 9/29/17 12:40	90.00	48.87 48.87	53.895072 53.884446	0.32
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 9/29/17 13:10	120.10 130.10	50.29 50.29	41.49 41.48	189.03 189.04	9/29/17 13:00 9/29/17 13:10	120.10 130.10	50.47 50.47	85.62 85.24	11.76 12.13	9/29/17 13:00 9/29/17 13:10	120.00 130.00	48.70 48.70	53.86227 53.848179	0.36
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 9/29/17 13:50	160.10 170.10	50.29 50.29	39.01 37.81	191.51 192.71	9/29/17 13:40 9/29/17 13:50	160.10 170.10	50.47 50.47	83.77 83.09	13.61 14.28	9/29/17 13:40 9/29/17 13:50	160.00 170.00	48.70 48.70	53.819766 53.795973	0.40
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 9/29/17 14:20	190.10 200.10	50.29 50.29	36.59 35.52	193.93 195.00	9/29/17 14:10 9/29/17 14:20	190.10 200.10	50.47 50.47	81.99 82.34	15.38 15.03	9/29/17 14:10 9/29/17 14:20	190.00 200.00	48.70 48.70	53.801979 53.78142	0.42
25	9/29/17 14:20	210.10	50.29	34.88	195.64	9/29/17 14:30	210.10	50.47	81.64	15.03	9/29/17 14:20	210.00	48.70	53.78142	0.44
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 28	9/29/17 14:50 9/29/17 15:00	230.10 240.10	50.47 50.47	33.08 33.80	197.43 196.72	9/29/17 14:50 9/29/17 15:00	230.10 240.10	50.47 50.47	81.31 80.71	16.06 16.67	9/29/17 14:50 9/29/17 15:00	230.00 240.00	48.87 48.87	53.770101 53.782575	0.45
29	9/29/17 15:10	250.10	50.47	33.69	196.72	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 9/29/17 15:40	270.10 280.10	50.47 50.47	31.74 31.62	198.78 198.90	9/29/17 15:30 9/29/17 15:40	270.10 280.10	50.47 50.47	79.52 79.56	17.85 17.81	9/29/17 15:30 9/29/17 15:40	270.00 280.00	48.87 48.87	53.740995 53.7306	0.48
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 35	9/29/17 16:00	300.10 310.10	50.29 50.29	31.44 31.47	199.07 199.05	9/29/17 16:00 9/29/17 16:10	300.10 310.10	50.47 50.47	78.47 78.41	18.90 18.96	9/29/17 16:00 9/29/17 16:10	300.00 310.00	48.87 48.87	53.74677 53.750004	0.47
36	9/29/17 16:10 9/29/17 16:20	320.10	50.29	30.23	200.29	9/29/17 16:10	310.10	50.47	78.41	19.21	9/29/17 16:10	320.00	48.87	53.750004	0.47
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 9/29/17 16:50	340.10 350.10	50.29 50.29	30.37 30.06	200.15 200.46	9/29/17 16:40 9/29/17 16:50	340.10 350.10	50.47 50.47	77.70 77.23	19.67 20.15	9/29/17 16:40 9/29/17 16:50	340.00 350.00	48.87 48.87	53.722284 53.732448	0.50
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 9/29/17 17:30	380.10 390.10	50.29 50.29	29.00 27.94	201.52 202.58	9/29/17 17:20 9/29/17 17:30	380.10 390.10	50.47 50.47	76.42 76.32	20.96 21.06	9/29/17 17:20 9/29/17 17:30	380.00 390.00	48.87 48.70	53.724363 53.713275	0.49
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 46	9/29/17 17:50 9/29/17 18:00	410.10 420.10	50.29 50.29	28.67 27.91	201.84	9/29/17 17:50 9/29/17 18:00	410.10 420.10	50.47 50.47	76.35 75.75	21.02 21.62	9/29/17 17:50 9/29/17 18:00	410.00 420.00	48.70 48.70	53.722746 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	21.02	9/29/17 18:10	430.00	48.70	53.722746	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 50	9/29/17 18:30 9/29/17 18:40	450.10 460.10	50.29 50.47	26.51 26.06	204.01 204.46	9/29/17 18:30 9/29/17 18:40	450.10 460.10	50.47 50.47	75.43 74.89	21.94	9/29/17 18:30 9/29/17 18:40	450.00 460.00	48.70 48.70	53.725056 53.707038	0.49
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 54	9/29/17 19:10 9/29/17 19:20	490.10 500.10	50.47 50.47	25.03 26.31	205.48 204.21	9/29/17 19:10 9/29/17 19:20	490.10 500.10	50.47 50.47	74.46 74.30	22.91 23.07	9/29/17 19:10 9/29/17 19:20	490.00 500.00	48.70 48.87	53.711196 53.702418	0.51
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 57	9/29/17 19:40 9/29/17 19:50	520.10 530.10	50.47 50.47	25.34 25.76	205.18 204.76	9/29/17 19:40 9/29/17 19:50	520.10 530.10	50.47 50.47	73.91 73.73	23.47	9/29/17 19:40 9/29/17 19:50	520.00 530.00	48.87 48.87	53.688789 53.722746	0.53
58	9/29/17 20:00	540.10	50.47	24.79	205.73	9/29/17 19:30	540.10	50.47	73.72	23.65	9/29/17 20:00	540.00	48.87	53.722746	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 61	9/29/17 20:20 9/29/17 20:30	560.10 570.10	50.47 50.47	22.90 23.65	207.62 206.87	9/29/17 20:20 9/29/17 20:30	560.10 570.10	50.47 50.47	73.06 73.10	24.32 24.28	9/29/17 20:20 9/29/17 20:30	560.00 570.00	48.70 48.87	53.682783 53.706807	0.54
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 65	9/29/17 21:00 9/29/17 21:10	600.10 610.10	50.47 50.47	23.99 21.42	206.53 209.09	9/29/17 21:00 9/29/17 21:10	600.10 610.10	50.47 50.47	72.24 72.26	25.13 25.11	9/29/17 21:00 9/29/17 21:10	600.00 610.00	48.70 48.87	53.695719 53.679549	0.52
66	9/29/17 21:20	620.10	50.47	22.96	207.56	9/29/17 21:20	620.10	50.47	72.16	25.22	9/29/17 21:20	620.00	48.87	53.679549	0.54
67 68	9/29/17 21:30 9/29/17 21:40	630.10 640.10	50.47 50.47	22.19 21.93	208.33 208.59	9/29/17 21:30 9/29/17 21:40	630.10 640.10	50.47 50.47	71.89 72.01	25.48 25.37	9/29/17 21:30 9/29/17 21:40	630.00 640.00	48.70 48.70	53.671695 53.66823	0.55 0.55
69	9/29/17 21:40	650.10	50.47	22.44	208.59	9/29/17 21:40	650.10	50.47	72.01	25.40	9/29/17 21:50	650.00	48.70	53.682783	0.54
70	9/29/17 22:00	660.10	50.47	22.45	208.07	9/29/17 22:00	660.10	50.47	71.83	25.54	9/29/17 22:00	660.00	48.87	53.692716	0.53
71 72	9/29/17 22:10 9/29/17 22:20	670.10 680.10	50.47 50.47	23.96 21.59	206.56 208.93	9/29/17 22:10 9/29/17 22:20	670.10 680.10	50.47 50.47	71.48 71.51	25.89 25.86	9/29/17 22:10 9/29/17 22:20	670.00 680.00	48.70 48.70	53.671695 53.674929	0.55
73	9/29/17 22:30	690.10	50.47	20.96	209.56	9/29/17 22:30	690.10	50.47	71.36	26.02	9/29/17 22:30	690.00	48.87	53.661531	0.56
74 75	9/29/17 22:40 9/29/17 22:50	700.10 710.10	50.47 50.47	21.15 19.60	209.37 210.91	9/29/17 22:40 9/29/17 22:50	700.10 710.10	50.47 50.47	71.28 70.78	26.09 26.60	9/29/17 22:40 9/29/17 22:50	700.00 710.00	48.87 48.87	53.678394 53.677701	0.54
76	9/29/17 22:50	710.10	50.47	20.68	209.84	9/29/17 22:50	710.10	50.47	70.78	26.35	9/29/17 23:00	710.00	48.87	53.677701	0.54
77	9/29/17 23:10	730.10	50.47	19.51	211.01	9/29/17 23:10	730.10	50.47	70.26	27.11	9/29/17 23:10	730.00	48.70	53.672388	0.55
78 79	9/29/17 23:20 9/29/17 23:30	740.10 750.10	50.47 50.47	19.92 20.83	210.60 209.69	9/29/17 23:20 9/29/17 23:30	740.10 750.10	50.47 50.47	70.15 70.26	27.23 27.12	9/29/17 23:20 9/29/17 23:30	740.00 750.00	48.70 48.87	53.68902 53.686248	0.53
80	9/29/17 23:40	760.10	50.47	21.00	209.52	9/29/17 23:40	760.10	50.47	70.21	27.12	9/29/17 23:40	760.00	48.87	53.662455	0.56
81	9/29/17 23:50	770.10	50.47	20.95	209.57	9/29/17 23:50	770.10	50.47	70.00	27.37	9/29/17 23:50	770.00	48.70	53.654601	0.56
82 83	9/30/17 0:00 9/30/17 0:10	780.10 790.10	50.29 50.47	20.27 19.73	210.25 210.78	9/30/17 0:00 9/30/17 0:10	780.10 790.10	50.47 50.47	69.78 69.85	27.60 27.53	9/30/17 0:00 9/30/17 0:10	780.00 790.00	48.70 48.87	53.66823 53.652291	0.55 0.57
84	9/30/17 0:20	800.10	50.29	19.38	211.14	9/30/17 0:20	800.10	50.47	69.85	27.52	9/30/17 0:20	800.00	48.87	53.651598	0.57
85 86	9/30/17 0:30 9/30/17 0:40	810.10 820.10	50.47 50.47	18.66 20.08	211.85 210.44	9/30/17 0:30 9/30/17 0:40	810.10 820.10	50.47 50.47	69.60 69.77	27.78 27.60	9/30/17 0:30 9/30/17 0:40	810.00 820.00	48.87 48.70	53.652291 53.644206	0.57 0.57
87	9/30/17 0:50	830.10	50.47	18.82	211.69	9/30/17 0:50	830.10	50.47	69.24	28.13	9/30/17 0:50	830.00	48.70	53.64051	0.58
88	9/30/17 1:00	840.10	50.47	20.06	210.46	9/30/17 1:00	840.10	50.47	69.34	28.03	9/30/17 1:00	840.00	48.70	53.651136	0.57
89 90	9/30/17 1:10 9/30/17 1:20	850.10 860.10	50.47 50.47	17.49 17.77	213.03 212.74	9/30/17 1:10 9/30/17 1:20	850.10 860.10	50.47 50.47	69.21 68.87	28.16 28.50	9/30/17 1:10 9/30/17 1:20	850.00 860.00	48.70 48.70	53.64051 53.64051	0.58
91	9/30/17 1:30	870.10	50.47	19.43	211.09	9/30/17 1:30	870.10	50.47	68.94	28.43	9/30/17 1:30	870.00	48.87	53.634735	0.58
92	9/30/17 1:40	880.10	50.47	16.66	213.86	9/30/17 1:40	880.10	50.47	68.91	28.46	9/30/17 1:40	880.00	48.87	53.651829	0.57
93 94	9/30/17 1:50 9/30/17 2:00	890.10 900.10	50.47 50.47	17.35 17.29	213.17 213.23	9/30/17 1:50 9/30/17 2:00	890.10 900.10	50.47 50.47	68.49 68.54	28.88 28.83	9/30/17 1:50 9/30/17 2:00	890.00 900.00	48.70 48.70	53.634504 53.649519	0.58
95	9/30/17 2:10	910.10	50.47	16.01	214.51	9/30/17 2:10	910.10	50.47	68.62	28.75	9/30/17 2:10	910.00	48.70	53.647902	0.57
96 97	9/30/17 2:20 9/30/17 2:30	920.10 930.10	50.47 50.47	16.46 15.86	214.06	9/30/17 2:20 9/30/17 2:30	920.10 930.10	50.47 50.47	67.99 68.20	29.39 29.17	9/30/17 2:20	920.00 930.00	48.87 48.70	53.670771 53.644437	0.55 0.57
98	9/30/17 2:40	940.10	50.47	15.86 15.38	214.66 215.14	9/30/17 2:30	930.10	50.47	68.05	29.17	9/30/17 2:30 9/30/17 2:40	940.00	48.70	53.644437	0.57
99	9/30/17 2:50	950.10	50.47	16.38	214.14	9/30/17 2:50	950.10	50.47	67.95	29.43	9/30/17 2:50	950.00	48.87	53.672157	0.55

