## NEW SALES & SERVICE CENTRE

# Electro Scan (UK) Limited


## New Address

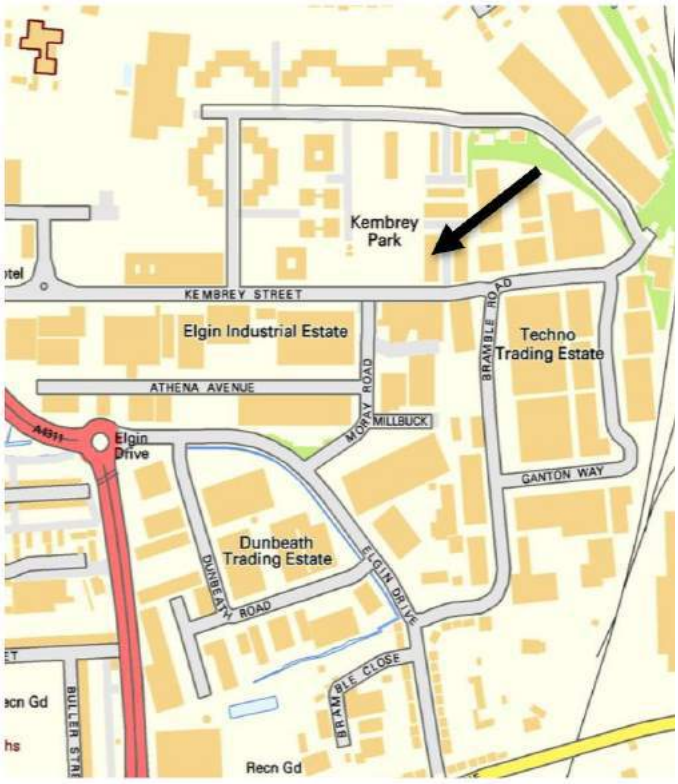
Unit 15 Kembrey Trade Centre
Aspen Close, Swindon SN2 8AJ

Brad Weston, Company Director
Company Nr: 9211607
brad@electroscan.com
Mobile: +44 7739 358611

## Location

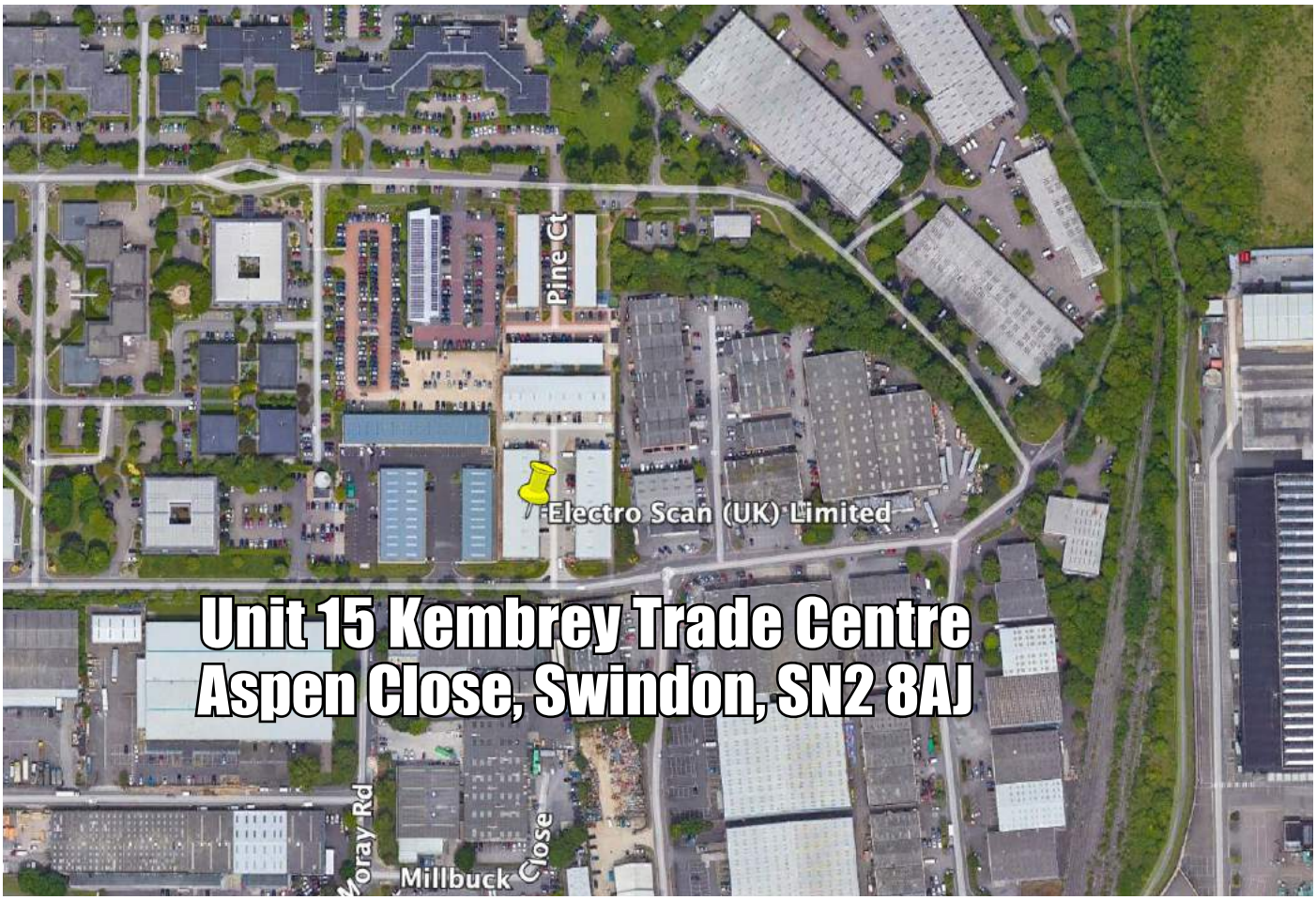
The Kembrey Trade Centre is situated off Kembrey Street, adjacent to the Elgin/Techno Industrial Estates. Access to Kembrey Street is just off the Great Western Way dual carriageway, which provides access to Junction 15 via the A419 and Junction 16 of the M4 motorway.

