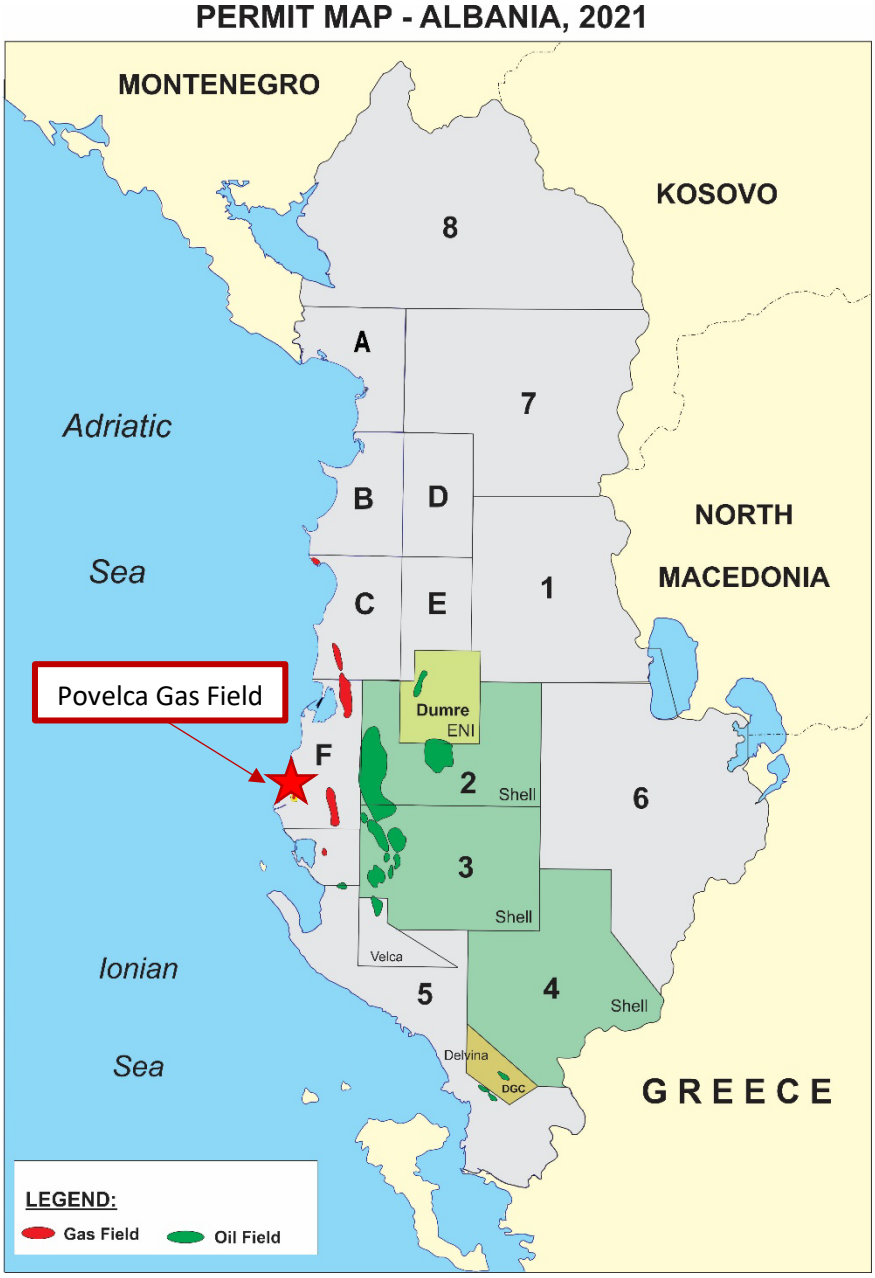
Povelca Field – Investment Opportunity



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INTRODUCTION

The Povelca gas field lies in Central Albania (cover page) and the field itself comprises an area of 12 sq.km. The field has been discovered by DPNG (former Albpetrol) in mid-80's with Pov-1 gas discovery. About 38 wells have been drilled in the area since then, with 23 wells hitting gas (Fig. 1). Exploration and later on, the development phase have been supported only by 2D seismic data recorded during 1980-1990. About 10 bcf of gas has been produced so far from the field and the last 3 production wells are recorded in 2015. Since 2015 the field is shut down. The lack of investment capital and, partly, the lack of market has been the main reason for the field to die out slowly since early 90's.

