

APPROVED BY

Rosneft Board of Directors

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COMPANY POLICY

FOR ASSESSMENT AND INVENTORY OF CRUDE HYDROCARBONS RESERVES

№ P1-01.02.01 P-01

VERSION 1.00

(with amendments approved by the decision of Rosneft' Management Board (Minutes of the meeting dated 30.06.2017 № Pr-IS-22p) effective as of 28.08. 2017 by Order № 489)

(EXCERPT FOR PUBLICATION PURPOSES)

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INTRODUCTORY PROVISIONS

INTRODUCTION

The Company Policy for assessment and inventory of crude hydrocarbons (hereinafter: the Policy) establishes the general principles of assessment and inventory of crude hydrocarbons in all fields and licensed areas of Rosneft, Group companies located in the various federal subjects of the Russian Federation, internal sea waters, territorial waters and continental shelf and abroad.

This Policy has been developed in accordance with the following instruments:

- Russian Federal Law № 2395-1 dated 21.02.1992 “On Subsurface Resources”;
- Tentative classification of fields reserves, potential and inferred resources of oil and combustible gases, approved by the Ministry of Natural Resources of the Russian Federation, Order № 126 dated 07.02.2001;
- Procedure for the provision of public reporting by companies engaged in mineral exploration and extraction, to the federal and territorial funds of geological information, approved by the Government of the Russian Federation, Order № 215 dated 28.02.1996;
- Letter № WB-61/2594 dated 08.10.1996 of the Ministry of Natural Resources of the Russian Federation “Guidelines for filling in the form of federal statistical observation № 6-GR (oil, gas, components), maintaining federal and consolidated territorial balance of reserves”;
- RF Government Decree № 69 dated 11.02.2005 “State expertise of mineral resources, geological, economic and ecological information on the subsoil resources provided for use; rates and methods of payment for the expertise”;
- Methodical recommendations for assessment of geological reserves of oil and gas applying the volumetric method.

AIMS

This Policy outlines the Company’s position for assessment and inventory of crude hydrocarbons, formalizes uniform principles and approaches in this area.

TASKS

The tasks set by this Policy are as follows:

- Setting aims and tasks for the Company, as well as implementation principles of assessment and inventory of crude hydrocarbons;
- Establishing a performance management system for the assessment and inventory of hydrocarbon reserves (including facilities management, levels of management, distribution of responsibilities and authority);
- Establishing a structure and hierarchy of local normative documents regulating the Company’s activities in the assessment and inventory of crude hydrocarbons;
- Identification of the major risks and defining risk management activity.

SCOPE

This Policy is mandatory for all Rosneft and Rosneft subsidiaries' employees whose activities are directly or indirectly related to the assessment and inventory of hydrocarbon reserves in the fields and licensed areas of Rosneft, Group companies located in the various federal subjects of the Russian Federation, internal sea waters, territorial waters and continental shelf and abroad.

This Policy is of advisory nature for the employees of Rosneft's dependent entities.

The requirements of this Policy will be subject to compulsory implementation in Rosneft subsidiaries and dependent entities, as well as in any other Entity in which Rosneft participates directly or indirectly, after they are implemented in the Entity in accordance with its Charter and pursuant to the procedure established therein.

Orders, local regulatory documents and any other internal documents shall not conflict with this Policy.

VALIDITY AND AMENDMENT PROCEDURE

This Policy is a permanent local regulatory document.

This Policy is approved at Rosneft by a decision of the Rosneft Board of Directors and introduced into force in Rosneft by Rosneft's Order.

The Policy is recognized as ceased to be in force in Rosneft based on the decision of the Rosneft Board of Directors.

Amendments to this Policy are introduced based on the decision of the Rosneft Board of Directors and put into force by Rosneft's order.

Introduction of amendments to this Policy can be initiated by Rosneft Top Management, Group companies upon the approval of the Rosneft top manager, responsible for the assessment and inventory of hydrocarbon reserves.

Amendments to this Policy are introduced in the following cases: changes in the legislation of the Russian Federation related to subsoil resources use; maintaining the hydrocarbon resource base; changes in organizational structure or authority of the managers, etc.

1. TERMS AND DEFINITIONS

TERMS AND DEFINITIONS FROM THE CORPORATE GLOSSARY

AUDIT OF RESERVES - is quantity and value evaluation of crude hydrocarbons reserves. The audit of reserves is performed on a specific date in the current economic conditions and under the current state legal agreements.

