



ООО Research and Production Company **SPECBURMATERIALY**

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Company profile

- ООО Research and Production Company Specburmaterialy (RPC SBM) – is Russian research and production company specializing in the research, development and introduction of new and advanced materials and reagents for the construction and repair of oil and gas wells
- ООО RPC SBM was registered 29.09.2014 by reconstruction of ZAO RPC SBM
- ZAO RPC SBM was part of a research organization in SBM group of companies, operating more than 12 years in the oil and gas sector
- Since the beginning of 2014 RPC SBM is part of the company National Drilling Service
- ООО RPC SBM and АО NPO Polycell are affiliated companies

The head office Zhukovskij

- The laboratory of drilling fluids, materials and reagents
- The laboratory of casing and cement slurries
- The laboratory of technologies and materials for elimination complications during drilling and repair of wells
- The laboratory of technologies and materials for drilling waste disposal

Division Orenburg

Research center Orenburgskij

Division Malinovaja Varakka, Karelija

Production of quartz, feldspar and mica

Activities

The organization of production of new materials and chemicals, including development of formulations, process flow diagrams and regulations, circuit diagrams of devices, equipment selection, maintenance commissioning, optimization and modernization of existing production facilities

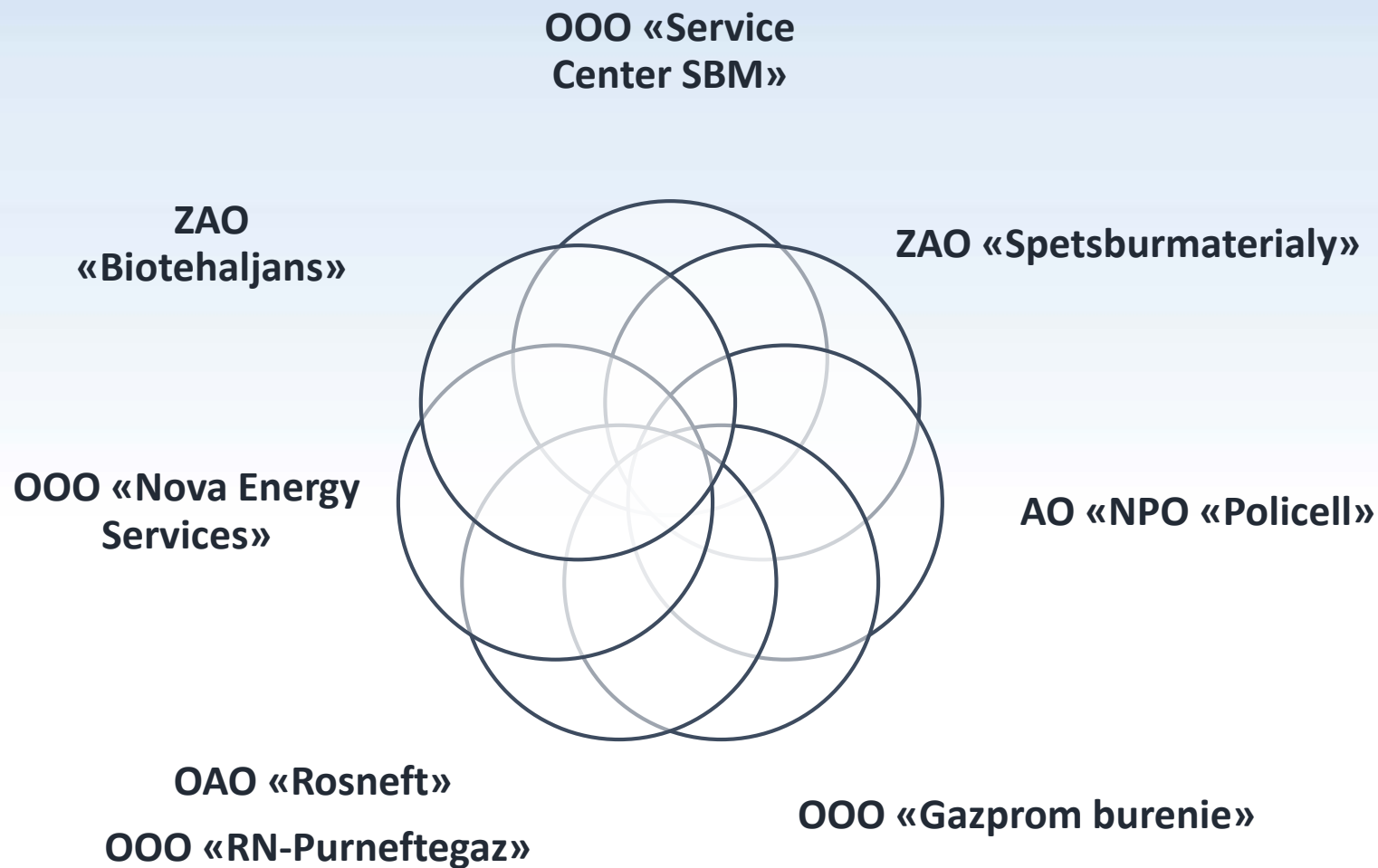
Development of scientific and technical products documentation (specifications, MSDS, etc)

