PAVLOVA, S. M., PRIATOKAYA, T. V.

"Analysis of Crude Oils in the Volga-Ural Region."

Report submitted at the Fifth World Petroleum Congress, 30 May - 5 June 1959, New York.

PAVLOVA, Serafima Nikolayevna; DRIATSKAYA, Zoya Vasil'yevna; BARANOVA, Z.N.; MKHCHIYAN, M.A.; ZHMYKHOVA, N.M.: ZAVERSHINSKAYA, S.V.; RAGINA, G.M., vedushchiy red.; YASHCHURZHINSKAYA, A.B., tekhn. red.

[Oils of eastern areas of the U.S.S.R.] Nefti vostochnykh raionov SSSR; spravochnaia kniga. Pod red. S.N. Pavlovoi i Z.V. Driatskoi. Leningrad, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, Leningr. otd-nie, 1958. 506 p. (MIRA 11:10)
(Petroleum)

18(6)

AUTHORS: Kuznetsov, V. D., Academician, Loskutov, A. I., Pavlova, S. N. SOV/20-123-2-17/59

TITLE: The Problem of the Cold Hardening of Metals When Cutting With a Lubricant (K voprosu o naklepe metallov pri rezanii so smazkoy)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 2, pp 272-274 (USSR)

ABSTRACT: First, a short report is given on some earlier papers dealing with this subject. The present paper seeks a final solution of this problem. As described by a previous paper by N. A. Pleteneva et al. (Ref 9), cold hardening was investigated by measuring microhardness on the plane bottom of the cavities drilled out by means of a special drill from R 18 steel and by using various lubricants. Investigations were carried out in brass, copper, aluminum, zinc, and cadmium with solutions of stearic acid in paraffin oil and of sodium oleate in distilled water, the drill performing 450 revolutions per minute. In the case of brass, copper, and aluminum, also solutions of oleic acid and stearic acid in purified mineral oil and toluene were used. In the latter case the drill

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performed 8 revolutions per minute. Microhardness was measured by means of the device PMT-3. The results obtained by the experiments are given by 4 tables. Table 1 contains the microhardness values of surfaces after drilling in solutions of stearic acid in paraffin oil with a velocity of 450 revolutions per minute. Each value given in this table is an average value obtained from 20 to 40 measurements. In the case of brass, copper, and aluminum a very weak tendency towards an increase of microhardness with increasing concentration of the stearic acid is observed. In the case of drilling in solutions of sodium oleate in distilled water, the influence exercised by surface-active substances upon the strengthening of metals was even less. In this case, a very weak tendency towards a decrease of microhardness was found in aluminum. In the aforementioned cases the presence of surface-active substances in the lubricant has thus practically no influence upon the strengthening of metals. Similar results were obtained also when drilling was carried out with a speed of 8 revolutions per minute. In the case of the drilling of brass, copper, and aluminum in solutions of oleic acid and stearic acid in purified mineral

oil, the strength of the bottom of the cavities was the same in all concentrations. However, when the same materials were drilled with solutions of oleic acid and stearic acid in toluene, a weak tendency towards an increase of microhardness with an increase of the content of surface-active substances was observed in a non-active solvent. Only in the case of drilling aluminum with the use of solutions of sodium oleate in distilled water, was a decease of strength observed, but to an extent of not more than 7 %. The results obtained by the experiments discussed in this paper agree well with the conclusions drawn by S. Ya. Veyler (Ref 10). There are 4 tables and 10 references, 9 of which are Soviet.

SUBMITTED: July 17, 1958

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L 16926-65 EWT(m)/EPF(c)/T Pr-4 WE

ACCESSION NR: AP5002732 S/0065/64/000/007/0012/0018

AUTHOR: Mkhchiyan, M. A.; Driatskaya, Z. V.; Pavlova, S. N.

TITLE: Petroleum of the Markovskiy deposit

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 7, 1964, 12-18

TOPIC TAGS: crude petroleum, sulfur, petroleum refinery product, hydrocarbon

ABSTRACT: The article presents a complete characterization of Markovskiy crude, a light-brown, free-flowing liquid, possessing a sharp unpleasnat odor, due to its content of sulfur compounds, chiefly mercaptans (0.89% sulfur). A complete physico-chemical characterization of the crude is presented; the contents of aromatic, naphthenic, and aliphatic hydrocarbons in the various temperature fractions are summarized. The sulfur content of Markovskiy crude is compared with crudes of other deposits. Boiling points and percent yields are summarized for seven normal parafins, 16 isoparaffins, seven naphthenic hydrocarbons (five-membered), three naphthenic hydrocarbons (six-membered), and four aromatic hydrocarbons. The diesel fractions, mazut)

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L 16926-65

ACCESSION NR: AP5002732

grades, kerosene and oil fractions, dewaxed oil fractions, and the residue and mixtures of hydrocarbons isolated by adsorption separation of the residue, are characterized. Orig. art. has 8 tables.

ASSOCIATION: VNIINP

SUBMITTED: 00	ENCL: 00	SUB CODE: FP
NO REF SOV: 000	OTHER: 000	JPRS

Card 2/2

KUZNETSOV, V.D., akademik; LOSKUTOV, A.I.; PAVLOVA, S.N.

Hardening of metals in cutting with lubrication. Dokl.AN SSSR 123 no.2:272-274 N '58. (MIRA 11:12)
(Metals--Hardening)

Pavlova, S.N.

SKOBLO, A.I.; PAVLOVA, S.N.; DRIATSKAYA, Z.V.

Use of adsorption refining for the production of high-quality transformer oil from Emba crudes. Khim. i tekh. topl. i masel no.9:21-24 S '57. (MLRA 10:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.
(Kazakhstan--Petroleum--Refining)
(Insulating oils)

PAVLOVA, S. N.

USSR

ON: Characteristics of the Syzran Crude Oil Deposit
ON: Characteristics of the Novostepanovskiy Crude Oil Deposit

SOURCE: M: Sovetskiye Nefti, Moscow-Leningrad, 1947
Abstracted in USAF "Treasure Island", on file in
Library of Congress, Air Information Division,
Report No. 064044-064043

PAVLOVA, S. N.

USSR

On Characteristics of The Crude Oil of The Syzran' Deposit

Source: M: Sovetskiye Nefti, Moscow Leningrad, 1947

Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 67636.

PAVLOVA, S. N. (Co-author)

USSR
M: Sovetskiye Nefti (Soviet Oils)
Moscow-Leningrad, 1947)

SOURCE: Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 78223, 224,225, 226, 227, 228

PAVLOVA, S.N.; DRIATSKAYA, Z.V.; BARANOVA, Z.N.; ZAVERSHINSKAYA, S.V.

First industrial petroleum in Siberia. Khim.i tekh.topl.i masel 6 no.9:8-14 S '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.
(Siberia, Western--Petroleum--Analysis)

PAVLOVA, S. N.

USSR

On: Characteristics of the Chib'yu crude oil deposit
On: Characteristics of the Stavropol'skiv deposit
On: Characteristics of the Chib'yu and Sed'iol crude oils

SOURCE: Sovetskive Nefti: Moscow--Leningrad; 1947
Abstracted in USAF "Treasure Island" file in Library of Congress, Air Information Division, Report No. 68236-68240

PAVLOVA, S.N.; DRIATSKAYA, Z.V.; MKHCHIYAN, M.A.

Crude oils of the Mangyshlak Peninsula. Khim. i tekh. topl. i masel 8 no.6:1-7 Je '63. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.
(Mangyshlak Peninsula--Petroleum--Analysis)

PHASE I BOOK EXPLOITATION SOV/6443

Pavlova, Serafima Nikolayevna, Zoya Vasil'yevna Driatskaya, Mariya Artemovna Mkhchiyan, Zoya Nikolayevna Baranova, Nataliya Mikhaylovna Zhmykhova, and Sof'ya Viktorovna Zavershinskaya

Nefti vostochnykh rayonov SSSR; spravochnaya kniga (Oils of the Eastern Regions of the U.S.S.R.; a Handbook) Moscow, Gostoptekhizdat, 1962. 607 p. Errata slip inserted. 2660 copies printed.

Eds. (Title page): S.N. Pavlova and Z.V. Driatskaya; Executive Ed.: K.F. Kleymenova; Tech. Ed.: A.S. Polosina.

PURPOSE: This handbook is intended for personnel of the petroleum-industry engaged in planning, designing, geological exploration, production, refining, and scientific research. It can also be used by teachers and students specializing in petrochemistry.

COVERAGE: This handbook complements the edition of 1958. It contains petroleum-research data for the period 1957-1961. The text describes crudes taken from new petroleum deposits in areas from the

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Volga region to Sakhalin. The following characteristics are given: physicochemical properties, elementary composition, fractional content from i.b.p. to 500°C, properties of commercial petroleum products or of their components, ash composition, and the hydrocarbon composition of dissolved gas. Fractionation curves, characteristics of individual fractions, and evaporation data are also given for most of the crudes. There are 16 references: 15 Soviet and 1 non-Soviet.

TABLE OF CONTENTS [Abridged].

PAVLOVA, S. E.

USSR
M: Sovetskiye Nefti (Soviet Oils) Co-Author Moscow-Leningrad-1947

SOURCE: Abstracted in USAF "Treasure Island", on fild in Library of Congress, Air Information Division, Report No. 074671, 42-41

PAVLOVA, S. N.

USSR
M: Sovetskiye Nefti (Soviet Oils)

SOURCE: Moscow & Leningrad (1947)
Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 074120, 074122, 074151

PAVLOVA, S. N.

USSR
M: Sovetskiye Nefti (Soviet Oils) Co-Author Moscow-Leningrad-1947

SOURCE: Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 074831

PAVLOVA, S. N.

USSR
Sovet skiye Nefti (Soviet Oils) Co-Author Moscow Leningrad 1947

SOURCE: Abstracted in USAF "Treasure Island", on file in
Library of Congress, Air Information Division,
Report No. 074324, 326, 328, 337, 338, 339, 340, 341, 357, 358, 359, 360, 361.

PAVLOVA, S. N.

USSR
Sovetskiye Nefti (Soviet Oils)
(Moscow-Leningrad-1947

SOURCE: Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 78203, 78211, 78212, 78194

21(4) PHASE I BOOK EXPLOITATION SOV/1441

Pavlova, S.N., Z.V. Driatskaya, Z.N. Baranova, M.A. Mkhchiyan, N.M. Zhmykhova, and S.V. Zavershinskaya.

Nefti vostochnykh rayonov SSSR; spravochnaya kniga (Oils of Eastern Regions of the USSR; a Handbook) Leningrad, Gostoptekhizdat, 1958. 506 p. 1,000 copies printed.

Sponsoring Agencies: USSR Gosudarstvennyy planovy komitet, Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

Eds.: Pavlova, S.N.; and Z.V. Driatskaya; Executive Ed.: Ragina, G.M.; Tech. Ed.: Yashchurzhinskaya, A.B.

PURPOSE: This handbook is intended for petroleum production personnel, refiners, scientific research organizations, as well as students

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PAVLOVA, S.N.; BARANOVA, Z.N.

Crudes of the new oil fields of the Perm Province. Khim.i tekh.topl. i masel 7 no.11:32-36 N '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.
(Perm Province—Petroleum—Analysis)

PAVLOVA, S. N.

USSR
M: Sovetskiye Nefti (Soviet Oils)
Moscow-Leningrad 1947

SOURCE: Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 075961,60

MKHCHIYAN, M.A., BARANOVA, Z.N.; DRIATSKAYA, Z.V.; PAVLOVA, S.N.

Petroleums of Siberia. Khim. i tekh. topl. i masel 9 no.12: 1-6 D '64. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

PAVLOVA, S. N.

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5657. METHOD OF INVESTIGATING PETROLEUMS. Pavlova, S.N. and Dolatkova, Z.V. (Moscow: Gostoptekhizdat, 1955. "Methods of Investigating Petroleum and Petroleum Products (Metody Issledovaniya Nefteĭ i Nefteproduktov)", 7-28; abstr. in Ref. Zh. Khim., (Ref. J. Chem., Moscow), 1956, (18), 59136). A programme and method are given for investigation of petroleums to provide data for designing new refineries, for planning treatment in existing refineries, and for the description of petroleums by geological-prospecting organizations.

P'VIOVA, S.M.

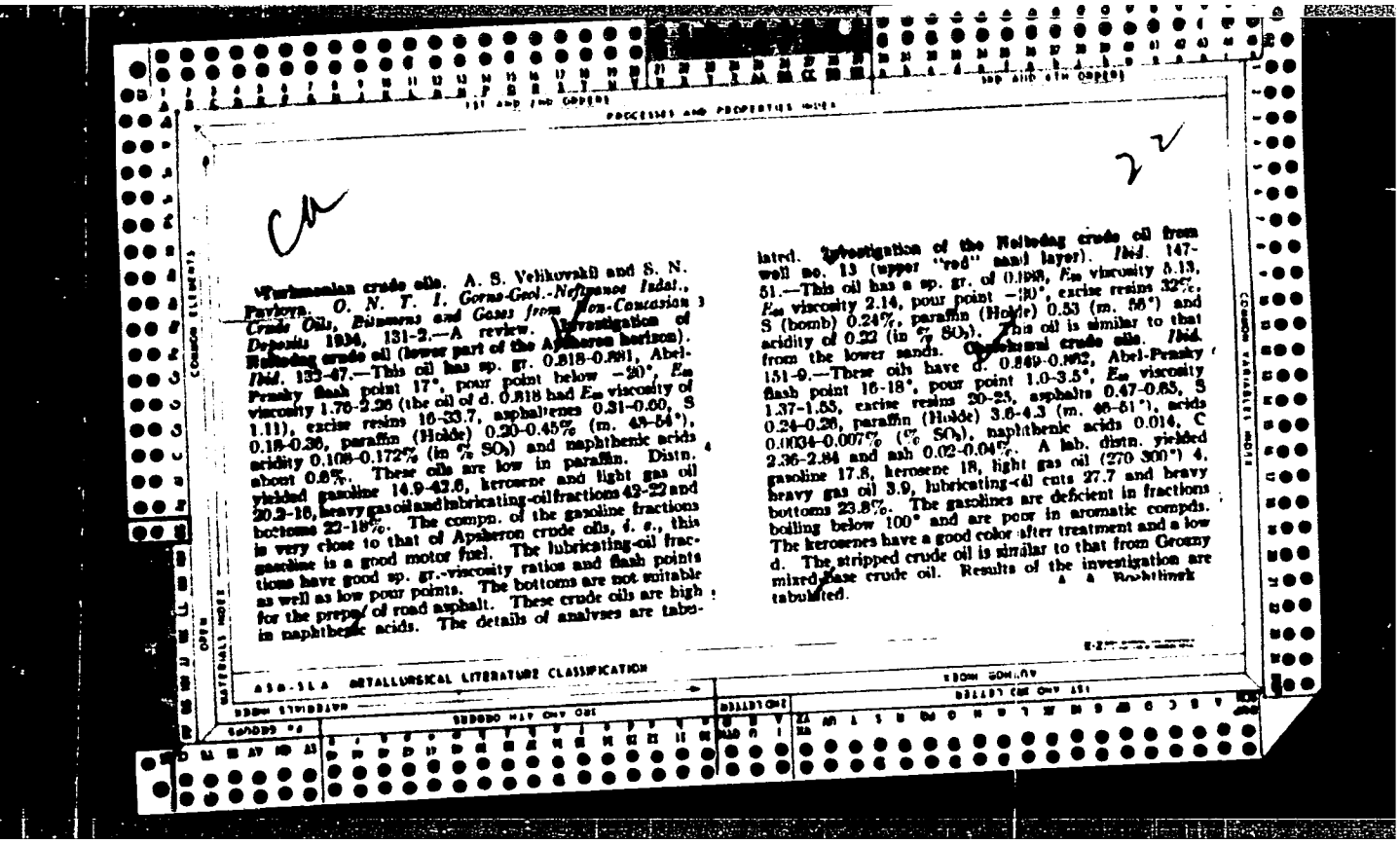
VELIKOVSKII, I.S. and P'VIOVA, S.M. Nefti SSSR. Moskva, Gostoptekhizdat, 1945.
147 p.
NNC DLC: TN[illegible].S. P'.

SO: IC, Soviet Geography, Part I, 1951, Uncl.

