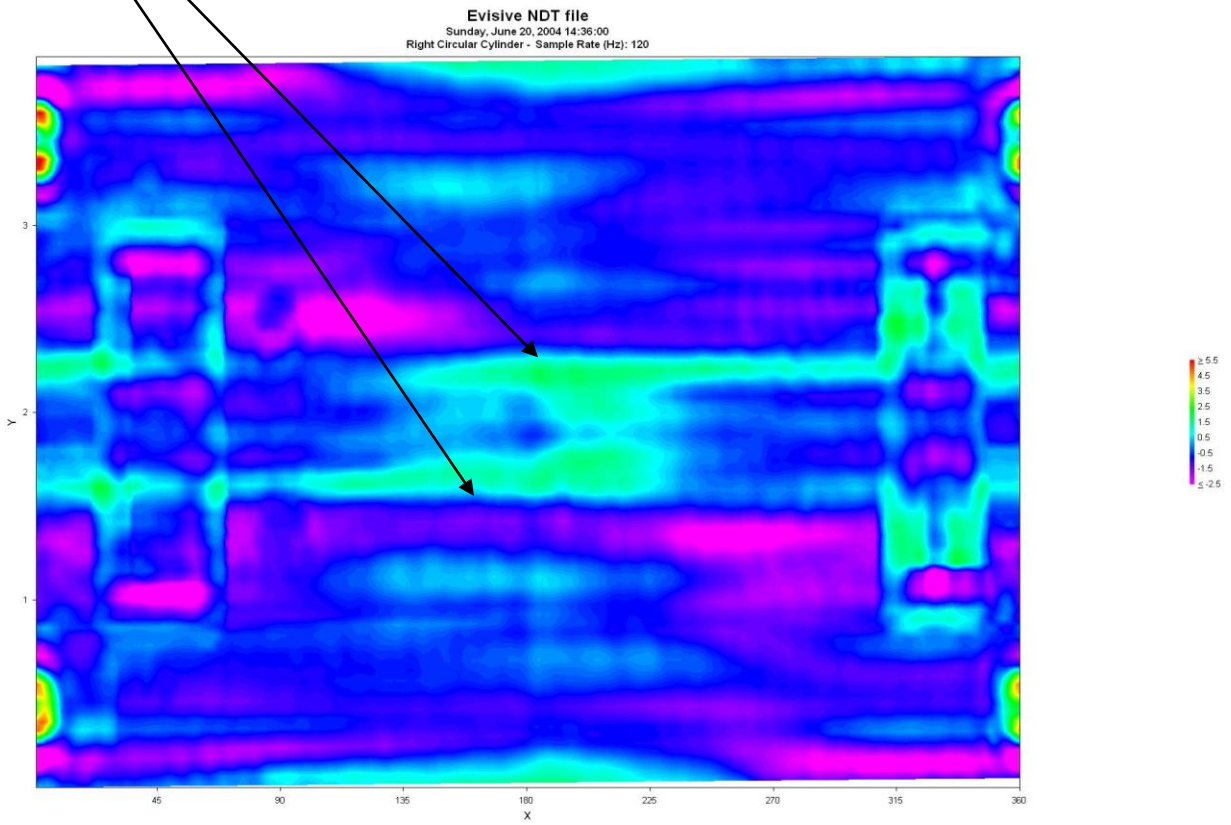
HDPE Pipe Electro-Fusion Coupling Inspection and Imaging Using Evisive Scan™ Technology

