

261 Leverett Road
Drinking Water Well
Application



Sadler, Pam Field

From: David Ahlfeld [ahlfeld@engin.umass.edu]
Sent: Friday, June 15, 2012 8:42 AM
To: Sadler, Pam Field
Cc: Nancy Gilbert; Federman, Julie
Subject: Re: BOH Agenda Addition

Water supply cert. approved 6-21-12

Pam,
Thanks for confirming all of that.

On 6/15/2012 8:18 AM, Sadler, Pam Field wrote:
Good Morning!

As suggested Julie has inquired of the iron and manganese in the town's water. Amy Lane – Asst. Superintendent of Operations at DPW has confirmed the town's water does have high levels of iron and manganese, and Well 4 has been treated for removal of these elements for esthetic purposes. Ellie Kurth also of the DPW (you met her at the last BOH meeting) has also reported in regards to another local water question unrelated to this item that relatively high levels of iron are common in groundwater in our area. Julie also spoke to a representative at the lab who tested the water samples in question and learned the high level of turbidity (suspended particles which cause cloudiness of the water) is consistent with a new well. Please let me know if you have further questions.

Have a great weekend!
Pam

Pamela Field-Sadler
Amherst Health Department
phone: 413-259-3154
fax: 413-259-2404
sadlerp@amherstma.gov

Approved 5-17-12

Does this need to go to Board again for water supply Certificate?

From: David Ahlfeld [mailto:ahlfeld@engin.umass.edu]
Sent: Wednesday, June 13, 2012 11:20 AM
To: Sadler, Pam Field
Cc: Nancy Gilbert
Subject: Re: BOH Agenda Addition

TUESDAY 6/12/2012 yep

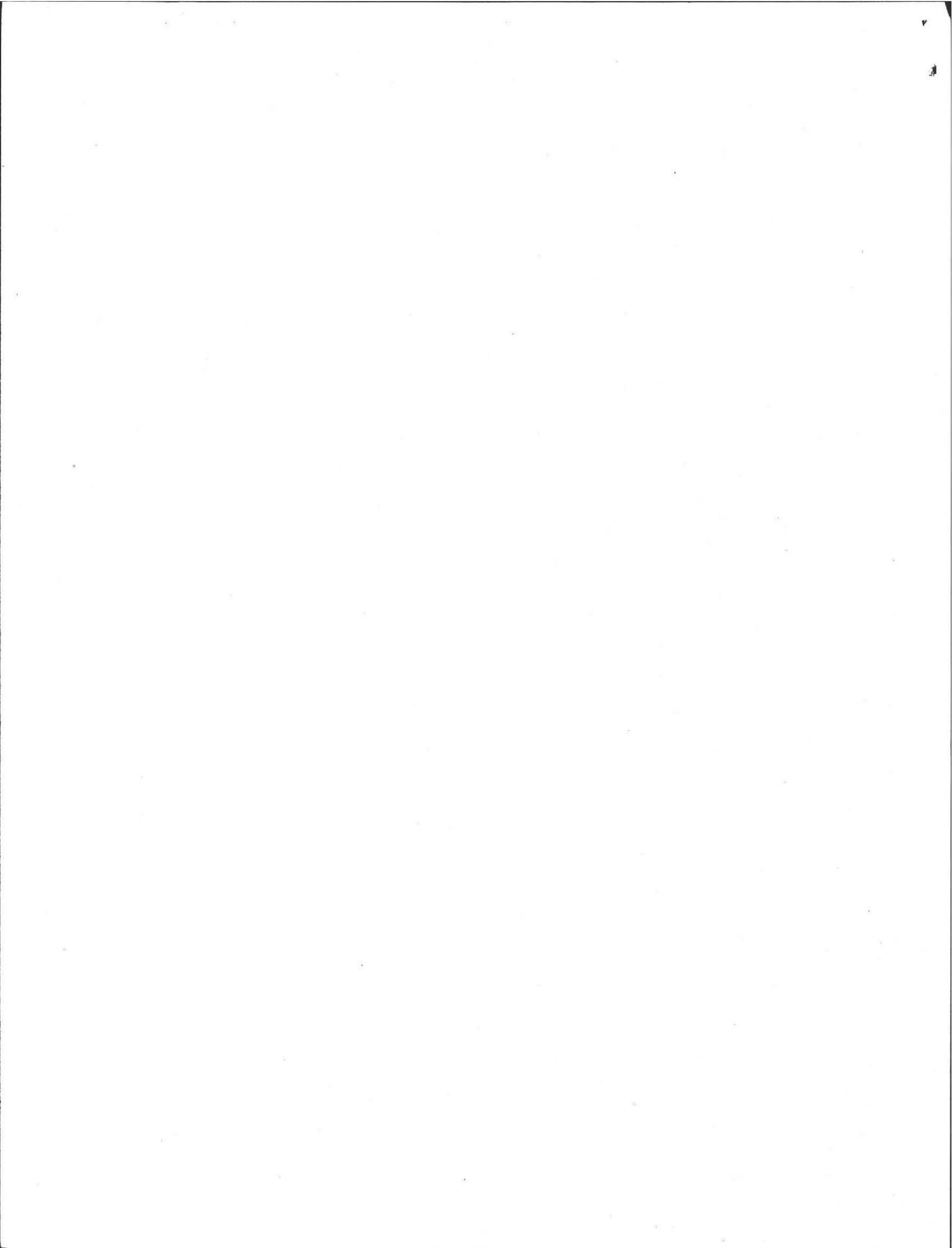
Pam and Nancy,
This report looks fine. The well construction and pumping test data look good. The water quality report shows high iron and manganese (these cause taste and staining issues but are not a health risk). Since this is the first of these water quality reports that we have done, it might be good for Julie to chat with the Town water person (used to be Bob Parasou (sp?)) to confirm that these values are typical of our local waters.

David

On 6/12/2012 2:54 PM, Sadler, Pam Field wrote:
Hi David and Nancy,

Please recall at the May 17th meeting, the BOH approved a well construction application for 261 Leverett Road. This well has been completed and the folks are ready to request a water supply certificate. This item is going to be added to the BOH agenda under New Business. David, I have attached the documents which will be in the BOH packet to support this





request. If you have a moment, will you please review the documents and share your comments? I will then make sure your comments are available for the BOH.

Thank you,
Pam

Pamela Field-Sadler

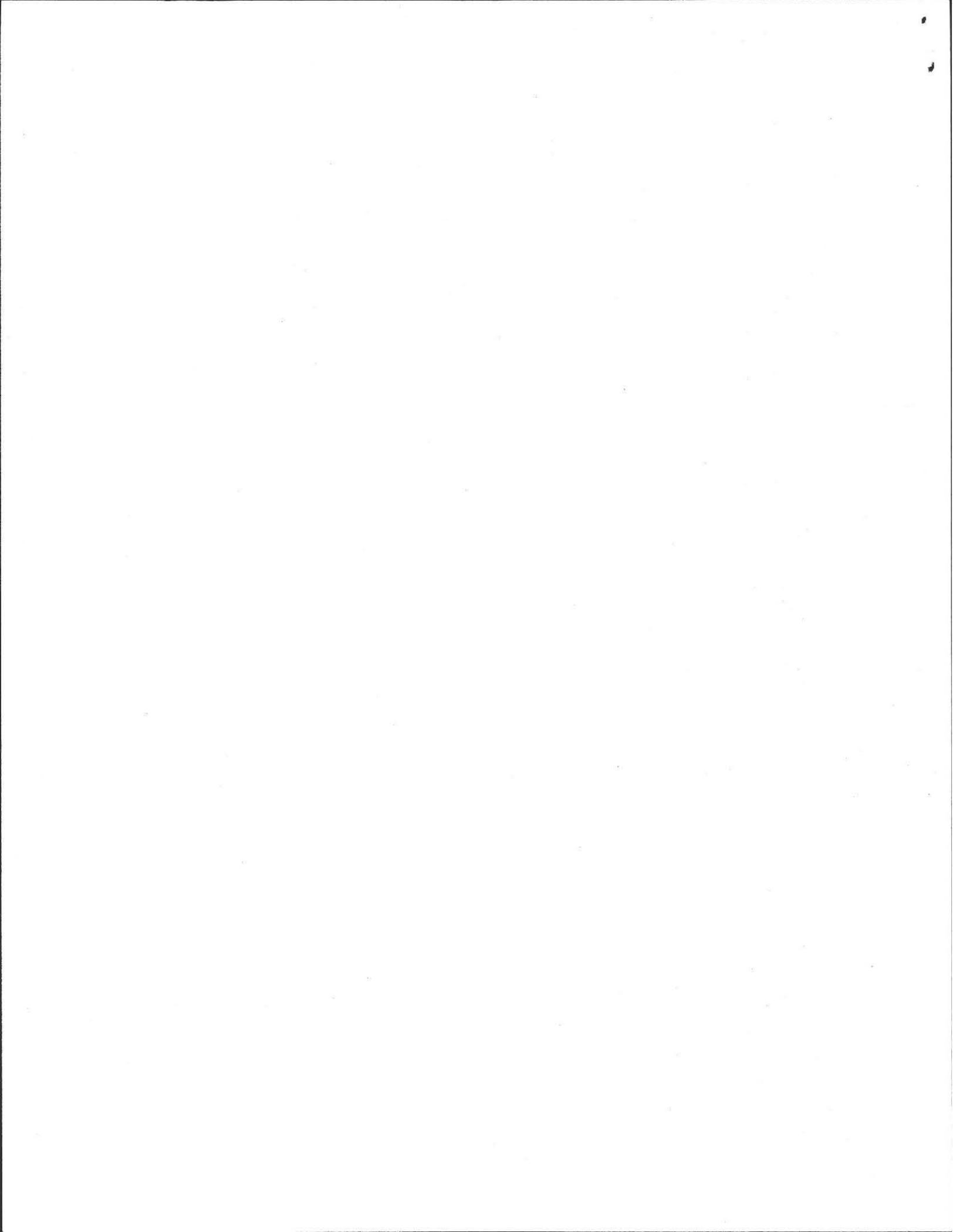
Amherst Health Department
phone: 413-259-3154
fax: 413-259-2404
sadlerp@amherstma.gov

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David P. Ahlfeld, Professor
Dept. of Civil and Environmental Engineering
18 Marston Hall University of Massachusetts Amherst, MA 01003
(413) 545-2681 (office), (413) 545-2202 (fax)
ahlfeld@engin.umass.edu
<http://www.ecs.umass.edu/cee/faculty/ahlfeld.html>

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No. 1962 P. 2

Town of



AMHERST

Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK,
AMHERST, MA 01002
(413) 259-3077 (413) 259-2404 - FAX

APPLICATION FOR A WELL CONSTRUCTION PERMIT

I hereby petition the Board of Health of the Town of Amherst for a Well Construction Permit (WCP) to install a private well in the Town of Amherst. ATTACHED IS A PLAN SHOWING THE PROPOSED LOCATION OF THE WELL (WITH ORIGINAL DATE, STAMP AND SIGNATURE OF AN ENGINEER, REGISTERED SANITARIAN, OR REGISTERED LAND SURVEYOR) AND ALL OTHER REQUIREMENTS OF THE AMHERST BOARD OF HEALTH REGULATIONS FOR PRIVATE WELLS.

- 1. Address of Property: 261 Leverett Road, Amherst
- 2. Assessor of Parcel Number: _____
- 3. Name of Owner: Susan Handley & Bruce McCandleless Telephone Number: _____
Address of Owner: 20 Kingman Road, Amherst, MA.
- 4. Name of Well Driller: Rich Chevalier Reg. # _____
(Must be registered with Massachusetts Water Resources Commission)
- 5. Purpose of Well: *Drinking Agricultural Only () Ground Source Heat Pump ()
\$100.00 \$50.00 \$50.00

The undersigned acknowledges that he must, before commencing construction or use of the system which is the matter of this application, secure any and all other permits which may be required by the laws of the Town of Amherst and the Commonwealth of Massachusetts, and agree to abide by all regulations of the Town of Amherst and the Commonwealth of Massachusetts concerning private wells.

The undersigned also understands that if a private well is to be used for drinking purposes, a BUILDING PERMIT affecting the structure the well is to serve WILL NOT BE ISSUED UNTIL A Water Supply Certificate has been granted by the Amherst Board of Health.

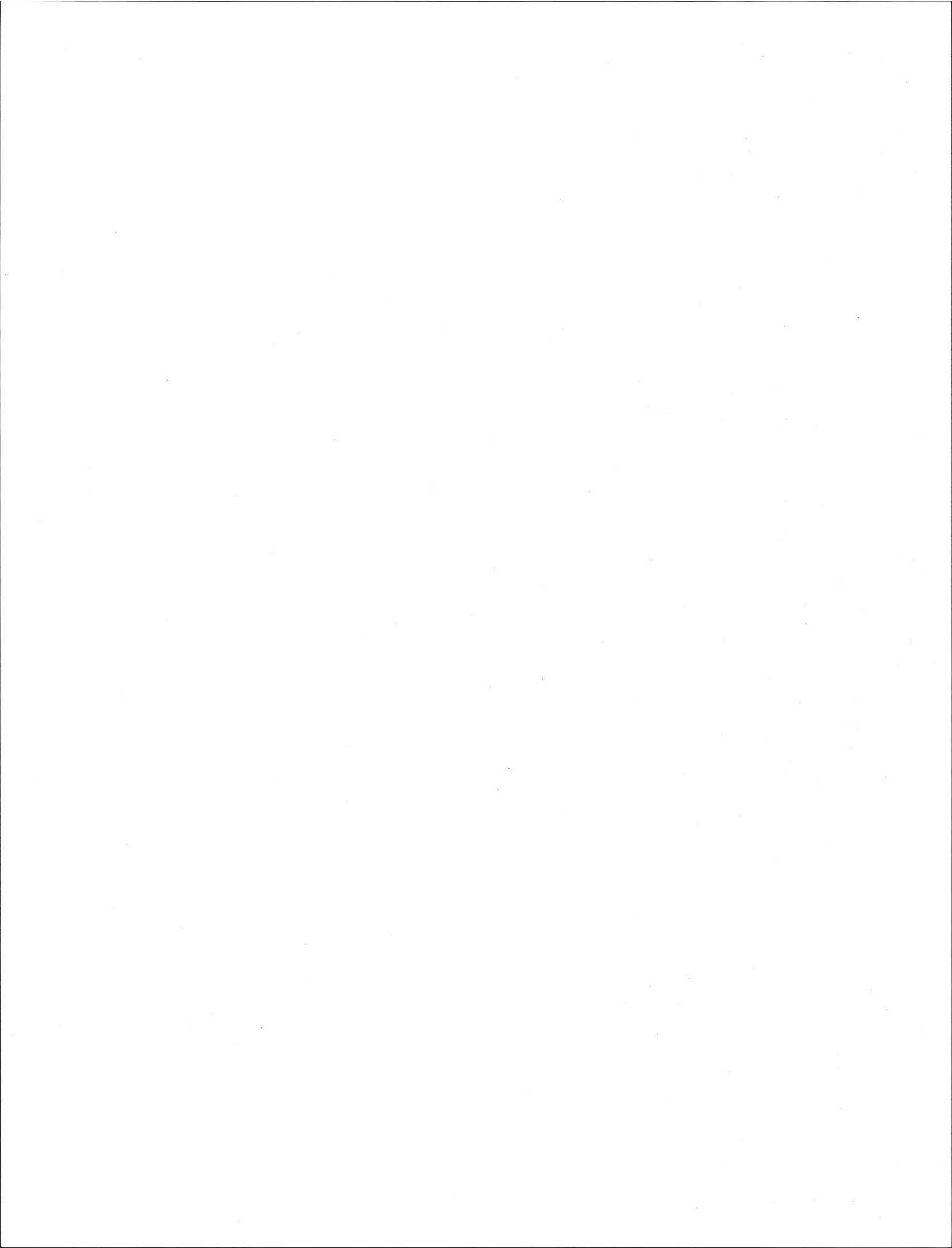
Name of Applicant: R. E. Laplante Const.

Applicant Signature: Paul Laplante (Const Super) Date: 4-26-2012

For Office Use Only	
<input checked="" type="checkbox"/> Permit Issued By: <u>Edna R. Guille</u>	<input type="checkbox"/> Permit Denied By: _____
PERMIT NUMBER: <u>12-2</u>	REASON: _____
DATE ISSUED: <u>5-17-2012</u>	DATE DENIED: _____
Inspected By: <u>Edna R. Guille</u>	Fee Paid: Yes ___ No ___ Amount _____
Inspection Date: <u>6-8-2012</u>	Cash/Check # _____
	Date of Payment _____

MUNIS App. 13522 Batch 5510

Amherst Public Health
Apr. 26. 2012 3:34PM



Massachusetts Department of Conservation and Recreation
Office of Water Resources

165028

TYPE OR PRINT ONLY

Well Completion Report

1. WELL LOCATION GPS (Required) North 42° 25.583 West 72° 30.572
 Address at Well Location: 261 Leverett Rd. Property Owner/Client: L. a. Plante Construction
 Subdivision Name: _____ Mailing Address: 296 N Main St
 City/Town: Amherst, MA 01002 City/Town: F Longmeadow, MA 01025
 Assessors Map _____ Assessors Lot #: _____ NOTE: Assessors Map and Lot # mandatory if no street address available
 Board of Health permit obtained: Yes Not Required Permit Number 12-01 Date Issued 5/17/12

2. WORK PERFORMED N W **3. WELL TYPE** D M S T **4. DRILLING METHOD** A U A U **6. CASING**
 From (ft) To (ft) Type Thickness Diameter
42 78 19" 6"

5. WELL LOG		OVERBURDEN LITHOLOGY			Water Bearing Zone	Loss or Addition of Fluid	Drop in Drill Stem	Extra Fast or Slow Drill Rate
From (ft)	To (ft)	Code	Color	Comment				
<u>0</u>	<u>28</u>	<u>G</u>	<u>BR</u>		<u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>
<u>28</u>	<u>48</u>	<u>T</u>	<u>BR</u>		<u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>
						<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>
						<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>
						<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>
						<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>
						<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>Y</u> <input type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>

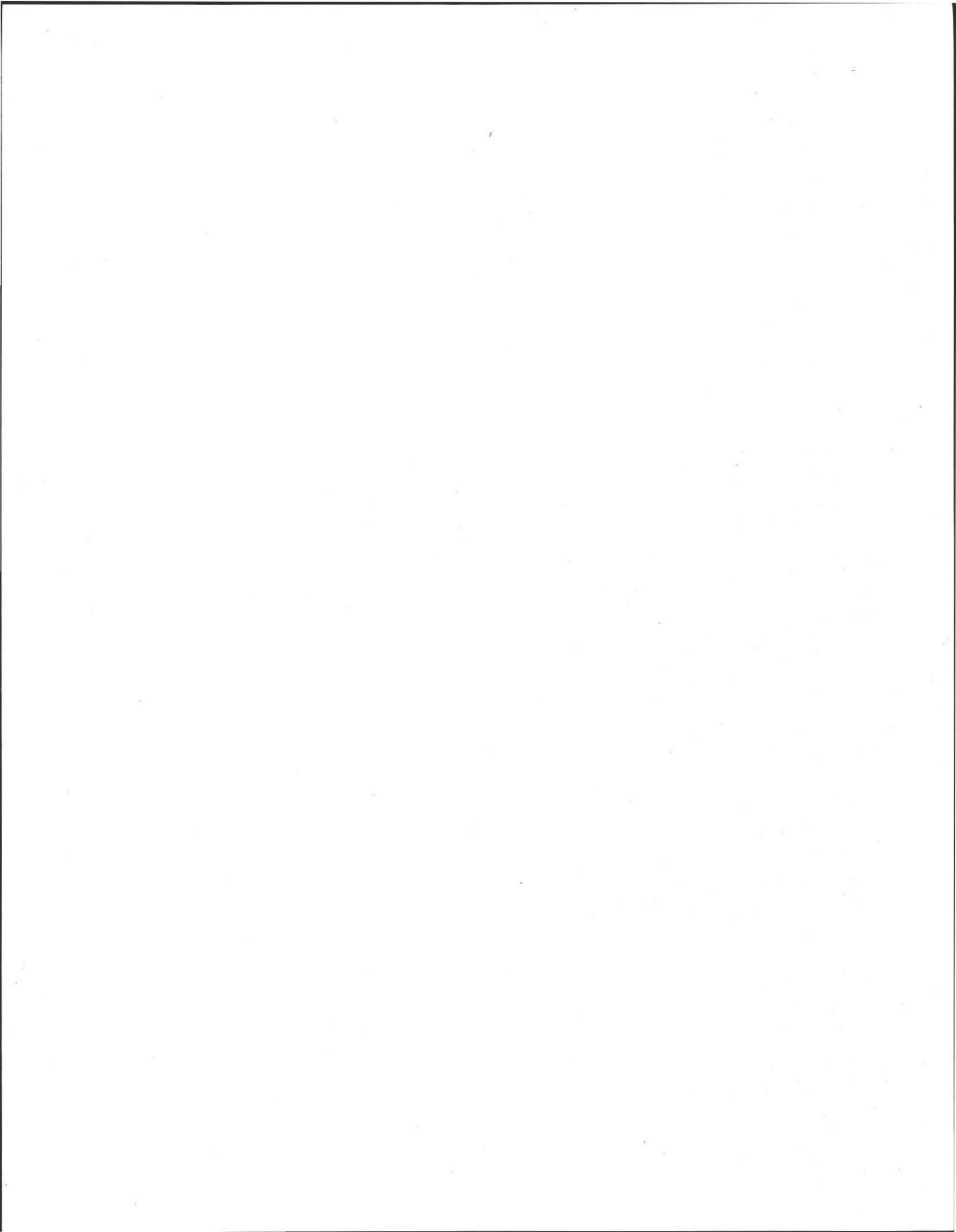
WELL LOG		BEDROCK LITHOLOGY			Water Bearing Zone	Drop in Drill Stem	Extra Large Chips	Extra Fast or Slow Drill Rate	Visible Rust Staining	Loss or Addition of Fluid	# of Fractures per foot
From (ft)	To (ft)	Code	Comment								
<u>48</u>	<u>58</u>	<u>SH</u>		<u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>0</u>	
<u>58</u>	<u>158</u>	<u>SH</u>		<u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>0</u>	
<u>158</u>	<u>258</u>	<u>GR</u>		<u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>0</u>	
<u>258</u>	<u>358</u>	<u>GR</u>		<u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>0</u>	
<u>358</u>	<u>458</u>	<u>GR</u>		<u>Y</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>1</u>	
<u>458</u>	<u>500</u>	<u>GR</u>		<u>Y</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>F</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>Y</u> <input checked="" type="checkbox"/> <u>N</u>	<u>1</u>	

10. WELL TEST DATA (ALL SECTIONS MANDATORY FOR PRODUCTION WELLS)							11. STATIC WATER LEVEL (ALL WELLS)	
Date	Method	Yield (GPM)	Time Pumped (hrs & min)	Pumping Level (Ft. BGS)	Time to Recover (hrs & min)	Recovery (Ft. BGS)	Date Measured	Depth Below Ground Surface (ft)
<u>5/22</u>	<u>Air</u>	<u>8</u>	<u>2:00</u>	<u>500</u>	<u>12:00</u>	<u>40'</u>	<u>5/23/12</u>	<u>40'</u>

12. PERMANENT PUMP (IF AVAILABLE) Pump Description BWS Horsepower 1
 Pump Intake Depth 480 (ft) Nominal Pump Capacity 5 (gpm)
13. ADDITIONAL WELL INFORMATION Developed N Fracture Enhancement N
 Disinfected N Surface Seal Type W D
 Total Well Depth 500 Depth to Bedrock 48

14. COMMENTS _____
15. WELL DRILLER'S STATEMENT This well was drilled, altered, and/or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge.
 Driller: Mike Sanders Supervising Driller Signature: [Signature] Registration #: 5581
 Firm: L. G. CRUSHING & SONS, INC Date Complete: 5/22/12 Rig Permit #: 051613

NOTE: Well Completion Reports must be filed by the registered well driller within 30 days of well completion.
 BOARD OF HEALTH COPY





Quabbin Analytical Laboratory

Box 1192 Stadler Street, Belchertown, MA 01007

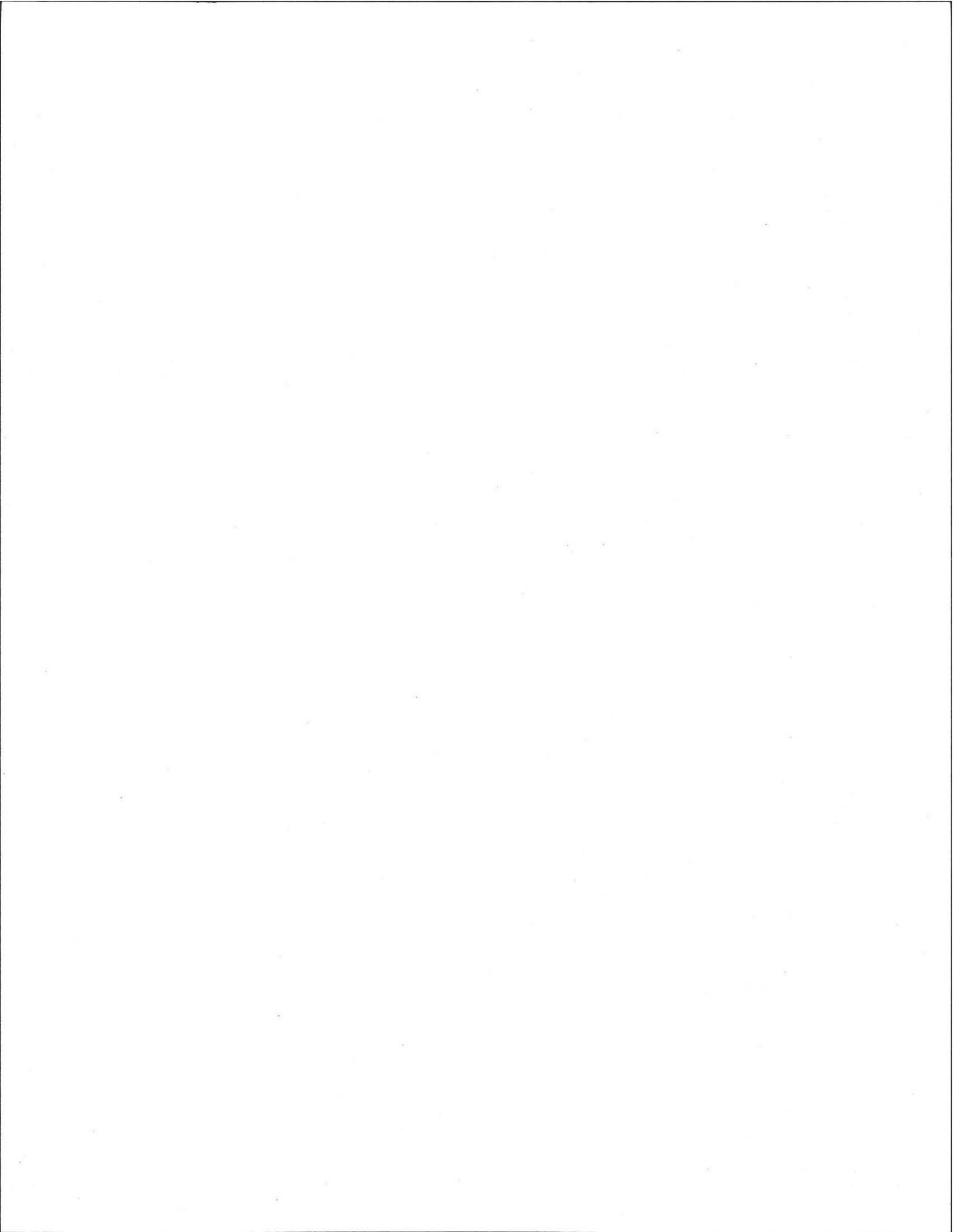
(413)-323-7134

Name:	Cushing & Sons, Inc.	Sample Date:	5-22-12
Address:	P.O. Box 668	Report Date:	5-23-12
	Walpole, NH 03608-0668	Collected By:	C.O.
Sample Location:	John Rathbun, Builder	Type Supply:	Well
	180 Pratt Corner Road	Sample No.:	QAL 4415
	Leverett, MA 01054		

TESTED FOR	RESULTS	MAX. RECOMMENDED LEVELS
Total Coliform Bacteria	Absent	Absent
Fecal Coliform Bacteria	Absent	Absent
Nitrite Nitrogen	0	1.0 mg/l
Nitrate Nitrogen	5.8	10.0 mg/l
pH	8.22	6.5-8.5
Color	6.0	15 cu
Iron	*1.89	.30 mg/l
Manganese	*.21	.05 mg/l
Copper	Not Tested	1.3 mg/l
Sulfate	Not Tested	250 mg/l
Chloride	14.4	250 mg/l
Total Hardness	40.0	No Limit
Conductivity	Not Tested	No Limit
Total Dissolved Solids	Not Tested	500 mg/l
Turbidity	4.6	5 NTU
Chlorine	Not Tested	No Limit
Sodium	40.4	No Limit

Results are only for those items listed above and on the above collected date. Except for the following _____, the sample was found to be within acceptable levels for D.E.P. Drinking Water Standards. If there are any questions on this report, please do not hesitate to call this office.