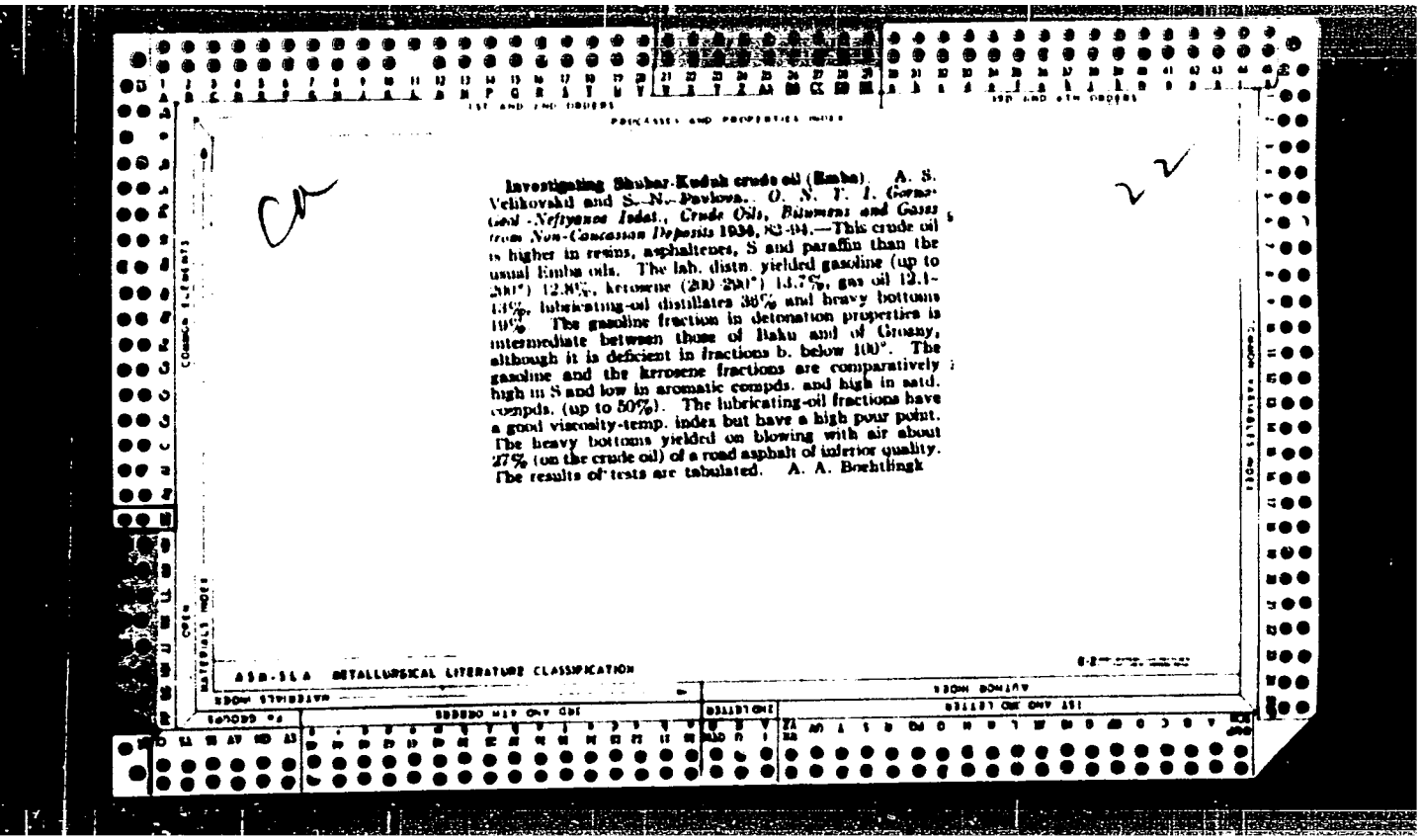
PAVLOVA, S. N.

VELIKOVSKII, A. S. AND S. N. PAVLOVA.
Nefti SSSR. Moskva, Gostoptekhizdat, 1945. 147 p.
NNC DLC: TN870.6.V4

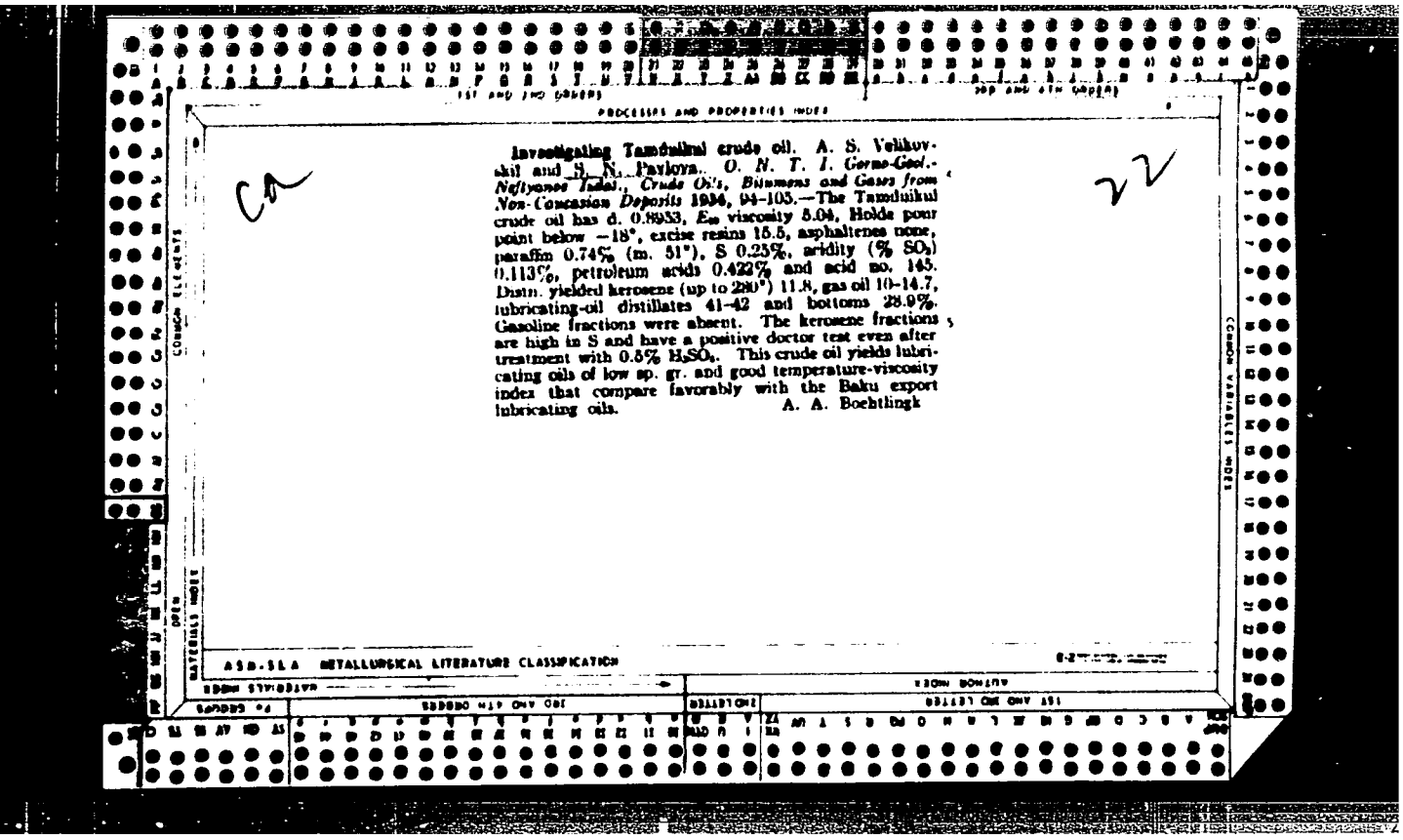
SO: LC, Soviet Geography, Part I, 1951, Uncl.



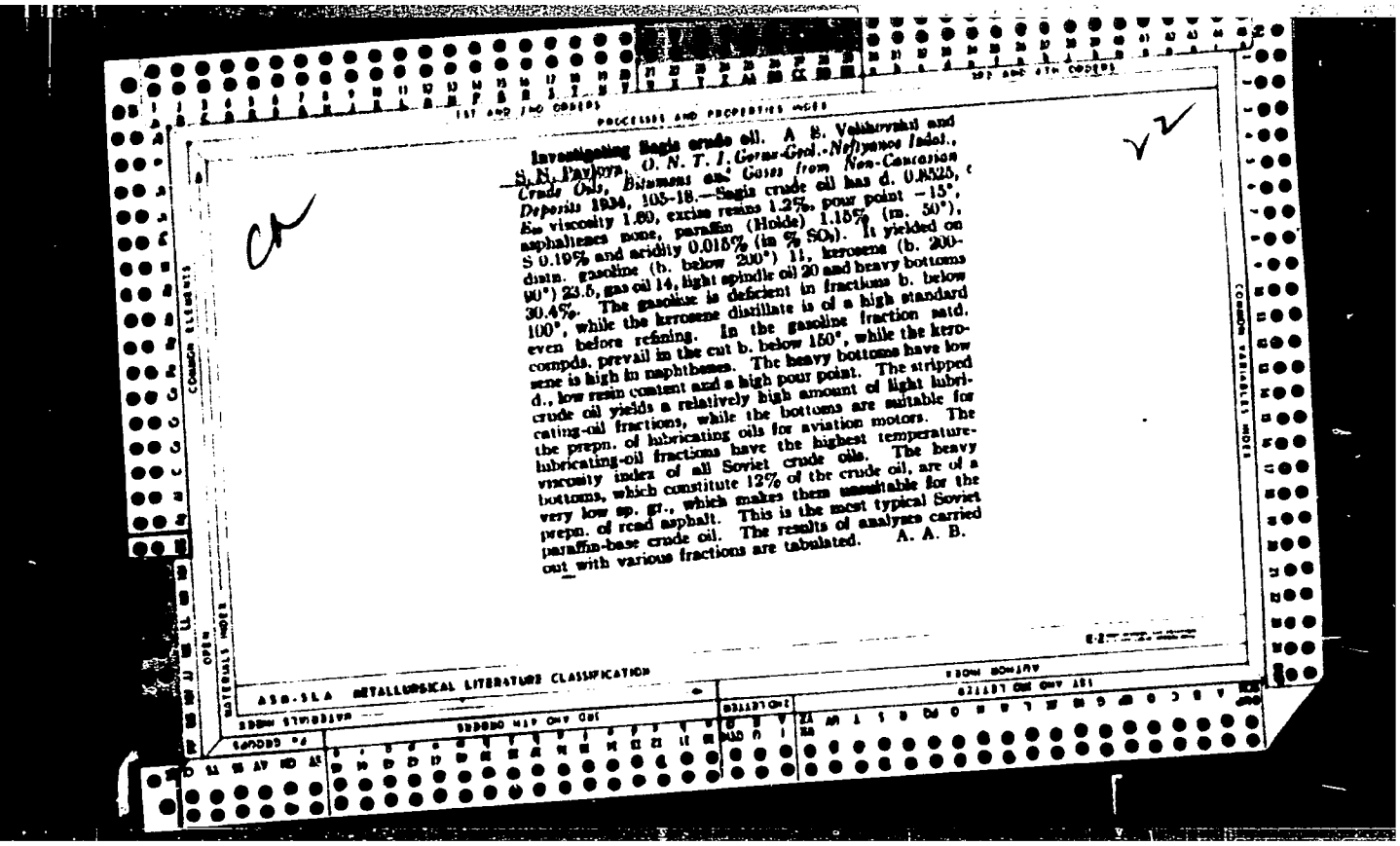
Turkmenian crude oils. A. S. Velikovskii and S. N. Pavlova. *O. N. T. I. Gorno-Geol.-Neftyanoe Izdat., Crude Oils, Bitumens and Gases from Non-Caucasian Deposits* 1934, 131-2.—A review. Investigation of Nebitdag crude oil (lower part of the Absheron horizon). *Ibid.* 133-47.—This oil has sp. gr. 0.818-0.891, Abel-Pensky flash point 17°, pour point below −30°, E_{20} viscosity 1.76-2.26 (the oil of d. 0.818 had E_{20} viscosity of 1.11), cacine resins 16-33.7, asphaltenes 0.31-0.60, S 0.18-0.36, paraffin (Holde) 0.20-0.45% (m. 49-54°), acidity 0.108-0.172% (in % SO_3) and naphthenic acids about 0.6%. These oils are low in paraffin. Distn. yielded gasoline 14.9-42.6, kerosene and light gas oil 20.2-16, heavy gas oil and lubricating-oil fractions 43-22 and bottoms 22-18%. The compn. of the gasoline fractions is very close to that of Apsheron crude oils, *i. e.*, this gasoline is a good motor fuel. The lubricating-oil fractions have good sp. gr.-viscosity ratios and flash points as well as low pour points. The bottoms are not suitable for the prepn. of road asphalt. These crude oils are high in naphthenic acids. The details of analyses are tabulated. Investigation of the Nebitdag crude oil from well no. 13 (upper "red" sand layer). *Ibid.* 147-51.—This oil has a sp. gr. of 0.1898, E_{20} viscosity 5.13, E_{50} viscosity 2.14, pour point −30°, cacine resins 32%, S (bomb) 0.24%, paraffin (Holde) 0.53 (m. 56°) and acidity of 0.22 (in % SO_3). This oil is similar to that from the lower sands. Cheleken crude oils. *Ibid.* 151-9.—These oils have d. 0.849-0.892, Abel-Pensky flash point 16-18°, pour point 1.0-3.5°, E_{20} viscosity 1.37-1.55, cacine resins 20-25, asphalts 0.47-0.65, S 0.24-0.26, paraffin (Holde) 3.6-4.3 (m. 46-51°), acids 0.0034-0.007% (% SO_3), naphthenic acids 0.014, C 2.36-2.84 and ash 0.02-0.04%. A lab. distn. yielded gasoline 17.8, kerosene 18, light gas oil (270-300°) 4, heavy gas oil 3.9, lubricating-oil cuts 27.7 and heavy bottoms 23.8%. The gasolines are deficient in fractions boiling below 100° and are poor in aromatic compds. The kerosenes have a good color after treatment and a low acid. The stripped crude oil is similar to that from Grozny mixed-base crude oil. Results of the investigation are tabulated. A. A. Boshtinek