Complex supply of materials and reagents for the construction and repair of oil and gas wells

Geological evaluation of industrial minerals deposits for the needs of the oil and gas industry, for example barytes, clay, limestone, chalk, marble, dolomite, siderite, mica, flasks and tripoli, dolomite, quartz, apatite, talc, gravel, peat, coal, asbestos, vermiculite

Marketing research on metal mineral raw materials for drilling materials and reagents

General Clients



Stages of development

2003

Deliveries of materials and reagents

2007

Development of products for drilling. Implementation and delivery of materials

2014

A wide range of research and development of new technologies, procedures and reagents

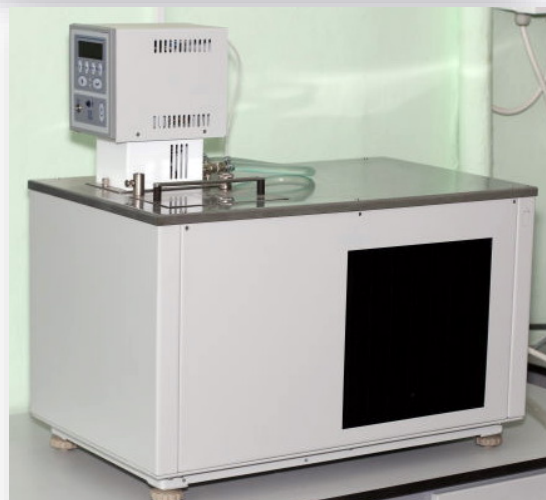
2016

Delivery of materials, reagents and service support of the elimination of complications during drilling and workover

The main scientific and technological achievements

- **1993-2001 development and delivery of new types of weighting materials and drilling fluids**
- Aegirite weighting material (patent №2055855 from 10.03.1996)
- Apatite weighting material (patent № 2087513 from 20.08.1997)
- A process for preparing drilling fluids (patent №2088627 from 02.03.1995)
- A method for producing weighting additives for drilling fluids (decision to grant a patent on the application №96116866 from 14.08.96)
- Titanium magnetite weighting material (patent №2,177,492 from 27.12.2001)
- Marble powders MR1-MR5 for drilling fluid were developed and produced
- Deliveries were made to Rosneft-Purneftegaz, Nefteotdacha Samara Drilling Company, Gazprom, M-I Drilling Fluids
- A pilot batch of siderite weighting agent was turned out. Tests were carried out in Orenburgburgaz
- A new waterproofing (gelling) material based on silica-alumina waste was developed

