

To all tender participants

*Dear Sirs,*

We hereby invite you to submit your formal bids to purchase oil products on the following terms:

<b>Lot #</b>	<b>2022-23</b>
<b>Product</b>	Fuel oil / RME 180 / RMG 380
<b>Producer</b>	Ryazan, Yaroslavl, Kuibyshev, Syzran, Saratov refineries. Other Producers are in Seller's option subject to meeting the below quality guarantees.
<b>Quantity</b>	up to 7 300 000 mt in Seller's option
<b>Delivery terms</b>	FOB Baltic Sea (including STS with floating storage) in Seller's option. We are currently developing our shipping activity therefore please also provide your bids on CIF/CFR basis or propose alternative FOB + freight formula (flat rate * world scale average month of nomination)
<b>Delivery period</b>	January 01, 2022 – December 31, 2022 (both dates inclusive), carryover deliveries of FOB volumes shall be made available until January, 2023.
<b>Quality</b>	As per the guaranteed quality specification below. Typical specification for this product is enclosed strictly for information purposes and shall not carry an obligation of the Seller to meet its parameters.
<b>Bidding deadline</b>	The signed Bid shall be submitted strictly through the CJSC TEK – TORG electronic platform in the relevant Rosneft's module ( <a href="https://tender.tektorg.ru">https://tender.tektorg.ru</a> ) under the heading "Tender sales of RAW HYDROCARBONS" pursuant to rules and regulations of the electronic platform <b>no later than 15:00 Moscow time on the 07<sup>th</sup> of October, 2021.</b>
<b>Bid validity</b>	Your bid should be <b>valid through the 30<sup>th</sup> of November 2021 at 22:00 Moscow time.</b> Should validity not be indicated in your bid, Rosneft shall deem your bid irrevocable and valid through the general validity deadline indicated above.



<p><b>Restrictions</b></p>	<p><b>Rosneft shall not consider and will reject any bids which contain the following:</b></p> <ul style="list-style-type: none"> <li>- pricing period options,</li> <li>- non-relevant quotations,</li> <li>- any additional quality guarantees outside the standard guaranteed specification,</li> <li>- escalation/ de-escalation in Buyer's option,</li> <li>- escalation/ de-escalation based on any additional parameters except indicated in respective column,</li> <li>- laydays and cargo sizes in Buyer's option,</li> <li>- quantity in Buyer's option,</li> <li>- delivery terms in Buyer's option,</li> <li>- non-standard payment terms, as well as any non-standard currency/alternative currency clauses,</li> <li>- cancel/re-sell clause,</li> <li>- provision of Financial statements clause,</li> <li>- alternative Anti-corruption, Confidentiality, Sanctions, Limitation of Liability, Destination clauses.</li> </ul>
<p><b>General terms and conditions</b></p>	<p>The following Rosneft standard terms and conditions are attached to this invitation letter and shall be incorporated into a written form of bilateral Contract, which is binding for execution in case the bid is acknowledged by Rosneft as winning:</p> <ul style="list-style-type: none"> <li>a) Laytime, Specific conditions 1-4, Nomination, Payment terms, Currency/Alternative currency - as per <b>Attachment №1</b>;</li> <li>b) Anti-corruption, Confidentiality, Sanctions, Liability - as per <b>Attachment № 2</b>;</li> <li>c) Destination - as per <b>Attachment № 3</b></li> </ul> <p>(all a), b) and c) – “the Rosneft Standard”).</p> <p>By submitting the bid, you fully accept all provisions of the Rosneft Standard and express your intention to be deemed a person entering into transaction with Rosneft on terms of your bid and the Rosneft Standard, conditional upon acceptance of your bid by Rosneft. In case of acceptance of your bid by Rosneft via relevant written notification, your company shall be fully liable to Rosneft for performance of transaction on the terms of the Rosneft Standard and the executed bilateral sales and purchase agreement.</p>
<p><b>Pricing:</b></p>	<p>Mean of the mean quotations for <b>Fuel oil 3,5%</b> as published in Platt's European Marketscan under the headings</p>

	“Northwest Europe barges FOB Rotterdam” and “Northwest Europe cargoes CIF NWE/basis ARA”
<b>Pricing period:</b>	Month of actual delivery. Average of all quotations published during month of BL date.
<b>Escalation/ De-escalation:</b>	Kindly note that we are ready to consider escalation/ de-escalation based on a kinematic viscosity measured in centistokes / mm <sup>2</sup> /s at 50 degree of Celsius and/ or based on a density measured in kg/l at 15 degree of Celsius. We will not review or consider any additional escalation/ de-escalation.
<b>Jurisdiction:</b>	In accordance with the laws of the Russian Federation.
<b>Cargo sizes:</b>	- 100 000 mt +/-10% in Seller’s operational tolerance, and/or - 30 000 mt +/-10% in Seller’s operational tolerance. Cargo size 100 000 mt or 30 000 mt is in Seller’s option.

