VADIM AKHMETGAREEV

13475 Rincon Dr, Apt 2205, Houston, TX, 77077 | (936)294-6143 | vadim.worldwide@gmail.com
Green Card holder | No sponsorship required | EB-1A in Petroleum Engineering
Senior Reservoir Engineer | Senior Petroleum Engineer | Petroleum / Reservoir Engineering Manager

Experienced Reservoir Engineer with a proven 16-year track record of successfully developing and executing over 40 different Oil, Gas, and Energy Transition projects, resulting in a 20-30% increase in oil production rates and a $15M economic effect.

SKILLS

- Reservoir Analysis and Management
- PTA/RTA/DCA, Production Forecasting
- 3D simulation, FDP, Reserves Estimation
- Economic Analysis, Risk Management
- IOR/EOR, Production Optimization

- PVT, Well Testing, Logs
- AI/ML, Energy Transition, CCUS
- CMG, Eclipse, Emerson, ARIES, Spotfire
- Python, R, Matlab, MS Office
- Communication, Public Speaking

- Presentations, Time Management
- Leadership, Teamwork, Organizational Skills
- Project Management, Strategic Planning
- Management of Multifunctional Teams
- Adaptability, Critical Thinking, Work Ethic

PROFESSIONAL EXPERIENCE

Sr. Petroleum Engineering Advisor | *Terra Laboratories LLC, Golden, CO, USA*   *Sep 2017 – present*

Terra Laboratories is an innovative AI Energy company providing services to the Oil&Gas, Green Energy, and Energy Transition.
- Brought and managed $0.5M budget projects by converting abandoned wells into geothermal wells and optimizing Redox flow battery technology.
- Produced and supervised $0.3M budget projects by oil and gas production optimization, EOR, and laboratory studies.
- Increased efficiency of fracing by 10-20% at client's 200+ wells in Permian, Uinta, and Williston Basins by frac design optimization
- Reduced core analysis time by 5 times and increased accuracy by 30% through the use of AI and data from more than 100 fraced wells.
- Prepared over 30 presentations for clients from the US, Indonesia, the Middle East, and Central Asia.

Petroleum Engineering Consultant | *Froswell LLC*   *Aug 2022 – present*

Froswell has offices in Singapore, Argentina, and the USA, runs services in oil production, geology, geophysics, green energy, data, and AI
- Increased oil production rates by 20-30% in Argentina (4 wells) and Brazil (3 wells) by ultrasonic stimulation of wells.
- Contributed to a $2M contract for 3D reservoir modeling with AI by providing technical expertise in reservoir engineering, geology, and production
- Prepared a $35M exploration project for an area of 2,500 sq mi in Arizona and New Mexico for drilling wells and helium production.

Head of Reservoir Engineering Department | *Nauka LLC, Russia*   *Feb 2021 – Feb 2024*

Nauka is a project and design company specializing in the Oil&Gas
- Completed 8 Field Development Plans with 3D full field simulation and 5 Reserve Estimation projects totaling over $1M.
- Improved the client's profitability by 23% by identifying oil sweet spots and drilling 12 sidetracks.
- Enhanced well log recognition and characterization by 30% by developing ML algorithms with data from over 3,000 wells.

Reservoir Engineering Consultant | *Phystech II, Kazakhstan*   *Jan 2021 – Feb 2024*

Phystech II is one of the small oil production companies in West Kazakhstan. It owns a viscous oil field with approximately 100 wells.
- Improved oil production by 260 bbl/d after performing FDP, defining areas with the highest oil saturation and successfully drilling 5 new wells.
- Enhanced oil production by 90 bbl/d due to solvent treatment of 6 wells.
- Increased oil production by 70 bbl/d by transferring to another formation and perforating 5 wells.

Deputy Director - Chief Geologist (contractor) | *Jizzakh Petroleum LLC, Uzbekistan*   *Feb 2020 – Feb 2021*

Jizzakh Petroleum is the second main oil and gas production company in Uzbekistan
- Increased oil production by 48% (from 3200 bbl/d to 4300 bbl/d in Karshi and from 1250 bbl/d to 2300 bbl/d in Andijan) or 20% of all oil production of the country by wells stimulation, workover, and production optimization. Successfully drilled and completed 7 new wells with 400 bbl/d totally.
- Led 6 departments of Karshi and Andijan production divisions: Reservoir engineering, Production, Geology, Drilling and completion, Workover.
- Planned the oil and gas production, measurements, wells testing, production logging, and workover schedule monthly.
- Performed work on regulatory processes, obtaining various permits and interacting with state and federal agencies.
- Managed drilling, logging, and workover contractors to ensure compliance with company policies and procedures.

Assistant Professor (contractor) | *Almetevsk State Petroleum Institute, Russia*   *Aug 2019 – Feb 2020*

Implemented a method for obtaining geological data from drilling logs and cuttings. Studied 1,500 ft of cuttings using HAWK Pyrolysis, XRD, XRF and matched with drilling logs using AI. Optimized frac design using these data. Delivered Reservoir Engineering course lectures.

