



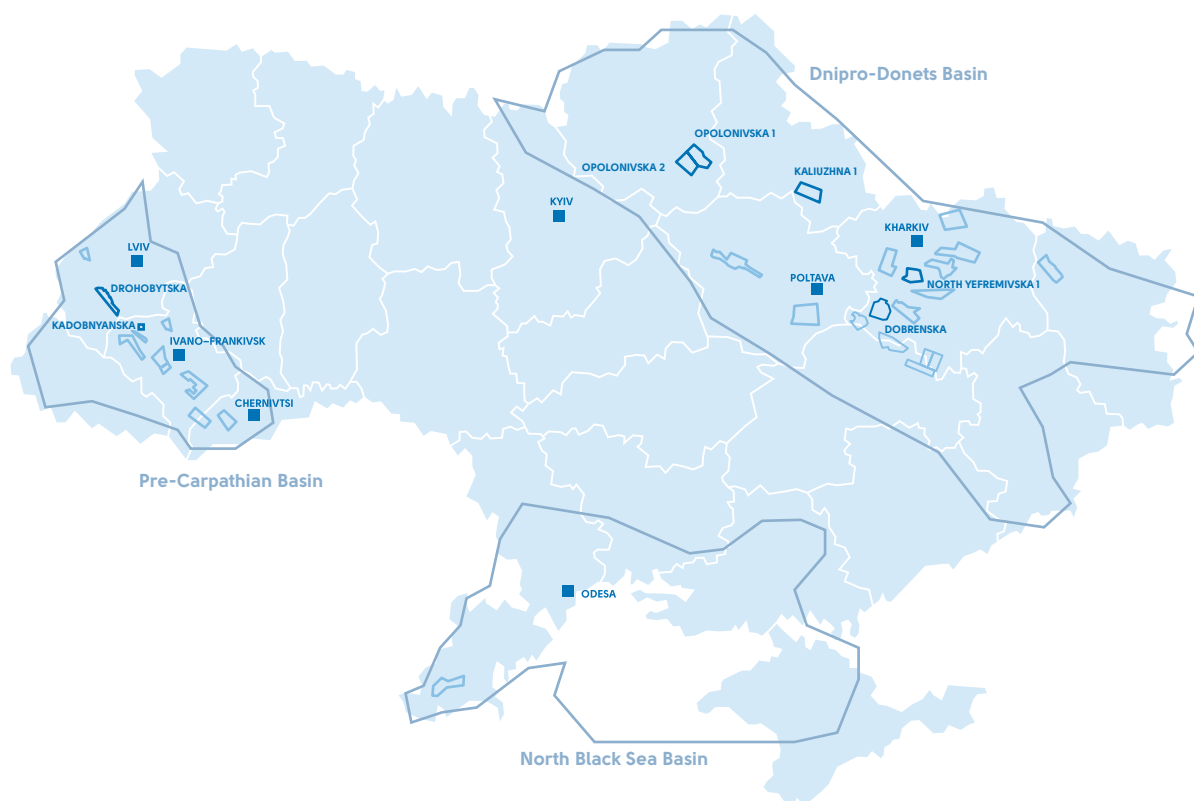
**Ukraine  
NOW**






# ROUND 2

# 30

# AUCTION BLOCKS FOR LICENSING ROUNDS



**Round 2 (January - April 2019)**

-  Blocks for round 2
-  Blocks for further rounds
-  Main oil and gas basins



BLOCK 11

NORTH EFREMOVSKA LICENSE

LOCATION

North-Efremivska block is located at the intersection of Zmiyiv, Pervomaysk and Nova Vodolaha districts of Kharkiv region. Acreage of the block is 99.51 sq.km.

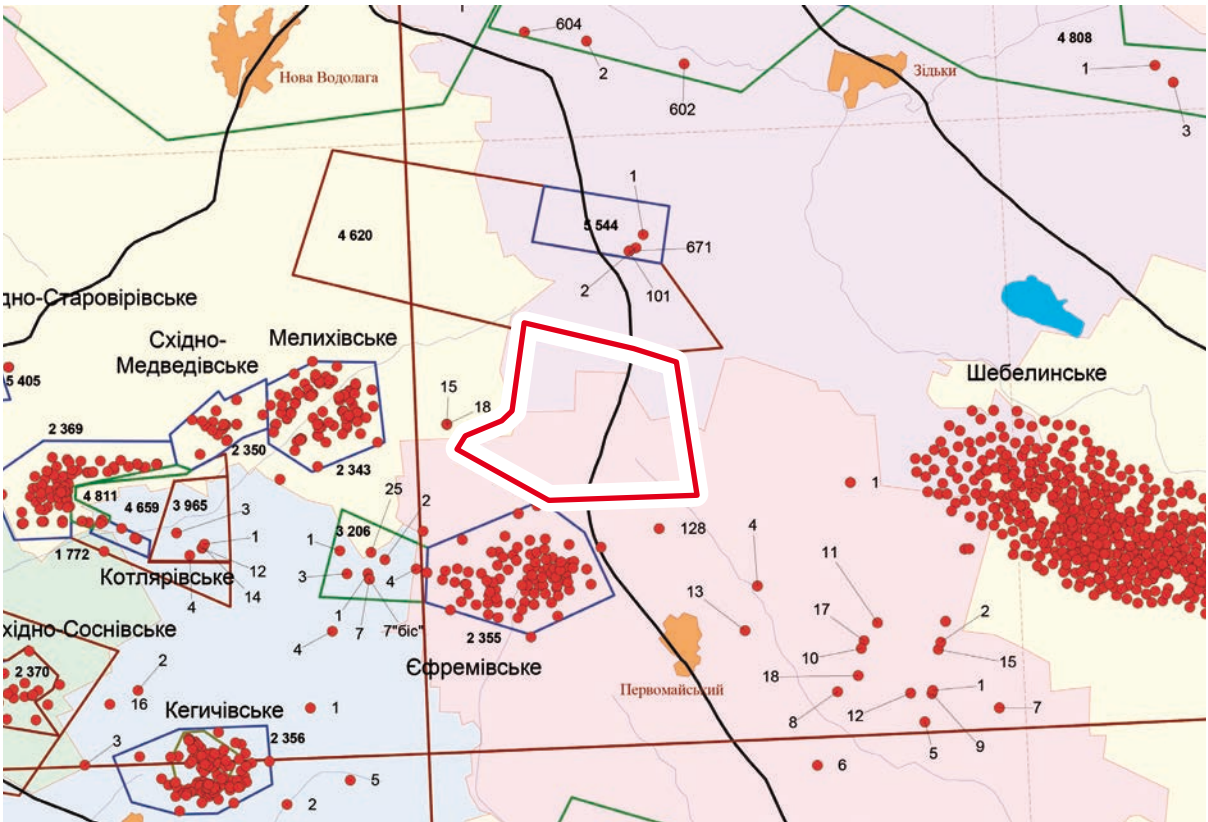
CONCESSION TYPE

Combined license for geological exploration with pilot and commercial development, and production of hydrocarbons. Duration - 20 years.

DEPOSITS DISCOVERED IN THE AREA

Bezpalivske, Shurinske, Shebelynske, Efremivske, Melykhivske fields.

