

Potholing



EXPOSE PIPE



MAGNET TEST

—Sticks—→



Steel

Doesn't Stick



SCRATCH TEST

Color
of a
Penny



Copper

No Shine



Plastic

Silver Streaks→



Lead



Advantages

- Many Companies Offer This Service.

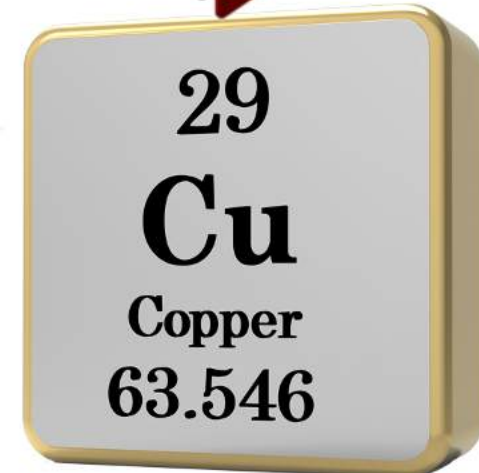
Disadvantages

- Most Costly Alternative.
- Requires Landscaping Digging and Back Filling.
- Does Not Assess Full Pipe Length, Especially if Multiple Pipe Materials Used.
- Customers Must Be Notified of Disturbance Inside Pipe and Take Action to Flush Their Own Line.
- Unable to Determine Galvanized Pipes Requiring Replacement.
- GIS or Mapping Inaccuracies May Require Multiple Holes to be Dug.

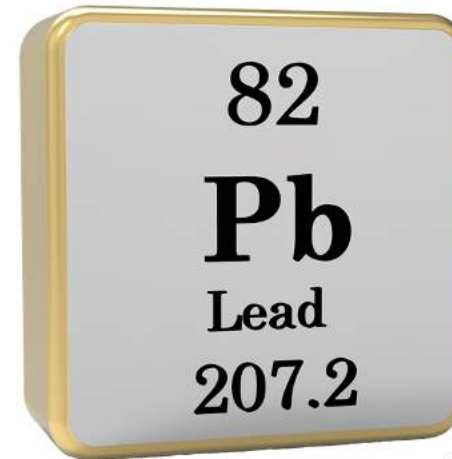
Recommended by EPA's Office of Research and Development (ORD).



Potholing Can't See Lead Inside of Galvanized Pipe.



AI PIPE MATERIAL RECOGNITION



**Customer-Owned
House-to-Meter**



**Utility-Owned
Meter-to-Main**



Advantages

- No Digging or Excavation
- Less Expensive. About 1 hour per Home.
- More Accurate. Automatically identified Copper, Plastic, Galvanized, and Lead. Only Tech Identifying to Galvanized Requiring Replacement.
- Readings Can Identify Lead Connectors.
- Less Disturbance. Flushing After each Survey.
- Ability to Certify Non-Lead Homes.
- **Water Utilities Can Charge Home Sellers or Buyers for 'Certificate' to Recoup Costs.**

Disadvantages

- Cannot Navigate Pipes that are Already Damaged.

Offered by Electro Scan Inc. and adopted by the City of Baltimore, Maryland and Pittsburgh Water, Pennsylvania, and hundreds of other water utilities.