Why Use Wellhead Protection?

With the emergence of horizontal drilling and multi-stage fracturing techniques in the shale regions, equipment is exposed to more abrasive sand and fluids than ever before.

Guardian isolation tools are the safest method for protecting all surface wellhead equipment.

High-pressure, high-volume well stimulation requires the best wellhead isolation equipment and experienced personnel to operate it. Wellhead isolation and protection tools shield the wellhead from higher pressures and abrasive materials which are being pumped during well stimulation operations.

Guardian isolation tools are the safest method for protecting all surface wellhead equipment.

Eliminate the need to kill the well.

The corrosive nature of the fluids and sand which flow through the wellhead not only reduce the life and efficiency of the equipment, but can create serious safety hazards if washouts occur during pumping.

Isolating your wellhead from these elements protects your well, your ancillary equipment, your people, and your profits by minimizing non-productive time and pressure-related incidents. Our tools allow you to frac directly through the existing wellhead (as seen above), eliminating the need to kill the well and reducing the possibility of valves failing during the operation due to sand and erosion.
In an industry where things are rarely simple, the concept and execution of wellhead isolation is, simply put, the most logical, cost-effective, and safest method for protecting your wellhead during high pressure stimulation operations.

Operators Achieve Operational and Financial Efficiencies with Guardian Stage Tools - Saving two days of NPT on a 3-Pad Well

Client: Leading Permian Operator
Location: Delaware Basin
Service: Replace Frac Stack Equipment with Guardian Frac Stage Tools

Synopsis:
- Guardian stage tools completed Frac operation in 20 days compared to 22 days with traditional Frac Stack
- Greasing time cut by 1.5 hours per day
  - Running stage tools allows for valve greasing to occur without shutting down the operation
  - Alternatively, high-pressured grease injection can reduce the greasing time but increase the cost of the frac stack
- NPT cut by 1.1 hours per day
  - Customer showed average of 270 hours of NPT/month with frac stacks - based on three (3) month stretch, with 20 frac stacks
  - After Guardian stage tools were brought on, the average dropped to 61 hours/month which was a reduction of 209 hours/month, a 77% reduction in NPT

- Frac Stack Up to 75% Higher Cost than Guardian Stage Tools
  - Guardian Stage Tool Cost
    - Single-day charge per well, NO additional maintenance charges
  - Traditional Frac Stack Costs
    - Frac stack rental rate per day
    - Valve rebuild charges
    - Greasing personnel and equipment
    - Repair and maintenance charges

Guardian Wellhead Protection & Rentals

Stage Tools
- Single screw injection tool inserts the main mandrel through the tree and into the wellhead bore
- Sealing occurs in the ID of the wellhead
- Full bore ID accommodates perforating guns and plugs without obstructions
- Can remain rigged up on the wellhead during entire frac job
- Adapts to any type wireline or coiled tubing connectors
You Require. We Respond.

**Casing Savers**
- Single or double piston hydraulic cylinder inserts the main mandrel through the tree and into the wellhead bore
- Sealing occurs in ID of the production casing
- Average installation or removal time: 45 minutes
- Can be installed or removed while under pressure, allowing the well to remain energized

**Rental Tools**
Renting your equipment and the qualified personnel to operate them from Guardian allows customers to focus on oil and gas production.

Guardian’s broad inventory of well intervention support equipment includes:
- Frac Stacks
- Thru-tubing Frac Stacks
- Ground Frac Missile Manifolds
- Man Lifts
- Hydraulic BOPs
- Flowback Manifolds and Plug Catchers
- API Spacer Spools, Double Stud Adapters
Tree Savers

- Double piston hydraulic cylinder inserts the main mandrel through the tree and into the wellhead bore and tubing hanger
- Sealing occurs in the ID of the production tubing
- Average installation or removal time: 30 minutes

Guardian’s Focus on Safety

At Guardian, safety is our top priority. Having an inherent familiarity with each aspect of wellhead isolation and the products we use gives the Guardian team an advantage when it comes to identifying and avoiding potential problems. Sometimes it’s something as simple as having master and safety valves hydraulically actuated and remotely operated from the truck to remove the hazard of personnel being at the wellhead during a stimulation procedure.

Guardian applies safety, health and environmental protection through the values we instill in our personnel, as well as our interaction with clients, suppliers and the public. This means compliance with all regulations, governmental legislations and clients’ mandates at every operation site; maintaining safety, health and environmental protection training and coaching programs for all personnel; and ensuring that both employees and suppliers comply with Guardian’s safety policy by making it an integral part of their work activities.
Greene’s Energy Group offers a range of services to the oil and gas industry. We are a completions and production-focused business servicing our Customers in the Permian Basin, South Texas and other serviceable locations.