David Fredenburgh, Director





Quabbin Analytical Laboratory

Box 1192 Stadler Street, Belchertown, MA 01007

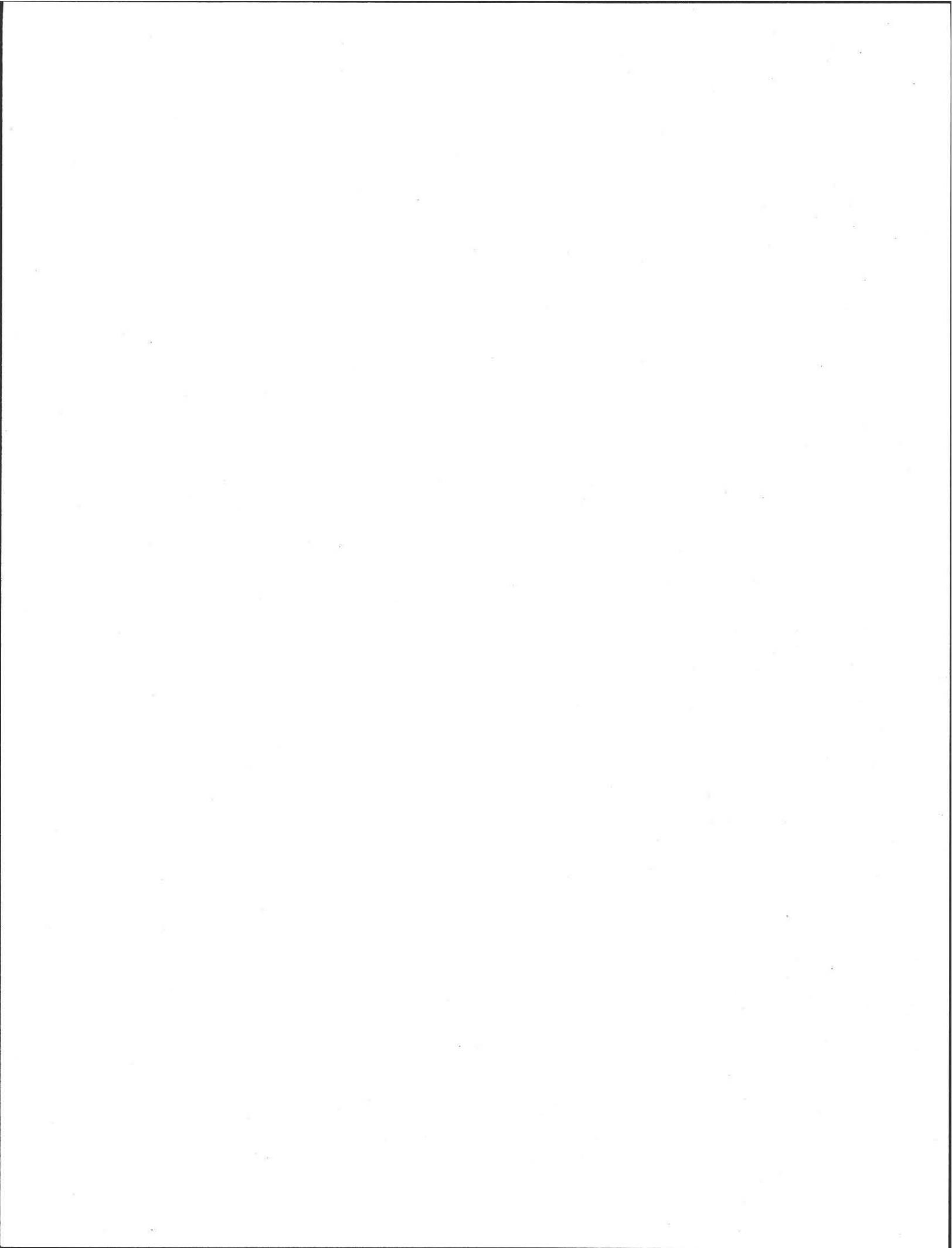
(413)-323-7134

Name:	Cushing & Sons	Sample Date:	5-23-12
Address:	P.O. Box 668	Report Date:	5-24-12
	Walpole, NH 03608-0668	Collected By:	G.O.
Sample Location:	Laplante Construction	Type Supply:	Well
	261 Leverett Road	Sample No.:	QAL 4426
	Amherst, MA 01002		

TESTED FOR	RESULTS	MAX. RECOMMENDED LEVELS
Total Coliform Bacteria	Absent	Absent
Fecal Coliform Bacteria	Absent	Absent
Nitrite	0	1.0 mg/l
Nitrate	9.0	10.0 mg/l
pH	8.23	6.5-8.5
Alkalinity	44.0	No Limit
Iron	*1.41	.30 mg/l
Manganese	*.13	.05 mg/l
Copper	0	1.3 mg/l
Sulfate	22.0	250 mg/l
Chloride	54.8	250 mg/l
Hardness	116.0	No Limit
Conductivity	277.0	No Limit
Total Dissolved Solids	182.8	500 mg/l
Turbidity	*24.4	5 NTU
Chlorine	0	No Limit
Sodium	55.9	No Limit

Results are only for those items listed above and on the above collected date. Except for the following *Iron, Manganese & Turbidity, the sample was found to be within acceptable levels for D.E.P. Drinking Water Standards. If there are any questions on this report, please do not hesitate to call this office.

David Prodenburgh, Director



CUSHING & SONS, INC.
WATER WELL DRILLERS
Job Report

GPS
N42° 25.583
W072° 30.577

Customer

Laplante Construction
296 N. Main Street
E. Longmeadow, Ma. 01028

Pump By: C+S

Date Signed 4/20/12 by RC

Date Completed 5-22-12 by MIKES #212

Phone: 413-525-6121 work 413-636-5281
Paul GC

Well Data

Total Depth 500 ft. yield 8 gpm
Casing Length 80' ft. static ft.
Depth to Bedrock 48' ft. off-set ft.
Other Materials: 3 Bags Mud
Blow test at 400 Ft
1 Hydro Frac

Pump Data

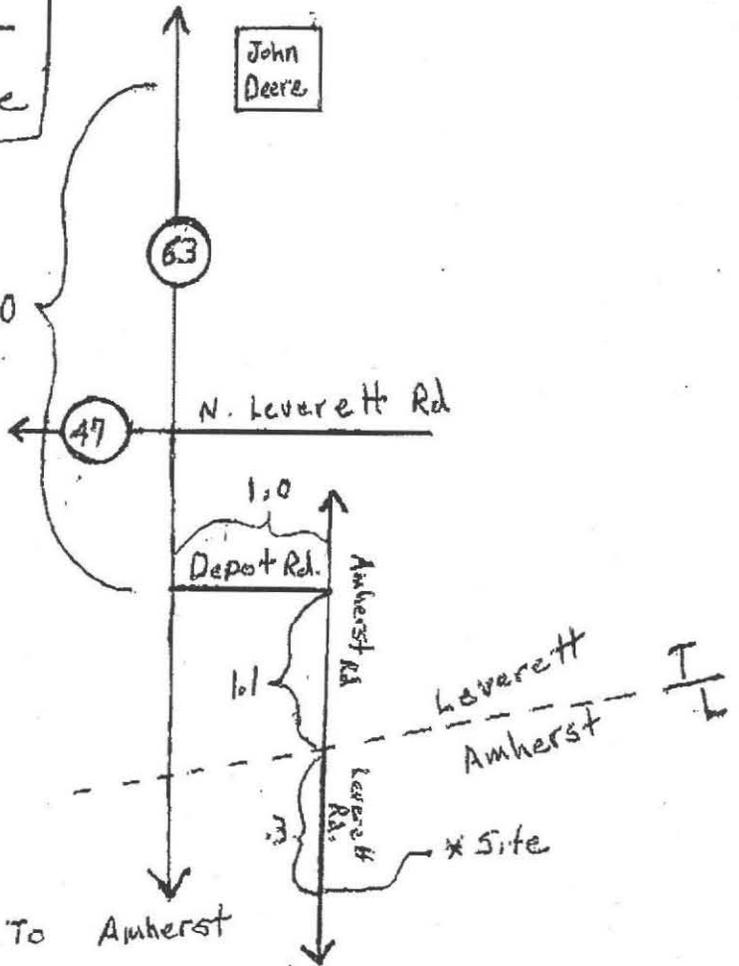
Type installation: _____
Sub Cont.: _____ Ph.# _____
Foundation _____ Stone _____ Cement _____ SI
R. Hammer _____ yes _____ no _____
Panel to C. Box: _____ ft. _____
Elec. Type: _____
Type Plumbing: _____ PVC _____ Copper _____ Iro

Bit 5,960

Well Location: 261 Leverett Rd.
Amherst, Ma.

Map: To Erving

15' Into Bedrock, Grout Space
100-400-5



Log 0-28' Gravel
28-48 Till
48-58 soft rock
58-500 granite & shale

Fractures

415'
430'
478'

Note: Sketch pressure tank location, electrical service panel location, and other helpful information.

TYPE OR PRINT ONLY

Well Completion Report

1. WELL LOCATION GPS (Required) North 42° 25.583 West 72° 30.577

Address at Well Location: 261 Leverett Rd. Property Owner/Client: L. A. Plante Construction
 Subdivision Name: _____ Mailing Address: 296 N Main St
 City/Town: Amherst, MA 01002 City/Town: E. Longmeadow, MA 01025
 Assessors Map _____ Assessors Lot #: _____ NOTE: Assessors Map and Lot # mandatory if no street address available
 Board of Health permit obtained: Yes Not Required Permit Number 12-01 Date Issued 5/17/12

2. WORK PERFORMED N W **3. WELL TYPE** D M S T **4. DRILLING METHOD** Overburden A W Bedrock A W **6. CASING** From (ft) To (ft) Type Thickness Diameter
12 78 19" 4"

5. WELL LOG		OVERBURDEN LITHOLOGY			Water Bearing Zone	Loss or Addition of Fluid	Drop in Drill Stem	Extra Fast or Slow Drill Rate
From (ft)	To (ft)	Code	Color	Comment				
<u>0</u>	<u>28</u>	<u>G</u>	<u>BR</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>
<u>28</u>	<u>48</u>	<u>T</u>	<u>BR</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>
						<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>
						<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>
						<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>
						<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>
						<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>
						<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>

7. SCREEN

From (ft)	To (ft)	Type	Slot Size	Diameter
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

8. ANNULAR SEAL/FILTER PACK/ABANDONMENT MTL.

From (ft)	To (ft)	Material Description	Purpose
<u>5</u>	<u>78</u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

WELL LOG		BEDROCK LITHOLOGY			Water Bearing Zone	Drop in Drill Stem	Extra Large Chips	Extra Fast or Slow Drill Rate	Visible Rust Staining	Loss or Addition of Fluid	# of Fractures per foot
From (ft)	To (ft)	Code	Comment								
<u>48</u>	<u>58</u>	<u>SH</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>0</u>	
<u>58</u>	<u>158</u>	<u>SH</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>0</u>	
<u>158</u>	<u>258</u>	<u>GR</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>0</u>	
<u>258</u>	<u>358</u>	<u>GR</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>0</u>	
<u>358</u>	<u>458</u>	<u>GR</u>		<u>Y</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>1</u>	
<u>458</u>	<u>500</u>	<u>GR</u>		<u>Y</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>1</u>	

9. SITE SKETCH

10. WELL TEST DATA (ALL SECTIONS MANDATORY FOR PRODUCTION WELLS)							11. STATIC WATER LEVEL (ALL WELLS)	
Date	Method	Yield (GPM)	Time Pumped (hrs & min)	Pumping Level (Ft. BGS)	Time to Recover (hrs & min)	Recovery (Ft. BGS)	Date Measured	Depth Below Ground Surface (ft)
<u>5/22</u>	<u>Air</u>	<u>8</u>	<u>2:00</u>	<u>500'</u>	<u>12:00</u>	<u>40'</u>	<u>5/23/12</u>	<u>40'</u>

12. PERMANENT PUMP (IF AVAILABLE) Pump Description Horsepower 1
 Pump Intake Depth 480 (ft) Nominal Pump Capacity 5 (gpm)

13. ADDITIONAL WELL INFORMATION Developed / N Fracture Enhancement / N
 Disinfected / N Surface Seal Type

14. COMMENTS Total Well Depth 500 Depth to Bedrock 48'

15. WELL DRILLER'S STATEMENT This well was drilled, altered, and/or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge.

Driller: Mike Sanders Supervising Driller Signature: [Signature] Registration #: 5581
 Firm: L. G. CUSHING & SONS, INC Date Complete: 5/22/12 Rig Permit #: 0563

Well Completion Report Codes

Section 2

Work Performed	Work Performed Code
Decommission	DC
Deepen	DP
Hydrofracture	HF
New Well	NW
Repair	RP
Replacement	RE

Section 3

Well Type	Well Type Code
Cathodic Protection	CTPR
Domestic	DMST
Geoconstruction	GCON
Geothermal Closed Loop	GTCL
Geothermal Open Loop	GTOL
Industrial	INDS
Injection	INJC
Irrigation	IRRG
Monitoring	MONT
Public Water Supply	PBWS
Recovery	RCVR
Test Wells	TSTW

Section 4

Drilling Method	Drilling Method Code
Air Hammer	AH
Air Rotary	AR
Auger	AG
Cable Tool	CT
Casing Advancement	CA
Core	CR
Direct Push	DP
Drive and Wash	DW
Dug	DG
Mud Rotary	MR
Reverse Rotary	RR
Sonic	SN

Section 5

Overburden Lithology Name	Overburden (OB) Code	Overburden Color	Overburden Color Code	Bedrock Name	Bedrock (BR Code)
Artificial Fill	AF	Black	BL	Amphibolite	AM
Boulders	B	Bluish Gray	BG	Basalt	BS
Clay	CL	Brown	BR	Conglomerate/Breccia	CG/BR
Coarse Sand	CS	Dark Gray	DG	Diorite	DI
Cobbles	C	Greenish Gray	GG	Gabbro	GB
Fine Sand	FS	Light Gray	LG	Gneiss	GN
Fine to Coarse Sand	FCS	Reddish Brown	RB	Granite	GR
Gravel	G	Yellowish Brown	YB	Limestone	LS
Medium Sand	MS			Marble	MA
Organics	O			Quartzite	QZ
Sand & Gravel	SG			Rhyolite	RH
Silt	SI			Sandstone	SS
Silty Clay	SICL			Schist	SC
Silty Sand	SIS			Shale	SH
Silty Sand & Gravel	SISG			Slate/Phyllite	SL/PH
Till	T			Pegmatite	PM

Section 6

Casing Type	Casing Type Code	Thickness	Thickness (NO CODE)
Certa-Lok	CTL	Schedule 5	
Fiberglass	FBG	Schedule 10	
Galvanized Pipe	GLP	Schedule 40	
HDPE	HDP	Schedule 80	
NSF Coated Steel	NCS	Schedule 160	
PVC	PVC	SDR 13.5	
Stainless Steel	SST	SDR 17	
Steel	STL	SDR 21	
		SDR 26	
		SDR 32.5	
		SDR 40	
		17#	
		19#	

Section 7

Screen Type	Screen Code
Carbon Steel	CST
Continuous Wire PVC	CWP
Galvanized Wire Wrapped	GWW
Perforated Pipe	PPF
Pre-pack PVC	PPP
Pre-pack Stainless	PPS
Slotted PVC	SLP
Stainless Steel Vee Wire	SSV
Stainless Steel Well Point	SSP

Section 8

Annular Seal/Filter Pack/Abandonment	Annular Seal/Filter Pack/Abandonment Material Code	Purpose	Purpose Code
Bentonite Chips/Pellets	BC	Fill	FL
Bentonite Grout	BG	Filter	FT
Cement/Bentonite Grout	CB	Seal	AS
Concrete	CT		
Sand	SD		
Native Material	NM		

Section 10

Method	Method Code
Air Blow with Drill Stem	AB
Air Lift	AL
Bailing	BL
Constant Rate Pump	CR
Variable Rate Pump	VR
Slug	SG

Section 12

Pump Description	Pump Description Code	Horsepower
3 Wire Variable Speed Submersible	3WVS	1/2 20
2 Wire Variable Speed Submersible	2WVS	3/4 25
2 Wire Constant Speed Submersible	2WSS	1 30
3 Wire Constant Speed Submersible	3WSS	1 1/2 40
Constant Speed Submersible Turbine	CSST	2 50
Variable Speed Submersible Turbine	VSST	3 60
Jet	JET	5 75
Line Shaft Turbine	LST	7 1/2 100
Centrifugal	CENT	10 125
		15 150
		200

Section 13

Surface Seal Type	Well Seal Type Code
Cement	CM
Cement/Bentonite	CB
Concrete	CT
None	NO

TYPE OR PRINT ONLY

Well Completion Report

1. WELL LOCATION GPS (Required) North 42° 25.583 West 72° 30.577
 Address at Well Location: 261 Leverett Rd. Property Owner/Client: L. a. Plant Construction
 Subdivision Name: _____ Mailing Address: 296 N Main St
 City/Town: Amherst, MA 01002 City/Town: F Longmeadow, MA 01025
 Assessors Map _____ Assessors Lot #: _____ NOTE: Assessors Map and Lot # mandatory if no street address available
 Board of Health permit obtained: Yes Not Required Permit Number 12-01 Date Issued 5/17/12

2. WORK PERFORMED N W **3. WELL TYPE** D M S T **4. DRILLING METHOD** Overburden: A H Bedrock: A H **6. CASING** From (ft) To (ft) Type Thickness Diameter
±2 78 19" 6"

5. WELL LOG		OVERBURDEN LITHOLOGY			Water Bearing Zone	Loss or Addition of Fluid	Drop in Drill Stem	Extra Fast or Slow Drill Rate	7. SCREEN				
From (ft)	To (ft)	Code	Color	Comment					From (ft)	To (ft)	Type	Slot Size	Diameter
<u>0</u>	<u>28</u>	<u>G</u>	<u>BR</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>					
<u>28</u>	<u>48</u>	<u>T</u>	<u>BR</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>					

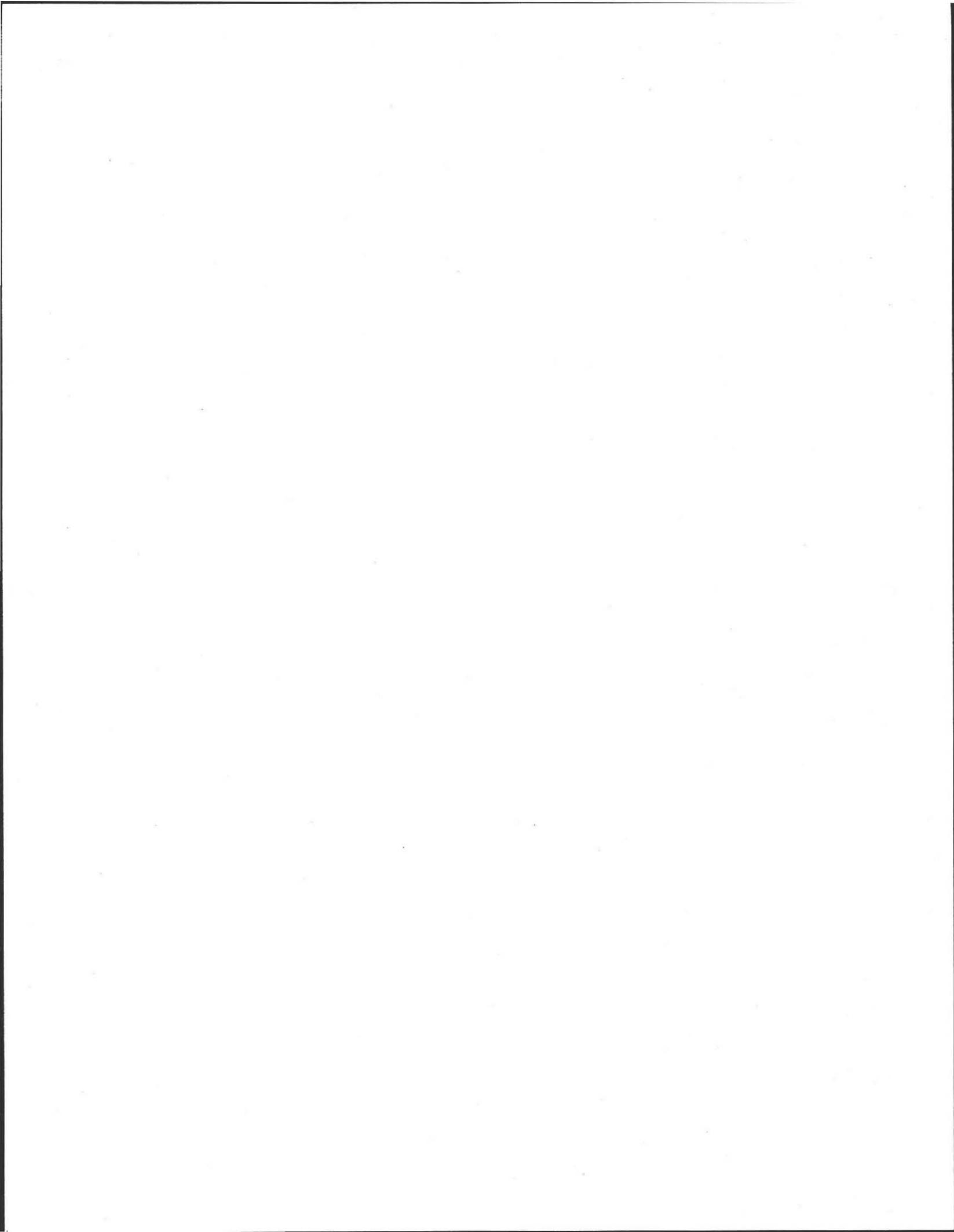
WELL LOG		BEDROCK LITHOLOGY			Water Bearing Zone	Drop in Drill Stem	Extra Large Chips	Extra Fast or Slow Drill Rate	Visible Rust Staining	Loss or Addition of Fluid	# of Fractures per foot	9. SITE SKETCH	
From (ft)	To (ft)	Code	Comment										
<u>48</u>	<u>58</u>	<u>SH</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>0</u>			
<u>58</u>	<u>158</u>	<u>SH</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>0</u>			
<u>158</u>	<u>258</u>	<u>GR</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>0</u>			
<u>258</u>	<u>358</u>	<u>GR</u>		<u>N</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>0</u>			
<u>358</u>	<u>458</u>	<u>GR</u>		<u>Y</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>1</u>			
<u>458</u>	<u>500</u>	<u>GR</u>		<u>Y</u>	<u>Y/N</u>	<u>Y/N</u>	<u>F/S</u>	<u>Y/N</u>	<u>Y/N</u>	<u>1</u>			

10. WELL TEST DATA (ALL SECTIONS MANDATORY FOR PRODUCTION WELLS)							11. STATIC WATER LEVEL (ALL WELLS)	
Date	Method	Yield (GPM)	Time Pumped (hrs & min)	Pumping Level (Ft. BGS)	Time to Recover (hrs & min)	Recovery (Ft. BGS)	Date Measured	Depth Below Ground Surface (ft)
<u>5/22</u>	<u>Air</u>	<u>8</u>	<u>2:00</u>	<u>500</u>	<u>12:00</u>	<u>40'</u>	<u>5/23/12</u>	<u>40'</u>

12. PERMANENT PUMP (IF AVAILABLE) Pump Description 3 W 5 S Horsepower 1
 Pump Intake Depth 480 (ft) Nominal Pump Capacity 5 (gpm)
13. ADDITIONAL WELL INFORMATION Developed Y / N Fracture Enhancement Y / N
 Disinfected Y / N Surface Seal Type NO
 Total Well Depth 500 Depth to Bedrock 48

14. COMMENTS
15. WELL DRILLER'S STATEMENT This well was drilled, altered, and/or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge.
 Driller: Mike Sanders Supervising Driller Signature: [Signature] Registration #: 5581
 Firm: L G CUSHING & SONS, INC Date Complete: 5/22/12 Rig Permit #: 0563

NOTE: Well Completion Reports must be filed by the registered well driller within 30 days of well completion.
 BOARD OF HEALTH COPY



Massachusetts Department of Conservation and Recreation
Office of Water Resources
Well Completion Report

165028

TYPE OR PRINT ONLY

1. WELL LOCATION: GPS (Required) North 42° 25.583 West 72° 30.577
 Address at Well Location: 261 Levee Rd. Property Owner/Client: Lea Plant & Construction
 Subdivision Name: _____ Mailing Address: 226 N Main St
 City/Town: Amherst, MA 01002 City/Town: E. Longmeadow, MA 01106
 Assessors Map _____ Assessors Lot #: _____ NOTE: Assessors Map and Lot # mandatory if no street address available
 Board of Health permit obtained: Yes Not Required Permit Number 12-01 Date Issued 5/17/12

2. WORK PERFORMED: N W D M S T
3. WELL TYPE: A H A H
4. DRILLING METHOD: Overburden _____ Bedrock _____
6. CASING: From (ft) 12 To (ft) 78 Type SP4 Thickness 19" Diameter 6"

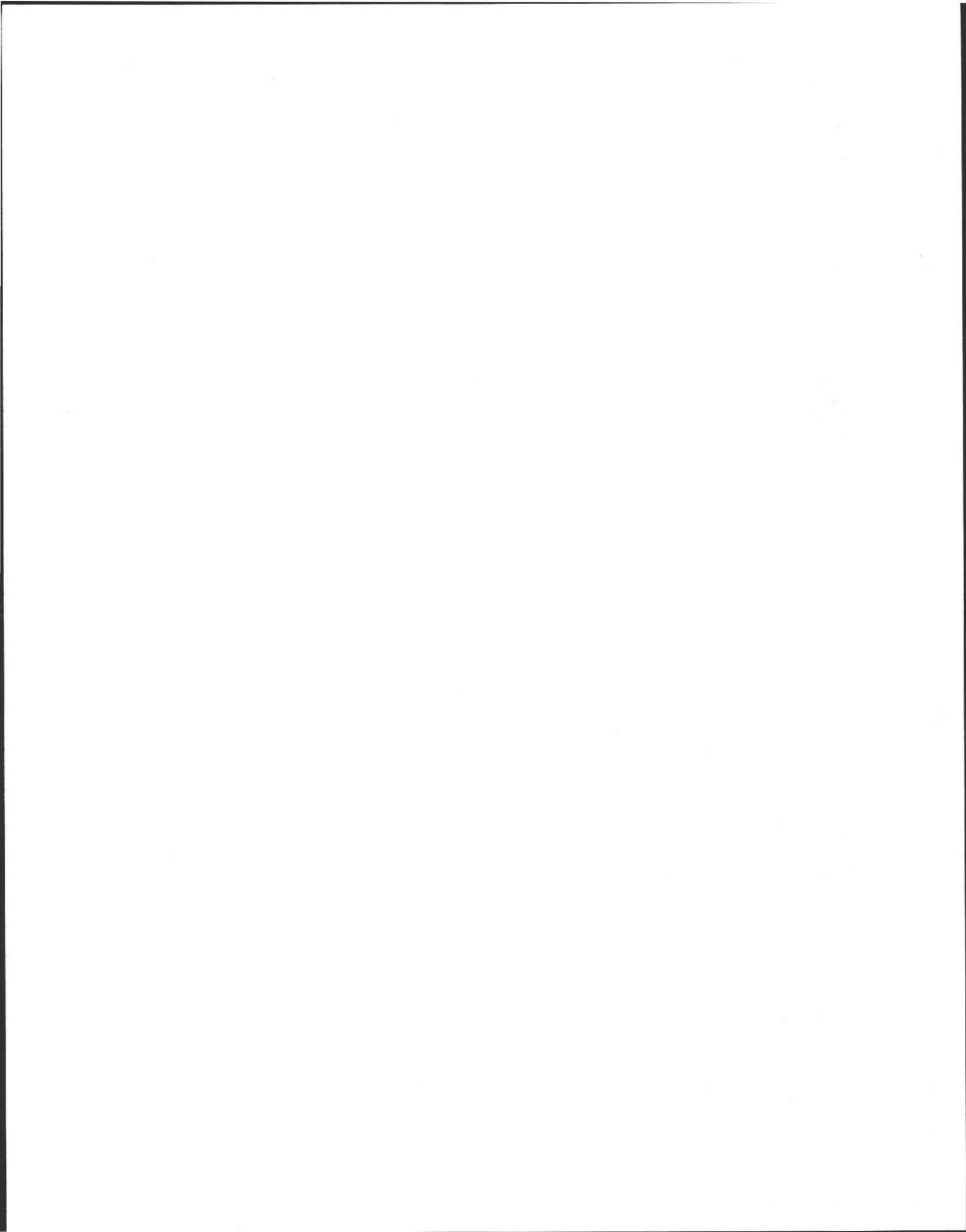
5. WELL LOG		OVERBURDEN LITHOLOGY		Water Bearing Zone	Loss or Addition of Fluid	Drop in Drill Stem	Extra Fast or Slow Drill Rate	7. SCREEN		
From (ft)	To (ft)	Code	Color					Comment	From (ft)	To (ft)
0	28	G	BR	N	Y/N	Y/N	F/S			
28	48	T	BR	N	Y/N	Y/N	F/S			
					Y/N	Y/N	F/S			
					Y/N	Y/N	F/S			
					Y/N	Y/N	F/S			
					Y/N	Y/N	F/S			