	F	G		К	L	М	N	Р	R	S	T	U	W	Υ	Z
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	48 F DD (ft)	lour Pumping Test at PW-3	t 4.5 gpm on ET (min)	PW-1 at 45 T (deg F)	Nixon Road Fram FT (H2O) corr	i ingham, M i DD (ft)	A 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
101 102	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 29.80	9/30/17 3:10	970.00	48.70	53.688096	0.53
102	9/30/17 3:20 9/30/17 3:30	980.10 990.10	50.47 50.47	14.61 13.64	215.91 216.88	9/30/17 3:20 9/30/17 3:30	980.10 990.10	50.47 50.47	67.58 67.60	29.80	9/30/17 3:20 9/30/17 3:30	980.00 990.00	48.70 48.70	53.665689 53.671464	0.55 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
105 106	9/30/17 3:50 9/30/17 4:00	1010.10 1020.10	50.47 50.47	15.91 14.51	214.60 216.01	9/30/17 3:50 9/30/17 4:00	1010.10 1020.10	50.47 50.47	67.12 67.31	30.25 30.06	9/30/17 3:50 9/30/17 4:00	1010.00 1020.00	48.70 48.70	53.67516 53.658759	0.54
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
108 109	9/30/17 4:20	1040.10	50.47 50.47	13.18 14.41	217.33	9/30/17 4:20	1040.10	50.47 50.47	66.88 67.10	30.49 30.28	9/30/17 4:20	1040.00	48.70 48.70	53.681397	0.54
110	9/30/17 4:30 9/30/17 4:40	1050.10 1060.10	50.47	14.41	216.11 216.41	9/30/17 4:30 9/30/17 4:40	1050.10 1060.10	50.47	66.76	30.28	9/30/17 4:30 9/30/17 4:40	1050.00 1060.00	48.70	53.685093 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
112 113	9/30/17 5:00 9/30/17 5:10	1080.10 1090.10	50.47 50.47	12.93 12.90	217.59 217.62	9/30/17 5:00 9/30/17 5:10	1080.10 1090.10	50.47 50.47	66.46 66.38	30.91 30.99	9/30/17 5:00 9/30/17 5:10	1080.00 1090.00	48.87 48.70	53.700108 53.68209	0.52
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
115 116	9/30/17 5:30	1110.10 1120.10	50.47 50.47	12.83 10.98	217.69 219.54	9/30/17 5:30 9/30/17 5:40	1110.10 1120.10	50.47 50.47	66.26 66.03	31.12 31.35	9/30/17 5:30	1110.00 1120.00	48.87 48.87	53.713506	0.50 0.51
117	9/30/17 5:40 9/30/17 5:50	1130.10	50.47	12.93	217.59	9/30/17 5:50	1130.10	50.47	66.08	31.33	9/30/17 5:40 9/30/17 5:50	1130.00	48.70	53.710503 53.696181	0.51
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
119 120	9/30/17 6:10 9/30/17 6:20	1150.10 1160.10	50.29 50.29	12.22 10.99	218.30 219.53	9/30/17 6:10 9/30/17 6:20	1150.10 1160.10	50.47 50.47	65.80 65.71	31.58 31.66	9/30/17 6:10 9/30/17 6:20	1150.00 1160.00	48.70 48.70	53.679549 53.703804	0.54
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
122 123	9/30/17 6:40 9/30/17 6:50	1180.10 1190.10	50.29 50.29	10.32 10.58	220.20 219.93	9/30/17 6:40 9/30/17 6:50	1180.10 1190.10	50.47 50.47	65.55 65.44	31.83 31.93	9/30/17 6:40 9/30/17 6:50	1180.00 1190.00	48.70 48.87	53.690406 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
126 127	9/30/17 7:20 9/30/17 7:30	1220.10 1230.10	50.29 50.29	12.05 10.71	218.47 219.80	9/30/17 7:20 9/30/17 7:30	1220.10 1230.10	50.47 50.47	65.23 65.46	32.15 31.92	9/30/17 7:20 9/30/17 7:30	1220.00 1230.00	48.70 48.70	53.698029 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
129 130	9/30/17 7:50 9/30/17 8:00	1250.10 1260.10	50.29 50.29	10.56 12.93	219.96 217.59	9/30/17 7:50 9/30/17 8:00	1250.10 1260.10	50.47 50.47	64.78 64.79	32.59 32.58	9/30/17 7:50 9/30/17 8:00	1250.00 1260.00	48.87 48.87	53.692947 53.717202	0.53
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 53.712813	0.52
133 134	9/30/17 8:30 9/30/17 8:40	1290.10 1300.10	50.29 50.29	11.06 12.12	219.46 218.40	9/30/17 8:30 9/30/17 8:40	1290.10 1300.10	50.47 50.47	64.85 64.16	32.53 33.22	9/30/17 8:30 9/30/17 8:40	1290.00 1300.00	48.70 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
136 137	9/30/17 9:00 9/30/17 9:10	1320.10 1330.10	50.29 50.29	12.64 12.66	217.87 217.86	9/30/17 9:00 9/30/17 9:10	1320.10 1330.10	50.47 50.47	64.62 64.42	32.75 32.95	9/30/17 9:00 9/30/17 9:10	1320.00 1330.00	48.70 48.87	53.696181 53.724132	0.52
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
139 140	9/30/17 9:30	1350.10 1360.10	50.29 50.29	13.33 12.70	217.18 217.82	9/30/17 9:30 9/30/17 9:40	1350.10	50.47 50.47	64.02 63.91	33.35 33.47	9/30/17 9:30 9/30/17 9:40	1350.00 1360.00	48.87 48.87	53.717202 53.696643	0.50
141	9/30/17 9:40 9/30/17 9:50	1370.10	50.29	12.54	217.82	9/30/17 9:50	1360.10 1370.10	50.47	63.99	33.38	9/30/17 9:50	1370.00	48.70	53.706114	0.52
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
143 144	9/30/17 10:10 9/30/17 10:20	1390.10 1400.10	50.29 50.29	12.71 12.66	217.81 217.85	9/30/17 10:10 9/30/17 10:20	1390.10 1400.10	50.47 50.47	63.79 63.50	33.58 33.87	9/30/17 10:10 9/30/17 10:20	1390.00 1400.00	48.70 48.87	53.709348 53.717202	0.51
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
146 147	9/30/17 10:40 9/30/17 10:50	1420.10 1430.10	50.29 50.29	12.98 11.92	217.54 218.60	9/30/17 10:40 9/30/17 10:50	1420.10 1430.10	50.47 50.47	63.36 63.26	34.02 34.11	9/30/17 10:40 9/30/17 10:50	1420.00 1430.00	48.87 48.87	53.696181 53.720205	0.52
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 12.86	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
150 151	9/30/17 11:20 9/30/17 11:30	1460.10 1470.10	50.29 50.29	13.39	217.66 217.12	9/30/17 11:20 9/30/17 11:30	1460.10 1470.10	50.47 50.47	63.20 63.21	34.18 34.16	9/30/17 11:20 9/30/17 11:30	1460.00 1470.00	48.70 48.87	53.687865 53.671233	0.53
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
153 154	9/30/17 11:50 9/30/17 12:00	1490.10 1500.10	50.29 50.29	11.80 12.61	218.71 217.90	9/30/17 11:50 9/30/17 12:00	1490.10 1500.10	50.47 50.47	62.95 63.05	34.42 34.32	9/30/17 11:50 9/30/17 12:00	1490.00 1500.00	48.87 48.87	53.680935 53.701032	0.54
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
156 157	9/30/17 12:20 9/30/17 12:30	1520.10 1530.10	50.29 50.29	11.22 10.76	219.30 219.75	9/30/17 12:20 9/30/17 12:30	1520.10 1530.10	50.47 50.47	62.36 62.87	35.01 34.51	9/30/17 12:20 9/30/17 12:30	1520.00 1530.00	48.70 48.87	53.675853 53.697336	0.54
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 9/30/17 13:00	1550.10	50.29	11.88 11.12	218.64 219.40	9/30/17 12:50 9/30/17 13:00	1550.10	50.47 50.47	62.60 62.38	34.78 34.99	9/30/17 12:50	1550.00 1560.00	48.70 48.70	53.70981 53.706345	0.51
160 161	9/30/17 13:10	1560.10 1570.10	50.29 50.29	11.12	219.40	9/30/17 13:10	1560.10 1570.10	50.47	62.29	35.08	9/30/17 13:00 9/30/17 13:10	1570.00	48.87	53.706343	0.51
162	9/30/17 13:20	1580.10	50.29	11.41	219.11	9/30/17 13:20	1580.10	50.47	62.14	35.23	9/30/17 13:20	1580.00	48.87	53.704035	0.51
163 164	9/30/17 13:30 9/30/17 13:40	1590.10 1600.10	50.29 50.29	11.48 12.83	219.04 217.69	9/30/17 13:30 9/30/17 13:40	1590.10 1600.10	50.47 50.47	62.39 62.09	34.98 35.29	9/30/17 13:30 9/30/17 13:40	1590.00 1600.00	48.87 48.87	53.7075 53.683245	0.51
165	9/30/17 13:50	1610.10	50.29	11.70	218.81	9/30/17 13:50	1610.10	50.47	61.91	35.47	9/30/17 13:50	1610.00	48.87	53.720667	0.50
166 167	9/30/17 14:00 9/30/17 14:10	1620.10 1630.10	50.29 50.29	10.16 10.10	220.36 220.42	9/30/17 14:00 9/30/17 14:10	1620.10 1630.10	50.47 50.47	61.83 61.63	35.54 35.74	9/30/17 14:00 9/30/17 14:10	1620.00 1630.00	48.70 48.70	53.698953 53.68209	0.52
168	9/30/17 14:20	1640.10	50.29	11.75	218.77	9/30/17 14:20	1640.10	50.47	61.99	35.39	9/30/17 14:20	1640.00	48.87	53.713506	0.50
169 170	9/30/17 14:30 9/30/17 14:40	1650.10 1660.10	50.29 50.29	10.74 11.70	219.78 218.81	9/30/17 14:30 9/30/17 14:40	1650.10 1660.10	50.47 50.47	61.71 61.58	35.67 35.80	9/30/17 14:30 9/30/17 14:40	1650.00 1660.00	48.70 48.70	53.692023 53.695257	0.53 0.52
171	9/30/17 14:40	1670.10	50.29	10.50	220.01	9/30/17 14:40	1670.10	50.47	61.64	35.80	9/30/17 14:40	1670.00	48.70	53.698953	0.52
172	9/30/17 15:00	1680.10	50.29	10.93	219.59	9/30/17 15:00	1680.10	50.47	61.62	35.76	9/30/17 15:00	1680.00	48.70	53.695488	0.52
173 174	9/30/17 15:10 9/30/17 15:20	1690.10 1700.10	50.29 50.29	10.58 9.24	219.94 221.28	9/30/17 15:10 9/30/17 15:20	1690.10 1700.10	50.47 50.47	61.30 61.35	36.08 36.03	9/30/17 15:10 9/30/17 15:20	1690.00 1700.00	48.87 48.70	53.692947 53.678394	0.53
175	9/30/17 15:30	1710.10	50.29	11.13	219.39	9/30/17 15:30	1710.10	50.47	61.34	36.04	9/30/17 15:30	1710.00	48.70	53.681628	0.54
176 177	9/30/17 15:40 9/30/17 15:50	1720.10 1730.10	50.29 50.29	10.93 11.81	219.59 218.71	9/30/17 15:40 9/30/17 15:50	1720.10 1730.10	50.47 50.47	61.56 61.36	35.81 36.02	9/30/17 15:40 9/30/17 15:50	1720.00 1730.00	48.70 48.70	53.674929 53.674698	0.54
178	9/30/17 16:00	1740.10	50.29	8.99	221.52	9/30/17 16:00	1740.10	50.47	61.12	36.25	9/30/17 16:00	1740.00	48.70	53.684169	0.53
179 180	9/30/17 16:10 9/30/17 16:20	1750.10 1760.10	50.29 50.29	10.10 10.48	220.42 220.04	9/30/17 16:10 9/30/17 16:20	1750.10 1760.10	50.47 50.47	60.73 61.23	36.65 36.15	9/30/17 16:10 9/30/17 16:20	1750.00 1760.00	48.70 48.87	53.676777 53.684169	0.54 0.53
181	9/30/17 16:20 9/30/17 16:30	1760.10	50.29	9.02	220.04	9/30/17 16:20 9/30/17 16:30	1760.10	50.47	60.88	36.15	9/30/17 16:20	1760.00	48.87	53.684169	0.53
182	9/30/17 16:40	1780.10	50.29	9.07	221.44	9/30/17 16:40	1780.10	50.47	60.86	36.52	9/30/17 16:40	1780.00	48.87	53.673081	0.54
183 184	9/30/17 16:50 9/30/17 17:00	1790.10 1800.10	50.47 50.47	8.07 8.41	222.44 222.11	9/30/17 16:50 9/30/17 17:00	1790.10 1800.10	50.47 50.47	61.09 61.04	36.28 36.34	9/30/17 16:50 9/30/17 17:00	1790.00 1800.00	48.87 48.70	53.673081 53.665689	0.54
185	9/30/17 17:10	1810.10	50.47	8.57	221.95	9/30/17 17:10	1810.10	50.47	60.77	36.60	9/30/17 17:10	1810.00	48.70	53.689713	0.53
186 187	9/30/17 17:20 9/30/17 17:30	1820.10 1830.10	50.47 50.47	9.16 9.02	221.36 221.49	9/30/17 17:20 9/30/17 17:30	1820.10 1830.10	50.47 50.47	60.31 60.75	37.07 36.62	9/30/17 17:20 9/30/17 17:30	1820.00 1830.00	48.70 48.70	53.655756 53.672619	0.56 0.55
188	9/30/17 17:40	1840.10	50.47	9.02	221.49	9/30/17 17:40	1840.10	50.47	60.53	36.85	9/30/17 17:40	1840.00	48.70	53.662917	0.56
189	9/30/17 17:50	1850.10	50.47	9.01	221.50	9/30/17 17:50	1850.10	50.47	60.27	37.10	9/30/17 17:50	1850.00	48.70	53.669847	0.55
190 191	9/30/17 18:00 9/30/17 18:10	1860.10 1870.10	50.47 50.47	9.23 7.16	221.29 223.35	9/30/17 18:00 9/30/17 18:10	1860.10 1870.10	50.47 50.47	60.29 59.82	37.09 37.55	9/30/17 18:00 9/30/17 18:10	1860.00 1870.00	48.87 48.70	53.674236 53.684169	0.54
192	9/30/17 18:20	1880.10	50.47	9.10	221.41	9/30/17 18:20	1880.10	50.47	60.34	37.03	9/30/17 18:20	1880.00	48.70	53.649981	0.57
193 194	9/30/17 18:30 9/30/17 18:40	1890.10 1900.10	50.47 50.47	8.23 7.41	222.29 223.11	9/30/17 18:30 9/30/17 18:40	1890.10 1900.10	50.47 50.47	60.40 59.84	36.97 37.54	9/30/17 18:30 9/30/17 18:40	1890.00 1900.00	48.70 48.87	53.677239 53.678625	0.54 0.54
195	9/30/17 18:40	1910.10	50.47	7.41 8.81	223.11	9/30/17 18:40	1900.10	50.47	59.84	37.54	9/30/17 18:40	1910.00	48.87	53.678625	0.54
	_	_	_	_	_	_	_		-	_	_	_	_	-	

	F	G	I	K	L	M	N	Р	R	S	T	U	W	Υ	Z
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	48 F DD (ft)	lour Pumping Test at PW-3	t 4.5 gpm on ET (min)	PW-1 at 45 T (deg F)	Nixon Road Fram FT (H2O) corr	ingham, Ma	A 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
198 199	9/30/17 19:20 9/30/17 19:30	1940.10 1950.10	50.47 50.47	9.15 7.58	221.37 222.94	9/30/17 19:20 9/30/17 19:30	1940.10 1950.10	50.47 50.47	59.74 59.92	37.64 37.46	9/30/17 19:20 9/30/17 19:30	1940.00 1950.00	48.70 48.87	53.661069 53.685786	0.56
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 9/30/17 20:10	1980.10 1990.10	50.47 50.47	6.05 7.65	224.47 222.87	9/30/17 20:00 9/30/17 20:10	1980.10 1990.10	50.47 50.47	59.60 59.75	37.78 37.62	9/30/17 20:00 9/30/17 20:10	1980.00 1990.00	48.87 48.70	53.658759 53.674698	0.56
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
205 206	9/30/17 20:30 9/30/17 20:40	2010.10	50.47 50.47	6.69 6.99	223.83 223.53	9/30/17 20:30 9/30/17 20:40	2010.10 2020.10	50.47 50.47	59.43 59.49	37.94 37.88	9/30/17 20:30 9/30/17 20:40	2010.00	48.70 48.70	53.657604 53.667537	0.56
207	9/30/17 20:50	2030.10	50.47	8.30	222.22	9/30/17 20:50	2030.10	50.47	59.49	38.22	9/30/17 20:50	2030.00	48.70	53.6677932	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
209 210	9/30/17 21:10 9/30/17 21:20	2050.10 2060.10	50.47 50.47	8.28 6.76	222.24 223.76	9/30/17 21:10 9/30/17 21:20	2050.10 2060.10	50.47 50.47	59.33 59.03	38.04 38.34	9/30/17 21:10 9/30/17 21:20	2050.00 2060.00	48.70 48.70	53.688096 53.671002	0.53
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
213 214	9/30/17 21:50 9/30/17 22:00	2090.10 2100.10	50.47 50.47	6.77 6.60	223.75 223.92	9/30/17 21:50 9/30/17 22:00	2090.10 2100.10	50.47 50.47	59.44 59.27	37.94 38.10	9/30/17 21:50 9/30/17 22:00	2090.00 2100.00	48.87 48.87	53.658528 53.668923	0.56
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
216 217	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 9/30/17 22:40	2130.10 2140.10	50.47 50.47	6.55 7.83	223.97 222.69	9/30/17 22:30 9/30/17 22:40	2130.10 2140.10	50.47 50.47	58.67 58.93	38.70 38.45	9/30/17 22:30 9/30/17 22:40	2130.00 2140.00	48.87 48.87	53.693409 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
221 222	9/30/17 23:10 9/30/17 23:20	2170.10 2180.10	50.47 50.47	5.65 6.62	224.87 223.90	9/30/17 23:10 9/30/17 23:20	2170.10 2180.10	50.47 50.47	58.48 58.53	38.89 38.85	9/30/17 23:10 9/30/17 23:20	2170.00 2180.00	48.70 48.70	53.680011 53.687172	0.54 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
224 225	9/30/17 23:40 9/30/17 23:50	2200.10 2210.10	50.47 50.47	5.85 5.73	224.67 224.79	9/30/17 23:40 9/30/17 23:50	2200.10 2210.10	50.47 50.47	58.84 58.72	38.53 38.65	9/30/17 23:40 9/30/17 23:50	2200.00 2210.00	48.87 48.87	53.684631 53.711889	0.53
226	10/1/17 0:00	2220.10	50.47	4.70	225.82	10/1/17 0:00	2220.10	50.47	58.72	39.00	10/1/17 0:00	2220.00	48.87	53.711889	0.51
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
228 229	10/1/17 0:20 10/1/17 0:30	2240.10 2250.10	50.47 50.47	5.90 6.73	224.62 223.79	10/1/17 0:20 10/1/17 0:30	2240.10 2250.10	50.47 50.47	58.25 58.29	39.13 39.08	10/1/17 0:20 10/1/17 0:30	2240.00 2250.00	48.70 48.87	53.680704 53.688096	0.54
230	10/1/17 0:40	2260.10	50.47	5.78	224.74	10/1/17 0:30	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
232 233	10/1/17 1:00 10/1/17 1:10	2280.10 2290.10	50.47 50.47	4.90 4.47	225.62 226.04	10/1/17 1:00 10/1/17 1:10	2280.10 2290.10	50.47 50.47	58.17 58.19	39.20 39.19	10/1/17 1:00 10/1/17 1:10	2280.00 2290.00	48.70 48.70	53.687403 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
236 237	10/1/17 1:40	2320.10 2330.10	50.47 50.47	4.32 6.33	226.20 224.18	10/1/17 1:40 10/1/17 1:50	2320.10 2330.10	50.47 50.47	58.13 57.98	39.25 39.39	10/1/17 1:40 10/1/17 1:50	2320.00 2330.00	48.70 48.70	53.701263 53.671002	0.52
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
240 241	10/1/17 2:20	2360.10 2370.10	50.47 50.47	4.59 4.26	225.92 226.26	10/1/17 2:20 10/1/17 2:30	2360.10 2370.10	50.47 50.47	58.32 58.13	39.05 39.24	10/1/17 2:20 10/1/17 2:30	2360.00 2370.00	48.87 48.70	53.686017 53.702418	0.53
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 10/1/17 3:10	2400.10 2410.10	50.47 50.47	5.68 5.57	224.84 224.94	10/1/17 3:00 10/1/17 3:10	2400.10 2410.10	50.47 50.47	57.82 57.69	39.55 39.68	10/1/17 3:00 10/1/17 3:10	2400.00 2410.00	48.87 48.87	53.706807 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 3.94	226.30	10/1/17 3:30 10/1/17 3:40	2430.10	50.47 50.47	57.62	39.75	10/1/17 3:30 10/1/17 3:40	2430.00 2440.00	48.87	53.720667 53.700108	0.50
248 249	10/1/17 3:40 10/1/17 3:50	2440.10 2450.10	50.47 50.47	3.94	226.58 226.58	10/1/17 3:40	2440.10 2450.10	50.47	57.53 57.31	39.84 40.06	10/1/17 3:40	2450.00	48.87 48.87	53.700108	0.52
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
251 252	10/1/17 4:10 10/1/17 4:20	2470.10 2480.10	50.47 50.47	2.12	228.40 228.50	10/1/17 4:10 10/1/17 4:20	2470.10 2480.10	50.47 50.47	57.60 57.48	39.78 39.89	10/1/17 4:10 10/1/17 4:20	2470.00 2480.00	48.87 48.87	53.720205 53.706114	0.50
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	53.706114	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
255 256	10/1/17 4:50 10/1/17 5:00	2510.10 2520.10	50.47 50.47	3.13 3.80	227.39 226.71	10/1/17 4:50 10/1/17 5:00	2510.10 2520.10	50.47 50.47	57.55 57.53	39.82 39.84	10/1/17 4:50 10/1/17 5:00	2510.00 2520.00	48.87 48.87	53.701032 53.727135	0.52
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	48.87	53.710041	0.51
258	10/1/17 5:20	2540.10	50.47	3.52	227.00	10/1/17 5:20	2540.10	50.47	57.42	39.95	10/1/17 5:20	2540.00	48.87	53.739378	0.48
259 260	10/1/17 5:30 10/1/17 5:40	2550.10 2560.10	50.47 50.47	2.68 2.17	227.84 228.35	10/1/17 5:30 10/1/17 5:40	2550.10 2560.10	50.47 50.47	56.91 56.84	40.46 40.53	10/1/17 5:30 10/1/17 5:40	2550.00 2560.00	48.87 48.87	53.725287 53.724132	0.49
261	10/1/17 5:50	2570.10	50.47	3.08	227.44	10/1/17 5:50	2570.10	50.47	56.70	40.67	10/1/17 5:50	2570.00	48.70	53.728752	0.49
262 263	10/1/17 6:00 10/1/17 6:10	2580.10 2590.10	50.47 50.47	1.39 2.01	229.13 228.51	10/1/17 6:00 10/1/17 6:10	2580.10 2590.10	50.47 50.47	56.79 56.83	40.59 40.55	10/1/17 6:00 10/1/17 6:10	2580.00 2590.00	48.70 48.70	53.751159 53.733141	0.47
264	10/1/17 6:10	2600.10	50.47	3.65	228.51	10/1/17 6:10	2600.10	50.47	56.83	40.55	10/1/17 6:10	2600.00	48.70	53.733141	0.48
265	10/1/17 6:30	2610.10	50.47	2.75	227.76	10/1/17 6:30	2610.10	50.47	56.91	40.47	10/1/17 6:30	2610.00	48.87	53.722977	0.50
266 267	10/1/17 6:40 10/1/17 6:50	2620.10 2630.10	50.47 50.47	2.47	228.05 228.49	10/1/17 6:40 10/1/17 6:50	2620.10 2630.10	50.47 50.47	56.78 56.59	40.59 40.78	10/1/17 6:40 10/1/17 6:50	2620.00 2630.00	48.87 48.87	53.7306 53.711196	0.49
268	10/1/17 7:00	2640.10	50.47	2.06	228.46	10/1/17 7:00	2640.10	50.47	56.82	40.78	10/1/17 7:00	2640.00	48.87	53.711196	0.50
269	10/1/17 7:10	2650.10	50.47	2.30	228.22	10/1/17 7:10	2650.10	50.47	56.52	40.86	10/1/17 7:10	2650.00	48.87	53.725287	0.49
270 271	10/1/17 7:20	2660.10 2670.10	50.47 50.47	1.59 1.79	228.93 228.72	10/1/17 7:20 10/1/17 7:30	2660.10 2670.10	50.47 50.47	56.37 56.64	41.00 40.74	10/1/17 7:20 10/1/17 7:30	2660.00 2670.00	48.70 48.87	53.734989 53.743998	0.48
272	10/1/17 7:40	2680.10	50.47	0.91	229.60	10/1/17 7:40	2680.10	50.47	56.68	40.69	10/1/17 7:40	2680.00	48.70	53.716278	0.50
273	10/1/17 7:50	2690.10	50.47	0.76	229.76	10/1/17 7:50	2690.10	50.47	56.10	41.27	10/1/17 7:50	2690.00	48.70	53.721822	0.50
274 275	10/1/17 8:00	2700.10 2710.10	50.47 50.47	1.55 2.51	228.97 228.01	10/1/17 8:00 10/1/17 8:10	2700.10 2710.10	50.47 50.47	56.14 56.50	41.23 40.87	10/1/17 8:00 10/1/17 8:10	2700.00 2710.00	48.70 48.70	53.726211 53.727597	0.49
276	10/1/17 8:20	2720.10	50.47	2.75	227.76	10/1/17 8:20	2720.10	50.47	56.67	40.71	10/1/17 8:20	2720.00	48.70	53.731293	0.49
277	10/1/17 8:30	2730.10	50.47	0.44	230.08	10/1/17 8:30	2730.10	50.47	56.17	41.20	10/1/17 8:30	2730.00	48.70	53.734989	0.48
278 279	10/1/17 8:40 10/1/17 8:50	2740.10 2750.10	50.47 50.47	2.23 1.74	228.29 228.78	10/1/17 8:40 10/1/17 8:50	2740.10 2750.10	50.47 50.47	56.28 56.14	41.09 41.23	10/1/17 8:40 10/1/17 8:50	2740.00 2750.00	48.70 48.70	53.738916 53.722515	0.48
280	10/1/17 9:00	2760.10	50.47	1.27	229.25	10/1/17 9:00	2760.10	50.47	56.20	41.17	10/1/17 9:00	2760.00	48.70	53.721822	0.50
281	10/1/17 9:10	2770.10	50.47	1.74	228.78	10/1/17 9:10	2770.10	50.47	56.21	41.16	10/1/17 9:10	2770.00	48.70	53.723901	0.49
282 283	10/1/17 9:20 10/1/17 9:30	2780.10 2790.10	50.47 50.47	1.64 2.82	228.88 227.70	10/1/17 9:20 10/1/17 9:30	2780.10 2790.10	50.47 50.47	56.29 56.10	41.08 41.27	10/1/17 9:20 10/1/17 9:30	2780.00 2790.00	48.70 48.70	53.701725 53.740764	0.52 0.48
284	10/1/17 9:40	2800.10	50.47	1.06	229.45	10/1/17 9:40	2800.10	50.47	56.11	41.26	10/1/17 9:40	2800.00	48.70	53.745153	0.47
285 286	10/1/17 9:50	2810.10	50.47 50.47	0.46	230.06	10/1/17 9:50	2810.10	50.47	55.99 55.81	41.38 41.56	10/1/17 9:50	2810.00	48.70 48.70	53.744691	0.47
286	10/1/17 10:00 10/1/17 10:10	2820.10 2830.10	50.47	1.50 1.92	229.02 228.59	10/1/17 10:00 10/1/17 10:10	2820.10 2830.10	50.47 50.47	55.81 55.72	41.56	10/1/17 10:00 10/1/17 10:10	2820.00 2830.00	48.70	53.724825 53.743074	0.49
288	10/1/17 10:20	2840.10	50.47	1.34	229.18	10/1/17 10:20	2840.10	50.47	56.08	41.29	10/1/17 10:20	2840.00	48.70	53.720898	0.50
289 290	10/1/17 10:30 10/1/17 10:40	2850.10 2860.10	50.47 50.47	1.46 1.10	229.05 229.42	10/1/17 10:30 10/1/17 10:40	2850.10 2860.10	50.47 50.47	55.83 56.05	41.54 41.32	10/1/17 10:30 10/1/17 10:40	2850.00 2860.00	48.70 48.70	53.745384 53.722053	0.47
291	10/1/17 10:40	2870.10	50.47	1.62	228.90	10/1/17 10:40	2870.10	50.47	55.99	41.38	10/1/17 10:40	2870.00	48.70	53.722746	0.50
_		_			_								_		

