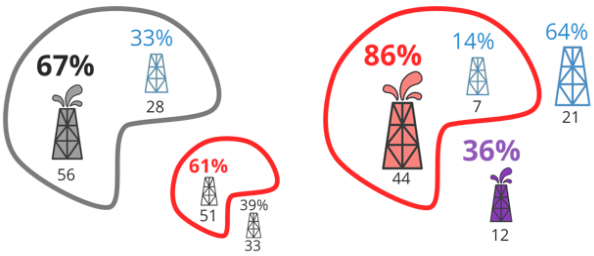
DEPROIL

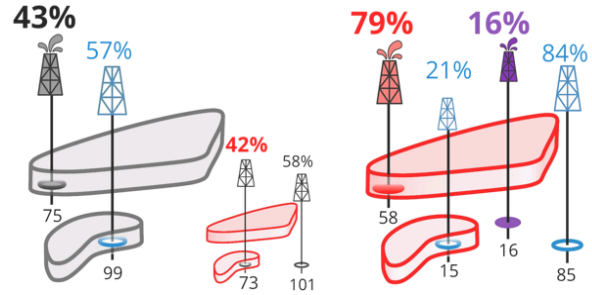
DETAILED OIL & GAS PROSPECTING

- **89 exploration projects (700,000 km²)**
- **84 wells validated 3D models**
- **51 wells drilled within mapped commercial pools with a success rate of 86-100%**
- **33 wells drilled outside mapped commercial pools with a success rate of 16-36%**

Outcome of 84 drilled wells



Outcome of 176 well tests



DIRECT COMMERCIAL HYDROCARBON POOL MAPPING

DEPROIL

DETAILED OIL & GAS PROSPECTING

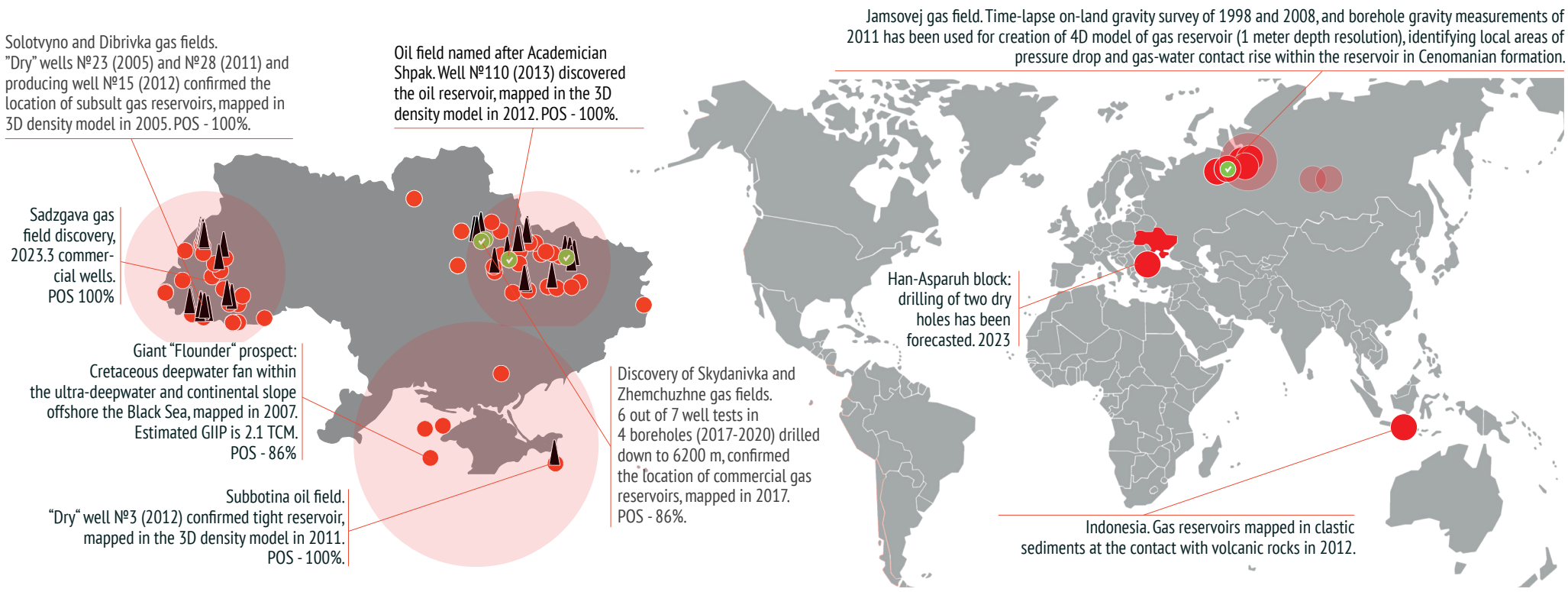
DEPROIL Ltd. is a scientific and technical geophysical company that has been operating since 1991, providing services to Ukrainian and international oil and gas companies in exploration of oil and gas oil and gas, development, and underground gas storage monitoring.