**! Rosneft Oil Company reserves the right to send you an additional invitation with request to improve and/or clarify your bid. However, Rosneft does not intend to introduce such additional invitation more than once.**

**! Cargo size shall always be in Seller’s option.**

**! You are requested to present your bids in strict compliance with the above terms and conditions. Nevertheless, with consideration to the above, you are free to submit your bid(s) on any additional terms and conditions/delivery basis which are not specified in this letter for our consideration. Rosneft shall have the right but not an obligation to accept the bids on additional terms and conditions.**

#### **Guaranteed quality specification:**

Test	Unit	Method	Guarantee					
			Kuibyshev	Syzran	Yaroslavl	Ryazan	Saratov	Blend
Kinematic viscosity at 50 Dgr C, max	mm <sup>2</sup> /s	GOST 33 ASTM D 445 ISO 3104 DIN EN ISO 3104	900,0	850,0	900	900,0	850,0	900,0
Ash, max	% mass	ASTM D 482 GOST 1461	0,14	0,14	0,10	0,14	0,14	0,14

Sediment Content, <b>max</b>	% mass	ASTM D 473 GOST 6370	1,0	1,0	0,1	1,0	1,0	1,0
Water Content, <b>max</b>	% vol	ASTM D 95 GOST 2477	1,0	1,0	0,5	1,0	1,0	1,0
Water Soluble Acids and Alkalis, <b>max</b>	pH	GOST 6307	absence	absence	absence	9,0pH	absence	9,0
Sulphur Content, <b>max</b>	% mass	ASTM D 4294 GOST R 51947	3,5	3,5	3,0	3,5	3,5	3,5
Flash Point (opened cup), <b>min</b>	Dgr C	ASTM D 92 GOST 4333	90	90	65	65	90	65
Pour Point, <b>max</b>	Dgr C	GOST 20287	25	25	25	25	25	25
Density at 15 Dgr C, <b>max</b>	kg/l	GOST R 51069 ASTM D 1298 ASTM D 4052	1,007	1,000	0,991	1,007	0,985	1,007
Hydrogen Sulphide, <b>max</b>	ppm	IP 399 IP 570 GOST P 53716 GOST 33198 GOST 32505	10,0	10,0	10,0	10,0	10,0	10,0
Total Sediment by Hot Filtration: -Total Sediment Potential, <b>max</b> - Procedure A -Total Sediment Accelerated, <b>max</b> - Procedure B	% mass	ISO 10307-2	not standardized	not standardized 0,1	not standardized	0,1 0,1	0,1 0,1	not standardized

- ! No other quality guarantees or assurances apart from the above are guaranteed by the Seller.**
- ! Historical quality specifications are enclosed for information purposes only and are not guaranteed by Rosneft.**
- ! By presenting your bid (s) you confirm and agree that the subject Fuel oil / RME 180 / RMG 380 is of fully merchantable quality, that you fully understand and accept its quality and therefore waive the right to present any claims on non-merchantability of the delivered products unless the specification deviates from that described above.**

Mandatory conditions for consideration of the bids/bid requirements are as follows:

- ✓ Completed Rosneft Oil Company counterparty clearing procedure
- ✓ A signed bid sent to Rosneft Oil Company strictly through CJSC TEK – TORG electronic platform in relevant Rosneft’s module (<https://tender.tektorg.ru>) in section under heading “Tender sales of RAW HYDROCARBONS” pursuant to the rules and conditions of the electronic platform;
- ✓ A signed Bid shall include the following information:
  - Product name and producer
  - Quantity of products
  - Delivery basis and delivery period
  - Pricing for each relevant delivery basis
  - Your express confirmation of the terms of this invitation letter and the Rosneft Standard in the following format: **“Hereby we expressly confirm and accept the terms of the Rosneft invitation letter and the Rosneft Standard and acknowledge that this Bid is submitted on terms of the Rosneft invitation letter and the Rosneft Standard.”**
- ✓ Your Bids shall be submitted in table format as follows:

