

1637 44TH ST. W. WILLISTON, ND 58801 | WWW.NOS-LLC.COM (855) WELLHEAD





NORTHERN OILFIELD SERVICES provides integrated manufacturing, repair, remanufacture, and operational services for drilling equipment, oilfield wellhead equipment, and valves. With our large inventory of drilling equipment and professionally trained technicians, we can service all major brands of wellhead equipment either at your site or at our facility.

However, having the best equipment at the wellhead is only half of the equation. Your equipment is used for days on end, it needs to be maintained to the proper standards for safety, efficiency, and ease of operation. Hiring Northern Oilfield Services to service, supply, refurbish, inspect, and deliver your equipment is a must in order to ensure safe, cost-effective operations.

OVER 100
YEARS
COMBINED
MANAGEMENT
EXPERIENCE



DRILLING EQUIPMENT

RENTAL AND SALES SERVICES

At NORTHERN OILFIELD SERVICES, you can choose to rent or buy your equipment from our expansive inventory. We provide equipment such as:

- Up to 10,000 PSI Zipper Manifolds
- Up to 10,000 PSI Drill Out Trees
 Spools, DSA's, and VBR's
- Drilling-Rig-Rental Support
 Both manual and hydraulic Packages

- Up to 10,000 PSI Frac Trees Tubing Head Assemblies
 - Casing Head Assemblies
 - Production Tree Assemblies

 - valves

With our engineering experience and professional supplier relationships, we can create a custom plan that will fit your operation's needs. At Northern Oilfield Services, we can help set you up for success from the time drilling begins to when your product hits the pipeline. Learn more by visiting our website NOS-LLC.com!

CUSTOM SERVICES

TAILORED TO YOUR OPERATION

Our team at **NORTHERN OILFIELD SERVICES** works hard to help you create the perfect wellhead operation. Our specialty services include:

- · Torque and Tests
- Frac Installations
- · Valve Repairs and Other Valve Services
- Specialized Equipment Repair and

Maintenance

- Wellhead Field Services
- Engineering and Design Services
- · Casing Cutting
- Well Maintenance Programs

And much more upon request!





Our in-field maintenance programs at Northern Oilfield Services are the most effective protection against equipment downtime that can end up being very costly. Our seasonal in-field inspections & valve greasing increases the life cycle of all valves. Northern Oilfield Services' special blend, low-temp grease keeps valves functioning — regardless of what the weather looks like.

VALVE PRODUCTS

171AG Graphite Grease is formulated for use as a valve-body-fill grease on gate valves, wellheads, or frac valves while in service or in storage. It is pumpable to -25°F(-32°C)

187 Molylube is a multipurpose, synthetic grease that meets the demands of heavy-duty equipment under extreme conditions. Temp. Range: -50°F to >400°F (-45°C to >204°C)

610 Valve Arctic Seal is an excellent cold weather valve lubricant and sealant made with

Liquilon®. Temp. Range: -30°F to >450°F (-34°C to >232°C)

622 is an excellent, synthetic valve lubricant and sealant that resists hydrogen sulfide, crude oil, oilfield brine, diesel, and seawater. Service Temp. Range: -60° F to $>400^{\circ}$ F (-51° C to $>204^{\circ}$ C)

NORTHERN OILFIELD SERVICES



SALES. SERVICE. REFURBISH. INSPECT.

You can extend the life of your valves and find issues that can be quickly resolved for pennies on the dollar compared to the cost of a new valve. This helps you take care of things before they turn into expensive downtime due to the cost of change out and loss of production.

When there is a problem, quickly resolve it with our replacement and repair program. If the valve is not functioning correctly, then we install a new one and take the old one out to be refurbished. The refurbished piece is set aside for you until your equipment needs it later on. You can also track your equipment with services such as well inventory. This is where our technicians will confirm and document the equipment you have on site — providing you with a record of your surface equipment for easy reference later on

WHEN IT COMES TO REPAIRS. YOU HAVE OPTIONS.

Here at Northern Oilfield Services, we offer both:

- OEM Equipment
- NOS Custom Equipment

ADDITIONAL SERVICES INCLUDE

- 1. Warehousing & Inventory Control
- 2. Repair & Refurbish Equipment
- 3. Iron Rental
- 4. Wellhead & Valves Service & Sales

There is also no need to worry about keeping your job site looking great because, at Northern Oilfield Services, we can wash and paint your equipment as well.

Take control of your operation with our beneficial and efficient services to make the most of your wellhead.

RECORDING EQUIPMENT

SPECIFICATIONS:

Pressure rating of up to 15,000 PSI with temperature range capabilities from -4 to 122° F.

APPLICATIONS:

- Crystal Engineering® Digital Gauges 32,000 data points
- · Dead weight
- · Barton® recorders
- Flow meters
- Multiple temperatures & pressures at the same time

At Northern Oilfield Services, we provide technology to more accurately record pressure, temperatures, volume, and flow rate within a 0.01% accuracy. Using this technology can also help you more easily distribute and analyze testing results.