The company has developed a proprietary technology for mapping commercial hydrocarbon pools of different morphology and origin, implemented in the GCIS (Geophysical Complex Interpretation System) software, which performs joint regularization-free 3D inversion of gravity, well-log, and seismic data.

The technology is based on over 30 years of scientific research and industrial application and has been applied in 89 exploration projects covering more than 700,000 km^2.

Technology's performance has been validated by 176 well tests from 84 wells across 25 license areas, demonstrating a commercial success rate of 86–100% and high predictive accuracy of reservoir properties and production parameters.

GLOBAL SOLUTION FOR QUANTITATIVE MAPPING OF COMMERCIAL HYDROCARBON POOLS



- **REGIONAL - mapping areas of increased concentration of commercial hydrocarbon pools within oil and gas basins for licensing and further prospecting**
- **EXPLORATION - mapping commercial hydrocarbon-bearing pools within licenses and their ranking by the volume of total and recoverable reserves and initial production rate of new wells**
- **DEVELOPMENT - mapping production-induced changes within hydrocarbon reservoirs: pressure drop, gas saturation change, gas-water contact rise, identification of the unswept zones**
- **MONITORING - mapping operation-induced changes in the reservoir system of a hydrocarbon field or an underground gas storage: change of pressure, gas saturation, location of dynamic gas reservoirs, gas pathways**

Technology development:	1974	1984	1989	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	IDEA	KARPATY	ELENA-2D	GCIS-2D		GCIS-3D				GCIS-4D		GCIS-4D+1D						Resources (Monte Carlo)	3D density of resources	Total and recoverable reserves		Initial production rate
Basin study:																						
Total area (628 490 km^2)					90 180	2 988	67 124		30 000		104 717	67 131	247 866	491	17 933							
Number of projects (21)					1	1	3		1		3	5	3	1	3							
Exploration & production:																						
Total area (72 430 km^2)			10	168	2 295	147	6 579	23 509	11 285	15 949	1 495	675	934	2 268	878	655		532	1 350	721	1 025	1 955
Number of projects (69)			1	1	8	1	5	7	7	8	3	2	6	4	3	2		1	4	2	1	3
High-precision observations:																						
3D gravity survey												618	996	756	738	606	312	715	467	753	1 022	110
Total area (7 093 km^2)												1	3	4	4	3	2	5	2	2	3	1
Number of projects (24)																						
3D magnetic survey													423	903	564	401	63	620	489	699	946	186
Total area (5 295 km^2)													1	3	3	2	1	4	2	2	3	1
Number of projects (18)																						
Results & recommendations:																						
Estimated hydrocarbon reserves: gas, bcm / oil, million tons									2100 / 0										16,2 / 0	40,2 / 0	8,9 / 0	129,5 / 18,4
Recommended wells (138)								4	21	1	1	7	5	14	6	15			13	5	5	41
Confirmation by drilling:																						
Name of the license			Western Lukva	Gashyniv	Chertizh Mykulychyn Western Vilshany		Dobrjany South Bushtyno		Bogatojka Buchach Lischyny Solotvyno	Orohovychi-Dubanevychi Mykytyntsi Subbotina		Krasnyi Kut	Hersevanivka Novomechebylivka	Budyshchany Chutovo	Suhodil Dashava Ostroverhivka	Mehedivka Holotovshchyna Vasyshchi Svyrydivka	Yuzivska	Kosachi	North Skvortsi Skydanivka Khorosheve Olyshivka	Tyniv Machukhy	Zhdenievo	Marchenky Tarhanivka Rozpashna Novoukrainka Western Novoukrainka
Wells (81) / Well tests (166)			1 / 1	5 / 5	10 / 11		8 / 21		10 / 43	19 / 52		5 / 6	2 / 3	1 / 1	2 / 2	5 / 5			6 / 9	6 / 5	1 / 2	
Well tests confirmed the prognosis (136)			1	3	11		18		42	33		4	2	1	2	5			8	4	2	
Actual probability of succes (POS) in mapping commercial hydrocarbon-bearing reservoirs (85%)			100%	60%	100%		86%		98%	63%		67%	67%	100%	100%	100%			89%	80%	100%	
Discovered fields (5)										Chkaliv			Medvezhe	Academic Shpak						Zhemchuzhne	Skydanivka	

OUR CLIENTS:

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DEPROIL

Off.5, B. 4b, Pylypa Orlyka Str.,
Ivano-Frankivsk, Ukraine, 76000
+380 (67) 4492220
+380 (67) 3403708
e-mail: info@deproil.com
www.deproil.com