## Local Map



# Email or Call to Arrange a Visit

Brad Weston, brad@electroscan.com, Mobile: +44 7739 358611


# New Pressurised Water Leak Detection Sales & Service

## TRIDENT

ELECTRO SCAN

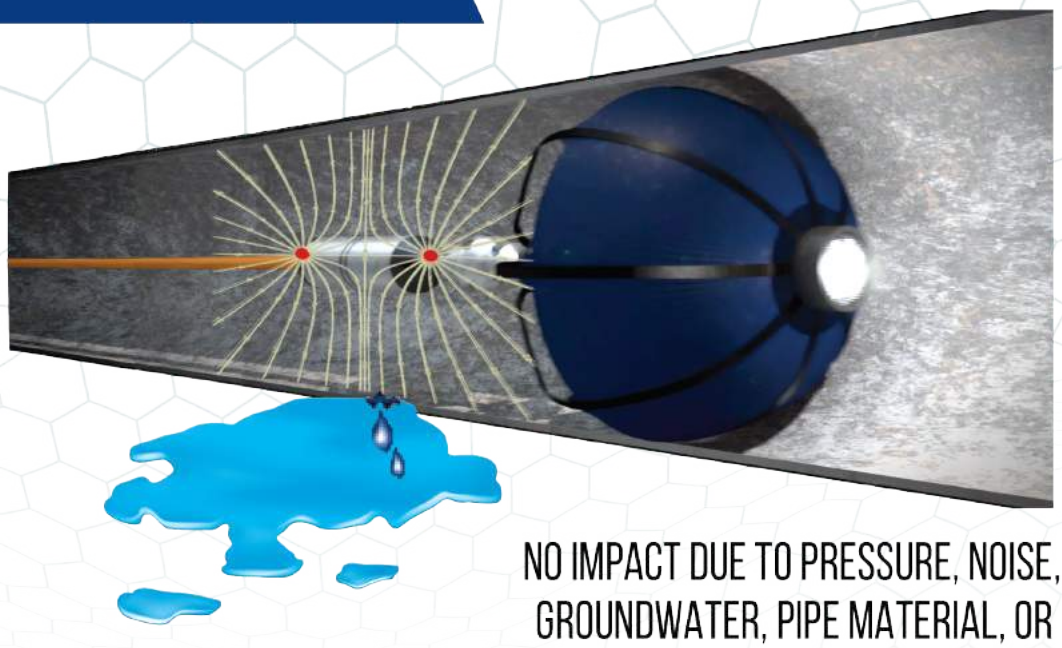
CCTV

# ELECTRO SCAN DELTA

CONDUCTIVITY

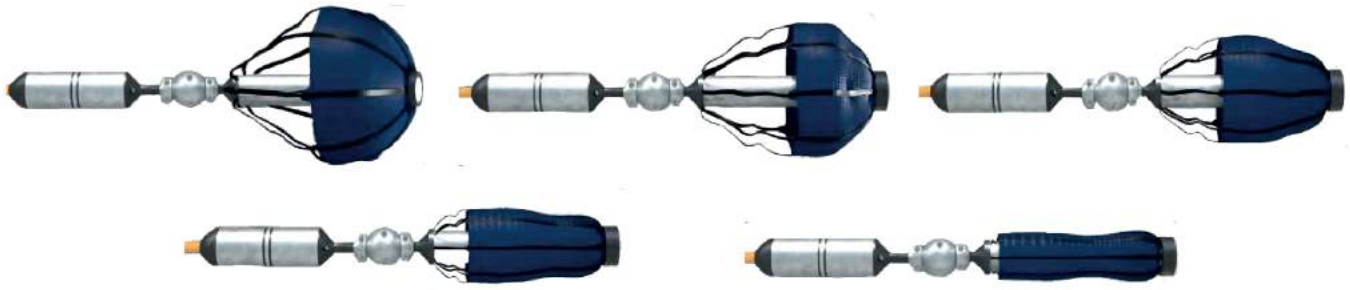
CCTV

ACOUSTIC*



NO IMPACT DUE TO PRESSURE, NOISE, GROUNDWATER, PIPE MATERIAL, OR CUSTOMER USAGE.

| Condition | Performance |
|---|---|
| Features | Low Voltage Conductivity FELL, CCTV, Acoustic Hydrophone, Pressure Sensor |
| Pipe Diameters | 3-60 inches (76-1500mm) |
| Pressure | ZERO to 12 bar (174 psi) |
| Temperatures | 41-86° F / 5-30° C |
| Common Launch Points | Air Release Valves, Blow Off Valves, Gate Valves, Hot Taps, Hydrants, and Meters |
| Flow Rate | Min. Flow Rate for Hydrochute Propulsion is 0.3m/sec. Pull-Through able to handle NO FLOW conditions. |
| Pricing | Per Day or Per Meter Based on Project Size, Access Difficulty, Insertion Points, Diameters, and Traffic Control |
| Pipe Lengths Per Survey | 1km Recommended for CCTV. Up to 2km with specialised equipment. |
| Average Production | 1-2 Pipe Sections per Day |



* Integrated Acoustic lets utilities compare results with Conductivity, revealing what they are 'not' hearing

# ELECTRO SCAN TRIDENT

**Pressurized Water Main Leak Detection.**
**Finding & Measuring Leaks in GPM or LPS.**

CONDUCTIVITY

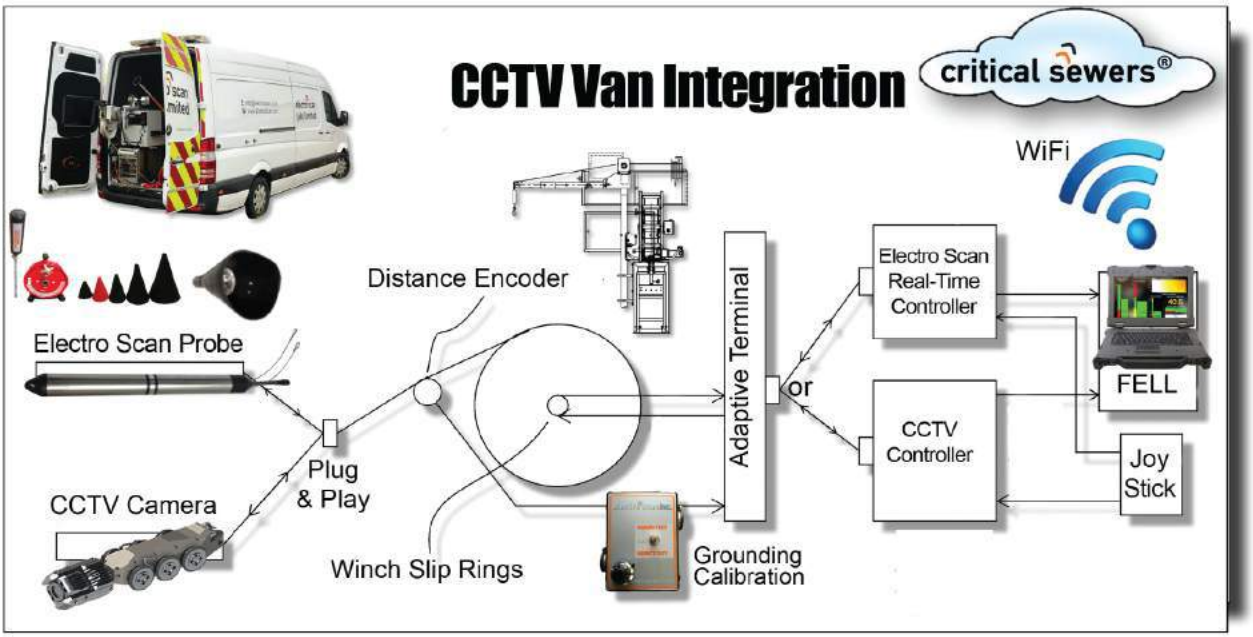
CCTV


| Condition | Performance |
|---|---|
| Probe Sensors | Low Voltage Conductivity FELL and CCTV |
| Pipe Diameters | 4-10 inches (100-255mm) |
| Pressure | 0 to 175 psi (12 bar) |
| Temperatures | 5-30°C, 41-86°F |
| Flow Rate | Push Cable able to handle flow or no-flow conditions |
| Pricing | Per Day or Per Meter Based on Total Project Size |
| Launch Points | Hydrants, Air Release Valves, Blow Off Valves, Gate Valves, Hot Taps, Meters |
| Pipe Length Per Survey | Up to 400ft (120m) in either direction from access |
| Construction | High impact ABS & powder-coated, zinc-plated mild steel |
| Dimensions (Length x Width) | 5 inches x 1.6 inches |
| Camera Features | Display: 10.1", 1280 x 800 HD color TFT<br>Storage: Internal 128Gb, USB flash storage supported<br>Power Options: Mains Input (100-240 VAC), DC Output (16 VDC) or Built-In Battery (4S2P)<br>Focal Range: 10mm to ∞<br>Active Pixels: 768 x 492 (NTSC) / 765 x 582 (PAL)<br>LED Luminance: ≥ 208 Lumens<br>Resolution: ≥ 460 TVL |

