The Jewett City Water Company

PO Box 1088
Enfield, CT 06083-1088
Tel.: (800) 430-8073
Fax: (860) 749-5381

August 1, 2024

Re: Docket 20-10-31 – Application of The Jewett City Water Company to Amend Rate Schedules – Order #3

The NRW for each water system within the Company for the year 2024 from January to June is attached.

The report contains the production and revenue water for each system, a description of any leak, location of leak and repair date. Included in the report are the leak detection surveys performed by outside consultants for the S & W System and Hill & Dale System.

The leak detection survey of the S & W system in 2024 there were no leaks detected. The Company will continue to monitor the S & W system for any increase in production and will utilize the leak detection service company to help identify the location of any leak.

The Company has contracted with the leak detection service for all systems to be surveyed. The main system survey is scheduled to begin in August. Any leaks discovered will be addressed as the Company is notified by the contractor of any possible leaks.

Respectively Submitted,

THE JEWETT CITY WATER COMPANY

Robert Sherwood
President

Jewett City Water Company
Non Revenue Water

Docket 20-10-31
Order # 3

WATER PRODUCTION AND CONSUMPTION YEAR 2024

Quantities of water produced and purchased and the quantities delivered to consumer and lost or unaccounted for including system demand experience, during the year. Estimates for each of the listed items of non-revenue water

Potable water produced, metered, and discharged for consumptive use

JCWC MAIN SYSTEM

Month	Thou. Gals. from terminal Reservoirs	Thou. Gals pumped from Wells	Thou. Gals. Purchased	Total Thou. Gals. delivered to mains
January	9,381	7,398		16,779
February	8,533	7,179		15,712
March	9,106	7,627		16,733
April	11,944	4,474		16,418
May	10,574	6,648		17,222
June	11,445	7,036		18,481
July				
August				
September				
October				
November				
December				
Total PRODUCTION WATER	60,983	40,362		101,345
Total REVENUE Water (System only)				75,480
Balance as NON-REVENUE Water		(State Percentage:	25.5%	25,865
Description and estimated consumption of Non-Revenue Water				
a. Utility Usage -- at source/treatment plants				400
b. Utility Usage -- flushing hydrants (No flushed 70)				1,095
c. Utility Usage -- bleeders (No. in use)				
d. Utility Usage -- meter bench (No. meters tested)				
e. Utility Usage -- other purposes (specify):				
New construction, fill, flush,				
f. Fire Protection (No. of hydrant-using fires)				
g. Main Breaks (No. of breaks 3)				475
h. Service Line losses before meters (No. of cases 1)				50
I. Other Non-Revenue uses/losses (specify):				
			Total	2,020
j. Balance (unknown)				23,845
6 mon Total Non-Revenue (Unaccounted-for) Water			23.5%	23,845

Jewett City Water Company
Non Revenue Water

Docket 20-10-31
Order # 3

WATER PRODUCTION AND CONSUMPTION YEAR 2024

Quantities of water produced and purchased and the quantities delivered to consumer and lost or unaccounted for including system demand experience, during the year. Estimates for each of the listed items of non-revenue water

Potable water produced, metered, and discharged for consumptive use

JCWC HILL N DALE SYSTEM

Month	Thou. Gals. from terminal Reservoirs	Thou. Gals pumped from Wells	Thou. Gals. Purchased	Total Thou. Gals. delivered to mains
January		144		144
February		128		128
March		142		142
April		226		226
May		221		221
June		190		190
July				
August				
September				
October				
November				
December				
Total PRODUCTION WATER	0	1,051		1,051
Total REVENUE Water (System only)				903
Balance as NON-REVENUE Water		(State Percentage:	14.1%)	148

Description and estimated consumption of Non-Revenue Water

a. Utility Usage -- at source/treatment plants	40
b. Utility Usage -- flushing hydrants (No flushed)	
c. Utility Usage -- bleeders (No. in use)	
d. Utility Usage -- meter bench (No. meters tested)	
e. Utility Usage -- other purposes (specify):	
New construction, fill, flush, filter bed malfunction	
f. Fire Protection (No. of hydrant-using fires)	
g. Main Breaks (No. of breaks)	
h. Service Line losses before meters (No. of cases)	
I. Other Non-Revenue uses/losses (specify):	
Total	40
j. Balance (unknown)	108
6 mon Total Non-Revenue (Unaccounted-for) Water 10.3%	108