Refinery	Product	Quality (if applicable)	Delivery period	Quantity, tons (from 0 up to X mt)	Delivery terms (dispatch point/destination), as per terms indicated in the invitation.	Price/premium/disc out against price formula, in USD per ton at delivery terms	Price formula + pricing period

- ! **Bids forwarded by other means and/or to other addresses (as well as those forwarded after the Bidding deadline indicated in this letter) shall not be considered.**
- ! **Compliance with the Bidding deadline is a mandatory prerequisite for consideration of your bid by Rosneft.**
- ! **The correct format and substance of your bid helps us expedite our consideration of your bid.**
- ! **Your acceptance of the terms of this invitation, Attachments № 1, 2, 3 hereto and form of the Rosneft bilateral sales and purchase agreement is an essential condition for consideration of your Bid**
- ! **If, upon acceptance of your offer by Rosneft, you refuse to close a transaction by signing the bilateral sale and purchase agreement on terms of the accepted offer and the Rosneft Standard, Rosneft, at its sole discretion, will be entitled to re-sell the agreed quantity of the products to a third party and to claim all possible and actually incurred damages from you, including but not limited to difference between the price offered by you and the price of re-sale.**

- ! Rosneft Oil Company reserves the right to reject any bids with validity, which deviates from the requirement stipulated in this letter.**
- ! Rosneft Oil Company reserves the right to decline all bids received.**
- ! The Seller shall be Rosneft Oil Company.**

If you have encountered theft, fraud or corruption in Rosneft, please reach out to us via the Security Hotline. We ensure confidentiality of all calls and messages.

Contact phone number: 8 (800) 500-25-45 – (free call around-the-clock)

E-mail: [sec\\_hotline@rosneft.ru](mailto:sec_hotline@rosneft.ru)

Mailing address: 119180, Moscow, 3/9 B. Polyanka, POB 13

(marked "Security hotline")

**This letter constitutes an invitation to bid, is not an offer or an invitation to take part in any auction or tender, under no circumstances should it be considered a legally binding document for Rosneft, and does not impose any obligations on Rosneft, including the acceptance of any of the received bids.**

We are looking forward to our long-term and mutually beneficial cooperation.

Kind regards,

Denis Nyrkov

Director

Crude Oil and Product Trading Department



METHOD	TEST	UNIT	AUGUST
ASTM D1298	Density at 15°C	kg/l	0,9920
ASTM D1298	Density at 20°C	g/ml	0,9886
ASTM D445	Kinematic Viscosity at 80°C	mm <sup>2</sup> /s	123,9
ASTM D445	Kinematic Viscosity at 50°C	mm <sup>2</sup> /s	733,3
NOM 47 /UNI 20048	Viscosity at 80°C	Engler Degree	16,35
ASTM D4294	Total Sulphur Content	%(m/m)	2,870
ASTM D92	Flash point open cup	OC	138
ASTM D95	Water by distillation	%(m/m)	0,05
ASTM D97	Pour point	OC	9
ASTM D482	Ash	%(m/m)	0,050
ASTM D473	Sediment by Extraction	%(m/m)	0,01
ASTM D1160	Vacuum distillation		
	Distillation Pressure	mm Hg	2
	Initial boiling point (IBP)	OC	184
	5 % recovered at (AET)	OC	249
	10 % recovered at (AET)	OC	296
	20 % recovered at (AET)	OC	375
	30 % recovered at (AET)	OC	467
	40 % recovered at (AET)	OC	517
	50 % recovered at (AET)	OC	-
	60 % recovered at (AET)	OC	-
	70 % recovered at (AET)	OC	-
	Onset of Cracking at	OC	524,7
	Recovered at 360 °C	%(v/v)	15
	Recovery at temperature of cracking	%(v/v)	47,0
ASTM D1159 / ASTM D1160	Bromine number on OVHD up to 3600C	g Br <sub>2</sub> /100 g	10,2
	Recovered at 360°C	%(v/v)	15,0
	Distillation Pressure	mm Hg	2
AMS 79-004 / EXXON 79-004	Toluene equivalent	%(v/v)	49
BP 230/75	Xylene Equivalent	%	46/50
SMS 1600-83	P- Value	-	1,4
IP 390 раздел B	Accelerated Total Sediment	%(m/m)	0,04
IP 390 раздел A	Potential Total Sediment	%(m/m)	0,01
IP 375	Total Sediments Existent	%(m/m)	0,01
IP 143	Asphaltene	%(m/m)	5,7
ASTM D4868	Gross Calorific Value	MJ/kg	42,25
ASTM D4868	Net Calorific Value	MJ/kg	39,97
ГОСТ 6307-75	Water soluble Acids and Alkalies	-	6,5
IP 470 / IP 501	Vanadium	mg/kg	172
	Nickel	mg/kg	43
	Sodium	mg/kg	19
	Aluminium	mg/kg	<5
	Silicon	mg/kg	<10
	Iron	mg/kg	13
IP 399	Hydrogen Sulfide Content	mg/kg	<0.5
ASTM D4530	Micro Carbon Residue	%(m/m)	14,5