WELL LOG		BEDROCK LITHOLOGY		Water Bearing Zone	Drop in Drill Stem	Extra Large Chisps	Extra Fast or Slow Drill Rate	Visible Rust Staining	Loss or Addition of Fluid	# of Fractures per foot	8. ANNUAL SEAL/FILTER PACK/ABANDONMENT INTL.
From (ft)	To (ft)	Code	Comment								
48	58	SH		N	Y/N	Y/N	F/S	Y/N	Y/N	0	
58	158	SH		N	Y/N	Y/N	F/S	Y/N	Y/N	0	
158	258	GR		N	Y/N	Y/N	F/S	Y/N	Y/N	0	
258	358	GR		N	Y/N	Y/N	F/S	Y/N	Y/N	0	
358	458	GR		Y	Y/N	Y/N	F/S	Y/N	Y/N	1	
458	500	GR		Y	Y/N	Y/N	F/S	Y/N	Y/N	1	

10. WELL TEST DATA (ALL SECTIONS MANDATORY FOR PRODUCTION WELLS)							11. STATIC WATER LEVEL (ALL WELLS)	
Date	Method	Yield (GPM)	Time Pumped (hrs & min)	Pumping Level (Ft. BGS)	Time to Recover (hrs & min)	Recovery (Ft. BGS)	Date Measured	Depth Below Ground Surface (ft)
5/22	Air	8	24:00	500'	12:00	40'	5/23/12	40'

12. PERMANENT PUMP (IF AVAILABLE): Pump Description 3 W 5 S Horsepower 1
 Pump Intake Depth 480 (ft) Nominal Pump Capacity 5 (gpm)
13. ADDITIONAL WELL INFORMATION: Developed N Fracture Enhancement N
 Disinfected N Surface Seal Type W D
 Total Well Depth 500 Depth to Bedrock 48

15. WELL DRILLER'S STATEMENT: This well was drilled, altered, and/or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge.
 Driller: Mike Sanders Supervising Driller Signature: [Signature] Registration #: 0518
 Firm: J. G. CUSHING & SONS, INC. Date Complete: 5/22/12 Rig Permit #: 0063



No. 1962 P. 2

Town of



AMHERST

Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK,
AMHERST, MA 01002
(413) 259-3077 (413) 259-2404 - FAX

APPLICATION FOR A WELL CONSTRUCTION PERMIT

I hereby petition the Board of Health of the Town of Amherst for a Well Construction Permit (WCP) to install a private well in the Town of Amherst. ATTACHED IS A PLAN SHOWING THE PROPOSED LOCATION OF THE WELL (WITH ORIGINAL DATE, STAMP AND SIGNATURE OF AN ENGINEER, REGISTERED SANITARIAN, OR REGISTERED LAND SURVEYOR) AND ALL OTHER REQUIREMENTS OF THE AMHERST BOARD OF HEALTH REGULATIONS FOR PRIVATE WELLS.

- 1. Address of Property: 261 Leverett Road, Amherst
- 2. Assessor of Parcel Number: _____
- 3. Name of Owner: Susan Handley & Bruce McCandless Telephone Number: _____
Address of Owner: 20 Kingman Road, Amherst, MA.
- 4. Name of Well Driller: Rich Chevalier Reg. # _____
(Must be registered with Massachusetts Water Resources Commission)
- 5. Purpose of Well: *Drinking Agricultural Only () Ground Source Heat Pump ()
\$100.00 \$50.00 \$50.00

The undersigned acknowledges that he must, before commencing construction or use of the system which is the matter of this application, secure any and all other permits which may be required by the laws of the Town of Amherst and the Commonwealth of Massachusetts, and agree to abide by all regulations of the Town of Amherst and the Commonwealth of Massachusetts concerning private wells.

The undersigned also understands that if a private well is to be used for drinking purposes, a BUILDING PERMIT affecting the structure the well is to serves WILL NOT BE ISSUED UNTIL A Water Supply Certificate has been granted by the Amherst Board of Health.

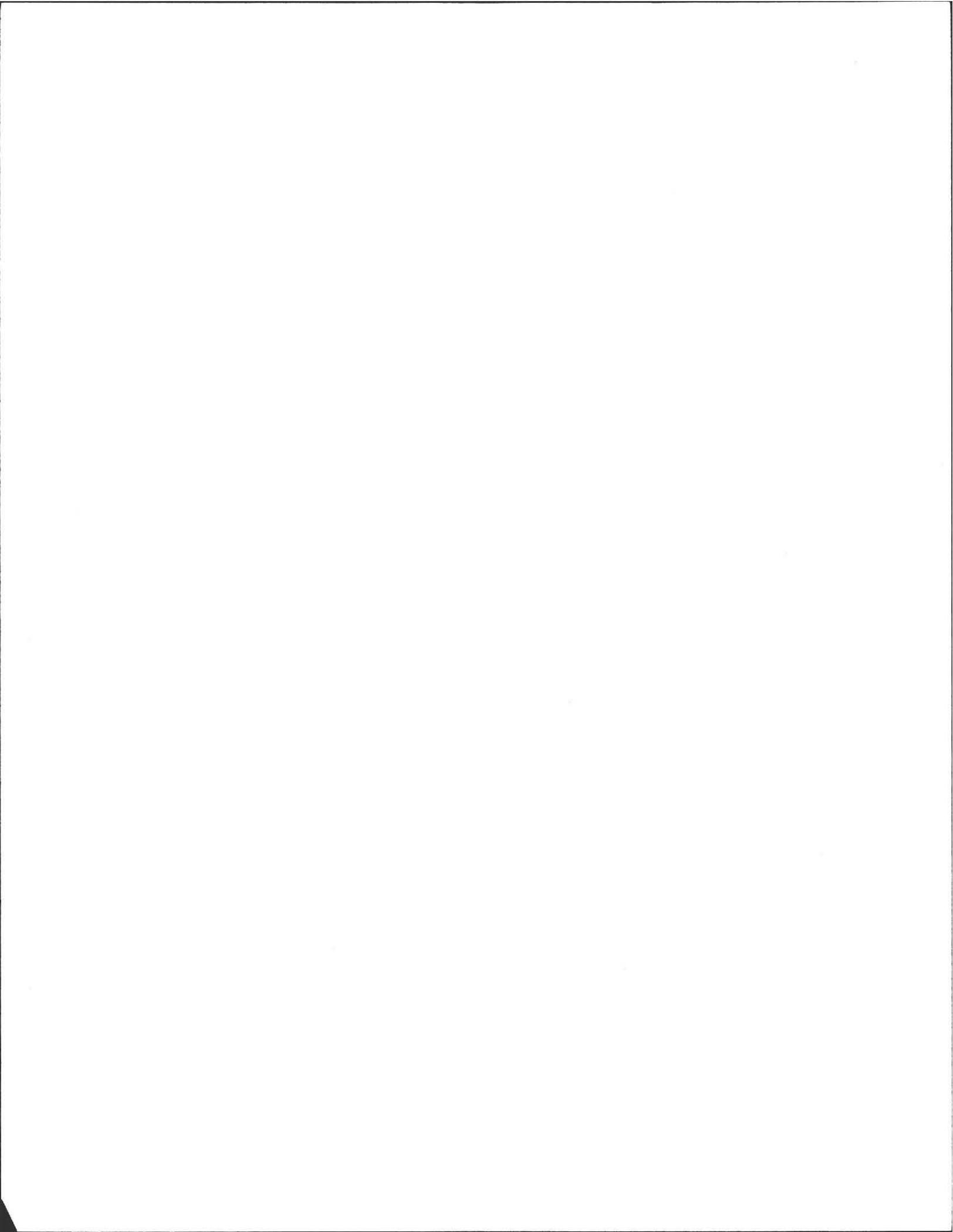
Name of Applicant: R. E. Laplante Const.

Applicant Signature: Paul Laplante (Const Super) Date: 4-26-2012

For Office Use Only	
<input checked="" type="checkbox"/> Permit Issued By: <u>Edna R Smith</u>	<input type="checkbox"/> Permit Denied By: _____
PERMIT NUMBER: <u>12-2</u>	REASON: _____
DATE ISSUED: <u>5-17-2012</u>	DATE DENIED: _____
Inspected By: <u>Edna R Smith</u>	Fee Paid: Yes ___ No ___ Amount _____
Inspection Date: <u>6-8-2012</u>	Cash/Check # _____
	Date of Payment _____

MUNIS App. 13522 Batch 5210

Amherst Public Health
Apr. 26. 2012 3:34PM



MAY-23-2012 02:53P FROM:QUABBIN

413-323-5033

TO:16033578572

P.1



Quabbin Analytical Laboratory

Box 1192 Stadler Street, Belchertown, MA 01007

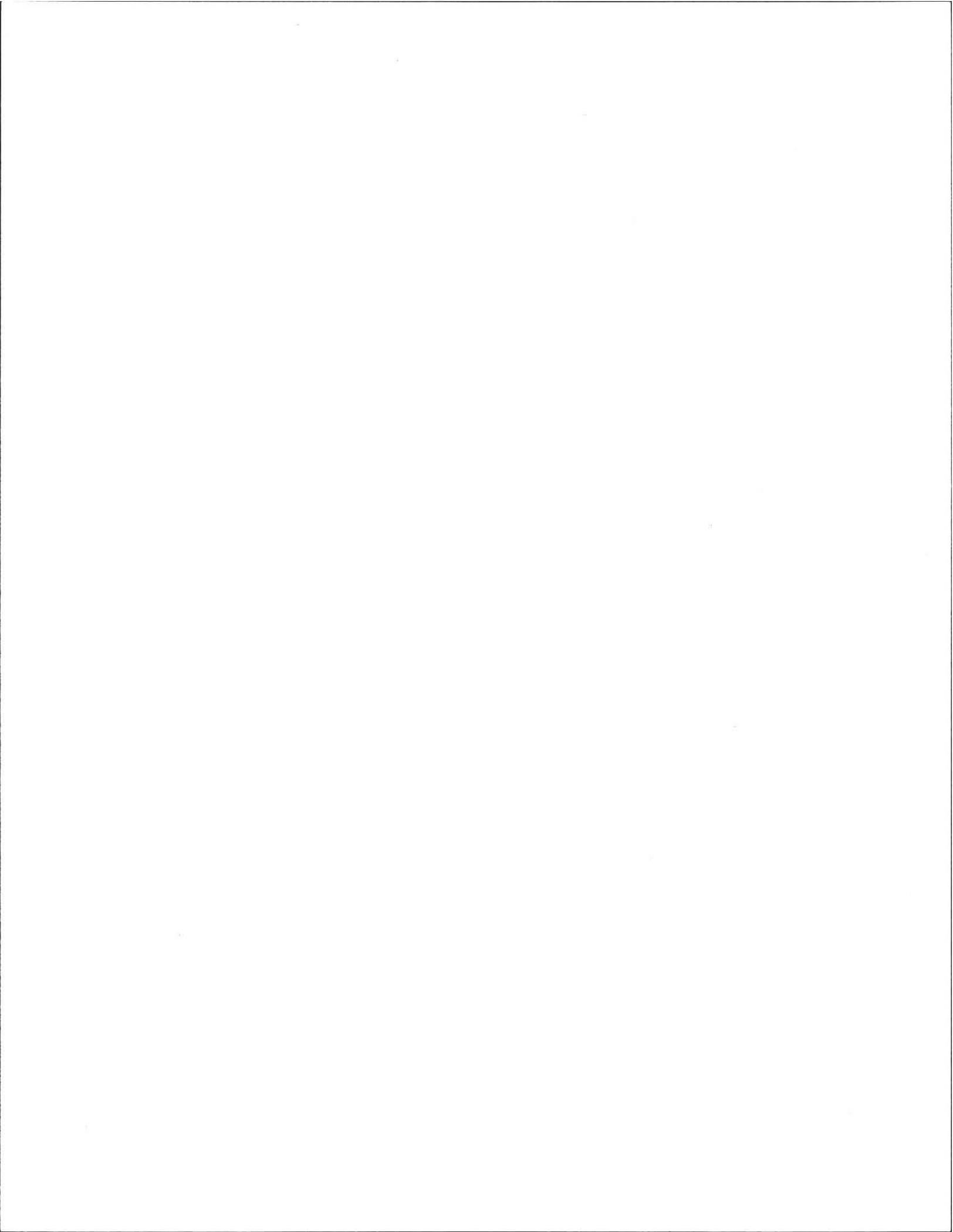
(413)-323-7134

Name:	Cushing & Sons, Inc.	Sample Date:	5-22-12
Address:	P.O. Box 668	Report Date:	5-23-12
	Walpole, NH 03608-0668	Collected By:	C.O.
Sample Location:	John Rathbun, Builder	Type Supply:	Well
	180 Pratt Corner Road	Sample No.:	QAL 4415
	Leverett, MA 01054		

TESTED FOR	RESULTS	MAX. RECOMMENDED LEVELS
Total Coliform Bacteria	Absent	Absent
Fecal Coliform Bacteria	Absent	Absent
Nitrite Nitrogen	0	1.0 mg/l
Nitrate Nitrogen	5.8	10.0 mg/l
pH	8.22	6.5-8.5
Color	6.0	15 cu
Iron	*1.89	.30 mg/l
Manganese	*.21	.05 mg/l
Copper	Not Tested	1.3 mg/l
Sulfate	Not Tested	250 mg/l
Chloride	14.4	250 mg/l
Total Hardness	40.0	No Limit
Conductivity	Not Tested	No Limit
Total Dissolved Solids	Not Tested	500 mg/l
Turbidity	4.6	5 NTU
Chlorine	Not Tested	No Limit
Sodium	40.4	No Limit

Results are only for those items listed above and on the above collected date. Except for the following _____, the sample was found to be within acceptable levels for D.E.P. Drinking Water Standards. If there are any questions on this report, please do not hesitate to call this office.

David Fredenburgh, Director





Quabbin Analytical Laboratory

Box 1192 Stadler Street, Belchertown, MA 01007

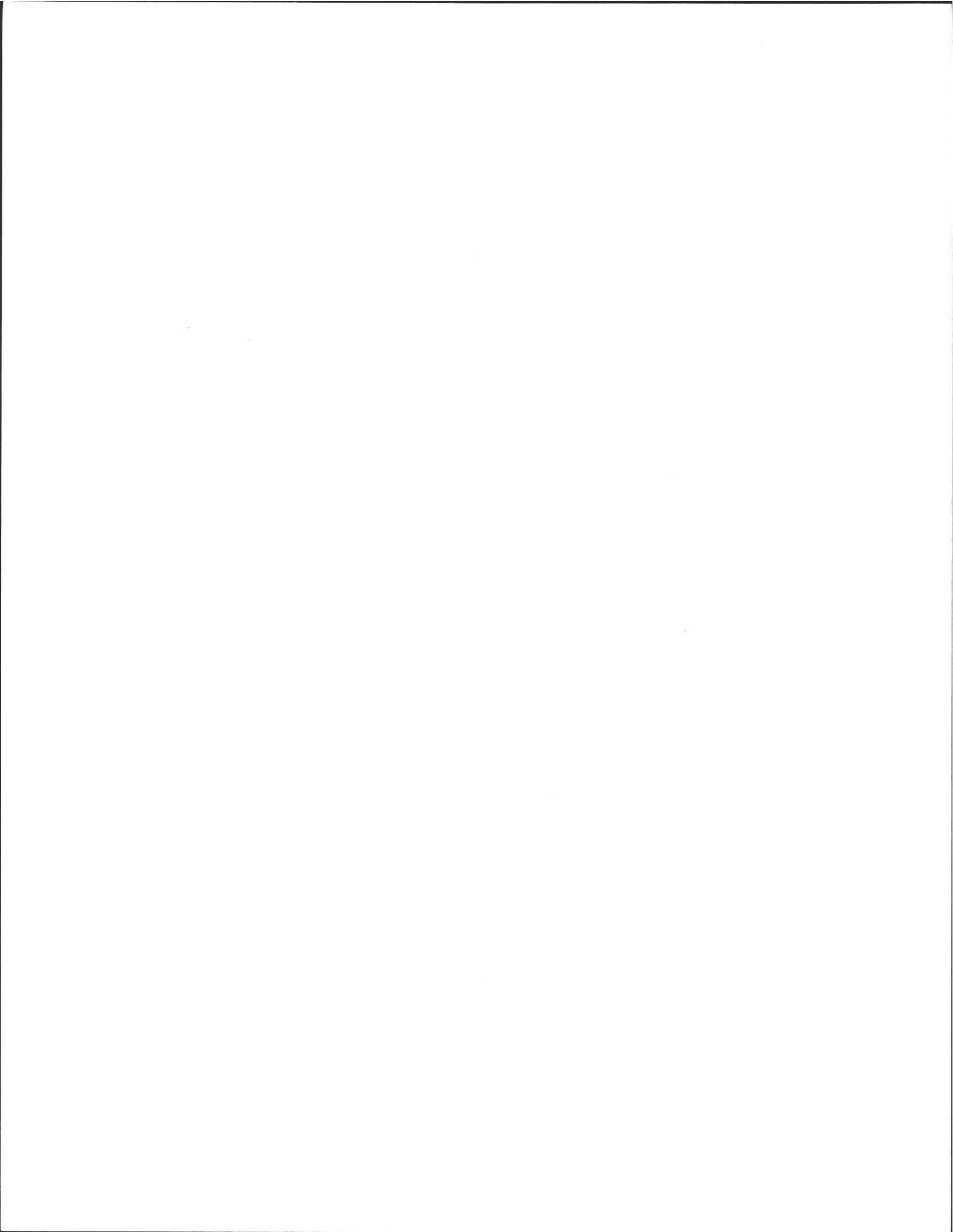
(413)-323-7134

Name:	Cushing & Sons	Sample Date:	5-23-12
Address:	P.O. Box 668	Report Date:	5-24-12
	Walpole, NH 03608-0668	Collected By:	G.O.
Sample Location:	Laplante Construction	Type Supply:	Well
	261 Leverett Road	Sample No.:	QAL 4426
	Amherst, MA 01002		

TESTED FOR	RESULTS	MAX. RECOMMENDED LEVELS
Total Coliform Bacteria	Absent	Absent
Fecal Coliform Bacteria	Absent	Absent
Nitrite	0	1.0 mg/l
Nitrate	9.0	10.0 mg/l
pH	8.23	6.5-8.5
Alkalinity	44.0	No Limit
Iron	*1.41	.30 mg/l
Manganese	*.13	.05 mg/l
Copper	0	1.3 mg/l
Sulfate	22.0	250 mg/l
Chloride	54.8	250 mg/l
Hardness	116.0	No Limit
Conductivity	277.0	No Limit
Total Dissolved Solids	182.8	500 mg/l
Turbidity	*24.4	5 NTU
Chlorine	0	No Limit
Sodium	55.9	No Limit

Results are only for those items listed above and on the above collected date. Except for the following *Iron, Manganese & Turbidity, the sample was found to be within acceptable levels for D.E.P. Drinking Water Standards. If there are any questions on this report, please do not hesitate to call this office.

David Frodenburgh, Director



CUSHING & SONS, INC.
WATER WELL DRILLERS
Job Report

GPS
N42° 25.583
W072° 30.577

Customer

LaPlante Construction
296 N. Main Street
E. Longmeadow, Ma. 01028

Pump By: C+S

Date Signed 4/20/12 by RC

Date Completed 5-22-12 by MIKES #212

Phone: 413-525-6121 work 413-636-5281
PAUL GC

Well Data

Total Depth 500 ft. yield 8 gpm

Casing Length 80' ft. static _____ ft.

Depth to Bedrock 48' ft. off-set _____ ft.

Other Materials: 3 Bags Mud

Blow test at 400 Ft

1 Hydro Frac

Bit 5.960

Well Location: 261 Leverett Rd.

Amherst, Ma.

15' 100-400-5

Into Bedrock, Grout Space

Pump Data

Type installation: _____

Sub Cont.: _____ Ph.# _____

Foundation _____ Stone _____ Cement _____ SI _____

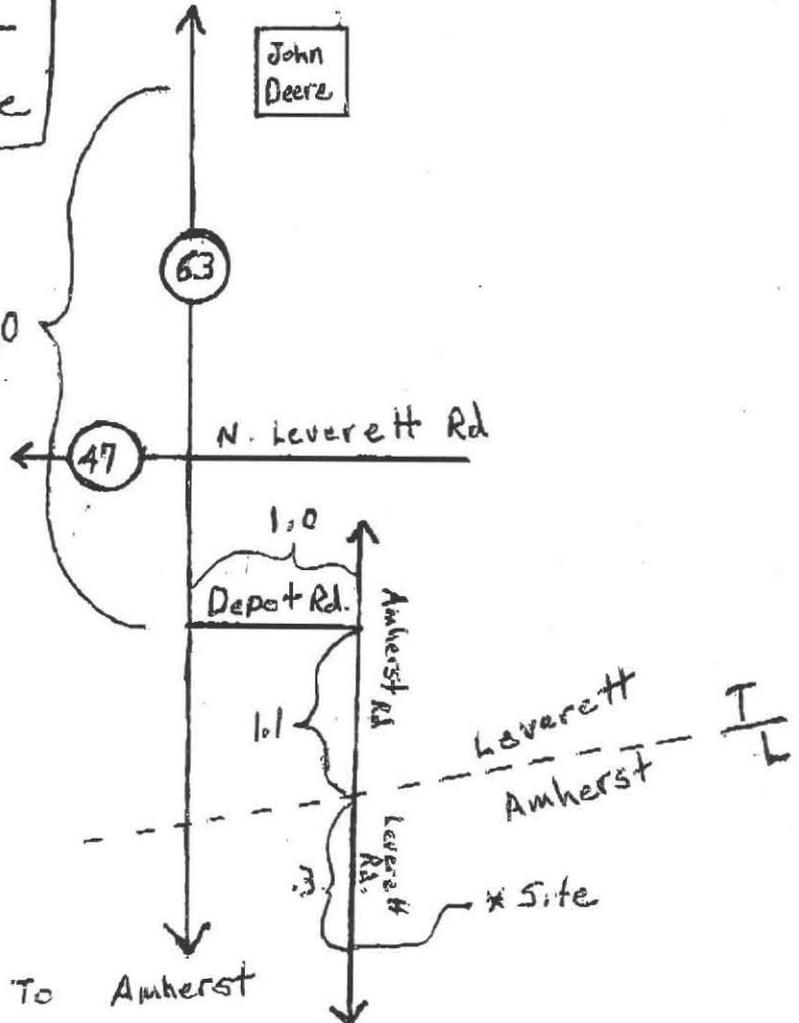
R. Hammer _____ yes _____ no _____

Panel to C. Box: _____ ft. _____

Elec. Type: _____

Type Plumbing: _____ PVC _____ Copper _____ Iro _____

Map: To Erving

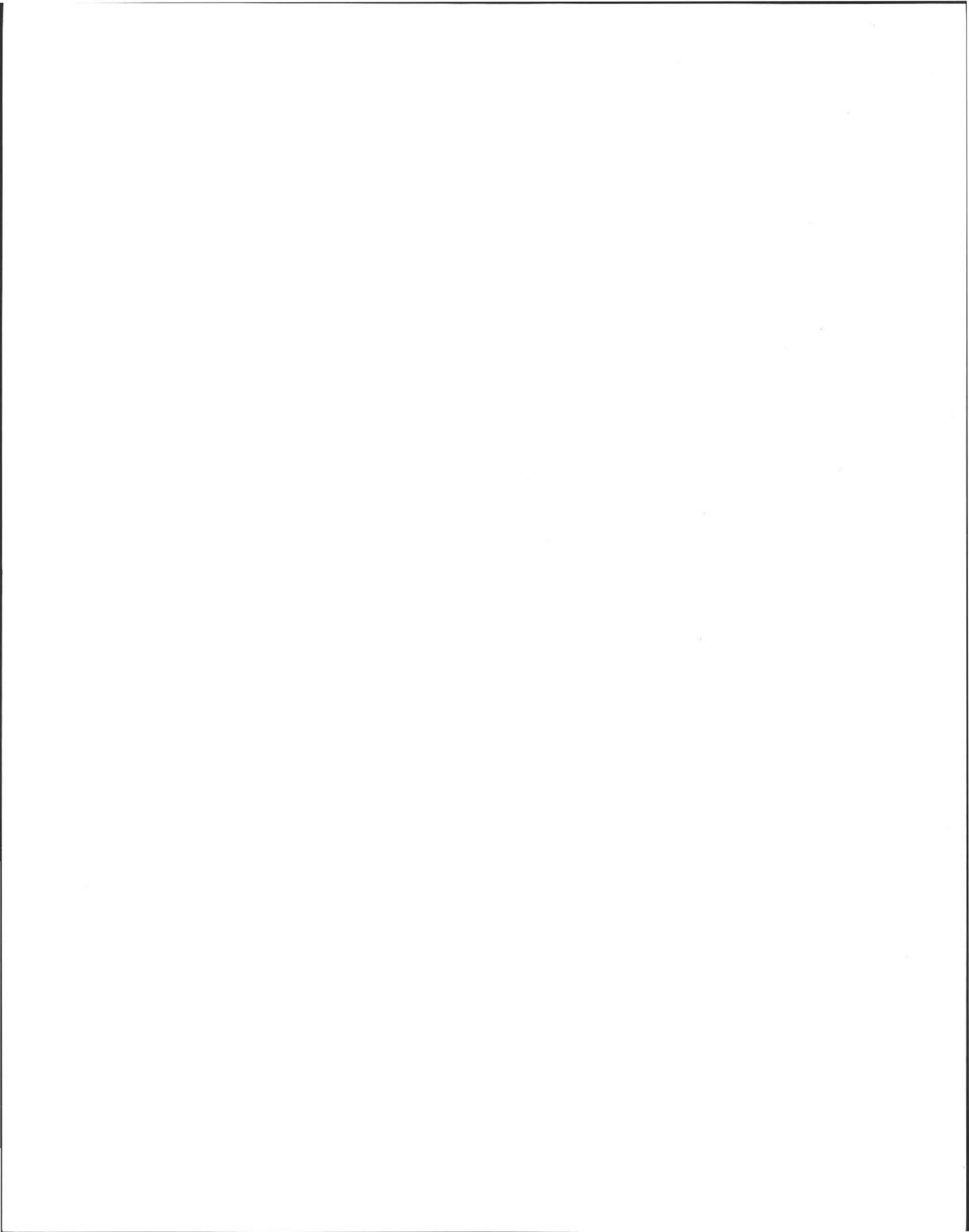


Log 0-28' Gravel
28-48 Till
48-58 soft Rock
58-500 Granite & shale

Fractures

415'
430'
478'

Note: Sketch pressure tank location, electrical service panel location, and other helpful information.