# Upgrade Your Sewer CCTV Vans To Find Infiltration & Certifiy CIPP as Watertight

## ES-600 CCTV TRUCK INTEGRATION ES-670, ES-660, ES-650, ES-400

**Aries** **Cues** **IBAK** **Ipek** **Rausch** **Custom**

FEATURED CASE STUDIES

Australia
Germany
United States
United Kingdom
United Arab Emirates

# WHY CCTV CAMERAS CAN'T 'SEE' UNDERGROUND LEAKS AND CAN'T CERTIFY PIPES AS WATERTIGHT?

BREAKING NEWS

# Electro Scan Surpasses 2,500 Surveys of Cured-In-Place Pipe

# CIPP Lined Pipe Surveyed By Electro Scan (UK) Ltd.









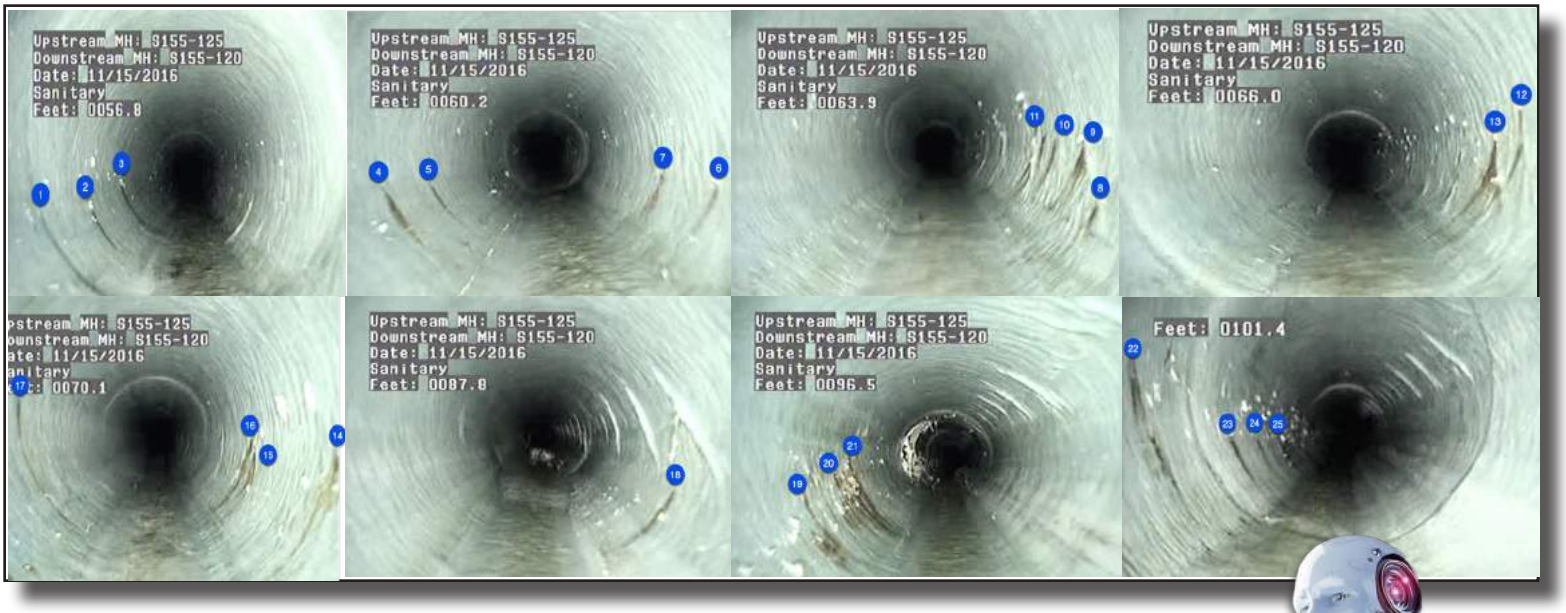
# APPROVED USING UK CCTV STANDARDS

UNFORTUNATE FINDINGS

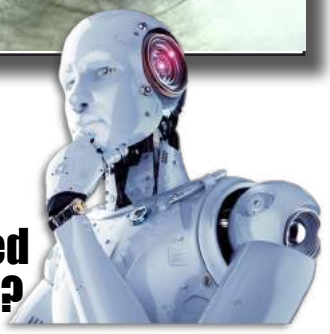
# CCTV ≠ WATERTIGHT!

## Role of Visual Inspection Reduced.

## CCTV Found to Routinely Miss Leaks in Pipes.




## Why Utilities Shift Away From CCTV* To Assess Underground Pipes?



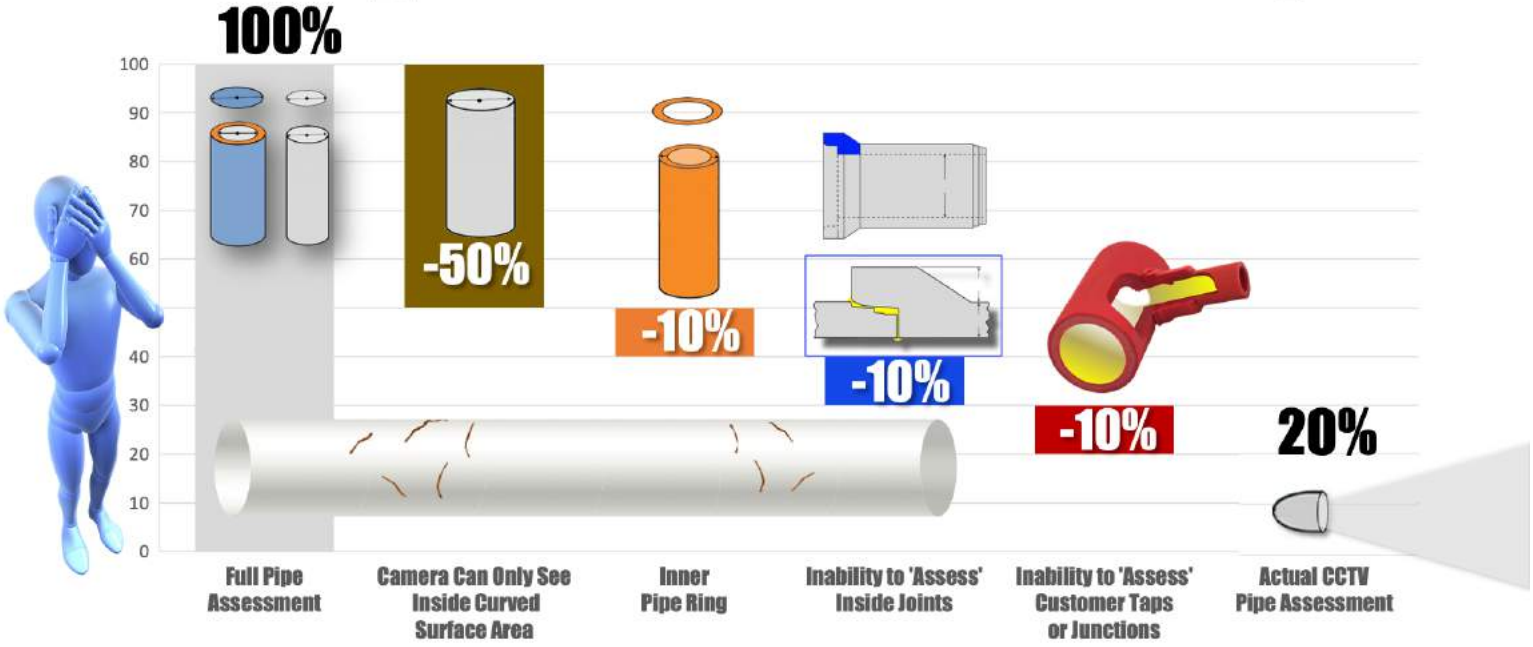
| | Solved By AI? |
|---|---|
| 1. CCTV Cameras Only Visually 'See' 20% of the Pipe. | NO |
| 2. CCTV Can't See Leaks Which Are Leading Cause of Sinkholes. | NO |
| 3. CCTV Can't Quantify Leaks in Industry Standard Gallons per Minute. | NO |
| 4. Other Technologies More Accurate, Better for Repair Selection. | NO |
| 5. CCTV Can't Tell Whether Cracks Go Through a Pipe Wall. | NO |
| 6. CCTV Can't Tell Whether Joints Are Watertight. | NO |
| 7. CCTV Can't Verify Trenchless Repairs or Relined Pipes Are Watertight. | NO |
| 8. CCTV Not Able to Measure Pipe Wall Thickness or Corrosion. | NO |
| 9. CCTV Can't Tell If Connections Are Watertight, Before or After Repair. | NO |
| 10. High Costs Incurred to Bypass Pump Pipe Before Able to CCTV. | NO |