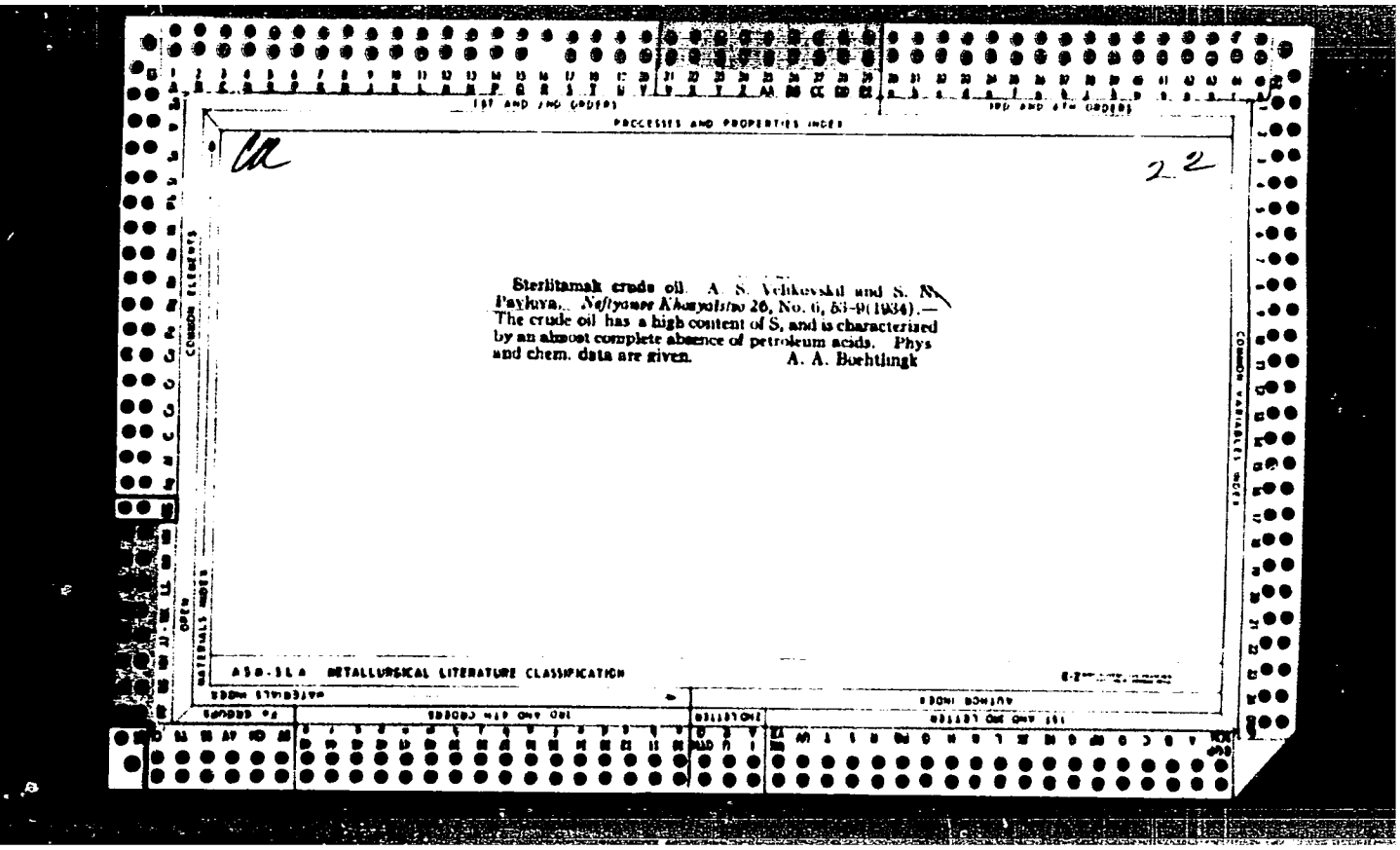
Investigating Shubar-Kuduk crude oil (Emba). A. S. Velikovskii and S. N. Pavlova. *O. N. T. I. Gorno-Geol.-Neftyanoe Issled., Crude Oils, Bitumens and Gases from Non-Concession Deposits* 1936, 83-94.—This crude oil is higher in resins, asphaltenes, S and paraffin than the usual Emba oils. The lab. distn. yielded gasoline (up to 200°) 12.8%, kerosene (200-300°) 13.7%, gas oil 12.1-14%, lubricating-oil distillates 36% and heavy bottoms 10%. The gasoline fraction in detonation properties is intermediate between those of Baku and of Grozny, although it is deficient in fractions b. below 100°. The gasoline and the kerosene fractions are comparatively high in S and low in aromatic compds. and high in satd. compds. (up to 50%). The lubricating-oil fractions have a good viscosity-temp. index but have a high pour point. The heavy bottoms yielded on blowing with air about 27% (on the crude oil) of a road asphalt of inferior quality. The results of tests are tabulated. A. A. Boehtlingk



Investigating Tamdulkul crude oil. A. S. Velikovskii and N. N. Pavlova. *O. N. T. I. Gorno-Geol.-Neftyanoe Inst., Crude Oils, Bitumens and Gases from Non-Concession Deposits* 1936, 94–105.—The Tamdulkul crude oil has d. 0.8953, E_{20} viscosity 5.04, Holde pour point below −18°, excise resins 15.5, asphaltenes none, paraffin 0.74% (m. 51°), S 0.25%, acidity (% SO_3) 0.113%, petroleum acids 0.422% and acid no. 145. Distn. yielded kerosene (up to 280°) 11.8, gas oil 10–14.7, lubricating-oil distillates 41–42 and bottoms 28.9%. Gasoline fractions were absent. The kerosene fractions are high in S and have a positive doctor test even after treatment with 0.5% H_2SO_4. This crude oil yields lubricating oils of low sp. gr. and good temperature-viscosity index that compare favorably with the Baku export lubricating oils. A. A. Boehtlingk



Investigating Sagis crude oil. A. B. Vasilyevskii and S. N. Taylova. *O. N. T. I. Gorno-Geol.-Neftyanoe Izdel., Crude Oils, Bitumens and Gases from Non-Caucasian Deposits* 1934, 105-18.—Sagis crude oil has d. 0.8525, ε 50 viscosity 1.60, cxtin resins 1.2%, pour point −15°, asphaltenes none, paraffin (Holde) 1.15% (m. 50°), S 0.19% and acidity 0.018% (in % SO_3). It yielded on distn. gasoline (b. below 200°) 11, kerosene (b. 200-90°) 23.5, gas oil 14, light spindle oil 20 and heavy bottoms 30.4%. The gasoline is deficient in fractions b. below 100°, while the kerosene distillate is of a high standard even before refining. In the gasoline fraction satd. compds. prevail in the cut b. below 150°, while the kerosene is high in naphthenes. The heavy bottoms have low d., low resin content and a high pour point. The stripped crude oil yields a relatively high amount of light lubricating-oil fractions, while the bottoms are suitable for the prepn. of lubricating oils for aviation motors. The lubricating-oil fractions have the highest temperature-viscosity index of all Soviet crude oils. The heavy bottoms, which constitute 12% of the crude oil, are of a very low sp. gr., which makes them unsuitable for the prepn. of road asphalt. This is the most typical Soviet paraffin-base crude oil. The results of analyses carried out with various fractions are tabulated. A. A. B.



PROCESSES AND PROPERTIES INDEX

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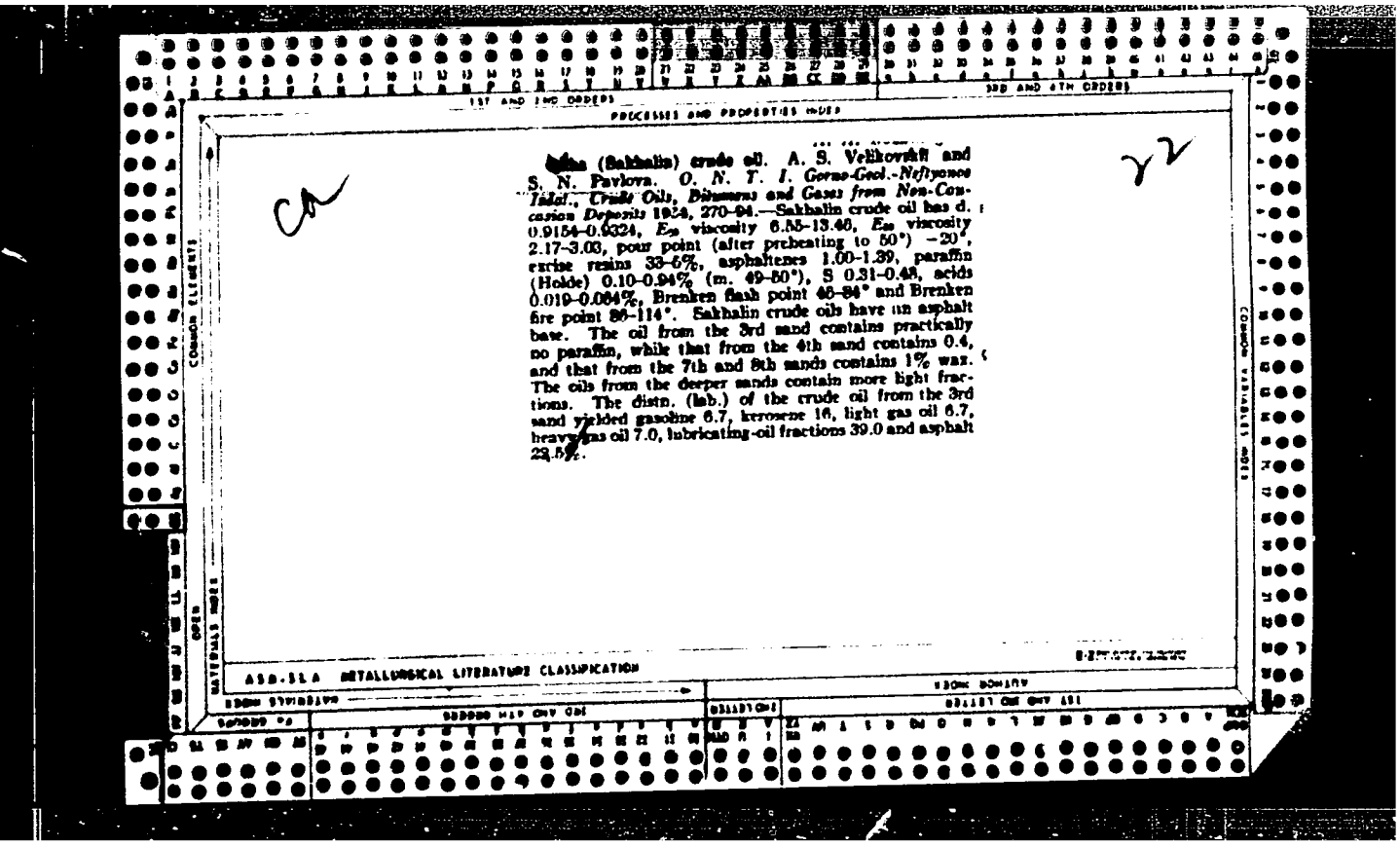
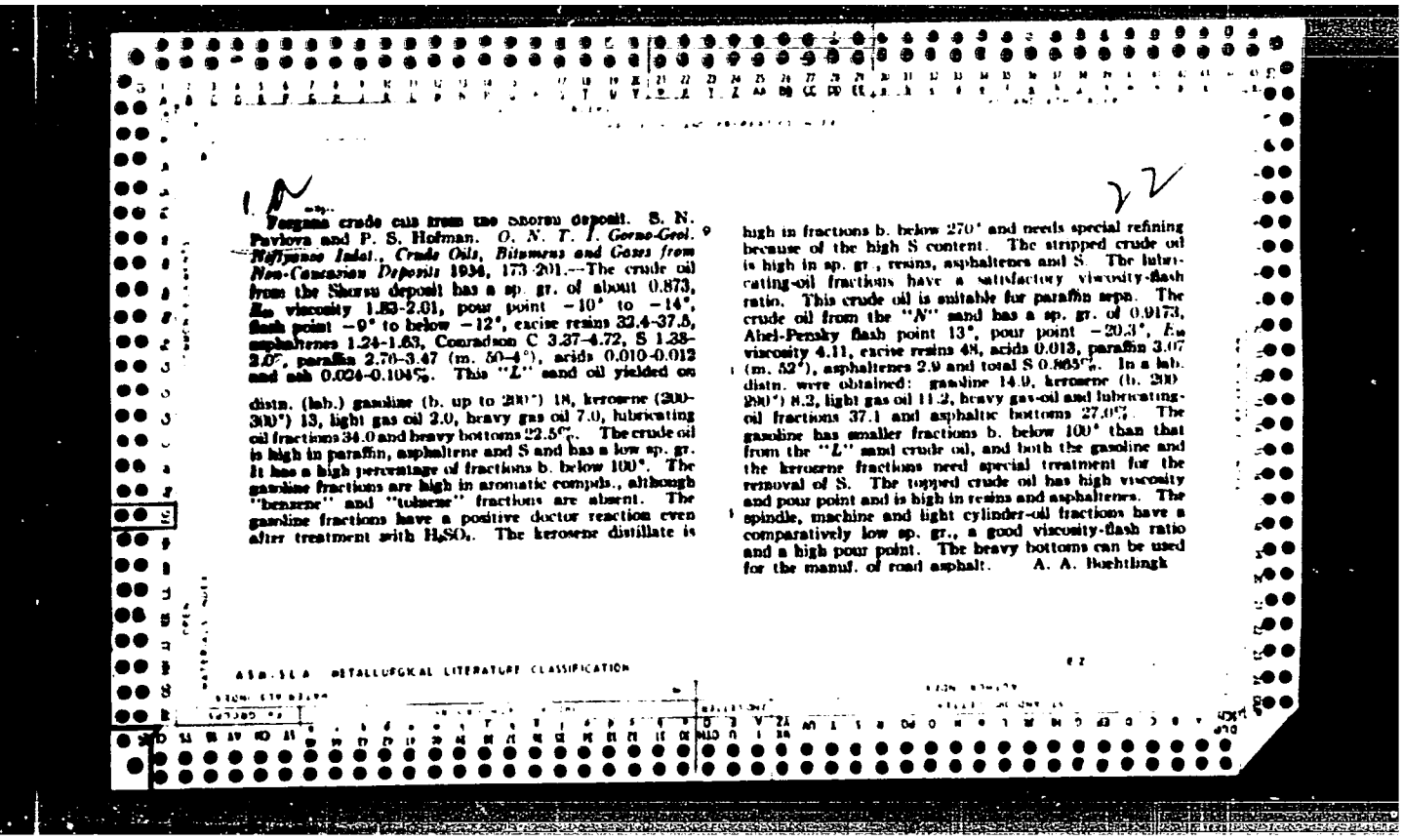
Sterlitamak crude oil. A. S. Velikovskii and S. N. Paykuva. *Neftyanoe Khozyaistvo* 26, No. 6, 53-9(1934).—The crude oil has a high content of S, and is characterized by an almost complete absence of petroleum acids. Phys and chem. data are given. A. A. Boehtlingk

A50-31A METALLURGICAL LITERATURE CLASSIFICATION

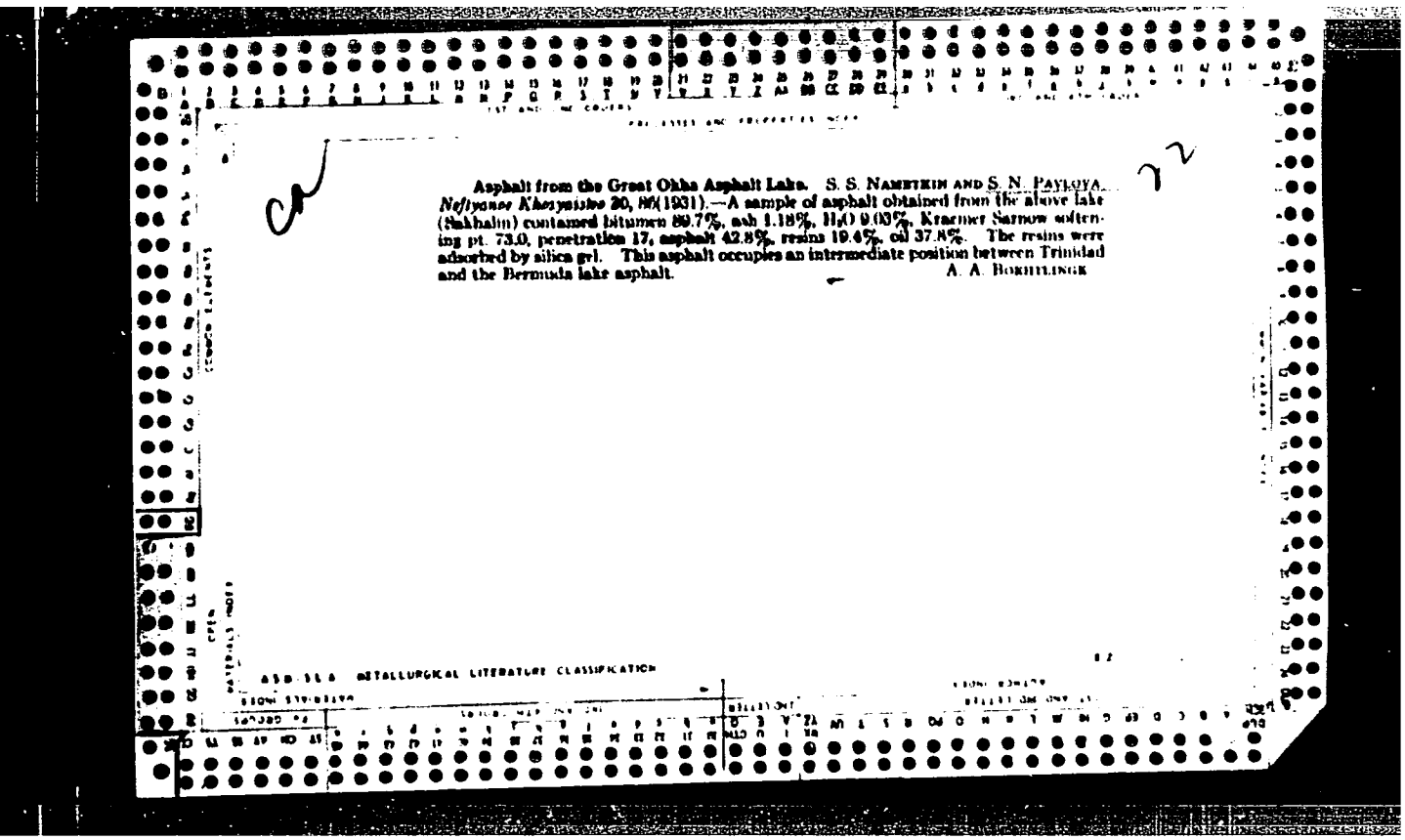


(Sakhalin) crude oil. A. S. Velikovskii and S. N. Pavlova. *O. N. T. I. Gorno-Geol.-Neftyanoe Izdat., Crude Oils, Bitumens and Gases from Non-Caucasian Deposits* 1934, 270–94.—Sakhalin crude oil has d. 0.9154–0.9324, E_{20} viscosity 6.85–13.46, E_{50} viscosity 2.17–3.03, pour point (after preheating to 50°) −20°, resins 33–6%, asphaltenes 1.00–1.39, paraffin (Holde) 0.10–0.94% (m. 49–50°), S 0.31–0.48, acids 0.019–0.064%, Brenken flash point 46–84° and Brenken fire point 86–114°. Sakhalin crude oils have an asphalt base. The oil from the 3rd sand contains practically no paraffin, while that from the 4th sand contains 0.4, and that from the 7th and 8th sands contains 1% wax. The oils from the deeper sands contain more light fractions. The distn. (lab.) of the crude oil from the 3rd sand yielded gasoline 6.7, kerosene 16, light gas oil 6.7, heavy gas oil 7.0, lubricating-oil fractions 39.0 and asphalt 23.5%.

