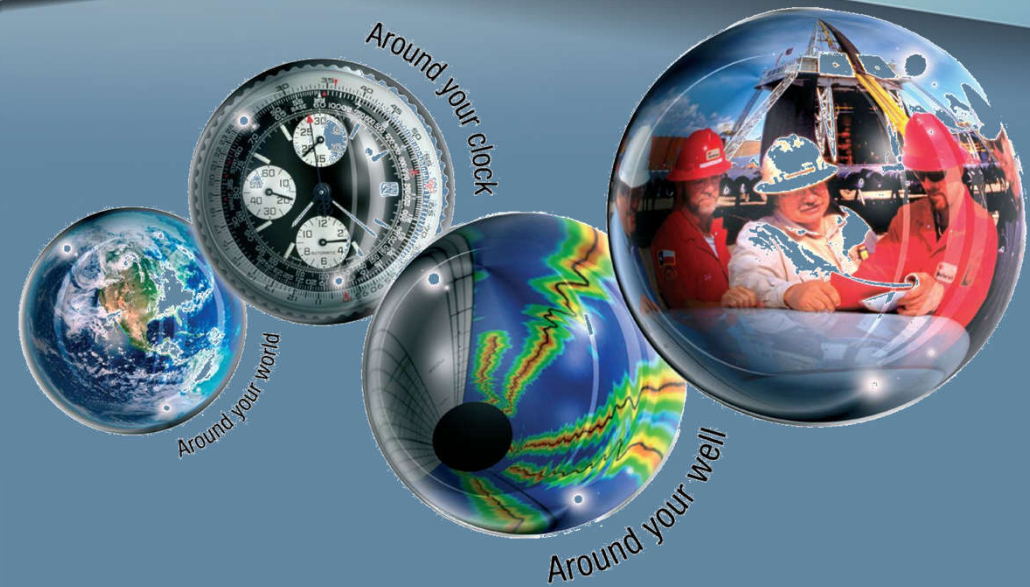


All around you



MATRIX ACIDIZING SERVICES

BR INDUSTRIAL OPERATIONS LLP

BR INDUSTRIAL OPERATIONS WILL:

H

- Introduce programs to ensure safe working conditions and professional suitability of personnel in order to fulfill the assigned tasks of preventing occupational injuries and harm to the health of employees
- To constantly work on improvement in terms of safety engineering
- Ensure a continuous improvement of HSE management system

S

- Ensure technical safety and reliability of the warehouse for safe and secure storage of goods.
- Ensure a continuous improvement of HSE management system
- Any personnel has a right to intervene in case of detection of unsafe work and hazardous conditions

E

- Comply with all applicable laws, regulations and other requirements in accordance with accepted obligations
- To constantly work on improvement in terms of environmental protection of the country
- Ensure a continuous improvement of HSE management system
- Pollution Prevention
- Any personnel has a right to intervene in case of detection of environmental pollution

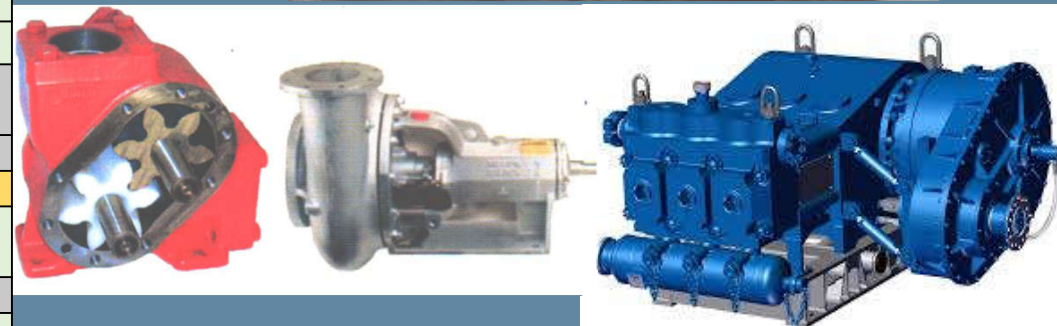
Well stimulation activities

- **Matrix Acidizing**
- **Fracture Acidizing**
- **Wellbore Clean-out (Backflush)**
- **Water and Gas Shut-off**
- **Injection Tests**
- **Acid mixing and transportation.**



