

Field

# SPE Workshop *Preliminary* Technical Programme **Hydraulic Fracturing in Russia: Experience and Perspectives**September 25 – 27, 2018



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#### Session 1. New Methodology in Hydraulic Fracturing: Design, Technologies, Approaches

- 1. David Cotrell, Tobias Hoeink, Elijah Odusina, Sachin Ghorpade, **Baker Hughes, a GE company**Quantifying the Probability of Success of Stimulation Treatments When Information is Limited
- Tatyana Pospelova, N.Pavlyukov, V.Pavlov, R.Melikov, A.Ptashny, A.Krasnikov, TNNC; M.Samoylov, Rosneft Upstream Peer Review and Technical Development Center

Optimal Approach for Clustering of Geomechanical Modeling Results in Purpose of Hydraulic Fracturing Planning

- 3. Suleyman Sitdikov, K.Baydyukov, A.Kushnikov, **Rosneft**A Comprehensive Method for Quality Evaluation of Chemical Additives for Hydraulic Fracturing
- 4. Alexey Yudin, Schlumberger
  Improving Economics of Hard-To-Recover Reserves Development. Case Study of Achimov Formation at Prirazlomnoe Oil
- 5. Alexander Bochkarev, MIPT Engineering Center
  Dimensionless Parameters for Estimating the Efficiency of Hydraulic Fracturing in the Bazhenov Formation
- 6. **Schlumberger, Gazprom neft**High Rate Stimulation as New Way to Achieve Effective Half-Length of Fracture
- 7. Semen Kudrya, Samotlorneftegas

  Multistage Hydraulic Fracturing: New Solutions of Old Problems

# Session 2. Multistage Hydraulic Fracturing in Russia: from Pilots to Integrated Projects

- Ildar Fayzullin, Gazpromneft STC
   Readiness for Development of Hard-to-Recover Deposits the Image Of Tomorrow's Fracturing Service
- A. Vagizov, Y. Islamov, G. Amineva, R. Khisamatov, I. Saygafarov, Bashneft
   Tournai Stage Carbonates Development Efficiency Improvement with Multistage Hydraulic Fracturing on Horizontal Wells, Case Study
- 3. Alexander Bochkarev, MIPT Engineering Center
  Cross-Calibration and Cross-Validation of Hydraulic Fracturing Modeling Parameters and Hydrodynamic Model
- 4. Mikhail Samoylov, **Rosneft Upstream Peer Review and Technical Development Center**; Vladimir Astafyev, Alexey Andreev, **Halliburton**

Multistage Hydraulic Fracturing Integrated Design: from Simulators to Tools for Field Performance Analysis and Prediction

- 5. Askhat Ishangaliev, M.Maskhadov, **Schlumberger**, A.Korepanov, V.Fedotov, **Gazpromneft-Yamal**Novoportovskoe Oilfield Multistage Stimulation Campaign, Helps to Unlock Oil Rims Potential
- Anton Ivanov, NOV Completion Tools
   Re-fracturing Technology in Existing Well Completions by Utilizing Cup-to-Cup Straddle Assembly

# Session 3. Models and Software

1. Alexey Pestrikov, Rosneft

Corporate Hydraulic Fracturing Simulator: Implementation Current Results and Perspectives for Development

2. Oleg Borschuk, UfaNIPIneft

Hydraulic Fracturing Models. Extensions and Limitations

3. Grigory Paderin, Gazpromneft STC

Hydraulic Fracturing Design Simulator: from the Functional Concept to Testing and Validation

4. Artem Erofeev, MIPT Engineering Center

New Software Tool for Design, Maintenance and Efficiency Analysis of Multi-Stage Fracturing in Reservoirs of Hard-to-Recover Reserves

- 5. Andrey Osiptsov, **Skoltech** 
  - A More Accurate Prediction of Hydraulic Fracture Geometry Based on the Coupled Solution to the Problem of Fracture Propagation and Proppant Transport
- 6. Sergey Golovin, A.Baykin, A.Valov, **Hydrodynamics Instutute, RAS**; E.Dontsov, **Houston University**; E.Shel, G.Paderin, **Gazpromneft STC**

Modelling Approaches for the Development of a Planar Hydraulic Fracture in Poroelastic Medium

#### **Session 4. Hydraulic Fracturing in Extreme Environments**

Komi Republic and the Nenets Autonomous District

- T.Khakimov, A.Bukharov, N.Demyanenko, A.Rodionov, KogalymNIPIneft
   Impact of Azimuth of Hole and Entry Angle on Hydraulic Fracturing Efficiency, Povkhovskoe Field, BV8 Side Tracks Case
- Sergey Kondratyev, Ramil Sharaeev, PermNIPIneft
   Improving the Efficiency of Hydraulic Fracturing Technologies In Carbonate Reservoirs of Perm Krai, the Komi Republic and
  - the Nenets Autonomous District

