ENERGY-SAVING TECHNOLOGY
OF PIPELINE PETROLEUM DELIVERY

Description
The additive "VIOL" provides 20% reduction of flow friction when introduced into a turbulent flow of oil (70 g/m³). Being hydrocarbonic, "VIOL" does not change the quality of oil and oil products. Produced in the form of 10% benzine polymer solution.

Technical appraisal and economic benefits
"VIOL" allows
• improving the throughput of petroleum pipelines;
• improving the reliability of pipelines by reducing pressure difference in the working unit;
• reducing power input due to deactivation of intermediate plants and pumps.
• reducing friction and related heat dissipation facilitating the transport of highly viscous paraffinic crudes;
• cleaning oil tanks from paraffinaceous sediments by the stripping effect of oil flow. 2,000 tons of sediment was removed from a 20,000 m³ tank at the "Raskino" Oil Pumping Station.

Application areas
Petroleum supply

Development stage
The additive has been tested at petroleum pipelines Aleksandrovskoe – Anzhero-Sudzhensk, and Tikhoretsk – Novorossiysk. Pilot batches delivered.

Patent situation
Know-how protected.

Commercial offers
• Sales
• Joint commercialization
• Know-how contract

Estimated cost
US$ 1,500 for 1 m³ of product

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