



SOUTH-RUSANIV BLOCK

Mineral: oil, natural gas, condensate.

Type, period of subsoil use: geological study of oil and gas subsoil, including research and development of fields with extraction of oil and gas (industrial development of fields), 20 years.

Location: Romensky district of Sumy region and Myrhorod district of Poltava region.

Block area: 317.2 km².

Geological summary. The area is represented by a hilly plain, which is divided by river valleys, gullies and ravines. The block is located in the central part of the Northern zone of the Dnieper-Donetsk basin. According to the oil and gas geological zoning, South-Rusaniv block is located within Hlynko-Solokhivsky oil and gas area (density of non-exploratory production resources of 100-200 thousand tons of hydrocarbons per 1 km²) and Talalaivsko-Rybalsky oil and gas area (density of non-exploratory production resources of 30-50 thousand tons of hydrocarbons per 1 km²). The following explored hydrocarbon deposits near the area: oil and gas condensate deposits (Vasylyvske, Andriyashivske, Anastasivske, Lipovodolynske, Valyukhivske, Hadiatske, Hlynko-Rozbyshivske) and gas condensate deposits (Rusanivske, Klynko-Krasnoznamyanske). Oil-and-gas prospects in Pivdenno-Rusanivska area are associated with terrigenous Carboniferous and Upper Devonian deposits, which are productive in neighboring fields. Probably, productive horizons lie at depths of 3000-5600 m. The Kulyabchyn gas condensate field is located within the South-Rusaniv gas condensate field.

The deposit is a part of Artyukhiv-Anastasivsky shaft in the western part of the axial zone of the Dnieper-Donetsk depression. In the lower coal deposits on the roof of the B-20 horizon, the structure is a brachianticline of northwestern extension divided by discharges into three blocks. Its dimensions are 1.9x1.5 km, amplitude is about 70 m. The only gas-condensate deposit of the B-20 formation-type horizon is connected with a vaulted tectonic shielded trap. Collector rocks are composed of sandstones. The effective gas-saturated thickness of sandstones is 3.2-4.8 m. Klymenkivska, Starosilka and Georgiivska structures are within the South-Rusanivska area. In 1990, the Klymenkivka structure was included into the fund prepared on Vb23 horizon - Upper Visean Lower Carboniferous (C1v2). Type of the structure is structural-lithological. It is limited to the raising and extension of the line of replacement of sandstone horizons XIIa m.f.g. There is a low-amplitude vault in closed isogypsum minus 5 125 m in the western part of the trap. The eastern part of the trap is complicated by a submeridian discharge of amplitude 50 m. The dimensions of the structure within the isogypsum are minus 5,275 m - 12.3x2.0, the amplitude is 165 m. The prospective area is 20 km². Depths of productive horizons in the lower coal-sand-siltstone reservoirs are 4 900 – 5 400 m.

Georgiveska structure is found on the reflection horizon VI5. An anticline zone was found in the subsalt Devonian bounded by an isoline minus 5600 and complicated by four vaults: Shevtsovsky, Kulyabchynsky, Georgievsky, and Vyshnevetky. Georgiveska structure is an anticlinal fold of sublatitudinal extension with two vaults bounded by isogypsum minus 5450 m. The dimensions of the structure are 8.5x2.0 km, area - 15.25 km².