CURRENT RESERVES ESTIMATION - is reserves estimation reflecting operational changes the stock status of crude hydrocarbons in the current year, by fields or individual calculating field objects, based on the results of exploration work or revaluation calculation parameters.

GEOLOGICAL MODEL - is an integrated aggregate of geological, geophysical and field data simulating a geological object in the tridimensional format.

GEOLOGICAL RESERVES OF OIL, COMBUSTIBLE GASES, CONDENSATE - are the amounts of oil, gas, condensate and free useful components contained in them contained in the depths of the studied drilling deposits and the presence of which in the reservoirs has been proven by a trial or commercial operation or well testing, or justified by geological and geophysical studies.

GEOLOGICAL RESOURCES OF OIL, COMBUSTIBLE GASES, CONDENSATE - is the amount of oil, gas, condensate, contained in undrilled traps, oil and gas bearing or producible oil and gas reservoirs, reservoirs or complexes, and the presence of which in the reservoirs is expected based on the geological concepts, theoretical assumptions, results of geological, geophysical and geochemical studies.

GEOPHYSICAL WELL SURVEY - is a complex of physical methods used to study the rocks in the borehole and interwell space, as well as to monitor the technical condition of wells.

GEOLOGICAL EXPLORATION - is a complex of different types of geological studies of mineral resources in order to search for and evaluate mineral deposits.

INTERNATIONAL CLASSIFICATION SEC - is a standard accounting and assessment system for hydrocarbon reserves, assessing and characterizing a field based on the plausibility of the existence of deposits in these fields and on the term of the Company's license to develop the field.

Note: International classification SEC meets the requirements of the New York Stock Exchange and is a guideline for the assessment of hydrocarbon reserves.

INTERNATIONAL CLASSIFICATION PRMS (PETROLEUM RESOURCES MANAGEMENT SYSTEM) - is a set of system management standards for hydrocarbon resources and reserves, estimating the probability of the oil presence in the field and taking into account the economic efficiency of these reserves extraction (including such factors as the cost of exploration and drilling, current operating costs, transportation costs, taxes, current product prices and other factors affecting the economic viability of a deposit).

Note: According to the standards of the PRMS International Classification, reserves are classified as "proven", "probable" and "possible" based on both geological and commercial factors.

INDEPENDENT AUDIT COMPANY - is a legal entity auditing the reserves of crude hydrocarbons based on an international classification under a Contract signed with Rosneft.

LICENSE COMMITMENT - is subsoil user's obligation as per the terms and conditions of the use of subsurface resources (License Contract) in terms of subsoil use.

LICENSED AREA - is a geometrized subsoil block provided to the user in accordance with the license for subsoil use for geological study, exploration and production of crude hydrocarbons.

LICENSE TO USE A SITE OF SUBSURFACE RESOURCES (LICENSE) - a document certifying the owner's right to use a site of subsurface resources within certain limits, in accordance with the purpose specified therein within the period specified therein, subject to the owner's compliance with the specified conditions. The representatives of state authorities and the subsoil user can sign an agreement establishing the conditions of the site use and the obligations of the parties to deliver such an agreement [RF Law dated 21.02.1992 № 2395-1 "On Subsurface Resources"].

RECOVERABLE RESERVES OF OIL, COMBUSTIBLE GASES, CONDENSATE - are a part of geological reserves of oil, gas and condensate, recovery of which, as of the date of the calculation, is cost-effective in a competitive market, provided rational use of modern production technology and equipment, provided compliance with the requirements for the protection of subsoil resources and environment.

RECOVERABLE RESOURCES OF OIL, COMBUSTIBLE GASES, CONDENSATE - are a part of geological resources of oil, gas and condensate, which is projected to be extracted from the ground using the available technology, provided compliance with the requirements for the protection of subsoil resources and environment.

RESERVES ESTIMATION - is a complex of scientific research to synthesize the data on the exploration, testing or operational works performed in the fields, aimed at creating objective geological models of deposits according to their degree of their study, upon which various methods are used to establish the amount of minerals and useful components contained therein.

RESOURCE BASE - implies reserves and resources of crude hydrocarbons of all categories registered in the state balance of the Russian Federation for the subsoil user.