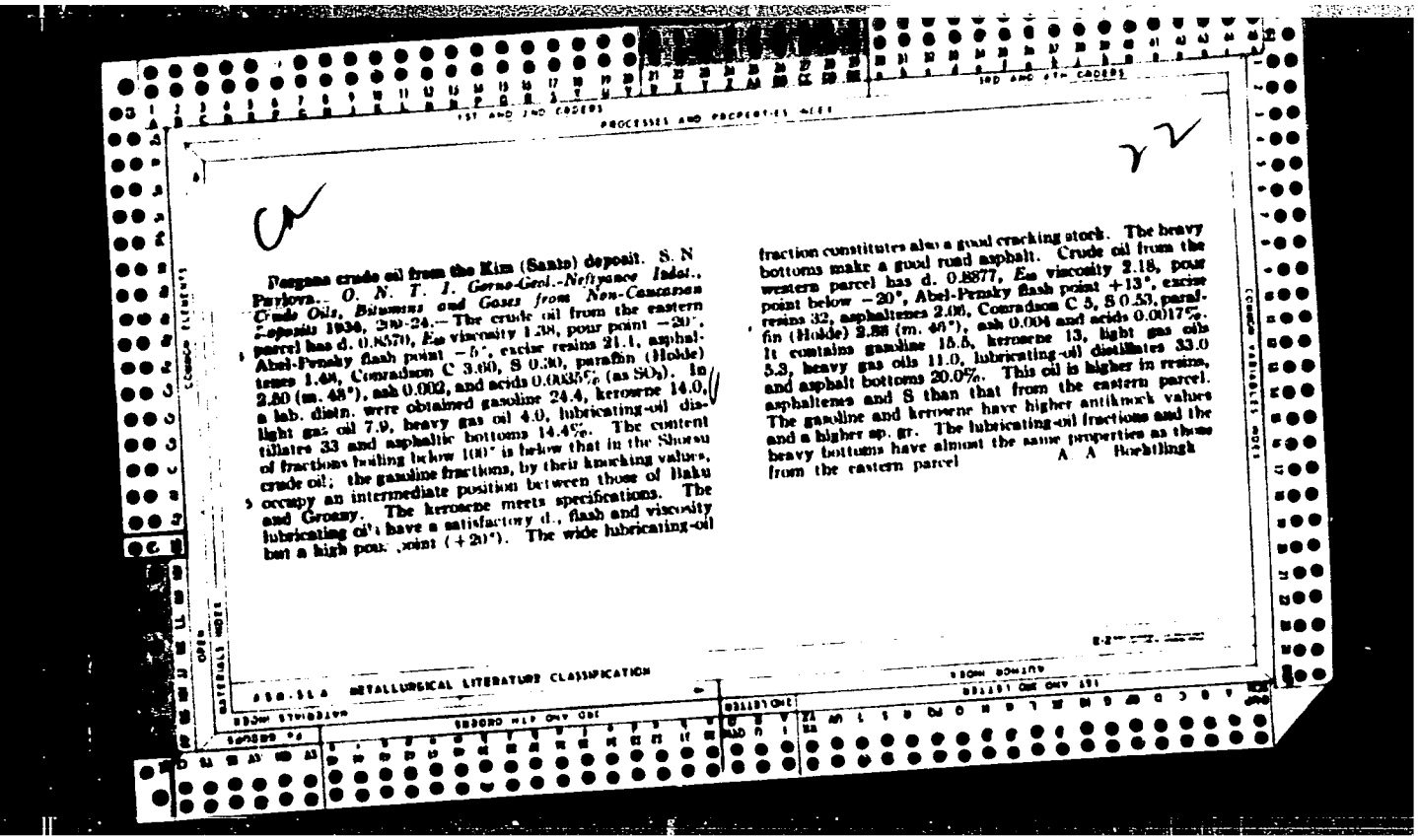


Pavlova and P. S. Hofman. *O. N. T. I. Gorno-Geol.* 9 *Neftyanoe Inst., Crude Oils, Bitumens and Gases from Non-Caucasian Deposits* 1934, 173-201.—The crude oil from the Sheresu deposit has a sp. gr. of about 0.873, *E*₂₀ viscosity 1.83-2.01, pour point −10° to −14°, flash point −9° to below −12°, excise resins 33.4-37.8, asphaltenes 1.24-1.63, Conradson C 3.37-4.72, S 1.38-2.0%, paraffin 2.70-3.47 (m. 50-4°), acids 0.010-0.012 and ash 0.024-0.104%. This "*L*" sand oil yielded on distn. (lab.) gasoline (b. up to 200°) 18, kerosene (200-300°) 13, light gas oil 2.0, heavy gas oil 7.0, lubricating oil fractions 34.0 and heavy bottoms 22.5%. The crude oil is high in paraffin, asphaltene and S and has a low sp. gr. It has a high percentage of fractions b. below 100°. The gasoline fractions are high in aromatic compds., although "benzene" and "toluene" fractions are absent. The gasoline fractions have a positive doctor reaction even after treatment with H_2SO_4. The kerosene distillate is high in fractions b. below 270° and needs special refining because of the high S content. The stripped crude oil is high in sp. gr., resins, asphaltenes and S. The lubricating-oil fractions have a satisfactory viscosity-flash ratio. This crude oil is suitable for paraffin sepn. The crude oil from the "*N*" sand has a sp. gr. of 0.9173, Abel-Pensky flash point 13°, pour point −20.3°, *E*₂₀ viscosity 4.11, excise resins 48, acids 0.018, paraffin 3.07 (m. 52°), asphaltenes 2.9 and total S 0.805%. In a lab. distn. were obtained: gasoline 14.9, kerosene (b. 200-280°) 8.2, light gas oil 11.2, heavy gas-oil and lubricating-oil fractions 37.1 and asphaltic bottoms 27.0%. The gasoline has smaller fractions b. below 100° than that from the "*L*" sand crude oil, and both the gasoline and the kerosene fractions need special treatment for the removal of S. The topped crude oil has high viscosity and pour point and is high in resins and asphaltenes. The spindle, machine and light cylinder-oil fractions have a comparatively low sp. gr., a good viscosity-flash ratio and a high pour point. The heavy bottoms can be used for the manuf. of road asphalt. A. A. Boehtlingk

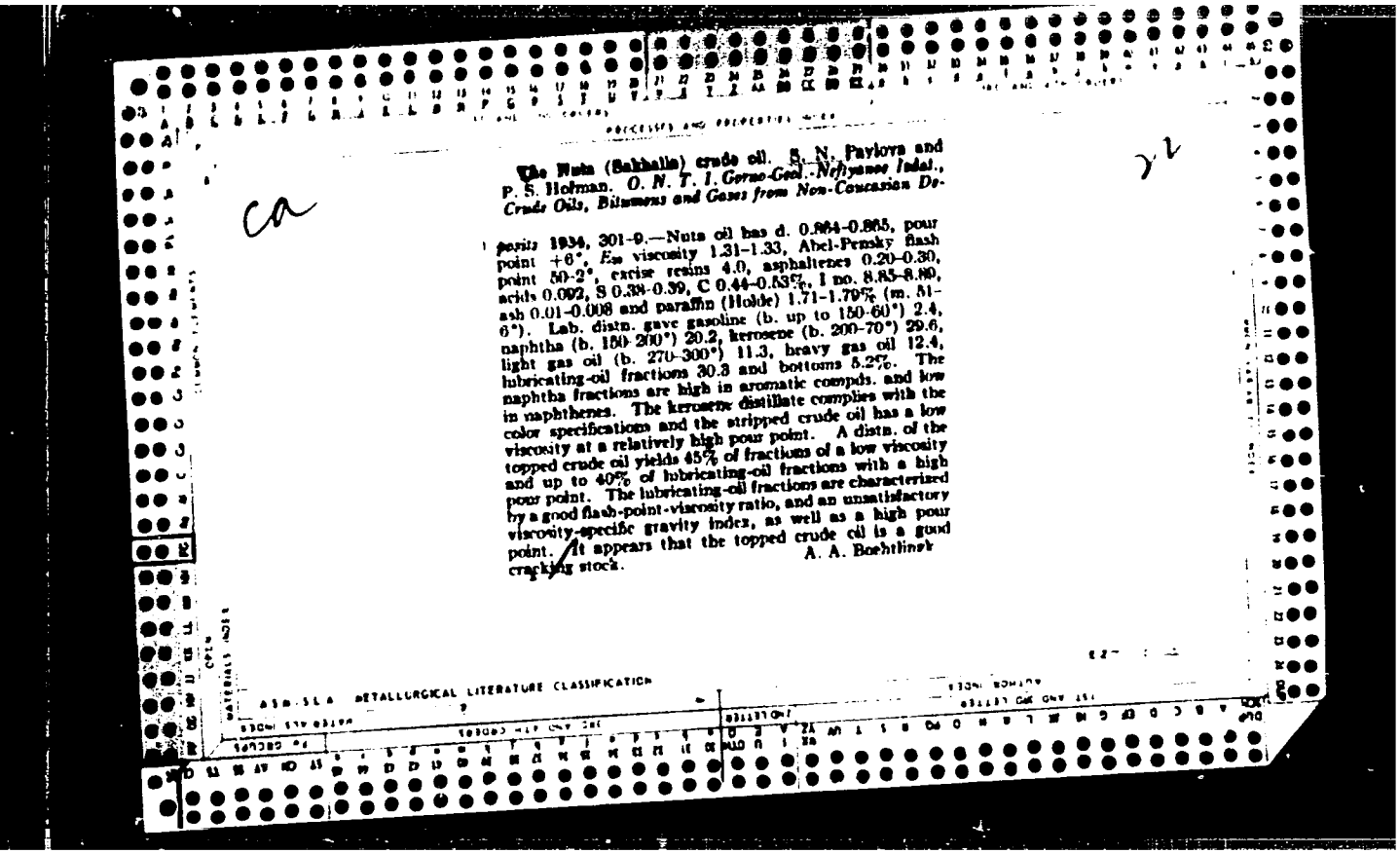
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



Asphalt from the Great Okha Asphalt Lake. S. S. Nametkin and S. N. Payloya. *Neftyanoe Khozyaistvo* 20, 89(1931).—A sample of asphalt obtained from the above lake (Sakhalin) contained bitumen 89.7%, ash 1.18%, H_2O 9.03%, Kraemer Sarnow softening pt. 73.0, penetration 17, asphalt 42.8%, resins 19.4%, oil 37.8%. The resins were adsorbed by silica gel. This asphalt occupies an intermediate position between Trinidad and the Bermuda lake asphalt. A. A. Boehtlingk



Pangana crude oil from the Kim (Santa) deposit. S. N Pavlova. *O. N. T. I. Gorno-Geol.-Neftyanoe Inst.*, *Crude Oils, Bitumens and Gases from Non-Caucasian Deposits* 1936, 200-24.— The crude oil from the eastern parcel has d. 0.8570, *E*₂₀ viscosity 1.38, pour point −20°, Abel-Pensky flash point −5°, cacisc resins 21.1, asphaltenes 1.48, Conradson C 3.00, S 0.30, paraffin (Holde) 2.80 (m. 48°), ash 0.002, and acids 0.0035% (as SO_3). In a lab. distn. were obtained gasoline 24.4, kerosene 14.0, light gas oil 7.9, heavy gas oil 4.0, lubricating-oil distillates 33 and asphaltic bottoms 14.4%. The content of fractions boiling below 180° is below that in the Shirvan crude oil; the gasoline fractions, by their knocking values, occupy an intermediate position between those of Baku and Grozny. The kerosene meets specifications. The lubricating oils have a satisfactory d., flash and viscosity but a high pour point (+2°). The wide lubricating-oil fraction constitutes also a good cracking stock. The heavy bottoms make a good road asphalt. Crude oil from the western parcel has d. 0.8877, *E*₂₀ viscosity 2.18, pour point below −20°, Abel-Pensky flash point +13°, cacisc resins 32, asphaltenes 2.00, Conradson C 5, S 0.53, paraffin (Holde) 2.88 (m. 46°), ash 0.004 and acids 0.0017%. It contains gasoline 15.5, kerosene 13, light gas oils 5.3, heavy gas oils 11.0, lubricating-oil distillates 33.0 and asphalt bottoms 20.0%. This oil is higher in resins, asphaltenes and S than that from the eastern parcel. The gasoline and kerosene have higher antiknock values and a higher sp. gr. The lubricating-oil fractions and the heavy bottoms have almost the same properties as those from the eastern parcel A. A. Boshtlingk



The Nuta (Sakhalin) crude oil. S. N. Pavlova and P. S. Hofman. *O. N. T. I. Gorno-Geol.-Neftyanoe Izdat., Crude Oils, Bitumens and Gases from Non-Caucasian Deposits* 1934, 301–9.—Nuta oil has d. 0.864–0.865, pour point +6°, E_{20} viscosity 1.31–1.33, Abel-Pensky flash point 50–2°, excise resins 4.0, asphaltenes 0.20–0.30, acids 0.092, S 0.38–0.39, C 0.44–0.53%, I no. 8.85–8.80, ash 0.01–0.008 and paraffin (Holde) 1.71–1.79% (m. 51–6°). Lab. distn. gave gasoline (b. up to 150–60°) 2.4, naphtha (b. 150–200°) 20.2, kerosene (b. 200–70°) 29.6, light gas oil (b. 270–300°) 11.3, heavy gas oil 12.4, lubricating-oil fractions 30.3 and bottoms 5.2%. The naphtha fractions are high in aromatic compds. and low in naphthenes. The kerosene distillate complies with the color specifications and the stripped crude oil has a low viscosity at a relatively high pour point. A distn. of the topped crude oil yields 45% of fractions of a low viscosity and up to 40% of lubricating-oil fractions with a high pour point. The lubricating-oil fractions are characterized by a good flash-point-viscosity ratio, and an unsatisfactory viscosity-specific gravity index, as well as a high pour point. It appears that the topped crude oil is a good cracking stock.

