

ADVANCED NDT (HYDRASNAKE)

Aging Infrastructure Challenges

- Pipelines may have unknown structural or hydraulic deterioration that negatively impacts pipeline operations
- Detecting precisely where leaks and problem areas are occurring
- Unexpected pipeline failures and subsequent spills
- Increasing customer and community expectations for service continuity and environmental stewardship

Service Solution Overview



Proactive Asset Management

- Allocate the cost and schedule of rehabilitation efforts by knowing where problems are located and their severity
- Save money with targeted repairs versus full replacement
- Reduce unplanned, emergency repairs keeping pipelines in service more consistently
- Avoid negative consequences with customers and communities

PICA's HydraSnake Advanced NDT service solution uses high resolution Remote Field Testing (RFT) technology to inspect water mains and provide proactive asset management. HydraSnake provides direct measurement of water main wall thickness continuously along the water main and detects corrosion, wall thinning and graphitization.



HydraSnake is customized for fire hydrant or tee adapter deployment and is offered in two sizes:

- 6-inch (15.24 cm)
- 8-inch (20.32 cm)



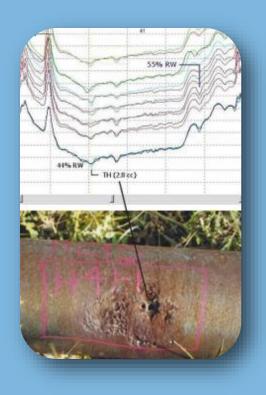
HYDRASNAKE – ADVANCED NDT

HydraSnake tools measure the condition of buried 6-inch and 8-inch water mains without excavation.

- Easy access through fire hydrant or tee adapters
- Detects graphitization, pitting, erosion and cracks
- Non-contact cleaning to bare metal is not required
- Tests through scale, cement, epoxy and plastic liners
- Sensitive to internal and external flaws
- Flexible and durable
- Fast, reliable and repeatable



TECHNOLOGICAL CAPABILITIES



HydraSnake is a "smart tool" that measures the remaining wall thickness and corrosion defects of cast and ductile iron pipe. As the tool travels through the pipe, it continuously records the wall thickness and stores the information on board.

- After deployment the data is downloaded from the Tool for analysis
- The diameter of the tool is significantly smaller than the ID of the pipe to allow for protrusions, linings and scale
- The smaller diameter, in combination with the flexibility of HydraSnake allows the tool to negotiate tees and short radius elbows