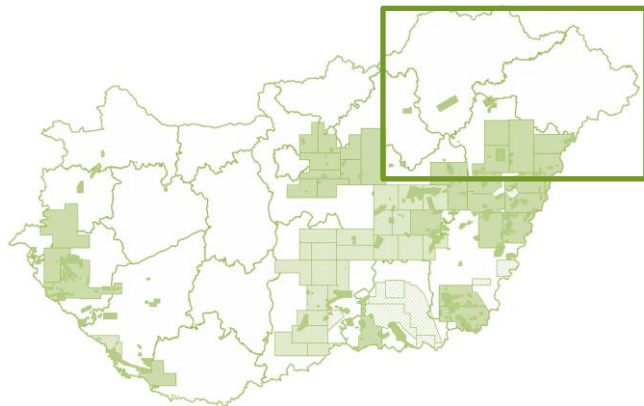


JKX assets in Hungary

Portfolio of six mining plots in the Northeast



1 **Hajdúnánás IV & V MPs** (35 sq. km)

2 5.5-8.5 Bcf gas

1-2 MMboe oil

3 **Tiszavasvári IV MP** (44 sq. km)

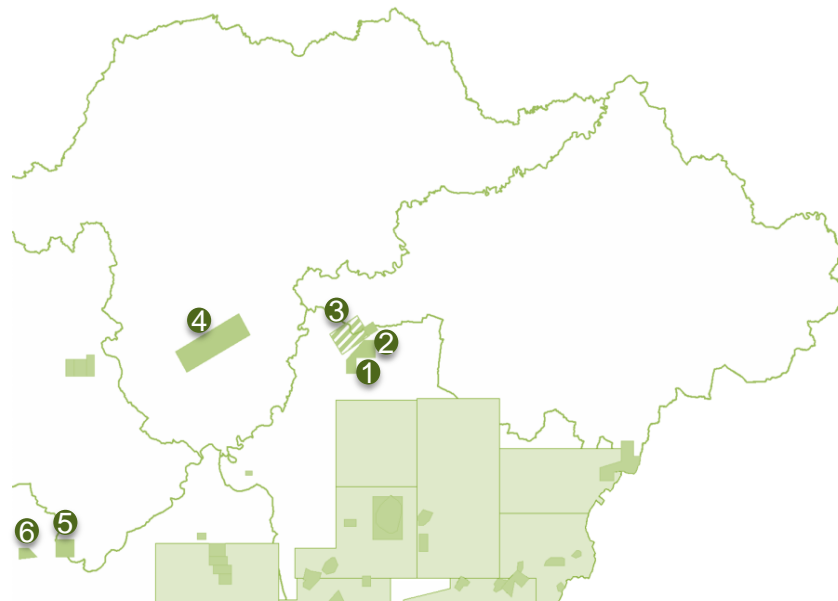
10 Bcf appraisal

100-150 Bcf upside

4 **Emőd V MP (Mezo)** (100 sq. km)

1-2 MMboe appraisal

7-19 MMboe exploration upside



5 **Pély I MP** (15 sq. km)

5-10 Bcf prospect

6 **Jászkisér II MP** (6 sq. km)