A. A. Boehtlingk

1ST AND 2ND ORDERS

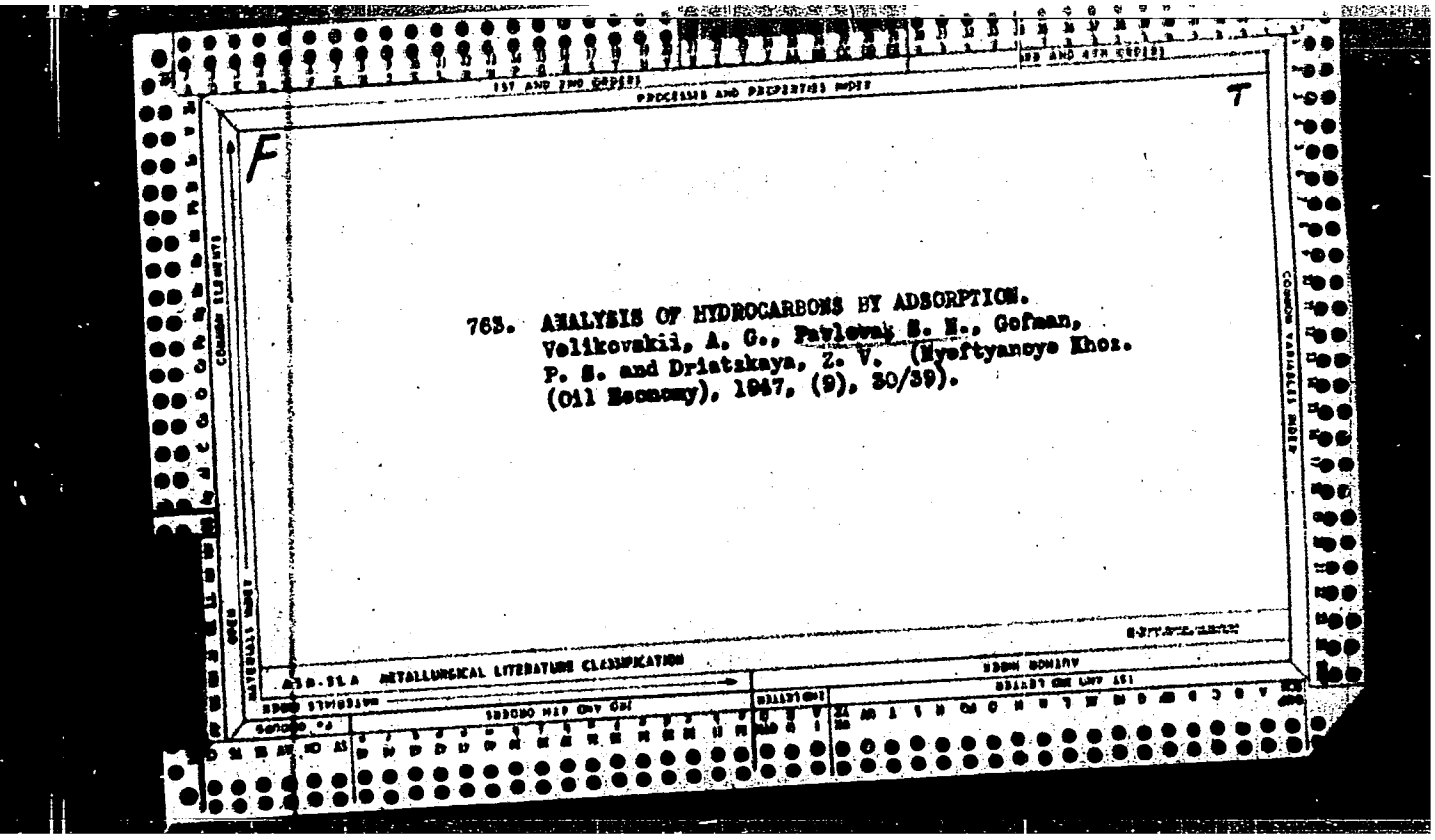
3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

13-I-3

BAIKAL CRUDE OIL. FERGANA CRUDE OILS FROM THE SHORSU DEPOSIT. S.N. Pavlova and P.S. Hofman. FERGANA CRUDE OIL FROM THE KIM (SANTO) DEPOSIT. S.N. Pavlova. CHIMION CRUDE OIL (EASTERN PARCEL, SAND "M," WELL NO. 47). A.S. Velikovskii and P.S. Hofman. TURKMENIAN CRUDE OILS. NEFTEDAG crude oil (lower part of the Apsheron horizon). Nebidag crude oil from well no. 13 (upper "red" sand layer). Cheleken crude oils. Okha (Sakhalin) crude oil. A. S. Velikovskii and S. N. Pavlova. Nuta (Sakhalin) crude oil. S. N. Pavlova and P. S. Hofman. Crude oils from non-Caucasian deposits. A. S. Velikovskii and S. N. Pavlova. Ukhta crude oils. S. N. Pavlova and P. S. Hofman. Shubar-Kuduk crude oil (Emba). Tanulukal crude oil. Sagiz crude oil. A. S. Velikovskii and S. N. Pavlova. Sulphur compounds in Shorsu crude oil. M. A. Kagarmovskaja and A. S. Semina. Resinous Emba crude oil (Dzhaman-Agach deposit). Light gasoline-paraffinic crude oil of the Emba district (Novobogatinskii field). A. I. Voronov (O.N.T.I. Gorno-Geol.-Neft. Izdat., 1934, 256—259, 173—201, 209—224, 225—230, 131—138, 139—147, 147—151, 151—159, 270—284, 301—309, 6—45, 46—61, 82—94, 94—105, 105—108, 206—209, 73—82, 119—126). Ch. Abs. (e)

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



765. ANALYSIS OF HYDROCARBONS BY ADSORPTION.
Velikovskii, A. G., Pavlova, S. N., Gofman,
P. S. and Driatskaya, Z. V. (Neftyanoye Khoz.
(Oil Economy), 1947, (9), 30/39).

PAVLOVA, S.N.; DRIATSKAYA, Z.V.; MKHCHIYAN, M.A.

Molecular sieve method for determining the composition of methane hydrocarbons of a normal structure in gasoline fractions. Khim. i tekh.topl.i masel 7 no.3:58-60 Mr '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.
(Petroleum—Analysis)
(Paraffins)

S/065/62/000/011/002/006
E075/E436

AUTHORS: Pavlova, S.N., Baranova, Z.N.

TITLE: Crudes from new deposits in the Permskaya oblast' District

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.11, 1962, 32-36

TEXT: The production of crude oil in the Permskaya oblast' district should increase by more than three times due to exploitation of several deposits. The crudes from the Ufa swell are the most suitable for refining. They contain from 0.54 to 0.87% S, 5.2 to 9.9% asphalts and resins, 5.5 to 6.1% wax and 45.2 to 50.8% of fractions boiling to 300°C. In the Lobanovo crudes the S content is 1.4%, wax 5.4 to 6.7%, asphalts and resins 3.25 to 9.74%, fractions boiling to 300°C 39.2 to 41%. Chernusheno crudes have 2.2 to 2.95% S, wax 2.04 to 4.58%, asphalts and resins 12.7 to 24.1%, fractions boiling to 300°C 32.2 to 37.7%. Crudes from the region between the Kuyeda and Andreyevka swells contain 2.00 to 3.24% S, 2.22 to 3.36% wax, 22.8 to 32.5% asphalts and resins and 23.5 to 30% of fractions boiling to 300°C. Benzene distillates of all the crudes have octane numbers not exceeding 45, paraffinic

Card 1/2

PAVLOVA, S. N., jt. au.

Velikovskiy, A. S., Petroleum in the USSR. Moskva, Gos. nauch.-tekhn. izd-vo neftianoi i gornoi lit-ry, 1945. 1.7 p. (Sovremennaia neftianaia tekhnika; [illegible] povysheniia kvalifikatsii inzhenerov neftianoi promyshlennosti) (53-344)

TN-7 .C.R.V4

PAVLOVA, S. N.

USSR

M: Sovetskiye Nefti (Soviet Oils) (Moscow-Leningrad 1947)

Soviet Source:
Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 77547, 77549, 77565-66-67

PAVLOV, B. N.

M: "Sovetskiye Nefti" (Soviet Oil)
Moscow - Leningrad, 19[illegible] (co-author .

Soviet Source:

Abstracted in USA "Treasury Index",
Library of Congress, Air [illegible],
Report No. [illegible] .

PAVLOVA, S. N.

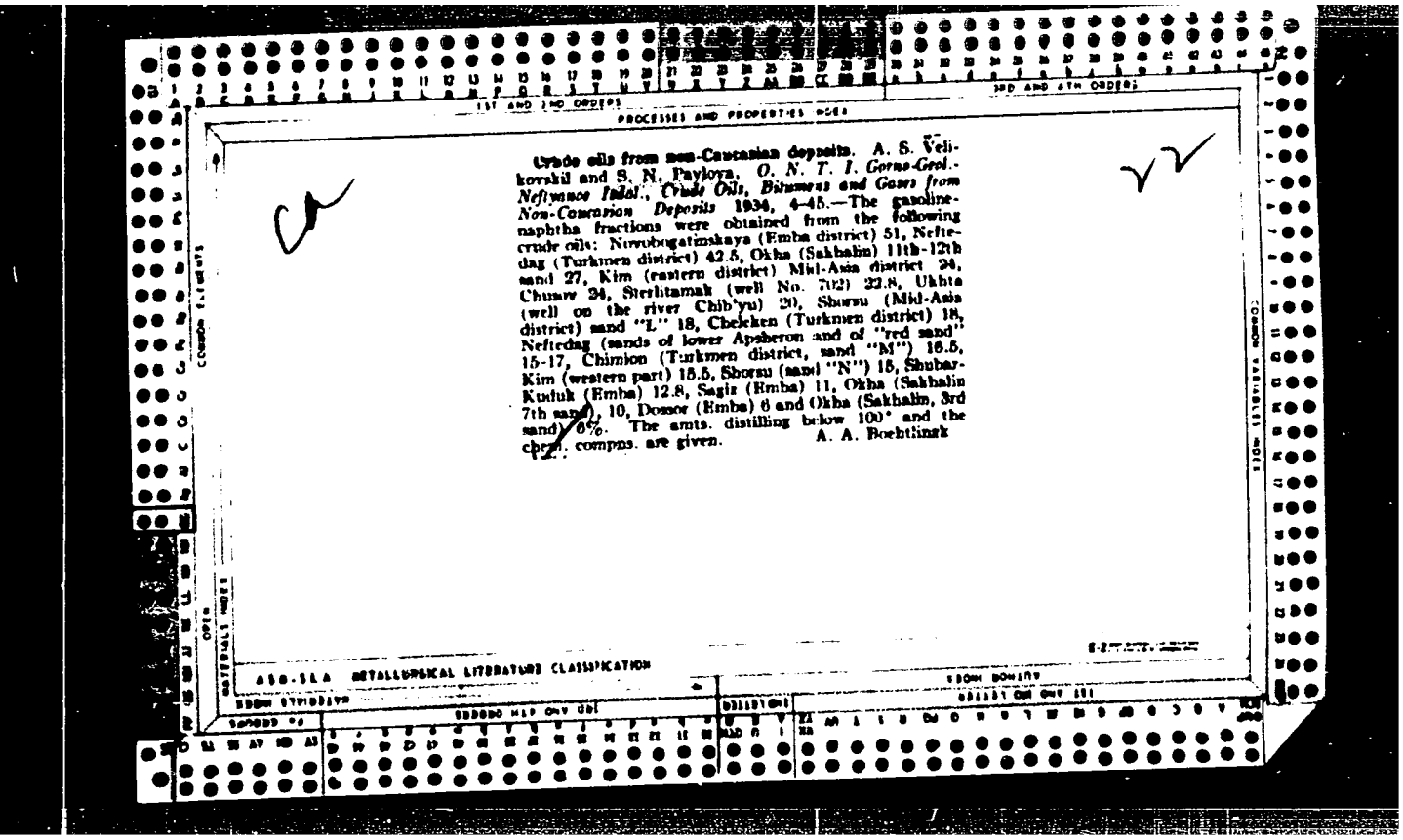
USSR

Co-Author on Determination of Acidity and of Naphthenic Acids in Crude Oils and in their Products in the USSR and Co-Author on Flash Point Determination of Crude Oils in the USSR

Soviet Source: N: Nefti SSSR, 1945, MOSCOW* Leningrad
Abstracted in USAF "Treasure Island", on file in Library of Congress Air Information Division, Report No. 87019, 87020. Unclassified.

Investigations on Khhabi petroleum. S. N. Pavlova and P. S. Hofman. *Neftyanoe Khoz.* 19, No. 9, 42-6 (1938); *Chimie & industrie* 41, 895.—This petroleum has low d., relatively low solidifying point, a high paraffin content and moderate resin and S contents. In addn. to gasoline, it can yield kerosene for tractors and for lighting, but only rather small quantities of viscous oils. A. Papineau-Couture

METALLURGICAL LITERATURE CLASSIFICATION



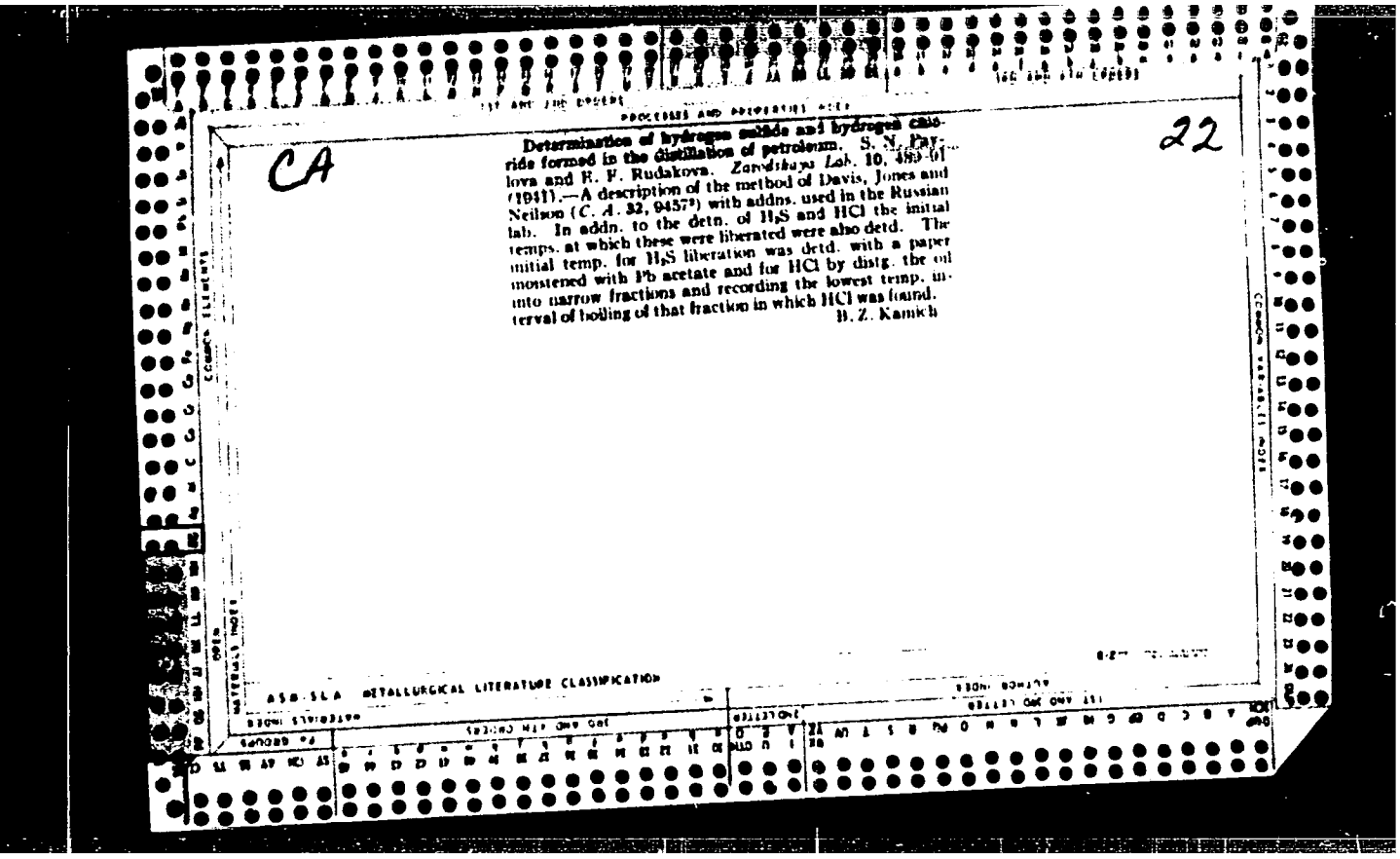
Crude oils from non-Caucasian deposits. A. S. Velikovskii and S. N. Pavlova. *O. N. T. I. Gorno-Geol.-Neftyanoe Inst., Crude Oils, Bitumens and Gases from Non-Caucasian Deposits* 1934, 4-45.—The gasoline-naphtha fractions were obtained from the following crude oils: Novoboguslmskaya (Emba district) 51, Neftedag (Turkmen district) 42.5, Okha (Sakhalin) 11th-12th sand 27, Kim (eastern district) Mid-Asia district 24, Chusov 24, Sterlitamak (well No. 702) 22.8, Ukhta (well on the river Chib'yu) 20, Shorsu (Mid-Asia district) sand "L" 18, Cheleken (Turkmen district) 18, Neftedag (sands of lower Apsheron and of "red sand" 15-17, Chimion (Turkmen district, sand "M") 16.5, Kim (western part) 15.5, Shorsu (sand "N") 15, Shubar-Kuduk (Emba) 12.8, Sagiz (Emba) 11, Okha (Sakhalin 7th sand) 10, Dossor (Emba) 6 and Okha (Sakhalin, 3rd sand) 6%. The amts. distilling below 100° and the chem. compns. are given.