MIE (Ministry of Infrastructure and Energy) has awarded a License to Albpetrol (NOC) to develop the Povelca Field. A PSA between Albpetrol and EDG Natural Gas (EDG) is expected to be signed by the Albanian Government sometime in 1Q, 2022. After having the full ownership in early 2022, EDG Company will start operations (mainly workovers) to rejuvenate the field, using the necessary capital and its technical expertise. Despite the fact that EDG is capable to cover all capital costs during the Evaluation Period (2 years), the Company is looking for a potential partner to join and then to carry on onto the Field Development phase (25 years).

EVALUATION PROGRAM

- **2021 program**: G&G work; partial data gathering.
- **2022 program**:
  - Complete G& G data gathering
  - Field & well data evaluation and integration with seismic
  - WO operations in 3 wells
  - Upgrade the gas pipeline infrastructure and gathering station.
  - Gas marketing (CNG or TAP)

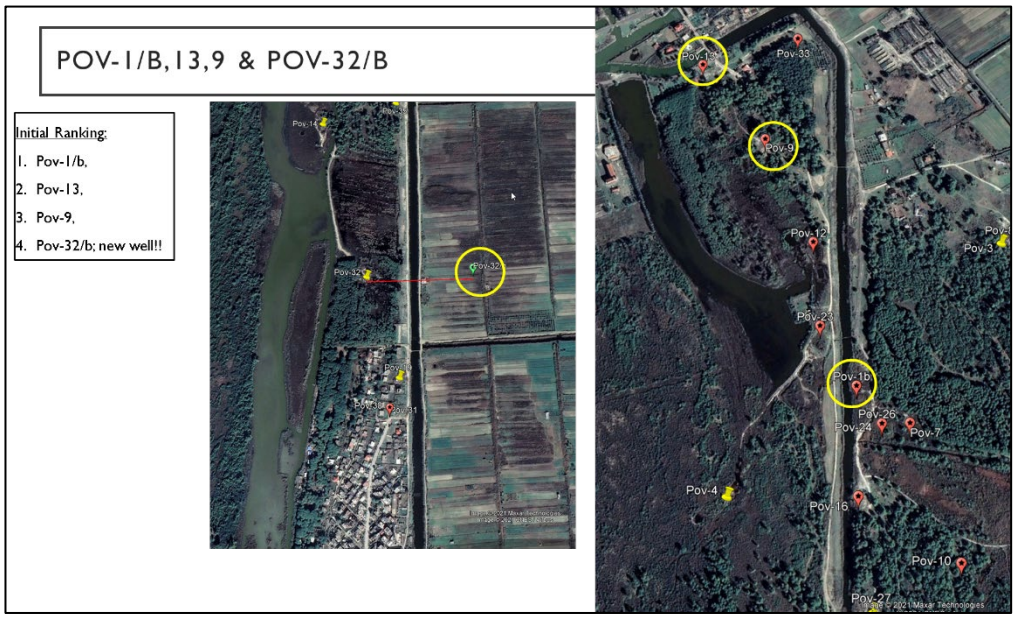

Figure 1: Initial ranking of potential workovers and new drilling in Povelca Field

- **2023 program**:
  - Drill one well
  - Gas marketing
  - Initiate full development plan.

Opportunity

- Acquire current working interests by diluting existing partners (up to 50%).
- Access to all field data (logs; production; seismic; reports, etc.) and newly recorded petrophysical and production data during Evaluation Period.
- Assignment of operatorship and covering 100% of capital.
- No debts, liens, or impairments
- 25 year Field Development under PSA, with extension possibilities
- Upside potential (partly outside the block), southern/northern structural extension.