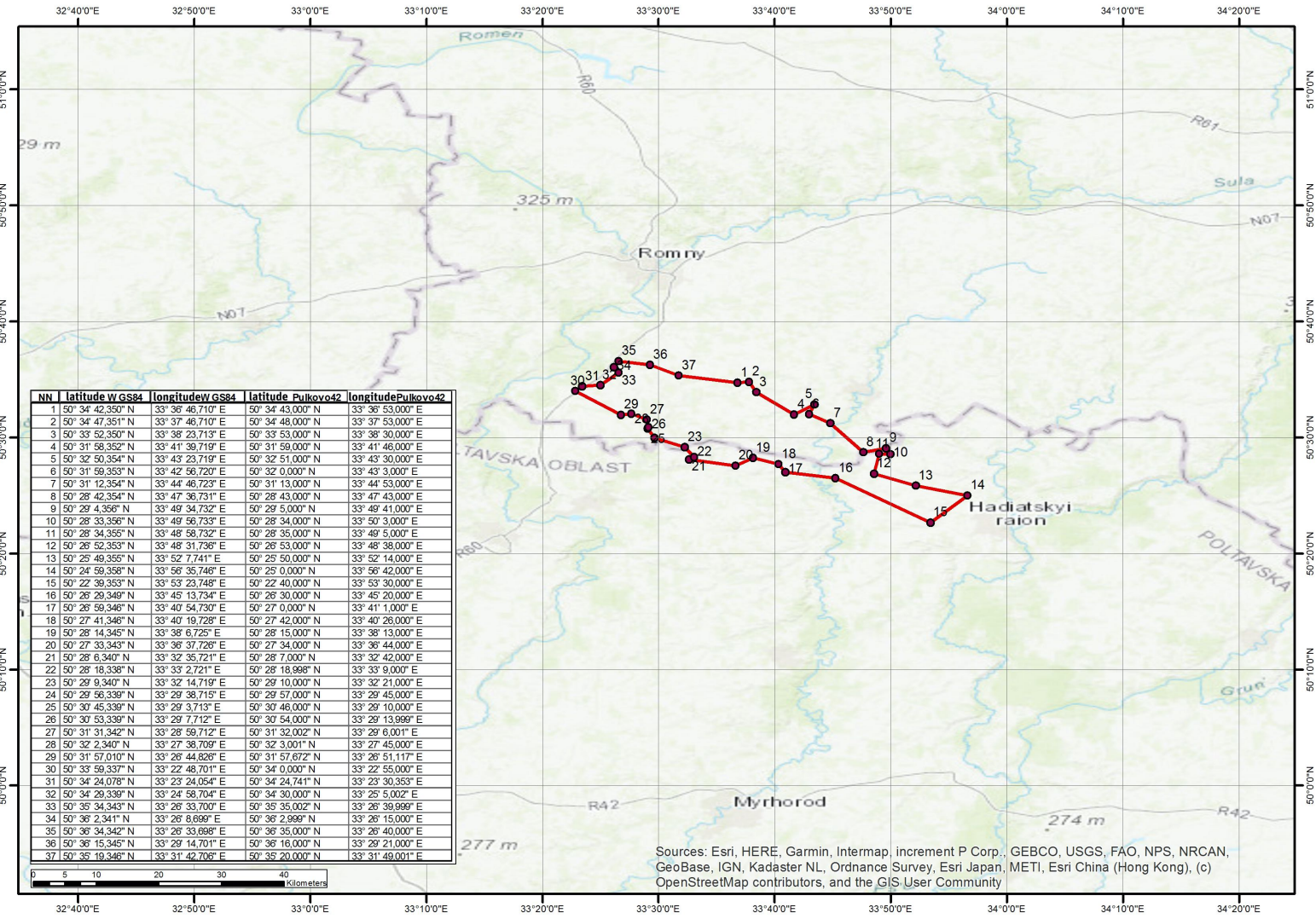
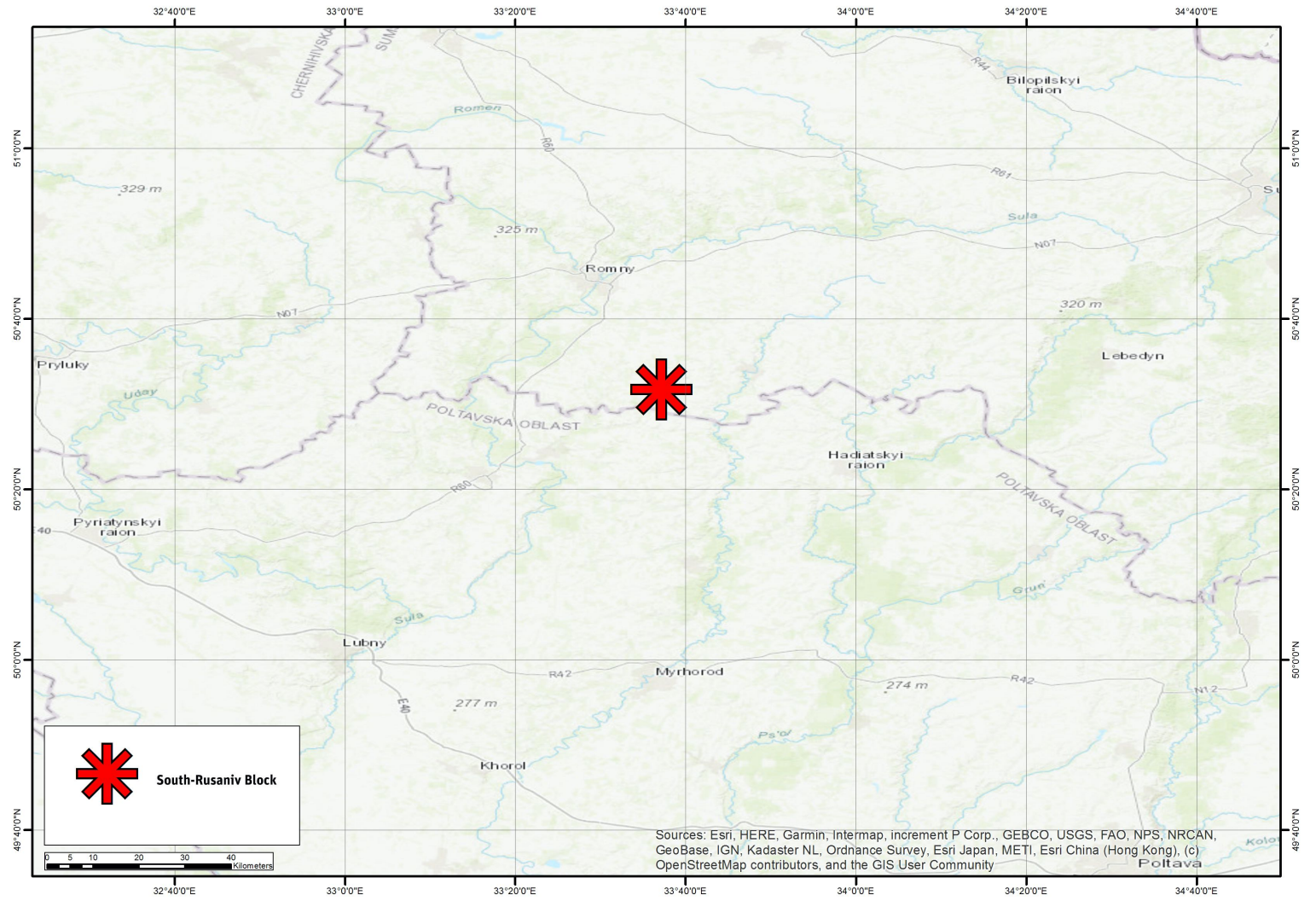
Along these reflection horizons the Starosilsky object is represented by a structural terrace of north-western extension, which is shielded from the north and east by an uncoordinated discharge of amplitude 50 m, it is limited by discharge amplitude of 40 m in the west. Vv4 Starosilka structural-tectonic trap on the reflection horizon is limited in the south by isogypsum minus 5150 m. Its dimensions are 7.5x3.5 km, amplitude 350 m, oriented area - 13.75 km². The presence of a structural-tectonic hydrocarbon trap is predicted on the Starosilka structure and the possibility of existence and lithological is not excluded. Possible productive horizons are sand reservoirs of the Upper, Lower Viseu and Tournai Lower Carboniferous complexes in the depth range of 4600-5150 m. The thickness of sandstones is 2-20 m. There are a number of promising structures within the South-Rusaniv block: Yahanivska, Dymyska, Pivnichno-Pogarshchynska, Bratska, Sotnykivska, Luchkivska, Markivska and others, where it is necessary to continue work on prospecting and exploration of hydrocarbon deposits.