RUSSIAN CLASSIFICATION OF RESERVES - is the classification of crude hydrocarbons reserves, developed and approved by the Ministry of Natural Resources of the Russian Federation.

STATE RESERVES COMMITTEE UNDER THE RF MINISTRY OF NATURAL RESOURCES - is a federal budget institution whose purpose is to ensure the rational exploitation of subsoil resources in the interests of the state; performing the state expertise of mineral resources, geological, economic and environmental information on the subsoil resources provided for use.

STATE APPRAISAL OF COMMERCIAL MINERALS RESERVES - is examination of geological, geophysical and geological-production materials at any stage of the geological exploration of deposits, provided these materials allow for an objective assessment of the quantity and quality of mineral resources, their economic importance, mining, hydrogeological, environmental and other conditions of their production.

STATE REGISTER OF MINERAL RESERVES - is a document kept to register the state of the mineral resource base by the Federal Agency for Subsoil Use, containing information on the quantity,

quality and degree of reserves exploration for each type of mineral resources of commercial importance in the fields, on their placement, on the degree of commercial development, production, loss and on the industry provision with the proven reserves of mineral resources based on the classification of mineral reserves.

TECHNICAL AND ECONOMIC SUBSTANTIATION OF OIL RECOVERY FACTOR - is a complex of works to substantiate the oil recovery factor and choose the best development option based on the results of technical and economic calculations.

TERMS AND CONDITIONS OF THE USE OF SUBSURFACE RESOURCES (LICENSE CONTRACT) - are a component of a license to use a site of subsurface resources, containing the rights and obligations of the subsoil user; it remains applicable during the terms specified in the license to use a site of subsurface resources, or through the validity term of the license to use a site of subsurface resources.

2. DESIGNATIONS AND ABBREVIATIONS

COMPANY - is a group of legal entities of various legal forms, including Rosneft, in respect of which the latter acts as the principal or predominant (participating) society.

CRUDE HYDROCARBONS - oil, combustible gas, condensate.

GS – geophysical well survey.

GE – geological exploration.

GROUP COMPANY - is an economic entity, where Rosneft holds 20 percent or more of direct and (or) indirect ownership interest by securities or shares in the authorized capital thereof.

STRUCTURAL SUBDIVISION (SS) - is structural subdivision with separate functions, tasks and responsibilities within their competence, as per the Regulations on Subdivisions.

STATISTIC REPORTING FORM 6-GR (FORM 6-GR) - is a reporting document compiled by the oil and gas companies of the Group to show inventories of crude hydrocarbons in the fields and perspective areas approved by the State Committee for Mineral Reserves in the Group Company's balance sheet as of January 1st of the year following the reporting year.

3. GENERAL PROVISIONS

Being the leader in the Russian oil industry and one of the largest public oil and gas companies in the world, Rosneft understands its importance as a largest budget-making enterprise in the Russian Federation.

Rosneft is an open and public company seeking to increase its profits and capitalization. A key objective of the Company is to maintain a stable growth of the Company sustainable value.

The key element of the Company capitalization are crude hydrocarbons reserves which it possesses. Therefore, the Company pays a lot of attention to the evaluation and inventory of crude hydrocarbons reserves.

The implementation of effective assessment and inventory of crude hydrocarbons contributes to the objective of increasing the Company's profitability.

3.1. COMPANY TARGETS WHILE ASSESSING THE RESOURCES OF CRUDE HYDROCARBONS

The Company's target in the assessment and inventory of crude hydrocarbons is to ensure effective management of the resource base for setting and achieving strategic goals in the area of field exploration and production of crude hydrocarbons, effective business planning of the Company.

3.2. COMPANY OBJECTIVES WHILE ASSESSING THE RESOURCES OF CRUDE HYDROCARBONS

The Company achieves its key objectives through solving the following tasks:

- Effective planning and organization of work for the calculation of crude hydrocarbons reserves in the Company fields.
- Analysis of crude hydrocarbons reserves and resources movement, monitoring the replenishment of crude hydrocarbons reserves of industrial category.
- Ensuring the approval of changes in crude hydrocarbons reserves as per the established procedure.
- Cooperation with the Federal Agency for Subsoil Use to register and un-register mineral reserves in the State Balance.
- Organization of work on the independent audit of the reserves.
- Development of effective measures to improve the categorization of reserves.