REGIONAL GEOLOGICAL BACKGROUND

Povelca field sits in the southern portion of the Durresi Basin, a prolific gas province in Albania, where several gas fields have been discovered (Fig. 2). The Durresi Basin comprise a thick siliciclastic series of Mollasse sediments of Miocene - Pliocene age. The eastern and south-eastern provenance has brought plenty of sediments during post-Oligocene orogeny, which can reach a thickness of more than 7 km. In general, a fast sedimentation has been observed in many subsurface areas, which are associated with high pore pressure regime. The organic material is found in-situ, associated with thick shales, with an average TOC of 0.5%. The deformation in Durresi Basin is post-Miocene forming several structural trends, verging westward. Povelca field sits in one structural trend, which is continuing northward towards Semani. The sandstone reservoirs are developed as channels in a slope environment system (slope channels) with good porosity ranges (18-24%), sealed by intercalated shales. The gas is bacterial and trapped either in structural traps or combined ones: stratigraphic/structural.

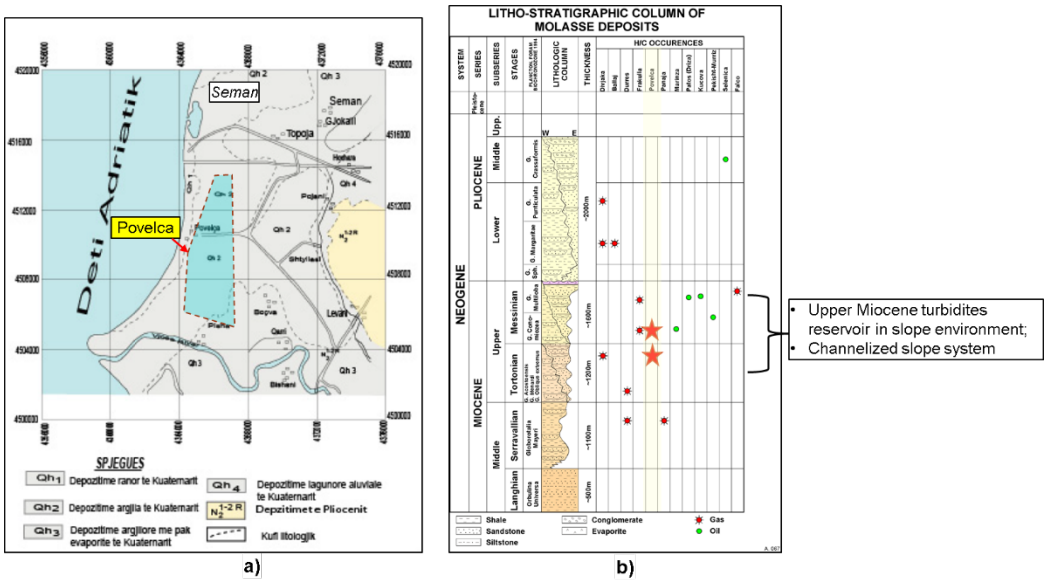

Figure 2: a) Geological map of Povleca field and b) Litho-stratigraphic column of the Durresi Basin

EXPLORATION AND DEVELOPMENT HISTORY

The Povelca field stretched alongside the flat area near the Adriatic Sea and covered by Pliocene-Quaternary deposits. The geological fieldwork cannot contribute in mapping of underlying sediments, therefore the 2D seismic data were the main drive for mapping the subsurface and proposing exploration and development wells in this area. In general, the seismic data are of good quality (Figure 3) and helpful for structural mapping. Povelca anticlinal is bound by a major thrust to the west and a small throw on the backlimb (Figure 4). High amplitudes of seismic reflectors were used to guide location of new wells.