A. A. Boehtlingk

Ca

22

Baikal crude oil. S. N. Pavlova and P. S. Hofman. *O. N. T. I. Gorno-Geol.-Neftyanoe Izdat., Crude Oils, Bitumens and Gases from Non-Caucasian Deposits* 1934, 250 9.—The crude oil was collected from the surface of the water. It had d. 0.907, pour point −3°, E_{50} viscosity 5.27, excise resins 72, asphaltenes 7.70, silica-gel resins 21.0, acids 0.0424, paraffin (Holde) (m. 49°) 1.2, S 0.33 and C 10.8%. Initial b. p. was 240° (the light fractions were probably lost); 4.8% distd. below 270° (sp. gr. 0.897), 8.23% at 270-300° (sp. gr. 0.883), fuel oil 85.75% (sp. gr. 0.975). This is a heavy asphaltic crude oil which yields about 14% kerosene-gas oil fractions, about 40% lubricating oil cuts and about 46% residual asphalt. Details of analysis are tabulated. A. A. B.

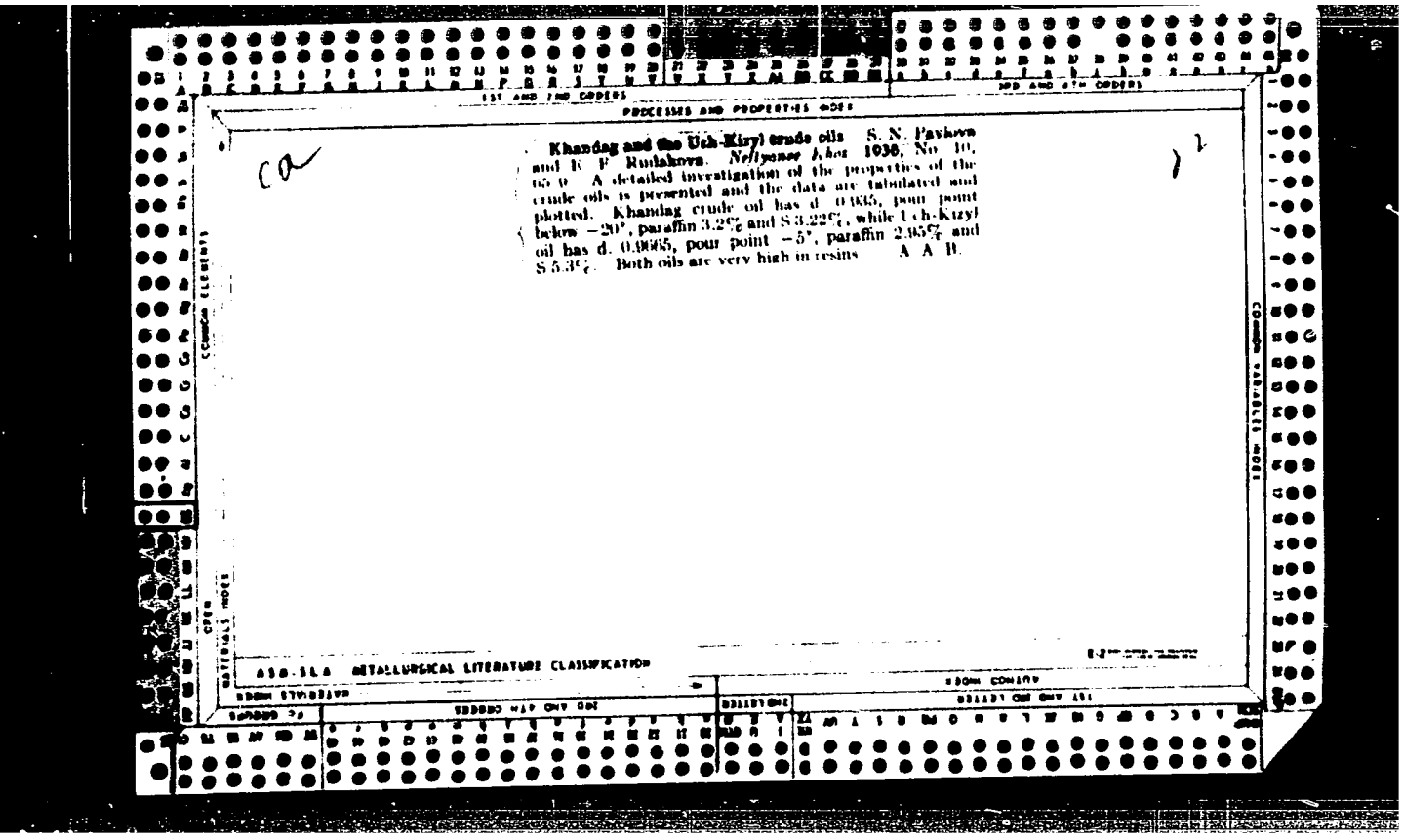


CA

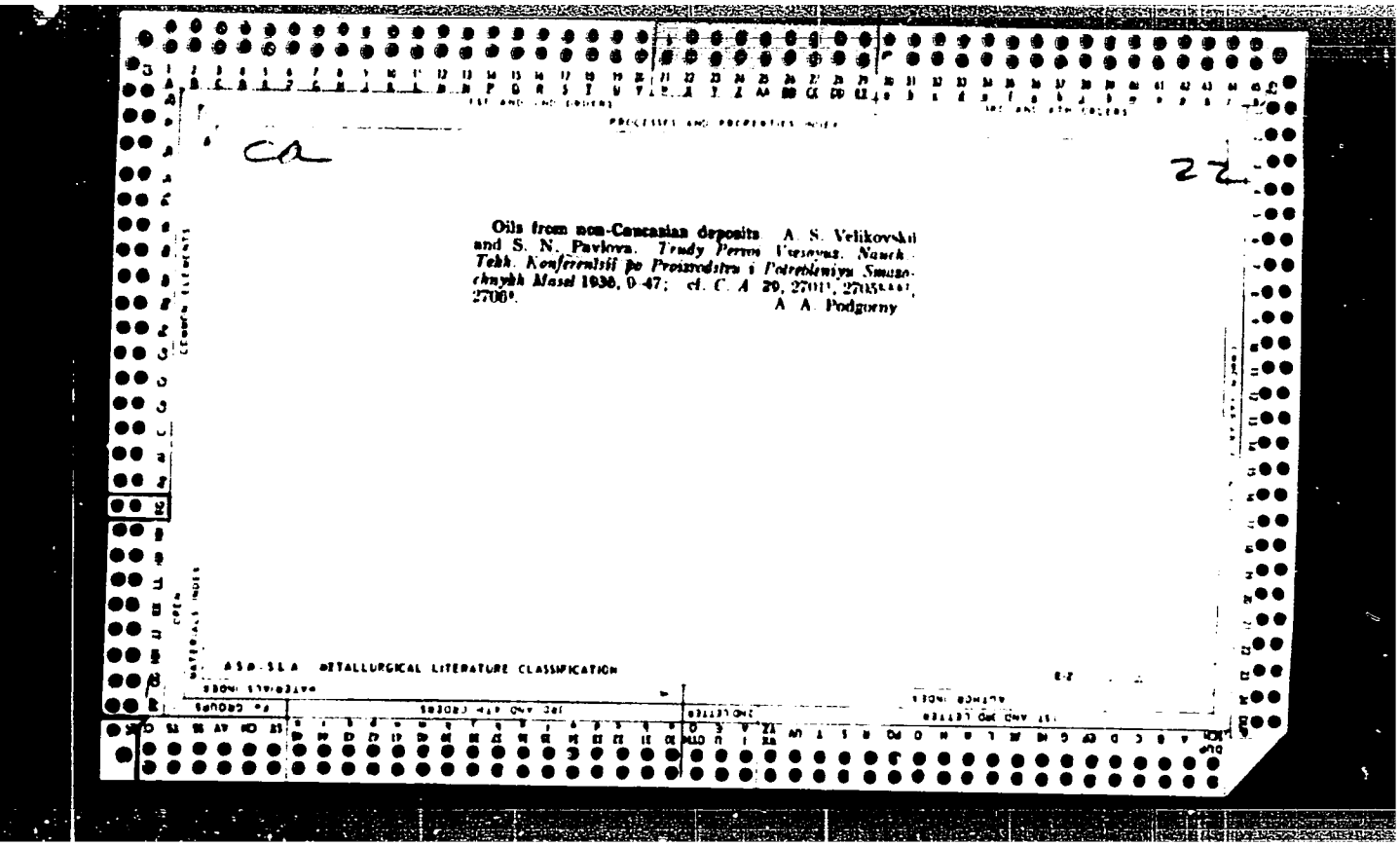
22

Determination of hydrogen sulfide and hydrogen chlorides formed in the distillation of petroleum. S. N. Pavlova and R. F. Rudakova. *Zavodskaya Lab.* 10, 489–91 (1941).—A description of the method of Davis, Jones and Neilson (*C. A.* 32, 9457[9]) with addns. used in the Russian lab. In addn. to the detn. of H_2S and HCl the initial temps. at which these were liberated were also detd. The initial temp. for H_2S liberation was detd. with a paper moistened with Pb acetate and for HCl by distg. the oil into narrow fractions and recording the lowest temp. interval of boiling of that fraction in which HCl was found.
B. Z. Kamich

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

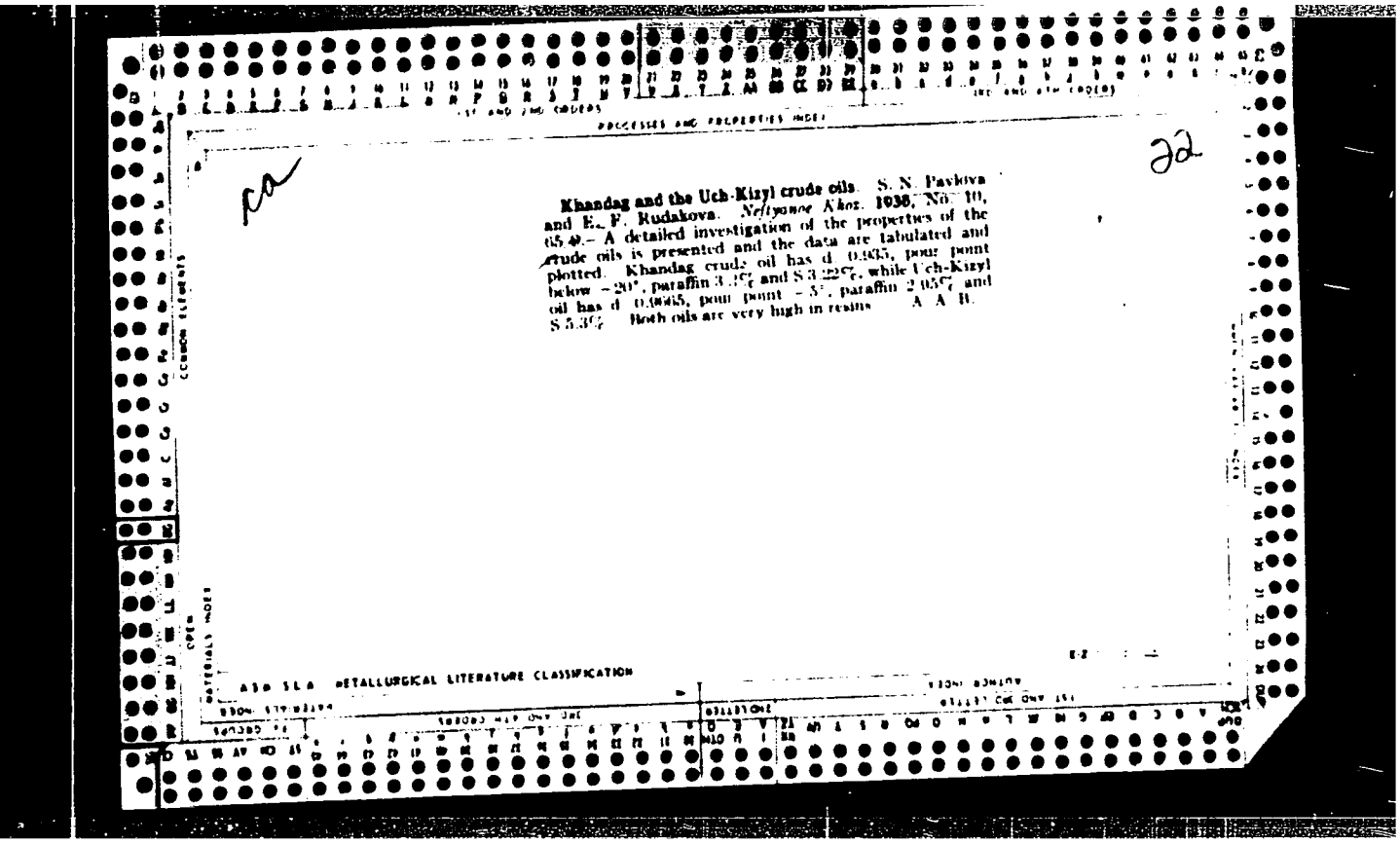


Khanday and the Uch-Kizyl crude oils S. N. Pavlova and K. F. Rudakova. *Neftyanoe Khoz* **1936**, No. 10, 65-9. A detailed investigation of the properties of the crude oils is presented and the data are tabulated and plotted. Khanday crude oil has d. 0.885, pour point below −20°, paraffin 3.2% and S 3.22%, while Uch-Kizyl oil has d. 0.9065, pour point −5°, paraffin 2.85% and S 5.3%. Both oils are very high in resins. A. A. B.