Map of North Efremivska block



MAP SYMBOLS

Point Number	USK 2000, E			USK 2000, N			SK-42, E			SK-42, N		
	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.
1	36	5	24.89	49	33	43.55	36	5	30.79	49	33	43.84
2	36	10	42.44	49	32	45.77	36	10	48.34	49	32	46.06
3	36	12	46.03	49	32	16.48	36	12	51.93	49	32	16.77
4	36	13	29.53	49	28	0.47	36	13	35.42	49	28	0.77
5	36	6	15.42	49	28	2.54	36	6	21.32	49	28	2.84
6	36	1	52.82	49	29	46.99	36	1	58.72	49	29	47.30
7	36	2	19.28	49	30	12.05	36	2	25.19	49	30	12.36
8	36	4	7.68	49	30	38.07	36	4	13.58	49	30	38.37
9	36	4	38.93	49	30	56.27	36	4	44.83	49	30	56.57

- well
- gas-distribution plant
- gas pipeline
- NORTH EFREMOVSKA BLOCK

GEOLOGICAL CHARACTERISTICS

In terms of oil and gas, North-Efremivska block belongs to Mashivka and Shebelynka petroleum province. In terms of tectonics, the block is located in the northern cutoff part of the Dnipro-Donets graben. The depth of the bedding of the basement within the block is 15-17 km.

SURVEY INFORMATION AVAILABLE

**Assessment of hydrocarbon resources (Ukrainian classification)**  
not estimated.

**Well data**  
No wells have been drilled at the area of the block.

**Seismic surveys**  
The main seismic surveys of North Efremivska block have been done by common depth point method in 1981-83, by team 37/81. The regional CDP profile Leventsovka-Bezlyudivka crosses the block from the southwest to the northeast.

Seismic surveys

Year of surveys	Number of lines	Number of linear km	Fold
1981	11	221,2	12-24
1983	1	9,0	12

EXPLORATION WORK PROGRAM  
REQUIREMENTS

- Stage I (12 months) - processing and reinterpretation of 2D seismic data;
- Stage II (12 months) – acquisition of 2D or 3D seismic data on ¼ of the block’s area;
- Stage III (24 months) – one productive well drilling.

## NORTH EFREMIVSKA LICENSE

## NORTH EFREMIVSKA LICENSE

### Map of geophysical surveys and seismic lines





## MAP SYMBOLS

- ☐ 1:25 000
- ☒ 1:50 000
- ☐ 1:100 000



NORTH EFREMIVSKA BLOCK

-  geophysical survey  
 seismic lines

- survey with no mapping

- |                  |                      |
|------------------|----------------------|
| <b>45860</b>     | report number        |
| <b>PROB A.M.</b> | author of the report |
| <b>1982</b>      | year of the report   |



BLOCK 12

DOBRENSKA LICENSE

LOCATION

Dobrenska block is located in Krasnohrad district of Kharkiv region. Acreage of the block is 122.23 sq.km.

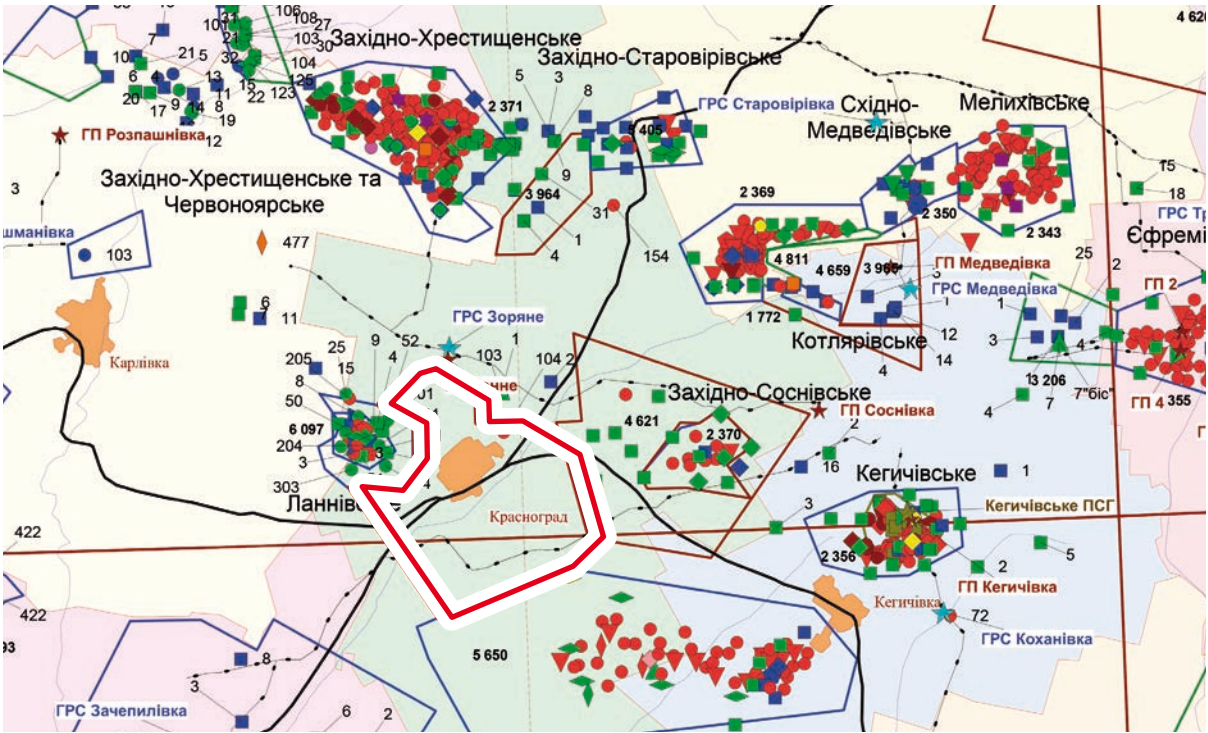
CONCESSION TYPE

Combined license for geological exploration with pilot and commercial development, and production of hydrocarbons. Duration - 20 years.

DEPOSITS DISCOVERED IN THE AREA

Lannivske, Kobzivske West-Sosnivske gas condensate fields.

Map of Dobrenska block



MAP SYMBOLS

Point Number	USK 2000, E			USK 2000, N			SK-42, E			SK-42, N		
	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.
1	35	25	6.28	49	25	37.06	35	25	12.20	49	25	37.40
2	35	27	42.42	49	24	31.62	35	27	48.33	49	24	31.96
3	35	27	42.42	49	23	49.73	35	27	48.33	49	23	50.07
4	35	29	23.61	49	23	48.82	35	29	29.52	49	23	49.16
5	35	32	11.83	49	22	39.32	35	32	17.74	49	22	39.66
6	35	33	14.43	49	19	55.73	35	33	20.34	49	19	56.07
7	35	31	40.43	49	18	59.73	35	31	46.33	49	19	0.07
8	35	25	30.75	49	17	26.99	35	25	36.65	49	17	27.34
9	35	21	12.42	49	21	49.72	35	21	18.34	49	21	50.07
10	35	23	15.42	49	21	39.72	35	23	21.34	49	21	40.07
11	35	24	31.42	49	22	40.73	35	24	37.34	49	22	41.07
12	35	24	33.42	49	23	50.73	35	24	39.33	49	23	51.07
13	35	22	47.42	49	24	31.73	35	22	53.34	49	24	32.07
14	35	24	18.30	49	25	29.12	35	24	24.22	49	25	29.47

- well
- ★ gas-distribution plant
- gas pipeline
- DOBRENSKA BLOCK

## **GEOLOGICAL CHARACTERISTICS**

Dobrenska block is located in the central, the most submerged part of the Dnipro-Donets Basin and belongs to the Mashivka and Shebelynka petroleum regions. The depth of the basement embed within the block is 11.0-13.5 km. Dobrenska structure is located in the south-eastern part of the block.