*** AI-CCTV unable to overcome weaknesses of visual inspection.**

# THE TOP TEN LIST

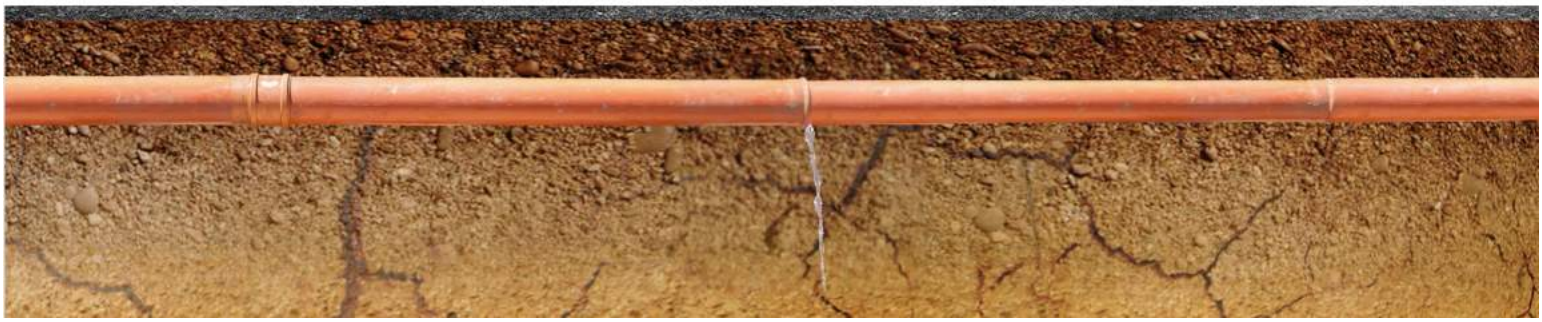
# What Prevents 'SEEING' Leaks to Locate & Quantify SEWER INFILTRATION?

## 10 VISUAL-BASED CCTV CAMERAS & AI ALGORTHMS Only 'Sees' 20% of a Pipe



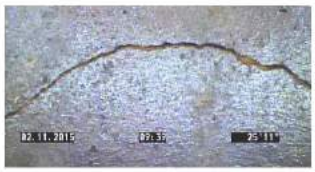

## 9 FALSE-POSITIVE CCTV READINGS MAY CONTRIBUTE TO Missed Sinkholes & Voids

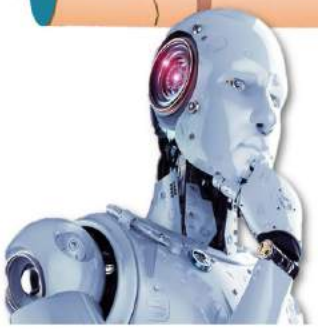
# 8 CURRENT WRc & NASSCO STANDARDS MAKE NO ATTEMPT TO Identify or Measure Leaks

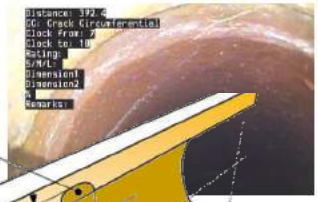
# 7 SUPERFICIAL CRACKS CALLED OUT BY CCTV, CANNOT CONFIRM IF Cracks Go Through Wall

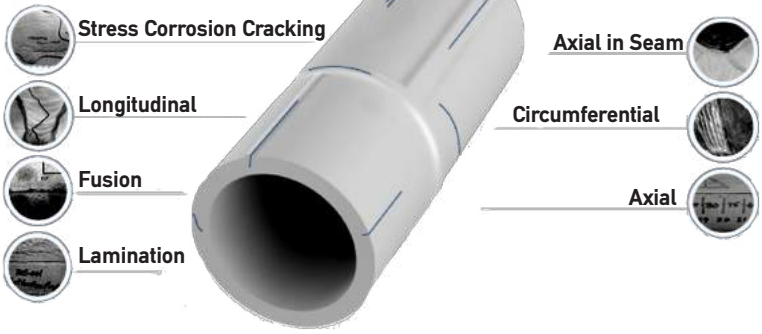
CCTV Cameras Can't Tell if Cracks or Bad Joints Leak Through Pipe Wall Leading to Poor Repair Decisions.





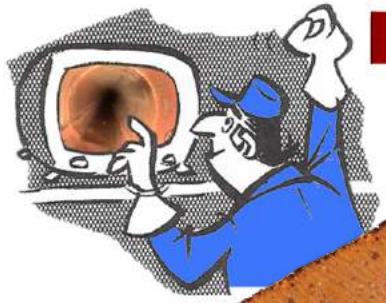
# AI CAN'T SEE WHAT CCTV CAN'T SEE!

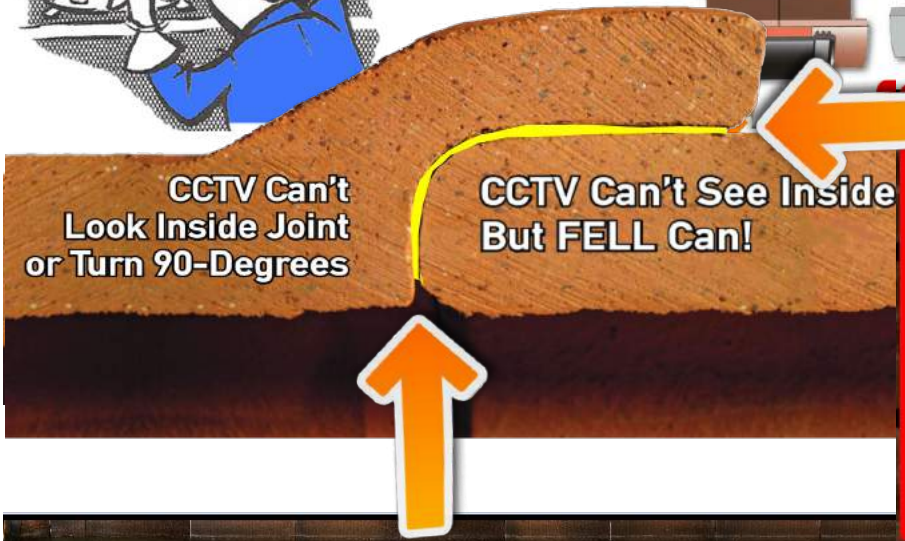


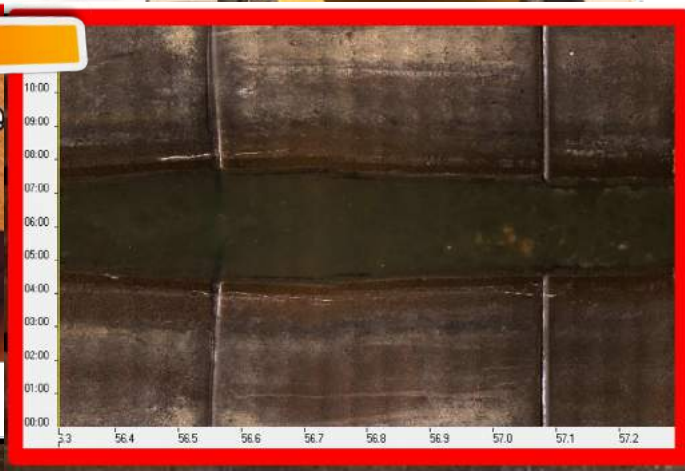


# 6 CAMERAS ARE NOT RECOMMENDED TO ACCEPT OR CERTIFY Post-Rehabilitation

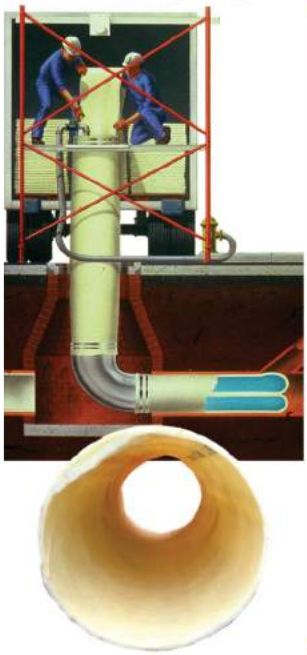
# 5 CCTV, VISUAL, OR AI INSPECTIONS CANNOT TELL WHETHER Joints Are Watertight?