	F	G	ı	K	L	M	N	Р	R	S	T	U	W	Υ	Z
2	PW-1	ET (min)	T (deg F)	FT (H2O) corr	48 F DD (ft)	lour Pumping Test at PW-3	4.5 gpm on	PW-1 at 45 T (deg F)	Nixon Road Fram FT (H2O) corr	ingham, MA	A 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
294 295	10/1/17 11:20 10/1/17 11:30	2900.10 2910.10	50.47 50.47	173.31 176.88	57.21 53.63	10/1/17 11:20 10/1/17 11:30	2900.10 2910.10	50.47 50.47	63.37 64.26	34.01 33.12	10/1/17 11:20 10/1/17 11:30	2900.00 2910.00	48.70 48.70	52.791123 52.415517	0.43
296	10/1/17 11:40	2920.10	50.29	180.00	50.52	10/1/17 11:30	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
298 299	10/1/17 12:00 10/1/17 12:10	2940.10 2950.10	50.29 50.11	183.76 185.04	46.76 45.48	10/1/17 12:00 10/1/17 12:10	2940.10 2950.10	50.47 50.47	67.17 68.04	30.20 29.34	10/1/17 12:00	2940.00 2950.00	48.70 48.70	51.525243 51.303945	0.27
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 10/1/17 12:40	2970.10 2980.10	50.11 50.11	187.88 189.22	42.64 41.30	10/1/17 12:30	2970.10 2980.10	50.47 50.47	69.22 69.57	28.15 27.80	10/1/17 12:30	2970.00 2980.00	48.70 48.70	50.906394 50.731527	0.20
302 303	10/1/17 12:40	2980.10	50.11	189.76	40.75	10/1/17 12:40	2990.10	50.47	70.20	27.80	10/1/17 12:40	2990.00	48.70	50.731527	0.17
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
305 306	10/1/17 13:10 10/1/17 13:20	3010.10 3020.10	49.94 49.94	191.80 192.44	38.72 38.07	10/1/17 13:10 10/1/17 13:20	3010.10 3020.10	50.47 50.47	70.95 71.40	26.43 25.97	10/1/17 13:10	3010.00 3020.00	48.87 48.87	50.296554 50.16858	0.14
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 13:20	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
309 310	10/1/17 13:50 10/1/17 14:00	3050.10 3060.10	50.11 49.94	194.56 195.20	35.96 35.31	10/1/17 13:50 10/1/17 14:00	3050.10 3060.10	50.47 50.47	72.66 72.88	24.71 24.49	10/1/17 13:50 10/1/17 14:00	3050.00 3060.00	48.87 48.87	49.845642 49.769874	0.10
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
312 313	10/1/17 14:20 10/1/17 14:30	3080.10 3090.10	49.94 49.94	196.23 196.52	34.29 34.00	10/1/17 14:20 10/1/17 14:30	3080.10 3090.10	50.47 50.47	73.96 74.22	23.41	10/1/17 14:20 10/1/17 14:30	3080.00 3090.00	48.87 48.87	49.623189 49.561974	0.08
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
316 317	10/1/17 15:00 10/1/17 15:10	3120.10 3130.10	49.94 49.94	198.13 198.68	32.39 31.84	10/1/17 15:00 10/1/17 15:10	3120.10 3130.10	50.47 50.47	74.77 74.94	22.60 22.44	10/1/17 15:00 10/1/17 15:10	3120.00 3130.00	48.87 48.87	49.355922 49.293552	0.05
318	10/1/17 15:10	3140.10	49.94	199.32	31.20	10/1/17 15:10	3140.10	50.47	74.99	22.38	10/1/17 15:10	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
320 321	10/1/17 15:40 10/1/17 15:50	3160.10 3170.10	49.94 49.94	199.66 200.38	30.86 30.14	10/1/17 15:40 10/1/17 15:50	3160.10 3170.10	50.47 50.47	75.81 76.00	21.56 21.38	10/1/17 15:40 10/1/17 15:50	3160.00 3170.00	48.87 48.87	49.175973 49.165578	0.02
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
324 325	10/1/17 16:20 10/1/17 16:30	3200.10 3210.10	49.76 49.76	201.37 201.56	29.15 28.95	10/1/17 16:20 10/1/17 16:30	3200.10 3210.10	50.47 50.47	76.65 76.95	20.72	10/1/17 16:20 10/1/17 16:30	3200.00 3210.00	48.70 48.70	49.082418 49.060473	0.03
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
327 328	10/1/17 16:50 10/1/17 17:00	3230.10 3240.10	49.76 49.76	202.41 202.67	28.10 27.85	10/1/17 16:50 10/1/17 17:00	3230.10 3240.10	50.47 50.47	77.24 77.67	20.13 19.70	10/1/17 16:50 10/1/17 17:00	3230.00 3240.00	48.70 48.70	49.056315 49.044072	0.00
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
331 332	10/1/17 17:30 10/1/17 17:40	3270.10 3280.10	49.76 49.76	203.27 203.71	27.24 26.81	10/1/17 17:30 10/1/17 17:40	3270.10 3280.10	50.47 50.47	78.05 78.17	19.32 19.20	10/1/17 17:30 10/1/17 17:40	3270.00 3280.00	48.70 48.70	49.0644 49.07133	0.00 -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
335 336	10/1/17 18:10 10/1/17 18:20	3310.10 3320.10	49.76 49.76	204.53 204.75	25.99 25.77	10/1/17 18:10 10/1/17 18:20	3310.10 3320.10	50.47 50.47	78.57 78.22	18.80 19.15	10/1/17 18:10 10/1/17 18:20	3310.00 3320.00	48.87 48.87	49.073178 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
339 340	10/1/17 18:50 10/1/17 19:00	3350.10 3360.10	49.76 49.76	205.32 205.22	25.20 25.30	10/1/17 18:50 10/1/17 19:00	3350.10 3360.10	50.47 50.47	78.55 78.80	18.82 18.57	10/1/17 18:50 10/1/17 19:00	3350.00 3360.00	48.70 48.87	49.088424 49.10829	-0.01 -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
343 344	10/1/17 19:30 10/1/17 19:40	3390.10 3400.10	49.76 49.76	205.72 206.65	24.79 23.87	10/1/17 19:30 10/1/17 19:40	3390.10 3400.10	50.47 50.47	79.70 79.69	17.67 17.68	10/1/17 19:30 10/1/17 19:40	3390.00 3400.00	48.70 48.87	49.144095 49.169274	-0.02 -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
346 347	10/1/17 20:00 10/1/17 20:10	3420.10 3430.10	49.76 49.76	206.68 207.29	23.84	10/1/17 20:00 10/1/17 20:10	3420.10 3430.10	50.47 50.47	79.84 79.73	17.54 17.64	10/1/17 20:00 10/1/17 20:10	3420.00 3430.00	48.70 48.70	49.198149 49.205772	0.00 -0.01
348	10/1/17 20:10	3440.10	49.76	207.26	23.26	10/1/17 20:10	3440.10	50.47	80.08	17.29	10/1/17 20:10	3440.00	48.87	49.231644	-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
350 351	10/1/17 20:40 10/1/17 20:50	3460.10 3470.10	49.76 49.76	207.79 207.88	22.72 22.63	10/1/17 20:40 10/1/17 20:50	3460.10 3470.10	50.47 50.47	79.84 80.29	17.53 17.08	10/1/17 20:40 10/1/17 20:50	3460.00 3470.00	48.70 48.70	49.282464 49.323582	-0.01 -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
353 354	10/1/17 21:10 10/1/17 21:20	3490.10 3500.10	49.76 49.76	207.91 208.51	22.61 22.01	10/1/17 21:10 10/1/17 21:20	3490.10 3500.10	50.47 50.47	80.41 80.22	16.97 17.15	10/1/17 21:10 10/1/17 21:20	3490.00 3500.00	48.87 48.87	49.375788 49.416444	-0.02 -0.04
355	10/1/17 21:20	3510.10	49.76	208.47	22.01	10/1/17 21:20	3510.10	50.47	80.89	16.49	10/1/17 21:20	3510.00	48.87	49.416444	-0.04
356	10/1/17 21:40	3520.10	49.76	208.77	21.74	10/1/17 21:40	3520.10	50.47	80.90	16.47	10/1/17 21:40	3520.00	48.70	49.50561	-0.05
357 358	10/1/17 21:50 10/1/17 22:00	3530.10 3540.10	49.76 49.76	208.98 209.01	21.54 21.51	10/1/17 21:50 10/1/17 22:00	3530.10 3540.10	50.47 50.47	81.16 81.15	16.21 16.23	10/1/17 21:50 10/1/17 22:00	3530.00 3540.00	48.70 48.87	49.557585 49.595007	-0.05 -0.04
359	10/1/17 22:10	3550.10	49.76	209.01	21.51	10/1/17 22:10	3550.10	50.47	81.22	16.16	10/1/17 22:10	3550.00	48.87	49.622496	-0.03
360	10/1/17 22:20	3560.10	49.76	209.33	21.19	10/1/17 22:20	3560.10	50.47	81.20	16.17	10/1/17 22:20	3560.00	48.70	49.671006	-0.05
361 362	10/1/17 22:30 10/1/17 22:40	3570.10 3580.10	49.76 49.76	209.70 209.62	20.81	10/1/17 22:30 10/1/17 22:40	3570.10 3580.10	50.47 50.47	81.36 81.51	16.01 15.86	10/1/17 22:30 10/1/17 22:40	3570.00 3580.00	48.70 48.87	49.716282 49.774956	-0.05 -0.06
363	10/1/17 22:50	3590.10	49.76	209.63	20.88	10/1/17 22:50	3590.10	50.47	81.29	16.08	10/1/17 22:50	3590.00	48.87	49.816767	-0.04
364 365	10/1/17 23:00 10/1/17 23:10	3600.10 3610.10	49.76 49.76	210.07 209.83	20.45	10/1/17 23:00 10/1/17 23:10	3600.10 3610.10	50.47 50.47	81.51 81.36	15.86 16.02	10/1/17 23:00 10/1/17 23:10	3600.00 3610.00	48.87 48.70	49.859271 49.923258	-0.04 -0.06
366	10/1/17 23:10	3620.10	49.76	210.46	20.05	10/1/17 23:10	3620.10	50.47	81.69	15.69	10/1/17 23:10	3620.00	48.70	49.923258	-0.05
367	10/1/17 23:30	3630.10	49.76	210.16	20.36	10/1/17 23:30	3630.10	50.47	81.93	15.44	10/1/17 23:30	3630.00	48.70	50.00226	-0.03
368 369	10/1/17 23:40 10/1/17 23:50	3640.10 3650.10	49.76 49.76	210.53 210.52	19.98 19.99	10/1/17 23:40 10/1/17 23:50	3640.10 3650.10	50.47 50.47	81.94 82.23	15.43 15.14	10/1/17 23:40 10/1/17 23:50	3640.00 3650.00	48.70 48.70	50.036217 50.093967	-0.03 -0.06
370	10/2/17 0:00	3660.10	49.76	210.65	19.87	10/2/17 0:00	3660.10	50.47	81.97	15.40	10/2/17 0:00	3660.00	48.87	50.159571	-0.07
371	10/2/17 0:10	3670.10	49.76	210.91	19.61	10/2/17 0:10	3670.10	50.47	82.05	15.33	10/2/17 0:10	3670.00	48.87	50.211546	-0.05
372 373	10/2/17 0:20 10/2/17 0:30	3680.10 3690.10	49.76 49.76	210.96 211.21	19.56 19.31	10/2/17 0:20 10/2/17 0:30	3680.10 3690.10	50.47 50.47	82.65 82.43	14.73 14.94	10/2/17 0:20 10/2/17 0:30	3680.00 3690.00	48.70 48.70	50.27946 50.348067	-0.07 -0.07
374	10/2/17 0:40	3700.10	49.76	211.07	19.45	10/2/17 0:40	3700.10	50.47	82.20	15.17	10/2/17 0:40	3700.00	48.70	50.415981	-0.07
375	10/2/17 0:50	3710.10	49.76	210.99	19.53	10/2/17 0:50	3710.10	50.47	82.38	14.99	10/2/17 0:50	3710.00	48.87	50.49198	-0.08
376 377	10/2/17 1:00 10/2/17 1:10	3720.10 3730.10	49.76 49.76	211.24 211.70	19.28 18.82	10/2/17 1:00 10/2/17 1:10	3720.10 3730.10	50.47 50.47	82.62 82.85	14.75 14.53	10/2/17 1:00 10/2/17 1:10	3720.00 3730.00	48.70 48.70	50.571675 50.640744	-0.08 -0.07
378	10/2/17 1:20	3740.10	49.76	211.81	18.71	10/2/17 1:20	3740.10	50.47	82.88	14.49	10/2/17 1:20	3740.00	48.87	50.720439	-0.08
379	10/2/17 1:30	3750.10	49.58	211.78 212.04	18.74	10/2/17 1:30	3750.10	50.47	82.88	14.50	10/2/17 1:30	3750.00	48.87 48.70	50.800134	-0.08
380 381	10/2/17 1:40 10/2/17 1:50	3760.10 3770.10	49.76 49.76	212.04	18.48 18.39	10/2/17 1:40 10/2/17 1:50	3760.10 3770.10	50.47 50.47	83.00 82.72	14.37 14.66	10/2/17 1:40 10/2/17 1:50	3760.00 3770.00	48.70	50.885604 50.95398	-0.09 -0.07
382	10/2/17 2:00	3780.10	49.58	212.45	18.07	10/2/17 2:00	3780.10	50.47	82.94	14.43	10/2/17 2:00	3780.00	48.70	51.039681	-0.09
383	10/2/17 2:10	3790.10	49.58	212.29	18.22	10/2/17 2:10	3790.10	50.47	83.20	14.18	10/2/17 2:10	3790.00	48.70	51.110367	-0.07
384 385	10/2/17 2:20 10/2/17 2:30	3800.10 3810.10	49.58 49.58	212.37 212.56	18.14 17.96	10/2/17 2:20 10/2/17 2:30	3800.10 3810.10	50.47 50.47	83.04 83.43	14.34 13.95	10/2/17 2:20 10/2/17 2:30	3800.00 3810.00	48.70 48.70	51.18267 51.232104	-0.07 -0.05
386	10/2/17 2:40	3820.10	49.58	212.38	18.13	10/2/17 2:40	3820.10	50.47	83.33	14.04	10/2/17 2:40	3820.00	48.70	51.307872	-0.08
387	10/2/17 2:50	3830.10	49.58	212.35	18.16	10/2/17 2:50	3830.10	50.47	83.48	13.90	10/2/17 2:50	3830.00	48.70	51.357768	-0.05