In the north-western part, Dobrenska block is determined far-off plunge of the Lannivska structure. The Lannivska structure is a brachyanticlinal fold of the south-eastern strike, the western part of which is complicated by the Verhnyolannivsky salt stock.

Dobrenska and Lannivska structures are separated by a deep upfold. In the northern and eastern parts of Dobrenska block are developed South-Verbivsky and South-Sosnivsky downfolds.

## **SURVEY INFORMATION AVAILABLE**

### **Assessment of hydrocarbon resources (Ukrainian classification)**

Not estimated.

### **Well data**

In the eastern part of Dobrenska block, appraisal well No. 632 has been drilled, which was stopped at a depth of 4500 meters in the Cartamishean deposits of Permian (upper Carboniferous).

### **Seismic surveys**

Dobrenska block was not explored deliberately by geological exploration. At the boundary of the block, along its perimeter come the ends of lines, performed in the 1970's and 90's and aimed at studying areas in the vicinity.

**Seismic surveys**

Year of surveys	Number of lines	Number of linear km	Fold
1977	4	50,3	12-24
1984	2	27,0	12-24

## **EXPLORATION WORK PROGRAM REQUIREMENTS**

Stage I (12 months) - processing and reinterpretation of 2D seismic data;

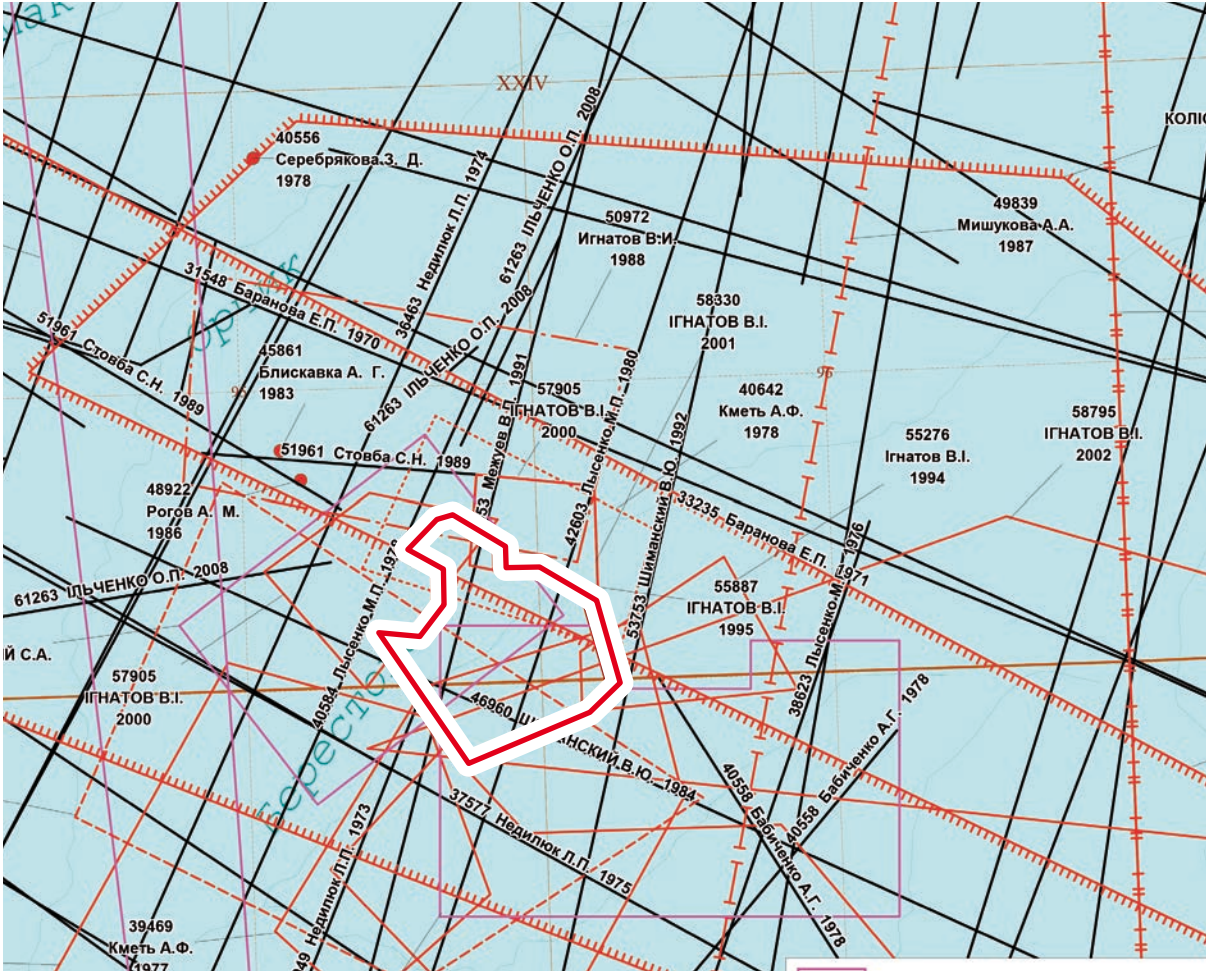
Stage II (12 months) – acquisition of 2D or 3D seismic data on 1/4 of the block's area;

Stage III (24 months) – one productive well drilling.

BLOCK 12

DOBRENSKA LICENSE

Map of geophysical surveys and seismic lines



MAP SYMBOLS

1:25 000

1:50 000

1:100 000

geophysical survey

seismic lines



DOBRENSKA BLOCK

survey with no mapping

45860 report number

Рогов А.М. author of the report

1982 year of the report



BLOCK 13

OPOLONIVSKA 1 LICENSE

LOCATION

Opolonivska-1 block is located in Borzna and Bakhmach districts of Chernihiv region at a distance of 10 km to the west of Bakhmach city. Acreage of the block is 247,87 sq. km.