4-7 Bcf prospect

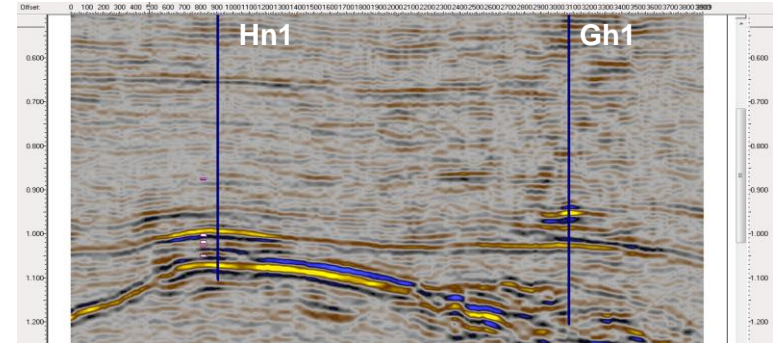
Hajdúnánás IV Development

less than 1.5 years from identifying target to production

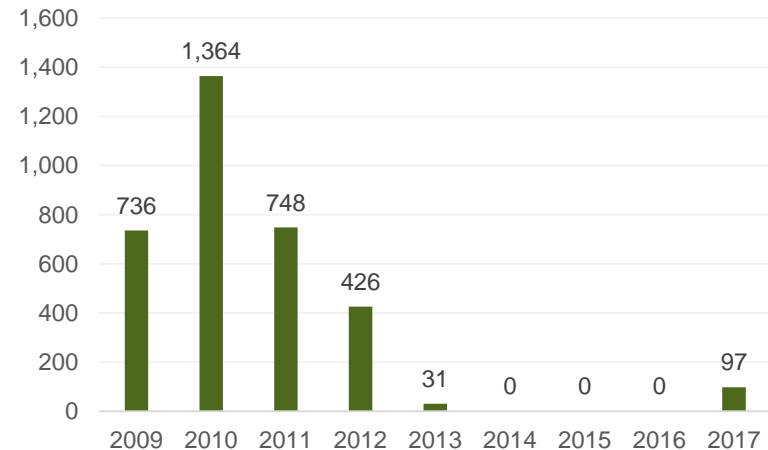


- Prospect located on current Hajdúnánás IV mining plot was identified as a result of seismic acquisition program completed in 2007
- Hn-1 drilled as discovery in July 2008 - Hn-2 appraisal drilled in December 2008
- Production facility with the capacity of 500 Mcm per day was constructed, together with all required infrastructure
- It took 16 months from identifying the target to bringing the field to production
- Production period lasted for about 4 years before wells watered out from the main reservoir intervals
- In 2017, after a break of more than three years, production was resumed after sidetrack of well Hn-2 and then workover of well Hn-1
- Current production of the field is approximately 20 Mcm per day of gas and 1.9 tons per day of condensate (~135 boepd)
- Total cumulative production to date is approximately 180 MMcm of gas and 20.8 thousand tons of condensate (>1.2 MMboe)

Hajdúnánás target on seismic (left)



Hajdúnánás field production, boepd



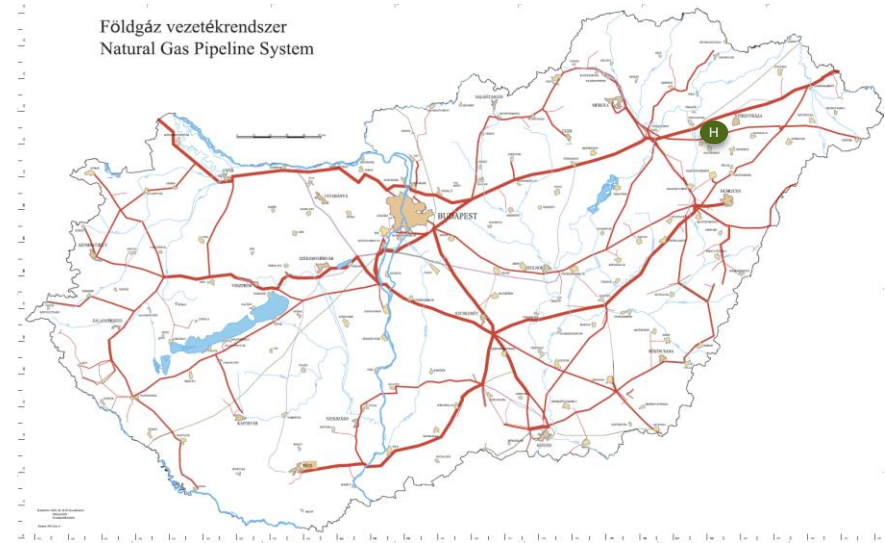
Infrastructure in place for current and future projects