TORQUE APPLICATION & INSPECTION

SPECIFICATIONS:

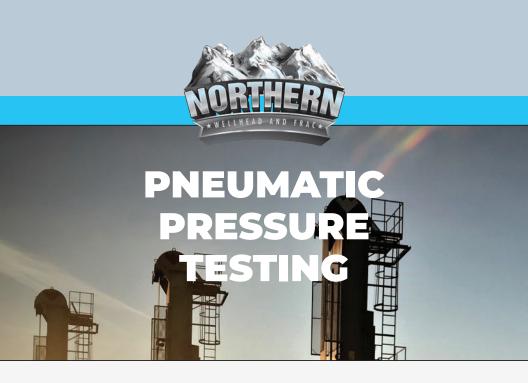
Sizes range from $\frac{1}{4}$ inch to 3- $\frac{3}{8}$ inches with widths as small as $\frac{3}{4}$ inches for low clearance

APPLICATIONS:

- Hydraulic, Pneumatic, Electric, and Manual Torque Tool Application
- Lubrication Options (Decrease necessary ft•lbs of torque and bolt stress)
- Flange Management
- Lok-Rite Back-Up Tools For Reduced Pinch Points

Don't shut a job down over a single bolt. Inspect, verify, and record using job specific torque applications, recording, and flange management.





SPECIFICATIONS:

- Pressure rating of 5000 PSI
- Volumes of 10,000 SCF
- Flow rates of 22 CFM
- Inert purging (Nitrogen)
- · Pipeline product displacement
- Leak detection
- Commissioning and startup

At Northern Oilfield Services, we provide a safe and inert gas application for you to test the functionality of your equipment without the hassle of fluid purge and disposal. This helps to reduce the time between inspections and bring the project online.

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SPECIFICATIONS:

Pressure rating of 15,000 PSI with a max flow rates of 52 gpm

APPLICATIONS:

- New facility and existing equipment
- Backside frac protection
- Production equipment
- Winterization (Glycol and Methanol)

Easily verify pressure capacity and functionality with our hydrostatic pressure testing equipment here at Northern Oilfield Services. You can be certain your equipment is ready and operating at peak performance.





TRIR is at zero

70,000+ hours without a recordable incident

Zero safety violations in the entire lifetime of the company

API 6 Program compliant "In Progress"

Zero vehicle collisions

In-house PEC Safeland & Bakken-specific certified trainer

Our Goal is "Mission Zero" when it comes to safety

In-house training Offerings (Offered to all Customers at no charge)

AED

PEC Safeland

· Offshore · Basic Fork Lift

Bakken Mod · Basic Crane

H2S Clear · Defensive Driving

CPR First aid



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MAKE YOUR WELLHEAD AS SAFE AS POSSIBLE

The MonoRail system here at Northern Oilfield Services is a safer, more convenient option for a fracing fluid delivery system. Previous iterations of the conventional frac iron involved more connection points that had the opportunity to fail, had connections that needed to be adjusted with a sledgehammer, and were much more expensive to own and maintain.

The new MonoRail system—sometimes referred to as the monoline system—simplifies frac fluid delivery by reducing the number of connections between the pump trucks and the frac tree. With fewer connections, there are fewer opportunities for the structure to fail. Additionally, the new MonoRail system is bolted together and is adjusted with torqued connections and gaskets, making the connections much more secure and safe.

With significantly more secure connections and significantly fewer connections, the MonoRail system is clearly the superior choice when it comes to fracing equipment.

OTHER BENEFITS OF THE MONORAIL SYSTEM

The MonoRail system we offer here at Northern Oilfield Services is a definitive step forward in fracing technology and overall wellhead safety. Other benefits of the Monoline zipper manifold include:

- · Increased safety that removes frac iron in the air
- A fully adjustable, full-flanged system
- Precise-fit connections through rotating spools (regardless of well spacing)
- It is the safest manifold to date in the oil and natural gas industry
- The Monoline system is available in every iron size you'll need



THE NEXT STEP IN FRACING TECHNOLOGY

Each and every aspect of the Monoline zipper manifold system is purposeful and meticulously designed. When the Monoline was designed, they were looking at every flaw and weak point the old system had and thought, "How can we make this better?" They proceeded to replace the less-than-secure hammer-union connections with API-6A-compliant flange connections, reduced the installation time, and made the MonoRail system safer than ever.

The Monoline system is a huge step forward for any wellhead. Contact us at Northern Oilfield Services and ask how we can help you create a safer and cost-effective wellhead with our MonoRail system and more!

Reach out to Northern Oilfield Services today to learn more or to get your own MonoRail system set up for your wellhead!



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SOME OF THE **ESSENTIAL** WELLHEAD EQUIPMENT OUR TEAM AT **NORTHERN OILFIELD SERVICES** PROVIDES INCLUDES:

- CASING HEADS
- CASING SPOOLS
- CASING HANGERS
- TUBING HANGERS
- TUBING HEADS
- TUBING SPOOLS
- TUBING HEAD ADAPTERS
- FLOW TEES
- TREE ASSEMBLIES AND
 CAPS
- CHOKES POSITIVE AND ADJUSTABLE
- BALL VALVES

- GATE VALVES
 - PLUG VALVES
 - PRESSURE TESTING
 - WELL MAINTENANCE
 - MOBILE ACCUMULATORS
- HEATERS
 - HOT SHOT
 - ENGINEERING
 - WELL DESIGN
 - CRANE SERVICES
 - ... And much more upon request.

We provide custom design field maintenance and lubrication programs for all of your wellhead equipment and valves. Additionally, we can provide storage and property maintenance for your property.



At **NORTHERN OILFIELD SERVICES**, we remanufacture, resell, and repair wellhead equipment to meet and exceed all standards and regulations. We also sell new wellhead equipment (API-6A), valves and virtually all of the additional related equipment you will need for your drilling or fracing site.

Our partners turn-key capabilities allow us to access machining, painting and coating, testing and monitoring. This allows us to provide the ultimate quality control with closely supervised engineering and design.

Here at Northern Oilfield Services, we go above and beyond to make sure you and your wellhead are taken care of. With our services, you'll experience reduced equipment downtime, reduced repair costs, and an overall smoother wellhead experience.

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