Jewett City Water Company
Non Revenue Water

Docket 20-10-31
Order # 3

WATER PRODUCTION AND CONSUMPTION YEAR 2024

Quantities of water produced and purchased and the quantities delivered to consumer and lost or unaccounted for including system demand experience, during the year. Estimates for each of the listed items of non-revenue water

1. Potable water produced, metered, and discharged for consumptive use

JCWC S & W SYSTEM

Month	Thou. Gals. from terminal Reservoirs	Thou. Gals pumped from Wells	Thou. Gals. Purchased	Total Thou. Gals. delivered to mains
January		291		291
February		277		277
March		297		297
April		295		295
May		352		352
June		422		422
July				
August				
September				
October				
November				
December				
1(a) Total PRODUCTION WATER	0	1,934		1,934
2. Total REVENUE Water (System only)				2,351
3. Balance as NON-REVENUE Water		(State Percentage:	-21.6%	-417
4. Description and estimated consumption of Non-Revenue Water				
a. Utility Usage -- at source/treatment plants				50
b. Utility Usage -- flushing hydrants (No flushed)				
c. Utility Usage -- bleeders (No. in use)				
d. Utility Usage -- meter bench (No. meters tested)				
e. Utility Usage -- other purposes (specify):				
New construction, fill, flush, filter bed malfunction				
f. Fire Protection (No. of hydrant-using fires)				
g. Main Breaks (No. of breaks)				
h. Service Line losses before meters (No. of cases)				
I. Other Non-Revenue uses/losses (specify):				
			Total	50
j. Balance (unknown)				-467
6 mon Total Non-Revenue (Unaccounted-for) Water			-24.1%	-467

Jewett City Water Company
Main/ Service Leaks 2024, Jan-June

Docket 20-10-31
Order # 3

REPAIR DATE	SYSTEM	LOCATION	TYPE OF REPAIR	DESCRIPTION OF REPAIRS	Estimated Water Loss 1000/gals
1/18/2024	MAIN	62 ARROWHEAD DR	SERVICE	BREEZELINE CONTRACTOR RIPPED SERVICE, REPAIRED SECTION	50
2/29/2024	MAIN	BURLESON/ASHLAND	MAIN VALVE	2" GATE VALVE BROKE, REPLACED WITH 2" CURBSTOP	129
2/29/2024	MAIN	17 BURLESON LN	MAIN	HOLE IN MAIN AT COMPRESSON FITTING, REPLACED SECTION	216
5/23/2024	Main	MAPLE ST	MAIN	REPAIR MAIN FS1-2.63-15	130

JCWC The Jewett City Water Company

PO Box 1088
Enfield, CT 06083-1088
Tel.: (800) 430-8073
Fax: (860) 749-5381

January 31, 2025

Re: Docket 20-10-31 – Application of The Jewett City Water Company to Amend Rate Schedules – Order #3

The NRW for each water system within the Company for the year 2024 from January to December is attached.

The report contains the production and revenue water for each system, a description of any leak, location of leak and repair date. Included in the report are the leak detection surveys performed by outside consultants for the Main System, S & W System and Hill & Dale System.

The leak detection survey of the S & W system in 2024 detected no leaks. The Company will continue to monitor the S & W system for any increase in production and will utilize the leak detection service company to help identify the location of any leak.

The Company has contracted with the leak detection service for all systems to be surveyed. The Leak detection surveys have been completed. Any leaks discovered will be addressed as the Company is notified by the contractor of any possible leaks.