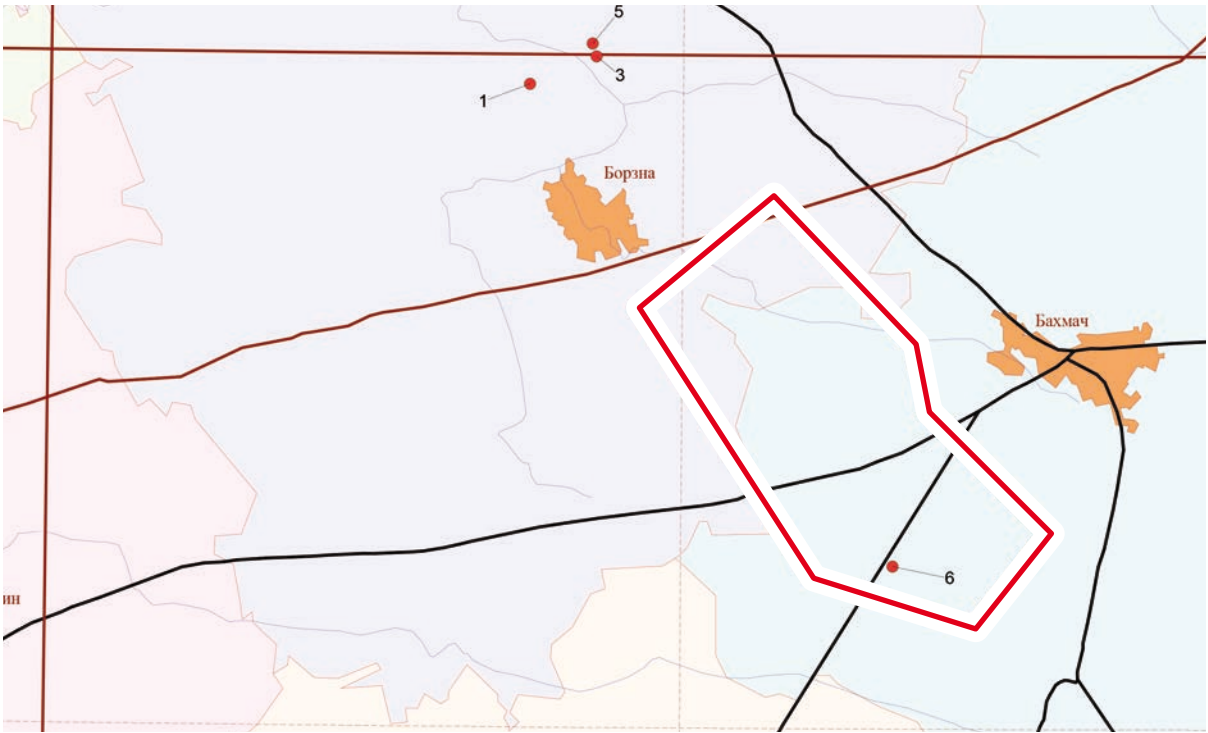
CONCESSION TYPE

Combined license for geological exploration with pilot and commercial development, and production of hydrocarbons. Duration - 20 years.

DEPOSITS DISCOVERED IN THE AREA

Bakhmach oil field with deposits in the upper Visean stage is located within the block. To the south-east of the block is Sofiivska oil field, and to the north-west - Kynashivska and Yadutivska fields.

Map of Opolonivska 1 block



MAP SYMBOLS

Point Number	USK 2000, E			USK 2000, N			SK-42, E			SK-42, N		
	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.
1	32	35	54.10	51	4	32.67	32	36	0.39	51	4	33.09
2	32	27	41.97	51	12	26.32	32	27	48.28	51	12	26.74
3	32	33	57.07	51	15	44.68	32	34	3.39	51	15	45.09
4	32	40	37.09	51	11	24.68	32	40	43.39	51	11	25.09
5	32	41	15.09	51	9	25.68	32	41	21.39	51	9	26.09
6	32	46	57.11	51	5	52.68	32	47	3.39	51	5	53.09
7	32	43	27.11	51	3	4.68	32	43	33.39	51	3	5.09

- well
- gas-distribution plant
- gas pipeline
- OPOLONIVSKA 1 BLOCK

## GEOLOGICAL CHARACTERISTICS

In terms of oil and gas geological zoning, the block is located mainly within the northern part of the Sofiivka and Monastyrshche petroleum regions of the Dnipro-Donets Basin.

## SURVEY INFORMATION AVAILABLE

### Assessment of hydrocarbon resources (Ukrainian classification)

As of January 2018, the possible oil reserves of the Bakhmach deposit of subcategory 122 are 18 thousand tons, the accumulated extraction is 1 thousand tons.

Pivnichnozahorivska structure is accounted in the deposits of the Upper Devonian with inferred oil resources (subcategory 334) in the amount of 2.454 million tons

Inferred oil resources (subcategory 334) of Strilnykivska structure is 0.338 million tons.

### Well data

14 wells were drilled at Bakhmach structure. Well No.6 yielded an inflow of oil with an initial rate of production of 10.2 m<sup>3</sup> per day on a 10mm choke in the perspective intervals of 2797-2801m and 2811-2814m. Another well No. 526 discovered oil-saturated sandstones, and limestone with a crude smell in the core (1411,1-1426,6 m). There was no drilling at Strilnykivska and Pivnichnozahorivska structures.

### Seismic surveys

According to the results of the seismic surveys carried out in 2008-2009, 11 profiles with a total length of 96,045 km have been performed, 19 profiles with a total length of 233 km (team 6/79, 6/82, 6/85) have been reworked, and a new passport for Pivnichnozahorivska structure have been issued (Sabetsky V. and co-authors, 2009).

Seismic surveys

Year of surveys	Number of lines	Number of linear km	Fold
1971-1972	4	56,8	6-12
1974	2	17,0	24
1974-1975	3	36,7	24
1975	2	22,4	24
1976	6	105,1	12-24
1977	1	20	24
1978	8	116,6	24
1979	19	343,9	24
1980	3	42,5	24-48
1982	12	227,6	48
1985	4	49,8	24-48
1988	5	67,1	48
1990	1	11,6	48
1992	6	71,7	48
2002	3	26,3	48
2008	12	155,3	48-96
2013	2	19,5	48

