

Welcome

Paul Martyn PSM

Chief Executive,
Department for Energy and Mining

27 November 2025



**GEOLOGICAL
SURVEY OF**
South Australia

DISCOVERY DAY



**Government
of South Australia**

Department for
Energy and Mining



GSSA: Unlocking South Australia's Geological Potential



World-Class Geological Data

Providing high-quality, precompetitive geoscience data



Accelerating Resource Discovery

Identifying new mineral and energy opportunities



Driving Economic Growth

Underpinning billions in exploration and mining activity



Supporting Energy Transition

Delivering insights into critical minerals and clean energy resource discovery



Innovation and Collaboration

Connecting government, industry and academia



Exponential Return on Investment

GSSA returns \$6.50 for every \$1 invested



GSSA
DISCOVERY DAY
.....

Turning Knowledge into Opportunity for South Australia's Future

South Australia's World Class Drill Core Library

Globally recognised

Hailed as one of the world's best drill core facilities, combining physical samples with cutting-edge digital technologies

Proven economic impact

Instrumental in major discoveries that have delivered billions in royalties and economic benefits to SA

Enormous geological collection

10 million metres from 50,000+ drill holes spanning over 140 years of exploration

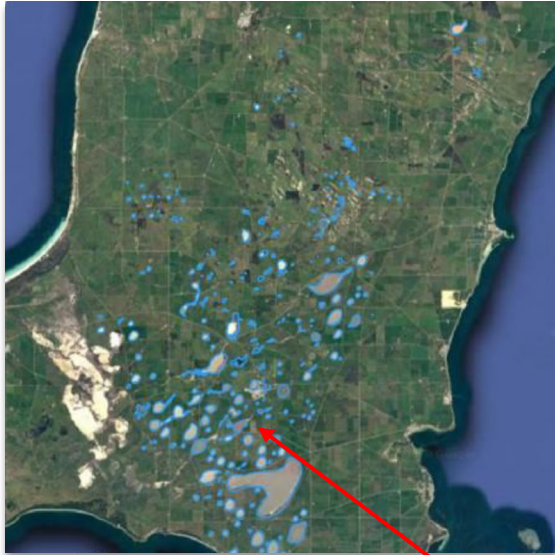
Driving new discovery & innovation

Historical samples and geodata are revealing significant value for today's explorers and industries



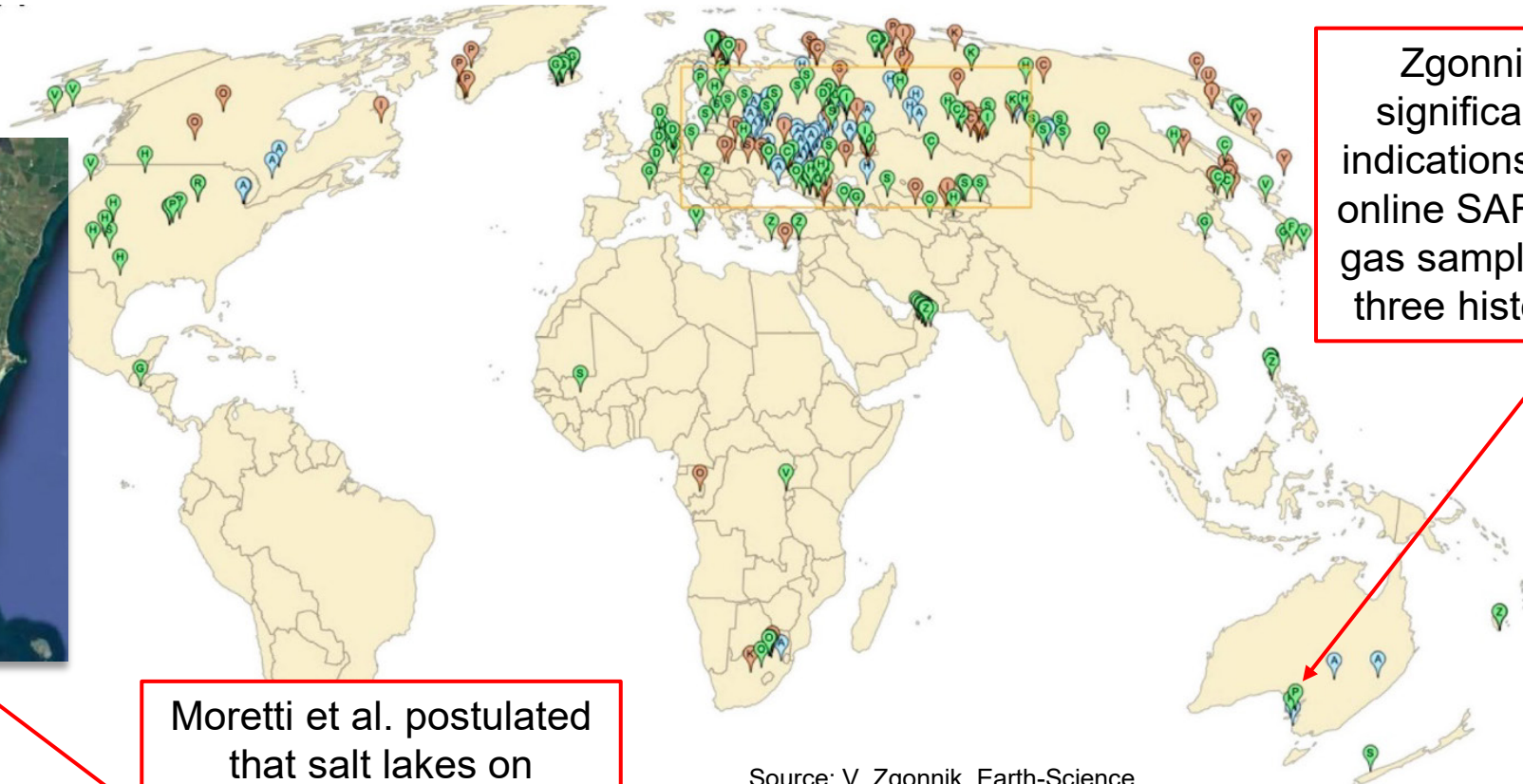
GSSA
DISCOVERY DAY
.....