    3. Aslanbek Aleroev, Sergey Kondratyev, PermNIPIneft

Experience in Hydraulic Fracturing In Conditions of Low-Permeability Reservoirs and High Fracturing Pressure In Fields of the

- M.Novikov, A.Islamov, Sheshmaoil; A.Gazizov, A.Davletov, V.Mironov, Carbo International
   Evolution of Proppant Hydraulic Fracturing Technology for Carbonate Reservoir: Vereiskian Stage of Sheshmaoil Company's Fields
- 5. M.Mukhamteshin, **Bashneft Dobycha**, V.Bildanov, **Rosneft Upstream Peer Review and Technical Development Center**Acid-Proppant Hydraulic Fracturing. Step Forward
- 6. Ildar Fayzullin, Maksim Pichugin, Ruslan Gaynetdinov, **Gazpromneft STC**Implementation Efficiency of Multistage Acid-Proppant Fracturingiln Carbonate Reservoirs of Gazprom Neft

# **Session 5. Hydraulic Fracturing and Related Projects**

- 1. Oleg Salimov, **UfaNIPIneft** 
  - Geophysical Methods' Curves Adjustment For Hydraulic Fracturing Geomechanical Model Development
- 2. Valery Pavlov, T.Pospelova, R.Melikov, N.Pavlyukov, A.Ptashy, A.Krasnikov, TNNC; A.Prokhorov, Rosneft Upstream Peer Review and Technical Development Center
  - Special Research and Geomechanical Modelling for Hydraulic Fracturing Optimization and Complex Reservoir Field Development Planning
- 3. Alik Kasimov, **PetroGeoScan** 
  - Fractures' Spatial Characteristics Based on Record Of Near-Wellbore Stress and Strain State Changes Inherent in Hydraulic Fracture Initiation
- 4. Mikhail Salischev, I.Sishmanidi, V.Kuznetsov, Gazpromneft STC
  - Completion in Bazhenov Formation: Efficiency Based on Superficial and Downhole Microseismic Monitoring
- 5. Arslan Nasibullin, Almetyevsk state oil institute
  - First in Russia Master's Programme on Hydraulic Fracturing: Current Results and Future Development

### **Poster Session**

- 1. Artur Tkachenko, N.Pavlov, V.Vorontsov, Geologika
  - Hydraulic Fracturing Materials and Supplies Quality Control
- 2. I. Vershinina, M. Kandakova, E. Bazhenova, Kogalym NIPIneft
  - Permeability of Reservoir Rock Matrix Adjustment to Natural Fracture and Drilling Induced Fractures under Hydrodynamic Simulation
- 3. Konstantin Brikner, GeoSplit
  - Quantum Dots Marked Proppant. Lab Tests, Field Implementation
- 4. Vyacheslav Nikitin, L. Yunusova, A.Fomin, Mirrico
  - Use of a Water-Soluble Fiber in Fracturing Fluids With Low Loading Guar Gum

#### 5. Albert Vainshtein, Skoltech

What Could we Machine-Learn from Field Data to Optimize the Design of Hydraulic Fracturing?

# 6. Andrey Rymarenko, Gazpromneft-Angara; Alexey Kovalevsky, Schlumberger

Complex Stimulation Approach to Boost Eastern Siberia Oil Production

#### 7. Ilya Doktorenko, Sakhalin Energy

Sakhalin-2, Lunskoe-Alfa

#### 8. Lyubov Kalvan, A.Mitin, Weatherford

Downhole Microseismic Monitoring of Hydraulic Fracturing in Horizontal Wells in Real Time

# 9. Ksenia Medvedeva, Gazpromneft STC

Comparison of Various Methods of Numerical and Analytical Modeling of Inflow to The Well with Multistage Hydraulic Fracturing

# 10. T.Sinitsyna, R.Gafarov, TNNC

Interdisciplinary Approach to Well Interventions Candidates Selection, Talinskiy Licensed Area Case, Krasnoleninskoe Oil-Gas Condensate Field

#### 11. Vasily Ryzhov, Gradient

Microseismic Investigations Capabilities for Design of Horizontal Wellbore and Multistage Hydraulic Fracturing for Tatneft

#### 12. Mikhail Pustovalov, Mikhail Ryabov, Oil Energy

Inhouse Development Experience of The Multistage Frac Completion System

# 13. V. Vorontsov, A.Tkachenko, N.Pavlov, Geologika

Lab Test of Resin Coated Proppant And Impact of Obtained Data to Hydraulic Fracturing Design

# 14. Almaz Sadretdinov, M.Samoylov, **Rosneft Upstream Peer Review and Technical Development Center**; R.Musin, **Nyaganneftegaz**

Multistage Hydraulic Fracturing on Talinskoe Field