## EXPLORATION WORK PROGRAM REQUIREMENTS

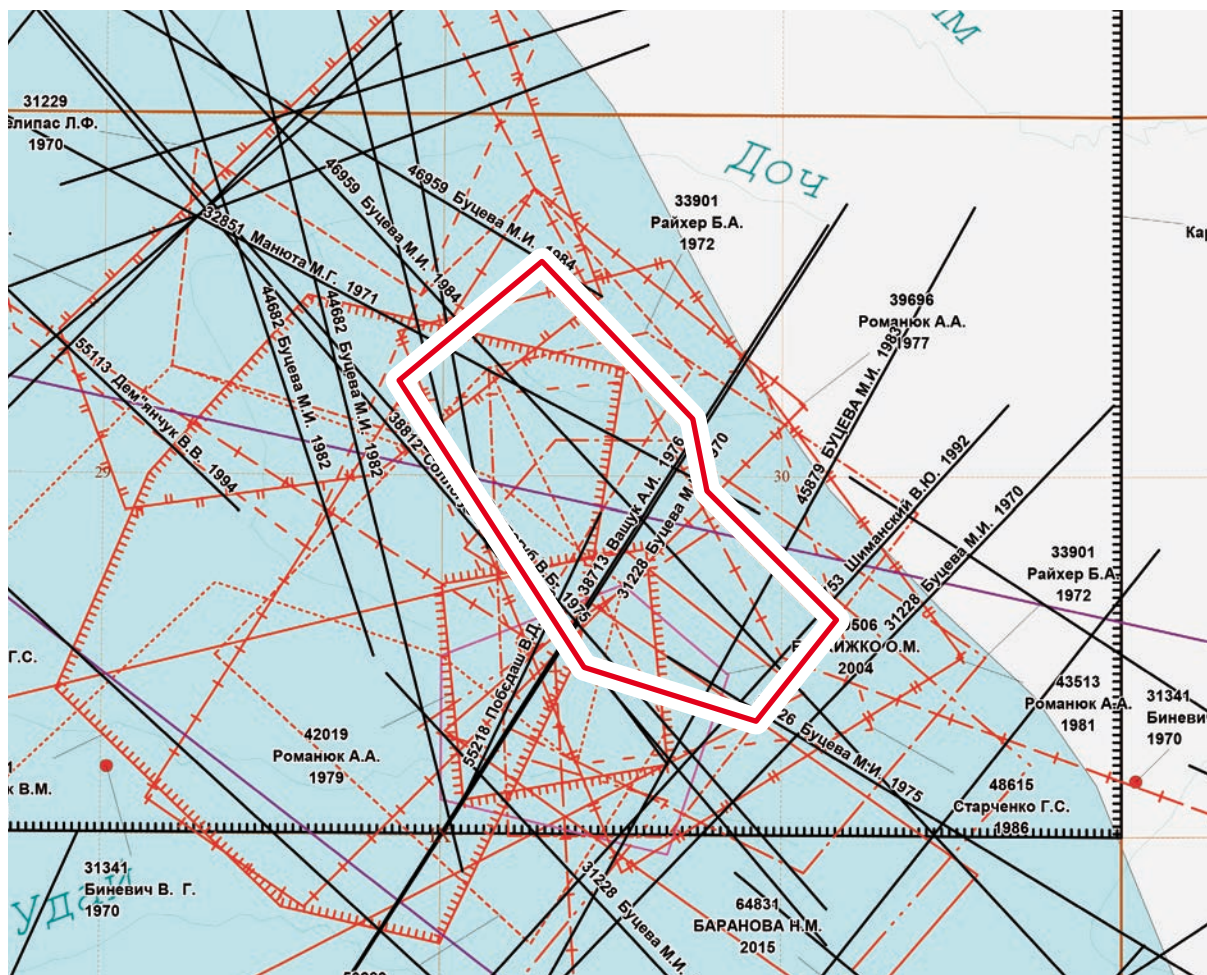
Stage I (12 months) - processing and reinterpretation of 2D seismic data;

Stage II (12 months) – acquisition of 2D or 3D seismic data on 1/4 of the block's area;

Stage III (24 months) – one productive well drilling.

## OPOLONIVSKA 1 LICENSE

### Map of geophysical surveys and seismic lines



## MAP SYMBOLS



1:25 000



1:50 000



1:100 000



geophysical survey



seismic lines



OPOLONIVSKA 1  
BLOCK



survey with no mapping

45860 report number

**Рогов А.М.** author of the report

1982 year of the report



BLOCK 14

OPOLONIVSKA 2 LICENSE

LOCATION

Opolonivska-2 block is located in Borzna, Ichnya and Bakhmach districts of Chernihiv region at a distance of 15 km southwest of Bakhmach city. Acreage of the block is 230,51 sq. km.

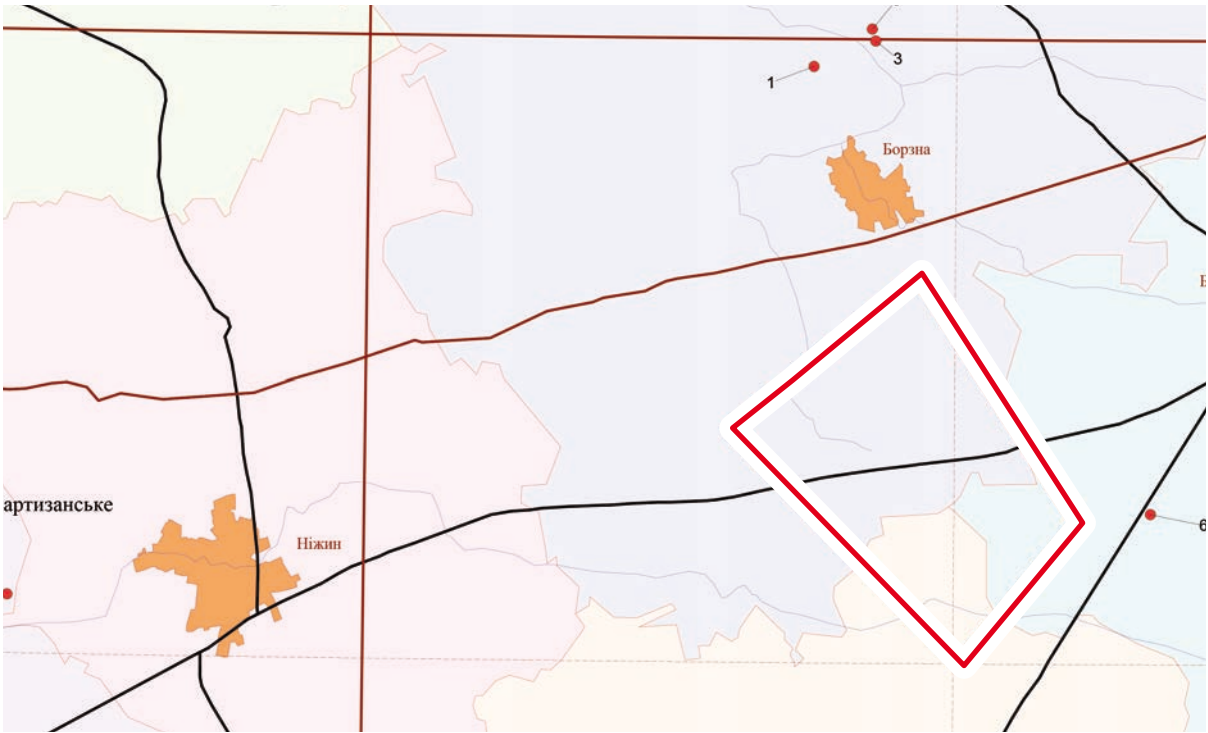
CONCESSION TYPE

Combined license for geological exploration with pilot and commercial development, and production of hydrocarbons. Duration - 20 years.

DEPOSITS DISCOVERED IN THE AREA

Bakhmach oilfield with deposits in the Upper Visean stage is located in the proximity to the block in the northeastern direction. To the south-east of the block is located Sofiivska oil field with deposits in the upper and lower Visean stage.

Map of Opolonivska 2 block



MAP SYMBOLS

Point Number	USK 2000, E			USK 2000, N			SK-42, E			SK-42, N		
	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.
1	32	35	54.10	51	4	32.67	32	36	0.39	51	4	33.09
2	32	29	58.10	50	59	59.66	32	30	4.39	51	0	0.10
3	32	18	12.08	51	7	28.66	32	18	18.39	51	7	29.10
4	32	21	13.08	51	9	0.66	32	21	19.39	51	9	1.10
5	32	27	41.97	51	12	26.32	32	27	48.28	51	12	26.74

- well
- gas-distribution plant
- gas pipeline
- OPOLONIVSKA 2 BLOCK

## **GEOLOGICAL CHARACTERISTICS**

In terms of oil and gas geological zoning, the block is located in the northern part of the Sofiivka and Monastyrshche petroleum regions of the Dnipro-Donets Basin.