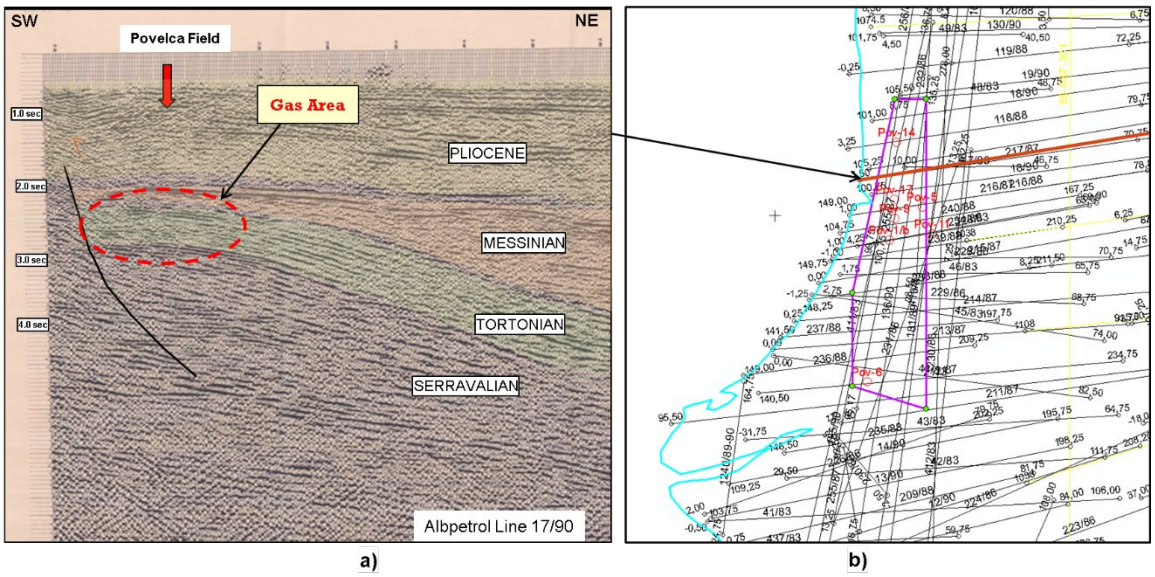

Figure 3: a) Typical Povelca 2D Seismic Line and b) seismic base map

Only 23 wells have been producing gas, out of 38 wells, which are including exploration, development and appraisals. The total gas produced is ~ 10 BCF. About 8 wells has been evaluated to have untested gas reservoirs due to technical reasons.

The gas has been found mainly in a combined (stratigraphic-structural) trap of Upper Miocene (Messinian – Tortonian) formation. The sandstones reservoirs are deposited in slope channels, whereas the gas reservoirs have been discovered within the overpressure zone, at so-called 'transition zone' (Figure 5b).