JKX owns and operates Oil & Gas Production Facility



- Hajdúnánás Oil & Gas Production Facility built in 2009
- Capacity of 500 Mcm per day (18 MMcfd)
- 8" export pipeline with capacity of > 40 MMcfd
- Fiscal metering and tie-in to National Pipeline network
- Currently operating

JKX processing facility location vs. gas pipelines



Hajdúnánás V – Chevelle prospect

Potential GIIP of 5-7 bcf



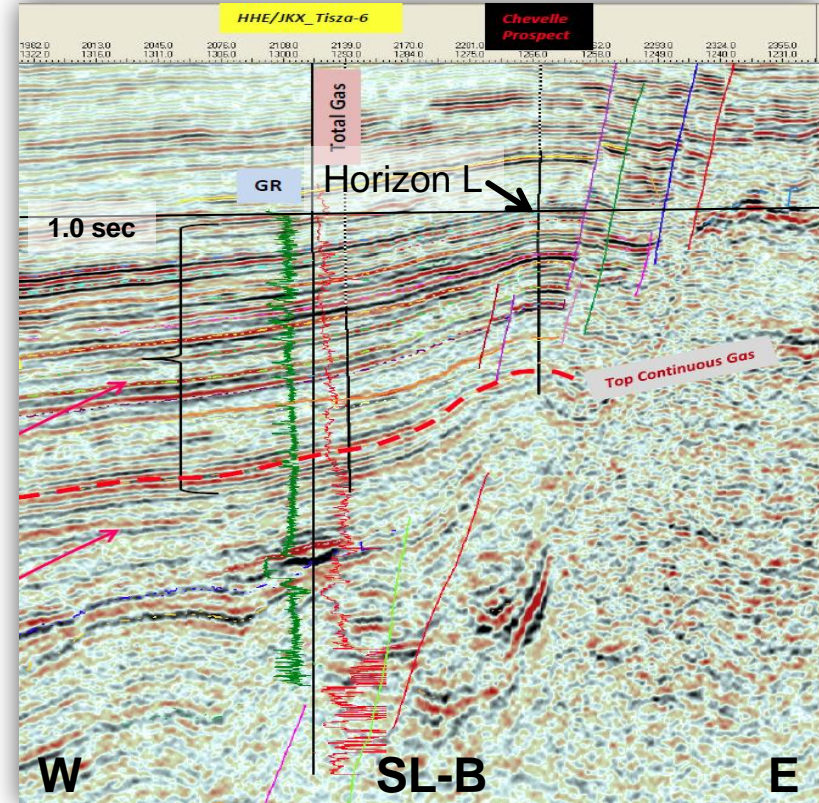
Key features of this prospect:

- 3-way dip and fault bounded
- Stacked Reservoir Targets
- Pannonian Delta Front and Delta Top Sands
- High Quality Reservoir
- High Quality Gas
- Gas charge derisked by Tiv-6 well
- Shallow depth to target
- <\$2.5mm completed well cost
- P(50) 7 Bcf GIIP (4 intervals)

Further considerations

- Surface location is within Natura 2000 area which will require an Environmental submittal and drilling within a restricted period each year
- More economical to drill after flowline infrastructure for Tiszavasvári IV is in place

