Wellhead Safety for Non-wellhead Professionals

Presented by

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GE Oil & Gas
Pressure Control
Agenda

- The GE acquisition
- Wellhead/Christmas tree safety
  - Customer-initiated
  - Gate valves
  - Actuators
  - Exposed wellhead housings
  - Hidden pressures
- Branch information
  - Tyler
  - Shreveport
Acquisition by GE Oil & Gas
GE Acquisition

- WGPC is part of GE Oil & Gas, Drilling & Production
- Surface wellhead elements will merge
- Pressure Control management will remain
- Transition timeframe = 12 months
Wellhead/Christmas Tree Safety
Wellhead/Christmas Tree Tree Safety
Customer-initiated changes

- Stairs/ platforms
- Barricades
- Site security
Wellhead/Christmas Tree Safety
Model 1000 and 2200T Gate Valves

- Handwheel
- Body fittings
- Potential leaks
  - Bonnet/body
  - Stem
  - Fittings
Wellhead/Christmas Tree Safety

Body Fittings
Wellhead/Christmas Tree Safety

Actuators

- Pressure inlet
- Pressure relief valve
Wellhead/Christmas Tree Safety
Exposed wellhead housings

- Test or injection fittings
- Lockscrews
Wellhead/Christmas Tree Safety
Lockscrews
Wellhead/Christmas Tree Safety
Hidden pressure

VALVE REMOVAL PLUG

BACK PRESSURE VALVES
Wellhead/Christmas Tree Safety Valve Removal (VR) Plugs

- One-piece, solid for lower pressures
- Two-piece for higher pressures
Wellhead/Christmas Tree Safety
Valve Removal (VR) Plugs

- Warning tags
Wellhead/Christmas Tree Safety
Types of Back Pressure Valves

- **One-way Type H**
- **Two-way – Type H**
  - Phasing out. Recommended up to 10,000 psi
- **Two-way – Type HP**
  - New WGPC Proprietary design up to 20,000 psi

Also referred to as 2-way Check Valves
Branch Information
Service Branch — Tyler, TX

Capabilities:
• Equipment preparation & inventory management
• Assembly & hydrostatic testing to 30,000 psi
• Welding & painting
• Rental equipment/Frac equipment
• Crane truck service (24,700 lbs payload)
• Service tools, BPV Lubricators, and other service equipment
• 2 Super Service Trailers with 10K hydro test pumps
• 2 Field Greasing Units

Facility:
• Property 3 acres
• Office 6,300 sq.ft.
• Warehouse/Shop 37,700 sq.ft.

Personnel
• Service 10
• Total 29
• H2S certified personnel
Service Branch — Shreveport, LA

Capabilities:
- Equipment reparation & inventory management
- Assembly & hydrostatic testing to 30,000 PSI
- Painting
- Rental equipment/Frac equipment
- Crane truck service (32,220lbs payload)
- Service tools/BPV Lubricators

Facility:
- Property: 3 acres
- Office: 2,750 sq.ft.
- Warehouse/Shop: 32,065 sq.ft.

Personnel
- Service: 25
- Total: 51