

# THE PROBLEMS

## THAT HAVE YOU FEELING POWERLESS

**Face it ...** Downhole mechanical problems like tubing leaks and pump failures are going to shut down your production at some point.

**A survey of 32,000+ producing wells** in the U.S. found that corrosion pitting, rodwear and wall loss are the major causes of tubing failure. But rodware is especially frustrating since 70% of all U.S. wells are subject to it and conventional test methods often overlook it.

- **Tubing leaks account for 42% of all well failures.**
- **81% of tubing failures are due to corrosion pitting and rodwear.**
- **More than 70% of America's producing wells suffer rodwear, which often goes undetected by traditional means.**

**The conventional ALTERNATIVES that don't meet all your NEEDS.**

Different types of tubing defects require different forms of testing. But no single method widely used in the field measures ALL major defects.

**Hydrostatic or Pressure Testing** Locates existing holes, but can not measure wall thickness. There either is or isn't a leak in the tube, no in between.

**Caliper Testing** Estimates internal but not external wall loss, and has difficulty measuring depth of pits, especially where scale or paraffin are present.

**Traditional Rack** Inspections Evaluate each individual tube but provide no positional information to help cure the problem.

No single form of testing can provide a true picture of the problem. But using several methods is very costly, and operating expenses versus production decline curves are facts of life.

Costly "laydown" techniques reveal the condition of each tubing joint but not where wear and corrosion occur in the well. Pressure testing isolates the failure now, but what about marginal tubing that will fail later?

If you had that kind of information you could prevent needless workovers, eliminate future problems and reduce your operation costs.



# THE SOLUTION

## THE STATE OF THE ART COMPUTERIZED ARTIS-4 T.T.I.S.

**OCS utilizes state of the art Computerized Artis-4 T.T.I.S.** Our Inspection Technology with a state of the art wellhead inspection system that provides the following benefits:

- Can detect localized wall loss such as large holes, pitting and corrosion/erosion
- 100% non-contact no shoes
- Electromagnetic Technology
- 360 Degree coverage
- Designed to detect lengthy longitudinal areas such as rod wear
- T.T.I.S. is designed to inspect for Longitudinal Thru-Wall Splits/Holes