Prospect identified post Tiv-6 drilling

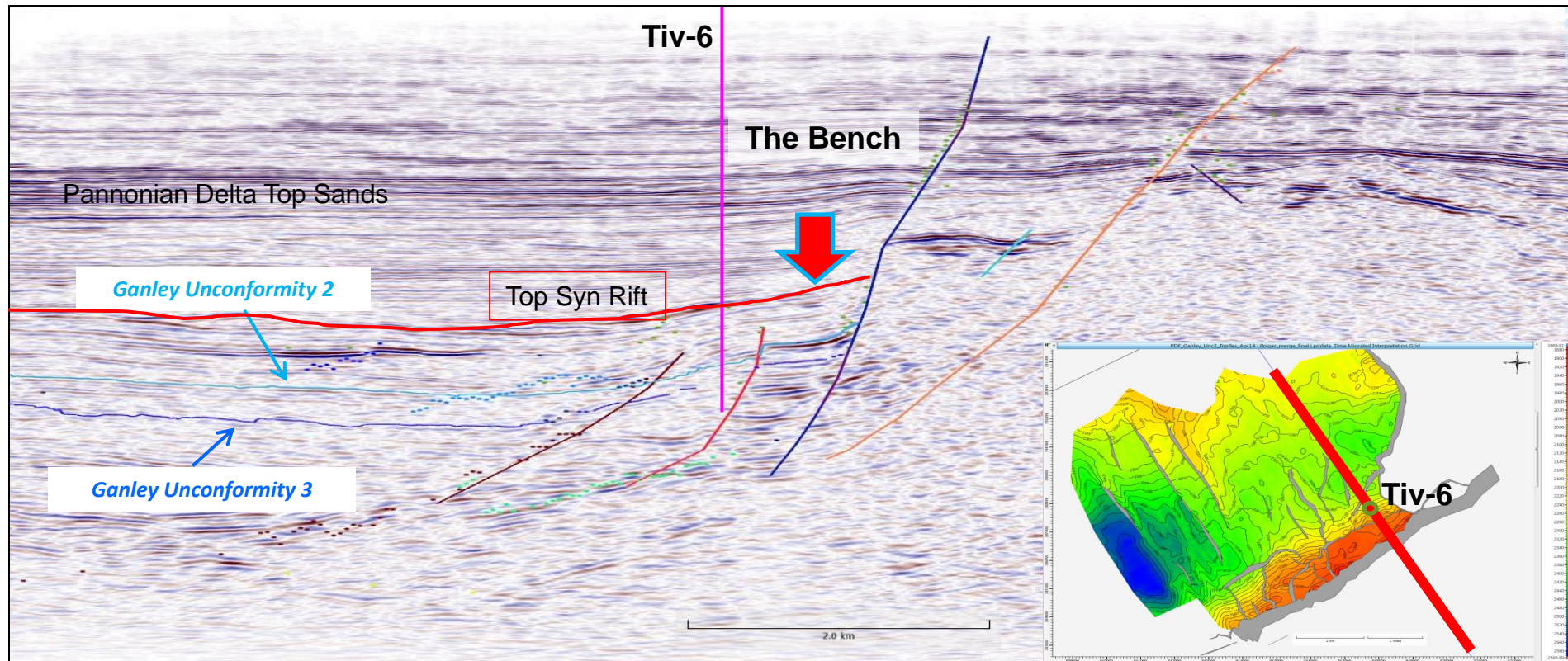


Bench prospect on seismic

Better looking reservoir sequence vs. Tiv-6



- Seismic cross-section shows better reservoir interval continuity within the Bench structure
- Re-processing of old seismic data is currently underway