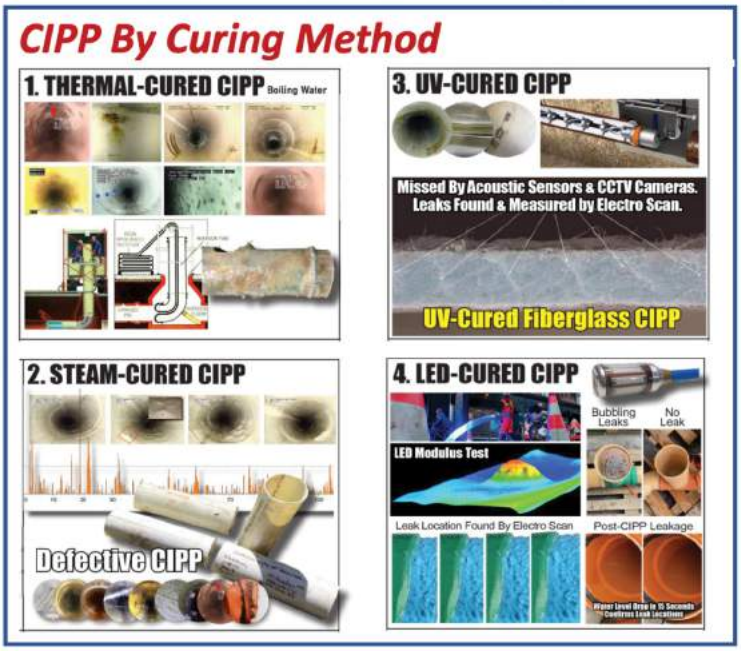





# 4 CCTV, VISUAL, OR AI INSPECTIONS CANNOT TELL WATER TIGHTNESS OF CURED-IN-PLACE PIPE LINER






# 3 CCTV CANNOT BE USED TO ASSESS THE INSIDE OF SEWER MAINS WHEN PIPES ARE Full of Water or Surcharged


## 2 FALSE-POSITIVE CCTV MAY INADVERTANTLY APPROVE

# Leaks in Plastic Pipe



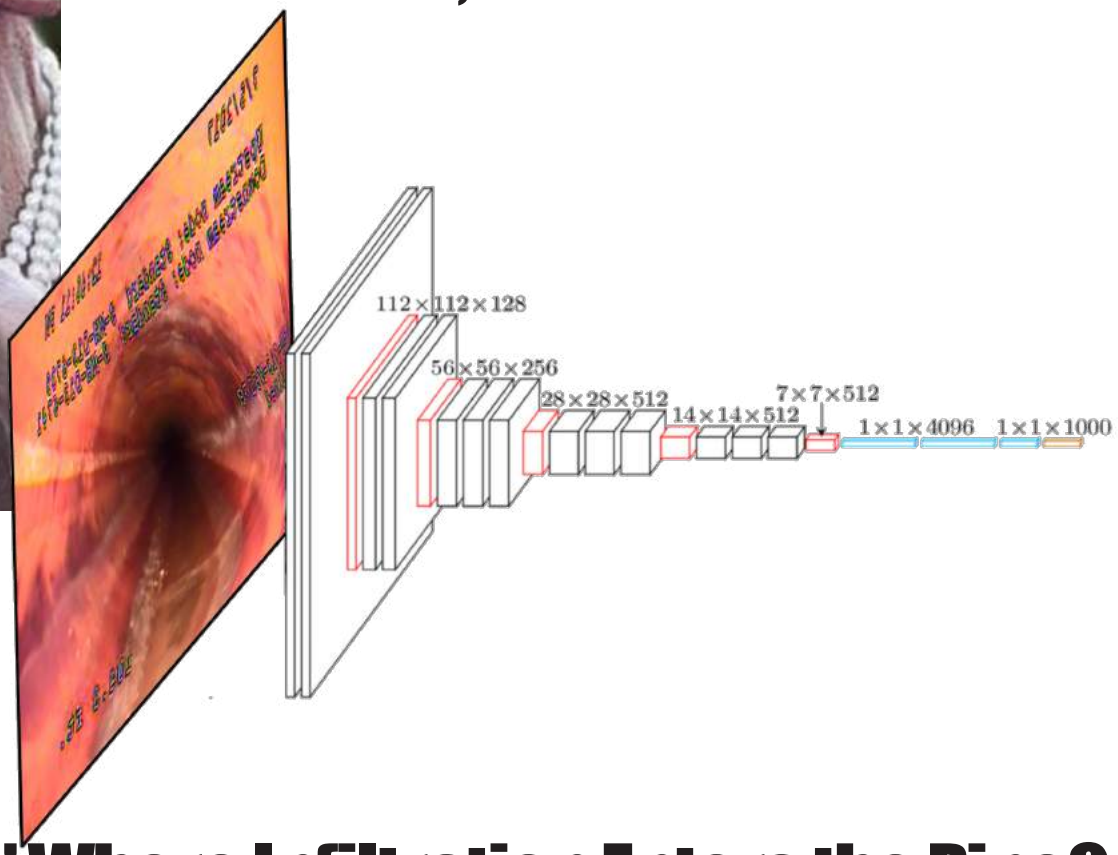
## 1 NOT POSSIBLE FOR CCTV OR AI TO TELL WHETHER

# Laterals Are Watertight?

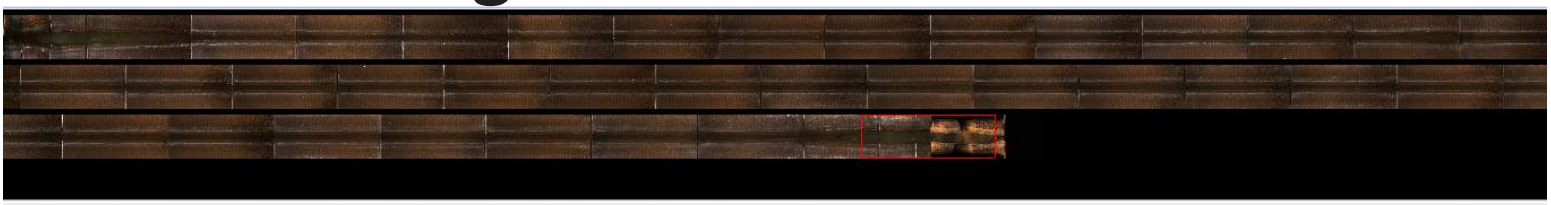

*Cameras Can't Assess What They Can't See.*

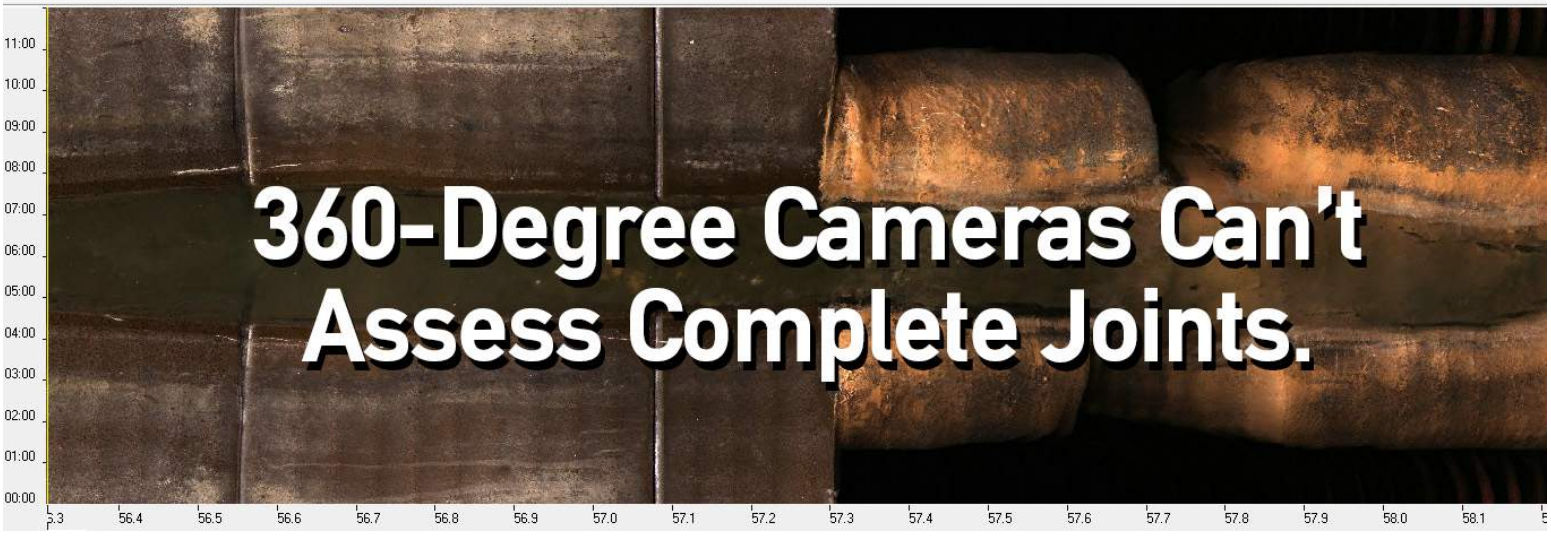
# AI-CCTV Now Viewed as Lipstick on a Pig.

## If CCTV CAN'T TELL IF A CRACK GOES THRU A PIPE WALL, AI-CCTV CAN'T EITHER.


## Can You 'See' Where Infiltration Enters the Pipe? Neither Can High Resolution Cameras or AI!





# Manual-Based CCTV

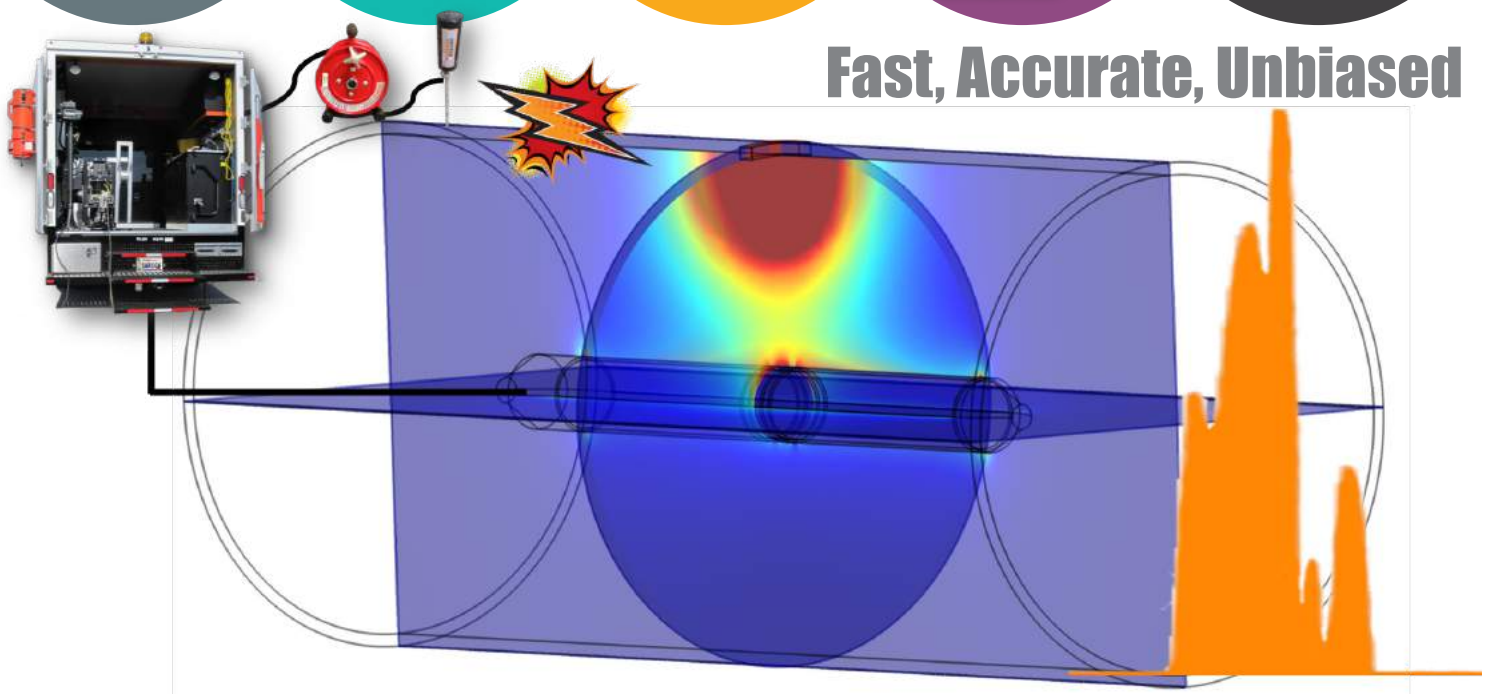