2	F	G	I	K	L 49.1	M	N A F com on	P DW 1 at 45	R Niven Bood From	S ingham M	Т	U	W	Υ	Z
3	PW-1	ET (min)	T (deg F)	FT (H2O) corr	DD (ft)	lour Pumping Test at 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
389 390	10/2/17 3:10 10/2/17 3:20	3850.10 3860.10	49.58 49.58	213.13 213.07	17.39 17.45	10/2/17 3:10 10/2/17 3:20	3850.10 3860.10	50.47 50.47	83.55 83.43	13.82 13.94	10/2/17 3:10 10/2/17 3:20	3850.00 3860.00	48.87 48.70	51.452247 51.484356	-0.05 -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
392 393	10/2/17 3:40 10/2/17 3:50	3880.10 3890.10	49.58 49.58	213.46 213.38	17.06 17.14	10/2/17 3:40 10/2/17 3:50	3880.10 3890.10	50.47 50.47	84.02 83.79	13.35 13.58	10/2/17 3:40 10/2/17 3:50	3880.00 3890.00	48.70 48.70	51.587613 51.627114	-0.05 -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
395 396	10/2/17 4:10	3910.10 3920.10	49.58 49.58	213.61 213.54	16.91	10/2/17 4:10	3910.10	50.47 50.47	84.19 84.27	13.18	10/2/17 4:10	3910.00 3920.00	48.87 48.70	51.733605	-0.06 -0.04
397	10/2/17 4:20 10/2/17 4:30	3930.10	49.58	213.78	16.98 16.74	10/2/17 4:20 10/2/17 4:30	3920.10 3930.10	50.47	84.24	13.10 13.14	10/2/17 4:20 10/2/17 4:30	3930.00	48.70	51.773799 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
399 400	10/2/17 4:50 10/2/17 5:00	3950.10 3960.10	49.58 49.58	214.23 214.36	16.29 16.16	10/2/17 4:50 10/2/17 5:00	3950.10 3960.10	50.47 50.47	84.45 84.65	12.93 12.72	10/2/17 4:50 10/2/17 5:00	3950.00 3960.00	48.70 48.70	51.881676 51.919791	-0.03 -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
402 403	10/2/17 5:20 10/2/17 5:30	3980.10 3990.10	49.58 49.58	214.34 214.58	16.18 15.94	10/2/17 5:20 10/2/17 5:30	3980.10 3990.10	50.47 50.47	84.62 84.36	12.75 13.02	10/2/17 5:20 10/2/17 5:30	3980.00 3990.00	48.87 48.87	51.978003 51.992787	-0.04 -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
405 406	10/2/17 5:50	4010.10	49.58 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 48.70	52.009188	-0.01
406	10/2/17 6:00 10/2/17 6:10	4020.10 4030.10	49.58	214.65 214.85	15.87 15.67	10/2/17 6:00 10/2/17 6:10	4020.10 4030.10	50.47 50.47	84.91 84.46	12.46 12.91	10/2/17 6:00 10/2/17 6:10	4020.00 4030.00	48.70	52.033212 52.074099	-0.02 -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
409 410	10/2/17 6:30 10/2/17 6:40	4050.10 4060.10	49.58 49.58	215.11 215.39	15.40 15.13	10/2/17 6:30 10/2/17 6:40	4050.10 4060.10	50.47 50.47	84.97 84.88	12.41 12.50	10/2/17 6:30 10/2/17 6:40	4050.00 4060.00	48.87 48.70	52.131156 52.16442	-0.02 -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
412 413	10/2/17 7:00 10/2/17 7:10	4080.10 4090.10	49.58 49.58	215.38 215.48	15.14 15.04	10/2/17 7:00 10/2/17 7:10	4080.10 4090.10	50.47 50.47	85.12 84.83	12.26 12.54	10/2/17 7:00 10/2/17 7:10	4080.00 4090.00	48.70 48.70	52.226328 52.254741	-0.03 -0.03
414	10/2/17 7:20	4100.10	49.58	215.51	15.04	10/2/17 7:20	4100.10	50.47	85.22	12.16	10/2/17 7:10	4100.00	48.70	52.279458	-0.03
415	10/2/17 7:30 10/2/17 7:40	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
416 417	10/2/17 7:50	4120.10 4130.10	49.58 49.58	215.60 215.81	14.92 14.71	10/2/17 7:40 10/2/17 7:50	4120.10 4130.10	50.47 50.47	84.90 85.13	12.47 12.24	10/2/17 7:40 10/2/17 7:50	4120.00 4130.00	48.87 48.70	52.323348 52.340442	-0.02 -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
419 420	10/2/17 8:10 10/2/17 8:20	4150.10 4160.10	49.58 49.58	216.06 216.16	14.45 14.36	10/2/17 8:10 10/2/17 8:20	4150.10 4160.10	50.47 50.47	85.09 85.55	12.29 11.82	10/2/17 8:10 10/2/17 8:20	4150.00 4160.00	48.87 48.70	52.370703 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
422 423	10/2/17 8:40 10/2/17 8:50	4180.10 4190.10	49.58 49.58	216.10 216.53	14.42 13.99	10/2/17 8:40 10/2/17 8:50	4180.10 4190.10	50.47 50.47	85.51 85.51	11.87 11.86	10/2/17 8:40 10/2/17 8:50	4180.00 4190.00	48.70 48.87	52.433304 52.440696	-0.01 -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 4220.10	49.58 49.58	216.43 216.49	14.09 14.03	10/2/17 9:10 10/2/17 9:20	4210.10 4220.10	50.47 50.47	85.84 85.53	11.53 11.85	10/2/17 9:10 10/2/17 9:20	4210.00 4220.00	48.87 48.87	52.468878 52.464951	-0.02 0.00
426 427	10/2/17 9:20 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
429 430	10/2/17 9:50 10/2/17 10:00	4250.10 4260.10	49.58 49.58	216.49 216.95	14.03 13.57	10/2/17 9:50 10/2/17 10:00	4250.10 4260.10	50.47 50.47	86.06 85.70	11.31 11.68	10/2/17 9:50 10/2/17 10:00	4250.00 4260.00	48.70 48.87	52.495674 52.509765	-0.02 -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	52.54095	-0.03
432 433	10/2/17 10:20 10/2/17 10:30	4280.10 4290.10	49.58 49.58	217.07 216.59	13.45 13.93	10/2/17 10:20 10/2/17 10:30	4280.10 4290.10	50.47 50.47	86.04 86.03	11.33 11.34	10/2/17 10:20 10/2/17 10:30	4280.00 4290.00	48.87 48.87	52.551807 52.55481	-0.01 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
435 436	10/2/17 10:50 10/2/17 11:00	4310.10 4320.10	49.58 49.58	217.29 217.35	13.23 13.17	10/2/17 10:50 10/2/17 11:00	4310.10 4320.10	50.47 50.47	86.07 86.15	11.30 11.22	10/2/17 10:50 10/2/17 11:00	4310.00 4320.00	48.70 48.87	52.585533 52.585533	-0.02 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
439 440	10/2/17 11:30 10/2/17 11:40	4350.10 4360.10	49.58 49.58	217.65 217.53	12.86 12.99	10/2/17 11:30 10/2/17 11:40	4350.10 4360.10	50.47 50.47	86.27 86.53	11.10 10.84	10/2/17 11:30 10/2/17 11:40	4350.00 4360.00	48.70 48.87	52.654602 52.703574	-0.03 -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
442 443	10/2/17 12:00 10/2/17 12:10	4380.10 4390.10	49.58 49.58	217.78 217.89	12.74 12.63	10/2/17 12:00 10/2/17 12:10	4380.10 4390.10	50.47 50.47	86.35 86.47	11.02 10.90	10/2/17 12:00 10/2/17 12:10	4380.00 4390.00	48.87 48.87	52.782114 52.801287	-0.04 -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
445 446	10/2/17 12:30 10/2/17 12:40	4410.10 4420.10	49.58 49.58	218.28 217.89	12.24 12.63	10/2/17 12:30 10/2/17 12:40	4410.10 4420.10	50.47 50.47	86.55 86.55	10.82	10/2/17 12:30 10/2/17 12:40	4410.00 4420.00	48.70 48.70	52.878903 52.901772	-0.04 -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 10/2/17 13:10	4440.10 4450.10	49.58 49.58	218.07 218.56	12.45 11.95	10/2/17 13:00 10/2/17 13:10	4440.10 4450.10	50.47 50.47	86.68 86.49	10.69 10.88	10/2/17 13:00 10/2/17 13:10	4440.00 4450.00	48.70 48.70	52.938501 52.952361	-0.01 -0.01
450	10/2/17 13:10	4460.10	49.58	218.31	12.21	10/2/17 13:10	4460.10	50.47	86.95	10.42	10/2/17 13:20	4460.00	48.70	52.965066	-0.01
451 452	10/2/17 13:30	4470.10 4480.10	49.58	218.30 218.48	12.22 12.03	10/2/17 13:30	4470.10 4480.10	50.47 50.47	86.95 86.81	10.43	10/2/17 13:30	4470.00 4480.00	48.70 48.87	52.981236 52.993941	-0.02
452	10/2/17 13:40 10/2/17 13:50	4480.10	49.58 49.58	218.48	12.03	10/2/17 13:40 10/2/17 13:50	4490.10	50.47	86.81 87.20	10.56 10.17	10/2/17 13:40 10/2/17 13:50	4490.00	48.87	53.030901	-0.01 -0.04
454	10/2/17 14:00	4500.10	49.58	218.39	12.13	10/2/17 14:00	4500.10	50.47	86.98	10.40	10/2/17 14:00	4500.00	48.70	53.030439	0.00
455 456	10/2/17 14:10 10/2/17 14:20	4510.10 4520.10	49.58 49.58	218.56 218.64	11.95 11.87	10/2/17 14:10 10/2/17 14:20	4510.10 4520.10	50.47 50.47	86.80 86.76	10.58 10.62	10/2/17 14:10 10/2/17 14:20	4510.00 4520.00	48.70 48.70	53.051691 53.089806	-0.02 -0.04
457	10/2/17 14:30	4530.10	49.58	218.94	11.58	10/2/17 14:30	4530.10	50.47	86.98	10.39	10/2/17 14:30	4530.00	48.70	53.096505	-0.01
458 459	10/2/17 14:40 10/2/17 14:50	4540.10 4550.10	49.58 49.58	218.70 218.96	11.81 11.56	10/2/17 14:40 10/2/17 14:50	4540.10 4550.10	50.47 50.47	87.05 87.11	10.33 10.27	10/2/17 14:40 10/2/17 14:50	4540.00 4550.00	48.70 48.87	53.124687 53.149635	-0.03 -0.02
460	10/2/17 15:00	4560.10	49.58	218.83	11.69	10/2/17 15:00	4560.10	50.47	87.20	10.17	10/2/17 15:00	4560.00	48.87	53.170887	-0.02
461 462	10/2/17 15:10 10/2/17 15:20	4570.10 4580.10	49.58 49.58	218.91 219.30	11.61 11.22	10/2/17 15:10 10/2/17 15:20	4570.10 4580.10	50.47 50.47	87.53 87.02	9.85 10.35	10/2/17 15:10 10/2/17 15:20	4570.00 4580.00	48.87 48.87	53.195604 53.222862	-0.02 -0.03
463	10/2/17 15:30	4590.10	49.58	219.24	11.28	10/2/17 15:30	4590.10	50.47	87.21	10.16	10/2/17 15:30	4590.00	48.70	53.264673	-0.04
464 465	10/2/17 15:40 10/2/17 15:50	4600.10 4610.10	49.58 49.58	219.26 219.45	11.26 11.06	10/2/17 15:40 10/2/17 15:50	4600.10 4610.10	50.47 50.47	87.11 87.13	10.26 10.24	10/2/17 15:40 10/2/17 15:50	4600.00 4610.00	48.70 48.70	53.30325 53.348526	-0.04 -0.05
466	10/2/17 16:00	4620.10	49.58	219.47	11.05	10/2/17 16:00	4620.10	50.47	87.14	10.24	10/2/17 16:00	4620.00	48.70	53.394033	-0.05
467 468	10/2/17 16:10 10/2/17 16:20	4630.10 4640.10	49.58 49.58	219.25 219.15	11.27 11.37	10/2/17 16:10 10/2/17 16:20	4630.10 4640.10	50.47 50.47	87.60 87.35	9.77 10.02	10/2/17 16:10 10/2/17 16:20	4630.00 4640.00	48.70 48.70	53.430069 53.473497	-0.04 -0.04
469	10/2/17 16:20	4650.10	49.58	219.15	11.09	10/2/17 16:20	4650.10	50.47	87.35	9.65	10/2/17 16:20	4650.00	48.87	53.473497	-0.04
470	10/2/17 16:40	4660.10	49.58	219.71	10.81	10/2/17 16:40	4660.10	50.47	87.76	9.61	10/2/17 16:40	4660.00	48.70	53.549496	-0.04
471 472	10/2/17 16:50 10/2/17 17:00	4670.10 4680.10	49.58 49.58	219.60 219.62	10.91 10.89	10/2/17 16:50 10/2/17 17:00	4670.10 4680.10	50.47 50.47	87.39 87.94	9.98 9.44	10/2/17 16:50 10/2/17 17:00	4670.00 4680.00	48.70 48.70	53.59662 53.643744	-0.05 -0.05
473	10/2/17 17:10	4690.10	49.58	219.44	11.08	10/2/17 17:10	4690.10	50.47	87.79	9.58	10/2/17 17:10	4690.00	48.87	53.69826	-0.05
474 475	10/2/17 17:20 10/2/17 17:30	4700.10 4710.10	49.58 49.58	219.87 219.85	10.65 10.67	10/2/17 17:20 10/2/17 17:30	4700.10 4710.10	50.47 50.47	87.85 87.71	9.52 9.66	10/2/17 17:20 10/2/17 17:30	4700.00 4710.00	48.87 48.87	53.728752 53.793201	-0.03 -0.06
476	10/2/17 17:40	4720.10	49.58	219.80	10.72	10/2/17 17:40	4720.10	50.47	87.90	9.48	10/2/17 17:40	4720.00	48.70	53.840787	-0.05
477 478	10/2/17 17:50 10/2/17 18:00	4730.10 4740.10	49.58 49.58	220.04 220.00	10.48 10.52	10/2/17 17:50 10/2/17 18:00	4730.10 4740.10	50.47 50.47	87.52 87.79	9.85 9.59	10/2/17 17:50 10/2/17 18:00	4730.00 4740.00	48.70 48.87	53.898075 53.948433	-0.06 -0.05
478	10/2/17 18:00	4740.10	49.58	220.00	10.52	10/2/17 18:00	4740.10	50.47	87.79 87.82	9.59	10/2/17 18:00	4740.00	48.87	53.948433	-0.05
480	10/2/17 18:20	4760.10	49.58	220.22	10.30	10/2/17 18:20	4760.10	50.47	88.22	9.15	10/2/17 18:20	4760.00	48.87	54.030438	-0.04
481 482	10/2/17 18:30 10/2/17 18:40	4770.10 4780.10	49.58 49.58	220.23 220.16	10.29 10.36	10/2/17 18:30 10/2/17 18:40	4770.10 4780.10	50.47 50.47	88.13 88.15	9.24 9.23	10/2/17 18:30 10/2/17 18:40	4770.00 4780.00	48.87 48.70	54.100662 54.143628	-0.07 -0.04
483	10/2/17 18:50	4790.10	49.58	220.48	10.03	10/2/17 18:50	4790.10	50.47	87.94	9.43	10/2/17 18:50	4790.00	48.70	54.185208	-0.04