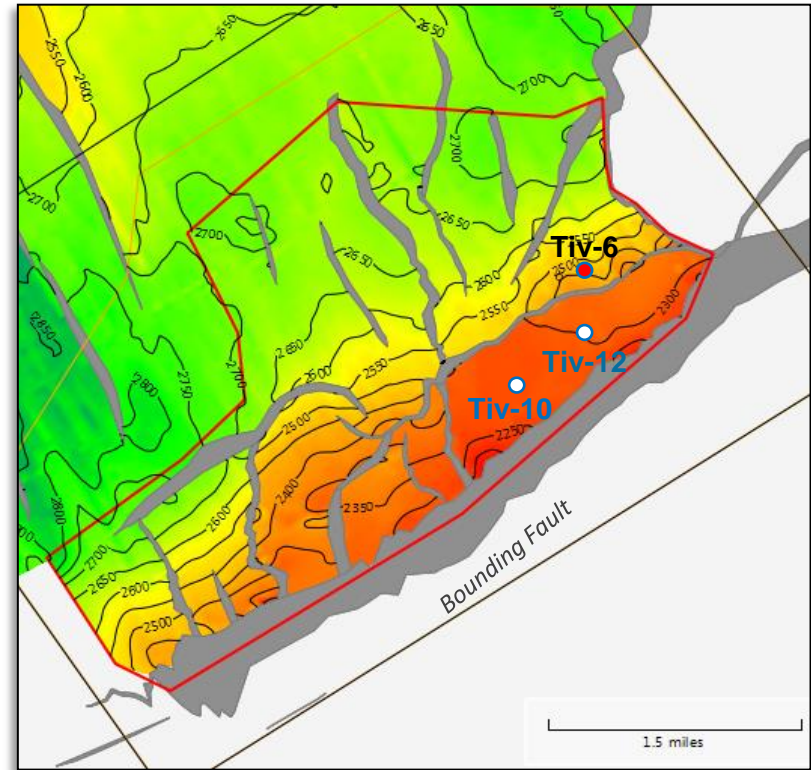
Next appraisal target

Bench Structure: Tiv-12 \$3.3m In Dry Hole



- Tiv-12 and Tiv-10 well targets are fully permitted and ready to drill – dry hole cost \$3.3mm each
- Tiv-6 discovery of Miocene gas accumulation prompted reinterpretation of available 3D seismic data with well data
- Identification of a “Bench structure” updip across the fault from Tiv-6 well with much better seismically defined sand/shale packages
- Prospect is a hangingwall dip and fault closed structure mapped over an area of 6.5 sq km
- If in direct communication with the Tiv-6 well the structure may exceed 18 sq km
- The primary reservoir interval is an amplitude supported Miocene sand-prone facies.
- The target depth for the Tiv-12 well picked at 2300m TVD

Depth Structure Map (m) – Top Reservoir



Volumetrics for the Bench structure

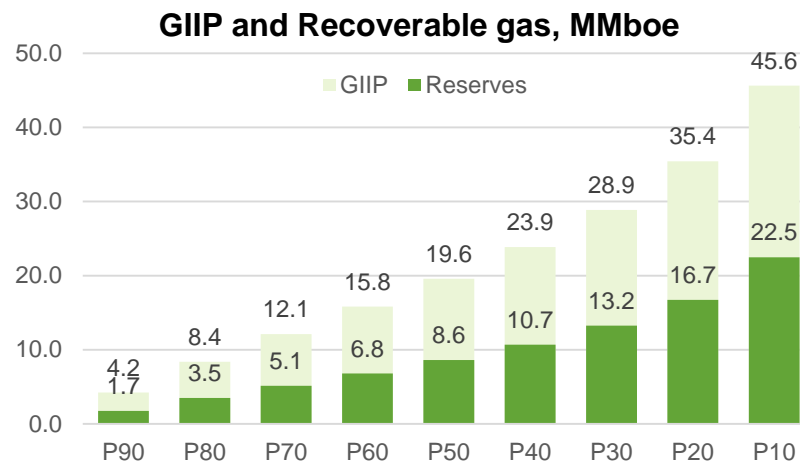
P(50) recoverable gas estimate at 52 Bcf / 8.6 MMboe



- Based on Monte Carlo simulation we have estimated P(50) values for GIIP and recoverable gas at 19.6 MMboe and 8.6 MMboe, respectively
- Key assumptions used in the simulation are as follows:
 - Pay area. P(90) for just one of three mapped blocks, P(10) for three blocks. Total bench area is around 8 sq km, total licence block area – 44 sq km
 - Net thickness. Tiv-6 as P(90) value (but potentially low elong porosity due to complex (heavy) mineralogy & grain density)
 - Porosity P(90) is 10% v 11% for Tiv-6 which is downdip
 - Recovery factor. P(90) of 28% and P(10) of 66%
- Overall, P(90) case estimate justifies a 6-well development, while P(50) case allows for more than 25-well development

