Pennsylvania's Department of Environmental Protection Approves Electro Scan's SWORDFISH for Water Service Lead Detection

Electro Scan Emerges as a Cost-Effective Replacement to Using Excavation or Potholing to Inventory Water Service Lines in Pennsylvania's 9,200 Water Systems.

Pennsylvania State Capitol in Harrisburg, PA.

HARRISBURG, PENNSYLVANIA, USA, May 28, 2024 /EINPresswire.com/ -- Electro Scan Inc. is delighted to announce that the State of Pennsylvania Department of Environmental Protection (PADEP) has approved the company's SWORDFISH to inventory lead water service lines.

Prior to the acceptance of the Electro Scan SWORDFISH, water systems were forced to excavate or expose buried water services to determine their pipe material.

> Eliminating the high cost, inaccuracy, and customer disruption of digging, excavating, and potholing to determine a water service line's pipe material, has been a major goal for us."
>
> *Mike App, Executive Vice President, Electro Scan Inc.*

With over 50,000 U.S. water systems required by the EPA to conduct a comprehensive inventory of water service lines, including copper,
galvanized, plastic, and lead pipes, Pennsylvania has almost 9,200 public water systems.

"Electro Scan's SWORDFISH utilizing machine-intellgent electrical resistance technology is a game-changer," states Mike App, Executive Vice President, Electro Scan Inc.

According to the PADEP approval, water operators using Electro Scan's SWORDFISH device "will not need to physically verify the service line material by potholing or excavating."

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Pennsylvania's population of nearly 13 million people supports 5,728,788 housing units with a median year built of 1964.

By comparison, the neighboring state of New York where SWORDFISH was approved in 2023, has a population of 20 million people and supports 8,449,178 housing units with a median year built of 1957.

Lead pipes were outlawed in 1986 for use in the building and construction of water service lines.

"Many cities that used predictive modeling combined with excavation of buried water service lines are being told to go back to the drawing board due to the inaccuracy of the methodology and reluctance of homeowners to accept their results," states Chuck Hansen, Founder, Electro Scan Inc.

"A key driver behind Electro Scan's technology is to deliver water operators a 'one-and-done' solution, eliminating the need to keep going back to the same property to repeatedly survey the same line," states Hansen.

In the early days of the lead and copper rule, many utilities sent crews to take photographs of each

Pennsylvania Department of Environmental Protection approves Electro Scan's SWORDFISH to inventory utility-owned and private-owned water services lines.

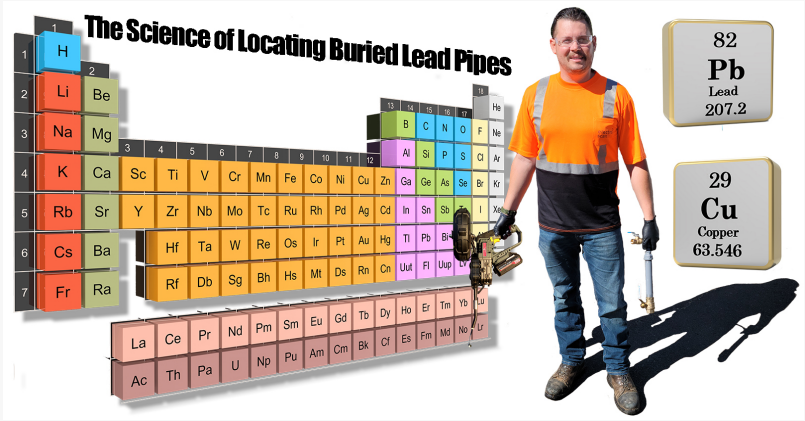
Median Year Built of 1964

State of Pennsylvania Housing Built By Decade

Total Number of Housing Units	5,728,788	100%
Built in 1939 or Earlier	1,470,362	26%
Built between 1940 and 1949	410,191	7%
Built between 1950 and 1959	771,101	13%
Built between 1960 and 1969	576,906	10%
Built between 1970 and 1979	716,448	13%
Built between 1980 and 1989	551,065	10%
Built between 1990 and 1999	538,637	9%
Built between 2000 and 2009	459,492	8%
Built between 2010 and 2019	228,525	4%
Built in 2020 or Later	6,061	0.1%

Source: Point2Homes.com, May 2024

With over 5.7 million housing units and a median year built of 1964, over 25% or 1.5 million homes were built before 1939 in the State of Pennsylvania.



The Electro Scan SWORDFISH measures the change in electrical resistance of pipe materials that have unique levels of conductivity that correspond with unique values in the periodic table.

customer's meter box, hose bib, and outdoor water faucet to catalog pipe materials.

But housing contractors and plumbers notoriously used lead pipe and melted lead ingots to solder pipe joints that may leach into our drinking water.

Municipal and publicly traded water systems are bracing for a new round of lead and copper rule requirements that are expected to tighten rules & regulations for the identification, verification, and replacement of lead water service lines.

New proposed regulations as part of the Lead and Copper Rule Improvements (LCRI) may include the requirement to test water quality on all pipes where excavation or potholing can inadvertently dislodge lead particulates in drinking water pipes.

High cost, pipe disturbance, inaccuracies, and disruption to Customer's landscape has forced water industry leaders to seek out better, faster, and cheaper solutions to detect lead pipes, like SWORDFISH from Electro Scan Inc.

The proposed LCRI may also give homeowners the right to request retesting of their buried water pipes if they disagree with a water system's initial inventory results.

Once enacted, the LCRI will require all UNKNOWN pipe materials to be determined within the next three years or risk being cataloged as lead pipes to be scheduled for replacement for a mandatory ten-year period.

Over 25% of all homes in Pennsylvania were built before 1939 when the installation of lead for drinking water pipes was common.

Pennsylvania cities with the leading number of homes built before 1939, include Philadelphia (293,652), Pittsburgh (76,830), Scranton (18,633), Harrisburg (17,435), and Erie (11,398).

Excluding Pennsylvania's top five cities, there are still over 1 million homes built elsewhere before 1939 in the state.

According to a 2017 Report by the Environmental Defense Fund, Pennsylvania is one of four (4) states having a Mandatory Disclosure of Lead Pipes earning an A minus rating.

A key condition of PADEP's approval is that water operators must either be an Electro Scan employee (or Electro Scan contractor) trained to use the SWORDFISH device and accompanying software; or be a PWS employee (or PWS contractor) who has attended the manufacturer-provided 2-day training and follows the Standard Operating Procedures provided from Electro Scan.

The decision by PADEP to approve SWORDFISH adds a significant backlog of sales and services for the Company resulting from pent-up demand from water systems wishing to use a more accurate, cost-effective, and reliable water service line inventory solution.

ABOUT ELECTRO SCAN INC.
Electro Scan Inc. is headquartered in Sacramento, California, USA, and is a leading international supplier of machine-intelligent pipeline assessment and quality assurance products and services for the water, sewer, and oil & gas markets. The company designs, develops, and markets proprietary equipment and delivers technical field services using its SaaS-based cloud application that automatically locates, measures, and reports leaks and water service line pipe materials, including lead pipes. The company's products and professional services detect buried lead water services on a house-by-house basis; typically not found or confirmed by legacy inspection methods.

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