	F	G	ı	K	L	М	N	Р	R	S	T	U	W	Υ	Z
2	PW-1	ET (min)	T (deg F)	FT (H2O) corr	48 F DD (ft)	lour Pumping Test at PW-3	4.5 gpm on ET (min)	PW-1 at 45 T (deg F)	Nixon Road Fram FT (H2O) corr	ingham, Ma	A 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
486 487	10/2/17 19:20 10/2/17 19:30	4820.10 4830.10	49.58 49.58	220.21 220.63	10.31 9.89	10/2/17 19:20 10/2/17 19:30	4820.10 4830.10	50.47 50.47	87.95 88.24	9.43 9.13	10/2/17 19:20 10/2/17 19:30	4820.00 4830.00	48.70 48.70	54.348063 54.407199	-0.06 -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
490 491	10/2/17 20:00 10/2/17 20:10	4860.10 4870.10	49.58 49.58	220.53 220.79	9.99 9.73	10/2/17 20:00 10/2/17 20:10	4860.10 4870.10	50.47 50.47	88.36 88.50	9.01 8.88	10/2/17 20:00 10/2/17 20:10	4860.00 4870.00	48.70 48.70	54.531939 54.593385	-0.04 -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 10/2/17 20:40	4890.10 4900.10	49.58 49.58	220.93 220.96	9.59 9.56	10/2/17 20:30 10/2/17 20:40	4890.10 4900.10	50.47 50.47	88.44 88.45	8.94 8.92	10/2/17 20:30 10/2/17 20:40	4890.00 4900.00	48.87 48.87	54.694794 54.757395	-0.06 -0.06
494 495	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	54.737393	-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
497 498	10/2/17 21:10	4930.10 4940.10	49.58 49.58	221.20 221.08	9.32 9.44	10/2/17 21:10 10/2/17 21:20	4930.10 4940.10	50.47 50.47	88.43 88.91	8.94 8.46	10/2/17 21:10 10/2/17 21:20	4930.00 4940.00	48.87 48.70	54.884445 54.916554	-0.03 -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
501 502	10/2/17 21:50 10/2/17 22:00	4970.10 4980.10	49.58 49.58	221.32 221.10	9.19 9.42	10/2/17 21:50 10/2/17 22:00	4970.10 4980.10	50.47 50.47	88.57 88.69	8.81 8.69	10/2/17 21:50 10/2/17 22:00	4970.00 4980.00	48.70 48.87	55.056771 55.118448	-0.05 -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
504 505	10/2/17 22:20	5000.10 5010.10	49.58 49.58	221.08 221.47	9.44 9.05	10/2/17 22:20 10/2/17 22:30	5000.10 5010.10	50.47 50.47	89.02 88.81	8.35 8.56	10/2/17 22:20 10/2/17 22:30	5000.00 5010.00	48.87 48.70	55.183128 55.206459	-0.01 -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	-0.02
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
508 509	10/2/17 23:00 10/2/17 23:10	5040.10 5050.10	49.58 49.58	221.79 221.79	8.73 8.73	10/2/17 23:00 10/2/17 23:10	5040.10 5050.10	50.47 50.47	88.70 88.80	8.67 8.58	10/2/17 23:00 10/2/17 23:10	5040.00 5050.00	48.87 48.70	55.293084 55.336512	-0.04 -0.04
510	10/2/17 23:10	5060.10	49.58	221.73	8.79	10/2/17 23:10	5060.10	50.47	89.21	8.16	10/2/17 23:10	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
512 513	10/2/17 23:40 10/2/17 23:50	5080.10 5090.10	49.58 49.58	221.81 222.10	8.71 8.41	10/2/17 23:40 10/2/17 23:50	5080.10 5090.10	50.47 50.47	88.92 89.00	8.45 8.38	10/2/17 23:40 10/2/17 23:50	5080.00 5090.00	48.70 48.70	55.438845 55.474419	-0.03 -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
516 517	10/3/17 0:20 10/3/17 0:30	5120.10 5130.10	49.58 49.58	221.79 221.73	8.73 8.79	10/3/17 0:20 10/3/17 0:30	5120.10 5130.10	50.47 50.47	88.99 89.02	8.39 8.36	10/3/17 0:20 10/3/17 0:30	5120.00 5130.00	48.70 48.87	55.531476 55.570977	-0.02 -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
519 520	10/3/17 0:50 10/3/17 1:00	5150.10 5160.10	49.58 49.58	222.15 222.29	8.37 8.22	10/3/17 0:50 10/3/17 1:00	5150.10 5160.10	50.47 50.47	89.07 89.14	8.30 8.23	10/3/17 0:50 10/3/17 1:00	5150.00 5160.00	48.87 48.70	55.639122 55.675158	-0.04 -0.04
521	10/3/17 1:10	5170.10	49.58	222.29	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	-0.04
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
523 524	10/3/17 1:30 10/3/17 1:40	5190.10 5200.10	49.58 49.58	222.42 222.32	8.10 8.19	10/3/17 1:30 10/3/17 1:40	5190.10 5200.10	50.47 50.47	89.31 89.25	8.06 8.12	10/3/17 1:30 10/3/17 1:40	5190.00 5200.00	48.87 48.87	55.780032 55.815837	-0.04 -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	55.883982	-0.05
527 528	10/3/17 2:10 10/3/17 2:20	5230.10 5240.10	49.58 49.58	222.39 222.57	8.12 7.95	10/3/17 2:10 10/3/17 2:20	5230.10 5240.10	50.47 50.47	89.73 89.33	7.64 8.04	10/3/17 2:10 10/3/17 2:20	5230.00 5240.00	48.87 48.87	55.901769 55.923252	-0.02 -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
531 532	10/3/17 2:50 10/3/17 3:00	5270.10 5280.10	49.58 49.58	222.81 222.72	7.71 7.80	10/3/17 2:50 10/3/17 3:00	5270.10 5280.10	50.47 50.47	89.63 89.72	7.74 7.65	10/3/17 2:50 10/3/17 3:00	5270.00 5280.00	48.87 48.70	56.010108 56.031129	-0.03 -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	56.044527	-0.01
534 535	10/3/17 3:20 10/3/17 3:30	5300.10 5310.10	49.58 49.58	223.11 223.11	7.40 7.40	10/3/17 3:20 10/3/17 3:30	5300.10 5310.10	50.47 50.47	89.56 89.63	7.81 7.74	10/3/17 3:20 10/3/17 3:30	5300.00 5310.00	48.87 48.87	56.057925 56.057463	-0.01 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
538 539	10/3/17 4:00 10/3/17 4:10	5340.10 5350.10	49.58 49.58	222.97 223.07	7.55 7.45	10/3/17 4:00 10/3/17 4:10	5340.10 5350.10	50.47 50.47	89.73 89.55	7.64 7.82	10/3/17 4:00 10/3/17 4:10	5340.00 5350.00	48.87 48.87	56.069706 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
541 542	10/3/17 4:30 10/3/17 4:40	5370.10	49.58 49.58	223.20 223.59	7.31 6.93	10/3/17 4:30 10/3/17 4:40	5370.10 5380.10	50.47 50.47	89.93	7.44 7.52	10/3/17 4:30 10/3/17 4:40	5370.00 5380.00	48.70 48.70	56.10066 56.105511	-0.01 0.00
543	10/3/17 4:50	5380.10 5390.10	49.58	223.41	7.11	10/3/17 4:50	5390.10	50.47	89.85 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
545 546	10/3/17 5:10 10/3/17 5:20	5410.10 5420.10	49.58 49.58	223.68 223.35	6.84 7.17	10/3/17 5:10 10/3/17 5:20	5410.10 5420.10	50.47 50.47	89.87 89.74	7.51 7.63	10/3/17 5:10 10/3/17 5:20	5410.00 5420.00	48.87 48.87	56.126763 56.136927	0.01 -0.01
547	10/3/17 5:30	5430.10	49.58	223.55	6.97	10/3/17 5:30	5430.10	50.47	90.01	7.36	10/3/17 5:30	5430.00	48.87	56.117754	0.02
548	10/3/17 5:40 10/3/17 5:50	5440.10	49.58	223.66	6.86	10/3/17 5:40	5440.10	50.47	90.03	7.34	10/3/17 5:40	5440.00	48.87	56.112672	0.01
549 550	10/3/17 5:50	5450.10 5460.10	49.58 49.58	223.78 223.88	6.74 6.64	10/3/17 5:50 10/3/17 6:00	5450.10 5460.10	50.47 50.47	90.04 90.24	7.33 7.13	10/3/17 5:50 10/3/17 6:00	5450.00 5460.00	48.70 48.87	56.108745 56.100198	0.00
551	10/3/17 6:10	5470.10	49.58	224.14	6.37	10/3/17 6:10	5470.10	50.47	90.13	7.25	10/3/17 6:10	5470.00	48.70	56.069244	0.03
552 553	10/3/17 6:20 10/3/17 6:30	5480.10 5490.10	49.58 49.58	223.77 224.17	6.75 6.35	10/3/17 6:20 10/3/17 6:30	5480.10 5490.10	50.47 50.47	89.75 90.03	7.62 7.34	10/3/17 6:20 10/3/17 6:30	5480.00 5490.00	48.70 48.70	56.056308 56.058618	0.01
554	10/3/17 6:30	5500.10	49.58	223.98	6.54	10/3/17 6:30	5500.10	50.47	89.91	7.46	10/3/17 6:40	5500.00	48.70	56.055846	0.00
555	10/3/17 6:50	5510.10	49.58	224.13	6.38	10/3/17 6:50	5510.10	50.47	89.97	7.41	10/3/17 6:50	5510.00	48.70	56.045451	0.01
556 557	10/3/17 7:00 10/3/17 7:10	5520.10 5530.10	49.58 49.58	224.30 224.41	6.22 6.11	10/3/17 7:00 10/3/17 7:10	5520.10 5530.10	50.47 50.47	90.25 90.35	7.12 7.03	10/3/17 7:00 10/3/17 7:10	5520.00 5530.00	48.70 48.70	56.05446 56.055384	-0.01 0.00
558	10/3/17 7:20	5540.10	49.58	224.17	6.35	10/3/17 7:20	5540.10	50.47	90.40	6.97	10/3/17 7:20	5540.00	48.70	56.050302	0.01
559	10/3/17 7:30	5550.10	49.58	224.08	6.43	10/3/17 7:30	5550.10	50.47	90.44	6.93	10/3/17 7:30	5550.00	48.70	56.035518	0.01
560 561	10/3/17 7:40 10/3/17 7:50	5560.10 5570.10	49.58 49.58	224.26 224.18	6.26 6.34	10/3/17 7:40 10/3/17 7:50	5560.10 5570.10	50.47 50.47	90.30 90.21	7.08 7.16	10/3/17 7:40 10/3/17 7:50	5560.00 5570.00	48.70 48.70	56.011725 56.015652	0.02
562	10/3/17 8:00	5580.10	49.58	224.26	6.26	10/3/17 8:00	5580.10	50.47	90.14	7.23	10/3/17 8:00	5580.00	48.70	56.014035	0.00
563 564	10/3/17 8:10 10/3/17 8:20	5590.10 5600.10	49.58 49.58	224.08 224.25	6.43	10/3/17 8:10 10/3/17 8:20	5590.10 5600.10	50.47 50.47	90.20 90.20	7.18 7.18	10/3/17 8:10 10/3/17 8:20	5590.00 5600.00	48.70 48.70	56.008029 56.000637	0.01
565	10/3/17 8:20	5610.10	49.58	224.28	6.24	10/3/17 8:20	5610.10	50.47	90.20	7.18	10/3/17 8:20	5610.00	48.70	55.989549	0.01
566	10/3/17 8:40	5620.10	49.58	224.27	6.25	10/3/17 8:40	5620.10	50.47	90.28	7.10	10/3/17 8:40	5620.00	48.70	55.974765	0.01
567 568	10/3/17 8:50 10/3/17 9:00	5630.10 5640.10	49.58 49.58	224.07 224.45	6.44	10/3/17 8:50 10/3/17 9:00	5630.10 5640.10	50.47 50.47	90.45 90.34	6.92 7.03	10/3/17 8:50 10/3/17 9:00	5630.00 5640.00	48.70 48.70	55.956054 55.953744	0.02
569	10/3/17 9:10	5650.10	49.58	224.45	6.17	10/3/17 9:10	5650.10	50.47	90.38	6.99	10/3/17 9:10	5650.00	48.70	55.952127	0.00
570	10/3/17 9:20	5660.10	49.58	224.11	6.40	10/3/17 9:20	5660.10	50.47	90.30	7.07	10/3/17 9:20	5660.00	48.70	55.948431	0.00
571 572	10/3/17 9:30 10/3/17 9:40	5670.10 5680.10	49.58 49.58	224.64 224.47	5.88 6.05	10/3/17 9:30 10/3/17 9:40	5670.10 5680.10	50.47 50.47	90.48 90.53	6.89 6.85	10/3/17 9:30 10/3/17 9:40	5670.00 5680.00	48.70 48.70	55.966911 55.946352	-0.02 0.02
573	10/3/17 9:50	5690.10	49.58	224.38	6.14	10/3/17 9:50	5690.10	50.47	90.69	6.68	10/3/17 9:50	5690.00	48.70	55.921404	0.02
574	10/3/17 10:00	5700.10	49.58	224.41	6.11	10/3/17 10:00	5700.10	50.47	90.67	6.71	10/3/17 10:00	5700.00	48.70	55.896918	0.02
575 576	10/3/17 10:10 10/3/17 10:20	5710.10 5720.10	49.58 49.58	224.52 224.51	6.00 6.01	10/3/17 10:10 10/3/17 10:20	5710.10 5720.10	50.47 50.47	90.73 90.51	6.65 6.86	10/3/17 10:10 10/3/17 10:20	5710.00 5720.00	48.70 48.70	55.892298 55.869429	0.00
577	10/3/17 10:20	5730.10	49.58	224.56	5.96	10/3/17 10:20	5730.10	50.47	90.54	6.84	10/3/17 10:30	5730.00	48.70	55.868736	0.02
578	10/3/17 10:40	5740.10	49.58	224.74	5.78	10/3/17 10:40	5740.10	50.47	90.38	6.99	10/3/17 10:40	5740.00	48.70	55.843557	0.03
579	10/3/17 10:50	5750.10	49.58	224.65	5.87	10/3/17 10:50	5750.10	50.47	90.67	6.70	10/3/17 10:50	5750.00	48.70	55.841709	0.00

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

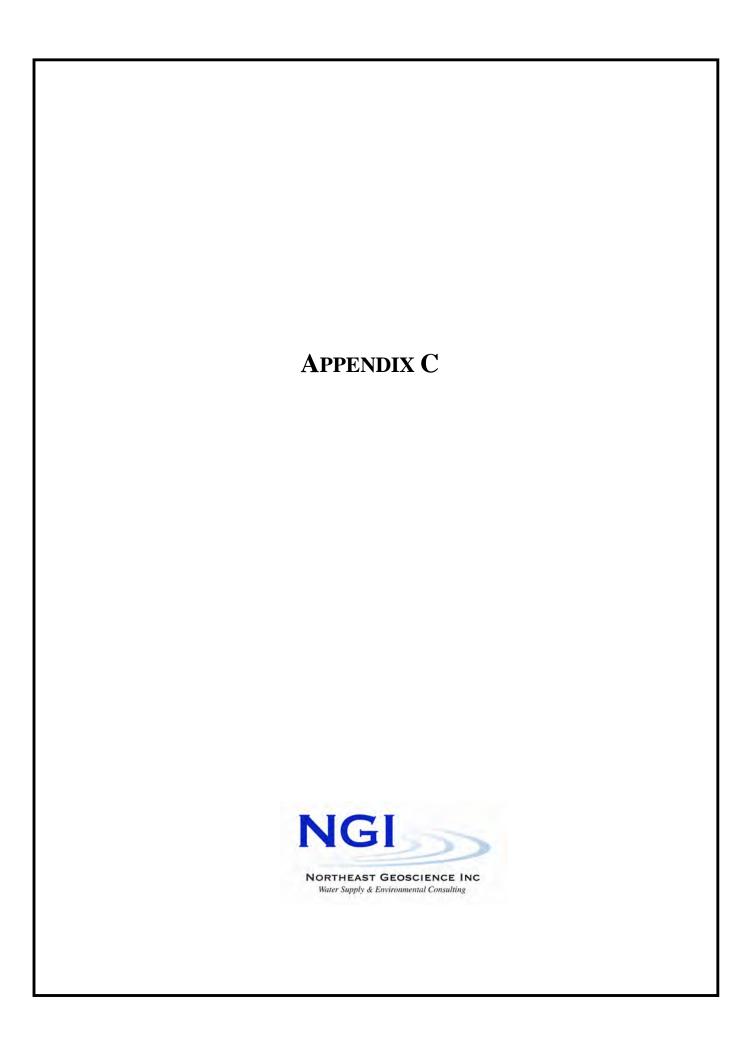
Dry Period Testing Field Log - PW-1 45 Nixon Road - Framingham, MA

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







Volatile Organic Contaminant Report

VOC

Page 1 of 2

I. PWS INFOR	MATION:	Please refer t	your DEP Water (Quality Sam	oling Sch	edul	e (WQSS) to he	lp complete	this form		
PWS ID #:				С	ity / Tow	n:	FRAMINGHAM				
PWS Name:	Ford	d's Meadow					PWS C	class: CC	M 🖂 NTN	C TNC	
DEP LOCATION (LOC) ID#		DEP Lo	cation Name				Sample Acidified?	Date Collected	Collected By		
PW-1	Bedrock	Well No.1	Well No.1					Yes ⊠	2/8/2017	J.G.B.	
Routine or		Original, Resubi					If Resubmitted	Report, list b	elow:		
Special Sample		Confirmation	Report	(1) Reason for Resubmission				(2) C	(2) Collection Date of Original Sample		
☐ RS 🖾 SS	☑ Origin	nal 🗌 Resubmitte	d Confirmation	☐ Resample ☐ Reanalysis ☐ Report Correction							
SAMPLE NOTES	SAMPLE NOTES – Such as, if a Manifold/Multiple sample, list the source(s) that were on-line during sample collection.										
II. ANALYTICA	AL LABOR	RATORY INFO	RMATION:								
Primary Lab MA	A Cert. #:	M-MA086	Primary Lab Nam	e: Alpha Ai	sha Analytical Subcontracted? (Y/I			ted? (Y/N) N			
Analysis Lab M	A Cert. #:	M-MA086	Analysis Lab Nam	e: Alpha Ai	nalytical						
Lab Meth	od	Date Extracte (551.1 only)	Date Analyzed	Lab Samp			SAMPLE NOTES ed or additional cor			ether sample was	
524.2			2/10/2017	L170408	5-01						
Was this Sa composited by		COMPOSITE S	AMPLE NOTES - Plea	se list the comp	posited sour	ces b	by DEP Source Co	de (XXXXXX	-XXX), up to five	e individual sources.	
Yes:□ N	lo:□										