WATER WELL DRILLERS

Office: Route 12N, Keene, NH 03431
Mailing: PO Box 200, Walpole, NH 03608
Phone: 603-352-8866
802-254-4850

DATE: 5/24/12

TO: Laplante Const.

ATTN: Paul

FAX: 413-525-9104

TOTAL NUMBER OF PAGES BEING SENT (INCLUDING THIS ONE): 4

Anything Else please call

BART CUSHING
(603)513-9970

SINCERELY,

RC

FAX: 603-357-8572

Rich Chevalier

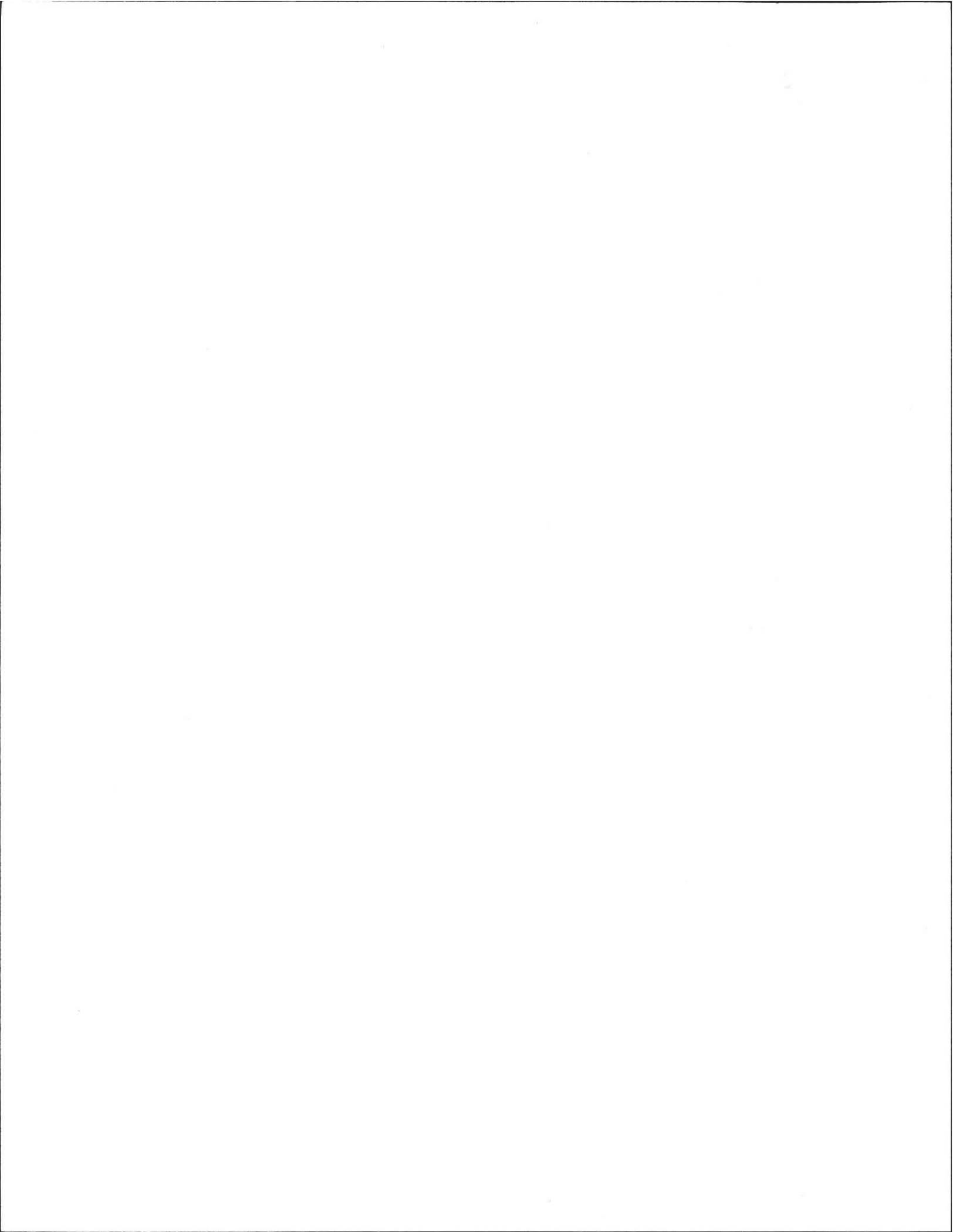


**Water Wells and Pump Services
Serving New England Since 1972**

mailing:
PO Box 688
Walpole, NH 03608
800-831-8883
603-352-8866

facilities:
Rt. 12 North
Keene, NH 03431
fax 603-357-8572
cell 603-313-9975





**AMHERST BOARD OF HEALTH REGULATIONS FOR
PRIVATE WELLS**

**Adoption Date: October 30, 2008
Amended Date: February 22, 2011**

I. PURPOSE

These regulations are intended to protect the public health and general welfare by contributing to the protection of groundwater in the Town and by providing assurance that private wells intended for drinking water use meet applicable water quality standards.

II. AUTHORITY

These regulations are adopted by the Amherst Board of Health, as authorized by Massachusetts General Laws, Chapter II1, section 31. These regulations supersede all previous regulations adopted by the Board of Health pursuant to the construction of private wells. These regulations are derived from the Massachusetts Department of Environmental Protection Model Board of Health Regulations for Private Wells, October 30, 1989, as revised February 1998.

III. DEFINITIONS

Agent: Any person designated and authorized by the Board to enforce these regulations. The agent shall have all the authority of the appointing Board and shall be directly responsible to the Board and under its direction and control.

Applicant: Any person who intends to have a private well constructed and is applying for a permit for same.

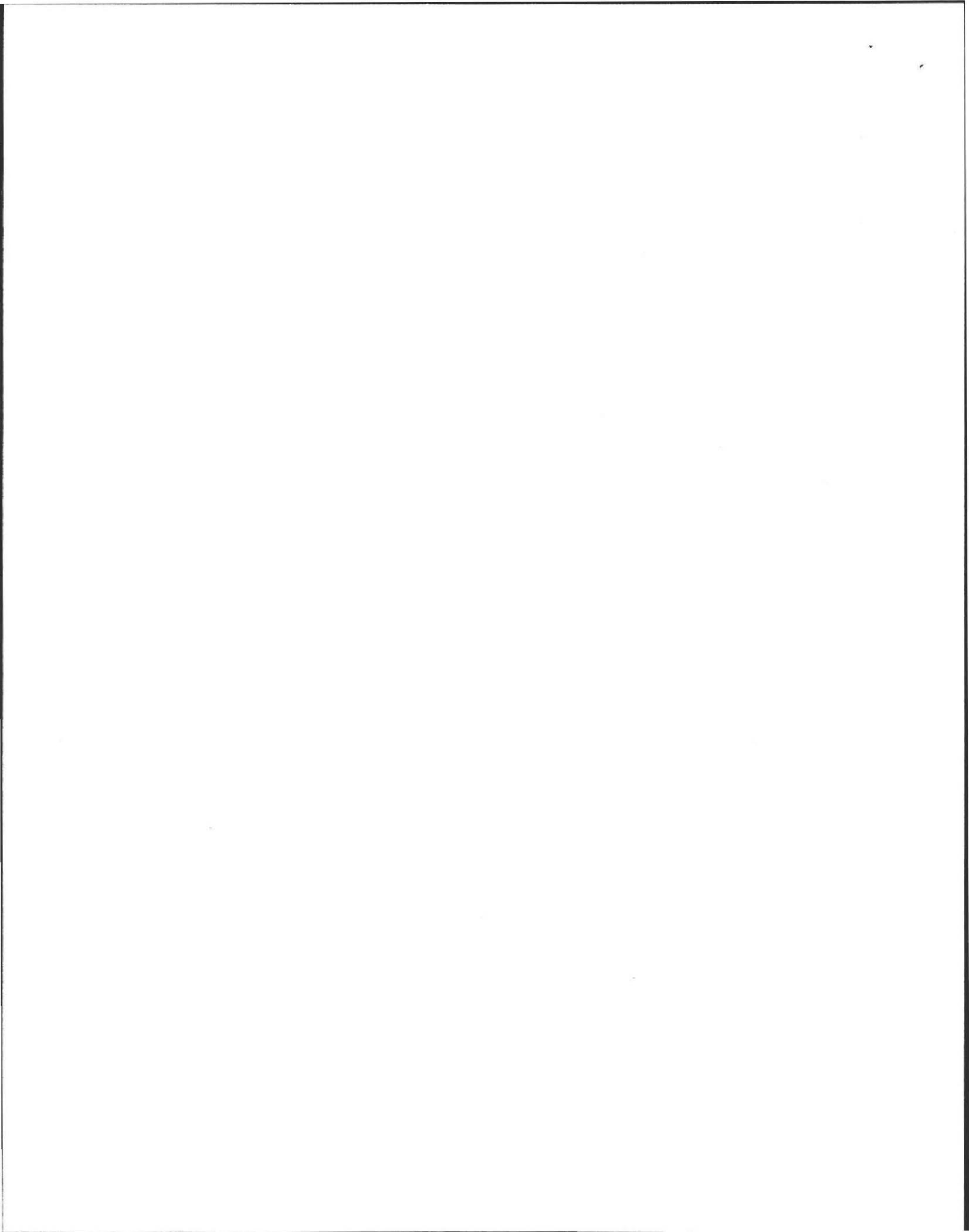
Board: The Board of Health of Amherst, Massachusetts or its authorized agent.

Casing: Impervious durable pipe placed in a boring to prevent the walls from caving and to serve as a vertical conduit for water in a well.

Certified Laboratory: Any laboratory currently certified by the Massachusetts Department of Environmental Protection for analysis of drinking water. Provisional certification shall also qualify.

Ground Source Heat Pump (GSHP) Well: Any excavation by any method for the purpose of transferring heat to or from the earth for heating and cooling purposes in which the ambient ground temperature (prior to GSHP operations) is 90 degrees Fahrenheit or less.

Person: An individual, corporation, company, association, trust, or partnership.



Private Well: Any dug, driven, or drilled hole, with a depth greater than its largest surface diameter, including ground source heat pump geothermal wells, and not subject to regulation by 310 CMR 22.00.

Private Water Supply Well: Any private well developed to supply groundwater for any use.

Private Drinking Water Well: Any private well developed to supply water intended and/or used for human consumption.

Pumping Test: A procedure used to determine the characteristics of a well and adjacent geologic formation by installing and operating a pump.

Registered Well Driller: Any person registered with the Department of Environmental Management/Office of Water Resources to dig or drill wells in the Commonwealth of Massachusetts.

Static Water Level: The level of water in a well under non-pumping conditions.

Structure: A combination of materials assembled at a fixed location to give-support or shelter, such as a building, framework, retaining wall, fence, or the like.

IV. WELL CONSTRUCTION PERMIT

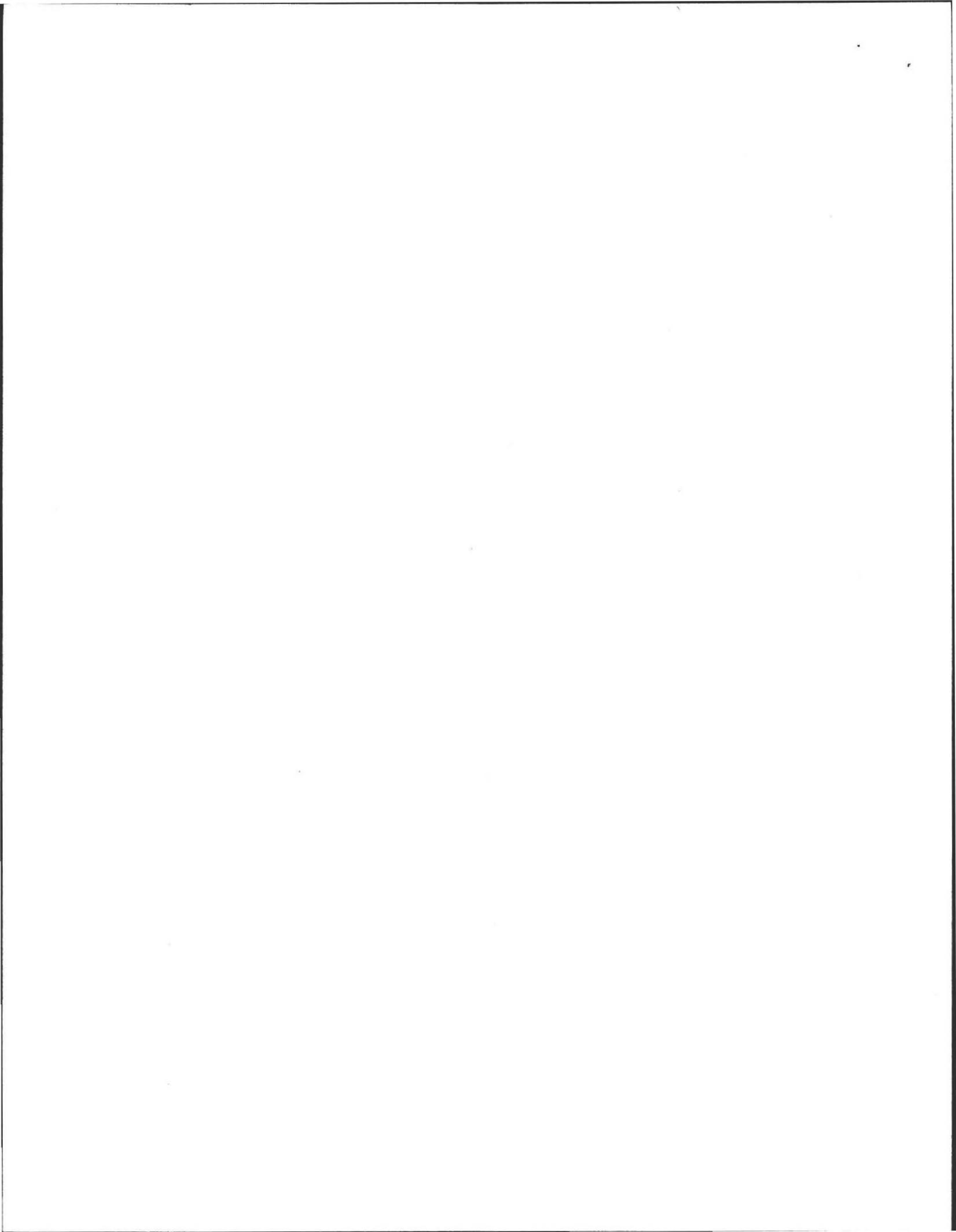
The property owner or his designated representative shall obtain a permit from the Board of Health prior to the commencement of construction of a private well.

The permit application to construct a private well shall include the following:

- 1) the property owner's name and address
- 2) the well driller's name and proof of valid state registration
- 3) a plan with a specified scale showing the location of the proposed well in relation to existing or proposed above or below ground structures on the subject property.

Permits for private drinking water wells shall also include:

- 4) a written description of visible prior and current land uses within two-hundred (200) feet of the proposed well location, which represent a potential source of contamination, including but not limited to the following:
 - a) existing and proposed structures
 - b) subsurface sewage disposal systems
 - c) subsurface and above ground fuel storage tanks
 - d) public ways
 - e) utility rights-of-way
 - f) any other potential sources of pollution.
- 5) proof that the owner of any property within one hundred and fifty (150) feet of the well and all property abutters have been notified by registered



or certified mail, return receipt requested, of the applicant's intention to install a well.

The Board shall set a fee for the permit based on the type of private well.

The permit shall be posted in a visible manner on site at all times that work is taking place. Each permit shall expire one (1) year from the date of issuance unless revoked for cause. Permits may be extended for one additional six (6) months period provided that a written request has been received by the Board prior to the one year expiration date, and the Board subsequently votes to grant such an extension. No additional fee shall be charged for a permit extension, provided there is no change in the plans for the proposed well.

Well Construction Permits are not transferable.

V. WATER SUPPLY CERTIFICATE

The issuance of a Water Supply Certificate by the Board shall certify that the private well may be used as a private drinking water well. No person shall use a private well, installed after the effective date of these regulations, as a private drinking water well without a Water Supply Certificate issued by the Board of Health.

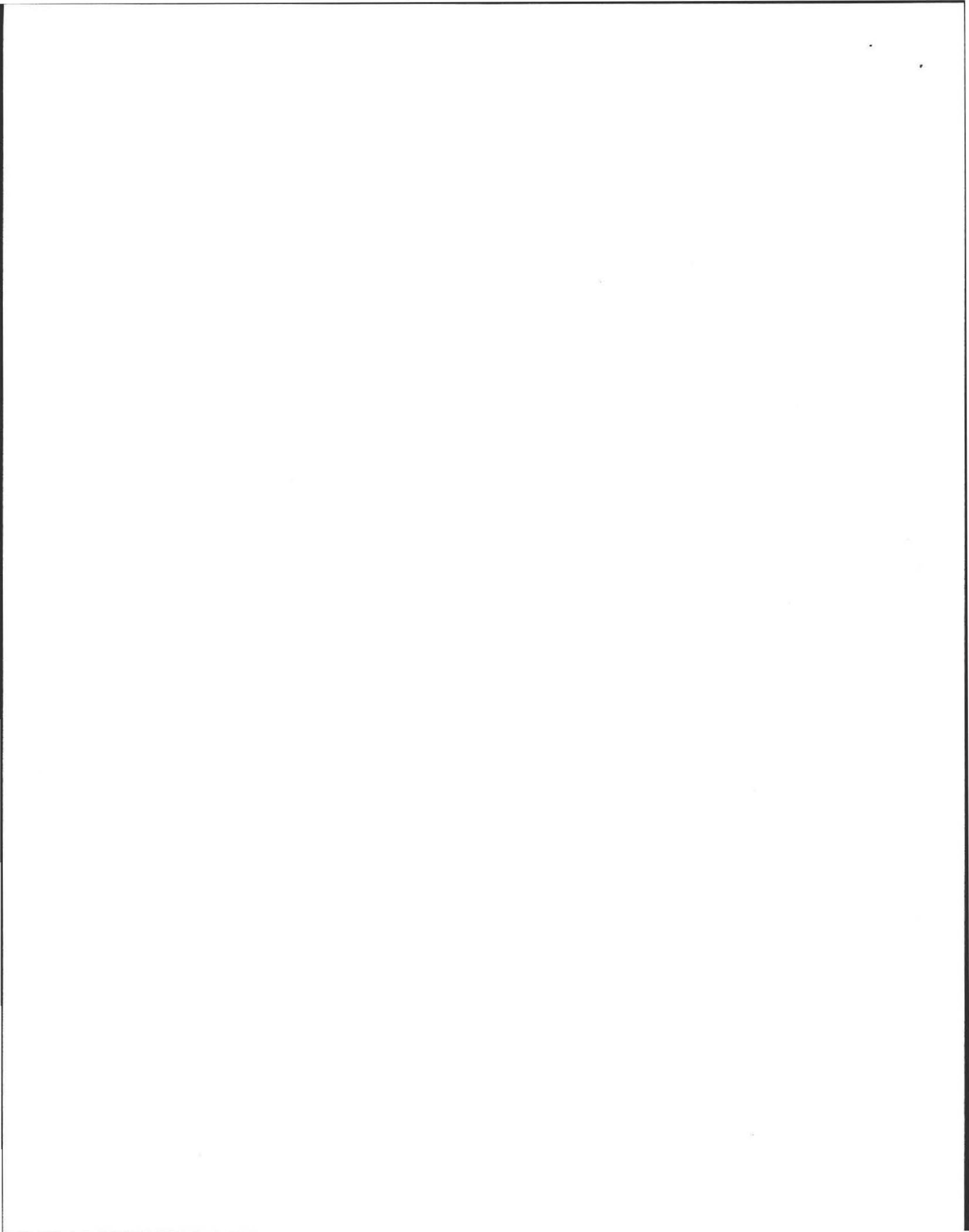
The following shall be submitted to the Board of Health to obtain a Water Supply Certificate:

- a) well construction permit
- b) copy of the Water Well Completion Report as required by the DEM Office of Water Resources (313 CMR 3.00)
- c) a copy of the Pumping Test Report required pursuant to Section VII of these regulations
- d) a copy of the Water Quality Report required pursuant to Section VIII of these regulations.

Upon the receipt and review of the above documents, the Board shall make a final decision on the application for a Water Supply Certificate. A final decision shall be in writing and shall comprise one of the following actions:

- a) Issue a Water Supply Certificate
- b) Deny the applicant a Water Supply Certificate and specify the reasons for the denial.
- c) Issue a conditional Water Supply Certificate with those conditions which the Board deems necessary to ensure fitness, purity and quantity of the water derived from that private well. Said conditions may include but not be limited to requiring treatment or additional testing of the water.

It shall be the responsibility of the applicant to transmit a copy of any issued Water Supply Certificate or conditional Water Supply Certificate to the Building Commissioner



in association with any request for a certificate of a certificate of occupancy for any building(s) to be served by a private well.

VI. WELL LOCATION AND USE REQUIREMENTS

In locating a private drinking water well, the applicant shall identify all potential sources of contamination which exist or are proposed within two hundred (200) feet of the site. When possible, the well shall be located upgradient of all potential sources of contamination and shall be as far removed from potential sources of contamination as possible, given the layout of the premises.

Each private well shall be accessible for repair, maintenance, testing, and inspection. The well shall be completed in a water bearing formation that will produce the required quantity of water under normal operating conditions.

Each private well shall be located at least ten (10) feet from any property line. The centerline of a well shall, if extended vertically, clear any projection from an adjacent structure by at least five (5) feet.

All private drinking water wells shall be located a minimum of 25 feet away from the normal driving surface of any public roadway or a minimum of 15 feet from property boundary of the road right-of-way, whichever is greater.

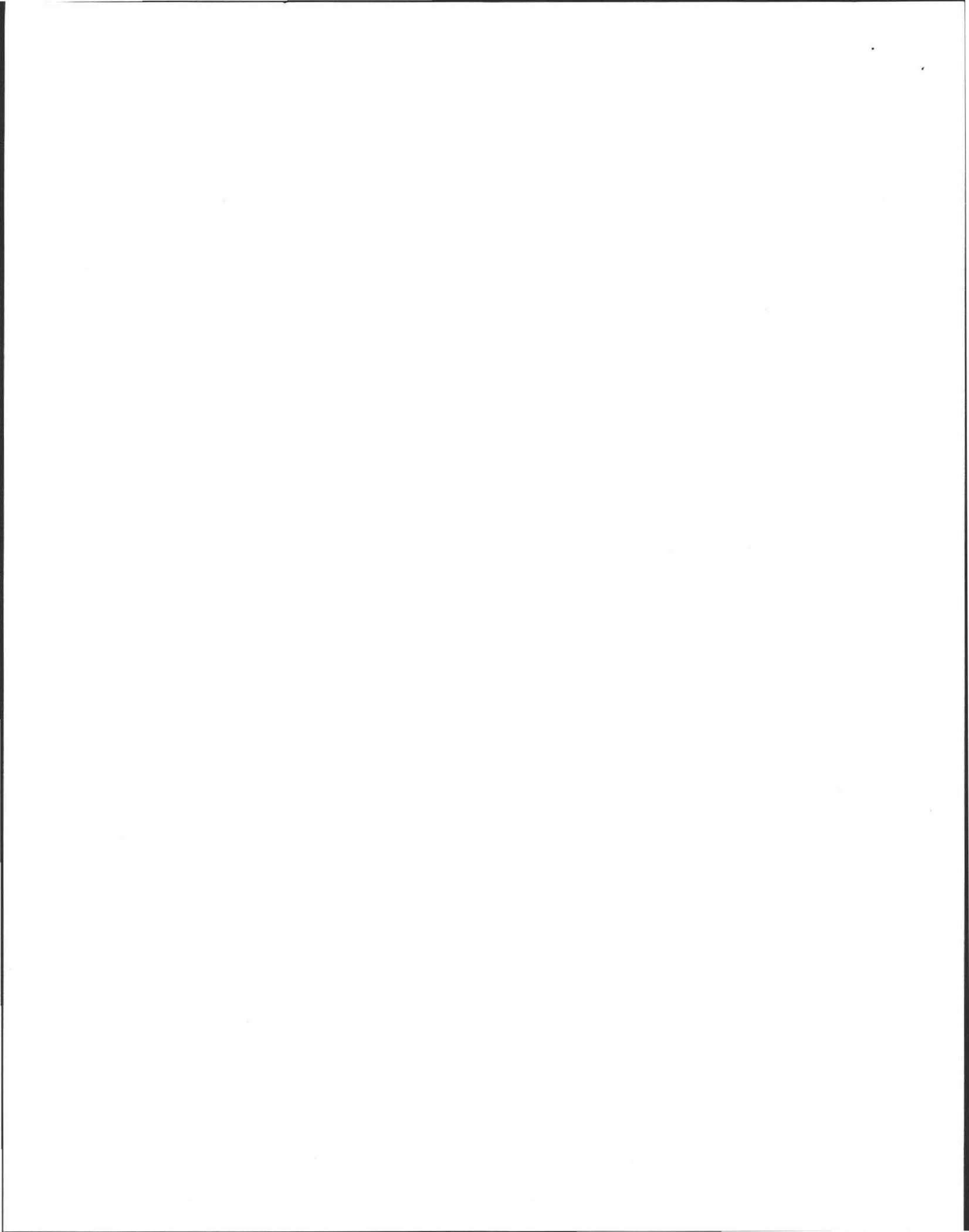
Each private water supply well shall be located at least 25 feet, laterally, from the normal high water mark of any lake, pond, river, stream, ditch, or slough. When possible, private water systems shall be located in areas above the 100-year floodplain.

A suction line or private water supply well shall be located a minimum of 10 feet from a building sewer constructed of durable corrosion resistant material with watertight joints, or 50 feet from a building sewer constructed of any other type of pipe; 50 feet from a septic tank; 100 feet from a leaching field; and 100 feet from a privy.

Water supply lines for drinking water shall be installed at least 10 feet from and 18 inches above any sewer line. Whenever water supply lines must cross sewer lines, both pipes shall be constructed of class 150 pressure pipe and shall be pressure tested to assure a watertight-condition.

The Board reserves the right to impose greater dimensional requirements than those listed, and to impose minimum lateral distance requirements from other potential sources of contamination not listed above. All such special well location requirements shall be listed, in writing, as a condition of the well construction permit.

No private well, or its associated distribution system, shall be connected to either the distribution system of a public water supply system or any type of waste distribution system.



VII. WATER QUANTITY REQUIREMENTS

When applying for a Water Supply Certificate the applicant shall submit to the Board for review and approval a Pumping Test Report. The Pumping Test Report shall include the name and address of the well owner, description of well location if different from that described in the well construction permit application, date the pumping test was performed, depth at which the pump was set for the test, location for the discharge line, static water level immediately before pumping commenced, discharge rate and, if applicable, the time the discharge rate changed, pumping water levels and respective times after pumping commenced, maximum drawdown during the test, duration of the test, including both the pumping time and the recovery time during which measurements were taken, recovery water levels and respective times after cessation of pumping, and reference point used for all measurements.