Respectively Submitted,

THE JEWETT CITY WATER COMPANY

Robert Sherwood

Robert Sherwood
President

Jewett City Water Company
Non Revenue Water

Docket 20-10-31
Order # 3

WATER PRODUCTION AND CONSUMPTION YEAR 2024

Quantities of water produced and purchased and the quantities delivered to consumer and lost or unaccounted for including system demand experience, during the year. Estimates for each of the listed items of non-revenue water

Potable water produced, metered, and discharged for consumptive use

JCWC MAIN SYSTEM

Month	Thou. Gals. from terminal Reservoirs	Thou. Gals pumped from Wells	Thou. Gals. Purchased	Total Thou. Gals. delivered to mains
January	9,381	7,398		16,779
February	8,533	7,179		15,712
March	9,106	7,627		16,733
April	11,944	4,474		16,418
May	10,574	6,648		17,222
June	11,445	7,036		18,481
July	10,942	8,141		19,083
August	13,182	6,799		19,981
September	12,634	7,685		20,319
October	13,472	6,104		19,576
November	11,351	7,190		18,541
December	11,044	7,133		18,177
Total PRODUCTION WATER	133,608	83,414		217,022
Total REVENUE Water (System only)				115,614
Balance as NON-REVENUE Water		(State Percentage:	46.7%	101,408
Description and estimated consumption of Non-Revenue Water				
a. Utility Usage -- at source/treatment plants				800
b. Utility Usage -- flushing hydrants (No flushed 197)				2,437
c. Utility Usage -- bleeders (No. in use)				
d. Utility Usage -- meter bench (No. meters tested 220)				19
e. Utility Usage -- other purposes (specify):				
New construction, fill, flush,				
f. Fire Protection (No. of hydrant-using fires)				
g. Main Breaks (No. of breaks 4)				600
h. Service Line losses before meters (No. of cases 5)				766
I. Other Non-Revenue uses/losses (specify):				
			Total	4,622
j. Balance (unknown)				96,786
6 mon Total Non-Revenue (Unaccounted-for) Water			44.6%	96,786

Jewett City Water Company
Non Revenue Water

Docket 20-10-31
Order # 3

WATER PRODUCTION AND CONSUMPTION YEAR 2024

Quantities of water produced and purchased and the quantities delivered to consumer and lost or unaccounted for including system demand experience, during the year. Estimates for each of the listed items of non-revenue water

Potable water produced, metered, and discharged for consumptive use

JCWC HILL N DALE SYSTEM

Month	Thou. Gals. from terminal Reservoirs	Thou. Gals pumped from Wells	Thou. Gals. Purchased	Total Thou. Gals. delivered to mains
January		144		144
February		128		128
March		142		142
April		226		226
May		221		221
June		190		190
July		203		203
August		195		195
September		142		142
October		164		164
November		110		110
December		102		102
Total PRODUCTION WATER	0	1,967		1,967
Total REVENUE Water (System only)				1,478
Balance as NON-REVENUE Water		(State Percentage:	24.9%)	489
Description and estimated consumption of Non-Revenue Water				
a. Utility Usage -- at source/treatment plants				100
b. Utility Usage -- flushing hydrants (No flushed)				
c. Utility Usage -- bleeders (No. in use)				
d. Utility Usage -- meter bench (No. meters tested)				
e. Utility Usage -- other purposes (specify):				
New construction, fill, flush, filter bed malfunction				
f. Fire Protection (No. of hydrant-using fires)				
g. Main Breaks (No. of breaks)				
h. Service Line losses before meters (No. of cases)				
I. Other Non-Revenue uses/losses (specify):				
			Total	100
j. Balance (unknown)				389
6 mon Total Non-Revenue (Unaccounted-for) Water			19.8%	389

Jewett City Water Company
Non Revenue Water

Docket 20-10-31
Order # 3

WATER PRODUCTION AND CONSUMPTION YEAR 2024

Quantities of water produced and purchased and the quantities delivered to consumer and lost or unaccounted for including system demand experience, during the year. Estimates for each of the listed items of non-revenue water

1. Potable water produced, metered, and discharged for consumptive use

JCWC S & W SYSTEM

Month	Thou. Gals. from terminal Reservoirs	Thou. Gals pumped from Wells	Thou. Gals. Purchased	Total Thou. Gals. delivered to mains
January		291		291
February		277		277
March		297		297
April		295		295
May		352		352
June		422		422
July		399		399
August		412		412
September		433		433
October		523		523
November		505		505
December		545		545
1(a) Total PRODUCTION WATER	0	4,751		4,751
2. Total REVENUE Water (System only)				3,562
3. Balance as NON-REVENUE Water		(State Percentage:	25.0%	1,189
4. Description and estimated consumption of Non-Revenue Water				
a. Utility Usage -- at source/treatment plants				100
b. Utility Usage -- flushing hydrants (No flushed)				
c. Utility Usage -- bleeders (No. in use)				
d. Utility Usage -- meter bench (No. meters tested)				
e. Utility Usage -- other purposes (specify):				
New construction, fill, flush, filter bed malfunction				
f. Fire Protection (No. of hydrant-using fires)				
g. Main Breaks (No. of breaks)				
h. Service Line losses before meters (No. of cases)				
I. Other Non-Revenue uses/losses (specify):				
			Total	100
j. Balance (unknown)				1,089
Total Non-Revenue (Unaccounted-for) Water			22.9%	1,089