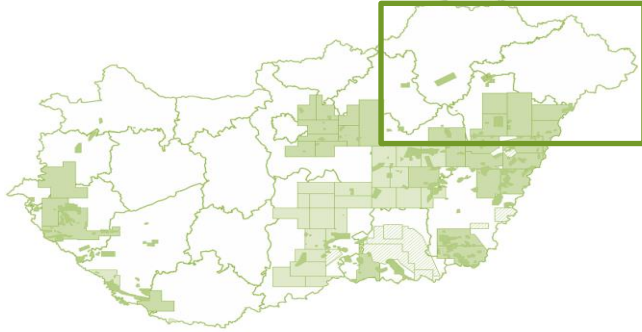
Simulation results

	P(90)	P(50)	P(10)
Pay area [m2]	1,736,402	4,185,188	6,616,805
Net thickness [m]	18.0	51.9	85.7
Porosity [%]	10.0%	12.5%	15.0%
Gas saturation [%]	50.0%	60.0%	70.0%
Bg	216.9	238.6	259.9
GIIP [Mm3]	719,635	3,328,837	7,753,646
RF [v/v]	28%	47%	66%
Recoverable gas [Bcm]	0.3	1.5	3.8
Recoverable gas [Bcf]	10.5	51.7	134.8
Recoverable gas [MMboe]	1.7	8.6	22.5



Emőd V mining plot and Mezőkeresztes oil field

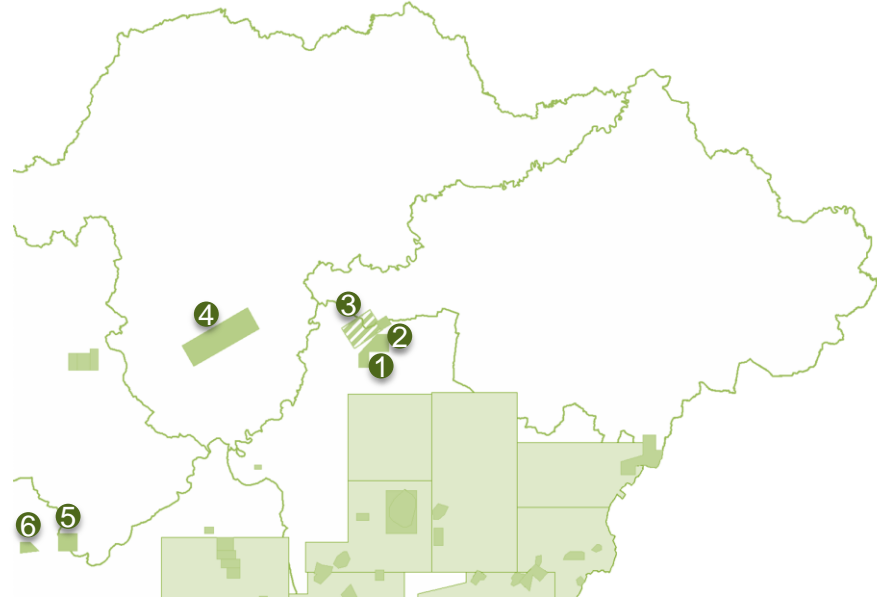
Proven field redevelopment / EOR + substantial oil-rich prospect



- 1 **Hajdúnánás IV & V MPs** (35 sq. km)
- 2 5.5-8.5 Bcf gas (exploration)
1-2 MMboe oil