**Inaccurate, Error-Prone, Inconsistent, Not Repeatable, No Leakage Measurements, Can't 'See' Defects in CIPP Liners**

**FALSE-POSITIVE READINGS CALL 'BAD CIPP' AS 'GOOD.'**

# Machine-Based FELL

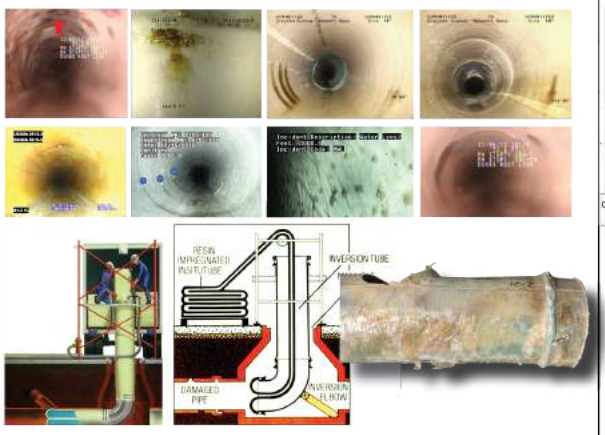
- Each defect width & intensity is measured in the field according to Ohm's Law.
- Area of each defect is point cloud defined & processed to eliminate redundant data.
- Area under the curve determined as part of final post-processing in the Cloud.
- Torricelli's Law assumes One Foot of Head Pressure & One Percent Pipe Gradient.
- GPM derived & displayed in Critical Sewers® cloud, including GPD/IDM.