Geological Records and Data Driving New Discovery and Industry in SA



Source: Moretti et al. geosciences (2021)

Moretti et al. postulated that salt lakes on Yorke Peninsula and Kangaroo Island are natural hydrogen seeps



Zgonnik revealed significant hydrogen indications by reviewing online SARIG records of gas samples taken from three historic drillholes

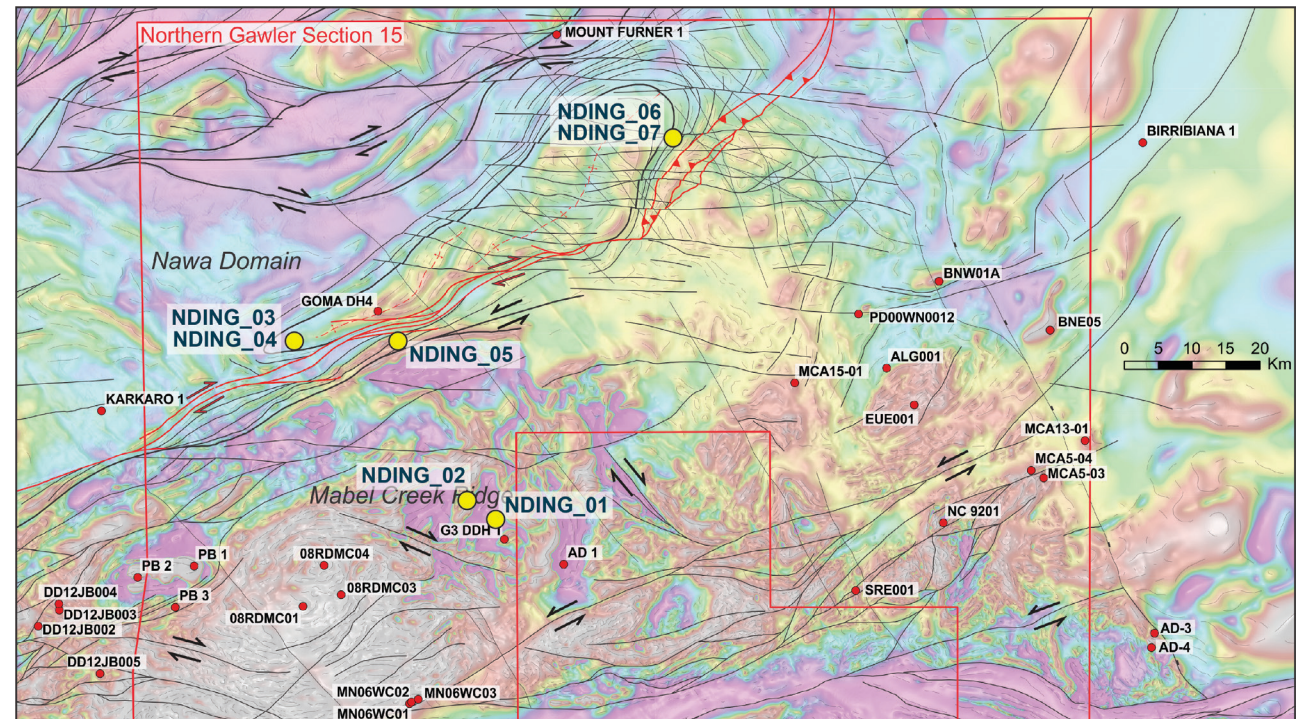
Source: V. Zgonnik, Earth-Science Reviews 203 (2020)



GSSA
DISCOVERY DAY

New Acreage in the Northern Gawler Province

- New Exploration Release Areas to be announced within the Northern Gawler Craton Section 15 region
- Direct result of new drilling undertaken as part of the Minex CRC, National Drilling Initiative



Northern Gawler Section 15 region



Geological Survey of South Australia

144 Years of Excellence



1903: Herbert Basedow upon his camel during expedition. (Photo 033763)



1875: Kapunda copper mine.



1908: Leigh Creek Coalfield reserved by the government. (Photo n 000083)



1866: Oil well at Alfred's Flat. (Photo n005967)



1959: First Cooper Basin petroleum exploration well (Innaminka 1). (Photo n011436)

Thank you

Paul Martyn PSM

Chief Executive,
Department for Energy and Mining



**GEOLOGICAL
SURVEY OF**
South Australia

DISCOVERY DAY



**Government
of South Australia**

Department for
Energy and Mining