In order to demonstrate the capacity of the well to provide adequate water a Required Volume is pumped during the test. The Required Volume is calculated as follows:

1. The volume of water necessary to support the household's daily need shall be determined using the following equation: (number of bedrooms plus one bedroom) x (110 gallons per bedroom) x (a safety factor of 2) = number of gallons needed daily.
2. The storage capacity of the well shall be determined using the measured static water level and the depth and radius of the drillhole or casing.
3. The Required Volume shall be calculated by adding the volumes of water in (1) and (2) above.

needed:

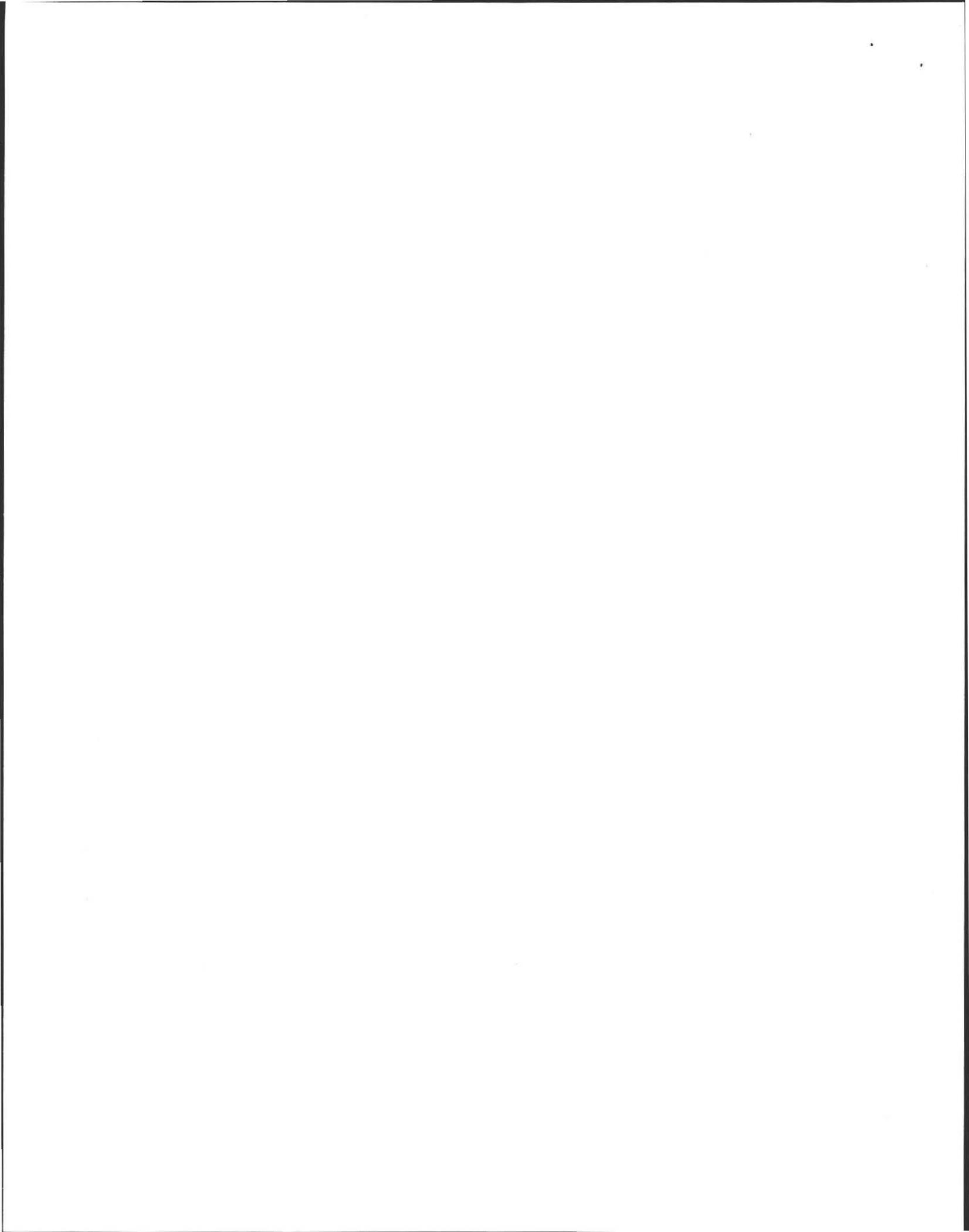
$$\begin{array}{r} 550 \\ \times 2 \\ \hline 1100 \end{array}$$
 115 sf.
 6" dia, 460'
 πr^2
 1 gallon of H₂O = .133681
 $115 \div () =$
 860.25
 REQUIRED VOLUME
 8 gpm / 2 hours
 = 960 gallons,
 recovered in
 12 hours

Successful completion of the pumping test requires

- a) that the well be pumped at a sustained rate of at least 0.5 gallons per minute
- b) that the Required Volume be pumped from the well within a period not to exceed 24-hours.
- c) that, within a twenty-four (24) hour period after the cessation of pumping, the water level in the well recovers to at least eighty-five (85) percent of the prepumped static water level.

If the well fails to sustain a pumping rate of 0.5 gallons per minute, fails to yield the Required Volume within a 24 hour period, or if the water level in the well fails to recover to within 85 percent of the prepumped static water level within a 24 hour period, the well should be redeveloped, hydrofractured, and/ or deepened. After completing the chosen procedure(s), another pumping test should be conducted.

VIII. WATER QUALITY TESTING REQUIREMENTS



When applying for a Water Supply Certificate and after the well has been completed and disinfected a water quality test shall be conducted.

A water sample shall be collected either after purging three well volumes or following the stabilization of the pH, temperature and specific conductance in the pumped well. The water sample to be tested shall be collected at the pump discharge or from a disinfected tap in the pump discharge line. In no event shall a water treatment device be installed prior to sampling.

The water quality test, utilizing an applicable US EPA approved method for drinking water testing shall be conducted by an EPA or Massachusetts certified laboratory and shall include analysis for the parameters listed in Appendix A. Samples taken from wells completed in crystalline bedrock should also be analyzed for radon, arsenic, and selenium. Additionally, in areas where current or historical land use includes agriculture, the sample should be analyzed for pesticides, herbicides, and arsenic. The results shall be compared to Massachusetts drinking water standards for public water supplies.

Following a receipt of the water quality test results, the applicant shall submit a Water Quality Report to the Board which includes:

- 1) a copy of the certified laboratory's test results
- 2) the name of the individual who performed the sampling
- 3) where in the system the water sample was obtained

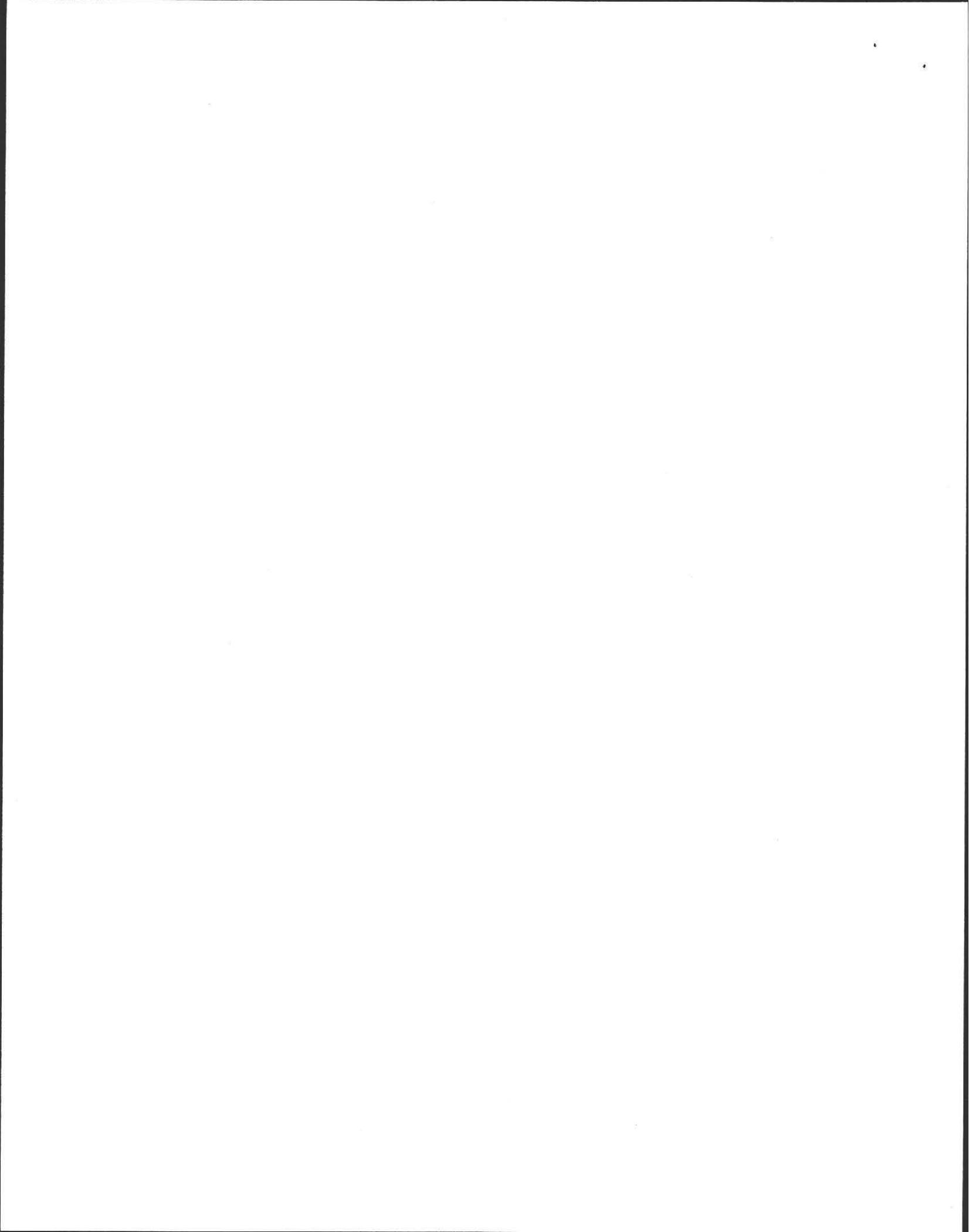
Because water quality at a well can change over time the Board recommends that the well be retested at intervals not to exceed ten years. More frequent retesting should be conducted if the well is in an agricultural, commercial, industrial or high density residential area. Retesting should also be considered if any of these conditions occur: an extended drought, an extended wet (high water table) period, significant changes in local hydrologic conditions.

The Board reserves the right to require retesting of the above parameters, or testing for additional parameters when, in the opinion of the Board, it is necessary due to local conditions or for the protection of public health, safety, and welfare. All costs and laboratory arrangements for water testing are the responsibility of the applicant.

Retesting shall be conducted if the title to the property on which the well is placed is transferred. Exclusions from this requirement follow those described in 310 CMR 15.301 (Title V – for septic systems).

IX. WELL CONSTRUCTION REQUIREMENTS

No person shall construct a private well unless they are a Registered Well Driller as defined in these Regulations.



Any work involving the connection of the private well to the distribution system of the residence must conform to the local plumbing code. All electrical connections between the well and the pump controls and all piping between the well and the storage and/or pressure tank in the house must be made by a pump installer or registered well driller, including the installation of the pump and appurtenance in the well or house.

A physical connection is not permitted between a water supply which satisfies the requirements of these regulations and another water supply that does not meet the requirements of these regulations without prior approval of the Board.

All aspects of construction of a well, including well screen, well casing, wellhead completion, grouting and sealing, pumps, and disinfection shall be in accordance with the Massachusetts Department of Environmental Protection Private Well Guidelines.

In addition, the following requirements must be followed:

All private water supply wells shall be designed such that no unsealed opening will be left around the well that could conduct surface water or contaminated groundwater vertically to the intake portion of the well or transfer water from one formation to another.

Private water supply wells shall be constructed using either steel, thermoplastic or precast concrete pipe well casing. The casing shall be of adequate strength and durability to withstand anticipated formation and hydrostatic pressures, the forces imposed on it during installation, and the corrosive effects of the local hydrogeologic environment.

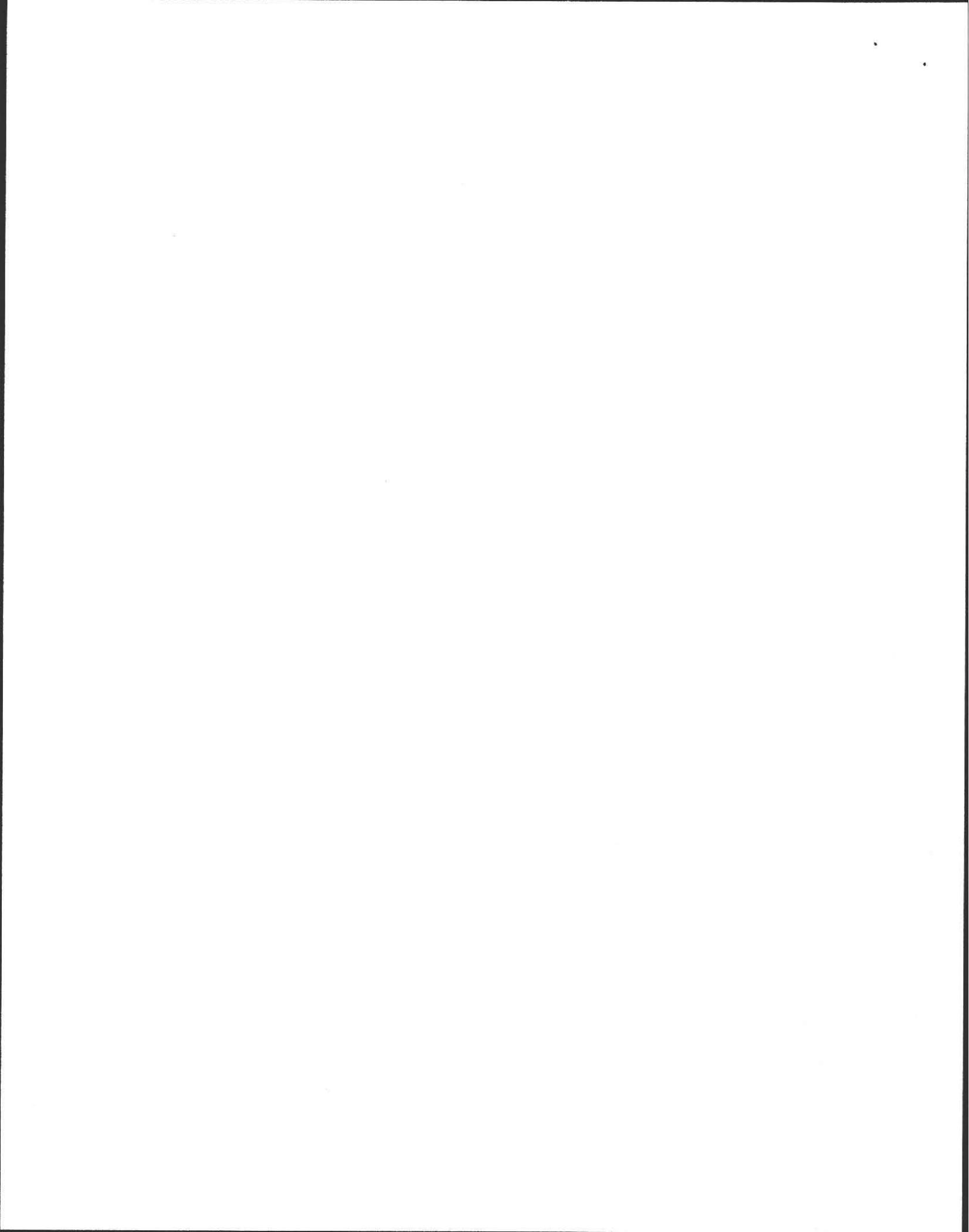
Private wells drilled in bedrock shall be grouted from the top of the weathered rock interface to fifteen (15) feet into competent bedrock.

All wells completed with the casing extending above grade shall have a surface seal designed to eliminate the possibility of surface water flowing down the annular space between the well casing and the surrounding backfilled materials.

All pumps shall be installed either below the frost line with a pitless adapter or in some other heated and protected sanitary location. Above ground pumps shall be installed in sheltered, dry, accessible locations and shall be protected from freezing.

X. DECOMMISSIONING REQUIREMENTS

Abandoned wells, test holes, and borings shall be decommissioned to prevent the well and the annular space outside the casing from serving as a water conduit. The criteria for abandoning a well and the subsequent decommissioning procedures shall be in accordance with the Massachusetts Department of Environmental Protection Private Well Guidelines. Within 30 days of the decommissioning a copy of the Decommissioning Report, containing information described in the DEP Private Well Guidelines, shall be



provided to the Board and filed at the Hampshire Registry of Deeds. A copy of a receipt for such filing shall be submitted to the Board.

XI. ENFORCEMENT

1. Permit or Certificate Suspension or Revocation

The Board of Health may suspend or revoke any Well Construction Permit, Water Supply Certificate, or variance issued pursuant to these regulations for any violation of these regulations, or any other applicable General Law, regulation or by-law, or if the results of a well-test demonstrates that water from the well is no longer suitable for human consumption. Such revocation or suspension may take place after a hearing held by the Board of Health of which the permit holder is given seven (7) days written notice. Such notice shall be deemed given upon mailing same, certified mail, return receipt requested, to the address listed on the permit application.

Nothing in this section shall prevent the Town from taking emergency action to prevent an imminent risk to the health, safety or welfare of the public or the users of a private well.

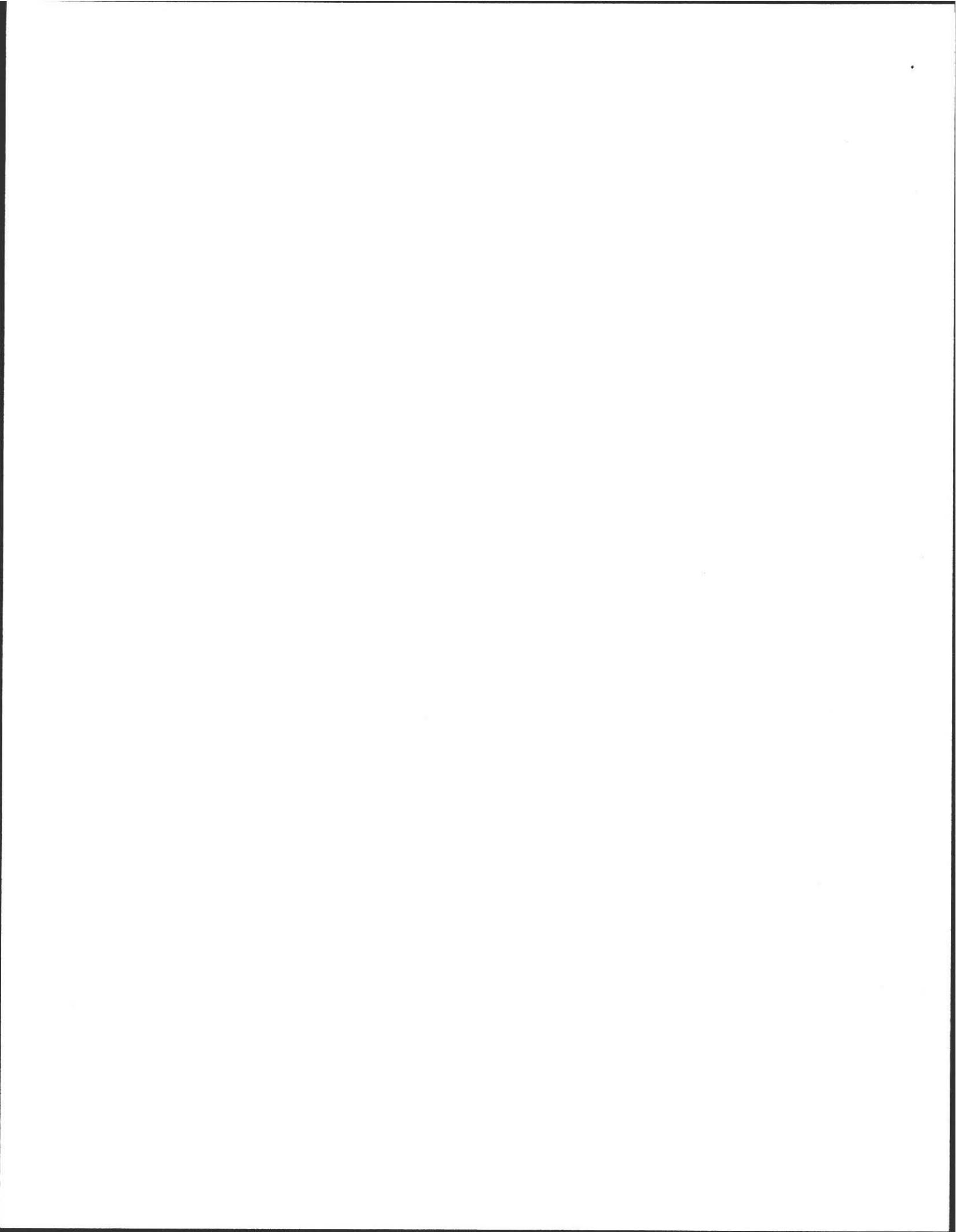
2. Non-Criminal Disposition

This regulation may be enforced by any Town police officers or agents of the Town's Board of Health.

Whoever violates any provision of this regulation may be penalized by a non-criminal disposition process as provided in G.L. c.40, §21D and the Town's non-criminal disposition by-law. If non-criminal disposition is elected, then any person who violates any provision of this regulation shall be subject to a penalty in the amount of three hundred dollars (\$300.00) per day for each day of violation, commencing ten (10) days following day of receipt of written notice from the Board of Health. Each day or portion thereof shall constitute a separate offense. If more than one, each condition violated shall constitute a separate offense.

3. Other

Whoever violates any provision of this regulation may be penalized by indictment or on complaint brought in the district court. Except as may be otherwise provided by law and as the district court may see fit to impose, the maximum penalty for each violation or offense shall be one thousand dollars (\$1000.00). Each day or portion thereof shall constitute a separate offense. If more than one, each condition violated shall constitute a separate offense.



The Board of Health may enforce these Regulations or enjoin violations thereof through any lawful process, and the election of one remedy by the Board of Health shall not preclude enforcement through any other lawful means.

XII. VARIANCE

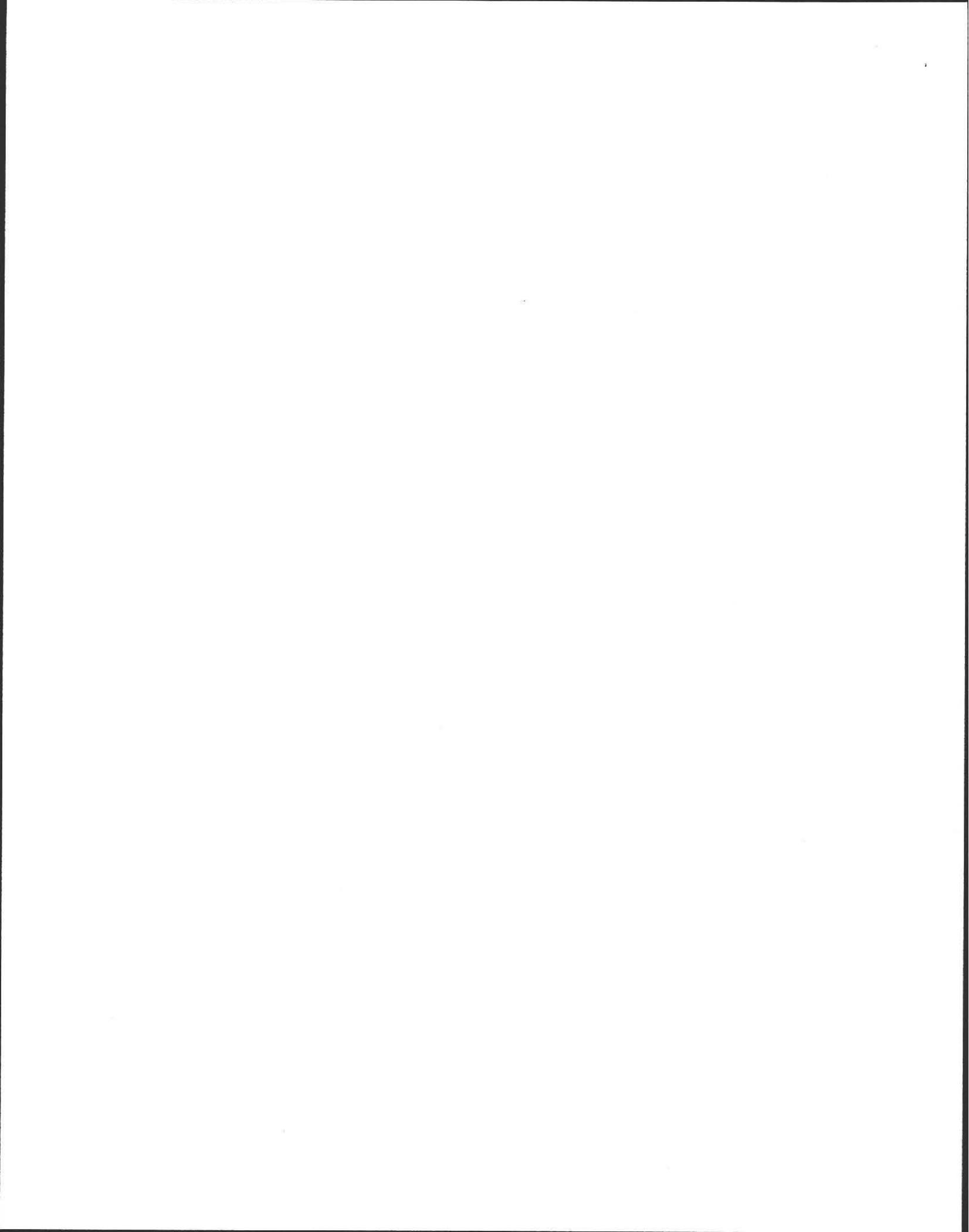
The Board may, after a public hearing, grant a variance to the application of these regulations when, in its opinion, the enforcement thereof would do manifest injustice, and the applicant has demonstrated that the equivalent degree of protection will still be provided to the private water supply without strict application to particular provisions of these regulations.

Every request for a variance shall be made in writing and shall state the specific variance sought and the reasons therefore. The writing shall contain all the information needed to assure the Board that, despite the issuance of a variance, the public health and environment will be protected. Notice of the hearing shall be given by the Board, at the applicant's expense, at least ten (10) days prior thereto, by certified mail to the owner of any property within one hundred and fifty (150) feet of the well to all abutters of the property upon which the private well is located and by publication in a newspaper of general circulation in the town or city in which the private well is located. The notice shall include a statement of the variance sought and the reasons therefore. Any grant or denial of a variance shall be in writing and shall contain a brief statement of the reasons for approving or denying the variance. A copy of each variance shall be conspicuously posted for thirty (30) days following its issuance and shall be available to the public at all reasonable hours in the office of the Town Clerk, Building Commissioner, or Office of the Board of Health. No work shall be done under any variance until thirty (30) days shall have elapsed from its issuance, unless the Board certifies in writing that an emergency exists.

Any variance may be subject to such qualification, revocation, suspension, condition, or expiration as is provided in these regulations or as the Board expresses in its grant of the variance. A variance may otherwise be revoked, modified or suspended, in whole or in part, only after the holder thereof has been notified in writing and has been given an opportunity to be heard, pursuant to Section XI of these regulations.

XIII. SEVERABILITY:

If any provision of these regulations or the application thereof is held to be invalid by a court of competent jurisdiction, the invalidity shall be limited to said provision(s) and the remainder of these regulations shall remain valid and effective. Any part of these regulations subsequently invalidated by a new state law or modification of an existing state law shall automatically be brought into conformity with the new or amended law and shall be deemed to be effective immediately, without recourse to a public hearing and the customary procedures for amendment or repeal of such regulation.



XIV. EFFECTIVE DATE

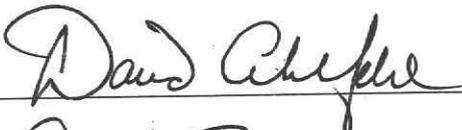
These regulations were adopted by vote of the Amherst Massachusetts Board of Health, at their regularly scheduled meeting held on October 30, 2008 and are to be in full force and effect on and after December 1, 2008. Before said date, these regulations shall be published and a copy thereof be placed on file in the Board of Health Offices and filed with the Department of Environmental Protection, Division of Wastewater Management (formerly Division of Water Pollution Control) in Boston. These regulations or any portions thereof may be amended, supplemented or repealed from time to time by the Board, with notice as provided by law, on its own motion or by petition.

This regulation as amended shall be effective as of March 15, 2011.

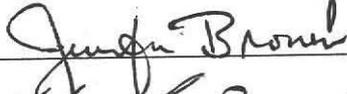
Reviewed and Amended: February 22, 2011.