3.3. PRINCIPLES OF THE COMPANY ACTIVITY IN THE ASSESSMENT AND INVENTORY OF CRUDE HYDROCARBONS RESOURCES

The Company's activity in the assessment and inventory of crude hydrocarbons is based on the following principles:

- Compliance with the legislation of the Russian Federation on the assessment and inventory of

crude hydrocarbons.

- When assessing based on the Russian reserves classification, comply with the uniform standards, rules and regulations on the assessment and inventory of crude hydrocarbons, established by the State Committee for Mineral Reserves with the Federal Agency for Subsoil Use.
- When assessing based on the PRMS and SEC International Classification systems, comply with the uniform standards, rules and regulations in accordance with the requirements of the International Society of Petroleum Engineers and the regulations of the US Securities and Exchange Committee.
- Apply the principles and methods of crude hydrocarbons reserves evaluation commonly used in international and domestic practice.
- Provide timely and high-quality planning and execution of works on assessment and inventory of crude hydrocarbons in the Company fields.
- Continuous risk forecast and risk monitoring for assessment and inventory of crude hydrocarbons and timely response to neutralize such.
- Ensure objective data on crude hydrocarbons reserves confirmed by an independent audit of reserves.
- Centralize and maintain a uniform information database on reserves.

3.4. MANAGEMENT OBJECTS FOR ASSESSMENT AND INVENTORY OF CRUDE HYDROCARBONS

The management objects for the assessment and inventory of crude hydrocarbons include:

- Company Resource base.
- Business processes: "Evaluation of crude hydrocarbons reserves - Russian classification", "Inventory of crude hydrocarbons reserves - Russian classification", "Assessment and inventory of crude hydrocarbons reserves - international classifications".
- Databases, information resources containing the information and documents (final reports on the evaluation of crude hydrocarbons reserves in the Company fields, statistical reporting form № 6-GR, etc.).
- Results of business processes:
 - ♦ Reports containing assessment of crude hydrocarbons reserves in accordance with the Russian classification of the Company fields, having passed the state expert examination of mineral reserves.
 - ♦ Updated geological and technical information on all Company fields and licensed areas.
 - ♦ Updated geological models.
 - ♦ Official reports of the independent auditor containing the results of evaluation of crude hydrocarbons reserves as per the international classifications PRMS and SEC in the Company fields.
 - ♦ Balance of the Company's mineral reserves containing the information about the resource base in all fields and licensed areas of the Company.

4. KEY RISKS AND RISK MANAGEMENT METHODS

Table 1
Key risks in the assessment and inventory of crude hydrocarbons and risk management methods

№	RISK DESCRIPTION	RISK OCCURRENCE CONSEQUENCE	RISK MANAGEMENT METHODS
1	2	3	4
1.	Insufficient background information for the reserves assessment	Inability to confirm the reserves in the course of further development of the fields due to low credibility of geological models and final evaluations in the resources calculations	<ul style="list-style-type: none"> ▪ Analysis of the background database to calculate the resources. ▪ Providing guidelines for supplementary research. ▪ Selecting analog fields for justifying the calculation parameters.
2.	Unavailability of a proven method for evaluating the resources calculations for challenging untraditional reservoirs (e.g. Bazhenov, Abalak, Khadum reservoirs with hard-to-recover resources).	Inability to confirm the reserves in the course of further development of the fields due to low credibility of geological models and final evaluations in the resources calculations	Research work on challenging reservoirs and developing methodology for their assessment (selection and study of kern from untraditional reservoirs, creating algorithms for GS interpretation, justification for adequate GS complexes for further research).
3.	Insufficient data to establish the permeability and approval of this parameter with the Committee for Mineral Reserves with the Federal Agency for Subsoil Use in order to be registered with the State Balance of Natural Reserves.	Failure to obtain all benefits for natural reserves extraction taxes applicable to hard-to-recover resources.	<ul style="list-style-type: none"> ▪ Analysis of resource base in order to establish challenged development facilities. ▪ Scheduling supplementary research for the fields (hydrodynamic survey, selection and study of kern, creating algorithms to establish the permeability, justification for adequate geophysical survey complexes and their implementation).
4.	Incorrect accounting for the production at multi-formation reservoirs leading to the inaccurate assessment of the current remaining reserves.	Inaccurate assessment of the current remaining reserves	<ul style="list-style-type: none"> ▪ Creating methods for distributing production by facility. ▪ Control over the compliance with the methods for distributing production by facility.
5.	Accounted object inconsistency in various reporting documentation, various degree of detail of the developed facilities and accounted objects	Inaccurate assessment of the remaining reserves, incorrect evaluation of the objects depletion.	<ul style="list-style-type: none"> ▪ Harmonization of accounted objects in various reporting documentation. ▪ Control over the compliance with the accounting rules applicable to the accounted objects