Available geological information: According to Nadra of Ukraine NJSC, there are 16 wells within the block drilled for oil and gas and liquidated in the appropriate manner.

42886 44125 49114 50290 50597 52649 52961 53848 55418 55431 55982 61709 41628 39632

Resources/reserves assessment. Prospective gas resources of the Dlock category are accounted within the block - 3.330 billion m³ (class code - 334 locks).

Minimum work program. Stage I (12 months) - processing and reinterpretation of 2D seismic data, Stage II (12 months) - conducting 2D or 3D seismic on 1/4 of the block area, Stage III (24 months) - drilling at least one productive well.



NN	latitude WGS84	longitude WGS84	latitude Pulkovo42	longitude Pulkovo42
1	50°34'42.350"N	33°36'46.710"E	50°34'43.000"N	33°36'53.000"E
2	50°34'47.351"N	33°37'46.710"E	50°34'48.000"N	33°37'53.000"E
3	50°33'52.350"N	33°38'23.713"E	50°33'53.000"N	33°38'30.000"E
4	50°31'58.352"N	33°41'39.719"E	50°31'59.000"N	33°41'46.000"E
5	50°32'50.354"N	33°43'23.719"E	50°32'51.000"N	33°43'30.000"E
6	50°31'58.353"N	33°42'56.720"E	50°32'0.000"N	33°43'3.000"E
7	50°31'12.354"N	33°44'46.723"E	50°31'13.000"N	33°44'53.000"E
8	50°28'42.354"N	33°47'36.731"E	50°28'43.000"N	33°47'43.000"E
9	50°29'4.356"N	33°49'34.732"E	50°29'5.000"N	33°49'41.000"E
10	50°28'33.356"N	33°49'56.733"E	50°28'34.000"N	33°50'3.000"E
11	50°28'34.356"N	33°48'56.732"E	50°28'35.000"N	33°49'5.000"E
12	50°26'52.353"N	33°48'31.736"E	50°26'53.000"N	33°48'38.000"E
13	50°25'49.355"N	33°52'7.741"E	50°25'50.000"N	33°52'14.000"E
14	50°24'58.358"N	33°56'35.746"E	50°25'0.000"N	33°56'42.000"E
15	50°22'59.351"N	33°53'23.749"E	50°22'40.000"N	33°53'30.000"E
16	50°26'29.349"N	33°45'13.734"E	50°26'30.000"N	33°45'20.000"E
17	50°26'58.346"N	33°40'54.730"E	50°27'0.000"N	33°41'1.000"E
18	50°27'41.346"N	33°40'19.728"E	50°27'42.000"N	33°40'26.000"E
19	50°28'14.345"N	33°38'6.725"E	50°28'15.000"N	33°38'13.000"E
20	50°27'33.343"N	33°36'37.726"E	50°27'34.000"N	33°36'44.000"E
21	50°28'6.340"N	33°32'35.721"E	50°28'7.000"N	33°32'42.000"E
22	50°28'18.338"N	33°33'2.721"E	50°28'18.998"N	33°33'9.000"E
23	50°29'9.340"N	33°32'14.719"E	50°29'10.000"N	33°32'21.000"E
24	50°29'56.339"N	33°29'38.715"E	50°29'57.000"N	33°29'45.000"E
25	50°30'45.338"N	33°29'3.713"E	50°30'46.000"N	33°29'10.000"E
26	50°30'53.339"N	33°29'7.712"E	50°30'54.000"N	33°29'13.999"E
27	50°31'31.342"N	33°28'59.712"E	50°31'32.000"N	33°29'6.001"E
28	50°32'2.340"N	33°27'38.709"E	50°32'3.001"N	33°27'45.000"E
29	50°31'57.010"N	33°26'44.826"E	50°31'57.672"N	33°26'51.117"E
30	50°33'58.337"N	33°22'48.701"E	50°34'0.000"N	33°22'55.000"E
31	50°34'24.078"N	33°23'24.054"E	50°34'24.741"N	33°23'30.353"E
32	50°34'29.339"N	33°24'58.704"E	50°34'30.000"N	33°25'5.002"E
33	50°35'34.343"N	33°26'33.700"E	50°35'35.002"N	33°26'39.999"E
34	50°36'2.341"N	33°26'8.699"E	50°36'2.999"N	33°26'15.000"E
35	50°36'34.342"N	33°26'33.698"E	50°36'35.000"N	33°26'40.000"E
36	50°36'15.345"N	33°29'14.709"E	50°36'16.000"N	33°29'21.000"E
37	50°35'19.346"N	33°31'42.708"E	50°35'20.000"N	33°31'49.001"E