Board of Health Members:

David Ahlfeld, Chairman



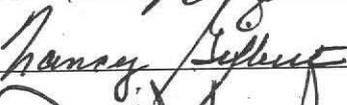
Jennifer Brown



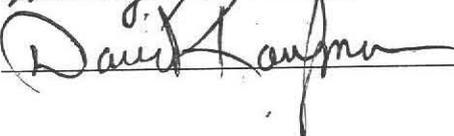
Maria Bulzacchelli



Nancy Gilbert

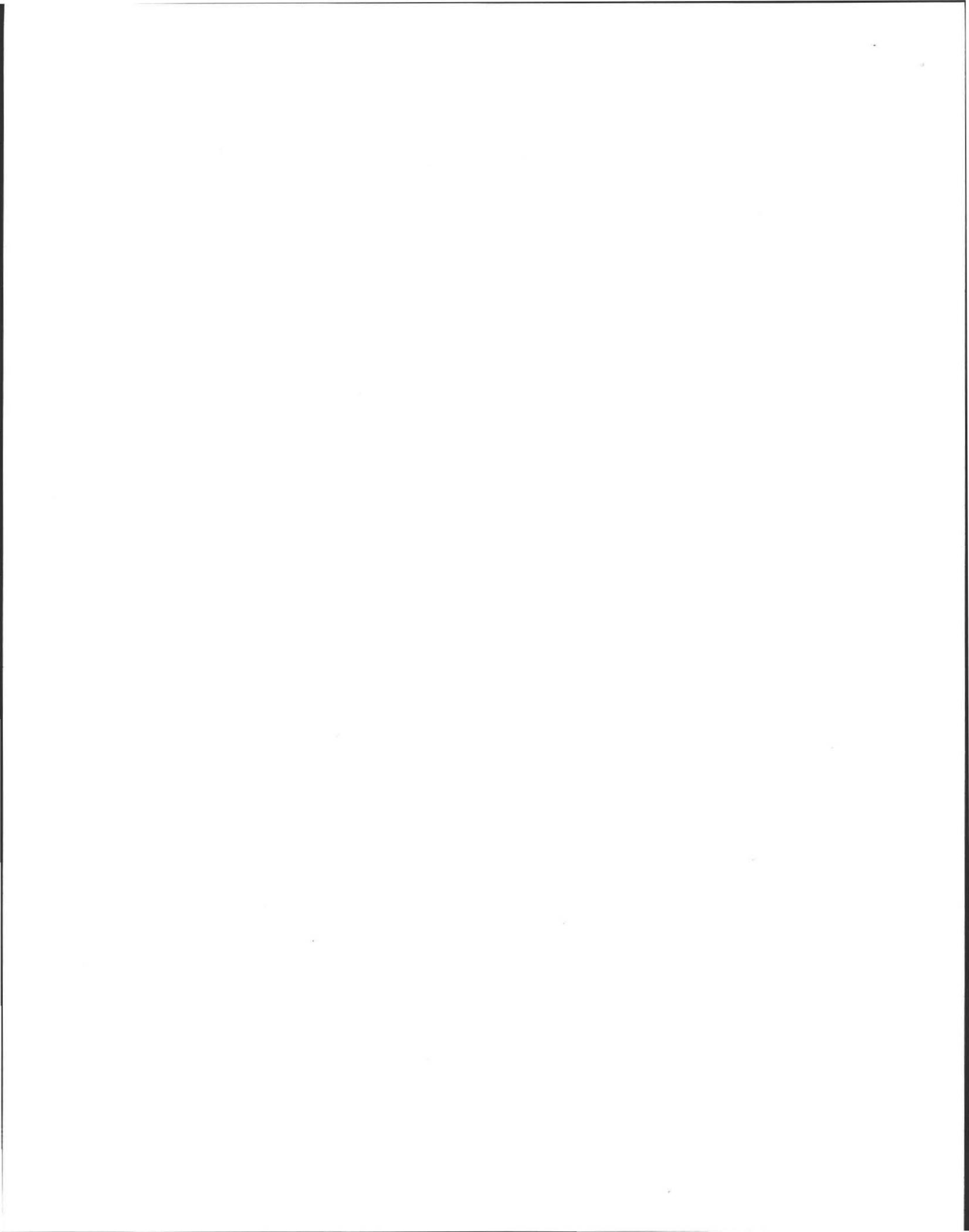


David Kaufman M.D.



XV. DISCLAIMER

The issuance of a Well Construction Permit or Water Supply Certificate shall not be construed as a guarantee by the Board or its agents that the water system will function satisfactorily nor that the water supply will be of sufficient quality or quantity for its intended use.

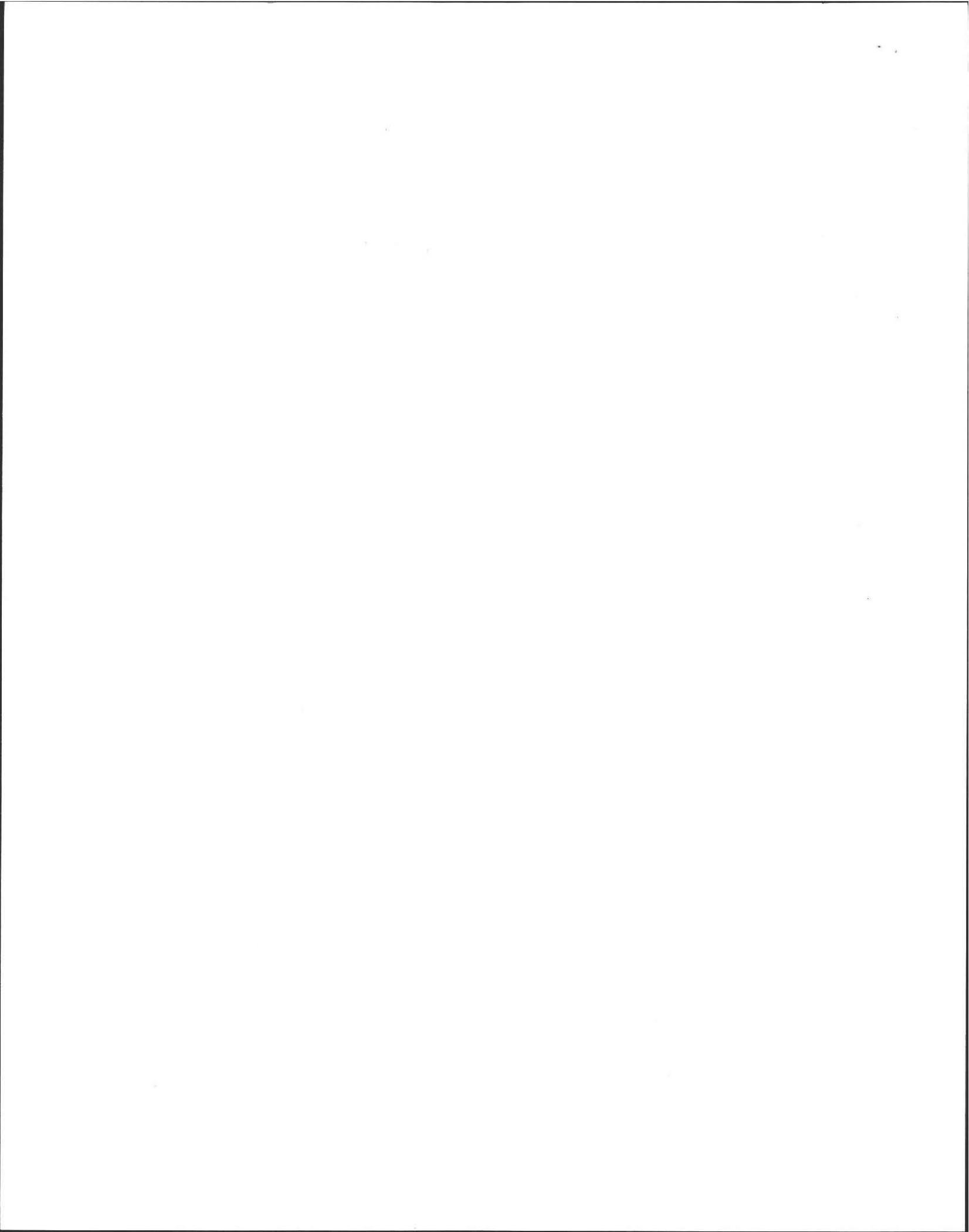


Appendix A: Required Analytes for Testing of Private Well Water Quality

Aluminum
Chloride
Coliform Bacteria
Color
Copper
Fluoride
Foaming Agents
Iron
Manganese
Nitrate
Odor
pH
Silver
Sodium
Sulfate
Total Dissolved Solids
Turbidity
Zinc

Volatile Organic Compounds

Benzene
Carbon Tetrachloride
Dichloromethane
o-Dichlorobenzene
p-Dichlorobenzene
1,2-Dichloroethane
cis-1,2-Dichloroethylene
trans-1,2-Dichloroethylene
1,1-Dichloroethylene
1,2-Dichloropropane
Ethylbenzene
Methyl Tertiary Butyl Ether(MTBE)
Monochlorobenzene
Styrene
Tetrachloroethylene (PCE)
Toluene
Trichloroethylene (TCE)
1,1,1-Trichloroethane (1,1, 1-TCA)
1,2,4-Trichlorobenzene
1,1,2-Trichloroethane
Vinyl Chloride (VC)
Xylenes(total)





DEPARTMENT OF ENVIRONMENTAL PROTECTION

MASSACHUSETTS WELL DRILLERS CERTIFICATE

Pursuant to the provisions of
Massachusetts General Laws Chapter 21G Section 20

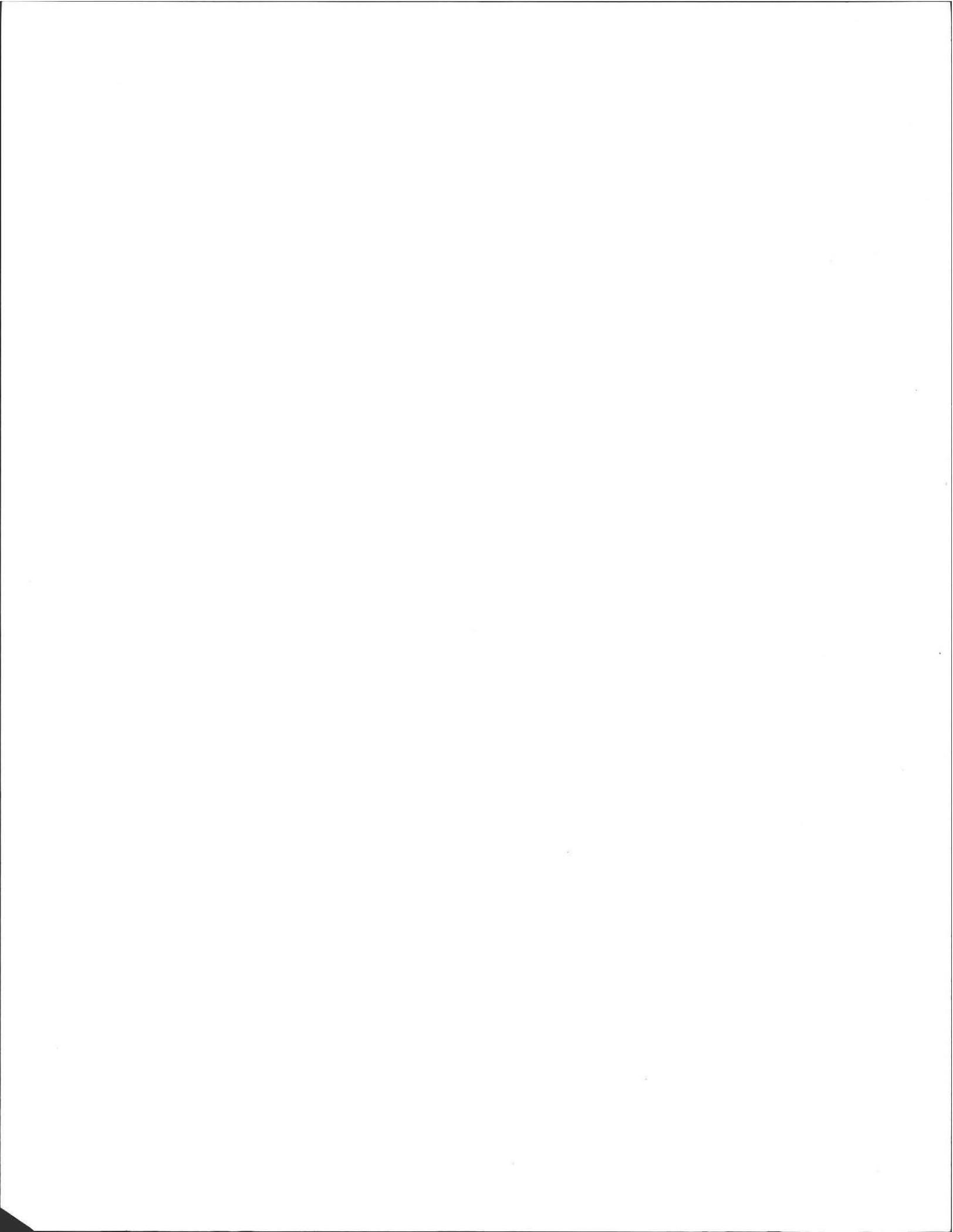
Bart Cushing #558

is authorized to dig or drill all types of wells
in the Commonwealth of Massachusetts during the period
Jan 01, 2012 to Dec 31, 2012.

Commissioner / Delegate

FILE
1

To go with Laplante Cons.
Request.





Water Wells and Systems
www.cushingandsons.com

May 1, 2012

Amherst Health Department
Bangs Community Center
70 Boltwood Walk
Amherst, MA 01002

To whom it may concern:

In looking at the property at 261 Leverett Road in Amherst, MA., I do not see any contaminating factors within 200' of the proposed site. I would refer you to your copy of the site plan for further or future plan information., This plan was not drawn by Cushing and Sons, but by a registered sanitarian outside of our agency.

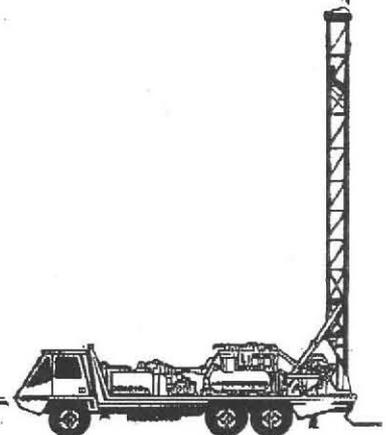
Sincerely,

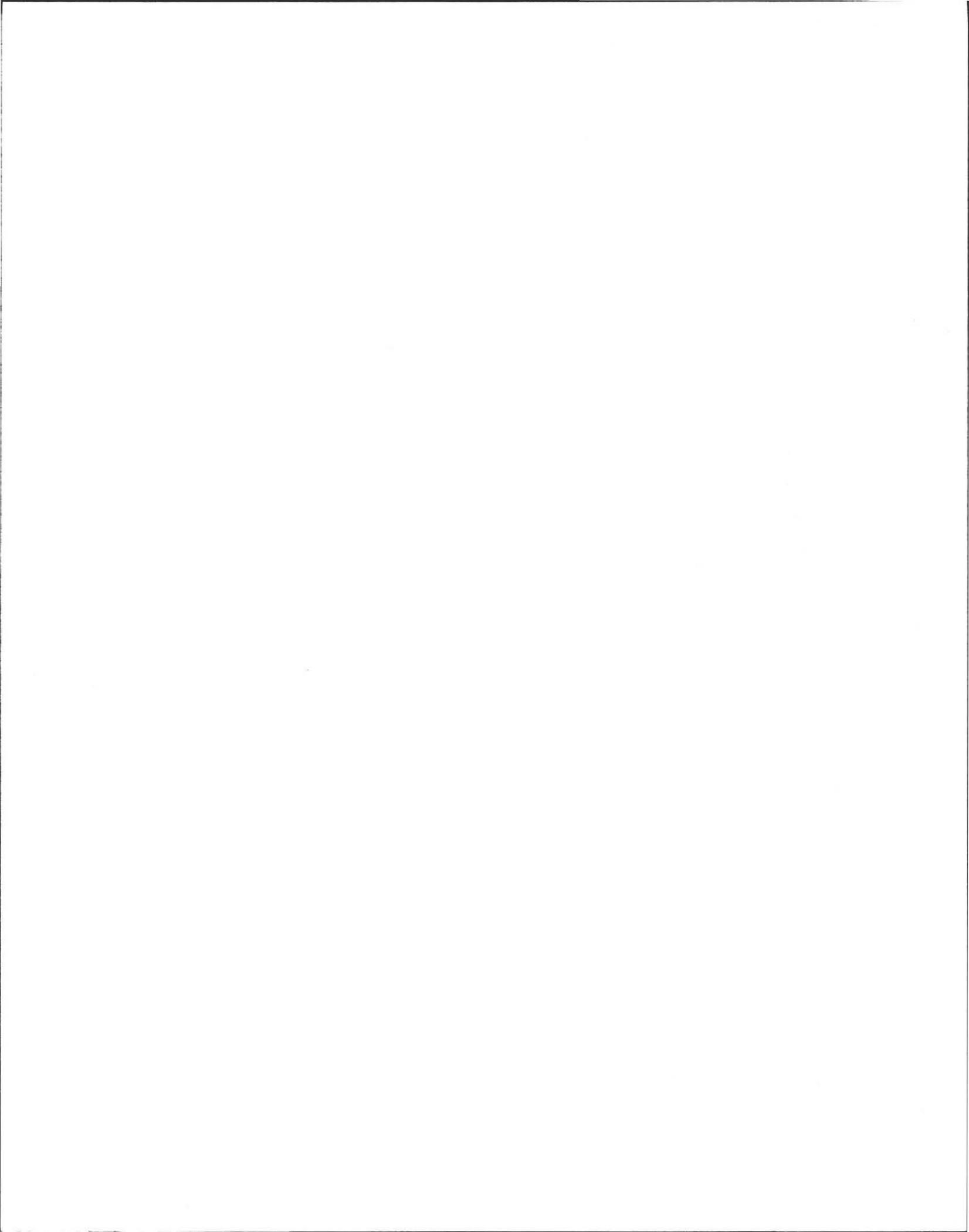
Rich Chevalier
Project Manager
Cushing & Sons

RC/jh

Office: 631 Rt. 12N, Keene, NH 03431 Mailing: PO Box 668, Walpole, NH 03608
Phone: 800-831-8883 603-352-8866 Fax: 603-357-8572

residential • commercial • municipal • geothermal • hazmat • dewatering • gravel & rock wells
cathodic grounding • VFD and conventional submersible pumps to 50 HP







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May 1, 2012

Pocomo Road Nominee Trust
269 Leverett Road
Amherst, MA 01002

Dear Sir or Madam:

This is to inform you that we intend to install a well at 261, Leverett Road in Asmherst, MA., adjacent to your property. Amherst Well Regulations require that we notify you. If you have any questions concerning this, please call the Amherst Board of Health office (413) 259-3077.

Please sign below to acknowledge you have received notification and return it to me in the enclosed stamped envelope.

Thank you for taking the time to acknowledge this letter.

Sincerely,
R. M. Chevalier
Project Manger
Cushing & Sons

Signature of abutter

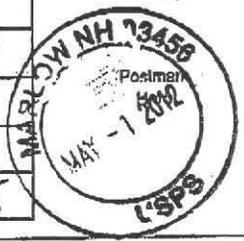
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U.S. Postal Service™
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For delivery information visit our website at www.usps.com.

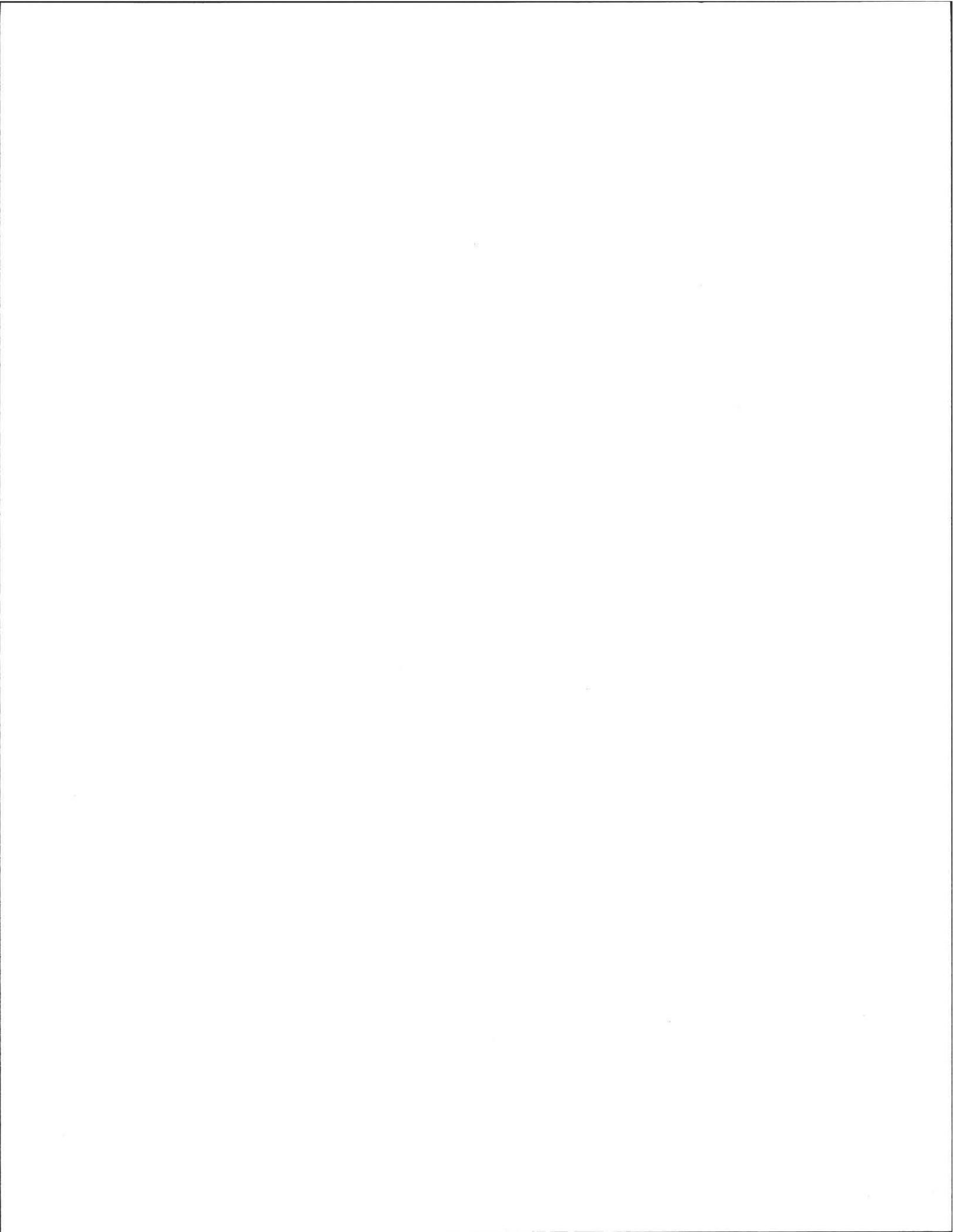
OFFICIAL USE

Postage	\$.45
Certified Fee	2.95
Return Receipt Fee (Endorsement Required)	2.35
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.75



Sent to Pocomo Road Nominee Trust
Street, Apt. No. or PO Box Leverett Road
City, State, ZIP+4 Amherst, MA 01002

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Phone: 800-831-8883 603-352-8866 Fax: 603-357-8572
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catholic grounding • VFD and conventional submersible pur...





Water Wells and Systems
www.cushingandsons.com

May 1, 2012

Edward Ferry
207 Leverett Road
Amherst, MA 01002

Dear Edward,

This is to inform you that we intend to install a well at 261 Leverett Road in Amherst, MA., adjacent to your property. Amherst Well Regulations require that we notify you. If you have any questions concerning this, please call the Amherst Board of Health office (413) 259-3077.

Please sign below to acknowledge you have received notification and return it to me in the enclosed stamped envelope.

Thank you for taking the time to acknowledge this letter.

Sincerely,
R. M. Chevalier
Project Manger
Cushing & Sons

Signature of abutter

7010 3090 0000 3730 1279

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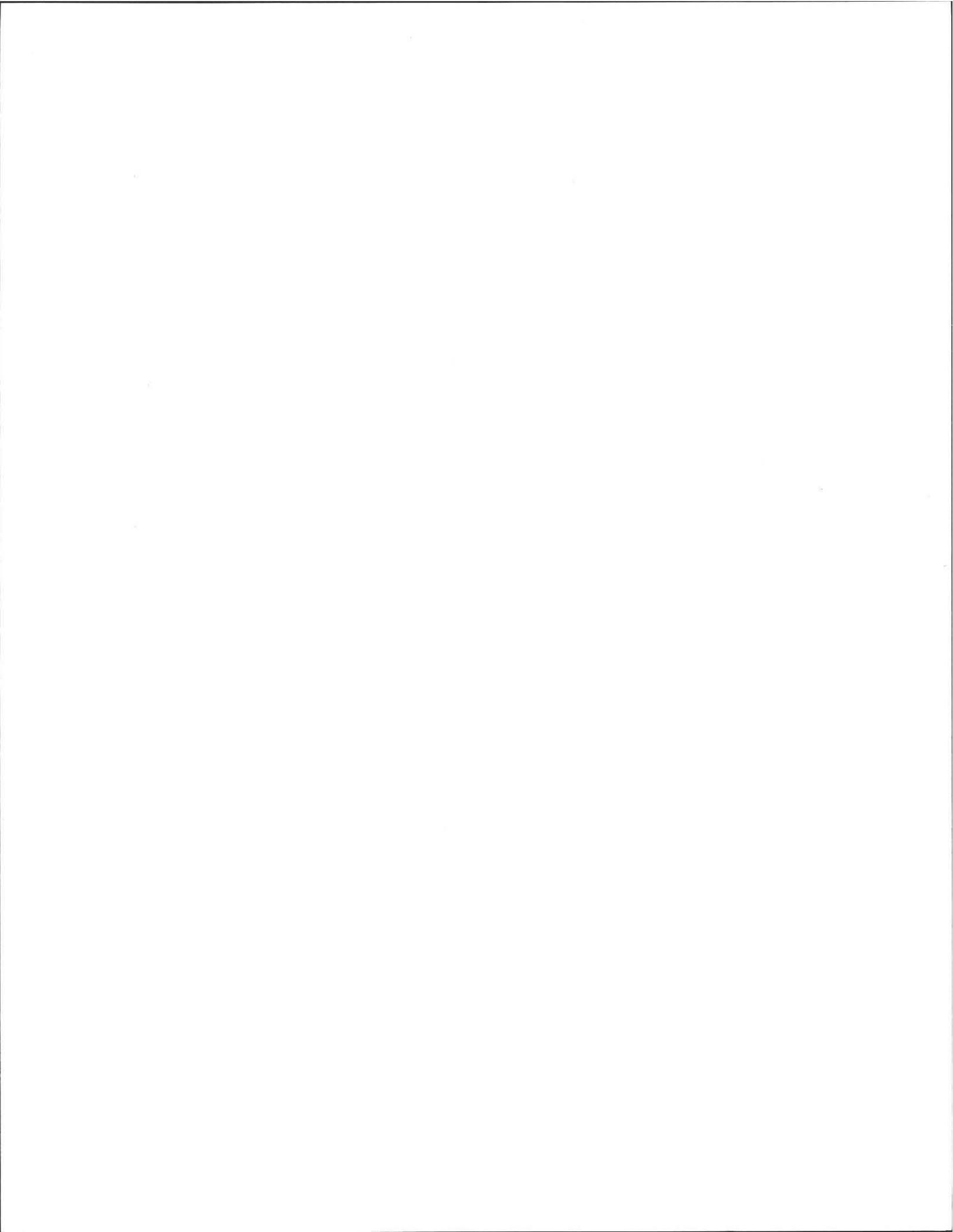
OFFICIAL USE

Postage	\$.45
Certified Fee	2.95
Return Receipt Fee (Endorsement Required)	2.35
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.75

Sent to: Edward Ferry
Street, Apt. No., or PO Box No.: 207 Leverett Rd.
City, State, ZIP+4: Amherst, MA 01002

Postmark: MAR 29 11 2012

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Phone: 800-831-8883 603-352-8866 Fax: 603-357-8572
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May 1, 2012

Jere Hochman
265 Leverett Road
Amherst, MA 01002

Dear Jere,

This is to inform you that we intend to install a well at 261 Leverett Road in Amherst, MA., adjacent to your property. Amherst Well Regulations require that we notify you. If you have any questions concerning this, please call the Amherst Board of Health office (413) 259-3077.

Please sign below to acknowledge you have received notification and return it to me in the enclosed stamped envelope.

Thank you for taking the time to acknowledge this letter.