№	RISK DESCRIPTION	RISK OCCURRENCE CONSEQUENCE	RISK MANAGEMENT METHODS
1	2	3	4
6.	Low quality of background geological and geophysical information	Inaccurate assessment of the initial crude hydrocarbons resources	<ul style="list-style-type: none"> ▪ Strict selection of contractors for geological and geophysical surveys at the procurement stage. ▪ Control over the geological and geophysical surveys (organizing supervising).
7.	Inaccurate recording of data errors in Statistical Reporting Form № 6-GR	Provision of incorrect data on the deposits parameters, oil properties to state authorities resulting in the incorrect resource base of the Company	Chief Geologists of oil and gas producing companies of the Group control strict compliance with the Russian legislation related to filling Statistical Reporting Form № 6-GR, and the procedure for provision of state reporting.
8.	Reduced rating of resources when assessed as per the international classifications due to changes of the scheduled introduction of the fields into development.	Reduction of the company's capitalization due to the reduced rating of resources as per international classifications PRMS and SEC.	Control over the compliance with the scheduled introduction of the fields into development and the action on the resources assessment as per international classifications PRMS and SEC
9.	Default of license contracts in terms of resources assessment deadlines	Loss of license, fines, deterioration of the Company's reputation.	Control over the delivery of license commitments.

The Company manages the risks associated with the assessment and accounting for the crude hydrocarbons reserves in the manner prescribed by the applicable law and relevant local regulatory documents of the Company.

The risk management for the "Assessment and inventory of crude hydrocarbons" is based on the following key principles:

- identification of risks in relation to the set objectives;
- planning activities taking into account the risks impact on the achievement of the objectives and targets;
- implementation of actions aimed at reducing the probability of risks and/or minimizing the adverse effects of their occurrence.

The Top Manager of Rosneft responsible for the assessment and inventory of crude hydrocarbons shall be the owner of the risks for assessment and inventory of crude hydrocarbons.

Employees of Rosneft structural divisions and oil and gas companies of the Group involved in the assessment and inventory of crude hydrocarbons, are responsible for the identification of risks, their qualitative assessment and corrective and preventive actions.

5. STRUCTURE AND HIERARCHY OF LOCAL REGULATORY DOCUMENTS FOR ASSESSMENT AND INVENTORY OF CRUDE HYDROCARBONS

The structure and hierarchy of local regulatory documents for assessment and inventory of crude hydrocarbons are presented in fig. 2.