Electro-Fusion Coupling

4” Polyethylene Coupling and Piping

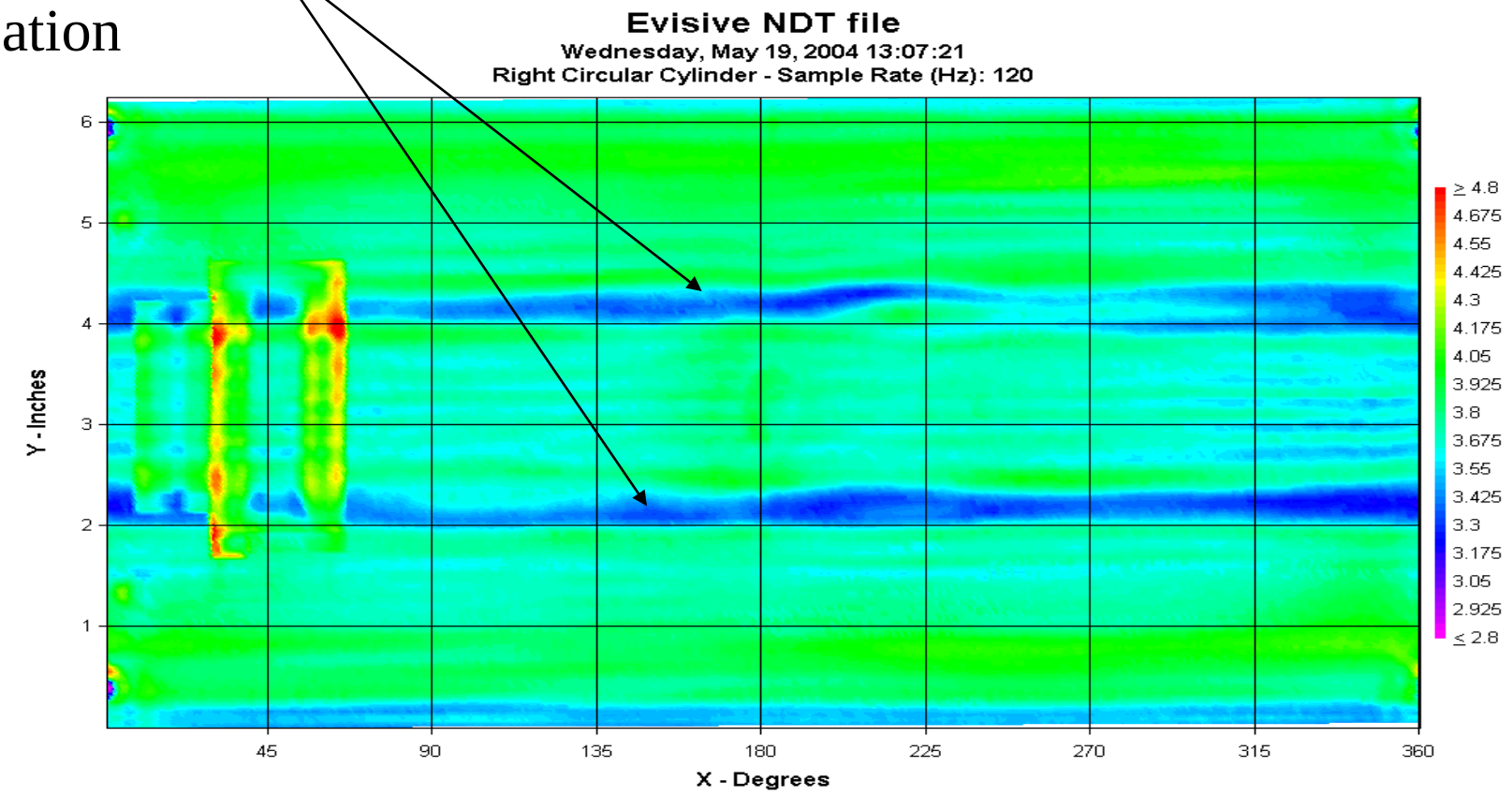
4 Inch Electro-Fusion Coupling Proper Insertion