## **SURVEY INFORMATION AVAILABLE**

### **Assessment of hydrocarbon resources (Ukrainian classification)**

Inferred oil resources (subcategory 334) within the Northern zone (Yershivska and Yelska structures) are 0,325 million tons, Southern (Perovska and Nizhna structures) - 0,26 million tons. Total estimation resources for Yershivska zone of structures is 0,585 million tons.

### **Well data**

In the northern part of the block, on the southern slope of the Velykozahorivska salt-dome structure, in 1979-1980, a structural exploratory well No. 794 with a depth 2290 meters was drilled with no commercial results.

Three exploration wells were drilled in the southern part of the block: two were within the scopes of Ivanhorodska structure and one was located at Plyskivska structure. According to the results of the drilling, it was discovered that upper Devonian deposits are highly submerged.

In the Yershivska zone of sandstone reservoir rock in the lower part of the Visean stage, which had been first explored in 1985 by seismic exploration, the drilling has not been carried out.

### **Seismic surveys**

On the territory of Opolonivska 2 block, seismic surveys have been carried out by the teams of the state enterprise Ukrgeofizyka No. 6-II / 76, 6/77, 6/78, 6/79, 6/85, 5/88, 5/92, 10/90.

**Seismic surveys**

Year of surveys	Number of lines	Number of linear km	Fold
1975	2	26,7	24
1976	10	212,75	24
1977	5	89,35	24
1978	7	129,32	24
1979	2	36,12	24
1982	1	15,7	48
1985	7	132,93	48
1988	1	13,5	48
1990	2	27,1	48
1992	8	82,45	48
2002	7	83,65	48

## **EXPLORATION WORK PROGRAM REQUIREMENTS**

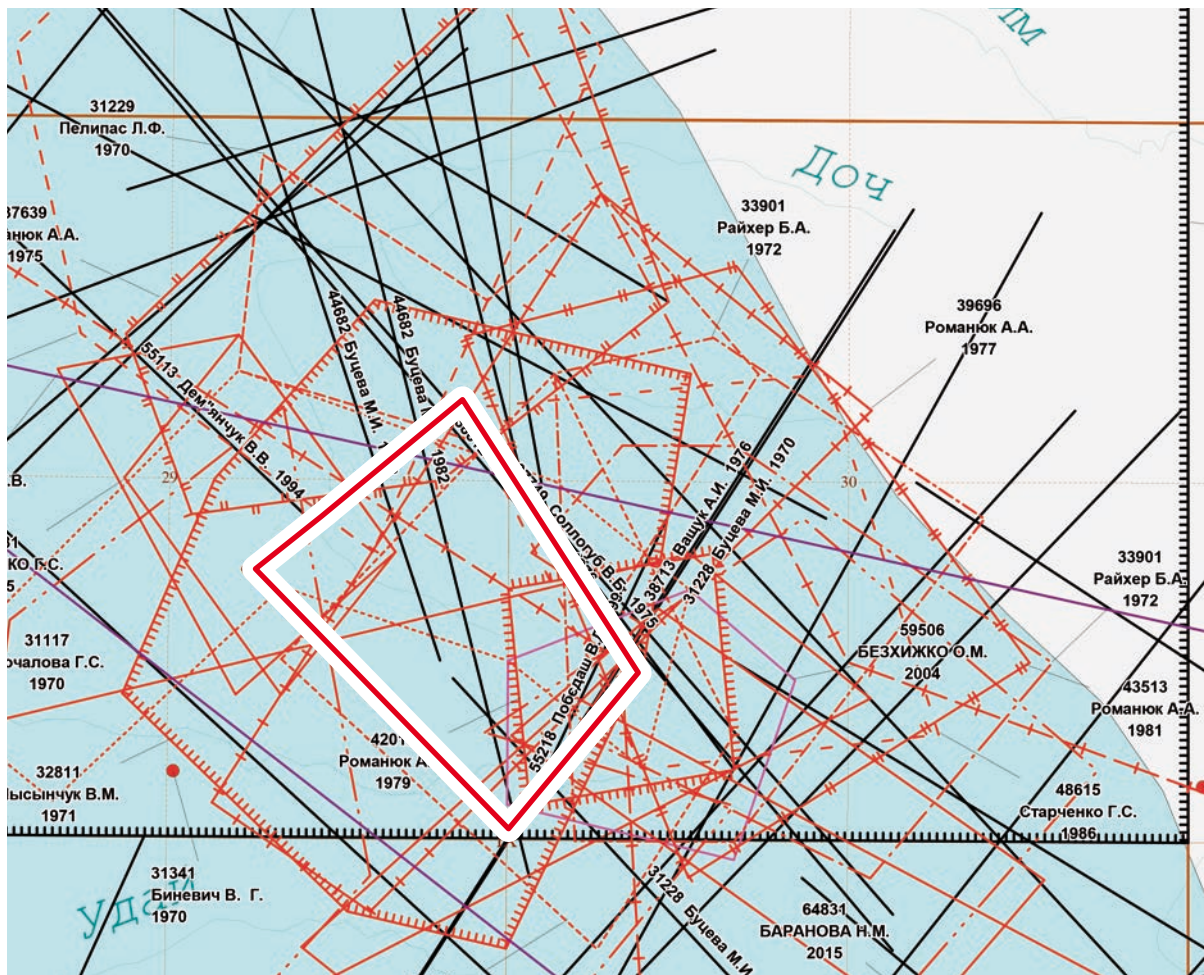
Stage I (12 months) - processing and reinterpretation of 2D seismic data;

Stage II (12 months) – acquisition of 2D or 3D seismic data on 1/4 of the block's area;

Stage III (24 months) – one productive well drilling.

## OPOLONIVSKA 2 LICENSE

### Map of geophysical surveys and seismic lines



## MAP SYMBOLS

 1:25 000

 1:50 000

 1:100 000

☐ geophysical survey

— seismic lines



OPOLONIVSKA 2  
BLOCK



survey with no mapping

**45860** report number

**Рогов А.М.** author of the report

1982 year of the report



BLOCK 15

KALIUZHNA 1 LICENSE

LOCATION

Kaliuzhna 1 block is located in the territory of Lebedyn and Okhtyrka districts of Sumy region. Acreage of the block is 162.36 sq. km.

