

Production Data **Water Analysis** **Pipe Analysis**

Inlet Conditions

Temperature	95 °F	Pressure	1000 psia
H ₂ S	5 psia	Acetate	0 ppm
CO ₂	10 psia	HCO ₃	0 ppm
Ionic Strength	0 M	Cl ⁻	150000 ppm
Sulfur	<input type="checkbox"/>	Oxygen	200 ppb

Operational Parameters

Service Life	5 yrs	Method of Inhibition	No Treatment
Allowance	0.5 mils	Inhibition Efficiency	None (<25%)
Measured pH	7	<input type="checkbox"/> Use Measured pH	<input type="checkbox"/> Glycol Injection

System Water

Liquid Fraction	= 0.14
Liquid Water(bbl/MMscf)	= 0.02
Vapor Fraction	= 0.86

Results

Calc. pH = 4.00
Cor.Index(mpy)= 10.55
Dew Point= 100.0°F

The specified corrosion allowance translates to a corrosion rate less than the predicted corrosion rate. Hence the projected life of the steel will be less than the desired service life.

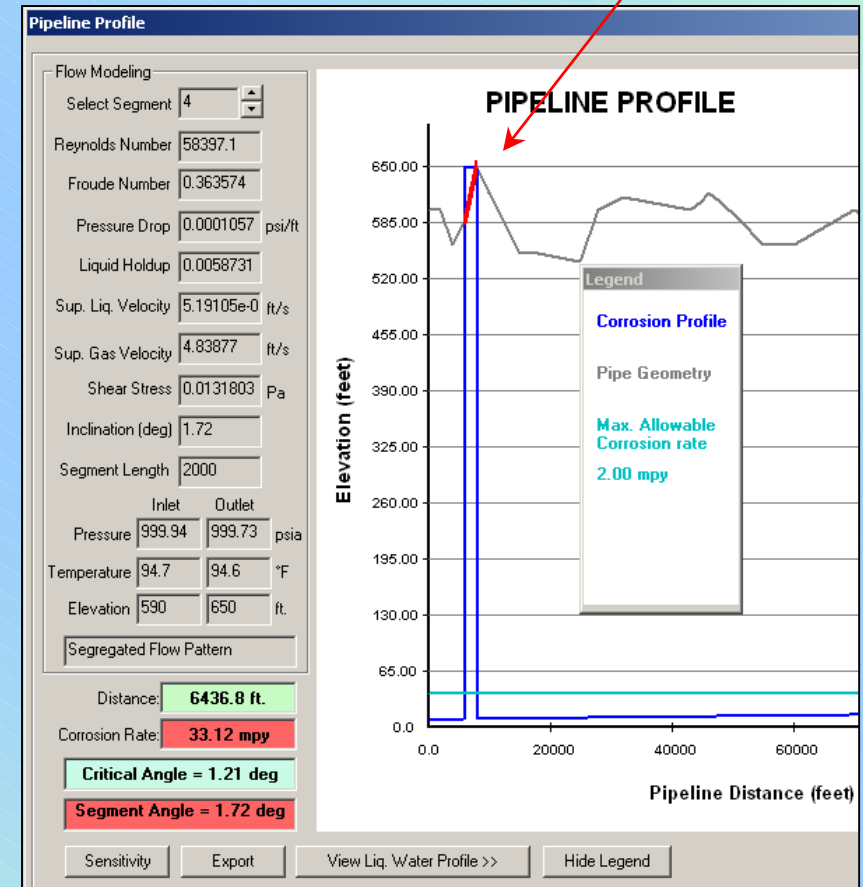
User Notes: Add comments here ...

For Help, press F1

- Dynamically generate corrosion and water condensation distribution profiles
- Analyze Corrosion Rates and water holdup at any point in a gas transmission piping system at a glance (ICDA)
- Identify hotspots in your piping system.
- Automatically convert between Unit Systems
- Evaluate Economics of Corrosion Easily
- Ease of converting data from Field Reports
- Export detailed data set to MS-Excel
- Plot and Print Charts and Reports

Determine water and glycol phase behavior and the effects of glycol-water mixture in the system

Instantaneous Bulk pH, Corrosion Index and System Dew Point Calculation



FEATURES & BENEFITS

- Perform ICDA analysis for gas transmission pipelines through hilly terrain to identify the problem zones and view predicted corrosion rate profile throughout the pipeline.
- Evaluate various Glycol injection scenarios and view its corrosion inhibition tendencies.
- State-of-the-art pH computation module that accounts for the effects of over 16 different anion and cation species.
- Ability to accurately model momentum transfer effects (flow regimes, void fractions, pressure drops and shear stresses) en-route to improved corrosion prediction
- Ability to accurately determine scaling effects due to formation of Iron carbonate and Iron sulfide scales as a function of temperature and pH
- Improved rules to account for variation of water content in oil and gas systems (production and transmission)
- Ability to account for effects of Oxygen, Chlorides and Sulfur on CO₂ - H₂S corrosion.

HIGHLIGHTS

- State-of-the-art interface (XP/2000 compatible) for enhanced efficacy and ease of use
- Enhanced, User friendly and Context Sensitive Help System
- Report generation module
- Comprehensive analysis based on extensive lab data, literature and experience
- Complex corrosion prediction and assessment tasks accomplished in minutes
- Ease of Pipeline Profiling, identifying problem zones, and viewing corrosion severity.

- **View Water Holdup profile**
- **View Effects of Glycol Injection**
- **View uninhibited and inhibited corrosion rates**
- **Profile an entire Pipe segment for analyzing water condensation in the line.**
- **Analyze effects of quality and amount of Glycol Injection on Corrosion Inhibition**