Jewett City Water Company
Main/ Service Leaks 2024, Jan-Dec

Docket 20-10-31
Order # 3

REPAIR DATE	SYSTEM	LOCATION	TYPE OF REPAIR	DESCRIPTION OF REPAIRS	Estimated Water Loss 1000/gals
18-Jan-24	MAIN	62 ARROWHEAD DR	SERVICE	BREEZELINE CONTRACTOR RIPPED SERVICE, REPAIRED SECTION	216
29-Feb-24	MAIN	BURLESON/ASHLAND	MAIN VALVE	2" GATE VALVE BROKE, REPLACED WITH 2" CURBSTOP	130
29-Feb-24	MAIN	17 BURLESON LN	MAIN	HOLE IN MAIN AT COMPRESSON FITTING, REPLACED SECTION	150
23-May-24	Main	MAPLE ST	MAIN	REPAIR MAIN FS1-2.63-15	160
22-Aug-24	Main	157 Ashland St	HYD VALVE	CUT IN TEE AND REPLACE HYDRANT VALVE	160
04-Sep-24	Main	38 RUSSELL ST	CURBSTOP/SERVICE	REPLACE CURB STOP AND 2' OF SERVICE	200
06-Sep-24	Main	50 MOHEGAN	CURBSTOP/SERVICE	REPLACE CURBSTOP AND SECTION OF SERVICE	100
23-Sep-24	Main	50 MOHEGAN	SERVICE	BAD COUPLING REPLACED COUPLING	50
26-Sep-24	MAIN	60 ELM ST	SERVICE	SPLIT IN SERVICE	200

Water Leak Survey Report For:
Jewett City
Water Company
Hill & Dale System

Hazardville Water Company
#481 Taylor Rd
Enfield, CT 06083

August 2024

Survey Completed by:

MATT GROUF

Grouf'sWater
LEAK SERVICES
DEAD ON IS MY NAME PINPOINT IS MY GAME

11 BIRCHES RD HUBBARDSTON, MA 01452
GROUFSWATER@GMAIL.COM

Equipment used in this Survey

I use state-of-the-art technology to accurately identify and narrow down areas of interest. This includes real-time or overnight correlating of water mains and services. High powered sonic equipment, capable of finding very small leaks, was applied to detect and pinpoint accurate leak locations quickly. This included listening on top of the ground over water mains, as well as contacting hydrants, services, and valves. Utilizing both digital correlating and sonic listening allowed me to precisely pinpoint water breaks for correction.

SubSurface Leak Detection: LD-18 w/ High Sensitivity Contact and Ground Microphones

SubSurface Leak Detection: LD-15 w/ High Sensitivity Contact and Ground Microphones

SubSurface Leak Detection: Z-Corr Digital Correlating Loggers

Schonstedt: GA-92 XTd Magnetic Locator

Schonstedt: REX Pipe and Cable Locator

Scope of Survey

The water leak detection survey was conducted on August 2, 2024. Acoustic listening and digital correlation of the entire system of mains and services were performed during this survey. Listening with sonic equipment on the valves, curb stops and sillcocks (when accessible), and on top of the ground over all the water mains was performed.

Dates in System

DATES WORKED	JOB TYPE	DETAILS
8/2/2024	SURVEY	SURVEY HOUSE TO HOUSE

Leaks Located

No Leaks were detected during this survey.

Conclusion

The Hill & Dale water system is an efficient system. Jewett City Water Company does an excellent job maintaining the water system. No leaks were uncovered during this survey. Leak Detection Surveys are essential to the conservation efforts of pure and clean water. Conserving this natural resource will help ensure a water supply is available for future generations. These surveys cut down on non-revenue water, which in turn increases revenues, and saves on rate payers resources. Underground leaks that do not surface, can undermine public and private property causing extensive damage. Leaks pose an increased risk for safety and are uncovered with routine leak detection.