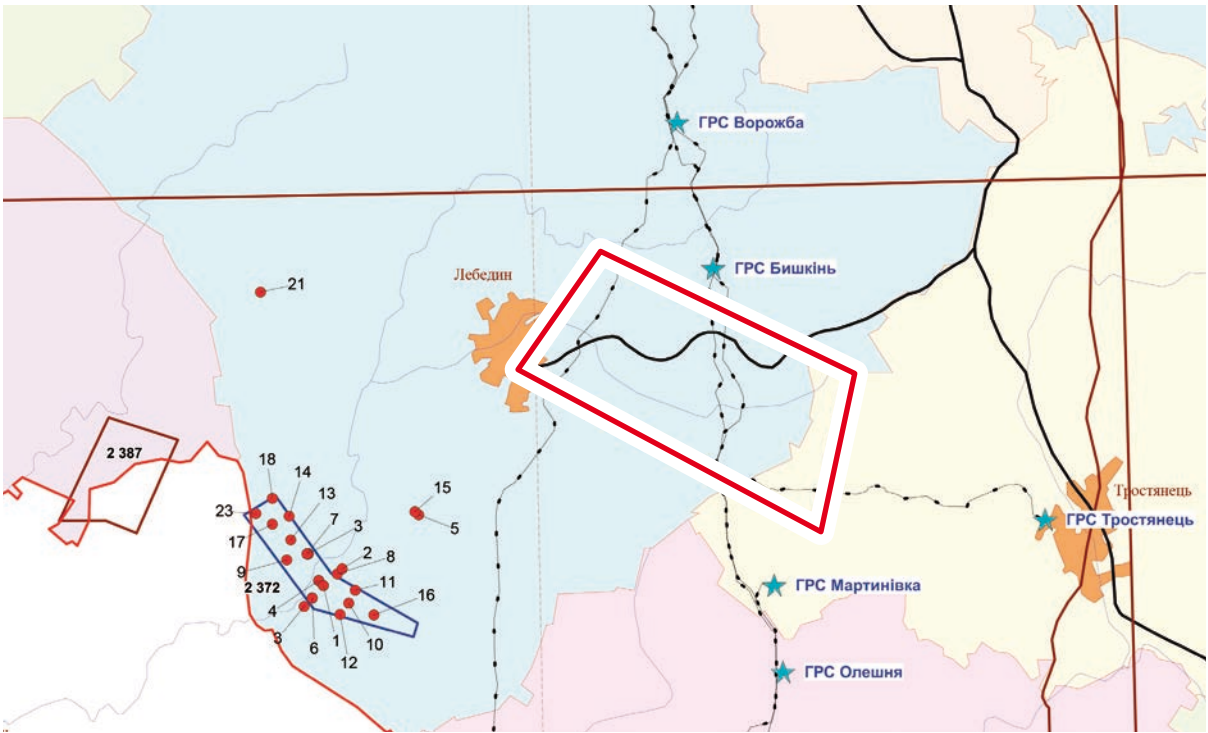
CONCESSION TYPE

Combined license for geological exploration with pilot and commercial development, and production of hydrocarbons. Duration - 20 years.

DEPOSITS DISCOVERED IN THE AREA

Marchenkivske, Tarkhanivske.

Map of Kaliuzhna 1 block



MAP SYMBOLS

Point Number	USK 2000, E			USK 2000, N			SK-42, E			SK-42, N		
	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.	deg.	min.	sec.
1	34	33	9.92	50	37	58.31	34	33	16.06	50	37	58.64
2	34	45	42.62	50	33	54.72	34	45	48.73	50	33	55.04
3	34	43	50.40	50	28	54.36	34	43	56.50	50	28	54.69
4	34	28	54.99	50	34	16.17	34	29	1.12	50	34	16.50

- well
- gas-distribution plant
- gas pipeline
- KALIUZHNA 1 BLOCK

## GEOLOGICAL CHARACTERISTICS

Kaliuzhna 1 block is located within the Northern edge of the Dnipro-Donets depression. Kaliuzhny object on the deposits of the lower Carboniferous (reflecting horizon V2-n ) is an anticlinal belt of structures of the northwest strike, within which Lebedynska, Kalyuzhna and Tryhubivska folds are determined.

Dimensions of Kaliuzhny oil and gas object on the reflecting horizon V2-n (CIV2) within the structure contour minus 2275 meters of screening discordant fault are 13.0 x 1.7 km, the amplitude is 80 meters, the perspective area is 21 sq. km.

Productive horizons are expected in Upper Visean sediments of lower Carboniferous (sandstone), in unconsolidated reservoir rocks, in the range of depths 2000-2650 meters.

## SURVEY INFORMATION AVAILABLE

### Assessment of hydrocarbon resources (Ukrainian classification)

Preliminary estimation of inferred resources (subcategory D1) accounts for 1,155 million tons of oil equivalent.

### Well data

In 1993-1994, on the Lebedynska structure, appraisal well No.1 was drilled at a depth of 3500 meters. The well passed 1070 meters of basement rocks, presented by crystalline schists. Waterflooded sandstones are discovered in the Visean deposits.

### Seismic surveys

During 1984-1994, in the area of Kaliuzhna 1 block, seismic surveys by common depth point method have been carried out by teams 25/84, 47/89, 34/90. In 1990, an aerospace research of this territory has been conducted, according to which the Cheremkivska anomaly has been identified, which corresponds to the Tryhubivska and Kaliuzhna structures.

Seismic surveys

Year of surveys	Number of lines	Number of linear km	Fold
1990	9	180,8	24-36
1992	7	104,2	24-36

## EXPLORATION WORK PROGRAM REQUIREMENTS

Stage I (12 months) - processing and reinterpretation of 2D seismic data;

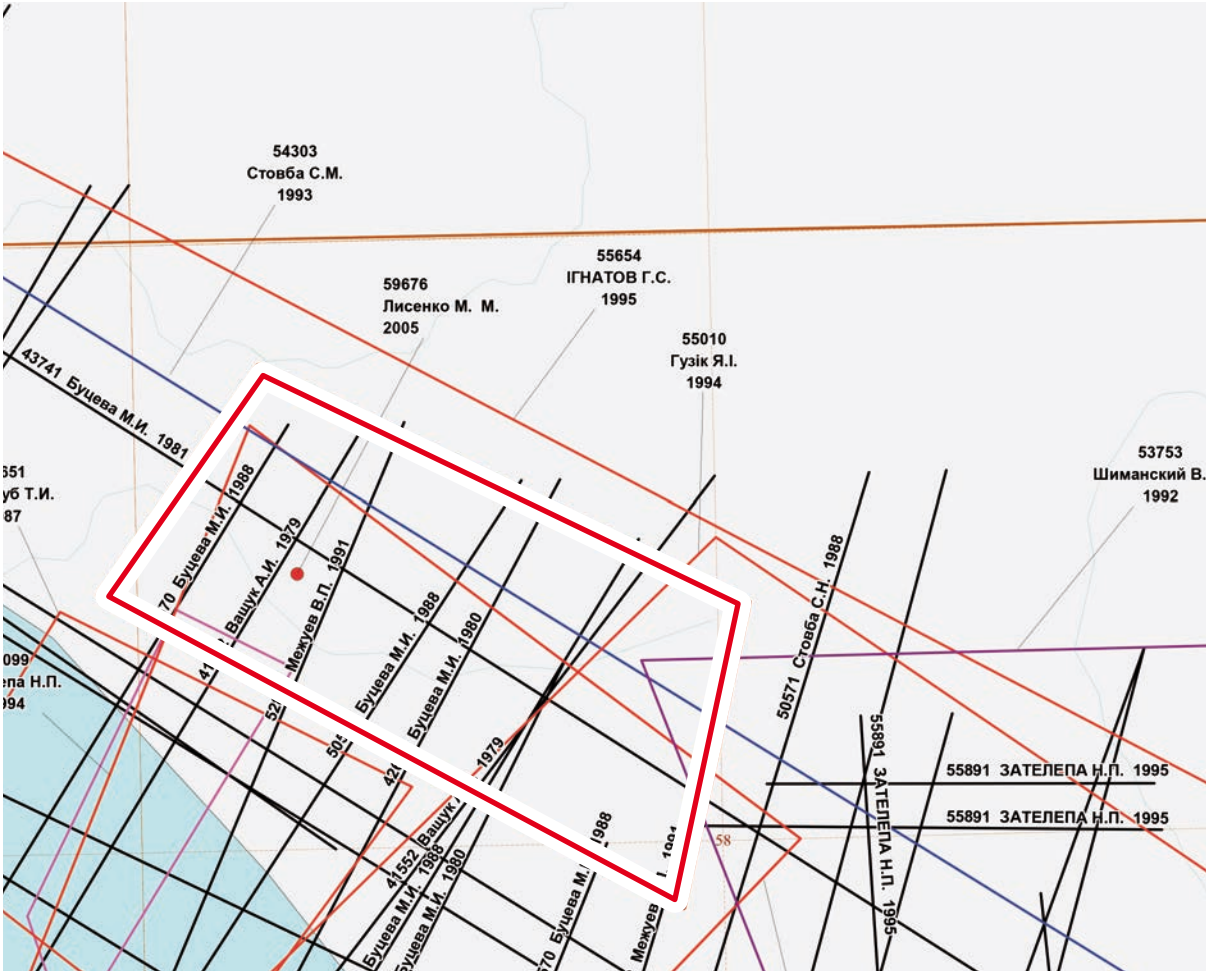
Stage II (12 months) – acquisition of 2D or 3D seismic data on 1/4 of the block's area;