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



Volatile Organic Contaminant Report

Page 2 of 2

P	WS ID#:			La	ab Sample ID#:	L1704085-01				
•	UNREGULATED	Results	MDL		CAS#		DDITIONAL D and/or NON-TARGET	Results	MDL	

CAS#	UNREGULATED VOC CONTAMINANTS	Results μg/L	MDL μg/L
67-66-3	CHLOROFORM*	ND	0.50
75-27-4	BROMODICHLOROMETHANE	ND	0.50
124-48-1	CHLORODIBROMOMETHANE	ND	0.50
75-25-2	BROMOFORM	ND	0.50
541-73-1	M-DICHLOROBENZENE	ND	0.50
74-95-3	DIBROMOMETHANE	ND	0.50
563-58-6	1,1-DICHLOROPROPENE	ND	0.50
75-34-3	1,1-DICHLOROETHANE*	ND	0.50
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	0.50
142-28-9	1,3-DICHLOROPROPANE	ND	0.50
74-87-3	CHLOROMETHANE	ND	0.50
74-83-9	BROMOMETHANE*	ND	0.50
96-18-4	1,2,3-TRICHLOROPROPANE	ND	0.50
630-20-6	1,1,1,2-TETRACHLOROETHANE	ND	0.50
75-00-3	CHLOROETHANE	ND	0.50
594-20-7	2,2-DICHLOROPROPANE	ND	0.50
95-49-8	O-CHLOROTOLUENE	ND	0.50
106-43-4	P-CHLOROTOLUENE	ND	0.50
108-86-1	BROMOBENZENE	ND	0.50
542-75-6	1,3-DICHLOROPROPENE*	ND	0.50
95-63-6	1,2,4-TRIMETHYLBENZENE	ND	0.50
87-61-6	1,2,3-TRICHLOROBENZENE	ND	0.50
103-65-1	N-PROPYLBENZENE	ND	0.50
104-51-8	N-BUTYLBENZENE	ND	0.50
91-20-3	NAPHTHALENE*	ND	0.50
87-68-3	HEXACHLOROBUTADIENE	ND	0.50
108-67-8	1,3,5-TRIMETHYLBENZENE	ND	0.50
99-87-6	P-ISOPROPYLTOLUENE	ND	0.50
98-82-8	ISOPROPYLBENZENE	ND	0.50
98-06-6	TERT-BUTYLBENZENE	ND	0.50
135-98-8	SEC-BUTYLBENZENE	ND	0.50
75-69-4	FLUOROTRICHLOROMETHANE	ND	0.50
75-71-8	DICHLORODIFLUOROMETHANE*	ND	0.50
74-97-5	BROMOCHLOROMETHANE	ND	0.50
1634-04-4	METHYL TERTIARY BUTYL ETHER (MTBE)# [*]	ND	0.50

CAS#	ADDITIONAL UNREGULATED and/or NON-TARGET VOC CONTAMINANTS (Report if analyzed or otherwise detected)	Results μg/L	MDL μg/L
109-99-9	TETRAHYDROFURAN (THF)*		
75-65-0	TERT-BUTYL ALCOHOL (TBA)*		
994-05-8	TERT-AMYL METHYL ETHER (TAME)*		
637-92-3	ETHYL TERTIARY BUTYL ETHER (ETBE)		
108-20-3	DI-ISOPROPYL ETHER (DIPE)		
67-64-1	ACETONE*		
76-13-1	FREON 113*		
78-93-3	METHYL ETHYL KETONE (MEK)*		
108-10-1	METHYL-ISOBUTYL KETONE (MIBK)*		
]	

[☐] Check this box if attaching lab report to show additional VOC results/contaminants tested.

^{*}Required * DEP ORSG limit established.

Surrogate Name	% Recovery (70 – 130%)
1,2-Dichlorobenzene-d4	100
4-Bromofluorobenzene	96

	I	certii	fy	und	er	ре	enali	ies	of	law	that	1	am	the	э ре	ersc	n
authorized i	to	fill o	ut	this	foi	rm	and	l the	in	forma	ation	со	ntain	ed	here	ein	is
true, accura	ite	and	СС	mple	ete	to	the	bes	t ex	tent (of my	kr.	iowle	edge	e.		

Primary Lab Director Signature:

e:	Joseph Wattons	
e: _	2/17/2017	

In accordance with 310 CMR 22.15(2), if mailing paper reports, <u>TWO</u> 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 <u>or</u> 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	□wqts
☐ Accepted ☐ Disapproved	Comments	Data Entered





Secondary Contaminant Report

I. P	WS INFORM	ATIC	ON: Pleas	se refer	to your DEP	Water Qua	lity Sam	pling Sch	edule (V	vQs	S) to h	elp cor	nplete	this forr	m		
PW	/S ID #:						Cit	y / Town:	FRA	MI	NGHA	M					
PW	/S Name:	Fo	rd's Mea	dow				<u> </u>		P۱	WS CI	ass:	CON	I 🛛 NT	NC	☐ TNC ☐	
I	DEP LOCATION (LOC) ID#			D	EP Location N	Name			Sample In					ate ected		Collected By	
Α	PW-1		Bedrock	k Well N	lo.1			☐ (M) ☐ (S)i	ultiple ngle		☑ (R)aw ☑ (F)inis	hed	2/8/	2017	J.G.	В.	
В								☐ (M)			☐ (R)aw ☐ (F)inis						
	Routine or Special Samp	ıla.	C		Resubmitted o ation Report	r		(1) Reason				ted Rep	····r	t below:	- D-	to of Original Com	
Α	□ RS ⊠ S		⊠ Origina		ıbmitted ☐ Co	nfirmation	□ Resa	mple \square Rea				rrection	(2	Conectio	п Ба	te of Original Sam	pie
В	□RS □S	-			ıbmitted ☐ Co			mple 🔲 Rea									
	SAMPLE NOTE	ES - (Such as, if a	a Manifold	/Multiple samp	le, list any sou	urces that	were on-line	during s	amp	le collec	tion).					
Α																	
В																	
11 /	ANALYTICAL	ΙΔΙ	BORATO	RY INF	ORMATION	۱.											
	mary Lab MA C			-MA086	1	٠. ، Lab Name	· Alpha	a Analytical						Subcor	ntrac	ted? (Y/N)	N
	alysis Lab MA			-MA086]]	s Lab Name		a Analytical						- Gubooi			
	-			Resi	ults		MDI	-				5					
	Compound			A	В	SMCL	MDL (mg/L)		Lab Meth	od		Dat Analy			Lat	Sample ID#	
IRO	N (mg/L)		0.	.062		0.3	0.050		200.7			2/15/2	2017		L	1704085-01	
MAI	NGANESE (mg/L))	ı	ND		0.05*	0.010		200.7			2/15/2	2017		L	1704085-01	
ALK	KALINITY (mg/L as	s CaC	03) 5	52.3		None	2.00		2320E	3		2/9/20	017		L	1704085-01	
CAL	LCIUM (mg/L)		1	15.5		None	0.100		200.7	r		2/15/2	2017		L	1704085-01	
MA	GNESIUM (mg/L)		2	2.52		None	0.100		200.7			2/15/2	2017		L	1704085-01	
HAF	RDNESS (mg/L as	CaCC	03) 4	19.1		None	0.660		200.7			2/15/2	2017		L	1704085-01	
POT	TASSIUM (mg/L)		1	ND		None	2.50		200.7			2/15/2	2017		L	1704085-01	
TUF	RBIDITY (NTU)		0).27		None	0.20		180.1			2/9/20	017		L	1704085-01	
ALU	JMINUM (mg/L)		1	ND		0.2	0.100		200.7			2/15/2	2017		L	1704085-01	
CHL	LORIDE (mg/L)		2	2.56		250	0.500		300.0			2/10/2	2017		L	1704085-01	
COI	LOR (C.U.)		•	6.0		15	5.0		2120E	3		2/8/20	017		L	1704085-01	
COI	PPER (mg/L)		1	ND		1	0.010		200.7			2/15/2	2017		L	1704085-01	
ODO	OR (T.O.N)		1	ND		3	1		2150E	3		2/8/20	017		L	1704085-01	
рН				7.2		6.5-8.5	NA		4500H+	-B		2/8/20	017		L	1704085-01	
SIL	VER (mg/L)			ND		0.10	0.007		200.7			2/15/2	2017		L	1704085-01	
SUL	_FATE (mg/L)			12.4		250	1.00		300.0			2/10/2	2017		L	1704085-01	
TDS	6 (mg/L)			81.		500	10		25400			2/9/20			L	1704085-01	
	C (mg/L)			.213		5	0.050		200.7			2/15/2	2017		L	1704085-01	
* EF	PA has established			h Advisory	(HA) for mang	anese at 0.3 i	mg/L and	an acute HA	at 1.0 m	g/L.							
Α	LAB SAMPLE	NOTE	:8														
B																	
pers	I certify u son authorized to tained herein is tru	fill ou		and the i	nformation			Prima	ry Lab D	Direc	ctor Si	gnature	e:	Josep	L	Vackons	
	ent of my knowledg		is and and	22,51010	2 3.70 2001							Date	e:	0	2/	17/2017	
end	ccordance with 31 of the month in w EP) deadline is th	vhich t	the results a	are receive												han 10 days after the ctronic reporting	he
DEI	P REVIEW STA	ATUS	(Initial & I	Date)		R	eview									☐ WQTS Data	
	Accepted		☐ Disa	approved	ı		ments									Entered	



Inorganic Contaminant Report

I. PWS INFOR	MATION: Plea	ase refer	to your DEI	P Water C	Quality Sa	mpling Sched	ule	(WQSS) to he	lp complete this	form		
PWS ID #:					-	City / Town	: T	FRAMINGHA	\M			
PWS Name:	Ford's Me	eadow						PWS (Class: COM	NTNC	□ TNC □	
DEP LOCATION (LOC) ID#		DEP L	ocation Nam	е		*Please note all	sampl f finis	ormation les are considered hed water if there	Date Collected	Co	ollected By	
PW-1	Bedrock Wel	ll No.1				☐ (M)ultiple ☐ (S)ingle	•		2/8/2017	J.G.B.		
Routine or		inal, Resul							Report, list below			
Special Sample ☐ RS ☐ SS	☑ Original □	nfirmation	-	nation	+_	(1) Reason for R				ion Date of 0	Original Sample	
	- (Such as, if a Mai				<u> </u>	nple Reanalys		<u> </u>	OII			
CAMILLE HOTES	(Oddir do, ii d ividi	illiola/ivialiti	ole dample, lie	or the source	ico triat were	c on line during a	шпр	ic concention).				
II ANALYTICAL LABORATORY INFORMATION:												
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												
ANTIMONY	ND	0.006	0.0040	200	0.8	2/14/2017	N	И-MA086	Alpha Analytic	al	L1704085-01	
ARSENIC	ND	0.010	0.0010	200	0.8	2/14/2017	N	И-MA086	Alpha Analytic	al	L1704085-01	
BARIUM	0.0077	2	0.0010	200	0.8	2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01	
BERYLLIUM	ND	0.004	0.0010	200	0.8	2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01	
CADMIUM	ND	0.005	0.0010	200	0.8	2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01	
CHROMIUM	ND	0.1	0.0010	200	0.8	2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01	
CYANIDE	ND	0.2	0.005	4500C	N-CE	2/13/2017	N	И-МА086	Alpha Analytic	al	L1704085-01	
FLUORIDE ¹	0.39	4.0	0.20	4500	F-C	2/8/2017	N	И-МА086	Alpha Analytic	al	L1704085-01	
MERCURY ²	ND	0.002	0.0002	245	5.1	2/10/2017	N	M-MA086	Alpha Analytic	al	L1704085-01	
NICKEL	ND	0.1*	0.0020	200	0.8	2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01	
SELENIUM	ND	0.05	0.0020	200		2/14/2017	N	И-МА086	Alpha Analytic	al	L1704085-01	
SODIUM	6.16	20*	2.00	200		2/15/2017		M-MA086	Alpha Analytic	-	L1704085-01	
THALLIUM	ND	0.002	0.0010	200		2/14/2017		M-MA086	Alpha Analytic		L1704085-01	
² Please note that it	a secondary MCL of f method 245.1 is u nowever DEP Office	sed for me	cury, only me	thod revisi	on 3.0 will b	e accepted by M	A DÉ	P	tice pursuant to 310) GIVIR 22. 16.	•	
Was this Samp by the	le composited Lab?		SITE SAMPL ne composite		by DEP So	ource Code (XX)	(XX)	(X-XXX), up to f	ive individual sour	ces per sam	ıple.	
Yes												
LAB SAMPLE N	NOTES	-										
	fy under penalties ut this form and th				Р	rimary Lab [Dire	ctor Signatu	ire: Josep	l Waa	kins	
	complete to the be							Da	ite:	2/17/1	17	
end of the month in		are receive							DEP Regional Office er is sooner. Please			
DEP REVIEW S	TATUS (Initial &	Date)			Reviev	N					□wqts	
☐ Accepted		Disapprov	ed		Comment						Data Entered	

Lead and Copper Analysis Report

I. P	WS INFO	ORMA	TION	: Please re	fer to your D	EP Lead	& Copp	per samplin	g pl	an for approved	d sam	pling loc	ations.	
PW	S ID #:]			City /	Tow	n: FRAMIN	GHA	М		
PW	S Name:	: [Ford	d's Meado	N					PV	vs c	lass: C	COM M NTNC	
Pout	ine or Spe	cial San	nnlae		iginal, Resubi					If Res	ubmit	ted Report	, list below:	
Rout			iipies		Confirmation	Report		(1)	Rea	son for Resubmis	ssion		(2) Collection Date	of Original Sample
	RS	⊠ ss		☑ Original	Resubmitte	d Confir	mation	Resamp	e 🗌	Reanalysis Re	port C	orrection		
SAN	IPLE NOTE	S – (Su	ch as,	if a Manifold/N	/ultiple sample	, list the sou	urces tha	at were on-line	duri	ng sample collection	n).			
II. A	NAI YTI	CALI	ABO	RATORY	INFORMAT	ION:								
	nary Lab			M-MA086	7	y Lab Nan	ne: A	Ipha Analytic	al				Subcontracted	1? (Y/N) N
	nalyte			vel (mg/L)	Lab Met	•		L (mg/L)	An	alysis Lab MA Ce	rt.#		Analysis Lab N	
	Lead:		0.0	15	200.	7	0	.0005		M-MA086			Alpha Analyti	ical
(Copper:		1.3	3	200.	7	(0.010		M-MA086			Alpha Analyti	ical
LAB SAMPLE NOTES														
	DEP Approved Sample Location Collection Date Lab Sample ID#													
(Se	(See DEP approved LCR plan for sampling locations) Collection Date Result (mg/L) Date Analyzed Result (mg/L) Date Analyzed Lab Sample ID#													
, , , , , , , , , , , , , , , , , , ,														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14 15														
16														
17														
18														
19														
20														
	Rep	ort SCH	HOOL F	RESULTS colle	ected in accord	ance with 3	10 CMR	22.06B (7)(a)) bel	ow. Do not use the	se sch	ool results i	n 90 th percentile calcu	ulations.
1														
2														
3														
4														
fill o	ut this form	n and th	ne info	rmation conta	person authoriz ined herein is my knowledge.		Prima	ry Lab Dire	ecto	r Signature: Date:		J	oepl Watern 2/17/2017	<i></i>
end (h in whic	ch the i	results are rec									al Office no later than Please note: Electr	
					Water Supplier	s must sub	mit Form	s LCR-D or L	CR-E	with this form to the	ne app	ropriate DE	P Regional Office.	
	REVIEW S	STATUS		& Date) Disapproved				leview ments						
^													Page	of



LCR-D

___ of __

Lead and Copper - 90th PERCENTILE COMPLIANCE Report (For Systems Required to Collect More Than 5 Samples)