METHOD	TEST	UNIT	JUNE	JULY	AUGUST
ASTM D1298	Density at 15°C	kg/l	0,9818	0,9821	0,9822
ASTM D1298	Density at 20°C	g/ml	0,9794	0,9787	0,979
ASTM D445	Kinematic Viscosity at 80°C	mm <sup>2</sup> /s	119,8	121,8	118,3
ASTM D445	Kinematic Viscosity at 50°C	mm <sup>2</sup> /s	690,5	699,2	684
NOM 47 /UNI 20048	Viscosity at 80°C	Engler Degree	15,81	16,07	15,62
ASTM D4294	Total Sulphur Content	%(m/m)	2,62	2,59	2,70
ASTM D92	Flash point open cup	OC	188	162	171
ASTM D95	Water by distillation	%(m/m)	0,05	0,05	0,05
ASTM D97	Pour point	OC	6	6	0
ASTM D482	Ash	%(m/m)	0,035	0,039	0,039
ASTM D473	Sediment by Extraction	%(m/m)	0,01	0,01	0,01
ASTM D1160	Vacuum distillation				
	Distillation Pressure	mm Hg	2	2	2
	Initial boiling point (IBP)	OC	209	196	199
	5 % recovered at (AET)	OC	282	303	287
	10 % recovered at (AET)	OC	320	340	328
	20 % recovered at (AET)	OC	378	409	395
	30 % recovered at (AET)	OC	462	485	481
	40 % recovered at (AET)	OC	526	532	532
	50 % recovered at (AET)	OC	552	566	561
	60 % recovered at (AET)	OC	-	-	-
	70 % recovered at (AET)	OC	-	-	-
	Onset of Cracking at	OC	568	576	570
	Recovered at 360 °C	%(v/v)	15,5	13,5	15,0
	Recovery at temperature of cracking	%(v/v)	54,0	54,0	54,5
ASTM D1159 / ASTM D1160	Bromine number on OVHD up to 3600C	g Br2/100 g	9,8	9,6	10,5
	Recovered at 360°C	%(v/v)	15,5	13,5	15
	Distillation Pressure	mm Hg	2	2	2
AMS 79-004 / EXXON 79-004	Toluene equivalent	%(v/v)	31	31	37
BP 230/75	Xylene Equivalent	%	31/35	31/35	36/40
SMS 1600-83	P- Value	-	1,7	1,7	1,8
IP 390 раздел B	Accelerated Total Sediment	%(m/m)	0,02	0,02	0,01
IP 390 раздел A	Potential Total Sediment	%(m/m)	0,01	0,02	0,01
IP 375	Total Sediments Existent	%(m/m)	0,01	0,01	0,01
IP 143	Asphaltene	%(m/m)	6,2	5,7	7,8
ASTM D4868	Gross Calorific Value	MJ/kg	42,51	45,05	42,48
ASTM D4868	Net Calorific Value	MJ/kg	40,2	42,29	40,16
ГОСТ 6307-75	Water soluble Acids and Alkalies	-	7,22	7,36	7,34
IP 470 / IP 501	Vanadium	mg/kg	153	142	136
	Nickel	mg/kg	25	38	39
	Sodium	mg/kg	16	18	12
	Aluminium	mg/kg	<5	6	<5
	Silicon	mg/kg	<10	<10	<10
	Iron	mg/kg	12	18	14
IP 399	Hydrogen Sulfide Content	mg/kg	<0.50	<0.50	<0.50
ASTM D4530	Micro Carbon Residue	%(m/m)	13,3	13,4	13,6