Sincerely,
R. M. Chevalier
Project Manger
Cushing & Sons

Signature of abutter

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OFFICIAL USE

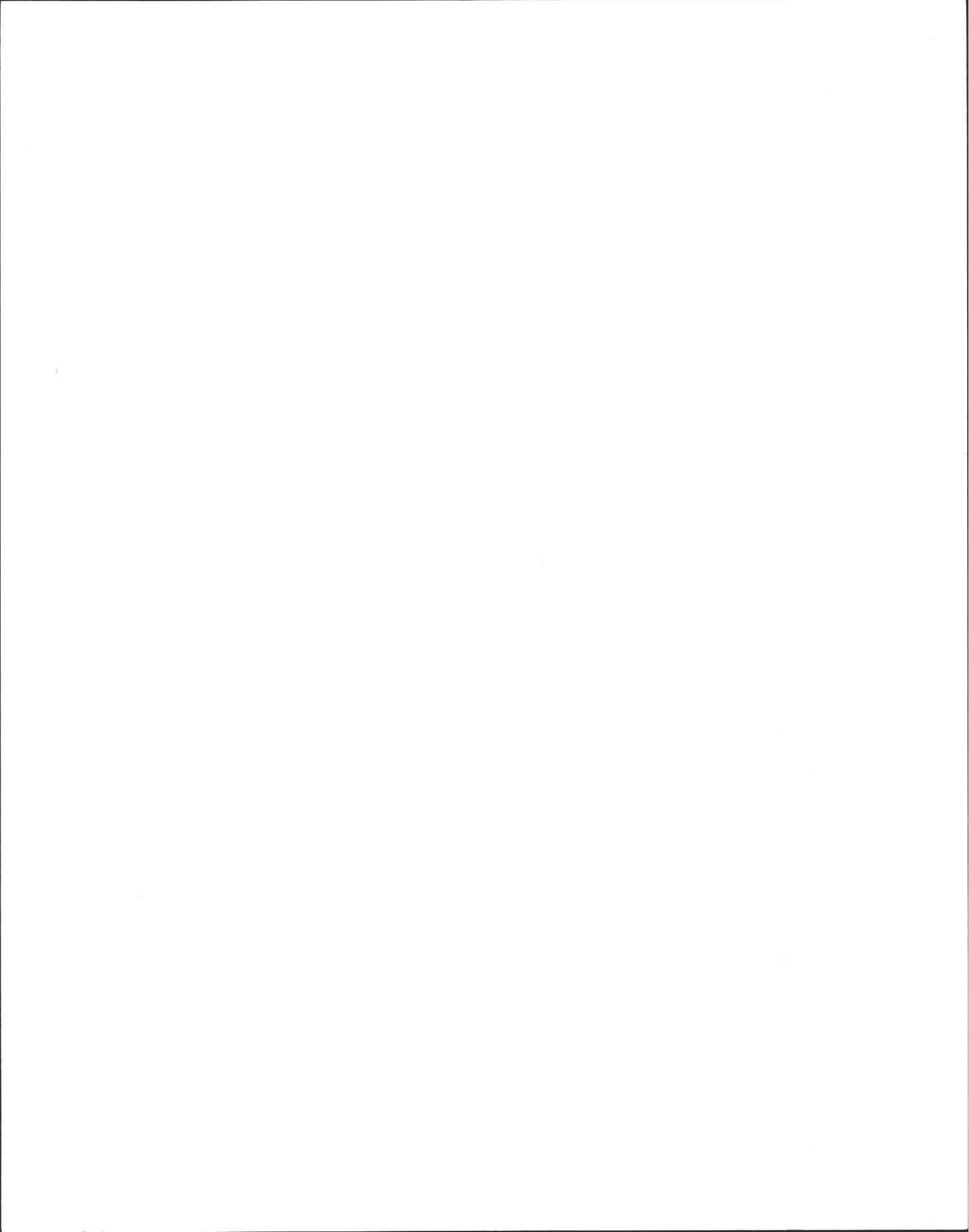
Postage	\$.45
Certified Fee	2.95
Return Receipt Fee (Endorsement Required)	2.35
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.75



Sent To: Jere Hochman
 Street, Apt. No. or PO Box No.: 265 Leverett Road
 City, State, ZIP+4: Amherst, MA 01002

7021 BELE 0000 040E 0102

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 Phone: 800-831-8883 603-352-8866 Fax: 603-357-8572
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 cathodic protection • VFD and conventional submersible pumps





Water Wells and Systems
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May 1, 2012

Paul Higgins
269 Leverett Rd.
Amherst, MA 01002

Dear Paul,

This is to inform you that we intend to install a well at 261 Leverett Road in Amherst, MA., adjacent to your property. Amherst Well Regulations require that we notify you. If you have any questions concerning this, please call the Amherst Board of Health office (413) 259-3077.

Please sign below to acknowledge you have received notification and return it to me in the enclosed stamped envelope.

Thank you for taking the time to acknowledge this letter.

Sincerely,
R. M. Chevalier
Project Manger
Cushing & Sons

Signature of abutter

EB2T DELE 0000 060E 070L

U.S. Postal Service
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(Domestic Mail Only; No Insurance Coverage Provided)

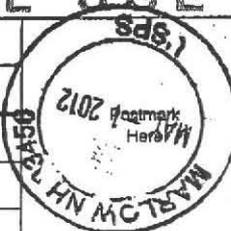
For delivery information visit our website at www.usps.com.

OFFICIAL USE

Postage	\$ 1.45
Certified Fee	2.95
Return Receipt Fee (Endorsement Required)	2.35
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 5.75

Sent To: Paul Higgins
Street, Apt. No., or PO Box No.: 269 Leverett Rd
City, State, ZIP+4: Amherst, MA 01002

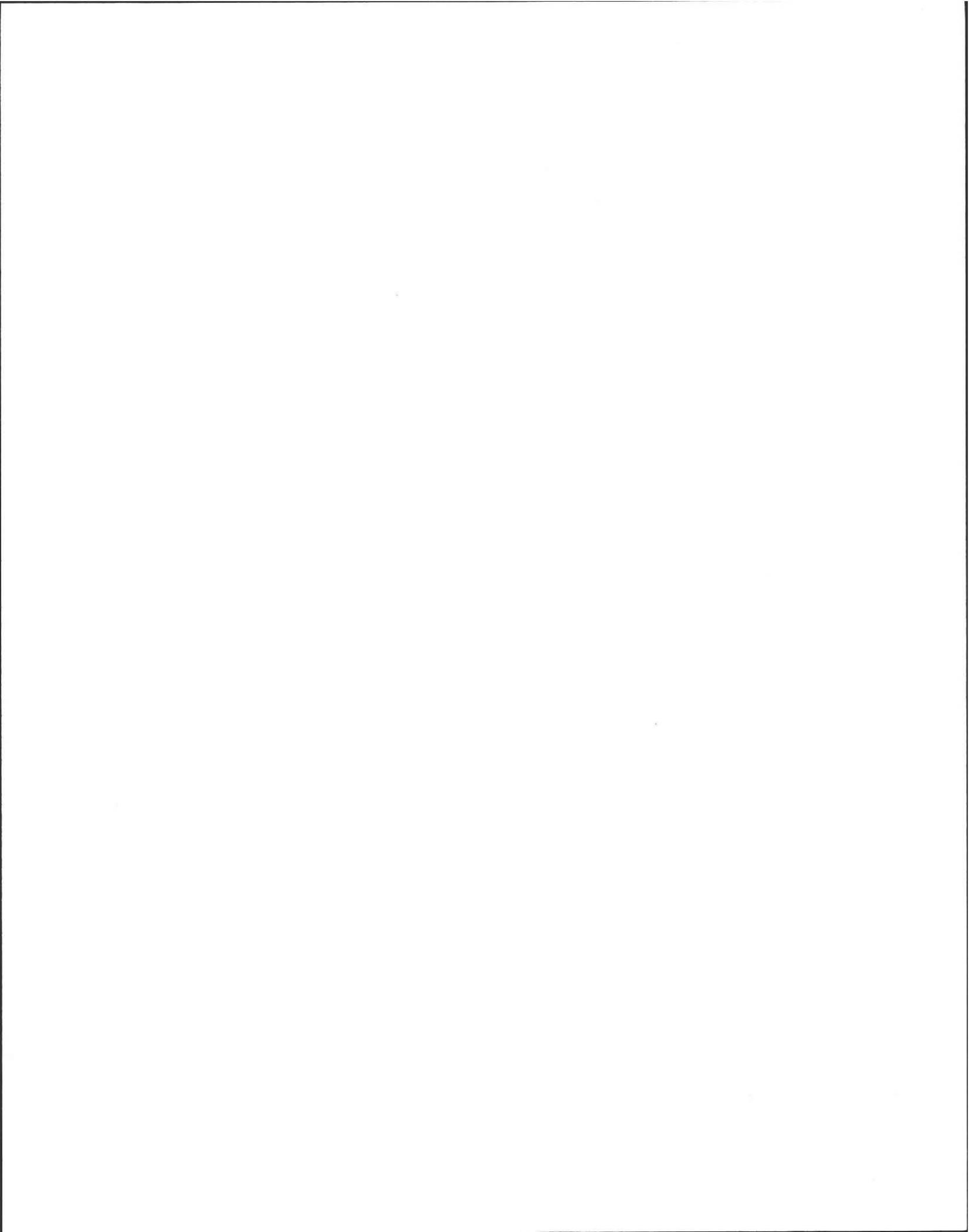
PS Form 3800, August 2006 See Reverse for Instructions



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LAPLANTE

CONSTRUCTION, INC.

296 NORTH MAIN STREET ■ EAST LONGMEADOW, MA 01028

OFFICE 413.525.6121
FAX 413.525.9104

The Responsible Building Professionals

DATE 4-26-2012

TO: Julie SederMAN

ATTENTION: Julie

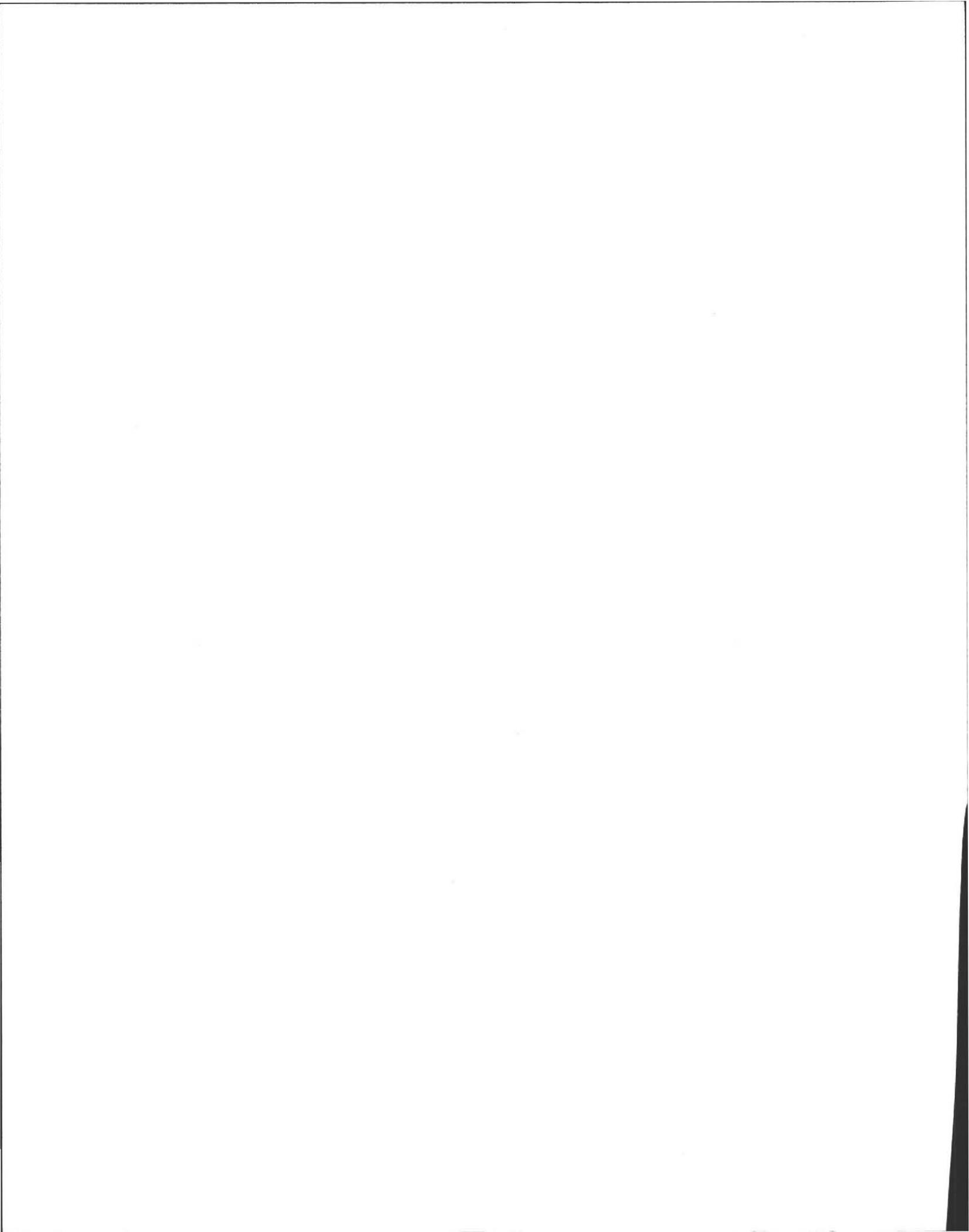
FAX NUMBER: 413-259-2404

FROM: PAUL LaplanTE

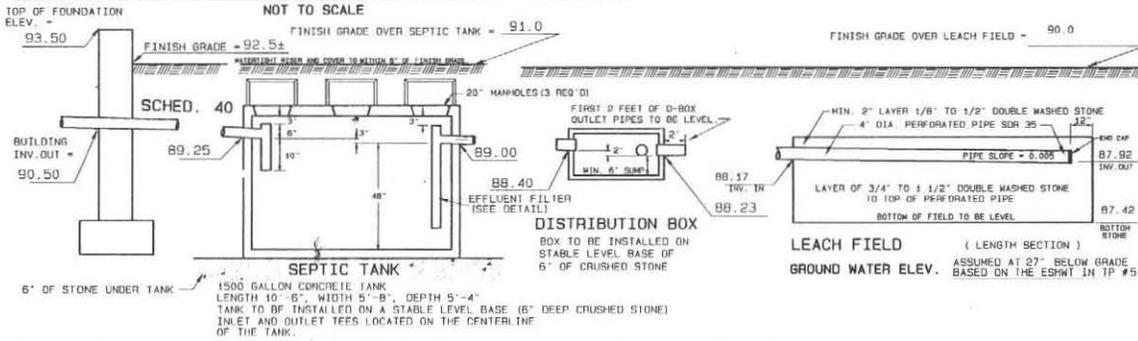
RE: Well for 261 LevereTT Rd Amherst
As per plan. submitted to Bldg. dept.

Number of pages including cover sheet: 2

If there are any problems with this transmission, please call (413) 525-6121.



SANITARY SYSTEM PROFILE



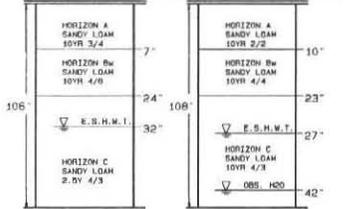
TEST PIT DATA

BOARD OF HEALTH WITNESS: DAVID ZAROZINSKI
 DATE: NOVEMBER 20, 2002 & NOVEMBER 9, 2005
 SOIL EVALUATOR: DOUGLAS J. MACLEAY, P.E.

PERC TEST ID	PERC RATE (MIN/IN)	PERC DEPTH (IN)
1	18	44
3	3	44

TEST PIT # 1
 ELEV. TOP = 81.75
 ESHWT = 79.08
 OBS. H2O = NONE
 BOTTOM = 72.92

TEST PIT # 5
 ELEV. TOP = 84.50
 ESHWT = 82.25
 OBS. H2O = 81.00
 BOTTOM = 75.50

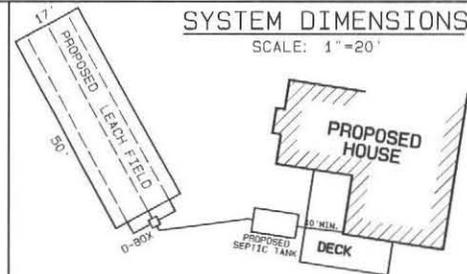
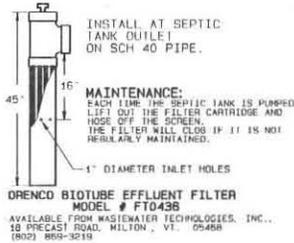


NOTES:

- REMOVE TOPSOIL & SUBSOIL BENEATH THE LEACHING FIELD AND TO 5" ON ALL SIDES OF THE FIELD REPLACE WITH FILL MATERIAL MEETING THE SPECIFICATIONS OF 310 CMR 15.255(3). (TITLE 5, 310 CMR 15.255(5))
- TITLE 5 REQUIRES OBSERVATION OF THE INSTALLED SYSTEM BY THE DESIGN ENGINEER AND A BOARD OF HEALTH MEMBER OR AGENT FOR THE BOARD OF HEALTH. THE SYSTEM MUST NOT BE BACKFILLED PRIOR TO OUR OBSERVATION. CONTACT OUR OFFICE AND THE BOARD OF HEALTH TWO BUSINESS DAYS BEFORE REQUESTED DATE FOR OBSERVATION.
- ALL DISTURBED AREAS SHOULD BE LOAMED, RAKED, FERTILIZED, SEEDED AND MULCHED AT THE COMPLETION OF CONSTRUCTION.

PROPERTY LINE REFERENCE:

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DESIGN DATA

DESIGN BASED ON SINGLE FAMILY RESIDENCE
 DESIGN FLOW 110 GALLON PER DAY PER BEDROOM
 TOTAL DESIGN FLOW 440 GALLON PER DAY.

SEPTIC TANK

440 GALLONS X 200% = 880 GALLONS DESIGN CAPACITY.
 USE 1500 GALLON SEPTIC TANK.

LEACHING FIELD

BOTTOM:
 50' LENGTH X 17' WIDTH = 850 SQUARE FEET.
 850 SQ. FT. X 53 GAL. PER SQ. FT. = 45050 GAL. LEACHING.
 TOTAL LEACHING CAPACITY = 450 GALLONS PER DAY.

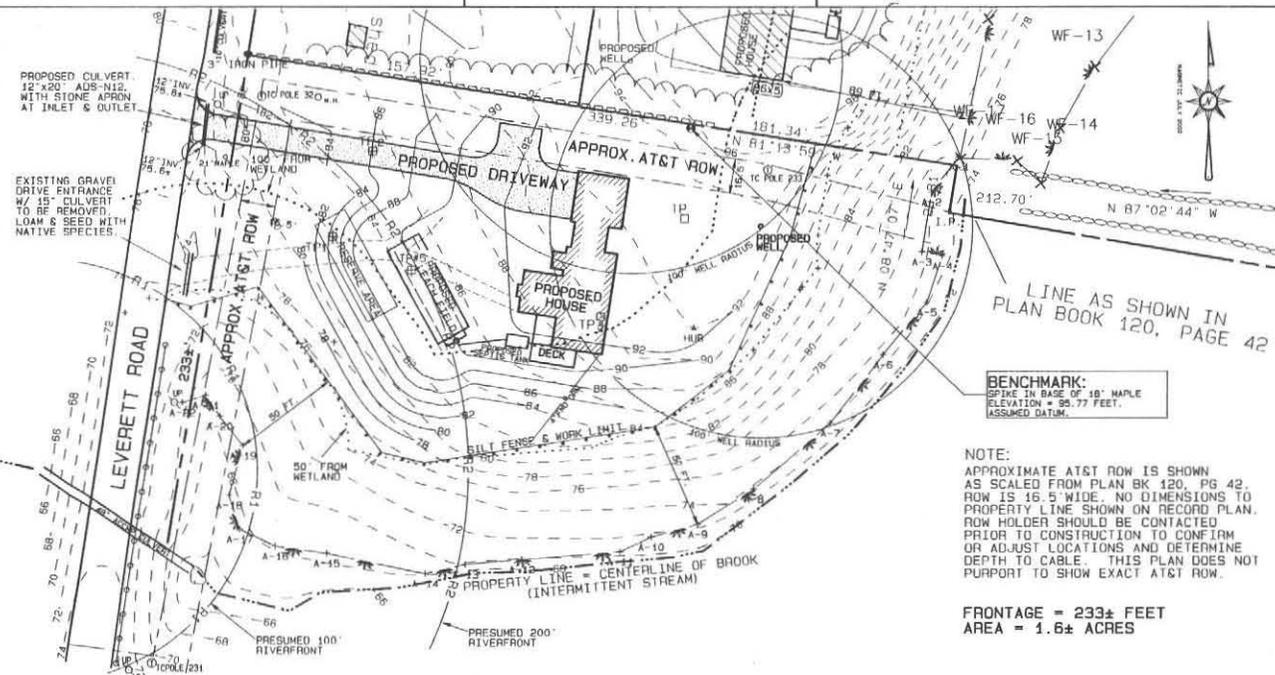
NOTE: PER TITLE 5, 310 CMR 15.240(6): A FIELD IS DESIGNED FOR THIS SITE DUE TO THE AREA LIMITATIONS CAUSED BY THE HOUSE LOCATION AND PROPERTY LINES.

GENERAL NOTES

- 4" PIPE WITH TIGHT JOINTS TO BE USED IN DISPOSAL SYSTEM EXCEPT WHERE OTHERWISE NOTED.
- 4" SDR 35 PERFORATED PIPE TO BE USED IN LEACHING AREA.
- 1500 GALLON REINFORCED CONCRETE SEPTIC TANK.
- AMHERST BOARD OF HEALTH MUST BE NOTIFIED WHEN SYSTEM IS NEARLY COMPLETE AND PRIOR TO BACKFILLING.
- ELEVATIONS BASED ON ASSUMED DATUM.
- UNLESS OTHERWISE NOTED, ALL SYSTEM COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 5 OF THE STATE SANITARY CODE AND ANY APPLICABLE LOCAL RULES.
- ANY CHANGE TO THIS PLAN MUST BE APPROVED BY THE BOARD OF HEALTH AND THE DESIGN ENGINEER.
- THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE GRINDER.

LEGEND

---	EXISTING CONTOURS
---	PROPOSED CONTOURS
---	4" SDR 35 PERFORATED PIPE
---	4" SDR 35 SOLID PIPE
---	100' WETLANDS OFFSET
---	50' WETLANDS OFFSET
---	EDGE OF WETLAND
---	CENTERLINE STREAM
---	PROPERTY LINE
---	STONEWALL



NOTE:
 APPROXIMATE AT&T ROW IS SHOWN AS SCALED FROM PLAN BK 120, PG 42. ROW IS 16.5' WIDE. NO DIMENSIONS TO PROPERTY LINE SHOWN ON RECORD PLAN. ROW HOLDER SHOULD BE CONTACTED PRIOR TO CONSTRUCTION TO CONFIRM OR ADJUST LOCATIONS AND DETERMINE DEPTH TO CABLE. THIS PLAN DOES NOT PURPORT TO SHOW EXACT AT&T ROW.

FRONTAGE = 233± FEET
 AREA = 1.6± ACRES

FLABS A1-A14 ARE BANK OF INTERMITTENT STREAM
 FLABS A14-A22 ARE EDGE OF BORDERING VEGETATED WETLAND
 WETLAND DELINEATED BY:
 CHUCK DAUCHY
 24 OLD LONG PLAIN ROAD
 LEVERETT, MA

SITE PLAN



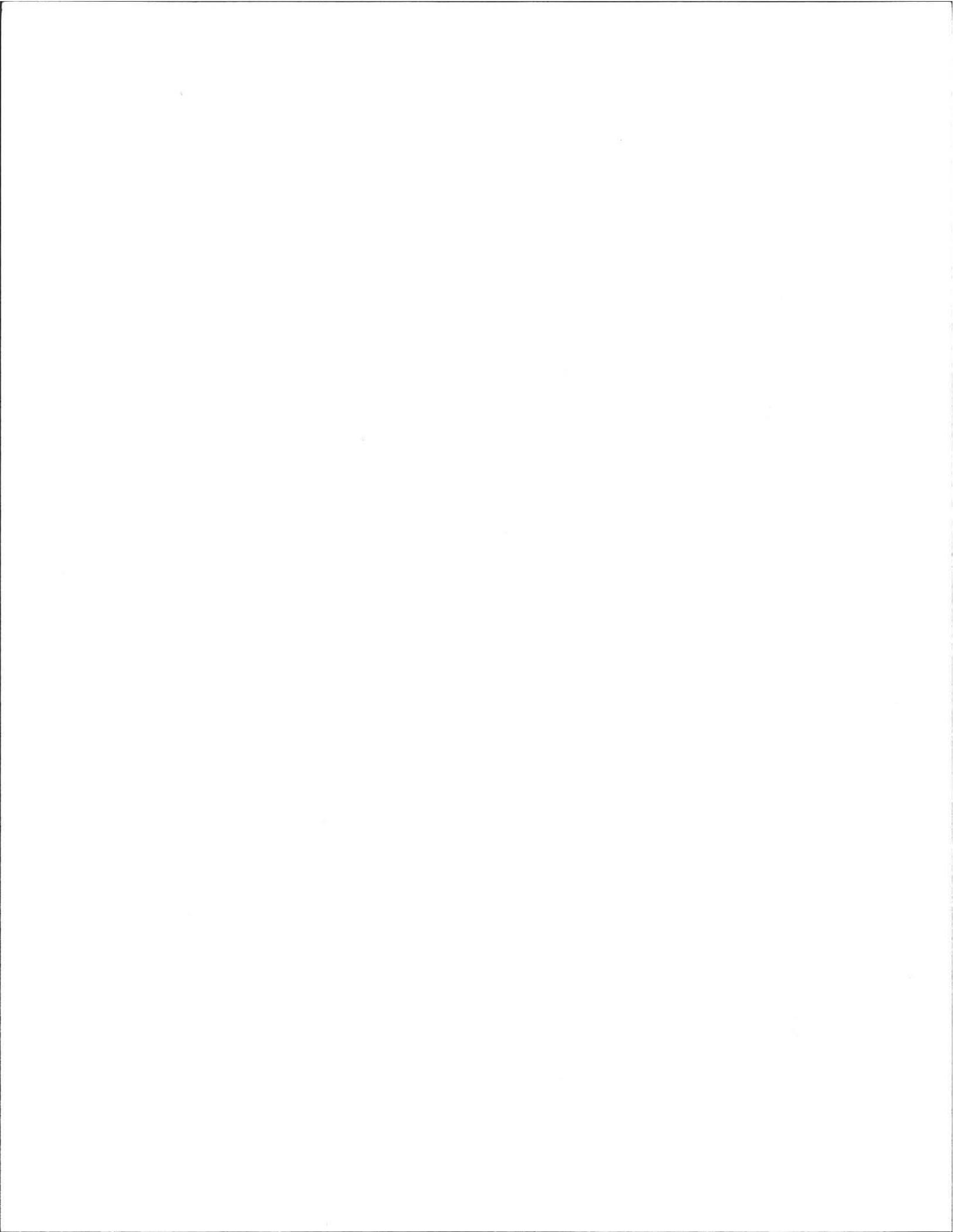
SHEET NO. 1 OF 1.

SCALE AS SHOWN
 DRN. BY S. K.
 CHECKED D. M.