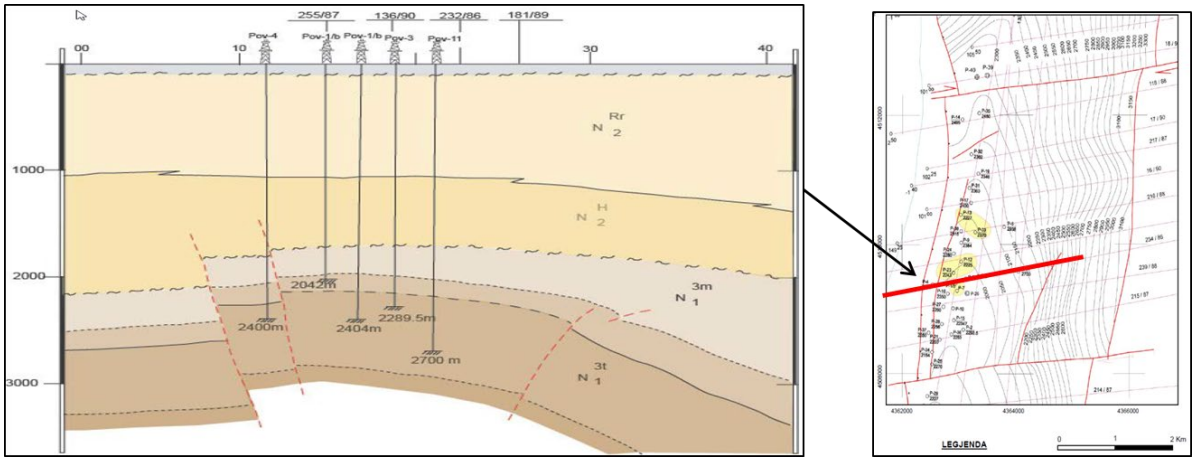

Figure 4, Geological cross section through Povelca field.

Gas pool has been confined alongside the structural crest (Figure 5a). Some tentative drilling below the gas zone failed to discover additional gas. The deeper section in Povelca anticline consists of shaly foresets of Upper Miocene associated with high pore pressure gradient (Figure 5b)

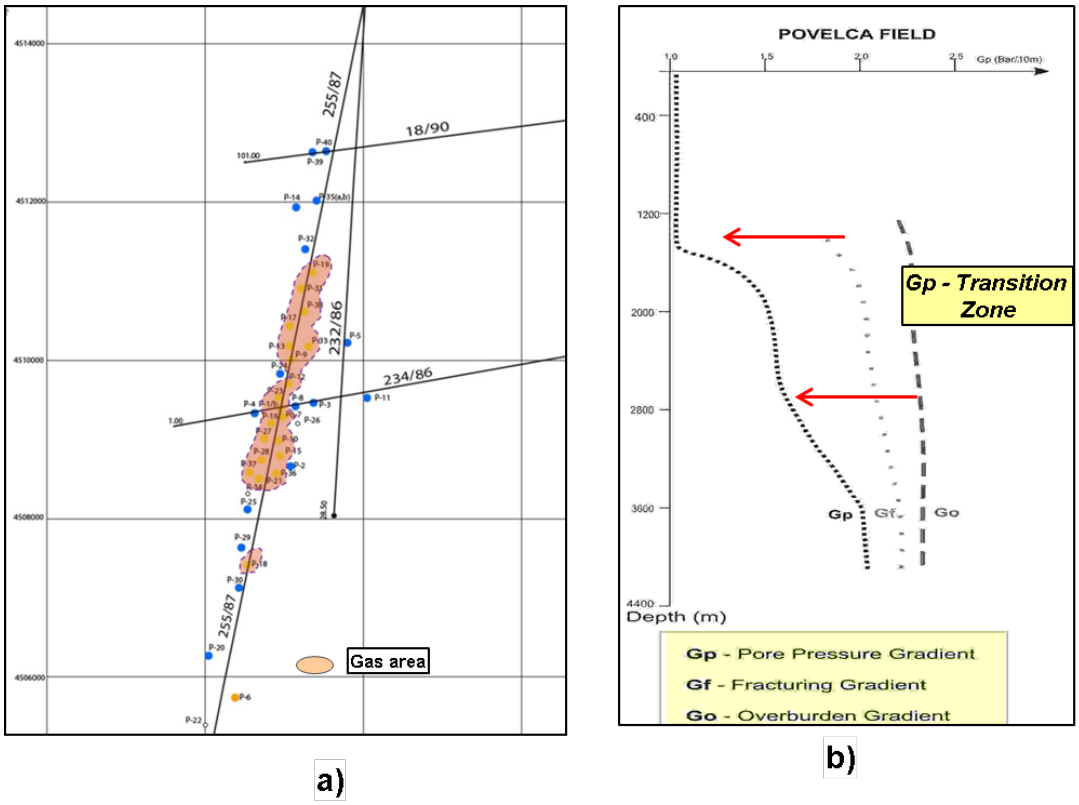

Figure 5; a) Distribution of gas pool in Povelca and b) pore pressure gradient

POVELCA RESERVOIRS AND PRODUCTION

Povelca field has produced ~ 10 BCF of dry gas. The main gas-bearing intervals are distributed within the depths of 1900 – 2400m MD. About 59 individual sands have been intersected and tested so far, with total thickness of 190m.