METHOD	TEST	UNIT	AUGUST
ASTM D1298	Density at 15°C	kg/l	0,9883
ASTM D1298	Density at 20°C	g/ml	0,9849
ASTM D445	Kinematic Viscosity at 80°C	mm <sup>2</sup> /s	112,8
ASTM D445	Kinematic Viscosity at 50°C	mm <sup>2</sup> /s	638,5
NOM 47 /UNI 20048	Viscosity at 80°C	Engler Degree	14,89
ASTM D4294	Total Sulphur Content	%(m/m)	2,91
ASTM D92	Flash point open cup	OC	116
ASTM D95	Water by distillation	%(m/m)	0,10
ASTM D97	Pour point	OC	9
ASTM D482	Ash	%(m/m)	0,050
ASTM D473	Sediment by Extraction	%(m/m)	0,04
ASTM D1160	Vacuum distillation		
	Distillation Pressure	mm Hg	2
	Initial boiling point (IBP)	OC	209
	5 % recovered at (AET)	OC	280
	10 % recovered at (AET)	OC	338
	20 % recovered at (AET)	OC	433
	30 % recovered at (AET)	OC	491
	40 % recovered at (AET)	OC	535
	50 % recovered at (AET)	OC	-
	60 % recovered at (AET)	OC	-
	70 % recovered at (AET)	OC	-
	Onset of Cracking at	OC	544
	Recovered at 360 °C	%(v/v)	13
	Recovery at temperature of cracking	%(v/v)	46,0
ASTM D1159 / ASTM D1160	Bromine number on OVHD up to 3600C	g Br <sub>2</sub> /100 g	17,4
	Recovered at 360°C	%(v/v)	13,0
	Distillation Pressure	mm Hg	2
AMS 79-004 / EXXON 79-004	Toluene equivalent	%(v/v)	35
BP 230/75	Xylene Equivalent	%	31/35
SMS 1600-83	P- Value	-	1,7
IP 390 раздел B	Accelerated Total Sediment	%(m/m)	0,04
IP 390 раздел A	Potential Total Sediment	%(m/m)	0,03
IP 375	Total Sediments Existent	%(m/m)	0,04
IP 143	Asphaltene	%(m/m)	5,4
ASTM D4868	Gross Calorific Value	MJ/kg	42,28
ASTM D4868	Net Calorific Value	MJ/kg	39,99
ГОСТ 6307-75	Water soluble Acids and Alkalies	-	7,5
IP 470 / IP 501	Vanadium	mg/kg	179
	Nickel	mg/kg	39
	Sodium	mg/kg	25
	Aluminium	mg/kg	15
	Silicon	mg/kg	15
	Iron	mg/kg	>60
IP 399	Hydrogen Sulfide Content	mg/kg	0,89
ASTM D4530	Micro Carbon Residue	%(m/m)	13,2

## SYZRAN FO

METHOD	TEST	UNIT	AUGUST
ASTM D1298	Density at 15°C	kg/l	0,9937
ASTM D1298	Density at 20°C	g/ml	0,9904
ASTM D445	Kinematic Viscosity at 50°C	mm <sup>2</sup> /s	787,0
ASTM D445	Kinematic Viscosity at 80°C	mm <sup>2</sup> /s	128,6
NOM 47 /UNI 20048	Viscosity at 80°C	Engler Degree	16,98
ASTM D4294	Total Sulphur Content	%(m/m)	2,92
ASTM D92	Flash point open cup	°C	108
ASTM D95	Water by distillation	%(m/m)	0,10
ASTM D97	Pour point	°C	15
ASTM D482	Ash	%(m/m)	0,070
ASTM D473	Sediment by Extraction	%(m/m)	0,05
ASTM D1160	Vacuum distillation		
	Distillation Pressure	mm Hg	2
	Initial boiling point (IBP)	°C	211
	5 % recovered at (AET)	°C	306
	10 % recovered at (AET)	°C	337
	20 % recovered at (AET)	°C	390
	30 % recovered at (AET)	°C	457
	40 % recovered at (AET)	°C	514
	50 % recovered at (AET)	°C	
	60 % recovered at (AET)	°C	
	70 % recovered at (AET)	°C	
	Onset of Cracking at	°C	531
	Recovery at temperature of cracking	%(v/v)	
	Recovered at 360 °C	%(v/v)	15,0
ASTM D1159 / ASTM D1160	Bromine number on OVHD up to 360 C	g Br <sub>2</sub> /100 g	17,1
	Recovered at 360°C	%(v/v)	15,0
	Distillation Pressure	mm Hg	2
AMS 79-004 / EXXON 79-004	Toluene equivalent	%(v/v)	65
BP 230/75	Xylene Equivalent	%	61/65
SMS 1600-83	P- Value	-	1,05
IP 390 Procedure B	Accelerated Total Sediment	%(m/m)	0,04
IP 390 Procedure A	Potential Total Sediment	%(m/m)	0,03
IP 375	Total Sediments Existent	%(m/m)	0,04
IP 143	Asphaltene	%(m/m)	9,9
ASTM D4868	Gross Calorific Value	MJ/kg	42,17
ASTM D4868	Net Calorific Value	MJ/kg	39,90
GOST 6307-75	Water soluble Acids and Alkalies	-	7,2
IP 470 / IP 501	Aluminium	mg/kg	<5
	Iron	mg/kg	41
	Sodium	mg/kg	17
	Nickel	mg/kg	49
	Silicon	mg/kg	<10
	Vanadium	mg/kg	247
IP 399	Hydrogen Sulfide Content	mg/kg	0,79
ASTM D4530	Micro Carbon Residue	%(m/m)	17,5