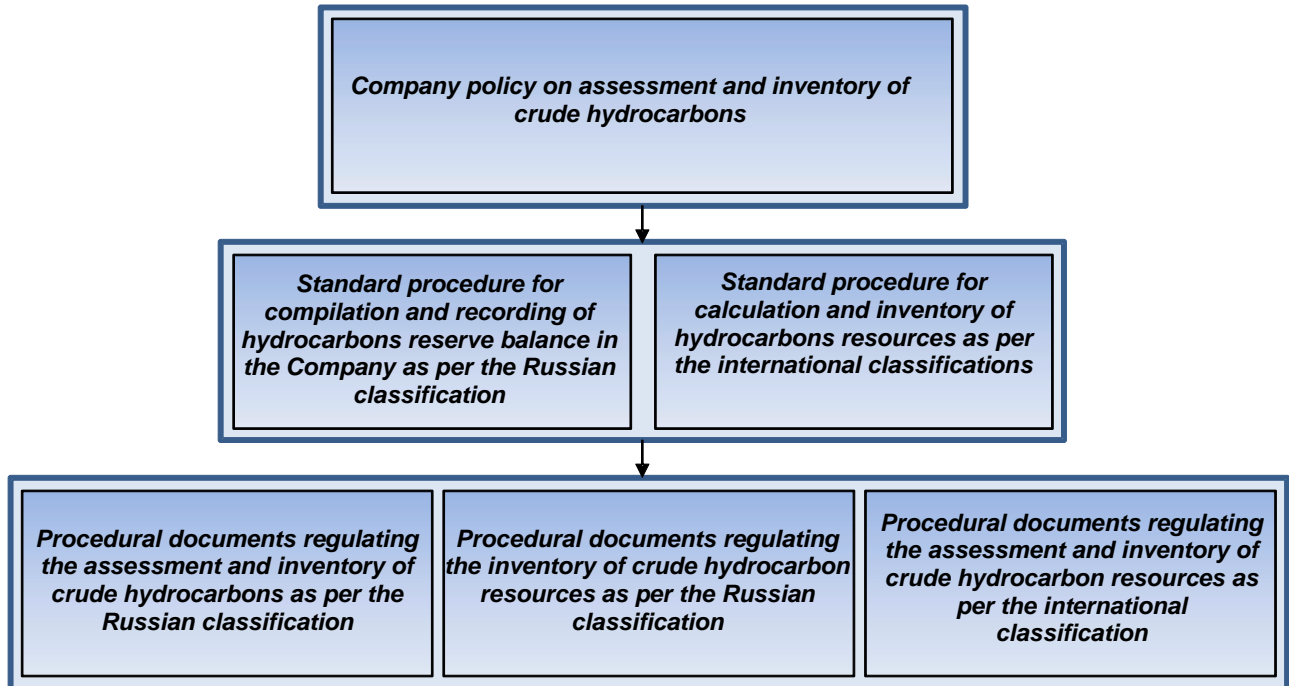


Fig. 1 Structure and hierarchy of local regulatory documents for assessment and inventory of crude hydrocarbons

6. POLICY ASSIGNMENT, DISTRIBUTION AND MONITORING

This Policy is public ¹.

This Policy requires translation into the English language.

This Policy shall be assigned, distributed and provided access to as per the established procedure by informing Rosneft employees and Group companies and by posting in the internal and external information resources of the Company.

The implementation and monitoring the compliance with this Policy in the course of the Company's business shall be performed by a Rosneft Top Manager responsible for the assessment and inventory of hydrocarbon reserves.

The control over the compliance with the Policy provisions is implemented at two levels:

- Monitoring by the Rosneft Top Manager responsible for the assessment and inventory of hydrocarbon reserves and heads of Rosneft's structural subdivisions; by the managers and Chief Geologists of the oil and gas producing companies of the Group, managers of corporate research and design institute of Rosneftinvolved in the evaluation and inventory of crude hydrocarbons resources.
- Independent control (internal and third-party audit).

Amendments to this Policy can be introduced following the above procedures in order to make improvements as per the established procedure.

¹ The following sections of the Policy are not deemed public:

- 4. BUSINESS PROCESSES FOR ASSESSMENT AND INVENTORY OF CRUDE HYDROCARBONS.
- 5. MANAGEMENT LEVELS, DISTRIBUTION OF RESPONSIBILITIES AND AUTHORITY.

7. REFERENCES

1. Russian Federal Law № 2395-1 dated 21.02.1992 “On Subsurface Resources”.
2. RF Government Decree № 69 dated 11.02.2005 “State expertise of mineral resources, geological, economic and ecological information on the subsoil resources provided for use; rates and methods of payment for the expertise”.
3. Letter of the RF ministry of Natural Resources № ББ-61/2594 dated 08.10.1996 № Guidelines for Filing the Federal Statistical Observation Form № 6-GR (oil, gas, components), maintaining the federal and territorial consolidated balance sheets for reserves”.
4. Tentative classification of fields reserves, potential and inferred resources of oil and combustible gases, approved by the Ministry of Natural Resources of the Russian Federation, Order № 126 dated 07.02.2001.
5. Procedure for the provision of public reporting by companies engaged in mineral exploration and extraction, to the federal and territorial funds of geological information, approved by the Government of the Russian Federation, Order № 215 dated 28.02.1996.
6. Petroleum Resources Management System for Gas, Liquid and Solid Hydrocarbons, Society of Petroleum Engineers (SPE), 2007.
7. Reserves definition of Rule 4-10(a) (1)-(32) of Regulation S-X of the United States Securities and Exchange Committee.

8. MATERIALS USED

1. Guidelines for the calculation of geological reserves of oil and gas applying the volumetric method. Petersilie V.I., Poroskuna V.I., Yatsenko G.G. - Moscow, Tver: VNIGNI, SPC Tvergeofizika, 2003.