2/14/12 CHD Riverfront Area Drive Loc., AT&T ROW D.M.
 2/7/12 CHD House, Drive, ST Loc., Grading, Fnd D.M.
 REV. DATE BY DESCRIPTION APPR.
 TITLE: SUBSURFACE SEWAGE DISPOSAL PLAN IN AMHERST, MASS.
 FOR: AMHERST BUILDING COMPANY, LLC
 FERRY LOT, LEVERETT ROAD
 DATE: NOVEMBER 21, 2005 JOB NO. 2002-072-10

MacLeay Associates, Inc. 102 Bridge Street, Shelburne Falls, MA 01370
 phone: (413) 625-9774 fax: (413) 625-9704 email: dmacleay@comcast.net



Town of



AMHERST

Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

May 7, 2012

RE: 261 Leveret Road, Amherst MA 01002

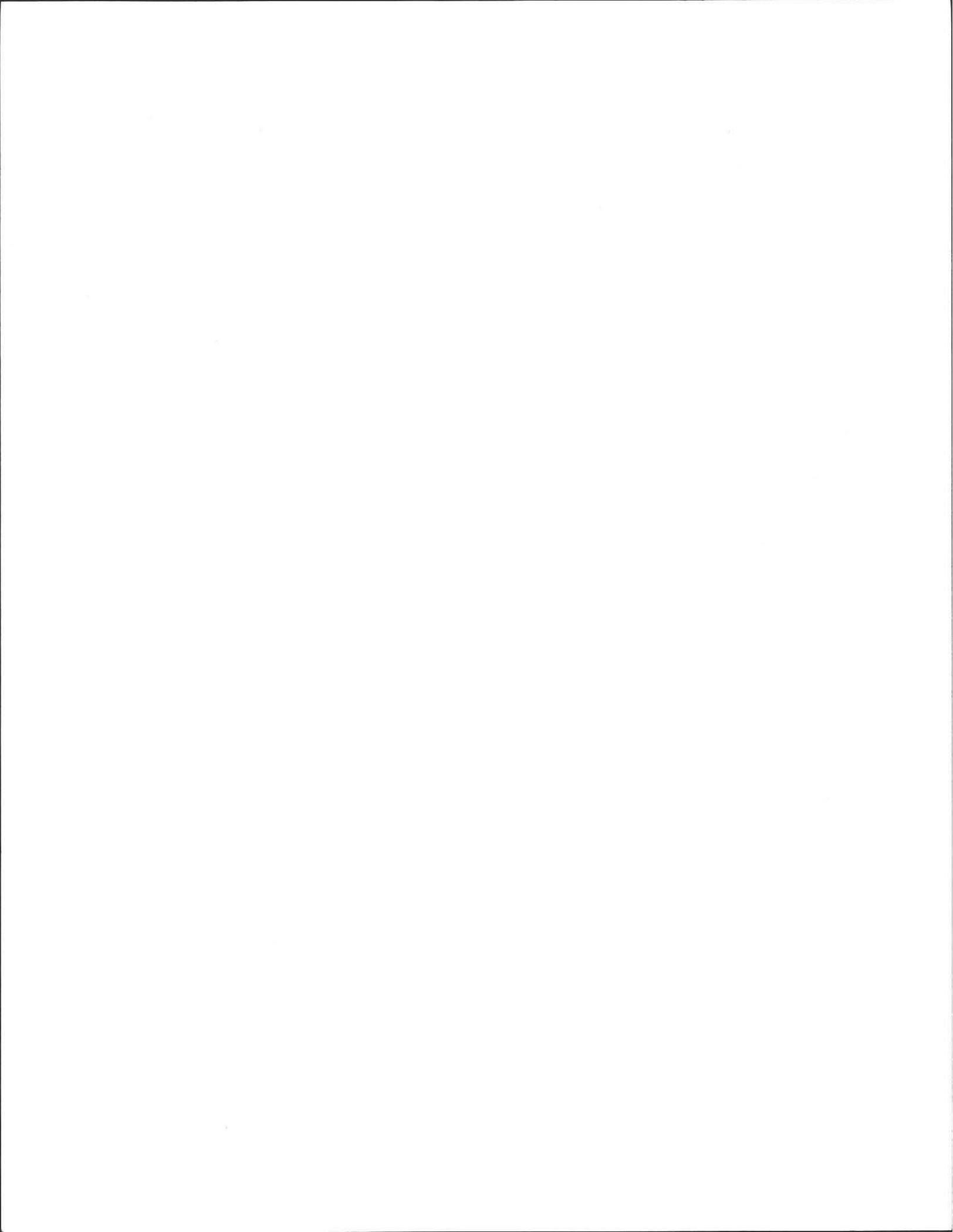
Dear Amherst Board of Health:

I have reviewed the plan for the installation of the drinking well at 261 Leveret Road, Amherst, currently owned by Susan Handley and Bruce McCandless. In my opinion the proposed well plan design meets the requirements of the Amherst Board of Health Regulations for Private Wells as adopted on October 30, 2008, with amendments effective on March 15, 2011.

Both Edmund Smith and I visited the site with Rich Chevalier of Cushing & Sons Water Wells and Pump Services on Friday, May 04, 2012. We observed no violations at this point. Mr. LaPlante of R.E LaPlante Construction and Rich Chevalier of Cushing & Sons will be notified to attend the BOH meeting to answer any questions or concerns, you may have.

Respectfully submitted by,

Javeria Mir, MPH, RS
Sanitarian



CUST NAME
4 BOLTWOOD AVENUE
05/08/12
CITY, ST, ZIP

***TOWN OF A TOWN HAL
AMHERST M REFERENCE
DATE/TIME 13:32

CUST NAME

0
DEPT

DE HEA059

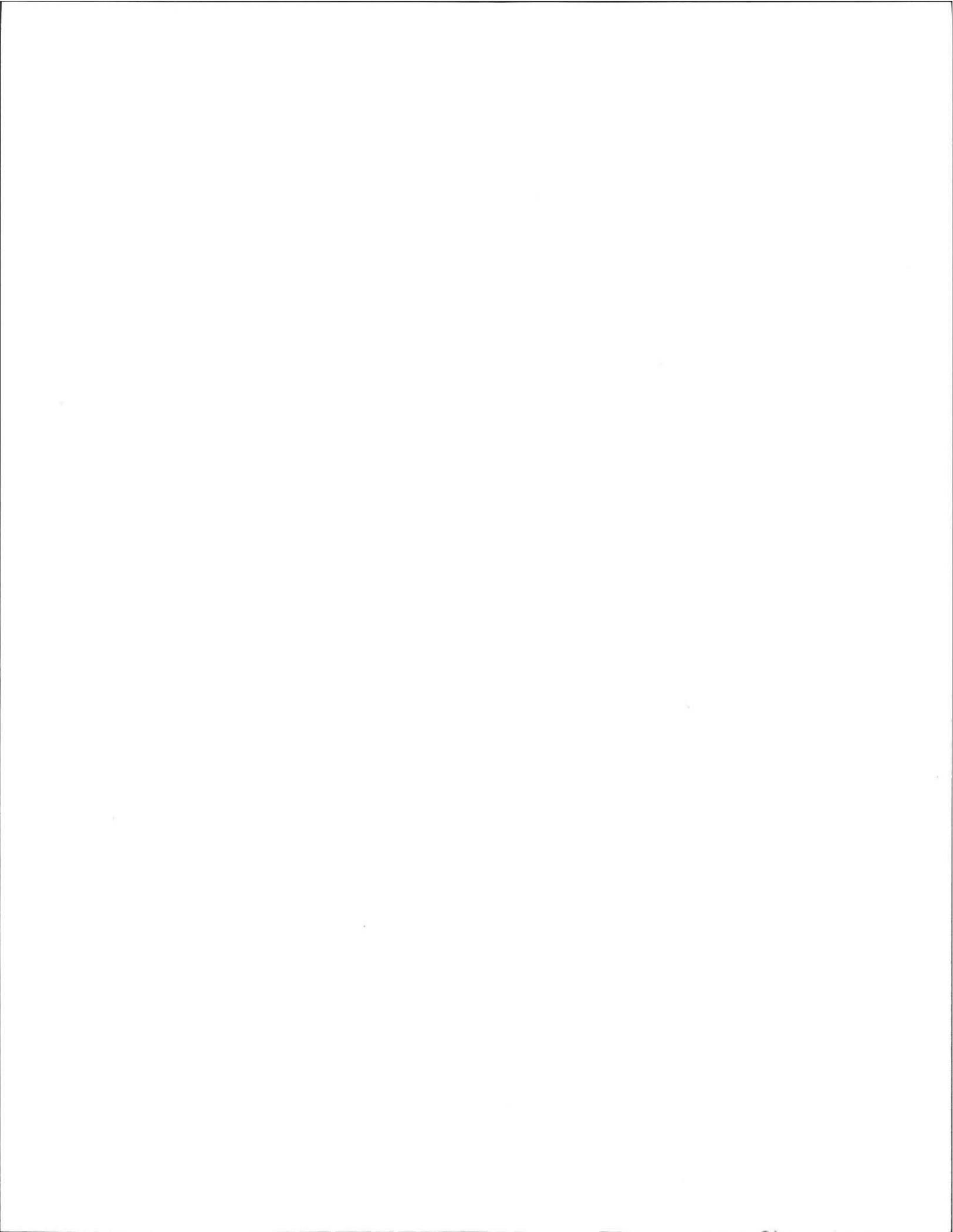
WELL PERMI 100.

RECPT TOTAL

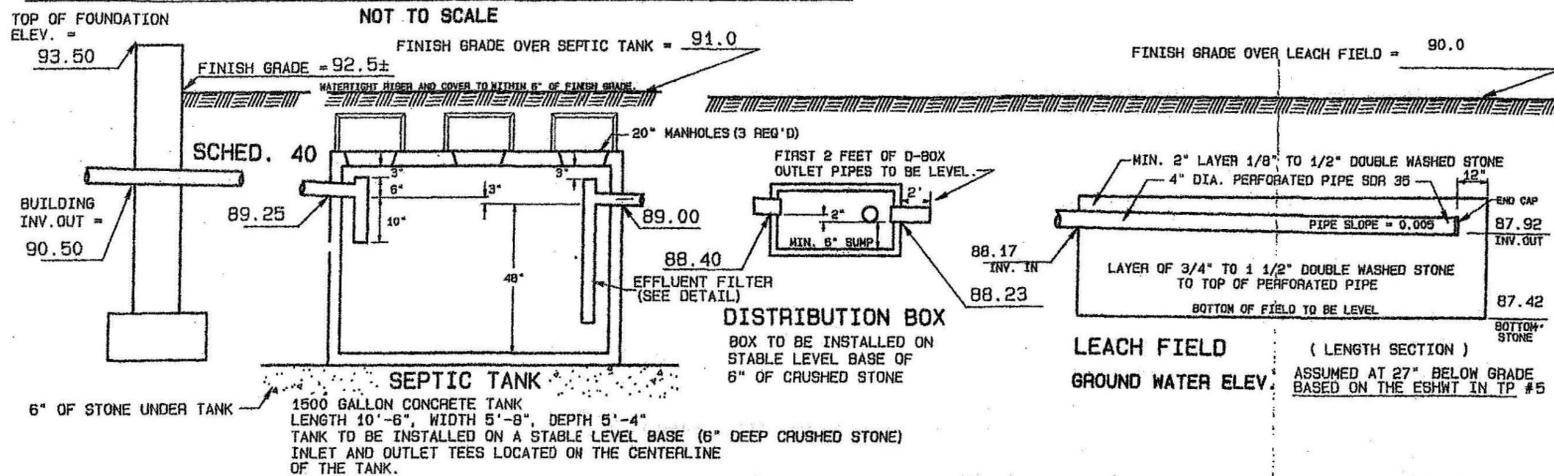
100.00
CUSHING AN QUA CHECK

8235

AMOUNT



SANITARY SYSTEM PROFILE



TEST PIT DATA

BOARD OF HEALTH WITNESS: DAVID ZAROZINSKI
 DATE: NOVEMBER 20, 2002 & NOVEMBER 9, 2005
 SOIL EVALUATOR: DOUGLAS J. MacLEAY, P.E.

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1	18	44
3	3	44

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 OBS. H2O = NONE
 BOTTOM = 72.92

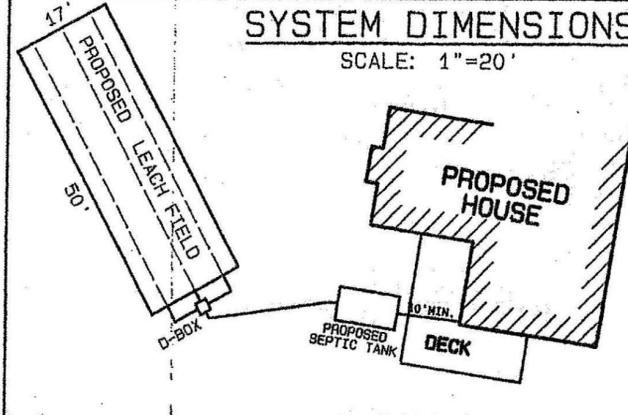
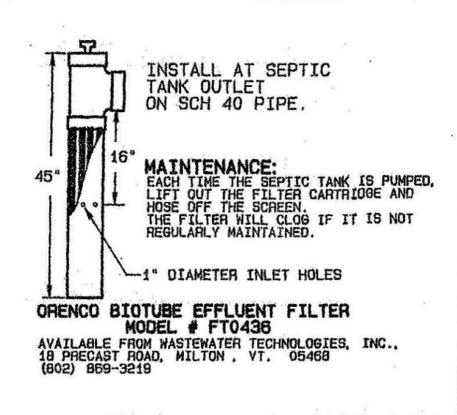
TEST PIT # 5
 ELEV. TOP = 84.50
 ESHWT = 82.25
 OBS. H2O = 81.00
 BOTTOM = 75.50

HORIZON	SOIL TYPE	THICKNESS
HORIZON A	SANDY LOAM	10YR 3/4
HORIZON Bw	SANDY LOAM	10YR 4/5
HORIZON C	SANDY LOAM	2.5Y 4/3

NOTES:

- REMOVE TOPSOIL & SUBSOIL BENEATH THE LEACHING FIELD AND TO 5' ON ALL SIDES OF THE FIELD. REPLACE WITH FILL MATERIAL MEETING THE SPECIFICATIONS OF 310 CMR 15.265 (3). (TITLE 5, 310 CMR 15.265 (5).)
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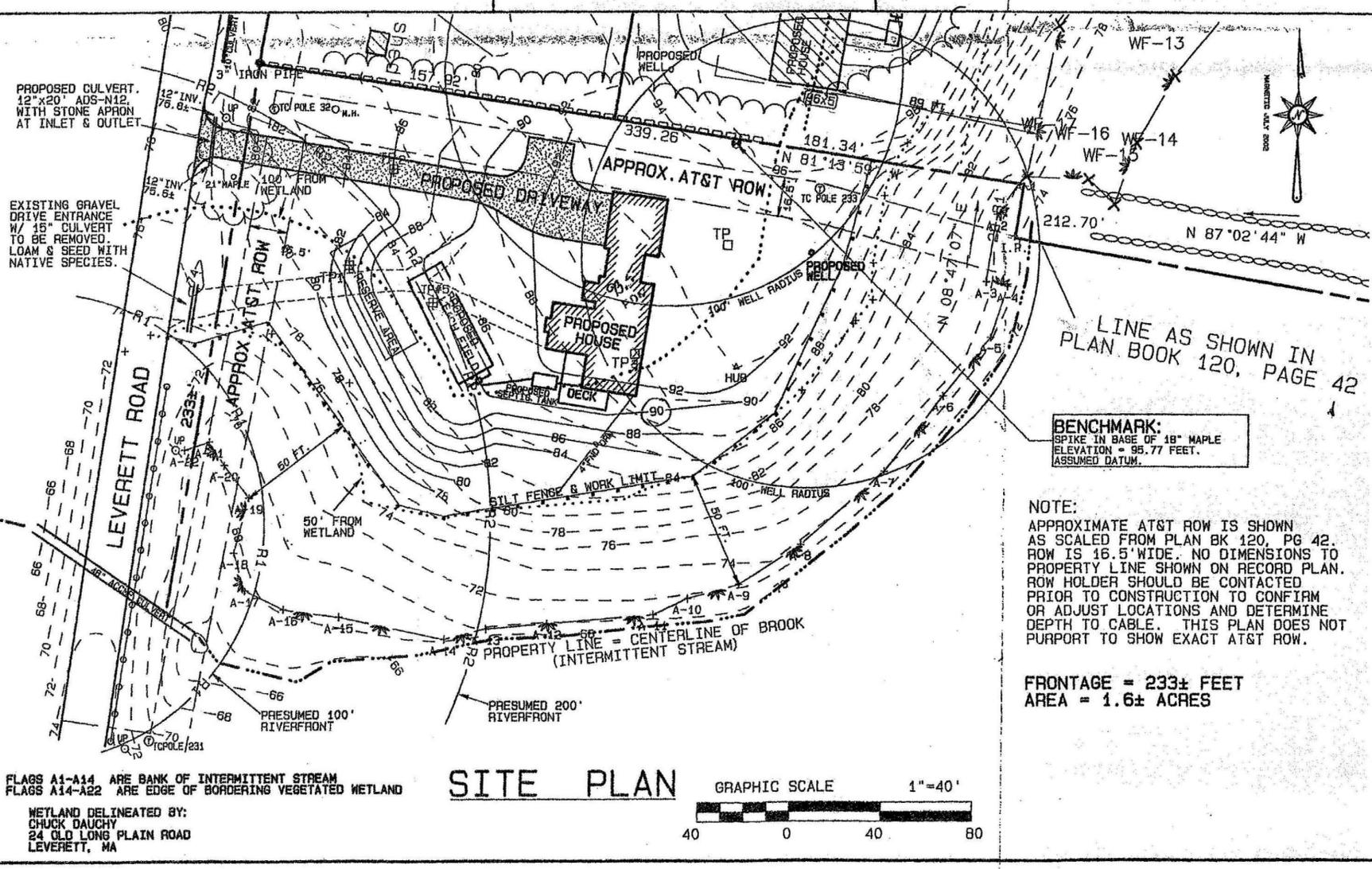
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 USE 1500 GALLON SEPTIC TANK.

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NOTE: PER TITLE 5, 310 CMR 15.240 (6); A FIELD IS DESIGNED FOR THIS SITE DUE TO THE AREA LIMITATIONS CAUSED BY THE HOUSE LOCATION AND PROPERTY LINES.



GENERAL NOTES

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LEGEND

- 100 --- EXISTING CONTOURS
- 100 --- PROPOSED CONTOURS
- 4" SDR 35 PERFORATED PIPE
- 4" SDR 35 SOLID PIPE
- 100' WETLANDS OFFSET
- 50' WETLANDS OFFSET
- EDGE OF WETLAND
- CENTERLINE STREAM
- PROPERTY LINE
- o-o-o-o-o-o-o-o-o-o STONEWALL

SHEET NO. 1 OF 1.

REV.	DATE	BY	DESCRIPTION	APPR.
2	2/14/12	CHD	Riverfront Area, Drive Loc., AT&T ROW	D.M.
1	2/7/12	CHD	House, Drive, ST Loc, Grading, Fnd Dn	D.M.

SCALE AS SHOWN

APPROVED: DOUGLAS J. MacLEAY, CIVIL ENGINEER, REGISTERED PROFESSIONAL ENGINEER

DRN. BY S.K.

CHECKED D.M.

TITLE: SUBSURFACE SEWAGE DISPOSAL PLAN IN AMHERST, MASS.

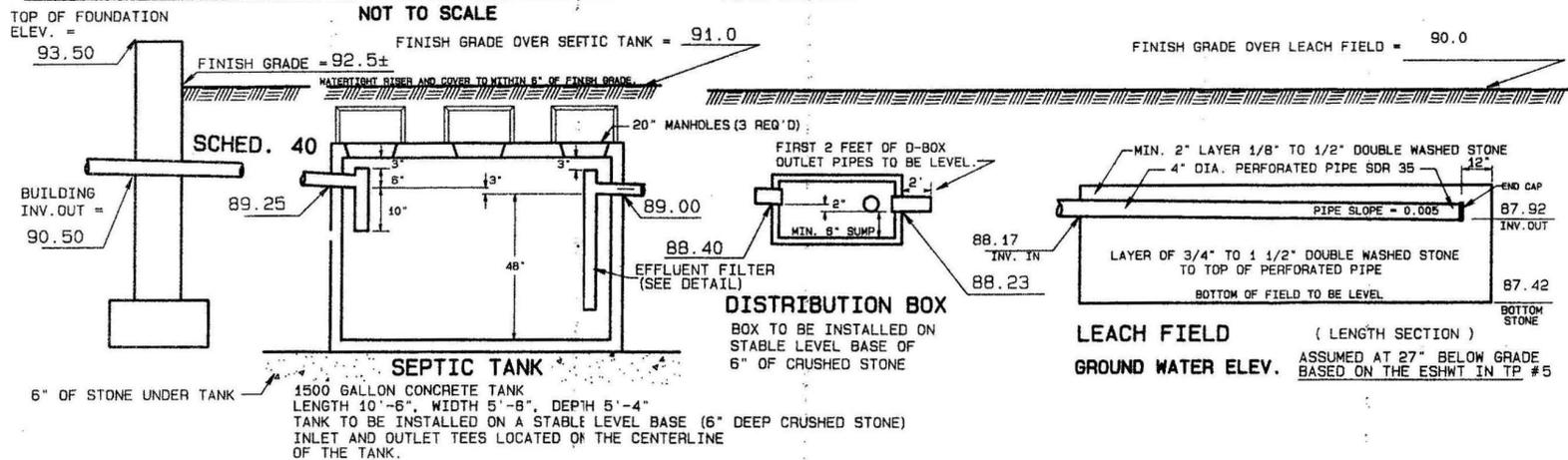
FOR: AMHERST BUILDING COMPANY, LLC, FERRY LOT, LEVERETT ROAD

DATE: NOVEMBER 21, 2005

JOB NO. 2002-072-10

MacLeay Associates, Inc. 102 Bridge Street, Shelburne Falls, MA 01370
 phone: (413) 825-9774 fax: (413) 825-9704 email: dmacleay@comcast.net

SANITARY SYSTEM PROFILE



TEST PIT DATA

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SOIL EVALUATOR: DOUGLAS J. MacLEAY, P.E.

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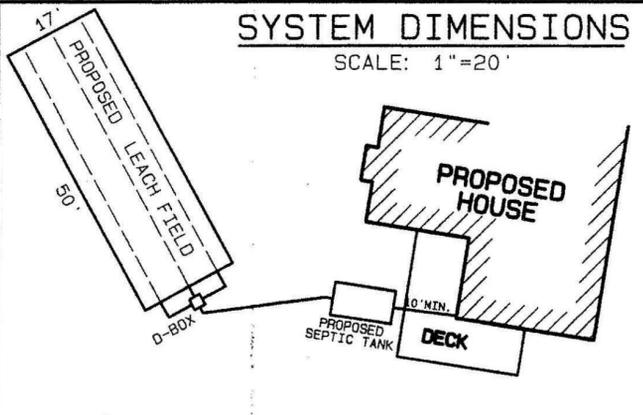
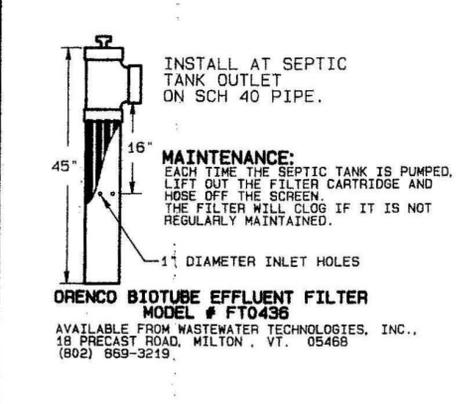
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BOTTOM = 72.92	BOTTOM = 75.50		

DEPTH	SOIL TYPE	DEPTH	SOIL TYPE
0" - 7"	HORIZON A SANDY LOAM 10YR 3/4	0" - 10"	HORIZON A SANDY LOAM 10YR 2/2
7" - 24"	HORIZON Bw SANDY LOAM 10YR 4/6	10" - 23"	HORIZON Bw SANDY LOAM 10YR 4/4
24" - 32"	E.S.H.W.T.	23" - 27"	E.S.H.W.T.
32" - 42"	HORIZON C SANDY LOAM 2.5Y 4/3	27" - 42"	HORIZON C SANDY LOAM 10YR 4/3

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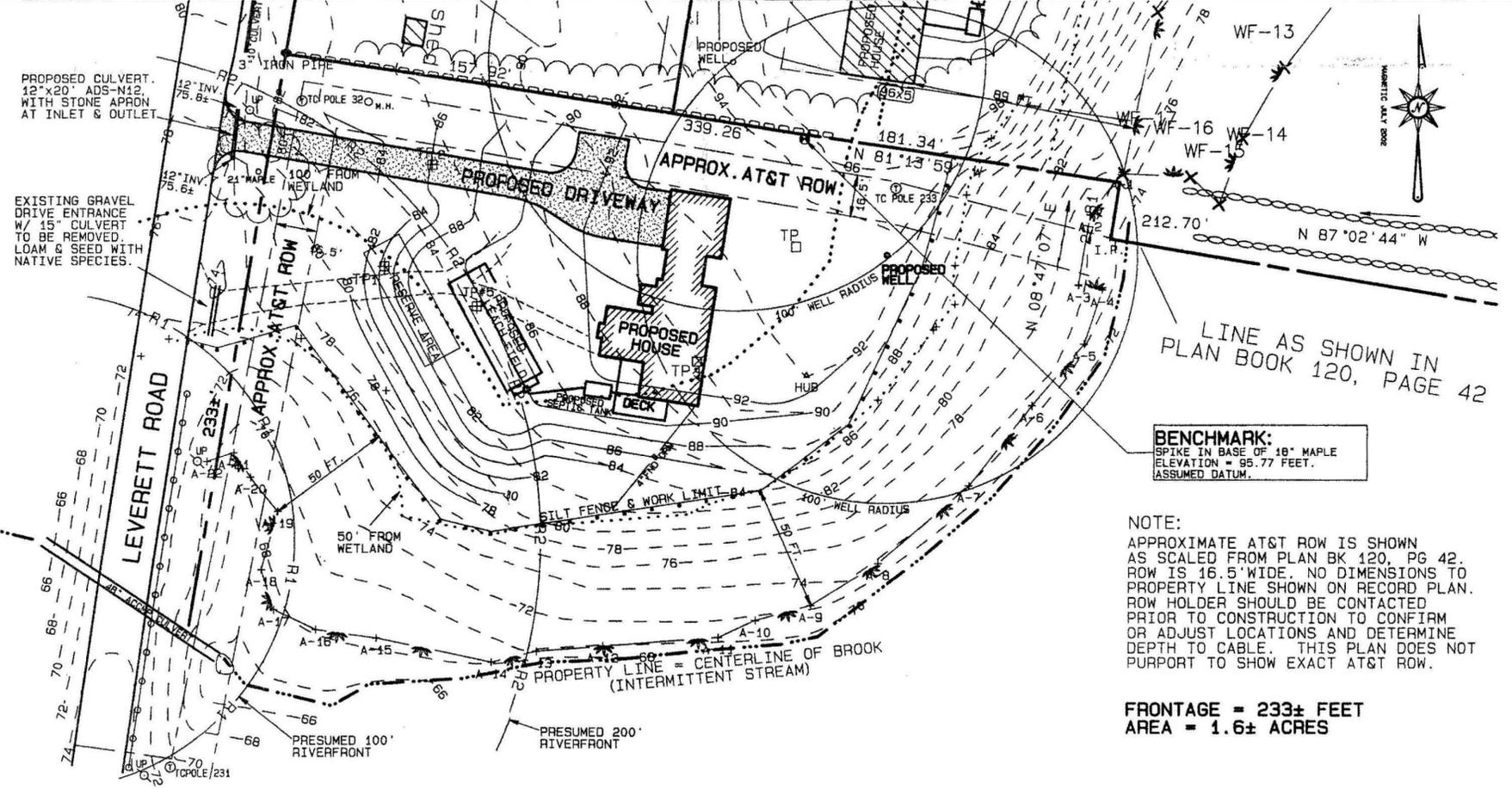
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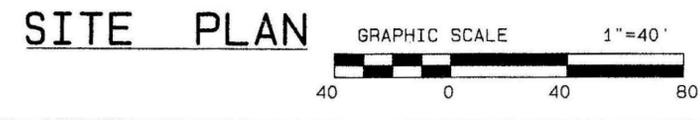
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FLAGS A1-A14 ARE BANK OF INTERMITTENT STREAM
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WETLAND DELINEATED BY:
CHUCK DAUCHY
24 OLD LONG PLAIN ROAD
LEVERETT, MA



SHEET NO. 1 OF 1.

SCALE	AS SHOWN	APPROVED:	2/14/12 CHD Riverfront Area, Drive Loc., AT&T ROW D.M.
DRN. BY	S. K.	1/27/12 CHD House, Drive, ST loc, Grading, Fnd Dm D.M.	
CHECKED	D. M.	REV. DATE BY DESCRIPTION	APPR.

TITLE: **SUBSURFACE SEWAGE DISPOSAL PLAN IN AMHERST, MASS.**

FOR: **AMHERST BUILDING COMPANY, LLC #261 FERRY LOT, LEVERETT ROAD**

DATE: NOVEMBER 21, 2005 JOB NO. 2002-072-10

MacLeay Associates, Inc. 102 Bridge Street, Shelburne Falls, MA 01370
phone: (413) 625-9774 fax: (413) 625-9704 email: dmacleay@comcast.net