METHOD	TEST	UNIT	JUNE	JULY	AUGUST
ASTM D1298	Density at 15°C	kg/l	0,9799	0,9729	0,9781
ASTM D1298	Density at 20°C	g/ml	0,9765	0,9695	0,9747
ASTM D445	Kinematic Viscosity at 80°C	mm <sup>2</sup> /s	119,1	97,71	113,0
ASTM D445	Kinematic Viscosity at 50°C	mm <sup>2</sup> /s	695,2	828,3	727,2
NOM 47 /UNI 20048	Viscosity at 80°C	Engler Degree	15,72	12,11	14,92
ASTM D4294	Total Sulphur Content	%(m/m)	2,59	2,60	2,57
ASTM D92	Flash point open cup	°C	136	156	148
ASTM D95	Water by distillation	%(m/m)	0,05	0,40	0,05
ASTM D97	Pour point	°C	12	9	12
ASTM D482	Ash	%(m/m)	0,046	0,046	0,051
ASTM D473	Sediment by Extraction	%(m/m)	0,02	0,03	0,01
ASTM D1160	Vacuum distillation				
	Distillation Pressure	mm Hg	2	2	2
	Initial boiling point (IBP)	°C	226	211	212
	5 % recovered at (AET)	°C	286	308	291
	10 % recovered at (AET)	°C	333	336	335
	20 % recovered at (AET)	°C	380	384	379
	30 % recovered at (AET)	°C	439	441	442
	40 % recovered at (AET)	°C		499	499
	50 % recovered at (AET)	°C		538	
	60 % recovered at (AET)	°C			
	70 % recovered at (AET)	°C			
	Onset of Cracking at	°C	527,5	542,1	521,7
	Recovered at 360 °C	%(v/v)			
	Recovery at temperature of cracking	%(v/v)	42,0	52,0	48,0
ASTM D1159 / ASTM D1160	Bromine number on OVHD up to 3600C	g Br <sub>2</sub> /100 g	11,3	12,6	13,0
	Recovered at 360°C	%(v/v)	17,0	14,0	14,0
	Distillation Pressure	mm Hg	2	2	2
AMS 79-004 / EXXON 79-004	Toluene equivalent	%(v/v)	49	49	49
BP 230/75	Xylene Equivalent	%	41/45	46/50	41/45
SMS 1600-83	P- Value	-	1,2	1,2	1,2
IP 390 раздел B	Accelerated Total Sediment	%(m/m)	0,02	0,02	0,02
IP 390 раздел A	Potential Total Sediment	%(m/m)	0,02	0,02	0,02
IP 375	Total Sediments Existent	%(m/m)	0,02	0,01	0,02
IP 143	Asphaltene	%(m/m)	7,4	4,6	6,0
ASTM D4868	Gross Calorific Value	MJ/kg	42,55	42,51	42,58
ASTM D4868	Net Calorific Value	MJ/kg	40,23	40,17	40,26
ГОСТ 6307-75	Water soluble Acids and Alkalies	-	6,9	6,3	6,6
IP 470 / IP 501	Vanadium	mg/kg	196	155	179
	Nickel	mg/kg	51	44	54
	Sodium	mg/kg	11	16	24
	Aluminium	mg/kg	<5	<5	<5
	Silicon	mg/kg	<10	<10	<10
	Iron	mg/kg	59	>60	>60
IP 399	Hydrogen Sulfide Content	mg/kg	0,9	<0,50	<0,50
ASTM D4530	Micro Carbon Residue	%(m/m)	15,4	13,6	14,6