Sr. Reservoir Engineer, Team lead | *TatNIPIneft, Tatneft, Russia*   *Jul 2010 – Aug 2019*

TatNIPIneft is the Research Center of Tatneft petroleum company.
Technical achievements:

- Conducted classical RE analysis, PTA/RTA/DCA, EUR estimation, long and short-term production forecasting, reservoir performance/deliverability analysis, formation damage, economic assessment, strategic planning, sensitivity analysis, risk management, and reservoir simulation.
- Provided technical support for the company's unconventional tight oil projects, frac design and production optimization. Analyzed microseismic data, cores and cuttings measurements, mud logging data.
- Completed 13 FDPs of Russian and the Middle East oil fields, 15 technical and economic assessments of exploration areas in Africa and Central Asia, 21 R&D projects in fracing and well stimulation, reservoir development, waterflooding, gas injection, IOR/EOR, PVT studies totaling over $10M.
- Supervised 22 of Tatneft's 86 oil fields and increased oil production by 5% (from 36,200 bbl/d to 38,000 bbl/d) using various production optimization technologies.
- Improved the economic effect by $2.5M through the creation of 127 patents in PE and the implementation of 50 of them at the company's fields.

Management achievements:
- Managed the multidisciplinary teams including a general role in reservoir engineering. Delivered projects on time and within budget.
- In cooperation with mathematicians and programmers, created algorithms to analyze the efficiency of waterflooding using ML algorithms.
- Interacted with state and federal regulatory agencies to obtain various permits and approve documentation.
- Led client meetings, negotiations, and was responsible for maintaining client relationships and ensuring regulatory compliance.
- Conducted more than 30 presentations for top managers of the company. Coached and developed young engineers.

Reservoir Engineer | *BashNIPIneft, Bashneft, Russia*   *Jan 2008 – Jun 2010*

BashNIPIneft is the Research Center of Bashneft Petroleum Company.
Worked in a multidisciplinary team with a technical role in reservoir engineering and completed 5 Field Development Plans (FDP) totaling around $300,000. Supervised 31 of 159 oil fields of Bashneft. Studied all classical reservoir engineering analysis and reservoir simulation. Performed technical writing of FDPs.

Field Engineer (summer jobs) | *Bashneft, Russia*   *2005, 2006, 2007*

Conducted liquid rate and water cut measurements at wells, measured fluid levels, checked pumps using dynamometer charts, and monitored the performance of equipment. Also performed diagnostics of quality of the on-surface up-stream objects, and wrote reports.

EDUCATION

- PhD, Petroleum Engineering, Ministry of Education and Science of the Russian Federation, Aug 2012 – Jun 2016.
- M.Sc., Reservoir Engineering, honours degree. Ufa State Petroleum Technological University, Ufa, Russia, Sep 2007 – May 2008.
- B.Eng., Petroleum Engineering, honours degree. Ufa State Petroleum Technological University, Ufa, Russia, Sep 2003 – May 2007.

CERTIFICATIONS

- Communicating with Confidence. LinkedIn, 2024
- Corporate Finance: ESG. LinkedIn, 2024
- Machine Learning. Stepik, 2023.
- Data Science and Machine Learning in Python. Stepik, 2022.
- Programming in Python. Stepik, 2022.
- Programming in R. Stepik, 2022.
- Mathematical statistics. Stepik, 2021.
- ARIES Halliburton. Online course. 2020.
- Corporate culture. Tatneft, Russia, 2019.
- Process management. Tatneft, Russia, 2019.
- Project management. Tatneft, Russia, 2019.
- Hydraulic fracturing of unconventionals. Moscow, Russia, 2018
- Specific solutions. Moscow State University, Russia, 2016.
- Formation damage course. University of Adelaide, 2015.
- Advanced waterflooding course. University of Adelaide, 2013.
- Advanced 3D simulation, Tempest More, Roxar, Russia, 2011.
- Hydraulic Fracturing. Acid stimulation. Schlumberger, Russia, 2010.
- 3D simulation, Tempest More, Emerson. Russia, 2007, 2008.

AWARDS

- Twice Gubkin Award, 2015, 2020, Moscow. This is the highest award in Russia for the oil and gas industry.
- Leaders-1000 the talent pool award of Tatneft company, 2018, Almetevsk.
- Patent of the Year of the Republic of Tatarstan, 2016, Kazan.
- Award "100 Best Invention of Russia-2016", Moscow, Federal Service for Intellectual Property.
- Twice Best Invention of the Year of the Republic of Tatarstan, 2014, 2015, Kazan.
- Twice Best Inventor of the Year of TATNEFT. Internal company's award, 2014, 2017, Bugulma.

MEMBERSHIP IN PROFESSIONAL SOCIETIES AND VOLUNTEERING

- SPE (Society of Petroleum Engineers), Oct 2010 – Present. Chairperson of the Volga Section (Russia and Caspian Region).
- EAGE (European Association of Geoscientists and Engineers), May 2017 – Present. Technical reviewer and program chair
- Elsevier journal reviewer

PUBLICATIONS IN PETROLEUM ENGINEERING

- 11 referred journal publications, 32 international conference publications, 2 books
- 127 patents. These patents were created while working for Tatneft company and all rights belong to the company. I am the author of these patents and the company paid a percentage of their implementation.