There are 5 main gas-bearing intervals throughout the Upper Miocene formation. The zone with highest potential has been proved in-between Pov-16 and Pov-17 wells.

23 wells out of 38 wells have been put in production (CoS = 60%). The produced gas from the reservoirs had an average yield of 5 – 50 mio m3 gas, whereas the sandstone layers stretches in an average area of between 2 – 4 Ha up to 15 Ha.

The bed thickness varies within the interval of 5-18m; porosity of 20-25% and permeability of 5-20 mD; gas saturation of 55-70%. The exploitation regime was gas extension drive.

The whole reservoir section is under overpressure, with initial pore pressure gradient of 1.4 – 1.55 bar/10m. Initial reservoir pressure was in a range of 300 – 500 bar.

The initial average production per well was between 17,000 – 90,000 Nm3/day. The final recovery factor for the field is estimated to be 90%. The remained gas pressure, at depleted wells, is estimated to be 10-20 bar.

A summary of reservoir parametres and field production (till end of 2001) are listed at Table 1.

	POVELCA FIELD	
1	Total Gas in Place discovered, Nm3	320, 000,000
2	Gas bearing reservoirs number	34
3	Minimum Gas in Place per reservoir, Nm3	10,000
4	Maximum Gas in Place per reservoir, Nm3	70,000,000
5	Cumulative Gas Production till Dec 2012, milli	271,173,000
6	Initial Gas Rate per well, Nm3/day	17,000-45,000
7	Initial Reservoir Pressure, atm	290 - 370
8	Pressure Gradient, atm/10m	1.4 - 1.55
9	Abandonent Pressure, atm	10 --30
10	Range of Reservoirs Temperature, ^{0}K	290 - 390
11	Lithology	Sandstone
12	Producing Area, Square Km	1.6
13	Range of reservoirs depth, m	1800-2350
14	Range of reservoirs thickness, m	0.7 - 23
15	Average Reservoirs Thickness, m	4.4
16	Range of Water Saturation, %	49 - 71
17	Range of Porosity, %	18 - 24
18	Range of Permeability, mD	5 -- 20
19	Total wells drilled	38
20	- Producing wells	23
21	- Dry wells	15

a)

GAS COMPOSITION - POVELCA FIELD	
Methane	96.96
Ethane	1.345
Propane	0.714
i-Butane	0.158
n-Butane	0.049
i-Pentane	0.0158
n-Pentane	0.00437
Hexanes	0.005
Hydrogen Sulphide	---
Nitrogen	0.687
Carbone Dioxide	0.1298
Gas Gravity (20oC)	0.7 kg/Nm3
Gas Calorific Value	8,750 Ccal/Nm3

b)

Table 1 Reservoir and Gas Parameters

PROSPECTIVE UPSIDE

There is undrain gas potential within the Povelca field which is related to:

- Unperforated reservoirs in recent active wells.
- Untested reservoirs in suspended wells (~ 9 wells).
- Undrained areas recognized and evaluated by Albpetrol which require new drilling (Figure 6a).
- Potential for new gas reservoirs towards the Northern and Southern ramps of Povelca Neogene anticline (partly out of actual License). Two mini-3D seismic acquisition are required (Total FF coverage 2*5 sq.km = 10 sq.km) (Figure 6b)

EDG Natural Gas believes that, at least, about 5-8 BCF of gas can be found within the field.

REQUIRED INVESTMENT

The fiscal commitment for the **Evaluation Period** is USD 500K. Taken into consideration the preliminary WP and the EDG goals to accelerate the operations and have gas sales during this Period, the required budget will be ~ USD 5.0 mio.