- 3 **Tiszavasvári IV MP** (44 sq. km)
10 Bcf appraisal
100-150 Bcf upside

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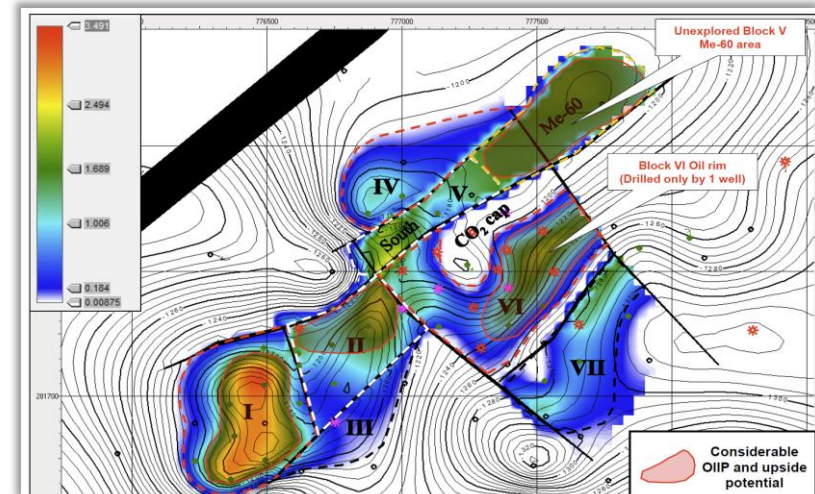
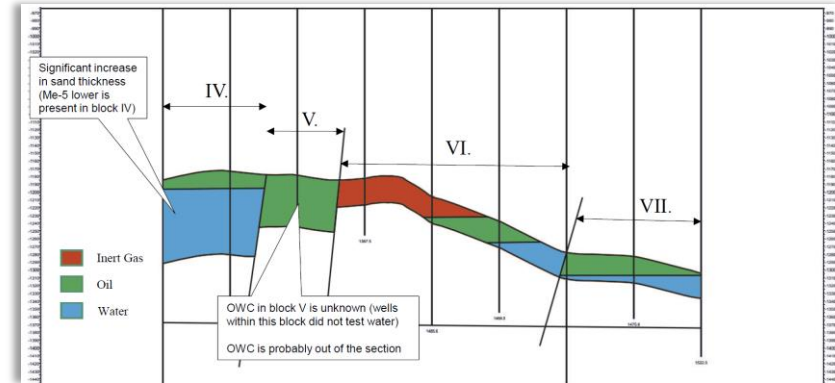
Field-area low-risk targets

Significant low-risk redevelopment + EOR opportunity



- The field was abandoned in the 70s achieving a recovery factor of circa 8%-10%
 - Abandoned before seismic was acquired
 - Heavy drilling muds used hence significant damage to low permeability reservoir
 - No secondary recovery attempted
- Comprehensive data revaluation project identified multiple low-risk well targets in Oligocene:
 - East-V, ME-60 - unexplored
 - East-VI (oil rim) – only 1 well drilled
 - East-VII (channel sand)
 - West-I
 - West-II
 - Me-38
- Triassic / Eocene upside
 - Not reached / explored by most wells
 - Excellent flow tests – typically 20-30 m3/d up to 80-100 m3/d

Oil pools in Me-5 East blocks



Exploration potential (1 of 2)

Two structures identified and analyzed, 7+ MMbbl upside



- The Mezőkeresztes-Sajóhídvég structural ridge is poorly explored. Only 12 2D seismic lines are available on the ridge with spacing of 2-3km whereas the lateral extent of the Mezőkeresztes field is only ~1500m
- Apart from Mezőkeresztes field only 3 wells were drilled along the ridge: all were off structure
- Limited exploration and small trap sizes imply the existence of several other multi-level oil accumulations along the ridge analogous to Mezőkeresztes
- Integrated regional mapping conducted by Geomega revealed two satellite structure NE of Mezőkeresztes both inside the mapped Paleogene pinchout line

Oil pools in Me-5 East blocks