Edges of pipe shown at proper location



4 Inch Electro-Fusion Coupling Poor Insertion

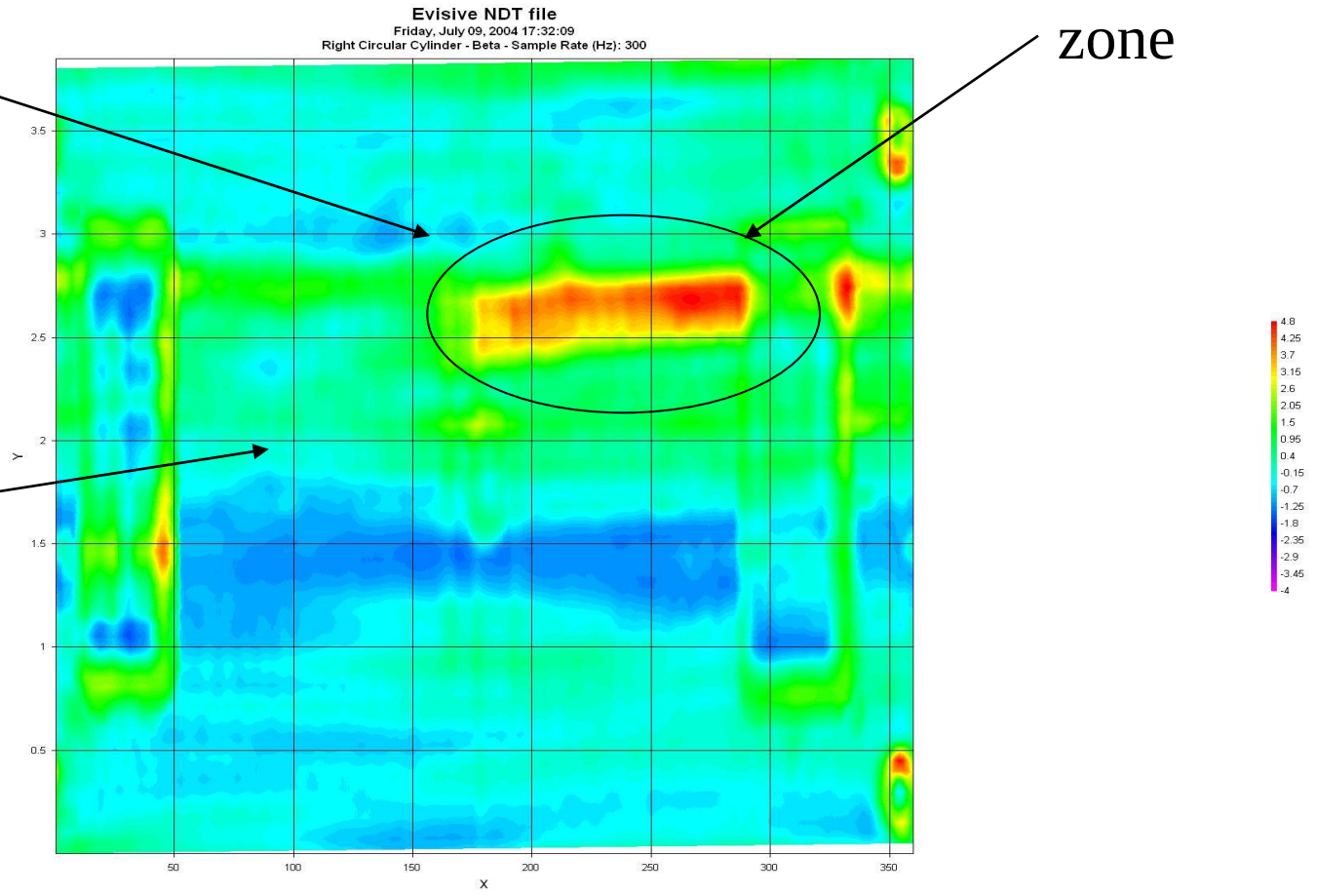
Edges of pipe not at proper location



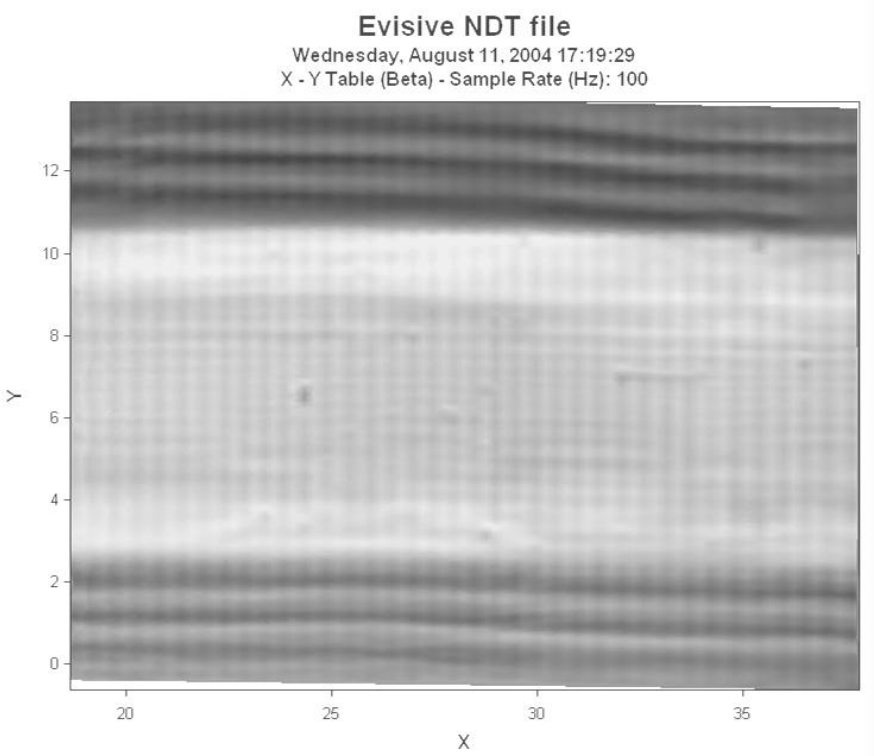
4 Inch Electro-Fusion Coupling Poor Insertion w/Melting