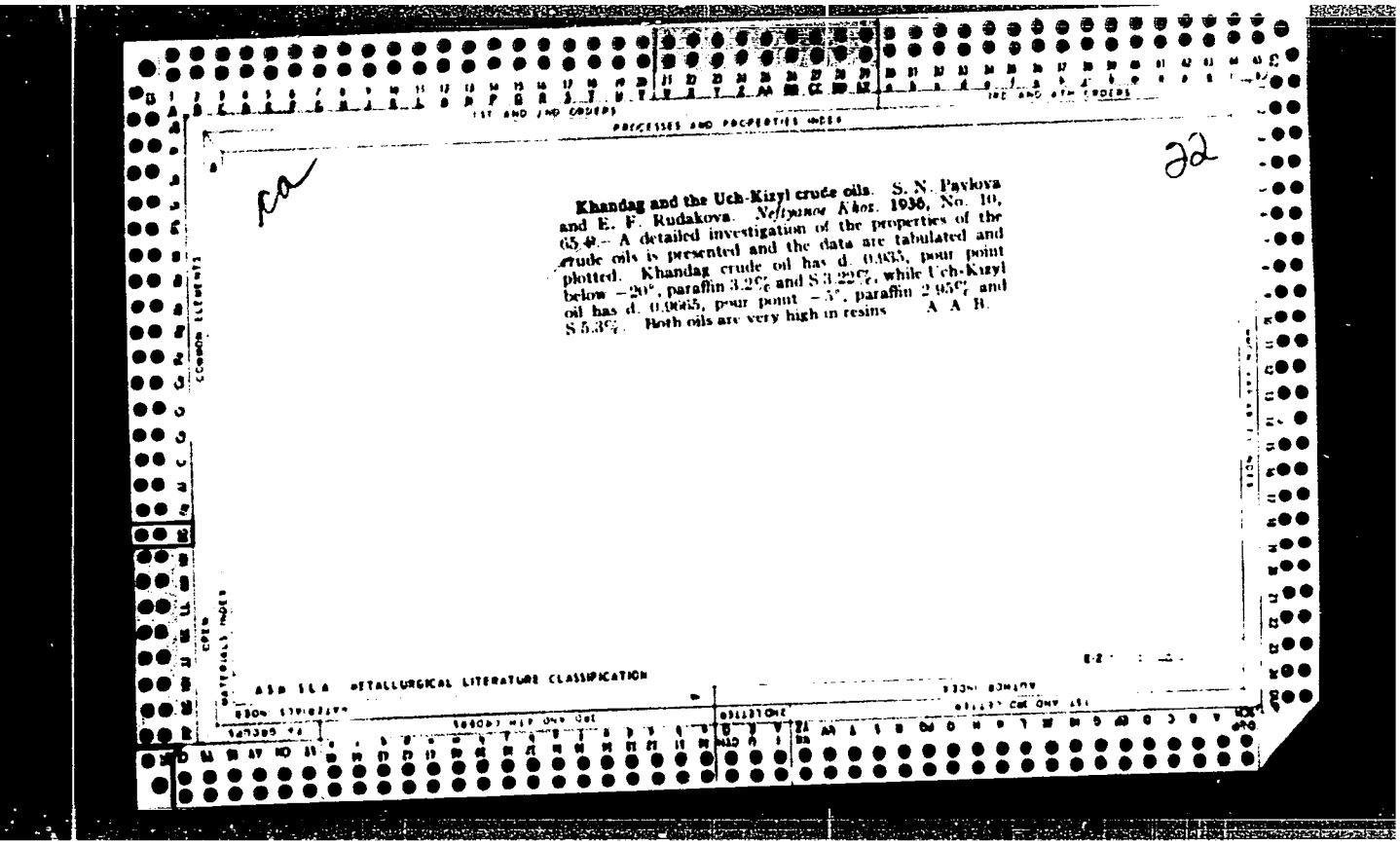


Oils from non-Caucasian deposits. A. S. Velikovskii and S. N. Pavlova. *Trudy Pervoi Vsesoyuz. Nauch.-Tekh. Konferentsii po Proizvodstvu i Pererabotke Smazochnykh Masel* 1936, 9-47; cf. *C. A.* 29, 2701[illegible], 2705[illegible], 2706[illegible].

A. A. Podgorny



Khanday and the Uch-Kizyl crude oils. S. N. Pavlova and E. F. Rudakova. *Neftyanoe Khoz.* **1938**, No. 10, 65–9.— A detailed investigation of the properties of the crude oils is presented and the data are tabulated and plotted. Khanday crude oil has d 0.935, pour point below −20°, paraffin 3.3% and S 3.22%, while Uch-Kizyl oil has d 0.9365, pour point −5°, paraffin 2.05% and S 5.3%. Both oils are very high in resins. A. A. B.



PROCESSES AND PROPERTIES INDEX

Khandag and the Uch-Kizyl crude oils. S. N. Pavlova and E. F. Rudakova. *Neftyanoe Khoz.* **1936**, No. 10, 65-9.—A detailed investigation of the properties of the crude oils is presented and the data are tabulated and plotted. Khandag crude oil has d. 0.855, pour point below −20°, paraffin 3.2% and S 3.22%, while Uch-Kizyl oil has d. 0.9065, pour point −5°, paraffin 2.95% and S 5.3%. Both oils are very high in resins A. A. B.

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

C 1

Crude oils found in the "Second Baku." S. N. Pavlova, P. S. Hofman and E. A. Kazmina. *Vostochnaya Neft* 1939, No. 1, 41-9.—The following crude oils, kerosenes, gasolines, fuel oils, lubricating oil fractions and bitumens were analyzed in detail: Kosvapkulovo, Syzran, Tuimazinsk, Buguruslan, Chusovo, Ishimbaevo and Krasno-Kama. The data are tabulated and plotted.

A. A. Bochtlingk

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH GROUPS

CA

22

Investigation of the Syzran petroleums S. S. Pavlova and P. N. Holman. *Vostochnaya Neft* 1939, No. 4-5, 40-6; *Khim. Referat. Zhur.* 1940, No. 6, 107.—Syzran petroleum from wells 8, 10 and 11 was investigated. Petroleum from well 10 has d. 0.859, E_{50} 1.31, flash point 3° and solidification temp. below −30°. Petroleums from all 3 wells contain resinous substances approx. 40, paraffin approx. 2 and S from 1.2 to 2.1%. The petroleum is a paraffinic-naphthenic aromatic oil with a predominance of paraffinic hydrocarbons. The yields of gasoline from wells 8, 10 and 11 are 3, 15 and 4%, kerosene 34, 20 and 25%, resp. The gasoline has a low octane no. and contains 0.02–0.05% of S. The illuminating properties of the kerosene are good. Expts. on reforming kerosene reduced the content of S to 0.1%. The oily fractions have a high solidification temp. and contain much S. High grade bitumen is obtained from the Syzran petroleums.

W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND CODES

PROCESSES AND PROPERTIES INDEX

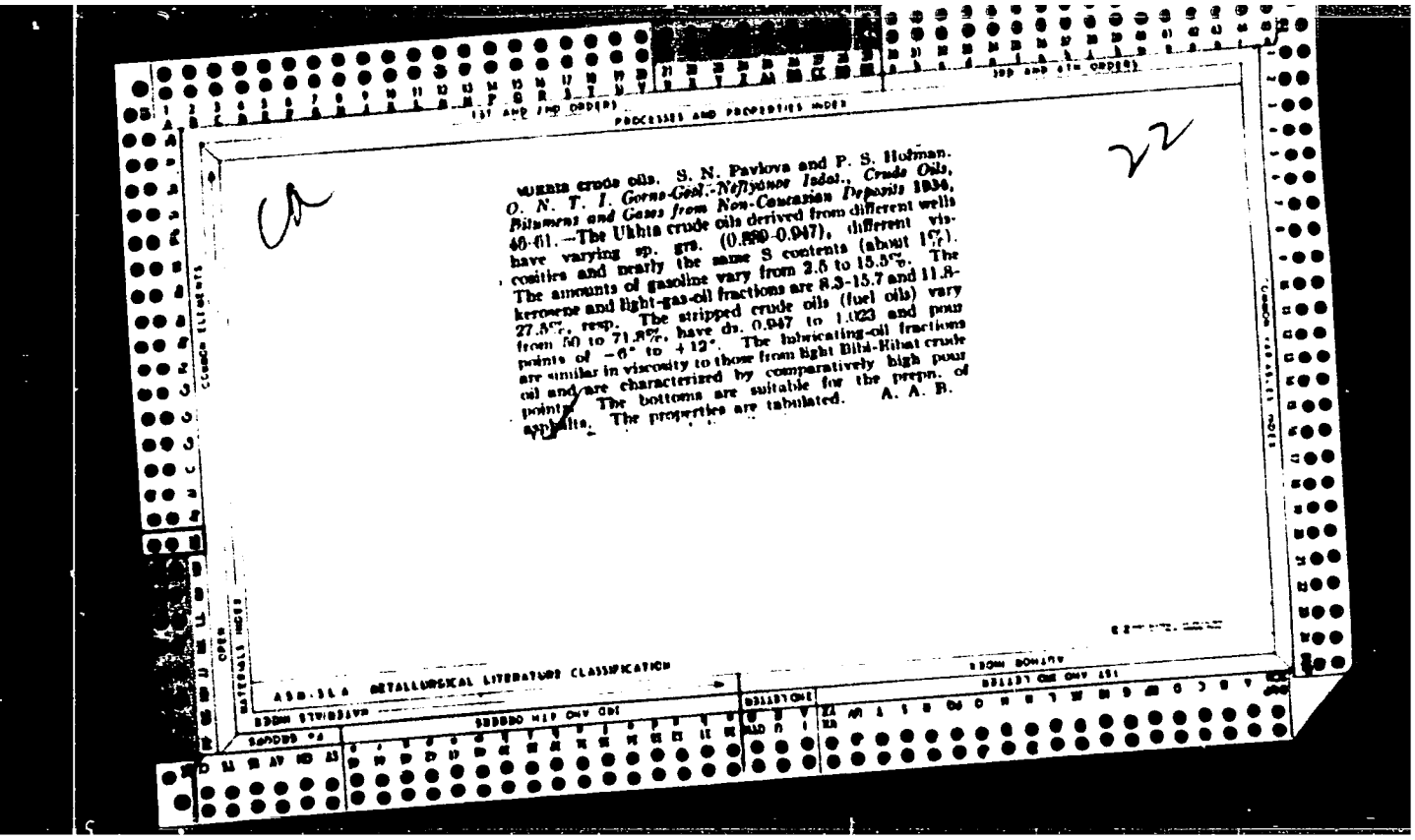
3RD AND 4TH CODES

22

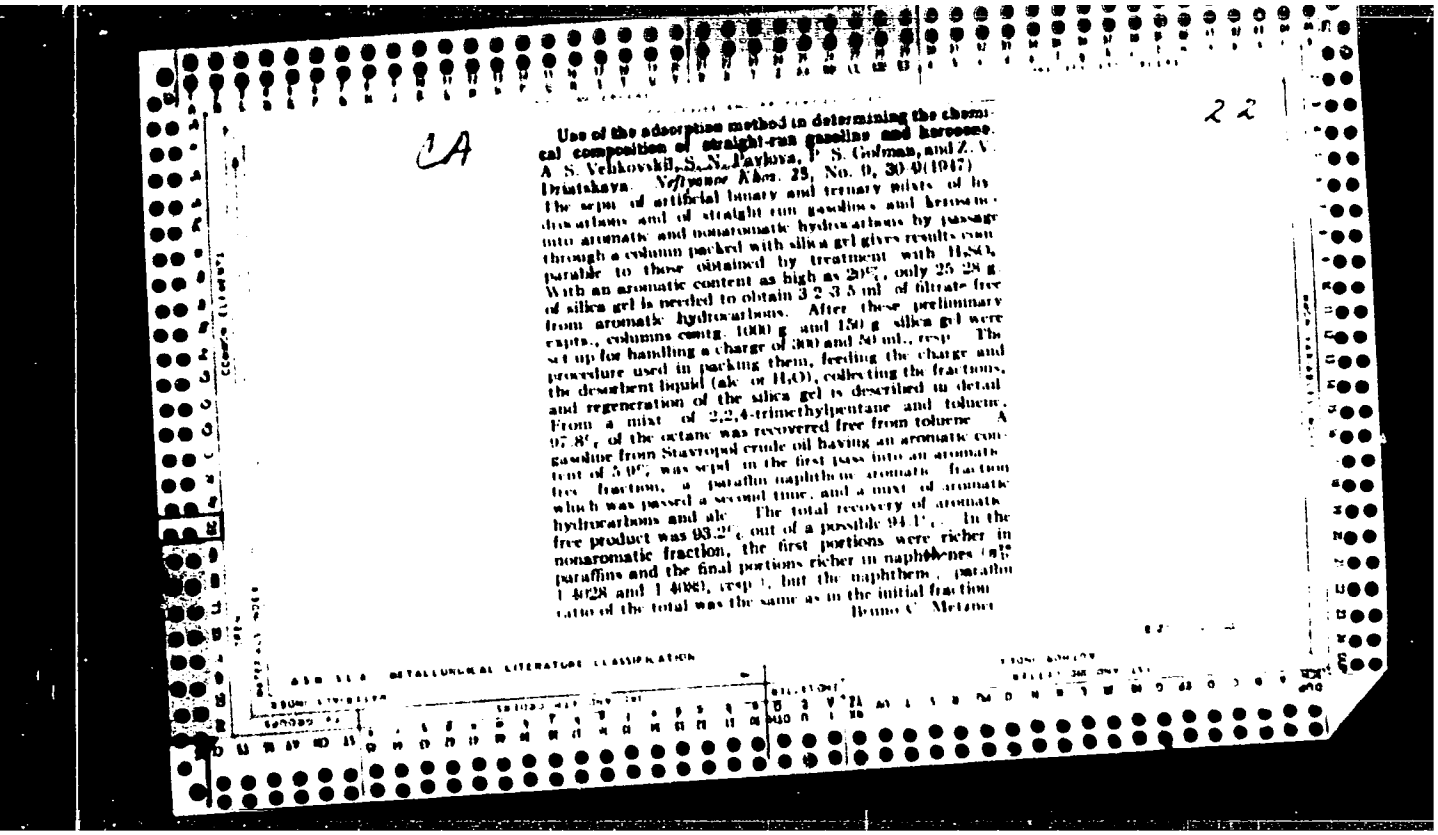
Investigation of Koschagyl petroleum. A. S. [illegible], [illegible] Rudakova, S. A. Pavlova, P. S. Holman and [illegible] (1947), [illegible] Neftyanoe Khozyaistvo 1947, No. 3, [illegible] 1947 II [illegible]. The raw oil contains [illegible] and no light [illegible] paraffin and the [illegible] resinous substances [illegible]. Upon [illegible] carbon test value is 1.44 [illegible] and [illegible] above distils below 200°, 10.5% at 200-300°, and [illegible]. The oil yields [illegible]. The gasoline has a high octane no. [illegible]. The gasoline [illegible] up to 1.44 of octane no. 70.5. The gasoline belongs to the naphthenomethane series of [illegible] but are never [illegible]. The mineral oil fractions have a high [illegible] finding of the thickness very sensitive to "Paraflow." [illegible] up to 200 residue yields 20% gasoline distg. up to 200.

M. G. Moore

ASO-SLA METALLURGICAL LITERATURE CLASSIFICATION



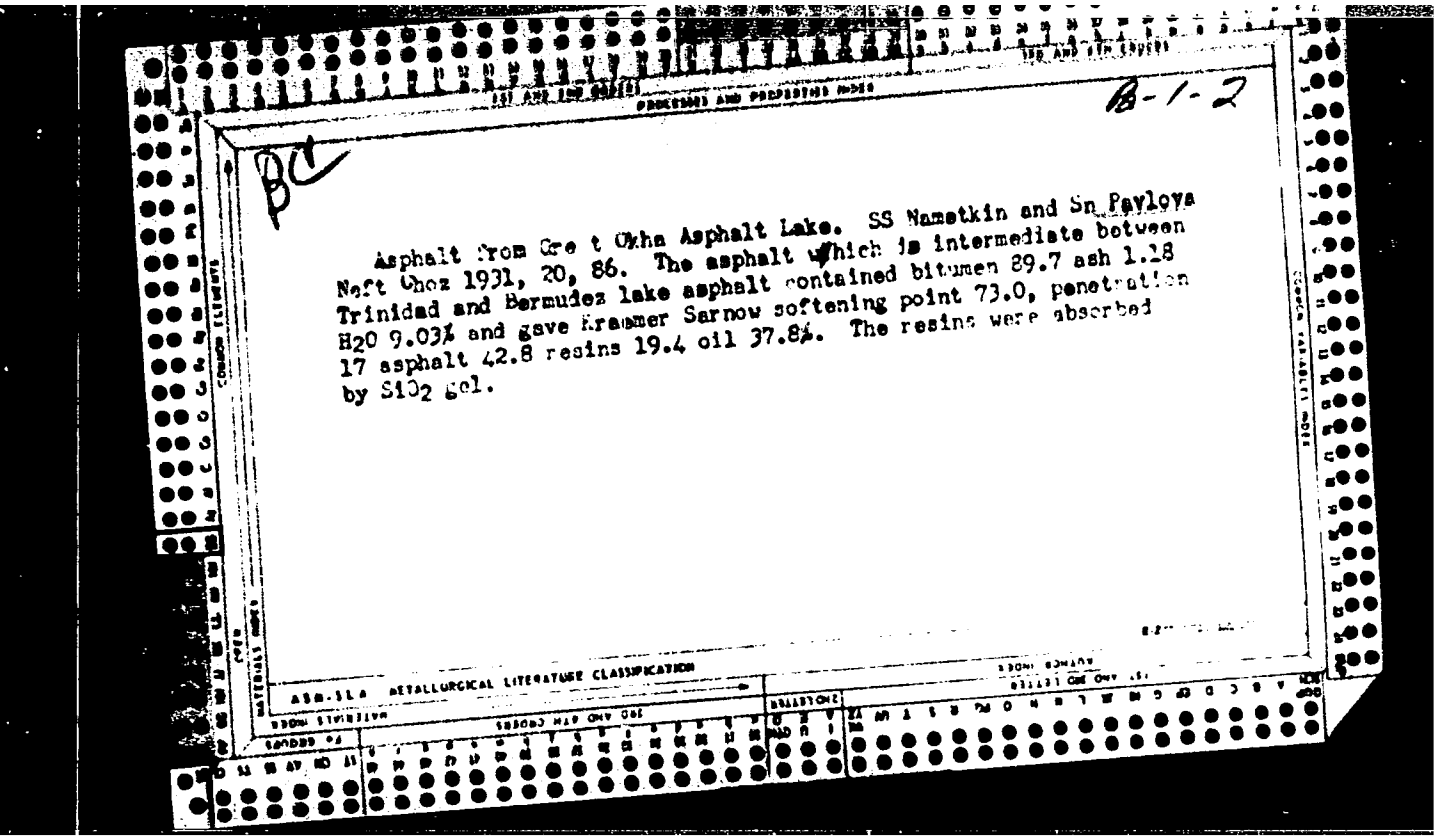
Ukhta crude oils. S. N. Pavlova and P. S. Hofman. *O. N. T. I. Gorno-Geol.-Neftyanoe Izdat., Crude Oils, Bitumens and Gases from Non-Caucasian Deposits* 1936, 40-61.—The Ukhta crude oils derived from different wells have varying sp. grs. (0.880-0.947), different viscosities and nearly the same S contents (about 1%). The amounts of gasoline vary from 2.6 to 15.5%. The kerosene and light-gas-oil fractions are 8.3-15.7 and 11.8-27.5%, resp. The stripped crude oils (fuel oils) vary from 50 to 71.8%, have dr. 0.947 to 1.023 and pour points of −6° to +12°. The lubricating-oil fractions are similar in viscosity to those from light Bibi-Hibat crude oil and are characterized by comparatively high pour points. The bottoms are suitable for the prepn. of asphalts. The properties are tabulated. A. A. B.