Equipment specifications

Component	Description
Cab and Chassis:	T-800 Kenworth 2004 (GOST Certified)
Engine:	Caterpillar 6 cylinder Turbo Diesel C-12 430 HP @ 1800 rpm 1550 ft/lbs. torque
Transmission:	Eaton Road Ranger 10 speed
Engine Emergency Shut Down(ESD)	Roda-Deco Pneumatic remote operation
Power Divider:	Spicer 784,450 HP rated
Low Pressure Pumps:	
- Centrifugal	Mission Magrum 3 X 4 X 13
- Roper:	Roper model #3622HBF2423 624 liters/minute (165 US Gallons/minute) @ full flow
High Pressure :	SPM 1WS600S Triplex pump, 3 Y:i" or 4 Y:i "Plungers, 600 Hp, Maximum CI/VP 707 Atm (10,394 PSI)
Heater:	5 M BTU ThermoGen Heater (rated output) Series/Parallel flow, Electronic ignition
Fire Suppression	
- 150 lb ANSUL	Wheeled unit w/Purple K suppressant . Nitrogen propelled
- 15 lb CO2	Flag Fire 15 Lb (6.8 kg)
High Pressure Treating:	2- 1502 API 10,000 psi working pressure 45 meters of pipe joints 8 @ Swivel Chiksan® (2 way swivel) 1 @ Check valve, 2 @ 2X1 Low torque valve 1 @ Thread to Thread Crossover 1 @ Wing to Wing Crossover 2 @ "T" Connection
Hoses:	
- Loading Suction Hose I	14 meters of 3" Tank truck hose 3" Fia 206 WECO connections
- Low Pressure Discharge Hose	14 meters of 2" Tank truck hose 2" Fia 206 WECO connections
-Tank Vent Hose	14 meters of 2" Tank truck hose 2" aluminum. Camlock connections



Functional diversity and superiority of our units:

- Greater pumping capacity rate (600 HHP, 300 HHP continuous)
- Higher pressure (15,000 psi for pressure testing and 10,000 psi operational pumping)
- Greater effective injection rate (980 L/min)
- Higher heating capacity (5.5 mil BTU or 1,465 kW)
- Greater flow rate through the boiler (350 l / min and 500 l / min)
- **Fuel-efficient engine for all pumping and heating procedures**
- Lockable and secure venting systems for fuel tanks
- **Ability to transport and work with different fluids**
- **Accurate measurement and setting of fluid pressure, volume and temperature enabled by Allmight System in order to perform at the optimum injection rate for Matrix acidizing works.**



Chemicals and Additives

We use chemicals from trusted manufacturers around the world mainly US and Europe, Russia.

- Raw HCL Acid (Local supplier)
- Raw HF Acid (Local supplier)
- Foamed Agents in order to clean out the well (supplied from USA, Texas and Russia)
- Corrosion Inhibitors to protect drill pipe, tubing or any other metal that can be in contact with acid during treatment (Supplied from Europe, Russia or USA as per request)
- Solvent & Diverters in order to increase effective permeability to hydrocarbons.



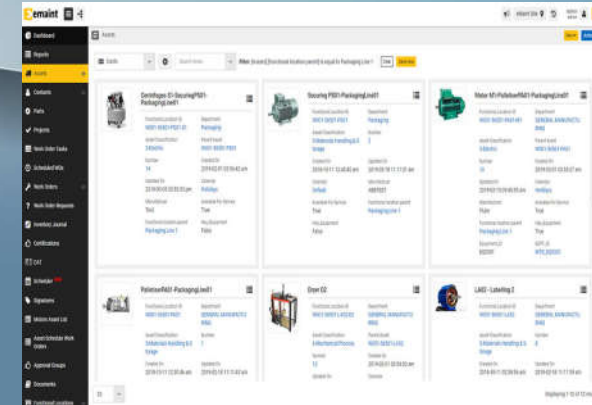
Our team consist of highly experienced professionals

- **High pressure/high temperature pumping**
- **Down hole completion**
- **Pressure rating and surface equipment**
- **First Aid and CPR**
- **H2S safety Training**
- **Matrix Acidizing.**
- **Safe handling of the fluids**
- **Heavy equipment operation and Driving**
- **Wax build up and clogging**
- **Acid pumping and Matrix acidizing**



Efficient work

- **E-MAINT CMMS Program to organize maintenance management system within the company**
- **CMMS software solutions provide a central repository for all asset data, work orders, materials and inventory, and other vital information for maintenance teams.**
- **CMMS directly integrated into 1C accounting software**
- **Most of the essential components have stand by equipment and spare parts**
- **Warehouse storage of all the equipment needed for work**



Case Study

- 1. Saigak Oil Kazakhstan**
Water Pumping, Injection test and Heating fluids
Duration 2 months (0 breakdown)
- 2. Schlumberger Logico, Kazakhstan**
TCO, Atyrau Region, Kazakhstan
Heating fluids for further Geological Decomposition
Duration 1,5 months (0 breakdown)
- 3. Schlumberger Logico, Kazakhstan**
Karachaganak, West-Kazakhstan Region, Kazakhstan
Heating fluids for further Geological Decomposition
Duration 14 months (0 breakdown)
- 4. Maersk Oil Kazakhstan**
Dunga oil field, Mangystau Region
Water Injection Project, (24/7/365)
Duration 2,5 years (1 breakdown)
- 5. EMIR-OIL Kazakhstan**
Emir-Oil oilfields, Mangystau Region
Hot oil work in wells, pipelines and export pipelines(oil sweetening);
Hot oil works on oil tanks and hot water circulation through the wells
Duration 2 months (78 operations have been carried out with 0 breakdown)
- 6. Mangystau Munai Gaz Kazakhstan**
Zhanozen oilfields, Mangystau Region
Acid stimulations work; fluid volume upto 150 cubic meters and 28% HCL
6 well campaign (0 breakdown)



THANK YOU FOR YOUR ATTENTION

FOR MORE INFORMATIONS PLEASE CONTACT US

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