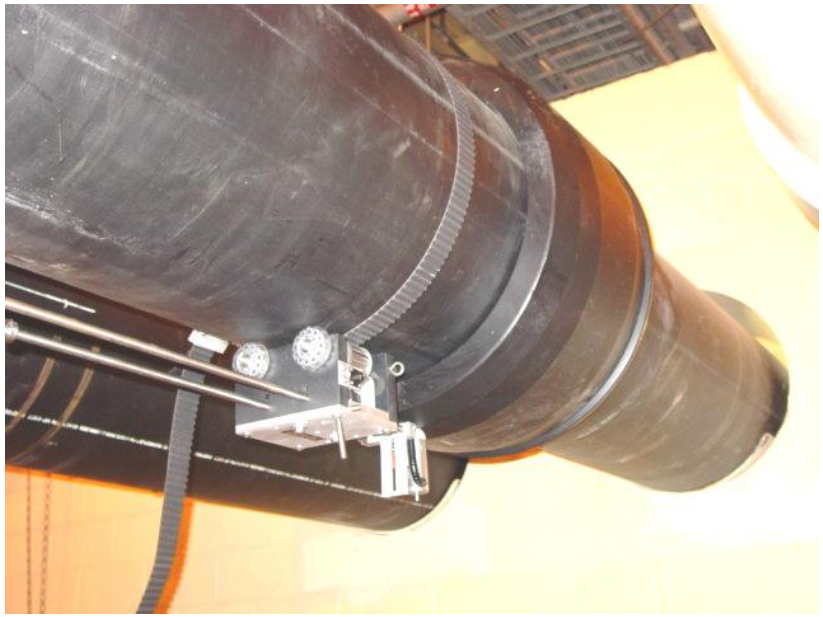
Edge of pipe at wrong location

Edge of pipe at correct location



Melt zone

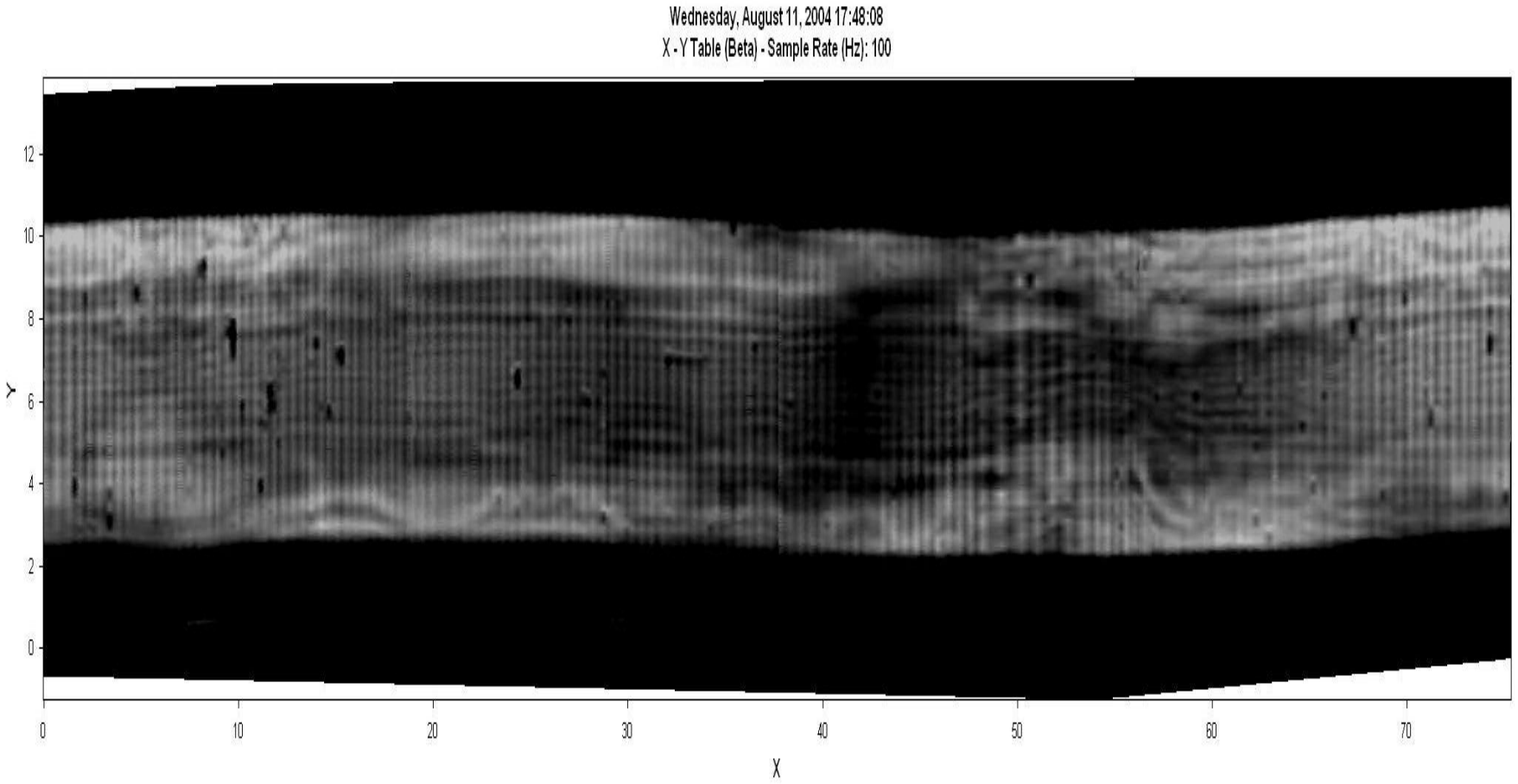




The scan image at left represents the inspection results for the electro-fusion coupling shown at right. These couplings achieve fusion with the pipe ends by resistance heating caused by passing a precise amount of power through wires embedded in the coupling body. Note the small indication near X=24, Y=6.5. This indication was caused by a small air bubble trapped in the molten plastic, and does not represent a rejectable defect in the electro-fusion coupling installation.

24 Inch PE Pipe Coupling Field Scan

24 Inch PE Pipe Coupling Field Scan



Defense and Aerospace Applications

Advanced materials require advanced NDE methods.

Let Evisive, Inc. help you push your envelope.