**Fast, Accurate, Unbiased**

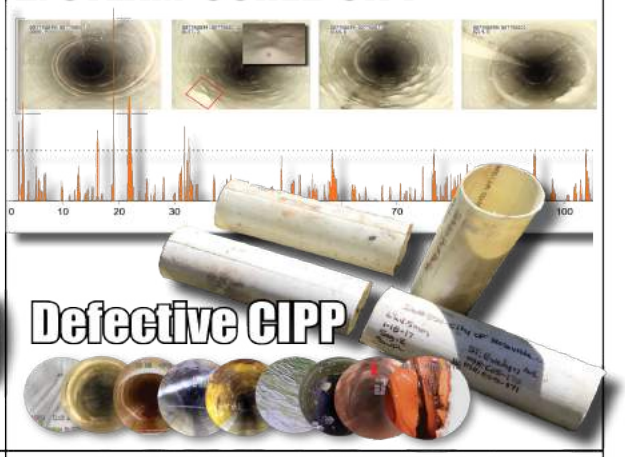


# BEWARE
# CCTV Tends to Approve All CIPP Regardless of Curing Method!

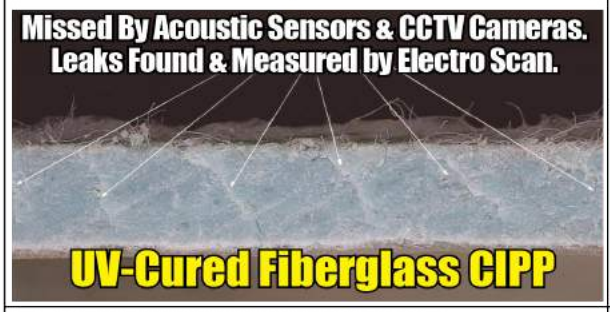
## 1. THERMAL-CURED CIPP Boiling Water



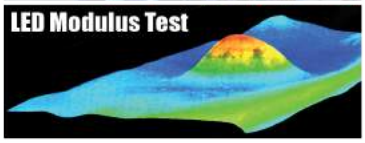

## 2. STEAM-CURED CIPP



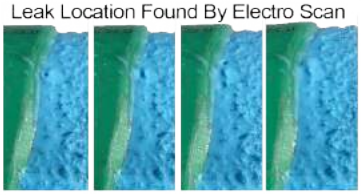

## 3. UV-CURED CIPP




## 4. LED-CURED CIPP

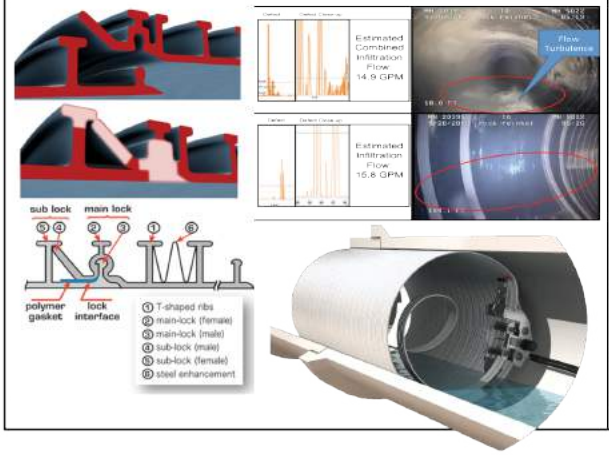








## 5. SPIRAL WOUND PIPE




## 6. SPRAY-IN-PLACE PIPE

NEW WAY

# Measure the Size of Hole


electroscaninc.

## Distributed Leaks

## Localised Leaks

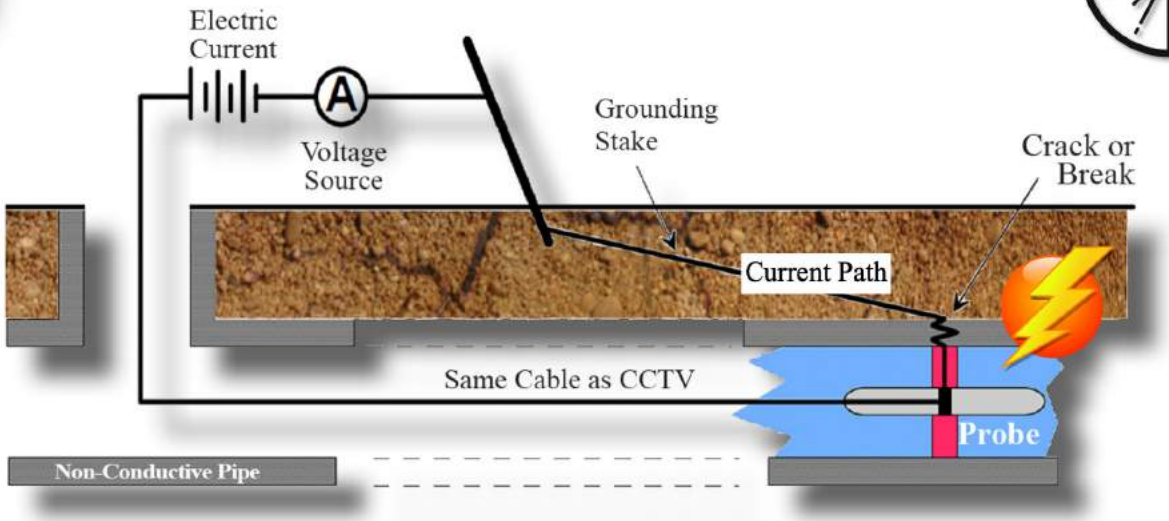
## NO IMPACT FROM...

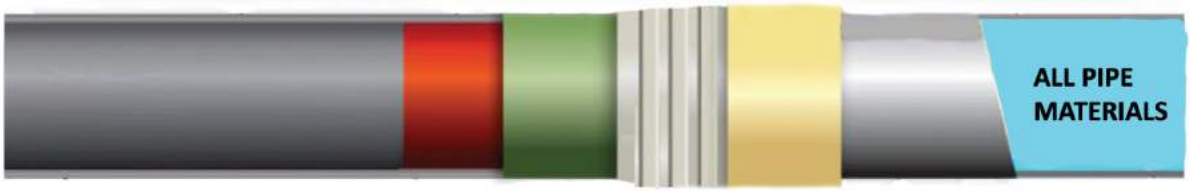
- GROUNDWATER
- GROUT
- DIAMETER
- CUSTOMER USE
- SOIL TYPES
- PIPE MATERIALS
- PIPE SHAPE
- TRENCH BEDDING
- SOIL RESISTVITIY
- EQUIPMENT BIAS
- LEAK LOCATION(s)
- FALSE READINGS