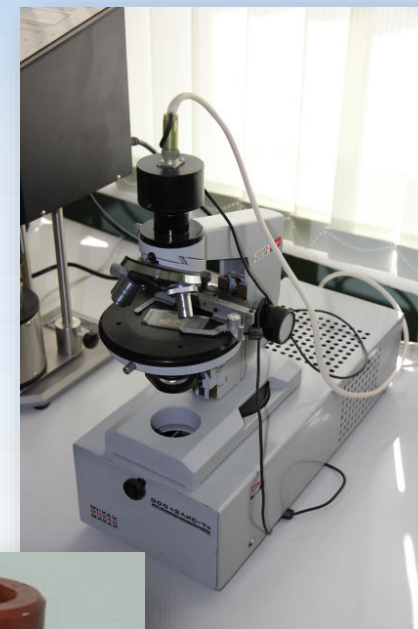
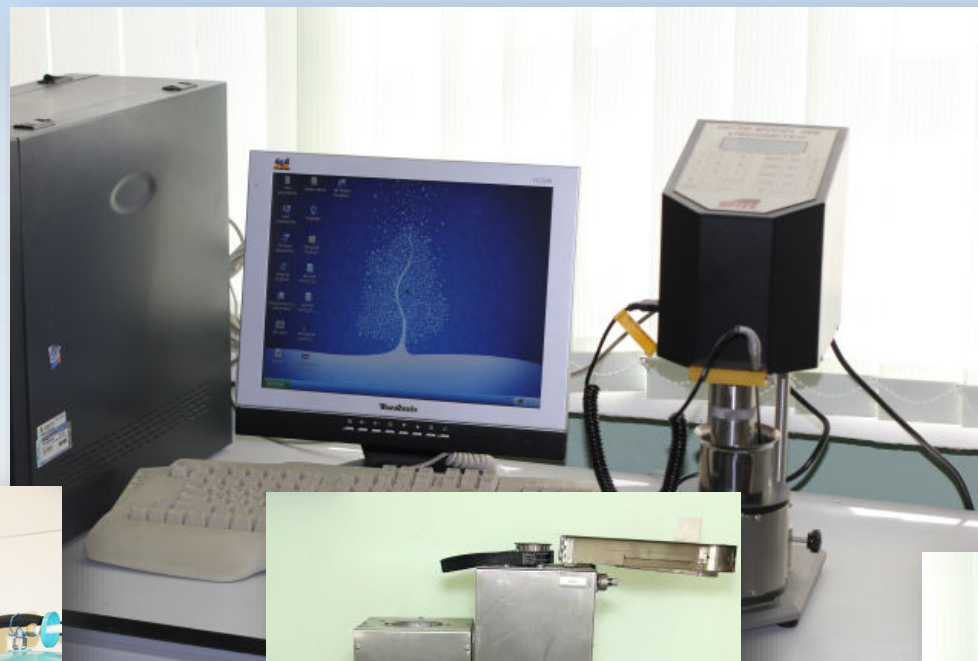
Modern laboratory equipment



The main scientific and technological achievements

- Field tests of gelling composition for water producing formations were conducted in conjunction with the SeaTac Chernogorneft
- Patent №2234558 from 26.12.01 - A method of producing a gelling composition was obtained
- The method of burial (curing) liquid waste in the form of brine was provided with the experts Podzemgazprom in an underground salt chamber (patent №2221148 from 26.12.01)
- Release of classified quartz sand for gas and water filters was organized and carried out
- Work on exploring ferrous sulfide scavengers has begun, the pilot batch of iron oxide was released
- The estimation of geological and commercial reserves Hojlinskij and Tolcheinskij barite deposits was provided
- First batch of Hojlinskij field barite weighting agent was released in Lyubertsy for drilling fluids and sulphate resistant cement
- Patent №2180325 on 01.03.2001 at the barite containing sulphate resistant cement was received with D.Mendeleev University of Chemical Technology of Russia

Modern laboratory equipment



The main scientific and technological achievements

- Mining estimation of Borshevsky, Zyryansky, Maximovsky, Ageevsky clay deposits for drilling was provided. Enterprise of clays for the production of drilling fluid was started in Kurgan later transferred to OAO Bentonite
- **Research and delivery of the developed materials and reagents have been initiated in the framework of SPC Spetsburmaterialy in 2001-2006**
- Deliveries of marble powder, quartz sand, filter media for water deferrization were carried out , works on the waterproofing compounds were provided
- Production of mica colmatant brands KF1-KF10, neutralizing hydrogen sulfide ZhS-SBM and PRZ-SBM was started
- Silica additives and lightweight for well cements in Tyumenburgaz and Astrahanburgaz were developed and produced
- The patent for the plugging mixture №2245989 was obtained together with the DOO Burgas
- A pilot batch of micronized mica and cement was released for construction workers and drillers