Number of Leaks located:

o Main Breaks – **o GPM**

o Service Leaks - approximately leaking a total of **o GPM**

o Hydrant Leaks - approximately leaking a total of **o GPM**

o Valve Leaks – **o GPM**

Approximate system total gallons per minute loss: **o GPM**

Approximate system yearly loss: **o Gallons**

Recommendations

Full system comprehensive leak detection survey conducted once per calendar year. Leak detection surveys can save an extensive amount of money and resources for the Jewett City Water Company, by detecting leaks that can go unnoticed.

Recognition

I would like to thank the Hazardville Water Company and the Jewett City Water Company for their immediate response to all inquiries in the system.

Water Leak Survey Report For:
Jewett City
Water Company
Jewett City Main System

Jewett City Water Company
#481 Taylor Rd
Enfield, CT 06083

August 2024

Survey Completed by:

MATT GROUF

Grouf'sWater
LEAK SERVICES
DEAD ON IS MY NAME PINPOINT IS MY GAME

11 BIRCHES RD HUBBARDSTON, MA 01452
GROUFSWATER@GMAIL.COM

Equipment used in this Survey

I use state-of-the-art technology to accurately identify and narrow down areas of interest. This included real-time or overnight correlating of water mains and services. High powered sonic equipment, capable of finding very small leaks, was applied to detect and pinpoint accurate leak locations quickly. This included listening on top of the ground over water mains, as well as contacting hydrants, services, and valves. Utilizing both digital correlating and sonic listening allowed me to precisely pinpoint water breaks for correction.

SubSurface Leak Detection: LD-18 w/ High Sensitivity Contact and Ground Microphones

SubSurface Leak Detection: LD-15 w/ High Sensitivity Contact and Ground Microphone

SubSurface Leak Detection: Z-Corr Digital Correlating Loggers

Schonstedt: GA-92 XTd Magnetic Locator

Schonstedt: REX Pipe and Cable Locator

Scope of Survey

The water leak detection survey began August 26, 2024 and was completed on October 4, 2024. Acoustic listening and digital correlation of approximately 27 miles of mains were performed during this survey. Streets with heavy traffic were correlated and listened on during early morning hours for accurate testing results. Four service leaks were detected in this survey. No leaks were found on any cross-country mains. Listening with sonic equipment on the hydrants, valves, curb stops (when accessible), and on top of the ground over all the water mains was performed. All leaks uncovered were immediately alerted to the Jewett City Water Company.

Streets Correlated and Listened Early Morning
East Main Street
North Main Street
South Main Street
Stone Hill Road
River Road
Preston Road
Voluntown Road
Slater Ave

Dates in System

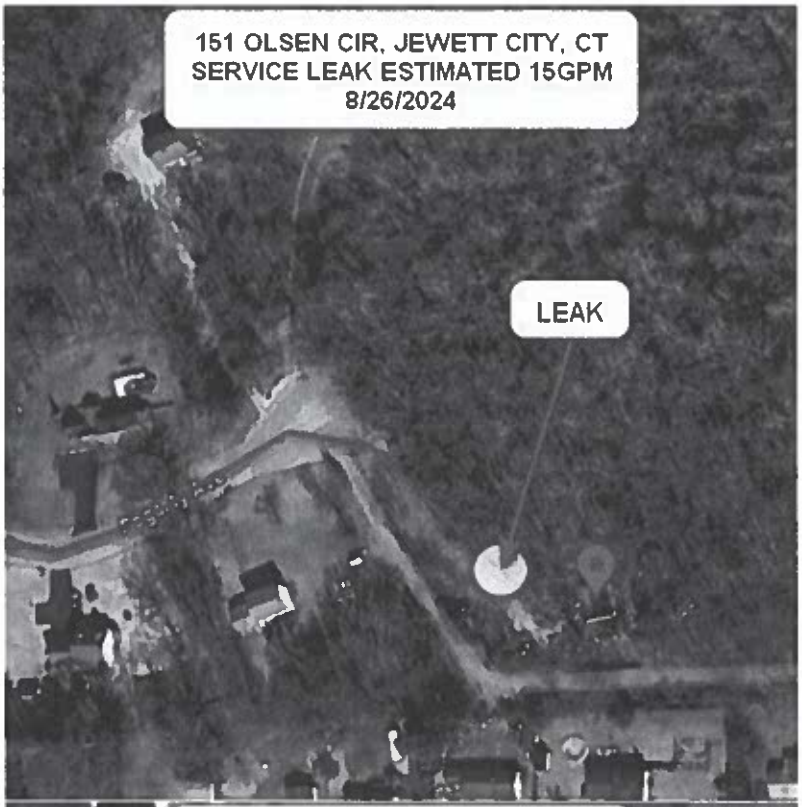
DATES WORKED	JOB TYPE	DETAILS
8/26/2024	START SURVEY	STARTED SYSTEM SURVEY
8/28/2024	SURVEY	SURVEY
9/10/2024	SURVEY	SURVEY
10/4/2024	SURVEY COMPLETE	SURVEY