# NO MORE VISUAL GUESSWORK.

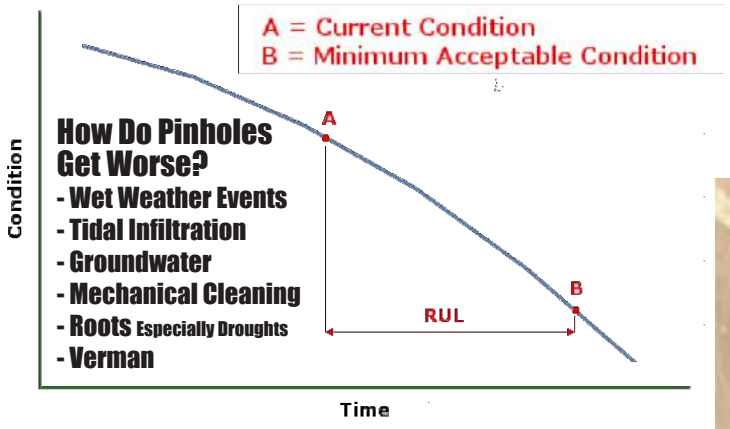
360°

## Science of Low Voltage Conductivity



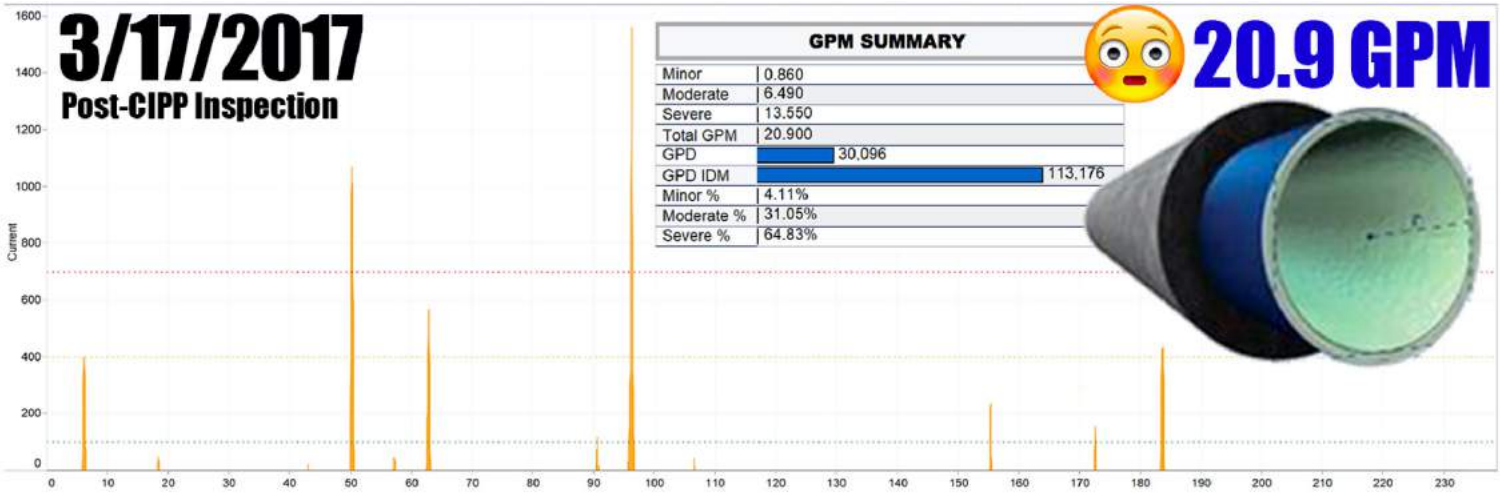



# Pinholes Get Worse, Not Better.

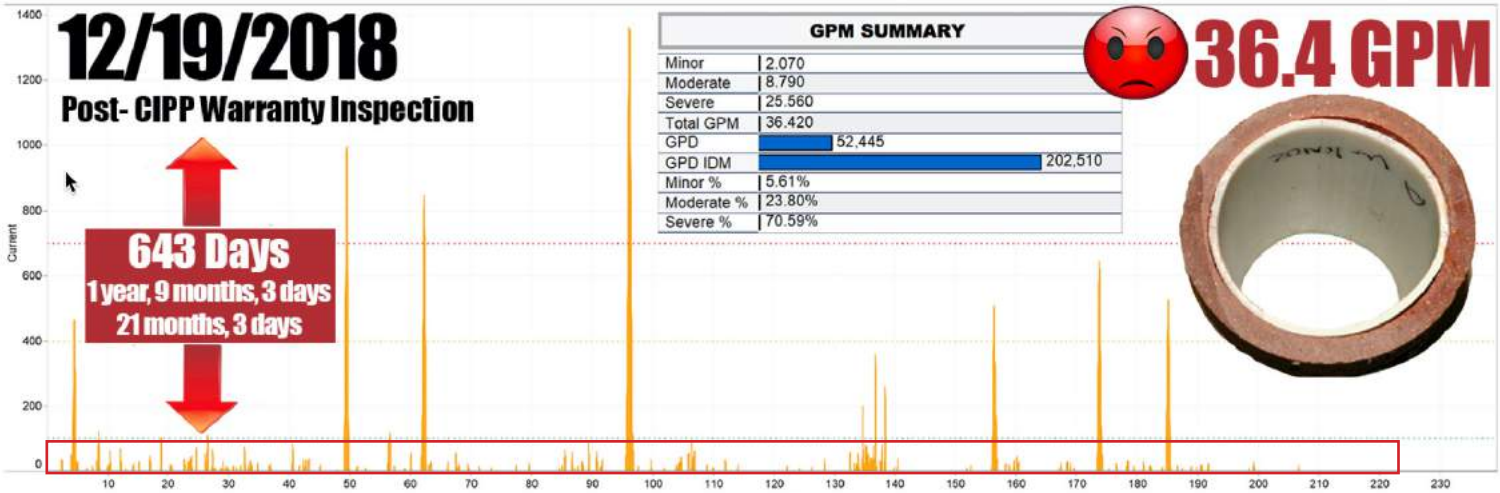




## POST-CIPP DAY 1




## POST-CIPP DAY 643



# Chuck Hansen

electroscaninc.

Moneta VENTURES HANSEN Investment Holdings, LLC

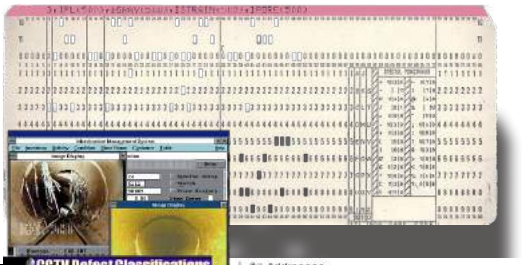
HANSEN

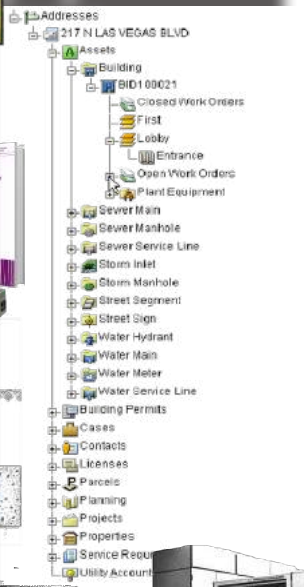
## HIGHLIGHTS

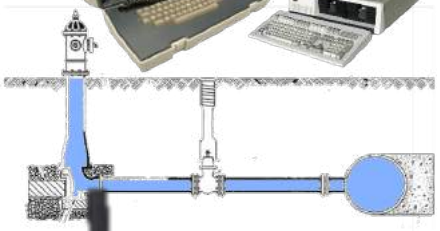
- +40 years in Water & Sewer Condition Assessment.
- Former Owner, HANSEN SOFTWARE (1980-2007).
- Multi-Patent Holder Condition Assessment Technology.
- Former Chair ASTM F36.2, Water & Sewer Inspection.
- ESG / Cleantech Private Equity Investor.
- Only Leak Detection Provider Able to Test Pipes in Pressurized & Gravity Pipelines.
- Current Member, AWWA Water Distribution Committee.

# +40TH ANNIVERSARY

## 1980



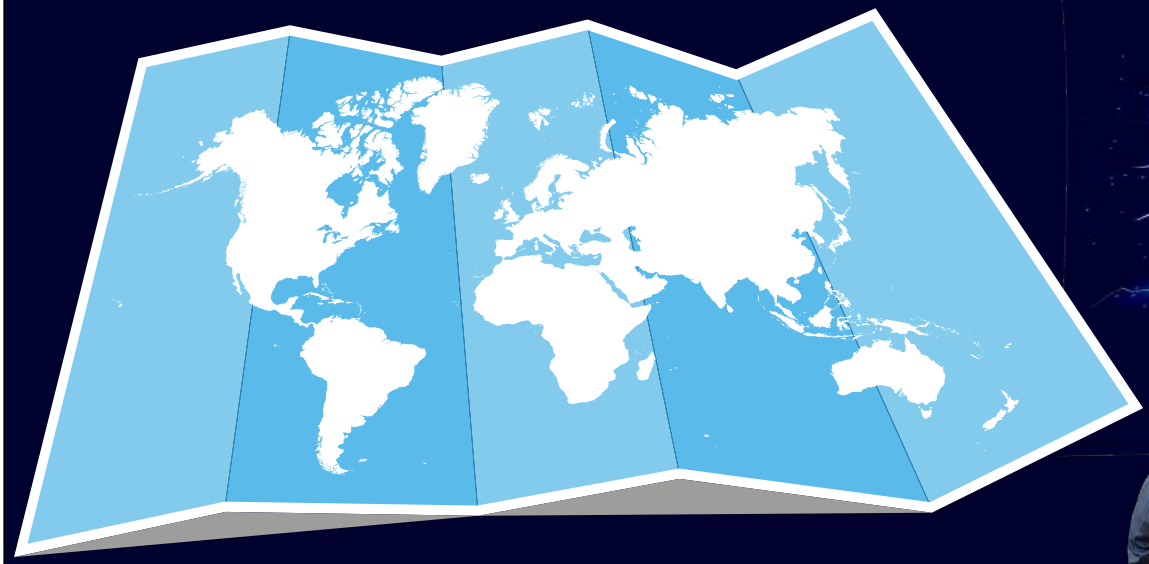





## 2023

# Accurate, Fast, Repeatable



SALES

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SERVICES

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## Worldwide

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