Modern laboratory equipment



The main scientific and technological achievements

- First pilot batches of dry lubricant additive Mikan 40 were released and delivered to the New Energy Services and Tyumenburgaz
- The patent on the mica-40C №230 243 was obtained with priority from 22.07.2005
- Lubricant additive Smeg and dry lubricant additive Silanzh were developed
- Geological and engineering works on the barite ores Medvedevsky deposits were conducted, recalculation of reserves and approval of the State Reserves Committee of the Russian Federation was held, the company developed a construction project for the production of barite weighting agent in the settlement Magnitogorsk, Chelyabinsk region on the basis of Barite-Gas
- **In the years 2007-2013 a new stage of development NPK Spetsburmaterialy was started associated with the creation of its specialists of ZAO NPO Policell in Vladimir for drilling reagents and materials issue on the basis of new developments, transmitted as a "know-how"**
- Production of lubricants SMEG-3,5,2, Mikan-40 Silanzh, Smolopolimer, polymer blends KPSS, plugging compounds, extended range colmatant KF KFC, KV was started in 2007

Modern laboratory equipment



The main scientific and technological achievements

- Patent №2460752 Smolopolimer was received with the priority from 27.12.2010
- Number of developed and transferred to the production of materials and reagents for 2014 amounted to more than 50. Among them, water shutoff compositions Polijekspan, Poliblok, Polifil'trol, special reagents Poliekol, PoliRR, Poliemulsan, Poliekonol were produced. Production of micronized well cements 5, 10, 15, as well as a wide range of additives for cements (Policemgazblok, PolicemPlast, PolicemSTP etc) was developed and started
- Works on the development of drilling waste technologies were provided in the SPC Spetsburmaterialy. Construction material (gravel mixture) at the Bovanenkovo field was developed and produced
- Works on the disposal of hydrocarbon mud and salt mud were carried out
- Employees of SPC Spetsburmaterialy participate in conferences, seminars, exhibitions
- More than 70 articles and reports for the period of the SPC Spetsburmaterialy were published

Competitive advantages

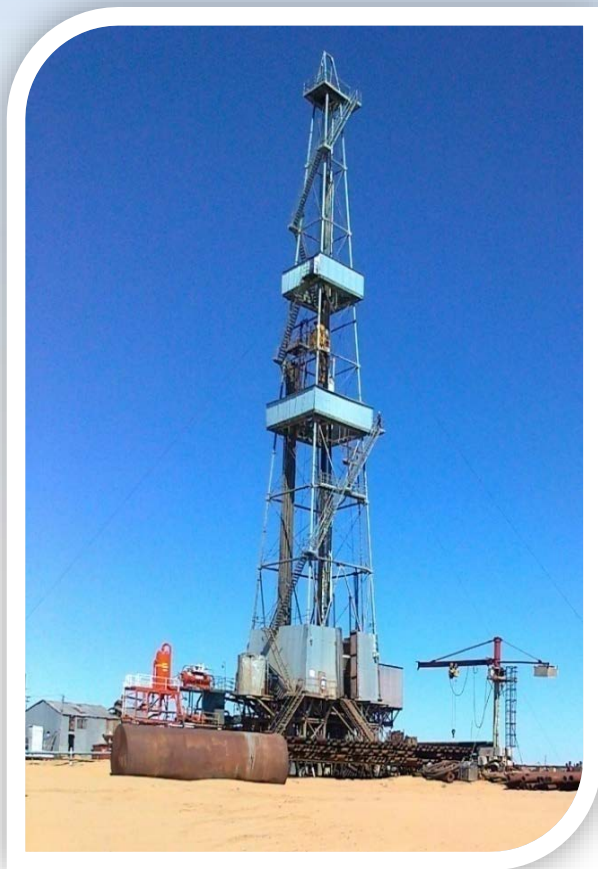


Modern research facilities and laboratory equipment allow to carry out a wide range of tasks

Developed infrastructure of branches in the main regions of the group of companies SBM

Experienced engineering staff

Providing advice and guidance in the field of drilling and plugging fluids



**Thank you for your
attention!**



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