The **Development Period** investments will be analysed and submitted at Field Development Plan, which is subject of approval from Albpetrol. It will include additional workovers; drill new wells; acquire 3D seismic (~ FF coverage ~ 2 * 5 sq.km), etc.

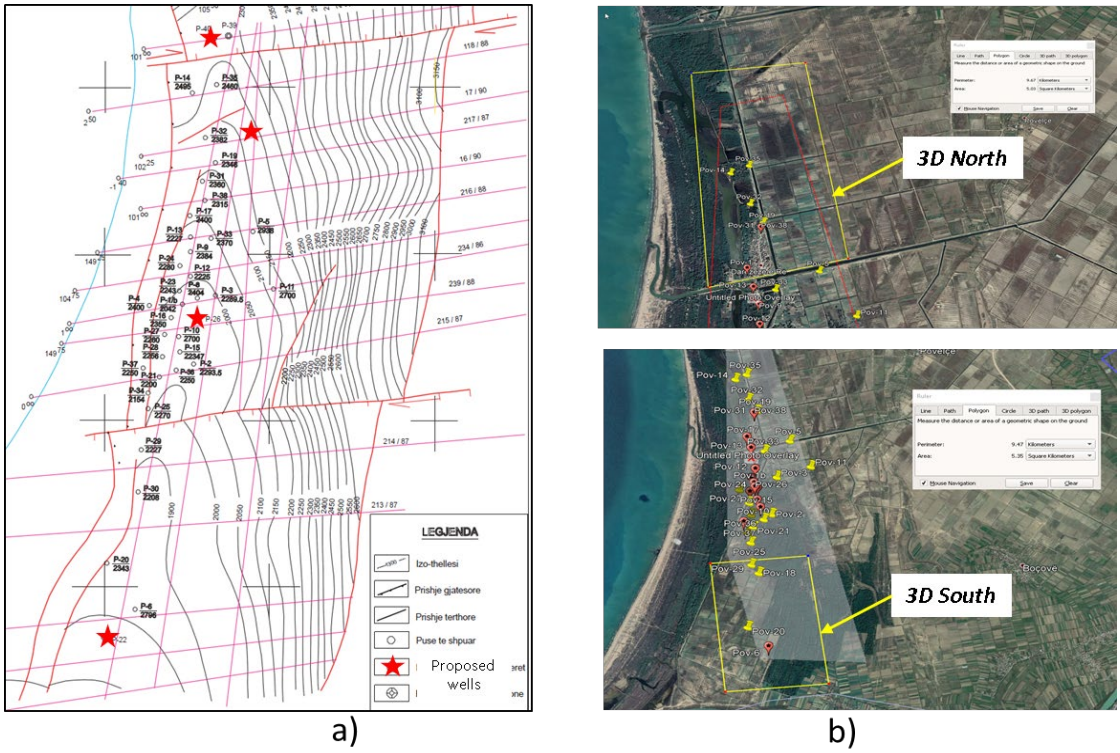

Figure 6; a) New wells proposed in the past, and b) possible new 3D seismic

Production Sharing Agreement:

The PSA will be signed between Albpetrol and the EDG Natural Gas shpk in Q1 2022. Albpetrol is given a license to develop the Povelca Field from the AKBN, a National Agency of Mineral Resources, who represent the Ministry of Infrastructure and Energy. EDG Natural Gas shpk will take the ownership of the Povelca field in Q1 2022.

The Povelca field Agreement effective date is expected in Q1, 2022. The overall development period is 25 years and if required, can be extended to additional 5 years. EDG Natural Gas has 100% equity.

Gas Marketing

There is gas demands in the country and beyond, in neighboring countries, therefore many options are in the table: pipeline to TAP (gas to EU); Gas-to-Power; CNG or LNG. CNG could be the best and fastest solution to sale gas.

Contacts:

For further information about this opportunity, the confidentiality agreement and scheduling a data room appointment please contact:

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