I. PW	S INFORM	IATI(ON: Please	refer	to your DEF	Lead	& Copper s			-	approv	ved	sampling lo	ocatio	ns.		
PWS	ID #:							Ci	ity / T	own:							
PWS	Name:											PV	VS Class:	CC	M 🗌 NTN	c 🗆	
Sam	pling		☐ FIRST SEI	MI-ANN	IUAL SAMPLII	NG PEF	RIOD				RE	DUC	ED - EVERY	THRE	E YEARS		
Freq	uency:		☐ SECOND	SEMI-A	NNUAL SAMF	PLING F	PERIOD				LE	AD S	SERVICE LIN	E (LSL) REPLACEME	NT PRO	GRAM
(choos	se one)		REDUCED	– ANN	IUAL						☐ DE	MON	NSTRATION				
Pleas limit (I mg/L Step : neces Step : than t	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 90 th 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. COPPER RESULTS (mg/L)																
LEAD RESULTS (mg/L) COPPER RESULTS (mg/L) # Results # Result																	
1* 16 31 46 1* 16 31 46																	
2 17 32 47 2 17 32 47																	
2 17 32 47 2 17 32 47 3 18 33 48 3 18 33 48																	
3 18 33 48 3 18 33 48 4 19 34 49 4 19 34 49																	
5																	
6		21		36		51			6			21		36		51	
7		22		37		52			7			22		37		52	
8		23		38		53			8			23		38		53	
9		24		39		54			9			24		39		54	
10		25		40		55			10			25		40		55	
11		26		41		56			11			26		41		56	
12		27		42		57			12			27		42		57	
13		28		43		58			13			28		43		58	
14		29		44		59			14		:	29		44		59	
15		30		45		60			15		:	30		45		60	
Му		f san	nples collec	ted:		x 0.9			_ _ TI	nis num	ber is	my	system's 9	-	lead and ercentile sar ppropriate s	nple #	
					Compared	to 0.0	15 ma/L								Compared	to 1.3	ma/L
(Lead	result at 90th p	ercer	ntile sample#)		(The lead				(Coppe	er result a	it 90 th pe	ercen	ntile sample#)		(The coppe		
II. CF	RTIFICATI	ON:															
Check you m		te the	e correct stat ne Consumer	Confi	dence Rule ((CCR)	reporting rec								ou are a com A(4)(i)6.	munity	system
	☐ My syste	em e	xceeded th	ne lea	d action lev	el and		ert#	of sam	oles)	samp	oling	sites exc o	ede	d the lead a	ction le	vel.
syster	n you must o	ompl	y with the Co	nsum	er Confidenc	e Rule	rmined from (CCR) repo	the	above	results.					and you are a R 22.16A(4)(i)		unity
	☐ My syste										00:	.li-	. aitaa	- له م	d the series	. o.c.t: -	. love!
	☐ My syste	em e	xceeaea th	ie cop	pper action	ievel a		ert #	of sam	oles)	samp	ng	sites exc e	eae	d the copper	action	ı ievel.
I have		e owr	ner of each sar	npling s	site of their site	s' indiv	e been previou idual results. I	sly a certi	pprove fy unde	d in writin r penalty					mplied with 310 orized to fill out t		
		Titlo					Signature of D	MS -	or Ower	r'e Door	neontoti.	v0				Date	



LCR-E

Lead and Copper - 90th PERCENTILE COMPLIANCE Report (For Systems Required to Collect 5 Samples)

I DWS INFORMA	TION: Please refer to your DEP Lead & Copper	campling plan fo	or approved sampling locations	
PWS ID #:	TION. Flease feler to your DEF Lead & Copper	City / Town:	or approved sampling locations.	
		City / Town.	DWO OLEREN COM D NT	ruo 🗆
PWS Name:			PWS Class: COM NT	INC [
Sampling	☐ FIRST SEMI-ANNUAL SAMPLING PERIOD		REDUCED - EVERY THREE YEARS	
Frequency:	SECOND SEMI-ANNUAL SAMPLING PERIOD		LEAD SERVICE LINE (LSL) REPLACEN	MENT PROGRAM
(choose one)	REDUCED – ANNUAL		☐ DEMONSTRATION	
Please report results	sults in ascending order (from lowest to highest value that are ND or less than (<) the laboratory's reported 0.005 mg/L for lead or 0.05 mg/L for copper shall be	I detection limit (M	IDL) as zero. Results at or above the labo	oratory's detection
Step 2: Take the ave	rage of the 4 th and 5 th highest sample results. This is	your 90 th percen	tile sample value.	
have an exceedance	90th percentile value against the corresponding act and are required to contact MassDEP as soon as p	ossible for inform	ation on compliance actions.	
Note: If you collected	I more than 5 samples you must use the 90th Percer	tile Compliance F	Report form for more than 5 samples (Forr	m LCR-D).
	LEAD RESULTS (mg/L)		COPPER RESULTS (mg/L)	.)
#	All results for sampling period	#	All results for sampling perio	od
1*		1*		
2		2		
3		3		
4		4		
5		5		
*Lowest Value	equired to collect five lead and copper sar	malaa Muraya	to me collected to the state of	
	highest comple regulte chave then evere			copper samples.
Circle 4" and 5" i	(Value of 4th highest result + Value of 2	ge the 4 th and	5 th highest sample results as follo	
(Lead 90th percent	(Value of 4th highest result + Value of 2 Compared to 0.015 mg/L	the 5th highest	5th highest sample results as followed result: = 90th Percentile Value Compare	
	(Value of 4th highest result + Value of 2 Compared to 0.015 mg/L (The lead action level)	the 5th highest	5th highest sample results as followed result) = 90th Percentile Value Compare	ows: ed to <u>1.3 mg/L</u>
(Lead 90th percent II. CERTIFICATIO Check and comp you are a commit	(Value of 4th highest result + Value of 2 Compared to 0.015 mg/L (The lead action level)	the 5th highest	result) = 90 th Percentile Value Compare (The cop	ed to 1.3 mg/L oper action level)
(Lead 90th percent) II. CERTIFICATIO Check and comp you are a commit accordance with	(Value of 4th highest result + Value of 2 Compared to 0.015 mg/L (The lead action level) N: Delete the correct statement for lead as determity system you must comply with the Compared to CMR 22.16A(4)(i)6. Stem was at or below the lead action level. Stem exceeded the lead action level	the 5th highest (Copper 9)	result) = 90 th Percentile Value Compare (The cop	ed to 1.3 mg/L oper action level) acceedance and tirements in
(Lead 90th percent) II. CERTIFICATIO Check and compyou are a common accordance with My system My system Check and compand you are a compand you are a component.	(Value of 4th highest result + Value of 2 Compared to 0.015 mg/L (The lead action level) N: Delete the correct statement for lead as determity system you must comply with the Compared to CMR 22.16A(4)(i)6. Stem was at or below the lead action level. Stem exceeded the lead action level	re the 4 th and the 5th highest (Copper 9 ermined by the nsumer Confidence of samples) etermined from	Compare (The cop) above results. If you have an exdence Rule (CCR) reporting requirements above results. If you have a compared the lead action on the above results. If you have a compared to the lead action on the above results. If you have a compared to the lead action on the above results. If you have a compared to the lead action on the above results. If you have a compared to the lead action on the above results. If you have a compared to the lead action on the above results.	ed to 1.3 mg/L oper action level) acceedance and direments in on level. an exceedance
(Lead 90th percent II. CERTIFICATIO Check and compyou are a common accordance with My system My system Check and compand you are a conduction accordance with	Compared to 0.015 mg/L (The lead action level) N: Delete the correct statement for lead as determinity system you must comply with the Compared to 310 CMR 22.16A(4)(i)6. Setem was at or below the lead action level. Setem exceeded the lead action level. (Insert #	re the 4 th and the 5th highest (Copper 9 ermined by the nsumer Confidence of samples) etermined from	Compare (The cop) above results. If you have an exdence Rule (CCR) reporting requirements above results. If you have a compared the lead action on the above results. If you have a compared to the lead action on the above results. If you have a compared to the lead action on the above results. If you have a compared to the lead action on the above results. If you have a compared to the lead action on the above results. If you have a compared to the lead action on the above results.	ed to 1.3 mg/L oper action level) acceedance and direments in on level. an exceedance
(Lead 90th percent) II. CERTIFICATIO Check and compyou are a common accordance with My system Check and compon and you are a conduction are a conduction accordance with My system	(Value of 4th highest result + Value of 2 Compared to 0.015 mg/L (The lead action level) N: Determine the correct statement for lead as determined as determined as determined as a comply with the Compared as a comply with the Compared as a comply with the Compared as a complex of the correct statement for complex of the correct statement for copper as a compared as a complex of the correct statement for copper as a compared as a complex of the correct statement for copper as a compared to the correct statement for copper as a compared to the correct statement for copper as a compared to the correct statement for copper as a compared to the correct statement for copper as a compared to 0.015 mg/L (Insert # 20.015 mg/L)	re the 4 th and the 5th highest (Copper 9 ermined by the nsumer Confidence of samples) etermined from	Compare (The coperation of the above results. If you have an expension of the above results. If you have an expension of the above results. If you have an expension of the above results. If you have a confidence Rule (CCR) reporting requirements. If you have a confidence Rule (CCR) reporting is sampling sites exceeded the coperation of the above results. If you have a confidence Rule (CCR) reporting is sampling sites exceeded the coperations.	ed to 1.3 mg/L oper action level) acceedance and direments in an level. an exceedance requirements in
(Lead 90th percent II. CERTIFICATIO Check and compyou are a common accordance with My system My system Check and compand you are a conductor accordance with My system My system My signature below it 310 CMR 22.06B(7).	Compared to 0.015 mg/L (The lead action level) N: Determine the correct statement for lead as determined as a comply with the Compared to Compared to 0.015 mg/L (The lead action level) N: Determine the correct statement for lead as determined as determined as a comply with the Compared to Compared t	the 4th and the 5th highest (Copper 9 ermined by the nsumer Confidence Consumer Confidence Consumer	compared to the above results. If you have an expension of the above results. If you have an expension of the above results. If you have an expension of the above results. If you have a confidence Rule (CCR) reporting requirements. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results. If you have a confidence Rule (CCR) reporting in the above results.	ed to 1.3 mg/L oper action level) acceedance and direments in an exceedance requirements in per action level.
(Lead 90th percent II. CERTIFICATIO Check and compyou are a common accordance with My system My system Check and compand you are a conductor accordance with My system My system My signature below it 310 CMR 22.06B(7).	Compared to 0.015 mg/L (The lead action level) N: Determine the correct statement for lead as determine yestem you must comply with the Compared to 2.16A(4)(i)6. Stemmine the correct statement for lead as determine yestem was at or below the lead action level. Glete the correct statement for copper as distribution of the comply with the compared to the comply with the community system you must comply with the 310 CMR 22.16A(4)(i)6. Stemmine was at or below the copper action level. Stemmine the copper action level and and contained the compared to this report have be a lead to this form and the information contained hereing the copper action copper action contained hereing the copper action containe	the 4th and the 5th highest (Copper 9 ermined by the nsumer Confidence Consumer Confidence Consumer	Compare Result) = 90 th Percentile Value Compare (The cop above results. If you have an exidence Rule (CCR) reporting requirements above results. If you have a confidence Rule (CCR) reporting requirements above results. If you have a confidence Rule (CCR) reporting requirements above results. If you have a confidence Rule (CCR) reporting reporting requirements above results. If you have a confidence Rule (CCR) reporting reporting requirements above results. If you have a confidence Rule (CCR) reporting reporting requirements above results. If you have a confidence Rule (CCR) reporting reporting requirements above results. If you have a confidence results is a confidence results of reporting requirements above results of reporting requirements.	ed to 1.3 mg/L oper action level) acceedance and direments in an exceedance requirements in per action level.



Massachusetts Department of Environmental Protection - Drinking Water Program BACTERIOLOGICAL REPORT

I. PWS	SINFORM	MATION:	Refer to your MassE	EP Coliforn	n Samplir	ng Plan to	help co	mplete the	e PWS In	formation ar	nd Mass[DEP App	proved Samp	le Site Information s	sections below.
PWS	ID #:		PWS Name:	FORD'S M	EADOW				City/To	own:	FRA	MINGH	AM	Class: COM ⊠	NTNC 🗆 TNC 🗀
II. ANA	ALYTICA	L INFOR	MATION: Refer to yo	ur MassDEI	⊃ state la	b certifica	ate for pr	oper Lab	MA Cert.	# and certifi	ed metho	ods.			
Prim	ary Lab N	/IA Cert.#	#: M-MA086 F	Primary Lab	Name:	Alpha A	nalytical						Subo	contracted? (Y/N):	N
Anal	ysis Lab	MA Cert.	.#: M-MA086 A	nalysis Lat	Name:	Alpha A	nalytical								
☑ Original	nal Report	Resub	mitted Report Confir	mation Repor	t (1) R	leason for I	Resubmis	sion: Res	sample 🗌 R	teanalysis 🗌 R	eport Corre	ction	(2) Collection	Date of Original Sample	e:
	otal Colifo		E.coli		Enteroco			ecal Colifo			IPC			Lab Sample No	tes
(TC) Metho	od	(EC) Method		(ET) Meti	nod	(FC) Metho	d ^{2B}	Me	ethod				
	9223B 9223B 9223B Chlorine HPC COLLECTION ANALYSIS														
	Sample Location A CONTROL Posuit Posuit Posuit Result Resu														
Type ^{1,3}	ample Location ype ^{1,3} Code # ¹ Approved SAMPLE LOCATION ¹ Result Result Result Result Result Result DATE TIME DATE TIME BY ID #														
	PW-1	Bedrock	Well No.1	A	Α					2/8/2017	14:00	2/9/20	05:30	J.G.B.	L1704085-01
					1										
					+										
					1										
^{2A} SWTF ³ Sample ⁴ Report ⁵ Collect	R systems: Fe Type: RS-F as #/100mL appropriate	HPC sample Routine Dist ,, P (present number of	, and Approved Sample Loc s shall be taken at the sam rribution Sample, RO-Origir t), A (absent), or Too Nume repeat samples within 24 h	e <u>distribution</u> si al Site Repeat, rous To Count: ours of laborato	tes and at the UR-Upstre TNTC-I (interpretation of the transfer of the transfe	ne same tim am Repeat, valid) or TN on for total o	e as total on DR-Down: TC-P (prestooliform-po	coliform, whe stream Repe- ent). Notify I sitive or inva	never chlori at, AR-Addit MassDEP of lid samples	ne residual is <u>n</u> tional Repeat, F f any <i>E.coli</i> or e and <i>E.coli</i> or er	ot detected RW-Raw Wa nterococci nterococci-p	ater, PT-P positive re positive rav	lant Tap, SS-Spe sults by the end v water samples.	ecial Sample of the business day.	·
			2.15(2), if mailing paper repo of the monitoring period, w									uays aπer	uie ena of the m	ionin in which the results	are received <u>or</u> no
			nat I am the person authoriz aplete to the best extent of i		s form and	the informat	ion contain	ned		ry Authorize		an	ept Wi	ukons 2/17/	17
Mas	sDEP Rev	iew Status	: Accepted	Disapproved	Re	eview Com	nments:		-			1900	9-6-00	Here's Education	





Perchlorate Report

I. PWS INFORM	ATION: Please ref	er to your DE	EP Wate	er Quality S	Sampling	Schedu	ile (WQ	SS) to he	lp comp	lete this for	m	
PWS ID #:					Cit	y / Towi	n: FF	RAMING	HAM			
PWS Name:	Ford's Mea	adow						PWS	Class:	сом 🗵] NTN	C TNC
DEP LOCATION (LOC) ID#	1	DEP Loca	ntion Nar	ne		5	Sample I	nformation	n	Date Collect	ted	Collected By
PW-1	Bedrock W	ell No.1				☐ (M)ı ⊠ (S)ii		⊠ (R)av □ (F)ini		2/8/2017	J.	G.B.
Routine or Special Sample		jinal, Resubmi onfirmation Re			(1) Reason		Resubmit	tted Repo	rt, list below: (2) Collection		of Original Sample
□ RS 🖾 SS	S ⊠ Original □	Resubmitted	☐ Confir	rmation [Resamp	ole 🗌 Rea	nalysis [Report C	Correction			
SAMPLE NOTES - (Such as, if a Manifold/M	ultiple sample, l	list any so	ources that w	vere on-line	e during co	ollection)	-		ı		
II ANALYTICAL	. LABORATORY II	NFORMATIO	ON.									
Primary Lab MA C		Primary		me: Alm	ha Anal	vtical				Subc	ontract	ed? (Y/N) N
•						·						¬
Analysis Lab MA	Cert. #: M-MA086	Analysis	Lab Na	me: Alp	ha Anal	ytical						
CONTAMINANT	Result	иом	MCL	MDL		MRL	Lab	Method	Date	Analyzed		Lab Sample ID#
PERCHLORATE	ND	μg/L	2.0	0.050	0	.050	33	32.0	2/1	15/2017	L	704085-01
CONDUCTIVITY		umhos/cm										
Perchlorate concentra positively present but All field samples anal	requires the use of a Ma ations between the Minin tentatively quantified). yzed with either EPA Me nout a perchlorate spike	num Detection	Limit (MC	DL) and the N	Minimum Roth	ed native p	erchlorat	•	·	,	•	
LAB SAMPLE NOTE	· · · · · · · · · · · · · · · · · · ·											
Deenslysis and 6	Spike Recovery (req	uired for rec	ulta hat	h.v.a.a.n. 0. 0. 1	ارما	20//		unian auch	ioot to m		in moti	and EDA 244.0\
Compound	Result (µg/L)	MDL (µg/L)	ı	MRL ug/L)	Spil Concen (µg/	ke tration	S _I Rec	oike overy %)		ab Method	III IIIeu	Date Analyzed
Perchlorate (reanalysis)					· ·		,	•				
Perchlorate (spike)												
authorized to fill out	under penalties of lav this form and the inform mplete to the best exten	nation containe	d herein		Primar	y Lab D	irector	· Signatu Da	ure:	//	L Wi 2/17/20	ukons 017
	ese results electronic in which you received											end of the month
	ATUS (Initial & Date)	, <u> </u>		Rev				. 51	•			□wqts
☐ Accepted	Disappr	oved		Comme								Data Entered