1A

22

Use of the adsorption method in determining the chemical composition of straight-run gasoline and kerosene. A. S. Velikovskii, S. N. Paykova, P. S. Golman, and Z. V. Dmitshava. *Neftyanoe Khoz.* 25, No. 9, 30-9(1947). The separation of artificial binary and ternary mixts. of hydrocarbons and of straight-run gasolines and kerosenes into aromatic and nonaromatic hydrocarbons by passage through a column packed with silica gel gives results comparable to those obtained by treatment with H_2SO_4. With an aromatic content as high as 20%, only 25-28 g. of silica gel is needed to obtain 3 2-3 5 ml. of filtrate free from aromatic hydrocarbons. After these preliminary expts., columns contg. 1000 g. and 150 g. silica gel were set up for handling a charge of 300 and 50 ml., resp. The procedure used in packing them, feeding the charge and the desorbent liquid (alc. or H_2O), collecting the fractions, and regeneration of the silica gel is described in detail. From a mixt. of 2,2,4-trimethylpentane and toluene, 97.8% of the octane was recovered free from toluene. A gasoline from Stavropol crude oil having an aromatic content of 5.0% was sepd. in the first pass into an aromatic-free fraction, a paraffin naphthene aromatic fraction which was passed a second time, and a mixt. of aromatic hydrocarbons and alc. The total recovery of aromatic-free product was 93.2% out of a possible 94.1%. In the nonaromatic fraction, the first portions were richer in paraffins and the final portions richer in naphthenes ($n^{20}D$ 1.4028 and 1.4088), resp., but the naphthene-paraffin ratio of the total was the same as in the initial fraction. Bruno C. Metzner



B-1-2

BC

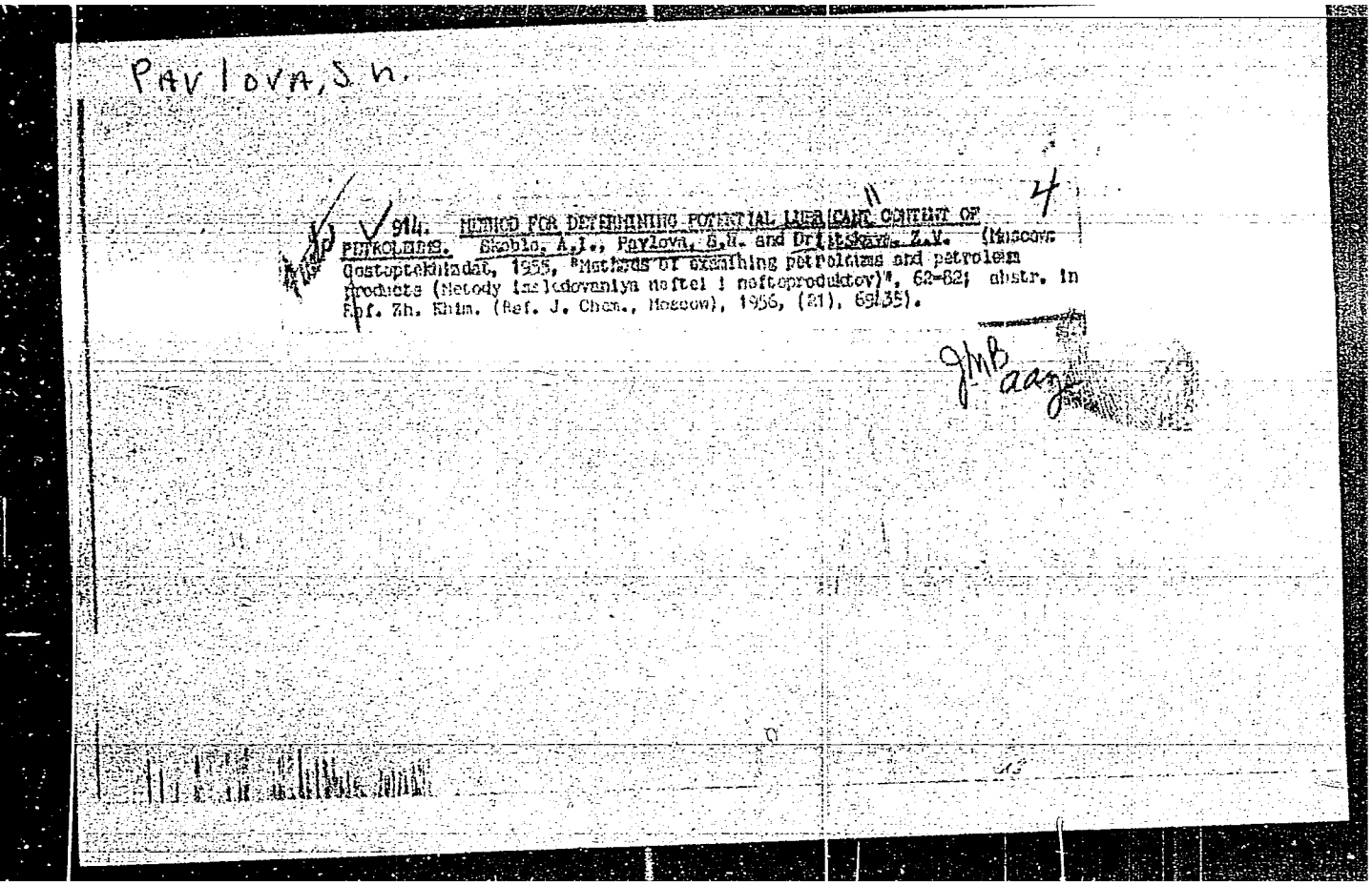
Asphalt from Cre t Okha Asphalt Lake. SS Nametkin and Sn Pavlova Neft Khoz 1931, 20, 86. The asphalt which is intermediate between Trinidad and Bermudez lake asphalt contained bitumen 89.7 ash 1.18 H_2O 9.03% and gave Kraemer Sarnow softening point 73.0, penetration 17 asphalt 42.8 resins 19.4 oil 37.8%. The resins were absorbed by SiO_2 gel.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MKHCHIYAN, M.A.; DRIATSKAYA, Z.V.; PAVLOVA, S.N.

Oil of the Markov field. Khim. i tekh. topl. i masel 9 no.7:12-18 Jl '64. (MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.



Pavlova, S. n.

V 914. METHOD FOR DETERMINING POTENTIAL LUBRICANT CONTENT OF PETROLEUMS. Skobla, A.J., Pavlova, S.N. and Dr[illegible]skaya, Z.V. (Moscow Gostoptekhizdat, 1955, "Methods of examining petroleums and petroleum products (Metody issledovaniya neftei i nefteproduktov)", 62-82; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1956, (21), 69135).

PAVLOVA, S.N.

128

SOV/6246

PHASE I BOOK EXPLOITATION

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

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Synthetic Zeolites: (Cont.) SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

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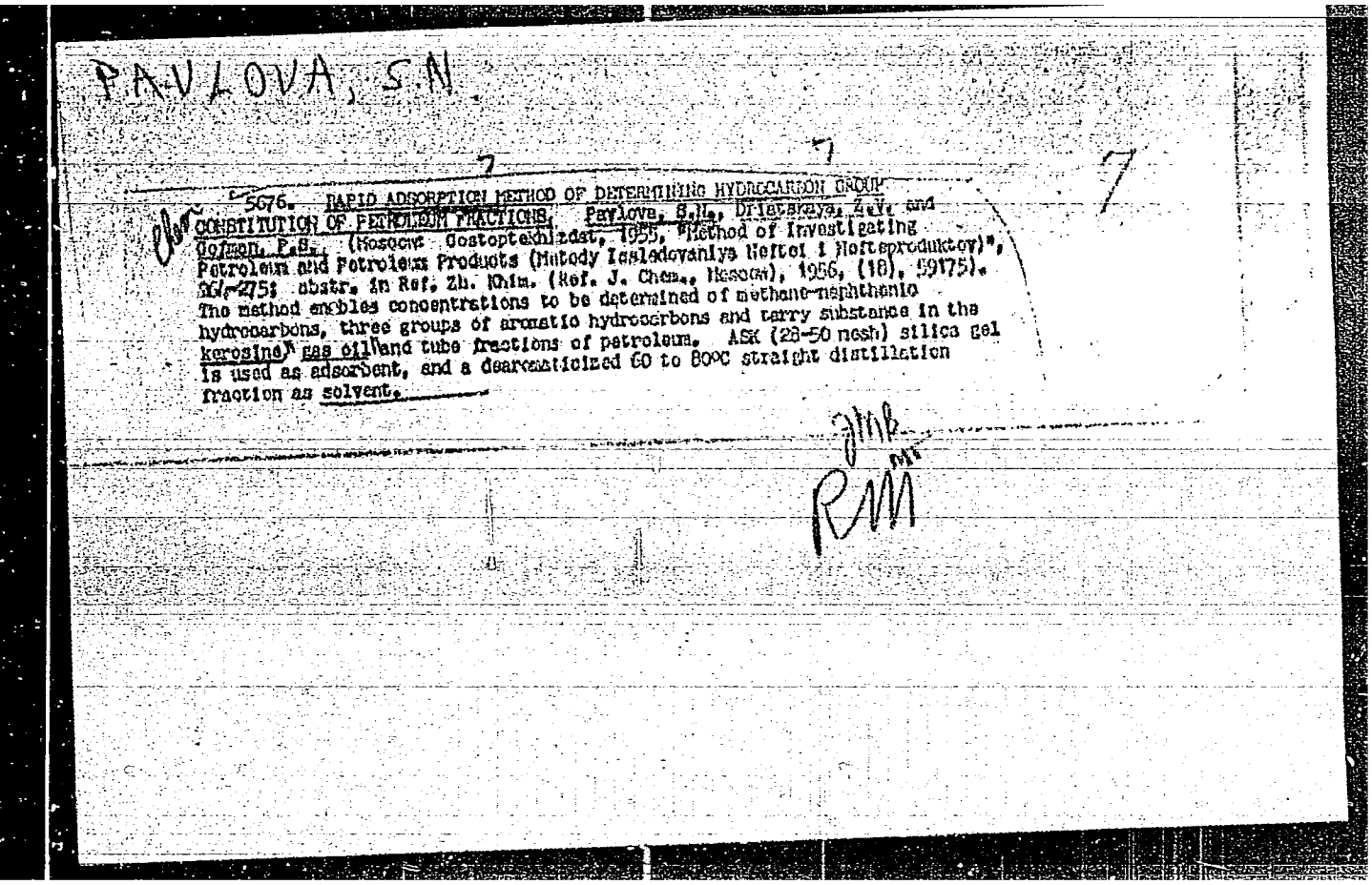

PAVLOVA, S.N.

5676. RAPID ADSORPTION METHOD OF DETERMINING HYDROCARBON GROUP CONSTITUTION OF PETROLEUM FRACTIONS. Pavlova, S.N., Driatskaya, A.V. and Gofman, F.E. (Moscow Gostoptekhizdat, 1955, "Method of Investigating Petroleum and Petroleum Products (Metody Issledovaniya Nefteі i Nefteproduktov)", 267-275; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1956, (18), 59175). The method enables concentrations to be determined of methane-naphthenic hydrocarbons, three groups of aromatic hydrocarbons and tarry substance in the kerosine, gas oil and tube fractions of petroleum. ASK (28-50 mesh) silica gel is used as adsorbent, and a dearomaticized 60 to 80°C straight distillation fraction as solvent.

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AUTHORS: Pavlova, S.N., Driatskaya, Z.V., Baranova, Z.N., and Zavershinskaya, S.V.

TITLE: The first exploitable Siberian crude

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1961, No.9, pp. 8-14

TEXT: An essay is given on this crude, discovered in April 1960 in Western Siberia, 400 km North of Tyumen'. The present find is called the Shaim field, and is at 1487-1500 m depth in a Jurassic bed. It has the following characteristics:

		Elemental crude composition, %	
Density ρ_4^{20}	0.827	C	85.8
Carbon residue, %	2.08	H	13.28
Composition, %		O	0.36
sulphur	0.46	S	0.46
adsorbable resins	10.2	N	0.10
asphaltenes	0.82		
paraffins	2.89/55°		
gas	3.5		

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The first exploitable Siberian crude

Gas composition, %		Yield of white products, %	
C_2H_6	1.2	up to 200°C	28.5
C_3H_8	25.8	" " 300°C	45.7
i-C_4H_{10}	17.2	" " 350°C	55.3
n-C_4H_{10}	55.8		

Properties of fractions are as follows:
SRB (28-85°C), yield 7.6%. ON 71.5 straight, 91 with 2.5 g TEL/kg, suitable for motor spirit B-91/155 (B-91/155).
SRB (28-120°C), yield 14.3%. ON 65.5 straight, 76.5 with 0.41 g TEL/kg, suitable for spirit A-76.
SRB (28-180°C), yield 25%, ON 66.6 with 0.82 g TEL/kg, suitable for motor spirit A-66. 0.05% S in all above fractions; aromatic content rises from 0 to 14%, and the naphthene content falls from 43% to 34%, of which just under one third is six-ringed. The crude therefore gives a much better platformer feed than Tuymazy. 150-280 °C cut gives colour-stable kerosine, with 22.8% yield on crude. Density is 0.811, and smoke point 21 mm, with 0.07% S. Diesel cuts, in the 150 to 350 °C range, give

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The first exploitable Siberian crude S/065/61/000/009/002/003
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52-59 cetane number, 0.08-0.12% S, and -18 to -25 °C pour point, with 27 to 36% yield. The residue range from 350 °C to 480 °C was examined in 3 °C cuts, and found suitable for all grades of fuel oil except naval grades. Throughout the range, the oil qualities change as follows:

Density ρ_4^{20}	0.8640-0.9126	Viscosity, cs	
		ν 50°	7.5 - 60.7
Temperature, °C	pour point, 10-40	ν 100°	2.2 - 10.1
		Sulphur content, %	0.3 - 0.84

There are 4 figures and 8 tables.

ASSOCIATION: VNII NP

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