

Business Line «Chemical treatment of wells»

of Mirrico Group of Companies is an oil reservoir expert. It is one of the leaders in implementation of technological solutions based on chemical methods of oilfield and reservoir stimulation at stages 3-4 of development, according to the quantity and quality of tracer surveys among Russian companies.

KEY ADVANTAGES OF BUSINESS LINE «CHEMICAL TREATMENT OF WELLS»:

- 1** Wide range service portfolio for oil recovery improvement:
 - effective chemical agents for different geological conditions;
 - global technologies of straightening the injectability profile;
 - complex approach to problems of work with a reservoir.
- 2** Service portfolio for extraction stimulation in wells with high and low injectability.
- 3** Own unique solutions for cement squeeze and water shut-off.
- 4** A wide range of tracers for survey performance.

Mirrico is a Russian group of production and service companies.

Basic types of activities: production and supply of chemical agents for different purposes, engineering support of customers relative to problems of application of chemical solutions, rendering of services.

FIELDS OF MIRRICO GROUP OF COMPANIES



OIL PROSPECTING AND EXTRACTION



HYDROCARBON PIPELINE TRANSFER



COAL PRODUCTION AND IMPROVEMENT



FERROUS AND NONFERROUS METALLURGY



CHEMICAL AND PETROCHEMICAL INDUSTRY



OIL AND GAS PROCESSING



WATER AND SEWAGE TREATMENT

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MC-ROCK TECHNOLOGY FOR PERFORMANCE OF CEMENT SQUEEZE

50%

of production well fund requires water shut-off.

85%

average water cut of products at the production field of the Russian Federation.



MIRRICO
GROUP OF COMPANIES

PROBLEM:**Performance of cement squeeze.**

- Fixing behind-the-casing flows.
- Fixing production casing leaks.
- Transfer to the overlying stratum.
- Installation of isolating bridges in oil and gas wells.

**SOLUTION OF MIRRICO GROUP OF COMPANIES:****The range of formulas of MC-Rock compounds developed and produced by Mirrico Group of Companies.**

MC-Rock is a mineral composition with the size of corns from 3 to 5 micron, forming a high-strength material in case of mixing with process water.

A WIDE RANGE OF MC-ROCK FORMULAS ENSURES GETTING OF MAXIMAL PROPERTIES OF CEMENT STONE AND SOLUTION.

Peculiarities of MC-Rock:

- A possibility to adjust density of compounds in the range from 1,2 to 2,15 g/cm³.
- MC-Rock formulas were adapted for performance of cement squeeze at the temperature up to 200 0C.
- MC-Rock compounds have high-strength properties (standard strength for any MC-Rock formula from 30 to 20 MPa for compression and from 10 to 15 MPa for bending).
- High permeability.
- Time of hardening is adjusted in a wide range.
- Contamination resistance.
- A possibility to adjust spreadability and rheology.
- Polar expansion of the stone compound from 5 to 10%, that has a positive impact on quality and duration of life of repaired well area.

RESULTS:

OA0 NK Yangpur — successful leak repair 168 mm.

OOO RN-Stavropolneftegaz are three successfully performed cement squeezes at the temperature in the range of behind-the-casing flow from 135 0C to 145 0C.

WHAT WE DO:

- Perform analysis of problems at wells.
 - Match formulas according to conditions and problems of the customer with maximal physical and chemical properties.
 - Provide a laboratory report of matching of a formula performed under well conditions of the customer with provision of all necessary data on matched formulas, obtained by means of hi-fi foreign equipment (strength, thickening time etc.).
 - Provide ready solutions consisting of chemical agents specially matched for solving of the customer's problems.
 - Provide engineering support at wells and training of a cementing crew of the customer by the qualified personnel.
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