Stage III (24 months) – one productive well drilling.

BLOCK 15

KALIUZHNA 1 LICENSE

Map of geophysical surveys and seismic lines



MAP SYMBOLS

- 1:25 000
- 1:50 000
- 1:100 000
- geophysical survey
- seismic lines
- KALIUZHNA 1 BLOCK
- survey with no mapping
- 45860

 report number
- Рогов А.М.

 author of the report
- 1982

 year of the report



# LICENSING PROCEDURE IN PROZORRO.SALE ONLINE SYSTEM

## STAGE I

Announcement of the auction and opening of acceptance of applications

90  
days

- The announcement is published by the State Geological Service of Ukraine on the official website ([www.geo.gov.ua](http://www.geo.gov.ua)) and by state enterprise ProZorro.Sale online system on its website ([www.zakupki.prom.ua](http://www.zakupki.prom.ua)).
- The auction data packages are posted on various electronic trading platforms, accredited by ProZorro.Sale – as the Ukrainian Energy Exchange (<https://sale.ueex.com.ua>).
- The trading platforms provide information publicly for free about the auction procedure and blocks.
- The description includes type of license, block location, reserves and resources evaluation, starting price of the bid, price of the geological data and auction documentation, which has to be paid only by the winner of the auction.

## STAGE II

Closing of acceptance of applications

1  
day

- The participant should be a resident company (Ukrainian legal entity) and is mandated to pay the guarantee fee at 20% of the starting price of the bid.
- Applicants have to submit an offer in one of electronic trading platforms, accredited by ProZorro.Sale. The names of the applicants are kept in the confidence till the end of the auction.

## STAGE III

Conducting the auction and selection of the winner

8  
days

- The auction procedure consists of one close and three open rounds. Everyone sees the results of close round only after all participants called out. A participant who gave the highest price has the right to make offer last in next open round.
- During the open rounds every participant has three minutes to make a decision one by one.
- A participant, who gave the lowest offer in previous round, has to make a decision first. A participant, who gave the highest offer in previous round, has to make a decision last.
- The participant with the highest price offer (cash bonus) wins the auction. If the winner refuses to pay, the participant that takes the second place in the auction is considered the winner.

## STAGE IV

Protocol signing

30  
days

- The auction protocol is signed by the winner, ProZorro.Sale, trading platform and the State Geological Service of Ukraine and further publishing online, while other participants have their guarantee fees returned.

## STAGE V

Granting a license

- Within 30 business days after the auction, the winner signs an agreement with the State Geological Service of Ukraine, pays the difference between the guarantee fee and final offer, price of geological data and auction documentation.

**Within 40 business days the winner has to contact the State Geological Service to obtain the license.**

### Contacts for obtaining information

Type of Data	Description	Contacts
<b>Coordination</b>	Organization of the auctions and coordination of state geological data disposal	<b>State Geological Service of Ukraine</b> Head of Permitting and International Relations Department +38 044 536-13-20 dozvilnadra@ukr.net Head of the Auction Department +38 044 456-60-56 auction@geo.gov.ua
<b>Seismic surveys</b>	Review of the reports is free of charge at the state enterprise Ukrgeofizyka.  Acquisition of the right to use of data is possible upon request to the State Geological Service of Ukraine. Cost shall be determined after evaluating the amount of data requested.	<b>Ukrgeofizyka</b> Chief geologist +38 044 453-38-02 info@ukrgeofizika.com.ua
<b>Well data</b>	Review of the reports is free of charge at the state enterprise Geoinform of Ukraine.  Public register of oil and gas wells is at the link below: <a href="http://geoinf.kiev.ua/wp/sverdlovini.php">http://geoinf.kiev.ua/wp/sverdlovini.php</a>  Logging data is provided by the Ukrainian State Geological Prospecting Institute upon the request. Acquisition of the right to use of data is possible upon request to the State Geological Service of Ukraine. Cost shall be determined after evaluating the amount of data requested.	<b>Geoinform of Ukraine</b> Chief geologist +38 044 456-21-84 geoinf@geomail.kiev.ua  <b>Ukrainian State Geological Prospecting Institute</b> Deputy director +38 044 430-70-26 gv@ukrdgri.gov.ua
<b>Geological reports</b>	Review of the reports is free of charge at the state enterprise Geoinform of Ukraine.	<b>Geoinform of Ukraine</b> Chief geologist +38 044 456-21-84 geoinf@geomail.kiev.ua
<b>Licensed blocks data</b>	Public map of licensed blocks is on the links below: <a href="http://www.geoinf.kiev.ua/wp/interaktyvni-karty-spetsdozvoliv.htm">www.geoinf.kiev.ua/wp/interaktyvni-karty-spetsdozvoliv.htm</a> <a href="http://www.minerals-ua.info/mapviewer/goruchi.php">www.minerals-ua.info/mapviewer/goruchi.php</a>	<b>Geoinform of Ukraine</b> Chief geologist +38 044 456-21-84 geoinf@geomail.kiev.ua
<b>Land tracts</b>	Public land tracts map is on the link below: <a href="http://www.map.land.gov.ua/kadastrova-karta">www.map.land.gov.ua/kadastrova-karta</a>	<b>State Service of Ukraine for Geodesy, Cartography and Cadastre</b> +38 044 244-82-47 land@land.gov.ua
<b>Environmental Impact Assessment</b>	It is necessary to conduct an EIA within a year after awarding a petroleum license	<b>Ministry of Ecology, EIA Department</b> +38 044 206-20-89 m.shimkus@menr.gov.ua