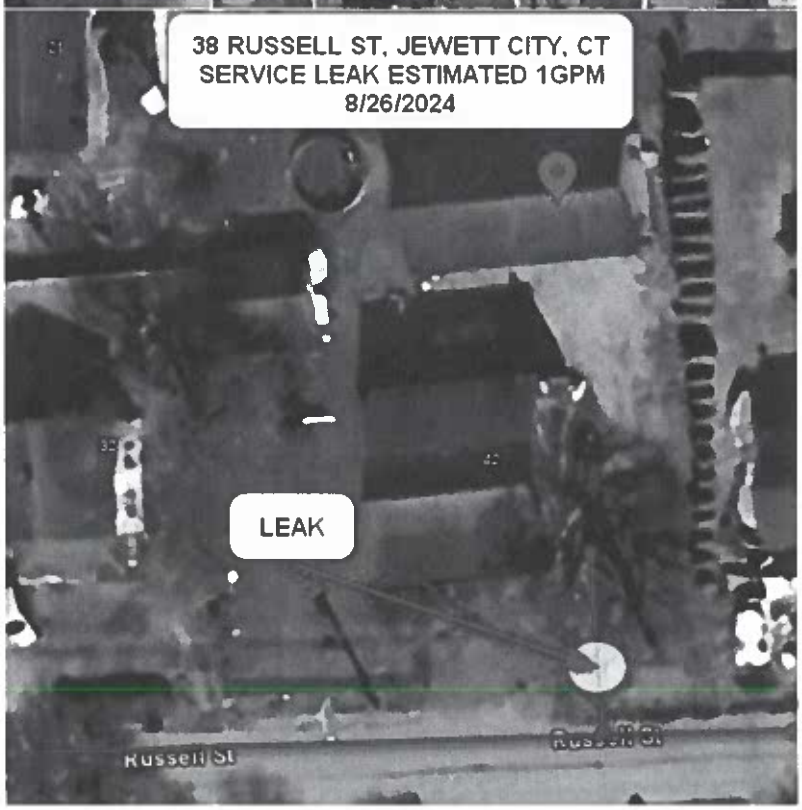
Leaks Located

Four service leaks were uncovered during this survey. An estimated total of 53 gallons per minute (GPM) loss, was due to these leaks. If left undetected, these leaks could add up to 76,320 gallons per day; 534,240 gallons per week; and a total of 27,780,480 gallons per year.

LEAK LIST FOR JEWETT CITY, CT 8/26/2024					
#	DATE	TYPE OF LEAK	ADDRESS	LOCATION DETAILS	ESTIMATED GPM
1	8/26/2024	SERVICE	151 OLSEN CIR	SERVICE LEAK	15
2	8/26/2024	SERVICE	38 RUSSELL ST	LEAK AT CURB STOP	1
3	8/26/2024	SERVICE	60 ELM ST	SERVICE LEAK	22
4	8/26/2024	SERVICE	122 ASHLAND ST	SERVICE LEAK	15
5	8/26/2024	SERVICE	225 E MAIN ST	HIGH USAGE?	
	TOTAL ESTIMATED GALLONS PER MINUTE LOSS				53

