

Pressure Pumping Cementing



Delivering Next Level Zonal Isolation

THE OILFIELD'S MOST PREPARED SERVICE PROVIDER

Quality cementing is mission-critical for maximizing well economics, optimizing downhole performance and helping protect the environment. That's why KLX Energy Services brings some of the field's most experienced cementing crews to the job—paired with state-of-the-art equipment and a commitment to always be ready for whatever the well throws at us. Our team plans ahead and works smart to deliver zonal isolation that holds strong over the long haul. All done in a way that minimizes NPT and improves overall well efficiency.

Serving a number of major U.S. basins, including the Big Horn, Powder River, Denver and Williston, KLX Energy Services has invested tens of millions of dollars into specialized cementing equipment and experienced specialists. Operators nationwide are benefiting from this commitment.

Surface Casing

- Proven reactive spacer system to minimize loss zone
- Thixotropic blend to prevent fallback with high compressive strength at low density
- Regional understanding of regulatory requirements

Intermediate Casing

- Mud flush, tuned and reactive spacers to improve bond performance
- Lightweight lead slurries recommended to relieve hydrostatic pressures in weak formations. Easily viewable on most CBL's
- High compressive strength, lightweight tail slurries to meet all industry standards

Production and Liners

- Weighted tuner spacer with flush (makes oil-based mud "water wet")
- Variable perforation-grade cement with compressive strength
- Ability to fine-tune any cement for shutdowns or high temperatures

Plug and Abandonment

- Custom-tailored cement blends that optimize according the specific formation
- All programs comply with regional abandonment regulations (WOGCC, etc.)

CONTACT

KLX ENERGY SERVICES HAS THE SOLID EXPERIENCE AND THE SPECIALIZED EQUIPMENT IT TAKES TO GET THE JOB DONE RIGHT. WHEN YOU'RE READY FOR NEXT-LEVEL CEMENTING.

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Equipment and Capabilities

Fleet, Features and Technology

- Five twin recirculating cement pumps; with redundant centrifugals providing 100% back-up on mixing
- Two body load cement pumps for tight locations
- Two 1200 hhp twin acid pumps with salt plug tubs; also great for toe-preps and step-rate tests
- All acid and cement pumps feature data acquisition systems
- Two 100 bbl batch mixers for spacers, plugs or on-the-fly changes

Bulk Equipment and Plant

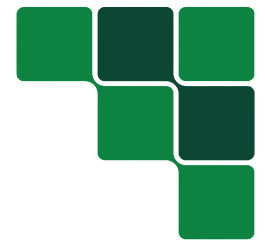
- Bulk plant has 22,000 cu. ft. of silo storage; one of the largest in the state of Wyoming
- Custom-built automated loading system capable of blending 175 cu. ft. every 20 minutes
- Based in Gillette, WY but serving numerous production areas
- Extensive selection of mobile bulk equipment to meet the needs of any operator or string
- Foreman with more than 40 years in the bulk cement industry

Cement Laboratory and Design Capabilities

- In-house lab capable of performing almost every API test
- Reactive spacer for loss (thief) zones
- Variable density spacer; rheology-tuned with acidic fluids and anionic surfactants for oil-based mud
- Variable cement slurries from 9 ppg to 20 ppg, and up to 450°F
- Fine to aggressive lost circulation material
- Technical software for all wellbore designs
- Ability to design slurries of almost any specification



KLX – Pressure Pumping Services



Powder River Specific

Acid Systems

- 20 years of designing and engineering acid systems
- Systems are designed specifically for individual formations

Acidizing Equipment

- We have twin pumpers and body load equipment customized for the basin

Additional Capabilities

Lab

- In-house lab in Gillette, WY
- HPHT viscometer testing for gel-breaker loadings
- Full water analysis
- Capable of blending Hydrochloric, Acetic, Hydrofluoric
- 9,000 gallons of Raw 22 Baume (35.2%) Hydrochloric storage on site
- 2,000 Gallons of Xylene Storage on site
- Mutual Solvent Tote Storage
- Chemical storage warehouse

Pressure Pumping Equipment

Acidizing Equipment

Combination of twin pumps and body load pumps

- Wireless real-time data acquisition
- Treatment van for critical job monitoring
- Transport capacity of 20,000 gals
- 20,000 gal lined frac tank for acid
- Energized systems (N2)
- Acid twin pump with stainless steel plumbing and salt plug tub
- Body load acid pump with salt plug tub
- Frac blender for large salt plugs
- 75,000 lb capacity salt conveyor trailer for large salt plugs

Data Acquisition

- Real-time data monitoring software with second-by-second CSV file capabilities
- Treatment van and trailer for critical job monitoring
- Manual inline ball droppers

Engineering and Modeling

- Engineers with 30+ years combined experience
- Frac Pro modeling software



CONTACT

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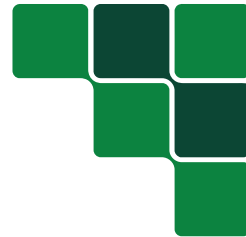
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NEXT LEVEL READINESS >



KLX – Cementing Services

Powder River Specific

Surface Casing

- Reactive spacer for loss zone
- Thixotropic blend to prevent fall back with high compressive strength at low density

Intermediate Casing

- Mud flush spacers
- Lightweight lead between 9 ppg - 12 ppg to cover Fox Hills formation for good CBL
- High compressive strength, lightweight tail slurries to meet all industry standards (12.5 ppg - 15.2 ppg)

Production & Liners

- Weighted tuned spacer with flush (makes OBM water-wet)
- Variable perforation grade cement with great compressive strength ranging from 12.5 ppg - 17.2 ppg
- We can fine-tune any cement to accommodate for shutdowns or high temperatures

Plug & Abandonment

- We tailor our cement blends to the according formations that need to be plugged
- Our programs also comply with all WOGCC requirements for proper abandonment

Cementing Equipment & Capabilities

Pump Capabilities

- (5) Twin Recirculating cement pumps
- 4 have redundant centrifugals that provide 100% back-up on mixing
- (1) Single Engine cement pump; great for tight locations
- (2) 1200 HHP Twin acid pump with salt plug tub; also great for toe-preps and step-rate tests
- All pumps (acid and cement) have data acquisition systems
- (2) 100-bbl batch mixers for spacers, plugs or on-the-fly changes

Bulk Equipment and Bulk Plant

- Bulk plant has 22,000 cu. ft. of silo storage; one of the largest in the state of Wyoming
- Custom-built automated loading system with the capability of blending 175 cu. ft. every 20 minutes
- Local : in Gillette, WY
- Plenty of mobile bulk equipment to meet any customer needs for any string
- Foreman has over 40 years in the bulk cement industry

Cement Laboratory and Design Capabilities

- In-house lab capable of performing every API test except Static Gel Strength
- Reactive spacer for loss
- Variable density spacer; rheology tuned with acidic fluids and anionic surfactants for OBM
- Variable cement slurries from 9 ppg to 20 ppg, ranging up to 450°F
- Fine to aggressive LCM material
- Technical software for all wellbore designs
- Ability to design any slurry customer needs, except foam



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