☐ Accepted

☐ Disapproved_

Nitrite Report

I. P	WS INFORMAT	ION: Pleas	e refer to your DEP	Water Qua	ality Sampling S	ched	lule (WQSS)) to he	elp compl	ete this form	
PW	'S ID #:				City / To	vn:	FRAMINO	SHAN	1		
PW	S Name:	Ford's Mea	ndow				PW	'S Cla	ss: CC	OM 🛛 NTNC	☐ TNC ☐
С	DEP LOCATION (LOC) ID#		DEP Location	on Name			Sample In	nforma	tion	Date Collected	Collected By
Α	PW-1	Bedrock	Well No.1				(M)ultiple (S)ingle	⊠ (□ (R)aw F)inished	2/8/2017	J.G.B.
В							(/· · l· ·	$=$ \cdot	R)aw F)inished		
С] (M)ultiple] (S)ingle		R)aw F)inished		
D							(M)ultiple (S)ingle	=	R)aw F)inished		
	Routine or Special Sample	o	riginal, Resubmitted of Confirmation Report	or	(1) Pos	on fo	If Res or Resubmiss		······································	list below:	of Original Sample
Α	□ RS ⊠ SS	⊠ Origina	I ☐ Resubmitted ☐ Co	onfirmation	☐ Resample ☐				,	2) Collection Date	or Original Sample
В	□RS □SS		Resubmitted Co		☐ Resample ☐		<u> </u>		-		
С	□RS □SS		I ☐ Resubmitted ☐ Co		☐ Resample ☐		<u> </u>				
D	□RS □SS	☐ Origina	I ☐ Resubmitted ☐ Co	onfirmation	☐ Resample ☐	Reana	alysis 🗌 Repo	ort Corr	ection		
	SAMPLE NOTES -	- (Such as, if a	Manifold/Multiple samp	ole, list the so	urces that were on	line du	uring sample o	collection	on).		
Α											
В											
С											
D											
II. A	NALYTICAL LA	ABORATO	RY INFORMATIO	N:							
	nary Lab MA Cert			г	Alpha Analytical					Subcontracte	43 (A\N) N
	nary Lab MA Cen			-	Alpha Analytical						
ш.		III-III/-	086 Analysis La	b Name:	Aipiia Ailaiyiicai						
	NITRITE Result (mg/L)	MCL (mg/L)	MDL (mg/L)		Lab Method			Date /	Analyzed	s	Lab Sample ID#
Α	ND	1	0.050		353.2			2/8	/2017	L	1704085-01
В		1									
С		1									
D		1									
Finis		ceeding the M	eding ½ of the MCL (0.5 CL of 1 mg/L requires c ces.								
^	LAB SAMPLE NO	TES									
В											
С											
D											
	orized to fill out this	form and the i	of law that I am the nformation contained h extent of my knowledge	erein is	Primary La	b Di	rector Sigi		- (/	osept Wa	
	·							Dat		2/17/2	
end		h the results ar	if mailing paper reports, e received <u>or</u> no later th								
DEI	P REVIEW STATU	JS (Initial & D	eate)		Review						☐ WQTS Data
			sannroved		mments						Entered



Nitrate Report

I. P	WS INFORMAT	ION: Please	refer to your DEP W	later Quality Sa	mpling Schedul	e (WQSS) to hel	p complete	this form	
PW	/S ID #:				City / Town:	FRAMINGHA	М		
PW	S Name:	Ford's Mea	dow			PWS C	lass: CC	M 🛛 NTNC	☐ TNC ☐
I	DEP LOCATION (LOC) ID#		DEP Location Nan	10	Sample	Information	Sample Acidified?	Date Collected	Collected By
Α	PW-1	Bedrock \	Well No.1		☐ (M)ultiple ☐ (S)ingle	☐ (R)aw☐ (F)inished	Yes □	2/8/2017	J.G.B.
В					(M)ultiple (S)ingle	(R)aw (F)inished	Yes 🗌		
С					(M)ultiple (S)ingle	(R)aw (F)inished	Yes □		
D					☐ (M)ultiple ☐ (S)ingle	(R)aw (F)inished	Yes □		
	Routine or		riginal, Resubmitted or	,	<u> </u>	If Resubmitte	ed Report, lis	t below:	1
	Special Sample		Confirmation Report	_	. ,	or Resubmission	, ,	Collection Date	of Original Sample
Α_	RS SS		Resubmitted Cor		Resample Reans	· · · · · · · · · · · · · · · · · · ·			
В	RS SS		Resubmitted Cor		Resample Reans	· ·			
С	□ RS □ SS		Resubmitted Cor		Resample Reans	<u> </u>			
D	RS SS	<u> </u>	☐ Resubmitted ☐ Cor		Resample Reana				
_	SAMPLE NOTES	– (Such as, if a N	Manifold/Multiple sample	, list the sources th	at were on-line durii	ng sample collection	1).		
A B									
С									
D									
II.	NALYTICAL L	ABORATOR	Y INFORMATION:						
Pri	nary Lab MA Cer	t. #: M-MA	⁰⁸⁶ Primary Lat	Name: Alpha	a Analytical			Subcontracte	ed? (Y/N) N
Ana	alysis Lab MA Ce	rt. #: M-MA	086 Analysis Lat	Name: Alph	a Analytical				
	NITRATE Result (mg/L)	MCL (mg/L)	MDL (mg/L)	La	b Method	Date	Analyzed	Sa	Lab ample ID#
Α	ND	10	0.10		353.2	2/	8/2017	L1	704085-01
В		10							
С		10							
D		10							
Finis		ceeding the MCI	ing $\frac{1}{2}$ of the MCL (5 mg/ _ of 10 mg/L requires cors.						
	LAB SAMPLE NO	TES							
Α									
В									
D									
ت_							n	11.1	
	orized to fill out this	form and the in	f law that I am the properties that I am the I am t		Primary Lab Di	_	re:	02/17/20	
In a	ccordance with 310 C	CMR 22.15(2), if	mailing paper reports, <u>T</u>			ved by your MassD	∟—— EP Regional (Office no later thar	10 days after the
(eDi	EP) deadline is the sa	ame as above.	received <u>or</u> no later than	ı ıu uays arter tne	ena oi ine monitorin	ig perioa, wnichevel	is sooner. P	rease note: Electro	эніс геропіпд
	P REVIEW STATU	` _	•	Revie					☐ WQTS
ıП.	Accepted	☐ Disa	approved	Commen	เธ				Data Entered

ALPHA	CHAIN O				PAGE	_ OF	Date	Rec'd i	in Lab:	2/	8/17	2		ALP	HA Jo	ob #: [117	04085
8 Walkup Drive Westboro, MA	320 Forbes Blvd		t Informa				Rep	ort Inf	ormat	ion - D	ata Del	iverat	oles	Billi	ng Info	ormatio	on	
Tel: 508-898-9	220 Tel: 508-822-9300	Project	Name: N	ixon	Rd		ΠA		-	□ ЕМА				_		Client inf		#:
Client Information		Project	Location:	Framin	, hem					uiremei			ject l	nforma	tion R	Require	ments	
Client: No Ahea	st Georgiana Inc	Project	#:		۵		☐ Yes	□ No	MA Mo Matrix	CP Analy Spike R	rtical Me equired	ethods on this	SDG?	(Regu	Yes 🗆	No CT	RCP Ar	nalytical Methods
Address: 97 W	alast St	Project	Manager:	Jay 3	Mins		☐ Yes	□ No	GW1 S	Standard	s (Info I	Require	d for N	1etals &	EPH w	ith Targ	ets)	,
Clinta	MA 01450	ALPHA	Quote #:		8					S RGP Progran	1				Criter	ria		
Phone: 978 - 3	365-9045	Turn-	Around Ti	me				1	1	75/	m/_	1.7		10	5	7 /	7	
Additional P	roject Information:	Date		RUSH (only	confirmed if pre-s	approved!)	D8260 C ANALYSIS	WETAL DABN DES 10 524.2	METALS: DINCP 13 DINCE	EPH. DRanges & Tarm.	D PCB C Targets D Ranges Only	TPH: DQuant Only	S/ DFingerprint	5 Elene 10	Radin Ambas	- feametry	P.	AMPLE INFO iltration Field Lab to do reservation Lab to do
ALPHA Lab ID (Lab Use Only)	Sample ID		Colle	ection Time	Sample Matrix	Sampler	, o o	META!	METAL	EPH: D	D PCB	Hali	10/a/		ed .	11		Lab to do
-5/	PW-1		2-8-17	14:00	DW	J63	X					7	X	X	X		Oamp	e Comments
Container Type P= Plastic A= Amber glass V= Vial G= Glass B= Bacteria cup C= Cube O= Other E= Encore D= BOD Bottle	Preservative A= None B= HCI C= HNO ₃ D= H ₂ SO ₄ E= NaOH F= MeOH H= Na ₂ S ₂ O ₃ I= Ascorbic Acid J= NH ₄ CI K= Zn Acetate O= Other	Relinqui	shed By:		Pre	iner Type eservative f/Time	2-17	Re	eceived	By:		1	Date/T	ime 5'.54	Alph	amples a's Term reverse	ns and C	d are subject to onditions.



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/

DATE AND TIME COLLECTED:

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

Legend

Passes

Fails EPA Primary
Fails EPA Secondary
Fails State Guideline

Attention

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

LOCATION: CLIENT JOB # L1704101

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	1		0.02	0.2 ug/L	EPA 504.1	BM-NH 0	2/16/17 6:01 PM
Date Extracted	-					No Limit	EPA 504.1	BM-NH 0	2/16/17 11:13 AM
Ethylene Dibromide (EDB)*	<0.02	ug/L	1		0.02	0.05 ug/L	EPA 504.1	BM-NH 0	2/16/17 6:01 PM
Aroclor 1016	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH 0	2/16/17 9:51 PM
Aroclor 1221	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH 0	2/16/17 9:51 PM
Aroclor 1232	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH 0	2/16/17 9:51 PM
Aroclor 1242	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH 0	2/16/17 9:51 PM
Aroclor 1248	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH 0	2/16/17 9:51 PM
Aroclor 1254	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH 0	2/16/17 9:51 PM
Aroclor 1260	<0.2	ug/L			0.2	No Limit	EPA 505	BM-NH 0	2/16/17 9:51 PM
Chlordane*	<0.2	ug/L	1		0.2	2 ug/L	EPA 505	BM-NH 0	2/16/17 9:51 PM
Date Extracted	-					No Limit	EPA 505	BM-NH 0	2/16/17 11:13 AM
Toxaphene*	<1.0	ug/L	1		1.0	3 ug/L	EPA 505	BM-NH 0	2/16/17 9:51 PM
2,4,5-TP (Silvex)*	<0.25	ug/L	1		0.25	50 ug/L	EPA 515.3	BM-NH 0	2/17/17 9:08 PM
2,4-D*	<1	ug/L	1		1	70 ug/L	EPA 515.3	BM-NH 0	2/17/17 9:08 PM
Dalapon*	<1	ug/L	1		1	200 ug/L	EPA 515.3	BM-NH 0	2/17/17 9:08 PM
Date Extracted	-					No Limit	EPA 515.3	KV-NH 0	2/17/17 9:15 AM
Dicamba*	<0.18	ug/L			0.18	No Limit	EPA 515.3	BM-NH 0	2/17/17 9:08 PM
Dinoseb*	<0.5	ug/L	1		0.5	7 ug/L	EPA 515.3	BM-NH 0	2/17/17 9:08 PM
Pentachlorophenol*	<0.1	ug/L	1		0.1	1 ug/L	EPA 515.3	BM-NH 0	2/17/17 9:08 PM
Picloram*	<1.3	ug/L	1		1.3	500 ug/L	EPA 515.3	BM-NH 0	2/17/17 9:08 PM
2,4-Dichlorophenylacetic acid	107	%				No Limit	EPA 515.3 - SS	BM-NH 0	2/17/17 9:08 PM
Alachlor*	<0.1	ug/L	1		0.1	2 ug/L	EPA 525.2	DD-NH 0	2/14/17 4:08 PM
Aldrin*	<0.1	ug/L			0.1	No Limit	EPA 525.2	DD-NH 0	2/14/17 4:08 PM
Atrazine*	<0.1	ug/L	1		0.1	3 ug/L	EPA 525.2	DD-NH 0	2/14/17 4:08 PM
Benzo(a)pyrene*	<0.1	ug/L	1		0.1	0.2 ug/L	EPA 525.2	DD-NH 0	2/14/17 4:08 PM
Butachlor*	<0.1	ug/L			0.1	No Limit	EPA 525.2	DD-NH 0	2/14/17 4:08 PM
Date Extracted	-					No Limit	EPA 525.2	KV-NH 0	2/13/17 9:43 AM
Di(2-ethylhexyl)adipate*	<0.6	ug/L	1		0.6	400 ug/L	EPA 525.2	DD-NH 0	2/14/17 4:08 PM
Di(2-ethylhexyl)phthalate*	<3	ug/L	1		3	6 ug/L	EPA 525.2	DD-NH 0	2/14/17 4:08 PM
Dieldrin*	<0.04	ug/L			0.04	No Limit	EPA 525.2	DD-NH 0	2/14/17 4:08 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

Legend

http://www.granitestateanalytical.com/

DATE AND TIME COLLECTED:

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

Fails EPA Primary
Fails EPA Secondary

Fails State Guideline

Attention

Passes

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

LOCATION: CLIENT JOB # L1704101

Test Description	Results	Test Units	Pass /Fail	DQ Flag	RL	Limit	Method	Analyst	Date-Time Analyzed
Endrin*	<0.1	ug/L	1		0.1	2 ug/L	EPA 525.2	DD-NH (02/14/17 4:08 PM
Heptachlor Epoxide*	< 0.06	ug/L	1		0.06	0.2 ug/L	EPA 525.2	DD-NH (02/14/17 4:08 PM
Heptachlor*	< 0.04	ug/L	1		0.04	0.4 ug/L	EPA 525.2	DD-NH (02/14/17 4:08 PM
Hexachlorobenzene*	<0.1	ug/L	1		0.1	1 ug/L	EPA 525.2	DD-NH (02/14/17 4:08 PM
Hexachlorocyclopentadiene*	<0.1	ug/L	1		0.1	50 ug/L	EPA 525.2	DD-NH (02/14/17 4:08 PM
Lindane*	< 0.07	ug/L	1		0.07	0.2 ug/L	EPA 525.2	DD-NH (02/14/17 4:08 PM
Methoxychlor*	<0.1	ug/L	1		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	1		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 C	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	1		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		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 C	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

Legend

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

Passes

Fails EPA Primary Fails EPA Secondary

Fails State Guideline

Attention

SAMPLE ID#:

1702-00872-001

SAMPLED BY:

Alpha Analytical

DATE AND TIME COLLECTED: DATE AND TIME RECEIVED:

Limit

02/08/2017

2:00 PM

SAMPLE ADDRESS:

L1704101

ANALYSIS PACKAGE:

RL

02/10/2017

PW-1 MA

RECEIPT TEMPERATURE:

SOC GSA MA

ON ICE 2.7 CELSIUS

12:45 PM

LOCATION:

Results

Test Units

CLIENT JOB #

L1704101

Method

Analyst

Date-Time Analyzed

Test Description Pass DQ /Fail Flag

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 SUB-COURIER: GRANITE STATE, NH

Alan	CHAIN OI	- CUST	DDY	PAGE 1 O	F 1	Da	ate Red	d in La	ıb:					A	LPH	A Job	#: L1	704101	BOOTT LESS
ANA	LYTICAL	Project Info	R	Report Information Data Deliverables									· Dilling Informati						
Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA TEL: 508-822-9300	Project Name	Project Name:						☐ FAX ☐ E								lient info		
Client Informa	FAX: 508-822-3288	Project Location: MA					□ ADEx □ Add'l Deliverables Regulatory Requirements/Report Limit:										6		-
Client: Alpha Analytical Lab		7	ion: MA			Sta	ate/Fed	Progra	m				GI-IIII		riteria				
Address: 8 Walku		Project #:		1.22		M	CD D	DECL	MOTI	VE O		A (INC.)							
Westborough, Ma		Project Mana		ntord			Yes	N-SU		VE G	A	re MCP	Analy	tical Me	thods	BLE (Require	CONF	IDENCE PROTOC	9
Phone: 508-898-9		Turn-Aroun	Contract of the last of the la				Yes		□ No		A	re CT R	CP (R	easona	ble Co	nfidence	e Protoc	cols) Required?	-
Fax:						-	IALY	SIS	_										1
Email: subreports	@alphalah.com	🛛 Standard	□F	Rush (ONLY IF F	PRE-APPROVED		Ŧ										1	SAMPLE HANDLING Filtration	
☐ These samples have been Previously analyzed by Alpha Due Date: Time:																		□ Done □ Not Needed	
Other Project Sp Please reference	pecific Requirements/Commer Alpha Job # L1704101 on this re	nts/Detection Lim port.	its:															☐ Lab to do Preservation ☐ Lab to do (Please specify below)	OL:
ALPHA Lab ID	Sample ID	Co	llection	Sample	Sampler's							1							
(Lab Use Only)		Date	Time	Matrix	Initials	504.1	505	515.3	531.1	525.2								Sample Specific	
	PW-1	2-8-14	14:00	DW		X	X	X	X	X					+	+	+		
															+	-	+		-
																			-
						-							1		7-				
																	A LE LA		Γ
													-		-		1173		
				7.5								- 1			-				
			1		1			1/	1/	Λ			8		-				_
LEASE ANSWER (QUESTIONS ABOVE!			Con	tainer Type	V	V	1/		A N/B		1	1	1					
					tainer Type Preservative	V	V H	V	V P/H			-			-	100	(C)	Please print clearly, legible	
SYOUR	PROJECT		Reling			Н		Н	P/H	N/B	- Receiv	- ved Bv	*	•	18	Date/Ti-		and completely Samples not be logged in and	car
S YOUR			Reling	P		Н	Н	Н	P/H	N/B	Receiv	- ved By:	÷		-	Date/Tin		and completely Samples	ca/

Phone: 978 -	rive 320 Forbes Blvd AA 01581 Mansfield, MA 02048 8-9220 Tel: 508-822-9300	Proje Proje Proje Proje ALPH Turr	ALPHA Quote #: Turn-Around Time						☐ Yes ☐ No Matrix Spike Required on this SDG? ☐ Yes ☐ No GW1 Standards (Info Required for M☐ Yes ☐ No NPDES RGP☐ Other State /Fed Program							Criteria				
ALPHA Lab ID (Lab Use Only)	Sample ID		Date	lection Time	Sample Matrix	Sampler Initials		/ 6	METALS: DAG	ED. CRCRAS DINCP 14	VPL. ORanges & Tar	D PCB Targer	TPH: DQuant O.	X Total Clubs	X Section Sect	N Presenting	The same		SAMPLE Filtration □ Field □ Lab to de Preservatio □ Lab to de	0 m
tainer Type	Preservative																			
P Plastic		Relinquis	ped By:		Date/T	ervative	-17	6	Receive	ed By:	2		2/8/1	ate/Tin	00	See r	evers	s submitter ms and Co e side, -01 (rev. 12-M		et to