Aerial Reports









GroufsWater

Conclusion

Smaller Water Systems like Jewett City Water Company, benefit immensely from Leak Detection programs. In this survey four leaks were uncovered. These leaks may never have surfaced, which is why yearly Leak Detection Surveys are essential to the conservation efforts of pure and clean water. Conserving this natural resource will help ensure a water supply is available for future generations. These surveys cut down on non-revenue water, which in turn increases revenues, and saves on rate payers resources. Underground leaks that do not surface, can undermine public and private property causing extensive damage. These leaks pose an increased risk for safety and are uncovered with routine leak detection. The amount of non-revenue water saved during this survey should decrease the amount of non-revenue water in the system.

Number of Leaks located:

0 Main Break – **0 GPM**

4 Service Leaks - approximately leaking a total of **53 GPM**

0 Hydrant Leaks - approximately leaking a total of **0 GPM**

0 Valve Leaks – **0 GPM**

Approximate system total gallons per minute loss: **53 GPM**

Approximate system yearly loss: **27,780,480 Gallons Per Year**

Recommendations

Full system comprehensive leak detection survey conducted once per calendar year.

Recognition

I would like to thank Jon and Nick at the Jewett City Water Company for their immediate response to all inquiries and leak locations. The system is maintained very well, with no leaking hydrants or valves.

Water Leak Survey Report For:
Jewett City
Water Company
S & W System

Hazardville Water Company
#481 Taylor Rd
Enfield, CT 06083

August 2024

Survey Completed by:

MATT GROUF

Grouf'sWater
LEAK SERVICES
DEAD ON IS MY NAME PINPOINT IS MY GAME

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Equipment used in this Survey

I use state-of-the-art technology to accurately identify and narrow down areas of interest. This includes real-time or overnight correlating of water mains and services. High powered sonic equipment, capable of finding very small leaks, was applied to detect and pinpoint accurate leak locations quickly. This included listening on top of the ground over water mains, as well as contacting hydrants, services, and valves. Utilizing both digital correlating and sonic listening allowed me to precisely pinpoint water breaks for correction.

SubSurface Leak Detection: LD-18 w/ High Sensitivity Contact and Ground Microphones

SubSurface Leak Detection: LD-15 w/ High Sensitivity Contact and Ground Microphone

SubSurface Leak Detection: Z-Corr Digital Correlating Loggers

Schonstedt: GA-92 XTd Magnetic Locator

Schonstedt: REX Pipe and Cable Locator

Scope of Survey

The water leak detection survey began August 5, 2024 and was completed on October 4, 2024. Acoustic listening and digital correlation of the entire system of mains and services were performed during this survey. Listening with sonic equipment on the valves, curb stops and sillcocks (when accessible), and on top of the ground over all the water mains was performed. All leaks uncovered were immediately alerted to the Jewett City Water Company.

Dates in System

DATES WORKED	JOB TYPE	DETAILS
8/5/2024	START SURVEY	SURVEY
10/4/2024	SURVEY	CORELATE LINES FROM WELL

Leaks Located

No Leaks were detected during this survey.

Conclusion

The S & W water system was running very efficient during this year's survey. Jewett City Water Company does an excellent job maintaining the water system. No leaks were uncovered during this survey. Conserving this natural resource will help ensure a water supply is available for future generations. These surveys cut down on non-revenue water, which in turn increases revenues, and saves on rate payers resources. Underground leaks that do not surface, can undermine public and private property causing extensive damage. These leaks pose an increased risk for safety and are uncovered with routine leak detection. The amount of non-revenue water saved during this survey should decrease the amount of unaccounted for water being pumped into the system.

Number of Leaks located:

o Main Leaks – **o GPM**

o Service Leak - approximately leaking a total of **o GPM**

o Hydrant Leaks - approximately leaking a total of **o GPM**

o Valve Leaks – **o GPM**

Approximate system total gallons per minute loss: **o GPM**

Approximate system yearly loss: **o Gallons**

Recommendations

Full system comprehensive leak detection survey conducted once per calendar year. Leak detection surveys save an extensive amount of money and resources for the Jewett City Water Company, by detecting leaks that can go unnoticed.

Recognition

I would like to thank the Hazardville Water Company and the Jewett City Water Company for their immediate response to all inquiries and leak locations.